REMEDIAL INVESTIGATION WORK PLAN

13-12 Beach Channel Drive 13-12, 13-16 and 13-24 Beach Channel Drive Far Rockaway, New York NYSDEC BCP Site No. C241254

Submitted to:

New York State Department of Environmental Conservation Region 2, Division of Environmental Remediation 47-40 21st Street, Long Island City, NY

Prepared for:

BCD Owner LLC 419 Park Avenue South, 4thFloor New York, New York

September 10, 2021 IEC Project No. 15209



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CERTIFICATION

I, Kevin Kleaka, certify that I am a Qual	lified Environmental Professional as de	efined in 6 NYCRR Part 375 and that this
Remedial Investigation Work Plan was p	prepared in accordance with applicable	statues and regulations and in substantial
conformance with the DER Technical Gu	uidance for Site Investigation and Rem	ediation (DER-10).
		V. X/
Kevin Kleaka	9/10/21	Below
Name	Date	Signature

Acronyms and Abbreviations

AMSL	Above Mean Sea Level	OER	Office of Environmental Remediation
AST	Aboveground Storage Tank	ORP	Oxidation-Reduction Potential
ASTM	American Society for Testing and Materials	PPM	Parts Per Million
AOC	Area of Concern	PPB	Parts Per Billion
ASP	Analytical Services Protocol	РСВ	Poly Chlorinated Biphenyl's
ВСР	Brownfield Cleanup Program	PAH	Poly Aromatic Hydrocarbons
BGS	Below Grade Surface	PCE	Tetrachloroethene
BTEX	Benzene Toluene Ethylbenzene and Xylenes	PGW	Protection of Groundwater
BER	Business Environmental Risk	PID	Photo Ionization Detector
СРР	Citizen Participation Plan	PFAS	Per- and Polyfluoroalkyl Substances
со	Certificate of Occupancy	PVC	Polyvinyl Chloride
CSM	Conceptual Site Model	QAQC	Quality Assurance Quality Control
cVOC	Chlorinated Volatile Organic Compound	QAPP	Quality Assurance Project Plan
CREC	Controlled Recognized Environmental Condition	RIWP	Remedial Investigation Work Plan
CEQR	City Environmental Quality Review	RCRA	Resource Conservation and Recovery Act
CAMP	Community Air Monitoring Program	REC	Recognized Environmental Condition
CLP	Contract Laboratory Program	RAO	Remedial Action Alternative
DER	Division of Environmental Remediation	RAWP	Remedial Action Work Plan
DOB	Department of Buildings	RIR	Remedial Investigation Report
DNAPL	Dense Non-Aqueous Phase Liquid	SF	Square Feet
DUSR	Data Usability Summary Report	SHWS	State Hazardous Waste Site
DO	Dissolved Oxygen	svoc	Semi-Volatile Organic Compound
EDR	Environmental Data Resources	SCO	Soil Cleanup Objective
EIS	Environmental Impact Statement	SSDS	Sub-Slab Depressurization System
ELAP	Environmental Laboratory Accreditation Program	TAGM	Technical and Administrative Guidance Memorandum
ESA	Environmental Site Assessment	TCE	Trichloroethylene
FWRIA	Fish and Wildlife Risk Impact Analysis	TCL	Target Compound List
FBG	Feet Below Grade	TIC	Tentatively Identified Compound
AWQS	Ambient Water Quality Standard	TAL	Target Analyte List
GPR	Ground Penetrating Radar	USGS	United States Geological Survey
GPS	Global Positioning System	USFWS	United states Fish and Wildlife Service
HREC	Historical Recognized Environmental Condition	μg/kg	Micrograms Per Kilogram
HASP	Health and Safety Plan	μg/m³	Micrograms Per Cubic Meter
LLC	Limited Liability Corporation	USCS	Unified Soil Classification System
MW	Monitoring Well	UST	Underground Storage Tank
MS	Matrix Spike	USEPA	United States Environmental Protection Agency
MSD	Matrix Spike Duplicate	VCP	Voluntary Cleanup Program
NYSDEC	New York State Department of Environmental Conservation	voc	Volatile Organic Compound
NYC	New York City		
NYCDEP	New York City Department of Environmental Protection		
NYSDOH	New York State Department of Health		
NYCRR	New York Codes Rules and Regulations		
NAPL	Non-Aqueous Phase Liquid		
NYSDOT	New York State Department of Transportation		

1 INTRODUCTION

Impact Environmental Closures, Inc ("IEC") has prepared this Remedial Investigation Work Plan as part of an application package for BCD Owner LLC ("Applicant") to enter the New York State Department of Environmental Conservation (NYSDEC) Brownfield Cleanup Program (BCP) as a Volunteer (Site No. C241254). The Applicant is seeking to remediate a property located at 13-12, 13-16 and 13-24 Beach Channel Drive, within the Far Rockaway section of Queens County, New York ("Site" or "Property"). The Brownfield Cleanup Agreement was executed between the Applicant and the NYSDEC on July 14, 2021.

The Property is currently developed with three (3) vacant structures: one (1) single story former fast-food restaurant; one (1) three-story former church and multi-family dwelling; and one (1) single story former car wash. BCD Owner LLC is proposing to demolish the three (3) existing structures and develop a new nine-story building. The redeveloped building will be utilized as a fully staffed homeless shelter and affordable housing apartment building. BCD Owner LLC is proposing to investigate and remediate the Site under the auspices of the Brownfields Cleanup Program.

1.1 Site Description

The Site consists of three (3) contiguous tax parcels encompassing approximately 33,095 square-feet (0.76-acres) in size whichis located about 0.76 miles west of the Nassau Expressway, NY Route 878 (refer to **Plate 1**), and situated on the east side of Beach Channel Drive and the west side of Redfern Avenue. The Site consists of three (3) parcels of land assigned New York City Tax Map Designation: Block 15528, and Lots 5, 6, and 9 (these lots are proposed to be merged into a single Lot in the future) and is in an area composed of commercial and residential development along collector and local roadways, respectively, within a historically commercial and residential area (refer to **Plate 1**). The Site has three (3) NYC Zoning designations: R6 for residential uses; DFR (special Downtown Far Rockaway District) for mixeduses; and C2-4 for commercial uses.

Currently, the Site is unoccupied and contains three (3) vacant structures. The building located on the south side of the site, Lot 5, is an approximately 1,400 square foot slab on grade structure, with one-story plus a mezzanine that was most recently occupied by a KFC. The remainder of the 10,500 square foot Lot 5 is comprised of an asphalt paved parking lot. The building located in the center of the Site, Lot 6, is an approximately 1,800 square-foot 3-story commercial and residential structure with a partial basement at a depth of approximately 4-feet below grade, that was most recently occupied by various retail establishments and residential apartment units. The remainder of the 11,095 square foot Lot 6 is comprised of concrete paved parking areas. Finally, the building located on the north of the Site, Lot 9, is an approximately 3,600 square foot slab on grade structure, with a single story, that was most recently occupied by a car wash and auto detailing establishment. The remainder of the 11,500 square foot Lot 9 is comprised of asphalt and concrete paved parking areas (see Plate 2 for Existing Site Plan).

The building currently receives electrical service from PSEG, Natural Gas from National Grid, potable water from NYCDEP, while sanitary waste is reportedly handled by the NYCDEP sanitary sewer. Storm water runoff for the Site is handled via drywells located throughout the property.

The surrounding land parcels have a combination of residential and commercial uses. The Site is bordered to the north by a strip mall containing several retail stores (Karen Hair Design, Roberts Delight restaurant, Amanah Deli & Grocery, and Little Caesar Pizza) and a row of multi-family residential dwellings, to the east by Redfern Avenue and a residential construction project, to the south by a strip mall containing several retail stores (Crown Fried Chicken, Sammy M Deli & Grocery, New Butterflies Chinese restaurant, Urban Home Sports Wear, Express shoe repair, George and Chris Cleaners, Money Gram, Alex Magic Electronics, Jamaica Breeze Buffet restaurant and Fish store) and Mott Avenue, and to the west by Beach Channel Drive and several commercial properties (Taco Bell, Klean and Kleaner Laundromat, and Shop Fair grocery store).

1.2 Proposed Redevelopment

The development project consists of a new mixed-use residential and community facility building. The proposed development will be approximately 125,000 GSF and 95 feet in height and include the co-location of a 40,000 SF homeless shelter and 85,000-SF supportive housing residence. Upon completion, the mixed-use facility will include a 200-bed homeless shelter and 137 affordable studio and one- and two-bedroom units. The building will be constructed slab on grade, with final excavation depth ranging from 4-feet bgs beneath the building slab, and 6-feet bgs in areas of footings. The building materials and design will assure the structure is contextual with other buildings in the neighborhood and with the mixed-use character of the street. The water table is expected at approximately 17-feet bgs and is not expected to impact the development. Development is slated to take 27 months to complete.

1.3 Physical Setting

The Site is located within the Atlantic Coastal Plain Physiographic Provence. The elevation of the Site, as presented on the United States Geologic Survey (USGS), Far Rockaway Quadrangle Map, ranges from approximately 17 feet above mean sea level (amsl) to 25 feet amsl. The **Site Topographic Map** (**Plate 1**) indicates the Site has an approximate 5.5-feet elevation change from the easternmost to westernmost portions of the property (approximate 3 % elevation change). The nearest major surface water body to the Site is Jamaica Bay, located approximately 0.8 miles (4,200 feet) to the west.

The site lies within an area classified as Urban Land. This soil type is most common in urbanized areas where much of the surface is covered with buildings, roads, driveways, parking lots and other manmade structures and where "made land" was used to provide structural integrity to existing water born and/or coastal deposits. Further classification of this soil type is based on quantity and type of fill material available during development and varies locally and regionally.

The geology of Long Island is comprised of glacial and littoral sedimentary sequences belonging to the Atlantic Coastal Plain physiographic province, bounded on the north by Long Island Sound, on the east and south by the Atlantic Ocean and to the west by New York Bay and the East River. The exposed and near surface geologic features on Long Island are a product of receding continental glaciers that fed three predominant aquifers in the regions. The Upper Glacier Aquifer which is at near-ground surface and ranges from 100 to 440 feet in thickness beneath the Site, the Magothy aquifer system, consisting of sands and fines, and the Lloyd aquifer system consisting primarily of coarse sands, marine clays and gravels.

Two distinct zones characterize the Upper Glacial Aquifer. The upper zone (commonly 0-to-140 feet thick) consists of sandy and silty till deposits, and the lower zone (166-to-300 feet thick) consists of fine to medium sands grading to coarse sands and fine gravels. The lower zone of this unit also contains thin, discontinuous lenses of silt and clay. Underlying the Upper Glacial Aquifer is the Magothy Formation, which is characterized by Cretaceous deltaic sediments consisting of fine to medium sand interbedded with clay and sandy clay of moderate permeability and silt and clay of low to very low permeability. The base (66 to 200 feet) may commonly contain coarse sand and gravel. The Lloyd aquifer, which lies immediately above meta-igneous bedrock, is approximately 0-566 feet thick, and occurs 200 to 1,800 feet below the surface. The Lloyd Aquifer contains fine to coarse sand and gravel with a clayey matrix with layers of silty clay. Consolidated clay separates these aquifers. The Raritan clay, a regionally thick marine clay, separates the Magothy aquifer from the Lloyd aquifer.

Based upon the topographic map (USGS – Far Rockaway Quadrangle), regional groundwater flow direction is presumed to be northwest. It should be noted that there are localized variations in groundwater flow direction due to man-made subsurface structures, including fill material, variable formation lithology and topography. Hydrologic conditions in the vicinity of the Site may also be subject to variations in seasonal precipitation and climate change.

Based on corporate records obtained by IEC, a Phase II Environmental Site Investigation (ESI) conducted by Tenen Environmental LLC in July 2018 at the Site identified fill material, containing sand, gravel, cobbles, brick, coal, and glass fragments between one (1) and three (3) feet bgs. The fill material was reportedly underlain by fine to coarse tan sand with some silt. Groundwater was encountered at approximately 17 feet bgs and the groundwater flow direction was estimated to the northwest. During a partial Remedial Investigation (RI) performed by IEC in October 2020, three (3) permanent groundwater monitoring wells were installed across the Site and groundwater was encountered at approximately 17-feet bgs.

The elevations of the installed monitoring wells were surveyed relative to a permanent benchmark on Site. The resultant groundwater flow direction at the Site was determined to be to the north by northwest.

1.4 Site Records Search

A search of available records has been completed for the Site in accordance with DER-10 Chapter 3, Section 3.1(a)2 Included below are records and documents reviewed as part of three (3) Phase I Environmental Site Assessments (ESAs):

- Phase I ESA for 13-12 Beach Channel Drive (Lot 5) by Singer Environmental Group, LTD. November 7, 2018
- Phase I ESA Review Letter for 13-16 Beach Channel Drive (Lot 6) by Singer Environmental Group, LTD. –
 September 18, 2018
- Phase I ESA Review Letter for 13-24 Beach Channel Drive (Lot 7) by Singer Environmental Group, LTD. –
 September 21, 2018
- Tenen Environmental, LLC Due Diligence Phase II Environmental Site Investigation (ESI), August 2, 2018

1.4.1 Historical Aerial Photographs, Sanborn Maps and City Directories

Historical documents for the Site which were reviewed as part of the documents cited in Section 1.4 are summarized below. Refer to **Appendix A** for the City Directories and **Appendix B** for Previous Environmental Reports reviewed.

13-12 Beach Channel Drive (Lot 5)

• City Directory listings from **1976** through to **2014** list the property as being occupied by Kentucky Fried Chicken (KFC).

13-16 Beach Channel Drive (Lot 6)

- In **1895**, the property was reportedly a part of a larger residential lot and was developed with a small shed.
- Historical information depicts the current three-story building was constructed at some time between
 1924 and 1933, at which time was utilized solely as a residence.
- In 1950, a small garage building was demolished, and the building was reportedly converted to partial commercial use.
- In 1962, the building was reportedly occupied by an animal hospital.
- In 1990, the building was reportedly vacated by the animal hospital, and was instead utilized for benign commercial and retail.
- At the time of the Phase I ESA (2018), the building's basement was occupied by World Outreach Evangelical Ministry, with the upper floors utilized as six (6) residential apartments.

13-24 Beach Channel Drive (Lot 9)

- Sanborn maps dated **1895** and **1912**, reportedly depict the property and surrounding lots developed with several small sheds and a barn.
- These structures were depicted as having been demolished circa 1933, and Sanborn maps dated 1951 depict the property occupied by Auto Laundry.

• The property usage reportedly remained consistent up to the most recent Sanborn map dated 2017.

1.4.2 New York City Department of Buildings Records

On January 8, 2021, IEC reviewed documents held on file with the New York City Department of Buildings (DOB) online database. Several historical certificates of occupancy (COs) were retrieved from said database. Refer to **Appendix C** for the COs reviewed. The following records for the Site were obtained:

- CO 120426 was issued for 13-10 Beach Channel Drive (which included Lots 1,5 and 6), on January 7, 1958
 for an open parking lot for more than five motor vehicles.
- CO 179220 was issued for 13-12 Beach Channel Drive, on September 23, 1970 for an eating place with accessory parking for 12 cars.
- CO 217074 was issued for 13-24 Beach Channel Drive, on October 27, 1992 for an Automotive Laundry facility.

1.4.3 Environmental Records

Environmental records reviewed for the Site as part of the three (3) Phase I ESAs, indicate the Site was identified in the Environmental Data Resources, Inc. (EDR) report under the following databases: E-Designation for Hazardous Materials, Air Quality, and Noise. Refer to **Appendix D** for the EDR report.

The Site was listed on the EDR proprietary E-DESIGNATION database with E-designation E-232 for:

- Air Quality HVAC fuel limited to natural gas;
- Noise Window Wall Attenuation and Alternate Ventilation; and
- Hazardous Materials Phase I and Phase II Testing Protocol.

1.5 Summary of Previous Environmental Investigations

Please refer to **Appendix B** for copies of previous environmental reports, and **Plates 3**, **4**, **and 5** for Previous Investigation sample locations.

Singer Environmental Group, LTD (SEG) Phase I ESA, November 7, 2018

The Property (13-12 Beach Channel Drive – Lot 5) is approximately 10,500 square feet in area and is developed with a 1-story commercial building occupied by a KFC restaurant. SEG concluded the following information based on results of the Phase I ESA:

- According to Environmental Data Resources (EDR), a dry cleaner is listed at 21-40 Mott Avenue from 1975 through 2014. According to EDR, this site is listed at a lower elevation than the subject property.
- A commercial building with a sign stating "Cleaners" is located to the east of the subject property.
 According to EDR, a dry cleaner is listed at 20-88 Mott Avenue from 1986 through 2014. This site is located across the street from the subject property.

- The subject property is an "E" Designated site with the NYC Department of Planning for Hazmat and Noise.
- Due to the fact that the site has an E-Designation for Hazardous Materials, in accordance with OER's
 (Office of Environmental Remediation) requirements, prior to obtaining a building permit for
 redevelopment of the Site, the following must be performed: 1) preparation of a Phase II
 InvestigationWork Plan, 2) implementation of an OER-approved Phase II Investigation, 3) preparation
 of a Phase II Investigation/Remedial Investigation report, and 4) preparation of an OER approved
 Remedial Action Work Plan.
- While the Noise E-Designation of the site is not considered a recognized environmental condition, in accordance with OER's requirements, prior to obtaining a building permit for redevelopment of the Site, a Noise Remedial Work Plan must be prepared and approved by OER.

Singer Environmental Group, LTD (SEG) review of Environmental Business Consultants (EBC) Phase I ESA, September 18, 2018

SEG concluded the following information based on a review of the EBC Phase I ESA:

- The Property (13-16 Beach Channel Drive Lot 6) is identified by the street address of 13-16 Beach Channel Drive and as Borough 4- Block 15528-Lot No. 6. The site was a portion of a larger residential property and developed with a small shed (center) from at least 1895. Between 1924 and 1933, the shed was demolished, and the property developed with the existing 3-story building, utilized as a residence, with a small, detached garage adjacent to the east. The garage was demolished in the late-1950's and the building partially converted for commercial use, with an animal hospital present by at least 1962. The animal hospital vacated the building circa 1990, with the building occupied by multiple commercial/retail and residential tenants since that time. The property is currently developed with a 3-story mixed use
 - (commercial/residential) building, with a basement. The building is occupied by World Outreach Evangelical Ministry (basement) and six residential apartments.
- While no physical evidence of a current underground storage tank (UST) was identified at the site, one
 ARA/LAA job is listed for the site for the installation of a new boiler and conversion from oil to gas. SEG
 recommended that clarification be made to identify the current heating system of the building, and an
 opinion be rendered on the former oil tank at the property.

Singer Environmental Group, LTD (SEG) review of Tenen Environmental (Tenen) Phase I ESA, September 21, 2018
SEG concluded the following information based on a review of the EBC Phase I ESA:

• The Site (13-24 [Lot 9] to 13-30 Beach Channel Drive), Tax Block 15528, Lots 9, 12, and 112, is an irregularly shaped parcel on the east side of Beach Channel Drive. The total Site area is approximately 17,235 square feet (SF). The Site is currently developed with one-story commercial buildings, and occupied by a car wash, salon, barber, deli, and fast-food restaurant. Note, only Lot 9 is part of the proposed RIWP.

- Lot 9 is currently occupied by a car wash and has historically been identified by Sanborn maps as an "auto laundry." An existing subgrade oil-water separator is located on the south side of the building.
- The Site was listed on the EDR proprietary E-DESIGNATION database with E-designation E-232 for Air
 Quality HVAC fuel limited to natural gas, Window Wall Attenuation and Alternate Ventilation, and
 Hazardous Materials Phase I and Phase II Testing Protocol.
- Due to the fact that the site has an E-Designation for Hazardous Materials, in accordance with OER's
 (Office of Environmental Remediation) requirements, prior to obtaining a building permit for
 redevelopment of the Site, the following must be performed: 1) preparation of a Phase II
 InvestigationWork Plan, 2) implementation of an OER-approved Phase II Investigation, 3) preparation
 of a Phase II Investigation/Remedial Investigation report, and 4) preparation of an OER approved
 Remedial Action Work Plan.
- While the Noise and Air E-Designation of the site is not considered a recognized environmental condition, in accordance with OER's requirements, prior to obtaining a building permit for redevelopment of the Site, a Noise and Air Remedial Work Plan must be prepared and approved by OER.

Tenen Environmental, LLC Due Diligence Phase II Environmental Site Investigation (ESI), August 2, 2018

Tenen conducted a Phase II ESI on Lots 6, 9, 12, and 112 on July 23 and 24 2018. As part of the investigation one (1) soil boring (SB-1) and one (1) temporary groundwater monitoring well (TW-1) were installed on Lot 6, and one (1) soil boring (SB-2) and one (1) temporary groundwater monitoring well (TW-2) were installed on Lot 9. Category B Deliverables were not obtained for the samples collected by Tenen. Additionally, the portions of the investigation conducted on Lots 12 and 112 are not relevant to this RIWP. See **Plate 3** for Soil Exceedance Map and **Table 1** analytical summary of retrieved data. Tenen concluded the following information based on results of the Phase II ESI:

- Fill material, containing sand, gravel, cobbles, brick, coal, and glass fragments, was encountered between one and three feet below grade (ft-bg) at the borings SB-1 and SB-2. The fill material was underlain by fine to coarse tan sand with some silt. Groundwater was encountered at approximately 17 ft-bg. The regional groundwater flow direction was estimated to be to the northwest.
- The collected soil samples were analyzed for VOCs, SVOCs, and metals, while groundwater samples were analyzed for VOCs and SVOCs.
- No VOCs or SVOCs were detected in soil samples (collected from 0-2 fbg) at concentrations above applicable NYCRR Part 375 Protection of Groundwater (PGW) or Restricted Residential (RR) Soil Cleanup Objectives (SCOs). Of note, the VOC Tetrachloroethylene (PCE) was detected in SB-1 (0-2') but at concentrations below applicable PGW and RR SCOs.
- The following compounds were detected in soil samples collected at the Site in exceedance of regulatory standards:

	Results	(mg/kg)	Standards (mg/kg)		
Compound	Compound SB-1 (0-2')		PGW SCOs	RR SCOs	
Lead	166	74.7	63	400	

Mercury	0.669	-	0.18	0.81
Zinc	376	205	109	10,000

Note: Samples not included in the table did not display regulatory exceedances

 The following compounds were detected in groundwater samples collected at the Site in exceedance of NYSDEC Ambient Water Quality Standards (AWQS):

	Result	ts (ug/L)	Standards (ug/L)
Compound	TW-1	TW-2	NY AWQS
PCE	16	-	5
Benzo(a)anthracene	0.03	-	0.002

Note: Samples not included in the table did not display regulatory exceedances

Tenen concluded that the metals detected in shallow soil samples could be attributed to "historic fill",
while the PCE in groundwater sample TW-1 was likely attributed to "upgradient surrounding property usage."

Impact Environmental Closures (IEC) Partial Remedial Investigation (RI), October/November 2020

IEC performed a Partial RI in October/November 2020, in accordance with an New York City Office of Environmental Remediation (NYCOER) approved Remedial Investigation Work Plan. The purpose of the Partial RI was to provide a baseline for soil, groundwater, and soil vapor conditions on the site, with a plan to complete the remainder of the Remedial Investigation based on the results and conditions of the Partial RI. See **Plates 3**, **4**, **and 5** for previous sample locations and **Tables 1**, **2**, **3 and 4** for Analytical Summaries. The following is a summary of the Partial RI:

- Prior to any sub-surface investigation work, a public 811 Markout was called. In addition, a private geophysical survey was performed using ground penetrating radar (GPR) and line locating tools, in order to pre-clear the proposed sample locations, and to determine the presence of any sub-grade utilities or obstructions/anomalies. No such obstructions or anomalies were detected in the locations scanned.
- Six (6) soil probes (designated SB-1 through SB-6) were installed by IEC with a Geoprobe. The soil probes were installed to determine the soil conditions across the site and were installed at depths representative of the excavation depths of the proposed redevelopment. Each soil boring was installed to a terminal depth of 4-feet bgs, and samples were collected from two intervals: shallow interval from 0-2 feet bgs, and intermediate interval from 2-4-feet or 4-6-feet bgs.
 - Soil boring SB-1 was installed in the southern corner of the property, on Lot 5.
 - o Soil boring SB-2 was installed in the eastern corner of the property, on Lot 9.
 - Soil boring SB-3 was installed in the northern corner of the property, on Lot 9.
 - Soil boring SB-4 was installed in the southwestern corner of the property, on Lot 5.
 - Soil boring SB-5 was installed along the eastern boundary of the property, on Lot 6.
 - o Soil boring SB-6 was installed in the center of the property, on Lot 6.
- A total of 12 soil samples were submitted for laboratory analysis. Each soil sample was analyzed for NYCRR
 Part 375 List VOCs, SVOCs, metals, PCBs, and pesticides.

^{- =} no regulatory exceedance

^{- =} no regulatory exceedance

• The following compounds were detected in soil samples collected at the Site in exceedance of regulatory standards:

		Results	Standards (mg/kg)			
Compound	SB-1 (0-2') SB-4 (0-2') SB-4 (2-4') SB-5 (0-2')				PGW SCOs	RR SCOs
Lead	168	190	76.6	77.1	63	400
Mercury	0.506	-	-	0.235	0.18	0.81
Zinc	-	200	-	-	109	10,000
PCE	0.88	-	3.2	-	1.3	19

		Results	Standards (mg/kg)			
Compound	SB-1 (0-2')	SB-4 (0-2')	SB-4 (2-4')	SB-5 (0-2')	PGW SCOs	RR SCOs
С						
Benzo(a)anthracene	-	6.8	-	-	1	1
Benzo(a)pyrene	-	7	-	-	1	1
Benzo(b)fluoranthene	-	8.8	-	-	1	1
Benzo(k)fluoranthene	-	2.3	-	-	0.8	3.9
Chrysene	-	6	-	-	1	3.9
Dibenzo(a,h)anthracene	-	0.92	-	-	0.33	0.33
Indeno(1,2,3 cd)pyrene	-	4.2	-	-	0.5	0.5

Note: Samples not included in the table did not display regulatory exceedances

- During the investigation three (3) permanent and one (1) temporary groundwater monitoring wells designated MW-1, MW-2, MW-3, and TWP-1 were installed. Estimated groundwater depth was approximately17-feet bg. Each well was screened from between 15-25-feet bgs.
 - o MW-1 was installed in the southern corner of the property, on Lot 5.
 - o MW-2 was installed in the eastern corner of the property, on Lot 9.
 - \circ $\,$ MW-3 was installed in the northern corner of the property, on Lot 9.
 - o TWP-1 was installed in the southwestern corner of the property, on Lot 5.
- A total of four (4) groundwater samples were submitted for laboratory analysis. Each groundwater sample was analyzed for NYCRR Part 375 List VOCs, SVOCs, metals, PCBs, and pesticides.
- The following compounds were detected in groundwater samples collected at the Site in exceedance of NYSDEC Ambient Water Quality Standards (AWQS):

^{- =} no regulatory exceedance

		Result	Standards (ug/L)		
Compound	MW-1	/-1 MW-2 MW-3 TWP-1			NY AWQS
Chloroform 18		15	-	9.2	7
PCE 62		-	240	52	5
Manganese (dissolved)	344.1	-	-	-	300
Benzo(b)fluoranthene	-	-	-	0.03	0.002
Benzo(k)fluoranthene	-	-	-	0.01	0.002

Note: Samples not included in the table did not display regulatory exceedances

- As part of the Partial RI, each of the three (3) permanent groundwater monitoring wells were surveyed to determine the approximate groundwater flow direction. The elevations of the installed monitoring wells were surveyed relative to a permanent surface benchmark. The results of the survey indicate groundwater is flowing towards the north-northwest, see **Plate 6**.
- Finally, as part of the investigation, six (6) soil vapor probes (designated SV-1 through SV-6) were installed across the site to determine soil vapor conditions below the proposed building footprint. Soil vapor probes were installed between 3-5-feet below grade.
 - o SV-1 was installed on the southwestern corner of the property, on Lot 5.
 - O SV-2 was installed in the southeast corner of the property, on Lot 5.
 - o SV-3 was installed in the center of the property, on Lot 6.
 - o SV-4 was installed in the northwestern corner of the property, on Lot 9.
 - SV-5 was installed in the central north portion of the property, on Lot 9.
 - o SV-6 was installed in the northeastern corner of the property, on Lot 9.
- A total of six (6) soil vapor samples were submitted for laboratory analysis. Each soil vapor sample was analyzed for USEPA TO-15 List VOCs.
- The following compounds were detected in soil vapor samples collected at the Site in exceedance of regulatory standards:

	Results (ug/m3)							
Compound	SV-1	SV-2	SV-3	SV-4	SV-5	SV-6	NYSDOH In- door Air Guid- ance Values	
PCE	15,800	1,040	129	88.2	113	1,050	30	
TCE	-	2.42	-	-	-	-	2	

Note: Samples not included in the table did not display regulatory exceedances

Based on the results of the soil samples collected during the initial Partial RI, in particular the detected
presence of PCE at elevated concentrations at sample locations SB-1 and SB-4, on the south portion of the
property (Lot 5), supplemental confirmatory soil borings were installed at the locations of SB-1 and SB-4
on November 6, 2020. The purpose of these soil borings was to confirm the presence of PCE at these

^{- =} no regulatory exceedance

^{- =} no regulatory exceedance

locations, and to vertically delineate the contamination.

- As part of this supplemental sampling event, a representative bottom sample was also collected from an onsite drywell (DW-1), located on Lot 5.
- Each soil boring (designated SB-1A and SB-4A) was advanced down to a terminal depth of 10-feet bgs. Five (5) samples were collected from each soil boring at two-foot intervals (0-2', 2-4', 4-6', 6-8' and 8-10'). Initially, the 0-2' and 2-4' samples from each location were submitted for laboratory analysis for TCL VOCs. PCE was detected at elevated concentrations in SB-4A at 2-4', thus the SB-4A 4-6' sample was subsequently submitted for analysis to determine the if PCE contamination extended deeper. See Table 2 for Supplementary Investigation Analytical Results.
- The following compounds were detected in the supplemental soil samples collected at the Site in exceedance of regulatory standards:

			Standards (mg/kg)					
Compound	SB-1A (0-2')	SB-1A (2- 4')	SB-4A (0- 2')	SB-4A (2- 4')	SB-4A (4- 6')	Drywell-1	PGW SCOs	RR SCOs
PCE	0.049	0.00055	0.012	23	0.0021	0.019	1.3	19

Note: Samples not included in the table did not display regulatory exceedances

- It should be noted, that during the Partial RI, an active drycleaner was noted to abut the Site to the south, approximately 20-feet south of SB-1/SB-1A and 40-feet west of SB-4/SB-4A.
- Category B Deliverables were obtained for the sample analysis collected as part of this partial RI. A Data
 Usability Summary Report will be generated for this data and will be included in the final BCP Remedial
 Investigation Report.

1.6 Conceptual Site Model

The Conceptual Site Model (CSM) is developed to provide a description of the Site that is based on existing knowledge of relevant site features, the surface and subsurface conditions and impacted media. The goal of the Conceptual Site Model is to understand the identified contaminants of concern and the risk they pose to receptors. The CSM is a tool that is developed and refined as information is obtained during review of the site history and continues throughout site investigation and remedial actions.

This RIWP has included development of an initial CSM for the Site to conceptualize the relationship between contaminant sources and contaminants of concern, environmental media and receptors through consideration of migration and exposure pathways. This conceptual model is based on current Site conditions and surrounding land use as well as the planned future Site and surrounding land uses.

Figure 1, is a pictorial depiction of environmental hazards associated with contaminated soil, groundwater and soil vapor. Exposure pathways to human (e.g., incidental ingestion, dermal absorption, and inhalation) and ecological receptors are also indicated based on the current information available for the Site. This CSM presents an initial

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understanding of the known Site conditions, and will help to identify data gaps and help focus the data collection efforts. The CSM will be maintained and updated as new information is collected throughout the life cycle of the project.

The past use of the Site (Lots 5, 6 and 9) has been commercial and residential occupancy. Lot 5 (13-12 Beach Channel Drive) was undeveloped until the 1970s, at which point it was developed with a take-out restaurant, and most recently was a KFC restaurant with a drive through lane. Lot 6 (13-16 Beach Channel Drive) was originally a larger residential parcel and was developed with the current three-story building in the mid-1920s as a residence. This property has since been occupied by several commercial and retail establishments, most notably a church and animal hospital. The upper floors of the building have consistently been utilized as residential apartments. Finally, Lot

9 (13-24 Beach Channel Drive) was originally developed with a small shed until the 1950s, at which point it was developed with the current one-story building depicted as an 'Auto-Laundry' operation. Refer to Appendix A for City Directory Listings, and Appendix B for Previous Environmental Reports, and Appendix C for New York City Department of Building Certificate of Occupancies. Based on IECs review of historical documentation for the property, including Certificate of Occupancies, City Directories, and Sanborn maps, no site-specific Areas of Concern (AOCs) have been documented as it relates to historical Site usage. However, contaminants of concern (COCs) at the Site have been identified based in soil, groundwater and soil vapor samples collected during prior subsurface investigations.

Chlorinated VOCs (cVOCs), specifically PCE, have been identified in shallow soil on the southern portion of the property, and in groundwater and soil vapor beneath the entire Site. Based on the site's history, there is no documented use, storage, or generation of hazardous substances, including cVOCs. Therefore, until supplemental investigations are performed, it is suspected that the referenced contaminants are potentially attributed to offsite sources. Of note, there is an active dry-cleaning facility that abuts the property to the south (21-40 Mott Avenue), and an ad-joining BCP site (BCP #C241224), located across Redfern Avenue to the east (20-02 Mott Avenue), which was also aformer dry-cleaning facility (Former Snow White Cleaners), and has documented cVOCs, including TCE and PCE.

The cVOC PCE has been detected in soil vapor beneath the Site at concentrations above the NYSDOH Indoor Air Guidance Values. Refer to Plate 3, 4, and 5 for existing sample collection locations/detected analytes. Refer to Tables 1, 2, 3 and 4, for Previous Investigation Analysis Summary. The VOC PCE has been detected above the NYSDEC Protection of Groundwater (PGW) Soil Cleanup Objective (SCO) in shallow soil from 2-4-feet bgs at one (1) location within the southwest portion of the Site (previous boring SB-4/SB-4A). No other VOCs were detected in shallow or intermediate depth soil samples across the breadth of the Site during the previous environmental investigations. Several SVOCs indicative of historic fill material were detected in shallow soil samples from 0-2-feet bgs at one (1) location within the southwest portion of the Site (SB-4/SB-4A) including: benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, chrysene, dibenzo(a,h)anthracene, and indeno(1,2,3-cd)pyrene.

Several heavy metals, also indicative of historic fill material, were detected in shallow soils from 0-2 and 2-4-feet bgs in samples collected from across the Site, including lead, zinc, and mercury. The cVOC PCE was detected in groundwater at four (4) onsite groundwater monitoring wells located across the Site, above the NYSDEC Groundwater Quality Standards (GQS) during previous environmental investigations.

Chemicals detected at concentrations greater than these standards and criteria are identified as chemicals of potential concern. Based on the available information, the CSM postulates that the cVOCs detected in groundwater and soil vapor have possibly migrated via groundwater onto the Site from an off-site source(s) or from possible undocumented disposal of spent dry-cleaning waste from adjoining or surrounding operations. Based on a review of former occupants of the onsite buildings, no manufacturing or industrial use is documented on the Property that would

have contributed to the cVOC contamination detected. Due to the presence of polyaromatic hydrocarbon (PAH) semi-volatile organic compounds and heavy metals in overburden, it appears that urban/historic fill is present is that of "made land" and infilling, site regrading, or from previous building demolition, that may be responsible for the presence of these contaminants.

A geotechnical report by GEO Design (See **Appendix B**), performed in December 2020 advanced boreholes down to a terminal depth of 100-feet bgs. Bedrock was not encountered during the investigation. Groundwater has been encountered at approximately 17-feet bgs in previous investigations and has been determined to flow in a north-northwesterly direction. The unconsolidated overburden soil consists of urban fill materials in the top 2-3-feet of section, with native underlying overburden consisting of granular soils, fine to medium grain brown sand, with trace gravel and silt. The geotechnical investigation detected a silt/clayey silt material from 33.5-feet bgs up to 42-feet bgs, underlain by a confining clay layer from 48.5-feet bgs up to 65.1-feet bgs. The Site has a sloped topography, with the eastern portion of the Property being approximately 7-10-feet higher in elevation relative to the western portion, and the nearest surface water body to the Site is the Motts Basin, located approximately 1,550 feet to the north-northwest. The potable water supply for the area of the Site is provided by the New York City Water Authority (obtained via the New York City Water Supply System) where the potable water supply is obtained from the Catskill/Delaware watersheds. The Catskill/Delaware watersheds consist of 19 reservoirs which use a series of tunnels and aqueducts to transfer water to municipalities. Groundwater in the area of Queens County is not currently used for potable purposes.

The Site is in an area which is residential mixed with commercial usage along collector roads. The Site is currently occupied by three (3) unoccupied buildings; one (1) one-story former KFC restaurant, one (1) three-story former church/residential apartment building, and one (1) one-story former carwash. The Site is bordered to the north by a retail strip mall and several multi-family dwellings followed by Dix Avenue, to the east by Redfern Avenue followed by an ongoing residential construction, to the south by a retail strip mall (which includes one active dry cleaner) followed by Mott Avenue, and to the west by Beach Channel Drive followed by several commercial properties

including a grocery store, a laundromat, and a Taco Bell restaurant. Once redeveloped, the use of the Site will be as a homeless shelter and affordable housing apartment building.

1.7 Purpose and Scope

The previous subsurface investigations completed at the Site do not constitute a comprehensive characterization of the Site. Therefore, BCD Owner LLC intends to perform the tasks listed below to supplement the data and findings of previous investigations in accordance with Environmental Conservation Law (ECL) Article 27, Title 14 (Brownfield Cleanup Program). This purpose of the RIWP is to collect sufficient information to identify and delineate potential contamination sources and efficiently designed remedial measures. Specifically, the results from the previous Site investigation in conjunction with the findings of the RI will be used to:

- To complete the delineation of the nature and extent of soil, soil vapor and groundwater contamination on the Site, in order to facilitate redevelopment.
- Define the vertical extent of Site fill material, as applicable.
- Determine the hydrogeological characteristics of the Site (e.g., geology, hydrogeology, depth to saturated zone, hydrologic gradients, soil porosity, transmissivity).
- Identify potential migration pathways through environmental media (e.g. soil, groundwater and soil vapor) and actual or potential receptors of contaminants through soil, groundwater and soil vapor.
- Establish background areas of contamination, as applicable.
- Determine the extent to which contaminant concentrations pose threats to public health and the
 environment and evaluate impacts to potential fish and wildlife resources.
- Collect sufficient data to evaluate actual and potential threats to public health and the environment inclusive of exposure pathway.
- Develop Remedial Action Objectives (RAOs) for the Site.
- Provided detailed laboratory analysis and waste characterization, in order to determine the transport and disposal logistics; including acceptable disposal facilities, and costing for future redevelopment.
- Provide sufficient information to allow for the identification of potentially feasible remedial alternatives.

The development of RAOs for the Site will be based on the contaminant characterization results obtained during the RI, exposure pathways and risk valuation data. Based on the current knowledge of potential Site issues, the RAOs for the Site may require implementation of remedial actions designed to remove or cover impacted soil/fill material.

1.8 Project Organization and Responsibilities

Names, contact information, and roles of the principal personnel who will participate in the investigation, including laboratory subcontractor, are listed below. Please see **Appendix G** for Key Personnel resumes.

- Kevin Kleaka, PG, Qualified Environmental Professional, will serve as the Project Director and will review and certify work performed under this RIWP as completed by IEC personnel under his direction and supervision
- For Greg Mendez-Chicas (Senior Project Manager) / Christopher Connolly (Project Manager), will be responsible for the overall coordination associated with implementation of RIWP. They will coordinate and supervise IEC project and field engineers/scientists, as well as subcontractors; ensure adherence to and successful completion of RIWP tasks; interface with the data validator during development of Data Usability Summary Reports and subsequent reporting and documentation of the work performed.
- > Xin Yuan, Project Engineer, will be responsible for the review and signoff of all project-related documents and proposed remedial investigatory work.
- Michael Bluight, PG, will be the Quality Assurance and Quality Control (QA/QC) officer, and will be responsible for the overall quality assurance and review of the project deliverables. He will interface with the Project Managers to address technical issues and provide quality control for the entire project.
- ➤ Daniel Fruhauf / Leif Robertson, will be the Field Team leaders, responsible for direction of the field program for implementation of the remedial investigation and remedial tasks. Responsibilities will include maintaining quality assurance policies related to various media sample collection, interface with the laboratory, well development and directing subcontractor activities, and ensuring the successful completion of all RIWP field activities.
- ➤ Heather Hayden, Alpha Analytical Laboratory Contractor, will be responsible for the receipt, analysis using approved USEPA Methodology, Quality Control/Quality Assurance, and subsequent delivery of data relating to soil, groundwater, and soil vapor/indoor air/outdoor air samples collected as part of the Remedial Investigation.
- > Christina Rink, Laboratory Data Consultants, Inc., Data Validator, will be responsible for reviewing, data QA/QC verification, and summarizing all Category B deliverables provided by the laboratory.

2 INVESTIGATION SCOPE

The previous environmental subsurface investigations completed at the Site have provided documentation of impacts to vadose zone soil, soil vapor and groundwater at select areas. The objective of this RI is to collect data to define the nature and extent of contamination in soil, groundwater, and soil vapor such that a qualitative human health exposure assessment can be developed and a remedial action work plan can be designed for the Site. The proposed RI will focus on further investigation of AOCs and other areas of the BCP Site where sampling has not yet been performed. Data collected during the RI will be used to identify potential health risks and to evaluate remedial alternatives.

This Remedial Investigation Work Plan (RIWP) proposes the following scope of work:

- Advancement of two (2) exploratory soil borings in sample locations where elevated PCE was detected to screen and accurately assess the silt/clayey silt material from 33.5-feet bgs up to 42-feet bgs and clay layer from 48.5-feet bgs up to 65.1-feet bgs identified during the aforementioned geotechnical investigation. Continuous field screening, and collection for laboratory analysis of a at 1-foot above the water table and from 1-footabove or in contact of each transitional or confining layer;
- Completion of eight (8) ten-foot step-out soil borings (four [4] surrounding each of the exploratory boreholes to both vertically and horizontally delineate the presence of PCE detected in prior soil samples SB-1 and SB-4, and the field screening and laboratory analysis of a total of up to 32 samples, as described below;
 - Shallow interval at 0-2 feet bgs
 - Intermediate interval at 6-8 feet bgs, or at the depth exhibiting evidence of contamination including odors, staining or highest PID reading. If no indication of contamination or PID measurement (>20 ppmV) are detected, a sample will becollected 1-foot above the groundwater table which is estimated at 17 feet bgs.
 - Water table interval
 - Bottom of depth of contamination (if observed)
- Installation of six (6) soil borings across the Site for the collection and analysis of three (3) depth intervals
 per boring, for field screening and laboratory analysis of up to 14 soil samples;
 - Shallow interval at 0-2 feet bgs
 - Intermediate interval at 6-8 feet bgs, or at the depth of the highest PID reading
 - Deep interval, directly above the groundwater table, approximately 15-17 feet bgs.
- Collection and laboratory analysis of one (1) sludge sample from the existing oil-water separator on Lot 9;
- The performance of a sub-slab depressurization pilot test to evaluate recoverability of soil vapor contaminants.
- Up to four (4) single and four (4) nested permanent monitoring wells, for a total of 12 monitoring wells, are anticipated for installation on the Site. The four (4) single wells will be installed to 25 fbg and screened between 15-25 fbg. The four (4) nested wells will consist of two (2) wells depths per location; the shallow wells will be installed to 32 fbg and screened between 30-32 fbg, while the intermediate wells will be installed to 42 fbg and screened between 40-42 fbg; and,

• Installation of six (6) soil vapor points throughout the property for the collection of six (6) soil vapor samples to further define the extent of cVOCs across the Site and assess the potential for off-site migration in relation to downgradient receptors. Soil vapor samples on the lower elevation northern and southern portions of the Site will be collected from approximately 3-feet bgs, while samples from the central portion of the Site will be collected at approximately 5-feet bgs.

The field investigation will be completed in accordance with NYSDEC DER-10 Guidance, the procedures specified in the Health and Safety Plan (HASP) and Quality Assurance Project Plan (QAPP) included as **Appendix E** and **Appendix F**, respectively. The site access agreement is included in BCP Application.

Modifications to this scope of work may be required: 1) in the event that unexpected contamination is detected and additional analytical data is needed; and 2) to attempt to confirm that impacts are adequately characterized and delineated in compliance with the Brownfield Law, regulations and applicable investigation guidance documents (e.g., DER 10). The NYSDEC and NYSDOH will be contacted to obtain approval for any modifications.

2.2 Utility Clearance

Prior to initiation of intrusive activities, Dig Safely New York (Call 811) will be contacted by the environmental contractor a minimum of three business days in advance of the work and informed of the intent to perform invasive subsurface work at the Site. A private utility mark out will also be performed on the Site. Should underground utilities on the property interfere with intrusive activities, the Applicant and the NYSDEC will be contacted to discuss possible relocation of a sampling point and/or mitigating measures.

2.3 Geophysical Survey/Ground Penetrating Radar

A remote sensing ground penetrating radar (GPR) survey will be performed over the planimetric surface of the investigation area not previously surveyed to assist with the location of underground utilities and identify potential anomalies that may be present beneath the Site. This remote survey will be performed in accordance with good commercial and customary practice and generally accepted protocols within the consulting industry. IEC does not accept responsibility for survey limitations due to inherent technological limitations or Site-specific conditions.

2.4 Soil Vapor Investigation

The main soil vapor contaminants detected during the previous sub-surface investigations above the relevant NYSDOH Indoor Air Guidance values were PCE and TCE. These samples were collected during IEC's Partial Remedial Investigation in October 2020 from six (6) soil vapor sampling points (SV-1, SV-2, SV-3, SV-4, SV-5, and SV-6) across the Site. The soil vapor sampling implants were inserted at an appropriate depth between 3' bgs and 5' bgs based on the elevation of the Site, and proposed depth of future excavation. The highest concentrations of PCE detected was in soil vapor point SV-1 (at 15,800 μ g/m³), in the southwest corner of the property. Only one (1) of the six (6) samples detected elevated concentrations of TCE above the NYSDOH Indoor Air guidance values, SV-2 (at 2.42 μ g/m³), located in the southeast portion of the property.

This RI proposes installation of up to six (6) additional soil vapor monitoring points. As the existing structures are currently unoccupied and will be demolished prior to the redevelopment of the Site, no indoor air or outdoor ambient air samples will be collected. Soil vapor implants will be set at a depth of approximately 5 feet at the higher elevation

(Lots 5 and 6) and 3 feet at the lower elevation (Lot 9) (the anticipated depth of site wide foundation excavation) or 1-2 feet above the ground- water interface, whichever is encountered first. The vapor implants will be installed with a Geoprobe drill rig in

accordance with ASTM Standard D6914-04 to confirm soil vapor conditions. A 6-inch-long sampling implant, constructed of 3/8-inch diameter stainless steel wire wrapped screen, will then be inserted down the bore hole using the Geoprobe at an approximate depth interval of 3 or 5 fbg, relative to proposed excavation depths associated with potential subsurface redevelopment activities of the Site. The implants will be advanced down the bore hole to an anchor point. As the probe rods are removed from the bore hole, the implant and associated Teflon tubing remained firmly anchored at the bottom. A porous, inert backfill material (i.e. washed No. 2 sand) will be used to create a sampling zone of one (1) to two (2) feet in length. The soil vapor monitoring points will be sealed above the sampling zone with bentonite slurry to prevent outdoor air infiltration and the remainder of the borehole will be filled with concrete. Sampling will occur for the duration of 2 hours.

Samples will be collected in 2.75-liter Summa canisters that have been certified clean by the laboratory and samples will be analyzed by using USEPA Method TO-15. Flow rate for both purging and sampling willnot exceed 0.2 L/min. 24-hours following soil vapor probe installation, one to three implant volumes shall be purged prior to the collection of any soil-gas samples. A sample log sheet will be maintained summarizing sample identification, date and time of sample collection, sampling depth, identity of samplers, sampling methods and devices, soil vapor purge volumes, volume of the soil vapor extracted, vacuum of canisters before and after the samples are collected, apparent moisture content of the sampling zone, and chain of custody protocols.

As part of the vapor intrusion evaluation, a tracer gas will be used in accordance with NYSDOH protocols to serve as a quality assurance/quality control (QA/QC) device to verify the integrity of the soil vapor probe seal. A container (box, plastic pail, etc.) will serve to keep the tracer gas in contact with the probe during testing. A portable monitoring device will be used to analyze a sample of soil vapor for the tracer gas prior to sampling. If the tracer sample results show a significant presence of the tracer, the probe seals will be adjusted to prevent infiltration. At the conclusion of the sampling round, tracer monitoring will be performed a second time to confirm the integrity of the probe seals.

A summary of the RI analytical program including appropriate field/equipment blanks and of sample parameter hold times and sample container requirements are provided in Tables 1 and 2 of the Quality Assurance Project Plan (QAPP), located in **Appendix F**. Refer to **Plate 7** for the proposed soil vapor point locations.

2.5 Soil Investigation

2.5.1 Soil Boring Advancement

The soil borings completed as part of the previous subsurface investigations indicated the presence the cVOC PCE at concentrations above the NYSDEC PGW SCOs in shallow soils on the southern portion of the Site, and is considered an

on-Site source. In addition, shallow soil borings from across the Site indicated the presence of historic fill in shallow soils beneath the Site based on the analytical data, with exceedances of NYSDEC Protection of Groundwater Soil Cleanup Objectives by several heavy metals (including lead, mercury, and zinc) and several poly-aromatic hydrocarbon (PAH) SVOCs. The main soil vapor contaminants identified above the NYSDOH Indoor Air Guidance values were PCE and TCE. As mentioned in Section1.6, the referenced cVOCs detected in groundwater and soil vapor are suspected to have possibly migrated via groundwater onto the Site from an off-site source(s) or from possible undocumented disposal of spent dry-cleaning waste from adjoining or surrounding operations. One of the goals of this RI is to confirm a migration pathway between the suspected off-site sources and the on-site area of concern as itrelated to cVOCs.

A total of 16 soil borings are proposed on the Site which are located throughout the Site, in areas that are accessible to drilling apparatus. Six (6) of the soil borings (SB-7 through SB-12) will be located across the Site in areas not investigated as part of previous investigations. Additionally, 10 soil borings (SB-1B, SB-1N/E/S/W, SB-4B, and SB-4N/E/S/W) will be used to vertically and horizontally delineate PCE on the southern portion of the Site with respect to areas where PCE was detected in previous samples and evaluate potential upgradient sources that may be migrating onto the Site. Refer to Plate 7 for these boring locations. The soil borings will be initially advanced/pre-cleared using soft dig techniques to a depth of at least 5 fbg to prevent damage to potential unknown underground utilities and soil samples will be collected using a decontaminated stainless-steel hand auger or equivalent sampling tool. Two (2) exploratory soil borings, designated SB-1B and SB-4B, will be advanced down to a depth of approximately 35-40 feet bgs or until a confining layer is encountered, whichever is shallower, to assess the silt and/or clay layers identified in the January 2021 Geotechnical Investigation estimated at 33.5-feet bgs for silt/clayey silt and 42-feet bgs for clay. The eight (8) delineation soil borings (SB-1N/E/S/W and SB-4N/E/S/W) will be advanced down to the water table, estimated at 17-feet bgs, in order to horizontally and vertically delineate the presence of PCE in overburden soils. Finally, the six (6) investigatory soil borings will also be advanced to a terminal depth of approximately 17-feet bgs to investigate potential on-site sources of contaminants and further characterize the quality of overburden across the Site.

The above-mentioned soil borings will be installed using a Geoprobe® hydraulically powered direct push rig, or similar direct push drill apparatus. For the purposes of this RIWP, a Geoprobe® drill rig is suggested. The Geoprobe® applies both static force and hydraulically powered percussion hammers for sampling tool placement (static down forces up to 18,000 pounds combined with percussion hammers of eight horsepower continuous output). A probedriven sampler consisting of a decontaminated steel hollow probe lined with a non-reactive transparent plastic sleeve allows soil to enter as it was advanced. The Geoprobe® facilitates the collection of continuous and discrete soil samples secured at the desired depths. Non-dedicated sample collection tools and equipment will be decontaminated between boring locations using potable tap water and a phosphate-free detergent (e.g., Alconox).

2.5.2 Field Screening

Headspace analysis will be performed on soil samples utilizing a portable photo-ionization detector (PID) to measure hydrocarbon concentrations in the secured samples. Headspace analysis is conducted by partially filling a clean wide-mouth glass container or clean plastic food grade zip-lock bag with a sample aliquot and sealing the jar top with aluminum foil or sealing the zip lock bag thereby creating a void. This void is referred to as the sample headspace. To facilitate the detection of possible hydrocarbons contained within the head space, the container will be agitated for a period of about thirty (30) seconds. A Photovac Micro-Tip PID will be inserted through either the foil or into the plastic zip lock bag into the headspace to measure the total VOCs present.

A PID utilizes the principle of photoionization for detection and measurement of VOCs. A PID does not respond to all compounds similarly; rather, each compound has its own response factor relative to its calibration. For this investigation, the PID will be calibrated to isobutylene span gas to yield total VOCs in parts per million by volume (ppm_v) referenced to benzene. VOC relative response factors for a PID calibrated to isobutylene are published by the manufacturer.

Visual and olfactory inspection of the soil sample aliquots recovered during advancement of the soil borings will also be conducted to identify lithology and signs of gross contamination. Color classifications will be made in accordance with the Munsell Classification System. Gradation classifications will be made in accordance with the Unified Soil Classification System (USCS).

2.5.3 Soil Sample Collection

Soil samples for laboratory analysis will be collected biased to locations of greatest suspected contamination. Representative soil samples from the six (6) investigatory soil borings for laboratory analysis are anticipated to be collected at approximately 0-2 fbg (shallow), 6-8 fbg, or the depth exhibiting the highest PID reading, and 15-17 fbg, directly above the water table(deep). Actual sample collection locations and depths will be selected in the field based on field observations and field screening, and any identified VOC impacts will be vertically delineated.

Up to 18 grab soil samples will be collected from the six (6) investigatory soil borings identified as SB-7 through SB-12: six (6) shallow (0-2' bgs), six (6) intermediate (approximately 6-8 fbg) or at highest PID reading, and six (6) deep (15-17 fbg) to define the sub-surface conditions beneath the Site and the laboratory analyses will include:

- Target Compound List (TCL) VOCs plus Tentatively Identified Compounds (TICs) by USEPA methods 8260C/5035
- TCL SVOCs plus TICs by USEPA method 8270D
- TCL Pesticides and herbicides by USEPA methods 8081B and 8151A
- PCBs by USEPA method 8082A

- Target Analytes List (TAL) Metals / Part 375 List metals (including cyanide and hexavalent and trivalent chromium) by USEPA Methods 6010C/7471B/9010C/7196A
- Per- and Polyfluoroalkyl Substances (PFAS) by USEPA Method 537
- 1,4-dioxane by USEPA Method 8270 SIM isotope dilution

Representative soil samples from the two (2) exploratory soil borings identified as SB-1B and SB-4B for laboratory analysis are anticipated to be collected immediately above or in contact with the upper transition layer and/or confining layer anticipated at 33.5 feet bgs for silt / silty clay or at 42 feet bgs for clay, to evaluate the presence of the cVOC PCE, or lack thereof. Furthermore, soil samples from the eight (8) step-out delineation soil borings proximal to SB-1B and SB-4B for laboratory analysis are anticipated to be collected at 0-2 feet bgs (shallow), and at the highest PID reading (intermediate) or, if no evidence of grossly impacted media is observed, the deeper sample will be collected from 1-foot above the water table anticipated at 17 feet bgs. Any VOC impacts encountered during field screening activities will be vertically delineated. Actual sample collection depths will be selected in the field based on field observations and field screening.

An estimated total of up to 38oil samples will be collected from the two (2) exploratory soil borings and eight (8) delineation borings and laboratory analyses will include:

 Target Compound List (TCL) VOCs plus Tentatively Identified Compounds (TICs) by USEPA methods 8260C/5035

Grab soil samples for VOC laboratory analysis will be collected using Encore or Terra Core sampling procedures. Representative grab soil samples for the other TCL and TAL analysis will be placed in pre-cleaned laboratory supplied sample collection containers. The sample containers will be appropriately labeled, stored in a cooler with ice (cooled to 4°C in the field) and submitted for analysis under proper chain of custody procedures to a NYSDOH Environmental Laboratory Approval Program (ELAP)-certified analytical laboratory. The laboratory will be required to furnish an equivalent ASP Category B deliverables package to facilitate data evaluation and preparation of a Data Usability Summary Report (DUSR) by a third-party validation expert. A summary of the RI analytical program including appropriate field/equipment blanks and of sample parameter hold times and sample container requirements are provided in **Appendix F**, the Quality Assurance Project Plan (QAPP) **Table 1** and **Table 2**. Refer to **Plate 7** for the proposed soil boring locations.

2.6 Groundwater Monitoring Well Installation and Sampling

Up to four (4) single and four (4) nested permanent monitoring wells, for a total of 12 monitoring wells, are anticipated for installation on the Site. The four (4) single wells (designated MW-5, MW-6, MW-10 and MW-11) will be installed to 25 fbg and screened between 15-25 fbg. The four (4) nested wells (designated MW-4, MW-7, MW-8 and

MW-9) will consist of two (2) wells depths per location; the shallow wells (MW-4s, MW-7s, MW-8s and MW-9s) will be installed to 32 fbg and screened between 30-32 fbg, while the intermediate wells (MW-4i, MW-7i, MW-8i and MW-9i) will be installed to 42 fbg and screened between 40-42 fbg. The purposes of the nested wells are to vertically profile cVOC concentrations and identify Dense Non-Aqueous Phase Liquid (DNAPL) that may have accumulated above a suspected confining layer (silt and clay) identified in the geotechnical evaluation (referenced in Section 1.6 of this report). These permanent groundwater monitoring wells will be installed by advancing the designated soil borings into the groundwater table to the designated interval depths. The monitoring wells will be used to evaluate groundwater flow direction and groundwater quality data. Should groundwater contamination be identified that appears to be from a hydraulically up gradient source, additional off-site investigation may be required to supplement the RI and NYSDEC review and approval of a supplemental plan. The anticipated location for groundwater monitoring wells on and off the Site is presented on Plate 7. A determination for well screen placements will be reviewed with the NYSDEC prior to well installation.

2.6.1 Monitoring Well Installation

A Geoprobe® track mounted rig or equivalent will be used to advance the designated soil borings to be completed as permanent monitoring wells, as applicable to the data indications and geology beneath the Site. Non-dedicated drilling tools and equipment will be decontaminated between boring locations using the procedures/methodology detailed in the QAPP provided in **Appendix F**.

The well point depth and construction will be determined based on evaluation of the soil boring and soil vapor data collected prior to well installation where contaminant distribution can be evaluated. The depth to groundwater is anticipated to be approximately 17 fbg based on previous environmental subsurface investigations performed at the Site. Bedrock has not been identified within the top 100-feet of overburden based on previous environmental and geotechnical investigations. Groundwater flow is anticipated in a north-northwesterly direction. Based on this groundwater flow information, the following monitoring well locations have been determined:

- MW4s/MW-4i: located in the center of the Site, directly down gradient from the active drycleaner.
- MW-5: located along the central eastern boundary of the Site.
- MW-6: located along the central northern boundary of the Site.
- MW-7s/MW-7i: located on the south portion of the site, proximal to the active dry cleaner.
- MW-8s/MW-8i: located on the south portion of the site, proximal to the active dry cleaner.
- MW-9s/MW-9i: located in the southeast corner of the Site, presumed either cross- or downgradient of 20-02 Mott Avenue (a former dry cleaning facility with documented impacts to groundwater).
- MW-10: located in the location of former boring SB-4 and proposed exploratory SB-4B in the southwest portion of the Site.
- MW-11: located along the western central boundary of the Site.

The anticipated location for groundwater monitoring wells on Site is presented on **Plate 7**. Additional off-Site wells may be required, and the locations reviewed with the NYSDEC. A determination for well construction and well screen placements will be reviewed with the NYSDEC prior to well installation.

The standard monitoring wells will be installed using 2-inch, inner diameter (ID), flush-joint schedule 40 polyvinyl chloride (PVC) casing with a flush-joint schedule 40 PVC, 0.010-inch machine slotted well screen. Nested wells will use 1-inch ID schedule 40 PVC casing and well screen. The specific construction details will be evaluated for each proposed well location and will be determined during the investigation based on the RI data collected prior to well installation. Each well screen interval and attached riser will be placed at the bottom of each borehole interval and a silica sand filter pack (Morie sand size #2) will be installed from the base of the well screen to a maximum of 2 feet above the top of the screen. Seals in the boreholes are constructed between sand packs. A two-foot bentonite chip seal will be installed around the casing above the filtration media and allowed to hydrate sufficiently to mitigate the potential for downhole grout contamination. A grout mixture will be placed above the bentonite seal to a point approximately one (1) foot below existing grade. Concrete will be used to fill the area surround 6 to 8-inches of the remaining well casing in conjunction with the installation of an eight- inch, steel flush mounted road box with an access cover in a concrete pad. The newly installed monitoring wells will be completed with lockable J-plugs.

2.6.2 Monitoring Well Development

Once completed, the newly installed monitoring wells will be developed in accordance with NYSDEC protocols. Development of the monitoring wells will be accomplished using a submersible pump with dedicated disposable polyethylene tubing. Field parameters including pH, temperature, turbidity, dissolved oxygen (DO), oxidation-reduction potential (ORP) and specific conductance will be measured periodically (e.g., every well volume or as necessary) during development. Field measurements will continue until they became relatively stable. Stability will be defined as variation between measurements of approximately 10 percent or less with no overall upward or downward trend in the measurements. The well development groundwater will be containerized in Steel 55-gallon DOT drums, labeled and stored on the Site until transport and disposal is arranged. The new monitoring wells will be allowed to equilibrate for a period of at least 72 hours prior to sample collection activities are initiated.

2.6.3 Groundwater Sample Collection

Groundwater sampling will be conducted with a submersible pump using the low-flow sampling procedures following USEPA guidance "Low Stress [low flow] Purging and Sampling Procedure for the Collection of Groundwater Samples from Monitoring Wells", dated September 19, 2017. During purging, field parameters will be measured including: water level drawdown, purge rate, pH, specific conductance, temperature, dissolved oxygen, turbidity and oxidation reduction-potential (ORP), every five minutes using a water quality meter (Horiba or similar) and a depth-to-water interface probe thatwill be decontaminated between wells. Samples should generally not be collected until the field parameters have stabilized. Field parameters will be considered stable once three sets of measurements are within ±0.1 standard units for pH, ±3% for conductivity and temperature, ±10 millivolts for ORP, and ±10% for turbidity and dissolved

oxygen. Purge rates should be adjusted to keep the drawdown in the well to less than 0.3 feet, as practical.

Additionally, an attempt should be made to achieve a stable turbidity reading of less than 10 Nephelometric Turbidity Units (NTU) prior to sampling. If the turbidity reading does not stabilize at reading of less than 10 NTU for a given well, then both filtered and unfiltered samples for metal compounds should be collected from that well. If necessary, field filtration should be performed using a 0.45 micron disposable in-line filter. Groundwater samples should be collected after parameters have stabilized as noted above or the readings are within the standard deviation of the field instrumentation. Deviations from the stabilization and drawdown criteria, if any, will be noted on the sampling logs.

A set of groundwater samples will be collected from the 12 newly installed monitoring wells/sampling points and analyzed for:

- Target Compound List (TCL) VOCs plus Tentatively Identified Compounds (TICs) by USEPA methods 8260C/5035
- TCL SVOCs plus TICs by USEPA method 8270D
- TCL Pesticides and herbicides by USEPA methods 8081B and 8151A
- PCBs by USEPA method 8082A
- Target Analytes List (TAL) Metals / Part 375 List metals (including cyanide and hexavalent and trivalent chromium) by USEPA Methods 6010C/7471B/9010C/7196A
- Per- and Polyfluoroalkyl Substances (PFAS) by USEPA Method 537
- 1,4-dioxane by USEPA Method 8270 SIM isotope dilution

A summary of the RI analytical program including appropriate field/equipment blanks and of sample parameter hold times and sample container requirements are provided in Tables 1 and 2 of the QAPP, located in **Appendix F**. Refer to **Plate 7** for the proposed groundwater monitoring well locations. **Table 5**, *Proposed Sample Analysis Summary*, provided further detail regarding sample depth and analytical parameters for each sample.

Quality Assurance/Quality Control (QA/QC) samples will be collected for the groundwater sampling event in accordance with the QAPP (**Appendix F**). Representative groundwater samples will be placed in pre-cleaned laboratory provided sample bottles, placed on ice and cooled to 4°C in the field, and transported under chain- of-custody

command to a NYSDOH ELAP-certified analytical laboratory. The laboratory will be required to furnish an equivalent ASP Category B deliverables package to facilitate groundwater data evaluation and preparation of a DUSR by a third-party validation expert. Accordingly, the samples will be analyzed by an NYSDOH ELAP-approved laboratory.

2.6.4 Monitoring Well Survey

IEC will survey vertical locations of the monitoring wells, including ground surface elevation, outer casing elevation, and inner casing elevation. This data will be used with the groundwater well gauging data to prepare a sample

location plan and a groundwater contour map depicting the elevation of the water table across the Site. Vertical control will be established by surveying performed relative to NAVD88 by a New York State-licensed land surveyor. Elevations of the top of monitoring well casings and protective well casings will be surveyed to the nearest 0.01 foot. All accessible wells will be gauged during this event.

2.7 Feasibility and Remedial Pilot Test Study

A Sub-Slab Depressurization Pilot Test will be conducted under the guidance of a NYS PE to evaluate the efficacy of recovering soil vapor contaminates from the Site to aid in the design of a mitigative and/or remediation system (potential Soil vapor Extraction), if indicated. The pilot test data evaluation and final design will be evaluated and certified by a NYS PE and included in the Remedial Action Work Plan (RAWP).

To facilitate pilot testing activities, one (1) Vapor Extraction (VE) and three (3) Vapor Monitoring Points (VMPs) will be installed to evaluate vacuum responses during the pilot testing activities. The well locations will be selected based on the findings of the soil investigation described above. Where possible, existing monitoring wells and vapor probes installed as part of the Remedial Investigation, or those proposed in the section above, will be used to monitor the test.

The pilot test wells will be installed in the area of the proposed building footprint and proximal to the maximum VOC concentrations, if possible. The VE wells will be screened though the impacted vadose zone soil. Wells will be placed at distances designed to measure the potential radii of influence and assess vacuum and pressure effectiveness during timed interval step testing. A typical pilot test well configuration is presented on **Figure 2** and **Figure 3**. The actual test well configurations will be biased to the results of soil boring and well installations proposed in the sections above.

2.7.1 Pilot Test Well Installation

The VE and VMP wells will be constructed of three (3) linear feet of four 4-inch diameter slotted (0.020 inch) schedule 40 PVC screen and seven (7) linear feet of four 4-inch diameter schedule 40 PVC riser. The wells will be advanced utilizing a hollow-stem auger drill rig. The outside of the well from its base to a point one foot above the highest screen section will be packed with clean filtration media (Morie sand). A two (2) foot bentonite seal will be packed around the casing above the filtration media. Drill cutting media will be placed above the bentonite seal to a point

6-inches below existing grade. Concrete will be used to fill the remaining 6-inches of open well casing in conjunction with the installation of a cast iron manhole with an access cover.

2.7.2 Proposed Pilot Testing Plan

The pilot test will be performed upon completion of the well installations described above to measure the recoverability of soil vapor, and if applicable, provide design parameters to effectively design a system to mitigate soil vapor

intrusion. Data collected during the testing will be used to determine radii of influence, the presence of any subsurface geological or mechanical anomalies, and to determine the number of wells necessary for a permanent system and their associated well spacing. Once the number and placement of the wells is determined, equipment specifications can be determined, and equipment selected. The following sections describe the procedures that will be used for the test.

2.7.3 Pilot Test Procedures

The VE test well will be utilized to extract soil vapor during the pilot test. A 3 HP EG&G Rotron regenerative blower, with a maximum flow rate of 160 cubic feet per minute (CFM) and a maximum vacuum rating of 50 inches of water will be utilized. The pilot test will be conducted in a series of three steps, each increasing the vacuum and flow sequentially until the maximum blower capacity is reached. During each step, airflow, wellhead vacuum, and hydrocarbon concentrations at the effluent of the blower and treatment system will be measured at timed intervals. The proposed vapor monitoring wells and selected existing wells onsite will be monitored for vacuum influence to assess vapor radius of influence and individual well vapor response. The total test run time will be approximately 3-hours; an air sample will be collected from the System extraction well raw effluent and analyzed for volatile organic compounds by USEPA method TO-15 Modified to include PCE, TCE, cis-1,2 DCE and Vinyl chloride.

2.7.4 Treatment of Air Effluent

During the pilot test activities, the process air flow will be controlled by valves at the raw influent and effluent lines. Raw effluent from the extraction well (VE) will be treated using a 200-pound granular activated carbon filter prior to discharge to the atmosphere. The treated system effluent will be continuously monitored with a Photo Ionization Detector (PID).

2.8 Quality Assurance/Quality Control Sampling

In addition to the soil, soil vapor and groundwater samples described above, field-specific quality assurance/quality control (QA/QC) samples will be collected and analyzed to ensure the reliability of the generated data as described

in the QAPP and to support the required third-party data usability assessment effort. Site- specific QA/QC samples will include matrix spikes (MS), matrix spike duplicates (MSD), blind duplicates and trip blanks. Refer to **Tables 1** and **2** in the QAPP (**Appendix F**) for a summary of the analytical program summary, QA/QC samples, the sample parameters, holding times and sample container requirements.

2.9 Investigation-Derived Waste Management

Investigation-derived wastes (IDW) (i.e., grossly-contaminated soil cuttings and purge water) will be containerized and staged on-site, pending proper disposal at an off-site facility. Soil cuttings with no apparent staining, odors, or elevated PID readings (greater than 20 ppmV) will be used to backfill boring holes. Soil to be disposed off-site will be placed in 55-gallon DOT-approved drums. Decontamination fluids, if necessary, will be placed in DOT-approved fluid

drums with closed tops. All drums will be properly labeled, sealed, and characterized as necessary.. Based on the potential for cVOCs in soil and groundwater, any detection of these compounds in excess soil and groundwater generated during the RI is classified as hazardous regardless of TCLP results. Therefore, waste characterization sampling will be performed to determine whether the waste can be considered non-hazardous waste through a contained-in policy demonstration. Samples are anticipated to be analyzed for TCL VOCs and TCLP VOCs to determine the appropriate waste code; and for TCL and TCLP semi-volatile organic compounds (SVOCs), TAL Metals and TCLP Metals, PCBs, pesticides, herbicides, ignitability, corrosivity, reactivity, and paint filter for disposal facility acceptance unless the RI analytical data is sufficient.. Management of IDW will comply with NYSDEC DER-10 3.3(e).

2.10 Site Mapping and Survey

A Site map will be prepared that will identify RI sampling points and relevant Site features. IEC will use a GPS unit to identify the soil vapor sampling locations, soil borings and newly installed monitoring wells relative to State planar grid coordinates. Additional geospatial data may be collected related to debris piles, structure locations, and/or subsurface structures. The top of the monitoring well casings will be surveyed relative to a benchmark elevation or approximate elevation above mean sea level and with respect to each other. Site maps will be provided with the RI report.

3 REMEDIAL INVESTIGATION REPORT

Upon completion of the RI fieldwork, a comprehensive Remedial Investigation Report (RIR) will be completed for the Site as described below.

3.1 Remedial Investigation Report

The RIR will include the following information and documentation, consistent with the NYSDEC's DER-10 Technical Guidance for Site Investigation and Remediation (May 2010).

- Site introduction and background;
- A description of the Site and the investigation areas;
- A description of the field procedures and methods used during the RI;
- A discussion of the nature and rationale for any significant variances from the scope of work described in this RI Work Plan;
- The data obtained during the RI and historical data considered by IEC to be of useable quality;
- A discussion of contaminant fate and transport;
- · Conclusions regarding the extent and character of environmental impact in the media being investigated;
- The conclusions of the qualitative human health and environmental risk assessments, including recommendations for more detailed assessments, if applicable; and,
- Supporting materials for RI data will include photographs, boring logs, monitoring well construction diagrams, laboratory analytical reports, tabulated analytical results, figures, and similar information.

4 INVESTIGATION SUPPORT DOCUMENTS

The following sections describe the support documents that will be used in conjunction with the RI.

4.1 Quality Assurance Project Plan (QAPP)

A complete Quality Assurance Project Plan (QAPP) is provided in **Appendix F** for the RI activities described herein. The QAPP dictates implementation of the investigation tasks delineated in this Work Plan. Refer to QAPP **Table 1** and **Table 2** for a summary of the analytical program summary and the sample parameters, holding times and sample container requirements, respectively.

4.1.1 Analytical Methods

The samples collected during the BCP Remedial Investigation will be analyzed using EPA-approved analytical methods that follow the most recent edition of the EPA's "Test Methods for Evaluating Solid Waste" (SW-846), Methods for Chemical Analysis of Water and Wastes" (EPA 600/4-79-020), and Standard Methods for Examination of Water and Wastewater" (prepared and published jointly by the American Public Health Association, American Water works Association and Water Pollution Control Federation). Additionally, modified methods approved by the NYSDEC will be used for analysis of emerging contaminants in soil and groundwater.

4.1.2 Laboratory

The subcontracted laboratory will be a NYSDOH ELAP-certified analytical laboratory that can perform Contract Laboratory Program (CLP) analysis on the media to be sampled during this investigation. The laboratory will perform the sample analysis in accordance with the most recent NYSDEC Analytical Services Protocol (ASP). See **Appendix F** for the QAPP, which outlines protocols and procedures of the selected laboratory.

4.1.3 Data Submittal

Analytical data will be submitted in complete ASP Category B data packages. Procedures for chain of custody, laboratory instrumentation calibration, laboratory analyses, reporting of data, internal quality control, and corrective actions shall be followed as per SW-846 and as per the laboratory's Quality Assurance Plan. Where appropriate, trip blanks, field blanks, field duplicates, and matrix spike, matrix spike duplicate shall be performed at a rate of 10% (approximately one per twenty samples) and will be used to assess the quality of the data. The laboratory's in-house QA/QC limits will be utilized whenever they are more stringent than those suggested by the EPA methods. Environmental data will be reported electronically using the database software application EQuIS as part of NYSDEC's Environmental Information Management System (EIMS).

4.1.4 Data Usability Summary Report

IEC will require third-party data review by a qualified, independent data validation specialist for evaluation of the accuracy and precision of the analytical results. The DUSRs will present the results of data validation, including a

summary assessment of laboratory data packages, sample preservation and COC procedures, and a summary assessment of precision, accuracy, representativeness, comparability, and completeness for each analytical method. The DUSR will follow NYSDEC format per the NYSDEC's September 1997 DUSR guidelines and May 2010 DER-10 guidance. The DUSR and necessary qualifications to the data will be appended to the RIR Report and a detailed assessment of each sample delivery group (SDG) will follow. Additional details on the DUSRs are provided in the QAPP in Appendix E.

4.2 Health and Safety Plan (HASP)

A Site Health and Safety Plan (HASP) has been prepared in accordance with 40 CFR 300.150 of the National Oil and Hazardous Substance Pollution Contingency Plan (NCP) and 29 CFR 1910.120 for the proposed BCP RI activities. A copy of the HASP is included as **Appendix E** of this RIWP. The HASP will be enforced by IEC and any IEC subcontractors engaged in RI/IRM field activities in accordance with the requirements of 29 CFR 1910.120. The HASP covers onsite investigation activities. Health and safety activities will be monitored throughout the Remedial Investigation. A member of the field team will be designated to serve as the on-site Health and Safety Officer throughout the field program. This person will report directly to the Project Managers and Project Director. The HASP will be subject to revision as necessary, based on new information that is discovered during the field investigation.

The HASP also includes a contingency plan that addresses potential site-specific emergencies, and a Community Air Monitoring Plan (CAMP) that describes required particulate and vapor monitoring to protect the neighboring community during intrusive site investigation activities. The CAMP is consistent with the requirements for community air monitoring at remediation sites as established by the NYSDOH and NYSDEC. Accordingly, it follows procedures and practices outlined under NYSDOH's Generic Community Air Monitoring Plan (dated December 2002) and NYSDEC Technical Assistance and Guidance Memorandum (TAGM) 4031: Fugitive Dust Suppression and Particulate Monitoring Program at Inactive Hazardous Waste Sites.

4.3 Citizen Participation Plan (CCP)

In accordance with NYSDEC's Brownfield Cleanup Program guidance, a Citizen Participation Plan (CPP) is required for the Site RI activities. A Community Participation Plan (CPP) will be published prior to any onsite RI activities and will meet the requirements of the NYSDEC's DER-10 guidance. IEC will coordinate and assist the Applicant with community relations throughout the course of the project. The CPP was approved by the NYSDEC on August 5, 2021.

4.4 Community Air Monitoring Program (CAMP)

IEC will conduct community air monitoring in compliance with the NYSDOH Generic CAMP. CAMP deployment will comply with NYSDEC DER-10 Appendix 1A and Appendix 1B. IEC will conduct monitoring for VOCs during ground-intrusive work (i.e., soil boring advancement and monitoring well installation). IEC will measure upwind concentrations at the start of each workday to establish background concentrations and will monitor VOCs at the downwind perimeter of the work zone, which will be established at a point on the site where the general public or

site employees may be present. Monitoring for VOCs will be conducted with a PID. Dust emissions will be monitored using real- time monitoring equipment capable of measuring PM-10 (e.g., DustTrak). If dust emissions are observed, work will stop, and dust suppression measures will be used. Community air monitoring requirements will be conducted until it is determined that the site is not a source of organic vapors.

The onsite RI activities will take place in an unoccupied building and will not require a CAMP. However, real-time air monitoring (CAMP) will be deployed during installation two (2) offsite monitoring wells along the south side of McLean Avenue and during ISCO injection points and UST removal activities.

Additionally, real-time air monitoring for VOCs and particulate levels at the perimeter of the exclusion zone or work area will be performed for any other type of ground intrusive activities that may results in fugitive dust or VOC migration.

4.5 Daily Reporting

Daily reports summarizing the activities conducted that day will be submitted by noon the next day to the NYSDEC and NYSDOH project managers and will include:

- A summary of activities completed that reporting day
- Photographic documentation of the activities completed during the reporting day
- Identification of samples collected during the reporting day
- Locations and references to a site map for completed activities
- A summary of any and all complaints with relevant details, including contact information
- A summary of CAMP findings, including elevated concentrations and response actions, if any
- An explanation of notable site conditions
- A list of anticipated work for the following reporting day
- Emergencies (e.g., accident, spill), request changes to the RIWP, or communicate other sensitive or time-critical information, if required.

Emergency conditions and changes to the RIWP will be communicated directly to the NYSDEC Project Manager.

5 PROJECT SCHEDULE

Based upon the Applicant's current construction schedule, the table below represents an anticipated schedule for the proposed RI and reporting following the approval of the RIWP If the schedule changes, it will be updated and submitted to the NYSDEC.

Activity		Wee	ks (f	ollov	wing	Арр	rova	l of I	RIWI	?)
Activity	1	2	3	4	5	6	7	8	9	10
Advance Soil Borings and Collect Soil Samples										
Install Monitoring Wells and Collect Groundwater Samples										
Install Soil Vapor Points and Collect Soil Vapor Samples										
Conduct Vapor Extraction Pilot Test										
Receipt of Laboratory Results										
Data Validation										
EQuIS™ Electronic Data Deliverable										
Preparation and Submission of RIR & RAWP										

FIGURES

13-12, 13-16, and 13-24 Beach Channel Drive, Far Rockaway, NY NYSDEC BCP Site Number C241254

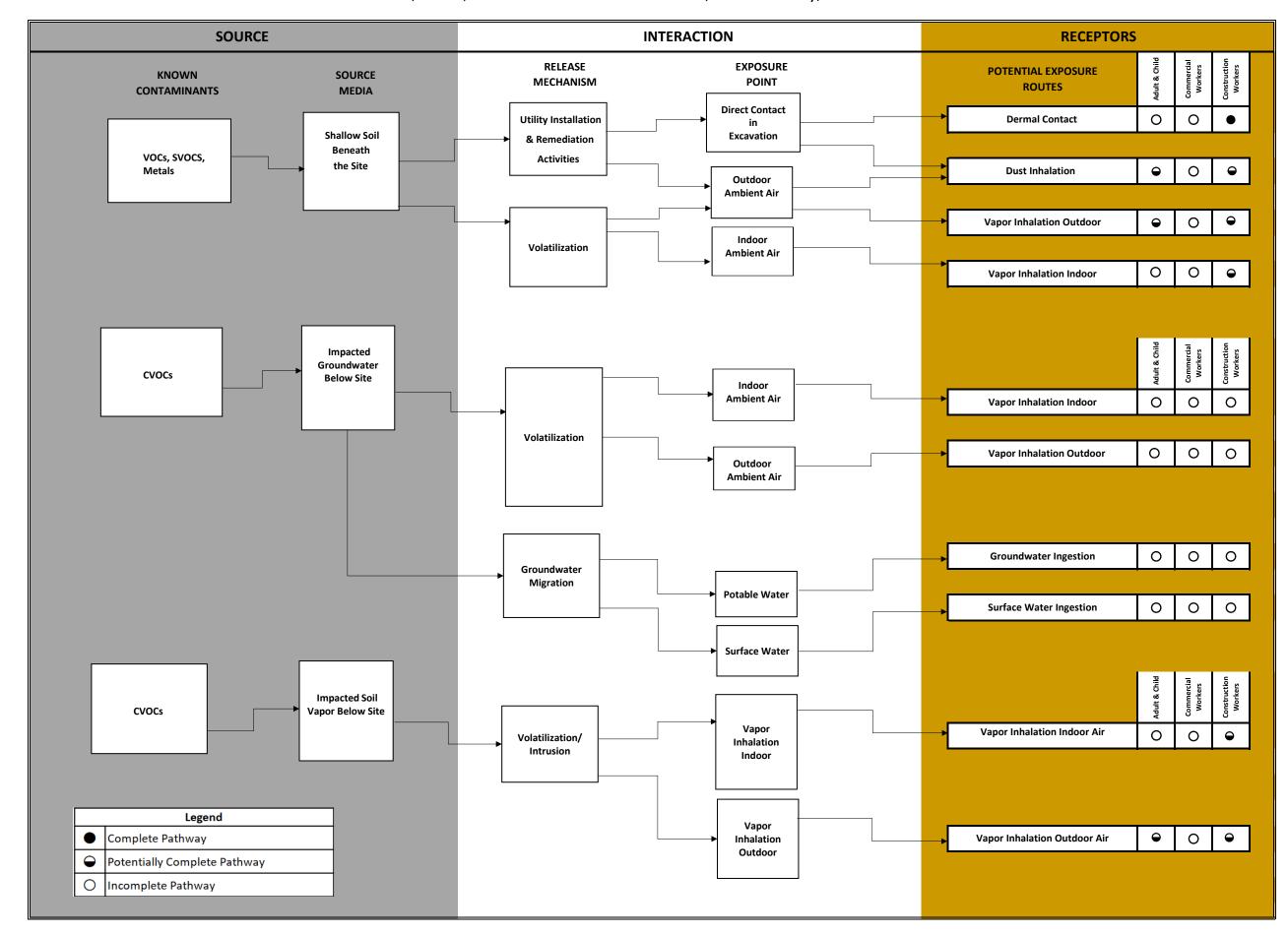


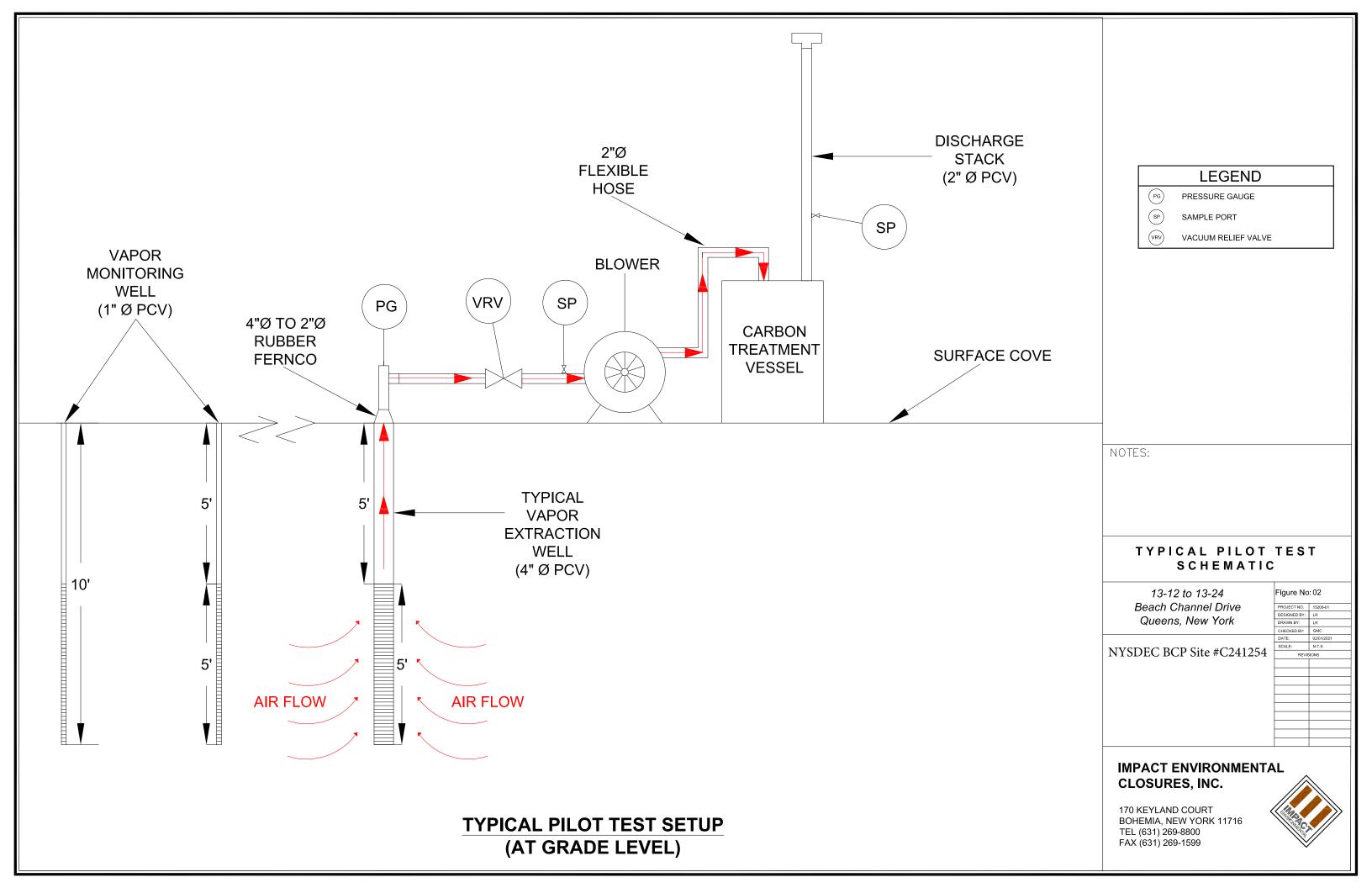
TEL: (631) 268-8800 FAX: (631) 269-1599

FIGURE 1: CONCEPTUAL SITE MODEL



13-12, 13-16, and 13-24 Beach Channel Drive, Far Rockaway, NY - NYSDEC BCP #C241254





Legend Site Boundaries **Existing Structures** Proposed Building Footprint Radius of Influence Measurement Distances Extraction Well 31-158-TAX LOT 9 AREA: 11316.02 SF Vapor Monitoring Well TAX LOT 5 10711.88 \$ NOTES: 178-238 30' MIN YARD CLEARANCE PROPOSED SVE PILOT TEST WELL LAYOUT 13-16 to 13-30 Figure 3 **Beach Channel** Drive, Far Project #: 15209 Rockaway, NY Drawn By: CJC NYSDEC BCP Site #C241254 GMC Checked By: Date: 8/6/21 Revisions X EL 23.76 Not to scale IMPACT ENVIRONMENTAL 205:10 1/41* CLOSURES, INC. 170 KEYLAND COURT BOHEMIA, NEW YORK 11716 TEL (631) 269-8800 FAX (631) 269-1599

PLATES

13-12, 13-16, and 13-24 Beach Channel Drive, Far Rockaway, NY NYSDEC BCP Site Number C241254



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FAX: (631) 269-1599



Vacant Land

Other



BCP Site Boundary



Base maps:

Site Location Map -NYCOER SPEED Map

Land Usage Map -Topographic Map -

NYC Planning ZoLa Map USGS Far Rockaway Quadrangle Topo Map

SITE LOCATION, LAND USAGE, AND TOPOGRPAHIC MAPS

13-16 to 13-30 Beach Channel Drive, Far Rockaway, NY
NYSDEC BCP Site #C241254
A

Plate 1 15209 Project #: Drawn By: GMC Checked By 1/7/21 Date:



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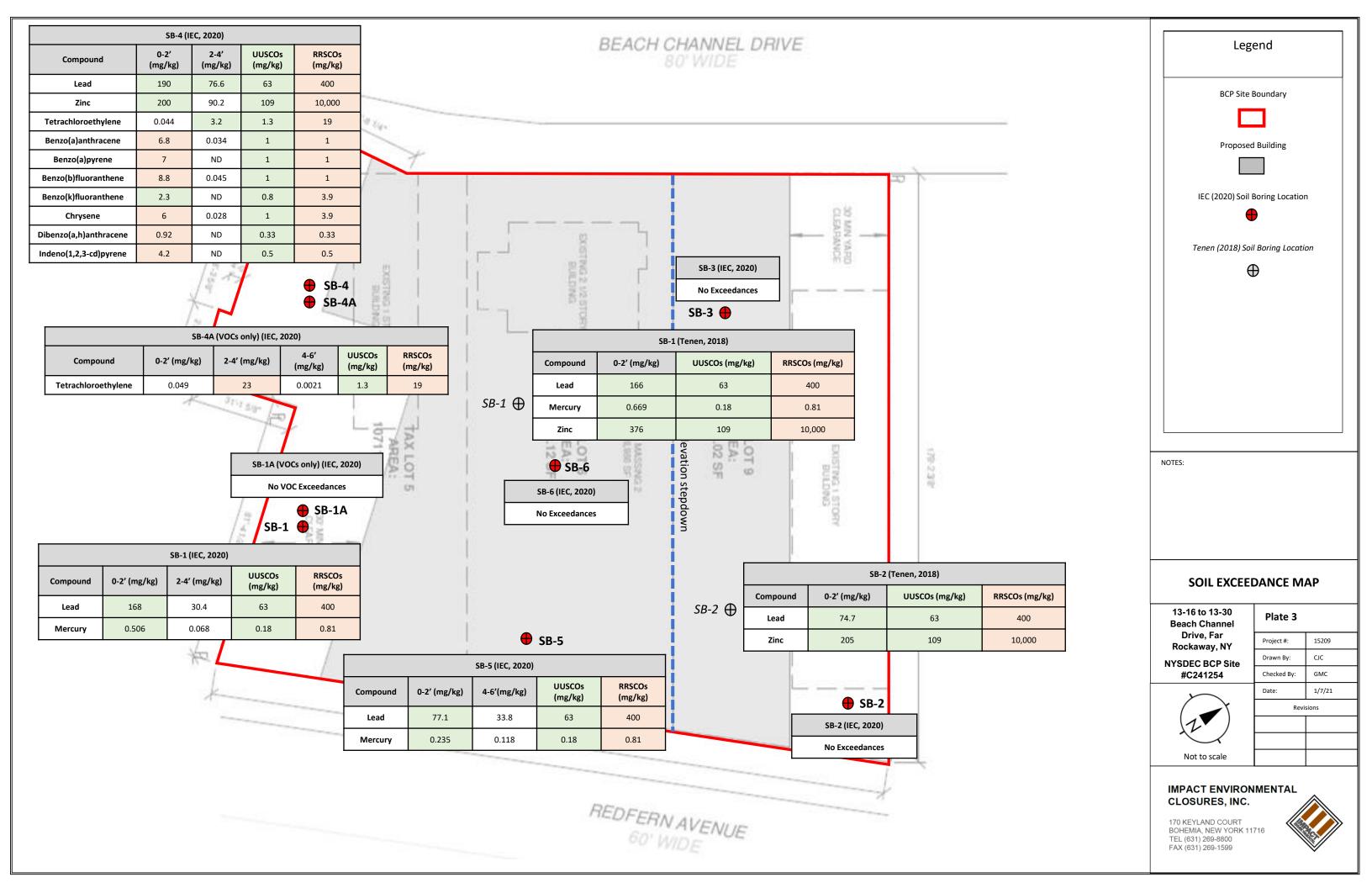


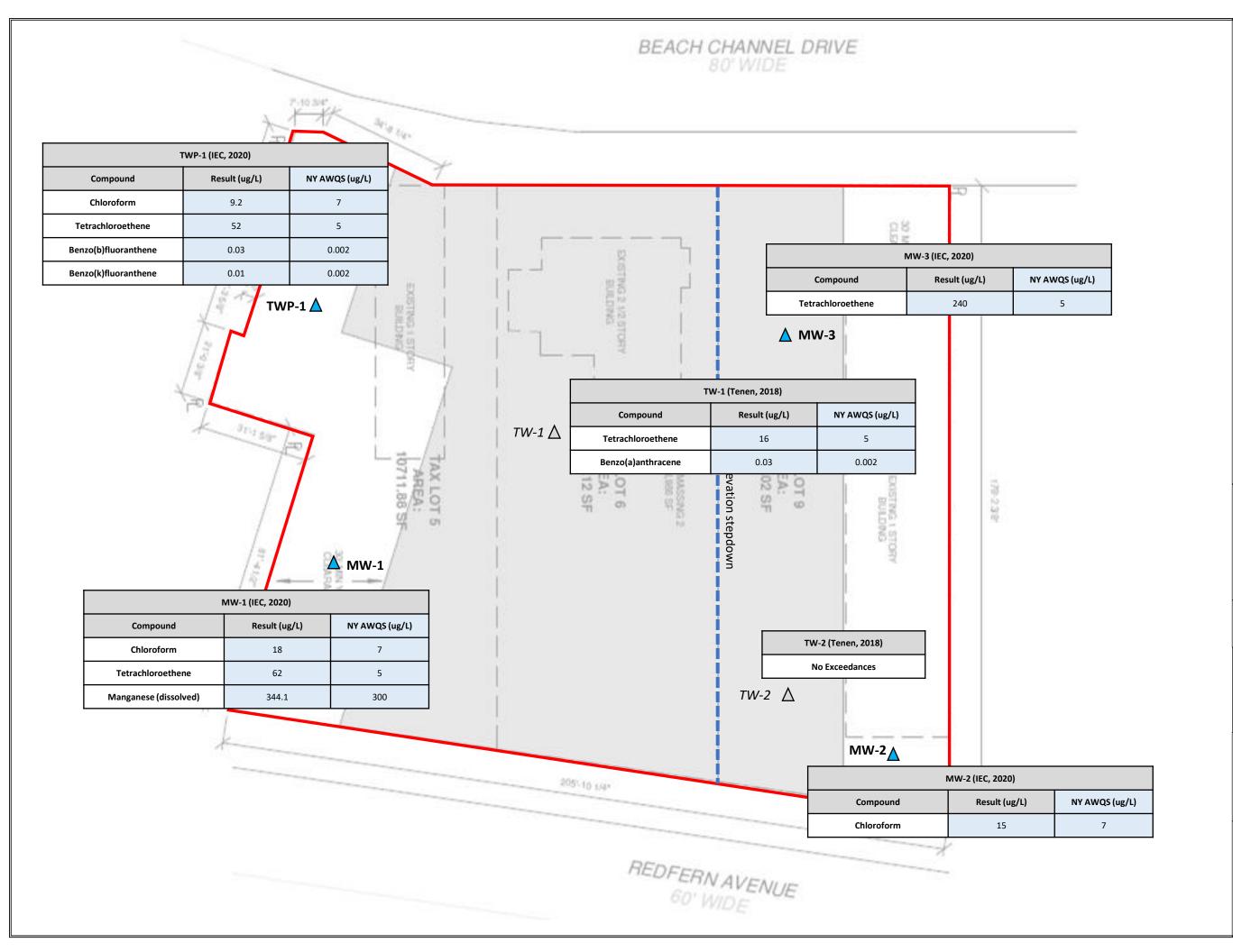
Legend

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Project #:	15209
Drawn By:	CJC
Checked By:	GMC
Date:	1/7/21

Revisions

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Legend

BCP Site Boundary



Existing Structures



IEC (2020) Groundwater Sample Location



Tenen (2018) Groundwater Sample Location



NOTES:

GROUNDWATER EXCEEDANCE MAP

13-16 to 13-30
Beach Channel
Duise For
Drive, Far
Rockaway, NY
1100kaway, 111
NIVODEO DOD O'
NYSDEC BCP Site
#C241254
#6241234

Plate 4	
Project #:	15209
Drawn By:	CJC
Checked By:	GMC
Date:	1/7/21

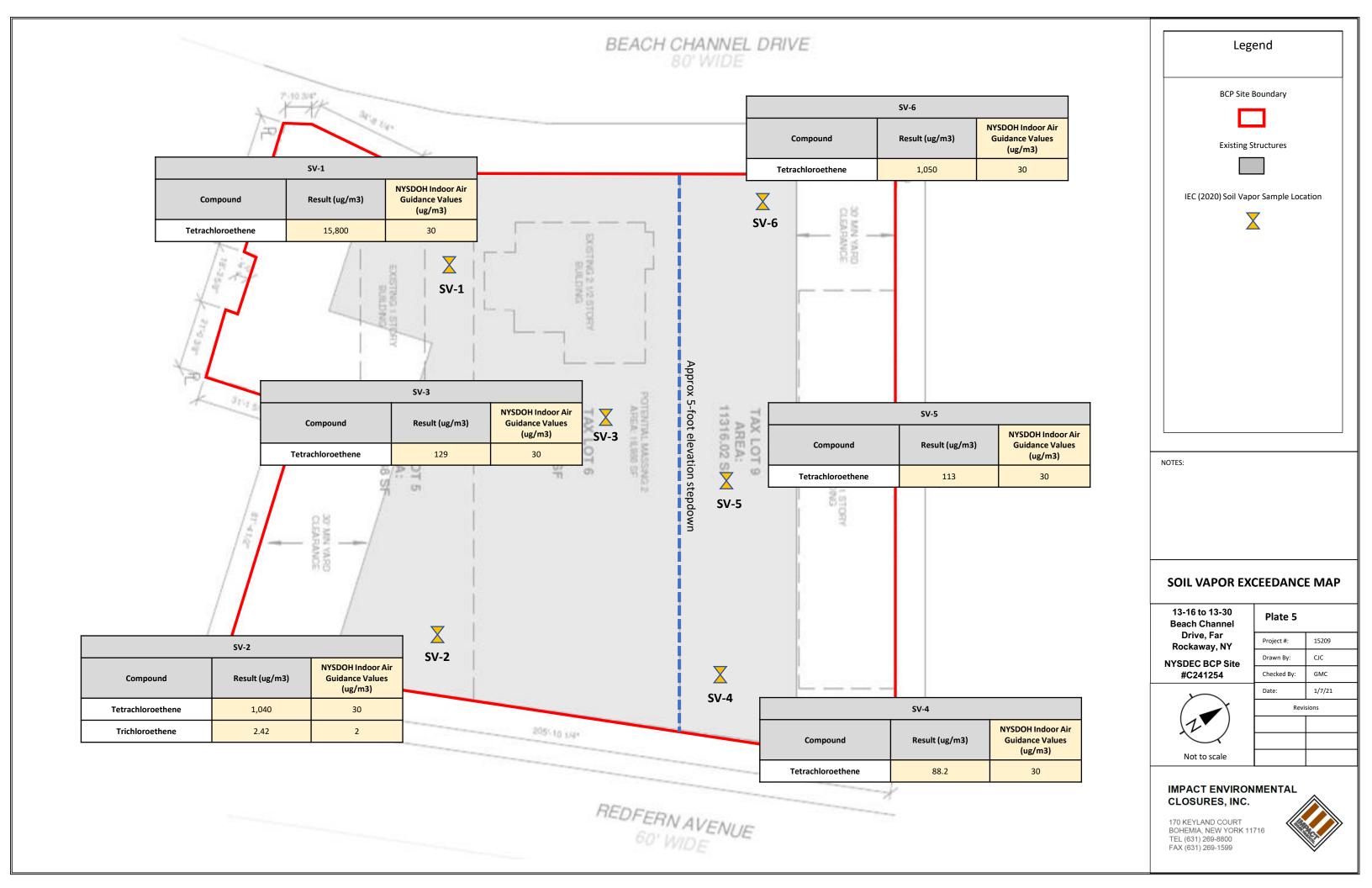


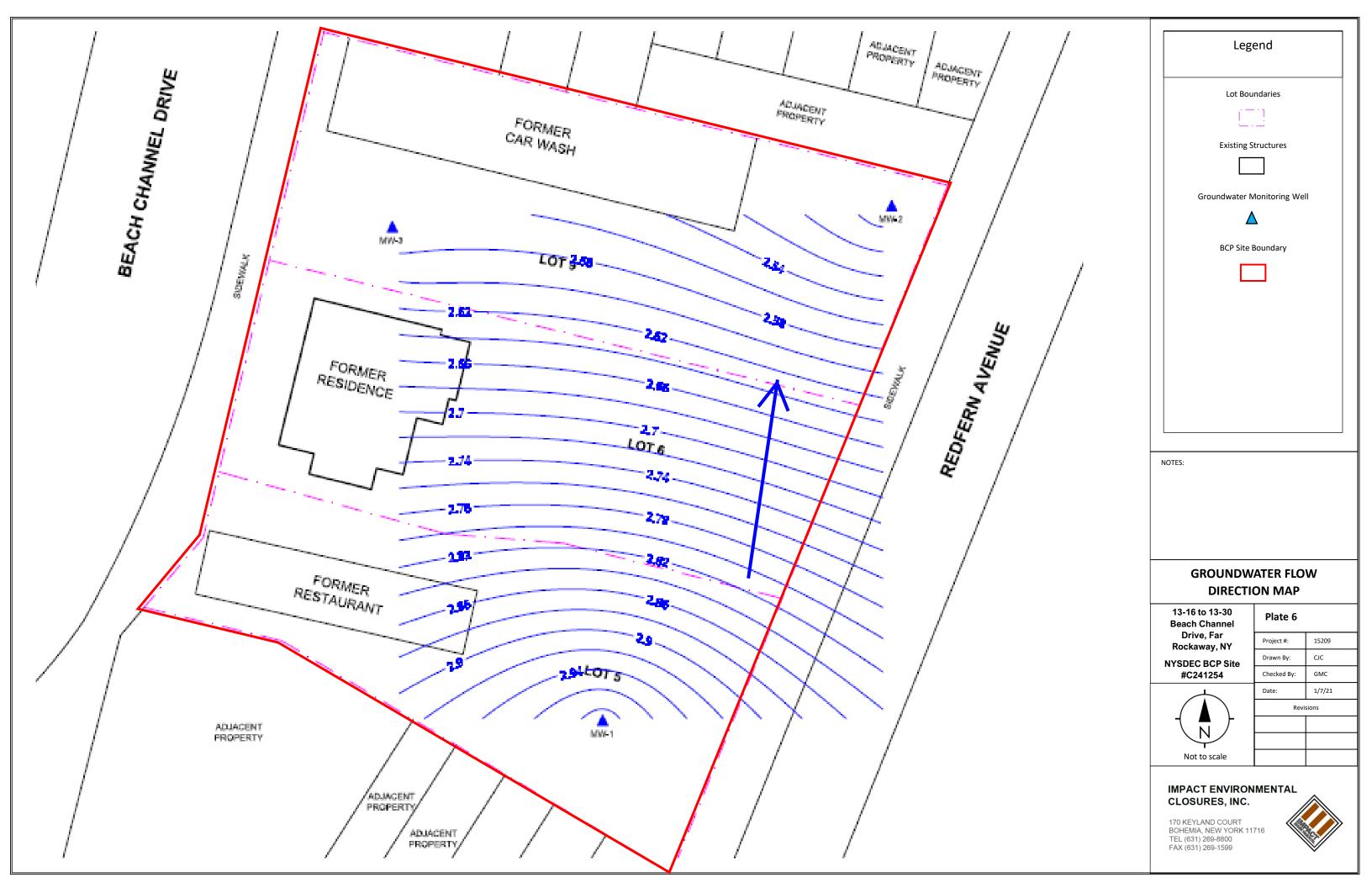
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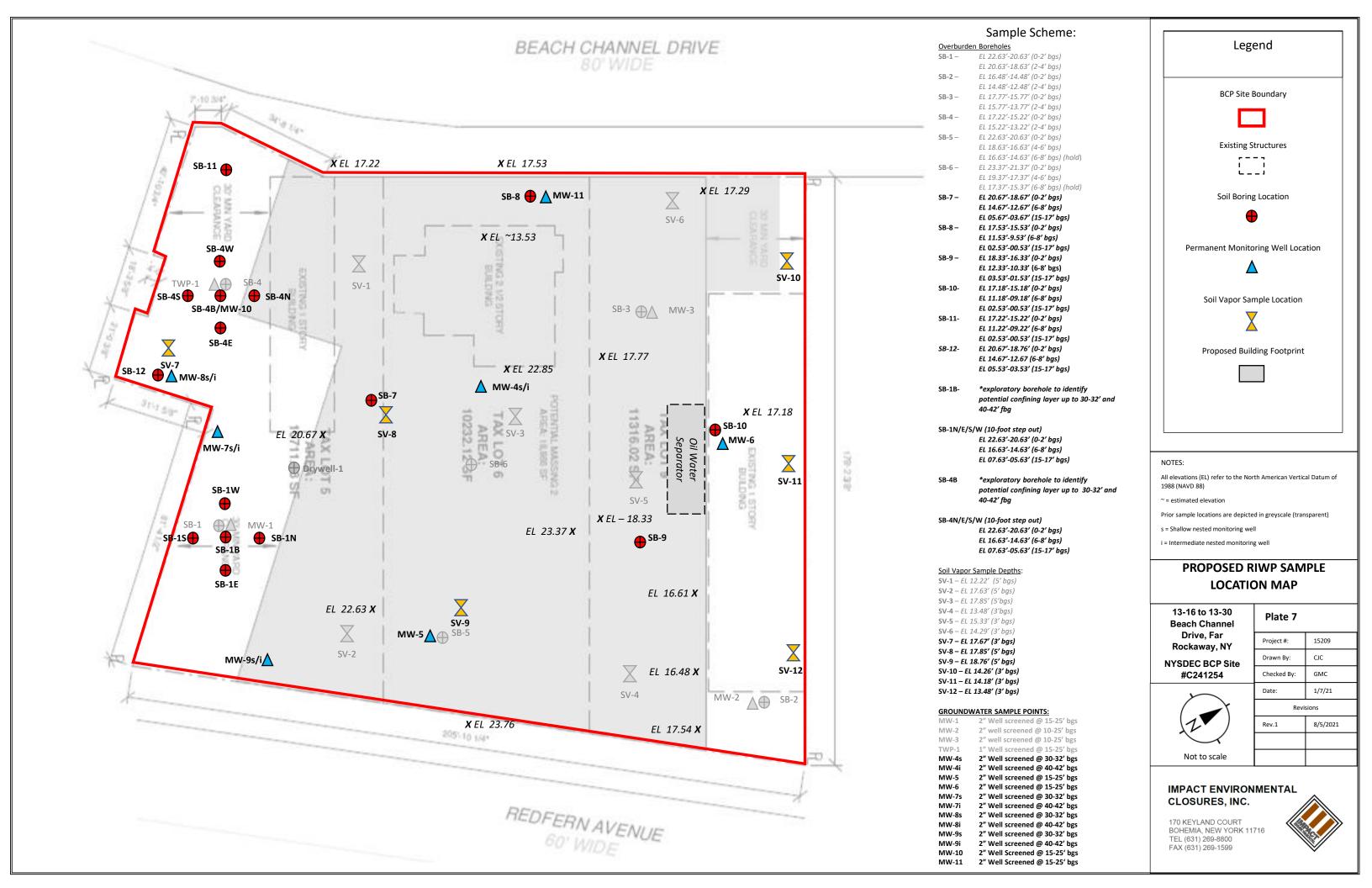
Revisions

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TABLES

13-12, 13-16, and 13-24 Beach Channel Drive, Far Rockaway, NY NYSDEC BCP Site Number C241254



170 Keyland Court Bohemia, New York 11716 TEL: (631) 268-8800

Beach Channel Drive, Queens NY

LOCATION				SB-1 (0-2	21	SB-2 (0-2)	SB-1 (0-2	21	SB-1 (2-4	4)	SB-2 (0-2	1	SB-2 (2-4	1)	SB-3 (0-2)\	SB-3 (4-	6)
SAMPLING DATE				7/23/20		7/23/201	•	10/20/20	•	10/20/20	•	10/20/202		10/20/20		10/21/20	•	10/21/20	•
LAB SAMPLE ID				L1828167		L1828167-		L2046791		L2046791-		L2046791-		L2046791-		L2046791-		L2046791	
SAMPLE TYPE				SOIL		SOIL		SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	NY-RESRR	NY-UNRES	Units	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual
				•		Volatile	Organi	cs by EPA 503	5										
Methylene chloride	100	0.05	mg/kg	<0.0022	U	<0.0019	U	0.26	U	0.0056	U	0.0061	U	0.0069	U	0.0057	U	0.0062	U
1,1-Dichloroethane	26	0.27	mg/kg	<0.00014	U	<0.00012	U	0.052	U	0.0011	U	0.0012	U	0.0014	U	0.0011	U	0.0012	U
Chloroform	49 2.4	0.37 0.76	mg/kg	<0.00013	U	<0.00012	U	0.078 0.052	U	0.0017 0.0011	U	0.0018 0.0012	U	0.0021 0.0014	U	0.0017 0.0011	U	0.0019 0.0012	U
Carbon tetrachloride Tetrachloroethene	19	1.3	mg/kg mg/kg	<0.00022 0.00058	U	<0.00019 <0.00016	U	0.052	U	0.0011	U	0.0012	-	0.0014	ı	0.0011	ı	0.0012	+ +
Chlorobenzene	100	1.1	mg/kg	<0.00038	U	<0.00010	U	0.026	U	0.00014	U	0.00030	U	0.00027	U	0.00027	U	0.00062	U
1,2-Dichloroethane	3.1	0.02	mg/kg	<0.00012	U	<0.00011	U	0.052	U	0.0011	U	0.0012	U	0.0014	U	0.0011	U	0.0012	U
1,1,1-Trichloroethane	100	0.68	mg/kg	<0.00016	U	<0.00014	U	0.026	U	0.00056	U	0.00061	U	0.00069	U	0.00057	U	0.00062	U
Benzene	4.8	0.06	mg/kg	<0.00016	U	<0.00014	U	0.026	U	0.00056	U	0.00061	U	0.00069	U	0.00057	U	0.00062	U
Toluene	100	0.7	mg/kg	<0.00052	U	<0.00045	U	0.052	U	0.0011	U	0.0012	U	0.0014	U	0.0011	U	0.0012	U
Ethylbenzene	41	1	mg/kg	<0.00013	U	<0.00012	U	0.052	U	0.0011	U	0.0012	U	0.0014	U	0.0011	U	0.0012	U
Vinyl chloride	0.9	0.02	mg/kg	<0.00032	U	<0.00028	U	0.052	U	0.0011	U	0.0012	U	0.0014	U	0.0011	U	0.0012	U
1,1-Dichloroethene	100 100	0.33	mg/kg	<0.00023	U	<0.0002	U	0.052	U	0.0011	U	0.0012	U	0.0014	U	0.0011	U	0.0012	U
trans-1,2-Dichloroethene Trichloroethene	21	0.19 0.47	mg/kg mg/kg	<0.00013 <0.00013	U	<0.00011 <0.00011	U	0.078 0.016	U	0.0017 0.00056	U	0.0018 0.00061	U	0.0021 0.00069	U	0.0017 0.00057	U	0.0019 0.00062	U
1,2-Dichlorobenzene	100	1.1	mg/kg	<0.00013	U	<0.00011	U	0.010	U	0.00030	U	0.00001	U	0.0003	U	0.00037	U	0.0005	U
1,3-Dichlorobenzene	49	2.4	mg/kg	<0.00014	U	<0.00012	U	0.1	U	0.0022	U	0.0024	U	0.0028	U	0.0023	U	0.0025	U
1,4-Dichlorobenzene	13	1.8	mg/kg	<0.00014	U	<0.00012	U	0.1	U	0.0022	U	0.0024	U	0.0028	U	0.0023	U	0.0025	U
Methyl tert butyl ether	100	0.93	mg/kg	<0.00019	U	<0.00017	U	0.1	U	0.0022	U	0.0024	U	0.0028	U	0.0023	U	0.0025	U
p/m-Xylene	~	~	mg/kg	<0.00053	U	<0.00047	U	0.1	U	0.0022	U	0.0024	U	0.0028	U	0.0023	U	0.0025	U
o-Xylene	~	~	mg/kg	<0.00028	U	<0.00024	U	0.052	U	0.0011	U	0.0012	U	0.0014	U	0.0011	U	0.0012	U
cis-1,2-Dichloroethene	100	0.25	mg/kg	<0.00017	U	<0.00015	U	0.052	U	0.0011	U	0.0012	U	0.0014	U	0.0011	U	0.0012	U
Acetone	100	0.05	mg/kg	<0.0046	U	0.0057	J	0.52	U	0.022	.	0.037		0.032	ļ , .	0.029	ļ , .	0.036	4
2-Butanone	100	0.12	mg/kg	<0.0021	U	<0.0018	U	0.52	U	0.011	U	0.0032	J	0.014	U	0.011	U	0.012	U
n-Butylbenzene sec-Butylbenzene	100 100	12 11	mg/kg mg/kg	<0.00016 <0.00014	U	<0.00014 <0.00012	U	0.052 0.052	U	0.0011 0.0011	U	0.0012 0.0012	U	0.0014 0.0014	U	0.0011 0.0011	U	0.0012 0.0012	U
tert-Butylbenzene	100	5.9	mg/kg	<0.00014	U	<0.00012	U	0.052	U	0.0011	U	0.0012	U	0.0014	U	0.0011	U	0.0012	U
n-Propylbenzene	100	3.9	mg/kg	<0.00011	U	<0.0001	U	0.052	U	0.0022	U	0.0024	U	0.0028	U	0.0023	U	0.0023	U
1,3,5-Trimethylbenzene	52	8.4	mg/kg	<0.00018	U	<0.00014	U	0.1	Ü	0.0022	U	0.0024	U	0.0028	U	0.0023	U	0.0025	U
1,2,4-Trimethylbenzene	52	3.6	mg/kg	<0.00032	U	<0.00028	U	0.1	Ü	0.0022	U	0.0024	U	0.0028	U	0.0023	U	0.0025	Ü
1,4-Dioxane	13	0.1	mg/kg	<0.034	Ü	<0.029	U	4.2	U	0.089	U	0.098	U	0.11	U	0.091	U	0.099	U
1,2-Dichloropropane	~	~	mg/kg	<0.00012	U	<0.0001	U	NT		NT		NT		NT		NT		NT	
Dibromochloromethane	~	~	mg/kg	< 0.00013	U	<0.00012	U	NT		NT		NT		NT		NT		NT	
1,1,2-Trichloroethane	~	~	mg/kg	<0.00025	U	<0.00022	U	NT		NT		NT		NT		NT		NT	
Trichlorofluoromethane	~	~	mg/kg	<0.00066	U	<0.00058	U	NT		NT		NT		NT		NT		NT	\perp
Bromodichloromethane	~	~	mg/kg	<0.0001	U	<0.00009	U	NT		NT		NT		NT		NT		NT	4
trans-1,3-Dichloropropene	~	~	mg/kg	<0.00026	U	<0.00023	U	NT		NT		NT		NT		NT		NT	4
cis-1,3-Dichloropropene	~	~	mg/kg mg/kg	<0.00015 <0.00015	U	<0.00013 <0.00013	U	NT NT		NT NT		NT NT		NT NT		NT NT		NT NT	+-
1,3-Dichloropropene, Total 1,1-Dichloropropene	~	~	mg/kg	<0.00015	U	<0.00013	U	NT		NT		NT		NT		NT		NT	+-1
Bromoform	~	~	mg/kg	<0.00013	U	<0.00013	U	NT		NT		NT		NT		NT		NT	+
1,1,2,2-Tetrachloroethane	~	~	mg/kg	<0.00016	U	< 0.00014	U	NT		NT		NT		NT		NT		NT	+-1
Chloromethane	~	~	mg/kg	<0.00089	U	<0.00078	U	NT		NT		NT		NT		NT		NT	
Bromomethane	~	~	mg/kg	<0.00055	U	<0.00048	U	NT		NT		NT		NT		NT		NT	
Chloroethane	~	~	mg/kg	<0.00043	U	<0.00038	U	NT		NT		NT		NT		NT		NT	
Xylenes, Total	100	0.26	mg/kg	<0.00028	U	<0.00024	U	NT		NT		NT		NT		NT		NT	
1,2-Dichloroethene, Total	~	~	mg/kg	<0.00013	U	<0.00011	U	NT		NT		NT		NT		NT		NT	\perp
Dibromomethane	~	~	mg/kg	<0.00023	U	<0.0002	U	NT		NT	1	NT		NT	-	NT	-	NT	+
Styrene	~	~	mg/kg	<0.00019	U	<0.00016	U	NT NT	+	NT NT		NT NT		NT NT	1	NT NT	1	NT NT	+
Dichlorodifluoromethane Carbon disulfide	~	~	mg/kg mg/kg	<0.00087 <0.0043	U	<0.00076 <0.0038	U	NT NT	+	NT NT		NT NT		NT NT	1	NT NT	1	NT NT	+
Vinyl acetate	~	~	mg/kg	<0.0043	U	<0.0038	U	NT	+	NT		NT		NT		NT		NT	+ -
4-Methyl-2-pentanone	~	~	mg/kg	<0.002	U	<0.0010	U	NT		NT		NT		NT		NT		NT	+
1,2,3-Trichloropropane	~	~	mg/kg	<0.00012	Ü	<0.00011	U	NT		NT		NT		NT		NT		NT	1
2-Hexanone	~	~	mg/kg	<0.0011	U	<0.00098	U	NT		NT		NT		NT		NT		NT	
Bromochloromethane	~	~	mg/kg	<0.0002	U	<0.00017	U	NT		NT		NT		NT		NT		NT	
2,2-Dichloropropane	~	~	mg/kg	<0.00019	U	<0.00017	U	NT		NT		NT		NT		NT		NT	$oxed{\Box}$
1,2-Dibromoethane	~	~	mg/kg	<0.00027	U	<0.00023	U	NT	$\downarrow \downarrow \downarrow$	NT		NT		NT	<u> </u>	NT	<u> </u>	NT	$\perp \!\!\! \perp \!\!\! \perp$
1,3-Dichloropropane	~	~	mg/kg	<0.00016	U	<0.00014	U	NT	\Box	NT		NT		NT	 	NT	 	NT	+
1,1,1,2-Tetrachloroethane	~	~	mg/kg	<0.00013	U	<0.00011	U	NT	1	NT	1	NT		NT	-	NT	-	NT	+
Bromobenzene	~	~	mg/kg	<0.00014	U	<0.00012	U	NT NT	+	NT NT		NT NT		NT NT	1	NT NT	1	NT NT	+
o-Chlorotoluene p-Chlorotoluene	~	~	mg/kg	<0.00018 <0.0001	U	<0.00016 <0.00009	U	NT NT	+	NT NT		NT NT		NT NT		NT NT		NT NT	+
1,2-Dibromo-3-chloropropane	~	~	mg/kg mg/kg	<0.0001	U	<0.00009	U	NT NT	+	NT	1	NT		NT		NT		NT	+
Hexachlorobutadiene	~	~	mg/kg	<0.00093	U	<0.00014	U	NT	+	NT		NT		NT		NT		NT	+-
Isopropylbenzene	~	~	mg/kg	<0.00010	U	<0.00014	U	NT		NT		NT		NT		NT		NT	+
p-IsopropyItoluene	~	~	mg/kg	<0.0001	U	<0.00009	U	NT		NT		NT		NT		NT		NT	
Naphthalene	100	12	mg/kg	<0.00062	U	<0.00054	U	NT		NT		NT		NT		NT		NT	
Acrylonitrile	~	~	mg/kg	<0.0011	U	<0.00096	U	NT		NT		NT		NT		NT		NT	
1,2,3-Trichlorobenzene	~	~	mg/kg	<0.00031	U	<0.00027	U	NT		NT		NT		NT		NT		NT	$oldsymbol{oldsymbol{oldsymbol{\Box}}}$
1,2,4-Trichlorobenzene	~	~	mg/kg	<0.00026	U	<0.00023	U	NT		NT		NT		NT		NT		NT	$\perp \perp \downarrow$
p-Diethylbenzene	~	~	mg/kg	<0.00017	U	<0.00015	U	NT		NT	<u> </u>	NT		NT	<u> </u>	NT	<u> </u>	NT	+
p-Ethyltoluene	~	~	mg/kg	<0.00037	U	<0.00032	U	NT	1	NT	1	NT		NT	 	NT	 	NT	4—
1,2,4,5-Tetramethylbenzene	~	~	mg/kg	<0.00018	U	<0.00016	U	NT NT	+	NT		NT		NT	1	NT	1	NT	+
Ethyl ether	~	~	mg/kg	<0.00032	U	<0.00028	U	NT NT	+	NT NT	1	NT NT		NT NT	\vdash	NT NT	\vdash	NT NT	$+\!-\!\!\!\!-\!\!\!\!\!-$
trans-1,4-Dichloro-2-butene			mg/kg	<0.0014	U	<0.0012	$\perp / / A$	INI	ı	IN I	1	INI		IN I	1	IN I	1	INI	

Beach Channel Drive, Queens NY

Semivolatile Organics by GC/MS Acenaphthene 100 20 mg/kg <0.019 U <0.017 U 0.029 J 0.14 U 0.14 U 0.14 U 0.13 U 0.14 U dexachlorobenzene 1.2 0.33 mg/kg <0.02 U <0.019 U 0.1 U 0.11 U 0.11 U 0.1 U 0.1 U 0.11 U 0.11																			
Acenanhthene	100	20	mg/kg	<0.010	111				13	0.14	111	0.14	111	0.14	111	0.12	1 11 1	0.14	111
Hexachlorobenzene	1.2	0.33	mg/kg	<0.019	U	<0.017	U	0.029	U	0.14	U	0.14	U	0.14	U	0.13	U	0.14	_
Fluoranthene	100	100	mg/kg	0.034	J	0.14	0	0.97	Ŭ	0.11	U	0.1	U	0.1	U	0.1	U	0.11	U
Naphthalene	100	12	mg/kg	<0.022	U	0.14	J	0.37	U	0.11	U	0.17	U	0.17	U	0.17	U	0.11	U
							J		U		_						_		_
Benzo(a)anthracene	1	1	mg/kg	0.022	J	0.11		0.36		0.11	U	0.1	U	0.1	U	0.1	U	0.11	U
Benzo(a)pyrene	1	1	mg/kg	<0.044	U	0.088	J	0.27		0.14	U	0.14	U	0.14	U	0.13	U	0.14	U
Benzo(b)fluoranthene	1	1	mg/kg	0.031	J	0.11		0.46		0.11	U	0.1	U	0.1	U	0.1	U	0.11	U
Benzo(k)fluoranthene	3.9	0.8	mg/kg	<0.029	U	0.039	J	0.1		0.11	U	0.1	U	0.1	U	0.1	U	0.11	U
Chrysene	3.9	1	mg/kg	0.023	J	0.1		0.38		0.11	U	0.1	U	0.1	U	0.1	U	0.11	U
Acenaphthylene	100	100	mg/kg	<0.028	U	<0.026	U	0.14	U	0.14	U	0.14	U	0.14	U	0.13	U	0.14	U
Anthracene	100	100	mg/kg	< 0.035	U	< 0.033	Ω	0.091	J	0.11	U	0.1	U	0.1	U	0.1	U	0.11	U
Benzo(ghi)perylene	100	100	mg/kg	<0.021	U	0.056	J	0.16		0.14	U	0.14	U	0.14	U	0.13	U	0.14	U
Fluorene	100	30	mg/kg	<0.018	U	< 0.016	U	0.029	J	0.18	U	0.17	U	0.17	U	0.17	U	0.18	U
Phenanthrene	100	100	mg/kg	0.03	j	0.078	j	0.56		0.11	Ü	0.1	U	0.1	U	0.1	Ü	0.11	Ü
Dibenzo(a,h)anthracene	0.33	0.33	mg/kg	<0.021	U	<0.019	U	0.041	1	0.11	U	0.1	U	0.1	U	0.1	Ü	0.11	U
	0.55	0.5	mg/kg					0.19	J		U		U	0.14	U	0.13	U	0.11	U
Indeno(1,2,3-cd)pyrene			-	<0.025	U	0.055	J			0.14	_	0.14	_		_				_
Pyrene	100	100	mg/kg	0.036	J	0.18		0.72		0.11	U	0.1	U	0.1	U	0.1	U	0.11	U
Dibenzofuran	59	7	mg/kg	<0.017	U	<0.016	U	0.028	J	0.18	U	0.17	U	0.17	U	0.17	U	0.18	U
Pentachlorophenol	6.7	0.8	mg/kg	<0.04	U	<0.037	U	0.14	U	0.14	U	0.14	U	0.14	U	0.13	U	0.14	U
Phenol	100	0.33	mg/kg	<0.027	U	<0.025	U	0.17	U	0.18	U	0.17	U	0.17	U	0.17	U	0.18	U
2-Methylphenol	100	0.33	mg/kg	<0.028	U	<0.026	U	0.17	U	0.18	U	0.17	U	0.17	U	0.17	U	0.18	U
3-Methylphenol/4-Methylphenol	100	0.33	mg/kg	<0.028	U	<0.026	U	0.25	U	0.26	U	0.25	U	0.25	U	0.24	U	0.26	U
1,2,4-Trichlorobenzene	~	~	mg/kg	<0.02	U	<0.019	U	NT		NT		NT		NT		NT		NT	
Bis(2-chloroethyl)ether	~	~	mg/kg	<0.024	Ü	<0.023	U	NT		NT		NT		NT		NT	1 1	NT	
2-Chloronaphthalene	~	~	mg/kg	<0.018	U	<0.023	U	NT		NT		NT	<u> </u>	NT	<u> </u>	NT	1 1	NT	+
1,2-Dichlorobenzene	~	~	mg/kg	<0.018	U	<0.017	U	NT	1	NT	t -	NT	t	NT	t	NT	1	NT	+
	~	~						NT	\vdash	NT	1	NT	-	NT	-	NT	+	NT NT	+
1,3-Dichlorobenzene	~	~	mg/kg	<0.031	U	<0.029	U		 		1		<u> </u>		<u> </u>		+		+-
1,4-Dichlorobenzene	~		mg/kg	<0.031	U	<0.029	U	NT		NT		NT		NT		NT		NT	
3,3'-Dichlorobenzidine		~	mg/kg	<0.048	U	<0.045	U	NT		NT		NT		NT		NT		NT	
2,4-Dinitrotoluene	~	~	mg/kg	<0.036	U	<0.034	U	NT		NT		NT		NT		NT		NT	
2,6-Dinitrotoluene	~	~	mg/kg	< 0.031	U	<0.029	U	NT		NT		NT		NT		NT		NT	
4-Chlorophenyl phenyl ether	~	~	mg/kg	< 0.019	U	< 0.018	U	NT		NT		NT		NT		NT		NT	
4-Bromophenyl phenyl ether	~	~	mg/kg	< 0.027	U	<0.026	Ω	NT		NT		NT		NT		NT		NT	
Bis(2-chloroisopropyl)ether	~	~	mg/kg	<0.031	U	<0.029	U	NT		NT		NT		NT		NT		NT	
Bis(2-chloroethoxy)methane	~	~	mg/kg	<0.018	U	<0.017	U	NT		NT		NT		NT		NT		NT	
Hexachlorobutadiene	~	~	mg/kg	<0.026	U	<0.024	U	NT		NT		NT		NT		NT		NT	1
Hexachlorocyclopentadiene	~	~	mg/kg	<0.16	U	<0.15	U	NT		NT		NT		NT		NT		NT	+
	~	~	mg/kg	<0.10	U	<0.13	U	NT	1	NT	-	NT		NT		NT		NT	+
Hexachloroethane	~	~									-								+
Isophorone	~		mg/kg	<0.023	U	<0.022	U	NT		NT		NT		NT		NT		NT	
Nitrobenzene		~	mg/kg	<0.027	U	<0.025	U	NT		NT		NT		NT		NT		NT	4
NDPA/DPA	~	~	mg/kg	<0.02	U	<0.019	U	NT		NT		NT		NT		NT		NT	
n-Nitrosodi-n-propylamine	~	~	mg/kg	<0.028	U	<0.026	U	NT		NT		NT		NT		NT		NT	
Bis(2-ethylhexyl)phthalate	~	~	mg/kg	< 0.062	U	<0.058	U	NT		NT		NT		NT		NT		NT	
Butyl benzyl phthalate	~	~	mg/kg	< 0.045	U	< 0.042	Ω	NT		NT		NT		NT		NT		NT	
Di-n-butylphthalate	~	~	mg/kg	< 0.034	U	<0.032	U	NT		NT		NT		NT		NT		NT	
Di-n-octylphthalate	~	~	mg/kg	<0.061	Ü	<0.057	U	NT		NT		NT		NT		NT	1 1	NT	
Diethyl phthalate	~	~	mg/kg	<0.017	U	<0.037	U	NT		NT		NT	<u> </u>	NT	<u> </u>	NT	1 1	NT	+
Dimethyl phthalate	~	~	mg/kg	<0.038	U	<0.035	U	NT		NT		NT	<u> </u>	NT	<u> </u>	NT	1 1	NT	+
Biphenyl	~	~	mg/kg	<0.038	U	<0.039	U	NT	†	NT	1	NT	<u> </u>	NT	<u> </u>	NT	+	NT	1
	~	~							1		1		<u> </u>		<u> </u>		+		+
4-Chloroaniline	~	~	mg/kg	<0.033	U	<0.03	U	NT	1	NT	+	NT	!	NT	!	NT	+	NT	+
2-Nitroaniline			mg/kg	<0.035	U	<0.032	U	NT	 	NT	-	NT	<u> </u>	NT	<u> </u>	NT	₩.	NT	+-
3-Nitroaniline	~	~	mg/kg	<0.034	U	<0.032	U	NT		NT		NT	<u> </u>	NT	<u> </u>	NT	\sqcup	NT	
4-Nitroaniline	~	~	mg/kg	< 0.074	U	< 0.07	U	NT		NT		NT		NT		NT	1 1	NT	
2-Methylnaphthalene	~	~	mg/kg	<0.022	U	<0.02	U	NT	Щ.	NT		NT	<u></u>	NT	<u></u>	NT		NT	\perp
1,2,4,5-Tetrachlorobenzene	~	~	mg/kg	<0.019	U	<0.018	U	NT		NT		NT		NT		NT		NT	
Acetophenone	~	~	mg/kg	<0.022	U	<0.021	U	NT		NT		NT		NT		NT		NT	
2,4,6-Trichlorophenol	~	~	mg/kg	<0.034	Ü	<0.032	U	NT		NT		NT		NT		NT	1 1	NT	
p-Chloro-m-cresol	~	~	mg/kg	<0.027	U	<0.032	U	NT		NT		NT		NT		NT	1 1	NT	+
	~	~						NT	-	NT		NT		NT		NT	+ +	NT	+
2-Chlorophenol	~	~	mg/kg	<0.021	U	<0.02	U		1		1		<u> </u>		<u> </u>		+		+
2,4-Dichlorophenol			mg/kg	<0.029	U	<0.027	U	NT	1	NT	+	NT	!	NT	!	NT	+	NT	+
2,4-Dimethylphenol	~	~	mg/kg	<0.059	U	<0.055	U	NT	<u> </u>	NT	<u> </u>	NT	<u> </u>	NT	<u> </u>	NT	1	NT	
2-Nitrophenol	~	~	mg/kg	<0.068	U	<0.063	U	NT		NT		NT		NT		NT	1 1	NT	
4-Nitrophenol	~	?	mg/kg	< 0.073	U	<0.068	U	NT		NT		NT		NT		NT		NT	\perp
2,4-Dinitrophenol	~	~	mg/kg	<0.084	U	<0.078	U	NT		NT		NT		NT		NT		NT	
	~	~	mg/kg	<0.086	U	<0.08	U	NT		NT		NT		NT		NT		NT	
4.6-Dinitro-o-cresol									t		† 		1				1		+
	~	~	mg/kg	<u i<="" td="" u3=""><td>1 11 1</td><td><0.030</td><td></td><td>[NI I</td><td></td><td>NI</td><td></td><td></td><td></td><td></td><td></td><td>NI</td><td></td><td>NT</td><td></td></u>	1 11 1	<0.030		[NI I		NI						NI		NT	
4,6-Dinitro-o-cresol 2,4,5-Trichlorophenol	~	~	mg/kg mg/kg	<0.034	U	<0.032	U	NT NT		NT NT		NT NT		NT NT		NT NT	+-+	NT NT	-
			mg/kg mg/kg mg/kg	<0.034 <0.18 <0.055	U U	<0.032 <0.17 <0.051	U	NT NT		NT NT		NT NT		NT NT		NT NT		NT NT NT	



Beach Channel Drive, Queens NY

LOCATION				SB-1 (0-	,	SB-2 (0-2		SB-1 (0-2		SB-1 (2-		SB-2 (0-2		SB-2 (2-4		SB-3 (0-2		SB-3 (4-6	
SAMPLING DATE				L1828167		L1828167		10/20/20		10/20/20		10/20/20		10/20/20		10/21/20		10/21/20	
LAB SAMPLE ID				7/23/20	18	7/23/20:	18	L2046791-	01	L2046791	-02	L2046791-	03	L2046791-	04	L2046791-	05	L2046791-	06
SAMPLE TYPE	NY-RESRR	NY-UNRES	Units	SOIL Results	Qual	SOIL Results	Qual	SOIL Results	Qual	SOIL Results	Qual	SOIL Results	Qual	SOIL Results	Qual	SOIL Results	Qual	SOIL Results	Qual
	INT-NESKK	NT-UNKES	Units	Results	Quai			Pesticides by G		Results	Quai	Results	Quai	Results	Quai	Results	Quai	Results	Quai
Delta-BHC	100	0.04	mg/kg	NT	NT	NT	NT	0.00164	U	0.00169	U	0.0016	U	0.00159	U	0.00154	U	0.00163	U
Lindane	1.3	0.1	mg/kg	NT	NT	NT	NT	0.00104	U	0.00103	U	0.00016	U	0.00133	U	0.00134	U	0.00103	U
Alpha-BHC	0.48	0.02	mg/kg	NT	NT	NT	NT	0.000683	U	0.000705	U	0.000668	U	0.000662	U	0.000642	U	0.000679	U
Beta-BHC	0.36	0.036	mg/kg	NT	NT	NT	NT	0.00164	U	0.00169	Ü	0.0016	Ü	0.00159	U	0.00154	U	0.00163	U
Heptachlor	2.1	0.042	mg/kg	NT	NT	NT	NT	0.00082	U	0.000846	U	0.000802	U	0.000794	U	0.00077	U	0.000103	U
Aldrin	0.097	0.005	mg/kg	NT	NT	NT	NT	0.00164	U	0.00169	Ü	0.0016	U	0.00159	U	0.00154	U	0.00163	U
Endrin	11	0.014	mg/kg	NT	NT	NT	NT	0.000683	U	0.000705	U	0.000668	U	0.000662	U	0.000642	U	0.000679	U
Dieldrin	0.2	0.005	mg/kg	NT	NT	NT	NT	0.00102	U	0.00106	U	0.001	U	0.000993	U	0.000963	U	0.00102	U
4,4'-DDE	8.9	0.0033	mg/kg	NT	NT	NT	NT	0.00164	Ü	0.00169	Ü	0.0016	Ü	0.00159	Ū	0.00154	U	0.00163	Ü
4,4'-DDD	13	0.0033	mg/kg	NT	NT	NT	NT	0.00164	U	0.00169	U	0.0016	U	0.00159	U	0.00154	U	0.00163	Ü
4,4'-DDT	7.9	0.0033	mg/kg	NT	NT	NT	NT	0.00307	U	0.00317	U	0.00301	U	0.00298	U	0.00289	U	0.00305	U
Endosulfan I	24	2.4	mg/kg	NT	NT	NT	NT	0.00164	U	0.00169	U	0.0016	U	0.00159	U	0.00154	U	0.00163	U
Endosulfan II	24	2.4	mg/kg	NT	NT	NT	NT	0.00164	U	0.00169	U	0.0016	U	0.00159	U	0.00154	U	0.00163	U
Endosulfan sulfate	24	2.4	mg/kg	NT	NT	NT	NT	0.000683	Ü	0.000705	U	0.000668	Ü	0.000662	U	0.000642	U	0.000679	U
cis-Chlordane	4.2	0.094	mg/kg	NT	NT	NT	NT	0.00205	U	0.00212	U	0.002	U	0.00199	U	0.00192	U	0.00204	U
						Polychlor	inated	Biphenyls by G	iC										
Aroclor 1016	1	0.1	mg/kg	NT	NT	NT	NT	0.0345	U	0.0359	U	0.0335	U	0.0344	U	0.0329	U	0.0352	U
Aroclor 1221	1	0.1	mg/kg	NT	NT	NT	NT	0.0345	U	0.0359	U	0.0335	U	0.0344	U	0.0329	U	0.0352	U
Aroclor 1232	1	0.1	mg/kg	NT	NT	NT	NT	0.0345	U	0.0359	U	0.0335	U	0.0344	U	0.0329	U	0.0352	U
Aroclor 1242	1	0.1	mg/kg	NT	NT	NT	NT	0.0345	U	0.0359	U	0.0335	U	0.0344	U	0.0329	U	0.0352	U
Aroclor 1248	1	0.1	mg/kg	NT	NT	NT	NT	0.0345	U	0.0359	U	0.0335	U	0.0344	U	0.0329	U	0.0352	U
Aroclor 1254	1	0.1	mg/kg	NT	NT	NT	NT	0.0345	U	0.0359	U	0.0335	U	0.0344	U	0.0329	U	0.0352	U
Aroclor 1260	1	0.1	mg/kg	NT	NT	NT	NT	0.00862	J	0.0359	U	0.0335	U	0.0344	U	0.0329	U	0.0352	U
Aroclor 1262	1	0.1	mg/kg	NT	NT	NT	NT	0.0345	U	0.0359	U	0.0335	U	0.0344	U	0.0329	U	0.0352	U
Aroclor 1268	1	0.1	mg/kg	NT	NT	NT	NT	0.0345	U	0.0359	U	0.0335	U	0.0344	U	0.0329	U	0.0352	U
PCBs, Total	1	0.1	mg/kg	NT	NT	NT	NT	0.00862	J	0.0359	U	0.0335	U	0.0344	U	0.0329	U	0.0352	U
						Chlorina	ited He	rbicides by GC	_										
2,4,5-TP (Silvex)	100	3.8	mg/kg					0.174	U	0.179	U	0.173	U	0.169	U	0.168	U	0.175	U
	1.0	1 40	/1		т т		Total N			4.00		0.547	1 1	0.00	1	4.55	1	4.00	
Arsenic, Total	16	13	mg/kg	5.08		2.01		4.14	 	1.03		0.547		0.92		1.55		1.38	4
Barium, Total	400	350	mg/kg	173	I	18	1	70.9	 	22.3	+	2.46	L	1.75	H .	7.98		3	₩
Beryllium, Total	72	7.2	mg/kg	0.117	J	0.282	J	0.212	H H	0.077	J	0.041	J	0.033	J	0.065	J	0.058	₩
Cadmium, Total	4.3	2.5	mg/kg	0.417	J	0.274	J	0.423	U	0.429	U	0.412	U	0.407	U	0.403	U	0.416	U
Chromium, Total			mg/kg	7.58		3.38	1	6.82	 	4.49	-	2.07		1.89		3.9		4.94 1.3	+
Copper, Total	270 400	50 63	mg/kg	19.7	1	32.2	1	20.3 168	├─ ┼	4.62	-	2.15		0.887	<u> </u>	2.17			+
Lead, Total	2000	1600	mg/kg	166		74.7				30.4 23	-	4.04 13.6		1.54 9	J	4.67 24.6		1.15 19.6	
Manganese, Total	0.81		mg/kg	57		28.4		64.6					-	-					
Mercury, Total Nickel, Total	310	0.18 30	mg/kg mg/kg	0.669 4.96		0.155 6.39		0.506 5.44	 	0.068 1.7	U	0.071 1.07	U	0.075 0.509	J	0.069 2.15	U	0.078 1.62	U
Selenium, Total	180	3.9	mg/kg	0.433	J	<0.202	U	0.203	\vdash	0.859	U	0.823	U	0.509	U	0.807	U	0.833	U
Silver, Total	180	2	mg/kg	<0.236	U	<0.202	U	0.203	J	0.859	U	0.823	U	0.814	U	0.807	U	0.833	U
Zinc, Total	10000	109	mg/kg	376	U	205	U	103	U	10.9	U	7.7	U	4.36	U	8.1	U	3.72	1
Aluminum, Total	~	~	mg/kg	4560	\vdash	1230		NT	 	NT		NT		4.30 NT		NT		3.72 NT	+
Antimony, Total	~	~	mg/kg	<0.317	U	5.63		NT	\vdash	NT		NT		NT		NT		NT	+-
Calcium, Total	~	~	mg/kg	1360	0	1970		NT	+	NT		NT	\vdash	NT		NT		NT	+
Cobalt, Total	~	~	mg/kg	1.68	+	2.6		NT	 	NT		NT		NT		NT		NT	+
Iron, Total	~	~	mg/kg	6870	+	3590		NT	+	NT		NT		NT		NT		NT	\vdash
Magnesium. Total	~	~	mg/kg	367	+	371		NT	+	NT		NT		NT		NT		NT	\vdash
Potassium, Total	~	~	mg/kg	182	J	94.8	J	NT	1	NT		NT		NT		NT		NT	\Box
Sodium, Total	~	~	mg/kg	67.9	J	45.8	J	NT		NT		NT		NT		NT		NT	+
Thallium, Total	~	~	mg/kg	<0.262	U	<0.247	U	NT		NT		NT		NT		NT		NT	\Box
Vanadium, Total	~	~	mg/kg	12.4	 	5.28	Ť	NT		NT		NT		NT		NT		NT	\Box
			010				neral C	hemistry											
Chromium, Trivalent	180	30	mg/kg	NT		NT		6.8		4.5		2.1		1.9		3.9		4.9	
Solids, Total	~	~	%	NT		NT		93.9		92.2		95.5		95.6		97.6		93.2	\Box
Cyanide, Total	27	27	mg/kg	NT		NT		0.37	J	1	U	1	U	1	U	1	U	0.99	U
Chromium, Hexavalent	110	1	mg/kg	NT		NT		0.852	U	0.868	Ü	0.838	U	0.837	U	0.82	U	0.858	U
NY-UNRES - NYSDEC Part 375 Unrestricte		Objectives	<i>3,</i> 0		•		•												=

NY-UNRES - NYSDEC Part 375 Unrestricted Use Soil Cleanup Objectives
NY-RESRR - NYSDEC Part 375 Restricted Residential Use Soil Cleanup Objectives

mg/kg - milligrams per kilogram U - not detected

J - estimated value
Bold - MDL exceeds applicable standard
Highlighted - result in exceedance of applicable standard



Beach Channel Drive, Queens NY

LOCATION SAMPLING DATE				SB-4 (0-2 10/20/20	SB-4 (2-4) 10/20/2020		SB-5 (0-2 10/21/202	2020 10/21/2020			SB-6 (0-2) 0 10/21/2020		SB-6 (4-6) 10/21/2020		
LAB SAMPLE ID				L2046791-		L2046791-		L2046791-		L2046791-		L2046791		L2046791	
SAMPLE TYPE				SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	NY-RESRR	NY-UNRES	Units	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual
Methylene chloride	100	0.05	mg/kg	0.0051	Urgani	cs by EPA 5035 0.37	U	0.0058	U	0.0065	U	0.0042	U	0.005	Ιυ
1,1-Dichloroethane	26	0.27	mg/kg	0.001	U	0.073	U	0.0012	U	0.0013	U	0.00084	U	0.001	U
Chloroform	49	0.37	mg/kg	0.0015	U	0.11	U	0.0017	U	0.002	U	0.0012	U	0.0015	U
Carbon tetrachloride	2.4	0.76	mg/kg	0.001	U	0.073	U	0.0012	U	0.0013	U	0.00084	U	0.001	U
Tetrachloroethene	19	1.3	mg/kg	0.044		3.2		0.00088		0.0014		0.00042	U	0.00024	J
Chlorobenzene	100	1.1	mg/kg	0.00051	U	0.037	U	0.00058	U	0.00065	U	0.00042	U	0.0005	U
1,2-Dichloroethane	3.1 100	0.02	mg/kg	0.001 0.00051	U	0.073 0.037	U	0.0012 0.00058	U	0.0013 0.00065	U	0.00084	U	0.001	U
1,1,1-Trichloroethane Benzene	4.8	0.06	mg/kg mg/kg	0.00051	U	0.037	U	0.00058	U	0.00065	U	0.00042	U	0.0005	U
Toluene	100	0.7	mg/kg	0.00031	U	0.037	U	0.00038	U	0.00003	U	0.00042	U	0.0003	U
Ethylbenzene	41	1	mg/kg	0.001	Ü	0.073	U	0.0012	U	0.0013	U	0.00084	Ü	0.001	U
Vinyl chloride	0.9	0.02	mg/kg	0.001	U	0.073	U	0.0012	U	0.0013	U	0.00084	U	0.001	U
1,1-Dichloroethene	100	0.33	mg/kg	0.001	U	0.073	U	0.0012	U	0.0013	U	0.00084	U	0.001	U
trans-1,2-Dichloroethene	100	0.19	mg/kg	0.0015	U	0.11	U	0.0017	U	0.002	U	0.0012	U	0.0015	U
Trichloroethene	21	0.47	mg/kg	0.00018	J	0.037	U	0.00058	U	0.00065	U	0.00042	U	0.0005	U
1,2-Dichlorobenzene	100	1.1	mg/kg	0.002	U	0.15	U	0.0023	U	0.0026	U	0.0017	U	0.002	U
1,3-Dichlorobenzene	49	2.4	mg/kg	0.002	U	0.15	U	0.0023	U	0.0026	U	0.0017	U	0.002	U
1,4-Dichlorobenzene	13	1.8	mg/kg	0.002	U	0.15	U	0.0023	U	0.0026	U	0.0017	U	0.002	U
Methyl tert butyl ether	100	0.93	mg/kg	0.002	U	0.15	U	0.0023	U	0.0026	U	0.0017	U	0.002	U
p/m-Xylene	~	~	mg/kg mg/kg	0.002	U	0.15	U	0.0023	U	0.0026	U	0.0017	U	0.002	U
o-Xylene cis-1,2-Dichloroethene	100	0.25	mg/kg mg/kg	0.001 0.001	U	0.073 0.073	U	0.0012 0.0012	U	0.0013 0.0013	U	0.00084	U	0.001	U
Acetone	100	0.25	mg/kg	0.001	U	0.073 0.73	U	0.0012	-	0.0013	, U	0.00084	-	0.001	+
2-Butanone	100	0.03	mg/kg	0.029	U	0.73	U	0.024	U	0.033	U	0.011	U	0.02	U
n-Butylbenzene	100	12	mg/kg	0.001	U	0.073	U	0.0012	U	0.0013	U	0.00084	U	0.001	U
sec-Butylbenzene	100	11	mg/kg	0.001	U	0.073	U	0.0012	U	0.0013	U	0.00084	U	0.001	U
tert-Butylbenzene	100	5.9	mg/kg	0.002	U	0.15	U	0.0023	U	0.0026	U	0.0017	U	0.002	U
n-Propylbenzene	100	3.9	mg/kg	0.001	U	0.073	U	0.0012	U	0.0013	U	0.00084	U	0.001	U
1,3,5-Trimethylbenzene	52	8.4	mg/kg	0.002	U	0.15	U	0.0023	U	0.0026	U	0.0017	U	0.002	U
1,2,4-Trimethylbenzene	52	3.6	mg/kg	0.002	U	0.15	U	0.0023	U	0.0026	U	0.0017	U	0.002	U
1,4-Dioxane	13	0.1	mg/kg	0.082	U	5.9	U	0.093	U	0.1	U	0.067	U	0.081	U
1,2-Dichloropropane	~	~	mg/kg	NT		NT		NT		NT		NT	1	NT	!
Dibromochloromethane	~	~	mg/kg	NT		NT		NT		NT		NT	+ +	NT	+
1,1,2-Trichloroethane	~	~	mg/kg	NT NT		NT NT		NT NT		NT NT		NT NT	+	NT NT	+
Trichlorofluoromethane Bromodichloromethane	~	~	mg/kg mg/kg	NT NT		NT NT		NT NT		NT		NT NT	+ +	NT NT	+
trans-1,3-Dichloropropene	~	~	mg/kg	NT		NT		NT		NT		NT	+ +	NT	+
cis-1,3-Dichloropropene	~	~	mg/kg	NT		NT		NT		NT		NT	1 1	NT	+
1,3-Dichloropropene, Total	~	~	mg/kg	NT		NT		NT		NT		NT		NT	+
1,1-Dichloropropene	~	~	mg/kg	NT		NT		NT		NT		NT		NT	+
Bromoform	~	~	mg/kg	NT		NT		NT		NT		NT		NT	
1,1,2,2-Tetrachloroethane	~	~	mg/kg	NT		NT		NT		NT		NT		NT	
Chloromethane	~	~	mg/kg	NT		NT		NT		NT		NT		NT	
Bromomethane	~	~	mg/kg	NT		NT		NT		NT		NT		NT	
Chloroethane	~	~	mg/kg	NT		NT		NT		NT		NT		NT	!
Xylenes, Total	100	0.26	mg/kg	NT		NT		NT		NT		NT	1	NT	
1,2-Dichloroethene, Total	~	~	mg/kg	NT	 	NT	 	NT		NT		NT	+	NT	4
Dibromomethane Sturono	~	~	mg/kg	NT NT	1	NT NT	\vdash	NT NT		NT NT	 	NT	+	NT NT	$+ - \parallel$
Styrene Dichlorodifluoromethane	~	~	mg/kg	NT NT		NT NT		NT NT		NT NT	1	NT NT	+ +	NT NT	+
Carbon disulfide	~	~	mg/kg mg/kg	NT NT		NT NT	1	NT NT		NT NT	1	NT NT	+	NT NT	$+ \dashv$
Vinyl acetate	~	~	mg/kg	NT		NT		NT		NT	1	NT	+ +	NT	$+ \dashv$
4-Methyl-2-pentanone	~	~	mg/kg	NT		NT		NT		NT		NT		NT	$+ \dashv$
1,2,3-Trichloropropane	~	~	mg/kg	NT		NT		NT		NT		NT		NT	$\dagger \exists \forall$
2-Hexanone	~	~	mg/kg	NT		NT		NT		NT		NT		NT	
Bromochloromethane	~	~	mg/kg	NT		NT		NT		NT		NT		NT	
2,2-Dichloropropane	~	~	mg/kg	NT		NT		NT		NT		NT		NT	التبل
1,2-Dibromoethane	~	~	mg/kg	NT		NT		NT		NT	ЩĪ	NT	$oxed{oxed}$	NT	$oxed{oxed}$
1,3-Dichloropropane	~	~	mg/kg	NT		NT	 	NT		NT		NT	\vdash	NT	+
1,1,2-Tetrachloroethane	~	~	mg/kg	NT		NT	 	NT		NT	\sqcup	NT	+	NT	+
Bromobenzene	~	~	mg/kg	NT	1	NT	1	NT		NT	\vdash	NT	+	NT	$+\!-\!\!\!\!+$
o-Chlorotoluene p-Chlorotoluene	~	~	mg/kg mg/kg	NT NT		NT NT		NT NT		NT NT	1	NT NT	+ +	NT NT	+
1,2-Dibromo-3-chloropropane	~	~	mg/kg mg/kg	NT NT		NT NT		NT NT		NT	1	NT NT	+	NT NT	$+ - \parallel$
Hexachlorobutadiene	~	~	mg/kg	NT		NT		NT		NT		NT	+	NT	$+ \dashv$
Isopropylbenzene	~	~	mg/kg	NT		NT		NT		NT	1	NT	1	NT	$+ \neg$
p-Isopropyltoluene	~	~	mg/kg	NT		NT		NT		NT		NT		NT	$+ \dashv$
Naphthalene	100	12	mg/kg	NT		NT		NT		NT		NT		NT	$\dagger \exists \forall$
Acrylonitrile	~	~	mg/kg	NT		NT		NT		NT		NT		NT	17
1,2,3-Trichlorobenzene	~	~	mg/kg	NT		NT		NT		NT		NT		NT	
1,2,4-Trichlorobenzene	~	~	mg/kg	NT		NT		NT		NT		NT		NT	
p-Diethylbenzene	~	~	mg/kg	NT		NT		NT		NT	$oxed{\Box}$	NT		NT	
p-Ethyltoluene	~	~	mg/kg	NT		NT		NT		NT		NT	\sqcup	NT	+
1,2,4,5-Tetramethylbenzene	~	~	mg/kg	NT	1	NT	1	NT		NT		NT	+	NT	+
Ethyl ether	~	~	mg/kg mg/kg	NT NT		NT	.	NT		NT NT		NT NT	1 1	NT	+
trans-1,4-Dichloro-2-butene					///	NT //		NT		. NIT		NIT		NT	

Beach Channel Drive, Queens NY

Semivolatile Organics by GC/MS															
Assassinations	100	20	ma/ka		tile Org		_	0.03		0.14		0.12	1 1	0.14	1
Hexachlorobenzene	1.2	0.33	mg/kg	0.78	U	0.14	U	0.02	U	0.14	U	0.13	U	0.14	U
Fluoranthene	100	100	mg/kg	15	E	0.066	J	0.11	U	0.11	U	0.10	U	0.10	U
Naphthalene	100	12	mg/kg	0.5	E .	0.000	U	0.38	J	0.28	J	0.10	U	0.10	U
Benzo(a)anthracene	1	1	mg/kg	6.8		0.034	J	0.048	J	0.039	J	0.10	U	0.17	U
Benzo(a)pyrene	1	1	mg/kg	7		0.034	U	0.37		0.14		0.13	U	0.14	Ü
Benzo(b)fluoranthene	1	1	mg/kg	8.8	Е	0.045	J	0.48		0.18		0.10	U	0.10	Ü
Benzo(k)fluoranthene	3.9	0.8	mg/kg	2.3	_	0.11	U	0.15		0.054		0.10	U	0.10	Ü
Chrysene	3.9	1	mg/kg	6		0.028	J	0.25		0.16	,	0.10	U	0.10	Ü
Acenaphthylene	100	100	mg/kg	0.16		0.14	Ū	0.1	j	0.038	J	0.13	Ü	0.14	Ü
Anthracene	100	100	mg/kg	2.5		0.11	U	0.064	j	0.041	J	0.10	U	0.10	U
Benzo(ghi)perylene	100	100	mg/kg	3.6		0.14	Ü	0.24		0.097	J	0.13	Ü	0.14	U
Fluorene	100	30	mg/kg	0.82		0.18	U	0.18	U	0.18	U	0.17	U	0.17	U
Phenanthrene	100	100	mg/kg	14	Е	0.044	J	0.11		0.2		0.10	U	0.10	U
Dibenzo(a,h)anthracene	0.33	0.33	mg/kg	0.92		0.11	U	0.062	J	0.025	J	0.10	U	0.10	U
Indeno(1,2,3-cd)pyrene	0.5	0.5	mg/kg	4.2		0.14	U	0.29		0.1	J	0.13	U	0.14	U
Pyrene	100	100	mg/kg	13	Е	0.056	J	0.37		0.37		0.10	U	0.10	U
Dibenzofuran	59	7	mg/kg	0.65		0.18	U	0.18	U	0.18	U	0.17	U	0.17	U
Pentachlorophenol	6.7	0.8	mg/kg	0.14	U	0.14	U	0.14	U	0.14	U	0.13	U	0.14	U
Phenol	100	0.33	mg/kg	0.18	U	0.18	U	0.18	U	0.18	U	0.17	U	0.17	U
2-Methylphenol	100	0.33	mg/kg	0.18	U	0.18	U	0.18	U	0.18	U	0.17	U	0.17	U
3-Methylphenol/4-Methylphenol	100	0.33	mg/kg	0.031	J	0.26	U	0.26	U	0.26	U	0.24	U	0.24	U
1,2,4-Trichlorobenzene	~	~	mg/kg	NT		NT		NT		NT		NT		NT	
Bis(2-chloroethyl)ether	~	~	mg/kg	NT		NT		NT		NT		NT		NT	
2-Chloronaphthalene	~	~	mg/kg	NT		NT		NT		NT		NT		NT	
1,2-Dichlorobenzene	~	~	mg/kg	NT		NT		NT		NT		NT		NT	
1,3-Dichlorobenzene	~	~	mg/kg	NT		NT		NT		NT		NT		NT	
1,4-Dichlorobenzene	~	~	mg/kg	NT		NT		NT		NT		NT		NT	
3,3'-Dichlorobenzidine	~	~	mg/kg	NT		NT		NT		NT		NT		NT	
2,4-Dinitrotoluene	~	~	mg/kg	NT		NT		NT		NT		NT		NT	
2,6-Dinitrotoluene	~	~	mg/kg	NT		NT		NT		NT		NT		NT	
4-Chlorophenyl phenyl ether	~	~	mg/kg	NT		NT		NT		NT		NT		NT	
4-Bromophenyl phenyl ether	~	~	mg/kg	NT		NT		NT		NT		NT		NT	
Bis(2-chloroisopropyl)ether	~	~	mg/kg	NT		NT		NT		NT		NT		NT	
Bis(2-chloroethoxy)methane	~	~	mg/kg	NT		NT		NT		NT		NT		NT	
Hexachlorobutadiene	~	~	mg/kg	NT		NT		NT		NT		NT		NT	
Hexachlorocyclopentadiene	~	~	mg/kg	NT		NT		NT		NT		NT		NT	
Hexachloroethane	~	~	mg/kg	NT		NT		NT		NT		NT		NT	
Isophorone	~	~	mg/kg	NT		NT		NT		NT		NT		NT	
Nitrobenzene	~	~	mg/kg	NT		NT		NT		NT		NT		NT	
NDPA/DPA	~	~	mg/kg	NT		NT		NT		NT		NT		NT	
n-Nitrosodi-n-propylamine	~	~	mg/kg	NT		NT		NT		NT		NT		NT	
Bis(2-ethylhexyl)phthalate	~	~	mg/kg	NT		NT		NT		NT		NT		NT	
Butyl benzyl phthalate	~	~	mg/kg	NT		NT		NT		NT		NT		NT	
Di-n-butylphthalate	~	~	mg/kg	NT		NT		NT		NT		NT		NT	
Di-n-octylphthalate	~	~	mg/kg	NT		NT		NT		NT		NT		NT	
Diethyl phthalate	~	~	mg/kg	NT		NT		NT		NT		NT		NT	
Dimethyl phthalate	~	~	mg/kg	NT		NT		NT		NT		NT		NT	
Biphenyl	~	~	mg/kg	NT	+	NT		NT		NT		NT		NT	
4-Chloroaniline	~	~	mg/kg	NT	+	NT		NT		NT		NT		NT	
2-Nitroaniline	~	~	mg/kg	NT	+ -	NT		NT		NT		NT		NT	
3-Nitroaniline	~	~	mg/kg	NT		NT		NT		NT		NT	-	NT	
4-Nitroaniline	~	~	mg/kg	NT		NT		NT		NT		NT	-	NT	
2-Methylnaphthalene	~	~	mg/kg	NT NT	+	NT NT	.	NT NT	.	NT NT	.	NT NT	1-	NT NT	+
1,2,4,5-Tetrachlorobenzene	~	~	mg/kg	NT NT	+	NT NT	1	NT NT	1	NT NT	1		+	NT NT	+
Acetophenone 2.4.6-Trichlorophenol	~	~	mg/kg	NT NT	+	NT NT	1	NT NT	1	NT NT	1	NT NT	+	NT NT	+
, ,	~	~	mg/kg mg/kg	NT NT	+	NT NT	1	NT NT	1	NT NT	1	NT NT	+	NT NT	+
p-Chloro-m-cresol	~	~	mg/kg	NT	+	NT	1	NT	1	NT	1	NT	+	NT	+
2-Chlorophenol 2,4-Dichlorophenol	~	~	mg/kg	NT	+	NT	1	NT	1	NT	1	NT	+	NT NT	+
2,4-Dicnioropnenoi 2,4-Dimethylphenol	~	~	mg/kg	NT	+	NT		NT		NT		NT	+	NT	+
	~	~	mg/kg	NT	+	NT		NT		NT		NT	+	NT	+
2-Nitrophenol	~	~	mg/kg mg/kg	NT NT	+	NT NT	1	NT NT	1	NT NT	1	NT NT	+	NT NT	+
4-Nitrophenol 2,4-Dinitrophenol	~	~	mg/kg	NT	+	NT	1	NT	1	NT	1	NT	+	NT NT	+
	~	~	mg/kg	NT	+	NT		NT		NT		NT	+	NT	+
1 6-Dinitro-o-cresol					-				1		1		+		+
,	~	~	ma/ka	NIT	1 1	NT		NIT		NIT		NT		NIT	
2,4,5-Trichlorophenol	~	~	mg/kg	NT NT	+ -	NT NT		NT NT		NT NT		NT NT	-	NT NT	
4,6-Dinitro-o-cresol 2,4,5-Trichlorophenol Benzoic Acid Benzyl Alcohol			mg/kg mg/kg mg/kg	NT NT NT		NT NT NT		NT NT NT		NT NT NT		NT NT NT		NT NT NT	



Beach Channel Drive, Queens NY

Deta-BHC		SB-4 (0-2	SB-4 (2-4	SB-5 (0-2)						3B-b (4-	(4-6)		
NY-RESRR				20	10/21/20	20	10/21/20		10/21/20		10/21/20		
Delta-BHC 100 0.04 mg		L2046791-		L2046791-		L2046791		L2046791-		L2046791-		L2046791	
NY-RESR NY-UNRES Un		SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
Delta-BHC		Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual
Lindane Alpha-BHC Alpha-BHC Alpha-BHC Alfania-BHC Allania-BHC Alfania-BHC Alfa		Organochl	lorine I	Pesticides by 0	GC .								
Alpha-BHC 0.48 0.02 mg	g	0.00171	U	0.0017	U	0.00169	U	0.0017	U	0.00155	U	0.00157	U
Alpha-BHC		0.000713	U	0.000706	U	0.000704	U	0.000711	U	0.000646	U	0.000654	U
Beta-BHC 0.36 0.036 mg		0.000713	U	0.000706	U	0.000704	U	0.000711	U	0.000646	U	0.000654	U
Heptachlor		0.00171	U	0.0017	U	0.00169	U	0.0017	U	0.00155	U	0.00157	U
Aldrin		0.000855	U	0.000848	U	0.000844	U	0.000853	U	0.000775	U	0.000785	U
Endrin	_	0.00171	U	0.0017	U	0.00169	U	0.0017	U	0.00155	U	0.00157	U
Dieldrin		0.000713	U	0.000706	U	0.000704	U	0.000711	U	0.000646	Ü	0.000654	U
4,4'-DDE 8.9 0.0033 mg 4,4'-DDD 13 0.0033 mg 4,4'-DDT 7.9 0.0033 mg Endosulfan II 24 2.4 mg Endosulfan sulfate 24 2.4 mg cis-Chlordane 4.2 0.094 mg Aroclor 1016 1 0.1 mg Aroclor 1221 1 0.1 mg Aroclor 1221 1 0.1 mg Aroclor 1232 1 0.1 mg Aroclor 1242 1 0.1 mg Aroclor 1248 1 0.1 mg Aroclor 1260 1 0.1 mg Aroclor 1260 1 0.1 mg Aroclor 1268 <	-	0.00107	U	0.00106	U	0.00106	U	0.00106	U	0.000969	Ü	0.000981	U
4,4'-DDD 13 0.0033 mg 4,4'-DDT 7.9 0.0033 mg Endosulfan I 24 2.4 mg Endosulfan III 24 2.4 mg Endosulfan Sulfate 24 2.4 mg cis-Chlordane 4.2 0.094 mg Aroclor 1016 1 0.1 mg Aroclor 1221 1 0.1 mg Aroclor 1232 1 0.1 mg Aroclor 1242 1 0.1 mg Aroclor 1254 1 0.1 mg Aroclor 1250 1 0.1 mg Aroclor 1262 1 0.1 mg Aroclor 1268 1 0.1 mg PCBs, Total 1 0.1 mg Arsoclor 1268		0.00171	U	0.0017	Ü	0.00169	Ü	0.0017	U	0.00155	Ü	0.00157	Ü
A,4'-DDT		0.00171	U	0.0017	U	0.00169	U	0.0017	U	0.00155	Ü	0.00157	Ü
Endosulfan I		0.00321	U	0.00318	U	0.00103	U	0.0032	U	0.00291	U	0.00294	Ü
Endosulfan II 24 2.4 mg Endosulfan sulfate 24 2.4 mg cis-Chlordane 4.2 0.094 mg Aroclor 1016 1 0.1 mg Aroclor 1221 1 0.1 mg Aroclor 1222 1 0.1 mg Aroclor 1242 1 0.1 mg Aroclor 1248 1 0.1 mg Aroclor 1254 1 0.1 mg Aroclor 1260 1 0.1 mg Aroclor 1262 1 0.1 mg Aroclor 1268 1 0.1 mg PCBs, Total 1 0.1 mg PCBs, Total 1 0.1 mg Arsenic, Total 400 350 mg Beryllium, Total 4.3 2.5 mg Chromium, Total 4.3 2.5 mg Chromium, Total 2.7 2. mg Manganese, Total		0.00321	U	0.00310	U	0.00317	U	0.0032	U	0.00251	U	0.00257	Ü
Endosulfan sulfate cis-Chlordane 24 2.4 mg Aroclor 1016 1 0.1 mg Aroclor 1221 1 0.1 mg Aroclor 1232 1 0.1 mg Aroclor 1242 1 0.1 mg Aroclor 1248 1 0.1 mg Aroclor 1254 1 0.1 mg Aroclor 1260 1 0.1 mg Aroclor 1262 1 0.1 mg Aroclor 1268 1 0.1 mg PCBs, Total 1 0.1 mg 2,4,5-TP (Silvex) 100 3.8 mg Arsenic, Total 16 13 mg Beryllium, Total 72 7.2 mg Cadmium, Total 72 7.2 mg Cadmium, Total 270 50 mg Lead, Total 400 63 mg Manganese, Total 200 1600 mg Malman, Total<		0.00171	U	0.0017	U	0.00169	U	0.0017	U	0.00155	U	0.00157	U
cis-Chlordane 4.2 0.094 mg Aroclor 1016 1 0.1 mg Aroclor 1221 1 0.1 mg Aroclor 1232 1 0.1 mg Aroclor 1242 1 0.1 mg Aroclor 1248 1 0.1 mg Aroclor 1254 1 0.1 mg Aroclor 1260 1 0.1 mg Aroclor 1268 1 0.1 mg Aroclor 1268 1 0.1 mg PCBs, Total 1 0.1 mg PCBs, Total 1 0.1 mg Arsenic, Total 16 13 mg Beryllium, Total 72 7.2 mg Cadmium, Total 72 7.2 mg Copper, Total 270 50 mg Lead, Total 400 63 mg Manganese, Total 2000 1600 mg Mickel, Total 310 <td></td> <td>0.000713</td> <td>U</td> <td>0.0017</td> <td>U</td> <td>0.00103</td> <td>U</td> <td>0.000711</td> <td>U</td> <td>0.00133</td> <td>U</td> <td>0.000137</td> <td>U</td>		0.000713	U	0.0017	U	0.00103	U	0.000711	U	0.00133	U	0.000137	U
Aroclor 1016		0.000713	U	0.000700	U	0.000704	U	0.000711	U	0.000040	U	0.000034	U
Aroclor 1221 Aroclor 1232 Aroclor 1242 Aroclor 1242 Aroclor 1248 Aroclor 1254 Aroclor 1254 Aroclor 1260 Aroclor 1260 Aroclor 1262 Aroclor 1268 Aroclor 1260 Arocl				Biphenyls by (0.00211	1 0 1	0.00213	U	0.00194	101	0.00196	
Aroclor 1221 Aroclor 1232 Aroclor 1242 Aroclor 1242 Aroclor 1248 Aroclor 1254 Aroclor 1254 Aroclor 1260 Aroclor 1260 Aroclor 1262 Aroclor 1268 Aroclor 1260 Arocl		0.0358	U	0.0354	U	0.0353	U	0.0358	U	0.0320	U	0.0242	
Aroclor 1232			U		U	0.0353	U		U		U	0.0342	U
Aroclor 1242		0.0358	U	0.0354 0.0354	U	0.0353	U	0.0358	U	0.0320	U	0.0342	U
Aroclor 1248		0.0358					_	0.0358		0.0320			
Aroclor 1254		0.0358	U	0.0354	U	0.0353	U	0.0358	U	0.0320	U	0.0342	U
Aroclor 1260		0.0358	U	0.0354	U	0.0353	U	0.0358	U	0.0320	U	0.0342	U
Aroclor 1262		0.0358	U	0.0354	U	0.0353	U	0.0358	U	0.0320	U	0.0342	U
Aroclor 1268		0.0819		0.0354	U	0.0125	J	0.0358	U	0.0320	U	0.0342	U
PCBs, Total		0.0358	U	0.0354	U	0.0353	U	0.0358	U	0.0320	U	0.0342	U
2,4,5-TP (Silvex) 100 3.8 mg		0.0358	U	0.0354	U	0.0353	U	0.0358	U	0.0320	U	0.0342	U
Arsenic, Total Barium, Total Barium, Total Beryllium, Total Cadmium, Total Cadmium, Total Cadmium, Total Cadmium, Total Cadmium, Total Copper, Total Lead, Total Lead, Total Manganese, Total Nickel, Total Nickel, Total Silver, Total Also Silver, Total Also Cadmium, Total Copper, Total	g	0.0819		0.0354	U	0.0125	J	0.0358	U	0.0320	U	0.0342	U
Arsenic, Total				rbicides by GO									
Barium, Total 400 350 mg Beryllium, Total 72 7.2 mg Cadmium, Total 4.3 2.5 mg Chromium, Total ~ ~ mg Copper, Total 270 50 mg Lead, Total 400 63 mg Manganese, Total 2000 1600 mg Mercury, Total 0.81 0.18 mg Nickel, Total 310 30 mg Selenium, Total 180 3.9 mg Silver, Total 180 2 mg Zinc, Total 10000 109 mg Aluminum, Total ~ ~ mg Antimony, Total ~ ~ mg Cobalt, Total ~ ~ mg Cobalt, Total ~ ~ mg Magnesium, Total ~ ~ mg Potassium, Total ~ ~ mg Sodium, Total <td>g</td> <td>0.177</td> <td>U</td> <td>0.175</td> <td>U</td> <td>0.18</td> <td>U</td> <td>0.182</td> <td>U</td> <td>-</td> <td><u> </u></td> <td>-</td> <td>-</td>	g	0.177	U	0.175	U	0.18	U	0.182	U	-	<u> </u>	-	-
Barium, Total 400 350 mg Beryllium, Total 72 7.2 mg Cadmium, Total 4.3 2.5 mg Chromium, Total ~ ~ mg Copper, Total 270 50 mg Lead, Total 400 63 mg Manganese, Total 2000 1600 mg Mercury, Total 0.81 0.18 mg Nickel, Total 310 30 mg Selenium, Total 180 3.9 mg Silver, Total 180 2 mg Zinc, Total 10000 109 mg Aluminum, Total ~ ~ mg Antimony, Total ~ ~ mg Cobalt, Total ~ ~ mg Cobalt, Total ~ ~ mg Magnesium, Total ~ ~ mg Potassium, Total ~ ~ mg Sodium, Total <td></td> <td></td> <td>Total N</td> <td></td>			Total N										
Beryllium, Total 72 7.2 mg	_	5.68		2.7		2.67		2.62		2.93		2.29	4
Cadmium, Total 4.3 2.5 mg Chromium, Total ~ ~ mg Copper, Total 270 50 mg Lead, Total 400 63 mg Manganese, Total 2000 1600 mg Mercury, Total 0.81 0.18 mg Nickel, Total 310 30 mg Selenium, Total 180 3.9 mg Silver, Total 180 2 mg Zinc, Total 10000 109 mg Aluminum, Total ~ ~ mg Antimony, Total ~ ~ mg Cobalt, Total ~ ~ mg Iron, Total ~ ~ mg Magnesium, Total ~ ~ mg Potassium, Total ~ ~ mg Sodium, Total ~ ~ mg Thallium, Total ~ ~ mg		140		88.4		36.6		29		0.779	U	1.58	
Chromium, Total ~ ~ mg Copper, Total 270 50 mg Lead, Total 400 63 mg Manganese, Total 2000 1600 mg Mercury, Total 0.81 0.18 mg Nickel, Total 310 30 mg Selenium, Total 180 3.9 mg Silver, Total 180 2 mg Aluminum, Total ~ ~ mg Aluminum, Total ~ ~ mg Calcium, Total ~ ~ mg Calcium, Total ~ ~ mg Cobalt, Total ~ ~ mg Magnesium, Total ~ ~ mg Potassium, Total ~ ~ mg Sodium, Total ~ ~ mg Thallium, Total ~ ~ mg		0.167	J	0.146	J	0.156	J	0.124	J	0.389	U	0.404	U
Copper, Total 270 50 mg	_	0.129	J	0.419	U	0.421	U	0.428	U	0.779	U	0.808	U
Lead, Total 400 63 mg Manganese, Total 2000 1600 mg Mercury, Total 0.81 0.18 mg Nickel, Total 310 30 mg Selenium, Total 180 3.9 mg Silver, Total 180 2 mg Zinc, Total 10000 109 mg Aluminum, Total ~ ~ mg Antimony, Total ~ ~ mg Cobalt, Total ~ ~ mg Loro, Total ~ ~ mg Magnesium, Total ~ ~ mg Potassium, Total ~ ~ mg Sodium, Total ~ ~ mg Thallium, Total ~ ~ mg		7.93		7.83		7.89		5.7		7.82		1.71	!
Manganese, Total 2000 1600 mg Mercury, Total 0.81 0.18 mg Nickel, Total 310 30 mg Selenium, Total 180 3.9 mg Silver, Total 180 2 mg Zinc, Total 10000 109 mg Aluminum, Total ~ ~ mg Calcium, Total ~ ~ mg Cobalt, Total ~ ~ mg Iron, Total ~ ~ mg Magnesium, Total ~ ~ mg Potassium, Total ~ ~ mg Thallium, Total ~ ~ mg	_	14.5		8.54		37.4		10		2.83		0.808	U
Mercury, Total 0.81 0.18 mg Nickel, Total 310 30 mg Selenium, Total 180 3.9 mg Silver, Total 180 2 mg Zinc, Total 10000 109 mg Aluminum, Total ~ ~ mg Antimony, Total ~ ~ mg Calcium, Total ~ ~ mg Cobalt, Total ~ ~ mg Iron, Total ~ ~ mg Magnesium, Total ~ ~ mg Potassium, Total ~ ~ mg Sodium, Total ~ ~ mg Thallium, Total ~ ~ mg		190		76.6		77.1		33.8		4.46		4.04	U
Nickel, Total 310 30 mg Selenium, Total 180 3.9 mg Silver, Total 180 2 mg Zinc, Total 10000 109 mg Aluminum, Total ~ ~ mg Antimony, Total ~ ~ mg Calcium, Total ~ ~ mg Cobalt, Total ~ ~ mg Iron, Total ~ ~ mg Magnesium, Total ~ ~ mg Potassium, Total ~ ~ mg Sodium, Total ~ ~ mg Thallium, Total ~ ~ mg	g	56.4		45.3		98.2		39.6		0.64	U	9.29	
Selenium, Total 180 3.9 mg Silver, Total 180 2 mg Zinc, Total 10000 109 mg Aluminum, Total ~ ~ mg Antimony, Total ~ ~ mg Calcium, Total ~ ~ mg Cobalt, Total ~ ~ mg Iron, Total ~ ~ mg Magnesium, Total ~ ~ mg Potassium, Total ~ ~ mg Sodium, Total ~ ~ mg Thallium, Total ~ ~ mg	g	0.154		0.102		0.235		0.118		0.064	U	0.065	U
Silver, Total 180 2 mg Zinc, Total 10000 109 mg Aluminum, Total ~ ~ mg Antimony, Total ~ ~ mg Calcium, Total ~ ~ mg Cobalt, Total ~ ~ mg Iron, Total ~ ~ mg Magnesium, Total ~ ~ mg Potassium, Total ~ ~ mg Sodium, Total ~ ~ mg Thallium, Total ~ ~ mg	g	4.35		3.24		6.8		3.29		2.63		2.02	U
Zinc, Total 10000 109 mg Aluminum, Total ~ ~ mg Antimony, Total ~ ~ mg Calcium, Total ~ ~ mg Cobalt, Total ~ ~ mg Iron, Total ~ ~ mg Magnesium, Total ~ ~ mg Potassium, Total ~ ~ mg Sodium, Total ~ ~ mg Thallium, Total ~ ~ mg	g	0.338	J	0.481	J	0.843	U	0.483	J	1.56	U	1.62	U
Aluminum, Total ~ ~ mg Antimony, Total ~ ~ mg Calcium, Total ~ ~ mg Cobalt, Total ~ ~ mg Iron, Total ~ ~ mg Magnesium, Total ~ ~ mg Potassium, Total ~ ~ mg Sodium, Total ~ ~ mg Thallium, Total ~ ~ mg	g	0.417	U	0.419	U	0.421	U	0.428	U	156	U	0.808	U
Antimony, Total	g	200		90.2		55.9		31		8.85		4.04	U
Calcium, Total	g	NT		NT		NT		NT		NT		NT	
Calculum, Total	g	NT		NT		NT		NT		NT		NT	
Total	g	NT		NT		NT		NT		NT		NT	
Magnesium, Total	g	NT		NT		NT		NT		NT		NT	
Magnesium, Total	g	NT		NT		NT		NT		NT		NT	
Potassium, Total ~ ~ mg Sodium, Total ~ ~ mg Thallium, Total ~ ~ mg		NT		NT		NT		NT		NT		NT	
Sodium, Total ~ ~ mg Thallium, Total ~ ~ mg		NT		NT		NT		NT		NT		NT	
Thallium, Total ~ mg		NT		NT		NT		NT		NT		NT	
		NT		NT		NT		NT		NT		NT	
		NT		NT		NT		NT		NT	i i	NT	\top
-			neral C	hemistry									
Chromium, Trivalent 180 30 mg	g	7.9		7.8		7.9		5.7		-	- 1	-	Τ-
Solids, Total		92.6		93.6		91.7		91.2		98	1 1	96.7	+
Cyanide, Total 27 27 mg	g	0.64	J	1	U	0.33	J	1.1	U	-	-	-	-
Chromium, Hexavalent 110 1 mg		0.864	U	0.855	U	0.872	U	0.877	U	-	1 - 1	_	T -

NY-UNRES - NYSDEC Part 375 Unrestricted Use Soil Cleanup Objectives
NY-RESRR - NYSDEC Part 375 Restricted Residential Use Soil Cleanup Objectives

mg/kg - milligrams per kilogram U - not detected

J - estimated value

Bold - MDL exceeds applicable standard

Highlighted - result in exceedance of applicable standard



Table 2 Supplemental Soil Analytical Results Summary

13-16 to 13-30 Beach Channel Drive, Far Rockaway, NY

LOCATION				SB-1A (0-2)		SB-1A (2-4)	1	SB-4A (0-2	١	SB-4A (2-4)		SB-4A (4-6)		DRY WELL-1	1
SAMPLING DATE				11/6/2020		11/6/2020		11/6/2020		11/6/2020		11/6/2020		11/6/2020	
LAB SAMPLE ID				L2049037-01		L2049037-02		L2049037-06		L2049037-07		L2049037-08		L2049037-11	
SAMPLE TYPE				SOIL		SOII		SOIL		SOIL		SOIL		SOII	
SAMPLE DEPTH (ft.)				JOIL		3011		3011	-	3012		3011		3011	-
SAMPLE DEF III (IC.)	NY-RESRR	NY-UNRES	Units	Results	Qual										
General Chemistry											4				
Solids, Total			%	90.2		97.6		88.5		90		90.2		62	
Volatile Organics by EPA 5035															
Methylene chloride	100	0.05	mg/kg	0.0046	U	0.0054	U	0.005	U	0.0044	U	0.0052	U	0.0076	U
1,1-Dichloroethane	26	0.27	mg/kg	0.00092	U	0.0011	U	0.001	U	0.00087	U	0.001	U	0.0015	U
Chloroform	49	0.37	mg/kg	0.0014	U	0.0016	U	0.0015	U	0.0013	U	0.0016	U	0.0023	U
Carbon tetrachloride	2.4	0.76	mg/kg	0.00092	U	0.0011	U	0.001	U	0.00087	U	0.001	U	0.0015	U
Tetrachloroethene	19	1.3	mg/kg	0.049		0.00055		0.012		0.32	Ε	0.0021		0.019	
Chlorobenzene	100		mg/kg	0.00046	U	0.00054	U	0.0005	U	0.00044	U	0.00052	U	0.00076	U
1,2-Dichloroethane	3.1	0.02	mg/kg	0.00092	U	0.0011	U	0.001	U	0.00087	U	0.001	U	0.0015	U
1,1,1-Trichloroethane	100		mg/kg	0.00046	U	0.00054	U	0.0005	U	0.00044	U	0.00052	U	0.00076	U
Benzene	4.8		mg/kg	0.00046	U	0.00054	U	0.0005	U	0.00044	U	0.00052	U	0.00076	U
Toluene	100		mg/kg	0.00092	U	0.0011	U	0.001	U	0.00087	U	0.001	U	0.0015	U
Ethylbenzene	41	1	mg/kg	0.00092	U	0.0011	U	0.001	U	0.00087	U	0.001	U	0.0015	U
Vinyl chloride	0.9		mg/kg	0.00092	U	0.0011	U	0.001	U	0.00087	U	0.001	U	0.0015	U
1,1-Dichloroethene	100	0.33	mg/kg	0.00092	U	0.0011	U	0.001	U	0.00087	U	0.001	U	0.0015	U
trans-1,2-Dichloroethene	100	0.19	mg/kg	0.0014	U	0.0016	U	0.0015	U	0.0013	U	0.0016	U	0.0023	U
Trichloroethene	21		mg/kg	0.00063		0.00054	U	0.0005	U	0.00081		0.00052	U	0.00049	J
1,2-Dichlorobenzene	100		mg/kg	0.0018	U	0.0022	U	0.002	U	0.0017	U	0.0021	U	0.003	U
1,3-Dichlorobenzene	49	2.4	mg/kg	0.0018	U	0.0022	U	0.002	U	0.0017	U	0.0021	U	0.003	U
1,4-Dichlorobenzene	13	1.8	mg/kg	0.0018	U	0.0022	U	0.002	U	0.0017	U	0.0021	U	0.003	U
Methyl tert butyl ether	100	0.93	mg/kg	0.0018	U	0.0022	U	0.002	U	0.0017	U	0.0021	U	0.003	U
p/m-Xylene			mg/kg	0.0018	U	0.0022	U	0.002	U	0.0017	U	0.0021	U	0.003	U
o-Xylene			mg/kg	0.00092	U	0.0011	U	0.001	U	0.00087	U	0.001	U	0.0015	U
cis-1,2-Dichloroethene	100	0.25	mg/kg	0.00092	U	0.0011	U	0.001	U	0.00087	U	0.001	U	0.0015	U
Acetone	100		mg/kg	0.015		0.015		0.0075	J	0.0087	U	0.011		0.042	
2-Butanone	100	0.12	mg/kg	0.0092	U	0.011	U	0.01	U	0.0087	U	0.01	U	0.015	U
n-Butylbenzene	100		mg/kg	0.00092	U	0.0011	U	0.001	U	0.00087	U	0.001	U	0.0015	U
sec-Butylbenzene	100	11	mg/kg	0.00092	U	0.0011	U	0.001	U	0.00087	U	0.001	U	0.0015	U
tert-Butylbenzene	100		mg/kg	0.0018	U	0.0022	U	0.002	U	0.0017	U	0.0021	U	0.003	U
n-Propylbenzene	100	3.9	mg/kg	0.00092	U	0.0011	U	0.001	U	0.00087	U	0.001	U	0.0015	U
1,3,5-Trimethylbenzene	52		mg/kg	0.0018	U	0.0022	U	0.002	U	0.0017	U	0.0021	U	0.003	U
1,2,4-Trimethylbenzene	52		mg/kg	0.0018	U	0.0022	U	0.002	U	0.0017	U	0.0021	U	0.003	U
1,4-Dioxane	13		mg/kg	0.074	U	0.087	U	0.08	U	0.07	U	0.083	U	0.12	U
Volatile Organics by EPA 5035 High															
Methylene chloride	100	0.05	mg/kg	-	-	-	-	-	-	0.26	U	-	-	-	-
1,1-Dichloroethane	26		mg/kg	-	-	-	-	-	-	0.052	U	-	-	-	-
Chloroform	49	0.37	mg/kg	-	-	-	-	-	-	0.078	U	-	-	-	-
Carbon tetrachloride	2.4		mg/kg	-	-	-	-	-	-	0.052	U	-	-	-	-
Tetrachloroethene	19		mg/kg	-	-	-	-	-	-	23		-	-	-	-
Chlorobenzene	100		mg/kg	-	-	-	-	-	-	0.026	U	-	-	-	-
1,2-Dichloroethane	3.1		mg/kg	-	-	-	-	-	-	0.052	U	-	-	-	-
1,1,1-Trichloroethane	100		mg/kg	-	-	-	-	-	-	0.026	U	-	-	-	-
Benzene	4.8		mg/kg	-	-	-	-	-	-	0.026	U	-	-	-	-
Toluene	100		mg/kg	-	-	-	-	-	-	0.052	U	-	-	-	-



Table 2 Supplemental Soil Analytical Results Summary

13-16 to 13-30 Beach Channel Drive, Far Rockaway, NY

LOCATION				SB-1A (0-2)		SB-1A (2-4)		SB-4A (0-2)		SB-4A (2-4)		SB-4A (4-6)		DRY WELL-1	L
SAMPLING DATE				11/6/2020		11/6/2020		11/6/2020		11/6/2020		11/6/2020		11/6/2020)
LAB SAMPLE ID				L2049037-01		L2049037-02		L2049037-06		L2049037-07		L2049037-08		L2049037-11	L
SAMPLE TYPE				SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	Ĺ
SAMPLE DEPTH (ft.)															
	NY-RESRR	NY-UNRES	Units	Results	Qual										
Ethylbenzene	41	1	mg/kg	-	-	-	-	-	-	0.052	U	-	-	-	-
Vinyl chloride	0.9	0.02	mg/kg	-	-	-	-	-	•	0.052	U	-	-	-	-
1,1-Dichloroethene	100	0.33	mg/kg	-	-	-	-	-	-	0.052	U	-	-	-	-
trans-1,2-Dichloroethene	100	0.19	mg/kg	-	-	-	-	-	-	0.078	U	-	-	-	-
Trichloroethene	21	0.47	mg/kg	-	-	-	-	-	1	0.042		ı	-	ı	-
1,2-Dichlorobenzene	100	1.1	mg/kg	-	-	-	-	-	•	0.1	U	•			-
1,3-Dichlorobenzene	49	2.4	mg/kg	-	-	-	-	-	•	0.1	U	•			-
1,4-Dichlorobenzene	13	1.8	mg/kg	-	-	-	-	-	-	0.1	U	-	-	-	-
Methyl tert butyl ether	100	0.93	mg/kg	-	-	-	-	-	•	0.1	U	•			-
p/m-Xylene			mg/kg	-	-	-	-	-	1	0.1	U	ı	-	ı	-
o-Xylene			mg/kg	-	-	-	-	-	1	0.052	U	ı	-	ı	-
cis-1,2-Dichloroethene	100	0.25	mg/kg	-	-	-	-	-	•	0.052	U	•			-
Acetone	100	0.05	mg/kg	-	-	-	-	-	•	0.52	U	•			-
2-Butanone	100	0.12	mg/kg	-	-	-	-	-	-	0.52	U	-	-	-	-
n-Butylbenzene	100	12	mg/kg	-	-	-	-	-	•	0.052	U	•			-
sec-Butylbenzene	100	11	mg/kg	-	-	-	-	-	•	0.052	U	•			-
tert-Butylbenzene	100	5.9	mg/kg	-	-	-	-	-	1	0.1	U	ı	-	ı	-
n-Propylbenzene	100	3.9	mg/kg	-	-	-	-	-	-	0.052	U	-	-	-	-
1,3,5-Trimethylbenzene	52	8.4	mg/kg	-	-	-	-	-	•	0.1	U	-	-		-
1,2,4-Trimethylbenzene	52	3.6	mg/kg	-	-	-	-	-	-	0.1	U	ı	-	ı	-
1,4-Dioxane	13		mg/kg	-	-	-	-	-	-	4.2	U	-	-	-	-

^{*} Comparison is not performed on parameters with non-numeric criteria.

NY-RESRR: New York NYCRR Part 375 Restricted-Residential Criteria, New York Restricted use Criteria per 6 NYCRR Part 375 Environmental Remediation Programs, effective December 14, 2006.

NY-UNRES: New York NYCRR Part 375 New York Unrestricted use Criteria Criteria per 6 NYCRR Part 375 Environmental Remediation Programs, effective December 14, 2006.

U - not detected

E - lab estimated value

BOLD - minimum detection limit above standard

Highlighted - Above applicable standard



Table 3 Groundwater Analytical Results (2018 and 2020)

Beach Channel Drive, Queens NY

Lacation					=								774/0.4	
LOCATION SAMPLING DATE			TW-1 7/23/2018		TW-2 7/23/2018		MW-1 10/27/2020)	MW-2 10/27/2020		MW-3 10/27/2020)	TWP-1 10/27/2020	
LAB SAMPLE ID			L1828167-03		L1828167-04	1	L2046790-01		L2046790-02		L2046790-0		L2046790-0	
SAMPLE TYPE			WATER		WATER		WATER		WATER		WATER		WATER	
	NY-AWQS	Units	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual
					Volatile Organic	s by G	C/MS	1	I					
Methylene chloride	5	ug/l	<0.7	U	<0.7	Ü	2.5	U	2.5	U	2.5	U	2.5	U
1,1-Dichloroethane	5	ug/l	<0.7	U	<0.7	U	2.5	U	2.5	U	2.5	U	2.5	U
Chloroform Carbon tetrachloride	7 5	ug/l ug/l	<0.7 <0.13	U	<0.7 <0.13	U	18 0.5	U	15 0.5	U	6.9 0.5	U	9.2 0.5	U
Tetrachloroethene	5	ug/l	16	U	0.86	U	62	U	0.82	U	240	E	52	-
Chlorobenzene	5	ug/l	<0.7	U	<0.7	U	2.5	U	2.5	U	2.5	U	2.5	U
1,2-Dichloroethane	0.6	ug/l	<0.13	U	<0.13	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,1-Trichloroethane	5	ug/l	<0.7	U	<0.7	U	2.5	U	2.5	U	2.5	U	2.5	U
Benzene	1	ug/l	<0.16	U	<0.16	U	0.5	U	0.5	U	0.5	U	0.5	U
Toluene	5 5	ug/l ug/l	<0.7	U	<0.7	U	2.5 2.5	U	2.5 2.5	U	2.5 2.5	U	2.5 2.5	U
Ethylbenzene Vinyl chloride	2	ug/l	<0.7 <0.07	U	<0.7 <0.07	U	1	U	1	U	1	U	1	U
1,1-Dichloroethene	5	ug/l	<0.17	U	<0.17	U	0.5	U	0.5	U	0.5	U	0.5	U
trans-1,2-Dichloroethene	5	ug/l	<0.7	U	<0.7	Ü	2.5	U	2.5	U	2.5	U	2.5	U
Trichloroethene	5	ug/l	0.23	J	<0.18	U	0.34	J	0.5	U	1		0.27	J
1,2-Dichlorobenzene	3	ug/l	<0.7	U	<0.7	U	2.5	U	2.5	U	2.5	U	2.5	U
1,3-Dichlorobenzene	3	ug/l	<0.7	U	<0.7	U	2.5	U	2.5	U	2.5	U	2.5	U
1,4-Dichlorobenzene Methyl tert butyl ether	3 10	ug/l ug/l	<0.7 <0.7	U	<0.7 <0.7	U	2.5 2.5	U	2.5 2.5	U	2.5 2.5	U	2.5	U
p/m-Xylene	5	ug/l	<0.7	U	<0.7	U	2.5	U	2.5	U	2.5	U	2.5	U
o-Xylene	5	ug/l	<0.7	U	<0.7	U	2.5	U	2.5	U	2.5	U	2.5	U
cis-1,2-Dichloroethene	5	ug/l	<0.7	U	<0.7	U	2.5	U	2.5	U	2.5	U	2.5	U
Acetone	50	ug/l	2.9	J	1.7	J	5	U	5	U	5	U	5	U
2-Butanone	50	ug/l	<1.9	U	<1.9	U	5	U	5	U	5	U	5	U
n-Butylbenzene sec-Butylbenzene	5 5	ug/l ug/l	<0.7 <0.7	U	<0.7	U	2.5 2.5	U	2.5 2.5	U	2.5 2.5	U	2.5 2.5	U
tert-Butylbenzene	5	ug/l	<0.7	U	<0.7 <0.7	U	2.5	U	2.5	U	2.5	U	2.5	U
n-Propylbenzene	5	ug/l	<0.7	U	<0.7	U	2.5	U	2.5	U	2.5	U	2.5	U
1,3,5-Trimethylbenzene	5	ug/l	<0.7	U	<0.7	Ü	2.5	U	2.5	U	2.5	U	2.5	U
1,2,4-Trimethylbenzene	5	ug/l	<0.7	U	<0.7	U	2.5	U	2.5	U	2.5	U	2.5	U
1,4-Dioxane	~	ug/l	<61	U	<61	U	250	U	250	U	250	U	250	U
1,2-Dichloropropane	1	ug/l	<0.14	U	<0.14	U	NT	-	NT		NT	-	NT	+
Dibromochloromethane 1,1,2-Trichloroethane	50 1	ug/l ug/l	<0.15 <0.5	U	<0.15 <0.5	U	NT NT		NT NT		NT NT		NT NT	+
Trichlorofluoromethane	5	ug/l	<0.7	U	<0.7	U	NT		NT		NT		NT	+
Bromodichloromethane	50	ug/l	<0.19	U	<0.19	U	NT		NT		NT		NT	\top
trans-1,3-Dichloropropene	0.4	ug/l	<0.16	U	<0.16	U	NT		NT		NT		NT	
cis-1,3-Dichloropropene	0.4	ug/l	<0.14	U	<0.14	U	NT		NT		NT		NT	
1,3-Dichloropropene, Total	~	ug/l	<0.14	U	<0.14	U	NT		NT NT		NT		NT	+
1,1-Dichloropropene	5 50	ug/l ug/l	<0.7 <0.65	U	<0.7 <0.65	U	NT NT		NT NT		NT NT		NT NT	+
Bromoform 1,1,2,2-Tetrachloroethane	5	ug/l	<0.17	U	<0.17	U	NT		NT		NT		NT	+
Chloromethane	~	ug/l	<0.7	U	<0.7	U	NT		NT		NT		NT	\top
Bromomethane	5	ug/l	<0.7	U	<0.7	Ü	NT		NT		NT		NT	
Chloroethane	5	ug/l	<0.7	U	<0.7	U	NT		NT		NT		NT	
Xylenes, Total	~	ug/l	<0.7	U	<0.7	U	NT	-	NT		NT		NT	4
1,2-Dichloroethene, Total	~	ug/l	<0.7	U	<0.7	U	NT NT	<u> </u>	NT NT		NT NT		NT NT	+
Dibromomethane 1,2,3-Trichloropropane	5 0.04	ug/l ug/l	<1 <0.7	U	<1 <0.7	U	NT		NT		NT NT		NT	+
Acrylonitrile	5	ug/l	<1.5	U	<1.5	U	NT		NT		NT		NT	1
Styrene	5	ug/l	<0.7	U	<0.7	U	NT		NT		NT		NT	
Dichlorodifluoromethane	5	ug/l	<1	U	<1	U	NT		NT		NT		NT	
Carbon disulfide	60	ug/l	<1	U	<1	U	NT	<u> </u>	NT		NT		NT	+
Vinyl acetate	~	ug/l	<1	U	<1	U	NT NT	1	NT NT		NT NT		NT NT	+
4-Methyl-2-pentanone 2-Hexanone	50	ug/l ug/l	<1 <1	U	<1 <1	U	NT NT	-	NT NT		NT	1	NT	+
Bromochloromethane	5	ug/l	<0.7	U	<0.7	U	NT		NT		NT		NT	+
2,2-Dichloropropane	5	ug/l	<0.7	U	<0.7	U	NT		NT		NT		NT	\top
1,2-Dibromoethane	0.0006	ug/l	<0.65	U	<0.65	U	NT		NT		NT		NT	
1,3-Dichloropropane	5	ug/l	<0.7	U	<0.7	U	NT		NT		NT		NT	
1,1,1,2-Tetrachloroethane	5	ug/l	<0.7	U	<0.7	U	NT		NT		NT		NT	\perp
Bromobenzene	5	ug/l	<0.7	U	<0.7	U	NT NT	<u> </u>	NT NT		NT NT		NT NT	+
o-Chlorotoluene p-Chlorotoluene	5 5	ug/l ug/l	<0.7 <0.7	U	<0.7 <0.7	U	NT NT	╁	NT NT	\vdash	NT NT		NT NT	+
1,2-Dibromo-3-chloropropane	0.04	ug/l	<0.7	U	<0.7	U	NT	1	NT		NT		NT	\top
Hexachlorobutadiene	0.5	ug/l	<0.7	U	<0.7	U	NT		NT		NT		NT	\Box
Isopropylbenzene	5	ug/l	<0.7	U	<0.7	U	NT		NT		NT		NT	
p-Isopropyltoluene	5	ug/l	<0.7	U	<0.7	U	NT		NT		NT	Щ	NT	
Naphthalene	10	ug/l	<0.7	U	<0.7	U	NT	├	NT	\vdash	NT		NT	+
1,2,3-Trichlorobenzene 1,2,4-Trichlorobenzene	5	ug/l ug/l	<0.7	U	<0.7	U	NT NT	├	NT NT	1	NT NT		NT NT	+
p-Diethylbenzene	5 ~	ug/l	<0.7 <0.7	U	<0.7 <0.7	U	NT NT	╁	NT NT	\vdash	NT NT		NT NT	+
p-Ethyltoluene	~	ug/l	<0.7	U	<0.7	U	NT	1	NT		NT		NT	\top
1,2,4,5-Tetramethylbenzene	5	ug/l	<0.54	U	<0.54	Ü	NT		NT		NT		NT	
Ethyl ether	~	ug/l	<0.7	U	<0.7	U	NT		NT		NT		NT	
trans-1,4-Dichloro-2-butene	5	ug/l	< 0.7	С	<0.7	U	NT	1	NT		NT	1	NT	1 7



Table 2 Groundwater Analytical Results (2018 and 2020)

Beach Channel Drive, Queens NY

LOCATION SAMPLING DATE			TW-1 7/23/2018		TW-2 7/23/2018		MW-1 10/27/202		MW-2 10/27/2020		MW-3 10/27/202	^	TWP-1 10/27/202	
LAB SAMPLE ID			7/23/2018 L1828167-03	3	7/23/2018 L1828167-0		L2046790-0		L2046790-02		L2046790-0		L2046790-0	
SAMPLE TYPE			WATER		WATER		WATER		WATER		WATER		WATER	
	NY-AWQS	Units	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual
Dibenzofuran	~	ug/l	<0.5	U	emivolatile Orga <0.5	unics by	GC/MS 2	U	2	U	2	U	2	U
Phenol	1	ug/l	<0.57	U	<0.57	U	5	U	5	U	5	U	5	U
2-Methylphenol	~	ug/l	<0.49	U	<0.49	U	5	U	5	U	5	U	5	U
3-Methylphenol/4-Methylphenol	~	ug/l	<0.48	U	<0.48	U	5	U	5	U	5	U	5	U
Acenaphthene	20	ug/l	NT		NT		0.1	U	0.1	U	0.1	U	0.1	U
Fluoranthene	50 10	ug/l	NT		NT		0.03	J	0.1	U	0.1	U	0.04	J
Naphthalene Benzo(a)anthracene	0.002	ug/l ug/l	NT NT		NT NT		0.1 0.1	U	0.1 0.1	U	0.1	U	0.1	U
Benzo(a)pyrene	0.002	ug/l	NT		NT		0.1	U	0.1	U	0.1	Ü	0.1	U
Benzo(b)fluoranthene	0.002	ug/l	NT		NT		0.1	U	0.1	U	0.1	U	0.03	J
Benzo(k)fluoranthene	0.002	ug/l	NT		NT		0.1	U	0.1	U	0.1	U	0.01	J
Chrysene	0.002	ug/l	NT		NT		0.1	U	0.1	U	0.1	U	0.1	U
Acenaphthylene	~	ug/l	NT		NT		0.1	U	0.1	U	0.1	U	0.1	U
Anthracene Benza(ghi)nag dana	50 ~	ug/l ug/l	NT NT		NT NT	-	0.1	U	0.1	U	0.02	J	0.1 0.1	U
Benzo(ghi)perylene Fluorene	50	ug/l	NT		NT		0.1	U	0.1	U	0.02	J	0.1	U
Phenanthrene	50	ug/l	NT		NT		0.03	J	0.1	U	0.03	J	0.04	J
Dibenzo(a,h)anthracene	~	ug/l	NT		NT		0.1	U	0.1	U	0.1	U	0.1	U
Indeno(1,2,3-cd)pyrene	0.002	ug/l	NT		NT		0.1	U	0.1	U	0.1	U	0.1	U
Pyrene	50	ug/l	NT		NT		0.03	J	0.1	U	0.02	J	0.03	J
Pentachlorophenol	1 0.04	ug/l	NT	1	NT	1	0.8	U	0.8	U	0.8	U	0.8	U
Hexachlorobenzene	0.04	ug/l	NT co.f	I I	NT co.f	1	0.8	U	0.8	U	0.8	U	0.8	U
1,2,4-Trichlorobenzene Bis(2-chloroethyl)ether	5 1	ug/l ug/l	<0.5 <0.5	U	<0.5 <0.5	U	NT NT	1	NT NT	\vdash	NT NT	+	NT NT	+
1,2-Dichlorobenzene	3	ug/l	<0.45	U	<0.45	U	NT		NT NT	H	NT		NT NT	+-
1,3-Dichlorobenzene	3	ug/l	<0.4	U	<0.4	U	NT		NT		NT	1	NT	\top
1,4-Dichlorobenzene	3	ug/l	<0.43	Ü	<0.43	Ü	NT		NT		NT		NT	
3,3'-Dichlorobenzidine	5	ug/l	<1.6	U	<1.6	U	NT		NT		NT		NT	
2,4-Dinitrotoluene	5	ug/l	<1.2	U	<1.2	U	NT		NT	\sqcup	NT		NT	—
2,6-Dinitrotoluene	5 ~	ug/l	<0.93	U	<0.93	U	NT	-	NT		NT	-	NT	+
4-Chlorophenyl phenyl ether	~	ug/l ug/l	<0.49	U	<0.49	U	NT NT		NT		NT	+	NT NT	+
4-Bromophenyl phenyl ether Bis(2-chloroisopropyl)ether	5	ug/l	<0.38 <0.53	U	<0.38 <0.53	U	NT NT		NT NT		NT NT		NT NT	+
Bis(2-chloroethoxy)methane	5	ug/l	<0.5	U	<0.5	U	NT		NT		NT		NT	
Hexachlorocyclopentadiene	5	ug/l	<0.69	U	<0.69	U	NT		NT		NT		NT	
Isophorone	50	ug/l	<1.2	U	<1.2	U	NT		NT		NT		NT	
Nitrobenzene	0.4	ug/l	<0.77	U	<0.77	U	NT		NT		NT		NT	
NDPA/DPA	50 ~	ug/l	<0.42	U	<0.42	U	NT		NT		NT	-	NT	4
n-Nitrosodi-n-propylamine Bis(2-ethylhexyl)phthalate	5	ug/l ug/l	<0.64 <1.5	U	<0.64 <1.5	U	NT NT		NT NT		NT NT	+	NT NT	+
Butyl benzyl phthalate	50	ug/l	<1.2	U	<1.2	U	NT	+	NT		NT	+	NT	+
Di-n-butylphthalate	50	ug/l	<0.39	U	<0.39	U	NT		NT		NT		NT	+
Di-n-octylphthalate	50	ug/l	<1.3	U	<1.3	U	NT		NT		NT		NT	
Diethyl phthalate	50	ug/l	<0.38	U	<0.38	U	NT		NT		NT		NT	
Dimethyl phthalate	50	ug/l	<1.8	U	<1.8	U	NT		NT		NT		NT	
Biphenyl	~	ug/l	<0.46	U	<0.46	U	NT	-	NT		NT		NT	
4-Chloroaniline	5	ug/l	<1.1	U	<1.1	U	NT	+	NT		NT	_	NT	_
2-Nitroaniline 3-Nitroaniline	5 5	ug/l ug/l	<0.5 <0.81	U	<0.5 <0.81	U	NT NT	+	NT NT		NT NT	+	NT NT	+
4-Nitroaniline	5	ug/l	<0.81	U	<0.8	U	NT		NT		NT		NT	+
1,2,4,5-Tetrachlorobenzene	5	ug/l	<0.44	U	<0.44	U	NT		NT		NT		NT	1
Acetophenone	~	ug/l	< 0.53	U	<0.53	U	NT		NT		NT		NT	
2,4,6-Trichlorophenol	~	ug/l	<0.61	U	<0.61	U	NT		NT		NT		NT	
p-Chloro-m-cresol	~	ug/l	<0.35	U	<0.35	U	NT		NT		NT		NT	
2-Chlorophenol		ug/l	<0.48	U	<0.48	U	NT	+	NT		NT	_	NT	_
2,4-Dichlorophenol 2,4-Dimethylphenol	1 50	ug/l ug/l	<0.41 <1.8	U	<0.41 <1.8	U	NT NT	+	NT NT		NT NT	+	NT NT	+
2-Nitrophenol	~	ug/l	<0.85	U	<0.85	U	NT	+	NT		NT	+	NT	+-
4-Nitrophenol	~	ug/l	<0.67	U	<0.67	U	NT		NT		NT		NT	1
2,4-Dinitrophenol	10	ug/l	<6.6	U	<6.6	U	NT		NT		NT		NT	
4,6-Dinitro-o-cresol	~	ug/l	<1.8	U	<1.8	U	NT		NT		NT		NT	
2,4,5-Trichlorophenol	~	ug/l	<0.77	U	<0.77	U	NT		NT	\sqcup	NT		NT	—
Benzoic Acid	~	ug/l	<2.6	U	<2.6	U	NT	+	NT	\vdash	NT	+	NT	+
Benzyl Alcohol Carbazole	~	ug/l ug/l	<0.59 <0.49	U	<0.59 <0.49	U	NT NT	1	NT NT		NT NT		NT NT	+
Carbazoie	l	ug/1	V0.49		nivolatile Organi				INI		INI		INI	
Acenaphthene	20	ug/l	<0.01	U	<0.01	U	NT	T	NT		NT	Т 1	NT	$\overline{}$
2-Chloronaphthalene	10	ug/l	<0.02	U	<0.02	U	NT	L	NT	ᆸ	NT	L	NT	1
Fluoranthene	50	ug/l	<0.02	U	<0.02	U	NT		NT		NT		NT	
Hexachlorobutadiene	0.5	ug/l	<0.05	U	<0.05	U	NT		NT	Щ	NT		NT	
Naphthalene	10	ug/l	<0.05	U	<0.05	U	NT		NT	\sqcup	NT		NT	—
Benzo(a)anthracene	0.002	ug/l	0.03	J	<0.02	U	NT	1	NT	\vdash	NT	+	NT	+
Benzo(h)fluoranthene	0.002	ug/l ug/l	<0.02	U	<0.02 <0.01	U	NT NT		NT NT	\vdash	NT NT	+	NT NT	+
Benzo(b)fluoranthene Benzo(k)fluoranthene	0.002	ug/l	<0.01 <0.01	U	<0.01 <0.01	U	NT NT	\vdash	NT NT	\vdash	NT NT	+	NT NT	+
Chrysene	0.002	ug/l	<0.01	U	<0.01	U	NT NT		NT NT		NT		NT NT	1
Acenaphthylene	~	ug/l	<0.01	U	<0.01	U	NT	L	NT		NT		NT	1
Anthracene	50	ug/l	<0.01	Ü	<0.01	U	NT		NT		NT		NT	
Benzo(ghi)perylene	~	ug/l	<0.01	U	<0.01	U	NT		NT		NT		NT	
Fluorene	50	ug/l	<0.01	U	<0.01	U	NT		NT	Ш	NT		NT	
Phenanthrene	50	ug/l	<0.02	U	<0.02	U	NT	1	NT	\vdash	NT	+	NT	
Dibenzo(a,h)anthracene	0.002	ug/l	<0.01 <0.01	U	<0.01 <0.01	U	NT NT	+	NT NT	\vdash	NT NT	+	NT NT	+
Indeno(1,2,3-cd)pyrene Pyrene	50	ug/l ug/l	<0.01	U	<0.01	U	NT NT		NT NT	\vdash	NT NT		NT NT	+
2-Methylnaphthalene	~	ug/l	<0.02	U	<0.02	U	NT		NT		NT		NT	+
Pentachlorophenol	1	ug/l	<0.01	U	<0.01	U	NT		NT		NT	1	NT	1
Hexachlorobenzene	0.04	ug/l	<0.01	U	<0.01	U	NT		NT		NT		NT	
Hexachloroethane	5	ug/l	<0.06	U	<0.06	U	NT		NT		NT		NT	T



Table 2 Groundwater Analytical Results (2018 and 2020)

Beach Channel Drive, Queens NY

LOCATION			TW-1		TW-2		MW-1		MW-2		MW-3		TWP-1	
SAMPLING DATE			7/23/2018		7/23/2018		10/27/2020		10/27/2020		10/27/202	0	10/27/2020	
LAB SAMPLE ID			L1828167-03		7/23/2018 L1828167-04				L2046790-02		L2046790-03		L2046790-04	
SAMPLE TYPE					L1828167-0 WATER	14	L2046790-01 WATER		WATER		WATER	J3	WATER	
SAMPLE TYPE			WATER			1			WATER					
	NY-AWQS	Units	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual
				(Organochlorine Pe	esticide	s by GC							
Delta-BHC	0.04	ug/l	NT		NT		0.014	U	0.014	U	0.014	U	0.014	U
Lindane	0.05	ug/l	NT		NT		0.014	U	0.014	U	0.014	U	0.014	U
Alpha-BHC	0.01	ug/l	NT		NT		0.014	U	0.014	U	0.014	U	0.014	U
Beta-BHC	0.04	ug/l	NT		NT		0.014	U	0.014	U	0.014	U	0.014	U
Heptachlor	0.04	ug/l	NT		NT		0.014	U	0.014	U	0.014	U	0.014	U
Aldrin	0	ug/l	NT		NT		0.014	U	0.014	U	0.014	U	0.014	U
Endrin	0	ug/l	NT		NT		0.029	U	0.029	U	0.029	U	0.029	U
Dieldrin	0.004	ug/l	NT		NT		0.029	U	0.029	U	0.029	U	0.029	U
4,4'-DDE	0.2	ug/l	NT		NT		0.029	U	0.029	U	0.029	U	0.029	U
4,4'-DDD	0.3	ug/l	NT		NT		0.029	U	0.029	U	0.029	U	0.029	U
4.4'-DDT	0.2	ug/l	NT		NT		0.029	Ü	0.029	Ü	0.029	Ü	0.029	Ü
Endosulfan I	~	ug/l	NT		NT		0.014	Ü	0.014	Ü	0.014	U	0.014	U
Endosulfan II	~	ug/l	NT		NT		0.029	U	0.029	U	0.029	U	0.029	U
Endosulfan sulfate	~	ug/l	NT		NT		0.029	U	0.029	U	0.029	U	0.029	Ü
cis-Chlordane	~	ug/l	NT		NT		0.014	U	0.014	U	0.108	IP	0.014	Ü
cis cinordane	<u> </u>	48/	INI		Polychlorinated B	iphenyl		U	0.014		0.100	- "	0.014	
Aroclor 1016	0.09	ug/l	NT		NT	.рсу.	0.083	U	0.083	U	0.083	U	0.083	U
Aroclor 1221	0.09	ug/l	NT		NT	+	0.083	U	0.083	U	0.083	U	0.083	U
Aroclor 1232	0.09	ug/l	NT		NT		0.083	U	0.083	U	0.083	U	0.083	U
Aroclor 1242	0.09	ug/l	NT		NT	+	0.083	U	0.083	U	0.083	U	0.083	Ü
Aroclor 1242 Aroclor 1248	0.09	ug/l	NT		NT	+	0.083	U	0.083	U	0.083	U	0.083	U
Aroclor 1254	0.09	ug/l	NT		NT	+	0.083	U	0.083	U	0.083	U	0.083	U
	0.09	ug/l	NT NT	_	NT NT	+	0.083	U	0.083	U	0.083	U	0.083	U
Aroclor 1260 Aroclor 1262	0.09	ug/l	NT NT		NT	-	0.083	U	0.083	U	0.083	U	0.083	U
	0.09			_		+	0.083	U		U		U	0.083	U
Aroclor 1268	0.09	ug/l	NT NT		NT NT	_	0.083	U	0.083	U	0.083	U		U
PCBs, Total		ug/l	NI		Dissolved	20-4-1-	0.083	U	0.083	U	0.083	U	0.083	U
Associa Dissaluad	25	/1	NT			ivietais	0.34		0.10	J	0.49	Т.	0.17	Т.
Arsenic, Dissolved	1000	ug/l	NT NT	_	NT	+	45.37	,	0.19 51.62	J	26.75	J	24.47	
Barium, Dissolved	3	ug/l			NT	1	0.5	U	0.5	U	0.5	U		+
Beryllium, Dissolved		ug/l	NT		NT	-		U				U	0.5	U
Cadmium, Dissolved	5	ug/l	NT		NT	1	0.24	١	0.2	U	0.06	J	0.1	J
Chromium, Dissolved	50	ug/l	NT	-	NT	-	0.66	J	0.64	J	1.1	-	0.61	J
Copper, Dissolved	200	ug/l	NT	-	NT	-	10.8		4.36	-	3.51		1.59	
Lead, Dissolved	25	ug/l	NT		NT	-	1	U	1	U	11	U	1	U
Manganese, Dissolved	300	ug/l	NT		NT	1	944.1	1	101.5	_	211.5		70.38	
Mercury, Dissolved	0.7	ug/l	NT		NT	1	0.2	U	0.2	U	0.2	U	0.2	U
Nickel, Dissolved	100	ug/l	NT		NT		11.7		2.08		4.41		3.07	
Selenium, Dissolved	10	ug/l	NT		NT	1	5	U	5	U	5	U	5	U
Silver, Dissolved	50	ug/l	NT		NT		0.4	U	0.4	U	0.4	U	0.4	U
Zinc, Dissolved	2000	ug/l	NT		NT		57.9		5.22	J	30.8		61.4	
					Total M	etals								
Arsenic, Total	25	ug/l	NT		NT	1	15.95	_	1.36	\vdash	13.22	4	27.19	
Barium, Total	1000	ug/l	NT	Ь	NT	\perp	112.4	Ь	54.46	ш	138.8		379.2	_
Beryllium, Total	3	ug/l	NT		NT		0.9		0.14	J	1.25		2.01	
Cadmium, Total	5	ug/l	NT		NT		0.69		0.2	U	0.16	J	1.59	
Chromium, Total	50	ug/l	NT	ш	NT		116.9		2.46	ш	35.25		140.5	
Copper, Total	200	ug/l	NT		NT		68.48		32.62		114		115.1	
Lead, Total	25	ug/l	NT		NT		17.71		1.24		10.81		212.5	
Manganese, Total	300	ug/l	NT		NT		1628		87.51		855.5		1657	
Mercury, Total	0.7	ug/l	NT		NT		0.2	U	0.2	U	0.2	U	0.2	U
Nickel, Total	100	ug/l	NT		NT		21.75		1.81	J	6.1		27.65	
Selenium, Total	10	ug/l	NT		NT		7.63		5	U	12.6		41.3	
Silver, Total	50	ug/l	NT		NT		0.4	U	0.4	U	0.4	U	0.4	U
Zinc, Total	2000	ug/l	NT		NT		292.9		14.34		96.85		667.8	
					General Ch	emistry								
Chromium, Trivalent	~	ug/l	NT		NT		117		10	U	35		140	
						_		_						
Cyanide, Total	200	ug/l	NT		NT		11		2	J	5	U	5	U

NY-AWQS - NYSDEC Ambient Water Quality Standards ug/L - micrograms per liter
U - not detected
J - lab estimated value
Bold - MDL exceeds applicable standard
Highlighted - Result exceeds AWQS



Table 4 Soil Gas Analytical Results (2020)

Beach Channel Drive, Queens NY

LOCATION			SV-1		SV-2		SV-3		SV-4		SV-5		SV-6	
SAMPLING DATE			10/27/202	0	10/27/202	0	10/27/202	20	10/27/2020	0	10/27/202	0	10/27/202	20
LAB SAMPLE ID			L2047588-0		L2047588-0		L2047588-0		L2047588-0		L2047588-0		L2047588-	
SAMPLE TYPE			SOIL_VAPOR		SOIL_VAPO		SOIL_VAPO		SOIL_VAPO		SOIL_VAPO	R	SOIL_VAP	
	NYSDOH Indoor Air Guidelines Values	Units	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual
Dichlorodifluoromethane	T	ug/m3	26.5	U	2.24	Title Organic	1.91	1	1.76	1	2.49		2.75	U
Chloromethane		ug/m3	11	U	0.898	U	0.413	U	0.413	U	0.413	U	1.15	U
Freon-114		ug/m3	37.4	U	3.04	U	1.4	U	1.4	U	1.4	U	3.89	U
Vinyl chloride		ug/m3	13.7	U	1.11	U	0.511	U	0.511	U	0.511	U	1.42	U
1,3-Butadiene		ug/m3	11.8	U	0.962	U	0.442	U	0.442	U	0.442	U	1.23	U
Bromomethane		ug/m3	20.8	U	1.69	U	0.777	U	0.777	U	0.777	U	2.16	U
Chloroethane		ug/m3	14.1	U	1.15	U	0.528	U	0.528	U	0.528	U	1.47	U
Ethanol		ug/m3	252	U	20.5	U	11.4	<u> </u>	9.42	U	9.42	U	26.2	U
Vinyl bromide		ug/m3	23.4	U	1.9	U	0.874 177	U	0.874	U	0.874 61.3	U	2.43 37.5	U
Acetone Trichlorofluoromethane	+	ug/m3 ug/m3	63.4 30.1	U	136 2.44	U	1.55		52 2.75		3.03		3.12	U
Isopropanol		ug/m3	32.9	U	2.68	U	2.46	1	1.23	U	1.23	U	3.42	U
1,1-Dichloroethene		ug/m3	21.2	U	1.72	Ü	0.793	U	0.793	U	0.793	Ü	2.2	U
Tertiary butyl Alcohol		ug/m3	40.6	Ü	3.3	U	1.55		1.52	Ü	1.52	Ü	4.21	U
Methylene chloride	60	ug/m3	46.6	U	3.79	U	1.74	U	1.74	U	1.74	U	4.83	U
3-Chloropropene		ug/m3	16.7	U	1.36	U	0.626	U	0.626	U	0.626	U	1.74	U
Carbon disulfide		ug/m3	16.7	U	11.9		0.623	U	1.61		0.632		1.73	U
Freon-113		ug/m3	41	U	3.33	U	1.53	U	1.53	U	1.53	U	4.26	U
trans-1,2-Dichloroethene	_	ug/m3	21.2	U	1.72	U	0.793	U	0.793	U	0.793	U	2.2	U
1,1-Dichloroethane	_	ug/m3	21.7 19.3	U	1.76 1.57	U	0.809 0.721	U	0.809 0.721	U	0.809 0.721	U	2.25 2	U
Methyl tert butyl ether 2-Butanone		ug/m3 ug/m3	39.5	U	4.72	U	9.05	0	2.11	U	3.42	U	4.1	U
cis-1,2-Dichloroethene		ug/m3	21.2	U	1.72	U	0.793	U	0.793	U	0.793	U	2.2	U
Ethyl Acetate		ug/m3	48.3	U	3.93	Ü	1.8	U	1.8	Ü	1.8	Ü	5.01	Ü
Chloroform		ug/m3	26.1	U	2.12	U	0.977	U	0.977	U	0.977	U	2.72	U
Tetrahydrofuran		ug/m3	39.5	U	3.21	U	1.47	U	1.47	U	1.47	U	4.1	U
1,2-Dichloroethane		ug/m3	21.7	U	1.76	U	0.809	U	0.809	U	0.809	U	2.25	U
n-Hexane		ug/m3	18.9	U	1.53	U	0.705	U	0.705	U	0.705	U	1.96	U
1,1,1-Trichloroethane		ug/m3	29.2	U	7.8		1.09	U	1.09	U	1.09	U	3.03	U
Benzene	_	ug/m3	17.1	U	1.39	U	0.639	U	0.639	U	0.639	U	1.78	U
Carbon tetrachloride Cyclohexane	_	ug/m3 ug/m3	33.7 18.4	U	2.74 1.5	U	1.26 0.688	U	1.26 0.688	U	1.26 0.688	U	3.5 1.91	U
1,2-Dichloropropane		ug/m3	24.7	U	2.01	U	0.924	U	0.924	U	0.924	U	2.57	U
Bromodichloromethane		ug/m3	35.8	U	2.91	U	1.34	U	1.34	U	1.34	U	3.72	U
1,4-Dioxane		ug/m3	19.3	U	1.57	U	0.721	U	0.721	U	0.721	U	2	U
Trichloroethene	2	ug/m3	28.8	U	2.42		1.07	U	1.07	U	1.07	U	2.99	U
2,2,4-Trimethylpentane		ug/m3	25	U	2.03	U	0.934	U	0.934	U	0.934	U	2.6	U
Heptane		ug/m3	21.9	U	1.78	U	0.82	U	0.82	U	0.82	U	2.28	U
cis-1,3-Dichloropropene		ug/m3	24.3	U	1.97	U	0.908	U	0.908	U	0.908	U	2.52	U
4-Methyl-2-pentanone	_	ug/m3	54.9	U	4.47	U	2.05	U	2.05	U	2.05	U	5.7	U
trans-1,3-Dichloropropene	_	ug/m3	24.3 29.2	U	1.97 2.37	U	0.908 1.09	U	0.908 1.09	U	0.908 1.09	U	2.52 3.03	U
1,1,2-Trichloroethane Toluene		ug/m3 ug/m3	20.2	U	1.64	U	1.14	0	0.754	U	0.754	U	2.1	U
2-Hexanone		ug/m3	21.9	U	1.78	U	2.73		0.82	U	0.82	U	2.28	U
Dibromochloromethane		ug/m3	45.6	U	3.71	Ü	1.7	U	1.7	Ü	1.7	Ü	4.74	Ü
1,2-Dibromoethane		ug/m3	41.1	U	3.34	U	1.54	U	1.54	U	1.54	U	4.27	U
Tetrachloroethene	30	ug/m3	15,800		1,040		129		88.2		113		1,050	
Chlorobenzene		ug/m3	24.6	U	2	U	0.921	U	0.921	U	0.921	U	2.56	U
Ethylbenzene		ug/m3	23.2	U	1.89	U	0.869	U	0.869	U	0.869	U	2.42	U
p/m-Xylene		ug/m3	46.5	U	3.78	U	2.47		1.74	U	1.74	U	4.82	U
Bromoform		ug/m3	55.3	U	4.5	U	2.07	U	2.07	U	2.07	U	5.75	U
Styrene 1,1,2,2-Tetrachloroethane	+	ug/m3	22.8	U	1.85	U	0.852	U	0.852 1.37	U	0.852 1.37	U	2.37	U
o-Xylene		ug/m3 ug/m3	36.7 23.2	U	2.99 1.89	U	1.37 1.07	U	0.869	U	0.869	U	3.82 2.42	U
4-Ethyltoluene		ug/m3	26.3	U	2.14	U	0.983	U	0.983	U	0.983	U	2.73	U
1,3,5-Trimethylbenzene	1	ug/m3	26.3	U	2.14	U	0.983	U	0.983	U	0.983	U	2.73	U
1,2,4-Trimethylbenzene		ug/m3	26.3	Ü	2.14	U	2.72	1	0.983	Ü	1.48		2.73	U
Benzyl chloride		ug/m3	27.7	U	2.25	Ü	1.04	U	1.04	U	1.04	U	2.88	U
1,3-Dichlorobenzene		ug/m3	32.2	U	2.62	U	1.2	U	1.2	U	1.2	U	3.34	U
1,4-Dichlorobenzene		ug/m3	32.2	U	2.62	U	1.2	U	1.2	U	1.2	U	3.34	U
1,2-Dichlorobenzene		ug/m3	32.2	U	2.62	U	1.2	U	1.2	U	1.2	U	3.34	U
1,2,4-Trichlorobenzene		ug/m3	39.7	U	3.23	U	1.48	U	1.48	U	1.48	U	4.13	U
Hexachlorobutadiene		ug/m3	57.1	U	4.64	U	2.13	U	2.13	U	2.13	U	5.93	U

NYSDOH Indoor Air Guidelines Values - No indoor air samples were collected. This guidance was used soley for comparitave purposes

ug/m3 - micrograms per cubic meter U - not detected

Bold - MDL exceeds applicable standard highlighted - result exceeds applicable guidelines



Table 5

Proposed Sample Analysis Summary

13-12, 13-16, and 13-24 Beach Channel Drive, Far Rockaway, NY

Sample Name	Sample Type	Sample Depth Interval (bgs)	Analysis	Holding Time	Sample Rationale
SB-1B	Soil	15-17-feet, 30-32-feet and	Target Compound List (TCL) VOCs plus Tentatively Identified Compounds (TICs)by USEPA methods 8260C/5035	14-days	Expoloratory Borehole to determine presence of a confining layer
36-16	Soil	40-42-feet	rarget compound list (TCL) vocs plus Tentatively Identified Compounds (TICs)by OSEPA friethods 8260C/3033	14-days	Expoloratory Borehole to determine presence of a confining layer
	Soil	0-2-feet		14-days	PCE Delineation Sample
SB-1N	Soil	6-8-feet (or highest PID)	Target Compound List (TCL) VOCs plus Tentatively Identified Compounds (TICs)by USEPA methods 8260C/5035	14-days	PCE Delineation Sample
	Soil	15-17-feet (if no PID)		14-days	PCE Delineation Sample (to be held pending results of 0-2 and 6-8-foot samples)
	Soil 0-2-feet			14-days	PCE Delineation Sample
SB-1E			Target Compound List (TCL) VOCs plus Tentatively Identified Compounds (TICs)by USEPA methods 8260C/5035	14-days	PCE Delineation Sample
	Soil	15-17-feet (if no PID)		14-days	PCE Delineation Sample (to be held pending results of 0-2 and 6-8-foot samples)
	Soil	0-2-feet		14-days	PCE Delineation Sample
SB-1S	Soil	6-8-feet (or highest PID)	Target Compound List (TCL) VOCs plus Tentatively Identified Compounds (TICs)by USEPA methods 8260C/5035	14-days	PCE Delineation Sample
	Soil	15-17-feet (if no PID)		14-days	PCE Delineation Sample (to be held pending results of 0-2 and 6-8-foot samples)
	Soil	0-2-feet		14-days	PCE Delineation Sample
SB-1W	Soil	6-8-feet (or highest PID)	Target Compound List (TCL) VOCs plus Tentatively Identified Compounds (TICs)by USEPA methods 8260C/5035	14-days	PCE Delineation Sample
	Soil	15-17-feet (if no PID)	3 3 3 3 3 3 3 3 3 3	14-days	PCE Delineation Sample (to be held pending results of 0-2 and 6-8-foot samples)
	Soil	15-17-feet, 30-32-feet and	Target Company List /TCI \ \ /OCs plus Tentatively Identified Company de /TICs\by LISEDA methods 9260C/F02F	14-days	Expoloratory Borehole to determine presence of a confining layer
SB-4B	Soil	40-42-feet	Target Compound List (TCL) VOCs plus Tentatively Identified Compounds (TICs)by USEPA methods 8260C/5035	14-days	Expoloratory Borehole to determine presence of a confining layer
	Soil	0-2-feet		14-days	PCE Delineation Sample
SB-4N	Soil	6-8-feet (or highest PID)	Target Compound List (TCL) VOCs plus Tentatively Identified Compounds (TICs)by USEPA methods 8260C/5035	14-days	PCE Delineation Sample
55	Soil	15-17-feet (if no PID)	ranger compound that (162) to as plan tentatively lacinatively lacinated compounds (1165)sy cost / methods of costs	14-days	PCE Delineation Sample (to be held pending results of 0-2 and 6-8-foot samples)
	Soil	0-2-feet		14-days	PCE Delineation Sample
SB-4E	Soil	6-8-feet (or highest PID)	Target Compound List (TCL) VOCs plus Tentatively Identified Compounds (TICs)by USEPA methods 8260C/5035	14-days	PCE Delineation Sample
35 42	Soil	15-17-feet (if no PID)	ranger compound list (162) voes plus remained compounds (1163)sy 632.74 methods 62666, 5635	14-days	PCE Delineation Sample (to be held pending results of 0-2 and 6-8-foot samples)
	Soil	0-2-feet		14-days	PCE Delineation Sample (to be field pending results of 6-2 and 6-8-100t samples)
SB-4S	Soil	6-8-feet (or highest PID)	Target Compound List (TCL) VOCs plus Tentatively Identified Compounds (TICs)by USEPA methods 8260C/5035	14-days	PCE Delineation Sample
35-43	Soil	15-17-feet (if no PID)	raiget compound List (TCL) voes plus Tentatively Identified compounds (Ties) by OSLFA friethous 82000, 3033	14-days	PCE Delineation Sample (to be held pending results of 0-2 and 6-8-foot samples)
	Soil	0-2-feet		14-days	PCE Delineation Sample (to be field pending results of 6-2 and 6-8-100t samples)
SB-4W	Soil	6-8-feet (or highest PID)	Target Compound List (TCL) VOCs plus Tentatively Identified Compounds (TICs)by USEPA methods 8260C/5035	14-days	PCE Delineation Sample
36-4VV	Soil	15-17-feet (if no PID)	raiget compound list (TCL) vocs plus Tentatively Identified compounds (Tics)by OSEPA filetilous 8260C/5055	14-days 14-days	PCE Delineation Sample PCE Delineation Sample (to be held pending results of 0-2 and 6-8-foot samples)
	3011	13-17-leet (II 110 PID)	Toward Commonwed List /TCL\\/CCc relus Towards reluctional admitted Commonwed (TICs) had ICCDA month and 03COC/F03F	·	PCE Defineation sample (to be field pending results of 0-2 and 6-8-root samples)
			Target Compound List (TCL) VOCs plus Tentatively Identified Compounds (TICs) by USEPA methods 8260C/5035	14-days	
			TCL SVOCs plus TICs by USEPA method 8270D	14-days	
SB-7, SB-8, SB-9, SB-10, SB-11,		0-2 feet	TCL Pesticides and herbicides by USEPA methods 8081B and 8151A PCBs by USEPA method 8082A	14-days	
and SB-12	Soil	6-8 feet 15-17 feet	Target Analytes List (TAL) Metals / Part 375 List metals (including cyanide and hexavalent and trivalent chromium) by USEPA Methods 6010C/7471B/9010C/7196A	365-days 180-days	Remedial Investigation Soil Samples
			Per- and Polyfluoroalkyl Substances (PFAS) by USEPA Method 537	28-days	
			1,4-dioxane by USEPA Method 8270 SIM isotope dilution	14-days	
			Target Compound List (TCL) VOCs plus Tentatively Identified Compounds (TICs)by USEPA methods 8260C/5035	14-days	
			TCL SVOCs plus TICs by USEPA method 8270D	7-days	
			TCL Pesticides and herbicides by USEPA methods 8081B and 8151A	7-days	
MW-5, MW-6, MW-10, and	Groundwater	15-25 feet	PCBs by USEPA method 8082A	365-days	Shallow Domadial Investigation Crowndy stor Samples
MW-11	Groundwater	15-25 feet	Target Analytes List (TAL) Metals / Part 375 List metals (including cyanide and hexavalent and trivalent chromium) by USEPA Methods 6010C/7471B/9010C/7196A	180-days	Shallow Remedial Investigation Groundwater Samples
			Per- and Polyfluoroalkyl Substances (PFAS) by USEPA Method 537	14-days	
			1,4-dioxane by USEPA Method 8270 SIM isotope dilution	14-days	
			Target Compound List (TCL) VOCs plus Tentatively Identified Compounds (TICs)by USEPA methods 8260C/5035	14-days	
			TCL SVOCs plus TICs by USEPA method 8270D	7-days	
ANA/ A. BANA/ A: BANA/ 3 - BANA/ 5:			TCL Pesticides and herbicides by USEPA methods 8081B and 8151A	7-days	
/IW-4s, MW-4i, MW-7s, MW-7i, MW-8s, MW-8i, MW-9s and	Groundwater	30-32 feet (s) and 40-42 feet (i)	PCBs by USEPA method 8082A	, 365-days	Intermediate Remedial Investigation Groundwater Samples
MW-9i	Groundwater	30-32 feet (s) and 40-42 feet (i)	Target Analytes List (TAL) Metals / Part 375 List metals (including cyanide and hexavalent and trivalent chromium) by USEPA Methods 6010C/7471B/9010C/7196A	180-days	Intermediate Remediai Investigation Groundwater Samples
			Per- and Polyfluoroalkyl Substances (PFAS) by USEPA Method 537	14-days	
			1,4-dioxane by USEPA Method 8270 SIM isotope dilution	14-days	
SV-7, SV-8, SV-9, SV-10, SV-11,	Soil Vapor	3- or 5-feet	VOCs by USEPA Method TO-15	30-days	Remdial Investigation Soil Vapor Samples

APPENDICES

13-12, 13-16, and 13-24 Beach Channel Drive, Far Rockaway, NY NYSDEC BCP Site Number C241254



170 Keyland Court Bohemia, New York 11716 TEL: (631) 268-8800

FAX: (631) 269-1599

Appendix A

Historical City Directories NYSDEC BCP Site Number C241254



IMPACT ENVIRONMENTAL 170 Keyland Court Bohemia, New York 11716 TEL: (631) 268-8800 FAX: (631) 269-1599 **1312 Beach Channel Drive** 1312 Beach Channel Drive

Far Rockaway, NY 11691

Inquiry Number: 5471477.9

November 01, 2018

The EDR-City Directory Abstract



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Thank you for your business.Please contact EDR at 1-800-352-0050 with any questions or comments.

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EXECUTIVE SUMMARY

DESCRIPTION

Environmental Data Resources, Inc.'s (EDR) City Directory Abstract is a screening tool designed to assist environmental professionals in evaluating potential liability on a target property resulting from past activities. EDR's City Directory Abstract includes a search and abstract of available city directory data. For each address, the directory lists the name of the corresponding occupant at five year intervals.

Business directories including city, cross reference and telephone directories were reviewed, if available, at approximately five year intervals for the years spanning 1922 through 2014. This report compiles information gathered in this review by geocoding the latitude and longitude of properties identified and gathering information about properties within 200 feet of the target property.

A summary of the information obtained is provided in the text of this report.

RECORD SOURCES

EDR's Digital Archive combines historical directory listings from sources such as Cole Information and Dun & Bradstreet. These standard sources of property information complement and enhance each other to provide a more comprehensive report.

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RESEARCH SUMMARY

The following research sources were consulted in the preparation of this report. An "X" indicates where information was identified in the source and provided in this report.

<u>Year</u>	<u>Source</u>	<u>TP</u>	<u>Adjoining</u>	Text Abstract	Source Image
2014	EDR Digital Archive	X	Χ	X	-
2010	EDR Digital Archive	Χ	X	X	-
2005	Hill-Donnelly Information Services	-	X	X	-
	Hill-Donnelly Information Services	Χ	X	X	-
2000	Cole Information Services	-	X	Χ	-
	Cole Information Services	Χ	X	X	-
1996	NYNEX	-	-	-	-
1991	NYNEX Information Resource Company	-	X	Χ	-
	NYNEX Information Resource Company	Χ	X	Χ	-
1983	New York Telephone	-	X	Χ	-
1976	New York Telephone	-	X	X	-
	New York Telephone	Χ	Χ	Χ	-

EXECUTIVE SUMMARY

<u>Year</u>	<u>Source</u>	<u>TP</u>	<u>Adjoining</u>	Text Abstract	Source Image
1970	New York Telephone	-	X	X	-
1967	New York Telephone	-	X	X	-
1962	New York Telephone Directory	-	X	X	-
1950	New York Telephone	-	X	X	-
1945	New York Telephone	-	X	X	-
1939	New York Telephone Company	-	X	X	-
1934	R. L. Polk & Co.	-	X	X	-
1922	H.C. Morris	-	-	-	-

FINDINGS

TARGET PROPERTY INFORMATION

ADDRESS

1312 Beach Channel Drive Far Rockaway, NY 11691

FINDINGS DETAIL

Target Property research detail.

Beach Channel Dr

1312 Beach Channel Dr

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2014	SQKFCINC	EDR Digital Archive
2010	SQKFCINC	EDR Digital Archive

BEACH CHANNEL DR

1312 BEACH CHANNEL DR

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2005	KFC 2 R	Hill-Donnelly Information Services
2000	Ky Fried Chicken	Cole Information Services
1991	Kentucky Fried Chicken	NYNEX Information Resource Company
1976	Kentucky Fried Chicken	New York Telephone
	Take Out Locations	New York Telephone

ADJOINING PROPERTY DETAIL

The following Adjoining Property addresses were researched for this report. Detailed findings are provided for each address.

BEACH CHANL

1315 BEACH CHANL

<u>Year</u>	<u>Uses</u>	<u>Source</u>
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1991 Dans Prime Meats Inc NYNEX Information Resource Company

BEACH CHANL DR

1326 BEACH CHANL DR

<u>Year</u> <u>Uses</u>	<u>Source</u>
-------------------------	---------------

1991 Beach Auto Parts Inc NYNEX Information Resource Company

Beach Channel Dr

1304 Beach Channel Dr

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2014	FAROS TAX SERVICE INC	EDR Digital Archive
2010	FAROS TAX SERVICE INC	EDR Digital Archive
	FAR ROCKAWAY EYECARE INC	EDR Digital Archive
	PAUL YEARWOOD A CORP	EDR Digital Archive
	P WOODYEAR CORP	EDR Digital Archive

BEACH CHANNEL DR

1304 BEACH CHANNEL DR

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2000	Far Rckwy Eye Cr	Cole Information Services
1983	Cohen Morris A atty	New York Telephone
1976	Cohen Morris A atty	New York Telephone
1970	Peninsula Car Svce	New York Telephone
	Peninsula Car Svce	New York Telephone

Beach Channel Dr

1305 Beach Channel Dr

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2014	WHITE CASTLE SYSTEM INC	EDR Digital Archive

<u>Year Uses</u>	<u>Source</u>
------------------	---------------

2010 WHITE CASTLE SYSTEM INC EDR Digital Archive

BEACH CHANNEL DR

1305 BEACH CHANNEL DR

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1976	Ace Wine & Liquor Store	New York Telephone
	J & T Wine & Liquor Store	New York Telephone
1970	Ace Wine & Liquor Store	New York Telephone
	J & T Wine & Liquor Store	New York Telephone
1962	Ace Wine & Liquor Store	New York Telephone Directory

1306 BEACH CHANNEL DR

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1970	B & L Auto Brokers	New York Telephone
	B & L Auta Brokers	New York Telephone
1962	Moss Carl roofng	New York Telephone Directory

1307 BEACH CHANNEL DR

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1976	Braverman Furn Outlet Inc	New York Telephone
1967	Empire Hrdwr	New York Telephone
1962	Empire Hrdwr	New York Telephone Directory
	Empire Hrdwr	New York Telephone Directory

1308 BEACH CHANNEL DR

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2005	Transitional Services Ny	Hill-Donnelly Information Services

1310 BEACH CHANNEL DR

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2005	Stevenson Tommie	Hill-Donnelly Information Services

Beach Channel Dr

1315 Beach Channel Dr

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2014	KLEEN & KLEENER	EDR Digital Archive
	BEACH CHANNEL LAUNDROMAT INC	EDR Digital Archive
2010	T & Z LAUNDROMAT CORPORATION	EDR Digital Archive
	BEACH CHANNEL LAUNDROMAT INC	EDR Digital Archive

<u>Year</u>	<u>Uses</u>	<u>Source</u>
-------------	-------------	---------------

2010 KLEEN & KLEENER EDR Digital Archive

BEACH CHANNEL DR

1315 BEACH CHANNEL DR

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2005	Super Laundromat Is	Hill-Donnelly Information Services
1983	Country Style Meats	New York Telephone
1976	Cozzies Bar & Restrnt	New York Telephone
	Cosmos Bar & Restrnt	New York Telephone
	Ferrer Tony	New York Telephone
1970	Pacetta Cosmo restrnt & bar	New York Telephone
	Coazzis Bar & Restrnt	New York Telephone
	Cosmos Bar & Restrnt	New York Telephone
1967	Pacetta Cosmo restrnt & bar	New York Telephone
	Pacetta Cosmo bar grill	New York Telephone
	Cozzies Bar & Restrnt	New York Telephone
	Cosmos Bar & Restrnt	New York Telephone
1962	Pacetta Casmo restrnt & bar	New York Telephone Directory
	Cozzies Bar & Restrnt	New York Telephone Directory
	Cosmos Bar & Restrnt	New York Telephone Directory
1945	Gundershemer Elsie	New York Telephone

Beach Channel Dr

1316 Beach Channel Dr

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2010	M & IG VIDEO CORP	EDR Digital Archive
	LIGHT GOD INTL MIRACLE CTR INC	EDR Digital Archive
	F L & GILLES EXPORT IMPORT	EDR Digital Archive

BEACH CHANNEL DR

1316 BEACH CHANNEL DR

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2005	Town & Country Travel	Hill-Donnelly Information Services
	M & Ig Video Corp 1s	Hill-Donnelly Information Services
2000	J Johnson	Cole Information Services
	P Overstreet	Cole Information Services
	David & Dnkns Cltr	Cole Information Services

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2000	M & Video Corp	Cole Information Services
1991	Davis Linda	NYNEX Information Resource Company
	Borgella Joel MD	NYNEX Information Resource Company
1983	Animal Clinic	New York Telephone
1976	Animal Clinic	New York Telephone
1970	Michaels Victor W DVM ofc	New York Telephone
1967	Animal Clinic	New York Telephone
	Michaels Victor W DVM ofc	New York Telephone
1962	Michaels Victor W DVM ofc N	New York Telephone Directory

Beach Channel Dr

1324 Beach Channel Dr

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2014	EMPIRE CAR WASH INC	EDR Digital Archive
2010	EMPIRE CAR WASH INC	EDR Digital Archive

BEACH CHANNEL DR

1324 BEACH CHANNEL DR

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2005	Empire Car Wash I s	Hill-Donnelly Information Services
1983	Lonnies Car Wash	New York Telephone
1976	Kleinmans Car Wash	New York Telephone
1967	Kleinmans Car Wash	New York Telephone
1962	Kleinmans Car Wash	New York Telephone Directory

Beach Channel Dr

1326 Beach Channel Dr

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2014	KARENS HAIR DESIGNS	EDR Digital Archive
2010	KARENS HAIR DESIGNS	EDR Digital Archive

BEACH CHANNEL DR

1326 BEACH CHANNEL DR

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2000	Beach At Prts Inc	Cole Information Services
1983	Beach Auto Parts Inc	New York Telephone

<u>Year</u> <u>Uses</u> <u>Source</u>

1970 Berts Tavern New York Telephone

1328 BEACH CHANNEL DR

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2000	Jordan Entrprs Inc	Cole Information Services
	Tonys Auto Repair	Cole Information Services
1991	Channel Auto Repair	NYNEX Information Resource Company
1983	Beach Auto Parts Inc	New York Telephone

Beach Channel Dr

1330 Beach Channel Dr

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2014	ROBERT S DELIGHT	EDR Digital Archive
2010	DFG MARKETING INC	EDR Digital Archive

BEACH CHANNEL DR

1330 BEACH CHANNEL DR

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1976	L & M Auto Parts	New York Telephone

Beach Channel Dr

1332 Beach Channel Dr

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2014	CENTRAL HAIR GALLERY	EDR Digital Archive
	SHIRLEYS HAIR DESIGN	EDR Digital Archive
2010	M V P HAIR UNISEX	EDR Digital Archive
	CENTRAL HAIR GALLERY	EDR Digital Archive
	SHIRLEYS HAIR DESIGN	EDR Digital Archive

BEACH CHANNEL DR

1332 BEACH CHANNEL DR

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2005	MVP Hair Unisex Is	Hill-Donnelly Information Services
2000	MVP Hair Unisax	Cole Information Services
1983	Tele Lab telvisn & radio svce	New York Telephone
1970	Tele Lab telvisn & radio svce	New York Telephone
1967	TeleLab telvisn & radio svce	New York Telephone

BEACH CHVNL DR

1324 BEACH CHVNL DR

<u>Year</u> <u>Uses</u> <u>Source</u>

1970 Kleinmans Car Wash New York Telephone

MET AVE

2158 MET AVE

<u>Year</u> <u>Uses</u> <u>Source</u>

1934 Goldenberg Louis bkpr John C Miller R. L. Polk & Co.

Marble Co Inc

2172 MET AVE

<u>Year</u> <u>Uses</u> <u>Source</u>

1934 Borruso Benj Oasis Auto School R. L. Polk & Co.

MOT AVE

2152 MOT AVE

<u>Year</u> <u>Uses</u> <u>Source</u>

1939 Avery Fredk W Co rl est ins New York Telephone Company

2202 MOT AVE

<u>Year</u> <u>Uses</u> <u>Source</u>

1970 Arco Pharmacy New York Telephone
 1945 Arco Pharmacy New York Telephone

2208 MOT AVE

<u>Year</u> <u>Uses</u> <u>Source</u>

1945 Royal Bake Shop New York Telephone

MOTT AVE

2130 MOTT AVE

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1970	Surf Car Syce	New York Telephone
1967	Surf Car Svce	New York Telephone
1962	Mickeys Taxi Svce	New York Telephone Directory
1934	Pacetta Cosmo cigars	R. L. Polk & Co.

Mott Ave

2134 Mott Ave

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2014	JOONS SEASIDE FISH CORP	EDR Digital Archive

MOTT AVE

2134 MOTT AVE

<u>Year</u>	<u>Uses</u>	Source
2005	Far Rockaway Fish Market Inc	Hill-Donnelly Information Services
2000	Far Rckwy Fsh Mkt	Cole Information Services
1991	Village Tavern	NYNEX Information Resource Company
1970	Village Tavern	New York Telephone
1967	Village Tavern	New York Telephone
1962	Village Tavern	New York Telephone Directory
1934	Economy Grocery TN Sarah Singer	R. L. Polk & Co.

Mott Ave

2136 Mott Ave

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2014	M & IG VIDEO CORP	EDR Digital Archive
	GLENN GARRY INCORPORATED	EDR Digital Archive
2010	MIKEY & ME INC	EDR Digital Archive
	GLENN GARRY INCORPORATED	EDR Digital Archive
	NIKKI & ME INC	EDR Digital Archive

MOTT AVE

2136 MOTT AVE

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2005	Garrys Discount 1 R	Hill-Donnelly Information Services
2000	Garrys Discount	Cole Information Services
1991	Garys Discount apparell	NYNEX Information Resource Company
1983	Garys Discount apparrell	New York Telephone
1976	Jay Prntng Svce	New York Telephone
1970	JAY PRNTNG SVCE	New York Telephone
1967	Jay Prnting Svce	New York Telephone
1962	Midway Fruit Market	New York Telephone Directory
	JAY PRNTNG SVCE	New York Telephone Directory

<u>Year</u> <u>Uses</u> <u>Source</u>

1934 Quinn John clk R. L. Polk & Co.

Mott Ave

2138 Mott Ave

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2014	MOTT AVENUE CHECK CASHING	EDR Digital Archive
2010	MOTT AVENUE CHECK CASHING	EDR Digital Archive

MOTT AVE

2138 MOTT AVE

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2005	Mott Avenue Check Cashing Corp	Hill-Donnelly Information Services
1983	Rockaway Check Cashing Svce Inc	New York Telephone
1970	Parisien Beauty Salon	New York Telephone
1967	Parisien Beauty Salon	New York Telephone
1962	Parisien Beauty Salon	New York Telephone Directory

Mott Ave

2140 Mott Ave

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2014	GEORGE & CHRIS CLEANERS INC	EDR Digital Archive
2010	GEORGE & CHRIS CLEANERS INC	EDR Digital Archive
	CHANG HEE SONG	EDR Digital Archive

MOTT AVE

2140 MOTT AVE

<u>Year</u>	<u>Uses</u>	Source
2005	George & Chris Cleaners	Hill-Donnelly Information Services
2000	Gaorge & Chrs Clnrs	Cole Information Services
	Chris & Geo & Tailors	Cole Information Services
1991	George & Chris Cleaners	NYNEX Information Resource Company
	Chris & Geo Cleanrs & Tailors	NYNEX Information Resource Company
1983	George & Chris Ceanrs & Tailors	New York Telephone
	Chris & Geo Cleanrs & Tailors	New York Telephone
1976	Chris & Geo Cleanrs & Tailors	New York Telephone
1970	Chris & Geo Cleanrs & Tailors	New York Telephone

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1970	George & Chris Cleanrs & Tailors	New York Telephone
1967	George & Chris Cleanrs & Tailors	New York Telephone
	Chris & Geo Cleanrs & Tailors	New York Telephone

Mott Ave

2141 Mott Ave

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2014	COSMO CATERERS INC	EDR Digital Archive
2010	COSMO CATERERS INC	EDR Digital Archive

MOTT AVE

2142 MOTT AVE

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1939	Barish Paul radio & vacuum clnr svce	New York Telephone Company
1934	Gebel Wm D Flora ladies tailor	R. L. Polk & Co.

Mott Ave

2144 Mott Ave

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2014	EXPRESS SHOE REPAIR & PHOTO SP	EDR Digital Archive
2010	EXPRESS SHOE REPAIR & PHOTO SP	EDR Digital Archive
	AA TOWING OF FAR ROCKAWAY	EDR Digital Archive

MOTT AVE

2144 MOTT AVE

<u>Year</u>	<u>Uses</u>	Source
2005	A A Towing Of Far Rockaway	Hill-Donnelly Information Services
	Express Shoe Repair s	Hill-Donnelly Information Services
2000	Express Shoe Repr	Cole Information Services
1991	RAYS SHOE REPAIRG	NYNEX Information Resource Company
	Rays Cleaning & Dying	NYNEX Information Resource Company
	Maiorino Ray shoerepairg	NYNEX Information Resource Company
1983	Rays Shoe Repairg	New York Telephone
	Rays Cleaning & Dying	New York Telephone
	Maiorino Ray shoe repairg	New York Telephone
1976	Maiorino Ray shoe repaire	New York Telephone

<u>Year</u>	<u>Uses</u>	Source
1970	Rays Shoe Repairs	New York Telephone
	Rays Cleaning & Dying	New York Telephone
1967	Rays Cleaning & Dying	New York Telephone
	Maiorino Ray shoe repairg	New York Telephone
1962	Rays Shoe Repairg	New York Telephone Directory
	Majorino Ray shoe repairg	New York Telephone Directory
1934	Reilly Wm br mgr The Great A & P Tea Co	R. L. Polk & Co.
	Fisher John br mgr Gt A & Tea Co	R. L. Polk & Co.

2146 MOTT AVE

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2005	Mbdg Realty F	Hill-Donnelly Information Services
2000	MBDG Realty	Cole Information Services
	Garrys Discount	Cole Information Services
1983	Garrys Discount Store	New York Telephone
1976	Garry Discount Store	New York Telephone

Mott Ave

2148 Mott Ave

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2014	NEW YORK SPREME SPORTSWEAR INC	EDR Digital Archive
	URBAN HOME SPORTSWEAR INC	EDR Digital Archive
2010	NEW YORK SPREME SPORTSWEAR INC	EDR Digital Archive
	A M ELECTRO PLAZA INC	EDR Digital Archive

MOTT AVE

2148 MOTT AVE

<u>Year</u>	<u>Uses</u>	Source
2005	Nobele Telecommunication	Hill-Donnelly Information Services
	Triple A Sportswear Inc	Hill-Donnelly Information Services
2000	Nobele Telecom	Cole Information Services
1991	Goorahoo Paul MD	NYNEX Information Resource Company
	Schwartz And Grubessi podiatrists	NYNEX Information Resource Company
1983	Burgos H Jr	New York Telephone
1970	Molinaro Jos	New York Telephone
1967	Molinaro Jos	New York Telephone

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1962	McCann Henry H	New York Telephone Directory
1939	Heumann Bros mts	New York Telephone Company
1934	Singer Sarah Economy Grocery	R. L. Polk & Co.
	Singer Saml Rose	R. L. Polk & Co.
	Patten Antoinette maid	R. L. Polk & Co.
	Holm Herbert A pntr	R. L. Polk & Co.

Mott Ave

2150 Mott Ave

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2014	BUTTERFLYS RESTAURANT	EDR Digital Archive
	XIANG CHINESE RESTAURANT INC	EDR Digital Archive
	CHEN SHU CHAI	EDR Digital Archive
2010	CHEN SHU CHAI	EDR Digital Archive
	BUTTERFLYS RESTAURANT	EDR Digital Archive

MOTT AVE

2150 MOTT AVE

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2005	Butterifys Restaurant	Hill-Donnelly Information Services
2000	Day Ton Car Svc	Cole Information Services
	Day Ton Car Svc	Cole Information Services
	Day Ton Car Svc	Cole Information Services
	Day Ton Car Svc	Cole Information Services
	Day Ton Car Svc	Cole Information Services
	Day Ton Car Svc	Cole Information Services
	Day Ton Car Svc	Cole Information Services
1991	C & J Pizza	NYNEX Information Resource Company
1970	Niedober Irwin	New York Telephone
	Niedober Statnry	New York Telephone
1967	Niedober Statnry	New York Telephone
1962	Sterns Statnry	New York Telephone Directory
1934	Levine Benj Gertrude stationer	R. L. Polk & Co.

Mott Ave

2152 Mott Ave

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2010	2152 GROCERY STORE INC	EDR Digital Archive
	A & S DELI GROCERY	EDR Digital Archive

MOTT AVE

2152 MOTT AVE

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2005	Souber Grocery IR	Hill-Donnelly Information Services
2000	Super Grocery	Cole Information Services
1983	Birnbaum B butchr	New York Telephone
1976	Birnbaum B butchr	New York Telephone
1970	Birnbaum B butchr	New York Telephone
1967	Birnbaum B butchr	New York Telephone
1962	Birnbaum B butchr	New York Telephone Directory
1939	Chavkin N L pharmcy Winfield HA vemyr 98866	New York Telephone Company
	Chave Schleif Agency Inc rl est & ins	New York Telephone Company
1934	Park Robt Roofing Co TN: Lorenzo Moreo	R. L. Polk & Co.
	Ch Ave Schleif Agency Inc NY W Kenneth Ch Ave pres Jeannie Walsh sec W W Schleif treas ins	R. L. Polk & Co.
	Butler Arth real est	R. L. Polk & Co.
	Avery Fredk W Co RTN Fredk W Avery real est	R. L. Polk & Co.

2154 MOTT AVE

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2000	2200 NP	Cole Information Services
1983	Pacheco Alicia	New York Telephone
1970	Brown Helen	New York Telephone
1967	Soto Geo	New York Telephone
	Brown Helen	New York Telephone
1962	Hutter Lucy A	New York Telephone Directory
	Trainor Margaret	New York Telephone Directory
1945	Nicholls Dorothy B	New York Telephone
1934	Rosen Mamie Mrs maid	R. L. Polk & Co.

2156 MOTT AVE

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1976	Finegold Aaron S Ins	New York Telephone
1970	Finegold Aaron S	New York Telephone
	Far Rockaway	New York Telephone
1967	Licht Nat rl est & ins	New York Telephone
1962	Bee Emm Floor Waxing Co Inc	New York Telephone Directory
1939	Roulston Thos Inc Branch Stores Fr Rockaway	New York Telephone Company
	Roulston Thos Inc Branch Fr Rockaway	New York Telephone Company

2164 MOTT AVE

<u>Year</u> <u>Uses</u> <u>Source</u>

1967 Rays Shoe Repairg New York Telephone

2196 MOTT AVE

<u>Year</u> <u>Uses</u> <u>Source</u>

1945 Pacetta Cosmo bar grill New York Telephone

2198 MOTT AVE

<u>Year</u> <u>Uses</u> <u>Source</u>

2000 Mott Av Chk Cshng Cole Information Services

2202 MOTT AVE

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1976	Gabler Edward A podltrst	New York Telephone
	Farron Robert MD	New York Telephone
1970	Arco Prescription Centers	New York Telephone
1967	Arco Pharmacy	New York Telephone
1962	Arco Pharmacy	New York Telephone Directory
1939	Arco Pharmacy Inc	New York Telephone Company

2204 MOTT AVE

<u>Year</u> <u>Uses</u> <u>Source</u>

1967 Stern Geo New York Telephone

2208 MOTT AVE

<u>Year</u>	<u>Uses</u>	Source
1970	Bayswater Pastry Shop	New York Telephone
1967	Bayswater Pastry Shop	New York Telephone
1962	Bayswater Pastry Shop	New York Telephone Directory
1934	Purcell Agnes maid	R. L. Polk & Co.

21-48 MOTT AVE

<u>Year</u> <u>Uses</u> <u>Source</u>

1950 OTTOS MEAT MKT New York Telephone
CONDINO DOMENICE % New York Telephone

HEUMANN BROS MTS New York Telephone

21-50 MOTT AVE

<u>Year</u> <u>Uses</u> <u>Source</u>

1950 KAIMOWITZ SOL STATNRY New York Telephone

21-52 MOTT AVE

<u>Year</u> <u>Uses</u> <u>Source</u>

1950 SCHAFFER BEN BUTCHR New York Telephone

SHOSTAK & KATZ BUTCHR New York Telephone

21-54 MOTT AVE

<u>Year</u> <u>Uses</u> <u>Source</u>

1950 HUTTER EVERETT New York Telephone

NICHOLLS DOROTHY B New York Telephone

21-56 MOTT AVE

<u>Year</u> <u>Uses</u> <u>Source</u>

1950 PACETTA COSMO D BAR & GRILL New York Telephone

22-02 MOTT AVE

<u>Year</u> <u>Uses</u> <u>Source</u>

1950 ARCO PHARMACY New York Telephone

22-08 MOTT AVE

<u>Year</u> <u>Uses</u> <u>Source</u>

1950 ROYAL BAKE SHOP New York Telephone

22-10 MOTT AVE

<u>Year</u> <u>Uses</u> <u>Source</u>

1950 BERNIES DAIRY New York Telephone

BAYSWATER DAIRY INS New York Telephone

22-11 MOTT AVE

<u>Year</u> <u>Uses</u> <u>Source</u>

1950 CENTRAL AUTO SALES New York Telephone

22-12 MOTT AVE

<u>Year</u> <u>Uses</u> <u>Source</u>

1950 ALS FRUIT MKT New York Telephone

ADJOINING PROPERTY: ADDRESSES NOT IDENTIFIED IN RESEARCH SOURCE

The following Adjoining Property addresses were researched for this report, and the addresses were not identified in research source.

Address Researched	Address Not Identified in Research Source
1304 Beach Channel Dr	2005, 2000, 1996, 1991, 1983, 1976, 1970, 1967, 1962, 1950, 1945, 1939, 1934, 1922
1304 BEACH CHANNEL DR	2014, 2010, 2005, 1996, 1991, 1967, 1962, 1950, 1945, 1939, 1934, 1922
1305 BEACH CHANNEL DR	2014, 2010, 2005, 2000, 1996, 1991, 1983, 1967, 1950, 1945, 1939, 1934, 1922
1305 Beach Channel Dr	2005, 2000, 1996, 1991, 1983, 1976, 1970, 1967, 1962, 1950, 1945, 1939, 1934, 1922
1306 BEACH CHANNEL DR	2014, 2010, 2005, 2000, 1996, 1991, 1983, 1976, 1967, 1950, 1945, 1939, 1934, 1922
1307 BEACH CHANNEL DR	2014, 2010, 2005, 2000, 1996, 1991, 1983, 1970, 1950, 1945, 1939, 1934, 1922
1308 BEACH CHANNEL DR	2014, 2010, 2000, 1996, 1991, 1983, 1976, 1970, 1967, 1962, 1950, 1945, 1939, 1934, 1922
1310 BEACH CHANNEL DR	2014, 2010, 2000, 1996, 1991, 1983, 1976, 1970, 1967, 1962, 1950, 1945, 1939, 1934, 1922
1315 BEACH CHANL	2014, 2010, 2005, 2000, 1996, 1983, 1976, 1970, 1967, 1962, 1950, 1945, 1939, 1934, 1922
1315 BEACH CHANNEL DR	2014, 2010, 2000, 1996, 1991, 1950, 1939, 1934, 1922
1315 Beach Channel Dr	2005, 2000, 1996, 1991, 1983, 1976, 1970, 1967, 1962, 1950, 1945, 1939, 1934, 1922
1316 Beach Channel Dr	2014, 2005, 2000, 1996, 1991, 1983, 1976, 1970, 1967, 1962, 1950, 1945, 1939, 1934, 1922
1316 BEACH CHANNEL DR	2014, 2010, 1996, 1950, 1945, 1939, 1934, 1922
1324 BEACH CHANNEL DR	2014, 2010, 2000, 1996, 1991, 1970, 1950, 1945, 1939, 1934, 1922
1324 Beach Channel Dr	2005, 2000, 1996, 1991, 1983, 1976, 1970, 1967, 1962, 1950, 1945, 1939, 1934, 1922
1324 BEACH CHVNL DR	2014, 2010, 2005, 2000, 1996, 1991, 1983, 1976, 1967, 1962, 1950, 1945, 1939, 1934, 1922
1326 BEACH CHANL DR	2014, 2010, 2005, 2000, 1996, 1983, 1976, 1970, 1967, 1962, 1950, 1945, 1939, 1934, 1922
1326 BEACH CHANNEL DR	2014, 2010, 2005, 1996, 1991, 1976, 1967, 1962, 1950, 1945, 1939, 1934, 1922
1326 Beach Channel Dr	2005, 2000, 1996, 1991, 1983, 1976, 1970, 1967, 1962, 1950, 1945, 1939, 1934, 1922
1328 BEACH CHANNEL DR	2014, 2010, 2005, 1996, 1976, 1970, 1967, 1962, 1950, 1945, 1939, 1934, 1922
1330 BEACH CHANNEL DR	2014, 2010, 2005, 2000, 1996, 1991, 1983, 1970, 1967, 1962, 1950, 1945, 1939, 1934, 1922
1330 Beach Channel Dr	2005, 2000, 1996, 1991, 1983, 1976, 1970, 1967, 1962, 1950, 1945, 1939, 1934, 1922
1332 Beach Channel Dr	2005, 2000, 1996, 1991, 1983, 1976, 1970, 1967, 1962, 1950, 1945, 1939, 1934, 1922

Address Researched	Address Not Identified in Research Source
1332 BEACH CHANNEL DR	2014, 2010, 1996, 1991, 1976, 1962, 1950, 1945, 1939, 1934, 1922
21-48 MOTT AVE	2014, 2010, 2005, 2000, 1996, 1991, 1983, 1976, 1970, 1967, 1962, 1945, 1939, 1934, 1922
21-50 MOTT AVE	2014, 2010, 2005, 2000, 1996, 1991, 1983, 1976, 1970, 1967, 1962, 1945, 1939, 1934, 1922
21-52 MOTT AVE	2014, 2010, 2005, 2000, 1996, 1991, 1983, 1976, 1970, 1967, 1962, 1945, 1939, 1934, 1922
21-54 MOTT AVE	2014, 2010, 2005, 2000, 1996, 1991, 1983, 1976, 1970, 1967, 1962, 1945, 1939, 1934, 1922
21-56 MOTT AVE	2014, 2010, 2005, 2000, 1996, 1991, 1983, 1976, 1970, 1967, 1962, 1945, 1939, 1934, 1922
2130 MOTT AVE	2014, 2010, 2005, 2000, 1996, 1991, 1983, 1976, 1950, 1945, 1939, 1922
2134 MOTT AVE	2014, 2010, 1996, 1983, 1976, 1950, 1945, 1939, 1922
2134 Mott Ave	2010, 2005, 2000, 1996, 1991, 1983, 1976, 1970, 1967, 1962, 1950, 1945, 1939, 1934, 1922
2136 Mott Ave	2005, 2000, 1996, 1991, 1983, 1976, 1970, 1967, 1962, 1950, 1945, 1939, 1934, 1922
2136 MOTT AVE	2014, 2010, 1996, 1950, 1945, 1939, 1922
2138 MOTT AVE	2014, 2010, 2000, 1996, 1991, 1976, 1950, 1945, 1939, 1934, 1922
2138 Mott Ave	2005, 2000, 1996, 1991, 1983, 1976, 1970, 1967, 1962, 1950, 1945, 1939, 1934, 1922
2140 Mott Ave	2005, 2000, 1996, 1991, 1983, 1976, 1970, 1967, 1962, 1950, 1945, 1939, 1934, 1922
2140 MOTT AVE	2014, 2010, 1996, 1962, 1950, 1945, 1939, 1934, 1922
2141 Mott Ave	2005, 2000, 1996, 1991, 1983, 1976, 1970, 1967, 1962, 1950, 1945, 1939, 1934, 1922
2142 MOTT AVE	2014, 2010, 2005, 2000, 1996, 1991, 1983, 1976, 1970, 1967, 1962, 1950, 1945, 1922
2144 MOTT AVE	2014, 2010, 1996, 1950, 1945, 1939, 1922
2144 Mott Ave	2005, 2000, 1996, 1991, 1983, 1976, 1970, 1967, 1962, 1950, 1945, 1939, 1934, 1922
2146 MOTT AVE	2014, 2010, 1996, 1991, 1970, 1967, 1962, 1950, 1945, 1939, 1934, 1922
2148 MOTT AVE	2014, 2010, 1996, 1976, 1950, 1945, 1922
2148 Mott Ave	2005, 2000, 1996, 1991, 1983, 1976, 1970, 1967, 1962, 1950, 1945, 1939, 1934, 1922
2150 Mott Ave	2005, 2000, 1996, 1991, 1983, 1976, 1970, 1967, 1962, 1950, 1945, 1939, 1934, 1922
2150 MOTT AVE	2014, 2010, 1996, 1983, 1976, 1950, 1945, 1939, 1922
2152 MOT AVE	2014, 2010, 2005, 2000, 1996, 1991, 1983, 1976, 1970, 1967, 1962, 1950, 1945, 1934, 1922
2152 MOTT AVE	2014, 2010, 1996, 1991, 1950, 1945, 1922
2152 Mott Ave	2014, 2005, 2000, 1996, 1991, 1983, 1976, 1970, 1967, 1962, 1950, 1945, 1939, 1934, 1922

Address Researched	Address Not Identified in Research Source
2154 MOTT AVE	2014, 2010, 2005, 1996, 1991, 1976, 1950, 1939, 1922
2156 MOTT AVE	2014, 2010, 2005, 2000, 1996, 1991, 1983, 1950, 1945, 1934, 1922
2158 MET AVE	2014, 2010, 2005, 2000, 1996, 1991, 1983, 1976, 1970, 1967, 1962, 1950, 1945, 1939, 1922
2164 MOTT AVE	2014, 2010, 2005, 2000, 1996, 1991, 1983, 1976, 1970, 1962, 1950, 1945, 1939, 1934, 1922
2172 MET AVE	2014, 2010, 2005, 2000, 1996, 1991, 1983, 1976, 1970, 1967, 1962, 1950, 1945, 1939, 1922
2196 MOTT AVE	2014, 2010, 2005, 2000, 1996, 1991, 1983, 1976, 1970, 1967, 1962, 1950, 1939, 1934, 1922
2198 MOTT AVE	2014, 2010, 2005, 1996, 1991, 1983, 1976, 1970, 1967, 1962, 1950, 1945, 1939, 1934, 1922
22-02 MOTT AVE	2014, 2010, 2005, 2000, 1996, 1991, 1983, 1976, 1970, 1967, 1962, 1945, 1939, 1934, 1922
22-08 MOTT AVE	2014, 2010, 2005, 2000, 1996, 1991, 1983, 1976, 1970, 1967, 1962, 1945, 1939, 1934, 1922
22-10 MOTT AVE	2014, 2010, 2005, 2000, 1996, 1991, 1983, 1976, 1970, 1967, 1962, 1945, 1939, 1934, 1922
22-11 MOTT AVE	2014, 2010, 2005, 2000, 1996, 1991, 1983, 1976, 1970, 1967, 1962, 1945, 1939, 1934, 1922
22-12 MOTT AVE	2014, 2010, 2005, 2000, 1996, 1991, 1983, 1976, 1970, 1967, 1962, 1945, 1939, 1934, 1922
2202 MOT AVE	2014, 2010, 2005, 2000, 1996, 1991, 1983, 1976, 1967, 1962, 1950, 1939, 1934, 1922
2202 MOTT AVE	2014, 2010, 2005, 2000, 1996, 1991, 1983, 1950, 1945, 1934, 1922
2204 MOTT AVE	2014, 2010, 2005, 2000, 1996, 1991, 1983, 1976, 1970, 1962, 1950, 1945, 1939, 1934, 1922
2208 MOT AVE	2014, 2010, 2005, 2000, 1996, 1991, 1983, 1976, 1970, 1967, 1962, 1950, 1939, 1934, 1922
2208 MOTT AVE	2014, 2010, 2005, 2000, 1996, 1991, 1983, 1976, 1950, 1945, 1939, 1922

TARGET PROPERTY: ADDRESS NOT IDENTIFIED IN RESEARCH SOURCE

The following Target Property addresses were researched for this report, and the addresses were not identified in the research source.

Address Researched Address Not Identified in Research Source

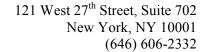
1312 Beach Channel Drive 1996, 1983, 1970, 1967, 1962, 1950, 1945, 1939, 1934, 1922

Appendix B

Previous Environmental Reports NYSDEC BCP Site Number C241254



170 Keyland Court Bohemia, New York 11716 TEL: (631) 268-8800 FAX: (631) 269-1599





August 2, 2018

Deergrow Developments 1, LLC 3008 Avenue J Brooklyn, NY 11210

Attn: Mr. Max Kozlowitz

Re: Due Diligence Environmental Site Investigation

13-16 to 13-30 Beach Channel Drive – Far Rockaway, NY

Tax Block 15528, Lots 6, 9, 12 and 112

Dear Max:

This letter report summarizes the findings of the Due Diligence Environmental Site Investigation (Phase II ESI) performed by Tenen Environmental, LLC (Tenen) at the above property (the Site) on July 23 and 24, 2018. The report includes a description of the sampling methodology and discusses the analytical results.

Background

The Site, located at 13-16 and 13-24 to 13-30 Beach Channel Drive, Far Rockaway, New York (Tax Block 15528, Lots 6, 9, 12, and 112) is an irregularly shaped parcel on the east side of Beach Channel Drive. The total Site area is approximately 28,000 square feet (SF). The Site has approximately 240 feet of frontage along Beach Channel Drive and approximately 50 feet of frontage along Dix Avenue. Other addresses associated with the Site include 13-36, 13-38 and 13-40 Beach Channel Drive and 21-19 Dix Avenue. The Site is located within the DFR Special Downtown Far Rockaway District and is zoned R5, a designation denoting a high-density district allowing a variety of housing, with a C1-2 overlay, allowing for uses to meet local retail needs. The Site is currently developed with one-story commercial buildings, occupied by a car wash, salon, barber, deli, and fast food restaurant, and a vacant three-story house previously used as a church. A location map of the Site is included as Figure 1.

Phase I Environmental Site Assessments (ESAs) for the Site were prepared by Environmental Business Consultants (EBC) for 13-16 Beach Channel Drive in November 2017, and by Tenen for 13-24 to 13-30 Beach Channel Drive in July 2018. The 2017 Phase I ESA performed by EBC did not identify any recognized environmental conditions (RECs) at the subject property (Lot 6) or adjoining properties. The 2018 Phase I ESA performed by Tenen identified the following RECs:

- Historic and current use of the Site (Lot 9) as an auto laundry (car wash) and historic use of the Site (Lot 12) for auto repair;
- Historic and current use of the north adjoining property as a filling station with underground gasoline storage and historic use of the property for auto repair.

Lot 9 (13-24 Beach Channel Drive) of the Site was listed on the EDR proprietary E-DESIGNATION database with E-designation E-232 for Air Quality – HVAC fuel limited to natural gas, Window Wall Attenuation and Alternate Ventilation, and Hazardous Materials Phase I and Phase II Testing Protocol.

The objectives of the Phase II ESI were to address the findings of the Phase I ESA and to determine if the historical uses of the Site or surrounding properties impacted the soil or groundwater at the Site.

Due Diligence Environmental Site Investigation

Site Geology and Hydrogeology. Fill material, containing sand, gravel, cobbles, brick, coal, and glass fragments, was encountered between one and three feet below grade (ft-bg) at the borings SB-1 and SB-2. The fill material was underlain by fine to coarse tan sand with some silt. Groundwater was encountered at approximately 17 ft-bg. The regional groundwater flow direction is to the northwest. Lithologic logs are presented in Attachment 1.

Sampling Methodology. The methodology used to collect the soil and groundwater samples is summarized below.

Soil. A total of four soil borings (SB-1 through SB-4) were installed on the Site. Boring SB-1 was collected in the outdoor yard behind the building on Lot 6; boring SB-2 was collected from the southwest portion of the parking lot on Lot 9; SB-3 was installed within the cellar of the building on Lot 12; SB-4 was installed within the building cellar on the northern portion of Lot 112. A trackmounted Geoprobe® direct-push unit was used to advance the exterior soil borings and to install the temporary wells; hand tools and a hand auger were used to advance the soil borings within the building footprints. Drilling was performed by Cascade Environmental of Lynbrook, New York.

All soil samples were collected using dedicated acetate liners. Soil screening using a PID indicated non-detect readings in all borings. No visual or olfactory observations were noted during borehole advancement. No grossly contaminated soil cuttings were encountered during this investigation. One soil sample was collected from each boring location within the fill material (SB-1 and SB-2 at 0-2 ft-bg) or at the groundwater interface (SB-3 and SB-4 at 5-7 ft-bg).

Groundwater. The four soil borings were converted into 1-inch diameter temporary wells (TMW-1 through TMW-4). Temporary groundwater well TW-4 on the northern portion of the Site is located in the presumably downgradient direction (TMW-1) and TW-1 on the southern portion of the Site is in the upgradient direction. One groundwater sample was collected from each of the four temporary wells using a peristaltic pump after water quality measurements stabilized; temporary well TW-3 went dry during purging and stabilization was discontinued to complete the process. The temporary wells were advanced to a depth of 20 to 25 feet (approximately 5 feet below the water table) at exterior locations (TW-1 and TW-2) and to a depth of approximately 7 feet below slab at interior locations within the cellar (TW-3 and TW-4) to collect the groundwater samples.

A summary of sample designations, media sampled, and locations is shown below. Of note, sample location SB-1/TW-1 is elevated approximately 4 feet above sample location SB-2/TW-2, which is at grade with Beach Channel Drive. The cellar slab within the building footprint is approximately 8 ft-bg. No duplicate samples were collected. Sampling locations are shown on Figure 2.

Boring Locations, Sample Designations and Media Sampled

Sample	Sample Name	Sample Type	Description of Location
Location	(Depth in ft-bg)		
SB-1	SB-1 (0-2)	Soil	Southern portion of Lot 6 (Site)
	TMW-1	Groundwater	
SB-2	SB-2 (0-2)	Soil	Southeastern portion of Lot 9 (Site)
	TMW-2	Groundwater	
SB-3	SB-3 (5-7)	Soil	Southeastern portion of Lot 12 (Site)
	TMW-3	Groundwater	
SB-4	SB-4 (5-7)	Soil	Northern portion of Lot 112 (Site)
	TMW-4	Groundwater	

Analytical Results

The samples were preserved on ice and sent under chain-of-custody documentation to Alpha Analytical, Inc. (Alpha). Alpha is certified by the New York State Department of Health (NYSDOH) Environmental Laboratory Approval Program (ELAP) as LABIDs 11148 and 11627.

All soil and groundwater samples were analyzed for volatile organic compounds (VOCs) and semivolatile organic compounds (SVOCs). Soil samples were also analyzed for total metals. The results of the sample analysis are presented below. Summaries of detected compounds in soil and groundwater sample are included in Tables 1 through 5. Laboratory deliverables are included in Attachment 2.

Soil

The soil results were compared to the New York State Department of Environmental Conservation (NYSDEC) Unrestricted Use SCOs as listed in 6 NYCRR Part 375-6.8(a) and Restricted-Residential Use (Restricted-Residential) SCOs as listed in 6 NYCRR Part 375-6.8(b).

No VOCs were detected in soil at concentrations above the Restricted-Residential Use SCOs or Unrestricted Use SCOs. The chlorinated solvent tetrachloroethene (PCE) was detected in SB-1 (0-2) and methylene chloride was detected in samples SB-3 (5-7) and SB-4 (5-7), below regulatory standards. Acetone, a common laboratory artifact, was also detected in several samples, below the corresponding Unrestricted Use SCO.

SVOCs, including several polyaromatic hydrocarbons (PAHs), consistent with the presence of historic fill material, were detected in samples SB-1 (0-2), SB-2 (0-2), and SB-3 (5-7). NO SVOCs were detected above the Restricted-Residential Use SCOs or Unrestricted Use SCOs.

No metals were detected above the Restricted-Residential Use SCOs. Lead [max: 166 mg/kg] and zinc [max: 376 mg/kg] were detected above the Unrestricted Use SCO of 63 mg/kg and 109 mg/kg, respectively, in SB-1 (0-2) and SB-2 (0-2). Mercury was detected in SB-1 (0-2) at a concentration of 0.669 mg/kg, above the Unrestricted Use SCO of 0.18 mg/kg.

Groundwater

Groundwater concentrations were compared to the NYSDEC Division of Water Technical and Operational Guidance Series (TOGS) 1.1.1 Class GA Water Quality Standards and Guidance Values (Class GA Standards).

PCE was detected in the upgradient temporary well TW-1 at 16 ug/kg, above the Class GA Standard of 5 ug/kg; PCE was detected in TW-2 through TW-4 below the Class GA Standard. Acetone was detected at 70 ug/kg in TW-4, above the Class GA Standard of 50 ug/kg. No other VOCs were detected above regulatory standards.

Two SVOCs were detected above their corresponding Class GA Standards: the PAH benzo(a)anthracene was detected in TW-1 at 0.03 ug/kg, and phenol was detected in TW-4 at 9.8 ug/kg. No other SVOCs were detected above regulatory standards.

Findings and Conclusions

The results of the Phase II environmental site investigation indicate the following:

- VOC and SVOCs were not detected in soil at concentrations above the Restricted-Residential Use or Unrestricted Use SCOs.
- No metals were detected above the Restricted-Residential Use SCOs. Historic-fill related metals lead, mercury, and zinc were detected above the Unrestricted Use SCO, with the highest concentrations detected in soil boring SB-1.
- The chlorinated solvent PCE was detected above the Class GA Standard in the upgradient temporary well TW-1. PCE impact is likely associated with an upgradient surrounding property use.
- The SVOC compounds benzo(a)anthracene and phenol were detected above the Class GA Standards in TW-1 and TW-4, respectively.
- Petroleum-related impacts were not detected in soil or groundwater samples.

Please contact us if you need any additional information.

Sincerely,

Tenen Environmental, LLC

Matthew Carroll, P.E.

MAAM Com

Principal / Environmental Engineer

Figure 1 Site Location

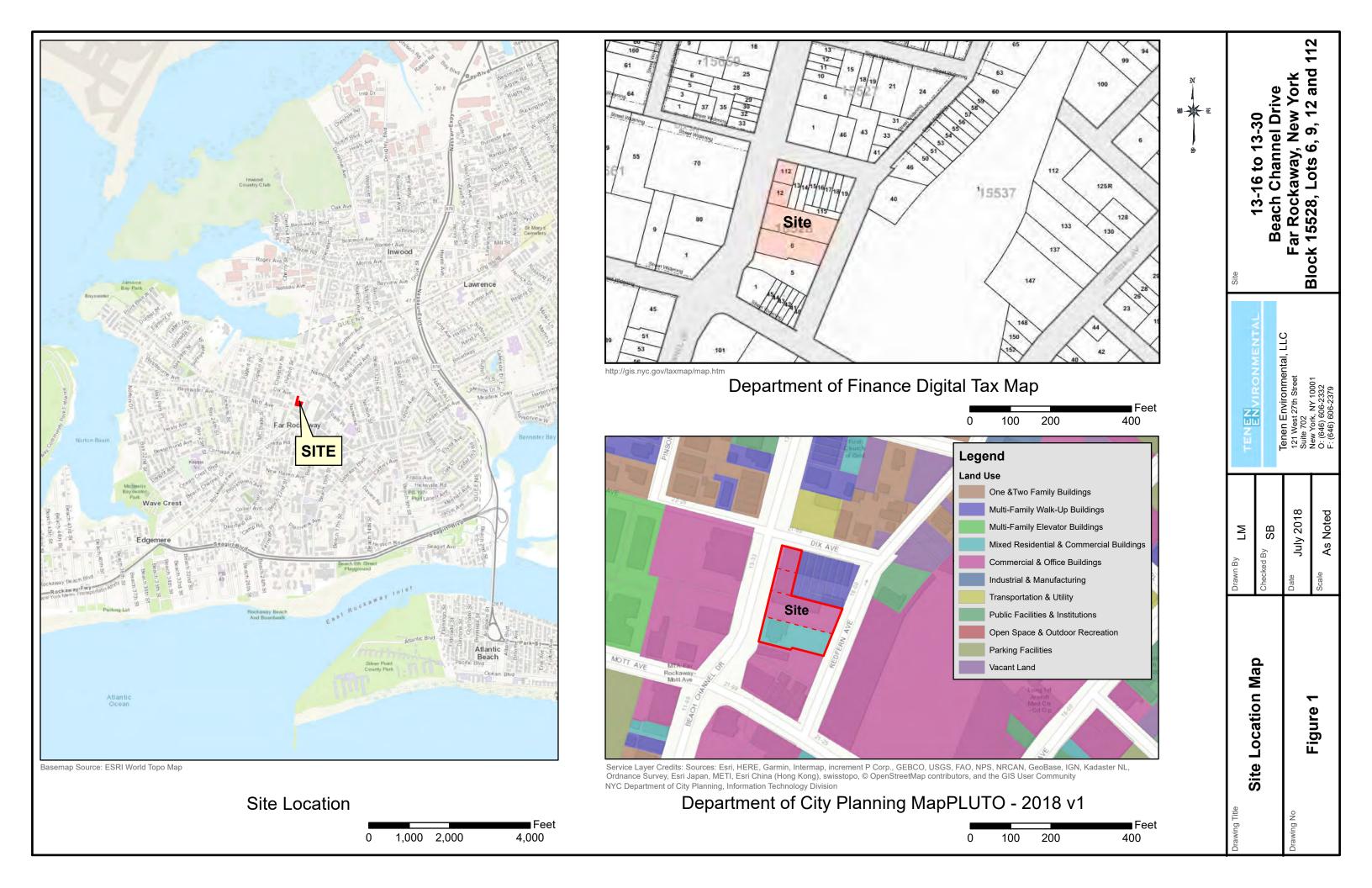
Figure 2 Soil and Groundwater Sample Locations

Tables 1 through 5 Analytical Results

Attachment 1

Lithologic Logs Laboratory Deliverables Attachment 2

Figures





Tables

AB ID:	١		SB-1 (0- L1828167		SB-2 (0- L182816		SB-3 (5- L1828472		SB-4 (5- L182847)
COLLECTION DATE:	NY- RESRR	NY- UNRES	7/23/20		7/23/20		7/24/20		7/24/20
olatile Organic Compounds	KESKK	UNKES	Conc	Q	Conc	Q	Conc	Q	Conc
Jnits: mg/kg Methylene chloride	100	0.05	<0.0022	U	< 0.0019	U	0.0026	J	0.0021
,1-Dichloroethane	26	0.03	< 0.00014	U	< 0.00012	U	< 0.0020	U	< 0.0021
Chloroform	49	0.37	< 0.00013	U	< 0.00012	U	< 0.00012	U	0.00014
Carbon tetrachloride	2.4	0.76	< 0.00022	U	< 0.00019	U	< 0.0002	U	< 0.00017
,2-Dichloropropane			< 0.00012	U	< 0.0001	U	< 0.00011	U	< 0.00009
Dibromochloromethane			< 0.00013	U	< 0.00012	U	< 0.00012	U	< 0.0001
,1,2-Trichloroethane			< 0.00025	U	< 0.00022	U	< 0.00023	U	< 0.0002
etrachloroethene	19	1.3	0.00058		< 0.00016	U	< 0.00017	U	< 0.00014
Chlorobenzene	100	1.1	< 0.00012	U	< 0.00011	U	< 0.00011	U	< 0.00009
richlorofluoromethane ,2-Dichloroethane			<0.00066	U	<0.00058	U	<0.00061 <0.00022	U	<0.00052 <0.00019
<u>/</u>	3.1	0.02	< 0.00024	U	<0.00021	U	<0.00022	U	<0.00019
,1,1-Trichloroethane Bromodichloromethane	100	0.08	<0.00016 <0.0001	U	<0.00014 <0.00009	U	<0.00013	U	<0.00012
rans-1,3-Dichloropropene			< 0.0001	U	<0.00009	U	< 0.0001	U	<0.00008
is-1,3-Dichloropropene			< 0.00026	U	< 0.00023	U	< 0.00024	U	< 0.0002
,3-Dichloropropene, Total			< 0.00015	U	< 0.00013	U	< 0.00014	U	< 0.00012
,1-Dichloropropene			< 0.00015	U	< 0.00013	U	< 0.00014	U	< 0.00012
Bromoform			< 0.00023	U	< 0.0002	U	< 0.00022	U	< 0.00018
,1,2,2-Tetrachloroethane			< 0.00016	U	< 0.00014	U	< 0.00014	U	< 0.00012
Benzene	4.8	0.06	< 0.00016	U	< 0.00014	U	< 0.00014	U	< 0.00012
oluene	100	0.7	< 0.00052	U	< 0.00045	U	< 0.00047	U	< 0.0004
thylbenzene	41	1	< 0.00013	U	< 0.00012	U	< 0.00012	U	< 0.0001
Chloromethane			< 0.00089	U	< 0.00078	U	< 0.00082	U	< 0.00069
Bromomethane			<0.00055	U	<0.00048	U	<0.00051	U	<0.00043
/inyl chloride	0.9	0.02	< 0.00032	U	<0.00028	U	< 0.00029	U	<0.00025
Chloroethane	100	0.33	<0.00043	U	<0.00038	U	<0.0004	U	<0.00034
,1-Dichloroethene rans-1,2-Dichloroethene	100	0.33	<0.00023 <0.00013	U	<0.0002 <0.00011	U	<0.00021 <0.00012	U	<0.00018
richloroethene	21	0.19	<0.00013	U	<0.00011	U	<0.00012	U	<0.0001
,2-Dichlorobenzene	100	1.1	<0.00013	U	< 0.00011	U	<0.00012	U	< 0.0001
,3-Dichlorobenzene	49	2.4	< 0.00014	U	< 0.00012	U	< 0.00012	U	< 0.00011
,4-Dichlorobenzene	13	1.8	< 0.00014	U	< 0.00012	U	< 0.00015	U	< 0.00011
Methyl tert butyl ether	100	0.93	< 0.00010	U	< 0.00017	U	< 0.00018	U	< 0.00015
/m-Xylene			< 0.00053	U	< 0.00047	U	< 0.00049	U	< 0.00042
-Xylene		-	< 0.00028	U	< 0.00024	U	< 0.00025	U	< 0.00022
Cylenes, Total	100	0.26	< 0.00028	U	< 0.00024	U	< 0.00025	U	< 0.00022
is-1,2-Dichloroethene	100	0.25	< 0.00017	U	< 0.00015	U	< 0.00015	U	< 0.00013
,2-Dichloroethene, Total			< 0.00013	U	< 0.00011	U	< 0.00012	U	< 0.0001
Dibromomethane			< 0.00023	U	< 0.0002	U	< 0.00021	U	< 0.00018
tyrene			< 0.00019	U	< 0.00016	U	< 0.00017	U	< 0.00014
Dichlorodifluoromethane			< 0.00087	U	< 0.00076	U	<0.0008	U	< 0.00068
Acetone	100	0.05	<0.0046	U	0.0057	J	0.028	**	0.018
Carbon disulfide	100	0.12	<0.0043 <0.0021	U	<0.0038	U	<0.004 <0.0019	U	<0.0034 <0.0016
-Butanone /inyl acetate		0.12	<0.0021	U	< 0.0018	U	< 0.0019	U	< 0.0016
-Methyl-2-pentanone			< 0.002	U	< 0.0013	U	< 0.0019	U	< 0.00010
,2,3-Trichloropropane			< 0.00012	U	< 0.00011	U	< 0.00011	U	< 0.00009
-Hexanone			< 0.0011	U	< 0.00098	U	< 0.001	U	< 0.00087
Bromochloromethane			< 0.0002	U	< 0.00017	U	< 0.00018	U	< 0.00015
,2-Dichloropropane			< 0.00019	U	< 0.00017	U	< 0.00018	U	< 0.00015
,2-Dibromoethane			< 0.00027	U	< 0.00023	U	< 0.00024	U	< 0.00021
,3-Dichloropropane			< 0.00016	U	< 0.00014	U	< 0.00015	U	< 0.00012
,1,1,2-Tetrachloroethane			< 0.00013	U	< 0.00011	U	< 0.00012	U	< 0.0001
Bromobenzene			< 0.00014	U	< 0.00012	U	< 0.00013	U	< 0.00011
-Butylbenzene	100	12	< 0.00016	U	< 0.00014	U	< 0.00015	U	< 0.00012
ec-Butylbenzene	100	11	< 0.00014	U	< 0.00012	U	< 0.00013	U	< 0.00011
ert-Butylbenzene	100	5.9	< 0.00011	U	< 0.0001	U	<0.0001 <0.00017	U	<0.00009
-Chlorotoluene			<0.00018	U	<0.00016	U		U	<0.00014
-Chlorotoluene ,2-Dibromo-3-chloropropane			<0.0001	U	<0.00009 <0.00083	U	<0.00009 <0.00087	U	<0.00008 <0.00074
,2-Dibromo-3-chioropropane lexachlorobutadiene			< 0.00095	U	< 0.00083	U	<0.00087	U	<0.00074
sopropylbenzene			<0.00010	U	< 0.00014	U	< 0.00013	U	<0.00012
-Isopropyltoluene			< 0.0001	U	< 0.00009	U	< 0.0001	U	<0.00008
Vaphthalene	100	12	< 0.00062	U	< 0.00054	U	< 0.00057	U	< 0.00048
Acrylonitrile			< 0.0011	U	< 0.00096	U	< 0.001	U	< 0.00085
-Propylbenzene	100	3.9	< 0.00016	U	< 0.00014	U	< 0.00015	U	< 0.00013
,2,3-Trichlorobenzene			< 0.00031	U	< 0.00027	U	< 0.00028	U	< 0.00024
,2,4-Trichlorobenzene			< 0.00026	U	< 0.00023	U	< 0.00024	U	< 0.0002
,3,5-Trimethylbenzene	52	8.4	< 0.00018	U	< 0.00016	U	< 0.00017	U	< 0.00014
,2,4-Trimethylbenzene	52	3.6	< 0.00032	U	<0.00028	U	<0.00029	U	<0.00025
,4-Dioxane	13	0.1	<0.034	U	<0.029	U	<0.031	U	<0.026
-Diethylbenzene			<0.00017	U	<0.00015	U	<0.00015	U	<0.00013
-Ethyltoluene			<0.00037 <0.00018	U	<0.00032 <0.00016	U	<0.00034 <0.00017	U	<0.00028 <0.00014
2.4.5-Tetramethylbanzana			<0.00018	U	<0.00018	U	<0.00017	U	<0.00014
,2,4,5-Tetramethylbenzene						_	< 0.0003	U	< 0.001
,2,4,5-Tetramethylbenzene Ethyl ether rans-1,4-Dichloro-2-butene			< 0.0014	U	< 0.0012	U			

CAMPLE ID.			SD 1 (0.2)		SD 2 (0.2)		CD 2 (5.7)		SD 4 (5.7)	
SAMPLE ID: LAB ID:	-		SB-1 (0-2) L1828167-01 7/23/2018		SB-2 (0-2) L1828167-02		SB-3 (5-7) L1828472-01		SB-4 (5-7) L1828472-02	
COLLECTION DATE:	NY-	NY-			7/23/20		7/24/2018		7/24/2018	
Semivolatile Organic	RESRR	UNRES								
Compounds			Conc	Q	Conc	Q	Conc	Q	Conc	Q
Acenaphthene	100	20	< 0.019	U	< 0.017	U	< 0.019	U	< 0.018	U
1,2,4-Trichlorobenzene			< 0.02	U	< 0.019	U	< 0.021	U	< 0.02	U
Hexachlorobenzene	1.2	0.33	< 0.02	U	< 0.019	U	< 0.02	U	< 0.02	U
Bis(2-chloroethyl)ether			< 0.024	U	< 0.023	U	< 0.024	U	< 0.024	U
2-Chloronaphthalene			< 0.018	U	< 0.017	U	< 0.018	U	< 0.018	U
1,2-Dichlorobenzene	100	1.1	< 0.032	U	< 0.03	U	< 0.032	U	< 0.032	U
1,3-Dichlorobenzene	49	2.4	< 0.031	U	< 0.029	U	< 0.031	U	< 0.03	U
1,4-Dichlorobenzene	13	1.8	< 0.031	U	< 0.029	U	< 0.032	U	< 0.031	U
3,3'-Dichlorobenzidine			< 0.048	U	< 0.045	U	< 0.048	U	< 0.047	U
2,4-Dinitrotoluene			< 0.036	U	< 0.034	U	< 0.036	U	< 0.035	U
2,6-Dinitrotoluene			< 0.031	U	< 0.029	U	< 0.031	U	< 0.03	U
Fluoranthene	100	100	0.034	J	0.14		< 0.021	U	< 0.02	U
4-Chlorophenyl phenyl ether			< 0.019	U	< 0.018	U	< 0.019	U	< 0.019	U
4-Bromophenyl phenyl ether			< 0.027	U	< 0.026	U	< 0.028	U	< 0.027	U
Bis(2-chloroisopropyl)ether			< 0.031	U	< 0.029	U	< 0.031	U	< 0.03	U
Bis(2-chloroethoxy)methane			< 0.018	U	< 0.017	U	< 0.018	U	< 0.018	U
Hexachlorobutadiene			< 0.026	U	< 0.024	U	< 0.026	U	< 0.026	U
Hexachlorocyclopentadiene			<0.16	U	< 0.15	U	< 0.16	U	< 0.16	U
Hexachloroethane			<0.029	U	< 0.027	U	< 0.029	U	< 0.029	U
Isophorone			<0.023	U	< 0.022	U	< 0.023	U	< 0.023	U
Naphthalene	100	12	<0.022	U	0.02	J	<0.022	U	< 0.022	U
Nitrobenzene			< 0.027	U	< 0.025	U	< 0.027	U	< 0.026	U
NDPA/DPA			< 0.02	U	< 0.019	U	< 0.02	U	< 0.02	U
n-Nitrosodi-n-propylamine			<0.028	U	< 0.026	U	< 0.028	U	< 0.027	U
Bis(2-ethylhexyl)phthalate			< 0.062	U	< 0.058	U	0.12	J	< 0.061	U
Butyl benzyl phthalate			< 0.045	U	< 0.042	U	< 0.045	U	< 0.045	U
Di-n-butylphthalate			< 0.034	U	< 0.032	U	< 0.034	U	< 0.034	U
Di-n-octylphthalate			< 0.061	U	< 0.057	U	< 0.061	U	< 0.06	U
Diethyl phthalate			< 0.017	U	< 0.016	U	< 0.017	U	< 0.016	U
Dimethyl phthalate			< 0.038	U	< 0.035	U	< 0.038	U	< 0.037	U
Benzo(a)anthracene	1	1	0.022	J	0.11		< 0.02	U	< 0.02	U
Benzo(a)pyrene	1	1	<0.044	U	0.088	J	<0.044	U	< 0.043	U
Benzo(b)fluoranthene	1	1	0.031	J	0.11	_	< 0.03	U	< 0.03	U
Benzo(k)fluoranthene	3.9	0.8	<0.029	U	0.039	J	< 0.029	U	< 0.028	U
Chrysene	3.9	1	0.023	J	0.1		<0.019	U	< 0.018	U
Acenaphthylene	100	100	<0.028	U	<0.026	U	<0.028	U	< 0.027	U
Anthracene	100	100	<0.035	U	<0.033	U	<0.035	U	<0.034	U
Benzo(ghi)perylene	100	100	<0.021	U	0.056	J	<0.021	U	< 0.021	U
Fluorene	100	30	<0.018	U	< 0.016	U	<0.018	U	< 0.017	U
Phenanthrene	100 0.33	100 0.33	0.03	J U	0.078	J U	<0.022	U	<0.022	U
Dibenzo(a,h)anthracene			<0.021	U	< 0.019	J	<0.021	U	< 0.02	U
Indeno(1,2,3-cd)pyrene	0.5 100	0.5 100	<0.025	J	0.055	J	<0.025	U	<0.025	U
Pyrene			0.036 <0.042	U	<0.039	U	<0.018 <0.042	U	<0.018	U
Biphenyl 4-Chloroaniline			<0.042	U	<0.039	U	<0.042	U	<0.041	U
2-Nitroaniline			<0.035	U	<0.032	U	<0.035	U	< 0.032	U
3-Nitroaniline			<0.033	U	<0.032	U	<0.033	U	< 0.034	U
4-Nitroaniline			<0.034	U	< 0.032	U	<0.034	U	< 0.033	U
Dibenzofuran	59	7	<0.074	U	<0.07	U	< 0.073	U	< 0.073	U
2-Methylnaphthalene			<0.017	U	<0.016	U	<0.017	U	<0.017	U
1,2,4,5-Tetrachlorobenzene	-		<0.022	U	<0.02	U	< 0.022	U	<0.021	U
Acetophenone			<0.019	U	<0.018	U	<0.019	U	<0.018	U
2,4,6-Trichlorophenol			<0.022	U	<0.021	U	<0.022	U	< 0.022	U
p-Chloro-m-cresol			<0.034	U	<0.032	U	<0.034	U	< 0.034	U
2-Chlorophenol			<0.027	U	<0.023	U	<0.027	U	<0.020	U
2,4-Dichlorophenol			<0.021	U	<0.027	U	<0.021	U	<0.021	U
2,4-Dimethylphenol	-		<0.029	U	<0.027	U	<0.029	U	<0.028	U
2-Nitrophenol			<0.039	U	< 0.063	U	<0.068	U	< 0.058	U
4-Nitrophenol			<0.003	U	< 0.068	U	< 0.074	U	< 0.007	U
2,4-Dinitrophenol			<0.073	U	< 0.008	U	<0.074	U	< 0.072	U
4,6-Dinitro-o-cresol			<0.086	U	< 0.078	U	< 0.087	U	< 0.085	U
Pentachlorophenol	6.7	0.8	<0.04	U	< 0.037	U	<0.04	U	< 0.039	U
Phenol	100	0.33	<0.04	U	< 0.025	U	<0.04	U	<0.039	U
2-Methylphenol	100	0.33	<0.027	U	<0.025	U	<0.027	U	<0.027	U
3-Methylphenol/4-Methylphenol	100	0.33	<0.028	U	< 0.026	U	<0.028	U	<0.027	U
2,4,5-Trichlorophenol			<0.028	U	<0.020	U	<0.028	U	<0.028	U
Benzoic Acid			<0.034	U	< 0.032	U	<0.034	U	< 0.18	U
Benzyl Alcohol			<0.18	U	<0.051	U	<0.18	U	<0.16	U
Carbazole			<0.033	U	< 0.016	U	<0.033	U	< 0.017	U
Total SVOCs			0.176	-	0.976	-	0.018	-	~0.01/	-
Notes:			0.170		0.770	<u> </u>	V.12			

Notes: NY-RESRR: Restricted-Residential Criteria, New York Restricted use current as of 5/2007 NY-UNRES: New York Unrestricted use Criteria current as of 5/2007

Cells highlighted in yellow indicate concentrations above the NY-UNRES

Cells highlighted in orange indicate concentrations above the NY-RESRR
DUP = designation for duplicate sample
MDL = Maximum Detection Limit
RL = Reporting limit
Qual = Laboratory Data Qualifier

For U qualified entries, the MDL is shown

U = not detected at or above the MDL

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-- = No standard

Results and MDL values are in milligrams per killogram

Table 3: Metals in Soil 13-16 to 13-30 Beach Channel Drive - Far Rockaway, NY

SAMPLE ID:			SB-1 (0-2)		SB-2 (0-2)		SB-3 (5-7)		SB-4 (5-7)	
LAB ID:	NY-	NY-	L1828167-01		L1828167-02		L1828472-01		L1828472-02	
COLLECTION DATE:	RESRR	UNRES	7/23/20	18	7/23/20	18	7/24/20	18	7/24/2018	
Total Metals	RESIGN	CIVILLO	Conc	Q	Conc	Q	Conc	Q	Conc	Q
Units: mg/kg				L ×		~		<u> </u>		Ľ
Aluminum, Total			4560		1230		543		414	
Antimony, Total			< 0.317	U	5.63		< 0.323	U	< 0.311	U
Arsenic, Total	16	13	5.08		2.01		1.55		2.01	
Barium, Total	400	350	173		18		2.37		2.13	
Beryllium, Total	72	7.2	0.117	J	0.282	J	0.043	J	0.041	J
Cadmium, Total	4.3	2.5	0.417	J	0.274	J	< 0.083	U	< 0.08	U
Calcium, Total	1	1	1360		1970		218		945	
Chromium, Total		-	7.58		3.38		4.46		5.18	
Cobalt, Total			1.68		2.6		0.349	J	0.475	J
Copper, Total	270	50	19.7		32.2		0.868		1.2	
Iron, Total	1	1	6870		3590		2080		2820	
Lead, Total	400	63	166		74.7		0.97	J	0.803	J
Magnesium, Total		-	367		371		60.5		47.1	
Manganese, Total	2000	1600	57		28.4		8.89		16.7	
Mercury, Total	0.81	0.18	0.669		0.155		< 0.015	U	< 0.014	U
Nickel, Total	310	30	4.96		6.39		1.45	J	1.86	J
Potassium, Total			182	J	94.8	J	62.6	J	47.2	J
Selenium, Total	180	3.9	0.433	J	< 0.202	U	< 0.219	U	0.319	J
Silver, Total	180	2	< 0.236	U	< 0.222	U	< 0.241	U	< 0.232	U
Sodium, Total			67.9	J	45.8	J	9.85	J	9.48	J
Thallium, Total			< 0.262	U	< 0.247	U	< 0.268	U	< 0.258	U
Vanadium, Total			12.4		5.28		2.67		3.53	
Zinc, Total	10000	109	376		205		4.04	J	3.83	J

Notes:

NY-RESRR: Restricted-Residential Criteria, New York Restricted use current as of 5/2007

NY-UNRES: New York Unrestricted use Criteria current as of 5/2007

Cells highlighted in yellow indicate concentrations above the NY-UNRES

Cells highlighted in orange indicate concentrations above the NY-RESRR

DUP = designation for duplicate sample

MDL = Maximum Detection Limit

RL = Reporting limit

Qual = Laboratory Data Qualifier

For U qualified entries, the MDL is shown

U = not detected at or above the MDL

For J qualified entries, the estimated concentration is shown

J = estimated value, indicating the detected value is below the RL, but above the MDL

-- = No standard

Results and MDL values are in milligrams per killogram

SAMPLE ID:		TW-1		TW-2		TW-3		TW-4	
LAB ID:	+	L1828167-03		TW-2 L1828167-04		L1828472-03		L1828472-04	
COLLECTION DATE:	NY-AWQS	7/23/2018		7/23/2018		7/24/2018		7/24/2018	
Volatile Organic Compounds	7	Conc	o	Conc	0	Conc	0	Conc	o
Units: ug/l			_		_		_		-
Methylene chloride	5	<0.7	U	<0.7	U	< 0.7	U	<0.7	U
1,1-Dichloroethane Chloroform	5	<0.7	U	<0.7	U	<0.7	_	<0.7	_
Carbon tetrachloride	5	<0.7	U	<0.7	U	<0.7	U	<0.13	J U
1,2-Dichloropropane	1	<0.13	U	<0.13	U	<0.13	U	<0.13	U
Dibromochloromethane	50	<0.14	U	<0.14	U	<0.14	U	<0.14	U
1,1,2-Trichloroethane	1	<0.15	U	<0.15	U	<0.15	U	<0.15	U
Tetrachloroethene	5	16		0.86	Ť	0.36	J	0.24	J
Chlorobenzene	5	< 0.7	U	< 0.7	U	< 0.7	U	< 0.7	Ü
Trichlorofluoromethane	5	< 0.7	U	< 0.7	U	< 0.7	U	< 0.7	U
1,2-Dichloroethane	0.6	< 0.13	U	< 0.13	U	< 0.13	U	< 0.13	U
1,1,1-Trichloroethane	5	< 0.7	U	< 0.7	U	< 0.7	U	< 0.7	U
Bromodichloromethane	50	< 0.19	U	< 0.19	U	< 0.19	U	< 0.19	U
trans-1,3-Dichloropropene	0.4	< 0.16	U	< 0.16	U	< 0.16	U	< 0.16	U
cis-1,3-Dichloropropene	0.4	< 0.14	U	< 0.14	U	< 0.14	U	< 0.14	U
1,3-Dichloropropene, Total		< 0.14	U	< 0.14	U	< 0.14	U	< 0.14	U
1,1-Dichloropropene	5	< 0.7	U	< 0.7	U	< 0.7	U	< 0.7	U
Bromoform	50	< 0.65	U	< 0.65	U	< 0.65	U	< 0.65	U
1,1,2,2-Tetrachloroethane	5	< 0.17	U	< 0.17	U	< 0.17	U	<0.17	U
Benzene Toluene	5	<0.16 <0.7	U	<0.16	U	<0.16	U	<0.16 0.82	U
Ethylbenzene	5	<0.7	U	<0.7	U	<0.7	U	< 0.7	U
Chloromethane		<0.7	U	<0.7	U	<0.7	U	<0.7	U
Bromomethane	5	<0.7	U	<0.7	U	<0.7	U	<0.7	U
Vinyl chloride	2	< 0.07	U	<0.07	U	< 0.07	U	< 0.07	U
Chloroethane	5	<0.7	U	<0.7	U	<0.7	U	<0.7	U
1,1-Dichloroethene	5	< 0.17	U	< 0.17	U	< 0.17	U	< 0.17	U
trans-1,2-Dichloroethene	5	< 0.7	U	< 0.7	U	< 0.7	U	< 0.7	U
Trichloroethene	5	0.23	J	< 0.18	U	< 0.18	U	< 0.18	U
1,2-Dichlorobenzene	3	< 0.7	U	< 0.7	U	< 0.7	U	< 0.7	U
1,3-Dichlorobenzene	3	< 0.7	U	< 0.7	U	< 0.7	U	< 0.7	U
1,4-Dichlorobenzene	3	< 0.7	U	< 0.7	U	< 0.7	U	< 0.7	U
Methyl tert butyl ether	10	< 0.7	U	< 0.7	U	< 0.7	U	< 0.7	U
p/m-Xylene	5	<0.7	U	<0.7	U	< 0.7	U	<0.7	U
o-Xylene	5	<0.7	U	< 0.7	U	<0.7	U	<0.7	U
Xylenes, Total cis-1,2-Dichloroethene		<0.7	U	<0.7	U	<0.7	U	<0.7	U
1.2-Dichloroethene, Total	5	<0.7	U	<0.7	U	<0.7	U	<0.7	U
Dibromomethane	5	<1	U	<1	U	<1	U	<1	U
1,2,3-Trichloropropane	0.04	<0.7	U	<0.7	U	<0.7	U	<0.7	U
Acrylonitrile	5	<1.5	U	<1.5	U	<1.5	U	<1.5	U
Styrene	5	<0.7	U	< 0.7	U	< 0.7	U	<0.7	U
Dichlorodifluoromethane	5	<1	U	<1	U	<1	U	<1	U
Acetone	50	2.9	J	1.7	J	20		70	
Carbon disulfide	60	<1	U	<1	U	<1	U	<1	U
2-Butanone	50	<1.9	U	<1.9	U	<1.9	U	3	J
Vinyl acetate		<1	U	<1	U	<1	U	<1	U
4-Methyl-2-pentanone		<1	U	<1	U	<1	U	<1	U
2-Hexanone	50	<1	U	<1	U	<1	U	<1	U
Bromochloromethane	5	< 0.7	U	< 0.7	U	< 0.7	U	< 0.7	U
2,2-Dichloropropane	5	< 0.7	U	< 0.7	U	< 0.7	U	< 0.7	U
1,2-Dibromoethane	0.0006	< 0.65	U	< 0.65	U	< 0.65	U	< 0.65	U
1,3-Dichloropropane 1,1,1,2-Tetrachloroethane	5	<0.7 <0.7	U	<0.7	U	<0.7	U	<0.7	U
Bromobenzene	5	<0.7	U	<0.7	U	<0.7	U	<0.7	U
n-Butylbenzene	5	<0.7	U	<0.7	U	<0.7	U	<0.7	U
sec-Butylbenzene	5	<0.7	U	<0.7	U	<0.7	U	<0.7	U
tert-Butylbenzene	5	<0.7	U	<0.7	Ū	<0.7	U	<0.7	U
o-Chlorotoluene	5	<0.7	U	<0.7	U	<0.7	U	<0.7	U
p-Chlorotoluene	5	<0.7	U	<0.7	U	< 0.7	U	<0.7	U
1,2-Dibromo-3-chloropropane	0.04	< 0.7	U	< 0.7	U	< 0.7	U	< 0.7	U
Hexachlorobutadiene	0.5	< 0.7	U	< 0.7	U	< 0.7	U	< 0.7	U
Isopropylbenzene	5	< 0.7	U	< 0.7	U	< 0.7	U	< 0.7	U
p-Isopropyltoluene	5	< 0.7	U	< 0.7	U	< 0.7	U	< 0.7	U
Naphthalene	10	< 0.7	U	< 0.7	U	< 0.7	U	< 0.7	U
n-Propylbenzene	5	< 0.7	U	< 0.7	U	< 0.7	U	< 0.7	U
1,2,3-Trichlorobenzene	5	< 0.7	U	< 0.7	U	< 0.7	U	< 0.7	U
1,2,4-Trichlorobenzene	5	<0.7	U	< 0.7	U	<0.7	U	<0.7	U
1,3,5-Trimethylbenzene	5	<0.7	U	<0.7	U	<0.7	U	<0.7	U
1,2,4-Trimethylbenzene	5	<0.7	U	<0.7	U	<0.7	U	<0.7	U
1,4-Dioxane p-Diethylbenzene	1	<61 <0.7	U	<61 <0.7	U	<61 <0.7	U	<61 <0.7	U
p-Ethyltoluene	1	<0.7	U	<0.7	U	<0.7	U	<0.7	U
1,2,4,5-Tetramethylbenzene	5	<0.54	U	<0.7	U	<0.7	U	<0.54	U
Ethyl ether		<0.7	U	<0.7	U	< 0.7	U	< 0.7	U
trans-1,4-Dichloro-2-butene	5	<0.7	U	<0.7	U	<0.7	U	<0.7	U
Total VOCs		19.13	-	2.56	-	20.36	-	76.36	-
Notes:	•		_		_		•		

Total VOCs 19.13 - 2.56 - 20.36 - 76.36

Notes:

Nt-AWQS: New York TOGS 111 Ambient Water Quality Standards criteria reflects all addendum to criteria through June 2004.

Cells highlighted in yellow indicate concentrations above the NY-AWQS

Cells highlighted in yellow indicate MDL values above the NY-AWQS

MDL = Maximum Detection Limit

Qual = Laboratory Data Qualifier

For U qualified entries, the MDL is shown

U = not detected at or above the MDL

For J qualified entries, the estimated concentration is shown

J = estimated value, indicating the detected value is below the RL, but above the MDL

-- No standard

Results and MDL values are in micrograms per liter (µg/L)

SAMPLE ID:	T	TW-1		TW-2		TW-3		TW-4	
LAB ID:	NY-AWQS	L1828167-03		L1828167-04		L1828472-03		L1828472-04	
COLLECTION DATE:		7/23/20	18	7/23/2018		7/24/20	18	7/24/2018	
Semivolatile Organic Compounds Units: ug/l		Conc	Q	Conc	Q	Conc	Q	Conc	Q
1,2,4-Trichlorobenzene	5	<0.5	U	<0.5	U	< 0.5	U	<0.5	U
Bis(2-chloroethyl)ether	1	< 0.5	U	<0.5	U	<0.5	U	<0.5	U
1,2-Dichlorobenzene	3	< 0.45	U	< 0.45	U	< 0.45	U	< 0.45	U
1,3-Dichlorobenzene	3	< 0.4	U	< 0.4	U	< 0.4	U	< 0.4	U
1,4-Dichlorobenzene	3	< 0.43	U	< 0.43	U	< 0.43	U	< 0.43	U
3,3'-Dichlorobenzidine	5	<1.6	U	<1.6	U	<1.6	U	<1.6	U
2,4-Dinitrotoluene	5	<1.2	U	<1.2	U	<1.2	U	<1.2	U
2,6-Dinitrotoluene 4-Chlorophenyl phenyl ether	5	<0.93 <0.49	U	<0.93 <0.49	U	<0.93	U	<0.93 <0.49	U
4-Enforophenyl phenyl ether		<0.49	U	<0.49	U	<0.38	U	<0.49	U
Bis(2-chloroisopropyl)ether	5	<0.53	U	<0.53	U	<0.53	U	<0.53	U
Bis(2-chloroethoxy)methane	5	<0.5	U	<0.5	U	<0.5	U	<0.5	U
Hexachlorocyclopentadiene	5	< 0.69	U	< 0.69	U	< 0.69	U	< 0.69	U
Isophorone	50	<1.2	U	<1.2	U	<1.2	U	<1.2	U
Nitrobenzene	0.4	< 0.77	U	< 0.77	U	< 0.77	U	< 0.77	U
NDPA/DPA	50	< 0.42	U	< 0.42	U	< 0.42	U	< 0.42	U
n-Nitrosodi-n-propylamine		< 0.64	U	< 0.64	U	< 0.64	U	< 0.64	U
Bis(2-ethylhexyl)phthalate	5	<1.5	U	<1.5	U	<1.5	U	<1.5	U
Butyl benzyl phthalate	50	<1.2	U	<1.2	U	<1.2	U	<1.2	U
Di-n-butylphthalate	50	<0.39	U	<0.39	U	0.44 <1.3	J U	<0.39 <1.3	U
Di-n-octylphthalate Diethyl phthalate	50 50	<1.3 <0.38	U	<0.38	U	<0.38	U	<1.3 1.4	U J
Dimethyl phthalate	50	<0.38	U	<0.38	U	<0.38	U	<1.8	U
Biphenyl	30	<0.46	U	<0.46	U	<0.46	U	<0.46	U
4-Chloroaniline	5	<1.1	U	<1.1	U	<1.1	U	<1.1	U
2-Nitroaniline	5	< 0.5	U	<0.5	U	<0.5	U	<0.5	U
3-Nitroaniline	5	< 0.81	U	< 0.81	U	< 0.81	U	< 0.81	U
4-Nitroaniline	5	< 0.8	U	< 0.8	U	< 0.8	U	< 0.8	U
Dibenzofuran		< 0.5	U	< 0.5	U	< 0.5	U	< 0.5	U
1,2,4,5-Tetrachlorobenzene	5	< 0.44	U	<0.44	U	< 0.44	U	< 0.44	U
Acetophenone		< 0.53	U	< 0.53	U	< 0.53	U	< 0.53	U
2,4,6-Trichlorophenol		< 0.61	U	< 0.61	U	< 0.61	U	< 0.61	U
p-Chloro-m-cresol 2-Chlorophenol		<0.35 <0.48	U	<0.35 <0.48	U	<0.35	U	<0.35 <0.48	U
2,4-Dichlorophenol	1	<0.48	U	<0.48	U	<0.48	U	<0.48	U
2,4-Dimethylphenol	50	<1.8	U	<1.8	U	<1.8	U	<1.8	U
2-Nitrophenol		< 0.85	U	< 0.85	U	< 0.85	U	< 0.85	U
4-Nitrophenol		< 0.67	U	< 0.67	U	< 0.67	U	< 0.67	U
2,4-Dinitrophenol	10	<6.6	U	<6.6	U	<6.6	U	<6.6	U
4,6-Dinitro-o-cresol		<1.8	U	<1.8	U	<1.8	U	<1.8	U
Phenol	1	< 0.57	U	< 0.57	U	< 0.57	U	9.8	
2-Methylphenol		< 0.49	U	< 0.49	U	< 0.49	U	< 0.49	U
3-Methylphenol/4-Methylphenol		<0.48	U	<0.48	U	<0.48	U	84	
2,4,5-Trichlorophenol		<0.77	U	<0.77	U	<0.77	U	<0.77	U
Benzoic Acid Benzyl Alcohol		<2.6 <0.59	U	<2.6 <0.59	U	<2.6 <0.59	U	<0.59	J U
Carbazole		<0.39	U	<0.39	U	<0.49	U	<0.49	U
Total SVOCs		-0.42	-	-0.47	-	0.44	-	119.2	-
SEMIVOLATILE ORGANICS BY O	C/MS-SIM					****			\vdash
Acenaphthene	20	< 0.01	U	< 0.01	U	< 0.01	U	< 0.01	U
2-Chloronaphthalene	10	< 0.02	U	< 0.02	U	< 0.02	U	< 0.02	U
Fluoranthene	50	< 0.02	U	< 0.02	U	< 0.02	U	< 0.02	U
Hexachlorobutadiene	0.5	< 0.05	U	< 0.05	U	< 0.05	U	< 0.05	U
Naphthalene	10	< 0.05	U	< 0.05	U	< 0.05	U	< 0.05	U
Benzo(a)anthracene	0.002	0.03	J	< 0.02	U	<0.02	U	<0.02	U
Benzo(a)pyrene	0	<0.02	U	<0.02	U	<0.02	U	<0.02	U
Benzo(b)fluoranthene Benzo(k)fluoranthene	0.002 0.002	<0.01	U	<0.01 <0.01	U	<0.01	U	<0.01	U
Chrysene	0.002	<0.01	U	<0.01	U	<0.01	U	<0.01	U
Acenaphthylene	0.002	<0.01	U	<0.01	U	<0.01	U	<0.01	U
Anthracene	50	<0.01	U	< 0.01	U	< 0.01	U	<0.01	U
Benzo(ghi)perylene		< 0.01	U	< 0.01	U	< 0.01	U	< 0.01	U
Fluorene	50	< 0.01	U	< 0.01	U	< 0.01	U	< 0.01	U
Phenanthrene	50	< 0.02	U	< 0.02	U	< 0.02	U	< 0.02	U
Dibenzo(a,h)anthracene		< 0.01	U	< 0.01	U	< 0.01	U	< 0.01	U
Indeno(1,2,3-cd)pyrene	0.002	< 0.01	U	< 0.01	U	< 0.01	U	< 0.01	U
Pyrene	50	< 0.02	U	< 0.02	U	< 0.02	U	< 0.02	U
2-Methylnaphthalene		< 0.02	U	< 0.02	U	< 0.02	U	< 0.02	U
Pentachlorophenol	1	< 0.01	U	< 0.01	U	< 0.01	U	< 0.01	U
Hexachlorobenzene	0.04	<0.01	U	<0.01	U	<0.01	U	<0.01	U
Hexachloroethane Total SVOCs	5	<0.06	U	< 0.06	U -	<0.06	U	< 0.06	U
TOTAL S VOCS	l	0.03	-	-		-	-	-	

Notes:

NY-AWQS: New York TOGS 111 Ambient Water Quality Standards criteria reflects all addendum to criteria through June 2004.

Cells highlighted in yellow indicate concentrations above the NY-AWQS
Cells shaded in grey indicate MDL values above the NY-AWQS
MDL = Maximum Detection Limit
Qual = Laboratory Data Qualifier

For U qualified entries, the MDL is shown

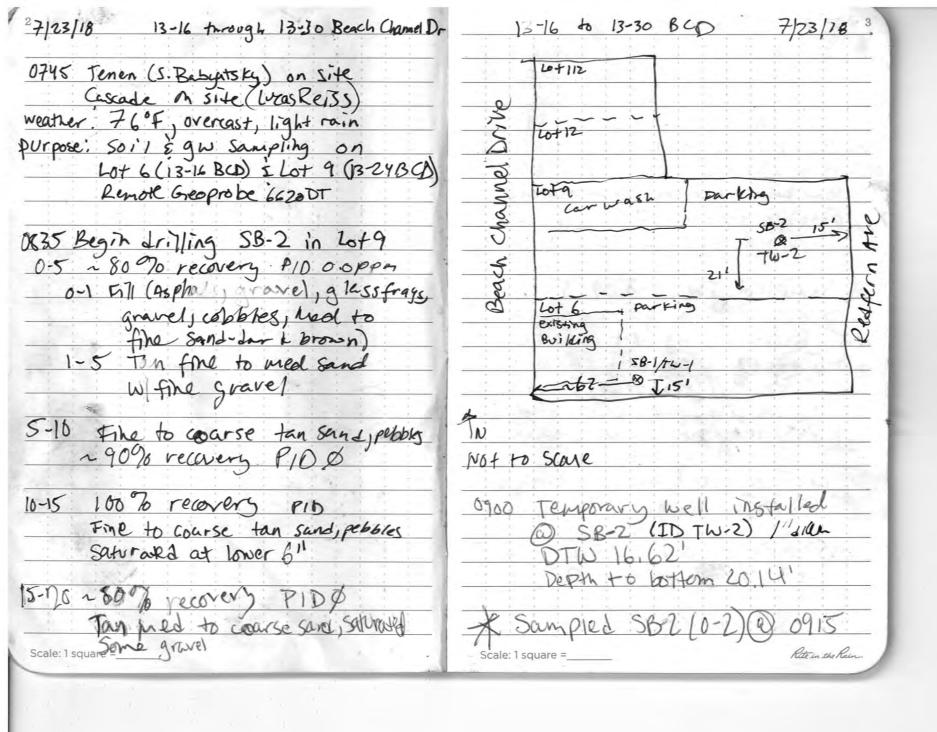
U = not detected at or above the MDL

J = estimated value, indicating the detected value is below the RL, but above the MDL

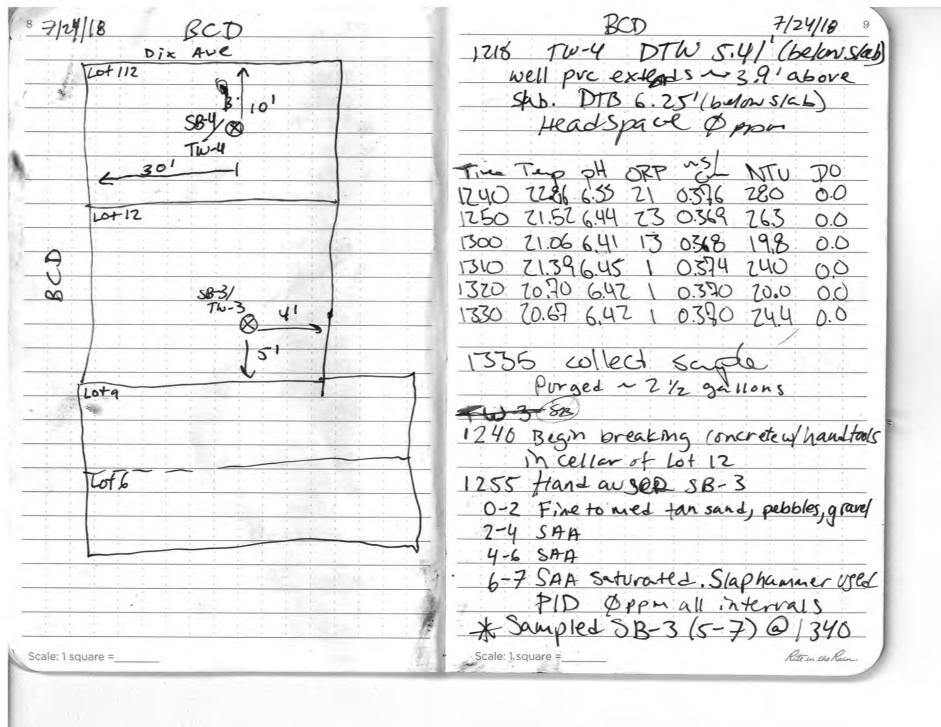
-- = No standard

Results and MDL values are in micrograms per liter ($\mu g/L$)

Attachment 1 Lithologic Logs



4 7123/18 13-16 + 0 13-30 BCD 7/23/18 5 15-16 to 13-30 BCD 5925 Begin purging & TW-Z 15-20 cont'd. DTW 16.62' Headspace O.Oppm med to coarse tan sand THE TEMP PH ORP MSKIM NTU DO Saturated @1 18' 0930 21.29 6.70 -2 2.90 72.) 4.84 0940 2002 6.44 31 2.91 19.8 2.68 20-25 med to coarse tan sand, saturated 0950 19.70 6.44 40 2.93 7.2 2.60 ~ 80% recovery PID & Total Dissolved solids not measured; possible sensor issue. 1040 Temp well (1" diam) installed Purged ~ 4 gallons in SB-1 boring (well ID TW-1) DTW 18.85 * Sampled TW-2 @ 0955 * Sampled SB-1 (0-2) @ 1045 1015 Begin drilling SB-1 in Lot6 0-5 170 00 recovery PID & Lot 6 13 at grade W/ Redfern Are 0-3 Fill (ASh, coal frag, Lot 9 is at grade w/ BCD resprick, black gilty Sand Lot & boring location is @ 3-5 Fine to med sand, tan 14 higher elevation than Lot 9 poring Tocation 5-10 Fine sand w/silt, tan ~ 75% recovery PIDS 1050 Begin purging TW-1 STW 1885' Headspace P 10-15 med to coarse tan sand 280 % recovery PIDS Readings recorded on next page. 15-20 280% recovery P106 Scale: 1 square =___ Rite in the Rain Scale: 1 square =



cale: 1 square =	Scale: 1 square =		Rite in the Rain.
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3115 - 111111111111111111111111111111111			

Attachment 2 *Laboratory Deliverables*



ANALYTICAL REPORT

Lab Number: L1828167

Client: Tenen Environmental, LLC

121 West 27th Street

Suite 702

New York City, NY 10001

ATTN: Mohamed Ahmed Phone: (646) 606-2332

Project Name: 13-16 TO 13-30 BCD

Project Number: 13-16 TO 13-30 BCD

Report Date: 07/30/18

The original project report/data package is held by Alpha Analytical. This report/data package is paginated and should be reproduced only in its entirety. Alpha Analytical holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0574), IL (200077), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #P330-17-00196).

Eight Walkup Drive, Westborough, MA 01581-1019 508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com



 Project Name:
 13-16 TO 13-30 BCD

 Project Number:
 13-16 TO 13-30 BCD

Lab Number: L1828167 **Report Date:** 07/30/18

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L1828167-01	SB-1 (0-2)	SOIL	13-16 TO 13-30 BEACH CHANNEL DRIVE	07/23/18 10:45	07/23/18
L1828167-02	SB-2 (0-2)	SOIL	13-16 TO 13-30 BEACH CHANNEL DRIVE	07/23/18 09:15	07/23/18
L1828167-03	TW-1	WATER	13-16 TO 13-30 BEACH CHANNEL DRIVE	07/23/18 11:40	07/23/18
L1828167-04	TW-2	WATER	13-16 TO 13-30 BEACH CHANNEL DRIVE	07/23/18 09:55	07/23/18
L1828167-05	TRIP BLANK	WATER	13-16 TO 13-30 BEACH CHANNEL DRIVE	07/23/18 00:00	07/23/18



 Project Name:
 13-16 TO 13-30 BCD
 Lab Number:
 L1828167

 Project Number:
 13-16 TO 13-30 BCD
 Report Date:
 07/30/18

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. All specific QC information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications. Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances the specific failure is not narrated but noted in the associated QC table. The information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications.

Please see the associated ADEx data file for a comparison of laboratory reporting limits that were achieved with the regulatory Numerical Standards requested on the Chain of Custody.

HOLD POLICY

For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Client Service Representative and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Client Services at 800-624-9220 with any questions.



 Project Name:
 13-16 TO 13-30 BCD
 Lab Number:
 L1828167

 Project Number:
 13-16 TO 13-30 BCD
 Report Date:
 07/30/18

Case Narrative (continued)

Report Submission

July 30, 2018: This final report includes the results of all requested analyses.

July 26, 2018: This is a preliminary report.

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

Volatile Organics

Any reported concentrations that are below 200 ug/kg may be biased low due to the sample not being collected according to 5035-L/5035A-L low-level specifications.

Semivolatile Organics

The WG1138758-2/-3 LCS/LCSD recoveries, associated with L1828167-03 and -04, are below the acceptance criteria for benzoic acid (0%/0%); however, it has been identified as a "difficult" analyte. The results of the associated samples are reported.

Total Metals

L1828167-01 and -02: The sample has elevated detection limits for all elements, with the exception of mercury, due to the dilution required by matrix interferences encountered during analysis.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Kwil. Wisterlind

Authorized Signature:

Title: Technical Director/Representative

Date: 07/30/18



ORGANICS



VOLATILES



07/23/18 10:45

Project Name: 13-16 TO 13-30 BCD

Project Number: 13-16 TO 13-30 BCD

SAMPLE RESULTS

L1828167

Lab Number:

Date Collected:

Report Date: 07/30/18

Lab ID: L1828167-01 Client ID: SB-1 (0-2)

Sample Location: 13-16 TO 13-30 BEACH CHANNEL DRIVE Date Received: 07/23/18 Field Prep: Not Specified

Sample Depth:

Matrix: Soil Analytical Method: 1,8260C Analytical Date: 07/24/18 11:50

Analyst: MV 91% Percent Solids:

Volatile Organics by GC/MS - Westborough Lab Methylene chloride ND ug/kg 4.8 2.2 1 1,1-Dichloroethane ND ug/kg 0.95 0.14 1 Chloroform ND ug/kg 0.95 0.14 1 Chloroform ND ug/kg 0.95 0.22 1 Carbon tetrachloride ND ug/kg 0.95 0.22 1 L2-Dichloropropane ND ug/kg 0.95 0.13 1 Dibromochloromethane ND ug/kg 0.95 0.13 1 1,1,2-Trichloroethane ND ug/kg 0.95 0.13 1 1,1-2-Trichloroethane ND ug/kg 0.95 0.25 1 Chlorobenzene ND ug/kg 0.95 0.25 1 Tetrachloroethane ND ug/kg 0.48 0.19 1 1,2-Dichloroethane ND ug/kg 0.95 0.24 1 1,1,1-Trichloroethane <th>Parameter</th> <th>Result</th> <th>Qualifier</th> <th>Units</th> <th>RL</th> <th>MDL</th> <th>Dilution Factor</th>	Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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1,1,2,2-Tetrachloroethane ND ug/kg 0.48 0.16 1 Benzene ND ug/kg 0.48 0.16 1 Toluene ND ug/kg 0.95 0.52 1 Ethylbenzene ND ug/kg 0.95 0.13 1 Chloromethane ND ug/kg 3.8 0.89 1 Bromomethane ND ug/kg 1.9 0.55 1 Vinyl chloride ND ug/kg 0.95 0.32 1 Chloroethane ND ug/kg 1.9 0.43 1 1,1-Dichloroethene ND ug/kg 0.95 0.23 1	1,1-Dichloropropene	ND		ug/kg	0.48	0.15	1
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Ethylbenzene ND ug/kg 0.95 0.13 1 Chloromethane ND ug/kg 3.8 0.89 1 Bromomethane ND ug/kg 1.9 0.55 1 Vinyl chloride ND ug/kg 0.95 0.32 1 Chloroethane ND ug/kg 1.9 0.43 1 1,1-Dichloroethene ND ug/kg 0.95 0.23 1	Benzene	ND		ug/kg	0.48	0.16	1
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Bromomethane ND ug/kg 1.9 0.55 1 Vinyl chloride ND ug/kg 0.95 0.32 1 Chloroethane ND ug/kg 1.9 0.43 1 1,1-Dichloroethene ND ug/kg 0.95 0.23 1	Ethylbenzene	ND		ug/kg	0.95	0.13	1
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Chloroethane ND ug/kg 1.9 0.43 1 1,1-Dichloroethene ND ug/kg 0.95 0.23 1	Bromomethane	ND		ug/kg	1.9	0.55	1
1,1-Dichloroethene ND ug/kg 0.95 0.23 1	Vinyl chloride	ND		ug/kg	0.95	0.32	1
-5-15	Chloroethane	ND		ug/kg	1.9	0.43	1
trans-1,2-Dichloroethene ND ug/kg 1.4 0.13 1	1,1-Dichloroethene	ND		ug/kg	0.95	0.23	1
	trans-1,2-Dichloroethene	ND		ug/kg	1.4	0.13	1



Project Name: Lab Number: 13-16 TO 13-30 BCD L1828167

Project Number: Report Date: 13-16 TO 13-30 BCD 07/30/18

SAMPLE RESULTS

Lab ID: L1828167-01 Date Collected: 07/23/18 10:45

Client ID: Date Received: 07/23/18 SB-1 (0-2) Field Prep: Not Specified

Sample Location: 13-16 TO 13-30 BEACH CHANNEL DRIVE

Parameter	Result	Qualifier (Jnits	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Wes	stborough Lab					
Trichloroethene	ND	u	ıg/kg	0.48	0.13	1
1,2-Dichlorobenzene	ND		ıg/kg	1.9	0.14	1
1,3-Dichlorobenzene	ND	u	ıg/kg	1.9	0.14	1
1,4-Dichlorobenzene	ND	u	ıg/kg	1.9	0.16	1
Methyl tert butyl ether	ND	u	ıg/kg	1.9	0.19	1
p/m-Xylene	ND	u	ıg/kg	1.9	0.53	1
o-Xylene	ND	u	ıg/kg	0.95	0.28	1
Xylenes, Total	ND	u	ıg/kg	0.95	0.28	1
cis-1,2-Dichloroethene	ND	u	ıg/kg	0.95	0.17	1
1,2-Dichloroethene, Total	ND	u	ıg/kg	0.95	0.13	1
Dibromomethane	ND	u	ıg/kg	1.9	0.23	1
Styrene	ND	u	ıg/kg	0.95	0.19	1
Dichlorodifluoromethane	ND	u	ıg/kg	9.5	0.87	1
Acetone	ND	u	ıg/kg	9.5	4.6	1
Carbon disulfide	ND	u	ıg/kg	9.5	4.3	1
2-Butanone	ND	u	ıg/kg	9.5	2.1	1
Vinyl acetate	ND	u	ıg/kg	9.5	2.0	1
4-Methyl-2-pentanone	ND	u	ıg/kg	9.5	1.2	1
1,2,3-Trichloropropane	ND	u	ıg/kg	1.9	0.12	1
2-Hexanone	ND	u	ıg/kg	9.5	1.1	1
Bromochloromethane	ND	u	ıg/kg	1.9	0.20	1
2,2-Dichloropropane	ND	u	ıg/kg	1.9	0.19	1
1,2-Dibromoethane	ND	u	ıg/kg	0.95	0.27	1
1,3-Dichloropropane	ND	u	ıg/kg	1.9	0.16	1
1,1,1,2-Tetrachloroethane	ND	u	ıg/kg	0.48	0.13	1
Bromobenzene	ND	u	ıg/kg	1.9	0.14	1
n-Butylbenzene	ND	u	ıg/kg	0.95	0.16	1
sec-Butylbenzene	ND	u	ıg/kg	0.95	0.14	1
tert-Butylbenzene	ND	u	ıg/kg	1.9	0.11	1
o-Chlorotoluene	ND	u	ıg/kg	1.9	0.18	1
p-Chlorotoluene	ND	u	ıg/kg	1.9	0.10	1
1,2-Dibromo-3-chloropropane	ND	u	ıg/kg	2.9	0.95	1
Hexachlorobutadiene	ND	u	ıg/kg	3.8	0.16	1
Isopropylbenzene	ND	u	ıg/kg	0.95	0.10	1
p-Isopropyltoluene	ND	u	ıg/kg	0.95	0.10	1
Naphthalene	ND	u	ıg/kg	3.8	0.62	1
Acrylonitrile	ND	u	ıg/kg	3.8	1.1	1



 Project Name:
 13-16 TO 13-30 BCD
 Lab Number:
 L1828167

Project Number: 13-16 TO 13-30 BCD **Report Date:** 07/30/18

SAMPLE RESULTS

Lab ID: Date Collected: 07/23/18 10:45

Client ID: SB-1 (0-2) Date Received: 07/23/18
Sample Location: 13-16 TO 13-30 BEACH CHANNEL DRIVE Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	
Volatile Organics by GC/MS - Westboro	ugh Lab						
n-Propylbenzene	ND		ug/kg	0.95	0.16	1	
1,2,3-Trichlorobenzene	ND		ug/kg	1.9	0.31	1	
1,2,4-Trichlorobenzene	ND		ug/kg	1.9	0.26	1	
1,3,5-Trimethylbenzene	ND		ug/kg	1.9	0.18	1	
1,2,4-Trimethylbenzene	ND		ug/kg	1.9	0.32	1	
1,4-Dioxane	ND		ug/kg	95	34.	1	
p-Diethylbenzene	ND		ug/kg	1.9	0.17	1	
p-Ethyltoluene	ND		ug/kg	1.9	0.37	1	
1,2,4,5-Tetramethylbenzene	ND		ug/kg	1.9	0.18	1	
Ethyl ether	ND		ug/kg	1.9	0.32	1	
trans-1,4-Dichloro-2-butene	ND		ug/kg	4.8	1.4	1	

Surrogate	% Recovery	Acceptance Qualifier Criteria	
1,2-Dichloroethane-d4	99	70-130	
Toluene-d8	95	70-130	
4-Bromofluorobenzene	85	70-130	
Dibromofluoromethane	109	70-130	



07/23/18 09:15

Project Name: 13-16 TO 13-30 BCD

Project Number: 13-16 TO 13-30 BCD

SAMPLE RESULTS

Lab Number: L1828167

Report Date: 07/30/18

SAMPLE RESUL

Lab ID: L1828167-02 Client ID: SB-2 (0-2)

Sample Location: 13-16 TO 13-30 BEACH CHANNEL DRIVE

Date Received: 07/23/18
Field Prep: Not Specified

Date Collected:

Sample Depth:

Matrix: Soil
Analytical Method: 1,8260C
Analytical Date: 07/24/18 11:24

Analyst: MV Percent Solids: 97%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Wes	tborough Lab					
Methylene chloride	ND		ug/kg	4.2	1.9	1
1,1-Dichloroethane	ND		ug/kg	0.84	0.12	1
Chloroform	ND		ug/kg	1.2	0.12	1
Carbon tetrachloride	ND		ug/kg	0.84	0.19	1
1,2-Dichloropropane	ND		ug/kg	0.84	0.10	1
Dibromochloromethane	ND		ug/kg	0.84	0.12	1
1,1,2-Trichloroethane	ND		ug/kg	0.84	0.22	1
Tetrachloroethene	ND		ug/kg	0.42	0.16	1
Chlorobenzene	ND		ug/kg	0.42	0.11	1
Trichlorofluoromethane	ND		ug/kg	3.3	0.58	1
1,2-Dichloroethane	ND		ug/kg	0.84	0.21	1
1,1,1-Trichloroethane	ND		ug/kg	0.42	0.14	1
Bromodichloromethane	ND		ug/kg	0.42	0.09	1
trans-1,3-Dichloropropene	ND		ug/kg	0.84	0.23	1
cis-1,3-Dichloropropene	ND		ug/kg	0.42	0.13	1
1,3-Dichloropropene, Total	ND		ug/kg	0.42	0.13	1
1,1-Dichloropropene	ND		ug/kg	0.42	0.13	1
Bromoform	ND		ug/kg	3.3	0.20	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.42	0.14	1
Benzene	ND		ug/kg	0.42	0.14	1
Toluene	ND		ug/kg	0.84	0.45	1
Ethylbenzene	ND		ug/kg	0.84	0.12	1
Chloromethane	ND		ug/kg	3.3	0.78	1
Bromomethane	ND		ug/kg	1.7	0.48	1
Vinyl chloride	ND		ug/kg	0.84	0.28	1
Chloroethane	ND		ug/kg	1.7	0.38	1
1,1-Dichloroethene	ND		ug/kg	0.84	0.20	1
trans-1,2-Dichloroethene	ND		ug/kg	1.2	0.11	1



 Project Name:
 13-16 TO 13-30 BCD
 Lab Number:
 L1828167

Project Number: 13-16 TO 13-30 BCD **Report Date:** 07/30/18

SAMPLE RESULTS

Lab ID: L1828167-02 Date Collected: 07/23/18 09:15

Client ID: SB-2 (0-2) Date Received: 07/23/18
Sample Location: 13-16 TO 13-30 BEACH CHANNEL DRIVE Field Prep: Not Specified

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ND	Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
1,2-Dichibrobenzene ND ug/kg 1.7 0.12 1 1,3-Dichibrobenzene ND ug/kg 1.7 0.12 1 1,4-Dichibrobenzene ND ug/kg 1.7 0.14 1 1,4-Dichibrobenzene ND ug/kg 1.7 0.17 1 1,4-Dichibrobenzene ND ug/kg 1.7 0.17 1 1,4-Dichibrobenzene ND ug/kg 1.7 0.17 1 1,5-Dichibrobenzene ND ug/kg 1.7 0.47 1 1,5-Dichibrobenzene ND ug/kg 0.84 0.24 1 1,5-Dichibrobenzene ND ug/kg 0.84 0.24 1 1,5-Dichibrobenzene ND ug/kg 0.84 0.15 1 1,2-Dichibrobenzene ND ug/kg 0.84 0.15 1 1,2-Dichibrobenzene ND ug/kg 0.84 0.11 1 1,2-Dichibrobenzene ND ug/kg 0.84 0.11 1 1,2-Dichibrobenzene ND ug/kg 0.84 0.11 1 1,2-Dichibrobenzene ND ug/kg 0.84 0.16 1 1,2-Dichibropropane ND ug/kg 0.84 1.8 1 1,2-Dichibropropane ND ug/kg 0.84 1.8 1 1,2-Z-Dichibropropane ND ug/kg 0.84 0.89 1 1,2-Z-Dichibropropane ND ug/kg 0.84 0.89 1 1,2-Z-Dichibropropane ND ug/kg 0.84 0.11 1 1,2-Z-Erichibropropane ND ug/kg 0.84 0.11 1 1,2-Tericachioropropane ND ug/kg 0.84 0.11 1 1,1-Z-Tericachioropropane ND ug/kg 0.84 0.12 1 1,1-Z-Tericachioropropane ND ug/kg 0.84 0.12 1 1,1-Z-Tericachioropropane ND ug/kg 0.84 0.12 1 1,1-Z-Dibromopane ND ug/kg 0.84 0.12 1 1,1-Z-Tericachioropropane ND ug/kg 0.84 0.14	Volatile Organics by GC/MS - We	stborough Lab					
1,2-Dichibrobenzene ND ug/kg 1.7 0.12 1 1,3-Dichibrobenzene ND ug/kg 1.7 0.12 1 1,4-Dichibrobenzene ND ug/kg 1.7 0.14 1 1,4-Dichibrobenzene ND ug/kg 1.7 0.17 1 1,4-Dichibrobenzene ND ug/kg 1.7 0.17 1 1,4-Dichibrobenzene ND ug/kg 1.7 0.17 1 1,5-Dichibrobenzene ND ug/kg 1.7 0.47 1 1,5-Dichibrobenzene ND ug/kg 0.84 0.24 1 1,5-Dichibrobenzene ND ug/kg 0.84 0.24 1 1,5-Dichibrobenzene ND ug/kg 0.84 0.15 1 1,2-Dichibrobenzene ND ug/kg 0.84 0.15 1 1,2-Dichibrobenzene ND ug/kg 0.84 0.11 1 1,2-Dichibrobenzene ND ug/kg 0.84 0.11 1 1,2-Dichibrobenzene ND ug/kg 0.84 0.11 1 1,2-Dichibrobenzene ND ug/kg 0.84 0.16 1 1,2-Dichibropropane ND ug/kg 0.84 1.8 1 1,2-Dichibropropane ND ug/kg 0.84 1.8 1 1,2-Z-Dichibropropane ND ug/kg 0.84 0.89 1 1,2-Z-Dichibropropane ND ug/kg 0.84 0.89 1 1,2-Z-Dichibropropane ND ug/kg 0.84 0.11 1 1,2-Z-Erichibropropane ND ug/kg 0.84 0.11 1 1,2-Tericachioropropane ND ug/kg 0.84 0.11 1 1,1-Z-Tericachioropropane ND ug/kg 0.84 0.12 1 1,1-Z-Tericachioropropane ND ug/kg 0.84 0.12 1 1,1-Z-Tericachioropropane ND ug/kg 0.84 0.12 1 1,1-Z-Dibromopane ND ug/kg 0.84 0.12 1 1,1-Z-Tericachioropropane ND ug/kg 0.84 0.14	Trichloroethene	ND		ua/ka	0.42	0.11	1
1,3-Dichforobenzene ND ugkg 1.7 0.12 1 1,4-Dichforobenzene ND ugkg 1.7 0.14 1 1,4-Dichforobenzene ND ugkg 1.7 0.17 1 1,7 0.14 1 1,4-Dichforobenzene ND ugkg 1.7 0.17 1 1,7 0.14 1 1,7 0.17							
1.7 1.7							
Multiyl terit butyl ether ND ug/kg 1.7 0.17 1 p/m-Xylene ND ug/kg 1.7 0.47 1 o-Xylene ND ug/kg 0.84 0.24 1 o-Xylenes ND ug/kg 0.84 0.24 1 dis-1,2-Dichloroethene ND ug/kg 0.84 0.15 1 1,2-Dichloroethene, Total ND ug/kg 1.7 0.20 1 Dichromoffluoromethane ND ug/kg 1.7 0.20 1 Styrene ND ug/kg 8.4 0.16 1 Dichloroeffluoromethane ND ug/kg 8.4 4.0 1 Acatone 5.7 J ug/kg 8.4 4.0 1 Acatonic 5.7 J ug/kg 8.4 4.0 1 Carbon disulfide ND ug/kg 8.4 1.8 1 2-Butanone ND ug/kg 8.4 1.8 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>							
p/m-Xylene ND ug/kg 1.7 0.47 1 c-Xylene ND ug/kg 0.84 0.24 1 xylenes, Total ND ug/kg 0.84 0.24 1 sich 12-Dichlorochene ND ug/kg 0.84 0.15 1 11-2-Dichlorochene, Total ND ug/kg 0.84 0.11 1 11-2-Dichlorochene, Total ND ug/kg 0.84 0.11 1 Styrene ND ug/kg 0.84 0.16 1 Styrene ND ug/kg 8.4 0.76 1 Acetone 5.7 J ug/kg 8.4 0.76 1 Acetone 5.7 J ug/kg 8.4 1.8 1 Carbon disullide ND ug/kg 8.4 1.8 1 4-Methyt-2-pentanone ND ug/kg 8.4 1.8 1 4-Methyt-2-pentanone ND ug/kg 8.4 0.1 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>							
o-Xylene ND ug/kg 0.84 0.24 1 Xylenes, Total ND ug/kg 0.84 0.24 1 xylenes, Total ND ug/kg 0.84 0.15 1 L2-Dichloroethene, Total ND ug/kg 0.84 0.11 1 Dibribromemishane ND ug/kg 1.7 0.20 1 Styrene ND ug/kg 8.4 0.16 1 Dichlorodifluoromethane ND ug/kg 8.4 4.0 1 Acetone 5.7 J ug/kg 8.4 4.0 1 Acetone 5.7 J ug/kg 8.4 4.0 1 Carbon disulfide ND ug/kg 8.4 1.8 1 Vinyl acetate ND ug/kg 8.4 1.8 1 Vinyl acetate ND ug/kg 8.4 1.8 1 4-Methyl-2-pentanone ND ug/kg 1.7 0.11							
Xylenes, Total ND ug/kg 0.84 0.24 1 cis-1,2-Dichloroethene ND ug/kg 0.84 0.15 1 1,2-Dichloroethene, Total ND ug/kg 0.84 0.11 1 Dichloroethene, Total ND ug/kg 0.84 0.16 1 Syrene ND ug/kg 8.4 0.76 1 Dichloroefffuoromethane ND ug/kg 8.4 4.0 1 Acetone 5.7 J ug/kg 8.4 4.0 1 Carbon disulfide ND ug/kg 8.4 1.8 1 Lebtanone ND ug/kg 8.4 1.8	· · · ·						
ND							
ND	·						
Dibromomethane ND							
Styrene ND ug/kg 0.84 0.16 1 Dichlorodifluoromethane ND ug/kg 8.4 0.76 1 Acetone 5.7 J ug/kg 8.4 4.0 1 Carbon disulfide ND ug/kg 8.4 1.8 1 2-Butanone ND ug/kg 8.4 1.8 1 Vilyal acetate ND ug/kg 8.4 1.8 1 4-Methyl-2-pentanone ND ug/kg 8.4 1.1 1 4-Methyl-2-pentanone ND ug/kg 1.7 0.11 1 2-Hexanone ND ug/kg 1.7 0.11 1 2-Hexanone ND ug/kg 1.7 0.17 1 2-Petholoropropane ND ug/kg 1.7 0.17 1 1,2-Dibromoethane ND ug/kg 0.42 0.11 1 1,1-1,2-Tetrachloroethane ND ug/kg 0.42 0.11	Dibromomethane	ND					1
ND	Styrene	ND			0.84	0.16	1
Acetone 5.7 J ug/kg 8.4 4.0 1 Carbon disulfide ND ug/kg 8.4 3.8 1 2-Butanone ND ug/kg 8.4 1.8 1 Viryl acetate ND ug/kg 8.4 1.8 1 4-Methyl-2-pentanone ND ug/kg 8.4 1.1 1 4-Methyl-2-pentanone ND ug/kg 1.7 0.11 1 1,2.3-Trichloropropane ND ug/kg 1.7 0.11 1 2-Hexanone ND ug/kg 1.7 0.11 1 2-Hexanone ND ug/kg 1.7 0.17 1 2-Petranone ND ug/kg 1.7 0.17 1 2-Petranone ND ug/kg 1.7 0.17 1 1,2-Dibromoethane ND ug/kg 0.84 0.23 1 1,1.12-Tetrachloropethane ND ug/kg 0.42 0.11 1	Dichlorodifluoromethane	ND			8.4	0.76	1
Carbon disulfide ND ug/kg 8.4 3.8 1 2-Butanone ND ug/kg 8.4 1.8 1 Vinyl acetate ND ug/kg 8.4 1.8 1 4-Methyl-2-pentanone ND ug/kg 8.4 1.1 1 4-Methyl-2-pentanone ND ug/kg 1.7 0.11 1 1,2,3-Trichloropropane ND ug/kg 8.4 0.98 1 2-Hexanone ND ug/kg 1.7 0.17 1 Bromochloromethane ND ug/kg 1.7 0.17 1 1,2-Dibromoethane ND ug/kg 0.84 0.23 1 1,3-Dichloropropane ND ug/kg 0.7 0.14 1 1,1,1,2-Tetrachloroethane ND ug/kg 0.42 0.11 1 n-Butylberzene ND ug/kg 0.42 0.11 1 n-Butylberzene ND ug/kg 0.84 0.12 <	Acetone	5.7	J		8.4	4.0	1
2-Butanone ND ug/kg 8.4 1.8 1 Vinyl acetate ND ug/kg 8.4 1.8 1 4-Methyl-2-pentanone ND ug/kg 8.4 1.1 1 1,2,3-Trichloropropane ND ug/kg 1.7 0.11 1 2-Hexanone ND ug/kg 1.7 0.17 1 Bromochloromethane ND ug/kg 1.7 0.17 1 2,2-Dichloropropane ND ug/kg 1.7 0.17 1 1,2-Dibromoethane ND ug/kg 0.84 0.23 1 1,3-Dichloropropane ND ug/kg 0.42 0.11 1 1,3-Dichloropropane ND ug/kg 0.42 0.11 1 1,1,1,2-Tetrachloroethane ND ug/kg 0.42 0.11 1 n-Butylbenzene ND ug/kg 0.42 0.11 1 n-Butylbenzene ND ug/kg 0.84 0.12	Carbon disulfide	ND			8.4	3.8	1
Vinyl acetate ND ug/kg 8.4 1.8 1 4-Methyl-2-pentanone ND ug/kg 8.4 1.1 1 1,2,3-Trichloropropane ND ug/kg 1.7 0.11 1 2-Hexanone ND ug/kg 8.4 0.98 1 Bromochloromethane ND ug/kg 1.7 0.17 1 2,2-Dichloropropane ND ug/kg 1.7 0.17 1 1,2-Dibromoethane ND ug/kg 0.84 0.23 1 1,3-Dichloropropane ND ug/kg 1.7 0.14 1 1,3-Dichloropropane ND ug/kg 0.84 0.23 1 1,3-Dichloropropane ND ug/kg 0.42 0.11 1 1,1,1,2-Tetrachloropethane ND ug/kg 0.42 0.11 1 Bromobenzene ND ug/kg 0.84 0.14 1 n-Butylbenzene ND ug/kg 0.84 0.12<	2-Butanone	ND			8.4	1.8	1
4-Methyl-2-pentanone ND ug/kg 8.4 1.1 1 1,2,3-Trichloropropane ND ug/kg 1.7 0.11 1 2-Hexanone ND ug/kg 8.4 0.98 1 Bromochloromethane ND ug/kg 1.7 0.17 1 2,2-Dichloropropane ND ug/kg 0.84 0.23 1 1,2-Dibromoethane ND ug/kg 0.84 0.23 1 1,3-Dichloropropane ND ug/kg 0.42 0.11 1 1,3-Dichloropropane ND ug/kg 0.42 0.11 1 1,1,1,2-Tetrachloropthane ND ug/kg 0.42 0.11 1 Bromobenzene ND ug/kg 0.42 0.11 1 n-Butylbenzene ND ug/kg 0.84 0.14 1 sec-Butylbenzene ND ug/kg 0.84 0.12 1 tetr-Butylbenzene ND ug/kg 1.7 0.	Vinyl acetate	ND			8.4	1.8	1
2-Hexanone ND ug/kg 8.4 0.98 1 Bromochloromethane ND ug/kg 1.7 0.17 1 2,2-Dichloropropane ND ug/kg 1.7 0.17 1 1,2-Dibromoethane ND ug/kg 0.84 0.23 1 1,3-Dichloropropane ND ug/kg 1.7 0.14 1 1,1,1,2-Tetrachloroethane ND ug/kg 0.42 0.11 1 Bromobenzene ND ug/kg 1.7 0.12 1 n-Butylbenzene ND ug/kg 0.84 0.14 1 n-Butylbenzene ND ug/kg 0.84 0.12 1 tetr-Butylbenzene ND ug/kg 1.7 0.10 1 tetr-Butylbenzene ND ug/kg 1.7 0.10 1 tetr-Butylbenzene ND ug/kg 1.7 0.16 1 tetr-Butylbenzene ND ug/kg 1.7 0.16	4-Methyl-2-pentanone	ND			8.4	1.1	1
Bromochloromethane ND	1,2,3-Trichloropropane	ND		ug/kg	1.7	0.11	1
2,2-Dichloropropane ND ug/kg 1.7 0.17 1 1,2-Dibromoethane ND ug/kg 0.84 0.23 1 1,3-Dichloropropane ND ug/kg 1.7 0.14 1 1,1,1,2-Tetrachloroethane ND ug/kg 0.42 0.11 1 1,1,1,2-Tetrachloroethane ND ug/kg 0.42 0.11 1 Bromobenzene ND ug/kg 1.7 0.12 1 n-Butylbenzene ND ug/kg 0.84 0.14 1 sec-Butylbenzene ND ug/kg 0.84 0.14 1 sec-Butylbenzene ND ug/kg 1.7 0.10 1 tert-Butylbenzene ND ug/kg 1.7 0.10 1 o-Chlorotoluene ND ug/kg 1.7 0.16 1 o-Chlorotoluene ND ug/kg 1.7 0.16 1 p-Chlorotoluene ND ug/kg 1.7 0.09 1 1,2-Dibromo-3-chloropropane ND ug/kg 2.5 0.83 1 Hexachlorobutadiene ND ug/kg 3.3 0.14 1 Isopropylbenzene ND ug/kg 0.84 0.09 1 Isopropylbenzene ND ug/kg 0.84 0.09 1	2-Hexanone	ND		ug/kg	8.4	0.98	1
1,2-Dibromoethane ND ug/kg 0.84 0.23 1 1,3-Dichloropropane ND ug/kg 1.7 0.14 1 1,1,1,2-Tetrachloroethane ND ug/kg 0.42 0.11 1 Bromobenzene ND ug/kg 1.7 0.12 1 n-Butylbenzene ND ug/kg 0.84 0.14 1 sec-Butylbenzene ND ug/kg 0.84 0.14 1 sec-Butylbenzene ND ug/kg 1.7 0.10 1 tert-Butylbenzene ND ug/kg 1.7 0.10 1 o-Chlorotoluene ND ug/kg 1.7 0.10 1 o-Chlorotoluene ND ug/kg 1.7 0.16 1 p-Chlorotoluene ND ug/kg 1.7 0.16 1 1,2-Dibromo-3-chloropropane ND ug/kg 2.5 0.83 1 Hexachlorobutadiene ND ug/kg 3.3 0.14 1 Isopropylbenzene ND ug/kg 0.84 0.09 1 Isopropylbenzene ND ug/kg 0.84 0.09 1	Bromochloromethane	ND		ug/kg	1.7	0.17	1
1,3-Dichloropropane ND ug/kg 1.7 0.14 1 1,1,1,2-Tetrachloroethane ND ug/kg 0.42 0.11 1 Bromobenzene ND ug/kg 1.7 0.12 1 n-Butylbenzene ND ug/kg 0.84 0.14 1 sec-Butylbenzene ND ug/kg 0.84 0.12 1 tert-Butylbenzene ND ug/kg 0.84 0.12 1 tert-Butylbenzene ND ug/kg 1.7 0.10 1 o-Chlorotoluene ND ug/kg 1.7 0.16 1 o-Chlorotoluene ND ug/kg 1.7 0.16 1 p-Chlorotoluene ND ug/kg 1.7 0.09 1 1,2-Dibromo-3-chloropropane ND ug/kg 2.5 0.83 1 Hexachlorobutadiene ND ug/kg 3.3 0.14 1 Isopropylbenzene ND ug/kg 0.84 0.09 1 Isopropyltoluene ND ug/kg 0.84 0.09 1	2,2-Dichloropropane	ND		ug/kg	1.7	0.17	1
1,1,1,2-Tetrachloroethane ND ug/kg 0.42 0.11 1 Bromobenzene ND ug/kg 1.7 0.12 1 n-Butylbenzene ND ug/kg 0.84 0.14 1 sec-Butylbenzene ND ug/kg 0.84 0.12 1 tert-Butylbenzene ND ug/kg 1.7 0.10 1 o-Chlorotoluene ND ug/kg 1.7 0.16 1 p-Chlorotoluene ND ug/kg 1.7 0.09 1 1,2-Dibromo-3-chloropropane ND ug/kg 2.5 0.83 1 Hexachlorobutadiene ND ug/kg 3.3 0.14 1 Isopropylbenzene ND ug/kg 0.84 0.09 1 p-Isopropyltoluene ND ug/kg 0.84 0.09 1 ND ug/kg 3.3 0.54 1	1,2-Dibromoethane	ND		ug/kg	0.84	0.23	1
ND	1,3-Dichloropropane	ND		ug/kg	1.7	0.14	1
n-Butylbenzene ND ug/kg 0.84 0.14 1 sec-Butylbenzene ND ug/kg 0.84 0.12 1 tert-Butylbenzene ND ug/kg 1.7 0.10 1 o-Chlorotoluene ND ug/kg 1.7 0.16 1 p-Chlorotoluene ND ug/kg 1.7 0.09 1 1,2-Dibromo-3-chloropropane ND ug/kg 2.5 0.83 1 Hexachlorobutadiene ND ug/kg 3.3 0.14 1 Isopropylbenzene ND ug/kg 0.84 0.09 1 p-Isopropyltoluene ND ug/kg 0.84 0.09 1 Naphthalene ND ug/kg 3.3 0.54 1	1,1,1,2-Tetrachloroethane	ND		ug/kg	0.42	0.11	1
ND	Bromobenzene	ND		ug/kg	1.7	0.12	1
tert-Butylbenzene ND ug/kg 1.7 0.10 1 o-Chlorotoluene ND ug/kg 1.7 0.16 1 p-Chlorotoluene ND ug/kg 1.7 0.09 1 1,2-Dibromo-3-chloropropane ND ug/kg 2.5 0.83 1 Hexachlorobutadiene ND ug/kg 3.3 0.14 1 Isopropylbenzene ND ug/kg 0.84 0.09 1 p-Isopropyltoluene ND ug/kg 0.84 0.09 1 ND ug/kg 3.3 0.54 1	n-Butylbenzene	ND		ug/kg	0.84	0.14	1
o-Chlorotoluene ND ug/kg 1.7 0.16 1 p-Chlorotoluene ND ug/kg 1.7 0.09 1 1,2-Dibromo-3-chloropropane ND ug/kg 2.5 0.83 1 Hexachlorobutadiene ND ug/kg 3.3 0.14 1 Isopropylbenzene ND ug/kg 0.84 0.09 1 p-Isopropyltoluene ND ug/kg 0.84 0.09 1 Naphthalene ND ug/kg 3.3 0.54 1	sec-Butylbenzene	ND		ug/kg	0.84	0.12	1
p-Chlorotoluene ND ug/kg 1.7 0.09 1 1,2-Dibromo-3-chloropropane ND ug/kg 2.5 0.83 1 Hexachlorobutadiene ND ug/kg 3.3 0.14 1 Isopropylbenzene ND ug/kg 0.84 0.09 1 p-Isopropyltoluene ND ug/kg 0.84 0.09 1 Naphthalene ND ug/kg 3.3 0.54 1	tert-Butylbenzene	ND		ug/kg	1.7	0.10	1
1,2-Dibromo-3-chloropropane ND ug/kg 2.5 0.83 1 Hexachlorobutadiene ND ug/kg 3.3 0.14 1 Isopropylbenzene ND ug/kg 0.84 0.09 1 p-Isopropyltoluene ND ug/kg 0.84 0.09 1 Naphthalene ND ug/kg 3.3 0.54 1	o-Chlorotoluene	ND		ug/kg	1.7	0.16	1
Hexachlorobutadiene ND ug/kg 3.3 0.14 1 Isopropylbenzene ND ug/kg 0.84 0.09 1 p-Isopropyltoluene ND ug/kg 0.84 0.09 1 Naphthalene ND ug/kg 3.3 0.54 1	p-Chlorotoluene	ND		ug/kg	1.7	0.09	1
Sopropylbenzene	1,2-Dibromo-3-chloropropane	ND		ug/kg	2.5	0.83	1
p-Isopropyltoluene ND ug/kg 0.84 0.09 1 Naphthalene ND ug/kg 3.3 0.54 1	Hexachlorobutadiene	ND		ug/kg	3.3	0.14	1
Naphthalene ND ug/kg 3.3 0.54 1	Isopropylbenzene	ND		ug/kg	0.84	0.09	1
Ü	p-Isopropyltoluene	ND		ug/kg	0.84	0.09	1
Acrylonitrile ND ug/kg 3.3 0.96 1	Naphthalene	ND		ug/kg	3.3	0.54	1
	Acrylonitrile	ND		ug/kg	3.3	0.96	1



 Project Name:
 13-16 TO 13-30 BCD
 Lab Number:
 L1828167

Project Number: 13-16 TO 13-30 BCD **Report Date:** 07/30/18

SAMPLE RESULTS

Lab ID: L1828167-02 Date Collected: 07/23/18 09:15

Client ID: SB-2 (0-2) Date Received: 07/23/18

Sample Location: 13-16 TO 13-30 BEACH CHANNEL DRIVE Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westboro	ugh Lab					
n-Propylbenzene	ND		ug/kg	0.84	0.14	1
1,2,3-Trichlorobenzene	ND		ug/kg	1.7	0.27	 1
1,2,4-Trichlorobenzene	ND		ug/kg	1.7	0.23	1
1,3,5-Trimethylbenzene	ND		ug/kg	1.7	0.16	1
1,2,4-Trimethylbenzene	ND		ug/kg	1.7	0.28	1
1,4-Dioxane	ND		ug/kg	84	29.	1
p-Diethylbenzene	ND		ug/kg	1.7	0.15	1
p-Ethyltoluene	ND		ug/kg	1.7	0.32	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	1.7	0.16	1
Ethyl ether	ND		ug/kg	1.7	0.28	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	4.2	1.2	1

Surrogate	% Recovery	Acceptance Qualifier Criteria	
1,2-Dichloroethane-d4	95	70-130	
Toluene-d8	95	70-130	
4-Bromofluorobenzene	90	70-130	
Dibromofluoromethane	109	70-130	



Project Name: 13-16 TO 13-30 BCD

Project Number: 13-16 TO 13-30 BCD

SAMPLE RESULTS

Report Date: 07/30/18

Lab ID: L1828167-03 Client ID: TW-1

Sample Location: 13-16 TO 13-30 BEACH CHANNEL DRIVE Date Received: Field Prep: Not Specified

Lab Number:

Date Collected:

07/23/18 11:40 07/23/18

L1828167

Sample Depth:

Matrix: Water Analytical Method: 1,8260C Analytical Date:

07/24/18 11:52

Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough	n Lab					
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	16		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
1,1-Dichloropropene	ND		ug/l	2.5	0.70	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1



 Project Name:
 13-16 TO 13-30 BCD
 Lab Number:
 L1828167

Project Number: 13-16 TO 13-30 BCD **Report Date:** 07/30/18

SAMPLE RESULTS

Lab ID: L1828167-03 Date Collected: 07/23/18 11:40

Client ID: TW-1 Date Received: 07/23/18

Sample Location: 13-16 TO 13-30 BEACH CHANNEL DRIVE Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Wes	stborough Lab					
Trichloroethene	0.23	J	ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
Xylenes, Total	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70	1
Dibromomethane	ND		ug/l	5.0	1.0	1
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70	1
Acrylonitrile	ND		ug/l	5.0	1.5	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	2.9	J	ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
Vinyl acetate	ND		ug/l	5.0	1.0	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
2,2-Dichloropropane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,3-Dichloropropane	ND		ug/l	2.5	0.70	1
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70	1
Bromobenzene	ND		ug/l	2.5	0.70	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
tert-Butylbenzene	ND		ug/l	2.5	0.70	1
o-Chlorotoluene	ND		ug/l	2.5	0.70	1
p-Chlorotoluene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Hexachlorobutadiene	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
Naphthalene	ND		ug/l	2.5	0.70	1



 Project Name:
 13-16 TO 13-30 BCD
 Lab Number:
 L1828167

Project Number: 13-16 TO 13-30 BCD **Report Date:** 07/30/18

SAMPLE RESULTS

Lab ID: L1828167-03 Date Collected: 07/23/18 11:40

Client ID: TW-1 Date Received: 07/23/18
Sample Location: 13-16 TO 13-30 BEACH CHANNEL DRIVE Field Prep: Not Specified

Volatile Organics by GC/MS - Westborough Lab n-Propylbenzene ND ug/l 2.5 0.70 1 1,2,3-Trichlorobenzene ND ug/l 2.5 0.70 1 1,2,4-Trichlorobenzene ND ug/l 2.5 0.70 1 1,3,5-Trimethylbenzene ND ug/l 2.5 0.70 1 1,2,4-Trimethylbenzene ND ug/l 2.5 0.70 1 1,4-Dioxane ND ug/l 250 61. 1 p-Diethylbenzene ND ug/l 2.0 0.70 1 p-Ethyltoluene ND ug/l 2.0 0.70 1 1,2,4,5-Tetramethylbenzene ND ug/l 2.0 0.54 1 Ethyl ether ND ug/l 2.5 0.70 1 trans-1,4-Dichloro-2-butene ND ug/l 2.5 0.70 1	Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	
1,2,3-Trichlorobenzene ND ug/l 2.5 0.70 1 1,2,4-Trichlorobenzene ND ug/l 2.5 0.70 1 1,3,5-Trimethylbenzene ND ug/l 2.5 0.70 1 1,2,4-Trimethylbenzene ND ug/l 2.5 0.70 1 1,4-Dioxane ND ug/l 250 61 1 p-Diethylbenzene ND ug/l 2.0 0.70 1 p-Ethyltoluene ND ug/l 2.0 0.70 1 1,2,4,5-Tetramethylbenzene ND ug/l 2.0 0.54 1 Ethyl ether ND ug/l 2.5 0.70 1	Volatile Organics by GC/MS - Westb	orough Lab						
1,2,4-Trichlorobenzene ND ug/l 2.5 0.70 1 1,3,5-Trimethylbenzene ND ug/l 2.5 0.70 1 1,2,4-Trimethylbenzene ND ug/l 2.5 0.70 1 1,4-Dioxane ND ug/l 250 61. 1 p-Diethylbenzene ND ug/l 2.0 0.70 1 p-Ethyltoluene ND ug/l 2.0 0.70 1 1,2,4,5-Tetramethylbenzene ND ug/l 2.0 0.54 1 Ethyl ether ND ug/l 2.5 0.70 1	n-Propylbenzene	ND		ug/l	2.5	0.70	1	
1,3,5-Trimethylbenzene ND ug/l 2.5 0.70 1 1,2,4-Trimethylbenzene ND ug/l 2.5 0.70 1 1,4-Dioxane ND ug/l 250 61. 1 p-Diethylbenzene ND ug/l 2.0 0.70 1 p-Ethyltoluene ND ug/l 2.0 0.70 1 1,2,4,5-Tetramethylbenzene ND ug/l 2.0 0.54 1 Ethyl ether ND ug/l 2.5 0.70 1	1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1	
1,2,4-Trimethylbenzene ND ug/l 2.5 0.70 1 1,4-Dioxane ND ug/l 250 61. 1 p-Diethylbenzene ND ug/l 2.0 0.70 1 p-Ethyltoluene ND ug/l 2.0 0.70 1 1,2,4,5-Tetramethylbenzene ND ug/l 2.0 0.54 1 Ethyl ether ND ug/l 2.5 0.70 1	1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1	
1,4-Dioxane ND ug/l 250 61. 1 p-Diethylbenzene ND ug/l 2.0 0.70 1 p-Ethyltoluene ND ug/l 2.0 0.70 1 1,2,4,5-Tetramethylbenzene ND ug/l 2.0 0.54 1 Ethyl ether ND ug/l 2.5 0.70 1	1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1	
p-Diethylbenzene ND ug/l 2.0 0.70 1 p-Ethyltoluene ND ug/l 2.0 0.70 1 1,2,4,5-Tetramethylbenzene ND ug/l 2.0 0.54 1 Ethyl ether ND ug/l 2.5 0.70 1	1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70	1	
p-Ethyltoluene ND ug/l 2.0 0.70 1 1,2,4,5-Tetramethylbenzene ND ug/l 2.0 0.54 1 Ethyl ether ND ug/l 2.5 0.70 1	1,4-Dioxane	ND		ug/l	250	61.	1	
1,2,4,5-Tetramethylbenzene ND ug/l 2.0 0.54 1 Ethyl ether ND ug/l 2.5 0.70 1	p-Diethylbenzene	ND		ug/l	2.0	0.70	1	
Ethyl ether ND ug/l 2.5 0.70 1	p-Ethyltoluene	ND		ug/l	2.0	0.70	1	
	1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.54	1	
trans-1,4-Dichloro-2-butene ND ug/l 2.5 0.70 1	Ethyl ether	ND		ug/l	2.5	0.70	1	
	trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70	1	

Surrogate	% Recovery	Acceptance Qualifier Criteria
1,2-Dichloroethane-d4	115	70-130
Toluene-d8	97	70-130
4-Bromofluorobenzene	108	70-130
Dibromofluoromethane	108	70-130



07/23/18 09:55

Project Name: 13-16 TO 13-30 BCD

Project Number: 13-16 TO 13-30 BCD

SAMPLE RESULTS

Lab Number: L1828167

Report Date: 07/30/18

Lab ID: L1828167-04

Client ID: TW-2

Sample Location: 13-16 TO 13-30 BEACH CHANNEL DRIVE Date Received: 07/23/18 Field Prep: Not Specified

Date Collected:

Sample Depth:

Matrix: Water Analytical Method: 1,8260C Analytical Date: 07/24/18 11:15

Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westbord	ough Lab					
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	0.86		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
1,1-Dichloropropene	ND		ug/l	2.5	0.70	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1



Project Name: 13-16 TO 13-30 BCD **Lab Number:** L1828167

Project Number: 13-16 TO 13-30 BCD **Report Date:** 07/30/18

SAMPLE RESULTS

Lab ID: L1828167-04 Date Collected: 07/23/18 09:55

Client ID: TW-2 Date Received: 07/23/18

Sample Location: 13-16 TO 13-30 BEACH CHANNEL DRIVE Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor		
Volatile Organics by GC/MS - Westborough	Volatile Organics by GC/MS - Westborough Lab							
Trichloroethene	ND		ug/l	0.50	0.18	1		
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1		
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1		
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1		
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1		
p/m-Xylene	ND		ug/l	2.5	0.70	1		
o-Xylene	ND		ug/l	2.5	0.70	1		
Xylenes, Total	ND		ug/l	2.5	0.70	1		
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1		
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70	1		
Dibromomethane	ND		ug/l	5.0	1.0	1		
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70	1		
Acrylonitrile	ND		ug/l	5.0	1.5	1		
Styrene	ND		ug/l	2.5	0.70	1		
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1		
Acetone	1.7	J	ug/l	5.0	1.5	1		
Carbon disulfide	ND		ug/l	5.0	1.0	1		
2-Butanone	ND		ug/l	5.0	1.9	1		
Vinyl acetate	ND		ug/l	5.0	1.0	1		
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1		
2-Hexanone	ND		ug/l	5.0	1.0	1		
Bromochloromethane	ND		ug/l	2.5	0.70	1		
2,2-Dichloropropane	ND		ug/l	2.5	0.70	1		
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1		
1,3-Dichloropropane	ND		ug/l	2.5	0.70	1		
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70	1		
Bromobenzene	ND		ug/l	2.5	0.70	1		
n-Butylbenzene	ND		ug/l	2.5	0.70	1		
sec-Butylbenzene	ND		ug/l	2.5	0.70	1		
tert-Butylbenzene	ND		ug/l	2.5	0.70	1		
o-Chlorotoluene	ND		ug/l	2.5	0.70	1		
p-Chlorotoluene	ND		ug/l	2.5	0.70	1		
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1		
Hexachlorobutadiene	ND		ug/l	2.5	0.70	1		
Isopropylbenzene	ND		ug/l	2.5	0.70	1		
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1		
Naphthalene	ND		ug/l	2.5	0.70	1		



 Project Name:
 13-16 TO 13-30 BCD
 Lab Number:
 L1828167

Project Number: 13-16 TO 13-30 BCD **Report Date:** 07/30/18

SAMPLE RESULTS

Lab ID: L1828167-04 Date Collected: 07/23/18 09:55

Client ID: TW-2 Date Received: 07/23/18

Sample Location: 13-16 TO 13-30 BEACH CHANNEL DRIVE Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor				
Volatile Organics by GC/MS - West	Volatile Organics by GC/MS - Westborough Lab									
n-Propylbenzene	ND		ug/l	2.5	0.70	1				
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1				
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1				
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1				
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70	1				
1,4-Dioxane	ND		ug/l	250	61.	1				
p-Diethylbenzene	ND		ug/l	2.0	0.70	1				
p-Ethyltoluene	ND		ug/l	2.0	0.70	1				
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.54	1				
Ethyl ether	ND		ug/l	2.5	0.70	1				
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70	1				

Surrogate	% Recovery	Acceptance Qualifier Criteria	
1,2-Dichloroethane-d4	116	70-130	
Toluene-d8	97	70-130	
4-Bromofluorobenzene	109	70-130	
Dibromofluoromethane	108	70-130	



07/23/18 00:00

Project Name: 13-16 TO 13-30 BCD

Project Number: 13-16 TO 13-30 BCD

SAMPLE RESULTS

Lab Number: L1828167

Report Date: 07/30/18

Lab ID: L1828167-05
Client ID: TRIP BLANK

Sample Location: 13-16 TO 13-30 BEACH CHANNEL DRIVE

Date Received: 07/23/18
Field Prep: Not Specified

Date Collected:

Sample Depth:

Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 07/24/18 10:37

Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westboroug	h Lab					
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
1,1-Dichloropropene	ND		ug/l	2.5	0.70	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1



Project Name: 13-16 TO 13-30 BCD **Lab Number:** L1828167

Project Number: 13-16 TO 13-30 BCD **Report Date:** 07/30/18

SAMPLE RESULTS

Lab ID: L1828167-05 Date Collected: 07/23/18 00:00

Client ID: TRIP BLANK Date Received: 07/23/18

Sample Location: 13-16 TO 13-30 BEACH CHANNEL DRIVE Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Wes	stborough Lab					
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
Xylenes, Total	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70	1
Dibromomethane	ND		ug/l	5.0	1.0	1
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70	1
Acrylonitrile	ND		ug/l	5.0	1.5	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	3.3	J	ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
Vinyl acetate	ND		ug/l	5.0	1.0	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
2,2-Dichloropropane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,3-Dichloropropane	ND		ug/l	2.5	0.70	1
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70	1
Bromobenzene	ND		ug/l	2.5	0.70	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
tert-Butylbenzene	ND		ug/l	2.5	0.70	1
o-Chlorotoluene	ND		ug/l	2.5	0.70	1
p-Chlorotoluene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Hexachlorobutadiene	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
Naphthalene	ND		ug/l	2.5	0.70	1



 Project Name:
 13-16 TO 13-30 BCD
 Lab Number:
 L1828167

Project Number: 13-16 TO 13-30 BCD **Report Date:** 07/30/18

SAMPLE RESULTS

Lab ID: L1828167-05 Date Collected: 07/23/18 00:00

Client ID: TRIP BLANK Date Received: 07/23/18
Sample Location: 13-16 TO 13-30 BEACH CHANNEL DRIVE Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	
Volatile Organics by GC/MS - Westboroug	ıh Lab						
n-Propylbenzene	ND		ug/l	2.5	0.70	1	
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1	
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1	
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1	
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70	1	
1,4-Dioxane	ND		ug/l	250	61.	1	
p-Diethylbenzene	ND		ug/l	2.0	0.70	1	
p-Ethyltoluene	ND		ug/l	2.0	0.70	1	
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.54	1	
Ethyl ether	ND		ug/l	2.5	0.70	1	
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70	1	

Surrogate	% Recovery	Qualifier	Acceptance Criteria	
1,2-Dichloroethane-d4	115		70-130	
Toluene-d8	97		70-130	
4-Bromofluorobenzene	107		70-130	
Dibromofluoromethane	110		70-130	



 Project Name:
 13-16 TO 13-30 BCD
 Lab Number:
 L1828167

 Project Number:
 13-16 TO 13-30 BCD
 Report Date:
 07/30/18

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C Analytical Date: 07/24/18 09:37

Analyst: MV

Parameter	Result	Qualifier	Units		RL	MDL
Volatile Organics by GC/MS	- Westborough Lab	for sample	e(s):	01-02	Batch:	WG1138866-5
Methylene chloride	ND		ug/kg)	5.0	2.3
1,1-Dichloroethane	ND		ug/kg	9	1.0	0.14
Chloroform	ND		ug/kg	9	1.5	0.14
Carbon tetrachloride	ND		ug/kg	9	1.0	0.23
1,2-Dichloropropane	ND		ug/kg	9	1.0	0.12
Dibromochloromethane	ND		ug/kg	9	1.0	0.14
1,1,2-Trichloroethane	ND		ug/kg	9	1.0	0.27
Tetrachloroethene	ND		ug/kg	9	0.50	0.20
Chlorobenzene	ND		ug/kg	9	0.50	0.13
Trichlorofluoromethane	ND		ug/kg	9	4.0	0.70
1,2-Dichloroethane	ND		ug/kg	9	1.0	0.26
1,1,1-Trichloroethane	ND		ug/kg	9	0.50	0.17
Bromodichloromethane	ND		ug/kg	9	0.50	0.11
trans-1,3-Dichloropropene	ND		ug/kg	9	1.0	0.27
cis-1,3-Dichloropropene	ND		ug/kg	9	0.50	0.16
1,3-Dichloropropene, Total	ND		ug/kg	9	0.50	0.16
1,1-Dichloropropene	ND		ug/kg	9	0.50	0.16
Bromoform	ND		ug/kg	9	4.0	0.25
1,1,2,2-Tetrachloroethane	ND		ug/kg	9	0.50	0.17
Benzene	ND		ug/kg	9	0.50	0.17
Toluene	ND		ug/kg	9	1.0	0.54
Ethylbenzene	ND		ug/kg	9	1.0	0.14
Chloromethane	ND		ug/kg	9	4.0	0.93
Bromomethane	ND		ug/kg	9	2.0	0.58
Vinyl chloride	ND		ug/kg	9	1.0	0.34
Chloroethane	ND		ug/kg)	2.0	0.45
1,1-Dichloroethene	ND		ug/kg)	1.0	0.24
trans-1,2-Dichloroethene	ND		ug/kg)	1.5	0.14
Trichloroethene	ND		ug/kg)	0.50	0.14



 Project Name:
 13-16 TO 13-30 BCD
 Lab Number:
 L1828167

 Project Number:
 13-16 TO 13-30 BCD
 Report Date:
 07/30/18

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C Analytical Date: 07/24/18 09:37

Analyst: MV

Parameter	Result	Qualifier	Units		RL	MDL
Volatile Organics by GC/MS	- Westborough Lab	for sample	(s):	01-02	Batch:	WG1138866-5
1,2-Dichlorobenzene	ND		ug/kg)	2.0	0.14
1,3-Dichlorobenzene	ND		ug/kg	3	2.0	0.15
1,4-Dichlorobenzene	ND		ug/kg	3	2.0	0.17
Methyl tert butyl ether	ND		ug/kg	9	2.0	0.20
p/m-Xylene	ND		ug/kg	3	2.0	0.56
o-Xylene	ND		ug/kg	9	1.0	0.29
Xylenes, Total	ND		ug/kg	9	1.0	0.29
cis-1,2-Dichloroethene	ND		ug/kg	9	1.0	0.18
1,2-Dichloroethene, Total	ND		ug/kg	9	1.0	0.14
Dibromomethane	ND		ug/kg	9	2.0	0.24
Styrene	ND		ug/kg	9	1.0	0.20
Dichlorodifluoromethane	ND		ug/kg	9	10	0.92
Acetone	ND		ug/kg	9	10	4.8
Carbon disulfide	ND		ug/kg	9	10	4.6
2-Butanone	ND		ug/kg	9	10	2.2
Vinyl acetate	ND		ug/kg)	10	2.2
4-Methyl-2-pentanone	ND		ug/kg	9	10	1.3
1,2,3-Trichloropropane	ND		ug/kg	9	2.0	0.13
2-Hexanone	ND		ug/kg	3	10	1.2
Bromochloromethane	ND		ug/kg	9	2.0	0.20
2,2-Dichloropropane	ND		ug/kg	9	2.0	0.20
1,2-Dibromoethane	ND		ug/kg	9	1.0	0.28
1,3-Dichloropropane	ND		ug/kg	9	2.0	0.17
1,1,1,2-Tetrachloroethane	ND		ug/kg	9	0.50	0.13
Bromobenzene	ND		ug/kg	9	2.0	0.14
n-Butylbenzene	ND		ug/kg)	1.0	0.17
sec-Butylbenzene	ND		ug/kg)	1.0	0.15
tert-Butylbenzene	ND		ug/kg)	2.0	0.12
o-Chlorotoluene	ND		ug/kg)	2.0	0.19



L1828167

07/30/18

Project Name:13-16 TO 13-30 BCDLab Number:Project Number:13-16 TO 13-30 BCDReport Date:

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C Analytical Date: 07/24/18 09:37

Analyst: MV

arameter	Result	Qualifier Units	s R	L	MDL
olatile Organics by GC/MS -	Westborough Lab	for sample(s):	01-02 B	atch: WG	1138866-5
p-Chlorotoluene	ND	ug/k	g 2.	0	0.11
1,2-Dibromo-3-chloropropane	ND	ug/k	g 3.	0	1.0
Hexachlorobutadiene	ND	ug/k	g 4.	0	0.17
Isopropylbenzene	ND	ug/k	g 1.	0	0.11
p-Isopropyltoluene	ND	ug/k	g 1.	0	0.11
Naphthalene	ND	ug/k	g 4.	0	0.65
Acrylonitrile	ND	ug/k	g 4.	0	1.2
n-Propylbenzene	ND	ug/k	g 1.	0	0.17
1,2,3-Trichlorobenzene	ND	ug/k	g 2.	0	0.32
1,2,4-Trichlorobenzene	ND	ug/k	g 2.	0	0.27
1,3,5-Trimethylbenzene	ND	ug/k	g 2.	0	0.19
1,2,4-Trimethylbenzene	ND	ug/k	g 2.	0	0.33
1,4-Dioxane	ND	ug/k	g 10	00	35.
p-Diethylbenzene	ND	ug/k	g 2.	0	0.18
p-Ethyltoluene	ND	ug/k	g 2.	0	0.38
1,2,4,5-Tetramethylbenzene	ND	ug/k	g 2.	0	0.19
Ethyl ether	ND	ug/k	g 2.	0	0.34
trans-1,4-Dichloro-2-butene	ND	ug/k	g 5.	0	1.4

		Acceptance	
Surrogate	%Recovery	Qualifier Criteria	
1,2-Dichloroethane-d4	92	70-130	
Toluene-d8	95	70-130	
4-Bromofluorobenzene	88	70-130	
Dibromofluoromethane	104	70-130	



 Project Name:
 13-16 TO 13-30 BCD
 Lab Number:
 L1828167

 Project Number:
 13-16 TO 13-30 BCD
 Report Date:
 07/30/18

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C Analytical Date: 07/24/18 10:00

Analyst: PD

arameter	Result	Qualifier Units	RL	MDL
olatile Organics by GC/MS	- Westborough Lab	for sample(s):	03-05 Batch:	WG1138874-5
Methylene chloride	ND	ug/l	2.5	0.70
1,1-Dichloroethane	ND	ug/l	2.5	0.70
Chloroform	ND	ug/l	2.5	0.70
Carbon tetrachloride	ND	ug/l	0.50	0.13
1,2-Dichloropropane	ND	ug/l	1.0	0.14
Dibromochloromethane	ND	ug/l	0.50	0.15
1,1,2-Trichloroethane	ND	ug/l	1.5	0.50
Tetrachloroethene	ND	ug/l	0.50	0.18
Chlorobenzene	ND	ug/l	2.5	0.70
Trichlorofluoromethane	ND	ug/l	2.5	0.70
1,2-Dichloroethane	ND	ug/l	0.50	0.13
1,1,1-Trichloroethane	ND	ug/l	2.5	0.70
Bromodichloromethane	ND	ug/l	0.50	0.19
trans-1,3-Dichloropropene	ND	ug/l	0.50	0.16
cis-1,3-Dichloropropene	ND	ug/l	0.50	0.14
1,3-Dichloropropene, Total	ND	ug/l	0.50	0.14
1,1-Dichloropropene	ND	ug/l	2.5	0.70
Bromoform	ND	ug/l	2.0	0.65
1,1,2,2-Tetrachloroethane	ND	ug/l	0.50	0.17
Benzene	ND	ug/l	0.50	0.16
Toluene	ND	ug/l	2.5	0.70
Ethylbenzene	ND	ug/l	2.5	0.70
Chloromethane	ND	ug/l	2.5	0.70
Bromomethane	ND	ug/l	2.5	0.70
Vinyl chloride	ND	ug/l	1.0	0.07
Chloroethane	ND	ug/l	2.5	0.70
1,1-Dichloroethene	ND	ug/l	0.50	0.17
trans-1,2-Dichloroethene	ND	ug/l	2.5	0.70
Trichloroethene	ND	ug/l	0.50	0.18



 Project Name:
 13-16 TO 13-30 BCD
 Lab Number:
 L1828167

 Project Number:
 13-16 TO 13-30 BCD
 Report Date:
 07/30/18

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C Analytical Date: 07/24/18 10:00

Analyst: PD

arameter	Result	Qualifier Units	RL RL	MDL
olatile Organics by GC/MS	- Westborough Lab	for sample(s):	03-05 Batch:	WG1138874-5
1,2-Dichlorobenzene	ND	ug/l	2.5	0.70
1,3-Dichlorobenzene	ND	ug/l	2.5	0.70
1,4-Dichlorobenzene	ND	ug/l	2.5	0.70
Methyl tert butyl ether	ND	ug/l	2.5	0.70
p/m-Xylene	ND	ug/l	2.5	0.70
o-Xylene	ND	ug/l	2.5	0.70
Xylenes, Total	ND	ug/l	2.5	0.70
cis-1,2-Dichloroethene	ND	ug/l	2.5	0.70
1,2-Dichloroethene, Total	ND	ug/l	2.5	0.70
Dibromomethane	ND	ug/l	5.0	1.0
1,2,3-Trichloropropane	ND	ug/l	2.5	0.70
Acrylonitrile	ND	ug/l	5.0	1.5
Styrene	ND	ug/l	2.5	0.70
Dichlorodifluoromethane	ND	ug/l	5.0	1.0
Acetone	ND	ug/l	5.0	1.5
Carbon disulfide	ND	ug/l	5.0	1.0
2-Butanone	ND	ug/l	5.0	1.9
Vinyl acetate	ND	ug/l	5.0	1.0
4-Methyl-2-pentanone	ND	ug/l	5.0	1.0
2-Hexanone	ND	ug/l	5.0	1.0
Bromochloromethane	ND	ug/l	2.5	0.70
2,2-Dichloropropane	ND	ug/l	2.5	0.70
1,2-Dibromoethane	ND	ug/l	2.0	0.65
1,3-Dichloropropane	ND	ug/l	2.5	0.70
1,1,1,2-Tetrachloroethane	ND	ug/l	2.5	0.70
Bromobenzene	ND	ug/l	2.5	0.70
n-Butylbenzene	ND	ug/l	2.5	0.70
sec-Butylbenzene	ND	ug/l	2.5	0.70
tert-Butylbenzene	ND	ug/l	2.5	0.70



Project Name: 13-16 TO 13-30 BCD
Project Number: 13-16 TO 13-30 BCD

Lab Number: L1828167 **Report Date:** 07/30/18

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C Analytical Date: 07/24/18 10:00

Analyst: PD

arameter	Result	Qualifier Units	s RL	MDL
olatile Organics by GC/MS - V	Vestborough Lab	for sample(s):	03-05 Batch:	WG1138874-5
o-Chlorotoluene	ND	ug/l	2.5	0.70
p-Chlorotoluene	ND	ug/l	2.5	0.70
1,2-Dibromo-3-chloropropane	ND	ug/l	2.5	0.70
Hexachlorobutadiene	ND	ug/l	2.5	0.70
Isopropylbenzene	ND	ug/l	2.5	0.70
p-Isopropyltoluene	ND	ug/l	2.5	0.70
Naphthalene	ND	ug/l	2.5	0.70
n-Propylbenzene	ND	ug/l	2.5	0.70
1,2,3-Trichlorobenzene	ND	ug/l	2.5	0.70
1,2,4-Trichlorobenzene	ND	ug/l	2.5	0.70
1,3,5-Trimethylbenzene	ND	ug/l	2.5	0.70
1,2,4-Trimethylbenzene	ND	ug/l	2.5	0.70
1,4-Dioxane	ND	ug/l	250	61.
p-Diethylbenzene	ND	ug/l	2.0	0.70
p-Ethyltoluene	ND	ug/l	2.0	0.70
1,2,4,5-Tetramethylbenzene	ND	ug/l	2.0	0.54
Ethyl ether	ND	ug/l	2.5	0.70
trans-1,4-Dichloro-2-butene	ND	ug/l	2.5	0.70

Tentatively Identified Compounds

No Tentatively Identified Compounds

ND

ug/l



 Project Name:
 13-16 TO 13-30 BCD
 Lab Number:
 L1828167

Project Number: 13-16 TO 13-30 BCD **Report Date:** 07/30/18

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C Analytical Date: 07/24/18 10:00

Analyst: PD

Parameter	Result	Qualifier	Units		RL	MDL	
Volatile Organics by GC/MS - West	borough La	b for sampl	e(s):	03-05	Batch:	WG1138874-5	

		Acceptance	
Surrogate	%Recovery Qua	lifier Criteria	
1,2-Dichloroethane-d4	115	70-130	
Toluene-d8	95	70-130	
4-Bromofluorobenzene	109	70-130	
Dibromofluoromethane	111	70-130	



Lab Control Sample Analysis Batch Quality Control

 Project Name:
 13-16 TO 13-30 BCD

 Project Number:
 13-16 TO 13-30 BCD

Lab Number:

L1828167

Report Date:

07/30/18

arameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	RPD Qual Limits
platile Organics by GC/MS - Westboro	ough Lab Associated sar	nple(s): 01	I-02 Batch: V	VG1138866-3	WG1138866-4		
Methylene chloride	99		101		70-130	2	30
1,1-Dichloroethane	110		110		70-130	0	30
Chloroform	111		110		70-130	1	30
Carbon tetrachloride	123		122		70-130	1	30
1,2-Dichloropropane	105		106		70-130	1	30
Dibromochloromethane	104		107		70-130	3	30
1,1,2-Trichloroethane	95		101		70-130	6	30
Tetrachloroethene	121		116		70-130	4	30
Chlorobenzene	109		109		70-130	0	30
Trichlorofluoromethane	118		115		70-139	3	30
1,2-Dichloroethane	102		106		70-130	4	30
1,1,1-Trichloroethane	119		117		70-130	2	30
Bromodichloromethane	110		112		70-130	2	30
trans-1,3-Dichloropropene	94		97		70-130	3	30
cis-1,3-Dichloropropene	107		108		70-130	1	30
1,1-Dichloropropene	113		110		70-130	3	30
Bromoform	93		97		70-130	4	30
1,1,2,2-Tetrachloroethane	90		93		70-130	3	30
Benzene	110		108		70-130	2	30
Toluene	106		104		70-130	2	30
Ethylbenzene	102		100		70-130	2	30
Chloromethane	111		106		52-130	5	30
Bromomethane	165	Q	162	Q	57-147	2	30



Lab Control Sample Analysis Batch Quality Control

Project Name: 13-16 TO 13-30 BCD Project Number: 13-16 TO 13-30 BCD Lab Number:

L1828167

Report Date:

07/30/18

rameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	RPD Qual Limits	
atile Organics by GC/MS - Westbor	ough Lab Associated	sample(s):	01-02 Batch: \	WG1138866-3	WG1138866-4			
Vinyl chloride	116		117		67-130	1	30	
Chloroethane	118		117		50-151	1	30	
1,1-Dichloroethene	114		109		65-135	4	30	
trans-1,2-Dichloroethene	114		112		70-130	2	30	
Trichloroethene	120		116		70-130	3	30	
1,2-Dichlorobenzene	109		107		70-130	2	30	
1,3-Dichlorobenzene	115		108		70-130	6	30	
1,4-Dichlorobenzene	114		108		70-130	5	30	
Methyl tert butyl ether	93		98		66-130	5	30	
p/m-Xylene	107		105		70-130	2	30	
o-Xylene	104		102		70-130	2	30	
cis-1,2-Dichloroethene	112		109		70-130	3	30	
Dibromomethane	102		109		70-130	7	30	
Styrene	98		98		70-130	0	30	
Dichlorodifluoromethane	121		110		30-146	10	30	
Acetone	102		115		54-140	12	30	
Carbon disulfide	103		101		59-130	2	30	
2-Butanone	97		111		70-130	13	30	
Vinyl acetate	99		107		70-130	8	30	
4-Methyl-2-pentanone	72		78		70-130	8	30	
1,2,3-Trichloropropane	87		89		68-130	2	30	
2-Hexanone	79		88		70-130	11	30	
Bromochloromethane	121		123		70-130	2	30	



L1828167

Lab Control Sample Analysis Batch Quality Control

 Project Name:
 13-16 TO 13-30 BCD

 Project Number:
 13-16 TO 13-30 BCD

Papart Data

Report Date: 07/30/18

Lab Number:

Parameter	LCS %Recovery	Qual 9	LCSD %Recovery	Qual	%Recovery Limits	RPD	RPD Limits
Volatile Organics by GC/MS - Westborou	ugh Lab Associated sa	mple(s): 01-0	02 Batch: \	WG1138866-3	WG1138866-4		
2,2-Dichloropropane	113		111		70-130	2	30
1,2-Dibromoethane	99		104		70-130	5	30
1,3-Dichloropropane	92		98		69-130	6	30
1,1,1,2-Tetrachloroethane	107		109		70-130	2	30
Bromobenzene	110		105		70-130	5	30
n-Butylbenzene	108		101		70-130	7	30
sec-Butylbenzene	109		100		70-130	9	30
tert-Butylbenzene	109		100		70-130	9	30
o-Chlorotoluene	103		96		70-130	7	30
p-Chlorotoluene	100		94		70-130	6	30
1,2-Dibromo-3-chloropropane	84		89		68-130	6	30
Hexachlorobutadiene	123		116		67-130	6	30
Isopropylbenzene	104		97		70-130	7	30
p-Isopropyltoluene	111		103		70-130	7	30
Naphthalene	93		95		70-130	2	30
Acrylonitrile	91		98		70-130	7	30
n-Propylbenzene	104		97		70-130	7	30
1,2,3-Trichlorobenzene	107		106		70-130	1	30
1,2,4-Trichlorobenzene	115		112		70-130	3	30
1,3,5-Trimethylbenzene	104		97		70-130	7	30
1,2,4-Trimethylbenzene	105		98		70-130	7	30
1,4-Dioxane	89		94		65-136	5	30
p-Diethylbenzene	111		104		70-130	7	30



 Project Name:
 13-16 TO 13-30 BCD

 Project Number:
 13-16 TO 13-30 BCD

Lab Number:

L1828167

Report Date:

07/30/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery		%Recovery Limits	RPD	Qual	RPD Limits	
Volatile Organics by GC/MS - Westborough L	ab Associated	sample(s):	01-02 Batch:	WG1138866-3	WG1138866-4				
p-Ethyltoluene	106		99		70-130	7		30	
1,2,4,5-Tetramethylbenzene	103		98		70-130	5		30	
Ethyl ether	101		102		67-130	1		30	
trans-1,4-Dichloro-2-butene	87		90		70-130	3		30	

	LCS	LCSD	Acceptance
Surrogate	%Recovery Qua	l %Recovery Qual	Criteria
1,2-Dichloroethane-d4	89	92	70-130
Toluene-d8	95	94	70-130
4-Bromofluorobenzene	86	84	70-130
Dibromofluoromethane	106	107	70-130



 Project Name:
 13-16 TO 13-30 BCD

 Project Number:
 13-16 TO 13-30 BCD

Lab Number:

L1828167

Report Date:

07/30/18

arameter	LCS %Recovery	Qual	LCSD %Recover	y Qual	%Recovery Limits	RPD	Qual	RPD Limits
olatile Organics by GC/MS - Westborough	Lab Associated	sample(s):	03-05 Batch	WG1138874-3	WG1138874-4			
Methylene chloride	120		110		70-130	9		20
1,1-Dichloroethane	110		100		70-130	10		20
Chloroform	110		110		70-130	0		20
Carbon tetrachloride	100		100		63-132	0		20
1,2-Dichloropropane	110		100		70-130	10		20
Dibromochloromethane	86		87		63-130	1		20
1,1,2-Trichloroethane	98		95		70-130	3		20
Tetrachloroethene	77		76		70-130	1		20
Chlorobenzene	87		86		75-130	1		20
Trichlorofluoromethane	96		91		62-150	5		20
1,2-Dichloroethane	120		110		70-130	9		20
1,1,1-Trichloroethane	110		100		67-130	10		20
Bromodichloromethane	120		120		67-130	0		20
trans-1,3-Dichloropropene	91		90		70-130	1		20
cis-1,3-Dichloropropene	110		110		70-130	0		20
1,1-Dichloropropene	100		100		70-130	0		20
Bromoform	83		83		54-136	0		20
1,1,2,2-Tetrachloroethane	100		100		67-130	0		20
Benzene	110		110		70-130	0		20
Toluene	85		84		70-130	1		20
Ethylbenzene	91		90		70-130	1		20
Chloromethane	110		110		64-130	0		20
Bromomethane	110		110		39-139	0		20



07/30/18

Lab Control Sample Analysis Batch Quality Control

Project Name: 13-16 TO 13-30 BCD

Lab Number: L1828167

Report Date:

Project Number:	13-16 TO 13-30 BCD

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	RPD Qual Limits
olatile Organics by GC/MS - Westboroug	h Lab Associated	sample(s):	03-05 Batch: W	VG1138874-3	3 WG1138874-4		
Vinyl chloride	100		99		55-140	1	20
Chloroethane	110		100		55-138	10	20
1,1-Dichloroethene	100		96		61-145	4	20
trans-1,2-Dichloroethene	110		100		70-130	10	20
Trichloroethene	110		110		70-130	0	20
1,2-Dichlorobenzene	85		83		70-130	2	20
1,3-Dichlorobenzene	83		81		70-130	2	20
1,4-Dichlorobenzene	83		82		70-130	1	20
Methyl tert butyl ether	120		120		63-130	0	20
p/m-Xylene	90		90		70-130	0	20
o-Xylene	95		95		70-130	0	20
cis-1,2-Dichloroethene	110		110		70-130	0	20
Dibromomethane	120		120		70-130	0	20
1,2,3-Trichloropropane	96		97		64-130	1	20
Acrylonitrile	140	Q	140	Q	70-130	0	20
Styrene	100		100		70-130	0	20
Dichlorodifluoromethane	93		92		36-147	1	20
Acetone	130		130		58-148	0	20
Carbon disulfide	110		110		51-130	0	20
2-Butanone	160	Q	160	Q	63-138	0	20
Vinyl acetate	130		130		70-130	0	20
4-Methyl-2-pentanone	100		100		59-130	0	20
2-Hexanone	110		120		57-130	9	20



Project Name: 13-16 TO 13-30 BCD

Project Number: 13-16 TO 13-30 BCD

Lab Number: L1828167

Report Date: 07/30/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	RPD Qual Limits
Volatile Organics by GC/MS - Westboro	ugh Lab Associated	sample(s):	03-05 Batch: V	VG1138874-	-3 WG1138874-4		
Bromochloromethane	110		110		70-130	0	20
2,2-Dichloropropane	110		100		63-133	10	20
1,2-Dibromoethane	92		94		70-130	2	20
1,3-Dichloropropane	94		93		70-130	1	20
1,1,1,2-Tetrachloroethane	84		82		64-130	2	20
Bromobenzene	78		76		70-130	3	20
n-Butylbenzene	90		88		53-136	2	20
sec-Butylbenzene	86		83		70-130	4	20
tert-Butylbenzene	82		80		70-130	2	20
o-Chlorotoluene	88		86		70-130	2	20
p-Chlorotoluene	90		86		70-130	5	20
1,2-Dibromo-3-chloropropane	85		89		41-144	5	20
Hexachlorobutadiene	100		99		63-130	1	20
Isopropylbenzene	86		84		70-130	2	20
p-Isopropyltoluene	83		82		70-130	1	20
Naphthalene	150	Q	160	Q	70-130	6	20
n-Propylbenzene	89		86		69-130	3	20
1,2,3-Trichlorobenzene	240	Q	250	Q	70-130	4	20
1,2,4-Trichlorobenzene	110		100		70-130	10	20
1,3,5-Trimethylbenzene	88		86		64-130	2	20
1,2,4-Trimethylbenzene	92		89		70-130	3	20
1,4-Dioxane	146		156		56-162	7	20
p-Diethylbenzene	87		85		70-130	2	20



 Project Name:
 13-16 TO 13-30 BCD

 Project Number:
 13-16 TO 13-30 BCD

Lab Number:

L1828167

Report Date:

07/30/18

Parameter	LCS %Recovery	Qual	LCS %Reco	_	Qual	%Recovery Limits	RPD	Qual	RPD Limits	
Volatile Organics by GC/MS - Westborough La	ab Associated	sample(s):	03-05 Ba	atch:	WG1138874-3	WG1138874-4				
p-Ethyltoluene	88		8	86		70-130	2		20	
1,2,4,5-Tetramethylbenzene	90		9	00		70-130	0		20	
Ethyl ether	120		12	20		59-134	0		20	
trans-1,4-Dichloro-2-butene	89		9	00		70-130	1		20	

	LCS	LCSD	Acceptance	
Surrogate	%Recovery Qual	%Recovery Qual	Criteria	
1,2-Dichloroethane-d4	110	112	70-130	
Toluene-d8	90	90	70-130	
4-Bromofluorobenzene	109	109	70-130	
Dibromofluoromethane	110	109	70-130	



SEMIVOLATILES



L1828167

07/23/18 10:45

Project Name: 13-16 TO 13-30 BCD

Project Number: 13-16 TO 13-30 BCD

SAMPLE RESULTS

Report Date: 07/30/18

Lab Number:

Date Collected:

Lab ID: L1828167-01

Client ID: SB-1 (0-2)

Sample Location: 13-16 TO 13-30 BEACH CHANNEL DRIVE Date Received: 07/23/18 Field Prep: Not Specified

Sample Depth:

Matrix: Soil Analytical Method: 1,8270D Analytical Date: 07/25/18 04:53

Analyst: PS 91% Percent Solids:

Extraction Method: EPA 3546 **Extraction Date:** 07/24/18 09:28

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	
Semivolatile Organics by GC/MS -	Westborough Lab						
Acenaphthene	ND		ug/kg	140	19.	1	
1,2,4-Trichlorobenzene	ND		ug/kg	180	20.	1	
Hexachlorobenzene	ND		ug/kg	110	20.	1	
Bis(2-chloroethyl)ether	ND		ug/kg	160	24.	1	
2-Chloronaphthalene	ND		ug/kg	180	18.	1	
1,2-Dichlorobenzene	ND		ug/kg	180	32.	1	
1,3-Dichlorobenzene	ND		ug/kg	180	31.	1	
1,4-Dichlorobenzene	ND		ug/kg	180	31.	1	
3,3'-Dichlorobenzidine	ND		ug/kg	180	48.	1	
2,4-Dinitrotoluene	ND		ug/kg	180	36.	1	
2,6-Dinitrotoluene	ND		ug/kg	180	31.	1	
Fluoranthene	34	J	ug/kg	110	21.	1	
4-Chlorophenyl phenyl ether	ND		ug/kg	180	19.	1	
4-Bromophenyl phenyl ether	ND		ug/kg	180	27.	1	
Bis(2-chloroisopropyl)ether	ND		ug/kg	220	31.	1	
Bis(2-chloroethoxy)methane	ND		ug/kg	190	18.	1	
Hexachlorobutadiene	ND		ug/kg	180	26.	1	
Hexachlorocyclopentadiene	ND		ug/kg	510	160	1	
Hexachloroethane	ND		ug/kg	140	29.	1	
Isophorone	ND		ug/kg	160	23.	1	
Naphthalene	ND		ug/kg	180	22.	1	
Nitrobenzene	ND		ug/kg	160	27.	1	
NDPA/DPA	ND		ug/kg	140	20.	1	
n-Nitrosodi-n-propylamine	ND		ug/kg	180	28.	1	
Bis(2-ethylhexyl)phthalate	ND		ug/kg	180	62.	1	
Butyl benzyl phthalate	ND		ug/kg	180	45.	1	
Di-n-butylphthalate	ND		ug/kg	180	34.	1	
Di-n-octylphthalate	ND		ug/kg	180	61.	1	



Project Name: Lab Number: 13-16 TO 13-30 BCD L1828167

Project Number: Report Date: 13-16 TO 13-30 BCD 07/30/18

SAMPLE RESULTS

Lab ID: L1828167-01 Date Collected: 07/23/18 10:45

Client ID: Date Received: 07/23/18 SB-1 (0-2) Sample Location: 13-16 TO 13-30 BEACH CHANNEL DRIVE Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS -	Westborough Lab					
Piothed ability along	ND		,	400	47	4
Diethyl phthalate	ND ND		ug/kg	180	17.	1
Dimethyl phthalate			ug/kg	180	38.	1
Benzo(a)anthracene	22	J	ug/kg	110	20.	1
Benzo(a)pyrene	ND		ug/kg	140	44.	1
Benzo(b)fluoranthene	31	J	ug/kg	110	30.	1
Benzo(k)fluoranthene	ND		ug/kg	110	29.	1
Chrysene	23	J	ug/kg	110	19.	1
Acenaphthylene	ND		ug/kg	140	28.	1
Anthracene	ND		ug/kg	110	35.	1
Benzo(ghi)perylene	ND		ug/kg	140	21.	1
Fluorene	ND		ug/kg	180	18.	1
Phenanthrene	30	J	ug/kg	110	22.	1
Dibenzo(a,h)anthracene	ND		ug/kg	110	21.	1
Indeno(1,2,3-cd)pyrene	ND		ug/kg	140	25.	1
Pyrene	36	J	ug/kg	110	18.	1
Biphenyl	ND		ug/kg	410	42.	1
4-Chloroaniline	ND		ug/kg	180	33.	1
2-Nitroaniline	ND		ug/kg	180	35.	1
3-Nitroaniline	ND		ug/kg	180	34.	1
4-Nitroaniline	ND		ug/kg	180	74.	1
Dibenzofuran	ND		ug/kg	180	17.	1
2-Methylnaphthalene	ND		ug/kg	220	22.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	180	19.	1
Acetophenone	ND		ug/kg	180	22.	1
2,4,6-Trichlorophenol	ND		ug/kg	110	34.	1
p-Chloro-m-cresol	ND		ug/kg	180	27.	1
2-Chlorophenol	ND		ug/kg	180	21.	1
2,4-Dichlorophenol	ND		ug/kg	160	29.	1
2,4-Dimethylphenol	ND		ug/kg	180	59.	1
2-Nitrophenol	ND		ug/kg	390	68.	1
4-Nitrophenol	ND		ug/kg	250	73.	1
2,4-Dinitrophenol	ND		ug/kg	860	84.	1
4,6-Dinitro-o-cresol	ND		ug/kg	470	86.	1
Pentachlorophenol	ND		ug/kg	140	40.	1
Phenol	ND		ug/kg	180	27.	1
2-Methylphenol	ND		ug/kg	180	28.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	260	28.	1



Project Name: Lab Number: 13-16 TO 13-30 BCD L1828167

Project Number: Report Date: 13-16 TO 13-30 BCD 07/30/18

SAMPLE RESULTS

Lab ID: L1828167-01 Date Collected: 07/23/18 10:45

Client ID: Date Received: 07/23/18 SB-1 (0-2)

Sample Location: 13-16 TO 13-30 BEACH CHANNEL DRIVE Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/M	S - Westborough Lab					
2,4,5-Trichlorophenol	ND		ug/kg	180	34.	1
Benzoic Acid	ND		ug/kg	580	180	1
Benzyl Alcohol	ND		ug/kg	180	55.	1
Carbazole	ND		ua/ka	180	18.	1

Surrogate	% Recovery	Acceptance Qualifier Criteria	
2-Fluorophenol	84	25-120	
Phenol-d6	88	10-120	
Nitrobenzene-d5	84	23-120	
2-Fluorobiphenyl	82	30-120	
2,4,6-Tribromophenol	86	10-136	
4-Terphenyl-d14	67	18-120	



L1828167

Lab Number:

Project Name: 13-16 TO 13-30 BCD

Report Date: **Project Number:** 13-16 TO 13-30 BCD 07/30/18

SAMPLE RESULTS

Lab ID: L1828167-02 Date Collected: 07/23/18 09:15

Date Received: Client ID: 07/23/18 SB-2 (0-2) Sample Location: 13-16 TO 13-30 BEACH CHANNEL DRIVE Field Prep:

Not Specified

Sample Depth:

Extraction Method: EPA 3546 Matrix: Soil **Extraction Date:** 07/24/18 09:28

1,8270D Analytical Method: Analytical Date: 07/25/18 09:17

Analyst: PS 97% Percent Solids:

1,2,4-Trichlorobenzene ND ug/kg 170 19. 1	Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
1.2.4-Trichlorobenzene ND ug/kg 170 19. 1 Hexachlorobenzene ND ug/kg 100 19. 1 Bis(2-chloroethyl)ether ND ug/kg 150 23. 1 2-Chloronaphthalene ND ug/kg 170 17. 1 1.2-Dichlorobenzene ND ug/kg 170 29. 1 1.3-Dichlorobenzene ND ug/kg 170 29. 1 1.4-Dichlorobenzene ND ug/kg 170 29. 1 1.4-Dichlorobenzene ND ug/kg 170 29. 1 1.4-Dichlorobenzene ND ug/kg 170 34. 1 1.4-Dichlorobenzene ND ug/kg 170 34. 1 2.4-Dinktrotluene ND ug/kg 170 34. 1 2.6-Dinktrotluene ND ug/kg 170 18. 1 4-Chlorophenyl phenyl ether ND ug/kg 170	Semivolatile Organics by GC/MS - W	estborough Lab					
1.2.4-Trichlorobenzene ND ug/kg 170 19. 1 Hexachlorobenzene ND ug/kg 100 19. 1 Bis(2-chloroethyl)ether ND ug/kg 150 23. 1 2-Chloronaphthalene ND ug/kg 170 17. 1 1.2-Dichlorobenzene ND ug/kg 170 29. 1 1.3-Dichlorobenzene ND ug/kg 170 29. 1 1.4-Dichlorobenzene ND ug/kg 170 29. 1 1.4-Dichlorobenzene ND ug/kg 170 29. 1 1.4-Dichlorobenzene ND ug/kg 170 34. 1 1.4-Dichlorobenzene ND ug/kg 170 34. 1 2.4-Dinktrotluene ND ug/kg 170 34. 1 2.6-Dinktrotluene ND ug/kg 170 18. 1 4-Chlorophenyl phenyl ether ND ug/kg 170	Acenaphthene	ND		ug/kg	130	17.	1
ND	1,2,4-Trichlorobenzene	ND			170	19.	1
Bis(2-chloroethyl)ether ND ug/kg 150 23. 1 2-Chloronaphthalene ND ug/kg 170 17. 1 1 1 1 1 1 1 1 1	Hexachlorobenzene	ND			100	19.	1
1,2-Dichlorobenzene ND ug/kg 170 30. 1 1,3-Dichlorobenzene ND ug/kg 170 29. 1 1,4-Dichlorobenzene ND ug/kg 170 29. 1 3,3-Dichlorobenzidine ND ug/kg 170 45. 1 2,4-Dinitrotoluene ND ug/kg 170 34. 1 2,6-Dinitrotoluene ND ug/kg 170 29. 1 Fluoranthene 140 ug/kg 170 29. 1 Fluoranthene 140 ug/kg 170 18. 1 4-Chlorophenyl phenyl ether ND ug/kg 170 26. 1 4-Bromophenyl phenyl ether ND ug/kg 170 26. 1 Bis(2-chlorostoxyl)methane ND ug/kg 180 17. 1 Hexachlorostotadiene ND ug/kg 180 17. 1 Hexachlorocthane ND ug/kg 150	Bis(2-chloroethyl)ether	ND		ug/kg	150	23.	1
1,3-Dichlorobenzene ND ug/kg 170 29. 1 1,4-Dichlorobenzene ND ug/kg 170 29. 1 3,3*-Dichlorobenzidine ND ug/kg 170 45. 1 2,4-Dinitrotoluene ND ug/kg 170 34. 1 2,6-Dinitrotoluene ND ug/kg 170 29. 1 Fluoranthene 140 ug/kg 170 29. 1 4-Chiorophenyl phenyl ether ND ug/kg 100 19. 1 4-Bromophenyl phenyl ether ND ug/kg 170 26. 1 4-Broditrophenyl phenyl ether ND ug/kg 200 29. 1 Bis(2-chloroistopropyl)ether ND ug/kg 180 17. 1 Hexachlorobutadiene ND ug/kg 180 17. 1 Hexachloroethane ND ug/kg 150 27. 1 Isophorone ND ug/kg 150 <td>2-Chloronaphthalene</td> <td>ND</td> <td></td> <td>ug/kg</td> <td>170</td> <td>17.</td> <td>1</td>	2-Chloronaphthalene	ND		ug/kg	170	17.	1
1.4-Dichlorobenzene ND ug/kg 170 29. 1 3.3-Dichlorobenzidine ND ug/kg 170 45. 1 2.4-Dinitrotoluene ND ug/kg 170 34. 1 2.6-Dinitrotoluene ND ug/kg 170 29. 1 Fluoranthene 140 ug/kg 100 19. 1 4-Chlorophenyl phenyl ether ND ug/kg 170 18. 1 4-Bromophenyl phenyl ether ND ug/kg 170 26. 1 Bis(2-chloroisopropyl)ether ND ug/kg 200 29. 1 Bis(2-chloroisopropyl)ether ND ug/kg 180 17. 1 Hexachlorobutadiene ND ug/kg 180 17. 1 Hexachlorocyclopentadiene ND ug/kg 480 150 1 Hexachlorocyclopentadiene ND ug/kg 130 27. 1 Isophorone ND ug/kg	1,2-Dichlorobenzene	ND		ug/kg	170	30.	1
ND	1,3-Dichlorobenzene	ND		ug/kg	170	29.	1
2,4-Dinitrotoluene ND ug/kg 170 34. 1 2,6-Dinitrotoluene ND ug/kg 170 29. 1 Fluoranthene 140 ug/kg 100 19. 1 4-Chlorophenyl phenyl ether ND ug/kg 170 18. 1 4-Bromophenyl phenyl ether ND ug/kg 170 26. 1 8is(2-chloroisopropyl)ether ND ug/kg 200 29. 1 Bis(2-chloroisopropyl)ether ND ug/kg 180 17. 1 Hexachlorobutadiene ND ug/kg 170 24. 1 Hexachlorocyclopentadiene ND ug/kg 480 150 1 Hexachlorocyclopentadiene ND ug/kg 130 27. 1 Isophorone ND ug/kg 150 22. 1 Naphthalene 20 J ug/kg 150 25. 1 NItrobenzene ND ug/kg	1,4-Dichlorobenzene	ND		ug/kg	170	29.	1
2,6-Dinitrotoluene ND ug/kg 170 29. 1 Fluoranthene 140 ug/kg 100 19. 1 4-Chlorophenyl phenyl ether ND ug/kg 170 18. 1 4-Bromophenyl phenyl ether ND ug/kg 170 26. 1 Bis(2-chlorostopropyl)ether ND ug/kg 200 29. 1 Bis(2-chlorostopropyl)ether ND ug/kg 180 17. 1 Hexachlorobutadiene ND ug/kg 170 24. 1 Hexachlorocyclopentadiene ND ug/kg 170 24. 1 Hexachlorocyclopentadiene ND ug/kg 180 150 1 Hexachlorocyclopentadiene ND ug/kg 180 27. 1 Isophorone ND ug/kg 130 27. 1 Isophorone ND ug/kg 150 22. 1 Naphthalene 20 J ug/kg 170 20. 1 Nitrobenzene ND ug/kg 150 25. 1 NItrobenzene ND ug/kg 150 25. 1 NDPA/DPA ND ug/kg 130 19. 1 NDPA/DPA ND ug/kg 170 26. 1 Bis(2-ethylhexyl)phthalate ND ug/kg 170 58. 1 Butyl benzyl phthalate ND ug/kg 170 42. 1 Butyl benzyl phthalate ND ug/kg 170 42. 1 Butyl benzyl phthalate ND ug/kg 170 42. 1 Din-ributylphthalate ND ug/kg 170 42. 1	3,3'-Dichlorobenzidine	ND		ug/kg	170	45.	1
Fluoranthene 140 ug/kg 100 19. 1 4-Chlorophenyl phenyl ether ND ug/kg 170 18. 1 4-Bromophenyl phenyl ether ND ug/kg 170 26. 1 Bis(2-chloroisopropyl)ether ND ug/kg 200 29. 1 Bis(2-chloroethoxy)methane ND ug/kg 180 17. 1 Hexachlorobutadiene ND ug/kg 170 24. 1 Hexachlorocyclopentadiene ND ug/kg 170 24. 1 Hexachlorocyclopentadiene ND ug/kg 150 10. 1 Hexachlorocyclopentadiene ND ug/kg 150 27. 1 Isophorone ND ug/kg 150 22. 1 Naphthalene 20 J ug/kg 170 20. 1 Nitrobenzene ND ug/kg 150 25. 1 NDPA/DPA ND ug/kg 150 25. 1 NDPA/DPA ND ug/kg 170 26. 1 Sis(2-ethylhexyl)phthalate ND ug/kg 170 58. 1 Butyl benzyl phthalate ND ug/kg 170 42. 1 Suphrbhalate ND ug/kg 170 42. 1	2,4-Dinitrotoluene	ND		ug/kg	170	34.	1
4-Chlorophenyl phenyl ether ND ug/kg 170 18. 1 4-Bromophenyl phenyl ether ND ug/kg 170 26. 1 Bis(2-chloroisopropyl)ether ND ug/kg 200 29. 1 Bis(2-chloroethoxy)methane ND ug/kg 180 17. 1 Hexachlorobutadiene ND ug/kg 170 24. 1 Hexachlorocyclopentadiene ND ug/kg 480 150 1 Hexachlorocyclopentadiene ND ug/kg 130 27. 1 Isophorone ND ug/kg 150 22. 1 Naphthalene 20 J ug/kg 150 22. 1 Naphthalene ND ug/kg 150 25. 1 NDPA/DPA ND ug/kg 170 26. 1 Sis(2-chloroethane) ND ug/kg 170 26. 1 Bis(2-chloroethane) ND ug/kg 170 26. 1 Bis(2-chloroethane) ND ug/kg 170 26. 1 Bis(2-chloroethane) ND ug/kg 170 58. 1 Butyl benzyl phthalate ND ug/kg 170 42. 1 Di-n-butylphthalate ND ug/kg 170 42. 1	2,6-Dinitrotoluene	ND		ug/kg	170	29.	1
4-Bromophenyl phenyl ether	Fluoranthene	140		ug/kg	100	19.	1
Bis(2-chloroisopropyl)ether ND ug/kg 200 29. 1 Bis(2-chloroethoxy)methane ND ug/kg 180 17. 1 Hexachlorobutadiene ND ug/kg 170 24. 1 Hexachlorocyclopentadiene ND ug/kg 480 150 1 Hexachlorocyclopentadiene ND ug/kg 130 27. 1 Hexachlorocyclopentadiene ND ug/kg 150 27. 1 Hexachlorocyclopentadiene ND ug/kg 150 27. 1 Isophorone ND ug/kg 150 22. 1 Isophorone ND ug/kg 170 20. 1 Naphthalene 20 Jug/kg 170 20. 1 NICophylopene ND ug/kg 150 25. 1 NDAPA/DPA ND ug/kg 170 26. 1 ND ug/kg 170 58. 1	4-Chlorophenyl phenyl ether	ND		ug/kg	170	18.	1
Bis(2-chloroethoxy)methane ND ug/kg 180 17. 1 Hexachlorobutadiene ND ug/kg 170 24. 1 Hexachlorocyclopentadiene ND ug/kg 480 150 1 Hexachlorocyclopentadiene ND ug/kg 130 27. 1 Hexachlorocyclopentadiene ND ug/kg 150 22. 1 Hexachlorocyclopentadiene ND ug/kg 150 27. 1 Isophorone ND ug/kg 150 22. 1 Naphthalene 20 J ug/kg 170 20. 1 Nitrobenzene ND ug/kg 150 25. 1 NDPA/DPA ND ug/kg 130 19. 1 n-Nitrosodi-n-propylamine ND ug/kg 170 26. 1 Bis(2-ethylhexyl)phthalate ND ug/kg 170 58. 1 Butyl benzyl phthalate ND ug/kg 170	4-Bromophenyl phenyl ether	ND		ug/kg	170	26.	1
Hexachlorobutadiene ND ug/kg 170 24. 1 Hexachlorocyclopentadiene ND ug/kg 480 150 1 Hexachloroethane ND ug/kg 130 27. 1 Isophorone ND ug/kg 150 22. 1 Naphthalene 20 J ug/kg 170 20. 1 Nitrobenzene ND ug/kg 150 25. 1 NDPA/DPA ND ug/kg 130 19. 1 n-Nitrosodi-n-propylamine ND ug/kg 170 26. 1 Bis(2-ethylhexyl)phthalate ND ug/kg 170 58. 1 Butyl benzyl phthalate ND ug/kg 170 42. 1 Di-n-butylphthalate ND ug/kg 170 32. 1	Bis(2-chloroisopropyl)ether	ND		ug/kg	200	29.	1
Hexachlorocyclopentadiene ND ug/kg 480 150 1 Hexachlorocyclopentadiene ND ug/kg 130 27. 1 Isophorone ND ug/kg 150 22. 1 Naphthalene 20 J ug/kg 170 20. 1 Nitrobenzene ND ug/kg 150 25. 1 NDPA/DPA ND ug/kg 130 19. 1 n-Nitrosodi-n-propylamine ND ug/kg 170 26. 1 Bis(2-ethylhexyl)phthalate ND ug/kg 170 58. 1 Butyl benzyl phthalate ND ug/kg 170 42. 1 Di-n-butylphthalate ND ug/kg 170 32. 1	Bis(2-chloroethoxy)methane	ND		ug/kg	180	17.	1
Hexachloroethane ND ug/kg 130 27. 1 Isophorone ND ug/kg 150 22. 1 Naphthalene 20 J ug/kg 170 20. 1 Nitrobenzene ND ug/kg 150 25. 1 NDPA/DPA ND ug/kg 130 19. 1 n-Nitrosodi-n-propylamine ND ug/kg 170 26. 1 Bis(2-ethylhexyl)phthalate ND ug/kg 170 58. 1 Butyl benzyl phthalate ND ug/kg 170 42. 1 Di-n-butylphthalate ND ug/kg 170 32. 1	Hexachlorobutadiene	ND		ug/kg	170	24.	1
Sophorone ND Ug/kg 150 22. 1	Hexachlorocyclopentadiene	ND		ug/kg	480	150	1
Naphthalene 20 J ug/kg 170 20. 1 Nitrobenzene ND ug/kg 150 25. 1 NDPA/DPA ND ug/kg 130 19. 1 n-Nitrosodi-n-propylamine ND ug/kg 170 26. 1 Bis(2-ethylhexyl)phthalate ND ug/kg 170 58. 1 Butyl benzyl phthalate ND ug/kg 170 42. 1 Di-n-butylphthalate ND ug/kg 170 32. 1	Hexachloroethane	ND		ug/kg	130	27.	1
Nitrobenzene ND ug/kg 150 25. 1 NDPA/DPA ND ug/kg 130 19. 1 n-Nitrosodi-n-propylamine ND ug/kg 170 26. 1 Bis(2-ethylhexyl)phthalate ND ug/kg 170 58. 1 Butyl benzyl phthalate ND ug/kg 170 42. 1 Di-n-butylphthalate ND ug/kg 170 32. 1	Isophorone	ND		ug/kg	150	22.	1
NDPA/DPA ND ug/kg 130 19. 1 n-Nitrosodi-n-propylamine ND ug/kg 170 26. 1 Bis(2-ethylhexyl)phthalate ND ug/kg 170 58. 1 Butyl benzyl phthalate ND ug/kg 170 42. 1 Di-n-butylphthalate ND ug/kg 170 32. 1	Naphthalene	20	J	ug/kg	170	20.	1
n-Nitrosodi-n-propylamine ND ug/kg 170 26. 1 Bis(2-ethylhexyl)phthalate ND ug/kg 170 58. 1 Butyl benzyl phthalate ND ug/kg 170 42. 1 Di-n-butylphthalate ND ug/kg 170 32. 1	Nitrobenzene	ND		ug/kg	150	25.	1
Bis(2-ethylhexyl)phthalate ND ug/kg 170 58. 1 Butyl benzyl phthalate ND ug/kg 170 42. 1 Di-n-butylphthalate ND ug/kg 170 32. 1	NDPA/DPA	ND		ug/kg	130	19.	1
Butyl benzyl phthalate ND ug/kg 170 42. 1 Di-n-butylphthalate ND ug/kg 170 32. 1	n-Nitrosodi-n-propylamine	ND		ug/kg	170	26.	1
Di-n-butylphthalate ND ug/kg 170 32. 1	Bis(2-ethylhexyl)phthalate	ND		ug/kg	170	58.	1
71	Butyl benzyl phthalate	ND		ug/kg	170	42.	1
Di-n-octylphthalate ND ug/kg 170 57. 1	Di-n-butylphthalate	ND		ug/kg	170	32.	1
	Di-n-octylphthalate	ND		ug/kg	170	57.	1



Project Name: 13-16 TO 13-30 BCD **Lab Number:** L1828167

Project Number: 13-16 TO 13-30 BCD **Report Date:** 07/30/18

SAMPLE RESULTS

Lab ID: L1828167-02 Date Collected: 07/23/18 09:15

Client ID: SB-2 (0-2) Date Received: 07/23/18

Sample Location: 13-16 TO 13-30 BEACH CHANNEL DRIVE Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - We	estborough Lab					
Diethyl phthalate	ND		ug/kg	170	16.	1
Dimethyl phthalate	ND		ug/kg	170	35.	1
Benzo(a)anthracene	110		ug/kg	100	19.	1
Benzo(a)pyrene	88	J	ug/kg	130	41.	1
Benzo(b)fluoranthene	110		ug/kg	100	28.	1
Benzo(k)fluoranthene	39	J	ug/kg	100	27.	1
Chrysene	100		ug/kg	100	17.	1
Acenaphthylene	ND		ug/kg	130	26.	1
Anthracene	ND		ug/kg	100	33.	1
Benzo(ghi)perylene	56	J	ug/kg	130	20.	1
Fluorene	ND		ug/kg	170	16.	1
Phenanthrene	78	J	ug/kg	100	20.	1
Dibenzo(a,h)anthracene	ND		ug/kg	100	19.	1
Indeno(1,2,3-cd)pyrene	55	J	ug/kg	130	23.	1
Pyrene	180		ug/kg	100	17.	1
Biphenyl	ND		ug/kg	380	39.	1
4-Chloroaniline	ND		ug/kg	170	30.	1
2-Nitroaniline	ND		ug/kg	170	32.	1
3-Nitroaniline	ND		ug/kg	170	32.	1
4-Nitroaniline	ND		ug/kg	170	70.	1
Dibenzofuran	ND		ug/kg	170	16.	1
2-Methylnaphthalene	ND		ug/kg	200	20.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	170	18.	1
Acetophenone	ND		ug/kg	170	21.	1
2,4,6-Trichlorophenol	ND		ug/kg	100	32.	1
p-Chloro-m-cresol	ND		ug/kg	170	25.	1
2-Chlorophenol	ND		ug/kg	170	20.	1
2,4-Dichlorophenol	ND		ug/kg	150	27.	1
2,4-Dimethylphenol	ND		ug/kg	170	55.	1
2-Nitrophenol	ND		ug/kg	360	63.	1
4-Nitrophenol	ND		ug/kg	240	68.	1
2,4-Dinitrophenol	ND		ug/kg	800	78.	1
4,6-Dinitro-o-cresol	ND		ug/kg	440	80.	1
Pentachlorophenol	ND		ug/kg	130	37.	1
Phenol	ND		ug/kg	170	25.	1
2-Methylphenol	ND		ug/kg	170	26.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	240	26.	1



 Project Name:
 13-16 TO 13-30 BCD
 Lab Number:
 L1828167

Project Number: 13-16 TO 13-30 BCD **Report Date:** 07/30/18

SAMPLE RESULTS

Lab ID: L1828167-02 Date Collected: 07/23/18 09:15

Client ID: SB-2 (0-2) Date Received: 07/23/18
Sample Location: 13-16 TO 13-30 BEACH CHANNEL DRIVE Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/M	S - Westborough Lab					
2,4,5-Trichlorophenol	ND		ug/kg	170	32.	1
Benzoic Acid	ND		ug/kg	540	170	1
Benzyl Alcohol	ND		ug/kg	170	51.	1
Carbazole	ND		ua/ka	170	16.	1

Surrogate	% Recovery	Acceptance Qualifier Criteria
2-Fluorophenol	92	25-120
Phenol-d6	96	10-120
Nitrobenzene-d5	82	23-120
2-Fluorobiphenyl	92	30-120
2,4,6-Tribromophenol	100	10-136
4-Terphenyl-d14	82	18-120



Project Name: 13-16 TO 13-30 BCD **Lab Number:** L1828167

Project Number: 13-16 TO 13-30 BCD **Report Date:** 07/30/18

SAMPLE RESULTS

Lab ID: L1828167-03 Date Collected: 07/23/18 11:40

Client ID: TW-1 Date Received: 07/23/18

Sample Location: 13-16 TO 13-30 BEACH CHANNEL DRIVE Field Prep: Not Specified

Sample Depth:

Matrix: Water Extraction Method: EPA 3510C
Analytical Method: 1,8270D Extraction Date: 07/24/18 08:13

Analytical Date: 07/26/18 19:12

Analyst: SZ

Bis(2-chloroethyl)ether ND	Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Bis(2-chloroethyl)ether ND	Semivolatile Organics by GC/MS - V	Vestborough Lab					
Bis 2-chloroethry ether ND ug/l 2.0 0.50 1	1,2,4-Trichlorobenzene	ND		ug/l	5.0	0.50	1
1,2-Dichlorobenzene ND ug/l 2.0 0.45 1 1,3-Dichlorobenzene ND ug/l 2.0 0.40 1 1,4-Dichlorobenzene ND ug/l 2.0 0.43 1 3,3-Dichlorobenzidine ND ug/l 5.0 1.6 1 2,4-Dinitrotoluene ND ug/l 5.0 1.2 1 2,6-Dinitrotoluene ND ug/l 5.0 0.93 1 4-Chlorophenyl phenyl ether ND ug/l 2.0 0.49 1 4-Bromophenyl phenyl ether ND ug/l 2.0 0.53 1 4-Bis(2-chlorosporpyl)ether ND ug/l 2.0 0.53 1 Bis(2-chlorosporpyl)ether ND ug/l 2.0 0.53 1 Hexachlorocyclopentadiene ND ug/l 2.0 0.50 1 Hexachlorocyclopentadiene ND ug/l 2.0 0.77 1 Nitrobanzene ND ug/l	Bis(2-chloroethyl)ether	ND			2.0	0.50	1
1,4-Dichlorobenzene ND ug/l 2,0 0,43 1 3,3'-Dichlorobenzidine ND ug/l 5,0 1,6 1 1 2,4-Dinitrotoluene ND ug/l 5,0 1,2 1 1 2,4-Dinitrotoluene ND ug/l 5,0 0,93 1 1 2,5-Dinitrotoluene ND ug/l 5,0 0,93 1 1 2,5-Dinitrotoluene ND ug/l 2,0 0,49 1 2,5-Dinitrotoluene ND ug/l 2,0 0,49 1 2,5-Dinitrotoluene ND ug/l 2,0 0,48 1 2,5-Dinitrotoluene ND ug/l 2,0 0,38 1 2,5-Dinitrotoluene ND ug/l 2,0 0,53 1 2,5-Dinitrotoluente ND ug/l 2,0 0,69 1 2,5-Dinitrotoluente ND ug/l 2,0 0,69 1 2,5-Dinitrotoluente ND ug/l 2,0 0,69 1 2,5-Dinitrotoluente ND ug/l 2,0 0,42 1 2,5-Dinitrotoluente ND ug/l 2,0 0,42 1 2,5-Dinitrotoluente ND ug/l 2,0 0,42 1 2,5-Dinitrotoluente ND ug/l 3,0 1,5 1 3,5-Dinitrotoluente ND ug/l 3,0 1,5 1 3,5-Dinitrotoluente ND ug/l 5,0 0,39 1 3,5-Dinitrotoluente ND ug/l 5,0 0,39 1 3,5-Dinitrotoluente ND ug/l 5,0 0,39 1 3,5-Dinitrotoluente ND ug/l 5,0 0,38 1 3,5-Dinitrotoluente ND ug/l 5,0 0,38 1 3,5-Dinitrotoluente ND ug/l 5,0 0,46 1 3,5-Dinitrotoluente ND ug/l 5,0 0,46 1 3,5-Dinitrotoluente ND ug/l 5,0 0,50 1,1 3,5-Dinitrotoluente ND ug/l 5,0 0,50 1,1 1 3,5-Dinitrotoluente ND ug/l 5,0 0,50 1,1 1 3,5-Dinitrotoluente ND ug/l 5,0 0,50 1,1 3,5-Dinitrotoluente	1,2-Dichlorobenzene	ND		ug/l	2.0	0.45	1
3,3*Dichlorobenzidine ND ug/l 5.0 1.6 1 2,4*Dinitrotoluene ND ug/l 5.0 1.2 1 2,6*Dinitrotoluene ND ug/l 5.0 0.93 1 4*Chlorophenyl phenyl ether ND ug/l 2.0 0.49 1 4*Bromophenyl phenyl ether ND ug/l 2.0 0.38 1 Bis(2*chloroshoxy)methane ND ug/l 2.0 0.53 1 Bis(2*chloroshoxy)methane ND ug/l 5.0 0.50 1 Hexachlorocyclopentadiene ND ug/l 2.0 0.69 1 Isophorone ND ug/l 5.0 1.2 1 Nitrobenzene ND ug/l 5.0 0.69 1 NItrobenzene ND ug/l 5.0 0.42 1 n-Nitrobenzene ND ug/l 5.0 0.64 1 Bis(2*-ethloroshorispopyllamine ND ug/l 5.0	1,3-Dichlorobenzene	ND		ug/l	2.0	0.40	1
2,4-Dinitrotoluene ND ug/l 5.0 1.2 1 2,6-Dinitrotoluene ND ug/l 5.0 0.93 1 4-Chlorophenyl phenyl ether ND ug/l 2.0 0.49 1 4-Bromophenyl phenyl ether ND ug/l 2.0 0.38 1 Bis(2-chlorostoxy)methare ND ug/l 2.0 0.53 1 Bis(2-chloroethoxy)methane ND ug/l 5.0 0.50 1 Hexachlorocyclopentadiene ND ug/l 2.0 0.69 1 Isophorone ND ug/l 5.0 0.50 1 Nitrobenzene ND ug/l 2.0 0.77 1 NDPA/DPA ND ug/l 2.0 0.42 1 n-Nitrosodi-n-propylamine ND ug/l 5.0 0.64 1 Bis(2-ethylhexyl)phthalate ND ug/l 5.0 0.64 1 Buyl bernyl phthalate ND ug/l 5.0 </td <td>1,4-Dichlorobenzene</td> <td>ND</td> <td></td> <td>ug/l</td> <td>2.0</td> <td>0.43</td> <td>1</td>	1,4-Dichlorobenzene	ND		ug/l	2.0	0.43	1
ND	3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6	1
4-Chlorophenyl phenyl ether ND ug/l 2.0 0.49 1 4-Bromophenyl phenyl ether ND ug/l 2.0 0.38 1 Bis(2-chloroisopropyl)ether ND ug/l 2.0 0.53 1 Bis(2-chlorosthoxy)methane ND ug/l 5.0 0.50 1 Hexachlorocyclopentadiene ND ug/l 5.0 0.69 1 Isophorone ND ug/l 5.0 1.2 1 Nitrobenzene ND ug/l 5.0 0.77 1 NITrobenzene ND ug/l 2.0 0.77 1 NDPA/DPA ND ug/l 2.0 0.77 1 NDPA/DPA ND ug/l 2.0 0.42 1 In-Nitrosodi-n-propylamine ND ug/l 5.0 0.64 1 Bis(2-ethylhexyl)phthalate ND ug/l 5.0 0.64 1 Bis(2-ethylhexyl)phthalate ND ug/l 5.0 0.64 1 Di-n-butylphthalate ND ug/l 5.0 0.39 1 Di-n-octylphthalate ND ug/l 5.0 0.39 1 Di-n-octylphthalate ND ug/l 5.0 0.38 1 Dien-polylphthalate ND ug/l 5.0 0.46 1 Bis(2-ethylphthalate ND ug/l 5.0 0.46 1	2,4-Dinitrotoluene	ND		ug/l	5.0	1.2	1
4-Bromophenyl phenyl ether ND ug/l 2.0 0.38 1 Bis(2-chloroisopropyl)ether ND ug/l 2.0 0.53 1 Bis(2-chloroethoxy)methane ND ug/l 5.0 0.50 1 Hexachlorocyclopentadiene ND ug/l 20 0.69 1 Isophorone ND ug/l 5.0 1.2 1 Isophorone ND ug/l 2.0 0.77 1 Nitrobenzene ND ug/l 2.0 0.77 1 NIDPA/DPA ND ug/l 2.0 0.64 1 Isis(2-ethylhexyl)phthalate ND ug/l 5.0 1.2 1 Bis(2-ethylhexyl)phthalate ND ug/l 5.0 0.64 1 Bis(2-ethylhexyl)phthalate ND ug/l 5.0 1.2 1 Di-n-butylphthalate ND ug/l 5.0 1.2 1 Di-n-butylphthalate ND ug/l 5.0 1.2 1 Di-n-octylphthalate ND ug/l 5.0 1.3 1 Di-n-octylphthalate ND ug/l 5.0 1.3 1 Diethyl phthalate ND ug/l 5.0 1.8 1 Bishenyl ND ug/l 5.0 1.8 1 Biphenyl ND ug/l 5.0 1.8 1 Biphenyl ND ug/l 5.0 1.1 1 C-Nitrosniline ND ug/l 5.0 0.50 1 C-Nitrosniline ND ug/l 5.0 0.50 1	2,6-Dinitrotoluene	ND		ug/l	5.0	0.93	1
Bis(2-chloroisopropyl)ether ND	4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.49	1
Bis(2-chloroethoxy)methane ND	4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.38	1
Hexachlorocyclopentadiene ND	Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53	1
Sophorone ND ug/l 5.0 1.2 1	Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50	1
Nitrobenzene ND ug/l 2.0 0.77 1 NDPA/DPA ND ug/l 2.0 0.42 1 n-Nitrosodi-n-propylamine ND ug/l 5.0 0.64 1 Bis(2-ethylhexyl)phthalate ND ug/l 3.0 1.5 1 Butyl benzyl phthalate ND ug/l 5.0 1.2 1 Di-n-butylphthalate ND ug/l 5.0 0.39 1 Di-n-butylphthalate ND ug/l 5.0 0.39 1 Di-n-butylphthalate ND ug/l 5.0 0.38 1 Di-n-butylphthalate ND ug/l 5.0 0.38 1 Di-n-butyl phthalate ND ug/l 5.0 0.38 1 Di-m-octylphthalate ND ug/l 5.0 0.38 1 Di-m-octylphthalate ND ug/l 5.0 0.38 1 Dimethyl phthalate ND ug/l 5.0 0.46 <td>Hexachlorocyclopentadiene</td> <td>ND</td> <td></td> <td>ug/l</td> <td>20</td> <td>0.69</td> <td>1</td>	Hexachlorocyclopentadiene	ND		ug/l	20	0.69	1
NDPA/DPA ND ug/l 2.0 0.42 1 n-Nitrosodi-n-propylamine ND ug/l 5.0 0.64 1 Bis(2-ethylhexyl)phthalate ND ug/l 3.0 1.5 1 Butyl benzyl phthalate ND ug/l 5.0 1.2 1 Di-n-butylphthalate ND ug/l 5.0 0.39 1 Di-n-octylphthalate ND ug/l 5.0 1.3 1 Diethyl phthalate ND ug/l 5.0 0.38 1 Dimethyl phthalate ND ug/l 5.0 1.8 1 Biphenyl ND ug/l 5.0 0.46 1 4-Chloroaniline ND ug/l 5.0 0.50 1 2-Nitroaniline ND ug/l 5.0 0.50 1 3-Nitroaniline ND ug/l 5.0 0.81 1	Isophorone	ND		ug/l	5.0	1.2	1
n-Nitrosodi-n-propylamine ND ug/l 5.0 0.64 1 Bis(2-ethylhexyl)phthalate ND ug/l 3.0 1.5 1 Butyl benzyl phthalate ND ug/l 5.0 1.2 1 Di-n-butylphthalate ND ug/l 5.0 0.39 1 Di-n-butylphthalate ND ug/l 5.0 0.39 1 Di-n-cotylphthalate ND ug/l 5.0 0.38 1 Diethyl phthalate ND ug/l 5.0 0.38 1 Diethyl phthalate ND ug/l 5.0 0.38 1 Dimethyl phthalate ND ug/l 5.0 1.8 1 Biphenyl ND ug/l 5.0 1.8 1 4-Chloroaniline ND ug/l 5.0 1.1 1 3-Nitroaniline ND ug/l 5.0 0.50 1 3-Nitroaniline ND ug/l 5.0 0.50 1	Nitrobenzene	ND		ug/l	2.0	0.77	1
Bis(2-ethylhexyl)phthalate ND ug/l 3.0 1.5 1	NDPA/DPA	ND		ug/l	2.0	0.42	1
Butyl benzyl phthalate ND ug/l 5.0 1.2 1 Di-n-butylphthalate ND ug/l 5.0 0.39 1 Di-n-octylphthalate ND ug/l 5.0 1.3 1 Diethyl phthalate ND ug/l 5.0 0.38 1 Dimethyl phthalate ND ug/l 5.0 1.8 1 Biphenyl ND ug/l 2.0 0.46 1 4-Chloroaniline ND ug/l 5.0 1.1 1 2-Nitroaniline ND ug/l 5.0 0.50 1 3-Nitroaniline ND ug/l 5.0 0.81 1	n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64	1
Di-n-butylphthalate ND ug/l 5.0 0.39 1 Di-n-octylphthalate ND ug/l 5.0 1.3 1 Diethyl phthalate ND ug/l 5.0 0.38 1 Dimethyl phthalate ND ug/l 5.0 1.8 1 Biphenyl ND ug/l 2.0 0.46 1 4-Chloroaniline ND ug/l 5.0 1.1 1 2-Nitroaniline ND ug/l 5.0 0.50 1 3-Nitroaniline ND ug/l 5.0 0.81 1	Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.5	1
Di-n-octylphthalate ND ug/l 5.0 1.3 1 Diethyl phthalate ND ug/l 5.0 0.38 1 Dimethyl phthalate ND ug/l 5.0 1.8 1 Biphenyl ND ug/l 2.0 0.46 1 4-Chloroaniline ND ug/l 5.0 1.1 1 2-Nitroaniline ND ug/l 5.0 0.50 1 3-Nitroaniline ND ug/l 5.0 0.81 1	Butyl benzyl phthalate	ND		ug/l	5.0	1.2	1
Diethyl phthalate ND ug/l 5.0 0.38 1 Dimethyl phthalate ND ug/l 5.0 1.8 1 Biphenyl ND ug/l 2.0 0.46 1 4-Chloroaniline ND ug/l 5.0 1.1 1 2-Nitroaniline ND ug/l 5.0 0.50 1 3-Nitroaniline ND ug/l 5.0 0.81 1	Di-n-butylphthalate	ND		ug/l	5.0	0.39	1
Dimethyl phthalate ND ug/l 5.0 1.8 1 Biphenyl ND ug/l 2.0 0.46 1 4-Chloroaniline ND ug/l 5.0 1.1 1 2-Nitroaniline ND ug/l 5.0 0.50 1 3-Nitroaniline ND ug/l 5.0 0.81 1	Di-n-octylphthalate	ND		ug/l	5.0	1.3	1
Biphenyl ND ug/l 2.0 0.46 1 4-Chloroaniline ND ug/l 5.0 1.1 1 2-Nitroaniline ND ug/l 5.0 0.50 1 3-Nitroaniline ND ug/l 5.0 0.81 1	Diethyl phthalate	ND		ug/l	5.0	0.38	1
4-Chloroaniline ND ug/l 5.0 1.1 1 2-Nitroaniline ND ug/l 5.0 0.50 1 3-Nitroaniline ND ug/l 5.0 0.81 1	Dimethyl phthalate	ND		ug/l	5.0	1.8	1
2-Nitroaniline ND ug/l 5.0 0.50 1 3-Nitroaniline ND ug/l 5.0 0.81 1	Biphenyl	ND		ug/l	2.0	0.46	1
3-Nitroaniline ND ug/l 5.0 0.81 1	4-Chloroaniline	ND		ug/l	5.0	1.1	1
	2-Nitroaniline	ND		ug/l	5.0	0.50	1
4-Nitroaniline ND ug/l 5.0 0.80 1	3-Nitroaniline	ND		ug/l	5.0	0.81	1
	4-Nitroaniline	ND		ug/l	5.0	0.80	1



Project Name: 13-16 TO 13-30 BCD **Lab Number:** L1828167

Project Number: 13-16 TO 13-30 BCD **Report Date:** 07/30/18

SAMPLE RESULTS

Lab ID: L1828167-03 Date Collected: 07/23/18 11:40

Client ID: TW-1 Date Received: 07/23/18
Sample Location: 13-16 TO 13-30 BEACH CHANNEL DRIVE Field Prep: Not Specified

Sample Depth:

Result	Qualifier	Units	RL	MDL	Dilution Factor
borough Lab					
ND		ug/l	2.0	0.50	1
ND		ug/l	10	0.44	1
ND		ug/l	5.0	0.53	1
ND		ug/l	5.0	0.61	1
ND		ug/l	2.0	0.35	1
ND		ug/l	2.0	0.48	1
ND		ug/l	5.0	0.41	1
ND		ug/l	5.0	1.8	1
ND		ug/l	10	0.85	1
ND		ug/l	10	0.67	1
ND		ug/l	20	6.6	1
ND		ug/l	10	1.8	1
ND		ug/l	5.0	0.57	1
ND		ug/l	5.0	0.49	1
ND		ug/l	5.0	0.48	1
ND		ug/l	5.0	0.77	1
ND		ug/l	50	2.6	1
ND		ug/l	2.0	0.59	1
ND		ug/l	2.0	0.49	1
	borough Lab ND	ND N	ND	ND	ND

Surrogate	% Recovery	Acceptance Qualifier Criteria	
2-Fluorophenol	64	21-120	
Phenol-d6	54	10-120	
Nitrobenzene-d5	71	23-120	
2-Fluorobiphenyl	73	15-120	
2,4,6-Tribromophenol	56	10-120	
4-Terphenyl-d14	85	41-149	



Project Name: 13-16 TO 13-30 BCD **Lab Number:** L1828167

Project Number: 13-16 TO 13-30 BCD **Report Date:** 07/30/18

SAMPLE RESULTS

Lab ID: L1828167-03 Date Collected: 07/23/18 11:40

Client ID: TW-1 Date Received: 07/23/18
Sample Location: 13-16 TO 13-30 BEACH CHANNEL DRIVE Field Prep: Not Specified

Sample Depth:

Matrix: Water Extraction Method: EPA 3510C

Analytical Method: 1,8270D-SIM Extraction Date: 07/24/18 08:13
Analytical Date: 07/24/18 22:17

Analyst: DV

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - We	stborough La	ab				
According	ND		4	0.40	0.04	4
Acenaphthene	ND		ug/l	0.10	0.01	1
2-Chloronaphthalene	ND		ug/l	0.20	0.02	1
Fluoranthene	ND		ug/l	0.10	0.02	1
Hexachlorobutadiene	ND		ug/l	0.50	0.05	1
Naphthalene	ND		ug/l	0.10	0.05	1
Benzo(a)anthracene	0.03	J	ug/l	0.10	0.02	1
Benzo(a)pyrene	ND		ug/l	0.10	0.02	1
Benzo(b)fluoranthene	ND		ug/l	0.10	0.01	1
Benzo(k)fluoranthene	ND		ug/l	0.10	0.01	1
Chrysene	ND		ug/l	0.10	0.01	1
Acenaphthylene	ND		ug/l	0.10	0.01	1
Anthracene	ND		ug/l	0.10	0.01	1
Benzo(ghi)perylene	ND		ug/l	0.10	0.01	1
Fluorene	ND		ug/l	0.10	0.01	1
Phenanthrene	ND		ug/l	0.10	0.02	1
Dibenzo(a,h)anthracene	ND		ug/l	0.10	0.01	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.01	1
Pyrene	ND		ug/l	0.10	0.02	1
2-Methylnaphthalene	ND		ug/l	0.10	0.02	1
Pentachlorophenol	ND		ug/l	0.80	0.01	1
Hexachlorobenzene	ND		ug/l	0.80	0.01	1
Hexachloroethane	ND		ug/l	0.80	0.06	1



Project Name: 13-16 TO 13-30 BCD **Lab Number:** L1828167

Project Number: 13-16 TO 13-30 BCD **Report Date:** 07/30/18

SAMPLE RESULTS

Lab ID: L1828167-03 Date Collected: 07/23/18 11:40

Client ID: TW-1 Date Received: 07/23/18
Sample Location: 13-16 TO 13-30 BEACH CHANNEL DRIVE Field Prep: Not Specified

Sample Depth:

Parameter Result Qualifier Units RL MDL Dilution Factor

Semivolatile Organics by GC/MS-SIM - Westborough Lab

Surrogate	% Recovery	Acceptance Qualifier Criteria	
2-Fluorophenol	63	21-120	
Phenol-d6	53	10-120	
Nitrobenzene-d5	82	23-120	
2-Fluorobiphenyl	77	15-120	
2,4,6-Tribromophenol	93	10-120	
4-Terphenyl-d14	98	41-149	



 Project Name:
 13-16 TO 13-30 BCD
 Lab Number:
 L1828167

Project Number: 13-16 TO 13-30 BCD **Report Date:** 07/30/18

SAMPLE RESULTS

Lab ID: L1828167-04 Date Collected: 07/23/18 09:55

Client ID: TW-2 Date Received: 07/23/18
Sample Location: 13-16 TO 13-30 BEACH CHANNEL DRIVE Field Prep: Not Specified

07/26/18 19:40

Sample Depth:

Analytical Date:

Matrix: Water Extraction Method: EPA 3510C
Analytical Method: 1,8270D Extraction Date: 07/24/18 08:13

Analyst: SZ

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	
Semivolatile Organics by GC/MS - W	estborough Lab						
1,2,4-Trichlorobenzene	ND		ug/l	5.0	0.50	1	
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50	1	
1,2-Dichlorobenzene	ND		ug/l	2.0	0.45	1	
1,3-Dichlorobenzene	ND		ug/l	2.0	0.40	1	
1,4-Dichlorobenzene	ND		ug/l	2.0	0.43	1	
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6	1	
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2	1	
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93	1	
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.49	1	
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.38	1	
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53	1	
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50	1	
Hexachlorocyclopentadiene	ND		ug/l	20	0.69	1	
Isophorone	ND		ug/l	5.0	1.2	1	
Nitrobenzene	ND		ug/l	2.0	0.77	1	
NDPA/DPA	ND		ug/l	2.0	0.42	1	
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64	1	
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.5	1	
Butyl benzyl phthalate	ND		ug/l	5.0	1.2	1	
Di-n-butylphthalate	ND		ug/l	5.0	0.39	1	
Di-n-octylphthalate	ND		ug/l	5.0	1.3	1	
Diethyl phthalate	ND		ug/l	5.0	0.38	1	
Dimethyl phthalate	ND		ug/l	5.0	1.8	1	
Biphenyl	ND		ug/l	2.0	0.46	1	
4-Chloroaniline	ND		ug/l	5.0	1.1	1	
2-Nitroaniline	ND		ug/l	5.0	0.50	1	
3-Nitroaniline	ND		ug/l	5.0	0.81	1	
4-Nitroaniline	ND		ug/l	5.0	0.80	1	



Project Name: 13-16 TO 13-30 BCD **Lab Number:** L1828167

Project Number: 13-16 TO 13-30 BCD **Report Date:** 07/30/18

SAMPLE RESULTS

Lab ID: L1828167-04 Date Collected: 07/23/18 09:55

Client ID: TW-2 Date Received: 07/23/18

Sample Location: 13-16 TO 13-30 BEACH CHANNEL DRIVE Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - We	estborough Lab					
Dibenzofuran	ND		ug/l	2.0	0.50	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.44	1
Acetophenone	ND		ug/l	5.0	0.53	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61	1
p-Chloro-m-cresol	ND		ug/l	2.0	0.35	1
2-Chlorophenol	ND		ug/l	2.0	0.48	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.41	1
2,4-Dimethylphenol	ND		ug/l	5.0	1.8	1
2-Nitrophenol	ND		ug/l	10	0.85	1
4-Nitrophenol	ND		ug/l	10	0.67	1
2,4-Dinitrophenol	ND		ug/l	20	6.6	1
4,6-Dinitro-o-cresol	ND		ug/l	10	1.8	1
Phenol	ND		ug/l	5.0	0.57	1
2-Methylphenol	ND		ug/l	5.0	0.49	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.48	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77	1
Benzoic Acid	ND		ug/l	50	2.6	1
Benzyl Alcohol	ND		ug/l	2.0	0.59	1
Carbazole	ND		ug/l	2.0	0.49	1

Surrogate	% Recovery	Acceptance Qualifier Criteria	
2-Fluorophenol	67	21-120	
Phenol-d6	55	10-120	
Nitrobenzene-d5	79	23-120	
2-Fluorobiphenyl	83	15-120	
2,4,6-Tribromophenol	57	10-120	
4-Terphenyl-d14	95	41-149	



 Project Name:
 13-16 TO 13-30 BCD
 Lab Number:
 L1828167

Project Number: 13-16 TO 13-30 BCD **Report Date:** 07/30/18

SAMPLE RESULTS

Lab ID: L1828167-04 Date Collected: 07/23/18 09:55

Client ID: TW-2 Date Received: 07/23/18

Sample Location: 13-16 TO 13-30 BEACH CHANNEL DRIVE Field Prep: Not Specified

Sample Depth:

Matrix: Water Extraction Method: EPA 3510C

Analytical Method: 1,8270D-SIM Extraction Date: 07/24/18 08:13
Analytical Date: 07/24/18 22:43

Analyst: DV

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor				
Semivolatile Organics by GC/MS-SIM - Westborough Lab										
Acenaphthene	ND		ug/l	0.10	0.01	1				
2-Chloronaphthalene	ND		ug/l	0.20	0.02	1				
Fluoranthene	ND		ug/l	0.10	0.02	1				
Hexachlorobutadiene	ND		ug/l	0.50	0.05	1				
Naphthalene	ND		ug/l	0.10	0.05	1				
Benzo(a)anthracene	ND		ug/l	0.10	0.02	1				
Benzo(a)pyrene	ND		ug/l	0.10	0.02	1				
Benzo(b)fluoranthene	ND		ug/l	0.10	0.01	1				
Benzo(k)fluoranthene	ND		ug/l	0.10	0.01	1				
Chrysene	ND		ug/l	0.10	0.01	1				
Acenaphthylene	ND		ug/l	0.10	0.01	1				
Anthracene	ND		ug/l	0.10	0.01	1				
Benzo(ghi)perylene	ND		ug/l	0.10	0.01	1				
Fluorene	ND		ug/l	0.10	0.01	1				
Phenanthrene	ND		ug/l	0.10	0.02	1				
Dibenzo(a,h)anthracene	ND		ug/l	0.10	0.01	1				
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.01	1				
Pyrene	ND		ug/l	0.10	0.02	1				
2-Methylnaphthalene	ND		ug/l	0.10	0.02	1				
Pentachlorophenol	ND		ug/l	0.80	0.01	1				
Hexachlorobenzene	ND		ug/l	0.80	0.01	1				
Hexachloroethane	ND		ug/l	0.80	0.06	1				



Project Name: 13-16 TO 13-30 BCD **Lab Number:** L1828167

Project Number: 13-16 TO 13-30 BCD **Report Date:** 07/30/18

SAMPLE RESULTS

Lab ID: L1828167-04 Date Collected: 07/23/18 09:55

Client ID: TW-2 Date Received: 07/23/18
Sample Location: 13-16 TO 13-30 BEACH CHANNEL DRIVE Field Prep: Not Specified

Sample Depth:

Parameter Result Qualifier Units RL MDL Dilution Factor

Semivolatile Organics by GC/MS-SIM - Westborough Lab

Surrogate	% Recovery	Acceptance Qualifier Criteria
2-Fluorophenol	79	21-120
Phenol-d6	64	10-120
Nitrobenzene-d5	115	23-120
2-Fluorobiphenyl	98	15-120
2,4,6-Tribromophenol	109	10-120
4-Terphenyl-d14	120	41-149



Project Name: 13-16 TO 13-30 BCD
Project Number: 13-16 TO 13-30 BCD

Lab Number: L1828167 **Report Date:** 07/30/18

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8270D Analytical Date: 07/24/18 09:47

Analyst: PS

Extraction Method: EPA 3546 Extraction Date: 07/23/18 13:40

Parameter	Result	Qualifier	Units	RL		MDL
Semivolatile Organics by GC/MS -	- Westborough	Lab for s	sample(s):	01-02	Batch:	WG1138511-1
Acenaphthene	ND		ug/kg	130		17.
1,2,4-Trichlorobenzene	ND		ug/kg	160		18.
Hexachlorobenzene	ND		ug/kg	97		18.
Bis(2-chloroethyl)ether	ND		ug/kg	150		22.
2-Chloronaphthalene	ND		ug/kg	160		16.
1,2-Dichlorobenzene	ND		ug/kg	160		29.
1,3-Dichlorobenzene	ND		ug/kg	160		28.
1,4-Dichlorobenzene	ND		ug/kg	160		28.
3,3'-Dichlorobenzidine	ND		ug/kg	160		43.
2,4-Dinitrotoluene	ND		ug/kg	160		32.
2,6-Dinitrotoluene	ND		ug/kg	160		28.
Fluoranthene	ND		ug/kg	97		19.
4-Chlorophenyl phenyl ether	ND		ug/kg	160		17.
4-Bromophenyl phenyl ether	ND		ug/kg	160		25.
Bis(2-chloroisopropyl)ether	ND		ug/kg	190		28.
Bis(2-chloroethoxy)methane	ND		ug/kg	180		16.
Hexachlorobutadiene	ND		ug/kg	160		24.
Hexachlorocyclopentadiene	ND		ug/kg	460		150
Hexachloroethane	ND		ug/kg	130		26.
Isophorone	ND		ug/kg	150		21.
Naphthalene	ND		ug/kg	160		20.
Nitrobenzene	ND		ug/kg	150		24.
NDPA/DPA	ND		ug/kg	130		18.
n-Nitrosodi-n-propylamine	ND		ug/kg	160		25.
Bis(2-ethylhexyl)phthalate	ND		ug/kg	160		56.
Butyl benzyl phthalate	ND		ug/kg	160		41.
Di-n-butylphthalate	ND		ug/kg	160		31.
Di-n-octylphthalate	ND		ug/kg	160		55.
Diethyl phthalate	ND		ug/kg	160		15.



Project Name: 13-16 TO 13-30 BCD
Project Number: 13-16 TO 13-30 BCD

Lab Number: L1828167 **Report Date:** 07/30/18

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8270D Analytical Date: 07/24/18 09:47

Analyst: PS

Extraction Method: EPA 3546
Extraction Date: 07/23/18 13:40

arameter	Result	Qualifier	Units	RL		MDL
Semivolatile Organics by GC/MS	- Westborough	Lab for s	sample(s):	01-02	Batch:	WG1138511-1
Dimethyl phthalate	ND		ug/kg	160		34.
Benzo(a)anthracene	ND		ug/kg	97		18.
Benzo(a)pyrene	ND		ug/kg	130		40.
Benzo(b)fluoranthene	ND		ug/kg	97		27.
Benzo(k)fluoranthene	ND		ug/kg	97		26.
Chrysene	ND		ug/kg	97		17.
Acenaphthylene	ND		ug/kg	130		25.
Anthracene	ND		ug/kg	97		32.
Benzo(ghi)perylene	ND		ug/kg	130		19.
Fluorene	ND		ug/kg	160		16.
Phenanthrene	ND		ug/kg	97		20.
Dibenzo(a,h)anthracene	ND		ug/kg	97		19.
Indeno(1,2,3-cd)pyrene	ND		ug/kg	130		23.
Pyrene	ND		ug/kg	97		16.
Biphenyl	ND		ug/kg	370		38.
4-Chloroaniline	ND		ug/kg	160		30.
2-Nitroaniline	ND		ug/kg	160		31.
3-Nitroaniline	ND		ug/kg	160		31.
4-Nitroaniline	ND		ug/kg	160		67.
Dibenzofuran	ND		ug/kg	160		15.
2-Methylnaphthalene	ND		ug/kg	190		20.
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	160		17.
Acetophenone	ND		ug/kg	160		20.
2,4,6-Trichlorophenol	ND		ug/kg	97		31.
p-Chloro-m-cresol	ND		ug/kg	160		24.
2-Chlorophenol	ND		ug/kg	160		19.
2,4-Dichlorophenol	ND		ug/kg	150		26.
2,4-Dimethylphenol	ND		ug/kg	160		54.
2-Nitrophenol	ND		ug/kg	350		61.



Project Name: 13-16 TO 13-30 BCD

Project Number: 13-16 TO 13-30 BCD

Lab Number:

L1828167

Report Date:

07/30/18

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8270D Analytical Date: 07/24/18 09:47

Analyst: PS

Extraction Method: EPA 3546
Extraction Date: 07/23/18 13:40

arameter	Result	Qualifier	Units	RL		MDL
semivolatile Organics by GC/MS	S - Westborough	n Lab for s	ample(s):	01-02	Batch:	WG1138511-1
4-Nitrophenol	ND		ug/kg	230		66.
2,4-Dinitrophenol	ND		ug/kg	780		76.
4,6-Dinitro-o-cresol	ND		ug/kg	420		78.
Pentachlorophenol	ND		ug/kg	130		36.
Phenol	ND		ug/kg	160		24.
2-Methylphenol	ND		ug/kg	160		25.
3-Methylphenol/4-Methylphenol	ND		ug/kg	230		25.
2,4,5-Trichlorophenol	ND		ug/kg	160		31.
Benzoic Acid	ND		ug/kg	530		160
Benzyl Alcohol	ND		ug/kg	160		50.
Carbazole	ND		ug/kg	160		16.

Tentatively Identified Compounds

No Tentatively Identified Compounds ND ug/kg

Surrogate	%Recovery Quali	Acceptance fier Criteria
2-Fluorophenol	72	25-120
Phenol-d6	73	10-120
Nitrobenzene-d5	78	23-120
2-Fluorobiphenyl	74	30-120
2,4,6-Tribromophenol	81	10-136
4-Terphenyl-d14	84	18-120



Project Name: 13-16 TO 13-30 BCD
Project Number: 13-16 TO 13-30 BCD

Lab Number: L1828167 **Report Date:** 07/30/18

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8270D Analytical Date: 07/25/18 10:41

Analyst: ALS

Extraction Method: EPA 3510C Extraction Date: 07/24/18 08:13

Parameter	Result	Qualifier	Units	RL		MDL
Semivolatile Organics by GC/MS -	Westborough	Lab for s	ample(s):	03-04	Batch:	WG1138758-1
Acenaphthene	ND		ug/l	2.0		0.44
1,2,4-Trichlorobenzene	ND		ug/l	5.0		0.50
Hexachlorobenzene	ND		ug/l	2.0		0.46
Bis(2-chloroethyl)ether	ND		ug/l	2.0		0.50
2-Chloronaphthalene	ND		ug/l	2.0		0.44
1,2-Dichlorobenzene	ND		ug/l	2.0		0.45
1,3-Dichlorobenzene	ND		ug/l	2.0		0.40
1,4-Dichlorobenzene	ND		ug/l	2.0		0.43
3,3'-Dichlorobenzidine	ND		ug/l	5.0		1.6
2,4-Dinitrotoluene	ND		ug/l	5.0		1.2
2,6-Dinitrotoluene	ND		ug/l	5.0		0.93
Fluoranthene	ND		ug/l	2.0		0.26
4-Chlorophenyl phenyl ether	ND		ug/l	2.0		0.49
4-Bromophenyl phenyl ether	ND		ug/l	2.0		0.38
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0		0.53
Bis(2-chloroethoxy)methane	ND		ug/l	5.0		0.50
Hexachlorobutadiene	ND		ug/l	2.0		0.66
Hexachlorocyclopentadiene	ND		ug/l	20		0.69
Hexachloroethane	ND		ug/l	2.0		0.58
Isophorone	ND		ug/l	5.0		1.2
Naphthalene	ND		ug/l	2.0		0.46
Nitrobenzene	ND		ug/l	2.0		0.77
NDPA/DPA	ND		ug/l	2.0		0.42
n-Nitrosodi-n-propylamine	ND		ug/l	5.0		0.64
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0		1.5
Butyl benzyl phthalate	ND		ug/l	5.0		1.2
Di-n-butylphthalate	ND		ug/l	5.0		0.39
Di-n-octylphthalate	ND		ug/l	5.0		1.3
Diethyl phthalate	ND		ug/l	5.0		0.38



Project Name:13-16 TO 13-30 BCDLab Number:Project Number:13-16 TO 13-30 BCDReport Date:

Lab Number: L1828167 **Report Date:** 07/30/18

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8270D Analytical Date: 07/25/18 10:41

Analyst: ALS

Extraction Method: EPA 3510C Extraction Date: 07/24/18 08:13

arameter	Result	Qualifier	Units	RL		MDL
Semivolatile Organics by GC/M	IS - Westborough	Lab for s	ample(s):	03-04	Batch:	WG1138758-1
Dimethyl phthalate	ND		ug/l	5.0		1.8
Benzo(a)anthracene	ND		ug/l	2.0		0.32
Benzo(a)pyrene	ND		ug/l	2.0		0.41
Benzo(b)fluoranthene	ND		ug/l	2.0		0.35
Benzo(k)fluoranthene	ND		ug/l	2.0		0.37
Chrysene	ND		ug/l	2.0		0.34
Acenaphthylene	ND		ug/l	2.0		0.46
Anthracene	ND		ug/l	2.0		0.33
Benzo(ghi)perylene	ND		ug/l	2.0		0.30
Fluorene	ND		ug/l	2.0		0.41
Phenanthrene	ND		ug/l	2.0		0.33
Dibenzo(a,h)anthracene	ND		ug/l	2.0		0.32
Indeno(1,2,3-cd)pyrene	ND		ug/l	2.0		0.40
Pyrene	ND		ug/l	2.0		0.28
Biphenyl	ND		ug/l	2.0		0.46
4-Chloroaniline	ND		ug/l	5.0		1.1
2-Nitroaniline	ND		ug/l	5.0		0.50
3-Nitroaniline	ND		ug/l	5.0		0.81
4-Nitroaniline	ND		ug/l	5.0		0.80
Dibenzofuran	ND		ug/l	2.0		0.50
2-Methylnaphthalene	ND		ug/l	2.0		0.45
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10		0.44
Acetophenone	ND		ug/l	5.0		0.53
2,4,6-Trichlorophenol	ND		ug/l	5.0		0.61
p-Chloro-m-cresol	ND		ug/l	2.0		0.35
2-Chlorophenol	ND		ug/l	2.0		0.48
2,4-Dichlorophenol	ND		ug/l	5.0		0.41
2,4-Dimethylphenol	ND		ug/l	5.0		1.8
2-Nitrophenol	ND		ug/l	10		0.85



Project Name: 13-16 TO 13-30 BCD

Project Number: 13-16 TO 13-30 BCD

Lab Number: L1828167

Report Date: 07/30/18

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8270D Analytical Date: 07/25/18 10:41

Analyst: ALS

Extraction Method: EPA 3510C Extraction Date: 07/24/18 08:13

Parameter	Result	Qualifier	Units	RL		MDL
Semivolatile Organics by GC/MS	S - Westborough	n Lab for sa	ample(s):	03-04	Batch:	WG1138758-1
4-Nitrophenol	ND		ug/l	10		0.67
2,4-Dinitrophenol	ND		ug/l	20		6.6
4,6-Dinitro-o-cresol	ND		ug/l	10		1.8
Pentachlorophenol	ND		ug/l	10		1.8
Phenol	ND		ug/l	5.0		0.57
2-Methylphenol	ND		ug/l	5.0		0.49
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0		0.48
2,4,5-Trichlorophenol	ND		ug/l	5.0		0.77
Benzoic Acid	ND		ug/l	50		2.6
Benzyl Alcohol	ND		ug/l	2.0		0.59
Carbazole	ND		ug/l	2.0		0.49

Tentatively Identified Compounds					
Total TIC Compounds	34.7	J	ug/l		
Aldol Condensate	34.7	J	ug/l		

Surrogate	%Recovery Q	Acceptance qualifier Criteria
2-Fluorophenol	42	21-120
Phenol-d6	31	10-120
Nitrobenzene-d5	62	23-120
2-Fluorobiphenyl	68	15-120
2,4,6-Tribromophenol	45	10-120
4-Terphenyl-d14	73	41-149



Project Name: 13-16 TO 13-30 BCD **Project Number:** 13-16 TO 13-30 BCD Lab Number: L1828167

Report Date: 07/30/18

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8270D-SIM Analytical Date: 07/24/18 18:21

Analyst: DV Extraction Method: EPA 3510C 07/24/18 08:13 Extraction Date:

Parameter	Result	Qualifier	Units	RL	MDL	
Semivolatile Organics by GC/MS	S-SIM - Westbo	orough Lab	for sample(s	s): 03-04	Batch:	WG1138759-1
Acenaphthene	ND		ug/l	0.10	0.01	
2-Chloronaphthalene	ND		ug/l	0.20	0.02	
Fluoranthene	ND		ug/l	0.10	0.02	
Hexachlorobutadiene	ND		ug/l	0.50	0.05	
Naphthalene	ND		ug/l	0.10	0.05	
Benzo(a)anthracene	ND		ug/l	0.10	0.02	
Benzo(a)pyrene	ND		ug/l	0.10	0.02	
Benzo(b)fluoranthene	ND		ug/l	0.10	0.01	
Benzo(k)fluoranthene	ND		ug/l	0.10	0.01	
Chrysene	ND		ug/l	0.10	0.01	
Acenaphthylene	ND		ug/l	0.10	0.01	
Anthracene	ND		ug/l	0.10	0.01	
Benzo(ghi)perylene	ND		ug/l	0.10	0.01	
Fluorene	ND		ug/l	0.10	0.01	
Phenanthrene	ND		ug/l	0.10	0.02	
Dibenzo(a,h)anthracene	ND		ug/l	0.10	0.01	
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.01	
Pyrene	ND		ug/l	0.10	0.02	
2-Methylnaphthalene	ND		ug/l	0.10	0.02	
Pentachlorophenol	ND		ug/l	0.80	0.01	
Hexachlorobenzene	ND		ug/l	0.80	0.01	
Hexachloroethane	ND		ug/l	0.80	0.06	



L1828167

Project Name: 13-16 TO 13-30 BCD Lab Number:

Project Number: 13-16 TO 13-30 BCD **Report Date:** 07/30/18

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D-SIM Extraction Method: EPA 3510C
Analytical Date: 07/24/18 18:21 Extraction Date: 07/24/18 08:13

Analyst: DV

ParameterResultQualifierUnitsRLMDLSemivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 03-04Batch: WG1138759-1

		Acceptance
Surrogate	%Recovery	Qualifier Criteria
2-Fluorophenol	43	21-120
Phenol-d6	33	10-120
Nitrobenzene-d5	76	23-120
2-Fluorobiphenyl	67	15-120
2,4,6-Tribromophenol	73	10-120
4-Terphenyl-d14	81	41-149



Project Name: 13-16 TO 13-30 BCD **Project Number:**

13-16 TO 13-30 BCD

Lab Number: L1828167

Report Date: 07/30/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	%Recovery Qual Limits	RPD	RPD Qual Limits
Semivolatile Organics by GC/MS -	Westborough Lab Assoc	iated sample(s):	01-02 Batch	: WG1138511-2 WG11385	11-3	
Acenaphthene	82		83	31-137	1	50
1,2,4-Trichlorobenzene	88		83	38-107	6	50
Hexachlorobenzene	90		91	40-140	1	50
Bis(2-chloroethyl)ether	75		71	40-140	5	50
2-Chloronaphthalene	93		90	40-140	3	50
1,2-Dichlorobenzene	82		79	40-140	4	50
1,3-Dichlorobenzene	79		78	40-140	1	50
1,4-Dichlorobenzene	80		76	28-104	5	50
3,3'-Dichlorobenzidine	73		75	40-140	3	50
2,4-Dinitrotoluene	107		106	40-132	1	50
2,6-Dinitrotoluene	103		102	40-140	1	50
Fluoranthene	92		94	40-140	2	50
4-Chlorophenyl phenyl ether	85		83	40-140	2	50
4-Bromophenyl phenyl ether	88		89	40-140	1	50
Bis(2-chloroisopropyl)ether	65		63	40-140	3	50
Bis(2-chloroethoxy)methane	82		81	40-117	1	50
Hexachlorobutadiene	87		85	40-140	2	50
Hexachlorocyclopentadiene	63		57	40-140	10	50
Hexachloroethane	85		88	40-140	3	50
Isophorone	89		88	40-140	1	50
Naphthalene	86		84	40-140	2	50
Nitrobenzene	92		89	40-140	3	50
NDPA/DPA	90		91	36-157	1	50



 Project Name:
 13-16 TO 13-30 BCD

 Project Number:
 13-16 TO 13-30 BCD

Lab Number: L1828167

Report Date:

07/30/18

arameter	LCS %Recovery	Qual	LCSD %Recovery	%Recovery Qual Limits	RPD	RPD Qual Limits
emivolatile Organics by GC/MS - W	estborough Lab Associ	ated sample(s):	01-02 Batch:	WG1138511-2 WG11385	11-3	
n-Nitrosodi-n-propylamine	87		82	32-121	6	50
Bis(2-ethylhexyl)phthalate	104		105	40-140	1	50
Butyl benzyl phthalate	114		117	40-140	3	50
Di-n-butylphthalate	105		105	40-140	0	50
Di-n-octylphthalate	108		110	40-140	2	50
Diethyl phthalate	102		102	40-140	0	50
Dimethyl phthalate	102		99	40-140	3	50
Benzo(a)anthracene	81		83	40-140	2	50
Benzo(a)pyrene	89		90	40-140	1	50
Benzo(b)fluoranthene	91		88	40-140	3	50
Benzo(k)fluoranthene	83		88	40-140	6	50
Chrysene	81		81	40-140	0	50
Acenaphthylene	95		94	40-140	1	50
Anthracene	90		92	40-140	2	50
Benzo(ghi)perylene	85		89	40-140	5	50
Fluorene	89		89	40-140	0	50
Phenanthrene	83		85	40-140	2	50
Dibenzo(a,h)anthracene	88		92	40-140	4	50
Indeno(1,2,3-cd)pyrene	88		90	40-140	2	50
Pyrene	90		92	35-142	2	50
Biphenyl	95		93	54-104	2	50
4-Chloroaniline	73		69	40-140	6	50
2-Nitroaniline	107		104	47-134	3	50



 Project Name:
 13-16 TO 13-30 BCD

 Project Number:
 13-16 TO 13-30 BCD

Lab Number:

L1828167

Report Date:

07/30/18

arameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	RPD Qual Limits
emivolatile Organics by GC/MS - W	estborough Lab Associ	ated sample(s)	: 01-02 Batcl	h: WG113	8511-2 WG11385	11-3	
3-Nitroaniline	83		86		26-129	4	50
4-Nitroaniline	90		92		41-125	2	50
Dibenzofuran	87		88		40-140	1	50
2-Methylnaphthalene	90		86		40-140	5	50
1,2,4,5-Tetrachlorobenzene	94		88		40-117	7	50
Acetophenone	92		89		14-144	3	50
2,4,6-Trichlorophenol	96		93		30-130	3	50
p-Chloro-m-cresol	110	Q	106	Q	26-103	4	50
2-Chlorophenol	93		90		25-102	3	50
2,4-Dichlorophenol	101		95		30-130	6	50
2,4-Dimethylphenol	110		107		30-130	3	50
2-Nitrophenol	101		100		30-130	1	50
4-Nitrophenol	119	Q	117	Q	11-114	2	50
2,4-Dinitrophenol	99		93		4-130	6	50
4,6-Dinitro-o-cresol	93		89		10-130	4	50
Pentachlorophenol	82		82		17-109	0	50
Phenol	83		80		26-90	4	50
2-Methylphenol	89		87		30-130.	2	50
3-Methylphenol/4-Methylphenol	99		98		30-130	1	50
2,4,5-Trichlorophenol	102		98		30-130	4	50
Benzoic Acid	82		78		10-110	5	50
Benzyl Alcohol	103		98		40-140	5	50
Carbazole	90		91		54-128	1	50



Project Name: 13-16 TO 13-30 BCD

Lab Number:

L1828167

Project Number: 13-16 TO 13-30 BCD

Report Date:

07/30/18

	LCS		LCSD		%Recovery			RPD
Parameter	%Recovery	Qual	%Recovery	Qual	Limits	RPD	Qual	Limits

Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-02 Batch: WG1138511-2 WG1138511-3

Surrogate	LCS %Recovery Qual	LCSD %Recovery Qual	Acceptance Criteria
2-Fluorophenol	87	83	25-120
Phenol-d6	87	82	10-120
Nitrobenzene-d5	93	88	23-120
2-Fluorobiphenyl	89	84	30-120
2,4,6-Tribromophenol	93	93	10-136
4-Terphenyl-d14	98	97	18-120



13-16 TO 13-30 BCD		Batch Quality Contr	OI	Lab Number:	L1828167
13-16 TO 13-30 BCD				Report Date:	07/30/18
	LCS	LCSD	%Recovery		RPD
	13-16 TO 13-30 BCD 13-16 TO 13-30 BCD	13-16 TO 13-30 BCD	13-16 TO 13-30 BCD 13-16 TO 13-30 BCD	13-16 TO 13-30 BCD	13-16 TO 13-30 BCD 13-16 TO 13-30 BCD Report Date:

arameter	%Recovery	Qual	%Recovery	Qual Limits	RPD	Qual	Limits
emivolatile Organics by GC/MS - Westbord	ough Lab Associ	iated sample(s):	03-04 Bat	ch: WG1138758-2 WG11387	' 58-3		
Acenaphthene	68		84	37-111	21		30
1,2,4-Trichlorobenzene	62		75	39-98	19		30
Hexachlorobenzene	67		78	40-140	15		30
Bis(2-chloroethyl)ether	61		75	40-140	21		30
2-Chloronaphthalene	64		81	40-140	23		30
1,2-Dichlorobenzene	60		71	40-140	17		30
1,3-Dichlorobenzene	57		71	40-140	22		30
1,4-Dichlorobenzene	59		70	36-97	17		30
3,3'-Dichlorobenzidine	61		72	40-140	17		30
2,4-Dinitrotoluene	68		84	48-143	21		30
2,6-Dinitrotoluene	72		90	40-140	22		30
Fluoranthene	70		85	40-140	19		30
4-Chlorophenyl phenyl ether	66		82	40-140	22		30
4-Bromophenyl phenyl ether	67		84	40-140	23		30
Bis(2-chloroisopropyl)ether	60		72	40-140	18		30
Bis(2-chloroethoxy)methane	66		80	40-140	19		30
Hexachlorobutadiene	59		74	40-140	23		30
Hexachlorocyclopentadiene	49		68	40-140	32	Q	30
Hexachloroethane	57		71	40-140	22		30
Isophorone	64		80	40-140	22		30
Naphthalene	61		78	40-140	24		30
Nitrobenzene	63		75	40-140	17		30
NDPA/DPA	69		85	40-140	21		30



L1828167

Lab Control Sample Analysis Batch Quality Control

 Project Name:
 13-16 TO 13-30 BCD

 Project Number:
 13-16 TO 13-30 BCD

Report Date: 07/30/18

Lab Number:

arameter	LCS %Recovery 0	LCSD Qual %Recovery	%Recovery Qual Limits	RPD	RPD Qual Limits
emivolatile Organics by GC/MS - V	Westborough Lab Associated	sample(s): 03-04 Batc	h: WG1138758-2 WG11387	58-3	
n-Nitrosodi-n-propylamine	68	78	29-132	14	30
Bis(2-ethylhexyl)phthalate	70	89	40-140	24	30
Butyl benzyl phthalate	71	85	40-140	18	30
Di-n-butylphthalate	66	84	40-140	24	30
Di-n-octylphthalate	66	84	40-140	24	30
Diethyl phthalate	69	84	40-140	20	30
Dimethyl phthalate	68	85	40-140	22	30
Benzo(a)anthracene	65	82	40-140	23	30
Benzo(a)pyrene	74	92	40-140	22	30
Benzo(b)fluoranthene	75	94	40-140	22	30
Benzo(k)fluoranthene	70	87	40-140	22	30
Chrysene	67	85	40-140	24	30
Acenaphthylene	65	82	45-123	23	30
Anthracene	70	84	40-140	18	30
Benzo(ghi)perylene	70	90	40-140	25	30
Fluorene	68	87	40-140	25	30
Phenanthrene	69	84	40-140	20	30
Dibenzo(a,h)anthracene	73	91	40-140	22	30
Indeno(1,2,3-cd)pyrene	75	94	40-140	22	30
Pyrene	70	84	26-127	18	30
Biphenyl	67	86	40-140	25	30
4-Chloroaniline	58	62	40-140	7	30
2-Nitroaniline	65	83	52-143	24	30



Project Name: 13-16 TO 13-30 BCD Project Number: 13-16 TO 13-30 BCD Lab Number:

L1828167

Report Date:

07/30/18

arameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	RPD Qual Limits	
emivolatile Organics by GC/MS - W	estborough Lab Associ	ated sample(s)	: 03-04 Batcl	h: WG11387	58-2 WG11387	58-3		
3-Nitroaniline	65		79		25-145	19	30	
4-Nitroaniline	69		80		51-143	15	30	
Dibenzofuran	67		84		40-140	23	30	
2-Methylnaphthalene	64		80		40-140	22	30	
1,2,4,5-Tetrachlorobenzene	61		77		2-134	23	30	
Acetophenone	64		78		39-129	20	30	
2,4,6-Trichlorophenol	65		81		30-130	22	30	
p-Chloro-m-cresol	68		88		23-97	26	30	
2-Chlorophenol	61		78		27-123	24	30	
2,4-Dichlorophenol	68		84		30-130	21	30	
2,4-Dimethylphenol	67		81		30-130	19	30	
2-Nitrophenol	65		82		30-130	23	30	
4-Nitrophenol	55		73		10-80	28	30	
2,4-Dinitrophenol	52		64		20-130	21	30	
4,6-Dinitro-o-cresol	54		69		20-164	24	30	
Pentachlorophenol	61		74		9-103	19	30	
Phenol	50		61		12-110	20	30	
2-Methylphenol	64		80		30-130	22	30	
3-Methylphenol/4-Methylphenol	65		79		30-130	19	30	
2,4,5-Trichlorophenol	65		86		30-130	28	30	
Benzoic Acid	0	Q	0	Q	10-164	NC	30	
Benzyl Alcohol	57		65		26-116	13	30	
Carbazole	71		88		55-144	21	30	



Project Name: 13-16 TO 13-30 BCD

Lab Number:

L1828167

Project Number: 13-16 TO 13-30 BCD

Report Date:

07/30/18

LCS LCSD %Recovery RPD Parameter %Recovery Qual %Recovery Qual Limits RPD Qual Limits

Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 03-04 Batch: WG1138758-2 WG1138758-3

Surrogate	LCS %Recovery Qual	LCSD %Recovery Qual	Acceptance Criteria
2-Fluorophenol	52	66	21-120
Phenol-d6	47	58	10-120
Nitrobenzene-d5	65	76	23-120
2-Fluorobiphenyl	66	83	15-120
2,4,6-Tribromophenol	64	80	10-120
4-Terphenyl-d14	75	95	41-149



Project Name: 13-16 TO 13-30 BCD Project Number: 13-16 TO 13-30 BCD Lab Number: L1828167

Report Date:	07/30/18	

Parameter	LCS %Recovery	Qual %	LCSD Recovery	Qual	%Recove Limits	ry RPD	Qual	RPD Limits	
Semivolatile Organics by GC/MS-SIM - We	estborough Lab As	sociated sample(s	s): 03-04	Batch:	WG1138759-2	WG1138759-3			
Acenaphthene	94		88		40-140	7		40	
2-Chloronaphthalene	95		88		40-140	8		40	
Fluoranthene	113		107		40-140	5		40	
Hexachlorobutadiene	87		80		40-140	8		40	
Naphthalene	84		79		40-140	6		40	
Benzo(a)anthracene	98		92		40-140	6		40	
Benzo(a)pyrene	108		100		40-140	8		40	
Benzo(b)fluoranthene	105		98		40-140	7		40	
Benzo(k)fluoranthene	94		89		40-140	5		40	
Chrysene	95		88		40-140	8		40	
Acenaphthylene	112		104		40-140	7		40	
Anthracene	100		95		40-140	5		40	
Benzo(ghi)perylene	106		104		40-140	2		40	
Fluorene	104		91		40-140	13		40	
Phenanthrene	90		86		40-140	5		40	
Dibenzo(a,h)anthracene	107		105		40-140	2		40	
Indeno(1,2,3-cd)pyrene	110		107		40-140	3		40	
Pyrene	110		104		40-140	6		40	
2-Methylnaphthalene	91		85		40-140	7		40	
Pentachlorophenol	102		94		40-140	8		40	
Hexachlorobenzene	93		88		40-140	6		40	
Hexachloroethane	82		76		40-140	8		40	



Project Name: 13-16 TO 13-30 BCD

Lab Number:

L1828167

Project Number: 13-16 TO 13-30 BCD

Report Date:

07/30/18

	LCS		LCSD		%Recovery			RPD
Parameter	%Recovery	Qual	%Recovery	Qual	Limits	RPD	Qual	Limits

Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 03-04 Batch: WG1138759-2 WG1138759-3

Surrogate	LCS %Recovery Qua	LCSD al %Recovery Qual	Acceptance Criteria
2-Fluorophenol	70	66	21-120
Phenol-d6	60	57	10-120
Nitrobenzene-d5	99	92	23-120
2-Fluorobiphenyl	87	81	15-120
2,4,6-Tribromophenol	96	84	10-120
4-Terphenyl-d14	107	103	41-149



METALS



07/23/18 10:45

Date Collected:

 Project Name:
 13-16 TO 13-30 BCD
 Lab Number:
 L1828167

 Project Number:
 13-16 TO 13-30 BCD
 Report Date:
 07/30/18

SAMPLE RESULTS

Lab ID: L1828167-01 Client ID: SB-1 (0-2)

Client ID: SB-1 (0-2) Date Received: 07/23/18
Sample Location: 13-16 TO 13-30 BEACH CHANNEL DRIVE Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Percent Solids: 91%

Dilution Date Date Prep **Analytical** Method Qualifier Factor **Prepared** Analyzed Method Parameter Result Units RL MDL Analyst Total Metals - Mansfield Lab Aluminum, Total 4560 mg/kg 8.33 2.25 2 07/24/18 06:15 07/24/18 12:12 EPA 3050B 1,6010D LC ND 2 1,6010D LC Antimony, Total mg/kg 4.17 0.317 07/24/18 06:15 07/24/18 12:12 EPA 3050B Arsenic, Total 5.08 mg/kg 0.833 0.173 2 07/24/18 06:15 07/24/18 12:12 EPA 3050B 1,6010D LC 2 Barium, Total 173 0.833 0.145 07/24/18 06:15 07/24/18 12:12 EPA 3050B 1,6010D LC mg/kg J 0.028 2 07/24/18 06:15 07/24/18 12:12 EPA 3050B 1,6010D LC Beryllium, Total 0.117 mg/kg 0.417 J 2 07/24/18 06:15 07/24/18 12:12 EPA 3050B 0.082 1,6010D LC Cadmium, Total 0.417 mg/kg 0.833 Calcium, Total 1360 8.33 2.92 2 07/24/18 06:15 07/24/18 12:12 EPA 3050B 1,6010D mg/kg LC 0.080 2 1,6010D LC Chromium, Total 7.58 0.833 07/24/18 06:15 07/24/18 12:12 EPA 3050B mg/kg 2 1,6010D LC Cobalt, Total 1.68 mg/kg 1.67 0.138 07/24/18 06:15 07/24/18 12:12 EPA 3050B 2 1,6010D Copper, Total 19.7 mg/kg 0.833 0.215 07/24/18 06:15 07/24/18 12:12 EPA 3050B LC 6870 0.752 2 1,6010D LC Iron, Total 07/24/18 06:15 07/24/18 12:12 EPA 3050B mg/kg 4.17 2 Lead, Total 166 mg/kg 4.17 0.223 07/24/18 06:15 07/24/18 12:12 EPA 3050B 1,6010D LC Magnesium, Total 367 8.33 1.28 2 07/24/18 06:15 07/24/18 12:12 EPA 3050B 1,6010D LC mg/kg 57.0 0.833 0.132 2 07/24/18 06:15 07/24/18 12:12 EPA 3050B 1,6010D LC Manganese, Total mg/kg Mercury, Total 0.669 mg/kg 0.069 0.015 1 07/24/18 07:00 07/24/18 12:09 EPA 7471B 1,7471B MG Nickel, Total 4.96 2.08 0.202 2 07/24/18 06:15 07/24/18 12:12 EPA 3050B 1,6010D LC mg/kg J 208 12.0 2 1,6010D LC Potassium, Total 182 mg/kg 07/24/18 06:15 07/24/18 12:12 EPA 3050B Selenium, Total 0.433 J mg/kg 1.67 0.215 2 07/24/18 06:15 07/24/18 12:12 EPA 3050B 1,6010D LC Silver, Total ND mg/kg 0.833 0.236 2 07/24/18 06:15 07/24/18 12:12 EPA 3050B 1,6010D LC J Sodium, Total 67.9 mg/kg 167 2.62 2 07/24/18 06:15 07/24/18 12:12 EPA 3050B 1,6010D LC Thallium, Total ND mg/kg 1.67 0.262 2 07/24/18 06:15 07/24/18 12:12 EPA 3050B 1,6010D LC Vanadium, Total 12.4 0.833 0.169 2 07/24/18 06:15 07/24/18 12:12 EPA 3050B 1,6010D LC mg/kg 2 1,6010D LC 376 0.244 Zinc, Total mg/kg 4.17 07/24/18 06:15 07/24/18 12:12 EPA 3050B



07/23/18 09:15

Date Collected:

 Project Name:
 13-16 TO 13-30 BCD
 Lab Number:
 L1828167

 Project Number:
 13-16 TO 13-30 BCD
 Report Date:
 07/30/18

SAMPLE RESULTS

Lab ID: L1828167-02 Client ID: SB-2 (0-2)

Client ID: SB-2 (0-2) Date Received: 07/23/18
Sample Location: 13-16 TO 13-30 BEACH CHANNEL DRIVE Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Percent Solids: 97%

Percent Solids: Parameter	97% Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mans	sfield Lab										
Aluminum, Total	1230		mg/kg	7.84	2.12	2	07/24/18 06:15	07/24/18 12:17	EPA 3050B	1,6010D	LC
Antimony, Total	5.63		mg/kg	3.92	0.298	2	07/24/18 06:15	07/24/18 12:17	EPA 3050B	1,6010D	LC
Arsenic, Total	2.01		mg/kg	0.784	0.163	2	07/24/18 06:15	07/24/18 12:17	EPA 3050B	1,6010D	LC
Barium, Total	18.0		mg/kg	0.784	0.136	2	07/24/18 06:15	5 07/24/18 12:17	EPA 3050B	1,6010D	LC
Beryllium, Total	0.282	J	mg/kg	0.392	0.026	2	07/24/18 06:15	5 07/24/18 12:17	EPA 3050B	1,6010D	LC
Cadmium, Total	0.274	J	mg/kg	0.784	0.077	2	07/24/18 06:15	5 07/24/18 12:17	EPA 3050B	1,6010D	LC
Calcium, Total	1970		mg/kg	7.84	2.74	2	07/24/18 06:15	07/24/18 12:17	EPA 3050B	1,6010D	LC
Chromium, Total	3.38		mg/kg	0.784	0.075	2	07/24/18 06:15	5 07/24/18 12:17	EPA 3050B	1,6010D	LC
Cobalt, Total	2.60		mg/kg	1.57	0.130	2	07/24/18 06:15	5 07/24/18 12:17	EPA 3050B	1,6010D	LC
Copper, Total	32.2		mg/kg	0.784	0.202	2	07/24/18 06:15	5 07/24/18 12:17	EPA 3050B	1,6010D	LC
Iron, Total	3590		mg/kg	3.92	0.708	2	07/24/18 06:15	5 07/24/18 12:17	EPA 3050B	1,6010D	LC
Lead, Total	74.7		mg/kg	3.92	0.210	2	07/24/18 06:15	5 07/24/18 12:17	EPA 3050B	1,6010D	LC
Magnesium, Total	371		mg/kg	7.84	1.21	2	07/24/18 06:15	5 07/24/18 12:17	EPA 3050B	1,6010D	LC
Manganese, Total	28.4		mg/kg	0.784	0.125	2	07/24/18 06:15	5 07/24/18 12:17	EPA 3050B	1,6010D	LC
Mercury, Total	0.155		mg/kg	0.065	0.014	1	07/24/18 07:00	07/24/18 12:11	EPA 7471B	1,7471B	MG
Nickel, Total	6.39		mg/kg	1.96	0.190	2	07/24/18 06:15	5 07/24/18 12:17	EPA 3050B	1,6010D	LC
Potassium, Total	94.8	J	mg/kg	196	11.3	2	07/24/18 06:15	5 07/24/18 12:17	EPA 3050B	1,6010D	LC
Selenium, Total	ND		mg/kg	1.57	0.202	2	07/24/18 06:15	5 07/24/18 12:17	EPA 3050B	1,6010D	LC
Silver, Total	ND		mg/kg	0.784	0.222	2	07/24/18 06:15	07/24/18 12:17	EPA 3050B	1,6010D	LC
Sodium, Total	45.8	J	mg/kg	157	2.47	2	07/24/18 06:15	5 07/24/18 12:17	EPA 3050B	1,6010D	LC
Thallium, Total	ND		mg/kg	1.57	0.247	2	07/24/18 06:15	5 07/24/18 12:17	EPA 3050B	1,6010D	LC
Vanadium, Total	5.28		mg/kg	0.784	0.159	2	07/24/18 06:15	07/24/18 12:17	EPA 3050B	1,6010D	LC
Zinc, Total	205		mg/kg	3.92	0.230	2	07/24/18 06:15	07/24/18 12:17	EPA 3050B	1,6010D	LC



Project Name: 13-16 TO 13-30 BCD
Project Number: 13-16 TO 13-30 BCD

Lab Number: L1828167 **Report Date:** 07/30/18

Method Blank Analysis Batch Quality Control

Parameter	Result Q	ualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	
Total Metals - Mansfield	Lab for sa	imple(s):	01-02 Ba	atch: Wo	G11386	97-1				
Mercury, Total	0.022	J	mg/kg	0.083	0.018	1	07/24/18 07:00	07/24/18 10:25	5 1,7471B	MG

Prep Information

Digestion Method: EPA 7471B

Parameter	Result Qua	lifier Uni	ts RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	
Total Metals - Mansfi	eld Lab for samp	ole(s): 01-02	2 Batch: W	/G11387	10-1				
Aluminum, Total	ND	mg/	kg 4.00	1.08	1	07/24/18 06:15	07/24/18 09:52	1,6010D	LC
Antimony, Total	ND	mg/	kg 2.00	0.152	1	07/24/18 06:15	07/24/18 09:52	1,6010D	LC
Arsenic, Total	ND	mg/	kg 0.400	0.083	1	07/24/18 06:15	07/24/18 09:52	1,6010D	LC
Barium, Total	ND	mg/	kg 0.400	0.070	1	07/24/18 06:15	07/24/18 09:52	1,6010D	LC
Beryllium, Total	ND	mg/	kg 0.200	0.013	1	07/24/18 06:15	07/24/18 09:52	1,6010D	LC
Cadmium, Total	ND	mg/	kg 0.400	0.039	1	07/24/18 06:15	07/24/18 09:52	1,6010D	LC
Calcium, Total	ND	mg/	kg 4.00	1.40	1	07/24/18 06:15	07/24/18 09:52	1,6010D	LC
Chromium, Total	ND	mg/	kg 0.400	0.038	1	07/24/18 06:15	07/24/18 09:52	1,6010D	LC
Cobalt, Total	ND	mg/	kg 0.800	0.066	1	07/24/18 06:15	07/24/18 09:52	1,6010D	LC
Copper, Total	ND	mg/	kg 0.400	0.103	1	07/24/18 06:15	07/24/18 09:52	1,6010D	LC
Iron, Total	ND	mg/	kg 2.00	0.361	1	07/24/18 06:15	07/24/18 09:52	1,6010D	LC
Lead, Total	ND	mg/	kg 2.00	0.107	1	07/24/18 06:15	07/24/18 09:52	1,6010D	LC
Magnesium, Total	ND	mg/	kg 4.00	0.616	1	07/24/18 06:15	07/24/18 09:52	1,6010D	LC
Manganese, Total	ND	mg/	kg 0.400	0.064	1	07/24/18 06:15	07/24/18 09:52	1,6010D	LC
Nickel, Total	ND	mg/	kg 1.00	0.097	1	07/24/18 06:15	07/24/18 09:52	1,6010D	LC
Potassium, Total	ND	mg/	kg 100	5.76	1	07/24/18 06:15	07/24/18 09:52	1,6010D	LC
Selenium, Total	ND	mg/	kg 0.800	0.103	1	07/24/18 06:15	07/24/18 09:52	1,6010D	LC
Silver, Total	ND	mg/	kg 0.400	0.113	1	07/24/18 06:15	07/24/18 09:52	1,6010D	LC
Sodium, Total	12.3	J mg/	kg 80.0	1.26	1	07/24/18 06:15	07/24/18 09:52	1,6010D	LC
Thallium, Total	ND	mg/	kg 0.800	0.126	1	07/24/18 06:15	07/24/18 09:52	1,6010D	LC
Vanadium, Total	ND	mg/	kg 0.400	0.081	1	07/24/18 06:15	07/24/18 09:52	1,6010D	LC
Zinc, Total	ND	mg/	kg 2.00	0.117	1	07/24/18 06:15	07/24/18 09:52	1,6010D	LC



Serial_No:07301810:42

Project Name: 13-16 TO 13-30 BCD Lab Number: L1828167 Project Number: 13-16 TO 13-30 BCD

Report Date: 07/30/18

Method Blank Analysis Batch Quality Control

Prep Information

Digestion Method: EPA 3050B



 Project Name:
 13-16 TO 13-30 BCD

 Project Number:
 13-16 TO 13-30 BCD

Lab Number:

L1828167

Report Date:

07/30/18

Parameter	LCS %Recovery	Qual %	LCSD 6Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample	e(s): 01-02 Bato	ch: WG113869	97-2 SRM Lo	t Number:	D098-540			
Mercury, Total	129		-		50-149	-		



 Project Name:
 13-16 TO 13-30 BCD

 Project Number:
 13-16 TO 13-30 BCD

Lab Number: L1828167

Report Date: 07/30/18

Parameter	LCS %Recove		SD covery	%Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample	(s): 01-02	Batch: WG1138710-2	SRM Lot Number:	D098-540		
Aluminum, Total	70		-	47-153	-	
Antimony, Total	141		-	6-194	-	
Arsenic, Total	99		-	83-117	-	
Barium, Total	89		-	82-118	-	
Beryllium, Total	94		-	83-117	-	
Cadmium, Total	94		-	82-117	-	
Calcium, Total	86		-	81-118	-	
Chromium, Total	93		-	83-119	-	
Cobalt, Total	95		-	84-116	-	
Copper, Total	94		-	84-116	-	
Iron, Total	96		-	60-140	-	
Lead, Total	93		-	82-117	-	
Magnesium, Total	82		-	76-124	-	
Manganese, Total	91		-	82-118	-	
Nickel, Total	92		-	82-117	-	
Potassium, Total	84		-	69-131	-	
Selenium, Total	99		-	78-121	-	
Silver, Total	95		-	80-120	-	
Sodium, Total	92		-	74-126	-	
Thallium, Total	96		-	80-119	-	
Vanadium, Total	96		-	79-121	-	

 Project Name:
 13-16 TO 13-30 BCD

 Project Number:
 13-16 TO 13-30 BCD

Lab Number:

L1828167

Report Date:

07/30/18

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sa	mple(s): 01-02 Batch: WG	1138710-2 SRM Lot Num	nber: D098-540		
Zinc, Total	94	-	81-119	-	



Matrix Spike Analysis Batch Quality Control

 Project Name:
 13-16 TO 13-30 BCD

 Project Number:
 13-16 TO 13-30 BCD

Lab Number:

L1828167

Report Date:

07/30/18

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Recovery Qual Limits	RPD Qual	RPD Limits
Total Metals - Mansfield Lab	Associated san	nple(s): 01-02	QC Ba	tch ID: WG113	8697-3	QC Sam	nple: L1827037-	01 Client ID: M	S Sample	
Mercury, Total	0.092	0.14	0.263	122	Q	-	-	80-120	-	20



Matrix Spike Analysis Batch Quality Control

 Project Name:
 13-16 TO 13-30 BCD

 Project Number:
 13-16 TO 13-30 BCD

Lab Number: L1828167

Report Date: 07/30/18

arameter	Native Sample	MS Added	MS Found	MS %Recovery		MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield La	ab Associated sar	mple(s): 01-02	QC Ba	tch ID: WG11387	10-3	QC Sam	ple: L1828228-01	Client ID: MS	Sample	
Aluminum, Total	5410	182	5620	115		-	-	75-125	-	20
Antimony, Total	1.92J	45.6	44.0	96		-	-	75-125	-	20
Arsenic, Total	4.61	10.9	15.2	97		-	-	75-125	-	20
Barium, Total	58.9	182	229	93		-	-	75-125	-	20
Beryllium, Total	0.183J	4.56	4.35	95		-	-	75-125	-	20
Cadmium, Total	ND	4.65	4.22	91		-	-	75-125	-	20
Calcium, Total	6510	911	6750	26	Q	-	-	75-125	-	20
Chromium, Total	13.4	18.2	36.9	129	Q	-	-	75-125	-	20
Cobalt, Total	8.01	45.6	47.2	86		-	-	75-125	-	20
Copper, Total	166.	22.8	93.9	0	Q	-	-	75-125	-	20
Iron, Total	18200	91.1	15600	0	Q	-	-	75-125	-	20
Lead, Total	128.	46.5	155	58	Q	-	-	75-125	-	20
Magnesium, Total	3330	911	3700	40	Q	-	-	75-125	-	20
Manganese, Total	183.	45.6	203	44	Q	-	-	75-125	-	20
Nickel, Total	14.5	45.6	53.6	86		-	-	75-125	-	20
Potassium, Total	915.	911	1680	84		-	-	75-125	-	20
Selenium, Total	ND	10.9	10.5	96		-	-	75-125	-	20
Silver, Total	ND	27.3	26.2	96		-	-	75-125	-	20
Sodium, Total	318.	911	1200	97		-	-	75-125	-	20
Thallium, Total	ND	10.9	8.54	78		-	-	75-125	-	20
Vanadium, Total	29.2	45.6	67.4	84		-	-	75-125	-	20

Matrix Spike Analysis Batch Quality Control

 Project Name:
 13-16 TO 13-30 BCD

 Project Number:
 13-16 TO 13-30 BCD

Lab Number:

L1828167

Report Date:

07/30/18

Parameter	Native Sample	MS Added	MS Found	MS %Recovery		MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield	Lab Associated sam	nple(s): 01-02	2 QC Ba	tch ID: WG1138	3710-3	QC Sam	ple: L1828228-01	Client ID: MS	S Sample	
Zinc, Total	196.	45.6	208	26	Q	-	-	75-125	-	20



Lab Number:

L1828167

Report Date:

07/30/18

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual RP	D Limits
Total Metals - Mansfield Lab Associated sample(s): 01-0	2 QC Batch ID: WG	G1138697-4 QC Sample:	L1827037-01	Client ID:	DUP Sample	
Mercury, Total	0.092	0.081	mg/kg	13		20



Project Name:

13-16 TO 13-30 BCD

Project Number: 13-16 TO 13-30 BCD

 Project Name:
 13-16 TO 13-30 BCD

 Project Number:
 13-16 TO 13-30 BCD

 Lab Number:
 L1828167

 Report Date:
 07/30/18

arameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
otal Metals - Mansfield Lab Associated sample(s): 01-0	O2 QC Batch ID: WG1	138710-4 QC Sample:	L1828228-01	Client ID:	DUP Sample
Aluminum, Total	5410	5280	mg/kg	2	20
Antimony, Total	1.92J	0.956J	mg/kg	NC	20
Arsenic, Total	4.61	9.02	mg/kg	65	Q 20
Barium, Total	58.9	71.7	mg/kg	20	20
Beryllium, Total	0.183J	0.255J	mg/kg	NC	20
Cadmium, Total	ND	ND	mg/kg	NC	20
Calcium, Total	6510	11100	mg/kg	52	Q 20
Chromium, Total	13.4	19.9	mg/kg	39	Q 20
Cobalt, Total	8.01	8.12	mg/kg	1	20
Copper, Total	166.	121	mg/kg	31	Q 20
Iron, Total	18200	32600	mg/kg	57	Q 20
Lead, Total	128.	258	mg/kg	67	Q 20
Magnesium, Total	3330	2860	mg/kg	15	20
Manganese, Total	183.	278	mg/kg	41	Q 20
Nickel, Total	14.5	16.7	mg/kg	14	20
Potassium, Total	915.	720	mg/kg	24	Q 20
Selenium, Total	ND	ND	mg/kg	NC	20
Silver, Total	ND	ND	mg/kg	NC	20
Sodium, Total	318.	289	mg/kg	10	20



 Project Name:
 13-16 TO 13-30 BCD

 Project Number:
 13-16 TO 13-30 BCD

Lab Number:

L1828167

Report Date:

07/30/18

Parameter	Native Sample	ative Sample Duplicate Sample Units		RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-0	QC Batch ID:	WG1138710-4 QC Sample:	L1828228-01	Client ID:	DUP Sample
Thallium, Total	ND	ND	mg/kg	NC	20
Vanadium, Total	29.2	27.3	mg/kg	7	20
Zinc, Total	196.	205	mg/kg	4	20



INORGANICS & MISCELLANEOUS



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 Project Name:
 13-16 TO 13-30 BCD
 Lab Number:
 L1828167

 Project Number:
 13-16 TO 13-30 BCD
 Report Date:
 07/30/18

SAMPLE RESULTS

Lab ID: L1828167-01 Date Collected: 07/23/18 10:45

Client ID: SB-1 (0-2) Date Received: 07/23/18
Sample Location: 13-16 TO 13-30 BEACH CHANNEL DRIVE Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry -	· Westborough Lab									
Solids, Total	90.9		%	0.100	NA	1	-	07/24/18 09:03	121,2540G	RI



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 Project Name:
 13-16 TO 13-30 BCD
 Lab Number:
 L1828167

 Project Number:
 13-16 TO 13-30 BCD
 Report Date:
 07/30/18

SAMPLE RESULTS

 Lab ID:
 L1828167-02
 Date Collected:
 07/23/18 09:15

 Client ID:
 SB-2 (0-2)
 Date Received:
 07/23/18

Sample Location: 13-16 TO 13-30 BEACH CHANNEL DRIVE Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst		
General Chemistry - Westborough Lab												
Solids, Total	97.2		%	0.100	NA	1	-	07/24/18 09:03	121,2540G	RI		



Lab Number:

L1828167

Report Date:

07/30/18

Parameter	Native Sam	ple D	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab A	Associated sample(s): 01-02	QC Batch ID:	WG1138766-1	QC Sample:	L1828061-01	Client ID:	DUP Sample
Solids, Total	94.5		92.6	%	2		20



Project Name:

13-16 TO 13-30 BCD

Project Number: 13-16 TO 13-30 BCD

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Project Name: 13-16 TO 13-30 BCD **Lab Number:** L1828167 Project Number: 13-16 TO 13-30 BCD

YES

Report Date: 07/30/18

Sample Receipt and Container Information

Were project specific reporting limits specified?

Cooler Information

Custody Seal Cooler

Α Absent

Container Info	ormation		Initial	Final	Temp			Frozen	
Container ID	Container Type	Cooler	рН	pН	•	Pres	Seal	Date/Time	Analysis(*)
L1828167-01A	Metals Only-Glass 60mL/2oz unpreserved	Α	NA		2.1	Υ	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG- TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL- TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE- TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE- TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA- TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1828167-01B	Vial Large Septa unpreserved (4oz)	Α	NA		2.1	Υ	Absent		NYTCL-8260(14)
L1828167-01C	Glass 120ml/4oz unpreserved	Α	NA		2.1	Υ	Absent		NYTCL-8270(14),TS(7)
L1828167-01X	Vial MeOH preserved split	Α	NA		2.1	Υ	Absent		NYTCL-8260(14)
L1828167-01Y	Vial Water preserved split	Α	NA		2.1	Υ	Absent	24-JUL-18 04:11	NYTCL-8260(14)
L1828167-01Z	Vial Water preserved split	Α	NA		2.1	Υ	Absent	24-JUL-18 04:11	NYTCL-8260(14)
L1828167-02A	Metals Only-Glass 60mL/2oz unpreserved	Α	NA		2.1	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG- TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL- TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE- TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE- TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA- TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1828167-02B	Vial Large Septa unpreserved (4oz)	Α	NA		2.1	Υ	Absent		NYTCL-8260(14)
L1828167-02C	Glass 120ml/4oz unpreserved	Α	NA		2.1	Υ	Absent		NYTCL-8270(14),TS(7)
L1828167-02X	Vial MeOH preserved split	Α	NA		2.1	Υ	Absent		NYTCL-8260(14)
L1828167-02Y	Vial Water preserved split	Α	NA		2.1	Υ	Absent	24-JUL-18 04:11	NYTCL-8260(14)
L1828167-02Z	Vial Water preserved split	Α	NA		2.1	Υ	Absent	24-JUL-18 04:11	NYTCL-8260(14)
L1828167-03A	Vial HCl preserved	Α	NA		2.1	Υ	Absent		NYTCL-8260(14)
L1828167-03B	Vial HCl preserved	Α	NA		2.1	Υ	Absent		NYTCL-8260(14)
L1828167-03C	Vial HCl preserved	Α	NA		2.1	Υ	Absent		NYTCL-8260(14)
L1828167-03D	Amber 250ml unpreserved	Α	7	7	2.1	Υ	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L1828167-03E	Amber 250ml unpreserved	Α	7	7	2.1	Υ	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L1828167-04A	Vial HCl preserved	Α	NA		2.1	Υ	Absent		NYTCL-8260(14)



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Lab Number: L1828167

Report Date: 07/30/18

Container Info	ormation		Initial	Final	Temp			Frozen	
Container ID	Container Type	Cooler	рН	рН	deg C	Pres	Seal	Date/Time	Analysis(*)
L1828167-04B	Vial HCl preserved	Α	NA		2.1	Υ	Absent		NYTCL-8260(14)
L1828167-04C	Vial HCl preserved	Α	NA		2.1	Υ	Absent		NYTCL-8260(14)
L1828167-04D	Amber 250ml unpreserved	Α	7	7	2.1	Υ	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L1828167-04E	Amber 250ml unpreserved	Α	7	7	2.1	Υ	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L1828167-05A	Vial HCl preserved	Α	NA		2.1	Υ	Absent		NYTCL-8260(14)
L1828167-05B	Vial HCl preserved	Α	NA		2.1	Υ	Absent		NYTCL-8260(14)



Project Name:

13-16 TO 13-30 BCD

Project Number: 13-16 TO 13-30 BCD

Project Name: Lab Number: 13-16 TO 13-30 BCD L1828167 **Project Number:** 13-16 TO 13-30 BCD **Report Date:** 07/30/18

GLOSSARY

Acronyms

EPA

MS

EDL - Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any

adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis

of PAHs using Solid-Phase Microextraction (SPME).

EMPC - Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an

analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case

estimate of the concentration.

- Environmental Protection Agency.

LCS - Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of

analytes or a material containing known and verified amounts of analytes.

LCSD - Laboratory Control Sample Duplicate: Refer to LCS.

LFB - Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of

analytes or a material containing known and verified amounts of analytes.

MDL - Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any

adjustments from dilutions, concentrations or moisture content, where applicable.

- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for

which an independent estimate of target analyte concentration is available. MSD - Matrix Spike Sample Duplicate: Refer to MS.

NA Not Applicable.

NC - Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's

reporting unit.

NDPA/DPA - N-Nitrosodiphenylamine/Diphenylamine.

NI - Not Ignitable.

NP - Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.

RL - Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL

includes any adjustments from dilutions, concentrations or moisture content, where applicable.

RPD - Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the

precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the

values; although the RPD value will be provided in the report.

SRM - Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the

associated field samples.

STLP - Semi-dynamic Tank Leaching Procedure per EPA Method 1315.

TEF - Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.

TEO - Toxic Equivalent: The measure of a sample is toxicity derived by multiplying each dioxin and furan by its corresponding TEF

and then summing the resulting values.

TIC - Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound

list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Footnotes

- The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Waterpreserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Report Format: DU Report with 'J' Qualifiers



 Project Name:
 13-16 TO 13-30 BCD
 Lab Number:
 L1828167

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 13-16 TO 13-30 BCD
 Report Date:
 07/30/18

Data Qualifiers

- A Spectra identified as "Aldol Condensation Product".
- The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentrations of the analyte at less than ten times (10x) the concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).
- Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
- Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations
 of the analyte.
- E Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
- G The concentration may be biased high due to matrix interferences (i.e, co-elution) with non-target compound(s). The result should be considered estimated.
- H The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- I The lower value for the two columns has been reported due to obvious interference.
- M Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.
- NJ Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.
- P The RPD between the results for the two columns exceeds the method-specified criteria.
- Q The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- R Analytical results are from sample re-analysis.
- **RE** Analytical results are from sample re-extraction.
- S Analytical results are from modified screening analysis.
- Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs).
- ND Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.

Report Format: DU Report with 'J' Qualifiers



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 Project Name:
 13-16 TO 13-30 BCD
 Lab Number:
 L1828167

 Project Number:
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 Report Date:
 07/30/18

REFERENCES

Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IV, 2007.

121 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WEF. Standard Methods Online.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.



Alpha Analytical, Inc. Facility: Company-wide

Department: Quality Assurance

Title: Certificate/Approval Program Summary

Serial_No:07301810:42

ID No.:17873 Revision 11

Published Date: 1/8/2018 4:15:49 PM

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Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility

EPA 624: m/p-xylene, o-xylene

EPA 8260C: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: lodomethane (methyl iodide), Methyl methacrylate, 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.

EPA 8270D: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine.

EPA 300: DW: Bromide EPA 6860: SCM: Perchlorate

EPA 9010: NPW and SCM: Amenable Cyanide Distillation

SM4500: NPW: Amenable Cyanide, Dissolved Oxygen; SCM: Total Phosphorus, TKN, NO2, NO3.

Mansfield Facility

SM 2540D: TSS

EPA 8082A: NPW: PCB: 1, 5, 31, 87,101, 110, 141, 151, 153, 180, 183, 187.

EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene,

3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

Biological Tissue Matrix: EPA 3050B

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility:

Drinking Water

EPA 300.0: Chloride, Nitrate-N, Fluoride, Sulfate; EPA 353.2: Nitrate-N, Nitrite-N; SM4500NO3-F: Nitrate-N, Nitrite-N; SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500CI-D, SM2320B, SM2540C, SM4500H-B

EPA 332: Perchlorate; EPA 524.2: THMs and VOCs; EPA 504.1: EDB, DBCP.

Microbiology: SM9215B; SM9223-P/A, SM9223B-Colilert-QT,SM9222D.

Non-Potable Water

SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH: Ammonia-N and Kjeldahl-N, EPA 350.1: Ammonia-N, LACHAT 10-107-06-1-B: Ammonia-N, EPA 351.1, SM4500NO3-F, EPA 353.2: Nitrate-N, EPA 351.1, SM4500P-B, E, E, EPA 351.1, SM4500P-B, E, EPA 351.1, SM4500P-B, E, EPA 351.1, SM4500P-B, EPA 351.1, SM4500P-B, E, EPA 351.1, SM4500P-B, EPA 351.1, SM450P-B, EPA 351.1, SM4500P-B, EPA 351.1, SM500P-B, EPA 351.1, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D.

EPA 624: Volatile Halocarbons & Aromatics,

EPA 608: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs

EPA 625: SVOC (Acid/Base/Neutral Extractables), EPA 600/4-81-045: PCB-Oil.

Microbiology: SM9223B-Colilert-QT; Enterolert-QT, SM9221E, SM9222D.

Mansfield Facility:

Drinking Water

EPA 200.7: Al, Ba, Be, Cd, Cr, Cu, Mn, Ni, Na, Ag, Ca, Zn. EPA 200.8: Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. EPA 245.1 Hg. EPA 522.

Non-Potable Water

EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.

EPA 200.8: Al, Sb, As, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn.

EPA 245.1 Hg.

SM2340B

For a complete listing of analytes and methods, please contact your Alpha Project Manager.

Pre-Qualtrax Document ID: 08-113 Document Type: Form

Westborough, MA 01681		Tonawanda, NY 14150: 275 (r Way Cooper Ave, Suite	105		of		Dist	Call	7	127/	d-	ALPHAGON
B Mathematica	The state of the s	Project Information				_	Del	in mark t	6.0				140400/
8 Walkup Dr. TEL: 508-898-9220	320 Forbes Blvd TEL: 508-822-9300	Project Name: 13-/6	In 13-30	BCA	_		-	LAS			1 App o		Billing Information
FAX: 508-898-9193	FAX: 508-822-3288	Project Location: [3-			ONLE	1-4-01	_ 7	-			ASP-B		Same as Client Info
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Address: \2\ IJ 2	7+25+15+15+16702		Project #) 1/2	*	_		Reg		y Requir	ement			Disposal Site Information
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Phone: 646-60		STREET, SQUARE, SQUARE							Standard		NY CP-	51	applicable disposal facilities.
Fax:	10-002	Turn-Around Time	N			_	1	3	Restricted	, la	Other		Disposal Facility:
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Thorn nomples have	base	Troom to again pie approve	IN IN YOUSO	NY # of Days	5:				Sewer Dis	scharge			Other:
Other project specific	been previously analyze ic requirements/comm	ed by Alpha					ANA	LYS	S				Sample Filtration
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APINIOC C	Sa	mple ID	Col	lection	Sample	Sampler's	15	15	0	Ш	1 1		
	8017	23	Date	Time	Matrix	Initials	S	U	1			to the second	Sample Specific Comments
78/67 -01		-2)	7/23/18		5	SB	X	X	X				
02		(2-0	1	0915	3		X	X	X				
05	TW-1			140	60 W		X	X					
87	TW-Z	14	V	0955	GW	V	X	X			100		
- 15-	TripBlo	y F		17.44	1-3/1								
	,						1			-			
												1	
reservative Code: = None	Container Code P = Plastic	Westboro: Certification N	lo: MA935		-		10.					+	
	A = Amber Glass	Mansfield: Certification N	lo: MA015		Cont	ainer Type	tX.	A	4		1.1.	1 1	Please print clearly, legibly
	V = Visi G = Glass					VIII VIII	1		4			+	and completely. Samples car not be logged in and
= NaOH	B = Bacteria Cup				Pr	eservative	1/B	4	13			1 1	turnaround time clock will not
	C = Cube O = Other	Relinquishad 1	BW	Date/	Time	1	teceiv	-	1	_	Date (Tie	_	start until any ambiguities are
= Na ₂ S ₂ O ₃	E = Encore	50/1	-	7/23/18	1	11	A CONTRACTOR OF THE PARTY OF TH	al by	11/2	1.00	Date/Tim		resolved. BY EXECUTING 7 THIS COC, THE CLIENT
	D ≈ BOD Bottle	18 / Som	1/22	3 1 14	1-15	1		1	mi	1 57/	77	100	HAS READ AND AGREES
= Other			1	122	Min o	100	17		100	110	1 /2	9/1	TO BE BOUND BY ALPHA'S
rm No: 01-25 HC (rev. 30-	-Sept-2013)	4	-	9	A Mars P	1	1	_		1/23	118 22	10-	TERMS & CONDITIONS. (See reverse side.)



ANALYTICAL REPORT

Lab Number: L1828472

Client: Tenen Environmental, LLC

121 West 27th Street

Suite 702

New York City, NY 10001

ATTN: Matt Carroll Phone: (646) 606-2332

Project Name: 13-16 TO 13-30 BCD

Project Number: 13-16 TO 13-30 BCD

Report Date: 07/26/18

The original project report/data package is held by Alpha Analytical. This report/data package is paginated and should be reproduced only in its entirety. Alpha Analytical holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0574), IL (200077), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #P330-17-00196).

Eight Walkup Drive, Westborough, MA 01581-1019 508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com



 Project Name:
 13-16 TO 13-30 BCD

 Project Number:
 13-16 TO 13-30 BCD

Lab Number: L1828472 **Report Date:** 07/26/18

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L1828472-01	SB-3 (5-7)	SOIL	13-16 TO 13-30 BEACH CHANNEL DR.	07/24/18 13:40	07/24/18
L1828472-02	SB-4 (5-7)	SOIL	13-16 TO 13-30 BEACH CHANNEL DR.	07/24/18 12:15	07/24/18
L1828472-03	TW-3	WATER	13-16 TO 13-30 BEACH CHANNEL DR.	07/24/18 15:15	07/24/18
L1828472-04	TW-4	WATER	13-16 TO 13-30 BEACH CHANNEL DR.	07/24/18 13:35	07/24/18
L1828472-05	TRIP BLANK	WATER	13-16 TO 13-30 BEACH CHANNEL DR.	07/24/18 00:00	07/24/18



 Project Name:
 13-16 TO 13-30 BCD
 Lab Number:
 L1828472

 Project Number:
 13-16 TO 13-30 BCD
 Report Date:
 07/26/18

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. All specific QC information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications. Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances the specific failure is not narrated but noted in the associated QC table. The information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications.

Please see the associated ADEx data file for a comparison of laboratory reporting limits that were achieved with the regulatory Numerical Standards requested on the Chain of Custody.

HOLD POLICY

For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Client Service Representative and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Client Services at 800-624-9220 with any questions.



 Project Name:
 13-16 TO 13-30 BCD
 Lab Number:
 L1828472

 Project Number:
 13-16 TO 13-30 BCD
 Report Date:
 07/26/18

Case Narrative (continued)

Report Submission

This report contains the results of the Volatile Organics analysis. The results of all other analyses will be issued under separate cover.

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

Volatile Organics

Any reported concentrations that are below 200 ug/kg may be biased low due to the sample not being collected according to 5035-L/5035A-L low-level specifications.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature:

Title: Technical Director/Representative Date: 07/26/18

Melissa Cripps Melissa Cripps

ORGANICS



VOLATILES



07/24/18 13:40

Project Name: 13-16 TO 13-30 BCD

Project Number: 13-16 TO 13-30 BCD

SAMPLE RESULTS

Lab Number: L1828472

Report Date: 07/26/18

Lab ID: L1828472-01

Client ID: SB-3 (5-7)

13-16 TO 13-30 BEACH CHANNEL DR. Sample Location:

Date Received: 07/24/18 Field Prep: Not Specified

Date Collected:

Sample Depth:

Matrix: Soil Analytical Method: 1,8260C Analytical Date: 07/25/18 17:11

Analyst: ΑD 90% Percent Solids:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	
Volatile Organics by GC/MS - Wes	stborough Lab						
Methylene chloride	2.6	J	ug/kg	4.4	2.0	1	
1,1-Dichloroethane	ND		ug/kg	0.87	0.13	1	
Chloroform	ND		ug/kg	1.3	0.12	1	
Carbon tetrachloride	ND		ug/kg	0.87	0.20	1	
1,2-Dichloropropane	ND		ug/kg	0.87	0.11	1	
Dibromochloromethane	ND		ug/kg	0.87	0.12	1	
1,1,2-Trichloroethane	ND		ug/kg	0.87	0.23	1	
Tetrachloroethene	ND		ug/kg	0.44	0.17	1	
Chlorobenzene	ND		ug/kg	0.44	0.11	1	
Trichlorofluoromethane	ND		ug/kg	3.5	0.61	1	
1,2-Dichloroethane	ND		ug/kg	0.87	0.22	1	
1,1,1-Trichloroethane	ND		ug/kg	0.44	0.15	1	
Bromodichloromethane	ND		ug/kg	0.44	0.10	1	
trans-1,3-Dichloropropene	ND		ug/kg	0.87	0.24	1	
cis-1,3-Dichloropropene	ND		ug/kg	0.44	0.14	1	
1,3-Dichloropropene, Total	ND		ug/kg	0.44	0.14	1	
1,1-Dichloropropene	ND		ug/kg	0.44	0.14	1	
Bromoform	ND		ug/kg	3.5	0.22	1	
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.44	0.14	1	
Benzene	ND		ug/kg	0.44	0.14	1	
Toluene	ND		ug/kg	0.87	0.47	1	
Ethylbenzene	ND		ug/kg	0.87	0.12	1	
Chloromethane	ND		ug/kg	3.5	0.82	1	
Bromomethane	ND		ug/kg	1.7	0.51	1	
Vinyl chloride	ND		ug/kg	0.87	0.29	1	
Chloroethane	ND		ug/kg	1.7	0.40	1	
1,1-Dichloroethene	ND		ug/kg	0.87	0.21	1	
trans-1,2-Dichloroethene	ND		ug/kg	1.3	0.12	1	
			3. 3				



Project Name: 13-16 TO 13-30 BCD **Lab Number:** L1828472

Project Number: 13-16 TO 13-30 BCD **Report Date:** 07/26/18

SAMPLE RESULTS

Lab ID: L1828472-01 Date Collected: 07/24/18 13:40

Client ID: SB-3 (5-7) Date Received: 07/24/18
Sample Location: 13-16 TO 13-30 BEACH CHANNEL DR. Field Prep: Not Specified

Sample Depth:

4-Methyl-2-pentanone ND ug/kg 8.7 1.1 1 1,2,3-Trichloropropane ND ug/kg 1.7 0.11 1 2-Hexanone ND ug/kg 8.7 1.0 1 Bromochloromethane ND ug/kg 1.7 0.18 1 2,2-Dichloropropane ND ug/kg 1.7 0.18 1 1,2-Dibromoethane ND ug/kg 0.87 0.24 1 1,3-Dichloropropane ND ug/kg 1.7 0.15 1 1,1,1,2-Tetrachloroethane ND ug/kg 0.44 0.12 1 Bromobenzene ND ug/kg 0.44 0.12 1 n-Butylbenzene ND ug/kg 0.87 0.15 1 sec-Butylbenzene ND ug/kg 0.87 0.13 1 tert-Butylbenzene ND ug/kg 0.87 0.13 1 tert-Butylbenzene ND ug/kg 1.7 0.10 <th>Parameter</th> <th>Result</th> <th>Qualifier</th> <th>Units</th> <th>RL</th> <th>MDL</th> <th>Dilution Factor</th>	Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
1,2-Dichlorobenzene ND ug/kg 1.7 0.12 1 1,3-Dichlorobenzene ND ug/kg 1.7 0.13 1 1,4-Dichlorobenzene ND ug/kg 1.7 0.15 1 1,4-Dichlorobenzene ND ug/kg 1.7 0.15 1 1,4-Dichlorobenzene ND ug/kg 1.7 0.16 1 1,4-Dichlorobenzene ND ug/kg 1.7 0.18 1 1,2-Dichlorobenzene ND ug/kg 1.7 0.49 1 1,2-Dichlorobenzene ND ug/kg 0.87 0.25 1 1,2-Dichlorobenzene ND ug/kg 0.87 0.25 1 1,2-Dichlorobenzene ND ug/kg 0.87 0.15 1 1,2-Dichlorobenzene ND ug/kg 0.87 0.12 1 1,2-Dichlorobenzene ND ug/kg 0.87 0.12 1 1,2-Dichlorobenzene ND ug/kg 0.87 0.12 1 1,2-Dichlorobenzene ND ug/kg 0.87 0.17 1 1,2-Dichlorobenzene ND ug/kg 8.7 0.80 1 1,2-Dichlorobenzene ND ug/kg 8.7 0.80 1 1,2-Dichlorobenzene ND ug/kg 8.7 0.80 1 1,2-Dichlorobenzene ND ug/kg 8.7 1.9 1 1,2-Dichlorobenzene ND ug/kg 8.7 1.1 1 1,2-Tertachloropepane ND ug/kg 8.7 1.1 1 1,2-Dichloropepane ND ug/kg 8.7 1.1 1 1,1-Dichloropepane ND ug/kg 8.7 1.1 1 1,1-Dichloropepane ND ug/kg 8.7 1.1 0.15 1 1,1-Dichloropepane ND ug/kg 1.7 0.10 1 1,1-Dichloropepane ND ug/kg	Volatile Organics by GC/MS - W	estborough Lab					
1,2-Dichlorobenzene ND ug/kg 1.7 0.12 1 1,3-Dichlorobenzene ND ug/kg 1.7 0.13 1 1,4-Dichlorobenzene ND ug/kg 1.7 0.15 1 1,4-Dichlorobenzene ND ug/kg 1.7 0.15 1 1,4-Dichlorobenzene ND ug/kg 1.7 0.16 1 1,4-Dichlorobenzene ND ug/kg 1.7 0.18 1 1,2-Dichlorobenzene ND ug/kg 1.7 0.49 1 1,2-Dichlorobenzene ND ug/kg 0.87 0.25 1 1,2-Dichlorobenzene ND ug/kg 0.87 0.25 1 1,2-Dichlorobenzene ND ug/kg 0.87 0.15 1 1,2-Dichlorobenzene ND ug/kg 0.87 0.12 1 1,2-Dichlorobenzene ND ug/kg 0.87 0.12 1 1,2-Dichlorobenzene ND ug/kg 0.87 0.12 1 1,2-Dichlorobenzene ND ug/kg 0.87 0.17 1 1,2-Dichlorobenzene ND ug/kg 8.7 0.80 1 1,2-Dichlorobenzene ND ug/kg 8.7 0.80 1 1,2-Dichlorobenzene ND ug/kg 8.7 0.80 1 1,2-Dichlorobenzene ND ug/kg 8.7 1.9 1 1,2-Dichlorobenzene ND ug/kg 8.7 1.1 1 1,2-Tertachloropepane ND ug/kg 8.7 1.1 1 1,2-Dichloropepane ND ug/kg 8.7 1.1 1 1,1-Dichloropepane ND ug/kg 8.7 1.1 1 1,1-Dichloropepane ND ug/kg 8.7 1.1 0.15 1 1,1-Dichloropepane ND ug/kg 1.7 0.10 1 1,1-Dichloropepane ND ug/kg	Trichloroethene	ND		ua/ka	0.44	0.12	1
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1,4-Dichlorobenzene							
Mothyl tert butyl either ND ug/kg 1.7 0.18 1 p'm-Xylene ND ug/kg 1.7 0.49 1 o-Xylene ND ug/kg 0.87 0.25 1 o-Xylenes ND ug/kg 0.87 0.25 1 cis-1,2-Dichloroethene ND ug/kg 0.87 0.15 1 1,2-Dichloroethene, Total ND ug/kg 0.87 0.12 1 Dibromomethane ND ug/kg 0.87 0.12 1 Silyrene ND ug/kg 0.87 0.12 1 Dibromomethane ND ug/kg 3.7 0.20 1 Acetone 28 ug/kg 8.7 4.2 1 Carbon disulfide ND ug/kg 8.7 1.9 1 2-Butanone ND ug/kg 8.7 1.9 1 4-Methyl-2-pentanone ND ug/kg 8.7 1.1 1							
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Dibromomethane ND							
Styrene ND ug/kg 0.87 0.17 1 Dichlorodifluoromethane ND ug/kg 8.7 0.80 1 Acetone 28 ug/kg 8.7 4.2 1 Carbon disulfide ND ug/kg 8.7 4.0 1 2-Butanone ND ug/kg 8.7 1.9 1 Vinyl acetate ND ug/kg 8.7 1.9 1 4-Methyl-2-pentanone ND ug/kg 8.7 1.1 1 4-Methyl-2-pentanone ND ug/kg 1.7 0.11 1 1,2,3-Trichloropropane ND ug/kg 1.7 0.11 1 2-Hexanone ND ug/kg 1.7 0.18 1 2-Lebindropropane ND ug/kg 1.7 0.18 1 1,2-Dibromoethane ND ug/kg 0.87 0.24 1 1,2-Dibromoethane ND ug/kg 0.44 0.12 1		ND					1
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Actorne 28 ug/kg 8.7 4.2 1 Carbon disulfide ND ug/kg 8.7 4.0 1 2-Butanone ND ug/kg 8.7 1.9 1 Vinyl acetate ND ug/kg 8.7 1.9 1 4-Methyl-2-pentanone ND ug/kg 8.7 1.1 1 4-Methyl-2-pentanone ND ug/kg 1.7 0.11 1 1,2,3-Trichloropropane ND ug/kg 1.7 0.11 1 2-Hexanone ND ug/kg 1.7 0.18 1 2-Lebranone ND ug/kg 1.7 0.18 1 1,2-Dibromedatione ND ug/kg 0.87 0.24 1 1,1,	·	ND			8.7	0.80	1
Carbon disulfide ND ug/kg 8.7 4.0 1 2-Butanone ND ug/kg 8.7 1.9 1 Vinyl acetate ND ug/kg 8.7 1.9 1 4-Methyl-2-pentanone ND ug/kg 8.7 1.1 1 4-Methyl-2-pentanone ND ug/kg 1.7 0.11 1 1,2,3-Trichloropropane ND ug/kg 1.7 0.11 1 2-Hexanone ND ug/kg 1.7 0.18 1 Bromochloromethane ND ug/kg 1.7 0.18 1 1,2-Dibromoethane ND ug/kg 0.87 0.24 1 1,3-Dichloropropane ND ug/kg 0.87 0.24 1 1,1,1,2-Tetrachloroethane ND ug/kg 0.47 0.15 1 Bromochezzene ND ug/kg 0.47 0.13 1 Bromobenzzene ND ug/kg 0.87 0.13 <t< td=""><td>Acetone</td><td>28</td><td></td><td></td><td>8.7</td><td>4.2</td><td>1</td></t<>	Acetone	28			8.7	4.2	1
2-Butanone ND ug/kg 8.7 1.9 1 Vinyl acetate ND ug/kg 8.7 1.9 1 4-Methyl-2-pentanone ND ug/kg 8.7 1.1 1 1,2,3-Trichloropropane ND ug/kg 1.7 0.11 1 2-Hexanone ND ug/kg 8.7 1.0 1 Bromochloromethane ND ug/kg 1.7 0.18 1 2,2-Dichloropropane ND ug/kg 1.7 0.18 1 1,2-Dibromoethane ND ug/kg 0.87 0.24 1 1,3-Dichloropropane ND ug/kg 1.7 0.15 1 1,1,1,2-Tetrachloroethane ND ug/kg 0.44 0.12 1 Bromobenzene ND ug/kg 0.44 0.12 1 Bromobenzene ND ug/kg 0.87 0.13 1 sec-Butylbenzene ND ug/kg 0.87 0.13 1	Carbon disulfide	ND			8.7	4.0	1
Vinyl acetate ND ug/kg 8.7 1.9 1 4-Methyl-2-pentanone ND ug/kg 8.7 1.1 1 1,2,3-Trichloropropane ND ug/kg 1.7 0.11 1 2-Hexanone ND ug/kg 8.7 1.0 1 Bromochloromethane ND ug/kg 1.7 0.18 1 2,2-Dichloropropane ND ug/kg 1.7 0.18 1 1,2-Dibromoethane ND ug/kg 0.87 0.24 1 1,3-Dichloropropane ND ug/kg 1.7 0.15 1 1,1,1,2-Tetrachloroethane ND ug/kg 0.44 0.12 1 Bromobenzene ND ug/kg 0.87 0.13 1 n-Butylbenzene ND ug/kg 0.87 0.15 1 sec-Butylbenzene ND ug/kg 1.7 0.10 1 tetr-Butylbenzene ND ug/kg 1.7 0.10	2-Butanone	ND			8.7	1.9	1
4-Methyl-2-pentanone ND ug/kg 8.7 1.1 1 1,2,3-Trichloropropane ND ug/kg 1.7 0.11 1 2-Hexanone ND ug/kg 8.7 1.0 1 Bromochloromethane ND ug/kg 1.7 0.18 1 2,2-Dichloropropane ND ug/kg 1.7 0.18 1 1,2-Dibromoethane ND ug/kg 0.87 0.24 1 1,3-Dichloropropane ND ug/kg 1.7 0.15 1 1,1,1,2-Tetrachloroethane ND ug/kg 0.44 0.12 1 Bromobenzene ND ug/kg 0.44 0.12 1 n-Butylbenzene ND ug/kg 0.87 0.15 1 sec-Butylbenzene ND ug/kg 0.87 0.13 1 tert-Butylbenzene ND ug/kg 1.7 0.10 1 o-Chlorotoluene ND ug/kg 1.7 0.10	Vinyl acetate	ND			8.7	1.9	1
2-Hexanone ND ug/kg 8.7 1.0 1 Bromochloromethane ND ug/kg 1.7 0.18 1 2,2-Dichloropropane ND ug/kg 1.7 0.18 1 1,2-Dibromoethane ND ug/kg 0.87 0.24 1 1,3-Dichloropropane ND ug/kg 1.7 0.15 1 1,1,1,2-Tetrachloroethane ND ug/kg 0.44 0.12 1 Bromobenzene ND ug/kg 1.7 0.13 1 n-Butylbenzene ND ug/kg 0.87 0.15 1 sec-Butylbenzene ND ug/kg 0.87 0.13 1 tert-Butylbenzene ND ug/kg 1.7 0.10 1 tert-Butylbenzene ND ug/kg 1.7 0.10 1 c-Chlorotoluene ND ug/kg 1.7 0.17 1 p-Chlorotoluene ND ug/kg 3.5 0.15 <t< td=""><td>4-Methyl-2-pentanone</td><td>ND</td><td></td><td></td><td>8.7</td><td>1.1</td><td>1</td></t<>	4-Methyl-2-pentanone	ND			8.7	1.1	1
Bromochloromethane ND	1,2,3-Trichloropropane	ND		ug/kg	1.7	0.11	1
2,2-Dichloropropane ND ug/kg 1.7 0.18 1 1,2-Dibromoethane ND ug/kg 0.87 0.24 1 1,3-Dichloropropane ND ug/kg 1.7 0.15 1 1,1,1,2-Tetrachloroethane ND ug/kg 0.44 0.12 1 Bromobenzene ND ug/kg 1.7 0.13 1 n-Butylbenzene ND ug/kg 0.87 0.15 1 sec-Butylbenzene ND ug/kg 0.87 0.13 1 tert-Butylbenzene ND ug/kg 1.7 0.10 1 o-Chlorotoluene ND ug/kg 1.7 0.10 1 o-Chlorotoluene ND ug/kg 1.7 0.09 1 1,2-Dibromo-3-chloropropane ND ug/kg 2.6 0.87 1 Hexachlorobutadiene ND ug/kg 3.5 0.15 1 Isopropylbenzene ND ug/kg 0.87 0	2-Hexanone	ND		ug/kg	8.7	1.0	1
1,2-Dibromoethane ND ug/kg 0.87 0.24 1 1,3-Dichloropropane ND ug/kg 1.7 0.15 1 1,1,1,2-Tetrachloroethane ND ug/kg 0.44 0.12 1 Bromobenzene ND ug/kg 1.7 0.13 1 n-Butylbenzene ND ug/kg 0.87 0.15 1 sec-Butylbenzene ND ug/kg 0.87 0.13 1 tert-Butylbenzene ND ug/kg 1.7 0.10 1 o-Chlorotoluene ND ug/kg 1.7 0.10 1 o-Chlorotoluene ND ug/kg 1.7 0.09 1 1,2-Dibromo-3-chloropropane ND ug/kg 2.6 0.87 1 Hexachlorobutadiene ND ug/kg 3.5 0.15 1 isopropylbenzene ND ug/kg 0.87 0.10 1 p-Isopropyltoluene ND ug/kg 0.87 0	Bromochloromethane	ND		ug/kg	1.7	0.18	1
1,3-Dichloropropane ND ug/kg 1.7 0.15 1 1,1,1,2-Tetrachloroethane ND ug/kg 0.44 0.12 1 Bromobenzene ND ug/kg 1.7 0.13 1 n-Butylbenzene ND ug/kg 0.87 0.15 1 sec-Butylbenzene ND ug/kg 0.87 0.13 1 tert-Butylbenzene ND ug/kg 1.7 0.10 1 o-Chlorotoluene ND ug/kg 1.7 0.17 1 p-Chlorotoluene ND ug/kg 1.7 0.09 1 1,2-Dibromo-3-chloropropane ND ug/kg 2.6 0.87 1 Hexachlorobutadiene ND ug/kg 3.5 0.15 1 Isopropylbenzene ND ug/kg 0.87 0.10 1 p-Isopropyltoluene ND ug/kg 0.87 0.10 1 ND ug/kg 0.87 0.10 1 <td>2,2-Dichloropropane</td> <td>ND</td> <td></td> <td>ug/kg</td> <td>1.7</td> <td>0.18</td> <td>1</td>	2,2-Dichloropropane	ND		ug/kg	1.7	0.18	1
1,1,1,2-Tetrachloroethane ND ug/kg 0.44 0.12 1 Bromobenzene ND ug/kg 1.7 0.13 1 n-Butylbenzene ND ug/kg 0.87 0.15 1 sec-Butylbenzene ND ug/kg 0.87 0.13 1 tert-Butylbenzene ND ug/kg 1.7 0.10 1 o-Chlorotoluene ND ug/kg 1.7 0.17 1 p-Chlorotoluene ND ug/kg 1.7 0.09 1 1,2-Dibromo-3-chloropropane ND ug/kg 2.6 0.87 1 Hexachlorobutadiene ND ug/kg 3.5 0.15 1 Isopropylbenzene ND ug/kg 0.87 0.10 1 p-Isopropyltoluene ND ug/kg 0.87 0.10 1 ND ug/kg 3.5 0.57 1	1,2-Dibromoethane	ND		ug/kg	0.87	0.24	1
Bromobenzene ND ug/kg 1.7 0.13 1 n-Butylbenzene ND ug/kg 0.87 0.15 1 sec-Butylbenzene ND ug/kg 0.87 0.13 1 tert-Butylbenzene ND ug/kg 1.7 0.10 1 o-Chlorotoluene ND ug/kg 1.7 0.17 1 p-Chlorotoluene ND ug/kg 1.7 0.09 1 1,2-Dibromo-3-chloropropane ND ug/kg 2.6 0.87 1 Hexachlorobutadiene ND ug/kg 3.5 0.15 1 Isopropylbenzene ND ug/kg 0.87 0.10 1 p-Isopropyltoluene ND ug/kg 0.87 0.10 1 Naphthalene ND ug/kg 3.5 0.57 1	1,3-Dichloropropane	ND		ug/kg	1.7	0.15	1
n-Butylbenzene ND ug/kg 0.87 0.15 1 sec-Butylbenzene ND ug/kg 0.87 0.13 1 tert-Butylbenzene ND ug/kg 1.7 0.10 1 o-Chlorotoluene ND ug/kg 1.7 0.01 1 p-Chlorotoluene ND ug/kg 1.7 0.09 1 1,2-Dibromo-3-chloropropane ND ug/kg 2.6 0.87 1 Hexachlorobutadiene ND ug/kg 3.5 0.15 1 Isopropylbenzene ND ug/kg 0.87 0.10 1 p-Isopropyltoluene ND ug/kg 0.87 0.10 1 Naphthalene ND ug/kg 3.5 0.57 1	1,1,1,2-Tetrachloroethane	ND		ug/kg	0.44	0.12	1
sec-Butylbenzene ND ug/kg 0.87 0.13 1 tert-Butylbenzene ND ug/kg 1.7 0.10 1 o-Chlorotoluene ND ug/kg 1.7 0.17 1 p-Chlorotoluene ND ug/kg 1.7 0.09 1 1,2-Dibromo-3-chloropropane ND ug/kg 2.6 0.87 1 Hexachlorobutadiene ND ug/kg 3.5 0.15 1 Isopropylbenzene ND ug/kg 0.87 0.10 1 p-Isopropyltoluene ND ug/kg 0.87 0.10 1 Naphthalene ND ug/kg 3.5 0.57 1	Bromobenzene	ND		ug/kg	1.7	0.13	1
tert-Butylbenzene ND ug/kg 1.7 0.10 1 o-Chlorotoluene ND ug/kg 1.7 0.17 1 p-Chlorotoluene ND ug/kg 1.7 0.09 1 1,2-Dibromo-3-chloropropane ND ug/kg 2.6 0.87 1 Hexachlorobutadiene ND ug/kg 3.5 0.15 1 Isopropylbenzene ND ug/kg 0.87 0.10 1 p-Isopropyltoluene ND ug/kg 0.87 0.10 1 Naphthalene ND ug/kg 3.5 0.57 1	n-Butylbenzene	ND		ug/kg	0.87	0.15	1
o-Chlorotoluene ND ug/kg 1.7 0.17 1 p-Chlorotoluene ND ug/kg 1.7 0.09 1 1,2-Dibromo-3-chloropropane ND ug/kg 2.6 0.87 1 Hexachlorobutadiene ND ug/kg 3.5 0.15 1 Isopropylbenzene ND ug/kg 0.87 0.10 1 p-Isopropyltoluene ND ug/kg 0.87 0.10 1 Naphthalene ND ug/kg 3.5 0.57 1	sec-Butylbenzene	ND		ug/kg	0.87	0.13	1
p-Chlorotoluene ND ug/kg 1.7 0.09 1 1,2-Dibromo-3-chloropropane ND ug/kg 2.6 0.87 1 Hexachlorobutadiene ND ug/kg 3.5 0.15 1 Isopropylbenzene ND ug/kg 0.87 0.10 1 p-Isopropyltoluene ND ug/kg 0.87 0.10 1 Naphthalene ND ug/kg 3.5 0.57 1	tert-Butylbenzene	ND		ug/kg	1.7	0.10	1
1,2-Dibromo-3-chloropropane ND ug/kg 2.6 0.87 1 Hexachlorobutadiene ND ug/kg 3.5 0.15 1 Isopropylbenzene ND ug/kg 0.87 0.10 1 p-Isopropyltoluene ND ug/kg 0.87 0.10 1 Naphthalene ND ug/kg 3.5 0.57 1	o-Chlorotoluene	ND		ug/kg	1.7	0.17	1
Hexachlorobutadiene ND ug/kg 3.5 0.15 1 Isopropylbenzene ND ug/kg 0.87 0.10 1 p-Isopropyltoluene ND ug/kg 0.87 0.10 1 Naphthalene ND ug/kg 3.5 0.57 1	p-Chlorotoluene	ND		ug/kg	1.7	0.09	1
Isopropylbenzene	1,2-Dibromo-3-chloropropane	ND		ug/kg	2.6	0.87	1
p-Isopropyltoluene ND ug/kg 0.87 0.10 1 Naphthalene ND ug/kg 3.5 0.57 1	Hexachlorobutadiene	ND		ug/kg	3.5	0.15	1
Naphthalene ND ug/kg 3.5 0.57 1	Isopropylbenzene	ND		ug/kg	0.87	0.10	1
, v	p-Isopropyltoluene	ND		ug/kg	0.87	0.10	1
Acrylonitrile ND ug/kg 3.5 1.0 1	Naphthalene	ND		ug/kg	3.5	0.57	1
	Acrylonitrile	ND		ug/kg	3.5	1.0	1



Project Name: 13-16 TO 13-30 BCD **Lab Number:** L1828472

Project Number: 13-16 TO 13-30 BCD **Report Date:** 07/26/18

SAMPLE RESULTS

Lab ID: L1828472-01 Date Collected: 07/24/18 13:40

Client ID: SB-3 (5-7) Date Received: 07/24/18

Sample Location: 13-16 TO 13-30 BEACH CHANNEL DR. Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough	h Lab					
n-Propylbenzene	ND		ug/kg	0.87	0.15	1
1,2,3-Trichlorobenzene	ND		ug/kg	1.7	0.28	1
1,2,4-Trichlorobenzene	ND		ug/kg	1.7	0.24	1
1,3,5-Trimethylbenzene	ND		ug/kg	1.7	0.17	1
1,2,4-Trimethylbenzene	ND		ug/kg	1.7	0.29	1
1,4-Dioxane	ND		ug/kg	87	31.	1
p-Diethylbenzene	ND		ug/kg	1.7	0.15	1
p-Ethyltoluene	ND		ug/kg	1.7	0.34	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	1.7	0.17	1
Ethyl ether	ND		ug/kg	1.7	0.30	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	4.4	1.2	1

Surrogate	% Recovery	Acceptance Qualifier Criteria	
1,2-Dichloroethane-d4	112	70-130	
Toluene-d8	101	70-130	
4-Bromofluorobenzene	110	70-130	
Dibromofluoromethane	99	70-130	



07/24/18 12:15

Project Name: 13-16 TO 13-30 BCD

Project Number: 13-16 TO 13-30 BCD

SAMPLE RESULTS

Lab Number: L1828472

Report Date: 07/26/18

Lab ID: L1828472-02

Client ID: SB-4 (5-7)

Sample Location: 13-16 TO 13-30 BEACH CHANNEL DR. Date Received: 07/24/18 Field Prep: Not Specified

Date Collected:

Sample Depth:

Matrix: Soil Analytical Method: 1,8260C Analytical Date: 07/25/18 17:38

Analyst: ΑD 93% Percent Solids:

Volatile Organics by GC/MS - Westborough Methylene chloride 1,1-Dichloroethane	2.1 ND	J	ua/ka			
		J				
1,1-Dichloroethane	ND		ug/kg	3.7	1.7	1
			ug/kg	0.74	0.11	1
Chloroform	0.14	J	ug/kg	1.1	0.10	1
Carbon tetrachloride	ND		ug/kg	0.74	0.17	1
1,2-Dichloropropane	ND		ug/kg	0.74	0.09	1
Dibromochloromethane	ND		ug/kg	0.74	0.10	1
1,1,2-Trichloroethane	ND		ug/kg	0.74	0.20	1
Tetrachloroethene	ND		ug/kg	0.37	0.14	1
Chlorobenzene	ND		ug/kg	0.37	0.09	1
Trichlorofluoromethane	ND		ug/kg	3.0	0.52	1
1,2-Dichloroethane	ND		ug/kg	0.74	0.19	1
1,1,1-Trichloroethane	ND		ug/kg	0.37	0.12	1
Bromodichloromethane	ND		ug/kg	0.37	0.08	1
trans-1,3-Dichloropropene	ND		ug/kg	0.74	0.20	1
cis-1,3-Dichloropropene	ND		ug/kg	0.37	0.12	1
1,3-Dichloropropene, Total	ND		ug/kg	0.37	0.12	1
1,1-Dichloropropene	ND		ug/kg	0.37	0.12	1
Bromoform	ND		ug/kg	3.0	0.18	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.37	0.12	1
Benzene	ND		ug/kg	0.37	0.12	1
Toluene	ND		ug/kg	0.74	0.40	1
Ethylbenzene	ND		ug/kg	0.74	0.10	1
Chloromethane	ND		ug/kg	3.0	0.69	1
Bromomethane	ND		ug/kg	1.5	0.43	1
Vinyl chloride	ND		ug/kg	0.74	0.25	1
Chloroethane	ND		ug/kg	1.5	0.34	1
1,1-Dichloroethene	ND		ug/kg	0.74	0.18	1
trans-1,2-Dichloroethene	ND		ug/kg	1.1	0.10	1



Project Name: Lab Number: 13-16 TO 13-30 BCD L1828472

Project Number: Report Date: 13-16 TO 13-30 BCD 07/26/18

SAMPLE RESULTS

Lab ID: L1828472-02 Date Collected: 07/24/18 12:15

Client ID: Date Received: 07/24/18 SB-4 (5-7) Sample Location: 13-16 TO 13-30 BEACH CHANNEL DR. Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - W	estborough Lab					
Trichloroethene	ND		ug/kg	0.37	0.10	1
1,2-Dichlorobenzene	ND		ug/kg	1.5	0.11	1
1,3-Dichlorobenzene	ND		ug/kg	1.5	0.11	1
1,4-Dichlorobenzene	ND		ug/kg	1.5	0.13	1
Methyl tert butyl ether	ND		ug/kg	1.5	0.15	1
p/m-Xylene	ND		ug/kg	1.5	0.42	1
o-Xylene	ND		ug/kg	0.74	0.22	1
Xylenes, Total	ND		ug/kg	0.74	0.22	1
cis-1,2-Dichloroethene	ND		ug/kg	0.74	0.13	1
1,2-Dichloroethene, Total	ND		ug/kg	0.74	0.10	1
Dibromomethane	ND		ug/kg	1.5	0.18	1
Styrene	ND		ug/kg	0.74	0.14	1
Dichlorodifluoromethane	ND		ug/kg	7.4	0.68	1
Acetone	18		ug/kg	7.4	3.6	1
Carbon disulfide	ND		ug/kg	7.4	3.4	1
2-Butanone	ND		ug/kg	7.4	1.6	1
Vinyl acetate	ND		ug/kg	7.4	1.6	1
4-Methyl-2-pentanone	ND		ug/kg	7.4	0.95	1
1,2,3-Trichloropropane	ND		ug/kg	1.5	0.09	1
2-Hexanone	ND		ug/kg	7.4	0.87	1
Bromochloromethane	ND		ug/kg	1.5	0.15	1
2,2-Dichloropropane	ND		ug/kg	1.5	0.15	1
1,2-Dibromoethane	ND		ug/kg	0.74	0.21	1
1,3-Dichloropropane	ND		ug/kg	1.5	0.12	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.37	0.10	1
Bromobenzene	ND		ug/kg	1.5	0.11	1
n-Butylbenzene	ND		ug/kg	0.74	0.12	1
sec-Butylbenzene	ND		ug/kg	0.74	0.11	1
tert-Butylbenzene	ND		ug/kg	1.5	0.09	1
o-Chlorotoluene	ND		ug/kg	1.5	0.14	1
p-Chlorotoluene	ND		ug/kg	1.5	0.08	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	2.2	0.74	1
Hexachlorobutadiene	ND		ug/kg	3.0	0.12	1
Isopropylbenzene	ND		ug/kg	0.74	0.08	1
p-Isopropyltoluene	ND		ug/kg	0.74	0.08	1
Naphthalene	ND		ug/kg	3.0	0.48	1
Acrylonitrile	ND		ug/kg	3.0	0.85	1



Project Name: 13-16 TO 13-30 BCD **Lab Number:** L1828472

Project Number: 13-16 TO 13-30 BCD **Report Date:** 07/26/18

SAMPLE RESULTS

Lab ID: L1828472-02 Date Collected: 07/24/18 12:15

Client ID: SB-4 (5-7) Date Received: 07/24/18
Sample Location: 13-16 TO 13-30 BEACH CHANNEL DR. Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	
Volatile Organics by GC/MS - West	borough Lab						
n-Propylbenzene	ND		ug/kg	0.74	0.13	1	
1,2,3-Trichlorobenzene	ND		ug/kg	1.5	0.24	1	
1,2,4-Trichlorobenzene	ND		ug/kg	1.5	0.20	1	
1,3,5-Trimethylbenzene	ND		ug/kg	1.5	0.14	1	
1,2,4-Trimethylbenzene	ND		ug/kg	1.5	0.25	1	
1,4-Dioxane	ND		ug/kg	74	26.	1	
p-Diethylbenzene	ND		ug/kg	1.5	0.13	1	
p-Ethyltoluene	ND		ug/kg	1.5	0.28	1	
1,2,4,5-Tetramethylbenzene	ND		ug/kg	1.5	0.14	1	
Ethyl ether	ND		ug/kg	1.5	0.25	1	
trans-1,4-Dichloro-2-butene	ND		ug/kg	3.7	1.0	1	

Surrogate	% Recovery	Acceptance Qualifier Criteria	
1,2-Dichloroethane-d4	114	70-130	
Toluene-d8	104	70-130	
4-Bromofluorobenzene	108	70-130	
Dibromofluoromethane	102	70-130	



Project Name: 13-16 TO 13-30 BCD

Project Number: 13-16 TO 13-30 BCD

SAMPLE RESULTS

Report Date: 07/26/18

Lab ID: L1828472-03

Client ID: TW-3

Sample Location: 13-16 TO 13-30 BEACH CHANNEL DR. Date Received: Field Prep:

Date Collected:

Lab Number:

07/24/18 15:15 07/24/18

L1828472

Not Specified

Sample Depth:

Matrix: Water Analytical Method: 1,8260C Analytical Date: 07/25/18 10:53

Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	
Volatile Organics by GC/MS - Wes	stborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1	
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1	
Chloroform	ND		ug/l	2.5	0.70	1	
Carbon tetrachloride	ND		ug/l	0.50	0.13	1	
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1	
Dibromochloromethane	ND		ug/l	0.50	0.15	1	
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1	
Tetrachloroethene	0.36	J	ug/l	0.50	0.18	1	
Chlorobenzene	ND		ug/l	2.5	0.70	1	
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1	
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1	
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1	
Bromodichloromethane	ND		ug/l	0.50	0.19	1	
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1	
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1	
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1	
1,1-Dichloropropene	ND		ug/l	2.5	0.70	1	
Bromoform	ND		ug/l	2.0	0.65	1	
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1	
Benzene	ND		ug/l	0.50	0.16	1	
Toluene	ND		ug/l	2.5	0.70	1	
Ethylbenzene	ND		ug/l	2.5	0.70	1	
Chloromethane	ND		ug/l	2.5	0.70	1	
Bromomethane	ND		ug/l	2.5	0.70	1	
Vinyl chloride	ND		ug/l	1.0	0.07	1	
Chloroethane	ND		ug/l	2.5	0.70	1	
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1	
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1	



L1828472

Project Name: 13-16 TO 13-30 BCD Lab Number:

Project Number: 13-16 TO 13-30 BCD **Report Date:** 07/26/18

SAMPLE RESULTS

Lab ID: L1828472-03 Date Collected: 07/24/18 15:15

Client ID: TW-3 Date Received: 07/24/18

Sample Location: 13-16 TO 13-30 BEACH CHANNEL DR. Field Prep: Not Specified

Parameter	Result	Qualifier Units	s RL	MDL	Dilution Factor
Volatile Organics by GC/MS - W	estborough Lab				
Trichloroethene	ND	ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND	ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND	ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND	ug/l	2.5	0.70	1
Methyl tert butyl ether	ND	ug/l	2.5	0.70	1
p/m-Xylene	ND	ug/l	2.5	0.70	1
o-Xylene	ND	ug/l	2.5	0.70	1
Xylenes, Total	ND	ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND	ug/l	2.5	0.70	1
1,2-Dichloroethene, Total	ND	ug/l	2.5	0.70	1
Dibromomethane	ND	ug/l	5.0	1.0	1
1,2,3-Trichloropropane	ND	ug/l	2.5	0.70	1
Acrylonitrile	ND	ug/l	5.0	1.5	1
Styrene	ND	ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND	ug/l	5.0	1.0	1
Acetone	20	ug/l	5.0	1.5	1
Carbon disulfide	ND	ug/l	5.0	1.0	1
2-Butanone	ND	ug/l	5.0	1.9	1
Vinyl acetate	ND	ug/l	5.0	1.0	1
4-Methyl-2-pentanone	ND	ug/l	5.0	1.0	1
2-Hexanone	ND	ug/l	5.0	1.0	1
Bromochloromethane	ND	ug/l	2.5	0.70	1
2,2-Dichloropropane	ND	ug/l	2.5	0.70	1
1,2-Dibromoethane	ND	ug/l	2.0	0.65	1
1,3-Dichloropropane	ND	ug/l	2.5	0.70	1
1,1,1,2-Tetrachloroethane	ND	ug/l	2.5	0.70	1
Bromobenzene	ND	ug/l	2.5	0.70	1
n-Butylbenzene	ND	ug/l	2.5	0.70	1
sec-Butylbenzene	ND	ug/l	2.5	0.70	1
tert-Butylbenzene	ND	ug/l	2.5	0.70	1
o-Chlorotoluene	ND	ug/l	2.5	0.70	1
p-Chlorotoluene	ND	ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND	ug/l	2.5	0.70	1
Hexachlorobutadiene	ND	ug/l	2.5	0.70	1
Isopropylbenzene	ND	ug/l	2.5	0.70	1
p-Isopropyltoluene	ND	ug/l	2.5	0.70	1
Naphthalene	ND	ug/l	2.5	0.70	1



 Project Name:
 13-16 TO 13-30 BCD
 Lab Number:
 L1828472

Project Number: 13-16 TO 13-30 BCD **Report Date:** 07/26/18

SAMPLE RESULTS

Lab ID: L1828472-03 Date Collected: 07/24/18 15:15

Client ID: TW-3 Date Received: 07/24/18

Sample Location: 13-16 TO 13-30 BEACH CHANNEL DR. Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - West	borough Lab					
n-Propylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,4-Dioxane	ND		ug/l	250	61.	1
p-Diethylbenzene	ND		ug/l	2.0	0.70	1
p-Ethyltoluene	ND		ug/l	2.0	0.70	1
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.54	1
Ethyl ether	ND		ug/l	2.5	0.70	1
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70	1

Surrogate	% Recovery	Acceptance Qualifier Criteria	
1,2-Dichloroethane-d4	121	70-130	
Toluene-d8	101	70-130	
4-Bromofluorobenzene	93	70-130	
Dibromofluoromethane	110	70-130	



L1828472

07/24/18 13:35

Project Name: 13-16 TO 13-30 BCD

Project Number: 13-16 TO 13-30 BCD

SAMPLE RESULTS

Lab Number:

Date Collected:

Report Date: 07/26/18

Lab ID: L1828472-04

Client ID: TW-4

Sample Location: 13-16 TO 13-30 BEACH CHANNEL DR. Date Received: 07/24/18 Field Prep: Not Specified

Sample Depth:

Matrix: Water Analytical Method: 1,8260C Analytical Date: 07/25/18 11:21

Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborou	gh Lab					
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	2.3	J	ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	0.24	J	ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
1,1-Dichloropropene	ND		ug/l	2.5	0.70	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	0.82	J	ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1



Project Name: 13-16 TO 13-30 BCD **Lab Number:** L1828472

Project Number: 13-16 TO 13-30 BCD **Report Date:** 07/26/18

SAMPLE RESULTS

Lab ID: L1828472-04 Date Collected: 07/24/18 13:35

Client ID: TW-4 Date Received: 07/24/18

Sample Location: 13-16 TO 13-30 BEACH CHANNEL DR. Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough	Lab					
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
Xylenes, Total	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70	1
Dibromomethane	ND		ug/l	5.0	1.0	1
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70	1
Acrylonitrile	ND		ug/l	5.0	1.5	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	70		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	3.0	J	ug/l	5.0	1.9	1
Vinyl acetate	ND		ug/l	5.0	1.0	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
2,2-Dichloropropane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,3-Dichloropropane	ND		ug/l	2.5	0.70	1
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70	1
Bromobenzene	ND		ug/l	2.5	0.70	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
tert-Butylbenzene	ND		ug/l	2.5	0.70	1
o-Chlorotoluene	ND		ug/l	2.5	0.70	1
p-Chlorotoluene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Hexachlorobutadiene	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
Naphthalene	ND		ug/l	2.5	0.70	1



 Project Name:
 13-16 TO 13-30 BCD
 Lab Number:
 L1828472

Project Number: 13-16 TO 13-30 BCD **Report Date:** 07/26/18

SAMPLE RESULTS

Lab ID: L1828472-04 Date Collected: 07/24/18 13:35

Client ID: TW-4 Date Received: 07/24/18

Sample Location: 13-16 TO 13-30 BEACH CHANNEL DR. Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - West	borough Lab					
n-Propylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,4-Dioxane	ND		ug/l	250	61.	1
p-Diethylbenzene	ND		ug/l	2.0	0.70	1
p-Ethyltoluene	ND		ug/l	2.0	0.70	1
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.54	1
Ethyl ether	ND		ug/l	2.5	0.70	1
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria	
1,2-Dichloroethane-d4	117		70-130	
Toluene-d8	100		70-130	
4-Bromofluorobenzene	90		70-130	
Dibromofluoromethane	111		70-130	



Project Name: 13-16 TO 13-30 BCD

Project Number: 13-16 TO 13-30 BCD

SAMPLE RESULTS

L1828472

Report Date: 07/26/18

Lab ID: L1828472-05

Client ID: TRIP BLANK

Sample Location: 13-16 TO 13-30 BEACH CHANNEL DR. Field Prep:

07/24/18 00:00 07/24/18

Lab Number:

Date Collected:

Date Received:

Not Specified

Sample Depth:

Matrix: Water Analytical Method: 1,8260C Analytical Date: 07/25/18 11:49

Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Wes	tborough Lab					
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
1,1-Dichloropropene	ND		ug/l	2.5	0.70	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1



Project Name: 13-16 TO 13-30 BCD **Lab Number:** L1828472

Project Number: 13-16 TO 13-30 BCD **Report Date:** 07/26/18

SAMPLE RESULTS

Lab ID: L1828472-05 Date Collected: 07/24/18 00:00

Client ID: TRIP BLANK Date Received: 07/24/18

Sample Location: 13-16 TO 13-30 BEACH CHANNEL DR. Field Prep: Not Specified

Volatile Organics by GC/MS - Westborough Lab Trichloroethene ND Ug/l 0.50 0.18 1 1.2-Dichlorobenzene ND Ug/l 2.5 0.70 1 1.3-Dichlorobenzene ND Ug/l 2.5 0.70 1 1.4-Dichlorobenzene ND Ug/l 2.5 0.70 1 1.4-Dichlorobenzene ND Ug/l 2.5 0.70 1 Methyl tert butyl ether ND Ug/l 2.5 0.70 1 Methyl tert butyl ether ND Ug/l 2.5 0.70 1 Mylene ND Ug/l 2.5 0.70 1 Dirm-Xylene ND Ug/l 2.5 0.70 1 Xylenes, Total ND Ug/l 2.5 0.70 1 Xylenes, Total ND Ug/l 2.5 0.70 1 1.2-Dichloroethene ND Ug/l 2.5 0.70 1 1.2-Dichloroethene, Total ND Ug/l 2.5 0.70 1 1.2-Dichloroethene, Total ND Ug/l 2.5 0.70 1 1.2-Dichloroethene, Total ND Ug/l 2.5 0.70 1 1.2-Dichloroethene ND Ug/l 2.5 0.70 1 Dibromomethane ND Ug/l 5.0 1.0 1 Acetone ND Ug/l 5.	
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Bromobenzene ND ug/l 2.5 0.70 1	
n-Butylbenzene ND ug/l 2.5 0.70 1	
sec-Butylbenzene ND ug/l 2.5 0.70 1	
tert-Butylbenzene ND ug/l 2.5 0.70 1	
o-Chlorotoluene ND ug/l 2.5 0.70 1	
p-Chlorotoluene ND ug/l 2.5 0.70 1	
1,2-Dibromo-3-chloropropane ND ug/l 2.5 0.70 1	
Hexachlorobutadiene ND ug/l 2.5 0.70 1	
Isopropylbenzene ND ug/l 2.5 0.70 1	
p-Isopropyltoluene ND ug/l 2.5 0.70 1	
Naphthalene ND ug/l 2.5 0.70 1	



Project Name: 13-16 TO 13-30 BCD **Lab Number:** L1828472

Project Number: 13-16 TO 13-30 BCD **Report Date:** 07/26/18

SAMPLE RESULTS

Lab ID: L1828472-05 Date Collected: 07/24/18 00:00

Client ID: TRIP BLANK Date Received: 07/24/18
Sample Location: 13-16 TO 13-30 BEACH CHANNEL DR. Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	
Volatile Organics by GC/MS - Westboroug	ıh Lab						
n-Propylbenzene	ND		ug/l	2.5	0.70	1	
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1	
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1	
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1	
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70	1	
1,4-Dioxane	ND		ug/l	250	61.	1	
p-Diethylbenzene	ND		ug/l	2.0	0.70	1	
p-Ethyltoluene	ND		ug/l	2.0	0.70	1	
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.54	1	
Ethyl ether	ND		ug/l	2.5	0.70	1	
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70	1	

Surrogate	% Recovery	Acceptance Qualifier Criteria	
1,2-Dichloroethane-d4	121	70-130	
Toluene-d8	100	70-130	
4-Bromofluorobenzene	91	70-130	
Dibromofluoromethane	109	70-130	



Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C Analytical Date: 07/25/18 09:57

Analyst: PD

Parameter	Result	Qualifier Units	RL RL	MDL
Volatile Organics by GC/MS	- Westborough Lab	for sample(s):	03-05 Batch:	WG1139369-5
Methylene chloride	ND	ug/l	2.5	0.70
1,1-Dichloroethane	ND	ug/l	2.5	0.70
Chloroform	ND	ug/l	2.5	0.70
Carbon tetrachloride	ND	ug/l	0.50	0.13
1,2-Dichloropropane	ND	ug/l	1.0	0.14
Dibromochloromethane	ND	ug/l	0.50	0.15
1,1,2-Trichloroethane	ND	ug/l	1.5	0.50
Tetrachloroethene	ND	ug/l	0.50	0.18
Chlorobenzene	ND	ug/l	2.5	0.70
Trichlorofluoromethane	ND	ug/l	2.5	0.70
1,2-Dichloroethane	ND	ug/l	0.50	0.13
1,1,1-Trichloroethane	ND	ug/l	2.5	0.70
Bromodichloromethane	ND	ug/l	0.50	0.19
trans-1,3-Dichloropropene	ND	ug/l	0.50	0.16
cis-1,3-Dichloropropene	ND	ug/l	0.50	0.14
1,3-Dichloropropene, Total	ND	ug/l	0.50	0.14
1,1-Dichloropropene	ND	ug/l	2.5	0.70
Bromoform	ND	ug/l	2.0	0.65
1,1,2,2-Tetrachloroethane	ND	ug/l	0.50	0.17
Benzene	ND	ug/l	0.50	0.16
Toluene	ND	ug/l	2.5	0.70
Ethylbenzene	ND	ug/l	2.5	0.70
Chloromethane	ND	ug/l	2.5	0.70
Bromomethane	ND	ug/l	2.5	0.70
Vinyl chloride	ND	ug/l	1.0	0.07
Chloroethane	ND	ug/l	2.5	0.70
1,1-Dichloroethene	ND	ug/l	0.50	0.17
trans-1,2-Dichloroethene	ND	ug/l	2.5	0.70
Trichloroethene	ND	ug/l	0.50	0.18



Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C Analytical Date: 07/25/18 09:57

Analyst: PD

arameter	Result	Qualifier Units	RL	MDL
olatile Organics by GC/MS	- Westborough La	ab for sample(s):	03-05 Batch:	WG1139369-5
1,2-Dichlorobenzene	ND	ug/l	2.5	0.70
1,3-Dichlorobenzene	ND	ug/l	2.5	0.70
1,4-Dichlorobenzene	ND	ug/l	2.5	0.70
Methyl tert butyl ether	ND	ug/l	2.5	0.70
p/m-Xylene	ND	ug/l	2.5	0.70
o-Xylene	ND	ug/l	2.5	0.70
Xylenes, Total	ND	ug/l	2.5	0.70
cis-1,2-Dichloroethene	ND	ug/l	2.5	0.70
1,2-Dichloroethene, Total	ND	ug/l	2.5	0.70
Dibromomethane	ND	ug/l	5.0	1.0
1,2,3-Trichloropropane	ND	ug/l	2.5	0.70
Acrylonitrile	ND	ug/l	5.0	1.5
Styrene	ND	ug/l	2.5	0.70
Dichlorodifluoromethane	ND	ug/l	5.0	1.0
Acetone	ND	ug/l	5.0	1.5
Carbon disulfide	ND	ug/l	5.0	1.0
2-Butanone	ND	ug/l	5.0	1.9
Vinyl acetate	ND	ug/l	5.0	1.0
4-Methyl-2-pentanone	ND	ug/l	5.0	1.0
2-Hexanone	ND	ug/l	5.0	1.0
Bromochloromethane	ND	ug/l	2.5	0.70
2,2-Dichloropropane	ND	ug/l	2.5	0.70
1,2-Dibromoethane	ND	ug/l	2.0	0.65
1,3-Dichloropropane	ND	ug/l	2.5	0.70
1,1,1,2-Tetrachloroethane	ND	ug/l	2.5	0.70
Bromobenzene	ND	ug/l	2.5	0.70
n-Butylbenzene	ND	ug/l	2.5	0.70
sec-Butylbenzene	ND	ug/l	2.5	0.70
tert-Butylbenzene	ND	ug/l	2.5	0.70



Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C Analytical Date: 07/25/18 09:57

Analyst: PD

Parameter	Result	Qualifier Units	s RL	MDL
olatile Organics by GC/MS -	Westborough Lab	for sample(s):	03-05 Batch:	WG1139369-5
o-Chlorotoluene	ND	ug/l	2.5	0.70
p-Chlorotoluene	ND	ug/l	2.5	0.70
1,2-Dibromo-3-chloropropane	ND	ug/l	2.5	0.70
Hexachlorobutadiene	ND	ug/l	2.5	0.70
Isopropylbenzene	ND	ug/l	2.5	0.70
p-Isopropyltoluene	ND	ug/l	2.5	0.70
Naphthalene	ND	ug/l	2.5	0.70
n-Propylbenzene	ND	ug/l	2.5	0.70
1,2,3-Trichlorobenzene	ND	ug/l	2.5	0.70
1,2,4-Trichlorobenzene	ND	ug/l	2.5	0.70
1,3,5-Trimethylbenzene	ND	ug/l	2.5	0.70
1,2,4-Trimethylbenzene	ND	ug/l	2.5	0.70
1,4-Dioxane	ND	ug/l	250	61.
p-Diethylbenzene	ND	ug/l	2.0	0.70
p-Ethyltoluene	ND	ug/l	2.0	0.70
1,2,4,5-Tetramethylbenzene	ND	ug/l	2.0	0.54
Ethyl ether	ND	ug/l	2.5	0.70
trans-1,4-Dichloro-2-butene	ND	ug/l	2.5	0.70

		Acceptance	
Surrogate	%Recovery	Qualifier Criteria	
1,2-Dichloroethane-d4	115	70-130	
Toluene-d8	101	70-130	
4-Bromofluorobenzene	95	70-130	
Dibromofluoromethane	108	70-130	



Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C Analytical Date: 07/25/18 09:03

Analyst: MV

Methylene chloride ND ug/kg 5.0 2.3 1,1-Dichloroethane ND ug/kg 1.0 0.14 Chloroform ND ug/kg 1.5 0.14 Carbon tetrachloride ND ug/kg 1.0 0.23 1,2-Dichloropropane ND ug/kg 1.0 0.12 Dibromochloromethane ND ug/kg 1.0 0.12 Dibromochloromethane ND ug/kg 1.0 0.14 1,1,2-Trichloroethane ND ug/kg 1.0 0.14 1,1,2-Trichloroethane ND ug/kg 0.50 0.20 Chlorobenzene ND ug/kg 0.50 0.20 Chlorobenzene ND ug/kg 0.50 0.13 Trichlorofluoromethane ND ug/kg 0.50 0.17 Bromodichloromethane ND ug/kg 0.50 0.11 Bromodichloropropene ND ug/kg 0.50 0.16 1,3-Dichloropropene, Total <	Parameter	Result	Qualifier	Units	RL		MDL	
1,1-Dichloroethane ND ug/kg 1.0 0.14 Chloroform ND ug/kg 1.5 0.14 Carbon tetrachloride ND ug/kg 1.0 0.23 1,2-Dichloropropane ND ug/kg 1.0 0.12 Dibromochloromethane ND ug/kg 1.0 0.14 1,1,2-Trichloroethane ND ug/kg 1.0 0.27 Tetrachloroethene ND ug/kg 0.50 0.20 Chlorobenzene ND ug/kg 0.50 0.20 Chlorobenzene ND ug/kg 4.0 0.70 1,2-Dichloroethane ND ug/kg 4.0 0.70 1,2-Dichloroethane ND ug/kg 0.50 0.17 Bromodichloromethane ND ug/kg 0.50 0.17 Bromodichloropropene ND ug/kg 0.50 0.11 trans-1,3-Dichloropropene ND ug/kg 0.50 0.16 1,3-Dichloropropene, Total <td< th=""><th>olatile Organics by 8260/5035 -</th><th>Westborough</th><th>Lab for sa</th><th>mple(s):</th><th>01-02</th><th>Batch:</th><th>WG1139392-5</th><th></th></td<>	olatile Organics by 8260/5035 -	Westborough	Lab for sa	mple(s):	01-02	Batch:	WG1139392-5	
Chloroform ND ug/kg 1.5 0.14 Carbon tetrachloride ND ug/kg 1.0 0.23 1,2-Dichloropropane ND ug/kg 1.0 0.12 Dibromochloromethane ND ug/kg 1.0 0.14 1,1,2-Trichloroethane ND ug/kg 1.0 0.27 Tetrachloroethane ND ug/kg 0.50 0.20 Chlorobenzene ND ug/kg 0.50 0.20 Chlorobenzene ND ug/kg 0.50 0.13 Trichlorofluoromethane ND ug/kg 4.0 0.70 1,2-Dichloroethane ND ug/kg 4.0 0.70 1,1,1-Trichloroethane ND ug/kg 0.50 0.17 Bromodichloromethane ND ug/kg 0.50 0.11 trans-1,3-Dichloropropene ND ug/kg 0.50 0.16 1,3-Dichloropropene ND ug/kg 0.50 0.16 1,1-Dichloropropene <td< td=""><td>Methylene chloride</td><td>ND</td><td></td><td>ug/kg</td><td>5.0</td><td></td><td>2.3</td><td></td></td<>	Methylene chloride	ND		ug/kg	5.0		2.3	
Carbon tetrachloride ND ug/kg 1.0 0.23 1,2-Dichloropropane ND ug/kg 1.0 0.12 Dibromochloromethane ND ug/kg 1.0 0.14 1,1,2-Trichloroethane ND ug/kg 1.0 0.27 Tetrachloroethane ND ug/kg 0.50 0.20 Chlorobenzene ND ug/kg 0.50 0.13 Trichlorofluoromethane ND ug/kg 4.0 0.70 1,2-Dichloroethane ND ug/kg 1.0 0.26 1,1,1-Trichloroethane ND ug/kg 0.50 0.17 Bromodichloromethane ND ug/kg 0.50 0.17 trans-1,3-Dichloropropene ND ug/kg 0.50 0.11 trans-1,3-Dichloropropene ND ug/kg 0.50 0.16 1,3-Dichloropropene, Total ND ug/kg 0.50 0.16 1,1-Dichloropropene ND ug/kg 0.50 0.16 Bromofo	1,1-Dichloroethane	ND		ug/kg	1.0		0.14	
1,2-Dichloropropane ND ug/kg 1.0 0.12 Dibromochloromethane ND ug/kg 1.0 0.14 1,1,2-Trichloroethane ND ug/kg 1.0 0.27 Tetrachloroethene ND ug/kg 0.50 0.20 Chlorobenzene ND ug/kg 0.50 0.13 Trichlorofluoromethane ND ug/kg 4.0 0.70 1,2-Dichloroethane ND ug/kg 1.0 0.26 1,1,1-Trichloroethane ND ug/kg 0.50 0.17 Bromodichloromethane ND ug/kg 0.50 0.11 trans-1,3-Dichloropropene ND ug/kg 0.50 0.11 trans-1,3-Dichloropropene ND ug/kg 0.50 0.16 1,3-Dichloropropene, Total ND ug/kg 0.50 0.16 1,1-Dichloropropene ND ug/kg 0.50 0.16 Bromoform ND ug/kg 0.50 0.17 Toluene	Chloroform	ND		ug/kg	1.5		0.14	
Dibromochloromethane ND ug/kg 1.0 0.14 1,1,2-Trichloroethane ND ug/kg 1.0 0.27 Tetrachloroethene ND ug/kg 0.50 0.20 Chlorobenzene ND ug/kg 0.50 0.13 Trichlorofluoromethane ND ug/kg 4.0 0.70 1,2-Dichloroethane ND ug/kg 1.0 0.26 1,1,1-Trichloroethane ND ug/kg 0.50 0.17 Bromodichloromethane ND ug/kg 0.50 0.11 trans-1,3-Dichloropropene ND ug/kg 0.50 0.16 1,3-Dichloropropene ND ug/kg 0.50 0.16 1,1-Dichloropropene, Total ND ug/kg 0.50 0.16 1,1-Dichloropropene ND ug/kg 0.50 0.16 Bromoform ND ug/kg 0.50 0.17 Benzene ND ug/kg 0.50 0.17 Toluene ND	Carbon tetrachloride	ND		ug/kg	1.0		0.23	
1,1,2-Trichloroethane	1,2-Dichloropropane	ND		ug/kg	1.0		0.12	
Tetrachloroethene ND ug/kg 0.50 0.20 Chlorobenzene ND ug/kg 0.50 0.13 Trichlorofluoromethane ND ug/kg 4.0 0.70 1,2-Dichloroethane ND ug/kg 1.0 0.26 1,1,1-Trichloroethane ND ug/kg 0.50 0.17 Bromodichloromethane ND ug/kg 0.50 0.11 trans-1,3-Dichloropropene ND ug/kg 1.0 0.27 cis-1,3-Dichloropropene ND ug/kg 0.50 0.16 1,3-Dichloropropene, Total ND ug/kg 0.50 0.16 1,1-Dichloropropene ND ug/kg 0.50 0.16 Bromoform ND ug/kg 4.0 0.25 1,1,2,2-Tetrachloroethane ND ug/kg 0.50 0.17 Benzene ND ug/kg 1.0 0.54 Ethylbenzene ND ug/kg 1.0 0.14 Chloromethane ND <td>Dibromochloromethane</td> <td>ND</td> <td></td> <td>ug/kg</td> <td>1.0</td> <td></td> <td>0.14</td> <td></td>	Dibromochloromethane	ND		ug/kg	1.0		0.14	
Chlorobenzene ND ug/kg 0.50 0.13 Trichlorofluoromethane ND ug/kg 4.0 0.70 1,2-Dichloroethane ND ug/kg 1.0 0.26 1,1,1-Trichloroethane ND ug/kg 0.50 0.17 Bromodichloromethane ND ug/kg 0.50 0.11 trans-1,3-Dichloropropene ND ug/kg 1.0 0.27 cis-1,3-Dichloropropene ND ug/kg 0.50 0.16 1,3-Dichloropropene, Total ND ug/kg 0.50 0.16 1,1-Dichloropropene, Total ND ug/kg 0.50 0.16 Bromoform ND ug/kg 0.50 0.16 Bromoform ND ug/kg 0.50 0.17 Benzene ND ug/kg 0.50 0.17 Toluene ND ug/kg 1.0 0.54 Ethylbenzene ND ug/kg 1.0 0.14 Chloromethane ND ug/	1,1,2-Trichloroethane	ND		ug/kg	1.0		0.27	
Trichlorofluoromethane ND ug/kg 4.0 0.70 1,2-Dichloroethane ND ug/kg 1.0 0.26 1,1,1-Trichloroethane ND ug/kg 0.50 0.17 Bromodichloromethane ND ug/kg 0.50 0.11 trans-1,3-Dichloropropene ND ug/kg 1.0 0.27 cis-1,3-Dichloropropene ND ug/kg 0.50 0.16 1,3-Dichloropropene, Total ND ug/kg 0.50 0.16 1,1-Dichloropropene ND ug/kg 0.50 0.16 Bromoform ND ug/kg 4.0 0.25 1,1,2,2-Tetrachloroethane ND ug/kg 0.50 0.17 Benzene ND ug/kg 0.50 0.17 Toluene ND ug/kg 1.0 0.54 Ethylbenzene ND ug/kg 1.0 0.14 Chloromethane ND ug/kg 2.0 0.58 Vinyl chloride ND	Tetrachloroethene	ND		ug/kg	0.50)	0.20	
1,2-Dichloroethane ND ug/kg 1.0 0.26 1,1,1-Trichloroethane ND ug/kg 0.50 0.17 Bromodichloromethane ND ug/kg 0.50 0.11 trans-1,3-Dichloropropene ND ug/kg 1.0 0.27 cis-1,3-Dichloropropene ND ug/kg 0.50 0.16 1,3-Dichloropropene, Total ND ug/kg 0.50 0.16 1,1-Dichloropropene ND ug/kg 0.50 0.16 Bromoform ND ug/kg 4.0 0.25 1,1,2,2-Tetrachloroethane ND ug/kg 0.50 0.17 Benzene ND ug/kg 0.50 0.17 Toluene ND ug/kg 1.0 0.54 Ethylbenzene ND ug/kg 1.0 0.14 Chloromethane ND ug/kg 2.0 0.58 Vinyl chloride ND ug/kg 1.0 0.34 Chloroethane ND ug/kg	Chlorobenzene	ND		ug/kg	0.50)	0.13	
1,1,1-Trichloroethane ND ug/kg 0.50 0.17 Bromodichloromethane ND ug/kg 0.50 0.11 trans-1,3-Dichloropropene ND ug/kg 1.0 0.27 cis-1,3-Dichloropropene ND ug/kg 0.50 0.16 1,3-Dichloropropene, Total ND ug/kg 0.50 0.16 1,1-Dichloropropene ND ug/kg 0.50 0.16 Bromoform ND ug/kg 4.0 0.25 1,1,2,2-Tetrachloroethane ND ug/kg 0.50 0.17 Benzene ND ug/kg 0.50 0.17 Toluene ND ug/kg 1.0 0.54 Ethylbenzene ND ug/kg 1.0 0.14 Chloromethane ND ug/kg 2.0 0.58 Vinyl chloride ND ug/kg 1.0 0.34 Chloroethane ND ug/kg 2.0 0.45 1,1-Dichloroethene ND ug/kg	Trichlorofluoromethane	ND		ug/kg	4.0		0.70	
Bromodichloromethane ND ug/kg 0.50 0.11 trans-1,3-Dichloropropene ND ug/kg 1.0 0.27 cis-1,3-Dichloropropene ND ug/kg 0.50 0.16 1,3-Dichloropropene, Total ND ug/kg 0.50 0.16 1,1-Dichloropropene ND ug/kg 0.50 0.16 Bromoform ND ug/kg 4.0 0.25 1,1,2,2-Tetrachloroethane ND ug/kg 0.50 0.17 Benzene ND ug/kg 0.50 0.17 Toluene ND ug/kg 1.0 0.54 Ethylbenzene ND ug/kg 1.0 0.14 Chloromethane ND ug/kg 4.0 0.93 Bromomethane ND ug/kg 2.0 0.58 Vinyl chloride ND ug/kg 1.0 0.34 Chloroethane ND ug/kg 1.0 0.24 trans-1,2-Dichloroethene ND ug/kg <td>1,2-Dichloroethane</td> <td>ND</td> <td></td> <td>ug/kg</td> <td>1.0</td> <td></td> <td>0.26</td> <td></td>	1,2-Dichloroethane	ND		ug/kg	1.0		0.26	
trans-1,3-Dichloropropene ND ug/kg 1.0 0.27 cis-1,3-Dichloropropene ND ug/kg 0.50 0.16 1,3-Dichloropropene, Total ND ug/kg 0.50 0.16 1,1-Dichloropropene ND ug/kg 0.50 0.16 Bromoform ND ug/kg 4.0 0.25 1,1,2,2-Tetrachloroethane ND ug/kg 0.50 0.17 Benzene ND ug/kg 0.50 0.17 Toluene ND ug/kg 1.0 0.54 Ethylbenzene ND ug/kg 1.0 0.14 Chloromethane ND ug/kg 4.0 0.93 Bromomethane ND ug/kg 2.0 0.58 Vinyl chloride ND ug/kg 1.0 0.34 Chloroethane ND ug/kg 1.0 0.24 trans-1,2-Dichloroethene ND ug/kg 1.0 0.24	1,1,1-Trichloroethane	ND		ug/kg	0.50)	0.17	
cis-1,3-Dichloropropene ND ug/kg 0.50 0.16 1,3-Dichloropropene, Total ND ug/kg 0.50 0.16 1,1-Dichloropropene ND ug/kg 0.50 0.16 Bromoform ND ug/kg 4.0 0.25 1,1,2,2-Tetrachloroethane ND ug/kg 0.50 0.17 Benzene ND ug/kg 1.0 0.54 Ethylbenzene ND ug/kg 1.0 0.14 Chloromethane ND ug/kg 4.0 0.93 Bromomethane ND ug/kg 2.0 0.58 Vinyl chloride ND ug/kg 1.0 0.34 Chloroethane ND ug/kg 2.0 0.45 1,1-Dichloroethene ND ug/kg 1.0 0.24 trans-1,2-Dichloroethene ND ug/kg 1.5 0.14	Bromodichloromethane	ND		ug/kg	0.50)	0.11	
1,3-Dichloropropene, Total ND ug/kg 0.50 0.16 1,1-Dichloropropene ND ug/kg 0.50 0.16 Bromoform ND ug/kg 4.0 0.25 1,1,2,2-Tetrachloroethane ND ug/kg 0.50 0.17 Benzene ND ug/kg 0.50 0.17 Toluene ND ug/kg 1.0 0.54 Ethylbenzene ND ug/kg 1.0 0.14 Chloromethane ND ug/kg 4.0 0.93 Bromomethane ND ug/kg 2.0 0.58 Vinyl chloride ND ug/kg 1.0 0.34 Chloroethane ND ug/kg 2.0 0.45 1,1-Dichloroethene ND ug/kg 1.0 0.24 trans-1,2-Dichloroethene ND ug/kg 1.5 0.14	trans-1,3-Dichloropropene	ND		ug/kg	1.0		0.27	
1,1-Dichloropropene ND ug/kg 0.50 0.16 Bromoform ND ug/kg 4.0 0.25 1,1,2,2-Tetrachloroethane ND ug/kg 0.50 0.17 Benzene ND ug/kg 0.50 0.17 Toluene ND ug/kg 1.0 0.54 Ethylbenzene ND ug/kg 1.0 0.14 Chloromethane ND ug/kg 4.0 0.93 Bromomethane ND ug/kg 2.0 0.58 Vinyl chloride ND ug/kg 1.0 0.34 Chloroethane ND ug/kg 2.0 0.45 1,1-Dichloroethene ND ug/kg 1.0 0.24 trans-1,2-Dichloroethene ND ug/kg 1.5 0.14	cis-1,3-Dichloropropene	ND		ug/kg	0.50)	0.16	
Bromoform ND ug/kg 4.0 0.25 1,1,2,2-Tetrachloroethane ND ug/kg 0.50 0.17 Benzene ND ug/kg 0.50 0.17 Toluene ND ug/kg 1.0 0.54 Ethylbenzene ND ug/kg 1.0 0.14 Chloromethane ND ug/kg 4.0 0.93 Bromomethane ND ug/kg 2.0 0.58 Vinyl chloride ND ug/kg 1.0 0.34 Chloroethane ND ug/kg 2.0 0.45 1,1-Dichloroethene ND ug/kg 1.0 0.24 trans-1,2-Dichloroethene ND ug/kg 1.5 0.14	1,3-Dichloropropene, Total	ND		ug/kg	0.50)	0.16	
1,1,2,2-Tetrachloroethane ND ug/kg 0.50 0.17 Benzene ND ug/kg 0.50 0.17 Toluene ND ug/kg 1.0 0.54 Ethylbenzene ND ug/kg 1.0 0.14 Chloromethane ND ug/kg 4.0 0.93 Bromomethane ND ug/kg 2.0 0.58 Vinyl chloride ND ug/kg 1.0 0.34 Chloroethane ND ug/kg 2.0 0.45 1,1-Dichloroethene ND ug/kg 1.0 0.24 trans-1,2-Dichloroethene ND ug/kg 1.5 0.14	1,1-Dichloropropene	ND		ug/kg	0.50)	0.16	
Benzene ND ug/kg 0.50 0.17 Toluene ND ug/kg 1.0 0.54 Ethylbenzene ND ug/kg 1.0 0.14 Chloromethane ND ug/kg 4.0 0.93 Bromomethane ND ug/kg 2.0 0.58 Vinyl chloride ND ug/kg 1.0 0.34 Chloroethane ND ug/kg 2.0 0.45 1,1-Dichloroethene ND ug/kg 1.0 0.24 trans-1,2-Dichloroethene ND ug/kg 1.5 0.14	Bromoform	ND		ug/kg	4.0		0.25	
Toluene ND ug/kg 1.0 0.54 Ethylbenzene ND ug/kg 1.0 0.14 Chloromethane ND ug/kg 4.0 0.93 Bromomethane ND ug/kg 2.0 0.58 Vinyl chloride ND ug/kg 1.0 0.34 Chloroethane ND ug/kg 2.0 0.45 1,1-Dichloroethene ND ug/kg 1.0 0.24 trans-1,2-Dichloroethene ND ug/kg 1.5 0.14	1,1,2,2-Tetrachloroethane	ND		ug/kg	0.50)	0.17	
Ethylbenzene ND ug/kg 1.0 0.14 Chloromethane ND ug/kg 4.0 0.93 Bromomethane ND ug/kg 2.0 0.58 Vinyl chloride ND ug/kg 1.0 0.34 Chloroethane ND ug/kg 2.0 0.45 1,1-Dichloroethene ND ug/kg 1.0 0.24 trans-1,2-Dichloroethene ND ug/kg 1.5 0.14	Benzene	ND		ug/kg	0.50)	0.17	
Chloromethane ND ug/kg 4.0 0.93 Bromomethane ND ug/kg 2.0 0.58 Vinyl chloride ND ug/kg 1.0 0.34 Chloroethane ND ug/kg 2.0 0.45 1,1-Dichloroethene ND ug/kg 1.0 0.24 trans-1,2-Dichloroethene ND ug/kg 1.5 0.14	Toluene	ND		ug/kg	1.0		0.54	
Bromomethane ND ug/kg 2.0 0.58 Vinyl chloride ND ug/kg 1.0 0.34 Chloroethane ND ug/kg 2.0 0.45 1,1-Dichloroethene ND ug/kg 1.0 0.24 trans-1,2-Dichloroethene ND ug/kg 1.5 0.14	Ethylbenzene	ND		ug/kg	1.0		0.14	
Vinyl chloride ND ug/kg 1.0 0.34 Chloroethane ND ug/kg 2.0 0.45 1,1-Dichloroethene ND ug/kg 1.0 0.24 trans-1,2-Dichloroethene ND ug/kg 1.5 0.14	Chloromethane	ND		ug/kg	4.0		0.93	
Chloroethane ND ug/kg 2.0 0.45 1,1-Dichloroethene ND ug/kg 1.0 0.24 trans-1,2-Dichloroethene ND ug/kg 1.5 0.14	Bromomethane	ND		ug/kg	2.0		0.58	
1,1-Dichloroethene ND ug/kg 1.0 0.24 trans-1,2-Dichloroethene ND ug/kg 1.5 0.14	Vinyl chloride	ND		ug/kg	1.0		0.34	
trans-1,2-Dichloroethene ND ug/kg 1.5 0.14	Chloroethane	ND		ug/kg	2.0		0.45	
	1,1-Dichloroethene	ND		ug/kg	1.0		0.24	
Trichloroethene ND ug/kg 0.50 0.14	trans-1,2-Dichloroethene	ND		ug/kg	1.5		0.14	
	Trichloroethene	ND		ug/kg	0.50)	0.14	



Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C Analytical Date: 07/25/18 09:03

Analyst: MV

Parameter	Result	Qualifier	Units	RL	-	MDL
Volatile Organics by 8260/5035	- Westborough	Lab for sa	mple(s):	01-02	Batch:	WG1139392-5
1,2-Dichlorobenzene	ND		ug/kg	2.0)	0.14
1,3-Dichlorobenzene	ND		ug/kg	2.0)	0.15
1,4-Dichlorobenzene	ND		ug/kg	2.0)	0.17
Methyl tert butyl ether	ND		ug/kg	2.0)	0.20
p/m-Xylene	ND		ug/kg	2.0)	0.56
o-Xylene	ND		ug/kg	1.0)	0.29
Xylenes, Total	ND		ug/kg	1.0)	0.29
cis-1,2-Dichloroethene	ND		ug/kg	1.0)	0.18
1,2-Dichloroethene, Total	ND		ug/kg	1.0)	0.14
Dibromomethane	ND		ug/kg	2.0)	0.24
Styrene	ND		ug/kg	1.0)	0.20
Dichlorodifluoromethane	ND		ug/kg	10		0.92
Acetone	ND		ug/kg	10		4.8
Carbon disulfide	ND		ug/kg	10		4.6
2-Butanone	ND		ug/kg	10		2.2
Vinyl acetate	ND		ug/kg	10		2.2
4-Methyl-2-pentanone	ND		ug/kg	10		1.3
1,2,3-Trichloropropane	ND		ug/kg	2.0)	0.13
2-Hexanone	ND		ug/kg	10		1.2
Bromochloromethane	ND		ug/kg	2.0)	0.20
2,2-Dichloropropane	ND		ug/kg	2.0)	0.20
1,2-Dibromoethane	ND		ug/kg	1.0)	0.28
1,3-Dichloropropane	ND		ug/kg	2.0)	0.17
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.5	0	0.13
Bromobenzene	ND		ug/kg	2.0)	0.14
n-Butylbenzene	ND		ug/kg	1.0)	0.17
sec-Butylbenzene	ND		ug/kg	1.0)	0.15
tert-Butylbenzene	ND		ug/kg	2.0)	0.12
o-Chlorotoluene	ND		ug/kg	2.0)	0.19



Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C Analytical Date: 07/25/18 09:03

Analyst: MV

arameter	Result	Qualifier	Units	RL	-	MDL	
olatile Organics by 8260/5035	- Westborough	Lab for sar	mple(s):	01-02	Batch:	WG1139392-5	
p-Chlorotoluene	ND		ug/kg	2.0)	0.11	
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.0)	1.0	
Hexachlorobutadiene	ND		ug/kg	4.0)	0.17	
Isopropylbenzene	ND		ug/kg	1.0)	0.11	
p-Isopropyltoluene	ND		ug/kg	1.0)	0.11	
Naphthalene	ND		ug/kg	4.0)	0.65	
Acrylonitrile	ND		ug/kg	4.0)	1.2	
n-Propylbenzene	ND		ug/kg	1.0)	0.17	
1,2,3-Trichlorobenzene	ND		ug/kg	2.0)	0.32	
1,2,4-Trichlorobenzene	ND		ug/kg	2.0)	0.27	
1,3,5-Trimethylbenzene	ND		ug/kg	2.0)	0.19	
1,2,4-Trimethylbenzene	ND		ug/kg	2.0)	0.33	
1,4-Dioxane	ND		ug/kg	100)	35.	
p-Diethylbenzene	ND		ug/kg	2.0)	0.18	
p-Ethyltoluene	ND		ug/kg	2.0)	0.38	
1,2,4,5-Tetramethylbenzene	ND		ug/kg	2.0)	0.19	
Ethyl ether	ND		ug/kg	2.0)	0.34	
trans-1,4-Dichloro-2-butene	ND		ug/kg	5.0)	1.4	

		A	Acceptance	
Surrogate	%Recovery	Qualifier	Criteria	
1,2-Dichloroethane-d4	110		70-130	
Toluene-d8	103		70-130	
4-Bromofluorobenzene	108		70-130	
Dibromofluoromethane	100		70-130	



Project Name: 13-16 TO 13-30 BCD

Project Number: 13-16 TO 13-30 BCD

Lab Number: L1828472

Report Date: 07/26/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	%Recovery Qual Limits	RPD	RPD Qual Limits
Volatile Organics by GC/MS - Westborough	Lab Associated	sample(s):	03-05 Batch: W0	G1139369-3 WG1139369-4		
Methylene chloride	83		84	70-130	1	20
1,1-Dichloroethane	88		89	70-130	1	20
Chloroform	90		92	70-130	2	20
Carbon tetrachloride	99		99	63-132	0	20
1,2-Dichloropropane	86		87	70-130	1	20
Dibromochloromethane	93		95	63-130	2	20
1,1,2-Trichloroethane	84		85	70-130	1	20
Tetrachloroethene	100		100	70-130	0	20
Chlorobenzene	86		86	75-130	0	20
Trichlorofluoromethane	90		90	62-150	0	20
1,2-Dichloroethane	96		96	70-130	0	20
1,1,1-Trichloroethane	95		98	67-130	3	20
Bromodichloromethane	91		93	67-130	2	20
trans-1,3-Dichloropropene	90		90	70-130	0	20
cis-1,3-Dichloropropene	86		88	70-130	2	20
1,1-Dichloropropene	87		88	70-130	1	20
Bromoform	120		120	54-136	0	20
1,1,2,2-Tetrachloroethane	77		76	67-130	1	20
Benzene	89		91	70-130	2	20
Toluene	86		83	70-130	4	20
Ethylbenzene	89		88	70-130	1	20
Chloromethane	91		92	64-130	1	20
Bromomethane	81		86	39-139	6	20



Project Name: 13-16 TO 13-30 BCD Project Number: 13-16 TO 13-30 BCD Lab Number:

L1828472

Report Date:

07/26/18

arameter	LCS %Recovery Qual	LCSD %Recovery	% Qual	Recovery Limits	RPD	RPD Qual Limits
platile Organics by GC/MS - Westbo	orough Lab Associated sample(s):	03-05 Batch: V	WG1139369-3 \	NG1139369-4		
Vinyl chloride	83	84		55-140	1	20
Chloroethane	92	91		55-138	1	20
1,1-Dichloroethene	87	88		61-145	1	20
trans-1,2-Dichloroethene	90	89		70-130	1	20
Trichloroethene	89	90		70-130	1	20
1,2-Dichlorobenzene	86	86		70-130	0	20
1,3-Dichlorobenzene	88	89		70-130	1	20
1,4-Dichlorobenzene	87	85		70-130	2	20
Methyl tert butyl ether	86	86		63-130	0	20
p/m-Xylene	90	90		70-130	0	20
o-Xylene	95	95		70-130	0	20
cis-1,2-Dichloroethene	87	92		70-130	6	20
Dibromomethane	89	88		70-130	1	20
1,2,3-Trichloropropane	79	77		64-130	3	20
Acrylonitrile	93	98		70-130	5	20
Styrene	110	105		70-130	5	20
Dichlorodifluoromethane	52	52		36-147	0	20
Acetone	110	99		58-148	11	20
Carbon disulfide	80	81		51-130	1	20
2-Butanone	110	120		63-138	9	20
Vinyl acetate	110	110		70-130	0	20
4-Methyl-2-pentanone	81	81		59-130	0	20
2-Hexanone	96	99		57-130	3	20



Project Name: 13-16 TO 13-30 BCD

Project Number: 13-16 TO 13-30 BCD

Lab Number: L1828472

Report Date: 07/26/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	RPD Qual Limits	
olatile Organics by GC/MS - Westborough	Lab Associated	sample(s):	03-05 Batch:	WG1139369-3	WG1139369-4			
Bromochloromethane	96		96		70-130	0	20	
2,2-Dichloropropane	99		97		63-133	2	20	
1,2-Dibromoethane	88		86		70-130	2	20	
1,3-Dichloropropane	83		83		70-130	0	20	
1,1,1,2-Tetrachloroethane	93		93		64-130	0	20	
Bromobenzene	92		90		70-130	2	20	
n-Butylbenzene	81		81		53-136	0	20	
sec-Butylbenzene	83		83		70-130	0	20	
tert-Butylbenzene	85		84		70-130	1	20	
o-Chlorotoluene	84		83		70-130	1	20	
p-Chlorotoluene	83		83		70-130	0	20	
1,2-Dibromo-3-chloropropane	88		86		41-144	2	20	
Hexachlorobutadiene	100		100		63-130	0	20	
Isopropylbenzene	84		83		70-130	1	20	
p-Isopropyltoluene	85		85		70-130	0	20	
Naphthalene	78		77		70-130	1	20	
n-Propylbenzene	83		81		69-130	2	20	
1,2,3-Trichlorobenzene	90		89		70-130	1	20	
1,2,4-Trichlorobenzene	91		90		70-130	1	20	
1,3,5-Trimethylbenzene	86		85		64-130	1	20	
1,2,4-Trimethylbenzene	58	Q	59	Q	70-130	2	20	
1,4-Dioxane	72		70		56-162	3	20	
p-Diethylbenzene	82		81		70-130	1	20	



Project Name: 13-16 TO 13-30 BCD

Lab Number:

L1828472 07/26/18

Project Number: 13-16 TO 13-30 BCD

Report Date:

Parameter	LCS %Recovery	Qual		CSD ecovery		%Recovery Limits	RPD	Qual	RPD Limits	
Volatile Organics by GC/MS - Westborough La	ab Associated	sample(s):	03-05	Batch:	WG1139369-3	WG1139369-4				
p-Ethyltoluene	84			84		70-130	0		20	
1,2,4,5-Tetramethylbenzene	83			80		70-130	4		20	
Ethyl ether	77			78		59-134	1		20	
trans-1,4-Dichloro-2-butene	92			88		70-130	4		20	

	LCS	LCSD	Acceptance
Surrogate	%Recovery Qual	%Recovery Qual	Criteria
1,2-Dichloroethane-d4	114	115	70-130
Toluene-d8	102	99	70-130
4-Bromofluorobenzene	93	90	70-130
Dibromofluoromethane	109	107	70-130



L1828472

Lab Control Sample Analysis Batch Quality Control

 Project Name:
 13-16 TO 13-30 BCD

 Project Number:
 13-16 TO 13-30 BCD

Lab Number:

Report Date: 07/26/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	%Recovery Qual Limits	RPD	RPD Qual Limits
Volatile Organics by 8260/5035 - Westboroug	gh Lab Associa	ited sample(s):	01-02 Batch:	WG1139392-3 WG1139392	2-4	
Methylene chloride	101		104	70-130	3	30
1,1-Dichloroethane	108		109	70-130	1	30
Chloroform	102		102	70-130	0	30
Carbon tetrachloride	90		89	70-130	1	30
1,2-Dichloropropane	110		105	70-130	5	30
Dibromochloromethane	97		95	70-130	2	30
1,1,2-Trichloroethane	112		105	70-130	6	30
Tetrachloroethene	92		88	70-130	4	30
Chlorobenzene	96		92	70-130	4	30
Trichlorofluoromethane	75		76	70-139	1	30
1,2-Dichloroethane	107		105	70-130	2	30
1,1,1-Trichloroethane	98		97	70-130	1	30
Bromodichloromethane	104		104	70-130	0	30
trans-1,3-Dichloropropene	115		111	70-130	4	30
cis-1,3-Dichloropropene	108		109	70-130	1	30
1,1-Dichloropropene	98		97	70-130	1	30
Bromoform	98		101	70-130	3	30
1,1,2,2-Tetrachloroethane	110		109	70-130	1	30
Benzene	100		101	70-130	1	30
Toluene	109		104	70-130	5	30
Ethylbenzene	102		100	70-130	2	30
Chloromethane	106		103	52-130	3	30
Bromomethane	69		72	57-147	4	30



 Project Name:
 13-16 TO 13-30 BCD

 Project Number:
 13-16 TO 13-30 BCD

Lab Number:

L1828472

Report Date:

07/26/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	%Recovery Qual Limits	RPD	RPD Qual Limits
Volatile Organics by 8260/5035 - Westbo	orough Lab Associa	ted sample(s):	01-02 Batch:	WG1139392-3 WG113939	2-4	
Vinyl chloride	96		96	67-130	0	30
Chloroethane	86		84	50-151	2	30
1,1-Dichloroethene	98		96	65-135	2	30
trans-1,2-Dichloroethene	98		96	70-130	2	30
Trichloroethene	95		95	70-130	0	30
1,2-Dichlorobenzene	94		92	70-130	2	30
1,3-Dichlorobenzene	94		95	70-130	1	30
1,4-Dichlorobenzene	91		90	70-130	1	30
Methyl tert butyl ether	97		98	66-130	1	30
p/m-Xylene	102		100	70-130	2	30
o-Xylene	99		97	70-130	2	30
cis-1,2-Dichloroethene	101		98	70-130	3	30
Dibromomethane	98		98	70-130	0	30
Styrene	101		97	70-130	4	30
Dichlorodifluoromethane	98		95	30-146	3	30
Acetone	117		93	54-140	23	30
Carbon disulfide	107		103	59-130	4	30
2-Butanone	86		78	70-130	10	30
Vinyl acetate	102		99	70-130	3	30
4-Methyl-2-pentanone	115		98	70-130	16	30
1,2,3-Trichloropropane	112		112	68-130	0	30
2-Hexanone	85		84	70-130	1	30
Bromochloromethane	91		90	70-130	1	30



 Project Name:
 13-16 TO 13-30 BCD

 Project Number:
 13-16 TO 13-30 BCD

Lab Number:

L1828472

Report Date:

07/26/18

arameter	LCS %Recovery Qual	LCSD %Recovery	%Recovery Qual Limits	RPD	RPD Qual Limits
olatile Organics by 8260/5035 - Wes	tborough Lab Associated sample	e(s): 01-02 Batch:	: WG1139392-3 WG1139392	2-4	
2,2-Dichloropropane	109	110	70-130	1	30
1,2-Dibromoethane	101	99	70-130	2	30
1,3-Dichloropropane	116	111	69-130	4	30
1,1,1,2-Tetrachloroethane	96	95	70-130	1	30
Bromobenzene	94	99	70-130	5	30
n-Butylbenzene	107	108	70-130	1	30
sec-Butylbenzene	98	99	70-130	1	30
tert-Butylbenzene	94	95	70-130	1	30
o-Chlorotoluene	105	106	70-130	1	30
p-Chlorotoluene	107	106	70-130	1	30
1,2-Dibromo-3-chloropropane	89	86	68-130	3	30
Hexachlorobutadiene	95	98	67-130	3	30
Isopropylbenzene	97	97	70-130	0	30
p-Isopropyltoluene	95	96	70-130	1	30
Naphthalene	85	87	70-130	2	30
Acrylonitrile	90	96	70-130	6	30
n-Propylbenzene	103	105	70-130	2	30
1,2,3-Trichlorobenzene	97	97	70-130	0	30
1,2,4-Trichlorobenzene	93	94	70-130	1	30
1,3,5-Trimethylbenzene	100	103	70-130	3	30
1,2,4-Trimethylbenzene	104	103	70-130	1	30
1,4-Dioxane	80	78	65-136	3	30
p-Diethylbenzene	91	91	70-130	0	30



Project Name: 13-16 TO 13-30 BCD

Lab Number:

L1828472 07/26/18

Project Number: 13-16 TO 13-30 BCD

Report Date:

<u>Parameter</u>	LCS %Recovery	Qual	LCSD %Recove		%Recovery Limits	RPD	Qual	RPD Limits	
Volatile Organics by 8260/5035 - Westborough	n Lab Associate	ed sample(s):	01-02 Ba	atch: WG1139	9392-3 WG1139392	2-4			
p-Ethyltoluene	99		100		70-130	1		30	
1,2,4,5-Tetramethylbenzene	91		91		70-130	0		30	
Ethyl ether	99		103		67-130	4		30	
trans-1,4-Dichloro-2-butene	108		114		70-130	5		30	

	LCS	LCSD	Acceptance
Surrogate	%Recovery Qual	%Recovery Qual	Criteria
1,2-Dichloroethane-d4	106	105	70-130
Toluene-d8	104	101	70-130
4-Bromofluorobenzene	108	108	70-130
Dibromofluoromethane	99	99	70-130



INORGANICS & MISCELLANEOUS



 Project Name:
 13-16 TO 13-30 BCD
 Lab Number:
 L1828472

 Project Number:
 13-16 TO 13-30 BCD
 Report Date:
 07/26/18

SAMPLE RESULTS

 Lab ID:
 L1828472-01
 Date Collected:
 07/24/18 13:40

 Client ID:
 SB-3 (5-7)
 Date Received:
 07/24/18

Sample Location: 13-16 TO 13-30 BEACH CHANNEL DR. Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry -	· Westborough Lab									
Solids, Total	89.6		%	0.100	NA	1	-	07/25/18 09:05	121,2540G	RI



 Project Name:
 13-16 TO 13-30 BCD
 Lab Number:
 L1828472

 Project Number:
 13-16 TO 13-30 BCD
 Report Date:
 07/26/18

SAMPLE RESULTS

 Lab ID:
 L1828472-02
 Date Collected:
 07/24/18 12:15

 Client ID:
 SB-4 (5-7)
 Date Received:
 07/24/18

 Sample Location:
 13-16 TO 13-30 BEACH CHANNEL DR.
 Field Prep:
 Not Specified

Sample Depth:

Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - \	Westborough Lab									
Solids, Total	92.5		%	0.100	NA	1	-	07/25/18 09:05	121,2540G	RI



Lab Duplicate Analysis Batch Quality Control

Project Name: 13-16 TO 13-30 BCD
Project Number: 13-16 TO 13-30 BCD

Lab Number:

L1828472

Report Date:

07/26/18

Parameter	Native Sam	ple D	Ouplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab A	Associated sample(s): 01-02	QC Batch ID:	WG1139262-1	QC Sample:	L1828445-12	Client ID:	DUP Sample
Solids, Total	87.7		89.6	%	2		20



Project Name: 13-16 TO 13-30 BCD **Lab Number:** L1828472 Project Number: 13-16 TO 13-30 BCD

Report Date: 07/26/18

Sample Receipt and Container Information

YES Were project specific reporting limits specified?

Cooler Information

Custody Seal Cooler

Absent Α

Container Information				Initial	Final	Temp			Frozen	
	Container ID	Container Type	Cooler	pН	рH	deg C	Pres	Seal	Date/Time	Analysis(*)
	L1828472-01A	Vial Large Septa unpreserved (4oz)	Α	NA		2.4	Υ	Absent		NYTCL-8260(14)
	L1828472-01B	Glass 60ml unpreserved split	Α	NA		2.4	Υ	Absent		TS(7)
	L1828472-01X	Vial MeOH preserved split	Α	NA		2.4	Υ	Absent		NYTCL-8260(14)
	L1828472-01Y	Vial Water preserved split	Α	NA		2.4	Υ	Absent	25-JUL-18 04:46	NYTCL-8260(14)
	L1828472-01Z	Vial Water preserved split	Α	NA		2.4	Υ	Absent	25-JUL-18 04:46	NYTCL-8260(14)
	L1828472-02A	Vial Large Septa unpreserved (4oz)	Α	NA		2.4	Υ	Absent		NYTCL-8260(14)
	L1828472-02B	Glass 60ml unpreserved split	Α	NA		2.4	Υ	Absent		TS(7)
	L1828472-02X	Vial MeOH preserved split	Α	NA		2.4	Υ	Absent		NYTCL-8260(14)
	L1828472-02Y	Vial Water preserved split	Α	NA		2.4	Υ	Absent	25-JUL-18 04:46	NYTCL-8260(14)
	L1828472-02Z	Vial Water preserved split	Α	NA		2.4	Υ	Absent	25-JUL-18 04:46	NYTCL-8260(14)
	L1828472-03A	Vial HCl preserved	Α	NA		2.4	Υ	Absent		NYTCL-8260(14)
	L1828472-03B	Vial HCl preserved	Α	NA		2.4	Υ	Absent		NYTCL-8260(14)
	L1828472-03C	Vial HCl preserved	Α	NA		2.4	Υ	Absent		NYTCL-8260(14)
	L1828472-04A	Vial HCl preserved	Α	NA		2.4	Υ	Absent		NYTCL-8260(14)
	L1828472-04B	Vial HCl preserved	Α	NA		2.4	Υ	Absent		NYTCL-8260(14)
	L1828472-04C	Vial HCl preserved	Α	NA		2.4	Υ	Absent		NYTCL-8260(14)
	L1828472-05A	Vial HCl preserved	Α	NA		2.4	Υ	Absent		NYTCL-8260(14)
	L1828472-05B	Vial HCl preserved	Α	NA		2.4	Υ	Absent		NYTCL-8260(14)



Project Name: Lab Number: 13-16 TO 13-30 BCD L1828472 **Project Number:** 13-16 TO 13-30 BCD **Report Date:** 07/26/18

GLOSSARY

Acronyms

EDL - Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis

of PAHs using Solid-Phase Microextraction (SPME).

EMPC - Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case

estimate of the concentration.

EPA - Environmental Protection Agency.

LCS - Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of

analytes or a material containing known and verified amounts of analytes.

LCSD - Laboratory Control Sample Duplicate: Refer to LCS.

LFB - Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of

analytes or a material containing known and verified amounts of analytes.

MDL - Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any

adjustments from dilutions, concentrations or moisture content, where applicable.

- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for

MS which an independent estimate of target analyte concentration is available.

- Matrix Spike Sample Duplicate: Refer to MS.

NA Not Applicable.

MSD

NC - Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's

reporting unit.

NDPA/DPA - N-Nitrosodiphenylamine/Diphenylamine.

NI - Not Ignitable.

NP - Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.

RL - Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL

includes any adjustments from dilutions, concentrations or moisture content, where applicable.

RPD - Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the

precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the

values; although the RPD value will be provided in the report.

SRM - Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the

associated field samples.

STLP - Semi-dynamic Tank Leaching Procedure per EPA Method 1315.

TEF - Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.

TEO - Toxic Equivalent: The measure of a sample is toxicity derived by multiplying each dioxin and furan by its corresponding TEF

and then summing the resulting values.

TIC - Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Footnotes

- The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Waterpreserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Report Format: DU Report with 'J' Qualifiers



Data Qualifiers

- A Spectra identified as "Aldol Condensation Product".
- The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).
- Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
- Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
- E Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
- G The concentration may be biased high due to matrix interferences (i.e, co-elution) with non-target compound(s). The result should be considered estimated.
- H The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- I The lower value for the two columns has been reported due to obvious interference.
- M Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.
- NJ Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.
- P The RPD between the results for the two columns exceeds the method-specified criteria.
- Q The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- R Analytical results are from sample re-analysis.
- **RE** Analytical results are from sample re-extraction.
- S Analytical results are from modified screening analysis.
- Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs).
- ND Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.

Report Format: DU Report with 'J' Qualifiers



 Project Name:
 13-16 TO 13-30 BCD
 Lab Number:
 L1828472

 Project Number:
 13-16 TO 13-30 BCD
 Report Date:
 07/26/18

REFERENCES

Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IV, 2007.

121 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WEF. Standard Methods Online.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.



Alpha Analytical, Inc.
Facility: Company-wide

Department: Quality Assurance

Title: Certificate/Approval Program Summary

ID No.:**17873** Revision 11

Page 1 of 1

Published Date: 1/8/2018 4:15:49 PM

Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility

EPA 624: m/p-xylene, o-xylene

EPA 8260C: <u>NPW</u>: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; <u>SCM</u>: lodomethane (methyl iodide), Methyl methacrylate, 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.

EPA 8270D: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine.

EPA 300: <u>DW:</u> Bromide EPA 6860: <u>SCM:</u> Perchlorate

EPA 9010: NPW and SCM: Amenable Cyanide Distillation

SM4500: NPW: Amenable Cyanide, Dissolved Oxygen; SCM: Total Phosphorus, TKN, NO2, NO3.

Mansfield Facility

SM 2540D: TSS

EPA 8082A: NPW: PCB: 1, 5, 31, 87,101, 110, 141, 151, 153, 180, 183, 187.

EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene,

3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

Biological Tissue Matrix: EPA 3050B

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility:

Drinking Water

EPA 300.0: Chloride, Nitrate-N, Fluoride, Sulfate; EPA 353.2: Nitrate-N, Nitrite-N; SM4500NO3-F: Nitrate-N, Nitrite-N; SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500CI-D, SM2320B, SM2540C, SM4500H-B

EPA 332: Perchlorate; EPA 524.2: THMs and VOCs; EPA 504.1: EDB, DBCP.

Microbiology: SM9215B; SM9223-P/A, SM9223B-Colilert-QT,SM9222D.

Non-Potable Water

SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH: Ammonia-N and Kjeldahl-N, EPA 350.1: Ammonia-N, LACHAT 10-107-06-1-B: Ammonia-N, EPA 351.1, SM4500NO3-F, EPA 353.2: Nitrate-N, EPA 351.1, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D. EPA 624: Volatile Halocarbons & Aromatics,

EPA 608: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan II, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs

EPA 625: SVOC (Acid/Base/Neutral Extractables), EPA 600/4-81-045: PCB-Oil.

Microbiology: SM9223B-Colilert-QT; Enterolert-QT, SM9221E, SM9222D.

Mansfield Facility:

Drinking Water

EPA 200.7: Al, Ba, Be, Cd, Cr, Cu, Mn, Ni, Na, Ag, Ca, Zn. EPA 200.8: Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. EPA 245.1 Hg. EPA 522.

Non-Potable Water

EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.

EPA 200.8: Al, Sb, As, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn.

EPA 245.1 Hg.

SM2340B

For a complete listing of analytes and methods, please contact your Alpha Project Manager.

Document Type: Form Pre-Qualtrax Document ID: 08-113

Дена	NEW YORK CHAIN OF CUSTODY	Service Centers Mahwah, NJ 07430: 35 White Albany, NY 12205: 14 Walker Tollawands, NY 14160: 276 0	Way	iie .	Pag	o if			(mm))			MINIALOOD	
Westbarough, MA 01581 8 Walkup Dr. TEL: 508-898-9220 FAX: 508-898-8193	Mansfield, MA 02048 320 Farbes Blvd TEL 506-822-9300 FAX: 508-822-3268	Project Information Project Name: 13-1 Project Location: 13-1	6 to 13-30	30 BCI Beach	Channel	DC	Deli	1000	-		ASP-B EQuIS (4 File)	Billing Information Same as Client Info	
Client Information	Env	Project # (Use Project name as f	10				Rea	Othe	r Requiren	nent		Disposal Site Information	
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Phone: 646-60	06-2332	Standa	rd 🔲	Due Date				NY R	estricted Us prestricted Sewer Disc	Jse	Other	Disposal Facility: NJ NY Other:	
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Preservative Code: A = None B = HCI	Container Code P = Plastic A = Amber Glass	Westboro: Certification No: MA935 Mansfield: Certification No: MA015			Container Lyne I'l		1/2	A	4			Please print clearly, legibly and completely. Samples car	
C = HNO_3 D = H_2SO_4 E = $NaOH$ F = $MeOH$ G = $NaHSO_4$ H = $Na_2S_2O_3$ K/E = $Zn Ao/NaOH$ O = $Other$	V = Vial G = Glass B = Becterie Cup C = Cube O = Other E = Encore D = BOD Bottle				Preservative							not be logged in and tumaround time clock will not start until any ambiguities are resolved. BY EXECUTING THIS COC, THE CLIENT HAS READ AND AGREES TO BE BOUND BY ALPHA'S TERMS & CONDITIONS.	



ANALYTICAL REPORT

Lab Number: L1828521

Client: Tenen Environmental, LLC

121 West 27th Street

Suite 702

New York City, NY 10001

ATTN: Mohamed Ahmed Phone: (646) 606-2332

Project Name: 13-16 TO 13-30 BCD

Project Number: 13-16 TO 13-30 BCD

Report Date: 07/31/18

The original project report/data package is held by Alpha Analytical. This report/data package is paginated and should be reproduced only in its entirety. Alpha Analytical holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0574), IL (200077), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #P330-17-00196).

Eight Walkup Drive, Westborough, MA 01581-1019 508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com



 Project Name:
 13-16 TO 13-30 BCD

 Project Number:
 13-16 TO 13-30 BCD

Lab Number: L1828521 **Report Date:** 07/31/18

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L1828521-01	SB-3 (5-7)	SOIL	13-16 TO 13-30 BEACH CHANNEL DR.	07/24/18 13:40	07/24/18
L1828521-02	SB-4 (5-7)	SOIL	13-16 TO 13-30 BEACH CHANNEL DR.	07/24/18 12:15	07/24/18
L1828521-03	TW-3	WATER	13-16 TO 13-30 BEACH CHANNEL DR.	07/24/18 15:15	07/24/18
L1828521-04	TW-4	WATER	13-16 TO 13-30 BEACH CHANNEL DR.	07/24/18 13:35	07/24/18



 Project Name:
 13-16 TO 13-30 BCD
 Lab Number:
 L1828521

 Project Number:
 13-16 TO 13-30 BCD
 Report Date:
 07/31/18

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. All specific QC information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications. Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances the specific failure is not narrated but noted in the associated QC table. The information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications.

Please see the associated ADEx data file for a comparison of laboratory reporting limits that were achieved with the regulatory Numerical Standards requested on the Chain of Custody.

HOLD POLICY

For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Client Service Representative and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Client Services at 800-624-9220 with any questions.



 Project Name:
 13-16 TO 13-30 BCD
 Lab Number:
 L1828521

 Project Number:
 13-16 TO 13-30 BCD
 Report Date:
 07/31/18

Case Narrative (continued)

Report Submission

The results of the Volatile Organics analysis were issued under separate cover.

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

Semivolatile Organics

The WG1140027-3 LCSD recovery, associated with L1828521-03 and -04, is below the acceptance criteria for benzoic acid (0%); however, it has been identified as a "difficult" analyte. The results of the associated samples are reported.

Total Metals

L1828521-01 and -02: The sample has elevated detection limits for all elements, with the exception of mercury, due to the dilution required by matrix interferences encountered during analysis.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature:

Title: Technical Director/Representative Date: 07/31/18

Melissa Cripps Melissa Cripps

ORGANICS



SEMIVOLATILES



Project Name: 13-16 TO 13-30 BCD

Project Number: 13-16 TO 13-30 BCD

SAMPLE RESULTS

Report Date: 07/31/18

Lab ID: L1828521-01

Client ID: SB-3 (5-7)

Sample Location: 13-16 TO 13-30 BEACH CHANNEL DR. Date Received:

07/24/18 13:40 07/24/18

L1828521

Field Prep:

RL

Date Collected:

Lab Number:

Not Specified

Dilution Factor

Sample Depth:

Parameter

Matrix: Soil 1,8270D Analytical Method:

Analytical Date: 07/30/18 18:58

Analyst: **ALS** 90% Percent Solids:

	, , 00 .0
Extraction Date:	07/28/18 11:53

MDL

Extraction Method: EPA 3546

raiailielei	Nesun	Qualifie	Ullita	IN.L	WIDE	Dilution Lactor	
Semivolatile Organics by GC/MS - V	Westborough Lab						
Acenaphthene	ND		ug/kg	140	19.	1	
1,2,4-Trichlorobenzene	ND		ug/kg	180	21.	1	
Hexachlorobenzene	ND		ug/kg	110	20.	1	
Bis(2-chloroethyl)ether	ND		ug/kg	160	24.	1	
2-Chloronaphthalene	ND		ug/kg	180	18.	1	
1,2-Dichlorobenzene	ND		ug/kg	180	32.	1	
1,3-Dichlorobenzene	ND		ug/kg	180	31.	1	
1,4-Dichlorobenzene	ND		ug/kg	180	32.	1	
3,3'-Dichlorobenzidine	ND		ug/kg	180	48.	1	
2,4-Dinitrotoluene	ND		ug/kg	180	36.	1	
2,6-Dinitrotoluene	ND		ug/kg	180	31.	1	
Fluoranthene	ND		ug/kg	110	21.	1	
4-Chlorophenyl phenyl ether	ND		ug/kg	180	19.	1	
4-Bromophenyl phenyl ether	ND		ug/kg	180	28.	1	
Bis(2-chloroisopropyl)ether	ND		ug/kg	220	31.	1	
Bis(2-chloroethoxy)methane	ND		ug/kg	190	18.	1	
Hexachlorobutadiene	ND		ug/kg	180	26.	1	
Hexachlorocyclopentadiene	ND		ug/kg	520	160	1	
Hexachloroethane	ND		ug/kg	140	29.	1	
Isophorone	ND		ug/kg	160	23.	1	
Naphthalene	ND		ug/kg	180	22.	1	
Nitrobenzene	ND		ug/kg	160	27.	1	
NDPA/DPA	ND		ug/kg	140	20.	1	
n-Nitrosodi-n-propylamine	ND		ug/kg	180	28.	1	
Bis(2-ethylhexyl)phthalate	120	J	ug/kg	180	62.	1	
Butyl benzyl phthalate	ND		ug/kg	180	45.	1	
Di-n-butylphthalate	ND		ug/kg	180	34.	1	
Di-n-octylphthalate	ND		ug/kg	180	61.	1	

Qualifier

Result

Units



Project Name: 13-16 TO 13-30 BCD **Lab Number:** L1828521

Project Number: 13-16 TO 13-30 BCD **Report Date:** 07/31/18

SAMPLE RESULTS

Lab ID: L1828521-01 Date Collected: 07/24/18 13:40

Client ID: SB-3 (5-7) Date Received: 07/24/18
Sample Location: 13-16 TO 13-30 BEACH CHANNEL DR. Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - We	estborough Lab					
Diethyl phthalate	ND		ug/kg	180	17.	1
Dimethyl phthalate	ND		ug/kg	180	38.	1
Benzo(a)anthracene	ND		ug/kg	110	20.	1
Benzo(a)pyrene	ND		ug/kg	140	44.	1
Benzo(b)fluoranthene	ND		ug/kg	110	30.	1
Benzo(k)fluoranthene	ND		ug/kg	110	29.	1
Chrysene	ND		ug/kg	110	19.	1
Acenaphthylene	ND		ug/kg	140	28.	1
Anthracene	ND		ug/kg	110	35.	1
Benzo(ghi)perylene	ND		ug/kg	140	21.	1
Fluorene	ND		ug/kg	180	18.	1
Phenanthrene	ND		ug/kg	110	22.	1
Dibenzo(a,h)anthracene	ND		ug/kg	110	21.	1
Indeno(1,2,3-cd)pyrene	ND		ug/kg	140	25.	1
Pyrene	ND		ug/kg	110	18.	1
Biphenyl	ND		ug/kg	410	42.	1
4-Chloroaniline	ND		ug/kg	180	33.	1
2-Nitroaniline	ND		ug/kg	180	35.	1
3-Nitroaniline	ND		ug/kg	180	34.	1
4-Nitroaniline	ND		ug/kg	180	75.	1
Dibenzofuran	ND		ug/kg	180	17.	1
2-Methylnaphthalene	ND		ug/kg	220	22.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	180	19.	1
Acetophenone	ND		ug/kg	180	22.	1
2,4,6-Trichlorophenol	ND		ug/kg	110	34.	1
p-Chloro-m-cresol	ND		ug/kg	180	27.	1
2-Chlorophenol	ND		ug/kg	180	21.	1
2,4-Dichlorophenol	ND		ug/kg	160	29.	1
2,4-Dimethylphenol	ND		ug/kg	180	60.	1
2-Nitrophenol	ND		ug/kg	390	68.	1
4-Nitrophenol	ND		ug/kg	250	74.	1
2,4-Dinitrophenol	ND		ug/kg	870	84.	1
4,6-Dinitro-o-cresol	ND		ug/kg	470	87.	1
Pentachlorophenol	ND		ug/kg	140	40.	1
Phenol	ND		ug/kg	180	27.	1
2-Methylphenol	ND		ug/kg	180	28.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	260	28.	1



Project Name: 13-16 TO 13-30 BCD **Lab Number:** L1828521

Project Number: 13-16 TO 13-30 BCD **Report Date:** 07/31/18

SAMPLE RESULTS

Lab ID: L1828521-01 Date Collected: 07/24/18 13:40

Client ID: SB-3 (5-7) Date Received: 07/24/18
Sample Location: 13-16 TO 13-30 BEACH CHANNEL DR. Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/M	S - Westborough Lab					
2,4,5-Trichlorophenol	ND		ug/kg	180	34.	1
Benzoic Acid	ND		ug/kg	580	180	1
Benzyl Alcohol	ND		ug/kg	180	55.	1
Carbazole	ND		ua/ka	180	18.	1

Surrogate	% Recovery	Acceptance Qualifier Criteria
2-Fluorophenol	70	25-120
Phenol-d6	70	10-120
Nitrobenzene-d5	72	23-120
2-Fluorobiphenyl	67	30-120
2,4,6-Tribromophenol	74	10-136
4-Terphenyl-d14	64	18-120



L1828521

07/31/18

07/24/18 12:15

07/24/18

Project Name: 13-16 TO 13-30 BCD

Project Number: 13-16 TO 13-30 BCD

SAMPLE RESULTS

Lab Number:

Report Date:

Date Collected:

Date Received:

Lab ID: L1828521-02

Client ID: SB-4 (5-7)

Sample Location: 13-16 TO 13-30 BEACH CHANNEL DR. Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8270D
Analytical Date: 07/30/18 19:23

Analyst: ALS Percent Solids: 93%

Extraction Method: EPA 3546
Extraction Date: 07/28/18 11:53

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS -	Westborough Lab					
Acenaphthene	ND		ug/kg	140	18.	1
1,2,4-Trichlorobenzene	ND		ug/kg	180	20.	1
Hexachlorobenzene	ND		ug/kg	110	20.	1
Bis(2-chloroethyl)ether	ND		ug/kg	160	24.	1
2-Chloronaphthalene	ND		ug/kg	180	18.	1
1,2-Dichlorobenzene	ND		ug/kg	180	32.	1
1,3-Dichlorobenzene	ND		ug/kg	180	30.	1
1,4-Dichlorobenzene	ND		ug/kg	180	31.	1
3,3'-Dichlorobenzidine	ND		ug/kg	180	47.	1
2,4-Dinitrotoluene	ND		ug/kg	180	35.	1
2,6-Dinitrotoluene	ND		ug/kg	180	30.	1
Fluoranthene	ND		ug/kg	110	20.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	180	19.	1
4-Bromophenyl phenyl ether	ND		ug/kg	180	27.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	210	30.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	190	18.	1
Hexachlorobutadiene	ND		ug/kg	180	26.	1
Hexachlorocyclopentadiene	ND		ug/kg	510	160	1
Hexachloroethane	ND		ug/kg	140	29.	1
Isophorone	ND		ug/kg	160	23.	1
Naphthalene	ND		ug/kg	180	22.	1
Nitrobenzene	ND		ug/kg	160	26.	1
NDPA/DPA	ND		ug/kg	140	20.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	180	27.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	180	61.	1
Butyl benzyl phthalate	ND		ug/kg	180	45.	1
Di-n-butylphthalate	ND		ug/kg	180	34.	1
Di-n-octylphthalate	ND		ug/kg	180	60.	1



Project Name: 13-16 TO 13-30 BCD **Lab Number:** L1828521

Project Number: 13-16 TO 13-30 BCD **Report Date:** 07/31/18

SAMPLE RESULTS

Lab ID: L1828521-02 Date Collected: 07/24/18 12:15

Client ID: SB-4 (5-7) Date Received: 07/24/18

Sample Location: 13-16 TO 13-30 BEACH CHANNEL DR. Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS	- Westborough Lab					
Diethyl phthalate	ND		ug/kg	180	16.	1
Dimethyl phthalate	ND		ug/kg	180	37.	1
Benzo(a)anthracene	ND		ug/kg	110	20.	1
Benzo(a)pyrene	ND		ug/kg	140	43.	1
Benzo(b)fluoranthene	ND		ug/kg	110	30.	1
Benzo(k)fluoranthene	ND		ug/kg	110	28.	1
Chrysene	ND		ug/kg	110	18.	1
Acenaphthylene	ND		ug/kg	140	27.	1
Anthracene	ND		ug/kg	110	34.	1
Benzo(ghi)perylene	ND		ug/kg	140	21.	1
Fluorene	ND		ug/kg	180	17.	1
Phenanthrene	ND		ug/kg	110	22.	1
Dibenzo(a,h)anthracene	ND		ug/kg	110	20.	1
Indeno(1,2,3-cd)pyrene	ND		ug/kg	140	25.	1
Pyrene	ND		ug/kg	110	18.	1
Biphenyl	ND		ug/kg	400	41.	1
4-Chloroaniline	ND		ug/kg	180	32.	1
2-Nitroaniline	ND		ug/kg	180	34.	1
3-Nitroaniline	ND		ug/kg	180	33.	1
4-Nitroaniline	ND		ug/kg	180	73.	1
Dibenzofuran	ND		ug/kg	180	17.	1
2-Methylnaphthalene	ND		ug/kg	210	21.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	180	18.	1
Acetophenone	ND		ug/kg	180	22.	1
2,4,6-Trichlorophenol	ND		ug/kg	110	34.	1
p-Chloro-m-cresol	ND		ug/kg	180	26.	1
2-Chlorophenol	ND		ug/kg	180	21.	1
2,4-Dichlorophenol	ND		ug/kg	160	28.	1
2,4-Dimethylphenol	ND		ug/kg	180	58.	1
2-Nitrophenol	ND		ug/kg	380	67.	1
4-Nitrophenol	ND		ug/kg	250	72.	1
2,4-Dinitrophenol	ND		ug/kg	850	83.	1
4,6-Dinitro-o-cresol	ND		ug/kg	460	85.	1
Pentachlorophenol	ND		ug/kg	140	39.	1
Phenol	ND		ug/kg	180	27.	1
2-Methylphenol	ND		ug/kg	180	27.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	260	28.	1



Project Name: 13-16 TO 13-30 BCD **Lab Number:** L1828521

Project Number: 13-16 TO 13-30 BCD **Report Date:** 07/31/18

SAMPLE RESULTS

Lab ID: L1828521-02 Date Collected: 07/24/18 12:15

Client ID: SB-4 (5-7) Date Received: 07/24/18
Sample Location: 13-16 TO 13-30 BEACH CHANNEL DR. Field Prep: Not Specified

Sample Depth:

		Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - W	estborough Lab					
2,4,5-Trichlorophenol	ND		ug/kg	180	34.	1
Benzoic Acid	ND		ug/kg	570	180	1
Benzyl Alcohol	ND		ug/kg	180	54.	1
Carbazole	ND		ug/kg	180	17.	1

Surrogate	% Recovery	Acceptance Qualifier Criteria
2-Fluorophenol	83	25-120
Phenol-d6	82	10-120
Nitrobenzene-d5	82	23-120
2-Fluorobiphenyl	81	30-120
2,4,6-Tribromophenol	87	10-136
4-Terphenyl-d14	79	18-120



Project Name: 13-16 TO 13-30 BCD **Lab Number:** L1828521

Project Number: 13-16 TO 13-30 BCD **Report Date:** 07/31/18

SAMPLE RESULTS

Lab ID: L1828521-03 Date Collected: 07/24/18 15:15

Client ID: TW-3 Date Received: 07/24/18
Sample Location: 13-16 TO 13-30 BEACH CHANNEL DR. Field Prep: Not Specified

10.00

Result

Sample Depth:

Parameter

Matrix: Water Extraction Method: EPA 3510C
Analytical Method: 1.8270D Extraction Date: 07/27/18 08:55

Analytical Method: 1,8270D Extraction Date: 07/27/18 08:55
Analytical Date: 07/29/18 22:00

Qualifier

Units

RL

MDL

Dilution Factor

Analyst: SZ

Parameter	Result	Qualifier	Units	KL	MDL	Dilution Factor	
Semivolatile Organics by GC/MS - We	estborough Lab						
1,2,4-Trichlorobenzene	ND		ug/l	5.0	0.50	1	
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50	1	
1,2-Dichlorobenzene	ND		ug/l	2.0	0.45	1	
1,3-Dichlorobenzene	ND		ug/l	2.0	0.40	1	
1,4-Dichlorobenzene	ND		ug/l	2.0	0.43	1	
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6	1	
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2	1	
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93	1	
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.49	1	
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.38	1	
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53	1	
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50	1	
Hexachlorocyclopentadiene	ND		ug/l	20	0.69	1	
Isophorone	ND		ug/l	5.0	1.2	1	
Nitrobenzene	ND		ug/l	2.0	0.77	1	
NDPA/DPA	ND		ug/l	2.0	0.42	1	
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64	1	
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.5	1	
Butyl benzyl phthalate	ND		ug/l	5.0	1.2	1	
Di-n-butylphthalate	0.44	J	ug/l	5.0	0.39	1	
Di-n-octylphthalate	ND		ug/l	5.0	1.3	1	
Diethyl phthalate	ND		ug/l	5.0	0.38	1	
Dimethyl phthalate	ND		ug/l	5.0	1.8	1	
Biphenyl	ND		ug/l	2.0	0.46	1	
4-Chloroaniline	ND		ug/l	5.0	1.1	1	
2-Nitroaniline	ND		ug/l	5.0	0.50	1	
3-Nitroaniline	ND		ug/l	5.0	0.81	1	
4-Nitroaniline	ND		ug/l	5.0	0.80	1	



 Project Name:
 13-16 TO 13-30 BCD
 Lab Number:
 L1828521

Project Number: 13-16 TO 13-30 BCD **Report Date:** 07/31/18

SAMPLE RESULTS

Lab ID: L1828521-03 Date Collected: 07/24/18 15:15

Client ID: TW-3 Date Received: 07/24/18
Sample Location: 13-16 TO 13-30 BEACH CHANNEL DR. Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Wes	tborough Lab					
Dibenzofuran	ND		ug/l	2.0	0.50	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.44	1
Acetophenone	ND		ug/l	5.0	0.53	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61	1
p-Chloro-m-cresol	ND		ug/l	2.0	0.35	1
2-Chlorophenol	ND		ug/l	2.0	0.48	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.41	1
2,4-Dimethylphenol	ND		ug/l	5.0	1.8	1
2-Nitrophenol	ND		ug/l	10	0.85	1
4-Nitrophenol	ND		ug/l	10	0.67	1
2,4-Dinitrophenol	ND		ug/l	20	6.6	1
4,6-Dinitro-o-cresol	ND		ug/l	10	1.8	1
Phenol	ND		ug/l	5.0	0.57	1
2-Methylphenol	ND		ug/l	5.0	0.49	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.48	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77	1
Benzoic Acid	ND		ug/l	50	2.6	1
Benzyl Alcohol	ND		ug/l	2.0	0.59	1
Carbazole	ND		ug/l	2.0	0.49	1

Surrogate	% Recovery	Acceptance Qualifier Criteria	
2-Fluorophenol	73	21-120	
Phenol-d6	63	10-120	
Nitrobenzene-d5	84	23-120	
2-Fluorobiphenyl	88	15-120	
2,4,6-Tribromophenol	89	10-120	
4-Terphenyl-d14	113	41-149	



Project Name: 13-16 TO 13-30 BCD **Lab Number:** L1828521

Project Number: 13-16 TO 13-30 BCD **Report Date:** 07/31/18

SAMPLE RESULTS

Lab ID: L1828521-03 Date Collected: 07/24/18 15:15

Client ID: TW-3 Date Received: 07/24/18

Sample Location: 13-16 TO 13-30 BEACH CHANNEL DR. Field Prep: Not Specified

Sample Depth:

Matrix: Water Extraction Method: EPA 3510C

Analytical Method: 1,8270D-SIM Extraction Date: 07/27/18 08:53
Analytical Date: 07/29/18 20:59

Analyst: DV

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM	1 - Westborough La	ab				
Acenaphthene	ND		ug/l	0.10	0.01	1
2-Chloronaphthalene	ND		ug/l	0.20	0.02	1
Fluoranthene	ND		ug/l	0.10	0.02	 1
Hexachlorobutadiene	ND		ug/l	0.50	0.05	 1
Naphthalene	ND		ug/l	0.10	0.05	 1
Benzo(a)anthracene	ND		ug/l	0.10	0.02	 1
Benzo(a)pyrene	ND		ug/l	0.10	0.02	1
Benzo(b)fluoranthene	ND		ug/l	0.10	0.02	
Benzo(k)fluoranthene	ND		ug/l	0.10	0.01	 1
Chrysene	ND			0.10	0.01	
Acenaphthylene	ND		ug/l	0.10	0.01	1
Anthracene	ND		ug/l	0.10	0.01	<u>'</u> 1
	ND		ug/l	0.10	0.01	1
Benzo(ghi)perylene Fluorene	ND		ug/l	0.10		
Phenanthrene	ND ND		ug/l	0.10	0.01	
			ug/l			
Dibenzo(a,h)anthracene	ND		ug/l	0.10	0.01	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.01	1
Pyrene	ND		ug/l	0.10	0.02	1
2-Methylnaphthalene	ND		ug/l	0.10	0.02	1
Pentachlorophenol	ND		ug/l	0.80	0.01	1
Hexachlorobenzene	ND		ug/l	0.80	0.01	1
Hexachloroethane	ND		ug/l	0.80	0.06	1



Project Name: 13-16 TO 13-30 BCD **Lab Number:** L1828521

Project Number: 13-16 TO 13-30 BCD **Report Date:** 07/31/18

SAMPLE RESULTS

Lab ID: L1828521-03 Date Collected: 07/24/18 15:15

Client ID: TW-3 Date Received: 07/24/18
Sample Location: 13-16 TO 13-30 BEACH CHANNEL DR. Field Prep: Not Specified

Sample Depth:

Parameter Result Qualifier Units RL MDL Dilution Factor

Semivolatile Organics by GC/MS-SIM - Westborough Lab

Surrogate	% Recovery	Acceptance Qualifier Criteria
2-Fluorophenol	71	21-120
Phenol-d6	60	10-120
Nitrobenzene-d5	103	23-120
2-Fluorobiphenyl	89	15-120
2,4,6-Tribromophenol	108	10-120
4-Terphenyl-d14	118	41-149



Project Name: 13-16 TO 13-30 BCD **Lab Number:** L1828521

Project Number: 13-16 TO 13-30 BCD **Report Date:** 07/31/18

SAMPLE RESULTS

Lab ID: L1828521-04 Date Collected: 07/24/18 13:35

Client ID: TW-4 Date Received: 07/24/18

Sample Location: 13-16 TO 13-30 BEACH CHANNEL DR. Field Prep: Not Specified

Sample Depth:

Analytical Date:

Matrix: Water Extraction Method: EPA 3510C
Analytical Method: 1,8270D Extraction Date: 07/27/18 08:55

Analyst: SZ

07/29/18 22:28

Bis(2-chloroethyl)ether ND ug/l 2.0 0.50 1	Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Bis(2-chloroethyl)ether ND ug/l 2.0 0.50 1	Semivolatile Organics by GC/MS - W	estborough Lab					
1,2-Dichlorobenzene ND ug/l 2.0 0.45 1 1,3-Dichlorobenzene ND ug/l 2.0 0.40 1 1,4-Dichlorobenzene ND ug/l 2.0 0.43 1 1,4-Dichlorobenzene ND ug/l 2.0 0.43 1 1,4-Dichlorobenzene ND ug/l 5.0 1.6 1 1,4-Dichlorobenzidine ND ug/l 5.0 1.6 1 1,4-Dichlorobenzidine ND ug/l 5.0 1.2 1 1,2-Dichlorobenzidine ND ug/l 5.0 0.93 1 1,4-Dichlorobenzidine ND ug/l 5.0 0.93 1 1,4-Dichlorobenzidine ND ug/l 2.0 0.49 1 1,4-Dichlorobenzene ND ug/l 2.0 0.49 1 1,4-Dichlorobenzene ND ug/l 2.0 0.49 1 1,4-Dichlorobenzene ND ug/l 2.0 0.53 1 1,4-Dichlorobenzene ND ug/l 2.0 0.53 1 1,4-Dichlorobenzene ND ug/l 2.0 0.50 1 1,4-Dichlorobenzene ND ug/l 2.0 0.69 1 1,4-Dichlorobenzene ND ug/l 2.0 0.69 1 1,4-Dichlorobenzene ND ug/l 2.0 0.77 1 1,4-Dichlorobenzene ND ug/l 2.0 0.77 1 1,4-Dichlorobenzene ND ug/l 2.0 0.42 1 1,4-Dichlorobenzene ND ug/l 2.0 0.42 1 1,4-Dichlorobenzene ND ug/l 3.0 1.5 1 1,4-Dichlorobenzene ND ug/l 5.0 0.64 1 1,4-Dichlorobenzene ND ug/l 5.0 0.64 1 1,4-Dichlorobenzene ND ug/l 5.0 0.39 1 1,4-Dichlorobenzene ND ug/l 5.0 0.38 1 1,4-Dichlorobenzene ND ug/l 5.0 0.38 1 1,4-Dichlorobenzene ND ug/l 5.0 0.38 1	1,2,4-Trichlorobenzene	ND		ug/l	5.0	0.50	1
1,2-Dichlorobenzene ND ug/l 2.0 0.45 1 1 1,3-Dichlorobenzene ND ug/l 2.0 0.40 1 1 1,4-Dichlorobenzene ND ug/l 2.0 0.43 1 1 1,4-Dichlorobenzene ND ug/l 5.0 1.6 1 1 1,3-Dichlorobenzidine ND ug/l 5.0 1.6 1 1 1 1 1 1 1 1 1	Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50	1
1,3-Dichlorobenzene ND ug/l 2.0 0.40 1 1 1,4-Dichlorobenzene ND ug/l 2.0 0.43 1 1 1,4-Dichlorobenzene ND ug/l 5.0 1.6 1 1 1,4-Dichlorobenzidine ND ug/l 5.0 1.6 1 1 1,4-Dichlorobenzidine ND ug/l 5.0 1.2 1 1 1 1,4-Dichlorobenzidine ND ug/l 5.0 0.93 1 1 1 1 1 1 1 1 1	1,2-Dichlorobenzene	ND		ug/l	2.0	0.45	1
3,3*-Dichlorobenzidine ND ug/l 5.0 1.6 1 2,4*-Dinitrotoluene ND ug/l 5.0 1.2 1 2,6*-Dinitrotoluene ND ug/l 5.0 0.93 1 4*-Chlorophenyl phenyl ether ND ug/l 2.0 0.49 1 4*-Bromophenyl phenyl ether ND ug/l 2.0 0.38 1 4*-Bromophenyl phenyl ether ND ug/l 2.0 0.53 1 Bis(2-chlorosepropyl)ether ND ug/l 5.0 0.50 1 Bis(2-chlorosepropyl)ether ND ug/l 5.0 0.50 1 Hexachlorocyclopentadiene ND ug/l 5.0 0.50 1 Hexachlorocyclopentadiene ND ug/l 5.0 0.69 1 Nitrobenzene ND ug/l 5.0 0.69 1 Nitrobenzene ND ug/l 5.0 0.42 1 Nn-Nitrosodiin-propylamine ND u	1,3-Dichlorobenzene	ND		ug/l	2.0	0.40	1
ND	1,4-Dichlorobenzene	ND		ug/l	2.0	0.43	1
ND	3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6	1
A-Chlorophenyl phenyl ether	2,4-Dinitrotoluene	ND		ug/l	5.0	1.2	1
A-Bromophenyl phenyl ether ND ug/l 2.0 0.38 1 Bis(2-chloroisopropyl)ether ND ug/l 2.0 0.53 1 Bis(2-chloroethoxy)methane ND ug/l 5.0 0.50 1 Hexachlorocyclopentadiene ND ug/l 5.0 0.69 1 Sophorone ND ug/l 5.0 1.2 1 Nitrobenzene ND ug/l 2.0 0.77 1 Nitrobenzene ND ug/l 5.0 1.2 1 Nitrobenzene ND ug/l 5.0 0.64 1 Bis(2-ethylhexyl)phthalate ND ug/l 5.0 0.64 1 Bis(2-ethylhexyl)phthalate ND ug/l 5.0 0.64 1 Din-n-butylphthalate ND ug/l 5.0 0.39 1 Din-n-butylphthalate ND ug/l 5.0 0.39 1 Din-notylphthalate ND ug/l 5.0 0.39 1 Din-notylphthalate ND ug/l 5.0 0.38 1 Din-notylphthalate ND ug/l 5.0 0.46 1 A-Chloroaniline ND ug/l 5.0 0.50 1.1 1 Bisphenyl ND ug/l 5.0 0.50 1.1 1 C-Nitroaniline ND ug/l 5.0 0.50 1 C-Nitroaniline ND ug/l 5.0 0.50 1	2,6-Dinitrotoluene	ND		ug/l	5.0	0.93	1
ND	4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.49	1
ND	4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.38	1
ND	Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53	1
ND	Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50	1
NItrobenzene ND ug/l 2.0 0.77 1 NDPA/DPA ND ug/l 2.0 0.42 1 NDPA/DPA ND ug/l 5.0 0.64 1 Bis(2-ethylhexyl)phthalate ND ug/l 5.0 1.5 1 Butyl benzyl phthalate ND ug/l 5.0 0.39 1 Di-n-butylphthalate ND ug/l 5.0 0.39 1 Di-n-butylphthalate ND ug/l 5.0 0.39 1 Di-n-butylphthalate ND ug/l 5.0 1.3 1 Diethyl phthalate ND ug/l 5.0 1.3 1 Diethyl phthalate ND ug/l 5.0 0.38 1 Diethyl phthalate ND ug/l 5.0 0.38 1 Diethyl phthalate ND ug/l 5.0 1.8 1 Bisphenyl ND ug/l 5.0 1.8 1 Bisphenyl ND ug/l 5.0 0.46 1 4-Chloroaniline ND ug/l 5.0 0.50 1 3-Nitroaniline ND ug/l 5.0 0.50 1	Hexachlorocyclopentadiene	ND		ug/l	20	0.69	1
NDPA/DPA	Isophorone	ND		ug/l	5.0	1.2	1
ND	Nitrobenzene	ND		ug/l	2.0	0.77	1
Sis (2-ethylhexyl) phthalate ND ug/l 3.0 1.5 1	NDPA/DPA	ND		ug/l	2.0	0.42	1
Butyl benzyl phthalate	n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64	1
Di-n-butylphthalate	Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.5	1
Di-n-octylphthalate	Butyl benzyl phthalate	ND		ug/l	5.0	1.2	1
Diethyl phthalate 1.4 J ug/l 5.0 0.38 1 Dimethyl phthalate ND ug/l 5.0 1.8 1 Biphenyl ND ug/l 2.0 0.46 1 4-Chloroaniline ND ug/l 5.0 1.1 1 2-Nitroaniline ND ug/l 5.0 0.50 1 3-Nitroaniline ND ug/l 5.0 0.81 1	Di-n-butylphthalate	ND		ug/l	5.0	0.39	1
Dimethyl phthalate ND ug/l 5.0 1.8 1 Biphenyl ND ug/l 2.0 0.46 1 4-Chloroaniline ND ug/l 5.0 1.1 1 2-Nitroaniline ND ug/l 5.0 0.50 1 3-Nitroaniline ND ug/l 5.0 0.81 1	Di-n-octylphthalate	ND		ug/l	5.0	1.3	1
ND	Diethyl phthalate	1.4	J	ug/l	5.0	0.38	1
4-Chloroaniline ND ug/l 5.0 1.1 1 2-Nitroaniline ND ug/l 5.0 0.50 1 3-Nitroaniline ND ug/l 5.0 0.81 1	Dimethyl phthalate	ND		ug/l	5.0	1.8	1
2-Nitroaniline ND ug/l 5.0 0.50 1 3-Nitroaniline ND ug/l 5.0 0.81 1	Biphenyl	ND		ug/l	2.0	0.46	1
3-Nitroaniline ND ug/l 5.0 0.81 1	4-Chloroaniline	ND		ug/l	5.0	1.1	1
•9	2-Nitroaniline	ND		ug/l	5.0	0.50	1
1-Nitroaniline ND ug/l 5.0 0.80 1	3-Nitroaniline	ND		ug/l	5.0	0.81	1
	4-Nitroaniline	ND		ug/l	5.0	0.80	1



 Project Name:
 13-16 TO 13-30 BCD
 Lab Number:
 L1828521

Project Number: 13-16 TO 13-30 BCD **Report Date:** 07/31/18

SAMPLE RESULTS

Lab ID: L1828521-04 Date Collected: 07/24/18 13:35

Client ID: TW-4 Date Received: 07/24/18

Sample Location: 13-16 TO 13-30 BEACH CHANNEL DR. Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - V	Vestborough Lab					
Dibenzofuran	ND		ug/l	2.0	0.50	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.44	1
Acetophenone	ND		ug/l	5.0	0.53	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61	1
p-Chloro-m-cresol	ND		ug/l	2.0	0.35	1
2-Chlorophenol	ND		ug/l	2.0	0.48	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.41	1
2,4-Dimethylphenol	ND		ug/l	5.0	1.8	1
2-Nitrophenol	ND		ug/l	10	0.85	1
4-Nitrophenol	ND		ug/l	10	0.67	1
2,4-Dinitrophenol	ND		ug/l	20	6.6	1
4,6-Dinitro-o-cresol	ND		ug/l	10	1.8	1
Phenol	9.8		ug/l	5.0	0.57	1
2-Methylphenol	ND		ug/l	5.0	0.49	1
3-Methylphenol/4-Methylphenol	84.		ug/l	5.0	0.48	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77	1
Benzoic Acid	24.	J	ug/l	50	2.6	1
Benzyl Alcohol	ND		ug/l	2.0	0.59	1
Carbazole	ND		ug/l	2.0	0.49	1

Surrogate	% Recovery	Acceptance Qualifier Criteria	
2-Fluorophenol	73	21-120	
Phenol-d6	60	10-120	
Nitrobenzene-d5	87	23-120	
2-Fluorobiphenyl	92	15-120	
2,4,6-Tribromophenol	86	10-120	
4-Terphenyl-d14	111	41-149	



Project Name: 13-16 TO 13-30 BCD **Lab Number:** L1828521

Project Number: 13-16 TO 13-30 BCD **Report Date:** 07/31/18

SAMPLE RESULTS

Lab ID: L1828521-04 Date Collected: 07/24/18 13:35

Client ID: TW-4 Date Received: 07/24/18

Sample Location: 13-16 TO 13-30 BEACH CHANNEL DR. Field Prep: Not Specified

Sample Depth:

Matrix: Water Extraction Method: EPA 3510C

Analytical Method: 1,8270D-SIM Extraction Date: 07/27/18 08:53
Analytical Date: 07/29/18 21:25

Analyst: DV

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM -	Westborough La	ab				
Acenaphthene	ND		ug/l	0.10	0.01	1
2-Chloronaphthalene	ND		ug/l	0.20	0.02	1
Fluoranthene	ND		ug/l	0.10	0.02	1
Hexachlorobutadiene	ND		ug/l	0.50	0.05	1
Naphthalene	ND		ug/l	0.10	0.05	1
Benzo(a)anthracene	ND		ug/l	0.10	0.02	1
Benzo(a)pyrene	ND		ug/l	0.10	0.02	1
Benzo(b)fluoranthene	ND		ug/l	0.10	0.01	1
Benzo(k)fluoranthene	ND		ug/l	0.10	0.01	1
Chrysene	ND		ug/l	0.10	0.01	1
Acenaphthylene	ND		ug/l	0.10	0.01	1
Anthracene	ND		ug/l	0.10	0.01	1
Benzo(ghi)perylene	ND		ug/l	0.10	0.01	1
Fluorene	ND		ug/l	0.10	0.01	1
Phenanthrene	ND		ug/l	0.10	0.02	1
Dibenzo(a,h)anthracene	ND		ug/l	0.10	0.01	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.01	1
Pyrene	ND		ug/l	0.10	0.02	1
2-Methylnaphthalene	ND		ug/l	0.10	0.02	1
Pentachlorophenol	ND		ug/l	0.80	0.01	1
Hexachlorobenzene	ND		ug/l	0.80	0.01	1
Hexachloroethane	ND		ug/l	0.80	0.06	1



Project Name: 13-16 TO 13-30 BCD **Lab Number:** L1828521

Project Number: 13-16 TO 13-30 BCD **Report Date:** 07/31/18

SAMPLE RESULTS

Lab ID: L1828521-04 Date Collected: 07/24/18 13:35

Client ID: TW-4 Date Received: 07/24/18
Sample Location: 13-16 TO 13-30 BEACH CHANNEL DR. Field Prep: Not Specified

Sample Depth:

Parameter Result Qualifier Units RL MDL Dilution Factor

Semivolatile Organics by GC/MS-SIM - Westborough Lab

Surrogate	% Recovery	Acceptance Qualifier Criteria
2-Fluorophenol	69	21-120
Phenol-d6	57	10-120
Nitrobenzene-d5	106	23-120
2-Fluorobiphenyl	89	15-120
2,4,6-Tribromophenol	110	10-120
4-Terphenyl-d14	116	41-149



 Project Name:
 13-16 TO 13-30 BCD
 Lab Number:
 L1828521

 Project Number:
 13-16 TO 13-30 BCD
 Report Date:
 07/31/18

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8270D Analytical Date: 07/27/18 20:59

Analyst: EK

Extraction Method: EPA 3510C Extraction Date: 07/26/18 23:29

Parameter	Result	Qualifier	Units	RL		MDL
Semivolatile Organics by GC/N	IS - Westborough	Lab for s	ample(s):	03-04	Batch:	WG1140027-1
Acenaphthene	ND		ug/l	2.0		0.44
1,2,4-Trichlorobenzene	ND		ug/l	5.0		0.50
Hexachlorobenzene	ND		ug/l	2.0		0.46
Bis(2-chloroethyl)ether	ND		ug/l	2.0		0.50
2-Chloronaphthalene	ND		ug/l	2.0		0.44
1,2-Dichlorobenzene	ND		ug/l	2.0		0.45
1,3-Dichlorobenzene	ND		ug/l	2.0		0.40
1,4-Dichlorobenzene	ND		ug/l	2.0		0.43
3,3'-Dichlorobenzidine	ND		ug/l	5.0		1.6
2,4-Dinitrotoluene	ND		ug/l	5.0		1.2
2,6-Dinitrotoluene	ND		ug/l	5.0		0.93
Fluoranthene	ND		ug/l	2.0		0.26
4-Chlorophenyl phenyl ether	ND		ug/l	2.0		0.49
4-Bromophenyl phenyl ether	ND		ug/l	2.0		0.38
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0		0.53
Bis(2-chloroethoxy)methane	ND		ug/l	5.0		0.50
Hexachlorobutadiene	ND		ug/l	2.0		0.66
Hexachlorocyclopentadiene	ND		ug/l	20		0.69
Hexachloroethane	ND		ug/l	2.0		0.58
Isophorone	ND		ug/l	5.0		1.2
Naphthalene	ND		ug/l	2.0		0.46
Nitrobenzene	ND		ug/l	2.0		0.77
NDPA/DPA	ND		ug/l	2.0		0.42
n-Nitrosodi-n-propylamine	ND		ug/l	5.0		0.64
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0		1.5
Butyl benzyl phthalate	ND		ug/l	5.0		1.2
Di-n-butylphthalate	ND		ug/l	5.0		0.39
Di-n-octylphthalate	ND		ug/l	5.0		1.3
Diethyl phthalate	ND		ug/l	5.0		0.38



 Project Name:
 13-16 TO 13-30 BCD
 Lab Number:
 L1828521

 Project Number:
 13-16 TO 13-30 BCD
 Report Date:
 07/31/18

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8270D Analytical Date: 07/27/18 20:59

Analyst: EK

Extraction Method: EPA 3510C Extraction Date: 07/26/18 23:29

arameter	Result	Qualifier	Units	RL		MDL
Semivolatile Organics by GC/M	IS - Westborough	Lab for sa	ample(s):	03-04	Batch:	WG1140027-1
Dimethyl phthalate	ND		ug/l	5.0		1.8
Benzo(a)anthracene	ND		ug/l	2.0		0.32
Benzo(a)pyrene	ND		ug/l	2.0		0.41
Benzo(b)fluoranthene	ND		ug/l	2.0		0.35
Benzo(k)fluoranthene	ND		ug/l	2.0		0.37
Chrysene	ND		ug/l	2.0		0.34
Acenaphthylene	ND		ug/l	2.0		0.46
Anthracene	ND		ug/l	2.0		0.33
Benzo(ghi)perylene	ND		ug/l	2.0		0.30
Fluorene	ND		ug/l	2.0		0.41
Phenanthrene	ND		ug/l	2.0		0.33
Dibenzo(a,h)anthracene	ND		ug/l	2.0		0.32
Indeno(1,2,3-cd)pyrene	ND		ug/l	2.0		0.40
Pyrene	ND		ug/l	2.0		0.28
Biphenyl	ND		ug/l	2.0		0.46
4-Chloroaniline	ND		ug/l	5.0		1.1
2-Nitroaniline	ND		ug/l	5.0		0.50
3-Nitroaniline	ND		ug/l	5.0		0.81
4-Nitroaniline	ND		ug/l	5.0		0.80
Dibenzofuran	ND		ug/l	2.0		0.50
2-Methylnaphthalene	ND		ug/l	2.0		0.45
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10		0.44
Acetophenone	ND		ug/l	5.0		0.53
2,4,6-Trichlorophenol	ND		ug/l	5.0		0.61
p-Chloro-m-cresol	ND		ug/l	2.0		0.35
2-Chlorophenol	ND		ug/l	2.0		0.48
2,4-Dichlorophenol	ND		ug/l	5.0		0.41
2,4-Dimethylphenol	ND		ug/l	5.0		1.8
2-Nitrophenol	ND		ug/l	10		0.85



Project Name: 13-16 TO 13-30 BCD
Project Number: 13-16 TO 13-30 BCD

Lab Number: L1828521 **Report Date:** 07/31/18

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8270D Analytical Date: 07/27/18 20:59

Analyst: EK

Extraction Method: EPA 3510C Extraction Date: 07/26/18 23:29

Parameter	Result	Qualifier	Units	RL		MDL
Semivolatile Organics by GC/MS -	Westboroug	h Lab for s	ample(s):	03-04	Batch:	WG1140027-1
4-Nitrophenol	ND		ug/l	10		0.67
2,4-Dinitrophenol	ND		ug/l	20		6.6
4,6-Dinitro-o-cresol	ND		ug/l	10		1.8
Pentachlorophenol	ND		ug/l	10		1.8
Phenol	ND		ug/l	5.0		0.57
2-Methylphenol	ND		ug/l	5.0		0.49
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0		0.48
2,4,5-Trichlorophenol	ND		ug/l	5.0		0.77
Benzoic Acid	ND		ug/l	50		2.6
Benzyl Alcohol	ND		ug/l	2.0		0.59
Carbazole	ND		ug/l	2.0		0.49

Tentatively Identified Compounds				
Total TIC Compounds	37.7	J	ug/l	
Unknown	1.64	J	ug/l	
Aldol Condensates	36.1	J	ug/l	

		Acceptance	
Surrogate	%Recovery Qua	alifier Criteria	
2-Fluorophenol	83	21-120	
Phenol-d6	74	10-120	
Nitrobenzene-d5	84	23-120	
2-Fluorobiphenyl	91	15-120	
2,4,6-Tribromophenol	52	10-120	
4-Terphenyl-d14	119	41-149	



Project Name: 13-16 TO 13-30 BCD **Project Number:** 13-16 TO 13-30 BCD Lab Number: L1828521

Report Date: 07/31/18

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8270D-SIM Analytical Date: 07/27/18 15:39

Analyst: DV Extraction Method: EPA 3510C 07/26/18 23:32 Extraction Date:

Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 03-04 Batch: WG1140028 Acenaphthene ND ug/l 0.10 0.01 2-Chloronaphthalene ND ug/l 0.20 0.02 Fluoranthene ND ug/l 0.10 0.02 Hexachlorobutadiene ND ug/l 0.50 0.05 Naphthalene ND ug/l 0.10 0.05 Benzo(a)anthracene 0.03 J ug/l 0.10 0.02 Benzo(b)fluoranthene ND ug/l 0.10 0.02 Benzo(b)fluoranthene ND ug/l 0.10 0.01 Chrysene ND ug/l 0.10 0.01 Acenaphthylene ND ug/l 0.10 0.01 Anthracene ND ug/l 0.10 0.01 Benzo(ghi)perylene ND ug/l 0.10 0.01 Fluorene ND ug/l 0.10 0.01 Phenanthrene ND <th>arameter</th> <th>Result</th> <th>Qualifier</th> <th>Units</th> <th>RL</th> <th>MDL</th> <th></th>	arameter	Result	Qualifier	Units	RL	MDL	
2-Chloronaphthalene ND ug/l 0.20 0.02 Fluoranthene ND ug/l 0.10 0.02 Hexachlorobutadiene ND ug/l 0.50 0.05 Naphthalene ND ug/l 0.10 0.05 Benzo(a)anthracene 0.03 J ug/l 0.10 0.02 Benzo(b)fluoranthene ND ug/l 0.10 0.02 Benzo(b)fluoranthene ND ug/l 0.10 0.01 Chrysene ND ug/l 0.10 0.01 Acenaphthylene ND ug/l 0.10 0.01 Acenaphthylene ND ug/l 0.10 0.01 Anthracene ND ug/l 0.10 0.01 Benzo(ghi)perylene ND ug/l 0.10 0.01 Fluorene ND ug/l 0.10 0.01 Phenanthrene ND ug/l 0.10 0.02 Dibenzo(a,h)anthracene ND ug/l	Semivolatile Organics by GC/M	S-SIM - Westbo	rough Lab	for sample(s): 03-04	Batch: WG11	40028-1
Fluoranthene ND	Acenaphthene	ND		ug/l	0.10	0.01	
Hexachlorobutadiene ND ug/l 0.50 0.05 Naphthalene ND ug/l 0.10 0.05 Benzo(a)anthracene 0.03 J ug/l 0.10 0.02 Benzo(a)pyrene ND ug/l 0.10 0.02 Benzo(b)fluoranthene ND ug/l 0.10 0.01 Benzo(k)fluoranthene ND ug/l 0.10 0.01 Chrysene ND ug/l 0.10 0.01 Acenaphthylene ND ug/l 0.10 0.01 Anthracene ND ug/l 0.10 0.01 Benzo(ghi)perylene ND ug/l 0.10 0.01 Fluorene ND ug/l 0.10 0.01 Phenanthrene ND ug/l 0.10 0.02 Dibenzo(a,h)anthracene ND ug/l 0.10 0.01 Indeno(1,2,3-cd)pyrene ND ug/l 0.10 0.02 2-Methylnaphthalene 0.03 J <td>2-Chloronaphthalene</td> <td>ND</td> <td></td> <td>ug/l</td> <td>0.20</td> <td>0.02</td> <td></td>	2-Chloronaphthalene	ND		ug/l	0.20	0.02	
Naphthalene ND ug/l 0.10 0.05 Benzo(a)anthracene 0.03 J ug/l 0.10 0.02 Benzo(a)pyrene ND ug/l 0.10 0.02 Benzo(b)fluoranthene ND ug/l 0.10 0.01 Benzo(k)fluoranthene ND ug/l 0.10 0.01 Chrysene ND ug/l 0.10 0.01 Acenaphthylene ND ug/l 0.10 0.01 Anthracene ND ug/l 0.10 0.01 Benzo(ghi)perylene ND ug/l 0.10 0.01 Fluorene ND ug/l 0.10 0.01 Phenanthrene ND ug/l 0.10 0.02 Dibenzo(a,h)anthracene ND ug/l 0.10 0.01 Indeno(1,2,3-cd)pyrene ND ug/l 0.10 0.01 Pyrene ND ug/l 0.10 0.02 2-Methylnaphthalene 0.03 J <td< td=""><td>Fluoranthene</td><td>ND</td><td></td><td>ug/l</td><td>0.10</td><td>0.02</td><td></td></td<>	Fluoranthene	ND		ug/l	0.10	0.02	
Benzo(a)anthracene 0.03 J ug/l 0.10 0.02 Benzo(a)pyrene ND ug/l 0.10 0.02 Benzo(b)fluoranthene ND ug/l 0.10 0.01 Benzo(k)fluoranthene ND ug/l 0.10 0.01 Chrysene ND ug/l 0.10 0.01 Acenaphthylene ND ug/l 0.10 0.01 Anthracene ND ug/l 0.10 0.01 Benzo(ghi)perylene ND ug/l 0.10 0.01 Fluorene ND ug/l 0.10 0.01 Phenanthrene ND ug/l 0.10 0.02 Dibenzo(a,h)anthracene ND ug/l 0.10 0.01 Indeno(1,2,3-cd)pyrene ND ug/l 0.10 0.01 Pyrene ND ug/l 0.10 0.02 2-Methylnaphthalene 0.03 J ug/l 0.80 0.01 Hexachlorobenzene ND	Hexachlorobutadiene	ND		ug/l	0.50	0.05	
Benzo(a)pyrene ND ug/l 0.10 0.02 Benzo(b)fluoranthene ND ug/l 0.10 0.01 Benzo(k)fluoranthene ND ug/l 0.10 0.01 Chrysene ND ug/l 0.10 0.01 Acenaphthylene ND ug/l 0.10 0.01 Anthracene ND ug/l 0.10 0.01 Benzo(ghi)perylene ND ug/l 0.10 0.01 Fluorene ND ug/l 0.10 0.01 Phenanthrene ND ug/l 0.10 0.02 Dibenzo(a,h)anthracene ND ug/l 0.10 0.01 Indeno(1,2,3-cd)pyrene ND ug/l 0.10 0.01 Pyrene ND ug/l 0.10 0.02 2-Methylnaphthalene 0.03 J ug/l 0.80 0.01 Hexachlorobenzene ND ug/l 0.80 0.01	Naphthalene	ND		ug/l	0.10	0.05	
Benzo(b)fluoranthene ND ug/l 0.10 0.01 Benzo(k)fluoranthene ND ug/l 0.10 0.01 Chrysene ND ug/l 0.10 0.01 Acenaphthylene ND ug/l 0.10 0.01 Anthracene ND ug/l 0.10 0.01 Benzo(ghi)perylene ND ug/l 0.10 0.01 Fluorene ND ug/l 0.10 0.01 Phenanthrene ND ug/l 0.10 0.02 Dibenzo(a,h)anthracene ND ug/l 0.10 0.01 Indeno(1,2,3-cd)pyrene ND ug/l 0.10 0.01 Pyrene ND ug/l 0.10 0.02 2-Methylnaphthalene 0.03 J ug/l 0.10 0.02 Pentachlorophenol ND ug/l 0.80 0.01 Hexachlorobenzene ND ug/l 0.80 0.01	Benzo(a)anthracene	0.03	J	ug/l	0.10	0.02	
Benzo(k)fluoranthene ND ug/l 0.10 0.01 Chrysene ND ug/l 0.10 0.01 Acenaphthylene ND ug/l 0.10 0.01 Anthracene ND ug/l 0.10 0.01 Benzo(ghi)perylene ND ug/l 0.10 0.01 Fluorene ND ug/l 0.10 0.01 Phenanthrene ND ug/l 0.10 0.02 Dibenzo(a,h)anthracene ND ug/l 0.10 0.01 Indeno(1,2,3-cd)pyrene ND ug/l 0.10 0.01 Pyrene ND ug/l 0.10 0.02 2-Methylnaphthalene 0.03 J ug/l 0.10 0.02 Pentachlorophenol ND ug/l 0.80 0.01 Hexachlorobenzene ND ug/l 0.80 0.01	Benzo(a)pyrene	ND		ug/l	0.10	0.02	
Chrysene ND ug/l 0.10 0.01 Acenaphthylene ND ug/l 0.10 0.01 Anthracene ND ug/l 0.10 0.01 Benzo(ghi)perylene ND ug/l 0.10 0.01 Fluorene ND ug/l 0.10 0.01 Phenanthrene ND ug/l 0.10 0.02 Dibenzo(a,h)anthracene ND ug/l 0.10 0.01 Indeno(1,2,3-cd)pyrene ND ug/l 0.10 0.01 Pyrene ND ug/l 0.10 0.02 2-Methylnaphthalene 0.03 J ug/l 0.10 0.02 Pentachlorophenol ND ug/l 0.80 0.01 Hexachlorobenzene ND ug/l 0.80 0.01	Benzo(b)fluoranthene	ND		ug/l	0.10	0.01	
Acenaphthylene ND ug/l 0.10 0.01 Anthracene ND ug/l 0.10 0.01 Benzo(ghi)perylene ND ug/l 0.10 0.01 Fluorene ND ug/l 0.10 0.01 Phenanthrene ND ug/l 0.10 0.02 Dibenzo(a,h)anthracene ND ug/l 0.10 0.01 Indeno(1,2,3-cd)pyrene ND ug/l 0.10 0.01 Pyrene ND ug/l 0.10 0.02 2-Methylnaphthalene 0.03 J ug/l 0.10 0.02 Pentachlorophenol ND ug/l 0.80 0.01 Hexachlorobenzene ND ug/l 0.80 0.01	Benzo(k)fluoranthene	ND		ug/l	0.10	0.01	
Anthracene ND ug/l 0.10 0.01 Benzo(ghi)perylene ND ug/l 0.10 0.01 Fluorene ND ug/l 0.10 0.01 Phenanthrene ND ug/l 0.10 0.02 Dibenzo(a,h)anthracene ND ug/l 0.10 0.01 Indeno(1,2,3-cd)pyrene ND ug/l 0.10 0.01 Pyrene ND ug/l 0.10 0.02 2-Methylnaphthalene 0.03 J ug/l 0.10 0.02 Pentachlorophenol ND ug/l 0.80 0.01 Hexachlorobenzene ND ug/l 0.80 0.01	Chrysene	ND		ug/l	0.10	0.01	
Benzo(ghi)perylene ND ug/l 0.10 0.01 Fluorene ND ug/l 0.10 0.01 Phenanthrene ND ug/l 0.10 0.02 Dibenzo(a,h)anthracene ND ug/l 0.10 0.01 Indeno(1,2,3-cd)pyrene ND ug/l 0.10 0.01 Pyrene ND ug/l 0.10 0.02 2-Methylnaphthalene 0.03 J ug/l 0.10 0.02 Pentachlorophenol ND ug/l 0.80 0.01 Hexachlorobenzene ND ug/l 0.80 0.01	Acenaphthylene	ND		ug/l	0.10	0.01	
Fluorene ND ug/l 0.10 0.01 Phenanthrene ND ug/l 0.10 0.02 Dibenzo(a,h)anthracene ND ug/l 0.10 0.01 Indeno(1,2,3-cd)pyrene ND ug/l 0.10 0.01 Pyrene ND ug/l 0.10 0.02 2-Methylnaphthalene 0.03 J ug/l 0.10 0.02 Pentachlorophenol ND ug/l 0.80 0.01 Hexachlorobenzene ND ug/l 0.80 0.01	Anthracene	ND		ug/l	0.10	0.01	
Phenanthrene ND ug/l 0.10 0.02 Dibenzo(a,h)anthracene ND ug/l 0.10 0.01 Indeno(1,2,3-cd)pyrene ND ug/l 0.10 0.01 Pyrene ND ug/l 0.10 0.02 2-Methylnaphthalene 0.03 J ug/l 0.10 0.02 Pentachlorophenol ND ug/l 0.80 0.01 Hexachlorobenzene ND ug/l 0.80 0.01	Benzo(ghi)perylene	ND		ug/l	0.10	0.01	
Dibenzo(a,h)anthracene ND ug/l 0.10 0.01 Indeno(1,2,3-cd)pyrene ND ug/l 0.10 0.01 Pyrene ND ug/l 0.10 0.02 2-Methylnaphthalene 0.03 J ug/l 0.10 0.02 Pentachlorophenol ND ug/l 0.80 0.01 Hexachlorobenzene ND ug/l 0.80 0.01	Fluorene	ND		ug/l	0.10	0.01	
Indeno(1,2,3-cd)pyrene ND ug/l 0.10 0.01 Pyrene ND ug/l 0.10 0.02 2-Methylnaphthalene 0.03 J ug/l 0.10 0.02 Pentachlorophenol ND ug/l 0.80 0.01 Hexachlorobenzene ND ug/l 0.80 0.01	Phenanthrene	ND		ug/l	0.10	0.02	
Pyrene ND ug/l 0.10 0.02 2-Methylnaphthalene 0.03 J ug/l 0.10 0.02 Pentachlorophenol ND ug/l 0.80 0.01 Hexachlorobenzene ND ug/l 0.80 0.01	Dibenzo(a,h)anthracene	ND		ug/l	0.10	0.01	
2-Methylnaphthalene 0.03 J ug/l 0.10 0.02 Pentachlorophenol ND ug/l 0.80 0.01 Hexachlorobenzene ND ug/l 0.80 0.01	Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.01	
Pentachlorophenol ND ug/l 0.80 0.01 Hexachlorobenzene ND ug/l 0.80 0.01	Pyrene	ND		ug/l	0.10	0.02	
Hexachlorobenzene ND ug/l 0.80 0.01	2-Methylnaphthalene	0.03	J	ug/l	0.10	0.02	
-9	Pentachlorophenol	ND		ug/l	0.80	0.01	
Heyachloroethane ND ug/L 0.80 0.06	Hexachlorobenzene	ND		ug/l	0.80	0.01	
Treadministration (ND dg/1 0.00 0.00	Hexachloroethane	ND		ug/l	0.80	0.06	



L1828521

Lab Number:

Project Name: 13-16 TO 13-30 BCD

Project Number: 13-16 TO 13-30 BCD **Report Date:** 07/31/18

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D-SIM Extraction Method: EPA 3510C
Analytical Date: 07/27/18 15:39 Extraction Date: 07/26/18 23:32

Analyst: DV

ParameterResultQualifierUnitsRLMDLSemivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 03-04Batch: WG1140028-1

		Acceptance
Surrogate	%Recovery	Qualifier Criteria
2-Fluorophenol	77	21-120
Phenol-d6	69	10-120
Nitrobenzene-d5	104	23-120
2-Fluorobiphenyl	96	15-120
2,4,6-Tribromophenol	112	10-120
4-Terphenyl-d14	125	41-149



Project Name: 13-16 TO 13-30 BCD
Project Number: 13-16 TO 13-30 BCD

Lab Number: L1828521 **Report Date:** 07/31/18

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8270D Analytical Date: 07/29/18 13:15

Analyst: RC

Extraction Method: EPA 3546
Extraction Date: 07/28/18 03:40

Parameter	Result	Qualifier	Units	RL		MDL
Semivolatile Organics by GC/MS -	Westborough	Lab for s	ample(s):	01-02	Batch:	WG1140471-1
Acenaphthene	ND		ug/kg	130		17.
1,2,4-Trichlorobenzene	ND		ug/kg	160		18.
Hexachlorobenzene	ND		ug/kg	97		18.
Bis(2-chloroethyl)ether	ND		ug/kg	140		22.
2-Chloronaphthalene	ND		ug/kg	160		16.
1,2-Dichlorobenzene	ND		ug/kg	160		29.
1,3-Dichlorobenzene	ND		ug/kg	160		28.
1,4-Dichlorobenzene	ND		ug/kg	160		28.
3,3'-Dichlorobenzidine	ND		ug/kg	160		43.
2,4-Dinitrotoluene	ND		ug/kg	160		32.
2,6-Dinitrotoluene	ND		ug/kg	160		28.
Fluoranthene	ND		ug/kg	97		18.
4-Chlorophenyl phenyl ether	ND		ug/kg	160		17.
4-Bromophenyl phenyl ether	ND		ug/kg	160		25.
Bis(2-chloroisopropyl)ether	ND		ug/kg	190		28.
Bis(2-chloroethoxy)methane	ND		ug/kg	170		16.
Hexachlorobutadiene	ND		ug/kg	160		24.
Hexachlorocyclopentadiene	ND		ug/kg	460		150
Hexachloroethane	ND		ug/kg	130		26.
Isophorone	ND		ug/kg	140		21.
Naphthalene	ND		ug/kg	160		20.
Nitrobenzene	ND		ug/kg	140		24.
NDPA/DPA	ND		ug/kg	130		18.
n-Nitrosodi-n-propylamine	ND		ug/kg	160		25.
Bis(2-ethylhexyl)phthalate	ND		ug/kg	160		56.
Butyl benzyl phthalate	ND		ug/kg	160		41.
Di-n-butylphthalate	ND		ug/kg	160		31.
Di-n-octylphthalate	ND		ug/kg	160		55.
Diethyl phthalate	ND		ug/kg	160		15.



 Project Name:
 13-16 TO 13-30 BCD
 Lab Number:
 L1828521

 Project Number:
 13-16 TO 13-30 BCD
 Report Date:
 07/31/18

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8270D Analytical Date: 07/29/18 13:15

Analyst: RC

Extraction Method: EPA 3546
Extraction Date: 07/28/18 03:40

Parameter	Result	Qualifier	Units	RL		MDL
Semivolatile Organics by GC/MS	- Westborough	Lab for s	ample(s):	01-02	Batch:	WG1140471-1
Dimethyl phthalate	ND		ug/kg	160		34.
Benzo(a)anthracene	ND		ug/kg	97		18.
Benzo(a)pyrene	ND		ug/kg	130		40.
Benzo(b)fluoranthene	ND		ug/kg	97		27.
Benzo(k)fluoranthene	ND		ug/kg	97		26.
Chrysene	ND		ug/kg	97		17.
Acenaphthylene	ND		ug/kg	130		25.
Anthracene	ND		ug/kg	97		32.
Benzo(ghi)perylene	ND		ug/kg	130		19.
Fluorene	ND		ug/kg	160		16.
Phenanthrene	ND		ug/kg	97		20.
Dibenzo(a,h)anthracene	ND		ug/kg	97		19.
Indeno(1,2,3-cd)pyrene	ND		ug/kg	130		22.
Pyrene	ND		ug/kg	97		16.
Biphenyl	ND		ug/kg	370		38.
4-Chloroaniline	ND		ug/kg	160		29.
2-Nitroaniline	ND		ug/kg	160		31.
3-Nitroaniline	ND		ug/kg	160		30.
4-Nitroaniline	ND		ug/kg	160		67.
Dibenzofuran	ND		ug/kg	160		15.
2-Methylnaphthalene	ND		ug/kg	190		20.
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	160		17.
Acetophenone	ND		ug/kg	160		20.
2,4,6-Trichlorophenol	ND		ug/kg	97		31.
p-Chloro-m-cresol	ND		ug/kg	160		24.
2-Chlorophenol	ND		ug/kg	160		19.
2,4-Dichlorophenol	ND		ug/kg	140		26.
2,4-Dimethylphenol	ND		ug/kg	160		53.
2-Nitrophenol	ND		ug/kg	350		61.



Project Name: 13-16 TO 13-30 BCD **Project Number:**

13-16 TO 13-30 BCD

Lab Number: L1828521

Report Date: 07/31/18

Method Blank Analysis Batch Quality Control

Analytical Method: Analytical Date:

1,8270D 07/29/18 13:15

Analyst:

RC

Extraction Method: EPA 3546 **Extraction Date:** 07/28/18 03:40

Qualifier Units RL MDL Result **Parameter** Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-02 Batch: WG1140471-1 4-Nitrophenol ND ug/kg 230 66. ND 75. 2,4-Dinitrophenol ug/kg 780 4,6-Dinitro-o-cresol ND ug/kg 420 78. ND 36. Pentachlorophenol 130 ug/kg Phenol ND 24. ug/kg 160 2-Methylphenol ND ug/kg 160 25. 230 3-Methylphenol/4-Methylphenol ND ug/kg 25. 2,4,5-Trichlorophenol ND 160 31. ug/kg Benzoic Acid ND 520 160 ug/kg Benzyl Alcohol ND 50. ug/kg 160 Carbazole ND ug/kg 160 16.

Tentatively Identified Compounds

No Tentatively Identified Compounds

ND

ug/kg

		1	Acceptance	
Surrogate	%Recovery	Qualifier	Criteria	
2-Fluorophenol	115		25-120	
Phenol-d6	119		10-120	
Nitrobenzene-d5	109		23-120	
2-Fluorobiphenyl	105		30-120	
2,4,6-Tribromophenol	107		10-136	
4-Terphenyl-d14	121	Q	18-120	



 Project Name:
 13-16 TO 13-30 BCD

 Project Number:
 13-16 TO 13-30 BCD

Lab Number:

L1828521

Report Date:

07/31/18

arameter	LCS %Recovery Qua	LCSD MRecovery	%Recovery Qual Limits	RPD	RPD Qual Limits
emivolatile Organics by GC/MS - W	estborough Lab Associated sa	mple(s): 03-04 Batch	n: WG1140027-2 WG11400	27-3	
Acenaphthene	74	78	37-111	5	30
1,2,4-Trichlorobenzene	65	69	39-98	6	30
Hexachlorobenzene	76	79	40-140	4	30
Bis(2-chloroethyl)ether	66	72	40-140	9	30
2-Chloronaphthalene	73	77	40-140	5	30
1,2-Dichlorobenzene	60	67	40-140	11	30
1,3-Dichlorobenzene	59	66	40-140	11	30
1,4-Dichlorobenzene	59	66	36-97	11	30
3,3'-Dichlorobenzidine	70	70	40-140	0	30
2,4-Dinitrotoluene	72	74	48-143	3	30
2,6-Dinitrotoluene	81	84	40-140	4	30
Fluoranthene	80	81	40-140	1	30
4-Chlorophenyl phenyl ether	74	80	40-140	8	30
4-Bromophenyl phenyl ether	74	80	40-140	8	30
Bis(2-chloroisopropyl)ether	65	70	40-140	7	30
Bis(2-chloroethoxy)methane	70	72	40-140	3	30
Hexachlorobutadiene	62	70	40-140	12	30
Hexachlorocyclopentadiene	51	57	40-140	11	30
Hexachloroethane	58	65	40-140	11	30
Isophorone	68	73	40-140	7	30
Naphthalene	68	74	40-140	8	30
Nitrobenzene	66	72	40-140	9	30
NDPA/DPA	80	82	40-140	2	30



 Project Name:
 13-16 TO 13-30 BCD

 Project Number:
 13-16 TO 13-30 BCD

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Lab Number: L1828521

Report Date: 07/31/18

Parameter	LCS %Recovery	LCSD Qual %Recovery	%Recovery / Qual Limits	RPD	RPD Qual Limits
Semivolatile Organics by GC/MS - Wes	tborough Lab Associa	ted sample(s): 03-04 Ba	atch: WG1140027-2 WG11400	27-3	
n-Nitrosodi-n-propylamine	71	75	29-132	5	30
Bis(2-ethylhexyl)phthalate	82	84	40-140	2	30
Butyl benzyl phthalate	77	81	40-140	5	30
Di-n-butylphthalate	77	79	40-140	3	30
Di-n-octylphthalate	73	77	40-140	5	30
Diethyl phthalate	79	82	40-140	4	30
Dimethyl phthalate	82	85	40-140	4	30
Benzo(a)anthracene	75	78	40-140	4	30
Benzo(a)pyrene	83	86	40-140	4	30
Benzo(b)fluoranthene	76	87	40-140	13	30
Benzo(k)fluoranthene	85	80	40-140	6	30
Chrysene	78	76	40-140	3	30
Acenaphthylene	75	78	45-123	4	30
Anthracene	77	79	40-140	3	30
Benzo(ghi)perylene	81	84	40-140	4	30
Fluorene	76	81	40-140	6	30
Phenanthrene	76	78	40-140	3	30
Dibenzo(a,h)anthracene	81	83	40-140	2	30
Indeno(1,2,3-cd)pyrene	83	90	40-140	8	30
Pyrene	78	80	26-127	3	30
Biphenyl	74	80	40-140	8	30
4-Chloroaniline	54	53	40-140	2	30
2-Nitroaniline	74	75	52-143	1	30



 Project Name:
 13-16 TO 13-30 BCD

 Project Number:
 13-16 TO 13-30 BCD

Lab Number: Report Date: L1828521 07/31/18

13-16 TO 13-30 BCD

	LCS		LCSE)		%Recovery			RPD	
Parameter	%Recovery	Qual	%Recov	ery	Qual	Limits	RPD	Qual	Limits	
Semivolatile Organics by GC/MS - Westborou	igh Lab Assoc	iated sample(s):	03-04	Batch:	WG1140	027-2 WG1140	027-3			
3-Nitroaniline	68		72			25-145	6		30	
4-Nitroaniline	72		74			51-143	3		30	
Dibenzofuran	74		78			40-140	5		30	
2-Methylnaphthalene	71		76			40-140	7		30	
1,2,4,5-Tetrachlorobenzene	69		74			2-134	7		30	
Acetophenone	66		72			39-129	9		30	
2,4,6-Trichlorophenol	71		74			30-130	4		30	
p-Chloro-m-cresol	79		79			23-97	0		30	
2-Chlorophenol	68		72			27-123	6		30	
2,4-Dichlorophenol	72		77			30-130	7		30	
2,4-Dimethylphenol	72		61			30-130	17		30	
2-Nitrophenol	68		76			30-130	11		30	
4-Nitrophenol	61		64			10-80	5		30	
2,4-Dinitrophenol	43		40			20-130	7		30	
4,6-Dinitro-o-cresol	66		66			20-164	0		30	
Pentachlorophenol	53		51			9-103	4		30	
Phenol	56		59			12-110	5		30	
2-Methylphenol	70		72			30-130	3		30	
3-Methylphenol/4-Methylphenol	70		71			30-130	1		30	
2,4,5-Trichlorophenol	80		79			30-130	1		30	
Benzoic Acid	50		0		Q	10-164	NC		30	
Benzyl Alcohol	61		65			26-116	6		30	
Carbazole	79		80			55-144	1		30	



Project Name: 13-16 TO 13-30 BCD

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	LCS		LCSD		%Recovery			RPD
Parameter	%Recovery	Qual	%Recovery	Qual	Limits	RPD	Qual	Limits

Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 03-04 Batch: WG1140027-2 WG1140027-3

%Recovery Qual	%Recovery Qual	Criteria
66	71	21-120
59	62	10-120
70	78	23-120
82	87	15-120
76	81	10-120
99	103	41-149
	70 82 76	66 71 59 62 70 78 82 87 76 81



 Project Name:
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 Project Number:
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arameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recove Limits	ery RPD	Qual	RPD Limits	
emivolatile Organics by GC/MS-SIM -	Westborough Lab A	ssociated sam	nple(s): 03-04	Batch: V	VG1140028-2	WG1140028-3			
Acenaphthene	82		81		40-140	1		40	
2-Chloronaphthalene	82		80		40-140	2		40	
Fluoranthene	99		98		40-140	1		40	
Hexachlorobutadiene	74		72		40-140	3		40	
Naphthalene	74		73		40-140	1		40	
Benzo(a)anthracene	87		84		40-140	4		40	
Benzo(a)pyrene	96		93		40-140	3		40	
Benzo(b)fluoranthene	94		91		40-140	3		40	
Benzo(k)fluoranthene	97		92		40-140	5		40	
Chrysene	84		83		40-140	1		40	
Acenaphthylene	98		96		40-140	2		40	
Anthracene	91		88		40-140	3		40	
Benzo(ghi)perylene	77		78		40-140	1		40	
Fluorene	92		91		40-140	1		40	
Phenanthrene	80		79		40-140	1		40	
Dibenzo(a,h)anthracene	87		81		40-140	7		40	
Indeno(1,2,3-cd)pyrene	76		77		40-140	1		40	
Pyrene	96		94		40-140	2		40	
2-Methylnaphthalene	79		78		40-140	1		40	
Pentachlorophenol	78		70		40-140	11		40	
Hexachlorobenzene	81		79		40-140	3		40	
Hexachloroethane	71		69		40-140	3		40	



Project Name: 13-16 TO 13-30 BCD

Lab Number:

L1828521

Project Number: 13-16 TO 13-30 BCD

Report Date:

07/31/18

	LCS	LCS			%Recovery			RPD		
Parameter	%Recovery	Qual	%Recovery	Qual	Limits	RPD	Qual	Limits		

Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 03-04 Batch: WG1140028-2 WG1140028-3

Surrogate	LCS %Recovery Q	LCSD ual %Recovery Qua	Acceptance al Criteria
2-Fluorophenol	70	73	21-120
Phenol-d6	59	62	10-120
Nitrobenzene-d5	96	97	23-120
2-Fluorobiphenyl	83	86	15-120
2,4,6-Tribromophenol	90	99	10-120
4-Terphenyl-d14	105	109	41-149



 Project Name:
 13-16 TO 13-30 BCD

 Project Number:
 13-16 TO 13-30 BCD

Lab Number:

L1828521

Report Date:

07/31/18

ameter	LCS %Recovery Qual	LCSD %Recovery	%Recovery Qual Limits	RPD	RPD Qual Limits
nivolatile Organics by GC/MS - W	estborough Lab Associated sampl	e(s): 01-02 Batch:	WG1140471-2 WG114047	1-3	
Acenaphthene	97	102	31-137	5	50
1,2,4-Trichlorobenzene	96	95	38-107	1	50
Hexachlorobenzene	101	108	40-140	7	50
Bis(2-chloroethyl)ether	97	96	40-140	1	50
2-Chloronaphthalene	100	104	40-140	4	50
1,2-Dichlorobenzene	93	93	40-140	0	50
1,3-Dichlorobenzene	90	88	40-140	2	50
1,4-Dichlorobenzene	91	90	28-104	1	50
3,3'-Dichlorobenzidine	95	98	40-140	3	50
2,4-Dinitrotoluene	109	116	40-132	6	50
2,6-Dinitrotoluene	110	112	40-140	2	50
Fluoranthene	108	112	40-140	4	50
4-Chlorophenyl phenyl ether	97	104	40-140	7	50
4-Bromophenyl phenyl ether	105	110	40-140	5	50
Bis(2-chloroisopropyl)ether	100	98	40-140	2	50
Bis(2-chloroethoxy)methane	103	102	40-117	1	50
Hexachlorobutadiene	93	94	40-140	1	50
Hexachlorocyclopentadiene	69	74	40-140	7	50
Hexachloroethane	88	86	40-140	2	50
Isophorone	101	101	40-140	0	50
Naphthalene	94	97	40-140	3	50
Nitrobenzene	97	95	40-140	2	50
NDPA/DPA	103	108	36-157	5	50



Project Name: 13-16 TO 13-30 BCD

Lab Number:

L1828521

Project Number: 13-16 TO 13-30 BCD

Report Date: 07/31/18

Parameter	LCS %Recovery	Qual	LCSD %Recov		9 Qual	6Recovery Limits	RPD	Qual	RPD Limits	
Semivolatile Organics by GC/MS - We	estborough Lab Associa	ated sample(s):	01-02	Batch:	WG114047	1-2 WG11404	171-3			
n-Nitrosodi-n-propylamine	100		100			32-121	0		50	
Bis(2-ethylhexyl)phthalate	106		108			40-140	2		50	
Butyl benzyl phthalate	111		112			40-140	1		50	
Di-n-butylphthalate	106		110			40-140	4		50	
Di-n-octylphthalate	106		108			40-140	2		50	
Diethyl phthalate	100		104			40-140	4		50	
Dimethyl phthalate	102		107			40-140	5		50	
Benzo(a)anthracene	101		103			40-140	2		50	
Benzo(a)pyrene	109		109			40-140	0		50	
Benzo(b)fluoranthene	101		117			40-140	15		50	
Benzo(k)fluoranthene	110		97			40-140	13		50	
Chrysene	102		104			40-140	2		50	
Acenaphthylene	103		108			40-140	5		50	
Anthracene	104		109			40-140	5		50	
Benzo(ghi)perylene	103		107			40-140	4		50	
Fluorene	100		106			40-140	6		50	
Phenanthrene	101		105			40-140	4		50	
Dibenzo(a,h)anthracene	103		108			40-140	5		50	
Indeno(1,2,3-cd)pyrene	103		110			40-140	7		50	
Pyrene	105		107			35-142	2		50	
Biphenyl	103		109		Q	54-104	6		50	
4-Chloroaniline	82		87			40-140	6		50	
2-Nitroaniline	108		114			47-134	5		50	



 Project Name:
 13-16 TO 13-30 BCD

 Project Number:
 13-16 TO 13-30 BCD

Lab Number: L1828521

Report Date: 07/31/18

rameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	RPD Qual Limits
mivolatile Organics by GC/MS - W	estborough Lab Associ	ated sample(s)	: 01-02 Batch	n: WG114	0471-2 WG114047	71-3	
3-Nitroaniline	87		91		26-129	4	50
4-Nitroaniline	100		104		41-125	4	50
Dibenzofuran	99		107		40-140	8	50
2-Methylnaphthalene	99		104		40-140	5	50
1,2,4,5-Tetrachlorobenzene	101		106		40-117	5	50
Acetophenone	102		103		14-144	1	50
2,4,6-Trichlorophenol	104		111		30-130	7	50
p-Chloro-m-cresol	104	Q	112	Q	26-103	7	50
2-Chlorophenol	103	Q	104	Q	25-102	1	50
2,4-Dichlorophenol	108		111		30-130	3	50
2,4-Dimethylphenol	107		107		30-130	0	50
2-Nitrophenol	103		103		30-130	0	50
4-Nitrophenol	107		115	Q	11-114	7	50
2,4-Dinitrophenol	75		89		4-130	17	50
4,6-Dinitro-o-cresol	92		103		10-130	11	50
Pentachlorophenol	88		96		17-109	9	50
Phenol	102	Q	100	Q	26-90	2	50
2-Methylphenol	108		110		30-130.	2	50
3-Methylphenol/4-Methylphenol	105		106		30-130	1	50
2,4,5-Trichlorophenol	107		116		30-130	8	50
Benzoic Acid	46		56		10-110	20	50
Benzyl Alcohol	104		103		40-140	1	50
Carbazole	107		110		54-128	3	50



Project Name: 13-16 TO 13-30 BCD

Lab Number:

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Project Number: 13-16 TO 13-30 BCD

Report Date:

07/31/18

LCS LCSD %Recovery RPD Parameter %Recovery Qual %Recovery Qual Limits RPD Qual Limits

Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-02 Batch: WG1140471-2 WG1140471-3

Surrogate	LCS %Recovery Qual	LCSD %Recovery Qual	Acceptance Criteria
2-Fluorophenol	106	105	25-120
Phenol-d6	111	112	10-120
Nitrobenzene-d5	102	102	23-120
2-Fluorobiphenyl	103	107	30-120
2,4,6-Tribromophenol	110	117	10-136
4-Terphenyl-d14	112	115	18-120



METALS



 Project Name:
 13-16 TO 13-30 BCD
 Lab Number:
 L1828521

 Project Number:
 13-16 TO 13-30 BCD
 Report Date:
 07/31/18

SAMPLE RESULTS

 Lab ID:
 L1828521-01
 Date Collected:
 07/24/18 13:40

 Client ID:
 SB-3 (5-7)
 Date Received:
 07/24/18

Sample Location: 13-16 TO 13-30 BEACH CHANNEL DR. Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Percent Solids: 90%

Percent Solids: Parameter	90% Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mans	sfield Lab										
Aluminum, Total	543		mg/kg	8.51	2.30	2	07/31/18 08:00	07/31/18 14:08	EPA 3050B	1,6010D	LC
Antimony, Total	ND		mg/kg	4.25	0.323	2	07/31/18 08:00	07/31/18 14:08	EPA 3050B	1,6010D	LC
Arsenic, Total	1.55		mg/kg	0.851	0.177	2	07/31/18 08:00	07/31/18 14:08	EPA 3050B	1,6010D	LC
Barium, Total	2.37		mg/kg	0.851	0.148	2	07/31/18 08:00	07/31/18 14:08	EPA 3050B	1,6010D	LC
Beryllium, Total	0.043	J	mg/kg	0.425	0.028	2	07/31/18 08:00	07/31/18 14:08	EPA 3050B	1,6010D	LC
Cadmium, Total	ND		mg/kg	0.851	0.083	2	07/31/18 08:00	07/31/18 14:08	EPA 3050B	1,6010D	LC
Calcium, Total	218		mg/kg	8.51	2.98	2	07/31/18 08:00	07/31/18 14:08	EPA 3050B	1,6010D	LC
Chromium, Total	4.46		mg/kg	0.851	0.082	2	07/31/18 08:00	07/31/18 14:08	EPA 3050B	1,6010D	LC
Cobalt, Total	0.349	J	mg/kg	1.70	0.141	2	07/31/18 08:00	07/31/18 14:08	EPA 3050B	1,6010D	LC
Copper, Total	0.868		mg/kg	0.851	0.219	2	07/31/18 08:00	07/31/18 14:08	EPA 3050B	1,6010D	LC
Iron, Total	2080		mg/kg	4.25	0.768	2	07/31/18 08:00	07/31/18 14:08	EPA 3050B	1,6010D	LC
Lead, Total	0.970	J	mg/kg	4.25	0.228	2	07/31/18 08:00	07/31/18 14:08	EPA 3050B	1,6010D	LC
Magnesium, Total	60.5		mg/kg	8.51	1.31	2	07/31/18 08:00	07/31/18 14:08	EPA 3050B	1,6010D	LC
Manganese, Total	8.89		mg/kg	0.851	0.135	2	07/31/18 08:00	07/31/18 14:08	EPA 3050B	1,6010D	LC
Mercury, Total	ND		mg/kg	0.070	0.015	1	07/26/18 08:00	07/27/18 20:24	EPA 7471B	1,7471B	EA
Nickel, Total	1.45	J	mg/kg	2.13	0.206	2	07/31/18 08:00	07/31/18 14:08	EPA 3050B	1,6010D	LC
Potassium, Total	62.6	J	mg/kg	213	12.2	2	07/31/18 08:00	07/31/18 14:08	EPA 3050B	1,6010D	LC
Selenium, Total	ND		mg/kg	1.70	0.219	2	07/31/18 08:00	07/31/18 14:08	EPA 3050B	1,6010D	LC
Silver, Total	ND		mg/kg	0.851	0.241	2	07/31/18 08:00	07/31/18 14:08	EPA 3050B	1,6010D	LC
Sodium, Total	9.85	J	mg/kg	170	2.68	2	07/31/18 08:00	07/31/18 14:08	EPA 3050B	1,6010D	LC
Thallium, Total	ND		mg/kg	1.70	0.268	2	07/31/18 08:00	07/31/18 14:08	EPA 3050B	1,6010D	LC
Vanadium, Total	2.67		mg/kg	0.851	0.173	2	07/31/18 08:00	07/31/18 14:08	EPA 3050B	1,6010D	LC
Zinc, Total	4.04	J	mg/kg	4.25	0.249	2	07/31/18 08:00	07/31/18 14:08	EPA 3050B	1,6010D	LC



 Project Name:
 13-16 TO 13-30 BCD
 Lab Number:
 L1828521

 Project Number:
 13-16 TO 13-30 BCD
 Report Date:
 07/31/18

SAMPLE RESULTS

 Lab ID:
 L1828521-02
 Date Collected:
 07/24/18 12:15

 Client ID:
 SB-4 (5-7)
 Date Received:
 07/24/18

Sample Location: 13-16 TO 13-30 BEACH CHANNEL DR. Field Prep: Not Specified

Sample Depth:

Matrix: Soil Percent Solids: 93%

Dilution Date Date Prep **Analytical** Method Qualifier Factor **Prepared** Analyzed Method **Parameter** Result Units RL MDL Analyst Total Metals - Mansfield Lab Aluminum, Total 414 mg/kg 8.19 2.21 2 07/31/18 08:00 07/31/18 14:13 EPA 3050B 1,6010D LC ND 2 1,6010D LC Antimony, Total mg/kg 4.10 0.311 07/31/18 08:00 07/31/18 14:13 EPA 3050B 2 Arsenic, Total 2.01 mg/kg 0.819 0.170 07/31/18 08:00 07/31/18 14:13 EPA 3050B 1,6010D LC 2 Barium, Total 2.13 0.819 0.142 07/31/18 08:00 07/31/18 14:13 EPA 3050B 1,6010D LC mg/kg 0.041 J 0.027 2 1,6010D LC Beryllium, Total mg/kg 0.410 07/31/18 08:00 07/31/18 14:13 EPA 3050B 2 ND 0.080 1,6010D LC Cadmium, Total mg/kg 0.819 07/31/18 08:00 07/31/18 14:13 EPA 3050B Calcium, Total 945 8.19 2.87 2 07/31/18 08:00 07/31/18 14:13 EPA 3050B 1,6010D mg/kg LC 2 1,6010D LC Chromium, Total 5.18 0.819 0.079 07/31/18 08:00 07/31/18 14:13 EPA 3050B mg/kg J 2 1,6010D LC Cobalt, Total 0.475 mg/kg 1.64 0.136 07/31/18 08:00 07/31/18 14:13 EPA 3050B 2 1,6010D Copper, Total 1.20 mg/kg 0.819 0.211 07/31/18 08:00 07/31/18 14:13 EPA 3050B LC 2 1,6010D LC Iron, Total 2820 4.10 0.740 07/31/18 08:00 07/31/18 14:13 EPA 3050B mg/kg J 2 Lead, Total 0.803 mg/kg 4.10 0.219 07/31/18 08:00 07/31/18 14:13 EPA 3050B 1,6010D LC Magnesium, Total 47.1 8.19 1.26 2 07/31/18 08:00 07/31/18 14:13 EPA 3050B 1,6010D LC mg/kg 16.7 0.819 0.130 2 07/31/18 08:00 07/31/18 14:13 EPA 3050B 1,6010D LC Manganese, Total mg/kg 1 Mercury, Total ND mg/kg 0.068 0.014 07/26/18 08:00 07/27/18 20:25 EPA 7471B 1,7471B EΑ Nickel, Total 1.86 J 2.05 0.198 2 07/31/18 08:00 07/31/18 14:13 EPA 3050B 1,6010D LC mg/kg J 205 2 1,6010D LC Potassium, Total 47.2 mg/kg 11.8 07/31/18 08:00 07/31/18 14:13 EPA 3050B Selenium, Total 0.319 J mg/kg 1.64 0.211 2 07/31/18 08:00 07/31/18 14:13 EPA 3050B 1,6010D LC Silver, Total ND mg/kg 0.819 0.232 2 07/31/18 08:00 07/31/18 14:13 EPA 3050B 1,6010D LC J Sodium, Total 9.48 mg/kg 164 2.58 2 07/31/18 08:00 07/31/18 14:13 EPA 3050B 1,6010D LC Thallium, Total ND mg/kg 1.64 0.258 2 07/31/18 08:00 07/31/18 14:13 EPA 3050B 1,6010D LC Vanadium, Total 3.53 0.819 2 07/31/18 08:00 07/31/18 14:13 EPA 3050B 1,6010D LC mg/kg 0.166 J 2 1,6010D LC 3.83 0.240 07/31/18 08:00 07/31/18 14:13 EPA 3050B Zinc, Total mg/kg 4.10



Project Name: 13-16 TO 13-30 BCD
Project Number: 13-16 TO 13-30 BCD

Lab Number: L1828521 **Report Date:** 07/31/18

Method Blank Analysis Batch Quality Control

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	
Total Metals - Mansfield	Lab for sample(s):	01-02 B	atch: WO	311396	56-1				
Mercury, Total	ND	mg/kg	0.083	0.018	1	07/26/18 08:00	07/27/18 19:37	7 1,7471B	EA

Prep Information

Digestion Method: EPA 7471B

Parameter	Result Q	ualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	
Total Metals - Mansfield	Lab for sa	mple(s):	01-02 I	Batch: W	G114114	14-1				
Aluminum, Total	ND		mg/kg	4.00	1.08	1	07/31/18 08:00	07/31/18 12:32	1,6010D	LC
Antimony, Total	ND		mg/kg	2.00	0.152	1	07/31/18 08:00	07/31/18 12:32	1,6010D	LC
Arsenic, Total	ND		mg/kg	0.400	0.083	1	07/31/18 08:00	07/31/18 12:32	1,6010D	LC
Barium, Total	ND		mg/kg	0.400	0.070	1	07/31/18 08:00	07/31/18 12:32	1,6010D	LC
Beryllium, Total	ND		mg/kg	0.200	0.013	1	07/31/18 08:00	07/31/18 12:32	1,6010D	LC
Cadmium, Total	ND		mg/kg	0.400	0.039	1	07/31/18 08:00	07/31/18 12:32	1,6010D	LC
Calcium, Total	ND		mg/kg	4.00	1.40	1	07/31/18 08:00	07/31/18 12:32	1,6010D	LC
Chromium, Total	ND		mg/kg	0.400	0.038	1	07/31/18 08:00	07/31/18 12:32	1,6010D	LC
Cobalt, Total	ND		mg/kg	0.800	0.066	1	07/31/18 08:00	07/31/18 12:32	1,6010D	LC
Copper, Total	ND		mg/kg	0.400	0.103	1	07/31/18 08:00	07/31/18 12:32	1,6010D	LC
Iron, Total	1.52	J	mg/kg	2.00	0.361	1	07/31/18 08:00	07/31/18 12:32	1,6010D	LC
Lead, Total	ND		mg/kg	2.00	0.107	1	07/31/18 08:00	07/31/18 12:32	1,6010D	LC
Magnesium, Total	ND		mg/kg	4.00	0.616	1	07/31/18 08:00	07/31/18 12:32	1,6010D	LC
Manganese, Total	0.216	J	mg/kg	0.400	0.064	1	07/31/18 08:00	07/31/18 12:32	1,6010D	LC
Nickel, Total	ND		mg/kg	1.00	0.097	1	07/31/18 08:00	07/31/18 12:32	1,6010D	LC
Potassium, Total	ND		mg/kg	100	5.76	1	07/31/18 08:00	07/31/18 12:32	1,6010D	LC
Selenium, Total	ND		mg/kg	0.800	0.103	1	07/31/18 08:00	07/31/18 12:32	1,6010D	LC
Silver, Total	ND		mg/kg	0.400	0.113	1	07/31/18 08:00	07/31/18 12:32	1,6010D	LC
Sodium, Total	1.73	J	mg/kg	80.0	1.26	1	07/31/18 08:00	07/31/18 12:32	1,6010D	LC
Thallium, Total	ND		mg/kg	0.800	0.126	1	07/31/18 08:00	07/31/18 12:32	1,6010D	LC
Vanadium, Total	ND		mg/kg	0.400	0.081	1	07/31/18 08:00	07/31/18 12:32	1,6010D	LC
Zinc, Total	ND		mg/kg	2.00	0.117	1	07/31/18 08:00	07/31/18 12:32	1,6010D	LC



Serial_No:07311816:12

 Project Name:
 13-16 TO 13-30 BCD
 Lab Number:
 L1828521

 Project Number:
 43-46 TO 43-30 BCD
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 07/24/48

Project Number: 13-16 TO 13-30 BCD **Report Date:** 07/31/18

Method Blank Analysis Batch Quality Control

Prep Information

Digestion Method: EPA 3050B



 Project Name:
 13-16 TO 13-30 BCD

 Project Number:
 13-16 TO 13-30 BCD

Lab Number:

L1828521

Report Date:

07/31/18

Parameter	LCS %Recovery (LCSD Qual %Recove	ry Qual	%Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated samp	le(s): 01-02 Batch:	WG1139656-2 SF	RM Lot Number	: D098-540			
Mercury, Total	117	-		50-149	-		



 Project Name:
 13-16 TO 13-30 BCD

 Project Number:
 13-16 TO 13-30 BCD

Lab Number: L1828521

Report Date: 07/31/18

arameter	LCS %Recov		CSD covery	%Recovery Limits	RPD	RPD Limits
otal Metals - Mansfield Lab Associated sam	ole(s): 01-02	Batch: WG1141144-2	SRM Lot Number: D0	98-540		
Aluminum, Total	61		-	47-153	-	
Antimony, Total	142		-	6-194	-	
Arsenic, Total	90		-	83-117	-	
Barium, Total	102		-	82-118	-	
Beryllium, Total	99		-	83-117	-	
Cadmium, Total	84		-	82-117	-	
Calcium, Total	98		-	81-118	-	
Chromium, Total	98		-	83-119	-	
Cobalt, Total	86		-	84-116	-	
Copper, Total	98		-	84-116	-	
Iron, Total	79		-	60-140	-	
Lead, Total	85		-	82-117	-	
Magnesium, Total	90		-	76-124	-	
Manganese, Total	98		-	82-118	-	
Nickel, Total	83		-	82-117	-	
Potassium, Total	75		-	69-131	-	
Selenium, Total	89		-	78-121	-	
Silver, Total	85		-	80-120	-	
Sodium, Total	79		-	74-126	-	
Thallium, Total	84		-	80-119	-	
Vanadium, Total	82		-	79-121	-	



 Project Name:
 13-16 TO 13-30 BCD

 Project Number:
 13-16 TO 13-30 BCD

Lab Number:

L1828521

Report Date:

07/31/18

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated samp	ole(s): 01-02 Batch: WG	1141144-2 SRM Lot Numb	er: D098-540		
Zinc, Total	87	-	81-119	-	



Matrix Spike Analysis Batch Quality Control

 Project Name:
 13-16 TO 13-30 BCD

 Project Number:
 13-16 TO 13-30 BCD

Lab Number:

L1828521

Report Date:

07/31/18

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Recovery Qual Limits	RPD Qual	RPD Limits
Total Metals - Mansfield Lab	Associated san	nple(s): 01-02	QC Ba	tch ID: WG113	9656-3	QC Sam	nple: L1828448-	02 Client ID: M	S Sample	
Mercury, Total	ND	0.135	0.181	134	Q	-	-	80-120	-	20



Matrix Spike Analysis Batch Quality Control

 Project Name:
 13-16 TO 13-30 BCD

 Project Number:
 13-16 TO 13-30 BCD

Lab Number: L1828521

Report Date: 07/31/18

arameter	Native Sample	MS Added	MS Found	MS %Recovery		MSD Found	MSD %Recovery		Recovery Limits	RPD		RPD imits
Total Metals - Mansfield Lab	o Associated sar	mple(s): 01-02	QC Bat	tch ID: WG1141	144-3	WG1141144	1-4 QC Sam	ple: L1	828692-19	Client	ID: MS	Sample
Aluminum, Total	3150	222	3970	369	Q	3930	353	Q	75-125	1		20
Antimony, Total	ND	55.6	54.5	98		53.6	97		75-125	2		20
Arsenic, Total	4.53	13.3	18.4	104		17.3	96		75-125	6		20
Barium, Total	96.9	222	342	110		302	93		75-125	12		20
Beryllium, Total	0.336J	5.56	5.80	104		5.66	102		75-125	2		20
Cadmium, Total	0.179J	5.67	5.84	103		5.69	101		75-125	3		20
Calcium, Total	1670	1110	3790	191	Q	2620	86		75-125	37	Q	20
Chromium, Total	6.52	22.2	29.6	104		28.8	101		75-125	3		20
Cobalt, Total	5.29	55.6	57.9	95		56.7	93		75-125	2		20
Copper, Total	24.5	27.8	61.4	133	Q	51.0	96		75-125	19		20
Iron, Total	3300	111	4860	1400	Q	3470	154	Q	75-125	33	Q	20
Lead, Total	87.5	56.7	138	89		120	58	Q	75-125	14		20
Magnesium, Total	134.	1110	1250	100		1180	95		75-125	6		20
Manganese, Total	98.7	55.6	172	132	Q	141	77		75-125	20		20
Nickel, Total	10.4	55.6	63.8	96		62.0	93		75-125	3		20
Potassium, Total	286.	1110	1340	95		1410	102		75-125	5		20
Selenium, Total	0.537J	13.3	13.2	99		13.1	99		75-125	1		20
Silver, Total	ND	33.3	33.1	99		32.4	98		75-125	2		20
Sodium, Total	110.J	1110	1220	110		1200	109		75-125	2		20
Thallium, Total	ND	13.3	11.8	88		11.7	88		75-125	1		20
Vanadium, Total	15.2	55.6	72.5	103		68.8	97		75-125	5		20



Matrix Spike Analysis Batch Quality Control

 Project Name:
 13-16 TO 13-30 BCD

 Project Number:
 13-16 TO 13-30 BCD

Lab Number:

L1828521

Report Date:

07/31/18

Parameter	Native Sample	MS Added	MS Found	MS %Recovery		MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield La	b Associated sam	ple(s): 01-02	QC Bate	ch ID: WG11411	44-3	WG1141144	-4 QC Samp	ole: L1828692-19	Client II	D: MS Sample
Zinc, Total	66.4	55.6	150	150	Q	132	119	75-125	13	20



Lab Duplicate Analysis

Batch Quality Control

Lab Number:

L1828521

Report Date:

07/31/18

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual I	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-0	2 QC Batch ID: V	WG1139656-4 QC Sample:	L1828448-02	Client ID:	DUP Sampl	e
Mercury, Total	ND	0.015J	mg/kg	NC		20



Project Name:

13-16 TO 13-30 BCD

Project Number: 13-16 TO 13-30 BCD

INORGANICS & MISCELLANEOUS



Serial_No:07311816:12

 Project Name:
 13-16 TO 13-30 BCD
 Lab Number:
 L1828521

 Project Number:
 13-16 TO 13-30 BCD
 Report Date:
 07/31/18

SAMPLE RESULTS

 Lab ID:
 L1828521-01
 Date Collected:
 07/24/18 13:40

 Client ID:
 SB-3 (5-7)
 Date Received:
 07/24/18

 Sample Location:
 13-16 TO 13-30 BEACH CHANNEL DR.
 Field Prep:
 Not Specified

Sample Depth:

Matrix: Soil

Parameter	Result Qu	ualifier Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry	- Westborough Lab								
Solids, Total	89.6	%	0.100	NA	1	-	07/25/18 09:05	121,2540G	RI



Serial_No:07311816:12

 Project Name:
 13-16 TO 13-30 BCD
 Lab Number:
 L1828521

 Project Number:
 13-16 TO 13-30 BCD
 Report Date:
 07/31/18

SAMPLE RESULTS

 Lab ID:
 L1828521-02
 Date Collected:
 07/24/18 12:15

 Client ID:
 SB-4 (5-7)
 Date Received:
 07/24/18

Sample Location: 13-16 TO 13-30 BEACH CHANNEL DR. Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry	· - Westborough Lab)								
Solids, Total	92.5		%	0.100	NA	1	-	07/25/18 09:05	121,2540G	RI



Lab Duplicate Analysis

Batch Quality Control

Lab Number: L1828521 07/31/18 Report Date:

Parameter	Native Sam	ple D	uplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab	Associated sample(s): 01-02	QC Batch ID:	WG1139262-1	QC Sample:	L1828445-12	Client ID:	DUP Sample
Solids, Total	87.7		89.6	%	2		20



Project Name:

13-16 TO 13-30 BCD

Project Number: 13-16 TO 13-30 BCD

Serial_No:07311816:12

Lab Number: L1828521

Report Date: 07/31/18

Project Name: 13-16 TO 13-30 BCD **Project Number:** 13-16 TO 13-30 BCD

Sample Receipt and Container Information

Were project specific reporting limits specified?

YES

Cooler Information

Cooler Custody Seal

A Absent

Container Info	rmation		Initial	Final	Temp			Frozen	
Container ID	Container Type	Cooler	рН	pН	deg C	Pres	Seal	Date/Time	Analysis(*)
L1828521-01A	Metals Only-Glass 60mL/2oz unpreserved	Α	NA		2.4	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG- TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL- TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE- TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE- TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA- TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1828521-01B	Glass 120ml/4oz unpreserved	Α	NA		2.4	Υ	Absent		NYTCL-8270(14)
L1828521-02A	Metals Only-Glass 60mL/2oz unpreserved	Α	NA		2.4	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1828521-02B	Glass 120ml/4oz unpreserved	Α	NA		2.4	Υ	Absent		NYTCL-8270(14)
L1828521-03A	Amber 250ml unpreserved	Α	7	7	2.4	Υ	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L1828521-03B	Amber 250ml unpreserved	Α	7	7	2.4	Υ	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L1828521-04A	Amber 250ml unpreserved	Α	7	7	2.4	Υ	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L1828521-04B	Amber 250ml unpreserved	Α	7	7	2.4	Υ	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)



 Project Name:
 13-16 TO 13-30 BCD
 Lab Number:
 L1828521

 Project Number:
 13-16 TO 13-30 BCD
 Report Date:
 07/31/18

GLOSSARY

Acronyms

EDL - Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis

of PAHs using Solid-Phase Microextraction (SPME).

EMPC - Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an applyte when the ions meet all of the identification criteria event the ion abundance ratio criteria. An EMPC is a worst case

analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case

estimate of the concentration.

EPA - Environmental Protection Agency.

LCS - Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of

analytes or a material containing known and verified amounts of analytes.

LCSD - Laboratory Control Sample Duplicate: Refer to LCS.

LFB - Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of

analytes or a material containing known and verified amounts of analytes.

MDL - Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any

adjustments from dilutions, concentrations or moisture content, where applicable.

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MS - Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.

which an independent estimate of target analyte concentration is available.

MSD - Matrix Spike Sample Duplicate: Refer to MS.

NA - Not Applicable.

NC - Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's

reporting unit.

NDPA/DPA - N-Nitrosodiphenylamine/Diphenylamine.

NI - Not Ignitable.

NP - Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.

RL - Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL

includes any adjustments from dilutions, concentrations or moisture content, where applicable.

RPD - Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the

precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the

values; although the RPD value will be provided in the report.

SRM - Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the

associated field samples.

STLP - Semi-dynamic Tank Leaching Procedure per EPA Method 1315.

TEF - Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.

TEQ - Toxic Equivalent: The measure of a sample is toxicity derived by multiplying each dioxin and furan by its corresponding TEF

and then summing the resulting values.

TIC - Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound

list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Footnotes

- The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Report Format: DU Report with 'J' Qualifiers



 Project Name:
 13-16 TO 13-30 BCD
 Lab Number:
 L1828521

 Project Number:
 13-16 TO 13-30 BCD
 Report Date:
 07/31/18

Data Qualifiers

- A Spectra identified as "Aldol Condensation Product".
- The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentrations of the analyte at less than ten times (10x) the concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).
- Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
- Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
- E Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
- G The concentration may be biased high due to matrix interferences (i.e, co-elution) with non-target compound(s). The result should be considered estimated.
- H The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- I The lower value for the two columns has been reported due to obvious interference.
- M Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.
- NJ Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.
- P The RPD between the results for the two columns exceeds the method-specified criteria.
- Q The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- R Analytical results are from sample re-analysis.
- **RE** Analytical results are from sample re-extraction.
- S Analytical results are from modified screening analysis.
- Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs).
- ND Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.

Report Format: DU Report with 'J' Qualifiers



Serial_No:07311816:12

 Project Name:
 13-16 TO 13-30 BCD
 Lab Number:
 L1828521

 Project Number:
 13-16 TO 13-30 BCD
 Report Date:
 07/31/18

REFERENCES

Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IV, 2007.

121 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WEF. Standard Methods Online.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.



Serial_No:07311816:12

Alpha Analytical, Inc. Facility: Company-wide

Department: Quality Assurance

Title: Certificate/Approval Program Summary

Published Date: 1/8/2018 4:15:49 PM Page 1 of 1

ID No.:17873

Revision 11

Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility

EPA 624: m/p-xylene, o-xylene

EPA 8260C: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: lodomethane (methyl iodide), Methyl methacrylate, 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.

EPA 8270D: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine.

EPA 300: DW: Bromide EPA 6860: SCM: Perchlorate

EPA 9010: NPW and SCM: Amenable Cyanide Distillation

SM4500: NPW: Amenable Cyanide, Dissolved Oxygen; SCM: Total Phosphorus, TKN, NO2, NO3.

Mansfield Facility

SM 2540D: TSS

EPA 8082A: NPW: PCB: 1, 5, 31, 87,101, 110, 141, 151, 153, 180, 183, 187.

EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene,

3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

Biological Tissue Matrix: EPA 3050B

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility:

Drinking Water

EPA 300.0: Chloride, Nitrate-N, Fluoride, Sulfate; EPA 353.2: Nitrate-N, Nitrite-N; SM4500NO3-F: Nitrate-N, Nitrite-N; SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500CI-D, SM2320B, SM2540C, SM4500H-B

EPA 332: Perchlorate; EPA 524.2: THMs and VOCs; EPA 504.1: EDB, DBCP.

Microbiology: SM9215B; SM9223-P/A, SM9223B-Colilert-QT,SM9222D.

Non-Potable Water

SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH: Ammonia-N and Kjeldahl-N, EPA 350.1: Ammonia-N, LACHAT 10-107-06-1-B: Ammonia-N, EPA 351.1, SM4500NO3-F, EPA 353.2: Nitrate-N, EPA 351.1, SM4500P-B, E, E, EPA 351.1, SM4500P-B, E, EPA 351.1, SM4500P-B, E, EPA 351.1, SM4500P-B, E, EPA 351.1, SM4500P-B, EPA 351.1, SM450P-B, EPA 351.1, SM4 SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D.

EPA 624: Volatile Halocarbons & Aromatics,

EPA 608: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan II, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs

EPA 625: SVOC (Acid/Base/Neutral Extractables), EPA 600/4-81-045: PCB-Oil.

Microbiology: SM9223B-Colilert-QT; Enterolert-QT, SM9221E, SM9222D.

Mansfield Facility:

Drinking Water

EPA 200.7: Al, Ba, Be, Cd, Cr, Cu, Mn, Ni, Na, Ag, Ca, Zn. EPA 200.8: Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. EPA 245.1 Hg. EPA 522.

Non-Potable Water

EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.

EPA 200.8: Al, Sb, As, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn.

EPA 245.1 Hg.

SM2340B

For a complete listing of analytes and methods, please contact your Alpha Project Manager.

Pre-Qualtrax Document ID: 08-113 Document Type: Form

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GEOTECHNICAL EVALUATION REPORT

PROPOSED 9-STORY BUILDING 13-12 BEACH CHANNEL DRIVE FAR ROCKAWAY, NY

Prepared for:

Camber Property Group LLC 419 Park Avenue South, Suite 401 New York, NY 10016

Prepared By:

GEODesign, Inc. P.C. 241West 30th Street, 5th Floor New York, NY 10001

GEODesign File No. 3887-009 January 2021

CONNECTICUT NEW JERSEY NEW YORK OREGON VERMONT



GEODesign, Inc. P.C. 241 West 30th Street, 5th Floor New York, NY 10001 (212) 221-6651

January 14, 2021 Project No.: 3887-009

Joanna Kandel Camber Property Group LLC 419 Park Avenue South, Suite 401 New York, NY 10016

Re: Geotechnical Evaluation Report

13-12 Beach Channel Drive, Far Rockaway, New York

Dear Ms. Kandel:

GEODesign, Inc. P.C. (GEODesign) is pleased to submit this geotechnical evaluation report for the referenced project site.

We appreciate the opportunity to work with you. Please contact us if you have any questions or need additional information.

Sincerely,

GEODesign, Inc. P.C.

Emma Gretina, PE

Senior Project Engineer

Thomas G. Thomann, PhD, PE Senior Principal / Reviewer



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1.0 - INTRODUCTION AND OBJECTIVES

1.1 GENERAL

This report provides geotechnical recommendations for the design and construction of a proposed building at 13-12 Beach Channel Drive, Far Rockaway, New York (see Figure 1). Authorization to proceed was obtained in the form of an agreement between Camber property Group LLC and GEODesign, Inc. P.C. (GEODesign) dated December 8, 2020.

The geotechnical evaluations and recommendations presented herein are in general accordance with the 2014 NYC Building Code (Code).

1.2 SITE CONDITIONS AND PROJECT UNDERSTANDING

The project site is located at 13-12 Beach Channel Drive (Block 15528, Lots 5, 6 and 9) in Far Rockaway, New York. The combined lot area is approximately 33,100 sq. ft. and the lots are currently occupied by asphalt surface parking, a concrete rear yard, and various one to two story buildings.

The site is bound by Beach Channel Drive to the west, various 1 to 3-story buildings with an asphalt parking lot to the north, Redfern Avenue to the east, and various 1 to 2-story buildings to the south. The site ground surface varies from approximately el. +16 to +23 feet¹.

The NYC Transit Authority (TA) "A" elevated subway line, which terminates on the south side of Mott Avenue at the Far Rockaway Mott Avenue Subway Station, is estimated to be more than 200 feet from the project site.

We understand that it is proposed to demolish the existing buildings and construct a new 9-story building that will encompass a portion of the site. The estimated new building footprint is approximately 19,500 sq. ft. Based on the architectural drawings dated December 9, 2020, the top of the first floor slabs are el. +17 and el. +23.5 feet along Beach Channel Drive and Redfern Avenue, respectively. We understand that a cellar level is being considered but is not finalized. For the purpose of this report, it is assumed that the building foundations with no cellar and one cellar level will be approximately 4 feet and 16 feet below the first floor slabs, respectively.

1.3 OBJECTIVES AND SCOPE OF SERVICES

The objectives of this investigation were to evaluate the subsurface conditions at the site and provide geotechnical recommendations for the design and construction of the proposed building. The following scope of services was performed to achieve these objectives:

- 1. Retained and managed subcontractors to perform test borings and laboratory testing;
- 2. Provided full time inspection of the test boring operations;
- 3. Performed engineering evaluations and prepared this geotechnical evaluation report that includes the following:

All elevations in the report are referenced to NAVD88.



- a. An Introductory Section presenting project background information and the scope of services:
- b. A Subsurface Conditions section that includes the following:
 - A description of the test boring and laboratory testing procedures and results;
 - A plan showing the location of the as-drilled test borings;
 - A description of the subsurface conditions;
- c. An Analyses and Recommendations section regarding the Foundation Design that includes the following:
 - Seismic site classification and liquefaction potential;
 - Foundation type, estimated capacity, and bearing elevation;
 - Ground floor slab support;
 - Permanent below grade wall lateral pressures;
 - Permanent groundwater control measures;
- d. A Construction Recommendations section that includes the following:
 - Excavation and temporary support of excavation considerations;
 - Adjacent building support considerations;
 - Temporary groundwater control;
 - Subgrade preparation;
 - Backfill and compaction control recommendations;
 - Pre-construction condition surveys;
 - Construction inspection and monitoring considerations;
- e. A Summary and Conclusions section;
- f. Appendices that include test boring logs and laboratory test results.

1.4 REPORT ORGANIZATION

This report is divided into five sections. Section 1 presents an introduction and the objectives of the study. Section 2 includes a description of the subsurface investigation methods and results. Section 3 provides engineering evaluation results and the foundation design and construction recommendations. A summary and conclusions are included in Section 4. Limitations of the subsurface explorations, analyses, and recommendations are included in Section 5. Tables and Figures are provided at the end of the text.



2.0 – SUBSURFACE CONDITIONS

2.1 GENERAL

The subsurface investigation included laboratory testing and a field investigation, which included performing test borings and installing a groundwater observation well. Details of the subsurface investigation and the conditions encountered are described in the following sections.

2.2 SUBSURFACE INVESTIGATION

2.2.1 Test Boring Program

Eight test borings, designated B-1 through B-8, were performed between December 10 and 16, 2020, at the locations shown in Figure 2. Special inspection of the test borings was performed on a continuous basis by GEODesign personnel under the direction of Mr. Thomas Thomann, PE of GEODesign.

The test borings were performed by Craig Geotechnical Drilling Co., Inc. of Mays Landing, NJ using a rubber tired all-terrain vehicle (ATV) mounted CME-750x drilling rig. The boreholes were advanced using mud rotary drilling techniques with a 2-7/8 or 3-7/8 inch diameter tri-cone roller bit and a 4-inch diameter flush joint casing.

Soil samples were obtained using techniques and equipment in general accordance with the American Society for Testing and Materials (ASTM) Standard Specification D1586-Standard Penetration Test (SPT). The SPT consists of driving a 2 inch O.D. split spoon sampler for a distance of 24 inches, with repeated blows of a 140 lb. hammer free falling a distance of 30 inches. The standard penetration, or N-value, is determined as the number of blows required to advance the sampler 12 inches after the initial 6 inches of penetration. The recovered split-spoon samples were placed in jars, labeled with the project name and number, boring number, sample, depth, SPT blow counts and the amount of recovery.

When cohesive soils were encountered, tube samples were collected using techniques and equipment in general accordance with ASTM Standard Specification D1587-Thin-Walled Tube Sampling and ASTM Standard Specification D1587-Sampling of Soil with Piston Sampler. The tube samples were obtained for the performance of laboratory strength and consolidation testing.

Upon completion of boring B-4, a groundwater observation well was installed. The well was constructed of nominal 2-inch diameter Schedule 25 PVC pipe with a 10-foot screen between depths of approximately 20 and 30 feet, and 20 feet of riser pipe. The annulus between the pipe and the borehole wall was backfilled with filter sand to the top of the screen. The remainder of the annulus was backfilled with drill cuttings. A flush-mount cap was installed at the top of the completed borehole.

The test boring logs are included in Appendix A.



2.2.2 Laboratory Testing

Geotechnical laboratory testing was conducted on representative soil samples to verify the field classifications and assist in engineering evaluations. The laboratory tests, which include sieve analyses, percent fines, Atterberg Limits, consolidation, and consolidated undrained triaxial testing are included in Appendix B.

2.3 GENERALIZED SUBSURFACE CONDITIONS

The following generalized strata descriptions are based on interpretations of the subsurface investigation results:

Stratum 1 – Uncontrolled Fill [7]²: This stratum consists of brown and black coarse to fine sand with varying amounts of silt, gravel, and miscellaneous fill such as asphalt and concrete. The N-values range from 17 to 19 blows per foot (bpf). The thickness of this stratum was less than approximately 5 feet and encountered in borings B-4 and B-7.

Stratum 2 – Upper Sand [6, 3b, 3a]: This stratum consists of brown and gray coarse to fine sand with varying amounts of gravel and silt. The N-values range from 3 to 65 bpf, with an average of 27 bpf, indicative of a medium dense material. The thickness of this stratum is approximately 30 to 35 feet.

Stratum 3 – Silt & Clay [6, 5b, 4c, 4b]: This stratum consists of brown and gray silt and clay with varying amounts of sand. The N-values range from 4 to 20 bpf, with an average of 10 bpf, indicative of a stiff material. The thickness of this stratum is approximately 25 to 30 feet.

Stratum 4 – Lower Sand [3b, 3a]: This stratum consists of gray fine sand with varying amounts of gravel and silt. The N-values typically range from 26 to 79 bpf, with an average of 41 bpf, indicative of a dense material. This stratum extends to a depth of at least 100 feet.

2.4 GROUNDWATER LEVEL

The groundwater was measured at a depth of approximately 17 feet (el. +5.3 feet) on December 14, 2020.

Groundwater measurements were not taken over an extended period of time; therefore, the measurements do not adequately reflect seasonal or other time dependent variations that may occur. See limitations in Section 5.

² The numbers in parentheses refer to the 2014 NYC Building Code classification system.



3.0 - ANALYSES AND RECOMMENDATIONS

3.1 GENERAL

This section presents engineering analyses, evaluations, and recommendations related to the design and construction of the foundations and below grade structures. The evaluations and recommendations are based on the available subsurface information, our experience on other projects, and the design requirements provided herein for the proposed structure.

3.2 FOUNDATION DESIGN

3.2.1 Seismic Recommendations

Based on the soil profile, the recommended seismic site classification is Site Class "D". In accordance with the Code, if the Risk Category is I&II, or III, the Seismic Design Category is "B". The appropriate Risk Category should be determined by the Architect or Structural Engineer.

The Code requires that a liquefaction potential assessment be performed for non-cohesive soils located below the groundwater and to a maximum depth of 50 feet. The liquefaction potential at the site was initially evaluated using the Code based liquefaction assessment diagram, which as shown in Figure 3, indicates that a liquefaction evaluation is required.

A site-specific liquefaction analysis was performed using the methods developed by I.M. Idriss and R. W. Boulanger (2004). These analyses require a peak ground surface acceleration and an earthquake magnitude to estimate the seismic shear stresses. Based on Site Class D, the Code specified peak ground surface acceleration for liquefaction evaluation is 0.24g. An earthquake magnitude of 5.5 is used in the analyses and is primarily based on historical earthquake information in the northeast. The Code specifies that, for Risk Category II/III buildings, the minimum acceptable factor of safety against liquefaction is 1.0. The factors of safety, as shown in Figure 4, are greater than 1.0. Therefore, if the new building is in Risk Category II/III, liquefaction does not need to be considered in the foundation design.

3.2.2 Foundation Recommendations

A cellar level is being considered but is not finalized. Based on the assumed foundation depths, the bottom of the new building foundations will be between approximately el. +13 and +19 feet if no cellar is constructed and between el. +1 and +7 feet if one cellar level is constructed. It is anticipated that Stratum 2 (sand) will be encountered at most of the assumed foundation elevations.

We have not been provided with the building loads; however, based on the proposed building height, we recommend that shallow foundations (i.e., spread or mat foundations) be considered.

We recommend that consideration initially be given to supporting the new building on spread footings bearing on Stratum 2 with an allowable bearing capacity of 3 tons per square foot (tsf). For a building with no cellar, it may be necessary to excavate an additional 3 feet to reach Stratum 2, at some spread footing locations.





If the spread footing stresses exceed the allowable bearing capacity or the spread footing configuration is inefficient, we recommend that consideration be given to a mat foundation bearing on Stratum 2 with an allowable bearing capacity of 3 tsf.

The mat stresses and deformations are estimated by performing structural analyses, which require a modulus of subgrade reaction value. For a mat foundation bearing on Stratum 2, we recommend a modulus of subgrade reaction value of 100 pci. The structural engineer's plots of estimated mat stresses and settlements should be provided to us for review. If the mat stresses or settlements are greater than the recommended values, especially close to the adjacent buildings, settlement reducing elements (i.e., micropiles) may be required at specific locations.

If a mat foundation is structurally feasible, it may not be the most cost effective foundation because the building foundation area is relatively high, which will result in a large mat concrete volume. Therefore, before selecting a mat foundation, it may be prudent to perform a cost comparison between a mat foundation and a pile foundation. If necessary, we can provide pile foundation recommendations for cost estimating purposes.

All foundations should bear a minimum of 4 feet below final grade and be placed on the appropriate bearing stratum. If the appropriate bearing material is not encountered at the foundation elevation, the unsuitable material should be removed until the appropriate bearing material is encountered.

If the adjacent building foundations are lower than the proposed building foundations, the new foundations should be lowered so that they match the adjacent building foundation or be moved so that it is located outside the influence zone of the adjacent building. If the adjacent building foundations are higher than the new foundations and are located within the influence zone of the adjacent building foundations, appropriate adjacent building support (e.g., underpinning) will be required.

A soil influence line of 1H:1V above the groundwater level and 2H:1V below the groundwater level should be used for determining the placement of new foundations relative to new or existing foundations.

If the new building is supported on spread footings, the ground floor slab can be designed as a slab-on-grade. If the bottom of the slab is below the design groundwater elevation, the slab should be designed to resist hydrostatic pressures and be waterproofed.

3.2.3 Lateral Earth Pressures

The design lateral pressures for permanent below grade walls consist of static and seismic pressures that are influenced by the thickness and type of overburden material, and wall bracing conditions. We recommend that the below grade walls above and below the design groundwater level be designed for a static equivalent hydrostatic lateral soil pressure of 45 pcf and 85 pcf, respectively (i.e., soil wall pressure is a triangular pressure).

In addition, a seismic lateral soil force of 6H² (lb/ft. of wall), where H is the total vertical height of the wall, in feet, should be included. This force should be applied at a distance of H/3 from the top of the wall (i.e., seismic wall pressure is an inverted triangle).



The recommended lateral pressures do not include any surcharge loads adjacent to the walls or at the ground surface. We recommend that a uniform (i.e., rectangular) lateral pressure distribution of 0.40 times the design surcharge be added to the lateral soil pressure distribution. The structural engineer should determine the magnitude of the design surcharge loads (i.e., live loads).

3.2.4 Permanent Groundwater Control

Based on the measured groundwater level and taking into consideration that the groundwater level may fluctuate due to seasonal conditions, we recommend a design groundwater elevation of +8.5 feet.

If the bottom of the foundation elements (i.e., slab, elevator pits, ejector pits, etc.) will be above the design groundwater elevation, the below grade walls and the foundation should, at a minimum, be damproofed. Damproofing should be performed at the bottom of the foundation by installing a membrane, such as Grace Construction Products Florprufe, or approved equal. Damproofing of the below grade walls should be performed with a liquid applied membrane (LAM), such as Grace Construction Products Procor, or approved equal, for 2-sided forms, or a membrane, such as Grace Construction Products Preprufe, or approved equal, for blind-sided forms.

If the bottom of the foundation elements will be below the design groundwater elevation, the below grade walls and foundation should be designed to resist groundwater pressures and be waterproofed. Waterproofing materials should be installed on the outside of the perimeter walls (Grace Construction Products Bituthene 3000 for two-sided form applications and Preprufe 160R for blind side applications, or approved equivalent) and directly beneath the foundation (Grace Construction Products Preprufe 300R, or equivalent). The waterproofing on the perimeter walls is typically installed to the ground surface. Waterstops should be installed at applicable locations.

The waterproofing installation should be inspected on a full-time basis to confirm that the waterproofing is being applied as per the manufacturer's specifications and details.

3.3 CONSTRUCTION RECOMMENDATIONS

3.3.1 Excavation Considerations

Local temporary soil excavations above the natural groundwater level can have cut slopes as steep as 1H:1V (horizontal to vertical). Temporary soil excavations below the natural groundwater should be no steeper than 2H:1V. The slopes of any excavations adjacent to any existing structures should be no steeper than 2H:1V, unless approved by the SOE engineer.

All vertical soil faces will require temporary support until the new foundation walls and foundations are constructed and the area is properly backfilled. Considering the subsurface conditions and the proposed excavation depths, a feasible support system could consist of soldier piles and timber lagging with lateral restraint (e.g., tiebacks, rakers, bracing, etc.), as required. Design of the excavation support system and lateral bracing must also consider the protection of surrounding subsurface utilities and other adjacent improvements.





Considering the proximity of the adjacent buildings, the vibrations from driving the soldier piles may cause damage to the adjacent buildings. Therefore, it may be necessary to install some of the soldier piles using drilling methods. At locations where driven piles are acceptable, the continuous vibrations from a vibratory hammer could increase the potential for settlement of adjacent structures; therefore, we recommend that a hydraulic impact hammer be used because the stroke of the hammer can be varied thereby providing some vibration control.

Measurements of vibration should be made at selected adjacent structures (preferably on the ground surface next to the building) during the installation of the support system and during excavation operations. The maximum allowable vibration levels should be established as part of the pre-construction condition survey of the adjacent structures. If the threshold levels are exceeded, it may be necessary to install the soldier piles using drilling methods.

The design and construction of any slopes and/or temporary excavation support systems should be the responsibility of a licensed New York Professional Engineer. All excavations and temporary support systems should conform to pertinent OSHA and local safety regulations.

3.3.2 Adjacent Building Support

Adjacent building support, typically underpinning, will be required at locations where the new foundations will be placed below and within the influence zone of adjacent building foundations. Based on a review of the site conditions, it does not appear that any excavation will be performed within the influence zone of any adjacent buildings if no cellar is constructed. However, if the new building will have a cellar level, adjacent building support may be required at some locations.

Underpinning typically consists of installing a series of interconnected concrete panels which create a continuous concrete wall that transfers the foundation loads from the present bearing level to a level that results in the new foundations being outside the influence zone of the existing adjacent foundations. Underpinning requires permission of the adjacent building owner and is typically difficult to perform below the groundwater. The underpinning designer should review all subsurface investigation results and adjacent building information and select and design appropriate underpinning methods.

The foundation type and depth of the adjacent buildings are currently unknown. We recommend that the adjacent structures be visited to determine the extent and depth of any cellar levels and any other features (e.g., elevator pits, ejector pits, etc.) that may affect the design and construction of the new building foundation. This information should then be used to develop a test pit plan. The purpose of test pits is to document the size, depth, and type of adjacent building foundations, and below grade encroachments that may be present. This information should then be used to develop methods and procedures for performing construction close to the adjacent buildings

If adjacent building support is required, the analysis and design should be performed by a licensed New York Professional Engineer. Adjacent building support installation should be inspected full time by a qualified engineer acting under the direction of the design engineer.



3.3.3 Temporary Groundwater Control

The groundwater level should be maintained sufficiently below the bottom of the excavation so that the foundation bearing surface can be adequately prepared. The need for temporary groundwater control will depend on the groundwater level at the time of construction and the proposed excavation depths.

Considering that groundwater was measured at approximately el. +5.5 feet and that excavations for the cellar foundations, elevator pits, and ejector pits will be close to or possibly lower than this elevation, it should be anticipated that temporary dewatering will be required.

If a cellar level is not constructed, the contractor should be prepared to collect and discharge groundwater, rain water, and surface runoff so that the subgrade can be properly prepared and concrete for the foundations can be poured. At a minimum, sump pits and pumps will be needed for dewatering.

A NYCDEP permit will be required to temporarily discharge groundwater into the sewer system.

3.3.4 Subgrade Preparation

Subgrade surfaces for the foundations and slabs should be level and cleaned of loose soil, mud, and other material (e.g., concrete, brick, wood, debris, etc.) that can have a negative impact on the performance of the foundation or slab and bear on the recommended material. Excavations to reach final subgrades should use a smooth edged bucket and/or hand tools.

If necessary, the soil subgrade should be proof-rolled with a minimum of 6 passes of a smooth drum roller with a minimum 1,500 lb. static weight and minimum centrifugal force of 4,000 lbs. or similar approved equipment. The proof-rolling should not be performed when the subgrade is wet, muddy, or frozen.

Any unstable areas which cannot be stabilized by additional compaction should be excavated to competent material and the area backfilled with compacted structural fill or 3/4" stone. If the foundation is constructed in the winter, the subgrade should be protected from frost to limit possible subgrade deterioration resulting from freezing and thawing cycles. Concrete should not be poured if the subgrade is wet, muddy, or frozen.

A minimum 6-inch thick layer of compacted coarse aggregate, commonly known as 3/4" gravel or crushed stone, or a "mud-slab" (i.e., 2 inches of lean concrete) should be placed below any slabs on grade and the approved building foundation subgrade to protect the subgrade from disturbance.

3.3.5 Backfill and Compaction Requirements

Select backfill or structural backfill should consist of granular soils free of cinder, brick, asphalt, ash, and other unsuitable materials. Such material should not contain any boulders or cobbles larger than about 4 inches across, and should have a fines content (material passing the No. 200 sieve) between 5 and 15 percent. The subgrade underneath the backfill should be properly prepared and inspected (building foundations only) prior to placement of backfill.



All backfill should be placed in lifts not exceeding 8 inches in loose thickness. Backfill placed beneath shallow foundations should be compacted to a minimum of 95% of the maximum dry density and in-situ density tests should be performed to confirm that the required compaction has been achieved. Backfill placed beneath slabs-on-grade, behind below grade walls, and underneath sidewalks should be compacted to a minimum of 90% of the maximum dry density.

3.3.6 Pre-construction Condition Survey and Monitoring

A pre-construction condition survey of any adjacent structures that may be affected by the construction should be performed for the protection of the new building owner in the event of a future damage claim. It is also required by the New York City Department of Buildings. The report should include detailed documentation and photographs of the existing condition of the structures.

Based on the survey results, a program should be developed for the purpose of monitoring the performance of the adjacent structures and construction procedures. The monitoring program should include, at a minimum, recommendations for the location of survey points to monitor vertical and horizontal movements, locations for crack gauges, and locations for monitoring vibrations during key construction activities. The monitoring program should also include threshold levels for allowable movements and vibrations, and the procedures to be implemented if the threshold levels are exceeded during construction.

3.3.7 Construction Monitoring

We recommend that a geotechnical engineer familiar with the subsurface conditions and foundation design criteria, review and approve the foundation contractors procedures and provide inspection services during excavation and foundation construction. Geotechnical related inspection services should include the following:

- Review and approval of contractor submittals related to foundation construction;
- Special inspection of the support of excavation;
- Special inspection of adjacent building support, if applicable;
- Special inspection of foundation subgrades, if applicable;
- Special inspection of structural fill placement and compaction;
- Monitoring of adjacent structures and interpretation of the monitoring data.





4.0 – SUMMARY AND CONCLUSIONS

This report provides geotechnical recommendations for the design and construction of a new 9-story building located at 13-12 Beach Channel Drive in Far Rockaway, New York.

Based on eight test borings, the subsurface conditions generally consist of approximately less than 5 feet of uncontrolled fill (Stratum 1), 30 to 35 feet of medium dense sand (Stratum 2), 25 to 30 feet of stiff silt and clay (Stratum 3), and dense sand (Stratum 4) that extends to a depth of at least 100 feet.

The recommended seismic site classification is Site Class "D". If the new building is in Risk Category I&II, or III, the Seismic Design Category is "B". Liquefaction does not need to be considered in the foundation design.

A cellar level is being considered but is not finalized. Based on the assumed foundation depths, the bottom of the new building foundations will be between approximately el. +13 and +19 feet if no cellar is constructed and between el. +1 and +7 feet if one cellar level is constructed. It is anticipated that Stratum 2 (sand) will be encountered at most of the assumed foundation elevations.

We recommend that consideration initially be given to supporting the new building on spread footings bearing on Stratum 2 with an allowable bearing capacity of 3 tsf. For a building with no cellar, it may be necessary to excavate an additional 3 feet to reach Stratum 2, at some spread footing locations.

If it is determined that spread footings are not feasible or are inefficient, we recommend that consideration be given to a mat foundation bearing on Stratum 2 with an allowable bearing capacity of 3 tsf and a modulus of subgrade reaction value of 100 pci. If the mat stresses or settlements calculated by the structural engineer are greater than the recommended values, settlement reducing elements (i.e., micropiles) may be required at specific locations. Before selecting a mat foundation, it may be prudent to perform a cost comparison between a mat foundation and a pile foundation. If necessary, we can provide pile foundation recommendations for cost estimating purposes.

We recommend a design groundwater elevation of +8.5 feet. If the bottom of the foundation and foundation elements (i.e., slab, elevator pits, ejector pits, etc.) will be above the design groundwater elevation, the below grade walls and foundation should, at a minimum, be damproofed. If the bottom of the foundation elements will be below the design groundwater elevation, the below grade walls and foundation should be designed to resist groundwater pressures and be waterproofed.

The report includes additional information regarding the subsurface conditions and foundation design recommendations and additional recommendations regarding excavation considerations, adjacent building support, temporary groundwater control, subgrade preparation, backfill and compaction requirements, pre-construction condition surveys and monitoring, and construction inspection and monitoring.



5.0 – LIMITATIONS

Explorations

- 1. The analysis and recommendations submitted in this report are based in part upon the data obtained from widely spaced subsurface explorations. The nature and extent of variations between these explorations may not become evident until construction. If variations then appear evident, it will be necessary to reevaluate the recommendations of this report.
- 2. The generalized soil profile described in the text is intended to convey trends in subsurface conditions. The boundaries between strata are approximate and idealized and have been developed by interpretations of widely spaced explorations and samples; actual soil transitions are probably more erratic. For specific information, refer to the boring logs.
- 3. Water level readings have been made in the drill holes at times and under conditions stated on the logs. These data have been reviewed and interpretations made in the text of this report. However, it must be noted that fluctuations in the level of the groundwater may occur due to variations in rainfall, temperature and other factors occurring since the time measurements were made.

Review

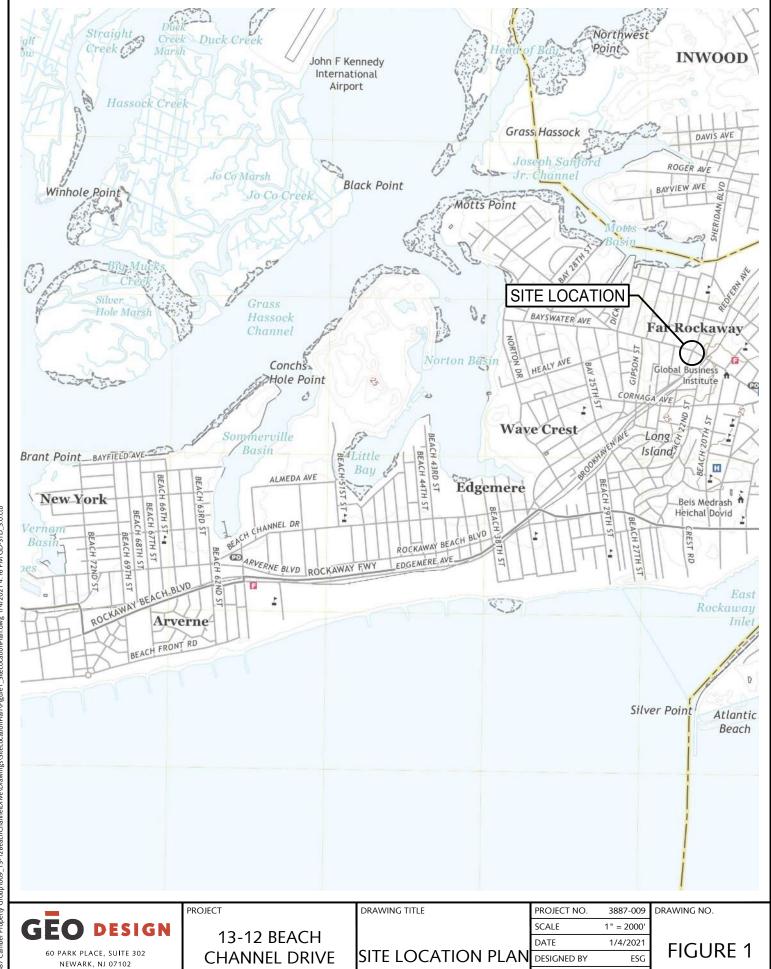
4. In the event that any changes in the nature, design, or location of the proposed structures are planned, the conclusions and recommendations contained in this report shall not be considered valid unless the changes are reviewed and conclusions of this report modified or verified in writing by GEODesign. It is recommended that this firm be provided the opportunity for a general review of final design and specifications in order that earthwork and foundation recommendations may be properly interpreted and implemented in the design and specifications.

Construction

5. It is recommended that this firm be retained to provide soil engineering services during construction of the excavation and foundation phases of the work. This is to observe compliance with the design concepts, specifications, and recommendations and to allow design changes in the event that subsurface conditions differ from those anticipated prior to start of construction.

Uses of Report

6. This report has been prepared for the exclusive use of Camber Property Group LLC for specific application to the proposed structure located at 13-12 Beach Channel Drive, Far Rockaway, NY in accordance with generally accepted soil and foundation engineering practices. No other warranty, express or implied, is made.



FAR ROCKAWAY, NY

DRAWN BY

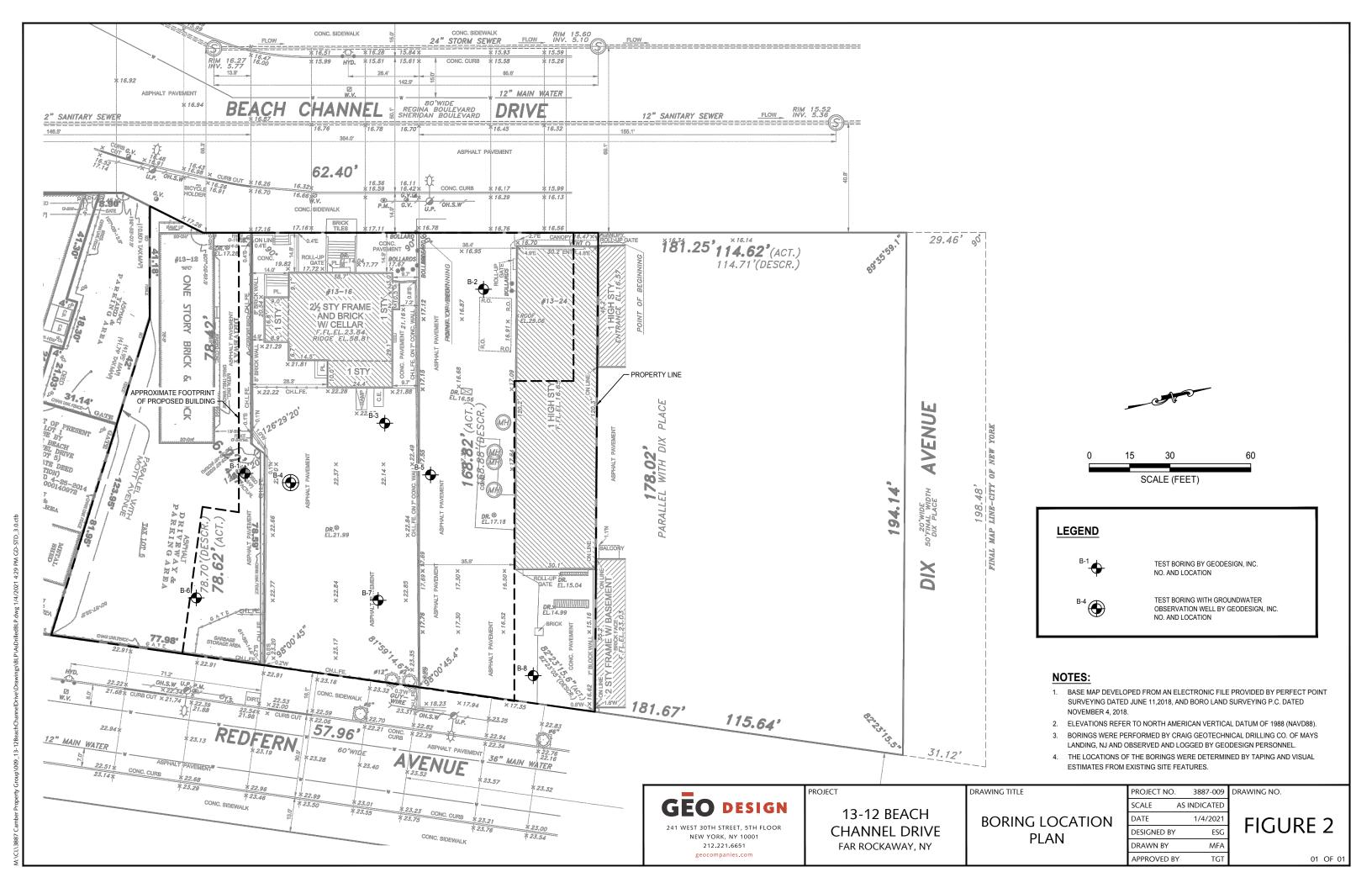
APPROVED BY

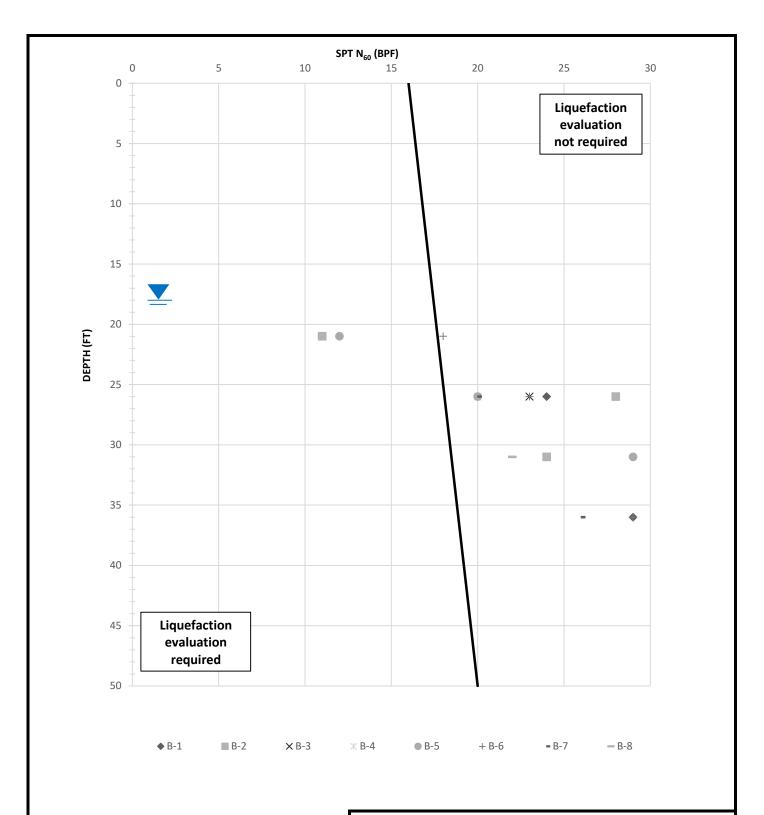
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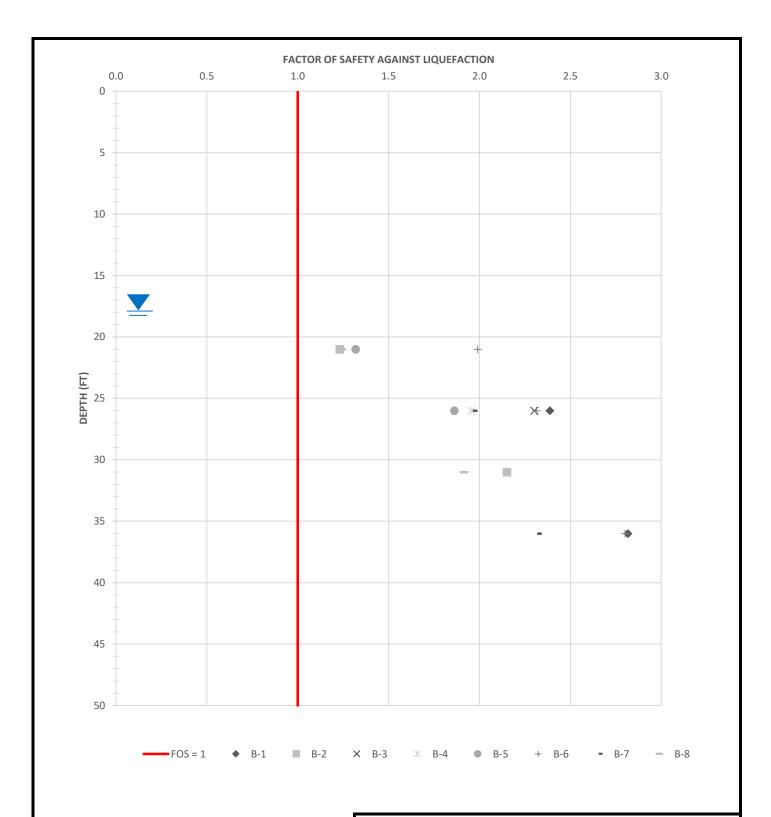
Notes:

- 1. Structural Occupancy Category II/III is assumed.
- 2. N-Values greater than 30 bpf not shown.

CODE BASED SOIL LIQUEFACTION POTENTIAL 13-12 Beach Channel Drive Far Rockaway, NY

GEO DESIGN 241 W 30th Street, New York, NY

DR. BY:	SO/MFA	SCALE:	NTS	PROJ NO.:	3887-009
CHK'D. BY:	ESG	DATE:	Dec-2020	FIG. NO:	3



Notes:

1. Factors of Safety greater than 3.0 are not shown.

SITE SPECIFIC LIQUEFACTION EVALUATION 13-12 Beach Channel Drive Far Rockaway, NY

GEO DESIGN

241 West 30th Street, New York, NY

DR. BY:	MFA	SCALE:	AS SHOWN	PROJ NO.:	3887-009
CHK'D. BY:	ESG	DATE:	Dec-20	FIG. NO:	4

APPENDIX A TEST BORING LOGS



241 West 30th St., 5th Fl. New York, NY 10001

Tel: 212.221.6651 Fax: 212.221.6799

BORING LOG

PROJECT NAME

13-12 Beach Channel Drive

Far Rockaway, NY

Boring No.: _ B-1

Page No.: 1 of 2

Borin	ıg Coı	mpan	y: Cra	aig Geo	otechni	ical D	rilling	, Co.		Date 9	Started	d: <u>12/14/2020</u>)	<u>Barrel</u>	Casing	Sampler	GR	OUNDWA	ATER OF	BSERVATIONS
	man:			ul Baro								eted: 12/14/2020		Type:	- FJ 4.0 in.	SS 1.38 in.	DATE	DEPTH (ft)	ELEV. (ft)	NOTES
		n Rep		sham /								(ft): 17.3 (NAVI	D88)	Hammer Wt.:	140 lbs		¥	(11)	(11)	
	ype:		_CIV	1E 750	X AIV							(ft): 42	_	Hammer Fall:	30 in.	30 in.	¥			
,001	dinate	28.								Rock	Depth	(11).	_	Hammer Type:		Cathead	Ā			
				SAM	PLE I	INFO	DRM.	ATIC	ON			STRATA					•	•		
	G	ENEF		SOIL		ROCK				LAB		SIRAIA	_							
O Depth (ft)	Type	Number	Recovery (inches)	Pen. Resist (blows/6 in.)	Coring Time (min./ft)	Recovery (%)	RQD (%)	Liquid Limit	Plastic Limit	Moisture Content (%)	Percent Fines	Depth & Elevation (ft)	SYMBOL	SA	AMPL	E DE	SCRIP'	TION		REMARKS/ OTHER TESTS
J —												ASPHALT 1.0 16.3								
			4.0	10 8								SAND		(SP) Brown	m-f SAI	ND, trace	silt [3b]			
	SS	1	10	6 4															-	
-												-							-	
-														=					-	
_				5 9										(SP) Light b	orown fin	e SAND,	trace silt [3	3b]	_	
	SS	2	13	9 14										-					-	
-												-		-					-	
-														-					-	
-														-					-	
_				8										(SP) Light b	prown c-1	SAND, I	ttle gravel,	trace silt	[3b]	Installed 10' of casing.
-	SS	3	12	9						9.2	3								-	, 5559.
-] [-					-	
-														_					-	
_														-					-	
				14 23								-		(SP) Light g silt [3a]	gray and	brown fin	e SAND, li	ttle grave	I, trace	
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	33	5	10	16 11															-	
-]							-	
-																			-	
-														-					-	

NOTES:

1) Stratification lines represent approximate boundary between material types, transitions may be gradual.

2) Water level readings have been made at times and under conditions stated, fluctuations of groundwater may occur due to other factors than those present at the time measurements were made. AC = After coring; NR = Not Recorded.

3) Abbreviations: A = Auger; C = Core; MC=Macrocore; D = Driven; G = Grab; PS = Piston Sample; SS = Split Spoon; SSL = 3.5 Inch ID Split Spoon; ST = Shelby Tube;

V = Vane; WOR/H = Weight of Rod/Hammer

4) Proportions Used: Trace = 1-10%; Little = 10-20%; Some = 20-35%; And = 35-50%

5) (SP) = Unified Soil Classification System symbol; [3a] = NYC Building Code Classification



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BORING LOG

PROJECT NAME

13-12 Beach Channel Drive

Far Rockaway, NY

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Page No.: 2 of 2

File No.: <u>3887-009</u>

				SAMI				ATIC	N			STRATA			
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Depth (ft)	Type	Number	Recovery (inches)	Pen. Resist (blows/6 in.)	Coring Time (min./ft)	Recovery (%)	RQD (%)	Liquid Limit	Plastic Limit	Moisture Content (%)	Percent Fines		SYMBOL	SAMPLE DESCRIPTION	REMARKS/ OTHER TESTS
-	SS	6	13	13 11 13 18								SAND (Continued)		(SP) Brown fine SAND, trace gravel and silt [3b]	
-															
30 —	SS	7	14	6 14 22 20										(SP) Brown fine SAND, little gravel, trace silt [3a]	
-															
35 —	SS	8	13	8 10 19 17										(SP) Brown fine SAND, trace silt [3b]	
-												38.5 <u>-21.2</u> SILT		- 	
40 —	· SS	9	16	8 8 10 9								42.0 -24.7		(ML) Brown SILT, little fine sand [5b] Bottom of Exploration at 42.0 ft	
-															
45 -														<u> </u>	
-														- - -	
50 — -															
-														- - -	
55															



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BORING LOG

PROJECT NAME

13-12 Beach Channel Drive

Far Rockaway, NY

Boring No.: _ B-2

Page No.: 1 of 2

Borir	ng Co	mpan	y: Cra	ig Geo	otechnic	cal Di	rilling	, Co.		Date 9	Starte	d: <u>12/16/202</u>	0	Barrel	Casing	Sampler	GF	OUNDWA	ATER OF	BSERVATIONS
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000.	aa.									. 100.1	D op	().		Hammer Type:	Safety - 0	Cathead	Ā			
				SAM	PLE I	NFC)RM	ATIO	ON			STRATA								
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0 —												ASPHALT 1.0 16.0								
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5-	SS	2	13	4 5 10								_		(SP) Brown	fine SAN	ID, little (gravel, trad	ce silt [3b]	-	
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- 25 —														_					-	

NOT LES:

1) Stratification lines represent approximate boundary between material types, transitions may be gradual.

2) Water level readings have been made at times and under conditions stated, fluctuations of groundwater may occur due to other factors than those present at the time measurements were made. AC = After coring; NR = Not Recorded.

3) Abbreviations: A = Auger; C = Core; MC=Macrocore; D = Driven; G = Grab; PS = Piston Sample; SS = Split Spoon; SSL = 3.5 Inch ID Split Spoon; ST = Shelby Tube;

V = Vane; WOR/H = Weight of Rod/Hammer

4) Proportions Used: Trace = 1-10%; Little = 10-20%; Some = 20-35%; And = 35-50%

5) (SP) = Unified Soil Classification System symbol: [3a] = NYC Building Code Classification



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BORING LOG

PROJECT NAME

13-12 Beach Channel Drive

Far Rockaway, NY

Boring No.: **B-2**

Page No.: 2 of 2

		SAMPLE INFORMATION GENERAL SOIL ROCK LAB										STRATA			
	G	ENER	RAL	SOIL	F	ROCK				LAB			占		DEMARKS/
ال Depth (ft)	Туре	Number	Recovery (inches)	Pen. Resist (blows/6 in.)	Coring Time (min./ft)	Recovery (%)	RQD (%)	Liquid Limit	Plastic Limit	Moisture Content (%)	Percent Fines		SYMBOL	SAMPLE DESCRIPTION	REMARKS/ OTHER TESTS
25 —	- SS	6	14	12 14 14 19								SAND (Continued)		(SP) Light brown m-f SAND, little gravel, trace silt [3b]	-
30 —				9										- - - (SP) Gray and brown, fine SAND, trace silt [3b]	-
-	SS	7	13	11 13 16								33.516.5 SILT & CLAY			
35 —	- SS	8	16	4 3 3 3				26	19	27.6		GEAT		(CL/ML) Brown CLAY and SILT [6]	
-												38.5 -21.5		- -	-
-	- SS	9	17	3 6 5 6								42.0 -25.0		(ML) Brown SILT, trace clay [5b]	
-														Bottom of Exploration at 42.0 ft	-
45 —															
-														- - -	
50 —															
-														- -	
55 —															



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BORING LOG

PROJECT NAME

13-12 Beach Channel Drive

Far Rockaway, NY

Boring No.: B-3

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	-	mpan			techni		rılling,	Co.			Started			Barrel	Casing FI	Sampler SS	GR	_		BSERVATIONS
Forer		_			novski							eted: 12/10/202		Type:	4.0 in.	SS 1.38 in.	DATE	DEPTH (ft)	ELEV. (ft)	NOTES
	-	n Rep		sham /								(ft): 22.3 (NA\	/D88)	I.D.:	140 lbs	140 lbs	¥	(11)	(11)	
Rig T			_CN	1E 750	x AIV							(ft): 102		Hammer Wt.: Hammer Fall:	30 in.	30 in.	¥			
Joor	dinate	es:								Rock	Deptn	(ft):		Hammer Type:	Safety -		Ţ			
				SAM	PLE I	NFC)RM	ATIC	ON			OTDATA		riammer type.	Guioty	041.1044				
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5 —				18								1		(SP) Light b	rown m-1	SAND,	trace grave	el and silt	[3a] _	
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				29 39																
_												1							-	
-														-					-	
_																			-	
0 —				30								-		_ (SP) Light bi	rown m	FOAND	traca ara	ol and silt	[30] -	20 foot of agains
	SS	5	1	38/0"										(SP) Light bi	OWII III-1	SAND,	u ace grave	and Silt	[Ja]	20 feet of casing installed.
-												1							-	Spoon refusal at
-																			-	20.5 feet. Inferre
																				cobbles.
-														<u> </u>					-	
													: ::.	Ĺ					_	

NOTES:

1) Stratification lines represent approximate boundary between material types, transitions may be gradual.

2) Water level readings have been made at times and under conditions stated, fluctuations of groundwater may occur due to other factors than those present at the time measurements were made. AC = After coring; NR = Not Recorded.

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V = Vane; WOR/H = Weight of Rod/Hammer

4) Proportions Used: Trace = 1-10%; Little = 10-20%; Some = 20-35%; And = 35-50%

5) (SP) = Unified Soil Classification System symbol; [3a] = NYC Building Code Classification



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BORING LOG

PROJECT NAME

13-12 Beach Channel Drive

Far Rockaway, NY

Boring No.: B-3

Page No.: 2 of 4
File No.: 3887-009

					PLE I			ATIC	ON			STRATA			
(ft)	G	ENER		sist in.)	e E	ROCK (%)		mit		AB (%)		_	SYMBOL	SAMPLE DESCRIPTION	REMARKS/ OTHER TESTS
Depth (ft)	Туре	Number	Recovery (inches)	Pen. Resist (blows/6 in.)	Coring Time (min./ft)	Recovery (%)	RQD (%)	Liquid Limit	Plastic Limit	Moisture Content (%)	Percent Fines	Depth & Elevation (ft)	SY.		OTHER 1E313
25 —	SS	6	16	8 10						14.7	2	SAND (Continued)		(SP) Light brown c-f SAND, little gravel, trace silt [3b]	
-				13 13								-		-	
-	-													-	
-														-	
30 —	SS	7	20	23 26								-		(SP) Light brown c-f SAND, little gravel, trace silt [3a]	
-				39 39								-		-	
-															
=														-	
35 —	SS	8	20	20 21								-		(SP) Gray m-f SAND, little silt [3a]	
-				24 36								-		-	
-														-	
-														-	
40 —	ss	9-1	2	10 7								40.1 -17.8 SILT & CLAY	İ	Top 2": (SP) Gray m-f SAND, little silt [3b]	
_	ss	9-2	12	5 7										Bottom 12": (ML) Brown SILT, trace fine sand and clay [5b]	
-														-	
-														-	
45 —				8								-		(ML) Brown SILT, trace fine sand and clay [5b]	
_	SS	10	18	7 9				20	18	27.3					
-	-													_	
-														-	
50 —				7 8										(ML) Dark gray SILT, some shells, trace clay [5b]	
-	SS	11	3	8 9										-	
_															
-												53.5 -31.2		-	
55 —														1	

GEO DESIGN

D/B/A Geo**Design**, Inc. P.C. Geotechnical | Construction | Environmental Engineers and Scientists

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BORING LOG

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13-12 Beach Channel Drive

Far Rockaway, NY

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				SAM	PLE I	NFC	RM	ATIC	ON			STRATA			
	G	ENER	AL	SOIL	F	ROCK				AB		JINAIA	۵ ا		DEMARKS!
Depth (ft)	Туре	Number	Recovery (inches)	Pen. Resist (blows/6 in.)	Coring Time (min./ft)	Recovery (%)	RQD (%)	Liquid Limit	Plastic Limit	Moisture Content (%)	Percent Fines	Depth & Elevation (ft)	SYMBOL	SAMPLE DESCRIPTION	REMARKS/ OTHER TESTS
55 -	SS	12	24	1 3 3 4										(CL) Olive green CLAY [4c]	PP= 1.25 TSF.
-	ST	1	24	P U S H				58	28	50.8		57.0 -34.7		(CH) Olive green CLAY	-
60 —	SS	13	24	4 5 7 14								59.0 -36.7		(CL) Olive green CLAY [4b]	PP= 1.75 TSF.
-															-
65 —	SS	14-1	1	8								65.1 -42.8 SAND		Top 1": (CL) Olive green CLAY [4a]	П
-		14-2		14 24 24								SAND		Bottom 17": (SM) Dark gray fine SAND and SILT, trace clay [3a]	_
-												68.5 -46.2		-	-
70 — -	SS	15	15	34 43 29 27										(SP) Gray fine SAND, trace gravel and silt [3a]	Auto Hammer used from 71 feet to 102 feet.
-														-	-
75 - -	SS	16	11	12 16 23 22								-		(SP) Gray fine SAND, trace silt [3a]	-
-														_	-
80 —	SS	17	14	17 26 26 29								-		(SP) Gray fine SAND, trace silt [3a]	- - -
-														_	- -
85 —												<u> </u>		<u></u>	



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				SAMI	PLE I	NFC	RM	ATIC	ON			STRATA			
	G	ENEF		SOIL	F	ROCK				LAB		SIKAIA	ب ا		
P Depth (ft)	Type	Number	Recovery (inches)	Pen. Resist (blows/6 in.)	Coring Time (min./ft)	Recovery (%)	RQD (%)	Liquid Limit	Plastic Limit	Moisture Content (%)	Percent Fines	Depth & Elevation (ft)	SYMBOL	SAMPLE DESCRIPTION	REMARKS/ OTHER TESTS
85 —	- SS	18	12	16 20 22 26										(SP) Gray fine SAND, trace gravel and silt [3a]	
-	-														
90 —	- SS	19	11	10 14 17 16										(SP) Gray fine SAND, trace silt [3a]	
95 —		20	12	19 17										(SP) Gray fine SAND, trace silt [3a]	
-	SS	20	13	20 21								-		-	
100 — -	- ss	21	17	12 14 27 39								102.0 -79.7		(SP) Gray fine SAND, trace silt [3a]	
-														Bottom of Exploration at 102.0 ft	
105 														- - -	
- - 110 <i>-</i>														- - -	
-														- - -	
- 115 —															



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BORING LOG

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Far Rockaway, NY

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Page No.: 1 of 2

	Desig	ring Company: Craig Geotechnical Drilling, Co. Date Started: 12 reman: Paul Baronovski Date Completed: 12											<u>Barrel</u>	Casing		O	JO:10117	01	BSERVATIONS
Rig T	-												Type:	FJ	SS	DATE	DEPTH	ELEV.	NOTES
	Type:	птер										(ft): 22.3 (NAVD88)	I.D.:	4.0 in.	1.38 in.		(ft)	(ft)	
Coord			CM	E 750	X ATV							(ft): <u>42</u>	Hammer Wt.:	140 lbs	140 lbs	▼ 12/14/20	18.0	4.3	post-flush
	dinate	es:								Rock	Depth	(ft):	Hammer Fall:	30 in. Safety -	30 in.	¥ 12/14/20	17.0	5.3	EOD
				CAM	PLE I	NEO	DM	A TIC	NAI				Hammer Type:	Salety -	Catrieau	-			
		ENER		SOIL		ROCK		AIIC		AB		STRATA							
O Depth (ft)	Type	Number		Pen. Resist (blows/6 in.)	Coring Time (min./ft)	Recovery (%)	RQD (%)	Liquid Limit	Plastic Limit	Moisture Content (%)	Percent Fines	Depth & Elevation (ft)	SAN	IPLE	DESC	RIPTIC	ON	WELL	REMARKS/ OTHER TESTS
												0.2ASPHALTCONCRETE							
-	- SS	1	7	7 9 8 6						11.7	8	FILL 21.0	(FILL) Black little asphalt	and bro , trace si	wn c-f SA It [7]	AND, some	gravel,		<u></u>
5				13								3.518.8 XX SAND	(SP) Brown	- — — — c-f SANI	n some	gravel trac	- — — —		Fine sand in spoon tip.
-	- SS	2	14	19 23 20									[3a]	C-I OAIN	D, Some	graver, trac	e siit		
10																			
-	- SS	3	10	5 5 7 11									(SP) Brown	fine SAN	ND, trace	gravel and	silt [3b]		Installed 10 feet of casing.
15 —				12									(SP) Brown	o f CANI	D. little er	rough trace	آودًا بازه		
-	SS	4	12	16 22 23									(SF) BIOWIT	C-I SAIN	D, iittie gi	avei, ii ace	SIII [Ja]		
20																		¥	
-	- SS	5	13	19 20 23 26									(SP) Brown	c-f SAN	D, little gi	avel, trace	silt [3a]		
-													-						

NOTES:

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V = Vane; WOR/H = Weight of Rod/Hammer

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BORING LOG

PROJECT NAME

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Far Rockaway, NY

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Page No.: 2 of 2

File No.: <u>3887-009</u>

				SAM	PLE I	NFC	RM	ATIC	ON			STRATA				
	G	ENEF	RAL	SOIL		ROCK				LAB		Olivala	占			DE144 DI404
Depth (ft)	Type	Number	Recovery (inches)	Pen. Resist (blows/6 in.)	Coring Time (min./ft)	Recovery (%)	RQD (%)	Liquid Limit	Plastic Limit	Moisture Content (%)	Percent Fines	Depth & Elevation (ft)	SYMBOL	SAMPLE DESCRIPTION	WELL LOG	REMARKS/ OTHER TESTS
-	- SS	6	14	10 7 13 15								SAND (Continued)		(SP) Brown c-f SAND, little gravel, trace silt [3b]		
30 —	- ss	7	16	17 17 17 17										(SP) Brown c-f SAND, little gravel, trace silt [3a]		Installed 30 feet well, 20 feet of riser and 10 feet of screen.
35—	· ss	8	18	16 17										(SP) Brown fine SAND, trace gravel and silt [3a]	- -	
-				25 23											-	
-	SS	9-1	13	8 6 5 4								40.5 -18.2 SILT 42.0 -19.7		Top 6": (SP) Brown fine SAND, trace gravel and silt [3b] Bottom 13": (ML) Brown SILT, trace fine sand and clay [5b] Bottom of Exploration at 42.0 ft		
45 —														- - -		
50 —														- - -	-	
55 —														-	_	



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Page No.: 1 of 2

	-	mpan			techni		rilling,	, Co.			Started			<u>Barrel</u>	Casing	Sampler	GR	OUNDWA	TER OF	BSERVATIONS
	man:	_			novski							eted: 12/15/202		Type:	4.0 in.	SS 1.38 in.	DATE	DEPTH (ft)	ELEV. (ft)	NOTES
	-	n Rep	.: <u>He</u> :									ft): 17.5 (NAV	(D88)		140 lbs	140 lbs	¥	(11)	(11)	
	ype:		_CN	E 750.	X ATV							(ft): <u>42</u>		Hammer Wt.:	30 in.	30 in.	¥			
Coor	dinate	es:								Rock	Depth	(ft):		Hammer Fall: Hammer Type:	Safety -		Ā			
				CVM	PLE I	NEC)DM	ΛΤΙ)NI					напппет туре.	Salety -	Califeau	-			
	G	ENER		SOIL		ROCK		A 1 K		_AB		STRATA	١.							
æ	j							=					SYMBOL	64	MDI	E DE	SCRIP	TION		REMARKS/
Depth (ft)		ē	ery (s)	Resi 8/6 in	ŢĘ	ery	8	Lin	٦	nt (3	Ħ		Σ×	SP	NVIPL	E DE	OCKIP	IION		OTHER TESTS
Dep	Type	Number	Recovery (inches)	Pen. Resist (blows/6 in.)	Coring Time (min./ft)	Recovery (%)	RQD (%)	Liquid Limit	Plastic Limit	Moisture Content (%)	Percent Fines	Depth &	0,							
0 —	É,	z	æ.	<u> 4 </u>	05	ř	ď		<u>-</u>	ΣŰ	直证	Elevation (ft)								
												ASPHALT 1.0 16.5								
-				12								1.0 16.5 SAND		(SP) Light b	rown c-f	SAND, li	ttle gravel.	trace silt	[3b]	
_	SS	1	13	11										(,)		,	.		_	
		'	10	11									: ::							
-				11										_					-	
-														_					_	
5 —														(OD) D					_	
				7 8										(SP) Brown	and gray	tine SAI	ND, trace s	SIIT [3D]		
-	SS	2	10	10										-					-	
				12															_	
-														_					-	
-														_					_	
0 —																				
				8 14										(SP) Light b	rown m-1	SAND,	little gravel	, trace sill	: [3b]	Installed 10'
-	SS	3	12	12										-					-	casing.
				16															_	
-														-					-	
-													::::						-	
5 —														(00)					<u>-</u>	
				10 15										(SP) Light b	rown m-1	SAND,	little gravel	, trace silf	[3a]	
-	SS	4	13	18										-					-	
				22									::::						_	
													::::						_	
-													: ::·	-					-	
_																			-	
0 —														(CD) Link In	****** - f	CANID !	ttle erecet	troop =:"	[2h] _	
				5 7										(SP) Light b	rown c-t	SAND, II	tue gravel,	trace silt	[JD]	
-	SS	5	7	5						13.6	2		: ::	<u> </u>					-	
				6										_					_	
													: ::							
-													::::	-					-	
													: ::							
-													::::						-	
5					<u></u>								: ·::							

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1) Stratification lines represent approximate boundary between material types, transitions may be gradual.

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BORING LOG

PROJECT NAME

13-12 Beach Channel Drive

Far Rockaway, NY

Boring No.: B-5

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File No.: <u>3887-009</u>

				SAM	PLE I	NFC	RM	ATIC	ON			STRATA			
	G	ENEF	RAL	SOIL		ROCK			L	AB		July	٦		
Depth (ft)	Туре	Number	Recovery (inches)	Pen. Resist (blows/6 in.)	Coring Time (min./ft)	Recovery (%)	RQD (%)	Liquid Limit	Plastic Limit	Moisture Content (%)	Percent Fines		SYMBOL	SAMPLE DESCRIPTION	REMARKS/ OTHER TESTS
-	- SS	6	10	9 9 11 13								SAND (Continued)		(SP) Brown c-f SAND, little gravel, trace silt [3b]	
30-				13										(SP) Brown fine SAND, trace silt [3b]	
-	- SS	7	13	13 16 15								33.5 -16.0			
35 —	- SS	8	18	4 4 3								SILT & CLAY		(ML) Brown SILT, trace fine sand and clay [6]	
- - 40 —				3										Top 23": (ML) Brown SILT, trace fine sand and clay [6]	
-	SS SS	9-1 9-2	23	3 3								41.5 -24.0 42.0 -24.5		Bottom 1": (CL) Dark gray CLAY [4c]	
-	-													Bottom of Exploration at 42.0 ft	
45 —															
-														- - -	
50 —															
-															
55 —															



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BORING LOG

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Far Rockaway, NY

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Page No.: 1 of 2

JOIIII	y Coi	npan	y: Cra	ig Geo	techni	cal Di	rilling,	, Co.		Date :	Started	12/14/202	0	<u>Barrel</u>	Casing	Sampler	GR	OUNDWA	ATER OF	BSERVATIONS
oren					novski							eted: 12/14/202		Type:	FJ	SS	DATE	DEPTH	ELEV.	NOTES
	-	n Rep	.: <u>He</u> s									ft): 23 (NAVD	88)	I.D.:	4.0 in.	1.38 in.	¥	(ft)	(ft)	
Rig Ty			CM	E 750	X ATV							(ft): <u>42</u>		Hammer Wt.:	140 lbs	140 lbs	¥			
coord	linate	es:								Rock	Depth	(ft):		Hammer Fall:	30 in.	30 in.	Ā			
					<u> </u>			A = 1						Hammer Type:	Safety -	Cathead	Ť			
-					PLE I			AIK		_AB		STRATA								
Depth (ft)	Type	Number Number	Recovery (inches)	Pen. Resist (blows/6 in.)		Recovery (%)	RQD (%)	Liquid Limit	Plastic Limit	Moisture Content (%)	Percent Fines	Depth & Elevation (ft)	SYMBOL	SA	MPL	E DE	SCRIP	TION		REMARKS/ OTHER TEST
0+												ASPHALT								
4												1.0 22.0		(00) 0			NID (
				12 10								SAND		(SP) Brown [3b]	and blac	k m-t SA	ND, trace	gravel an	d silt	
Ⅎ	SS	1	16	7										[30]					-	
				7																
T														[_	
4													::::	-					-	
5+				8									::::	(SP) Brown	fine SAN	ID. trace	gravel and	silt [3b]	_	
	66	2	10	9									: ; ; i	(3. / 2.3.7.1	0, 1	,	J. G. 51 GITC	. J [OD]		
1	SS	2	12	17									::::						_	
1				15									::::	-					-	
													::::							
+														-					-	
1														<u> </u>					-	
,													:							
٠				6										(SP) Brown	fine SAN	ID, trace	silt [3b]			Installed 10' of
4	SS	3	10	5 6										-					-	casing.
				9																
														-					-	
																			_	
+														_					-	
													::::							
7				13										(SP) Light b	rown c-f	SAND, s	some grave	l [3a]	_	
_	ss	4	9	16									::::			-	ū		_	
		7		22																
+				27									::::	+					-	
													: ; ;							
1													::::	†					-	
														1					_	
													::::							
-				19										(CD) Prove	0 f C A N II) i## ^	rovol [2c]		_	
				19 20									:	(SP) Brown	C-I SAINI	, iitlie g	iavei [3a]			
+	SS	5	17	18										<u> </u>					-	
				21									::: [:]	L					_	
Ţ													: : :						_	
4													::::: -::::	1					_	
4													::::·	}-					-	-
- 1					1	1	1	1	1	ĺ	1	l	1	ł						I

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BORING LOG

PROJECT NAME

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Far Rockaway, NY

Boring No.: B-6

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File No.: <u>3887-009</u>

				SAM	PLE I	NFC	RM	ATIC	N			STRATA			
	G	ENEF	RAL	SOIL	F	ROCK				AB		Junana	ᄀ		
Depth (ft)	Type	Number	Recovery (inches)	Pen. Resist (blows/6 in.)	Coring Time (min./ft)	Recovery (%)	RQD (%)	Liquid Limit	Plastic Limit	Moisture Content (%)	Percent Fines		SYMBOL	SAMPLE DESCRIPTION	REMARKS/ OTHER TESTS
-	- SS	6	11	11 12 11 13								SAND (Continued)		(SP) Brown c-f SAND, little gravel [3b]	
-	-													-	
30 —	- SS	7	15	15 15 16 15										(SP) Gray and brown m-f SAND, little gravel [3a]	
- 35 — -	SS	8	15	9 13 16 20										(SP) Gray fine SAND, trace silt [3b]	-
- - 40 —	-											38.5 -15.5 SILT		- 	-
-	- SS	9	22	2 2 2 5				26	19	29.7		42.0 -19.0		(CL/ML) Brown CLAY and SILT, little fine sand [6]	Autohammer used for S-9 due to rain.
-														Bottom of Exploration at 42.0 ft	
45 — -															-
-	-													- - -	
50 —															
-														-	
55 —															-



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BORING LOG

PROJECT NAME

13-12 Beach Channel Drive

Far Rockaway, NY

Boring No.: _ B-7

Page No.: 1 of 2

Borir	ıg Coı	mpan	y: <u>Cra</u>	ig Geo	techni	cal Dr	rilling,	Co.		Date \$	Started	d: <u>12/11/202</u>	.0	Barrel Casing Sampler GROUNDWATER OBSERVATIONS
	man:				novski							eted: 12/11/202		Type: FJ SS DATE DEPTH ELEV. NOTES
	_	n Rep	.: <u>He</u> :									(ft): 22.9 (NAV	/D88)	I.D.: 4.0 in. 1.38 in. (ii) (iii)
	ype:		_CN	E 750	X ATV							(ft): <u>42</u>		Training VI
coor	dinate	es:								Rock	Depth	(ft):		Hammer Fall: 30 in. 30 in. Hammer Type: Safety - Cathead ▼ ▼ ▼ ▼ ▼
				CAM	PLE I	NEC	DM	A TIC	146					Hammer Type. Safety - Catheau =
	_	FAIFF						AIIC		AB		STRATA		
Depth (ft)	Type	Number Number	Recovery (inches)	Pen. Resist Silons/6 in.)	Coring Time (min./ft)	Recovery (%)	RQD (%)	Liquid Limit	Plastic Limit	Moisture Content (%)	Percent Fines	Depth & Elevation (ft)	SYMBOL	SAMPLE DESCRIPTION REMARKS/ OTHER TESTS
0 —												ASPHALT,7	p. S	
-	SS	1	16	6 7 12 9								FILL		(FILL) Black and brown m-f SAND, little gravel and asphalt [7]
- 5												3.519.4 SAND		
-	SS	2	7	8 7 8 9						7.2	7	_		(SP/SM) Dark brown fine SAND, trace silt and gravel [3b]
-														
o —	SS	3	9	8 11								_		(SP) Light brown m-f SAND, little gravel, trace silt [3b] 10 feet of casing installed.
-				11 11								_		
- 5-				8								-		(SP) Light brown c-f SAND, some gravel, trace silt [3b]
-	SS	4	14	9 16 21								-		
-														
) 	SS	5	14	16 16 22								_		(SP) Brown c-f SAND, little gravel, trace silt [3a]
-				22										-
- 5 														

NOTES:

1) Stratification lines represent approximate boundary between material types, transitions may be gradual.

2) Water level readings have been made at times and under conditions stated, fluctuations of groundwater may occur due to other factors than those present at the time measurements were made. AC = After coring; NR = Not Recorded.

3) Abbreviations: A = Auger; C = Core; MC=Macrocore; D = Driven; G = Grab; PS = Piston Sample; SS = Split Spoon; SSL = 3.5 Inch ID Split Spoon; ST = Shelby Tube;

V = Vane; WOR/H = Weight of Rod/Hammer

4) Proportions Used: Trace = 1-10%; Little = 10-20%; Some = 20-35%; And = 35-50%

5) (SP) = Unified Soil Classification System symbol; [3a] = NYC Building Code Classification



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13-12 Beach Channel Drive

Far Rockaway, NY

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				SAM	PLE I	NFC	RM	ATIC	ON			STRATA			
	G	ENER	RAL	SOIL	F	ROCK				LAB		Olivala	占		DE114 DI/O/
25 Depth (ft)	Type	Number	Recovery (inches)	Pen. Resist (blows/6 in.)	Coring Time (min./ft)	Recovery (%)	RQD (%)	Liquid Limit	Plastic Limit	Moisture Content (%)	Percent Fines	Depth & Elevation (ft)	SYMBOL	SAMPLE DESCRIPTION	REMARKS/ OTHER TESTS
-	- SS	6	13	10 12 8 9								SAND (Continued)		(SP) Brown c-f SAND, little gravel, trace silt [3b]	
30 —			10	14 16										(SP) Brown c-f SAND, little gravel, trace silt [3a]	
- - -	SS	7	18	20 18										- - - -	
35 — - -	- SS	8	14	10 13 13 12										(SP) Brown fine SAND, trace silt [3b]	
- 40 — -	SS	9-1	4 17	4 3 3								40.3 -17.4 SILT		Top 4": (SP) Brown fine SAND, some gravel , trace silt [6] Bottom 17": (ML) Brown SILT, trace fine sand and clay	
-	-			4								42.0 -19.1		[6] Bottom of Exploration at 42.0 ft	
45 —	-														
50 — -	-													- - - -	
- 55 —															



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	-				techni		illinig,	. 00.			Started			<u>Barrel</u>	Casing	Sampler	GR	OUNDWA	ATER OB	SERVATIONS
	man:	_			novski							eted: 12/15/202		Type:	4.0 in.	SS 1.38 in.	DATE	DEPTH (ft)	ELEV. (ft)	NOTES
	-	n Rep	.: <u>He</u> s									ft): 17.4 (NAV	(88עי		140 lbs	140 lbs	¥	(11)	(14)	
Rig T			_CM	E 750	X ATV							(ft): 102		Hammer Wt.:	30 in.	30 in.	¥			
Coord	dinate	es:								Rock	Depth	(ft):		Hammer Fall: Hammer Type:	Safety -		Ā			
				SAM	PLE I	NEC)PM	٨ΤΙ)NI					папппет туре.	Salety -	Catrieau	-			
	G	ENER		SOIL		ROCK				AB		STRATA	١.							
Depth (ft)	Туре	Number	Recovery (inches)	st (Coring Time (min./ft)	Recovery (%)	RQD (%)	Liquid Limit	Plastic Limit	Moisture Content (%)	Percent Fines	Depth & Elevation (ft)	SYMBOL	SA	MPL	E DES	SCRIP'	TION		REMARKS/ OTHER TESTS
0	'	_				_	_	_	_			ASPHALT								
-				10								1.0 16.4 SAND		(SP) Brown	and blac	k m-f SA	ND, little o	ravel, trad	ce silt	
	SS	1	10	12										[3b]´			, ,	,		
				10 7																
+				,								3.5 13.9		_					+	
														_						
5				2										(SM) Brown	fine SAN	ND, little	silt, trace o	gravel [6]	\dashv	
	SS	2	9	2										, = , =	"	,	., ;	, [-]		
		-		4																
+				10										_					+	
												8.5 8.9								
+														-					4	
10 —				17										(SP) Brown	m-f SAN	ID, some	gravel, tra	ace silt [3a	ı]	
4	SS	3	16	18 27										<u> </u>					4	
				25																
1														-					1	
4														<u>-</u>					_	
1														_					1	
15 —				40										(CD) D	t O A L	ID			, 4	
				16 17										(SP) Brown	m-t SAN	ט, some	gravel, tra	ice siit [3a	IJ	
1	SS	4	20	20									:::.	-					†	
				23										-						
+													. : :	-					+	
														_					_	
20 -				7										(SP) Brown	c-m SAN	ND, little	gravel, trad	e silt [3b]	\dashv	
	ss	5	7	6						13.4	2			, ,		,,	, , ,	. []		
			′	5 7						.5.7	-									
+														-					+	
													· · · .						7	
+														-					4	
	I I	1	l		1	1							·.::							

NOTES:

1) Stratification lines represent approximate boundary between material types, transitions may be gradual.

2) Water level readings have been made at times and under conditions stated, fluctuations of groundwater may occur due to other factors than those present at the time measurements were made. AC = After coring; NR = Not Recorded.

3) Abbreviations: A = Auger; C = Core; MC=Macrocore; D = Driven; G = Grab; PS = Piston Sample; SS = Split Spoon; SSL = 3.5 Inch ID Split Spoon; ST = Shelby Tube;

V = Vane; WOR/H = Weight of Rod/Hammer

4) Proportions Used: Trace = 1-10%; Little = 10-20%; Some = 20-35%; And = 35-50%

5) (SP) = Unified Soil Classification System symbol; [3a] = NYC Building Code Classification

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BORING LOG

PROJECT NAME

13-12 Beach Channel Drive

Far Rockaway, NY

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				SAM	PLE I	NFC	RM	ATIC	ON			STRATA			
	G	ENEF	RAL	SOIL		ROCK				AB		Jiidia	占		DE114 DI/O/
55 Depth (ft)	Type	Number	Recovery (inches)	Pen. Resist (blows/6 in.)	Coring Time (min./ft)	Recovery (%)	RQD (%)	Liquid Limit	Plastic Limit	Moisture Content (%)	Percent Fines	Depth & Elevation (ft)	SYMBOL	SAMPLE DESCRIPTION	REMARKS/ OTHER TESTS
25 —				14 18										(SP) Brown m-f SAND, some gravel, trace silt [3a]	
-	ss	6	20	18										-	
-				30										-	
-														-	
														-	
30 —				10										(SP) Brown fine SAND, little gravel, trace silt [3b]	Installed 30'
-	ss	7	14	11 11										-	casing.
				11										_	
-														-	
-	1													-	_
35 —	SS	8-1	1	3								35.1 -17.7 CLAY &	7777	Top 1": (SP) Brown fine SAND, little gravel, trace silt [6] $\overline{/}$	Top 1" is SS8-1.
-				3								SILT		Bottom 23": (CL) Black varved CLAY, little fine sand	Bottom 23" is
	SS	8-2	23	3				28	17	29				[4c]	SS8-2.
-														- -	
-	1											38.5 -21.1		-	
-														-	
40 —															
				10 4										(ML/CL) Black varved SILT and CLAY, little fine sand [6/4c]	
-	SS	9	14	2											
-				5										-	
-	-													_	
_														_	
45 —														_	Top 12" is SS10-1.
-	99	10-1	12	4								46.0 -28.6		Top 12": (ML/CL) Black varved SILT and CLAY, little	Bottom 12" is SS10-2.
-			12	3 5										fine sand [6/4c] Bottom 12": (CL) Black CLAY, trace silt [4c]	PP = 1.0 TSF.
_	SS	10-2	12	5										BOLLOTT 12 . (OL) BIACK OLAT, trace sitt [40]	
												48.5 -31.1			
50 —				2										(CH) Black CLAY [4c]	PP = 1.25 TSF.
-	ss	11	24	3 4				57	28	53				-	-
_				3										-	
												53.5 -36.1			
-	1													-	
55 —													<i>\\\\\</i>		

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Far Rockaway, NY

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File No.: <u>3887-009</u>

				SAM	PLE I	NFC	RM	ATIC	ON			STRATA			
	G	ENER	RAL	SOIL	F	ROCK				LAB		SINAIA	占		DE144 DV0/
ר Depth (ft)	Type	Number	Recovery (inches)	Pen. Resist (blows/6 in.)	Coring Time (min./ft)	Recovery (%)	RQD (%)	Liquid Limit	Plastic Limit	Moisture Content (%)	Percent Fines	Depth & Elevation (ft)	SYMBOL	SAMPLE DESCRIPTION	REMARKS/ OTHER TESTS
55 — -	SS	12	24	10 9 11 14										(CL) Olive green CLAY [4b]	PP = 1.75 TSF.
- 60												58.541.1 SAND			
-	SS	13	22	8 13 18 29										(SP) Dark gray fine SAND, trace silt and clay [3a]	_
65 —				16										- (SP Light gray fine SAND, trace silt [3a]	Autohammer used
-	SS	14	13	28 31 37										-	from SS-14 to E.O.B.
70 —				12										(SP) Gray fine SAND, trace silt [3a]	
- -	SS	15	15	16 24 37										_	
- 75 —				6										(SP) Gray fine SAND, trace silt [3b]	
-	SS	16	13	8 18 27											
80 —				9										(SP) Gray fine SAND, trace silt [3b]	-
-	ss	17	12	12 16 20											
85															-



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Section Sect					SAM	PLE I	NFC	RM.	ATIC	ON			STRATA			
SAND (Continued) SS 18 15 11 12 13 15 15 12 15 15 15 15 15		G	ENEF		SOIL	F	ROCK				LAB		SIKAIA	_		
SAND (Continued) SS 18 15 11 12 13 15 15 12 15 15 15 15 15		Type	Number	Recovery (inches)	Pen. Resist (blows/6 in.)	Coring Time (min./ft)	Recovery (%)	RQD (%)	Liquid Limit	Plastic Limit	Moisture Content (%)	Percent Fines	Depth & Elevation (ft)	SYMBO		REMARKS/ OTHER TESTS
SS 19 24 13 13 14 15 17 13 14 15 17 15 15	- 85	- SS	18	15	11 22								SAND (Continued)		(SP) Gray fine SAND, trace silt [3a]	
SS 19 24 13 13 14 15 17 100 110	- 90 –															
- SS 20 18 21 30 30 30	-	- SS	19	24	13 15										(SP) Gray fine SAND, trace silt [3b]	
SS 21 15 17 28 31 1020 846 Bottom of Exploration at 102.0 ft	95 — -	- SS	20	18	21 30										(SP) Gray fine SAND, trace silt [3a]	
SS 21 15 28 31 1020 84.6 Bottom of Exploration at 102.0 ft	- - 100 —				l .										(SP) Gray fine SAND, trace silt [3a]	
	-	ss	21	15	28								102.0 -84.6		Bottom of Exploration at 102.0 ft	
	-														- -	
	105 -	-														
	-														- - -	
	110 —														- - -	
	-														- - -	
	115 —															

APPENDIX B LABORATORY TEST RESULTS

GeoDesign #3887-009 13-12 Beach Channel Drive LABORATORY TESTING DATA SUMMARY

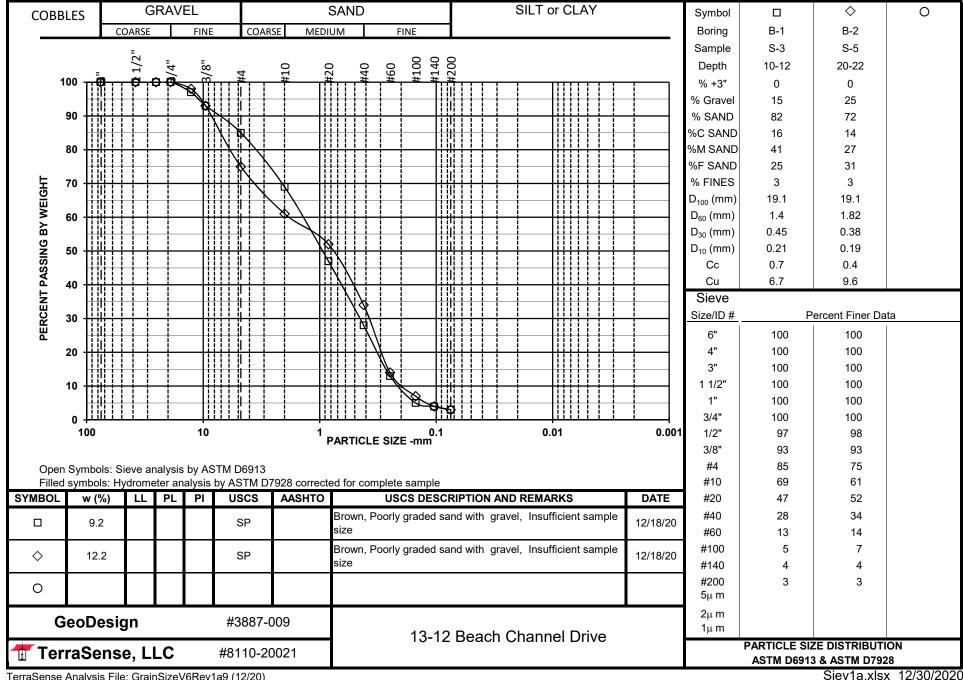
BORING	SAMPLE	DEPTH		ID	ENTIFICA	TION TES	STS		REMARKS
			WATER	LIQUID	PLASTIC	PLAS.	USCS	SIEVE	
NO.	NO.		CONTENT	LIMIT	LIMIT	INDEX	SYMB.	MINUS	
							(1)	NO. 200	
		(ft)	(%)	(-)	(-)	(-)		(%)	
B-1	S-3	10-12	9.2				SP	3	
B-2	S-5	20-22	12.2				SP	3	
B-2	S-8	35-37	27.6	26	19	7	CL-ML		
B-3	S-6	25-27	14.7				SP	2	
B-3	S-10	45-47	27.3	20	18	2	ML		
B-4	S-1	0-2	11.7				SP-SM	8	
B-5	S-5	20-22	13.6				SP	2	
B-6	S-9	40-42	29.7	26	19	7	CL-ML		
B-7	S-2	5-7	7.2				SP-SM	7	
B-8	S-5	20-22	13.4				SP	2	
B-8	S-8-2	35-37	29.0	28	17	11	CL		
B-8	S-11	50-52	53.0	57	28	29	CH		

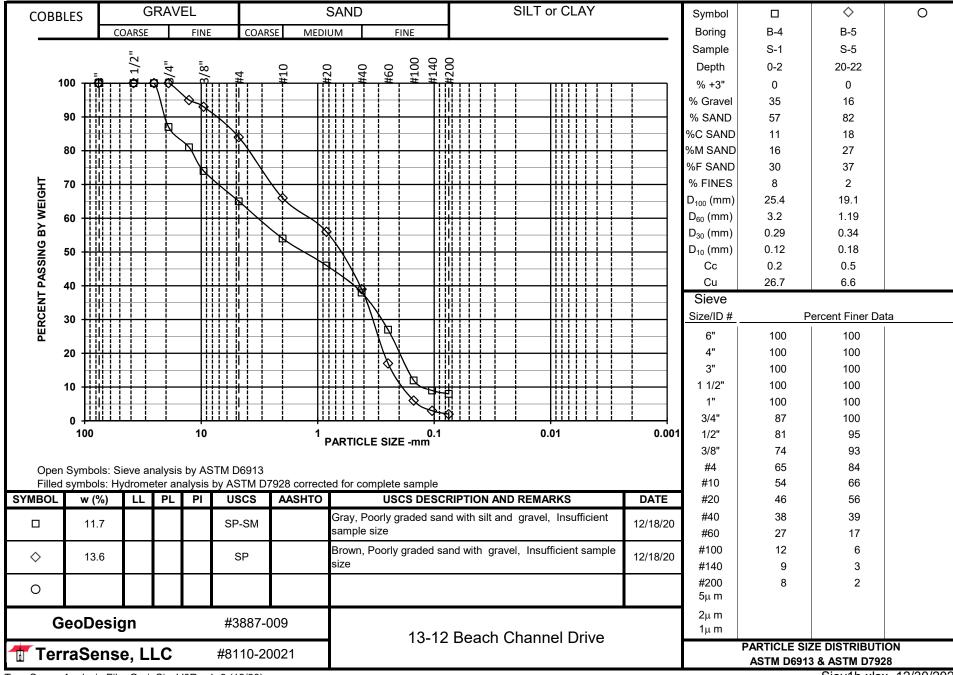
Note: (1) USCS symbol based on visual observation and Sieve and Atterberg limits reported.

Project No.: 8110-20021

File: Indx1.xlsx

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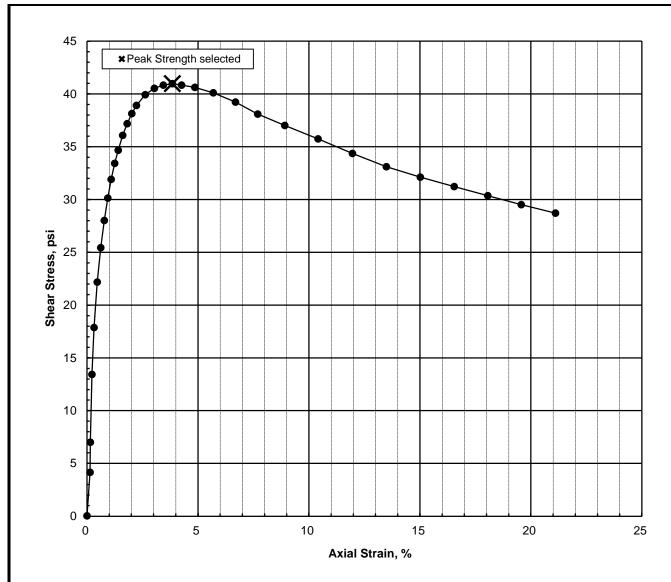


GeoDesign #3887-009 13-12 Beach Channel Drive LABORATORY TESTING DATA SUMMARY

BORING	SAMPLE	DEPTH			IDENTIF	FICATION	TESTS				STRENGT	ΓН	C	ONSOLIDAT	ΓΙΟΝ	REMARKS
			WATER	LIQUID	PLASTIC	PLAS.	USCS	TOTAL	DRY	Type Test	PEAK	AXIAL STRAIN	Method	INITIAL CO	ONDITIONS	/
NO.	NO.		CONTENT	LIMIT	LIMIT	INDEX	SYMB.	UNIT	UNIT		SHEAR	@ PEAK		VOID	SATUR-	TEST
							(1)	WEIGHT	WEIGHT		STRENGTH	STRESS		RATIO	ATION	ID
		(ft)	(%)	(-)	(-)	(-)		(pcf)	(pcf)		(psi)	(%)		(-)	(%)	
B-3	ST-1	58-60						108.8								
B-3	ST-1	58.2	45.5													
B-3	ST-1	58.75	51.4													
B-3	ST-1B	59	50.8	58	28	30	CH	105.5	70.0				D2435	1.472	96	C20307
B-3	ST-1	59.3	50.5													
B-3	ST-1C	59.6	45.7				CH	109.4	75.1	CU@70	41.0	3.8				TRS4775
															·	

Note: (1) USCS symbol based on visual observation and Atterberg limits reported.

Prepared by: NG Reviewed by: GET Date: 1/12/2021 TerraSense, LLC 45H Commerce Way Totowa, NJ 07512 Project No.: 8110-20021-2 File: Indx21-2.xlsx Page 1 of 1



Specimen Information

	Water	LL	PI	Length	Diameter	Wet Unit	Dry Unit
	Content (%)			(inch)	(inch)	Weight (pcf)	Weight (pcf)
Initial	45.7			6.012	2.867	109.4	75.1
Final	43.1			5.891	2.831	112.4	78.6

CH, Gray, Fat clay. Silt seams noted.

Test Summary

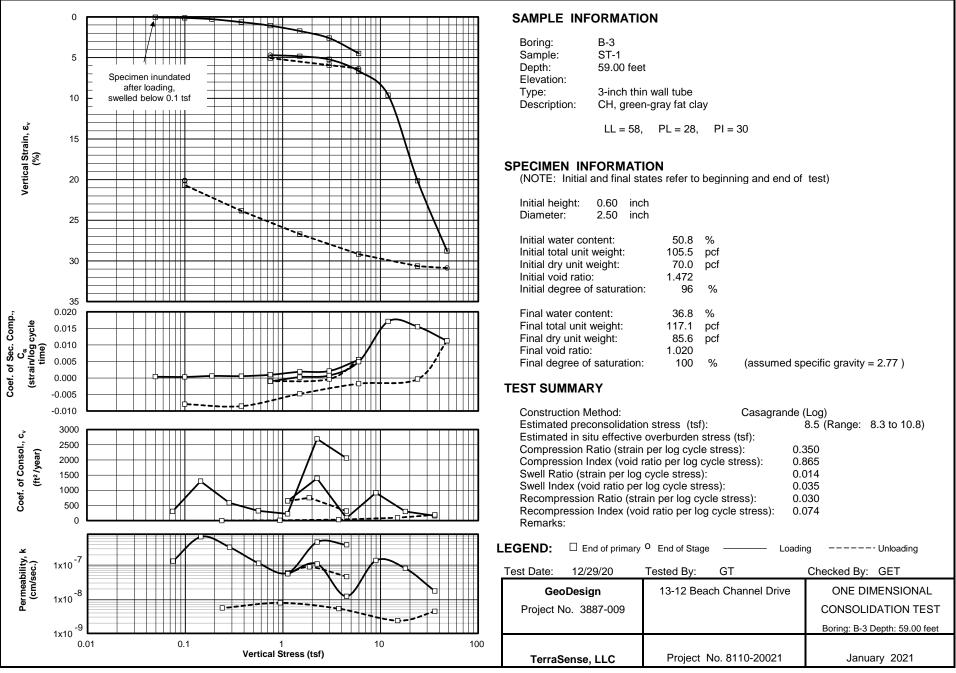
Cell Pressure	Axial Strain during	Peak Shear Strength	Strain to	Strain Rate
(psi)	confinement (%)	(psi)	Peak (%)	(%/min)
70.0	2.01	40.97	3.8	0.50

Tested by: BB Reviewed by: GET
Test Date: 12/22/2020 Review Date: 1/12/2021

Test Date:
GeoDesign

Project # 3887-009

TerraSense, LLC Project # 8110-20021 13-12 Beach Channel Drive



PROJECT: 13-12 Beach Channel Drive

PROJECT NO.: Initial height: Final height: 8110-20021 0.604 inch 0.493 inch Initial water content: 50.8 % Final water content: 36.8 % **BORING:** B-3 SAMPLE: ST-1 70.0 pcf Initial dry density: Final dry density: 85.6 pcf TEST: C20307 Initial total density: 105.5 pcf Final total density: 117.1 pcf DEPTH, feet: 59 Initial saturation: 96 % Final saturation: 100 % GT 1.020 BY: Initial void ratio: 1.472 Final void ratio: TEST DATE: 12/29/2020 18.3 % Final strain:

EQUIPMENT: SPECIMEN DESCRIPTION: CH, green-gray fat clay

Load Frame No.: 3

Ring Diameter: 2.5 inch G LL PL PI 2.77 58 28 30

	Load	d ₁₀₀	t ₁₀₀	t ₁₀₀	Final	Final	C_{V}	$C_{\scriptscriptstyle{lpha}}$	Constrained	Permeability
Load			Strain	Void Ratio	Strain	Void Ratio			Modulus	
No.	(tsf)	(inch)	(%)	(-)	(%)	(-)	(ft²/year)	(strain/logt)	(tsf)	(cm/sec)
1	0.050	0.0004	0.060	1.470	0.007	1.472	400	0.0004	83	1E-07
2	0.100	0.0008	0.132	1.468	0.188	1.467	302	0.0003	70	1E-07
3	0.190	0.0017	0.286	1.465	0.507	1.459	1300	0.0006	58	7E-07
4	0.380	0.0039	0.645	1.456	0.824	1.451	585	0.0005	53	3E-07
5	0.750	0.0065	1.078	1.445	1.271	1.440	322	0.0010	86	1E-07
6	1.50	0.0105	1.746	1.429	2.084	1.420	223	0.0018	112	6E-08
7	3.00	0.0158	2.613	1.407	3.562	1.384	2695	0.0021	173	5E-07
8	6.00	0.0271	4.491	1.361	6.342	1.315	2060	0.0055	160	4E-07
9	3.00	0.0358	5.937	1.325	5.876	1.326	316	-0.0003	207	5E-08
10	0.750	0.0306	5.067	1.346	4.700	1.356	755	-0.0010	259	9E-08
11	1.50	0.0293	4.853	1.352	4.910	1.350	646	0.0003	350	6E-08
12	3.00	0.0316	5.236	1.342	5.493	1.336	1395	0.0007	391	1E-07
13	6.00	0.0402	6.666	1.307	7.373	1.289	85	0.0049	210	1E-08
14	12.0	0.0581	9.626	1.234	14.317	1.118	917	0.0171	203	1E-07
15	24.0	0.1217	20.156	0.974	23.402	0.893	302	0.0155	114	8E-08
16	48.0	0.1737	28.782	0.760	30.880	0.708	160	0.0112	278	2E-08
17	24.0	0.1849	30.635	0.715	30.519	0.717	189	-0.0003	1295	4E-09
18	6.00	0.1760	29.160	0.751	28.854	0.759	96	-0.0017	1220	2E-09
19	1.50	0.1612	26.709	0.812	26.208	0.824	32	-0.0048	184	5E-09
20	0.380	0.1440	23.853	0.882	23.108	0.901	10	-0.0085	39	8E-09
21	0.100	0.1248	20.683	0.961	20.115	0.975	2	-0.0079	8.83	6E-09

PHASE I ENVIRONMENTAL ASSESSMENT



13-12 BEACH CHANNEL DRIVE/REDFERN AVENUE

QUEENS, NY 11691

PREPARED FOR:	
CROSS RIVER BANK	

PHASE I ENVIRONMENTAL SITE ASSESSMENT REPORT 13-12 BEACH CHANNEL DRIVE/REDFERN AVENUE QUEENS, NY 11691 DATE ISSUED: NOVEMBER 7, 2018

PREPARED BY: SINGER ENVIRONMENTAL GROUP, LTD. 5318 NEW UTRECHT AVENUE BROOKLYN, NY 11219

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EXECUTIVE SUMMARY

Scope

Singer Environmental Group (SEG) has performed a Phase I Environmental Site Assessment (ESA) in general accordance with the scope of work and limitations set forth by SEG for the property located at 13-12 Beach Channel Drive/Redfern Avenue, Queens, NY (the "Property").

The Phase I Environmental Site Assessment is designed to provide the Client with an assessment concerning environmental conditions (limited to those issues identified in the report) as they exist at the property. This assessment was conducted utilizing generally accepted ESA industry standards in accordance with ASTM E 1527-13, *Standard Practice for Environmental Site Assessments: Phase 1 Environmental Site Assessment Process*.

Site Description

According to the NYC Department of Buildings (DOB), this property is known as 13-12 Beach Channel Drive/Redfern Avenue with a block and lot of 15528, 5. The DOB has a zoning of "Store" building use. According to NYC Oasis Information, the zoning is R5 with a commercial overlay of C1-2. The Property is situated on an irregular shaped parcel of land comprised of 10,500 Sq. Ft. The parcel of land is situated in a residential/commercial area of Queens consisting of store type land use. The Property is a one story plus mezzanine building containing a fast food restaurant (KFC) and associated parking lot.

Site History

According to NYC Oasis information, this building was built in 1971. According to Certificate of Occupancy dated 1958@ 13-10 Beach Channel Drive (Lots 1, 5, 6): Open parking lot for more than five motor vehicles. The subject property is lot #5 which according to the 1958 Certificate of Occupancy this site was part of a parking lot along with lots #1 and 6, prior to the construction of the current structure. According to Certificate of Occupancy dated 1970: New Building- Eating Place, Accessory parking for 12 cars. A City Directory Abstract search was conducted to determine the historic commercial tenants. The following tenants are listed: SQKFC Inc-2010, 2014, KFC-2005, 2000, 1991, 1976, Take Out Location-1976. According to knowledgeable sources, the fast food restaurant has occupied the premises for more than 10 years.

Asbestos Containing Material (ACM), Lead Based Paint (LBP), Mold

SEG conducted limited visual asbestos containing material (ACM), lead-based paint (LBP) hazard and mold survey as part of this assessment. No lead based paint or mold hazards was noted during this inspection. SEG did not observe any visible and/or friable ACM.

Heating System, Above/Underground Storage Tanks

SEG observed a gas fired HVAC Unit on the roof. No aboveground storage tank, indications of an underground storage tank, vent or fill was noted. No fuel oil applications were filed with the Department of Buildings.

Polychlorinated Biphenyls (PCBs)

SEG did not observe any PCB's during this inspection.

Site Observations

First Floor - Ceramic floor tile, sheetrock/tile/laminate walls,

2'x2'/2'x4' ceiling tile. Prep area, ansul system, grease rap, gas meter, walk in refrigerator, electric meter/panel,

Co2 tank for beverages.

Mezzanine - Hot water tank, storage, walk in freezer.

Roof - Gas fired HVAC Unit.

Exterior - Parking-Storm drain.

Data Gaps

Data gaps in excess of the recommended 5-year interval were encountered. However, based on the available information reviewed, these historical data gaps are not considered to be a concern and are not expected to alter the conclusions or recommendations of this assessment.

STATE AND F.	EDERAL DATA	BASE SUM	MARY TABLE
Regulatory Database	Approximate Minimum Search Distance	Subject Property Listed	Off-site Listings within search distance
Federal NPL (National Priority List) Sites	1.0 Mile	No	0
Federal Delisted NPL Sites	1.0 Mile	No	0
Federal CERCLIS Sites	0.5 Mile	No	0
Federal CERCLIS NFRAP Sites	0.5 Mile	No	0
Federal RCRA CORRACTS Sites	1.0 Mile	No	0
Federal RCRA Non-CORRACTS TSD Sites	0.5 Mile	No	0
Federal RCRA Generators Sites	.250 Mile	No	2
State NY SHWS (State Hazardous Waste) Sites	1.0 Mile	No	1
State Solid Waste Facility/Landfill	0.5 Mile	No	4
NY LTANKS (Leaking Underground Storage	0.5 Mile	No	21
Tanks)			
NY Underground Storage Tanks	.250 Mile	No	10
NY Spills	.125 Mile	No	4
Vapor Reopened	1.0 Mile	No	0

"E" (Environmental Designation)

The subject property is an "E" Designated site with the NYC Department of Planning for Hazmat and Noise.

Due to the fact that the site has an E-Designation for Hazardous Materials, in accordance with OER's (Office of Environmental Remediation) requirements, prior to obtaining a building permit for redevelopment of the Site, the following must be performed: a) preparation of a Phase II Investigation Work Plan, 2) implementation of an OER-approved Phase II Investigation, 3) preparation of a Phase II Investigation/Remedial Investigation report, and 4) preparation of an OER approved Remedial Action Work Plan. The foregoing must address all environmental subsurface conditions at the site, including soil, soil vapor, ground water and vapor intrusion.

While the Noise E-Designation of the site is not considered a recognized environmental condition, in accordance with OER's requirements, prior to obtaining a building permit for redevelopment of the Site, a Noise Remedial Work Plan must be prepared and approved by OER.

Surrounding Areas

A dry cleaners is located to the south of the subject property.

According to Environmental Data Resources (EDR), a dry cleaners is listed at 21-40 Mott Avenue from 1975 through 2014. According to EDR, this site is listed at a lower elevation than the subject property.

A commercial building with a sign stating "Cleaners" is located to the east of the subject property. According to EDR, a dry cleaners is listed at 20-88 Mott Avenue from 1986 through 2014. This site is located across the street from the subject property.

ASSESSMENT SUMMARY TABLE					
Assessment Component	Section(S)	Recommended Actions	Estimated Cost		
Historical Review	3.0	No Further Action At This Time	N/A		
Current Occupants/Operations	2.2	No Further Action	N/A		
Hazardous Substances/Petroleum Products	5.3.1	No Further Action	N/A		
Drains, Sumps & Storm Water Dry Wells	5.3.5	No Further Action	N/A		
Storage Tanks	5.3.6	No Further Action	N/A		
PCB's	5.3.3	No Further Action	N/A		
Regulatory Agency/Database Review	7.0	No Further Action At This Time	N/A		
Asbestos Containing Materials	5.3.10	No Further Action	N/A		
Lead-Based Paint	5.3.12	No Further Action	N/A		
Lead In Drinking Water	5.3.8	No Further Action	N/A		
Radon	5.3.11	No Further Action	N/A		
Mold	5.3.12	No Further Action	N/A		
Wetlands	4.4	No Further Action	N/A		

CONCLUSIONS AND RECOMMENDATIONS

SEG has performed a Phase I Environmental Site Assessment in conformance with the scope and limitations of ASTM Practice E 1527-13 of 13-12 Beach Channel Drive/Redfern Avenue, QUEENS, NY, the Property. Any exceptions to or deletions from this practice are described in Section 1.4 of this report. This assessment has revealed no evidence of recognized environmental conditions in connection with the Property except for the following:

➤ A dry cleaners is located to the south of the subject property.

According to Environmental Data Resources (EDR), a dry cleaners is listed at 21-40 Mott Avenue from 1975 through 2014. According to EDR, this site is listed at a lower elevation than the subject property.

A commercial building with a sign stating "Cleaners" is located to the east of the subject property. According to EDR, a dry cleaners is listed at 20-88 Mott Avenue from 1986 through 2014. This site is located across the street from the subject property.

The subject property is an "E" Designated site with the NYC Department of Planning for Hazmat and Noise.

Due to the fact that the site has an E-Designation for Hazardous Materials, in accordance with OER's (Office of Environmental Remediation) requirements, prior to obtaining a building permit for redevelopment of the Site, the following must be performed: a) preparation of a Phase II Investigation Work Plan, 2) implementation of an OER-approved Phase II Investigation, 3) preparation of a Phase II Investigation/Remedial Investigation report, and 4) preparation of an OER approved Remedial Action Work Plan. The foregoing must address all environmental subsurface conditions at the site, including soil, soil vapor, ground water and vapor intrusion.

While the Noise E-Designation of the site is not considered a recognized environmental condition, in accordance with OER's requirements, prior to obtaining a building permit for redevelopment of the Site, a Noise Remedial Work Plan must be prepared and approved by OER.

1.0 INTRODUCTION

Singer Environmental Group (SEG) was retained to conduct a Phase I Environmental Site Assessment (ESA) of the property located at 13-12 Beach Channel Drive/Redfern Avenue, QUEENS, NY 11691 (the Property). The protocol used for this assessment is in general conformance with ASTM E 1527-13, Standard Practice for Environmental Site Assessments: Phase 1 Environmental Site Assessment Process.

On October 29, 2018, Shemon Singer, a representative of SEG, conducted a site reconnaissance to assess the possible presence of petroleum products and hazardous materials at the Property. SEG's investigation included review of reconnaissance of adjacent properties, background research, and review of available local, state, and federal regulatory records regarding the presence of petroleum products and/or hazardous materials at the Property.

SEG contracted Environmental Data Resources (EDR) of Southport, Connecticut to perform a computer database search for local, state, and Federal regulatory records pertaining to environmental concerns for the Property and properties in the vicinity of the Property (see Section 7.0).

1.1 PURPOSE

The purposes of this Phase I Environmental Site Assessment ("ESA") are: To identify existing or potential Recognized Environmental Conditions (as defined by ASTM Standard E-1527-13) in connection with the Property. SEG understands that the findings of this study will be used by the Client to evaluate a pending financial transaction in connection with the Property.

1.2 SCOPE OF SERVICES

The scope of work for this ESA is in accordance with the requirements of ASTM Standard E 1527-13. SEG warrants that the findings and conclusions contained herein were accomplished in accordance with the methodologies set forth in the Scope of Work. These methodologies are described as representing good commercial and customary practice for conducting an Environmental Site Assessment of a property for the purpose of identifying recognized environmental conditions.

No other warranties are implied or expressed.

1.3 ASSUMPTIONS

There is a possibility that even with the proper application of these methodologies there may exist on the Property conditions that could not be identified within the scope of the assessment or which were not reasonably identifiable from the available information. SEG believes that the information obtained from the record review and the interviews concerning the site is reliable. However, SEG cannot and does not warrant or guarantee that the information provided by these other sources is accurate or complete. The methodologies of this assessment are not intended to produce all inclusive or comprehensive results, but rather to provide the Client with information relating to the Property.

1.4 LIMITATIONS AND EXCEPTIONS

The findings and conclusions contain all of the limitations inherent in these methodologies that are referred to in ASTM 1527-13. An environmental lien search was not conducted as part of the scope of this Phase I Environmental Site Assessment.

1.5 USER PROVIDED INFORMATION

Pursuant to ASTM E 1527-2013, the following site information was requested from the Client (User of this report), by SEG.

Item	Provided by User	Not Provided by user	Discussed Below	Does Not Apply
2.1.1		X		
Environmental Pre-Survey				
Questionnaire				
2.1.2		X		
Title Records				
2.1.3		X		
Environmental Liens or Activity and				
Use Limitation				
2.1.4		X		
Specialized Knowledge				
2.1.5		X		
Valuation Reduction for Environmental				
Issues				
2.1.6		X		
Identification of Key Site Manager				
2.1.7	Yes, See Section			
Reason For Performing Phase I	1.1			
2.1.8		X		
Prior Environmental Reports				
2.1.9		X		
Other				

1.6 INTERVIEWS

The property manager, Mark was interviewed during the site reconnaissance on October 29, 2018. Mark did not indicate the presence of any environmental liens or was unaware of any contamination concerns regarding the Subject Property.

Regulatory Officials

A FOIL Request was submitted to the NYS Department of Environmental Conservation (NYS DEC), NYC Department of Health (DOH) and the NYC Department of Environmental Protection (DEP)

1.7 SPECIAL TERMS AND CONDITIONS

The conclusions and findings set forth in this report are strictly limited in time and scope to the date of the evaluations. The conclusions presented in the report are based solely on the services described therein, and not on scientific tasks or procedures beyond the scope of agreed-upon services or the time and budgeting restraints imposed by the client. No subsurface exploratory drilling or sampling was done under the scope of this work. Unless specifically stated otherwise in the report, no chemical analyses have been performed during the course of this ESA.

Some of the information provided in this report is based upon personal interviews, and research of available documents, records, and maps held by the appropriate government and private agencies. This is subject to the limitations of historical documentation, availability, and accuracy of pertinent records, and the personal recollections of those persons contacted.

SEG, their principals and employees are indemnified for any future changes or conditions of deterioration in or on the subject property. Inasmuch as each has made not guarantees of the premises, expressed or implied in connection with this report, any liability which each may have shall be limited to the fee for the inspection of the property.

1.8 USE RELIANCE

Cross River Bank, in evaluating a request for an extension of credit (the "Mortgage Loan") to be secured by the property may rely upon this report. This information also may be used by any actual or prospective purchaser, transferee, assignee, or servicer of the Mortgage Loan, any actual or prospective investor (including agent or advisor) in any securities evidencing a beneficial interest in or backed by the Mortgage Loan, any rating agency actually or prospectively rating any such securities, any indenture trustee, and any institutional provider(s) from time to time of any liquidity facility or credit support for such financing. In addition, this report or a reference to this report, may be included or quoted in any offering circular, registration statement, or prospectus in connection with a securitization or transaction involving the Mortgage Loan and/or such securities. This report has no other purpose and should not be relied upon by any other person or entity.

2.0 SITE DESCRIPTION

2.1 PROPERTY LOCATION AND JURISDICTION

The address of the Property is 13-12 Beach Channel Drive/Redfern Avenue, QUEENS, NY. The Property is located in a residential/commercial area of Queens. According to the NYC Department of Buildings, the block and lot numbers are 15528, 5. The legal description is reproduced below:

According to the NYC Department of Buildings (DOB), this property is known as 13-12 Beach Channel Drive/Redfern Avenue with a block and lot of 15528, 5. The DOB has a zoning of "store" building use. According to NYC Oasis Information, the zoning is R5 with a commercial overlay of C1-2. NYC Oasis records a lot area of 10,500 sq. ft., lot frontage 40 feet, lot depth 183 feet and a building gross area of 1,400 Sq. Ft. This property is located on the corner of Beach Channel Drive and Redfern Avenue.

According to NYC Oasis Information, the Property is currently owned by MIB Real Estate Holdings.

2.2 PROPERTY DESCRIPTION AND IMPROVEMENTS

The Property consists of an irregular shaped parcel 10,500 ft. in size. The Property is designed for store purposes. The structure at the Property is 1 story in height and a mezzanine and comprise a total of 1,400 square feet of building space. The site contains a fast food restaurant (KFC) and associated parking lot.

3.0 HISTORICAL USE INFORMATION

3.1 SITE HISTORY

According to NYC Oasis information, this building was built in 1971. According to Certificate of Occupancy dated 1958@ 13-10 Beach Channel Drive (Lots 1, 5, 6): Open parking lot for more than five motor vehicles. The subject property is lot #5 which according to the 1958 Certificate of Occupancy this site was part of a parking lot along with lots #1 and 6, prior to the construction of the current structure. According to Certificate of Occupancy dated 1970: New Building- Eating Place, Accessory parking for 12 cars. A City Directory Abstract search was conducted to determine the historic commercial tenants. The following tenants are listed: SQKFC Inc-2010, 2014, KFC-2005, 2000, 1991, 1976, Take Out Location-1976. According to knowledgeable sources, the fast food restaurant has occupied the premises for more than 10 years.

4.0 ENVIRONMENTAL SETTING

4.1 TOPOGRAPHY

The United States Geological Survey (USGS), Queens Quadrangle 7.5-Minute series topographic map was reviewed for this ESA. This map was published by the USGS in 1966 and was photorevised in 1995. A review of the USGS 7.5 Minute Topography map was conducted. Based on the topographical gradients, the groundwater flow is assumed to be in a southwesterly direction.

4.2 SOILS

Soil types in the area are generally loamy sand, silt loam, sandy loam and fine sandy loam.

4.3 GEOLOGY

There are no predominant geological surface features on the subject property. The elevation of the property is 25 feet above sea level.

4.4 HYDROLOGY

The nearest surface water in the vicinity of the Property is the Motts Basin. No settling ponds, lagoons, surface impoundments, wetlands or natural catchbasins were observed at the Property during this investigation.

4.5 FLOOD ZONE INFORMATION

Flood zone information and insurance should be addressed in the title report.

4.6 OIL AND GAS EXPLORATION

The on-site reconnaissance addressed oil and gas exploration at the Property. According to the NYS Department of Conservation, Division of Oil, Gas no operating or abandoned oil or gas wells are on or adjacent to the Property.

5.0 SITE RECONNAISSANCE

5.1 METHODOLOGY AND LIMITING CONDITIONS

The Property was inspected by Shemon Singer on October 29, 2018. The weather at the time of the site visit was cloudy, 56 degrees. SEG accessed the common areas, mezzanine, first floor and associated parking lot.

GENERAL SITE CHARACTERISTICS SOLID WASTE DISPOSAL dled by Private Sanitation. URFACE WATER DRAINAGE reams on the subject property. WELLS AND CISTERNS
dled by Private Sanitation. URFACE WATER DRAINAGE reams on the subject property.
URFACE WATER DRAINAGE reams on the subject property.
reams on the subject property.
WELLS AND CISTERNS
isterns was observed during the site reconnaissance.
5.2.4 WASTEWATER
r disposal or treatment facilities were observed during the
DITIONAL SITE OBSERVATIONS
cteristics were observed.
TIAL ENVIRONMENTAL CONDITIONS
TERIALS AND PETROLEUM PRODUCTS USED FORED AT THE SITE
aterials or wastes was observed on the Property.
BELED CONTAINERS AND DRUMS
observed during the Site reconnaissance.
TIONS OF REGULATED/ HAZARDOUS WASTE

No obvious indications of hazardous waste generator, storage or disposal were observed on the property or were indicated during interview.

5.3.2 EVIDENCE OF RELEASES

No obvious indications of hazardous material or petroleum product releases, such as stained areas or stressed vegetation, was observed during the site reconnaissance or reported during interviews. **See conclusions and recommendations.**

5.3.3 POLYCHLORINATED BIPHENYLS (PCBS)

An inspection was conducted at the subject property and in the immediate vicinity for the presence of any underground, surface or suspended transformers and visible power supply sources. Oilcontaining transformers are known to frequently contain PCBs (Polychlorinated biphenyl's). PCBs are contained in older transformers and other electrical equipment and have the potential for serious health risks. The level of PCB content in such transformers and electrical equipment is regulated by the U.S. Environmental Protection Agency, Regulations 40 CFR Part 761. Upon visual inspection, NO suspended transformers power supply sources were identified. Contact with Con Edison has nevertheless been made to determine definitely if any equipment owned and/or maintained by Con Edison located on or in the immediate vicinity of the subject property contain PCB's.

Older transformers and other electrical equipment could contain polychlorinated biphenyls (PCBs) at a level that subjects them to regulation by the U.S. EPA. PCBs in electrical equipment are controlled by United States Environmental Protection Agency regulations 40 CFR, Part 761. Under the regulations, there are five categories into which electrical equipment can be classified:

- Less than 50 parts per million (PPM) of PCBs "Non-PCB" transformer
- > 50 ppm-500 ppm "PCB-Contaminated" electrical equipment
- ➤ Greater than 500 ppm "*PCB*" transformer

5.3.4 LANDFILLS

No evidence of on-site landfilling was observed or reported during the site reconnaissance.

5.3.5 PITS, PONDS, LAGOONS, SUMPS, AND CATCH BASINS

No evidence of on-site pits, ponds or lagoons was observed or reported during the site reconnaissance. No evidence of sumps or catch basins, other than used for storm water removal, was observed or reported during the site reconnaissance.

5.3.6 ON-SITE ASTS AND USTS

SEG observed a gas fired HVAC Unit on the roof. No aboveground storage tank, indications of an underground storage tank, vent or fill was noted. No fuel oil applications were filed with the Department of Buildings.

5.3.7 RADIOLOGICAL HAZARDS

No radiological substances or equipment was observed or reported stored on the Property.

5.3.8 LEAD IN DRINKING WATER

Lead has historically been used in pipes, solder, and brass fixtures used in water distribution systems and building plumbing systems. In 1986, the USEPA banned the use of lead at concentrations exceeding 0.2% lead in colder and 8% lead in other plumbing materials. Lead in drinking water results primarily from corrosion of lead containing materials in service lines or from corrosion of lead containing materials in building plumbing such as lead solder, brass, bronze, and other leading containing alloys. The USEPA Action Level for lead in public drinking water supplies is 0.015 parts per million (ppm) or 0.015 milligrams per liter (mg/L).

The New York City Department of Environmental Protection Water Supply Division provides potable water to the building. Potable drinking water used in the system is obtained from groundwater wells and various lakes and reservoirs located in the Upstate New York area (Croton Reservoir). Based upon information supplied from the USEPA's Safe Drinking Water Information System (SDWIS), there is no indication that lead in drinking water is a concern at the subject property. In accordance with the scope of work for this assessment, SEG did not conducted lead-in –drinking water sampling at the subject property.

5.3.9 ASBESTOS-CONTAINING MATERIALS (ACM)

Asbestos is a term used to describe a group of six naturally occurring crystalline fiber minerals. Asbestos has excellent thermal stability, a high degree of tensile strength, and has been used extensively in the textile, insulation, and building industries, particularly as a component in fireproofing, decorative coatings, insulation materials, and as reinforcement for plaster binders in building products. Asbestos-containing building materials are generally classified as friable or non-friable. Friable ACM are those which can be crumbled, pulverized, or reduced to powder by hand pressure, or by normal use or maintenance can be expected to emit asbestos fibers into the air. Non-friable ACM is a potential concern if it is damaged by maintenance work, demolition or other activities, at which time it may be considered friable.

It should be noted that the limited visual screening survey conducted under the scope of work for this assessment does not constitute a full asbestos inspection, in which all areas of the building would have been thoroughly surveyed and sampled.

SEG did not observe any visible and/or friable ACM.

Please note: NO core samples were taken during this inspection, in the event of change in present status, eg, demolition, alteration, modification, all materials should tested and verified free of any ACM.

5.3.10 RADON

The US EPA has prepared a map to assist National, State, and local organizations to target their resources and to implement radon-resistant building codes. The map divides the country into five Radon Zones, Zone 1 being those areas with the average predicted indoor radon concentration in residential dwellings exceeding the EPA Action limit of 4.0 picoCuries per Liter (pCi/L). It is important to note that the EPA has found homes with elevated levels of radon in all five zones, and the EPA recommends site specific testing in order to determine radon levels at a specific location. However, the map does give a valuable indication of the propensity of radon gas accumulation in structures. This property is located in Zone 3.

Review of the EPA Map of Radon Zones places the Property in Zone 3, where average predicted radon levels are less than 2.0 pCi/L below the EPA action level of 4.0 pCi/L.

5.3.11 LEAD-BASED PAINT

Use of lead in household paint was banned by the US Environmental Protection Agency (EPA) effective January 1, 1978. The EPA and the US Department of Housing and UR6ABan Development (HUD) consider lead based paint as containing a lead concentration equal to or greater than 1.0 milligram per square centimeter (mg/cm') or 0.5% lead by weight, as defined by Title X of the 1992 Housing and Community Development Act.

Paint samples were <u>NOT</u> taken for lead content. However, in older buildings it is likely that lead based paint was used within the multi-layered painted surfaces. (Lead based paint was banned in 1978). Lead paint can be hazardous if digested, especially by small children.

SEG observed that the painted surfaces inside the building were in good condition, free of obvious chipping, flaking or peeling.

Lead violations, if any, should show up on the Title Report.

Please note: NO core samples were taken during this inspection, in the event of change in present status, eg, demolition, alteration, modification, all materials should tested and verified free of any Lead Based Paint.

5.3.12 MOLD

Molds are a class of fungi, and have been found to cause a variety of health problems in humans, including allergic, toxicological, and infectious responses. Molds are decomposers of organic materials, and thrive in humid environments. As such, interior areas of buildings characterized by poor ventilation and high humidity are the most common location of mo9ld growth. Building materials including drywall, wallpaper, baseboards, wood framing, insulation and carpeting often play host to such growth.

As part of this assessment, SEG performed a limited visual inspection for the conspicuous presence of mold. SEG observed the accessible areas at the subject property for the presence of conspicuous mold or observed water intrusion of accumulation. This evaluation did not include a review of pipe chases or areas behind enclosed walls and ceilings. SEG did not observe conspicuous visual or olfactory indications of the presence of mold, nor did SEG observe obvious indications of significant water damage inside the building.

Mold violations, if any, should show up on the Title Report.

5.3.13 VAPOR ENCROACHMENT/VAPOR INTRUSION

A Vapor Encroachment Condition (VEC) is defined by ASTM E2600-10 as the presence or likely presence of contaminant of concern (COC) vapors in the subsurface of the Target Property (TP) caused by the release of vapors from the contaminated soil or groundwater or both either or near the TP. Vapor Intrusion (VI) occurs when contaminated of concern (COC) vapors enter a structure from subsurface and impact the indoor air quality (IAQ) of a building. At high enough concentrations, vapor intrusion may present a health risk to the building's occupants. SEG conducted a review of historical resources and regulatory database listings to identify any potential sources of contaminations at the subject site that may result in Vapor Encroachment or Vapor Intrusion. In addition, SEG has reviewed available information for surrounding properties within the appropriate search distances to identify potential sources of VEC/VIC at the subject site.

This is not intended to meet the criteria of a Vapor Encroachment Screen (VES) as outlined by ASTM E2600-10 Standard Guide for Vapor Encroachment Screening on Property Involved in Real Estate Transaction. This is beyond the scope of a Phase I ESA.

FINDINGS:

The NYS DEC maintains a list of sites that have the potential for vapor intrusion and are being reevaluated.

The Subject Property is not included on the Vapor Reopened listing. No Vapor Reopened facilities are located <1/8 to one mile of the Property.

See conclusions and recommendations.

6.0 CURRENT USE OF ADJOINING PROPERTIES

During the vicinity reconnaissance, SEG observed the following land use on properties in the immediate vicinity of the Property.

6.1 CURRENT USE

	Current Use			
North	Areas immediately adjacent to the north of the property included the following:			
	Church/Residential			
South	Areas immediately adjacent to the south of the property included the following:			
	Deli/Residential, Stores, Dry Cleaners			
West	Areas immediately adjacent to the west of the property included the following:			
	Laundromat			
East	Areas immediately adjacent to the east of the property included the following:			
	Commercial building with a sign depicting cleaners			

6.2 HISTORICAL USE

	Historical Use		
North	Areas immediately adjacent to the north of the property included the following: Church/Residential		
	Church Residential		
South	Areas immediately adjacent to the south of the property included the following:		
Deli/Residential, Stores, Dry Cleaners			
West	Areas immediately adjacent to the west of the property included the following:		
	Laundromat		
East	Areas immediately adjacent to the east of the property included the following:		
	Commercial building with a sign depicting cleaners		

7.0 RECORDS REVIEW

7.1 STANDARD ENVIRONMENTAL RECORD SOURCES

7.1.1 STATE AND FEDERAL REGULATORY REVIEW

Information from standard Federal and state environmental record sources was provided through Environmental Data Resources (EDR). Data from governmental agency lists are updated and integrated into one database, which is updated as these data are released. This integrated database also contains postal service data in order to enhance address matching. Records from one government source are compared to records from another to clarify any address ambiguities. The demographic and geographic information available provides assistance in identifying and managing risk. The accuracy of the geocoded locations is approximately +/-300 feet.

In some cases, location information supplied by the database provider is insufficient to allow geocoded facility locations. These facilities are listed under the unmappables section within the EDR report. A review of the unmappable facilities indicated that none of these facilities are within the ASTM minimum search distance from the Property.

Regulatory information from the following database sources regarding possible recognized environmental conditions, within the ASTM minimum search distance from the Property, was reviewed. Specific facilities are discussed below if determined likely that a potential recognized environmental condition has resulted at the Property from the listed facilities. Please refer to Appendix C-1 for a complete listing.

Federal NPL

The National Priorities List (NPL) is the Environmental Protection Agency (EPA) database of uncontrolled or abandoned hazardous waste sites identified for priority remedial actions under the Superfund Program.

No NPL sites are located within one mile of the Property.

Federal CERCLIS List

The Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) list is a compilation of sites that the EPA has investigated or is currently investigating for a release or threatened release of hazardous substances.

No CERCLIS sites are listed within one-half mile of the Property.

Federal CERCLIS NFRAP Sites List

The CERCLIS No Further Remedial Action Planned (NFRAP) List is a compilation to human health or the environment, under the CERCLA framework.

No CERCLIS NFRAP sites are listed within ½ mile of the Property.

Federal Resource Conservation and Recovery Act (RCRA) CORRACTS TSD

Facilities List

The EPA Resource Conservation and Recovery Act (RCRA) Program identifies and tracks hazardous waste from the point of generation to the point of disposal. The RCRA Treatment, Storage and Disposal (TSD) database is a compilation by the EPA of reporting facilities that treat, store or dispose of hazardous waste. The CORRACTS database is the EPA's list of treatment storage or disposal facilities subject to corrective action under RCRA.

No RCRA CORRACTS TSD facilities are listed within one mile of the Property.

Federal Resource Conservation and Recovery Act (RCRA) CORRACTS Facilities

List

The RCRA CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

No (RCRA) CORRACTS sites are listed within one-half mile of the Property.

Federal RCRA Generator List

The RCRA program identifies and tracks hazardous waste from the point of generation to the point of disposal. The RCRA Generators database is a compilation by the EPA of reporting facilities that generate hazardous waste.

2 Sm. Quantity RCRA Generator facilities are listed within ½ mile of the Property.

Federal Emergency Response Notification System (ERNS)

The Emergency Response Notification System (ERNS) is a national database used to collect information or reported release of oil or hazardous substances.

No ERNS sites were listed on the Property or on the adjacent properties.

State Priority List

The database maintains a State Priority List (SPL) of sites considered to be actually or potentially contaminated and presenting a possible threat to human health and the environment.

No SPL sites are listed within one mile of the Property.

State CERCLIS-Equivalent List

The database maintains a State CERCLIS-equivalent list (SCL) of sites under investigation that could be actually or potentially contaminated and presenting a possible threat to human health and the environment.

No SCL sites are listed within one-half mile of the Property.

Solid Waste/Landfill Facilities (SWLF)

A database of SWLF is listed.

4 SWLF facilities are listed within one-half mile of the Property.

➤ Based upon the review of available information, the above listed facilities are not anticipated to directly impact the Property and no further investigation is warranted.

Inactive Hazardous Waste Disposal Sites in New York State (SHWS)

A database of SHWS is listed.

1 SHWS facilities are listed within one-half mile of the Property.

➤ Based upon the review of available information, the above listed facilities are not anticipated to directly impact the Property and no further investigation is warranted.

State Leaking Underground Storage Tank List (LUST)

The NYS DEC compiles lists of all leaks of hazardous substances from underground storage tanks.

21 LUST sites are listed within one-half mile of the Property.

➤ Based upon the review of available information, the above listed facilities are not anticipated to directly impact the Property and no further investigation is warranted.

State Underground Storage Tank List (UST)

The NYS DEC compiles lists of all underground storage tanks located ¼ mile of the subject property.

10 UST sites are listed within one-quarter mile of the Property.

➤ Based upon the review of available information, the above listed facilities are not anticipated to directly impact the Property and no further investigation is warranted.

NY Spills Database

The NYS DEC compiles lists of all spills reported ¼ mile of the subject property.

4 NY Spill sites are listed within one-quarter mile of the Property.

➤ Based upon the review of available information, the above listed facilities are not anticipated to directly impact the Property and no further investigation is warranted.

Vapor Reopened

The NYS DEC maintains a list of sites that have the potential for vapor intrusion and are being reevaluated.

The Subject Property is not included on the Vapor Reopened listing. No Vapor Reopened facilities are located <1/8 to one mile of the Property.

See conclusions and recommendations.

7.1.2 LOCAL REGULATORY REVIEW

7.1.2.1 BUILDING DEPARTMENT

Electronic records from the city Building Department were reviewed for evidence indicating the developmental history of the Property, and for the presence of documentation relative to underground storage tanks.

7.1.2.2OTHER AGENCIES

FOIL Requests were submitted to the NYS DEC, NYC DEP and NYC DOH, to date no response has been received, when a response is received an addendum will follow.

8.0 FINDINGS AND CONCLUSIONS

8.1 FINDINGS 8.1.1 ON-SITE ENVIRONMENTAL CONDITIONS

The subject property is an "E" Designated site with the NYC Department of Planning for Hazmat and Noise.

8.1.2 OFF-SITE ENVIRONMENTAL CONDITIONS

A dry cleaners is located to the south of the subject property.

According to Environmental Data Resources (EDR), a dry cleaners is listed at 21-40 Mott Avenue from 1975 through 2014. According to EDR, this site is listed at a lower elevation than the subject property.

A commercial building with a sign stating "Cleaners" is located to the east of the subject property. According to EDR, a dry cleaners is listed at 20-88 Mott Avenue from 1986 through 2014. This site is located across the street from the subject property.

HISTORICAL RESOLVED ENVIRONMENTAL CONDITIONS

Findings which would once have been classified as Recognized Environmental Conditions, but are no longer of concern are classified as Historical Recognized Environmental Conditions. For example, a past release which has been corrected may be classified as an HREC.

No historical recognized environmental conditions were identified in connection with the Property during the course of this assessment.

8.1.4 DE MINIMIS ENVIRONMENTAL CONDITIONS

De Minimis environmental conditions indicate a release which generally would not represent a threat to human health and would generally not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies.

No *de minimis* environmental conditions were identified in connection with the Property during the course of this assessment.

8.1.4 CONTROLLED RECOGNIZED ENVIRONMENTAL CONDITIONS

A Controlled Recognized Environmental Condition exists hen a recognized environmental condition has been addressed to the satisfaction of the applicable regulatory authority with hazardous substances or petroleum products allowed to remain in place subject to the implementation of required controls; for example, where property use restrictions, activity and use limitations, institutional controls, or engineering controls are required as conditions of regulatory approval, or where cleanup has been completed to a commercial use standard, but does not meet unrestricted residential cleanup criteria, this would be considered a controlled recognized environmental condition. Despite the name, no evaluation of the adequacy, implementation, or continued effectiveness of the required controls is required in completion of the Phase I.

No Controlled Recognized Environmental Conditions were identified.

8.2 CONCLUSIONS AND RECOMMENDATIONS

SEG has performed a Phase I Environmental Site Assessment in conformance with the scope and limitations of ASTM Practice E 1527-2013 of 13-12 Beach Channel Drive/Redfern Avenue, QUEENS, NY, the Property. Any exceptions to or deletions from this practice are described in Section 1.4 of this report. This assessment has revealed no evidence of recognized environmental conditions in connection with the Property except for the following:

A dry cleaners is located to the south of the subject property.

According to Environmental Data Resources (EDR), a dry cleaners is listed at 21-40 Mott Avenue from 1975 through 2014. According to EDR, this site is listed at a lower elevation than the subject property.

A commercial building with a sign stating "Cleaners" is located to the east of the subject property. According to EDR, a dry cleaners is listed at 20-88 Mott Avenue from 1986 through 2014. This site is located across the street from the subject property.

The subject property is an "E" Designated site with the NYC Department of Planning for Hazmat and Noise.

Due to the fact that the site has an E-Designation for Hazardous Materials, in accordance with OER's (Office of Environmental Remediation) requirements, prior to obtaining a building permit for redevelopment of the Site, the following must be performed: a) preparation of a Phase II Investigation Work Plan, 2) implementation of an OER-approved Phase II Investigation, 3) preparation of a Phase II Investigation/Remedial Investigation report, and 4) preparation of an OER approved Remedial Action Work Plan. The foregoing must address all environmental subsurface conditions at the site, including soil, soil vapor, ground water and vapor intrusion.

While the Noise E-Designation of the site is not considered a recognized environmental condition, in accordance with OER's requirements, prior to obtaining a building permit for redevelopment of the Site, a Noise Remedial Work Plan must be prepared and approved by OER.

8.3 DEVIATIONS

This Phase 1 ESA substantially complies with the scope of services and ASTM 1527-13.

9.0 REFERENCES

Reports, Plans, and Other Documents Reviewed:

NYC Department of Buildings Property Profile Overview

NYC Department of Finance Assessment Roll

NYC Oasis Maps

Property Shark

USGS - 7.5 Minute Topographic Quadrangle of Central Park, New York-New Jersey, 1966, photorevised 1995.

Radius database report (13-12 Beach Channel Drive/Redfern Avenue, Inquiry # 5471477.6s dated 10-31-18)

Radon Zone Map

City Directory Abstract

Certificate of Occupancy

Agencies Contacted via FOIL Requests:

NYS DEC

NYC DEP

NYS DOH

10.0 CERTIFICATION

Phase I Environmental Site Assessment Conducted on

Address:	13-12 Beach Channel Drive/Redfern Avenue, Queens, NY

Prepared for

Client Name: Cross River Bank

I declare that, to the best of my professional knowledge and belief, I meet the definition of Environmental Professional as defined in 312.10 of 40 CFR 312 and I have the specific qualifications based on education, training, and experience to assess a property of the nature, history, and setting of the subject property. I have developed and performed all appropriate inquiries in conformance with the standards and practices set forth in 40 CFR Part 312.

Shemon Singer

Environmental Professional Signature

Prepared By

Singer Environmental Group, LTD. 5318 New Utrecht Avenue Brooklyn, NY 11219 (tel) 718-437-9600 (fax) 718-437-0082



View of the Subject Property



View of the storm drain



View of the gas fired HVAC Unit



View of the parking lot



View of the KFC Restaurant



View of the KFC Kitchen



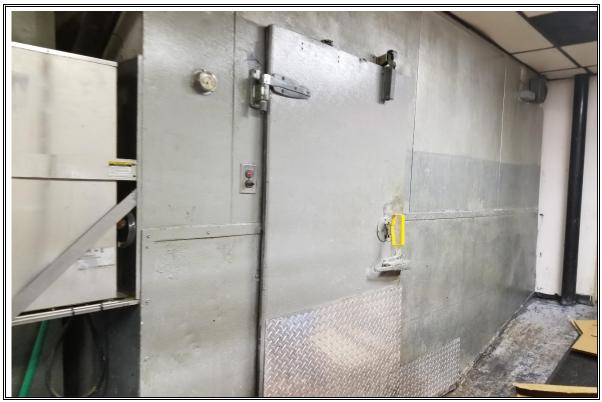
View of the ansul system



View of the grease trap



View of the gas meters



View of the walk in refrigerator



View of the water heater



View of the Co2 tank for beverages



View of the church/residential buildings located to the north of the subject property



View of the deli/residential buildings, located to the south of the subject Property



View of the stores, dry cleaners located to the south of the subject Property



View of the laundromat located to the west of the subject property



View of the commercial building (sign says cleaners) located to the east of the subject property

DEPARTMENT OF HOUSING AND BUILDINGS

BOROUGH OF

OUNTERS

. CITY OF NEW YORK

Date 1/7/58

CERTIFICATE OF OCCUPANCY

(Standard form adopted by the Board of Standards and Appeals and issued pursuant to Section 646 of the New York Charter, and Sections C.26-181.0 to C26-187.0 inclusive Administrative Code 2.1.3.1. to 2.1.3.7. Building Code.)

This certificate supersedes C. O. No.

To the owner or owners of the building or premises:

THIS CERTIFIES that the new altered existing building premises located at

13-10 Beach Channel Drive, MEC. Mott Ave.

Block 11

, conforms substantially to the approved plans and specifications, and to the requirements of the building code and all other laws and ordinances, and of the rules and regulations of the Board of Stand-

ards and Appeals, applicable to a building of its class and kind at the time the permit was issued; and CERTIFIES FURTHER that, any provisions of Section 646F of the New York Charter have been complied with as certified by a report of the Fire Commissioner to the Borough Superintendent.

NEW Alt No. Alt. 2244/57

Construction classification-

Occupancy classification-Councretal

. Height

stories.

feet

Date of completion—12/31/57

. Located in

Business

Use District.

D

. Height Zone at time of issuance of permit

This certificate is issued subject to the limitations hereinafter specified and to the following reso-Intions of the Board of Standards and Appeals:

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DEPARTMENT OF BUILDINGS

BOROUGH OF QUEENS , THE CITY OF NEW YORK

CERTIFICATE OF OCCUPANCY

O CHANGES OF USE OR OCCUPANCY NOT CONSISTENT WITH THIS CERTIFICATE SHALL

			OVED BY THE BOROUGH SUPERINTENDENT	
This cert	ificate supersedes (C. O. No.		
THIS C	ERTIFIES that	the new_XXXXXX	edisting building premises located at	
13-	12 Beach Ch	evial lears	Block 15528 Lot	E
That the	zoning lot and pre	mises above referre	d to are situated, bounded and described as follows:	٠.
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1312 Beach Channel Drive 1312 Beach Channel Drive

Far Rockaway, NY 11691

Inquiry Number: 5471477.9

November 01, 2018

The EDR-City Directory Abstract



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SECTION

Executive Summary

Findings

City Directory Images

Thank you for your business.Please contact EDR at 1-800-352-0050 with any questions or comments.

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EXECUTIVE SUMMARY

DESCRIPTION

Environmental Data Resources, Inc.'s (EDR) City Directory Abstract is a screening tool designed to assist environmental professionals in evaluating potential liability on a target property resulting from past activities. EDR's City Directory Abstract includes a search and abstract of available city directory data. For each address, the directory lists the name of the corresponding occupant at five year intervals.

Business directories including city, cross reference and telephone directories were reviewed, if available, at approximately five year intervals for the years spanning 1922 through 2014. This report compiles information gathered in this review by geocoding the latitude and longitude of properties identified and gathering information about properties within 200 feet of the target property.

A summary of the information obtained is provided in the text of this report.

RECORD SOURCES

EDR's Digital Archive combines historical directory listings from sources such as Cole Information and Dun & Bradstreet. These standard sources of property information complement and enhance each other to provide a more comprehensive report.

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RESEARCH SUMMARY

The following research sources were consulted in the preparation of this report. An "X" indicates where information was identified in the source and provided in this report.

<u>Year</u>	Source	<u>TP</u>	<u>Adjoining</u>	Text Abstract	Source Image
2014	EDR Digital Archive	Χ	X	X	-
2010	EDR Digital Archive	Χ	X	X	-
2005	Hill-Donnelly Information Services	-	X	X	-
	Hill-Donnelly Information Services	Χ	X	X	-
2000	Cole Information Services	-	X	X	-
	Cole Information Services	Χ	X	X	-
1996	NYNEX	-	-	-	-
1991	NYNEX Information Resource Company	-	X	X	-
	NYNEX Information Resource Company	Χ	X	X	-
1983	New York Telephone	-	X	X	-
1976	New York Telephone	-	X	X	-
	New York Telephone	Χ	X	X	-

EXECUTIVE SUMMARY

<u>Year</u>	<u>Source</u>	<u>TP</u>	<u>Adjoining</u>	Text Abstract	Source Image
1970	New York Telephone	-	X	X	-
1967	New York Telephone	-	X	X	-
1962	New York Telephone Directory	-	X	X	-
1950	New York Telephone	-	X	X	-
1945	New York Telephone	-	X	X	-
1939	New York Telephone Company	-	X	X	-
1934	R. L. Polk & Co.	-	X	X	-
1922	H.C. Morris	-	_	-	-

TARGET PROPERTY INFORMATION

ADDRESS

1312 Beach Channel Drive Far Rockaway, NY 11691

FINDINGS DETAIL

Target Property research detail.

Beach Channel Dr

1312 Beach Channel Dr

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2014	SQKFCINC	EDR Digital Archive
2010	SQKFCINC	EDR Digital Archive

BEACH CHANNEL DR

1312 BEACH CHANNEL DR

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2005	KFC 2 R	Hill-Donnelly Information Services
2000	Ky Fried Chicken	Cole Information Services
1991	Kentucky Fried Chicken	NYNEX Information Resource Company
1976	Kentucky Fried Chicken	New York Telephone
	Take Out Locations	New York Telephone

ADJOINING PROPERTY DETAIL

The following Adjoining Property addresses were researched for this report. Detailed findings are provided for each address.

BEACH CHANL

1315 BEACH CHANL

<u>Year</u>	<u>Uses</u>	<u>Source</u>
-------------	-------------	---------------

1991 Dans Prime Meats Inc NYNEX Information Resource Company

BEACH CHANL DR

1326 BEACH CHANL DR

<u>Year</u>	<u>Uses</u>	<u>Source</u>

1991 Beach Auto Parts Inc NYNEX Information Resource Company

Beach Channel Dr

1304 Beach Channel Dr

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2014	FAROS TAX SERVICE INC	EDR Digital Archive
2010	FAROS TAX SERVICE INC	EDR Digital Archive
	FAR ROCKAWAY EYECARE INC	EDR Digital Archive
	PAUL YEARWOOD A CORP	EDR Digital Archive
	P WOODYEAR CORP	EDR Digital Archive

BEACH CHANNEL DR

1304 BEACH CHANNEL DR

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2000	Far Rckwy Eye Cr	Cole Information Services
1983	Cohen Morris A atty	New York Telephone
1976	Cohen Morris A atty	New York Telephone
1970	Peninsula Car Svce	New York Telephone
	Peninsula Car Svce	New York Telephone

Beach Channel Dr

1305 Beach Channel Dr

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2014	WHITE CASTLE SYSTEM INC	EDR Digital Archive

<u>Year Uses</u>	<u>Source</u>
------------------	---------------

2010 WHITE CASTLE SYSTEM INC EDR Digital Archive

BEACH CHANNEL DR

1305 BEACH CHANNEL DR

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1976	Ace Wine & Liquor Store	New York Telephone
	J & T Wine & Liquor Store	New York Telephone
1970	Ace Wine & Liquor Store	New York Telephone
	J & T Wine & Liquor Store	New York Telephone
1962	Ace Wine & Liquor Store	New York Telephone Directory

1306 BEACH CHANNEL DR

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1970	B & L Auto Brokers	New York Telephone
	B & L Auta Brokers	New York Telephone
1962	Moss Carl roofng	New York Telephone Directory

1307 BEACH CHANNEL DR

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1976	Braverman Furn Outlet Inc	New York Telephone
1967	Empire Hrdwr	New York Telephone
1962	Empire Hrdwr	New York Telephone Directory
	Empire Hrdwr	New York Telephone Directory

1308 BEACH CHANNEL DR

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2005	Transitional Services Ny	Hill-Donnelly Information Services

1310 BEACH CHANNEL DR

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2005	Stevenson Tommie	Hill-Donnelly Information Services

Beach Channel Dr

1315 Beach Channel Dr

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2014	KLEEN & KLEENER	EDR Digital Archive
	BEACH CHANNEL LAUNDROMAT INC	EDR Digital Archive
2010	T & Z LAUNDROMAT CORPORATION	EDR Digital Archive
	BEACH CHANNEL LAUNDROMAT INC	EDR Digital Archive

<u>Year</u>	<u>Uses</u>	<u>Source</u>
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2010 KLEEN & KLEENER EDR Digital Archive

BEACH CHANNEL DR

1315 BEACH CHANNEL DR

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2005	Super Laundromat Is	Hill-Donnelly Information Services
1983	Country Style Meats	New York Telephone
1976	Cozzies Bar & Restrnt	New York Telephone
	Cosmos Bar & Restrnt	New York Telephone
	Ferrer Tony	New York Telephone
1970	Pacetta Cosmo restrnt & bar	New York Telephone
	Coazzis Bar & Restrnt	New York Telephone
	Cosmos Bar & Restrnt	New York Telephone
1967	Pacetta Cosmo restrnt & bar	New York Telephone
	Pacetta Cosmo bar grill	New York Telephone
	Cozzies Bar & Restrnt	New York Telephone
	Cosmos Bar & Restrnt	New York Telephone
1962	Pacetta Casmo restrnt & bar	New York Telephone Directory
	Cozzies Bar & Restrnt	New York Telephone Directory
	Cosmos Bar & Restrnt	New York Telephone Directory
1945	Gundershemer Elsie	New York Telephone

Beach Channel Dr

1316 Beach Channel Dr

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2010	M & IG VIDEO CORP	EDR Digital Archive
	LIGHT GOD INTL MIRACLE CTR INC	EDR Digital Archive
	F L & GILLES EXPORT IMPORT	EDR Digital Archive

BEACH CHANNEL DR

1316 BEACH CHANNEL DR

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2005	Town & Country Travel	Hill-Donnelly Information Services
	M & Ig Video Corp 1s	Hill-Donnelly Information Services
2000	J Johnson	Cole Information Services
	P Overstreet	Cole Information Services
	David & Dnkns Cltr	Cole Information Services

<u>Year</u>	<u>Uses</u>	Source
2000	M & Video Corp	Cole Information Services
1991	Davis Linda	NYNEX Information Resource Company
	Borgella Joel MD	NYNEX Information Resource Company
1983	Animal Clinic	New York Telephone
1976	Animal Clinic	New York Telephone
1970	Michaels Victor W DVM ofc	New York Telephone
1967	Animal Clinic	New York Telephone
	Michaels Victor W DVM ofc	New York Telephone
1962	Michaels Victor W DVM ofc N	New York Telephone Directory

Beach Channel Dr

1324 Beach Channel Dr

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2014	EMPIRE CAR WASH INC	EDR Digital Archive
2010	EMPIRE CAR WASH INC	EDR Digital Archive

BEACH CHANNEL DR

1324 BEACH CHANNEL DR

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2005	Empire Car Wash I s	Hill-Donnelly Information Services
1983	Lonnies Car Wash	New York Telephone
1976	Kleinmans Car Wash	New York Telephone
1967	Kleinmans Car Wash	New York Telephone
1962	Kleinmans Car Wash	New York Telephone Directory

Beach Channel Dr

1326 Beach Channel Dr

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2014	KARENS HAIR DESIGNS	EDR Digital Archive
2010	KARENS HAIR DESIGNS	EDR Digital Archive

BEACH CHANNEL DR

1326 BEACH CHANNEL DR

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2000	Beach At Prts Inc	Cole Information Services
1983	Beach Auto Parts Inc	New York Telephone

<u>Year</u> <u>Uses</u> <u>Source</u>

1970 Berts Tavern New York Telephone

1328 BEACH CHANNEL DR

<u>Year</u>	<u>Uses</u>	Source
2000	Jordan Entrprs Inc	Cole Information Services
	Tonys Auto Repair	Cole Information Services
1991	Channel Auto Repair	NYNEX Information Resource Company
1983	Beach Auto Parts Inc	New York Telephone

Beach Channel Dr

1330 Beach Channel Dr

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2014	ROBERT S DELIGHT	EDR Digital Archive
2010	DFG MARKETING INC	EDR Digital Archive

BEACH CHANNEL DR

1330 BEACH CHANNEL DR

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1976	L & M Auto Parts	New York Telephone

Beach Channel Dr

1332 Beach Channel Dr

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2014	CENTRAL HAIR GALLERY	EDR Digital Archive
	SHIRLEYS HAIR DESIGN	EDR Digital Archive
2010	M V P HAIR UNISEX	EDR Digital Archive
	CENTRAL HAIR GALLERY	EDR Digital Archive
	SHIRLEYS HAIR DESIGN	EDR Digital Archive

BEACH CHANNEL DR

1332 BEACH CHANNEL DR

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2005	MVP Hair Unisex Is	Hill-Donnelly Information Services
2000	MVP Hair Unisax	Cole Information Services
1983	Tele Lab telvisn & radio svce	New York Telephone
1970	Tele Lab telvisn & radio svce	New York Telephone
1967	TeleLab telvisn & radio svce	New York Telephone

BEACH CHVNL DR

1324 BEACH CHVNL DR

<u>Year</u> <u>Uses</u> <u>Source</u>

1970 Kleinmans Car Wash New York Telephone

MET AVE

2158 MET AVE

<u>Year</u> <u>Uses</u> <u>Source</u>

1934 Goldenberg Louis bkpr John C Miller R. L. Polk & Co.

Marble Co Inc

2172 MET AVE

<u>Year</u> <u>Uses</u> <u>Source</u>

1934 Borruso Benj Oasis Auto School R. L. Polk & Co.

MOT AVE

2152 MOT AVE

<u>Year</u> <u>Uses</u> <u>Source</u>

1939 Avery Fredk W Co rl est ins New York Telephone Company

2202 MOT AVE

<u>Year</u> <u>Uses</u> <u>Source</u>

1970 Arco Pharmacy New York Telephone
 1945 Arco Pharmacy New York Telephone

2208 MOT AVE

<u>Year</u> <u>Uses</u> <u>Source</u>

1945 Royal Bake Shop New York Telephone

MOTT AVE

2130 MOTT AVE

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1970	Surf Car Syce	New York Telephone
1967	Surf Car Svce	New York Telephone
1962	Mickeys Taxi Svce	New York Telephone Directory
1934	Pacetta Cosmo cigars	R. L. Polk & Co.

Mott Ave

2134 Mott Ave

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2014	JOONS SEASIDE FISH CORP	EDR Digital Archive

MOTT AVE

2134 MOTT AVE

<u>Year</u>	<u>Uses</u>	Source
2005	Far Rockaway Fish Market Inc	Hill-Donnelly Information Services
2000	Far Rckwy Fsh Mkt	Cole Information Services
1991	Village Tavern	NYNEX Information Resource Company
1970	Village Tavern	New York Telephone
1967	Village Tavern	New York Telephone
1962	Village Tavern	New York Telephone Directory
1934	Economy Grocery TN Sarah Singer	R. L. Polk & Co.

Mott Ave

2136 Mott Ave

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2014	M & IG VIDEO CORP	EDR Digital Archive
	GLENN GARRY INCORPORATED	EDR Digital Archive
2010	MIKEY & ME INC	EDR Digital Archive
	GLENN GARRY INCORPORATED	EDR Digital Archive
	NIKKI & ME INC	EDR Digital Archive

MOTT AVE

2136 MOTT AVE

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2005	Garrys Discount 1 R	Hill-Donnelly Information Services
2000	Garrys Discount	Cole Information Services
1991	Garys Discount apparell	NYNEX Information Resource Company
1983	Garys Discount apparrell	New York Telephone
1976	Jay Prntng Svce	New York Telephone
1970	JAY PRNTNG SVCE	New York Telephone
1967	Jay Prnting Svce	New York Telephone
1962	Midway Fruit Market	New York Telephone Directory
	JAY PRNTNG SVCE	New York Telephone Directory

<u>Year</u> <u>Uses</u> <u>Source</u>

1934 Quinn John clk R. L. Polk & Co.

Mott Ave

2138 Mott Ave

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2014	MOTT AVENUE CHECK CASHING	EDR Digital Archive
2010	MOTT AVENUE CHECK CASHING	EDR Digital Archive

MOTT AVE

2138 MOTT AVE

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2005	Mott Avenue Check Cashing Corp	Hill-Donnelly Information Services
1983	Rockaway Check Cashing Svce Inc	New York Telephone
1970	Parisien Beauty Salon	New York Telephone
1967	Parisien Beauty Salon	New York Telephone
1962	Parisien Beauty Salon	New York Telephone Directory

Mott Ave

2140 Mott Ave

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2014	GEORGE & CHRIS CLEANERS INC	EDR Digital Archive
2010	GEORGE & CHRIS CLEANERS INC	EDR Digital Archive
	CHANG HEE SONG	EDR Digital Archive

MOTT AVE

2140 MOTT AVE

<u>Year</u>	<u>Uses</u>	Source
2005	George & Chris Cleaners	Hill-Donnelly Information Services
2000	Gaorge & Chrs Clnrs	Cole Information Services
	Chris & Geo & Tailors	Cole Information Services
1991	George & Chris Cleaners	NYNEX Information Resource Company
	Chris & Geo Cleanrs & Tailors	NYNEX Information Resource Company
1983	George & Chris Ceanrs & Tailors	New York Telephone
	Chris & Geo Cleanrs & Tailors	New York Telephone
1976	Chris & Geo Cleanrs & Tailors	New York Telephone
1970	Chris & Geo Cleanrs & Tailors	New York Telephone

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1970	George & Chris Cleanrs & Tailors	New York Telephone
1967	George & Chris Cleanrs & Tailors	New York Telephone
	Chris & Geo Cleanrs & Tailors	New York Telephone

Mott Ave

2141 Mott Ave

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2014	COSMO CATERERS INC	EDR Digital Archive
2010	COSMO CATERERS INC	EDR Digital Archive

MOTT AVE

2142 MOTT AVE

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1939	Barish Paul radio & vacuum clnr svce	New York Telephone Company
1934	Gebel Wm D Flora ladies tailor	R. L. Polk & Co.

Mott Ave

2144 Mott Ave

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2014	EXPRESS SHOE REPAIR & PHOTO SP	EDR Digital Archive
2010	EXPRESS SHOE REPAIR & PHOTO SP	EDR Digital Archive
	AA TOWING OF FAR ROCKAWAY	EDR Digital Archive

MOTT AVE

2144 MOTT AVE

<u>Year</u>	<u>Uses</u>	Source
2005	A A Towing Of Far Rockaway	Hill-Donnelly Information Services
	Express Shoe Repair s	Hill-Donnelly Information Services
2000	Express Shoe Repr	Cole Information Services
1991	RAYS SHOE REPAIRG	NYNEX Information Resource Company
	Rays Cleaning & Dying	NYNEX Information Resource Company
	Maiorino Ray shoerepairg	NYNEX Information Resource Company
1983	Rays Shoe Repairg	New York Telephone
	Rays Cleaning & Dying	New York Telephone
	Maiorino Ray shoe repairg	New York Telephone
1976	Maiorino Ray shoe repaire	New York Telephone

<u>Year</u>	<u>Uses</u>	Source
1970	Rays Shoe Repairs	New York Telephone
	Rays Cleaning & Dying	New York Telephone
1967	Rays Cleaning & Dying	New York Telephone
	Maiorino Ray shoe repairg	New York Telephone
1962	Rays Shoe Repairg	New York Telephone Directory
	Majorino Ray shoe repairg	New York Telephone Directory
1934	Reilly Wm br mgr The Great A & P Tea Co	R. L. Polk & Co.
	Fisher John br mgr Gt A & Tea Co	R. L. Polk & Co.

2146 MOTT AVE

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2005	Mbdg Realty F	Hill-Donnelly Information Services
2000	MBDG Realty	Cole Information Services
	Garrys Discount	Cole Information Services
1983	Garrys Discount Store	New York Telephone
1976	Garry Discount Store	New York Telephone

Mott Ave

2148 Mott Ave

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2014	NEW YORK SPREME SPORTSWEAR INC	EDR Digital Archive
	URBAN HOME SPORTSWEAR INC	EDR Digital Archive
2010	NEW YORK SPREME SPORTSWEAR INC	EDR Digital Archive
	A M ELECTRO PLAZA INC	EDR Digital Archive

MOTT AVE

2148 MOTT AVE

<u>Year</u>	<u>Uses</u>	Source
2005	Nobele Telecommunication	Hill-Donnelly Information Services
	Triple A Sportswear Inc	Hill-Donnelly Information Services
2000	Nobele Telecom	Cole Information Services
1991	Goorahoo Paul MD	NYNEX Information Resource Company
	Schwartz And Grubessi podiatrists	NYNEX Information Resource Company
1983	Burgos H Jr	New York Telephone
1970	Molinaro Jos	New York Telephone
1967	Molinaro Jos	New York Telephone

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1962	McCann Henry H	New York Telephone Directory
1939	Heumann Bros mts	New York Telephone Company
1934	Singer Sarah Economy Grocery	R. L. Polk & Co.
	Singer Saml Rose	R. L. Polk & Co.
	Patten Antoinette maid	R. L. Polk & Co.
	Holm Herbert A pntr	R. L. Polk & Co.

Mott Ave

2150 Mott Ave

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2014	BUTTERFLYS RESTAURANT	EDR Digital Archive
	XIANG CHINESE RESTAURANT INC	EDR Digital Archive
	CHEN SHU CHAI	EDR Digital Archive
2010	CHEN SHU CHAI	EDR Digital Archive
	BUTTERFLYS RESTAURANT	EDR Digital Archive

MOTT AVE

2150 MOTT AVE

<u>Year</u>	<u>Uses</u>	Source
2005	Butterifys Restaurant	Hill-Donnelly Information Services
2000	Day Ton Car Svc	Cole Information Services
	Day Ton Car Svc	Cole Information Services
	Day Ton Car Svc	Cole Information Services
	Day Ton Car Svc	Cole Information Services
	Day Ton Car Svc	Cole Information Services
	Day Ton Car Svc	Cole Information Services
	Day Ton Car Svc	Cole Information Services
1991	C & J Pizza	NYNEX Information Resource Company
1970	Niedober Irwin	New York Telephone
	Niedober Statnry	New York Telephone
1967	Niedober Statnry	New York Telephone
1962	Sterns Statnry	New York Telephone Directory
1934	Levine Benj Gertrude stationer	R. L. Polk & Co.

Mott Ave

2152 Mott Ave

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2010	2152 GROCERY STORE INC	EDR Digital Archive
	A & S DELI GROCERY	EDR Digital Archive

MOTT AVE

2152 MOTT AVE

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2005	Souber Grocery IR	Hill-Donnelly Information Services
2000	Super Grocery	Cole Information Services
1983	Birnbaum B butchr	New York Telephone
1976	Birnbaum B butchr	New York Telephone
1970	Birnbaum B butchr	New York Telephone
1967	Birnbaum B butchr	New York Telephone
1962	Birnbaum B butchr	New York Telephone Directory
1939	Chavkin N L pharmcy Winfield HA vemyr 98866	New York Telephone Company
	Chave Schleif Agency Inc rl est & ins	New York Telephone Company
1934	Park Robt Roofing Co TN: Lorenzo Moreo	R. L. Polk & Co.
	Ch Ave Schleif Agency Inc NY W Kenneth Ch Ave pres Jeannie Walsh sec W W Schleif treas ins	R. L. Polk & Co.
	Butler Arth real est	R. L. Polk & Co.
	Avery Fredk W Co RTN Fredk W Avery real est	R. L. Polk & Co.

2154 MOTT AVE

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2000	2200 NP	Cole Information Services
1983	Pacheco Alicia	New York Telephone
1970	Brown Helen	New York Telephone
1967	Soto Geo	New York Telephone
	Brown Helen	New York Telephone
1962	Hutter Lucy A	New York Telephone Directory
	Trainor Margaret	New York Telephone Directory
1945	Nicholls Dorothy B	New York Telephone
1934	Rosen Mamie Mrs maid	R. L. Polk & Co.

2156 MOTT AVE

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1976	Finegold Aaron S Ins	New York Telephone
1970	Finegold Aaron S	New York Telephone
	Far Rockaway	New York Telephone
1967	Licht Nat rl est & ins	New York Telephone
1962	Bee Emm Floor Waxing Co Inc	New York Telephone Directory
1939	Roulston Thos Inc Branch Stores Fr Rockaway	New York Telephone Company
	Roulston Thos Inc Branch Fr Rockaway	New York Telephone Company

2164 MOTT AVE

<u>Year</u> <u>Uses</u> <u>Source</u>

1967 Rays Shoe Repairg New York Telephone

2196 MOTT AVE

<u>Year</u> <u>Uses</u> <u>Source</u>

1945 Pacetta Cosmo bar grill New York Telephone

2198 MOTT AVE

<u>Year</u> <u>Uses</u> <u>Source</u>

2000 Mott Av Chk Cshng Cole Information Services

2202 MOTT AVE

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1976	Gabler Edward A podltrst	New York Telephone
	Farron Robert MD	New York Telephone
1970	Arco Prescription Centers	New York Telephone
1967	Arco Pharmacy	New York Telephone
1962	Arco Pharmacy	New York Telephone Directory
1939	Arco Pharmacy Inc	New York Telephone Company

2204 MOTT AVE

<u>Year</u> <u>Uses</u> <u>Source</u>

1967 Stern Geo New York Telephone

2208 MOTT AVE

<u>Year</u>	<u>Uses</u>	Source
1970	Bayswater Pastry Shop	New York Telephone
1967	Bayswater Pastry Shop	New York Telephone
1962	Bayswater Pastry Shop	New York Telephone Directory
1934	Purcell Agnes maid	R. L. Polk & Co.
1967 1962	Bayswater Pastry Shop Bayswater Pastry Shop	New York Telephone New York Telephone Dire

21-48 MOTT AVE

<u>Year</u> <u>Uses</u> <u>Source</u>

1950 OTTOS MEAT MKT New York Telephone
CONDINO DOMENICE % New York Telephone

HEUMANN BROS MTS New York Telephone

21-50 MOTT AVE

<u>Year</u> <u>Uses</u> <u>Source</u>

1950 KAIMOWITZ SOL STATNRY New York Telephone

21-52 MOTT AVE

<u>Year</u> <u>Uses</u> <u>Source</u>

1950 SCHAFFER BEN BUTCHR New York Telephone

SHOSTAK & KATZ BUTCHR New York Telephone

21-54 MOTT AVE

<u>Year</u> <u>Uses</u> <u>Source</u>

1950 HUTTER EVERETT New York Telephone

NICHOLLS DOROTHY B New York Telephone

21-56 MOTT AVE

<u>Year</u> <u>Uses</u> <u>Source</u>

1950 PACETTA COSMO D BAR & GRILL New York Telephone

22-02 MOTT AVE

<u>Year</u> <u>Uses</u> <u>Source</u>

1950 ARCO PHARMACY New York Telephone

22-08 MOTT AVE

<u>Year</u> <u>Uses</u> <u>Source</u>

1950 ROYAL BAKE SHOP New York Telephone

22-10 MOTT AVE

<u>Year</u> <u>Uses</u> <u>Source</u>

1950 BERNIES DAIRY New York Telephone

BAYSWATER DAIRY INS New York Telephone

22-11 MOTT AVE

<u>Year</u> <u>Uses</u> <u>Source</u>

1950 CENTRAL AUTO SALES New York Telephone

22-12 MOTT AVE

<u>Year</u> <u>Uses</u> <u>Source</u>

1950 ALS FRUIT MKT New York Telephone

ADJOINING PROPERTY: ADDRESSES NOT IDENTIFIED IN RESEARCH SOURCE

The following Adjoining Property addresses were researched for this report, and the addresses were not identified in research source.

Address Researched	Address Not Identified in Research Source
1304 Beach Channel Dr	2005, 2000, 1996, 1991, 1983, 1976, 1970, 1967, 1962, 1950, 1945, 1939, 1934, 1922
1304 BEACH CHANNEL DR	2014, 2010, 2005, 1996, 1991, 1967, 1962, 1950, 1945, 1939, 1934, 1922
1305 BEACH CHANNEL DR	2014, 2010, 2005, 2000, 1996, 1991, 1983, 1967, 1950, 1945, 1939, 1934, 1922
1305 Beach Channel Dr	2005, 2000, 1996, 1991, 1983, 1976, 1970, 1967, 1962, 1950, 1945, 1939, 1934, 1922
1306 BEACH CHANNEL DR	2014, 2010, 2005, 2000, 1996, 1991, 1983, 1976, 1967, 1950, 1945, 1939, 1934, 1922
1307 BEACH CHANNEL DR	2014, 2010, 2005, 2000, 1996, 1991, 1983, 1970, 1950, 1945, 1939, 1934, 1922
1308 BEACH CHANNEL DR	2014, 2010, 2000, 1996, 1991, 1983, 1976, 1970, 1967, 1962, 1950, 1945, 1939, 1934, 1922
1310 BEACH CHANNEL DR	2014, 2010, 2000, 1996, 1991, 1983, 1976, 1970, 1967, 1962, 1950, 1945, 1939, 1934, 1922
1315 BEACH CHANL	2014, 2010, 2005, 2000, 1996, 1983, 1976, 1970, 1967, 1962, 1950, 1945, 1939, 1934, 1922
1315 BEACH CHANNEL DR	2014, 2010, 2000, 1996, 1991, 1950, 1939, 1934, 1922
1315 Beach Channel Dr	2005, 2000, 1996, 1991, 1983, 1976, 1970, 1967, 1962, 1950, 1945, 1939, 1934, 1922
1316 Beach Channel Dr	2014, 2005, 2000, 1996, 1991, 1983, 1976, 1970, 1967, 1962, 1950, 1945, 1939, 1934, 1922
1316 BEACH CHANNEL DR	2014, 2010, 1996, 1950, 1945, 1939, 1934, 1922
1324 BEACH CHANNEL DR	2014, 2010, 2000, 1996, 1991, 1970, 1950, 1945, 1939, 1934, 1922
1324 Beach Channel Dr	2005, 2000, 1996, 1991, 1983, 1976, 1970, 1967, 1962, 1950, 1945, 1939, 1934, 1922
1324 BEACH CHVNL DR	2014, 2010, 2005, 2000, 1996, 1991, 1983, 1976, 1967, 1962, 1950, 1945, 1939, 1934, 1922
1326 BEACH CHANL DR	2014, 2010, 2005, 2000, 1996, 1983, 1976, 1970, 1967, 1962, 1950, 1945, 1939, 1934, 1922
1326 BEACH CHANNEL DR	2014, 2010, 2005, 1996, 1991, 1976, 1967, 1962, 1950, 1945, 1939, 1934, 1922
1326 Beach Channel Dr	2005, 2000, 1996, 1991, 1983, 1976, 1970, 1967, 1962, 1950, 1945, 1939, 1934, 1922
1328 BEACH CHANNEL DR	2014, 2010, 2005, 1996, 1976, 1970, 1967, 1962, 1950, 1945, 1939, 1934, 1922
1330 BEACH CHANNEL DR	2014, 2010, 2005, 2000, 1996, 1991, 1983, 1970, 1967, 1962, 1950, 1945, 1939, 1934, 1922
1330 Beach Channel Dr	2005, 2000, 1996, 1991, 1983, 1976, 1970, 1967, 1962, 1950, 1945, 1939, 1934, 1922
1332 Beach Channel Dr	2005, 2000, 1996, 1991, 1983, 1976, 1970, 1967, 1962, 1950, 1945, 1939, 1934, 1922

Address Researched	Address Not Identified in Research Source
1332 BEACH CHANNEL DR	2014, 2010, 1996, 1991, 1976, 1962, 1950, 1945, 1939, 1934, 1922
21-48 MOTT AVE	2014, 2010, 2005, 2000, 1996, 1991, 1983, 1976, 1970, 1967, 1962, 1945, 1939, 1934, 1922
21-50 MOTT AVE	2014, 2010, 2005, 2000, 1996, 1991, 1983, 1976, 1970, 1967, 1962, 1945, 1939, 1934, 1922
21-52 MOTT AVE	2014, 2010, 2005, 2000, 1996, 1991, 1983, 1976, 1970, 1967, 1962, 1945, 1939, 1934, 1922
21-54 MOTT AVE	2014, 2010, 2005, 2000, 1996, 1991, 1983, 1976, 1970, 1967, 1962, 1945, 1939, 1934, 1922
21-56 MOTT AVE	2014, 2010, 2005, 2000, 1996, 1991, 1983, 1976, 1970, 1967, 1962, 1945, 1939, 1934, 1922
2130 MOTT AVE	2014, 2010, 2005, 2000, 1996, 1991, 1983, 1976, 1950, 1945, 1939, 1922
2134 MOTT AVE	2014, 2010, 1996, 1983, 1976, 1950, 1945, 1939, 1922
2134 Mott Ave	2010, 2005, 2000, 1996, 1991, 1983, 1976, 1970, 1967, 1962, 1950, 1945, 1939, 1934, 1922
2136 Mott Ave	2005, 2000, 1996, 1991, 1983, 1976, 1970, 1967, 1962, 1950, 1945, 1939, 1934, 1922
2136 MOTT AVE	2014, 2010, 1996, 1950, 1945, 1939, 1922
2138 MOTT AVE	2014, 2010, 2000, 1996, 1991, 1976, 1950, 1945, 1939, 1934, 1922
2138 Mott Ave	2005, 2000, 1996, 1991, 1983, 1976, 1970, 1967, 1962, 1950, 1945, 1939, 1934, 1922
2140 Mott Ave	2005, 2000, 1996, 1991, 1983, 1976, 1970, 1967, 1962, 1950, 1945, 1939, 1934, 1922
2140 MOTT AVE	2014, 2010, 1996, 1962, 1950, 1945, 1939, 1934, 1922
2141 Mott Ave	2005, 2000, 1996, 1991, 1983, 1976, 1970, 1967, 1962, 1950, 1945, 1939, 1934, 1922
2142 MOTT AVE	2014, 2010, 2005, 2000, 1996, 1991, 1983, 1976, 1970, 1967, 1962, 1950, 1945, 1922
2144 MOTT AVE	2014, 2010, 1996, 1950, 1945, 1939, 1922
2144 Mott Ave	2005, 2000, 1996, 1991, 1983, 1976, 1970, 1967, 1962, 1950, 1945, 1939, 1934, 1922
2146 MOTT AVE	2014, 2010, 1996, 1991, 1970, 1967, 1962, 1950, 1945, 1939, 1934, 1922
2148 MOTT AVE	2014, 2010, 1996, 1976, 1950, 1945, 1922
2148 Mott Ave	2005, 2000, 1996, 1991, 1983, 1976, 1970, 1967, 1962, 1950, 1945, 1939, 1934, 1922
2150 Mott Ave	2005, 2000, 1996, 1991, 1983, 1976, 1970, 1967, 1962, 1950, 1945, 1939, 1934, 1922
2150 MOTT AVE	2014, 2010, 1996, 1983, 1976, 1950, 1945, 1939, 1922
2152 MOT AVE	2014, 2010, 2005, 2000, 1996, 1991, 1983, 1976, 1970, 1967, 1962, 1950, 1945, 1934, 1922
2152 MOTT AVE	2014, 2010, 1996, 1991, 1950, 1945, 1922
2152 Mott Ave	2014, 2005, 2000, 1996, 1991, 1983, 1976, 1970, 1967, 1962, 1950, 1945, 1939, 1934, 1922

Address Researched	Address Not Identified in Research Source
2154 MOTT AVE	2014, 2010, 2005, 1996, 1991, 1976, 1950, 1939, 1922
2156 MOTT AVE	2014, 2010, 2005, 2000, 1996, 1991, 1983, 1950, 1945, 1934, 1922
2158 MET AVE	2014, 2010, 2005, 2000, 1996, 1991, 1983, 1976, 1970, 1967, 1962, 1950, 1945, 1939, 1922
2164 MOTT AVE	2014, 2010, 2005, 2000, 1996, 1991, 1983, 1976, 1970, 1962, 1950, 1945, 1939, 1934, 1922
2172 MET AVE	2014, 2010, 2005, 2000, 1996, 1991, 1983, 1976, 1970, 1967, 1962, 1950, 1945, 1939, 1922
2196 MOTT AVE	2014, 2010, 2005, 2000, 1996, 1991, 1983, 1976, 1970, 1967, 1962, 1950, 1939, 1934, 1922
2198 MOTT AVE	2014, 2010, 2005, 1996, 1991, 1983, 1976, 1970, 1967, 1962, 1950, 1945, 1939, 1934, 1922
22-02 MOTT AVE	2014, 2010, 2005, 2000, 1996, 1991, 1983, 1976, 1970, 1967, 1962, 1945, 1939, 1934, 1922
22-08 MOTT AVE	2014, 2010, 2005, 2000, 1996, 1991, 1983, 1976, 1970, 1967, 1962, 1945, 1939, 1934, 1922
22-10 MOTT AVE	2014, 2010, 2005, 2000, 1996, 1991, 1983, 1976, 1970, 1967, 1962, 1945, 1939, 1934, 1922
22-11 MOTT AVE	2014, 2010, 2005, 2000, 1996, 1991, 1983, 1976, 1970, 1967, 1962, 1945, 1939, 1934, 1922
22-12 MOTT AVE	2014, 2010, 2005, 2000, 1996, 1991, 1983, 1976, 1970, 1967, 1962, 1945, 1939, 1934, 1922
2202 MOT AVE	2014, 2010, 2005, 2000, 1996, 1991, 1983, 1976, 1967, 1962, 1950, 1939, 1934, 1922
2202 MOTT AVE	2014, 2010, 2005, 2000, 1996, 1991, 1983, 1950, 1945, 1934, 1922
2204 MOTT AVE	2014, 2010, 2005, 2000, 1996, 1991, 1983, 1976, 1970, 1962, 1950, 1945, 1939, 1934, 1922
2208 MOT AVE	2014, 2010, 2005, 2000, 1996, 1991, 1983, 1976, 1970, 1967, 1962, 1950, 1939, 1934, 1922
2208 MOTT AVE	2014, 2010, 2005, 2000, 1996, 1991, 1983, 1976, 1950, 1945, 1939, 1922

TARGET PROPERTY: ADDRESS NOT IDENTIFIED IN RESEARCH SOURCE

The following Target Property addresses were researched for this report, and the addresses were not identified in the research source.

<u>Address Researched</u> <u>Address Not Identified in Research Source</u>

1312 Beach Channel Drive 1996, 1983, 1970, 1967, 1962, 1950, 1945, 1939, 1934, 1922

bing maps

KFC

Address: 1312 Beach Channel Dr, Far Rockaway, NY 11691

Phone: (718) 327-9223

Website:

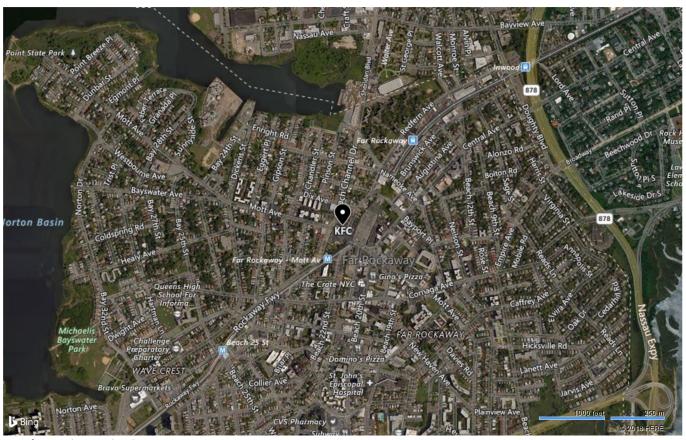
http://www.kfc.com/store-locator/J235010/NY/far-rockaway/1312-beach-ch

annel-drive

Cuisine: Fast Food,, Chicken Wings,, Chicken Shop

Price: \$
Hours

Monday - Thursday 10:30 AM - 11:00 PM Friday - Saturday 10:30 AM - 11:30 PM Sunday 10:30 AM - 11:00 PM



Data from: Yelp \cdot Facebook \cdot Foursquare \cdot Zomato

1 of 1 10/29/2018, 5:15 PM





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NYC Department of Buildings

Actions

Page: 1

Premises: 13-12 BEACH CHANNEL DRIVE QUEENS		BIN: <u>4297852</u>	Block: 15528	Lot: 5	
NUMBER		TYPE		FILE DATE	
ALT 447-87		ALTERATION		03/24/1987	
BN 854-89		BUILDING NOTICE		04/11/1989	
COQ 120426	(PDF)	CERTIFICATE OF OCCUPANCY - QUEENS		08/08/1957	
COQ 179220	(PDF)	CERTIFICATE OF OCCUPANCY - QUEENS		09/23/1970	
VECL 022817CN14DE02		VIOLATION ECB LIEN - ACTIVE		02/28/2017	

If you have any questions please review these <u>Frequently Asked Questions</u>, the <u>Glossary</u>, or call the 311 Citizen Service Center by dialing 311 or (212) NEW YORK outside of New York City.

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BIN# 4297852

NYC Department of Buildings

Property Profile Overview

1312 BEACH CHANNEL DRIVE

BEACH CHANNEL DRIVE 13-12 - 13-12 REDFERN AVENUE NO NUMBER

QUEENS 11691

Health Area : 3800 Tax Block : 15528 **Census Tract** : 1032.01 Tax Lot : 5 : 414 **Community Board** Condo : NO **Buildings on Lot** : 1 Vacant : NO

View DCP Addresses... Browse Block

<u>View Challenge Results</u> <u>Pre - BIS PA</u> <u>View Certificates of Occupancy</u>

Cross Street(s): MOTT AVENUE

DOB Special Place Name:

DOB Building Remarks:

Landmark Status:Special Status:N/ALocal Law:NOLoft Law:NOSRO Restricted:NOTA Restricted:NOUB Restricted:NO

Environmental Restrictions:HAZMAT/NOISEGrandfathered Sign:NOLegal Adult Use:NOCity Owned:NO

Additional BINs for Building: NONE

Additional Designation(s): MIH - MANDATORY INCLUSIONARY HOUSING

Special District: UNKNOWN

This property is not located in an area that may be affected by Tidal Wetlands, Freshwater Wetlands, Coastal Erosion Hazard Area, or Special Flood Hazard Area. Click here for more information

Department of Finance Building Classification:

K5-STORE BUILDING

Please Note: The Department of Finance's building classification information shows a building's tax status, which may not be the same as the legal use of the structure. To determine the legal use of a structure, research the records of the Department of Buildings.

	Total	Open	Elevator Records
Complaints	1	0	Electrical Applications
Violations-DOB	0	0	Permits In-Process / Issued
Violations-ECB (DOB)	1	1	Illuminated Signs Annual Permits
Jobs/Filings	12		Plumbing Inspections
ARA / LAA Jobs	1		Open Plumbing Jobs / Work Types
Total Jobs	13		<u>Facades</u>
	_		Marquee Annual Permits
Actions	4		Boiler Records
OR Enter Action Type:			DEP Boiler Information
OR Select from List: Select			Crane Information
AND Show Actions			After Hours Variance Permits

If you have any questions please review these <u>Frequently Asked Questions</u>, the <u>Glossary</u>, or call the 311 Citizen Service Center by dialing 311 or (212) NEW YORK outside of New York City.

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TENTATIVE ASSESSMENT ROLL 2018-2019 | City of New York

Taxable Status Date: January 5, 2018

EXPLANATION OF ASSESSMENT ROLL

View May 25, 2018 - Market Value History **View 2018 FINAL ASSESSMENT ROLL** View January 15, 2018 - Market Value History View May 25, 2017 - Market Value History **View 2017 FINAL ASSESSMENT ROLL View 2017 TENTATIVE ASSESSMENT ROLL** View January 15, 2017 - Market Value History **View 2016 FINAL ASSESSMENT ROLL** View May 25, 2016 - Market Value History **View 2016 TENTATIVE ASSESSMENT ROLL** View January 15, 2016 - Market Value History **View 2015 FINAL ASSESSMENT ROLL** View May 25, 2015 - Market Value History **View 2015 TENTATIVE ASSESSMENT ROLL** View January 15, 2015 - Market Value History View May 25, 2014 - Market Value History **View 2014 FINAL ASSESSMENT ROLL** View January 15, 2014 - Market Value History **View 2014 TENTATIVE ASSESSMENT ROLL View 2013 FINAL ASSESSMENT ROLL** View May 25, 2013 - Market Value History View January 15, 2013 - Market Value History **View 2013 TENTATIVE ASSESSMENT ROLL** View May 25, 2012 - Market Value History **View 2012 FINAL ASSESSMENT ROLL View 2012 TENTATIVE ASSESSMENT ROLL View 2011 FINAL ASSESSMENT ROLL** View May 25, 2011 - Market Value History **View 2011 TENTATIVE ASSESSMENT ROLL** View January 15, 2011 - Market Value History **View 2010 FINAL ASSESSMENT ROLL** View May 25, 2010 - Market Value History **View 2010 TENTATIVE ASSESSMENT ROLL View 2009 FINAL ASSESSMENT ROLL View 2008 FINAL ASSESSMENT ROLL View 2007 FINAL ASSESSMENT ROLL View 2006 FINAL ASSESSMENT ROLL**

Owner Name:

MIB REAL ESTATE HOLDINGS, LLC

Property Address and Zip Code:Borough:QUEENS13-12 BEACH CHANNEL DRIV 11691Block:15528Real Estate Billing Name and Address:Lot:5

MIB REAL ESTATE HOLDINGS, LLC

1 of 2 10/29/2018, 5:26 PM

130 CROSSWAYS PARK D STE 101 WOODBURY NY 11797 Tax Class: 4

Building Class: K5 Codes

Land Information

Lot Size Irregular Corner
40.00FT X 183.00FT IRREG

Building Information

Number of Buildings	Building Size	Extension	Stories
1	20.00FT X 70.00FT		1

Assessment Information

Description	Land	Total
ESTIMATED MARKET VALUE		548,000
ACTUAL AV	127,350	246,600
ACTUAL EX AV	0	0
TRANS AV	127,350	227,260
TRANS EX AV	0	0

Taxable/Billable Assessed Value

Assessed Value

SUBJECT TO ADJUSTMENTS, YOUR 2018/19 TAXES WILL BE BASED ON

227,260

Property is assessed at the following uniform percentages of full market value, unless limited to a lesser amount by law:

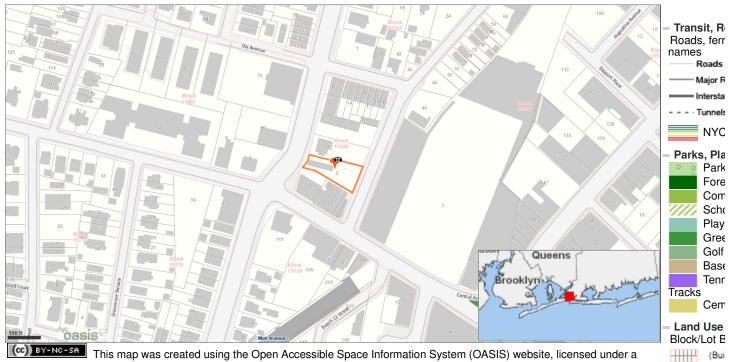
Class 1 - 6% Class 2 - 45% Class 3 - 45% Class 4 - 45%

Statements List | Select a BBL

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13-12 BEACH CHANNEL DRIVE





This map was created using the Open Accessible Space Information System (OASIS) website, licensed under a Creative Commons Attribution-Noncommercial-Share Alike 3.0 United States License. Visit www.oasisnyc.net for the latest information about data sources and notes about how the maps were developed. Contact oasisnyc@gc.cuny.edu with questions or comments. OASIS is developed and maintained by the Center for Urban Research, CUNY Graduate Center.

(Not all items in

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Location Report

Property Information (1)

13-12 BEACH CHANNEL DRIVE, QUEENS 11691

Commercial / Office Building Owner: MIB REAL ESTATE HOLDI **Block: 15528 Lot: 5 Property Characteristics:**

Lot Area: 10,500 sq ft (40' x 183') # of Buildings: 1 Year built: 1971

Building frontage: 20' (Building frontage along the street measured in feet.)

of floors: 1 Building Area: 1,400 sq ft **Total Units: 1 Residential Units: 0**

Primary zoning: R5 Commercial Overlay: C1-2

Floor Area Ratio: 0.13

Max. Allowable Residential FAR: 1.25 Max. Allowable Commercial FAR: 0 Max. Allowable Facility FAR: 2

The Maximum Allowable Floor Area Ratios are exclusive of bonuses for plazas, plaza-connected open areas, arcades or other amenities.

FAR may depend on street widths or other characteristics. Contact City Planning Dept. for latest information.

MORE INFO:

- Zoning Map#: 25b (how to read NYC zoning maps)
- Historical Zoning Maps: 25b
- NYC Dept. of Buildings
- Property transaction records (NB: buildings w/condos may not show transaction results)
- NYC Dept. of Finance Assessment Roll
- NYC HPD data
- NYC Planning's ZoLa application
- NYC Digital Tax Map
- NYC zoning guideNYC Watershed Resources

OASIS shortcut to this property:

http://www.oasisnyc.net/printmap.aspx?zoomto=lot:4155280005

Source: MapPLUTO Tax Block & Tax Lot files from the New York City Department of City Planning, 2016 (ver. 16v1).

Stewards (1)

Updated stewardship data coming soon (as of 2017).

NB: Stewards are civic groups that help take care of New York, not necessarily property owners.

Margert Community Corporation

Feedback? Email Us.

Stewards with large turfs (not mapped)

Community District (1)

Queens 14 Community District Information

Chairperson: Dolores Orr

District Manager: Mr. Jonathan L. Gaska

Address: 1931 Mott Avenue, Room 311, Far Rockaway, NY, 11691

Phone: 718-471-7300 Email: cbrock14@nyc.rr.com

Website: http://www.queenscb14.org/

Meeting Information: Meeting location updates are posted at http://www.cbrock.com/news.htm

Go to District Profile by NYC Dept. of City Planning

Political Districts (5)

NYC Council: District 31 NYS Assembly: District 031 NYS Senate: District 10

US House of Representatives: District 5

US Senate: New York

Print page Close window



Property Report by PropertyShark.com

Property Report for:

13-12 Beach Channel Dr, Far Rockaway, NY 11691

General

1. Your Notes

My notes View all notes

Watch List

Email me when the property is updated

Tags View all tags

Add/Create tag

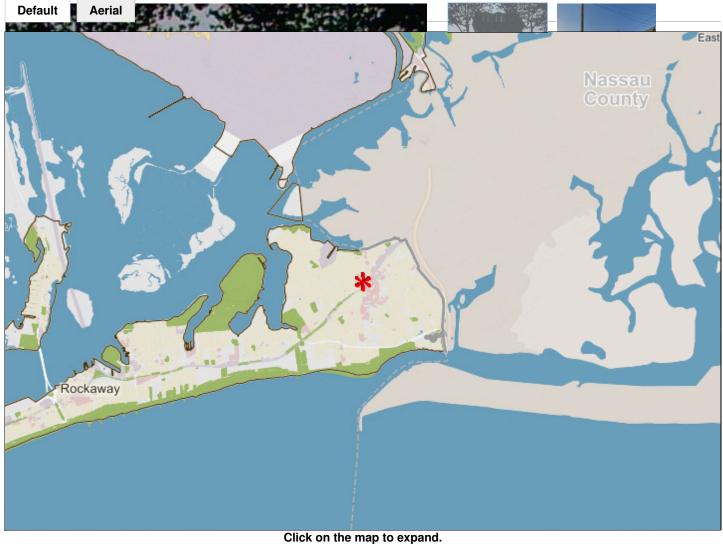
2. Overview

Address		Building	
Primary address	1312 Beach Channel Dr	Building class	Stand Alone Food Establishment (K5) i
Zip code	11691	Building sqft	1,400
Neighborhood	Far Rockaway	Building dimensions	20 ft x 70 ft
Borough	Queens	•	2011 X 7011
Block & lot	15528-0005	Buildings on lot Stories	1
			21 ft
Owner		Roof height	1971
Name	Mib Real Estate Holdings, LLC	Year built	1971
Address	130 Crossways Park Dr #101 Woodbury, NY 11797	Use	
Purchase date	04/21/2014	Commercial units	1
Purchase price	\$115,000	Retail sqft	1,400
Special factors	Multiple parcels	Certificate(s) of occupancy	Click here i
Property Taxes		Floor Area Ratio (FAR)	
Tax class	4	Residential FAR	1.25
Current tax bill	\$23,894	Facility FAR	2
		FAR as built	0.13 \imath
Lot		Allowed usable floor area	13,125
Lot sqft	10,500 [Usable floor area as built	1,365
Lot dimensions	40 ft x 183 ft	Unused FAR	11,760
Ground elevation	19 ft		
Corner lot	No.	Violations	
Comeriot	No	ECB violations	1
Zoning		LOB VIOIATIONS	•
Zoning districts	R6, C2-4, DFR 🚺		
Zoning map	25b		

3. Photos

Open Google Street View

4. Maps



Community district **0.28 Miles** Closest police station School district 27 Closest fire station 0.09 Miles 45901 1032 Census tract Tax map 40.60549, -73.75452 Sanborn map 408 004 Lat/Long

5. Income and Expenses

Owners of income-producing properties that have an actual assessed value of more than \$40,000 are required to file annual Real Property Income and Expense (RPIE) statements with the Department of Finance(DOF). The DOF uses the information from these statements, or data from comparables, to estimate the market value of a property for tax purposes.

	2017	2016	2015	2014	2013	2012	2010	2009	2008	2007
Rooms	0	0	1	0	0	0	0	0	0	0
Commercial sq. ft.	1,400	1,400	0	1,400	1,400	1,400	1,400	1,400	1,400	1,400
Total sq. ft.	1,400	1,400	0	1,400	1,400	1,400	1,400	1,400	1,400	1,400
Retail income	\$46,022	\$46,022	\$0	\$51,135	\$65,820	\$0	\$0	\$0	\$0	\$0
Total income	\$46,022	\$46,022	\$0	\$51,135	\$65,820	\$0	\$0	\$0	\$0	\$0
Light expense	\$7,100	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

	2017	2016	2015	2014	2013	2012	2010	2009	2008	2007
Cleaning expense	\$3,600	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Repair & mainenance expense	\$5,200	\$12,200	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Management expense	\$4,000	\$10,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Insurance expense	\$1,050	\$5,976	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Water & sewer expense	\$0	\$4,712	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total expenses	\$20,950	\$32,888	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Net profit	\$25,072	\$13,134	\$0	\$51,135	\$65,820	\$0	\$0	\$0	\$0	\$0

Dev

1. Floor Area Ratio & Air Rights

There are many rules that limit what you can build on a lot and how large it can be. But the most important is the Floor Area Ratio, or FAR. The FAR is expressed as a ratio of the size of the building in square feet to the size of the lot in square feet. For example, if a lot is 2,000 square feet and has an allowable FAR of 4.0, then you cannot build a building larger than 8,000 square feet. Max FAR depends on several factors including zoning, location and use.

The maximum usable floor area is calculated by multiplying the size of the lot by the larger of the residential or commercial FAR.

Area of lot in square feet		10,500
FAR	X	1.25
Maximum usable floor area of building	=	13,125

Available Air Rights by Parcel

The building on this lot is smaller than the maximum set by the FAR. Thus it may be possible to add to the building (either more floors or an extension) or it may be possible to sell the "air rights" to a developer who owns a nearby lot. (Note: other factors may limit what you can do.)

Maximum usable floor area		13,125
Usable floor area	-	1,365
Unused buildable square feet ("air rights")	=	11,760



Opportunity by parcel	Very little opportunity	
Above 250.000 sqft 100.000 - 250.000 sqft 60.000 - 100.000 sqft	30.000 - 60.000 sqft 10.000 - 30.000 sqft Below 10.000 sqft	
Residential FAR Facility FAR FAR as built	0.	1.25 2 .13 [

2. Zoning

New York City is divided into three basic zoning districts: residential (R), commercial (C) and manufacturing (M). These basic zoning districts are subdivided by the intensity of use. Development is governed by the use, bulk, and parking requirements of the zoning district.





This map was created from the NYC Department of City Planning's online zoning map files. It includes updates found in those files through 2/8/2017.

Zoning Designation

Residential	R6
Commercial	C2-4
Special districts	DFR
E-Designation	E-415 🔋

Parcel Vicinity

Frontage(s)

Redfern Av (wide)

Beach Channel Dr (wide)

Mott Av (wide)

Rezoning Projects

We have no information to indicate that there is a rezoning planned.

For more information about zoning district regulations, click here.

Residential R6



R6 zoning districts are widely mapped in built-up, medium-density areas in Brooklyn, Queens and the Bronx. The character of R6 districts can range from neighborhoods with a diverse mix of building types and heights to large-scale 'tower in the park developments such as Ravenswood in Queens and Homecrest in Brooklyn. Developers can choose between two sets of bulk regulations. Standard height factor regulations, introduced in 1961, produce small multi-family buildings on small zoning lots and, on larger lots, tall buildings that are set back from the street. Optional Quality Housing regulations produce high lot coverage buildings within height limits that often reflect the scale of older, pre-1961 apartment buildings in the neighborhood. More info

Commercial Overlay

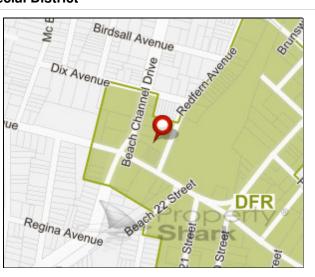
C2-4



C2-1 through C2-5 districts are commercial overlays mapped within residence districts. Mapped along streets that serve local retail needs, they are found extensively throughout the city's lower- and medium-density areas and occasionally in higher-density districts. Typical retail uses include neighborhood grocery stores, restaurants and beauty parlors. C2 districts permit a slightly wider range of uses, such as funeral homes and repair services. In mixed buildings, commercial uses are limited to one or two floors and must always be located below the residential use. More info

Special District

DFR



More info

Map Disclaimer: Our maps are not official zoning maps. The print version of the NYC Zoning Resolution, which includes the zoning maps, together with any amendments adopted by the City Council subsequent to the most recent update to the print version, remains the official version of the Zoning Resolution. All zoning descriptions have been taken from the NYC Planning official source.

3. Planimetric Map

This planimetric map shows features such as retaining walls, sidewalks, medians, curbs, and roadbeds that have been digitized from aerial photography. These features must be taken into consideration when determining how a new building, or extensions to an existing building, are situated within the lot. They can also affect the maximum height that can be built.



Neighborhood

1. Building Class

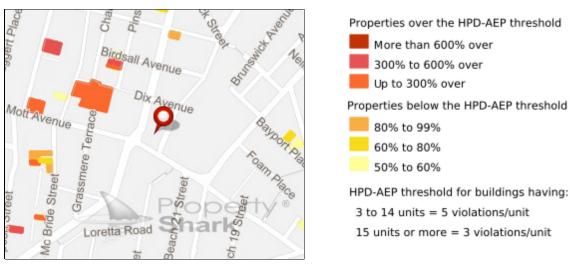
The building class specifies how a property is used or what type of building is present on that property. Building classes range from A to Z (excluding X). There are at most 10 different sub-classes within each building class (ranging from 0 to 10). These building classes cover all property uses from residential and commercial to government buildings and parks.

The full list of building classes can be found here.



2. HPD Alternative Enforcement Program

The HPD Alternative Enforcement Program map is based on the current month's HPD violations in a building divided by the number of units in the building. It takes in consideration the open hazardous and immediately hazardous violations (I/B/C class) in the last 5 years.



For more information, visit the HPD website.

3. Neighborhood Complaints

Created	Agency	Туре	Descriptor	Disposition	Closed
3/5/2018	DOT	Street condition	Pothole	The Department of Transportation inspected this complaint and repaired the problem.	3/9/2018

4. Urban Landscape Maps



On this color-coded map, view the year each property was built.

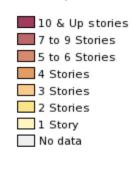


Click on the map to expand.

🜟 Year built: 1971



On this map, view the number of stories per building.



5. Demographics By Zip Code

Demographic data shown in this section was gathered from the 2014 American Community Survey and refers to zip code 11691.

Population Demographics		Economic/Employment	
Total population	62,577	Average household income	\$56,999
Female population	53.4%	White collar	80.2%
Male population	46.6%	Blue collar	19.8%
Median age	32.6		
Male median age	29.8	Housing	
Female median age	34.6	Family households	66.9%
Education		Households with kids	41.9%
Ludcation		Housing units	21,374
No highschool	12.7%	Occupied housing units	19,390
Some highschool or college	63.2%	Owner occupied units	25.2%
Bachelors degree	11.4%	Average number of people per household	3.08
Other		Median year structure built	1963
Citizens	84.4%	Houses with mortgages	74.4%
Citizens born in US	62.5%	Wealth	
English speakers	87.6%		
		Median value for units with a	\$430,500
Journey to Work		mortgage Median value for units without a	\$433,100
Work in a metropolitan area	99.9%	mortgage	φ 4 33,100
Work at home	2.4%	Median gross rent	\$1,037
Go to work by car	41.4%	Median housing costs per month	\$1,175
Go to work after 10 am	18.0%	Population in poverty	25.2%

Occupancy

1. Phone Records of Residents

Name	Unit	First seen	Phone number
Kfc		1993	(718) 327-9223
Spectrum		2012	(516) 927-7715
Time Warner Cable		2012	(516) 927-7715

2. Businesses

Entity	Phone number
KFC 1312 Beach Channel Drive 11691	(718) 327-9223

Ownership

1. Registered Owner

Mib Real Estate Holdings, LLC

Address: 130 Crossways Park Dr #101

Woodbury, NY 11797 Source: Assessment Roll Last recorded: 04/25/2018



Ownership data is aggregated from governmental sources like deeds and the assessment roll. If the registered owner is a LLC or other form of company, use our Real Owners service to find the person behind the company.

2. Contacts from Building Permits

Registration date	Role	Name	Address	Phone number	Email
12/30/2016	Owner	Mark Schmier M.I.B. Realty Corp	130 Crossways Park Dr Woodbury, NY 11797	(516) 308-4337	mschmier@lindencare.com
12/30/2016	Applicant	Davidson Christmas			
10/28/2014	Owner	Mark Schmier Bsb Real Estate Holdings LLC	123 Eileen Way Syosset, NY 11791	(516) 364-6200	
10/28/2014	Applicant	Brian III Brian III Development LLC		(203) 858-9554	
10/23/2014	Applicant	Brian III			
02/11/1999	Applicant	Gaetano Ragusa C/O George Petotto Tano Group Architects	1801 Kings Hwy Brooklyn, NY 11229	(718) 627-1707	
02/11/1999	Applicant	Gaetano Ragusa C/O George Petotto Tano Group Architects	1801 Kings Hwy Brooklyn, NY 11229	(718) 627-1707	
02/11/1999	Owner	Joseph S.Q. K.F.C, Corporation			
02/11/1999	Condo/CO-op second officer	Paul			
06/06/1997	Superintendent	Paul Panzarella S.Q.K.F.C	133-33 Brookville Blvd Queens, NY 11422	(718) 276-7001	
06/06/1997	Applicant	Paul Panzarella S.Q.K.F.C	133-33 Brookville Blvd Queens, NY 11422	(718) 276-7001	

3. Title Documents

Date	Туре	Amount	Party 1	Party 2	Doc image
4/21/2014 – D 4/25/2014 – R	Deed (M)	\$115,000	Robert J Panzarella, As Trustee 89 Grant Avenue East Rockaway NY 11518	Bortnick, Mark 3124 Judith Drive Bellmore NY 11710	iiiuge
			[+] See the rest of 2 parties		
10/28/2011 – D 1/24/2012 – R	Both RPTT & RETT	\$10,040	S Q K F C , in C 451 Sunrise Highway Lynbrook NY 11563	Divine Investors LLC 279 Outwater Lane Garfield NJ 07026	
12/7/2007 – D 12/28/2007 – R	Deed	\$215,000	David T Panzarella As Ancillary Executor 734 East El Camino Drive Phoenix AZ 85012 Estate of Angela O Panzarella 1312 Beach Channel Drive Far Rockaway NY 11691	Mib Real Estate Holdings, LLC One Old Country Road Suite 200 Carle Place NY 11514	
12/7/2007 – D 12/28/2007 – R	Deed	\$400,000	Estate of Ignatius N Lombardo 1312 Beach Channel Drive Far Rockaway NY 11691 [+] See the rest of 3 parties	Mib Real Estate Holdings LLC One Old Country Road Suite 200 Carle Place NY 11514	
2/5/1999 – R	Deed (M)		Panzarella, Anne (Ex/of)	Panzarella, Robert J(trustee)	
8/5/1996 – D 10/22/1996 – R	Deed (M)		Panzarella, Joseph R. 121 Riverside Drive Rockville Centre NY	Panzarella, Anne 121 Riverside Drive Rockville Centre NY	
11/10/1993 – R	Satisfaction of mortgage (M)		Panzarella, Joseph Reta	Mink, John Etal	
11/10/1993 – R	Satisfaction of mortgage (M)		Panzarella, Joseph Reta	Mink, John Etal	
11/10/1993 – R	Satisfaction of mortgage (M)		Panzarella, Joseph Reta	Mink, John Etal	
11/10/1993 – R	Satisfaction of mortgage (M)		Panzarella, Joseph Reta	Mink, John Etal	
10/6/1989 – R	Assignment, mortgage (M)		Mink, John	John P Mink Trust	
10/6/1989 – R	Assignment, mortgage (M)		Evans, Marilyn	Evans, Marilyn(trste)	
9/23/1983 – R	Mortgage (M)	\$52,500	Lombardo, Ignatius	Cohen, Lucille	
9/23/1983 – R	Deed		Cohen, Lucille	Lombardo, Ignatius	
9/23/1983 – R	Power of attorney (M)		Cohen, Lucille	Finegold, Aaron	
9/23/1983 – R	Power of attorney (M)		Mink, John A/K/A	Evans, Marilyn	
6/6/1981 – R	Maps (M)		Acquisition + Damage Maps		
5/8/1981 – R	Deed (M)		Jacobowitz Milton E	Marilyn Evans	
4/20/1978 – R	Deed (M)		Jaffee Ethel	John Mink	
2/28/1978 – R	Deed (M)		Goldstein Bertha	John Mink	
2/28/1978 – R	Deed (M)		Goldberg Celia	Marilyn Evans	
10/25/1974 – R	Deed (M)		Bicem Realty CORP	Aaron S Finegold	
3/28/1974 – R	Deed (M)		Finegold Aarons	Bicem Realty CORP	
1/2/1973 – R	Deed (M)		Finegold Irving	Aaron S Finegold	

R: recorded date

D: document date

Add this property to your watch list and get notified by email if it gets sold, enters pre-foreclosure, and more.

Email me when the property is updated 1

4. Liens

Call us today at 718-715-1758 and upgrade your subscription.

Permits

1. Permits

Pre filing date	Job type	Initial cost	Job status	Work type	Link to job
12/30/2016	Alteration type 2	\$10,000	Permit issued - entire job/work	Mechanical	
Filing to insta	all new hood with exha	aust duct only. no c	other work to be done. there w	ill be no change in use, egress	or occupancy.
10/23/2014	Alteration type 2	\$15,000	Plan exam - approved	Mechanical	
Install HVAC	unit on roof on existing	ıg dunnage			
02/11/1999	Alteration type 1		Plan exam - approved		
02/11/1999	Alteration type 1		Plan exam - approved		
02/11/1999	Alteration type 1		Pre-filing		
02/11/1999	Alteration type 1		Plan exam - approved		
	v ramp at entry to an e ude officeat first floor "	0	9	of occupants at dining room onl	y. change approved
02/10/1997	Alteration type 1		Plan exam - approved		
05/31/1995	Alteration type 1	\$5,000	Permit issued - entire job/work	Equipment, general construction	
	v ramp at entry to an e ude officeat first floor "			of occupants at dining room onl	y. change approved
plans to inclu				of occupants at dining room onl Plumbing, fire suppression	
	ude officeat first floor " Alteration type 2	as built condition".	-		
plans to inclu 03/15/1994	ude officeat first floor " Alteration type 2	as built condition".	-		
plans to inclu 03/15/1994 Fire suppres	ude officeat first floor " Alteration type 2 sion system	as built condition".	Signed-off		
plans to inclu 03/15/1994 Fire suppres 01/25/1993 04/17/1992	ude officeat first floor " Alteration type 2 sion system Alteration type 2	as built condition". \$3,450	Signed-off Plan exam - approved Permit issued - entire	Plumbing, fire suppression	
plans to inclu 03/15/1994 Fire suppres 01/25/1993 04/17/1992	Alteration type 2 sion system Alteration type 2 Alteration type 2 Alteration type 2	as built condition". \$3,450	Signed-off Plan exam - approved Permit issued - entire	Plumbing, fire suppression	

Add this property to your watch list and get notified by email if it gets sold, enters pre-foreclosure, and more.

Email me when the property is updated 1

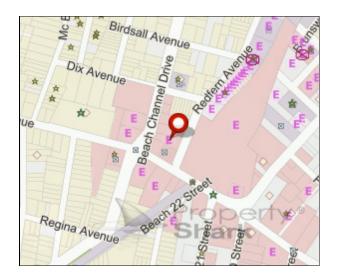
Risk

1. Toxic Sites

Get a Phase I environmental report Site Assessment or a Home Environmental Database Report for this property directly from Toxics Targeting.

This screening map, provided to PropertyShark by Toxics Targeting, shows environmental hazards such as toxic dumps, garbage landfills, leaking tanks, hazardous waste sites, and pollution discharges reported by local, state and federal government authorities.

Call 800-2-TOXICS (800-286-9427 NYS only) or 607-273-3391 for more info.



Toxic Sites on the Property

Selected NYC environmental quality review 'E' designation Total toxic sites on the property	1
Toxic Sites near the Property	
Haz waste generator or transporter	2
Total neighboring toxic sites	2

Leaking Tanks and Spills:



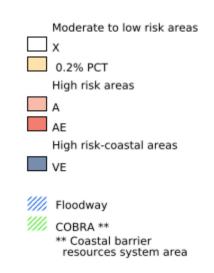


Map Disclaimer: Mapped locations are approximate; sites are identified based on current and/or historic information. Regulatory status of sites may have changed. Site symbols can refer to large properties, additional toxic sites are not mapped. Contamination problems can impact properties far from toxic sources. Sites include known and potential hazards.

2. FEMA Flood Zones

Use this map to determine if the property is in a flood zone.





Link to the map for this property at FEMA's Map Service Center (may not be available in all locations).

FEMA Flood Zoning

Distance to...

FEMA flood zone(s)	X	Nearest distance to coastline	0.31
Coastal barrier resources system	Out	(miles)	
area (COBRA)		Compass direction to coastline	97
Floodway	Out	Nearest distance to 100 year	444
FEMA special flood hazard area	Out	flood zone area (ft)	
Map panel ID	3604970382G	Angle100	137
Map quaderant ID	40073-E7		

3. Hurricane Evacuation Zones



This map shows hurricane evacuation zones. In the case of coastal storms, the City may order the evacuation of neighborhoods in danger of flooding, the most critical being Zone 1.

Hurricane evacuation zones

Zone 1
Zone 2
Zone 3
Zone 4

Zone 5

Zone 6

Taxes

4 T. D'''

1. Tax Bill

Property tax bill for 7/1/2018 to 6/30/2019

\$23,894

The tax bill is calculated based on the transitional assessed value of the property. If no changes are made to the way NYC computes property taxes, we estimate that the current assessed value will increase by approximately 20% per year until it reaches the maximum assessed value of \$246,600.

2. Key Values in Calculating the Bill

Tax class	4
Market value	\$548,000

3. Assessment Reductions & Open Petitions

New York City's Tax Commission is responsible for reviewing and determining the annual applications for corrections of assessments. Owners and other parties with legal interest can claim that they are incorrectly assessed or improperly denied an exemption from real property tax. There are four types of assessment claims subject to review and corrective action: excessive assessment, misclassification, unequal assessment and unlawful assessment. More information can be found on New York City Tax Commission website.

Assessment Reductions

Actions on applications reducing assessments or reclassifying property. Please note that reductions are expressed in total actual assessed value.

Tax year	Owner	Granted Reduction
2017	Mib Real Estate Holdi	\$30,100

4. Property Tax Calculation

Market Value

The first step is for the City Assessor to determine the *market value* of the property. While the term *market value* would seemingly refer to how much the property would sell for on the open market, in reality the *market values* that the City Assessor is almost always substantially lower.

For this property the City Assessor has assigned this market value:

Market value	=	\$548,000
Building market value	+	\$265,000
Land market value		\$283,000

Assessed Value

Next, the market value is used to compute the assessed value, which is a percentage of the market value. The exact percentage is determined by the tax class of the property. Tax class 1 is assessed at 6% of the market value, and tax classes 2,3 and 4 are assessed at 45%.

Maximum assessed value	=	\$246,600
Assessment ratio	х	45%
Market value		\$548,000

Transitional Value

To protect property owners from sudden large increases in property tax, the state limits how quickly the city can increase the assessed value. Typically these limits are applied when the City Assessor makes a big increase to the market value. Without the limits the assessed value would increase by a similar percentage. Instead, the change to the assessed value is phased in over a number of years.

Transitional net assessed value	=	\$227,260
Transitional exemption value	-	\$0
Transitional value		\$227,260

Taxable Value

The taxable value, for 2018/2019, is the smaller of the city's maximum assessed value and the transitional net assessed value.

Taxable value	= \$227,260
---------------	-------------

Property Tax

Current tax is calculated by multiplying the taxable value (the assessed value minus any exemptions) by the tax rate.

The city also grants some properties incentives called tax abatements, which are subtracted directly from the current tax. This results in the property tax, the amount the current owner pays.

Tax description	Billable value		Tax rate as billed June 2018		Tax bill
Current tax	\$227,260	Х	10.5140%	=	\$23,894
Total abatements				-	\$0
Property tax as billed June 2018				=	\$23,894

For more information, you can view this property's assessment, tax bill, and account statements by clicking here and entering the Borough, Block, & Lot.

5. Exemptions and Tax Abatements

Both the City and State of New York offer property tax reductions through exemptions and abatements for residential property, commercial constructions, and properties used by governmental, industrial, and nonprofit organizations. Exemptions provide tax relief by reducing a property's assessed value, and abatements reduce taxes by applying credits to the amount of tax due. The information in this section presents a summary of the granted amounts and other related values of the benefit programs. Some of this data comes from NYC Department of Housing Preservation and Development (HPD) and the Department of Finance, departments which administer the J-51 Program, 421a Program and the Cooperative and Condominium program.

We believe that no exemptions or abatements currently apply to this property.

6. Assessment History

Year	Building class	Market value	Assessed value	Taxable	Tax rate%	Base tax	Property tax
2017/18	K5	\$538,000	\$242,100	\$226,710	10.514%	\$23,836	\$23,836
2016/17	K5	\$525,000	\$236,250	\$217,080	10.574%	\$22,954	\$22,954
2015/16	K5	\$490,000	\$220,500	\$209,520	10.656%	\$22,326	\$22,326
2014/15	K5	\$491,000	\$220,950	\$204,210	10.684%	\$21,818	\$21,818
2013/14	K5	\$475,000	\$213,750	\$199,080	10.323%	\$20,551	\$20,551
2012/13	K5	\$431,000	\$193,950	\$189,990	10.288%	\$19,546	\$19,546
2011/12	K5	\$441,000	\$198,450	\$184,860	10.152%	\$18,767	\$18,767
2010/11	K5	\$431,000	\$193,950	\$177,570	10.312%	\$18,311	\$18,311
2009/10	K5	\$434,000	\$195,300	\$170,820	10.426%	\$17,810	\$17,810
2008/09	K5	\$374,000	\$168,300	\$161,760	10.241%	\$16,566	\$16,566
2007/08	K5	\$374,000	\$168,300	\$158,100	10.059%	\$15,903	\$15,903
2006/07	K5	\$360,000	\$162,000	\$156,390	10.997%	\$17,198	\$17,198
2005/06	K5	\$356,000	\$160,200	\$155,040	11.306%	\$17,529	\$17,529
2004/05	K5	\$371,000	\$166,950	\$162,360	11.558%	\$18,766	\$18,766
2003/04	K5	\$389,000	\$175,050	\$160,020	11.431%	\$18,292	\$18,292

Violations

1. HPD Violations

When excessive violations are present, this can adversely affect the support given by The NYC Department of Housing Preservation and Development (HPD). These violations can result in building-wide inspections, fees, and the requirement of extensive repair work to correct underlying conditions. In some cases, outstanding violations may result in a lien being placed on the property. It is also substantially more difficult to mortgage a building with extensive violations.

We do not have any record of violations in our database. Status can be verified here.

2. Complaints

Created	Agency	Туре	Descriptor	Disposition	Closed
12/27/2017	DOHMH	Food poisoning	1 or 2	The Department of Health and Mental Hygiene will review your complaint within 24 hours. Complaints of this type usually result in complainant contact and/or inspection by the agency. Initial status will be available 14 days after the date of your complaint by calling 311. If you are experiencing medical symptoms, please seek medical attention or consult the NYC Poison Control Center which can be reached through 311. Please note your Service Request number for future reference.	12/28/2017
1/23/2013	DOHMH	Food establishment	Food worker hygiene	The Department of Health and Mental Hygiene has sent official written notification to the Owner/Landlord warning them of potential violations and instructing them to correct the situation. If the situation persists 21 days after your initial complaint, please make a new complaint.	3/25/2013
9/6/2012	DOHMH	Food establishment	Rodents/insects /garbage	The Department of Health and Mental Hygiene has sent official written notification to the Owner/Landlord warning them of potential violations and instructing them to correct the situation. If the situation persists 21 days after your initial complaint, please make a new complaint.	11/6/2012
2/14/2012	DOHMH	Food establishment	Handwashing	The Department of Health and Mental Hygiene has received and processed your complaint. All restaurants and mobile food vendors are inspected annually. Restaurant inspection results can be found on WWW.NYC.GOV or a copy of the inspection can be requested from 311.	
11/15/2011	DOHMH	Food establishment	Rodents/insects /garbage	The Department of Health and Mental Hygiene has sent official written notification to the Owner/Landlord warning them of potential violations and instructing them to correct the situation. If the situation persists 21 days after your initial complaint, please make a new complaint.	1/15/2012

3. DOB Complaints

Date entered	Complaint	Complaint category	Disposition	Inspection
2/27/2017	4683297	Sep - professional certification compliance audit	ECB & dob violations served	2/28/2017
Complaint status ca	an be verified here.			

4. ECB Violations

There are eleven city agencies that administer the City's quality-of-life laws and issue Notices of Violation (NOVs) for alleged violations. The ECB is a separate and independent agency that hears challenges to those NOVs. The agencies that issue the most violations for real estate are:

- Department of Buildings (DOB)
- Department of Environmental Protection (DEP)
- Fire Department (FDNY)
- Landmarks Preservation Commission (LPC)
- · Department of Sanitation (DSNY)

Violation ID	Issue date	Туре	Served date	Link to violation
35184322J	2/28/2017	Construction	2/28/2017	

Failure to maintain bldg in code compliant manner.under alt 2 #421409309.at time of inspection at roof level found hvac unit not secured to dunnage.dunnnage also off parapet wall.gas fired hvac unit is seated i

For more information about the ECB and the types of violations, click here.

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1312 Beach Channel Drive 1312 Beach Channel Drive Far Rockaway, NY 11691

Inquiry Number: 5471477.6s

October 31, 2018

The EDR Radius Map™ Report



6 Armstrong Road, 4th floor Shelton, CT 06484 Toll Free: 800.352.0050 www.edrnet.com

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GEOCHECK ADDENDUM	

GeoCheck - Not Requested

Thank you for your business.
Please contact EDR at 1-800-352-0050

with any questions or comments.

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A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E 1527-13), the ASTM Standard Practice for Environmental Site Assessments for Forestland or Rural Property (E 2247-16), the ASTM Standard Practice for Limited Environmental Due Diligence: Transaction Screen Process (E 1528-14) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

TARGET PROPERTY INFORMATION

ADDRESS

1312 BEACH CHANNEL DRIVE FAR ROCKAWAY, NY 11691

COORDINATES

Latitude (North): 40.6054990 - 40° 36' 19.79" Longitude (West): 73.7545270 - 73° 45' 16.29"

Universal Tranverse Mercator: Zone 18 UTM X (Meters): 605372.3 UTM Y (Meters): 4495499.5

Elevation: 25 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property Map: 5940603 FAR ROCKAWAY, NY

Version Date: 2013

Southeast Map: 5940613 LAWRENCE, NY

Version Date: 2013

AERIAL PHOTOGRAPHY IN THIS REPORT

Portions of Photo from: 20150522, 20150610

Source: USDA

MAPPED SITES SUMMARY

Target Property Address: 1312 BEACH CHANNEL DRIVE FAR ROCKAWAY, NY 11691

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
A1	LOT 5,TAXBLOCK 15528	13-12 BEACH CHANNEL	NY E DESIGNATION		TP
A2	GEORGE/&CHRIS CLEANE	21-40 MOTT AVE.	NY DRYCLEANERS	Lower	77, 0.015, SSW
A3	GEORGE & CHRIS CLEAN	21-40 MOTT AVE	EDR Hist Cleaner	Lower	77, 0.015, SSW
A4	GEORGE & CHRIS CLEAN	2140 MOTT AVE	RCRA-CESQG, ICIS, US AIRS, NY MANIFEST	Lower	77, 0.015, SSW
5	LOT 9,TAXBLOCK 15528	13-24 BEACH CHANNEL	NY E DESIGNATION	Lower	139, 0.026, NNW
B6	LOT 101,TAXBLOCK 157	21-41 MOTT AVENUE	NY E DESIGNATION	Lower	167, 0.032, SSW
B7	LOT 109,TAXBLOCK 157	21-23 MOTT AVENUE	NY E DESIGNATION	Lower	198, 0.038, South
C8	LOT 1,TAXBLOCK 15661	22-02 MOTT AVENUE	NY E DESIGNATION	Lower	251, 0.048, West
C9	LOT 80,TAXBLOCK 1566	13-15 BEACH CHANNEL	NY E DESIGNATION	Lower	253, 0.048, WNW
D10	SNOW WHITE DRY CLEAN	20-88 MOTT AVE	EDR Hist Cleaner	Higher	257, 0.049, SSE
D11	SNOW WHITE DRY CLEAN	20-88 MOTT AVE.	NY DRYCLEANERS	Higher	257, 0.049, SSE
D12	SNOW WHITE CLEANERS	20-88 MOTT AVE	RCRA NonGen / NLR, US AIRS, NY MANIFEST	Higher	257, 0.049, SSE
D13	MTA NYCT - MOTT AVEN	MOTT AVE & BEACH 22N	RCRA-SQG, NJ MANIFEST, NY MANIFEST	Higher	299, 0.057, SSE
D14	LOT 1,TAXBLOCK 15537	20-02 MOTT AVENUE	NY E DESIGNATION	Higher	323, 0.061, SE
E15	LOT 40,TAXBLOCK 1553	18-01 REDFERN AVENUE	NY E DESIGNATION	Lower	327, 0.062, NE
F16	HI AUTO SVCE	1346 BCH CHANL DR	EDR Hist Auto	Lower	376, 0.071, North
F17	BP #36611	13-46 BEACH CHANNEL	NY AST	Lower	376, 0.071, North
F18	BP #36611	13-46 BEACH CHANNEL	NY UST	Lower	376, 0.071, North
F19	BP PRODUCTS NORTH AM	13-46 BEACH CHANNEL	RCRA-SQG, NY MANIFEST	Lower	376, 0.071, North
G20	MYLES FRENCH CLEANER	11-59 BEACH CHANNEL	EDR Hist Cleaner	Lower	383, 0.073, SW
G21	NEW MYLES FRENCH CLE	11-59 BEACH CHANNEL	NY DRYCLEANERS	Lower	383, 0.073, SW
G22	NEW MYLES FRENCH CLE	11-59 BEACH CHANNEL	RCRA-CESQG, ICIS, US AIRS, FINDS, ECHO, NY	Lower	383, 0.073, SW
23	DRUM RUN	BEACH 21ST ST AND MO	NY Spills	Higher	435, 0.082, SE
E24	LOT 50,TAXBLOCK 1553	17-27 REDFERN AVENUE	NY E DESIGNATION	Lower	445, 0.084, NE
E25	ON EMPTY LOT	17-25 17-27 REDFERN	NY Spills	Lower	445, 0.084, NE
G26	DRY CLEANERS	1159 BEACH CHANNEL D	NY Spills	Lower	464, 0.088, SW
H27	LOT 51,TAXBLOCK 1553	17-25 REDFERN AVENUE	NY E DESIGNATION	Lower	473, 0.090, NE
128	NOBO CORPORATION	10-74 BEACH 22ND STR	NY AST	Lower	498, 0.094, South
129	LOT 140,TAXBLOCK 157	10-74 BEACH 22 STREE	NY E DESIGNATION	Lower	498, 0.094, South
H30	LOT 53,TAXBLOCK 1553	17-21 REDFERN AVENUE	NY E DESIGNATION	Lower	501, 0.095, NE
31	2230-40 MOTT AVENUE	2230-40 MOTT AVENUE	NY Spills	Lower	524, 0.099, West
32	LOT 5,TAXBLOCK 15537	20-10 MOTT AVENUE	NY E DESIGNATION	Higher	525, 0.099, SE
H33	LOT 54,TAXBLOCK 1553	17-19 REDFERN AVENUE	NY E DESIGNATION	Lower	527, 0.100, NE
34	BELL BOY DRIVE IN CL	1361 BCH CHANNEL DR	EDR Hist Cleaner	Lower	571, 0.108, North
H35	LOT 56,TAXBLOCK 1553	17-15 REDFERN AVENUE	NY E DESIGNATION	Lower	576, 0.109, NE
H36	LOT 57,TAXBLOCK 1553	17-11 REDFERN AVENUE	NY E DESIGNATION	Lower	598, 0.113, NE
37	ACTION CENTER FOR DE	16-12 CENTRAL AVENUE	NY AST	Higher	617, 0.117, ESE
J38	LOT 58,TAXBLOCK 1553	17-09 REDFERN AVENUE	NY E DESIGNATION	Lower	622, 0.118, NE
39	BRAVO FASHION (RETAI	1057 BEACH 20TH STRE	NY AST	Higher	682, 0.129, SSE

MAPPED SITES SUMMARY

Target Property Address: 1312 BEACH CHANNEL DRIVE FAR ROCKAWAY, NY 11691

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS		RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
40	ENGINE 328 AND ENGIN	16-15 CENTRAL AVENUE	NY AST	Higher	715, 0.135, ESE
J41	JACK COLETTA INC./CO	1629 REDFERN AVE	NY SWF/LF, NY SWRCY	Lower	731, 0.138, NE
K42	ROCKAWAY CO	19-31 MOTT AVENUE	NY UST	Higher	777, 0.147, SE
K43	ROCKAWAY CO	19-31 MOTT AVENUE	NY AST	Higher	777, 0.147, SE
L44	FRESH EXPRESSIONS CO	1522 CENTRAL AVE	RCRA NonGen / NLR, FINDS, ECHO, NY MANIFEST	Lower	820, 0.155, East
M45	VERIZON NEW YORK INC	13-11 BAYPORT PLACE	NY TANKS, NY Spills	Lower	830, 0.157, ENE
M46	VERIZON NEW YORK - F	13-11 BAYPORT PL	RCRA NonGen / NLR, FINDS, ECHO	Lower	830, 0.157, ENE
N47	1136-1138 MCBRIDE ST	1136-1138 MCBRIDE ST	NY UST	Lower	849, 0.161, West
O48	ROCKAWAY COMPANY	19-20 MOTT AVENUE	NY AST	Higher	887, 0.168, SE
L49	CENTRAL ASSISTED LIV	1509 CENTRAL AVENUE	NY AST	Lower	888, 0.168, East
P50	OWEN AUTO SERVICE	1017 BEACH 21ST STRE	NY UST	Lower	914, 0.173, South
P51	RCL SERVICE CENTER	1009 BEACH 21ST STRE	NY UST	Lower	935, 0.177, South
O52	JP MORGAN CHASE	19-12 MOTT AVENUE	NY UST	Higher	935, 0.177, SE
N53	1141 MCBRIDE ST	1141 MCBRIDE ST	NY LTANKS	Lower	963, 0.182, West
54	CENTRAL BAYPORT LLC	13-06 BAYPORT PLACE	NY AST	Lower	978, 0.185, ENE
Q55	METROPOLITAN RUBBER	1406 AUGUSTINA AVENU	NY SWF/LF	Lower	1001, 0.190, ENE
Q56	FAR ROCKAWAY AUTO GL	14-06 AUGUSTINA AVEN	NY AST	Lower	1001, 0.190, ENE
57	ETWARU RESIDENCE	2122 NAMEOKE AVE	NY LTANKS	Lower	1021, 0.193, NNE
Q58	ARTIES COLLISION INC	1402 AUGUSTINA AVE	RCRA NonGen / NLR, FINDS, ECHO, NY MANIFEST	Lower	1050, 0.199, ENE
59	SHOREVIEW COOPERATIV	22-87 MOTT AVENUE	NY AST	Lower	1089, 0.206, West
R60	22-88 MOTT AVENUE	22-88 MOTT AVENUE	NY LTANKS	Lower	1100, 0.208, WNW
R61	TWICE MIGHT LLC	22-88 MOTT AVENUE	NY UST	Lower	1100, 0.208, WNW
R62	TWICE MIGHT LLC	22-88 MOTT AVENUE	NY AST	Lower	1100, 0.208, WNW
S 63	MEL CHEVROLET SALES	14-14 CENTRAL AVE	NY UST	Lower	1119, 0.212, ENE
S64	EL PAIS AUTO REPAIR	14-17 CENTRAL AVE	NY AST	Lower	1197, 0.227, ENE
65	STEVEN AUTO REPAIRS	1338 CENTRAL AVENUE	NY AST	Lower	1224, 0.232, ENE
66	OTHMAN SERVICE STATI	1401 CENTRAL AVE	RCRA NonGen / NLR, FINDS, ECHO, NY MANIFEST	Lower	1227, 0.232, ENE
67	NEXT TO	22-54 NAMEOKE AVE.	NY LTANKS	Lower	1231, 0.233, NNW
T68	AUTO MAVEN DENT DR I	10-16 BEACH 19TH STR	NY AST	Higher	1243, 0.235, SE
T69	AUTO MAVEN DENT DR I	1016 BEACH 19TH STRE	NY SWF/LF	Higher	1243, 0.235, SE
70	1124 BAYPORT PLACE	11-24 BAYPORT PLACE	NY AST	Higher	1243, 0.235, East
U71	NASSAU BEACH CLEANER	2105 CORNAGA AVE.	NY DRYCLEANERS	Higher	1244, 0.236, South
U72	NASSAU BEACH CLEANER	2105 CORNAGA AVE	RCRA-CESQG, FINDS, ECHO, NY MANIFEST	Higher	1244, 0.236, South
V73	US POSTAL SERVICE	1836 MOTT AVENUE	PA MANIFEST	Higher	1255, 0.238, SE
V74	US POSTAL SERVICE	1836 MOTT AVE	NY UST, NY AST, RCRA NonGen / NLR, FINDS, ECHO, NY	Higher	1255, 0.238, SE
75	23-08 MOTT AVE	23-08 MOTT AVENUE	NY UST	Lower	1284, 0.243, WNW
76	SORRENTINO REC CENTE	18-48 CORNAGA AVENUE	NY LTANKS	Higher	1443, 0.273, SE
W77	12-13 NEILSON ST	12-13 NEILSON ST	NY LTANKS, NY AST	Lower	1476, 0.280, ENE
W78	12-13 NELSON ST	12-13 NELSON ST	NY LTANKS	Lower	1490, 0.282, ENE

MAPPED SITES SUMMARY

Target Property Address: 1312 BEACH CHANNEL DRIVE FAR ROCKAWAY, NY 11691

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
79	11-41 MCBRIDE ST	11041 MCBRIDE ST	NY LTANKS	Lower	1502, 0.284, NNW
X80	MYCO GAS STATION	18-11 MOTT AVENUE	NY LTANKS, NY Spills	Higher	1521, 0.288, SE
X81	101ST POLICE PRECINT	16-12 MOTT AVENUE	NY LTANKS	Higher	1561, 0.296, SE
X82	1612 MOTT AVE	1612 MOTT AVE	NY LTANKS, NY Spills	Higher	1569, 0.297, SE
Y83	CLOSED-LACKOF RECENT	19020 NEW HAVEN AVE.	NY LTANKS	Higher	1798, 0.341, SSE
Y84	CLOSED-LACKOF RECENT	19-20 NEW HAVEN AVEN	NY LTANKS	Higher	1804, 0.342, SSE
85	APARTMENT BUILDING T	15-02 MOTT AVENUE	NY LTANKS, NY AST	Lower	1922, 0.364, SE
Z86	OIL CO., INC.	ONE SHERIDAN BLVD.	NY MOSF UST, NY MOSF AST	Lower	1951, 0.370, North
Z87	OIL CO., INC.	ONE SHERIDAN BLVD	NY MOSF	Lower	1951, 0.370, North
Z88	OIL CO, INC-DBA EAGL	1 SHERIDAN BOULEVARD	NY SWF/LF, NY LIENS, NY Spills, NY MANIFEST, NY	Lower	1951, 0.370, North
89	ST JOHNS EPISCOPAL H	327 BEACH 19TH ST	NY LTANKS, NY MANIFEST	Higher	1970, 0.373, South
90	NIELSON GARDENS	10-14 NEILSON STREET	NY LTANKS, NY UST, NY AST	Lower	2024, 0.383, ESE
AA91	JAMAICA BAY PEAKING	1425 BAY 24TH STREET	NY LTANKS, NY MOSF, NY CBS, NY TANKS, NY Spills,	Lower	2167, 0.410, WNW
AA92	FAR ROCKAWAY POWER S	1425 BAY 24TH STREET	NY MOSF UST, NY MOSF AST	Lower	2167, 0.410, WNW
93	FAR ROCKAWAY MGP	CORNER OF BRUNSWICK	EDR MGP	Lower	2266, 0.429, NE
94	KINGDOM HALL JEHOVA	2360 BROOKHAVEN AVE	NY LTANKS	Lower	2266, 0.429, SW
95	U HAUL	20A SHERIDAN BLVD	NY LTANKS	Lower	2322, 0.440, NNE
96	WAVECREST APARTMENTS	20-30 ELK DRIVE	NY LTANKS, NY Spills	Higher	2503, 0.474, South
97	327 BCH 19TH ST	327 BEACH 19TH STREE	NY LTANKS	Lower	2573, 0.487, South
98	INWOOD HOLDER	W. OF SHERIDAN BLVD.	EDR MGP	Lower	2968, 0.562, North
99	ROCKAWAY METAL	175 ROGER AVE	SEMS, NY SHWS, NY CBS UST, NY CBS, NY BROWNFIE	ELDS,Lower	3611, 0.684, North

TARGET PROPERTY SEARCH RESULTS

The target property was identified in the following records. For more information on this property see page 8 of the attached EDR Radius Map report:

Site Database(s) EPA ID

LOT 5,TAXBLOCK 15528 13-12 BEACH CHANNEL QUEENS, NY 11691 NY E DESIGNATION

N/A

DATABASES WITH NO MAPPED SITES

No mapped sites were found in EDR's search of available ("reasonably ascertainable ") government records either on the target property or within the search radius around the target property for the following databases:

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list	
NPL Proposed NPL NPL LIENS	. Proposed National Priority List Sites
Federal Delisted NPL site lis	st
Delisted NPL	National Priority List Deletions
Federal CERCLIS list	
FEDERAL FACILITY	Federal Facility Site Information listing
Federal CERCLIS NFRAP si	te list
SEMS-ARCHIVE	Superfund Enterprise Management System Archive
Federal RCRA CORRACTS	facilities list
CORRACTS	Corrective Action Report
Federal RCRA non-CORRA	CTS TSD facilities list
RCRA-TSDF	RCRA - Treatment, Storage and Disposal
Federal RCRA generators lis	st
RCRA-LQG	RCRA - Large Quantity Generators
Federal institutional control	ls / engineering controls registries
LUCIS	Land Use Control Information System

US ENG CONTROLS..... Engineering Controls Sites List US INST CONTROL..... Sites with Institutional Controls

Federal ERNS list

ERNS..... Emergency Response Notification System

State and tribal leaking storage tank lists

INDIAN LUST..... Leaking Underground Storage Tanks on Indian Land

NY HIST LTANKS..... Listing of Leaking Storage Tanks

State and tribal registered storage tank lists

FEMA UST..... Underground Storage Tank Listing NY CBS AST..... Chemical Bulk Storage Database

INDIAN UST..... Underground Storage Tanks on Indian Land

State and tribal institutional control / engineering control registries

NY RES DECL...... Restrictive Declarations Listing NY ENG CONTROLS...... Registry of Engineering Controls NY INST CONTROL...... Registry of Institutional Controls

State and tribal voluntary cleanup sites

NY VCP..... Voluntary Cleanup Agreements INDIAN VCP..... Voluntary Cleanup Priority Listing

State and tribal Brownfields sites

NY ERP..... Environmental Restoration Program Listing

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS..... A Listing of Brownfields Sites

Local Lists of Landfill / Solid Waste Disposal Sites

NY SWTIRE..... Registered Waste Tire Storage & Facility List

INDIAN ODI...... Report on the Status of Open Dumps on Indian Lands

ODI______Open Dump Inventory
DEBRIS REGION 9._____Torres Martinez Reservation Illegal Dump Site Locations

IHS OPEN DUMPS..... Open Dumps on Indian Land

Local Lists of Hazardous waste / Contaminated Sites

US HIST CDL..... Delisted National Clandestine Laboratory Register

NY DEL SHWS..... Delisted Registry Sites

US CDL...... National Clandestine Laboratory Register

Local Lists of Registered Storage Tanks

NY HIST UST..... Historical Petroleum Bulk Storage Database

NY HIST AST..... Historical Petroleum Bulk Storage Database

Local Land Records

LIENS 2..... CERCLA Lien Information

Records of Emergency Release Reports

HMIRS_____ Hazardous Materials Information Reporting System

NY Hist Spills..... SPILLS Database

Other Ascertainable Records

FUDS....... Formerly Used Defense Sites

DOD..... Department of Defense Sites

SCRD DRYCLEANERS...... State Coalition for Remediation of Drycleaners Listing

US FIN ASSUR..... Financial Assurance Information

EPA WATCH LIST..... EPA WATCH LIST

2020 COR ACTION 2020 Corrective Action Program List

TSCA..... Toxic Substances Control Act

TRIS...... Toxic Chemical Release Inventory System

SSTS_______Section 7 Tracking Systems
ROD______Records Of Decision
RMP______Risk Management Plans

RAATS______RCRA Administrative Action Tracking System

PADS...... PCB Activity Database System

FTTS......FIFRA/ TSČA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide

Act)/TSCA (Toxic Substances Control Act)

COAL ASH EPA...... Coal Combustion Residues Surface Impoundments List

PCB TRANSFORMER_____PCB Transformer Registration Database

RADINFO...... Radiation Information Database

HIST FTTS..... FIFRA/TSCA Tracking System Administrative Case Listing

DOT OPS..... Incident and Accident Data

CONSENT..... Superfund (CERCLA) Consent Decrees

INDIAN RESERV..... Indian Reservations

FUSRAP..... Formerly Utilized Sites Remedial Action Program

UMTRA...... Uranium Mill Tailings Sites
LEAD SMELTERS.... Lead Smelter Sites
US MINES..... Mines Master Index File
ABANDONED MINES..... Abandoned Mines

UXO...... Unexploded Ordnance Sites

DOCKET HWC..... Hazardous Waste Compliance Docket Listing

FUELS PROGRAM..... EPA Fuels Program Registered Listing

NY AIRS..... Air Emissions Data

NY COAL ASH...... Coal Ash Disposal Site Listing

NY Financial Assurance Information Listing

NY HSWDS..... Hazardous Substance Waste Disposal Site Inventory

NY VAPOR REOPENED...... Vapor Intrusion Legacy Site List NY UIC...... Underground Injection Control Wells

NY COOLING TOWERS...... Registered Cooling Towers

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

NY RGA HWS...... Recovered Government Archive State Hazardous Waste Facilities List

NY RGA LF...... Recovered Government Archive Solid Waste Facilities List

SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified in the following databases.

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property.

Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in **bold italics** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

STANDARD ENVIRONMENTAL RECORDS

Federal RCRA generators list

RCRA-SQG: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

A review of the RCRA-SQG list, as provided by EDR, and dated 03/01/2018 has revealed that there are 2 RCRA-SQG sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
MTA NYCT - MOTT AVEN EPA ID:: NYR000150961	MOTT AVE & BEACH 22N	SSE 0 - 1/8 (0.057 mi.)	D13	24
Lower Elevation	Address	Direction / Distance	Map ID	Page
BP PRODUCTS NORTH AM FPA ID:: NYD986909505	13-46 BEACH CHANNEL	N 0 - 1/8 (0.071 mi.)	F19	51

RCRA-CESQG: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Conditionally exempt small quantity generators (CESQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.

A review of the RCRA-CESQG list, as provided by EDR, and dated 03/01/2018 has revealed that there are 3 RCRA-CESQG sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
NASSAU BEACH CLEANER EPA ID:: NYD986939601	2105 CORNAGA AVE	S 1/8 - 1/4 (0.236 mi.)	U72	150
Lower Elevation	Address	Direction / Distance	Map ID	Page
GEORGE & CHRIS CLEAN	2140 MOTT AVE	SSW 0 - 1/8 (0.015 mi.)	A4	9

EPA ID:: NYD077444206

NEW MYLES FRENCH CLE 11-59 BEACH CHANNEL SW 0 - 1/8 (0.073 mi.) G22 55

EPA ID:: NYD981141468

State- and tribal - equivalent CERCLIS

NY SHWS: The State Hazardous Waste Sites records are the states' equivalent to CERCLIS. These sites may or may not already be listed on the federal CERCLIS list. Priority sites planned for cleanup using state funds (state equivalent of Superfund) are identified along with sites where cleanup will be paid for by potentially responsible parties. The data come from the Department of Environmental Conservation's Inactive Hazardous waste Disposal Sites in New York State.

A review of the NY SHWS list, as provided by EDR, and dated 08/09/2018 has revealed that there is 1 NY SHWS site within approximately 1 mile of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
ROCKAWAY METAL	175 ROGER AVE	N 1/2 - 1 (0.684 mi.)	99	245
Site Code: 479943				

Class Code: Significant threat to the public health or environment - action required.

State and tribal landfill and/or solid waste disposal site lists

NY SWF/LF: The Solid Waste Facilities/Landfill Sites records typically contain an inventory of solid waste disposal facilities or landfills in a particular state. The data come from the list.

A review of the NY SWF/LF list, as provided by EDR, and dated 12/08/2017 has revealed that there are 4 NY SWF/LF sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
AUTO MAVEN DENT DR I	1016 BEACH 19TH STRE	SE 1/8 - 1/4 (0.235 mi.)	T69	147
Lower Elevation	Address	Direction / Distance	Map ID	Page
JACK COLETTA INC./CO	1629 REDFERN AVE	NE 1/8 - 1/4 (0.138 mi.)	J41	83
METROPOLITAN RUBBER	1406 AUGUSTINA AVENU	ENE 1/8 - 1/4 (0.190 mi.)	Q55	118
OIL CO, INC-DBA EAGL	1 SHERIDAN BOULEVARD	N 1/4 - 1/2 (0.370 mi.)	Z 88	197

State and tribal leaking storage tank lists

NY LTANKS: Leaking Storage Tank Incident Reports. These records contain an inventory of reported leaking storage tank incidents reported from 4/1/86 through the most recent update. They can be either leaking underground storage tanks or leaking aboveground storage tanks. The causes of the incidents are tank test failures, tank failures or tank overfills

A review of the NY LTANKS list, as provided by EDR, and dated 10/16/2018 has revealed that there are 21 NY LTANKS sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
SORRENTINO REC CENTE Site ID: 551772 Program Number: 1702628	18-48 CORNAGA AVENUE	SE 1/4 - 1/2 (0.273 mi.)	76	166
MYCO GAS STATION Date Closed: 1996-10-02 Site ID: 224387 Program Number: 9608090	18-11 MOTT AVENUE	SE 1/4 - 1/2 (0.288 mi.)	X80	172
101ST POLICE PRECINT Date Closed: 1997-10-02 Site ID: 164731 Program Number: 9412991	16-12 MOTT AVENUE	SE 1/4 - 1/2 (0.296 mi.)	X81	175
1612 MOTT AVE Date Closed: 1995-06-14 Site ID: 316046 Program Number: 9413260	1612 MOTT AVE	SE 1/4 - 1/2 (0.297 mi.)	X82	176
CLOSED-LACKOF RECENT Date Closed: 2003-03-04 Site ID: 300940 Program Number: 8706832	19020 NEW HAVEN AVE.	SSE 1/4 - 1/2 (0.341 mi.)	Y83	178
CLOSED-LACKOF RECENT Date Closed: 2004-09-14 Date Closed: 2003-03-04 Site ID: 274033 Site ID: 154311 Program Number: 0307675 Program Number: 8706791	19-20 NEW HAVEN AVEN	SSE 1/4 - 1/2 (0.342 mi.)	Y84	179
ST JOHNS EPISCOPAL H Date Closed: 2006-07-11 Site ID: 228027 Program Number: 0204866	327 BEACH 19TH ST	S 1/4 - 1/2 (0.373 mi.)	89	209
WAVECREST APARTMENTS Date Closed: 2008-10-06 Site ID: 250586 Program Number: 0403513	20-30 ELK DRIVE	S 1/4 - 1/2 (0.474 mi.)	96	241
Lower Elevation	Address	Direction / Distance	Map ID	Page
1141 MCBRIDE ST Date Closed: 2004-01-26 Site ID: 300613 Program Number: 9413371	1141 MCBRIDE ST	W 1/8 - 1/4 (0.182 mi.)	N53	115
ETWARU RESIDENCE Date Closed: 1996-01-16 Site ID: 242927 Program Number: 9512756	2122 NAMEOKE AVE	NNE 1/8 - 1/4 (0.193 mi.)	57	120
22-88 MOTT AVENUE Date Closed: 1998-12-07 Site ID: 94420 Program Number: 9809570	22-88 MOTT AVENUE	WNW 1/8 - 1/4 (0.208 mi.)	R60	127
NEXT TO	22-54 NAMEOKE AVE.	NNW 1/8 - 1/4 (0.233 mi.)	67	144

Date Closed: 2006-02-02 Site ID: 354749 Program Number: 0509035				
12-13 NEILSON ST Date Closed: 1993-06-16 Site ID: 69128 Program Number: 9303442	12-13 NEILSON ST	ENE 1/4 - 1/2 (0.280 mi.)	W77	167
12-13 NELSON ST Date Closed: 1993-06-21 Site ID: 249108 Program Number: 9303657	12-13 NELSON ST	ENE 1/4 - 1/2 (0.282 mi.)	W78	170
11-41 MCBRIDE ST Date Closed: 2004-01-26 Site ID: 126185 Program Number: 9415199	11041 MCBRIDE ST	NNW 1/4 - 1/2 (0.284 mi.)	79	171
APARTMENT BUILDING T Date Closed: 2009-10-29 Site ID: 416519 Program Number: 0904364	15-02 MOTT AVENUE	SE 1/4 - 1/2 (0.364 mi.)	85	182
NIELSON GARDENS Date Closed: 2008-06-18 Site ID: 396163 Program Number: 0800413	10-14 NEILSON STREET	ESE 1/4 - 1/2 (0.383 mi.)	90	212
JAMAICA BAY PEAKING Date Closed: 1996-10-10 Site ID: 182470 Program Number: 9412343	1425 BAY 24TH STREET	WNW 1/4 - 1/2 (0.410 mi.)	AA91	217
KINGDOM HALL JEHOVA Date Closed: 2005-11-03 Site ID: 136480 Program Number: 9914058	2360 BROOKHAVEN AVE	SW 1/4 - 1/2 (0.429 mi.)	94	238
U HAUL Date Closed: 1988-05-16 Site ID: 217885 Program Number: 8710031	20A SHERIDAN BLVD	NNE 1/4 - 1/2 (0.440 mi.)	95	239
327 BCH 19TH ST Date Closed: 1993-02-23 Site ID: 216311 Program Number: 9013017	327 BEACH 19TH STREE	S 1/4 - 1/2 (0.487 mi.)	97	244

State and tribal registered storage tank lists

NY UST: The Underground Storage Tank database contains registered USTs. USTs are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA). The data come from the Department of Environmental Conservation's Petroleum Bulk Storage (PBS) Database

A review of the NY UST list, as provided by EDR, has revealed that there are 10 NY UST sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
ROCKAWAY CO Database: UST, Date of Governme	19-31 MOTT AVENUE ent Version: 09/25/2018	SE 1/8 - 1/4 (0.147 mi.)	K42	85
JP MORGAN CHASE Database: UST, Date of Government	19-12 MOTT AVENUE ent Version: 09/25/2018	SE 1/8 - 1/4 (0.177 mi.)	O52	112
US POSTAL SERVICE Database: UST, Date of Government	1836 MOTT AVE ent Version: 09/25/2018	SE 1/8 - 1/4 (0.238 mi.)	V74	156
Lower Elevation	Address	Direction / Distance	Map ID	Page
BP #36611 Database: UST, Date of Governme	13-46 BEACH CHANNEL ent Version: 09/25/2018	N 0 - 1/8 (0.071 mi.)	F18	37
1136-1138 MCBRIDE ST Database: UST, Date of Government	1136-1138 MCBRIDE ST ent Version: 09/25/2018	W 1/8 - 1/4 (0.161 mi.)	N47	95
OWEN AUTO SERVICE Database: UST, Date of Government	1017 BEACH 21ST STRE ent Version: 09/25/2018	S 1/8 - 1/4 (0.173 mi.)	P50	102
RCL SERVICE CENTER Database: UST, Date of Government	1009 BEACH 21ST STRE ent Version: 09/25/2018	S 1/8 - 1/4 (0.177 mi.)	P51	106
TWICE MIGHT LLC Database: UST, Date of Government	22-88 MOTT AVENUE ent Version: 09/25/2018	WNW 1/8 - 1/4 (0.208 mi.)	R61	128
MEL CHEVROLET SALES Database: UST, Date of Government	14-14 CENTRAL AVE ent Version: 09/25/2018	ENE 1/8 - 1/4 (0.212 mi.)	S63	132
23-08 MOTT AVE Database: UST, Date of Government	23-08 MOTT AVENUE ent Version: 09/25/2018	WNW 1/8 - 1/4 (0.243 mi.)	75	164

NY MOSF UST: Major Oil Storage Facilities Database. Facilities are licensed pursuant to Article 12 of the Navigation Law, 6 NYCRR Part 610 and 17 NYCRR Part 30. These facilities may be onshore facilities or vessels, with petroleum storage capacities of 400,000 gallons or greater. Includes MOSF's licensed or closed since April 1, 1986, (responsibility was transferred from DOT on October 13, 1985) plus available data obtained from DOT facilities licensed since Article 12 became law on April 1, 1978.

A review of the NY MOSF UST list, as provided by EDR, and dated 01/01/2002 has revealed that there are 2 NY MOSF UST sites within approximately 0.5 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
OIL CO., INC.	ONE SHERIDAN BLVD.	N 1/4 - 1/2 (0.370 mi.)	Z 86	186
FAR ROCKAWAY POWER S	1425 BAY 24TH STREET	WNW 1/4 - 1/2 (0.410 mi.)	AA92	231

NY MOSF: These facilities may be onshore facilities or vessels, with petroleum storage capacities of 400,000 gallons or greater.

A review of the NY MOSF list, as provided by EDR, and dated 09/25/2018 has revealed that there are 2 NY MOSF sites within approximately 0.5 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
OIL CO., INC.	ONE SHERIDAN BLVD	N 1/4 - 1/2 (0.370 mi.)	Z87	197
Tank Status: Inactive				

Facility Id: 1-1660

JAMAICA BAY PEAKING 1425 BAY 24TH STREET WNW 1/4 - 1/2 (0.410 mi.) AA91 217

Tank Status: Inactive Facility Id: 2-1560

NY AST: The Aboveground Storage Tank database contains registered ASTs. The data come from the Department of Environmental Conservation's Petroleum Bulk Storage (PBS) Database.

A review of the NY AST list, as provided by EDR, has revealed that there are 17 NY AST sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
ACTION CENTER FOR DE Database: AST, Date of Government \ Facility Id: 2-610219	16-12 CENTRAL AVENUE /ersion: 09/25/2018	ESE 0 - 1/8 (0.117 mi.)	37	75
BRAVO FASHION (RETAI Database: AST, Date of Government \ Facility Id: 2-607761	1057 BEACH 20TH STRE /ersion: 09/25/2018	SSE 1/8 - 1/4 (0.129 mi.)	39	79
ENGINE 328 AND ENGIN Database: AST, Date of Government \ Facility Id: 2-358037	16-15 CENTRAL AVENUE /ersion: 09/25/2018	ESE 1/8 - 1/4 (0.135 mi.)	40	81
ROCKAWAY CO Database: AST, Date of Government \ Facility Id: 2-309060	19-31 MOTT AVENUE /ersion: 09/25/2018	SE 1/8 - 1/4 (0.147 mi.)	K43	87
ROCKAWAY COMPANY Database: AST, Date of Government \ Facility Id: 2-159263	19-20 MOTT AVENUE /ersion: 09/25/2018	SE 1/8 - 1/4 (0.168 mi.)	O48	98
AUTO MAVEN DENT DR I Database: AST, Date of Government \ Facility Id: 2-609946	10-16 BEACH 19TH STR /ersion: 09/25/2018	SE 1/8 - 1/4 (0.235 mi.)	T68	145
1124 BAYPORT PLACE Database: AST, Date of Government \ Facility Id: 2-401153	11-24 BAYPORT PLACE /ersion: 09/25/2018	E 1/8 - 1/4 (0.235 mi.)	70	148
US POSTAL SERVICE Database: AST, Date of Government \ Facility Id: 2-602468	1836 MOTT AVE /ersion: 09/25/2018	SE 1/8 - 1/4 (0.238 mi.)	V74	156
Lower Elevation	Address	Direction / Distance	Map ID	Page
BP #36611 Database: AST, Date of Government \ Facility Id: 2-285862	13-46 BEACH CHANNEL /ersion: 09/25/2018	N 0 - 1/8 (0.071 mi.)	F17	35
NOBO CORPORATION Database: AST, Date of Government \ Facility Id: 2-602577	10-74 BEACH 22ND STR /ersion: 09/25/2018	S 0 - 1/8 (0.094 mi.)	I28	68
CENTRAL ASSISTED LIV Database: AST, Date of Government \ Facility Id: 2-612713	1509 CENTRAL AVENUE /ersion: 09/25/2018	E 1/8 - 1/4 (0.168 mi.)	L49	100
CENTRAL BAYPORT LLC Database: AST, Date of Government \	13-06 BAYPORT PLACE /ersion: 09/25/2018	ENE 1/8 - 1/4 (0.185 mi.)	54	116

Facility Id: 2-348473				
FAR ROCKAWAY AUTO GL Database: AST, Date of Government Versi Facility Id: 2-610132	14-06 AUGUSTINA AVEN ion: 09/25/2018	ENE 1/8 - 1/4 (0.190 mi.)	Q56	118
SHOREVIEW COOPERATIV Database: AST, Date of Government Versi Facility Id: 2-070165	22-87 MOTT AVENUE ion: 09/25/2018	W 1/8 - 1/4 (0.206 mi.)	59	125
TWICE MIGHT LLC Database: AST, Date of Government Versi Facility Id: 2-405183	22-88 MOTT AVENUE ion: 09/25/2018	WNW 1/8 - 1/4 (0.208 mi.)	R62	130
EL PAIS AUTO REPAIR Database: AST, Date of Government Versi Facility Id: 2-605889	14-17 CENTRAL AVE ion: 09/25/2018	ENE 1/8 - 1/4 (0.227 mi.)	S64	136
STEVEN AUTO REPAIRS Database: AST, Date of Government Versi Facility Id: 2-610023	1338 CENTRAL AVENUE on: 09/25/2018	ENE 1/8 - 1/4 (0.232 mi.)	65	138

NY MOSF AST: Major Oil Storage Facilities Database. Facilities are licensed pursuant to Article 12 of the Navigation Law, 6 NYCRR Part 610 and 17 NYCRR Part 30. These facilities may be onshore facilities or vessels, with petroleum storage capacities of 400,000 gallons or greater. Includes MOSF's licensed or closed since April 1, 1986, (responsibility was transferred from DOT on October 13, 1985) plus available data obtained from DOT facilities licensed since Article 12 became law on April 1, 1978.

A review of the NY MOSF AST list, as provided by EDR, and dated 01/01/2002 has revealed that there are 2 NY MOSF AST sites within approximately 0.5 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
OIL CO., INC. Facility Status: 2 Facility Status: 1	ONE SHERIDAN BLVD.	N 1/4 - 1/2 (0.370 mi.)	Z 86	186
FAR ROCKAWAY POWER S Facility Status: 1 Facility Status: 1 Facility Status: 3	1425 BAY 24TH STREET	WNW 1/4 - 1/2 (0.410 mi.)	AA92	231

NY TANKS: This database contains records of facilities that are or have been regulated under Bulk Storage Program. Tank information for these facilities may not be releasable by the state agency.

A review of the NY TANKS list, as provided by EDR, has revealed that there is 1 NY TANKS site within approximately 0.25 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
VERIZON NEW YORK INC	13-11 BAYPORT PLACE	ENE 1/8 - 1/4 (0.157 mi.)	M45	92
Database: TANKS, Data of Government Version: 00/25/2018				

Database: TANKS, Date of Government Version: 09/25/2018

Facility Id: 2-343986 Site Status: Active

ADDITIONAL ENVIRONMENTAL RECORDS

Local Lists of Landfill / Solid Waste Disposal Sites

Registered Recycling Facility List from the Department of Environmental Conservation.

A review of the NY SWRCY list, as provided by EDR, and dated 12/08/2017 has revealed that there is 1 NY SWRCY site within approximately 0.5 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
JACK COLETTA INC./CO	1629 REDFERN AVE	NE 1/8 - 1/4 (0.138 mi.)	J41	83

Records of Emergency Release Reports

NY Spills: Data collected on spills reported to NYSDEC. is required by one or more of the following: Article 12 of the Navigation Law, 6 NYCRR Section 613.8 (from PBS regs), or 6 NYCRR Section 595.2 (from CBS regs). It includes spills active as of April 1, 1986, as well as spills occurring since this date.

A review of the NY Spills list, as provided by EDR, and dated 10/16/2018 has revealed that there are 4 NY Spills sites within approximately 0.125 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
DRUM RUN Date Closed: 2012-08-02 Spill Number: 1204054 Site ID: 466912	BEACH 21ST ST AND MO	SE 0 - 1/8 (0.082 mi.)	23	63
Lower Elevation	Address	Direction / Distance	Map ID	Page
ON EMPTY LOT Date Closed: 2010-07-01 Spill Number: 1000860 Site ID: 433544	17-25 17-27 REDFERN	NE 0 - 1/8 (0.084 mi.)	E25	65
DRY CLEANERS Date Closed: 2007-01-04 Spill Number: 0611066 Site ID: 375635	1159 BEACH CHANNEL D	SW 0 - 1/8 (0.088 mi.)	G26	66
2230-40 MOTT AVENUE Date Closed: 2003-02-25 Spill Number: 9710254 Site ID: 244791	2230-40 MOTT AVENUE	W 0 - 1/8 (0.099 mi.)	31	72

Other Ascertainable Records

RCRA NonGen / NLR: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA)

of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

A review of the RCRA NonGen / NLR list, as provided by EDR, and dated 03/01/2018 has revealed that there are 6 RCRA NonGen / NLR sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
SNOW WHITE CLEANERS EPA ID:: NYD982180663	20-88 MOTT AVE	SSE 0 - 1/8 (0.049 mi.)	D12	19
US POSTAL SERVICE EPA ID:: NYD986974426	1836 MOTT AVE	SE 1/8 - 1/4 (0.238 mi.)	V74	156
Lower Elevation	Address	Direction / Distance	Map ID	Page
FRESH EXPRESSIONS CO EPA ID:: NYR000022715	1522 CENTRAL AVE	E 1/8 - 1/4 (0.155 mi.)	L44	89
VERIZON NEW YORK - F EPA ID:: NYR000108571	13-11 BAYPORT PL	ENE 1/8 - 1/4 (0.157 mi.)	M46	94
ARTIES COLLISION INC EPA ID:: NYD137916953	1402 AUGUSTINA AVE	ENE 1/8 - 1/4 (0.199 mi.)	Q58	121
OTHMAN SERVICE STATI EPA ID:: NYD982719288	1401 CENTRAL AVE	ENE 1/8 - 1/4 (0.232 mi.)	66	140

NY DRYCLEANERS: A listing of all registered drycleaning facilities.

A review of the NY DRYCLEANERS list, as provided by EDR, and dated 03/07/2018 has revealed that there are 4 NY DRYCLEANERS sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
SNOW WHITE DRY CLEAN Facility Id: 2-6308-00464	20-88 MOTT AVE.	SSE 0 - 1/8 (0.049 mi.)	D11	18
NASSAU BEACH CLEANER Facility Id: 2-6308-00444	2105 CORNAGA AVE.	S 1/8 - 1/4 (0.236 mi.)	U71	150
Lower Elevation	Address	Direction / Distance	Map ID	Page
GEORGE/&CHRIS CLEANE Facility Id: 2-6308-00344	Address 21-40 MOTT AVE.	Direction / Distance SSW 0 - 1/8 (0.015 mi.)	Map ID A2	Page 8

NY E DESIGNATION: Lots designation with an ?E? on the Zoning Maps of the City of New York for potential hazardous material contamination, air and/or noise quality impacts.

A review of the NY E DESIGNATION list, as provided by EDR, and dated 08/21/2018 has revealed that there are 16 NY E DESIGNATION sites within approximately 0.125 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
LOT 1,TAXBLOCK 15537	20-02 MOTT AVENUE	SE 0 - 1/8 (0.061 mi.)	D14	33

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
LOT 5,TAXBLOCK 15537	20-10 MOTT AVENUE	SE 0 - 1/8 (0.099 mi.)	32	73
Lower Elevation	Address	Direction / Distance	Map ID	Page
LOT 9,TAXBLOCK 15528 LOT 101,TAXBLOCK 157 LOT 109,TAXBLOCK 157 LOT 1,TAXBLOCK 15661 LOT 80,TAXBLOCK 1566 LOT 40,TAXBLOCK 1553 LOT 50,TAXBLOCK 1553 LOT 51,TAXBLOCK 1553 LOT 51,TAXBLOCK 1553 LOT 53,TAXBLOCK 1553 LOT 54,TAXBLOCK 1553 LOT 54,TAXBLOCK 1553 LOT 56,TAXBLOCK 1553	13-24 BEACH CHANNEL 21-41 MOTT AVENUE 21-23 MOTT AVENUE 22-02 MOTT AVENUE 13-15 BEACH CHANNEL 18-01 REDFERN AVENUE 17-27 REDFERN AVENUE 17-25 REDFERN AVENUE 10-74 BEACH 22 STREE 17-21 REDFERN AVENUE 17-19 REDFERN AVENUE 17-15 REDFERN AVENUE	NNW 0 - 1/8 (0.026 mi.) SSW 0 - 1/8 (0.032 mi.) S 0 - 1/8 (0.038 mi.) W 0 - 1/8 (0.048 mi.) WNW 0 - 1/8 (0.048 mi.) NE 0 - 1/8 (0.062 mi.) NE 0 - 1/8 (0.084 mi.) NE 0 - 1/8 (0.090 mi.) S 0 - 1/8 (0.094 mi.) NE 0 - 1/8 (0.095 mi.) NE 0 - 1/8 (0.100 mi.) NE 0 - 1/8 (0.100 mi.)	5 B6 B7 C8 C9 E15 E24 H27 I29 H30 H33 H35	15 15 16 17 17 33 64 68 71 71 73 74
LOT 57,TAXBLOCK 1553 LOT 58,TAXBLOCK 1553	17-11 REDFERN AVENUE 17-09 REDFERN AVENUE	NE 0 - 1/8 (0.113 mi.) NE 0 - 1/8 (0.118 mi.)	H36 J38	74 78

NY MANIFEST: Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a TSD facility.

A review of the NY MANIFEST list, as provided by EDR, and dated 07/01/2018 has revealed that there are 10 NY MANIFEST sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
SNOW WHITE CLEANERS EPA ID: NYD982180663	20-88 MOTT AVE	SSE 0 - 1/8 (0.049 mi.)	D12	19
MTA NYCT - MOTT AVEN EPA ID: NYR000150961	MOTT AVE & BEACH 22N	SSE 0 - 1/8 (0.057 mi.)	D13	24
NASSAU BEACH CLEANER EPA ID: NYD986939601	2105 CORNAGA AVE	S 1/8 - 1/4 (0.236 mi.)	U72	150
US POSTAL SERVICE EPA ID: NYD986974426	1836 MOTT AVE	SE 1/8 - 1/4 (0.238 mi.)	V74	156
Lower Elevation	Address	Direction / Distance	Map ID	Page
GEORGE & CHRIS CLEAN EPA ID: NYD077444206	2140 MOTT AVE	SSW 0 - 1/8 (0.015 mi.)	A4	9
BP PRODUCTS NORTH AM EPA ID: NYD986909505	13-46 BEACH CHANNEL	N 0 - 1/8 (0.071 mi.)	F19	51
NEW MYLES FRENCH CLE EPA ID: NYD981141468	11-59 BEACH CHANNEL	SW 0 - 1/8 (0.073 mi.)	G22	55
FRESH EXPRESSIONS CO EPA ID: NYR000022715	1522 CENTRAL AVE	E 1/8 - 1/4 (0.155 mi.)	L44	89
ARTIES COLLISION INC EPA ID: NYD137916953	1402 AUGUSTINA AVE	ENE 1/8 - 1/4 (0.199 mi.)	Q58	121
OTHMAN SERVICE STATI EPA ID: NYD982719288	1401 CENTRAL AVE	ENE 1/8 - 1/4 (0.232 mi.)	66	140

PA MANIFEST: Hazardous waste manifest information.

A review of the PA MANIFEST list, as provided by EDR, and dated 12/31/2016 has revealed that there is 1 PA MANIFEST site within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
US POSTAL SERVICE	1836 MOTT AVENUE	SE 1/8 - 1/4 (0.238 mi.)	V73	154
Generator EPA Id: NYD986974426				

NJ MANIFEST: Hazardous waste manifest information.

A review of the NJ MANIFEST list, as provided by EDR, and dated 12/31/2017 has revealed that there is 1 NJ MANIFEST site within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
MTA NYCT - MOTT AVEN	MOTT AVE & BEACH 22N	SSE 0 - 1/8 (0.057 mi.)	D13	24
EPA Id: NYR000150961				

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP: The EDR Proprietary Manufactured Gas Plant Database includes records of coal gas plants (manufactured gas plants) compiled by EDR's researchers. Manufactured gas sites were used in the United States from the 1800's to 1950's to produce a gas that could be distributed and used as fuel. These plants used whale oil, rosin, coal, or a mixture of coal, oil, and water that also produced a significant amount of waste. Many of the byproducts of the gas production, such as coal tar (oily waste containing volatile and non-volatile chemicals), sludges, oils and other compounds are potentially hazardous to human health and the environment. The byproduct from this process was frequently disposed of directly at the plant site and can remain or spread slowly, serving as a continuous source of soil and groundwater contamination.

A review of the EDR MGP list, as provided by EDR, has revealed that there are 2 EDR MGP sites within approximately 1 mile of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
FAR ROCKAWAY MGP	CORNER OF BRUNSWICK	NE 1/4 - 1/2 (0.429 mi.)	93	238
INWOOD HOLDER	W. OF SHERIDAN BLVD.	N 1/2 - 1 (0.562 mi.)	98	245

EDR Hist Auto: EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

A review of the EDR Hist Auto list, as provided by EDR, has revealed that there is 1 EDR Hist Auto

site within approximately 0.125 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
HI AUTO SVCE	1346 BCH CHANL DR	N 0 - 1/8 (0.071 mi.)	F16	34

EDR Hist Cleaner: EDR has searched selected national collections of business directories and has collected listings of potential dry cleaner sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include dry cleaning establishments. The categories reviewed included, but were not limited to dry cleaners, cleaners, laundry, laundromat, cleaning/laundry, wash & dry etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

A review of the EDR Hist Cleaner list, as provided by EDR, has revealed that there are 4 EDR Hist Cleaner sites within approximately 0.125 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
SNOW WHITE DRY CLEAN	20-88 MOTT AVE	SSE 0 - 1/8 (0.049 mi.)	D10	18
Lower Elevation	Address	Direction / Distance	Map ID	Page
GEORGE & CHRIS CLEAN MYLES FRENCH CLEANER BELL BOY DRIVE IN CL	21-40 MOTT AVE 11-59 BEACH CHANNEL 1361 BCH CHANNEL DR	SSW 0 - 1/8 (0.015 mi.) SW 0 - 1/8 (0.073 mi.) N 0 - 1/8 (0.108 mi.)	A3 G20 34	8 54 74

Due to poor or inadequate address information, the following sites were not mapped. Count: 3 records.

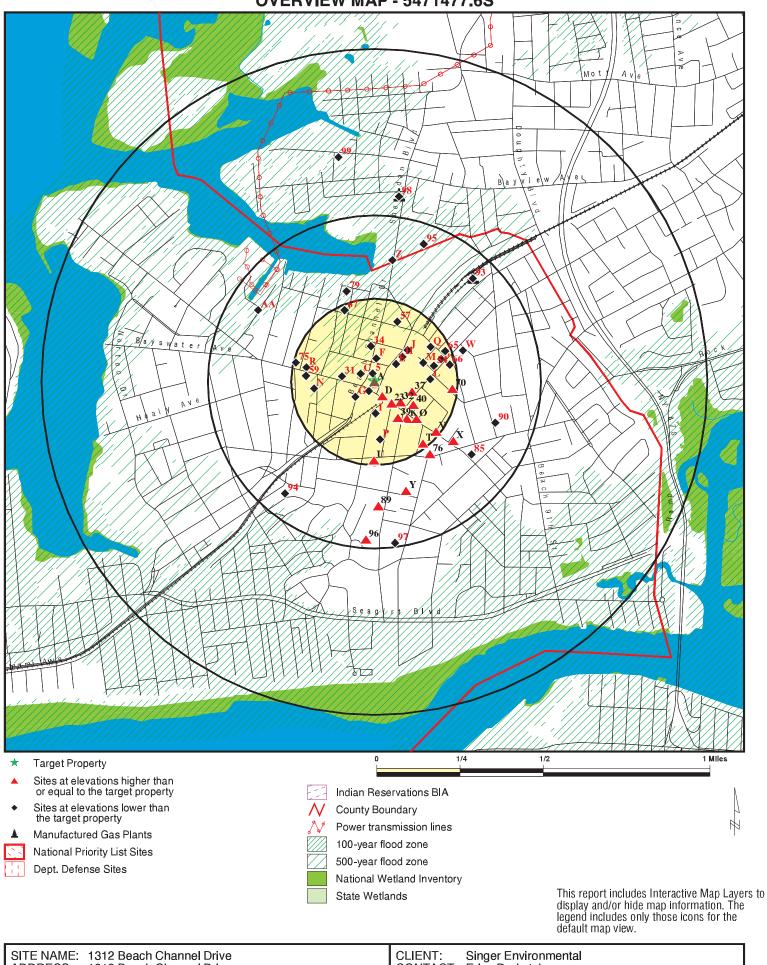
Site Name

34-11 BEACH CHANNEL DRIVE

FAR ROCKAWAY MGP FAR ROCKAWAY (INWOOD) F03 (LIRR) Database(s)

NY ENG CONTROLS, NY INST CONTROL, NY BROWNFIELDS NY VCP, NY BROWNFIELDS NY VCP

OVERVIEW MAP - 5471477.6S

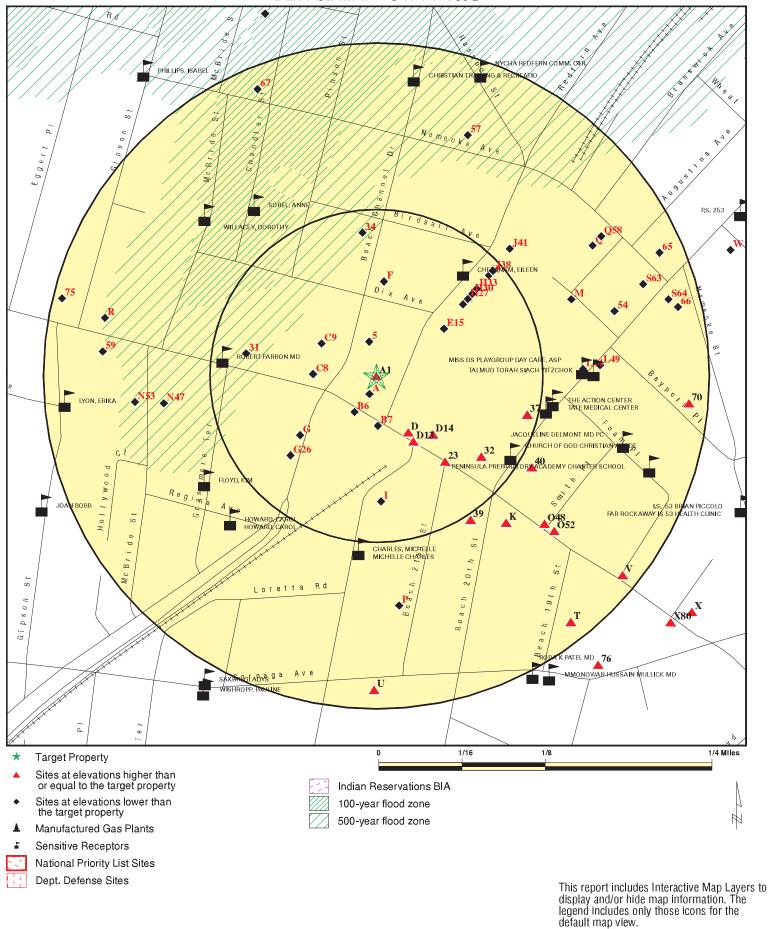


SITE NAME: 1312 Beach Channel Drive
ADDRESS: 1312 Beach Channel Drive
Far Rockaway NY 11691

CLIENT: Singer Environm
CONTACT: Erica Derkatch
INQUIRY #: 5471477.6s

LAT/LONG: 40.605499 / 73.754527 DATE: October 31, 2018 10:27 pm

DETAIL MAP - 5471477.6S



SITE NAME: 1312 Beach Channel Drive
ADDRESS: 1312 Beach Channel Drive
Far Rockaway NY 11691
LAT/LONG: 40.605499 / 73.754527

CLIENT: Singer Environmental
CONTACT: Erica Derkatch
INQUIRY #: 5471477.6s
DATE: October 31, 2018 10:28 pm

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
STANDARD ENVIRONMENT	TAL RECORDS							
Federal NPL site list								
NPL Proposed NPL NPL LIENS	1.000 1.000 TP		0 0 NR	0 0 NR	0 0 NR	0 0 NR	NR NR NR	0 0 0
Federal Delisted NPL sit	e list							
Delisted NPL	1.000		0	0	0	0	NR	0
Federal CERCLIS list								
FEDERAL FACILITY SEMS	0.500 0.500		0 0	0 0	0 0	NR NR	NR NR	0 0
Federal CERCLIS NFRA	P site list							
SEMS-ARCHIVE	0.500		0	0	0	NR	NR	0
Federal RCRA CORRAC	TS facilities lis	st						
CORRACTS	1.000		0	0	0	0	NR	0
Federal RCRA non-COR	RACTS TSD fa	cilities list						
RCRA-TSDF	0.500		0	0	0	NR	NR	0
Federal RCRA generator	rs list							
RCRA-LQG RCRA-SQG RCRA-CESQG	0.250 0.250 0.250		0 2 2	0 0 1	NR NR NR	NR NR NR	NR NR NR	0 2 3
Federal institutional con engineering controls reg								
LUCIS US ENG CONTROLS US INST CONTROL	0.500 0.500 0.500		0 0 0	0 0 0	0 0 0	NR NR NR	NR NR NR	0 0 0
Federal ERNS list								
ERNS	TP		NR	NR	NR	NR	NR	0
State- and tribal - equiva	alent CERCLIS							
NY SHWS	1.000		0	0	0	1	NR	1
State and tribal landfill a solid waste disposal site								
NY SWF/LF	0.500		0	3	1	NR	NR	4
State and tribal leaking	storage tank li	sts						
INDIAN LUST NY LTANKS NY HIST LTANKS	0.500 0.500 0.500		0 0 0	0 4 0	0 17 0	NR NR NR	NR NR NR	0 21 0
State and tribal registere	ed storage tan	k lists						
FEMA UST	0.250		0	0	NR	NR	NR	0

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
NY UST NY CBS UST NY MOSF UST NY CBS NY MOSF NY AST NY CBS AST NY MOSF AST INDIAN UST NY TANKS	0.250 0.250 0.500 0.250 0.500 0.250 0.250 0.250 0.250		1 0 0 0 0 3 0 0	9 0 0 0 14 0 0	NR NR 2 NR 2 NR NR 2 NR	NR NR NR NR NR NR NR NR	NR NR NR NR NR NR NR NR	10 0 2 0 2 17 0 2 0
State and tribal institutio control / engineering con		s						
NY RES DECL NY ENG CONTROLS NY INST CONTROL	0.125 0.500 0.500		0 0 0	NR 0 0	NR 0 0	NR NR NR	NR NR NR	0 0 0
State and tribal voluntary	/ cleanup site	es						
NY VCP INDIAN VCP	0.500 0.500		0 0	0 0	0 0	NR NR	NR NR	0 0
State and tribal Brownfie	lds sites							
NY BROWNFIELDS NY ERP	0.500 0.500		0 0	0 0	0 0	NR NR	NR NR	0 0
ADDITIONAL ENVIRONMEN	TAL RECORDS	<u> </u>						
Local Brownfield lists								
US BROWNFIELDS	0.500		0	0	0	NR	NR	0
Local Lists of Landfill / S Waste Disposal Sites	olid							
NY SWRCY NY SWTIRE INDIAN ODI ODI DEBRIS REGION 9 IHS OPEN DUMPS	0.500 0.500 0.500 0.500 0.500 0.500		0 0 0 0 0	1 0 0 0 0 0	0 0 0 0 0	NR NR NR NR NR	NR NR NR NR NR	1 0 0 0 0 0
Local Lists of Hazardous Contaminated Sites	waste /							
US HIST CDL NY DEL SHWS US CDL	TP 1.000 TP		NR 0 NR	NR 0 NR	NR 0 NR	NR 0 NR	NR NR NR	0 0 0
Local Lists of Registered	l Storage Tan	ıks						
NY HIST UST NY HIST AST	0.250 TP		0 NR	0 NR	NR NR	NR NR	NR NR	0 0
Local Land Records								
NY LIENS	TP		NR	NR	NR	NR	NR	0

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
LIENS 2	TP		NR	NR	NR	NR	NR	0
Records of Emergency F	Release Repo	rts						
HMIRS NY Spills NY Hist Spills NY SPILLS 90 NY SPILLS 80	TP 0.125 0.125 0.125 0.125		NR 4 0 0 0	NR NR NR NR NR	NR NR NR NR NR	NR NR NR NR NR	NR NR NR NR NR	0 4 0 0
Other Ascertainable Rec	ords							
RCRA NonGen / NLR FUDS DOD SCRD DRYCLEANERS US FIN ASSUR EPA WATCH LIST 2020 COR ACTION TSCA TRIS SSTS ROD RMP RAATS PRP PADS ICIS FTTS MLTS COAL ASH DOE COAL ASH EPA PCB TRANSFORMER RADINFO HIST FTTS DOT OPS CONSENT INDIAN RESERV FUSRAP UMTRA LEAD SMELTERS US AIRS US MINES ABANDONED MINES FINDS UXO ECHO DOCKET HWC FUELS PROGRAM	0.250 1.000 1.000 0.500 TP TP 0.250 TP TP 1.000 TP		1 0 0 0 RR O RR O RR NR RR RR RR O RR NR O O O O	5 0 0 0 RR 0 RRR 0 RR RRR NRR NR 0 NRRR 0 0 0 0	NOOORRRRROORRRRNNNOORRRROOOORRRRRONNN	N O O R R R R R R R R R R R R R R R R R	N N N N N N N N N N N N N N N N N N N	600000000000000000000000000000000000000
NY AIRS NY COAL ASH NY DRYCLEANERS NY E DESIGNATION	TP 0.500 0.250 0.125	1	NR 0 3 16	NR 0 1 NR	NR 0 NR NR	NR NR NR NR	NR NR NR NR	0 0 4 17

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
NY Financial Assurance	TP		NR	NR	NR	NR	NR	0
NY HSWDS	0.500		0	0	0	NR	NR	0
NY MANIFEST	0.250		5	5	NR	NR	NR	10
PA MANIFEST	0.250		0	1	NR	NR	NR	1
NJ MANIFEST	0.250		1	0	NR	NR	NR	1
NY SPDES	TP		NR	NR	NR	NR	NR	0
NY VAPOR REOPENED NY UIC	0.500 TP		0 NR	0 NR	0 NR	NR NR	NR NR	0
NY COOLING TOWERS	TP		NR NR	NR NR	NR NR	NR NR	NR NR	0 0
NT COOLING TOWERS	IF		INIX	INIX	INIX	INIX	INIX	U
EDR HIGH RISK HISTORICA	L RECORDS							
EDR Exclusive Records								
EDR MGP	1.000		0	0	1	1	NR	2
EDR Hist Auto	0.125		1	NR	NR	NR	NR	1
EDR Hist Cleaner	0.125		4	NR	NR	NR	NR	4
EDR RECOVERED GOVERN	MENT ARCHI\	/ES						
Exclusive Recovered Gov	vt. Archives							
NY RGA HWS	TP		NR	NR	NR	NR	NR	0
NY RGA LF	TP		NR	NR	NR	NR	NR	0
- Totals		1	43	45	25	2	0	116

NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

Direction Distance

Distance Elevation Site EDR ID Number

Database(s) EPA ID Number

A1 LOT 5,TAXBLOCK 15528 NY E DESIGNATION S121343947
Target 13-12 BEACH CHANNEL DRIVE N/A

13-12 BEACH CHANNEL DRIVE N/A
v QUEENS, NY 11691

Property QUEENS, NY 11691

Site 1 of 4 in cluster A

Actual: E DESIGNATION: 25 ft. Tax Lot(s):

Tax Block: 15528
Borough Code: QN
E-No: E-415
Effective Date: 9/7/2017
Satisfaction Date: Not reported
Cegr Number: 16DME010Q

Ulurp Number: 170243AZMQ, 170244AZRQ

Zoning Map No: 25b, 31a

Description: Hazardous Materials* Phase I and Phase II Testing Protocol

Lot Remediation Date: Not reported

Description: Window Wall Attenuation & Alternate Ventilation

Lot Remediation Date: Not reported

A2 GEORGE/&CHRIS CLEANERS NY DRYCLEANERS S106436629
SSW 21-40 MOTT AVE. N/A

SSW 21-40 MOTT AVE. < 1/8 FAR ROCKAWAY, NY 11691

0.015 mi.

77 ft. Site 2 of 4 in cluster A

Relative: DRYCLEANERS:

 Lower
 Facility ID:
 2-6308-00344

 Actual:
 Phone Number:
 718-327-4813

 24 ft.
 Region:
 Not reported

Registration Effective Date: 7/25/2002 11:02:45:476

Inspection Date: 07MAY21
Install Date: 91/98
Drop Shop: Not reported
Shutdown: Not reported
Alternate Solvent: Not reported
Current Business: Not reported

A3 GEORGE & CHRIS CLEANERS INC EDR Hist Cleaner 1019994858 SSW 21-40 MOTT AVE EDR HIST CLEANERS INC N/A

< 1/8 FAR ROCKAWAY, NY 11691

EDR Hist Cleaner

0.015 mi.

77 ft. Site 3 of 4 in cluster A

Relative: Lower Actual:

Year: Name: Type:

24 ft. 1975 GEORGE & CHRIS CLEANERS INC Drycleaning Plants, Except Rugs

GEORGE & CHRIS CLEANERS INC Drycleaning Plants, Except Rugs 1976 Drycleaning Plants, Except Rugs 1977 **GEORGE & CHRIS CLEANERS INC** Drycleaning Plants, Except Rugs 1978 **GEORGE & CHRIS CLEANERS INC GEORGE & CHRIS CLEANERS INC** Drycleaning Plants, Except Rugs 1979 Drycleaning Plants, Except Rugs 1980 GEORGE & CHRIS CLEANERS INC Drycleaning Plants, Except Rugs 1982 GEORGE & CHRIS CLEANERS INC 1983 GEORGE & CHRIS CLEANERS INC Drycleaning Plants, Except Rugs

MAP FINDINGS Map ID

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

GEORGE & CHRIS CLEANERS INC (Continued)

1019994858

1985	GEORGE & CHRIS CLEANERS INC	Drycleaning Plants, Except Rugs
1986	GEORGE & CHRIS CLEANERS INC	Drycleaning Plants, Except Rugs
1987	GEORGE & CHRIS CLEANERS INC	Drycleaning Plants, Except Rugs
1988	GEORGE & CHRIS CLEANERS INC	Drycleaning Plants, Except Rugs
1989	GEORGE & CHRIS CLEANERS INC	Drycleaning Plants, Except Rugs
1990	GEORGE & CHRIS CLEANERS INC	Drycleaning Plants, Except Rugs
1991	GEORGE & CHRIS CLEANERS INC	Drycleaning Plants, Except Rugs
1992	GEORGE & CHRIS CLEANERS INC	Drycleaning Plants, Except Rugs
1993	GEORGE & CHRIS CLEANERS INC	Drycleaning Plants, Except Rugs
1994	GEORGE & CHRIS CLEANERS INC	Drycleaning Plants, Except Rugs
1995	GEORGE & CHRIS CLEANERS INC	Drycleaning Plants, Except Rugs
1996	GEORGE & CHRIS CLEANERS INC	Drycleaning Plants, Except Rugs
1997	GEORGE & CHRIS CLEANERS INC	Drycleaning Plants, Except Rugs
1998	GEORGE & CHRIS CLEANERS INC	Drycleaning Plants, Except Rugs
1999	GEORGE & CHRIS CLEANERS INC	Drycleaning Plants, Except Rugs
2000	GEORGE & CHRIS CLEANERS INC	Drycleaning Plants, Except Rugs
2001	GEORGE & CHRIS CLEANERS INC	Drycleaning Plants, Except Rugs
2002	GEORGE & CHRIS CLEANERS INC	Drycleaning Plants, Except Rugs
2003	GEORGE & CHRIS CLEANERS INC	Drycleaning Plants, Except Rugs
2004	GEORGE & CHRIS CLEANERS INC	Drycleaning Plants, Except Rugs
2005	GEORGE & CHRIS CLEANERS INC	Drycleaning Plants, Except Rugs
2006	GEORGE & CHRIS CLEANERS INC	Drycleaning Plants, Except Rugs
2007	GEORGE & CHRIS CLEANERS INC	Drycleaning Plants, Except Rugs
2008	GEORGE & CHRIS CLEANERS INC	Drycleaning Plants, Except Rugs
2009	GEORGE & CHRIS CLEANERS INC	Drycleaning Plants, Except Rugs
2010	GEORGE & CHRIS CLEANERS INC	Drycleaning Plants, Except Rugs
2011	GEORGE & CHRIS CLEANERS INC	Drycleaning Plants, Except Rugs
2012	GEORGE & CHRIS CLEANERS INC	Drycleaning Plants, Except Rugs
2013	GEORGE & CHRIS CLEANERS INC	Drycleaning Plants, Except Rugs
2014	GEORGE & CHRIS CLEANERS INC	Drycleaning Plants, Except Rugs

Α4 **GEORGE & CHRIS CLEANERS INC** RCRA-CESQG 1000357190 ssw **2140 MOTT AVE** NYD077444206 ICIS

< 1/8 FAR ROCKAWAY, NY 11691

0.015 mi.

Site 4 of 4 in cluster A

Relative:

RCRA-CESQG:

Lower

77 ft.

Date form received by agency: 01/01/2007

Actual:

Facility name:

Facility address: 24 ft.

GEORGE & CHRIS CLEANERS INC 2140 MOTT AVE

FAR ROCKAWAY, NY 11691

EPA ID:

NYD077444206

Mailing address: MOTT AVE

FAR ROCKAWAY, NY 11691

Contact:

GEORGE MARKIDES

Contact address:

MOTT AVE FAR ROCKAWAY, NY 11691

Contact country: US

Contact telephone: 718-327-4813 Contact email: Not reported

EPA Region: 02

Classification: Conditionally Exempt Small Quantity Generator

Handler: generates 100 kg or less of hazardous waste per calendar Description:

month, and accumulates 1000 kg or less of hazardous waste at any time; or generates 1 kg or less of acutely hazardous waste per calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or

US AIRS

NY MANIFEST

Direction Distance Elevation

Site Database(s) EPA ID Number

GEORGE & CHRIS CLEANERS INC (Continued)

1000357190

EDR ID Number

other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste

Owner/Operator Summary:

Owner/operator name: GEORGE MARKIDES
Owner/operator address: NOT REQUIRED

NOT REQUIRED, WY 99999

Owner/operator country: US

Owner/operator telephone: 212-555-1212 Owner/operator email: Not reported Owner/operator fax: Not reported Owner/operator extension: Not reported Legal status: Private Owner/Operator Type: Owner Owner/Op start date: Not reported Owner/Op end date: Not reported

Owner/operator name: GEORGE MARKIDES
Owner/operator address: NOT REQUIRED

NOT REQUIRED, WY 99999

Not reported

Owner/operator country: US

Owner/operator telephone: 212-555-1212
Owner/operator email: Not reported
Owner/operator fax: Not reported
Owner/operator extension: Not reported
Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: Not reported

Handler Activities Summary:

Owner/Op end date:

U.S. importer of hazardous waste: No Mixed waste (haz. and radioactive): No Recycler of hazardous waste: No Transporter of hazardous waste: No Treater, storer or disposer of HW: No Underground injection activity: No On-site burner exemption: No Furnace exemption: No Used oil fuel burner: No Used oil processor: No User oil refiner: No Used oil fuel marketer to burner: No Used oil Specification marketer: No Used oil transfer facility: No Used oil transporter: No

Historical Generators:

Date form received by agency: 01/01/2006

MAP FINDINGS Map ID

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

GEORGE & CHRIS CLEANERS INC (Continued)

1000357190

GEORGE & CHRIS CLEANERS INC Site name:

Conditionally Exempt Small Quantity Generator Classification:

Date form received by agency: 11/30/1987

GEORGE & CHRIS CLEANERS INC Site name:

Classification: **Small Quantity Generator**

Waste code: F002

THE FOLLOWING SPENT HALOGENATED SOLVENTS: TETRACHLOROETHYLENE, Waste name:

METHYLENE CHLORIDE, TRICHLOROETHYLENE, 1,1,1-TRICHLOROETHANE,

CHLOROBENZENE, 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE, ORTHO-DICHLOROBENZENE, TRICHLOROFLUOROMETHANE, AND

1,1,2-TRICHLOROETHANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE LISTED IN F001, F004, OR F005, AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND

SPENT SOLVENT MIXTURES.

Violation Status: No violations found

ICIS:

Enforcement Action ID: NY000A0000263080034400313

FRS ID: 110002365636

Action Name: GEORGE CLEANERS 36081R033600313

Facility Name: **GEORGE CLEANERS** Facility Address: 21-40 MOTT AVE

FAR ROCKAWAY, NY 116913216

Enforcement Action Type: Notice of Violation

Facility County: **QUEENS** Program System Acronym: AIR

Enforcement Action Forum Desc: Administrative - Informal

EA Type Code: NOV Facility SIC Code: 7216 Federal Facility ID: Not reported Latitude in Decimal Degrees:

40.605304 Longitude in Decimal Degrees: -73.754714 Permit Type Desc: Not reported Program System Acronym:

NY0000002630800344

Facility NAICS Code: 812320 Tribal Land Code: Not reported

Enforcement Action ID: NY000A0000263080034400312

FRS ID: 110002365636

Action Name: GEORGE CLEANERS 36081R033600312

Facility Name: **GEORGE CLEANERS** Facility Address: 21-40 MOTT AVE

FAR ROCKAWAY, NY 116913216

Enforcement Action Type: Notice of Violation

QUEENS Facility County: Program System Acronym: **AIR**

Enforcement Action Forum Desc: Administrative - Informal

EA Type Code: NOV Facility SIC Code: 7216 Federal Facility ID: Not reported Latitude in Decimal Degrees: 40.605304 Longitude in Decimal Degrees: -73.754714 Permit Type Desc: Not reported

NY0000002630800344 Program System Acronym:

Direction Distance

Elevation Site Database(s) EPA ID Number

GEORGE & CHRIS CLEANERS INC (Continued)

1000357190

EDR ID Number

Facility NAICS Code: 812320
Tribal Land Code: Not reported

US AIRS MINOR:

Envid: 1000357190

Region Code: 02

Programmatic ID: AIR NY0000002630800344

Facility Registry ID: 110002365636
D and B Number: Not reported
Primary SIC Code: 7216
NAICS Code: 812320
Default Air Classification Code: MIN
Facility Type of Ownership Code: POF
Air CMS Category Code: Not reported
HPV Status: Not reported

US AIRS MINOR:

Region Code: 02

Programmatic ID: AIR NY0000002630800344

Facility Registry ID: 110002365636

Air Operating Status Code: OPR
Default Air Classification Code: MIN

Air Program: MACT Standards (40 CFR Part 63)

Activity Date: 2000-01-10 00:00:00

Activity Status Date: Not reported

Activity Group: Compliance Monitoring Activity Type: Inspection/Evaluation

Activity Status: Not reported

Region Code: 02

Programmatic ID: AIR NY0000002630800344

Facility Registry ID: 110002365636

Air Operating Status Code: OPR Default Air Classification Code: MIN

Air Program: MACT Standards (40 CFR Part 63)

Activity Date: 2005-08-16 00:00:00
Activity Status Date: 2005-08-16 00:00:00
Activity Group: Enforcement Action
Activity Type: Administrative - Informal

Activity Status: Achieved

Region Code: 02

Programmatic ID: AIR NY0000002630800344

Facility Registry ID: 110002365636

Air Operating Status Code: OPR
Default Air Classification Code: MIN

Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards

Activity Date: 2000-01-10 00:00:00

Activity Status Date: Not reported

Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation

Activity Status: Not reported

US AIRS MINOR:

Envid: 1000357190

Direction Distance

Elevation Site Database(s) EPA ID Number

GEORGE & CHRIS CLEANERS INC (Continued)

1000357190

EDR ID Number

Region Code: 02

Programmatic ID: AIR NY0000002630800344

Facility Registry ID: 110002365636
D and B Number: Not reported
Primary SIC Code: 7216
NAICS Code: 812320
Default Air Classification Code: MIN
Facility Type of Ownership Code: POF
Air CMS Category Code: Not reported
HPV Status: Not reported

US AIRS MINOR:

Region Code: 02

Programmatic ID: AIR NY0000002630800344

Facility Registry ID: 110002365636

Air Operating Status Code: OPR
Default Air Classification Code: MIN

Air Program: MACT Standards (40 CFR Part 63)

Activity Date: 2000-01-10 00:00:00

Activity Status Date: Not reported

Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation

Activity Status: Not reported

Region Code: 02

Programmatic ID: AIR NY0000002630800344

Facility Registry ID: 110002365636

Air Operating Status Code: OPR Default Air Classification Code: MIN

Air Program: MACT Standards (40 CFR Part 63)

Activity Date: 2005-08-16 00:00:00
Activity Status Date: 2005-08-16 00:00:00
Activity Group: Enforcement Action
Activity Type: Administrative - Informal

Activity Status: Achieved

Region Code: 02

Programmatic ID: AIR NY0000002630800344

Facility Registry ID: 110002365636

Air Operating Status Code: OPR Default Air Classification Code: MIN

Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards

Activity Date: 2000-01-10 00:00:00

Activity Status Date: Not reported

Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation

Activity Status: Not reported

NY MANIFEST:

Country: USA

EPA ID: NYD077444206 Facility Status: Not reported

Location Address 1: 2140 MOTT AVENUE

Code: BP

Location Address 2: Not reported Total Tanks: Not reported

Direction Distance

Elevation Site Database(s) EPA ID Number

GEORGE & CHRIS CLEANERS INC (Continued)

1000357190

EDR ID Number

Location City: FAR ROCKAWAY

Location State: NY
Location Zip: 11691
Location Zip 4: Not reported

NY MANIFEST:

EPAID: NYD077444206

Mailing Name: GEORGE L CHRIS CLEANERS

Mailing Contact: N/S

Mailing Address 1: 2140 MOTT AVENUE

Mailing Address 2: Not reported Mailing City: FAR ROCKAWAY

Mailing State: NY
Mailing Zip: 11691
Mailing Zip 4: Not reported
Mailing Country: USA
Mailing Phone: 7183274813

NY MANIFEST:

Document ID: NYG4447935 Manifest Status: Not reported

seq: 01

Year: 2006

Trans1 State ID: NJD000564906 Trans2 State ID: Not reported Generator Ship Date: 03/13/2006 Trans1 Recy Date: 03/13/2006 Trans2 Recv Date: Not reported TSD Site Recv Date: 03/17/2006 Part A Recv Date: Not reported Part B Recv Date: Not reported Generator EPA ID: NYD077444206

Trans1 EPA ID: NJ420 Trans2 EPA ID: Not reported TSDF ID 1: NJD000564906 TSDF ID 2: Not reported Manifest Tracking Number: Not reported Import Indicator: Not reported **Export Indicator:** Not reported Discr Quantity Indicator: Not reported Discr Type Indicator: Not reported Discr Residue Indicator: Not reported Discr Partial Reject Indicator: Not reported Discr Full Reject Indicator: Not reported Manifest Ref Number: Not reported Alt Facility RCRA ID: Not reported Alt Facility Sign Date: Not reported MGMT Method Type Code: Not reported

Waste Code: F002 - HALO SOLV + STILL BOTTOMS FM REC OF SOLV

Waste Code:
Waste

Number of Containers: 002

Direction Distance

Distance Elevation Site EDR ID Number

EDR ID Number

EPA ID Number

GEORGE & CHRIS CLEANERS INC (Continued)

1000357190

Container Type: DM - Metal drums, barrels

Handling Method: T Chemical, physical, or biological treatment.

Specific Gravity: 01.00

Waste Code: F002 - HALO SOLV + STILL BOTTOMS FM REC OF SOLV

Waste Code:
Wor reported
Waste Code:
Quantity:
Units:
P - Pounds

Number of Containers: 001

Container Type: DM - Metal drums, barrels

Handling Method: T Chemical, physical, or biological treatment.

Specific Gravity: 01.00

Click this hyperlink while viewing on your computer to access -1 additional NY MANIFEST: record(s) in the EDR Site Report.

5 LOT 9,TAXBLOCK 15528 NY E DESIGNATION S121344038 NNW 13-24 BEACH CHANNEL DRIVE N/A

< 1/8

1/8 QUEENS, NY 11691

0.026 mi. 139 ft.

Relative: E DESIGNATION:

 Lower
 Tax Lot(s):
 9

 Actual:
 Tax Block:
 15528

 19 ft.
 Borough Code:
 QN

 E-No:
 E-415

 Effective Date:
 9/7/201

Effective Date: 9/7/2017
Satisfaction Date: Not reported
Ceqr Number: 16DME010Q

Ulurp Number: 170243AZMQ, 170244AZRQ

Zoning Map No: 25b, 31a

Description: Air Quality - HVAC fuel limited to natural gas

Lot Remediation Date: Not reported

Description: Hazardous Materials* Phase I and Phase II Testing Protocol

Lot Remediation Date: Not reported

Description: Window Wall Attenuation & Alternate Ventilation

Lot Remediation Date: Not reported

B6 LOT 101,TAXBLOCK 15709 NY E DESIGNATION S121343833

SSW 21-41 MOTT AVENUE < 1/8 QUEENS, NY 11691

0.032 mi.

167 ft. Site 1 of 2 in cluster B

Relative: E DESIGNATION:

 Lower
 Tax Lot(s):
 101

 Actual:
 Tax Block:
 15709

 21 ft.
 Borough Code:
 QN

 E-No:
 E-415

TC5471477.6s Page 15

N/A

Direction Distance

Elevation Site Database(s) EPA ID Number

LOT 101, TAXBLOCK 15709 (Continued)

S121343833

EDR ID Number

Effective Date: 9/7/2017
Satisfaction Date: Not reported
Ceqr Number: 16DME010Q

Ulurp Number: 170243AZMQ, 170244AZRQ

Zoning Map No: 25b, 31a

Description: Exhaust stack location limitations

Lot Remediation Date: Not reported

Description: Hazardous Materials* Phase I and Phase II Testing Protocol

Lot Remediation Date: Not reported

Description: Window Wall Attenuation & Alternate Ventilation

Lot Remediation Date: Not reported

Description: Air Quality - HVAC fuel limited to natural gas

Lot Remediation Date: Not reported

B7 LOT 109,TAXBLOCK 15709 NY E DESIGNATION S121343836 South 21-23 MOTT AVENUE N/A

South 21-23 MOTT AVENUE < 1/8 QUEENS, NY 11691 0.038 mi.

198 ft. Site 2 of 2 in cluster B

Relative: E DESIGNATION:

 Lower
 Tax Lot(s):
 109

 Actual:
 Tax Block:
 15709

 24 ft.
 Borough Code:
 QN

 E-No:
 E-415

Effective Date: 9/7/2017
Satisfaction Date: Not reported
Ceqr Number: 16DME010Q

Ulurp Number: 170243AZMQ, 170244AZRQ

Zoning Map No: 25b, 31a

Description: Exhaust stack location limitations

Lot Remediation Date: Not reported

Description: Hazardous Materials* Phase I and Phase II Testing Protocol

Lot Remediation Date: Not reported

Description: Window Wall Attenuation & Alternate Ventilation

Lot Remediation Date: Not reported

Description: Air Quality - HVAC fuel limited to natural gas

Lot Remediation Date: Not reported

Direction Distance

Distance EDR ID Number Elevation Site EDR ID Number Database(s) EPA ID Number

C8 LOT 1,TAXBLOCK 15661 NY E DESIGNATION S121343808

N/A

N/A

West 22-02 MOTT AVENUE < 1/8 QUEENS, NY 11691

0.048 mi.

251 ft. Site 1 of 2 in cluster C

Relative: E DESIGNATION: Lower Tax Lot(s):

Actual: Tax Block: 15661
15 ft. Borough Code: QN
E-No: E-415

E-No: E-415
Effective Date: 9/7/2017
Satisfaction Date: Not reported
Ceqr Number: 16DME010Q

Ulurp Number: 170243AZMQ, 170244AZRQ

Zoning Map No: 25b, 31a

Description: Air Quality - HVAC natural gas with low Nox only

Lot Remediation Date: Not reported

Description: Hazardous Materials* Phase I and Phase II Testing Protocol

Lot Remediation Date: Not reported

Description: Window Wall Attenuation & Alternate Ventilation

Lot Remediation Date: Not reported

C9 LOT 80,TAXBLOCK 15661 NY E DESIGNATION S121344030

WNW 13-15 BEACH CHANNEL DRIVE

< 1/8 QUEENS, NY 11691

0.048 mi.

253 ft. Site 2 of 2 in cluster C

Relative: E DESIGNATION: Lower Tax Lot(s):

 Actual:
 Tax Block:
 15661

 15 ft.
 Borough Code:
 QN

 E-No:
 E-415

 Effective Date:
 9/7/2017

 Selicitation Date:
 Not sense

Effective Date: 9/7/2017
Satisfaction Date: Not reported
Ceqr Number: 16DME010Q

Ulurp Number: 170243AZMQ, 170244AZRQ

80

Zoning Map No: 25b, 31a

Description: Hazardous Materials* Phase I and Phase II Testing Protocol

Lot Remediation Date: Not reported

Description: Window Wall Attenuation & Alternate Ventilation

Lot Remediation Date: Not reported

Direction Distance

Elevation Site **EPA ID Number** Database(s)

D10 SNOW WHITE DRY CLEANING CORP **EDR Hist Cleaner** 1020089789 SSE

20-88 MOTT AVE N/A

< 1/8 0.049 mi.

257 ft. Site 1 of 5 in cluster D Relative: **EDR Hist Cleaner**

Higher Year: Name: Actual:

FAR ROCKAWAY, NY 11691

1986 SNOW WHITE DRY CLEANING CORP* 25 ft. SNOW WHITE DRY CLEANING CORP* 1987 1988 SNOW WHITE DRY CLEANING CORP 1989 SNOW WHITE DRY CLEANING CORP 1990 SNOW WHITE DRY CLEANING CORP 1991 SNOW WHITE DRY CLEANING CORP

1992 SNOW WHITE DRY CLEANING CORP 1993 SNOW WHITE DRY CLEANING CORP 1994 SNOW WHITE DRY CLEANING CORP 1995 SNOW WHITE DRY CLEANING CORP 1996 SNOW WHITE DRY CLEANING CORP 1997 SNOW WHITE DRY CLEANING CORP 1998 SNOW WHITE DRY CLEANING CORP

1999 SNOW WHITE DRY CLEANING CORP 2000 SNOW WHITE DRY CLEANING CORP 2001 SNOW WHITE DRY CLEANING CORP 2002 SNOW WHITE DRY CLEANING CORP 2003 SNOW WHITE DRY CLEANING CORP

2004 SNOW WHITE DRY CLEANING CORP 2005 SNOW WHITE DRY CLEANING CORP 2006 SNOW WHITE DRY CLEANING CORP 2007 SNOW WHITE DRY CLEANING CORP 2008 SNOW WHITE DRY CLEANING CORP 2009 SNOW WHITE DRY CLEANING CORP

2010 SNOW WHITE DRY CLEANING CORP 2011 SNOW WHITE DRY CLEANING CORP 2012 SNOW WHITE DRY CLEANING CORP SNOW WHITE DRY CLEANING CORP 2013 SNOW WHITE DRY CLEANING CORP 2014

Type:

Drycleaning Plants, Except Rugs Drycleaning Plants, Except Rugs

Drycleaning Plants, Except Rugs

D11 **SNOW WHITE DRY CLEANERS**

SSE 20-88 MOTT AVE.

< 1/8 FAR ROCKAWAY, NY 11691

0.049 mi.

257 ft. Site 2 of 5 in cluster D Relative: DRYCLEANERS:

Higher Facility ID: 2-6308-00464 Phone Number: 718-471-3770 Actual: Region: Not reported 25 ft.

Registration Effective Date: 8/13/2001 15:28:53:156 Inspection Date: 05APR11

Install Date: 86/05 Drop Shop:

Shutdown: Not reported Alternate Solvent: Not reported Current Business: Not reported NY DRYCLEANERS S110247931 N/A

EDR ID Number

MAP FINDINGS Map ID

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

D12 **SNOW WHITE CLEANERS** RCRA NonGen / NLR 1000434911 SSE **20-88 MOTT AVE US AIRS** NYD982180663

FAR ROCKAWAY, NY 11691 **NY MANIFEST** < 1/8

0.049 mi.

257 ft. Site 3 of 5 in cluster D Relative: RCRA NonGen / NLR:

Higher Date form received by agency: 01/01/2007

Facility name: SNOW WHITE CLEANERS Actual:

Facility address: 20-88 MOTT AVE 25 ft.

FAR ROCKAWAY, NY 11691 EPA ID: NYD982180663

Mailing address: MOTT AVE

FAR ROCKAWAY, NY 11691

Contact: Not reported Contact address: MOTT AVE

FAR ROCKAWAY, NY 11691

Contact country: US

Contact telephone: Not reported Contact email: Not reported

EPA Region: 02

Classification: Non-Generator

Description: Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:

BUN KUN MOON Owner/operator name: Owner/operator address: NOT REQUIRED

NOT REQUIRED, WY 99999

Owner/operator country:

Owner/operator telephone: 212-555-1212 Owner/operator email: Not reported Not reported Owner/operator fax: Owner/operator extension: Not reported Legal status: Private Owner/Operator Type: Owner Owner/Op start date: Not reported Owner/Op end date: Not reported

Owner/operator name: **BUN KUN MOON** Owner/operator address: NOT REQUIRED

NOT REQUIRED, WY 99999

Owner/operator country: US

Owner/operator telephone: 212-555-1212 Owner/operator email: Not reported Owner/operator fax: Not reported Owner/operator extension: Not reported Private Legal status: Owner/Operator Type: Operator Owner/Op start date: Not reported Owner/Op end date: Not reported

Handler Activities Summary:

U.S. importer of hazardous waste: No Mixed waste (haz. and radioactive): No Recycler of hazardous waste: No Transporter of hazardous waste: No Treater, storer or disposer of HW: No Underground injection activity: No

Direction Distance

Elevation Site Database(s) EPA ID Number

SNOW WHITE CLEANERS (Continued)

1000434911

EDR ID Number

On-site burner exemption: No Furnace exemption: No Used oil fuel burner: No Used oil processor: No User oil refiner: No Used oil fuel marketer to burner: No Used oil Specification marketer: No Used oil transfer facility: Nο Used oil transporter: No

Historical Generators:

Date form received by agency: 01/01/2006

Site name: SNOW WHITE CLEANERS

Classification: Conditionally Exempt Small Quantity Generator

Date form received by agency: 05/22/1995

Site name: SNOW WHITE CLEANERS
Classification: Small Quantity Generator

. Waste code: NONE . Waste name: None

Date form received by agency: 04/27/1987

Site name: SNOW WHITE CLEANERS
Classification: Small Quantity Generator

Waste code: D000
Waste name: Not Defined

Waste code: D001

. Waste name: IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF

LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT

WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.

. Waste code: F002

Waste name: THE FOLLOWING SPENT HALOGENATED SOLVENTS: TETRACHLOROETHYLENE,

METHYLENE CHLORIDE, TRICHLOROETHYLENE, 1,1,1-TRICHLOROETHANE,

CHLOROBENZENE, 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE, ORTHO-DICHLOROBENZENE, TRICHLOROFLUOROMETHANE, AND

1,1,2-TRICHLOROETHANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE LISTED IN F001, F004, OR F005, AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND

SPENT SOLVENT MIXTURES.

Violation Status: No violations found

US AIRS MINOR:

Envid: 1000434911

Region Code: 02

Programmatic ID: AIR NY0000002630800464

Facility Registry ID: 110004414535
D and B Number: Not reported

Direction Distance

Elevation Site Database(s) EPA ID Number

SNOW WHITE CLEANERS (Continued)

1000434911

EDR ID Number

Primary SIC Code: 7216

NAICS Code: 812320

Default Air Classification Code: MIN

Facility Type of Ownership Code: POF

Air CMS Category Code: Not reported

HPV Status: Not reported

US AIRS MINOR:

Region Code: 02

Programmatic ID: AIR NY0000002630800464

Facility Registry ID: 110004414535

Air Operating Status Code: OPR Default Air Classification Code: MIN

Air Program: MACT Standards (40 CFR Part 63)

Activity Date: 2000-10-13 00:00:00
Activity Status Date: Not reported

Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation

Activity Status: Not reported

Region Code: 02

Programmatic ID: AIR NY0000002630800464

Facility Registry ID: 110004414535

Air Operating Status Code: OPR
Default Air Classification Code: MIN

Air Program: MACT Standards (40 CFR Part 63)

Activity Date: 2001-10-11 00:00:00

Activity Status Date: Not reported

Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation

Activity Status: Not reported

Region Code: 02

Programmatic ID: AIR NY0000002630800464

Facility Registry ID: 110004414535

Air Operating Status Code: OPR
Default Air Classification Code: MIN

Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards

Activity Date: 2000-10-13 00:00:00

Activity Status Date: Not reported

Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation

Activity Status: Not reported

Region Code: 02

Programmatic ID: AIR NY0000002630800464

Facility Registry ID: 110004414535

Air Operating Status Code: OPR Default Air Classification Code: MIN

Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards

Activity Date: 2001-10-11 00:00:00

Activity Status Date: Not reported

Activity Group: Compliance Monitoring Activity Type: Inspection/Evaluation

Activity Status: Not reported

Direction Distance

Elevation Site Database(s) EPA ID Number

SNOW WHITE CLEANERS (Continued)

1000434911

EDR ID Number

US AIRS MINOR:

Envid: 1000434911

Region Code: 02

Programmatic ID: AIR NY0000002630800464

Facility Registry ID: 110004414535
D and B Number: Not reported
Primary SIC Code: 7216
NAICS Code: 812320
Default Air Classification Code: MIN
Facility Type of Ownership Code: POF
Air CMS Category Code: Not reported
HPV Status: Not reported

US AIRS MINOR:

Region Code: 02

Programmatic ID: AIR NY0000002630800464

Facility Registry ID: 110004414535

Air Operating Status Code: OPR Default Air Classification Code: MIN

Air Program: MACT Standards (40 CFR Part 63)

Activity Date: 2000-10-13 00:00:00

Activity Status Date: Not reported

Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation

Activity Status: Not reported

Region Code: 02

Programmatic ID: AIR NY0000002630800464

Facility Registry ID: 110004414535

Air Operating Status Code: OPR
Default Air Classification Code: MIN

Air Program: MACT Standards (40 CFR Part 63)

Activity Date: 2001-10-11 00:00:00

Activity Status Date: Not reported

Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation

Activity Status: Not reported

Region Code: 02

Programmatic ID: AIR NY0000002630800464

Facility Registry ID: 110004414535

Air Operating Status Code: OPR Default Air Classification Code: MIN

Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards

Activity Date: 2000-10-13 00:00:00

Activity Status Date: Not reported

Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation

Activity Status: Not reported

Region Code: 02

Programmatic ID: AIR NY0000002630800464

Facility Registry ID: 110004414535

Air Operating Status Code: OPR
Default Air Classification Code: MIN

Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards

Activity Date: 2001-10-11 00:00:00

Direction Distance

Elevation Site Database(s) EPA ID Number

SNOW WHITE CLEANERS (Continued)

1000434911

EDR ID Number

Activity Status Date: Not reported

Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

NY MANIFEST:

Country: USA

EPA ID: NYD982180663 Facility Status: Not reported

Location Address 1: 2088 MOTT AVENUE

Code: BP

Location Address 2: Not reported
Total Tanks: Not reported
Location City: FAR ROCKAWAY

Location State: NY
Location Zip: 11691
Location Zip 4: Not reported

NY MANIFEST:

EPAID: NYD982180663

Mailing Name: SNOW WHITE CLEANERS
Mailing Contact: SNOW WHITE CLEANERS
Mailing Address 1: 2088 MOTT AVENUE
Mailing Address 2: Not reported

Mailing Address 2: Not reported Mailing City: FAR ROCKAWAY

Mailing State: NY
Mailing Zip: 11691
Mailing Zip 4: Not reported
Mailing Country: USA
Mailing Phone: 7184713770

NY MANIFEST:

Discr Type Indicator:

Discr Residue Indicator:

Discr Partial Reject Indicator:

Document ID: NYC7079872
Manifest Status: Not reported

seq: 01 Year: 2003 Trans1 State ID: NYAP6277 Trans2 State ID: T364DANJ Generator Ship Date: 06/27/2003 Trans1 Recv Date: 06/27/2003 Trans2 Recv Date: 07/03/2003 TSD Site Recv Date: 07/07/2003 Part A Recv Date: Not reported Part B Recv Date: Not reported NYD982180663 Generator EPA ID: Trans1 EPA ID: TXR000050930 NJD071629976 Trans2 EPA ID: TSDF ID 1: OHD980587364 TSDF ID 2: Not reported Manifest Tracking Number: Not reported Import Indicator: Not reported Not reported **Export Indicator:** Discr Quantity Indicator: Not reported

Not reported

Not reported

Not reported

MAP FINDINGS Map ID

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

SNOW WHITE CLEANERS (Continued)

1000434911

Discr Full Reject Indicator: Not reported Manifest Ref Number: Not reported Alt Facility RCRA ID: Not reported Alt Facility Sign Date: Not reported MGMT Method Type Code: Not reported

Waste Code: F002 - HALO SOLV + STILL BOTTOMS FM REC OF SOLV

Waste Code: Not reported Waste Code: Not reported Waste Code: Not reported Waste Code: Not reported Waste Code: Not reported Quantity: 00120 Units: P - Pounds Number of Containers: 001

Container Type: DF - Fiberboard or plastic drums (glass) Handling Method: B Incineration, heat recovery, burning.

Specific Gravity: 01.00

Waste Code: F002 - HALO SOLV + STILL BOTTOMS FM REC OF SOLV

Waste Code: Not reported Waste Code: Not reported Waste Code: Not reported Waste Code: Not reported Quantity: 00120 Units: P - Pounds Number of Containers: 002

Container Type: DF - Fiberboard or plastic drums (glass) Handling Method: B Incineration, heat recovery, burning.

Specific Gravity:

Waste Code: F002 - HALO SOLV + STILL BOTTOMS FM REC OF SOLV

Waste Code: Not reported Waste Code: Not reported Waste Code: Not reported Waste Code: Not reported Quantity: 00195 P - Pounds Units: Number of Containers: 001

DF - Fiberboard or plastic drums (glass) Container Type: Handling Method: B Incineration, heat recovery, burning.

Specific Gravity: 01.00

> Click this hyperlink while viewing on your computer to access -1 additional NY MANIFEST: record(s) in the EDR Site Report.

D13 MTA NYCT - MOTT AVENUE STATION - A

SSE **MOTT AVE & BEACH 22ND ST** < 1/8 FAR ROCKAWAY, NY 11691

0.057 mi.

299 ft. Site 4 of 5 in cluster D

Relative: RCRA-SQG:

Higher Date form received by agency: 08/17/2007

MTA NYCT - MOTT AVENUE STATION - A Facility name: Actual:

Facility address: MOTT AVE & BEACH 22ND ST 25 ft.

FAR ROCKAWAY, NY 11691

EPA ID: NYR000150961

BROADWAY 5TH FLOOR Mailing address:

NEW YORK, NY 10004

RCRA-SQG 1010566447

NYR000150961

NJ MANIFEST

NY MANIFEST

Direction Distance Elevation

on Site Database(s) EPA ID Number

MTA NYCT - MOTT AVENUE STATION - A (Continued)

1010566447

EDR ID Number

Contact: LUMINITA MARINESCU
Contact address: BROADWAY 5TH FLOOR

NEW YORK, NY 10004

Contact country: US

Contact telephone: 646-252-3506

Contact email: LUMINITA.MARINESCU@NYCT.COM

EPA Region: 02

Classification: Small Small Quantity Generator

Description: Handler: generates more than 100 and less than 1000 kg of hazardous

waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of

hazardous waste at any time

Owner/Operator Summary:

Owner/operator name: MTA NYCT

Owner/operator address: BROADWAY 5TH FLOOR

NEW YORK, NY 10004

Owner/operator country: US

Owner/operator telephone: Not reported Owner/operator email: Not reported Owner/operator fax: Not reported Owner/operator extension: Not reported Legal status: State Owner/Operator Type: Owner Owner/Op start date: 03/01/1968 Owner/Op end date: Not reported

Owner/operator name: MTA NYCT
Owner/operator address: Not reported

Not reported

Owner/operator country: Not reported Owner/operator telephone: Not reported Owner/operator email: Not reported Owner/operator fax: Not reported Owner/operator extension: Not reported Legal status: State Owner/Operator Type: Operator Owner/Op start date: 03/01/1968 Owner/Op end date: Not reported

Handler Activities Summary:

U.S. importer of hazardous waste: No Mixed waste (haz. and radioactive): No Recycler of hazardous waste: No Transporter of hazardous waste: No Treater, storer or disposer of HW: No Underground injection activity: No On-site burner exemption: No Furnace exemption: No Used oil fuel burner: No Used oil processor: No User oil refiner: No Used oil fuel marketer to burner: No Used oil Specification marketer: No Used oil transfer facility: No

Direction Distance

Elevation Site Database(s) EPA ID Number

MTA NYCT - MOTT AVENUE STATION - A (Continued)

1010566447

EDR ID Number

Used oil transporter: No

. Waste code: D008 . Waste name: LEAD

Historical Generators:

Date form received by agency: 08/16/2007

Site name: MTA NYCT - MOTT AVENUE STATION - A

Classification: Small Quantity Generator

Violation Status: No violations found

NJ MANIFEST:

EPA Id: NYR000150961

Mail Address: BROADWAY 5TH FLOOR Mail City/State/Zip: NEW YORK, NY 10004

Facility Phone: Not reported Emergency Phone: Not reported

Contact: LUMINITA MARINESCU

Comments: Not reported SIC Code: Not reported County: NY081 Municipal: Not reported Previous EPA Id: Not reported Not reported Gen Flag: Not reported Trans Flag: TSDF Flag: Not reported Name Change: Not reported Date Change: Not reported

Manifest:

Manifest Number: 000199708WAS EPA ID: NYR000150961 Date Shipped: 05/10/2010 TSDF EPA ID: NJD991291105 Transporter EPA ID: NYD046765574 Transporter 2 EPA ID: Not reported Transporter 3 EPA ID: Not reported Transporter 4 EPA ID: Not reported Not reported Transporter 5 EPA ID: Transporter 6 EPA ID: Not reported Transporter 7 EPA ID: Not reported Transporter 8 EPA ID: Not reported Transporter 9 EPA ID: Not reported Not reported Transporter 10 EPA ID: Date Trans1 Transported Waste: 05/10/2010 Date Trans2 Transported Waste: Not reported Date Trans3 Transported Waste: Not reported Date Trans4 Transported Waste: Not reported Date Trans5 Transported Waste: Not reported Date Trans6 Transported Waste: Not reported Date Trans7 Transported Waste: Not reported Date Trans8 Transported Waste: Not reported Date Trans9 Transported Waste: Not reported Date Trans10 Transported Waste: Not reported Date TSDF Received Waste: 05/11/2010 TSDF EPA Facility Name: Not reported QTY Units: Not reported

Direction Distance Elevation

Site Database(s) EPA ID Number

MTA NYCT - MOTT AVENUE STATION - A (Continued)

1010566447

EDR ID Number

Transporter SEQ ID: Not reported Not reported Transporter-1 Date: Waste SEQ ID: Not reported Waste Type Code 2: Not reported Waste Type Code 3: Not reported Not reported Waste Type Code 4: Not reported Waste Type Code 5: Not reported Waste Type Code 6: Date Accepted: Not reported Manifest Discrepancy Type: Not reported Data Entry Number: Not reported

Was Load Rejected: NEW YORK, NY 10004

Reason Load Was Rejected: Not reported

Waste:

Manifest Year:
Waste Code:
Hand Code:
Quantity:
Not reported
H008
H111
H111
H100 P

000199760WAS Manifest Number: EPA ID: NYR000150961 Date Shipped: 05/25/2010 TSDF EPA ID: NJD991291105 Transporter EPA ID: NYD046765574 Transporter 2 EPA ID: Not reported Transporter 3 EPA ID: Not reported Transporter 4 EPA ID: Not reported Transporter 5 EPA ID: Not reported Transporter 6 EPA ID: Not reported Transporter 7 EPA ID: Not reported Transporter 8 EPA ID: Not reported Transporter 9 EPA ID: Not reported Transporter 10 EPA ID: Not reported 05/25/2010 Date Trans1 Transported Waste: Date Trans2 Transported Waste: Not reported Date Trans3 Transported Waste: Not reported Date Trans4 Transported Waste: Not reported Date Trans5 Transported Waste: Not reported Date Trans6 Transported Waste: Not reported Date Trans7 Transported Waste: Not reported Date Trans8 Transported Waste: Not reported Date Trans9 Transported Waste: Not reported Date Trans10 Transported Waste: Not reported 05/25/2010 Date TSDF Received Waste: TSDF EPA Facility Name: Not reported QTY Units: Not reported Transporter SEQ ID: Not reported Transporter-1 Date: Not reported Not reported Waste SEQ ID: Waste Type Code 2: Not reported Waste Type Code 3: Not reported Not reported Waste Type Code 4: Not reported Waste Type Code 5: Waste Type Code 6: Not reported Date Accepted: Not reported Manifest Discrepancy Type: Not reported

Direction Distance Elevation

ion Site Database(s) EPA ID Number

MTA NYCT - MOTT AVENUE STATION - A (Continued)

1010566447

EDR ID Number

Data Entry Number: Not reported

Was Load Rejected: NEW YORK, NY 10004

Reason Load Was Rejected: Not reported

Waste:

Manifest Year:
Waste Code:
D008
Hand Code:
H111
Quantity:
400 P

Manifest Number: 000200280WAS EPA ID: NYR000150961 Date Shipped: 09/10/2010 TSDF EPA ID: NJD991291105 Transporter EPA ID: NYD046765574 Not reported Transporter 2 EPA ID: Transporter 3 EPA ID: Not reported Transporter 4 EPA ID: Not reported Transporter 5 EPA ID: Not reported Transporter 6 EPA ID: Not reported Transporter 7 EPA ID: Not reported Transporter 8 EPA ID: Not reported Transporter 9 EPA ID: Not reported Not reported Transporter 10 EPA ID: Date Trans1 Transported Waste: 09/10/2010 Date Trans2 Transported Waste: Not reported Not reported Date Trans3 Transported Waste: Date Trans4 Transported Waste: Not reported Date Trans5 Transported Waste: Not reported Date Trans6 Transported Waste: Not reported Date Trans7 Transported Waste: Not reported Date Trans8 Transported Waste: Not reported Date Trans9 Transported Waste: Not reported Date Trans10 Transported Waste: Not reported 09/13/2010 Date TSDF Received Waste: TSDF EPA Facility Name: Not reported QTY Units: Not reported Transporter SEQ ID: Not reported Not reported Transporter-1 Date: Waste SEQ ID: Not reported Not reported Waste Type Code 2: Waste Type Code 3: Not reported Waste Type Code 4: Not reported Waste Type Code 5: Not reported Waste Type Code 6: Not reported Date Accepted: Not reported Manifest Discrepancy Type: Not reported Data Entry Number: Not reported

Was Load Rejected: NEW YORK, NY 10004

Reason Load Was Rejected: Not reported

Waste:

Manifest Year:
Waste Code:
D008
Hand Code:
H111
Quantity:

Not reported
D008
H111
400 P

Direction Distance Elevation

ance EDR ID Number vation Site Database(s) EPA ID Number

MTA NYCT - MOTT AVENUE STATION - A (Continued)

1010566447

Manifest Number: 000457304WAS NYR000150961 EPA ID: Date Shipped: 3/27/2012 TSDF EPA ID: NJD991291105 Transporter EPA ID: NYD046765574 Transporter 2 EPA ID: Not reported Transporter 3 EPA ID: Not reported Not reported Transporter 4 EPA ID: Transporter 5 EPA ID: Not reported Transporter 6 EPA ID: Not reported Transporter 7 EPA ID: Not reported Transporter 8 EPA ID: Not reported Transporter 9 EPA ID: Not reported Transporter 10 EPA ID: Not reported Date Trans1 Transported Waste: Not reported Date Trans2 Transported Waste: Not reported Date Trans3 Transported Waste: Not reported Date Trans4 Transported Waste: Not reported Date Trans5 Transported Waste: Not reported Date Trans6 Transported Waste: Not reported Date Trans7 Transported Waste: Not reported Date Trans8 Transported Waste: Not reported Not reported Date Trans9 Transported Waste: Date Trans10 Transported Waste: Not reported Date TSDF Received Waste: Not reported Not reported TSDF EPA Facility Name: QTY Units: Not reported Transporter SEQ ID: Not reported Transporter-1 Date: Not reported Waste SEQ ID: Not reported Waste Type Code 2: Not reported Waste Type Code 3: Not reported Waste Type Code 4: Not reported Waste Type Code 5: Not reported Not reported Waste Type Code 6: Date Accepted: Not reported Manifest Discrepancy Type: Not reported Data Entry Number: Not reported

Was Load Rejected: NEW YORK, NY 10004

Reason Load Was Rejected: Not reported

Waste:

Manifest Year:
Waste Code:
Hand Code:
Quantity:
Not reported
Not reported
100.00 Pounds

Manifest Number: 000423494WAS NYR000150961 EPA ID: Date Shipped: 6/7/2011 TSDF EPA ID: NJD991291105 Transporter EPA ID: NYD046765574 Transporter 2 EPA ID: Not reported Not reported Transporter 3 EPA ID: Transporter 4 EPA ID: Not reported Transporter 5 EPA ID: Not reported Transporter 6 EPA ID: Not reported

Direction Distance Elevation

EDR ID Number Site Database(s) **EPA ID Number**

MTA NYCT - MOTT AVENUE STATION - A (Continued)

1010566447

Transporter 7 EPA ID: Not reported Not reported Transporter 8 EPA ID: Transporter 9 EPA ID: Not reported Transporter 10 EPA ID: Not reported Date Trans1 Transported Waste: Not reported Not reported Date Trans2 Transported Waste: Not reported Date Trans3 Transported Waste: Not reported Date Trans4 Transported Waste: Date Trans5 Transported Waste: Not reported Date Trans6 Transported Waste: Not reported Date Trans7 Transported Waste: Not reported Date Trans8 Transported Waste: Not reported Date Trans9 Transported Waste: Not reported Date Trans10 Transported Waste: Not reported Date TSDF Received Waste: Not reported TSDF EPA Facility Name: Not reported Not reported QTY Units: Transporter SEQ ID: Not reported Transporter-1 Date: Not reported Waste SEQ ID: Not reported Waste Type Code 2: Not reported Waste Type Code 3: Not reported Not reported Waste Type Code 4: Waste Type Code 5: Not reported Not reported Waste Type Code 6: Not reported Date Accepted: Manifest Discrepancy Type: Not reported Data Entry Number: Not reported NEW YORK, NY 10004 Was Load Rejected:

Reason Load Was Rejected: Not reported

Waste:

Manifest Year: Not reported Waste Code: D008 Hand Code: H111

100.00 Pounds Quantity:

Manifest Number: 000201883WAS EPA ID: NYR000150961 Date Shipped: 11/24/2010 TSDF EPA ID: NJD991291105 Transporter EPA ID: NYD046765574 Transporter 2 EPA ID: Not reported Not reported Transporter 3 EPA ID: Transporter 4 EPA ID: Not reported Transporter 5 EPA ID: Not reported Transporter 6 EPA ID: Not reported Transporter 7 EPA ID: Not reported Transporter 8 EPA ID: Not reported Transporter 9 EPA ID: Not reported Transporter 10 EPA ID: Not reported Date Trans1 Transported Waste: 11/24/2010 Date Trans2 Transported Waste: Not reported Not reported Date Trans3 Transported Waste: Date Trans4 Transported Waste: Not reported Date Trans5 Transported Waste: Not reported Date Trans6 Transported Waste: Not reported

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

MTA NYCT - MOTT AVENUE STATION - A (Continued)

1010566447

Date Trans7 Transported Waste: Not reported Date Trans8 Transported Waste: Not reported Date Trans9 Transported Waste: Not reported Date Trans10 Transported Waste: Not reported Date TSDF Received Waste: 11/24/2010 TSDF EPA Facility Name: Not reported QTY Units: Not reported Transporter SEQ ID: Not reported Transporter-1 Date: Not reported Waste SEQ ID: Not reported Not reported Waste Type Code 2: Waste Type Code 3: Not reported Not reported Waste Type Code 4: Not reported Waste Type Code 5: Waste Type Code 6: Not reported Not reported Date Accepted: Manifest Discrepancy Type: Not reported Data Entry Number: Not reported

Was Load Rejected: NEW YORK, NY 10004

Reason Load Was Rejected: Not reported

Waste:

Manifest Year: Not reported Waste Code: D008 Hand Code: H111 Quantity: 100 P

NY MANIFEST:

Country: USA

EPA ID: NYR000150961 Facility Status: Not reported

MOTT AVE & BEACH 22ND ST Location Address 1:

ΒP Code:

Location Address 2: Not reported Total Tanks: Not reported **FAR ROCKAWAY** Location City:

Location State: NY Location Zip: 11691 Location Zip 4: Not reported

NY MANIFEST:

EPAID: NYR000150961

Mailing Name: MTA NYCT - MOTT AVENUE STATION - A Mailing Contact: MTA NYCT - MOTT AVENUE STATION - A

Mailing Address 1: 2 BROADWAY ROOM A27.64

Mailing Address 2: Not reported **NEW YORK** Mailing City: Mailing State: NY Mailing Zip: 10004 Mailing Zip 4: Not reported Mailing Country: USA Mailing Phone: 6462525777

NY MANIFEST:

Direction Distance Elevation

n Site Database(s) EPA ID Number

MTA NYCT - MOTT AVENUE STATION - A (Continued)

1010566447

EDR ID Number

Document ID: Not reported Manifest Status: Not reported seq: Not reported Year: 2012

Trans1 State ID: NYD046785574 Trans2 State ID: Not reported 03/27/2012 Generator Ship Date: Trans1 Recv Date: 03/27/2012 Trans2 Recv Date: Not reported TSD Site Recv Date: 03/27/2012 Part A Recv Date: Not reported Part B Recv Date: Not reported NYR000150961 Generator EPA ID: Trans1 EPA ID: Not reported Trans2 EPA ID: Not reported TSDF ID 1: NJD991291105 TSDF ID 2: Not reported 000457304WAS Manifest Tracking Number:

Import Indicator: N
Export Indicator: N
Discr Quantity Indicator: N
Discr Type Indicator: N
Discr Residue Indicator: N
Discr Partial Reject Indicator: N
Discr Full Reject Indicator: N

Manifest Ref Number: Not reported
Alt Facility RCRA ID: Not reported
Alt Facility Sign Date: Not reported
MGMT Method Type Code: H111
Waste Code: Not reported
Waste Code: Not reported

Waste Code:
Wot reported
Waste Code:
Quantity:
Units:
P - Pounds

Number of Containers: 1.0

Container Type: DM - Metal drums, barrels

Handling Method: T Chemical, physical, or biological treatment.

Specific Gravity:

Waste Code:

Waste Code 1_2:

Waste Code 1_3:

Waste Code 1_4:

Waste Code 1_5:

Waste Code 1_6:

Not reported

Not reported

Not reported

Not reported

<u>Click this hyperlink</u> while viewing on your computer to access -1 additional NY MANIFEST: record(s) in the EDR Site Report.

Direction Distance

Distance Elevation Site EDR ID Number

Database(s) EPA ID Number

D14 LOT 1,TAXBLOCK 15537 NY E DESIGNATION \$121343807

N/A

N/A

SE 20-02 MOTT AVENUE < 1/8 QUEENS, NY 11691

0.061 mi.

323 ft. Site 5 of 5 in cluster D

Relative: E DESIGNATION: Higher Tax Lot(s):

Actual: Tax Block:
25 ft. Borough Coo

Tax Block: 15537
Borough Code: QN
E-No: E-415
Effective Date: 9/7/2017
Satisfaction Date: Not reported
Ceqr Number: 16DME010Q

Ulurp Number: 170243AZMQ, 170244AZRQ

Zoning Map No: 25b, 31a

Description: Air Quality - HVAC natural gas with low Nox only

Lot Remediation Date: Not reported

Description: Exhaust stack location limitations

Lot Remediation Date: Not reported

Description: Hazardous Materials* Phase I and Phase II Testing Protocol

Lot Remediation Date: Not reported

Description: Window Wall Attenuation & Alternate Ventilation

Lot Remediation Date: Not reported

E15 LOT 40,TAXBLOCK 15537 NY E DESIGNATION S121343927

NE 18-01 REDFERN AVENUE < 1/8 QUEENS, NY 11691

0.062 mi.

327 ft. Site 1 of 3 in cluster E

Relative: E DESIGNATION:

 Lower
 Tax Lot(s):
 40

 Actual:
 Tax Block:
 15537

 24 ft.
 Borough Code:
 QN

 F-Mo:
 F-Mo:

E-No: E-415
Effective Date: 9/7/2017
Satisfaction Date: Not reported
Ceqr Number: 16DME010Q

Ulurp Number: 170243AZMQ, 170244AZRQ

Zoning Map No: 25b, 31a

Description: Air Quality - HVAC fuel limited to natural gas

Lot Remediation Date: Not reported

Description: Exhaust stack location limitations

Lot Remediation Date: Not reported

Description: Hazardous Materials* Phase I and Phase II Testing Protocol

Lot Remediation Date: Not reported

Description: Window Wall Attenuation & Alternate Ventilation

Lot Remediation Date: Not reported

Direction Distance

Distance EDR ID Number Elevation Site EDR ID Number Database(s) EPA ID Number

F16 HI AUTO SVCE EDR Hist Auto 1022010401
North 1346 BCH CHANL DR EDR Hist Auto N/A

< 1/8 FAR ROCKAWAY, NY 11691 0.071 mi.

376 ft. Site 1 of 4 in cluster F

Relative: Lower EDR Hist Auto

2013

2013

2014

2014

BEACH CHANNEL ISLAND CORP

BEACH CHANNEL ISLAND CORP

BP FAR ROCKAWAY

BP FAR ROCKAWAY

Gasoline Service Stations

Gasoline Service Stations

Gasoline Service Stations, NEC

Gasoline Service Stations. NEC

Year: Name: Type: Actual: 1983 M & Z SERVICE STATION INC General Automotive Repair Shops 14 ft. 1985 M & Z SERVICE STATION INC General Automotive Repair Shops 1986 M & Z SERVICE STATION INC General Automotive Repair Shops 1987 M & Z SERVICE STATION INC General Automotive Repair Shops MORTY FOREIGN & DOMESTIC AUTO 1992 General Automotive Repair Shops 1993 MORTY FOREIGN & DOMESTIC AUTO General Automotive Repair Shops HI AUTO SVCE General Automotive Repair Shops 1994 1994 MORTY FOREIGN & DOMESTIC AUTO General Automotive Repair Shops 1995 MORTY FOREIGN & DOMESTIC AUTO General Automotive Repair Shops HI AUTO SERVICE INC 1995 Gasoline Service Stations 1996 HI AUTO SERVICE INC Gasoline Service Stations 1997 HI AUTO SERVICE INC Gasoline Service Stations 1998 ASIF PETROLEUM CORP **Gasoline Service Stations** 1998 HI AUTO SERVICE INC **Gasoline Service Stations** 1999 ASIF PETROLEUM CORP Gasoline Service Stations 2000 ASIF PETROLEUM CORP Gasoline Service Stations 2001 ASIF PETROLEUM CORP Gasoline Service Stations 2001 BCD AUTO REPAIR INC General Automotive Repair Shops 2002 **BCD AUTO REPAIR INC** General Automotive Repair Shops 2002 ASIF PETROLEUM CORP Gasoline Service Stations 2002 1346 AMOCO STATION Gasoline Service Stations 2003 **BCD AUTO REPAIR INC** General Automotive Repair Shops 2003 1346 AMOCO STATION Gasoline Service Stations 2003 ASIF PETROLEUM CORP Gasoline Service Stations 2004 ASIF PETROLEUM CORP Gasoline Service Stations 2004 **BCD AUTO REPAIR INC** General Automotive Repair Shops 2004 1346 AMOCO STATION Gasoline Service Stations 2005 ASIF PETROLEUM CORP Gasoline Service Stations **BCD AUTO REPAIR INC** 2005 General Automotive Repair Shops 2005 1346 AMOCO STATION Gasoline Service Stations 2006 **BCD AUTO REPAIR INC** General Automotive Repair Shops 2006 ASIF PETROLEUM CORP **Gasoline Service Stations** 2007 ASIF PETROLEUM CORP Gasoline Service Stations 2007 **BCD AUTO REPAIR INC** General Automotive Repair Shops 2008 ASIF PETROLEUM CORP Gasoline Service Stations 2008 BEACH CHANNEL ISLAND CORP Gasoline Service Stations 2008 **BP FAR ROCKAWAY** Gasoline Service Stations, NEC 2009 **BP FAR ROCKAWAY** Gasoline Service Stations, NEC 2009 BEACH CHANNEL ISLAND CORP Gasoline Service Stations Gasoline Service Stations, NEC 2010 **BP FAR ROCKAWAY** 2010 BEACH CHANNEL ISLAND CORP Gasoline Service Stations 2011 **BP FAR ROCKAWAY** Gasoline Service Stations, NEC 2011 BEACH CHANNEL ISLAND CORP Gasoline Service Stations 2012 BEACH CHANNEL ISLAND CORP Gasoline Service Stations 2012 **BP FAR ROCKAWAY** Gasoline Service Stations, NEC

Direction Distance

Elevation Site Database(s) EPA ID Number

F17 BP #36611 NY AST U003297771
North 13-46 BEACH CHANNEL DRIVE N/A

North 13-46 BEACH CHANNEL DRIVE < 1/8 FAR ROCKAWAY, NY 11691

0.071 mi.

376 ft. Site 2 of 4 in cluster F

 Relative:
 AST:

 Lower
 Region:
 STATE

 Actual:
 DEC Region:
 2

 14 ft.
 Site Status:
 Active

 Facility Id:
 2-285862

 Program Type:
 PBS

UTM X: 605387.33891 UTM Y: 4495822.53645 Expiration Date: 03/01/2019 Site Type: Retail Gasoline Sales

Affiliation Records:

Site Id: 12726 Affiliation Type: Mail Contact

Company Name: BP PRODUCTS NORTH AMERICA INC

Contact Type: Not reported Contact Name: JOHN MAHONEY Address1: P.O. BOX 6038 Address2: Not reported City: **ARTESIA** State: CA 90702 Zip Code: Country Code: 001

Phone: (973) 392-6150

EMail: JOHN.MAHONEY@BP.COM

Fax Number: Not reported Modified By: DAFRANCI Date Last Modified: 2016-12-08

Site Id: 12726

Affiliation Type: Facility Operator
Company Name: BP #36611
Contact Type: Not reported

Contact Name: MUHAMMAD MUZAMMAL

Address1: Not reported Address2: Not reported City: Not reported State: NN

Zip Code: Not reported

Country Code: 001

Phone: (718) 868-8400
EMail: Not reported
Fax Number: Not reported
Modified By: EROBRECH
Date Last Modified: 2017-02-09

Site Id: 12726

Affiliation Type: Emergency Contact

Company Name: RODELEVEN SERVICE STATIONS, INC.

Contact Type: Not reported
Contact Name: JOHN MAHONEY
Address1: Not reported
Address2: Not reported
City: Not reported

Direction Distance

Elevation Site Database(s) EPA ID Number

BP #36611 (Continued) U003297771

State: NN

Zip Code: Not reported

Country Code: 999

Phone: (973) 392-6150
EMail: Not reported
Fax Number: Not reported
Modified By: MXLAY
Date Last Modified: 2016-10-06

Site Id: 12726
Affiliation Type: Facility Owner

Company Name: RODELEVEN SERVICE STATIONS, INC.

Contact Type: Not reported Contact Name: Not reported

Address1: 3333 NEW HYDE PARK RD., SUITE 201

Address2: Not reported City: NEW HYDE PARK

State: NY
Zip Code: 11042
Country Code: 001

Phone: (516) 365-8700
EMail: Not reported
Fax Number: Not reported
Modified By: NRLOMBAR
Date Last Modified: 2015-04-16

Tank Info:

 Tank Number:
 106

 Tank Id:
 53912

 Material Code:
 0022

Common Name of Substance: Waste Oil/Used Oil

Equipment Records:

A00 - Tank Internal Protection - None

B01 - Tank External Protection - Painted/Asphalt Coating H01 - Tank Leak Detection - Interstitial - Electronic Monitoring

104 - Overfill - Product Level Gauge (A/G)

J00 - Dispenser - None

G04 - Tank Secondary Containment - Double-Walled (Underground)

C00 - Pipe Location - No Piping

E04 - Piping Secondary Containment - Double walled UG

F00 - Pipe External Protection - None

D00 - Pipe Type - No Piping

Tank Location: 2

Tank Type: Fiberglass Reinforced Plastic

Tank Status: Closed - Removed
Pipe Model: Not reported
Install Date: 02/01/1998
Capacity Gallons: 280
Tightness Test Method: NN

Date Test:
Not reported
Next Test Date:
Not reported
Date Tank Closed:
O9/15/2007
Register:
True
Modified By:
NRLOMBAR

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

BP #36611 (Continued) U003297771

04/14/2017 Last Modified: waste oil/used oil Material Name:

NY UST U004062551 F18 **BP #36611** 13-46 BEACH CHANNEL DRIVE North N/A

FAR ROCKAWAY, NY 11691 < 1/8

0.071 mi.

376 ft. Site 3 of 4 in cluster F

UST: Relative:

Lower 2-285862 / Active Id/Status:

PBS Program Type: Actual: 14 ft. Region: STATE DEC Region:

Expiration Date: 03/01/2019 UTM X: 605387.33891 UTM Y: 4495822.53645 Site Type: Retail Gasoline Sales

Affiliation Records:

Site Id: 12726 Affiliation Type: Mail Contact

Company Name: BP PRODUCTS NORTH AMERICA INC

Contact Type: Not reported Contact Name: JOHN MAHONEY Address1: P.O. BOX 6038 Address2: Not reported **ARTESIA** City: State: CA 90702 Zip Code: Country Code: 001

Phone: (973) 392-6150

EMail: JOHN.MAHONEY@BP.COM

Fax Number: Not reported Modified By: **DAFRANCI** Date Last Modified: 2016-12-08

Site Id: 12726

Affiliation Type: **Facility Operator** Company Name: BP #36611 Contact Type: Not reported

Contact Name: MUHAMMAD MUZAMMAL

Address1: Not reported Not reported Address2: City: Not reported State: NN

Zip Code: Not reported Country Code: 001

Phone: (718) 868-8400 Not reported EMail: Fax Number: Not reported Modified By: **EROBRECH** Date Last Modified: 2017-02-09

Site Id: 12726

Affiliation Type: **Emergency Contact**

RODELEVEN SERVICE STATIONS, INC. Company Name:

Contact Type: Not reported

Direction Distance

Elevation Site Database(s) EPA ID Number

BP #36611 (Continued) U004062551

Contact Name: JOHN MAHONEY
Address1: Not reported
Address2: Not reported
City: Not reported
State: NN

Zip Code: Not reported

Country Code: 999

Phone: (973) 392-6150
EMail: Not reported
Fax Number: Not reported
Modified By: MXLAY
Date Last Modified: 2016-10-06

Site Id: 12726
Affiliation Type: Facility Owner

Company Name: RODELEVEN SERVICE STATIONS, INC.

Contact Type: Not reported Contact Name: Not reported

Address1: 3333 NEW HYDE PARK RD., SUITE 201

Address2: Not reported City: NEW HYDE PARK

State: NY
Zip Code: 11042
Country Code: 001

Phone: (516) 365-8700
EMail: Not reported
Fax Number: Not reported
Modified By: NRLOMBAR
Date Last Modified: 2015-04-16

Tank Info:

Tank Number: 001
Tank ID: 17612

Tank Status: Closed Prior to Micro Conversion, 03/91
Material Name: Closed Prior to Micro Conversion, 03/91

Gasoline

Capacity Gallons: 550
Install Date: 04/01/1970
Date Tank Closed: Not reported
Registered: True

Tank Location: Underground
Tank Type: Steel/carbon steel
Material Code: 0009

Tightness Test Method: NN

Common Name of Substance:

Date Test:
Not reported
Next Test Date:
Pipe Model:
Modified By:
Last Modified:
Not reported
TRANSLAT
Understanding 104/14/2017

Equipment Records:

H00 - Tank Leak Detection - None

100 - Overfill - None

B00 - Tank External Protection - None C00 - Pipe Location - No Piping

Direction Distance

Elevation Site Database(s) EPA ID Number

BP #36611 (Continued) U004062551

F00 - Pipe External Protection - None J02 - Dispenser - Suction Dispenser G00 - Tank Secondary Containment - None A00 - Tank Internal Protection - None D01 - Pipe Type - Steel/Carbon Steel/Iron

Tank Number: 002 Tank ID: 17613

Tank Status: Closed Prior to Micro Conversion, 03/91 Material Name: Closed Prior to Micro Conversion, 03/91

Capacity Gallons: 550
Install Date: 04/01/1970
Date Tank Closed: Not reported
Registered: True
Tank Location: Underground

Tank Location: Underground Tank Type: Steel/carbon steel

Material Code: 0009 Common Name of Substance: Gasoline

Tightness Test Method: NN

Date Test:
Not reported
Next Test Date:
Not reported
Pipe Model:
Modified By:
TRANSLAT
Last Modified:

Not reported
TRANSLAT
U4/14/2017

Equipment Records:

A00 - Tank Internal Protection - None
D01 - Pipe Type - Steel/Carbon Steel/Iron
B00 - Tank External Protection - None
C00 - Pipe Location - No Piping
F00 - Pipe External Protection - None
G00 - Tank Secondary Containment - None
J02 - Dispenser - Suction Dispenser
H00 - Tank Leak Detection - None

Tank Number: 003

Tank ID: 17614
Tank Status: Closed Prior to Micro Conversion, 03/91
Material Name: Closed Prior to Micro Conversion, 03/91

Gasoline

100 - Overfill - None

Capacity Gallons: 550
Install Date: 04/01/1970
Date Tank Closed: Not reported
Registered: True
Tank Location: Underground

Tank Type: Steel/carbon steel
Material Code: 0009

Tightness Test Method: NN

Common Name of Substance:

Date Test: Not reported
Next Test Date: Not reported
Pipe Model: Not reported
Modified By: TRANSLAT
Last Modified: 04/14/2017

MAP FINDINGS Map ID Direction

Distance

Elevation Site Database(s) **EPA ID Number**

BP #36611 (Continued) U004062551

Equipment Records:

H00 - Tank Leak Detection - None

100 - Overfill - None

B00 - Tank External Protection - None C00 - Pipe Location - No Piping F00 - Pipe External Protection - None G00 - Tank Secondary Containment - None J02 - Dispenser - Suction Dispenser A00 - Tank Internal Protection - None D01 - Pipe Type - Steel/Carbon Steel/Iron

Tank Number: 004 Tank ID: 17615

Tank Status: Closed Prior to Micro Conversion, 03/91 Material Name: Closed Prior to Micro Conversion, 03/91

Capacity Gallons: 550 Install Date: 04/01/1970 Date Tank Closed: Not reported Registered: True Tank Location: Underground

Tank Type: Steel/carbon steel

Material Code: 0009 Common Name of Substance: Gasoline

Tightness Test Method: NN

Date Test: Not reported Next Test Date: Not reported Pipe Model: Not reported **TRANSLAT** Modified By: Last Modified: 04/14/2017

Equipment Records:

A00 - Tank Internal Protection - None D01 - Pipe Type - Steel/Carbon Steel/Iron H00 - Tank Leak Detection - None

100 - Overfill - None

B00 - Tank External Protection - None C00 - Pipe Location - No Piping F00 - Pipe External Protection - None G00 - Tank Secondary Containment - None

J02 - Dispenser - Suction Dispenser

Tank Number: 005 Tank ID: 17616

Tank Status: Closed Prior to Micro Conversion, 03/91 Material Name: Closed Prior to Micro Conversion, 03/91

Capacity Gallons: 550

Install Date: 04/01/1970 Date Tank Closed: Not reported Registered: True Tank Location: Underground Tank Type: Steel/carbon steel

Material Code: 0009 Common Name of Substance: Gasoline

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

BP #36611 (Continued) U004062551

Tightness Test Method: NN

Date Test: Not reported Not reported Next Test Date: Pipe Model: Not reported Modified By: **TRANSLAT** 04/14/2017 Last Modified:

Equipment Records:

H00 - Tank Leak Detection - None

100 - Overfill - None

A00 - Tank Internal Protection - None D01 - Pipe Type - Steel/Carbon Steel/Iron B00 - Tank External Protection - None C00 - Pipe Location - No Piping F00 - Pipe External Protection - None G00 - Tank Secondary Containment - None J02 - Dispenser - Suction Dispenser

Tank Number: 006 Tank ID: 17617

Tank Status: Closed Prior to Micro Conversion, 03/91 Material Name: Closed Prior to Micro Conversion, 03/91

Capacity Gallons: 04/01/1970 Install Date: Date Tank Closed: Not reported Registered: True

Underground Tank Location: Tank Type: Steel/carbon steel

Material Code: 0009 Common Name of Substance: Gasoline

Tightness Test Method: NN

Date Test: Not reported Next Test Date: Not reported Not reported Pipe Model: TRANSLAT Modified By: Last Modified: 04/14/2017

Equipment Records:

H00 - Tank Leak Detection - None

100 - Overfill - None

B00 - Tank External Protection - None C00 - Pipe Location - No Piping F00 - Pipe External Protection - None G00 - Tank Secondary Containment - None J02 - Dispenser - Suction Dispenser A00 - Tank Internal Protection - None D01 - Pipe Type - Steel/Carbon Steel/Iron

007 Tank Number: Tank ID: 17618

Closed Prior to Micro Conversion, 03/91 Tank Status: Material Name: Closed Prior to Micro Conversion, 03/91

Capacity Gallons: 550 04/01/1970 Install Date: Date Tank Closed: Not reported

Direction Distance

Elevation Site Database(s) **EPA ID Number**

BP #36611 (Continued) U004062551

Registered: True

Tank Location: Underground Steel/carbon steel Tank Type:

0009 Material Code: Common Name of Substance: Gasoline

NN Tightness Test Method:

Date Test: Not reported Next Test Date: Not reported Pipe Model: Not reported Modified By: **TRANSLAT** 04/14/2017 Last Modified:

Equipment Records:

H00 - Tank Leak Detection - None

100 - Overfill - None

C00 - Pipe Location - No Piping F00 - Pipe External Protection - None B00 - Tank External Protection - None D01 - Pipe Type - Steel/Carbon Steel/Iron A00 - Tank Internal Protection - None J02 - Dispenser - Suction Dispenser G00 - Tank Secondary Containment - None

Tank Number: 800 Tank ID: 17619

Tank Status: Closed Prior to Micro Conversion, 03/91 Material Name: Closed Prior to Micro Conversion, 03/91

Capacity Gallons: 550 04/01/1970 Install Date: Date Tank Closed: Not reported Registered: True

Tank Location: Underground Tank Type: Steel/carbon steel

Material Code: 0009 Common Name of Substance: Gasoline

Tightness Test Method: NN

Date Test: Not reported Next Test Date: Not reported Not reported Pipe Model: Modified By: **TRANSLAT** Last Modified: 04/14/2017

Equipment Records:

H00 - Tank Leak Detection - None

100 - Overfill - None

A00 - Tank Internal Protection - None D01 - Pipe Type - Steel/Carbon Steel/Iron B00 - Tank External Protection - None C00 - Pipe Location - No Piping F00 - Pipe External Protection - None G00 - Tank Secondary Containment - None J02 - Dispenser - Suction Dispenser

Tank Number: 009

Direction Distance

Elevation Site Database(s) EPA ID Number

BP #36611 (Continued) U004062551

Tank ID: 17620

Tank Status: Closed Prior to Micro Conversion, 03/91 Material Name: Closed Prior to Micro Conversion, 03/91

Capacity Gallons: 550
Install Date: 04/01/1970
Date Tank Closed: Not reported
Registered: True
Tank Location: Underground
Tank Type: Steel/carbon steel

Material Code: 0009 Common Name of Substance: Gasoline

Tightness Test Method: NN

Date Test:
Not reported
Next Test Date:
Not reported
Pipe Model:
Not reported
Modified By:
TRANSLAT
Last Modified:
04/14/2017

Equipment Records:

B00 - Tank External Protection - None C00 - Pipe Location - No Piping F00 - Pipe External Protection - None H00 - Tank Leak Detection - None

100 - Overfill - None

G00 - Tank Secondary Containment - None J02 - Dispenser - Suction Dispenser A00 - Tank Internal Protection - None D01 - Pipe Type - Steel/Carbon Steel/Iron

Tank Number: 010 Tank ID: 17621

Tank Status: Closed Prior to Micro Conversion, 03/91 Material Name: Closed Prior to Micro Conversion, 03/91

Capacity Gallons: 550
Install Date: 04/01/1970
Date Tank Closed: Not reported
Registered: True
Tank Location: Underground
Tank Type: Steel/carbon steel

Material Code: 0009 Common Name of Substance: Gasoline

Tightness Test Method: NN

Date Test: Not reported
Next Test Date: Not reported
Pipe Model: Not reported
Modified By: TRANSLAT
Last Modified: 04/14/2017

Equipment Records:

H00 - Tank Leak Detection - None

100 - Overfill - None

B00 - Tank External Protection - None C00 - Pipe Location - No Piping F00 - Pipe External Protection - None A00 - Tank Internal Protection - None

Direction Distance

Elevation Site Database(s) EPA ID Number

BP #36611 (Continued) U004062551

D01 - Pipe Type - Steel/Carbon Steel/Iron G00 - Tank Secondary Containment - None J02 - Dispenser - Suction Dispenser

Tank Number: 011 Tank ID: 17622

Tank Status: Closed Prior to Micro Conversion, 03/91 Material Name: Closed Prior to Micro Conversion, 03/91

Capacity Gallons: 550
Install Date: 04/01/1970
Date Tank Closed: Not reported Registered: True

Tank Location: Underground Tank Type: Steel/carbon steel

Material Code: 0009 Common Name of Substance: Gasoline

Tightness Test Method: NN

Date Test:
Not reported
Next Test Date:
Not reported
Pipe Model:
Modified By:
TRANSLAT
Last Modified:

Not reported
Not reported
Value 12017

Equipment Records:

B00 - Tank External Protection - None C00 - Pipe Location - No Piping F00 - Pipe External Protection - None G00 - Tank Secondary Containment - None J02 - Dispenser - Suction Dispenser H00 - Tank Leak Detection - None

100 - Overfill - None

A00 - Tank Internal Protection - None D01 - Pipe Type - Steel/Carbon Steel/Iron

Tank Number: 012 Tank ID: 17623

Tank Status: Closed Prior to Micro Conversion, 03/91 Material Name: Closed Prior to Micro Conversion, 03/91

Capacity Gallons: 550
Install Date: 04/01/1970
Date Tank Closed: Not reported
Registered: True
Tank Location: Underground
Tank Type: Steel/carbon steel

Material Code: 0009 Common Name of Substance: Gasoline

Tightness Test Method: NN

Date Test:
Not reported
Next Test Date:
Pipe Model:
Modified By:
Last Modified:
Not reported
TRANSLAT
U4/2017

Equipment Records:

Direction Distance Elevation

vation Site Database(s) EPA ID Number

BP #36611 (Continued) U004062551

B00 - Tank External Protection - None C00 - Pipe Location - No Piping F00 - Pipe External Protection - None H00 - Tank Leak Detection - None

100 - Overfill - None

G00 - Tank Secondary Containment - None J02 - Dispenser - Suction Dispenser A00 - Tank Internal Protection - None D01 - Pipe Type - Steel/Carbon Steel/Iron

 Tank Number:
 013

 Tank ID:
 17624

Tank Status: Closed Prior to Micro Conversion, 03/91 Material Name: Closed Prior to Micro Conversion, 03/91

Capacity Gallons: 550

Install Date: Not reported Date Tank Closed: Not reported Registered: True

Tank Location: Underground Tank Type: Steel/carbon steel

Material Code: 9999 Common Name of Substance: Other

Tightness Test Method: NN

Date Test: Not reported
Next Test Date: Not reported
Pipe Model: Not reported
Modified By: TRANSLAT
Last Modified: 04/14/2017

Equipment Records:

H00 - Tank Leak Detection - None

100 - Overfill - None

A00 - Tank Internal Protection - None
D01 - Pipe Type - Steel/Carbon Steel/Iron
B00 - Tank External Protection - None
C00 - Pipe Location - No Piping
F00 - Pipe External Protection - None
G00 - Tank Secondary Containment - None

Tank Number: 014
Tank ID: 17625

Tank Status: Closed Prior to Micro Conversion, 03/91 Material Name: Closed Prior to Micro Conversion, 03/91

Capacity Gallons: 550

Install Date: Not reported
Date Tank Closed: Not reported
Registered: True
Tank Location: Underground
Tank Type: Steel/carbon steel

Material Code: 9999 Common Name of Substance: Other

Tightness Test Method: NN

Date Test: Not reported Next Test Date: Not reported

Direction Distance

Elevation Site Database(s) EPA ID Number

BP #36611 (Continued) U004062551

Pipe Model: Not reported Modified By: TRANSLAT Last Modified: 04/14/2017

Equipment Records:

H00 - Tank Leak Detection - None

100 - Overfill - None

B00 - Tank External Protection - None C00 - Pipe Location - No Piping F00 - Pipe External Protection - None G00 - Tank Secondary Containment - None A00 - Tank Internal Protection - None D01 - Pipe Type - Steel/Carbon Steel/Iron

Tank Number: 015 Tank ID: 17626

Tank Status: Closed Prior to Micro Conversion, 03/91 Material Name: Closed Prior to Micro Conversion, 03/91

Capacity Gallons: 550

Install Date: Not reported
Date Tank Closed: Not reported
Registered: True
Tank Location: Underground

Tank Type: Steel/carbon steel Material Code: 9999

Material Code: 9999
Common Name of Substance: Other

Tightness Test Method: NN

Date Test: Not reported
Next Test Date: Not reported
Pipe Model: Not reported
Modified By: TRANSLAT
Last Modified: 04/14/2017

Equipment Records:

H00 - Tank Leak Detection - None

100 - Overfill - None

B00 - Tank External Protection - None C00 - Pipe Location - No Piping F00 - Pipe External Protection - None G00 - Tank Secondary Containment - None A00 - Tank Internal Protection - None D01 - Pipe Type - Steel/Carbon Steel/Iron

 Tank Number:
 016

 Tank ID:
 17627

Tank Status: Closed Prior to Micro Conversion, 03/91 Material Name: Closed Prior to Micro Conversion, 03/91

Capacity Gallons: 550

Install Date: Not reported Date Tank Closed: Not reported Registered: True

Tank Location: Underground
Tank Type: Steel/carbon steel

Material Code: 9999 Common Name of Substance: Other

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

BP #36611 (Continued) U004062551

Tightness Test Method: NN

Not reported Date Test: Not reported Next Test Date: Pipe Model: Not reported Modified By: **TRANSLAT** 04/14/2017 Last Modified:

Equipment Records:

B00 - Tank External Protection - None C00 - Pipe Location - No Piping F00 - Pipe External Protection - None A00 - Tank Internal Protection - None D01 - Pipe Type - Steel/Carbon Steel/Iron H00 - Tank Leak Detection - None

100 - Overfill - None

G00 - Tank Secondary Containment - None

Tank Number: 017 Tank ID: 17628

Closed Prior to Micro Conversion, 03/91 Tank Status: Material Name: Closed Prior to Micro Conversion, 03/91

Capacity Gallons: 550

Install Date: Not reported Date Tank Closed: Not reported Registered: True

Tank Location: Underground Tank Type: Steel/carbon steel

Material Code: 9999 Common Name of Substance: Other

Tightness Test Method: NN

Date Test: Not reported Next Test Date: Not reported Not reported Pipe Model: Modified By: TRANSLAT Last Modified: 04/14/2017

Equipment Records:

H00 - Tank Leak Detection - None

100 - Overfill - None

B00 - Tank External Protection - None C00 - Pipe Location - No Piping F00 - Pipe External Protection - None G00 - Tank Secondary Containment - None A00 - Tank Internal Protection - None D01 - Pipe Type - Steel/Carbon Steel/Iron

Tank Number: 018 Tank ID: 17629

Closed Prior to Micro Conversion, 03/91 Tank Status: Material Name: Closed Prior to Micro Conversion, 03/91

Capacity Gallons: 550 Install Date: Not reported Date Tank Closed: Not reported Registered: True Tank Location: Underground

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

BP #36611 (Continued) U004062551

Tank Type: Steel/carbon steel

Material Code: 9999 Common Name of Substance: Other

Tightness Test Method: NN

Date Test: Not reported Next Test Date: Not reported Pipe Model: Not reported Modified By: **TRANSLAT** Last Modified: 04/14/2017

Equipment Records:

H00 - Tank Leak Detection - None

100 - Overfill - None

F00 - Pipe External Protection - None B00 - Tank External Protection - None C00 - Pipe Location - No Piping

G00 - Tank Secondary Containment - None D01 - Pipe Type - Steel/Carbon Steel/Iron A00 - Tank Internal Protection - None

Tank Number: 101 Tank ID: 17630 In Service Tank Status: Material Name: In Service Capacity Gallons: 4000 09/01/1990 Install Date: Date Tank Closed: Not reported Registered: True

Tank Location: Underground Tank Type: Equivalent technology

Material Code: 2712

Common Name of Substance: Gasoline/Ethanol

Tightness Test Method: 21

03/04/2015 Date Test: Next Test Date: Not reported Pipe Model: Not reported Modified By: **TLYE** Last Modified: 02/21/2018

Equipment Records:

G04 - Tank Secondary Containment - Double-Walled (Underground)

A00 - Tank Internal Protection - None

H01 - Tank Leak Detection - Interstitial - Electronic Monitoring

L99 - Piping Leak Detection - Other

E04 - Piping Secondary Containment - Double walled UG

C02 - Pipe Location - Underground/On-ground F04 - Pipe External Protection - Fiberglass J02 - Dispenser - Suction Dispenser B04 - Tank External Protection - Fiberglass

D06 - Pipe Type - Fiberglass Reinforced Plastic (FRP)

102 - Overfill - High Level Alarm K01 - Spill Prevention - Catch Basin

Tank Number: 102

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

BP #36611 (Continued) U004062551

Tank ID: 17631 Tank Status: In Service Material Name: In Service 4000 Capacity Gallons: Install Date: 09/01/1990 Date Tank Closed: Not reported Registered: True Tank Location: Underground

Tank Type: Equivalent technology

Material Code: 2712

Gasoline/Ethanol Common Name of Substance:

Tightness Test Method: 21

Date Test: 03/04/2015 Next Test Date: Not reported Pipe Model: Not reported Modified By: **TLYE** Last Modified: 02/21/2018

Equipment Records:

B04 - Tank External Protection - Fiberglass

D06 - Pipe Type - Fiberglass Reinforced Plastic (FRP)

102 - Overfill - High Level Alarm K01 - Spill Prevention - Catch Basin

G04 - Tank Secondary Containment - Double-Walled (Underground)

A00 - Tank Internal Protection - None

H01 - Tank Leak Detection - Interstitial - Electronic Monitoring

L99 - Piping Leak Detection - Other

E04 - Piping Secondary Containment - Double walled UG

J01 - Dispenser - Pressurized Dispenser

L07 - Piping Leak Detection - Pressurized Piping Leak Detector

C02 - Pipe Location - Underground/On-ground F04 - Pipe External Protection - Fiberglass

Tank Number: 103 Tank ID: 17632 Tank Status: In Service Material Name: In Service Capacity Gallons: 4000 Install Date: 09/01/1990 Date Tank Closed: Not reported Registered: True Tank Location: Underground

Tank Type: Equivalent technology

Material Code: 2712

Gasoline/Ethanol Common Name of Substance:

Tightness Test Method: 21

03/04/2015 Date Test: Next Test Date: Not reported Pipe Model: Not reported Modified By: **TLYE** 02/21/2018 Last Modified:

Equipment Records:

G04 - Tank Secondary Containment - Double-Walled (Underground) L07 - Piping Leak Detection - Pressurized Piping Leak Detector

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

BP #36611 (Continued) U004062551

B04 - Tank External Protection - Fiberglass

D06 - Pipe Type - Fiberglass Reinforced Plastic (FRP)

102 - Overfill - High Level Alarm K01 - Spill Prevention - Catch Basin

E04 - Piping Secondary Containment - Double walled UG

J01 - Dispenser - Pressurized Dispenser A00 - Tank Internal Protection - None L99 - Piping Leak Detection - Other

H01 - Tank Leak Detection - Interstitial - Electronic Monitoring

C02 - Pipe Location - Underground/On-ground F04 - Pipe External Protection - Fiberglass

Tank Number: 104 Tank ID: 17633 Tank Status: In Service Material Name: In Service Capacity Gallons: 4000 Install Date: 09/01/1990 Date Tank Closed: Not reported Registered: True

Tank Location: Underground

Equivalent technology Tank Type:

Material Code: 2712

Common Name of Substance: Gasoline/Ethanol

Tightness Test Method: 21

Date Test: 03/04/2015 Next Test Date: Not reported Pipe Model: Not reported Modified By: **TLYE** Last Modified: 02/21/2018

Equipment Records:

G04 - Tank Secondary Containment - Double-Walled (Underground)

A00 - Tank Internal Protection - None

H01 - Tank Leak Detection - Interstitial - Electronic Monitoring

L99 - Piping Leak Detection - Other

E04 - Piping Secondary Containment - Double walled UG

J01 - Dispenser - Pressurized Dispenser C02 - Pipe Location - Underground/On-ground F04 - Pipe External Protection - Fiberglass B04 - Tank External Protection - Fiberglass

D06 - Pipe Type - Fiberglass Reinforced Plastic (FRP)

102 - Overfill - High Level Alarm K01 - Spill Prevention - Catch Basin

L07 - Piping Leak Detection - Pressurized Piping Leak Detector

Tank Number: 105 Tank ID: 17634 Tank Status: In Service Material Name: In Service Capacity Gallons: 4000 Install Date: 09/01/1990 Not reported Date Tank Closed: Registered: True

Tank Location: Underground

Direction Distance

EDR ID Number Elevation Site **EPA ID Number** Database(s)

BP #36611 (Continued) U004062551

Tank Type: Equivalent technology

2712 Material Code:

Common Name of Substance: Gasoline/Ethanol

Tightness Test Method: 21

Date Test: 03/04/2015 Next Test Date: Not reported Pipe Model: Not reported Modified By: **TLYE** Last Modified: 02/21/2018

Equipment Records:

B04 - Tank External Protection - Fiberglass

D06 - Pipe Type - Fiberglass Reinforced Plastic (FRP)

102 - Overfill - High Level Alarm K01 - Spill Prevention - Catch Basin A00 - Tank Internal Protection - None

H01 - Tank Leak Detection - Interstitial - Electronic Monitoring

L99 - Piping Leak Detection - Other

E04 - Piping Secondary Containment - Double walled UG

J01 - Dispenser - Pressurized Dispenser

G04 - Tank Secondary Containment - Double-Walled (Underground)

C02 - Pipe Location - Underground/On-ground F04 - Pipe External Protection - Fiberglass

F19 **BP PRODUCTS NORTH AMERICA INC - BP 36611** RCRA-SQG 1000446457 NY MANIFEST NYD986909505

North 13-46 BEACH CHANNEL DR < 1/8 FAR ROCKAWAY, NY 11691

0.071 mi.

376 ft. Site 4 of 4 in cluster F

RCRA-SQG: Relative:

Lower Date form received by agency: 10/20/2015

BP PRODUCTS NORTH AMERICA INC - BP 36611 Facility name: Actual: 13-46 BEACH CHANNEL DR Facility address:

14 ft. FAR ROCKAWAY, NY 11691

> EPA ID: NYD986909505 Mailing address: PO BOX 80249

> > RANCHO SANTA MARGARITA, CA 92688

Contact: JOHN MAHONEY Contact address: PO BOX 6038

ARTESIA, CA 92688

Contact country: US

Contact telephone: 973-392-6150

Contact email: JOHN.MAHONEY@BP.COM

EPA Region:

Classification: Small Small Quantity Generator

Description: Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of

hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of

hazardous waste at any time

Owner/Operator Summary:

Owner/operator name: BP PRODUCTS NORTH AMERICA INC

Owner/operator address: Not reported

Not reported

Owner/operator country: US

Direction Distance

Elevation Site Database(s) EPA ID Number

BP PRODUCTS NORTH AMERICA INC - BP 36611 (Continued)

1000446457

EDR ID Number

Owner/operator telephone: Not reported Owner/operator email: Not reported Owner/operator fax: Not reported Owner/operator extension: Not reported Legal status: Private Owner/Operator Type: Operator Owner/Op start date: 11/01/1970 Owner/Op end date: Not reported

Owner/operator name: BP PRODUCTS NORTH AMERICA INC

Owner/operator address: PO BOX 6038

ARTESIA, CA 90702

Owner/operator country: US

Owner/operator telephone: 847-340-3092 Owner/operator email: Not reported Not reported Owner/operator fax: Owner/operator extension: Not reported Legal status: Private Owner/Operator Type: Owner 11/01/1970 Owner/Op start date: Owner/Op end date: Not reported

Handler Activities Summary:

U.S. importer of hazardous waste: No Mixed waste (haz. and radioactive): No Recycler of hazardous waste: Nο Transporter of hazardous waste: No Treater, storer or disposer of HW: No Underground injection activity: No On-site burner exemption: No Furnace exemption: Nο Used oil fuel burner: No Used oil processor: No User oil refiner: No Used oil fuel marketer to burner: No Used oil Specification marketer: No Used oil transfer facility: No Used oil transporter: No

. Waste code: D001

. Waste name: IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF

LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT

WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.

Historical Generators:

Date form received by agency: 01/01/2007

Site name: SPARTAN PETROLEUM
Classification: Not a generator, verified

Date form received by agency: 01/01/2006

Site name: SPARTAN PETROLEUM
Classification: Not a generator, verified

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

BP PRODUCTS NORTH AMERICA INC - BP 36611 (Continued)

1000446457

Date form received by agency: 04/19/1995

SPARTAN PETROLEUM Site name:

Classification: Unverified

Waste code: NONE Waste name: None

Date form received by agency: 08/09/1990

SPARTAN PETROLEUM Site name: Classification: Small Quantity Generator

Waste code: D001

IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF Waste name:

> LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT

WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.

Violation Status: No violations found

NY MANIFEST:

Country: USA

NYD986909505 EPA ID: Facility Status: Not reported

Location Address 1: AMOCO S/S 13-46 BEACH CHANNEL

Code:

Location Address 2: Not reported Total Tanks: Not reported FAR ROCKAWAY Location City:

Location State: NY Location Zip: 11694 Location Zip 4: Not reported

NY MANIFEST:

EPAID: NYD986909505

Mailing Name: SPARTAN PETROLEUM Mailing Contact: SPARTAN PETROLEUM Mailing Address 1: 1158 BROADWAY Mailing Address 2: Not reported Mailing City: **HEWLETT**

Mailing State: NY Mailing Zip: 11557 Mailing Zip 4: Not reported Mailing Country: USA

Mailing Phone: 000000000

NY MANIFEST:

Document ID: Not reported Manifest Status: Not reported Not reported seq: Year: 2017

Trans1 State ID: NJR000023036 Trans2 State ID: Not reported 10/18/2017 Generator Ship Date: Trans1 Recv Date: 10/18/2017 Trans2 Recv Date: Not reported

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

BP PRODUCTS NORTH AMERICA INC - BP 36611 (Continued)

1000446457

TSD Site Recv Date: 10/19/2017 Part A Recv Date: Not reported Part B Recv Date: Not reported Generator EPA ID: NYD986909505 Trans1 EPA ID: Not reported Trans2 EPA ID: Not reported TSDF ID 1: NJD991291105 TSDF ID 2: Not reported 012238337JJK Manifest Tracking Number:

Import Indicator: **Export Indicator:** Ν Discr Quantity Indicator: Ν Discr Type Indicator: Ν Discr Residue Indicator: Ν Discr Partial Reject Indicator: Ν Discr Full Reject Indicator: Ν

Manifest Ref Number: Not reported Alt Facility RCRA ID: Not reported Alt Facility Sign Date: Not reported

MGMT Method Type Code: H141

Waste Code: Not reported Waste Code: Not reported Waste Code: Not reported Waste Code: Not reported Waste Code: Not reported Waste Code: Not reported Quantity: 200

Units: P - Pounds

Number of Containers:

Container Type: DM - Metal drums, barrels

Handling Method: L Landfill. Specific Gravity: Waste Code: D018 Waste Code 1_2: D001 Waste Code 1_3: Not reported Waste Code 1_4: Not reported Waste Code 1 5: Not reported Waste Code 1_6: Not reported

> Click this hyperlink while viewing on your computer to access 1 additional NY MANIFEST: record(s) in the EDR Site Report.

G20 **MYLES FRENCH CLEANERS** 1018507400 **EDR Hist Cleaner** SW 11-59 BEACH CHANNEL DRIVE N/A

< 1/8 0.073 mi.

383 ft. Site 1 of 4 in cluster G

FAR ROCKAWAY, NY 11691

EDR Hist Cleaner

Relative: Lower Actual:

Year: Name: Type:

Drycleaning Plants, Except Rugs CHRISA CLEANERS INC 1974 16 ft. Drycleaning Plants, Except Rugs 1975 CHRISA CLEANERS INC

1976 CHRISA CLEANERS INC Drycleaning Plants, Except Rugs Drycleaning Plants, Except Rugs 1977 CHRISA CLEANERS INC 1978 CHRISA CLEANERS INC Drycleaning Plants, Except Rugs 1979 CHRISA CLEANERS INC Drycleaning Plants, Except Rugs

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

MYLES FRENCH CLEANERS (Continued)

1018507400

	,	
1979	CHRISA CLEANERS INC	Drycleaning Plants, Except Rugs
1987	MYLES FRENCH CLEANERS	Coin-Operated Laundries And Cleaning
1990	MYLES FRENCH CLEANERS	Coin-Operated Laundries And Cleaning, NEC
1991	MYLES FRENCH CLEANERS	Coin-Operated Laundries And Cleaning, NEC
1991	GIGI FRENCH CLEANERS NC	Drycleaning Plants, Except Rugs, NEC
1992	KIM MYLES INC	Coin-Operated Laundries And Cleaning, NEC
1993	KIM MYLES INC	Coin-Operated Laundries And Cleaning, NEC
1994	KIM MYLES INC	Coin-Operated Laundries And Cleaning, NEC
1995	KIM MYLES INC	Coin-Operated Laundries And Cleaning, NEC
1996	KIM MYLES INC	Coin-Operated Laundries And Cleaning, NEC
1997	KIM MYLES INC	Coin-Operated Laundries And Cleaning, NEC
1999	CHON-DH INC	Coin-Operated Laundries And Cleaning, NEC
2000	CHON-DH INC	Coin-Operated Laundries And Cleaning, NEC
2001	CHON-DH INC	Coin-Operated Laundries And Cleaning, NEC
2002	MYLES FRENCH CLEANERS	Coin-Operated Laundries And Cleaning, NEC
2003	MYLES FRENCH CLEANERS	Coin-Operated Laundries And Cleaning, NEC
2004	MYLES FRENCH CLEANERS	Coin-Operated Laundries And Cleaning, NEC
2005	MYLES FRENCH CLEANERS	Coin-Operated Laundries And Cleaning, NEC
2006	MYLES FRENCH CLEANERS	Coin-Operated Laundries And Cleaning, NEC
2009	LILY PARK DRY CLEANER INC	Drycleaning Plants, Except Rugs
2010	LILY PARK DRY CLEANER INC	Drycleaning Plants, Except Rugs
2013	MYLES FRENCH CLEANERS	Coin-Operated Laundries And Cleaning, NEC
2014	MYLES FRENCH CLEANERS	Coin-Operated Laundries And Cleaning, NEC

NY DRYCLEANERS \$110247446 G21 **NEW MYLES FRENCH CLEANERS** N/A

SW 11-59 BEACH CHANNEL DRIVE < 1/8 FAR ROCKAWAY, NY 11691

0.073 mi.

383 ft. Site 2 of 4 in cluster G

Relative: DRYCLEANERS:

Lower 2-6308-00314 Facility ID: Phone Number: 718-327-8053 Actual: Not reported Region: 16 ft.

Registration Effective Date: 4/25/2002 15:58:15:713

Inspection Date: 07DEC13 Install Date: 7/01 Drop Shop: Not reported Shutdown: Not reported Alternate Solvent: Not reported **Current Business:** Not reported

G22 **NEW MYLES FRENCH CLEANERS** RCRA-CESQG 1000220551 NYD981141468 SW 11-59 BEACH CHANNEL DR ICIS

FAR ROCKAWAY, NY 11691 < 1/8 0.073 mi. 383 ft. Site 3 of 4 in cluster G

Relative:

Lower RCRA-CESQG:

Date form received by agency: 01/01/2007 Actual:

Facility name: MYLES FRENCH CLEANERS 16 ft. Facility address: 11-59 BEACH CHANNEL DR

FAR ROCKAWAY, NY 11691

EPA ID: NYD981141468 Mailing address: BEACH CHANNEL DR **US AIRS**

FINDS

ECHO NY MANIFEST

Direction Distance

Elevation Site Database(s) EPA ID Number

NEW MYLES FRENCH CLEANERS (Continued)

1000220551

EDR ID Number

FAR ROCKAWAY, NY 11691

Contact: SUN PARK

Contact address: BEACH CHANNEL DR

FAR ROCKAWAY, NY 11691

Contact country: US

Contact telephone: 718-327-8053 Contact email: Not reported

EPA Region: 02

Classification: Conditionally Exempt Small Quantity Generator

Description: Handler: generates 100 kg or less of hazardous waste per calendar

month, and accumulates 1000 kg or less of hazardous waste at any time; or generates 1 kg or less of acutely hazardous waste per calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from

the cleanup of a spill, into or on any land or water, of acutely

hazardous waste

Owner/Operator Summary:

Owner/operator name: SUN-MOO PARK

Owner/operator address: 1159 BEACH CHANNEL DR

FAR ROCKAWAY, NY 11691

Owner/operator country: US

Owner/operator telephone: 718-327-8053 Owner/operator email: Not reported Owner/operator fax: Not reported Owner/operator extension: Not reported Legal status: Private Owner/Operator Type: Operator Owner/Op start date: 01/01/2001 Owner/Op end date: Not reported

Owner/operator name: SUN-MOO PARK

Owner/operator address: 1159 BEACH CHANNEL DR

Not reported

FAR ROCKAWAY, NY 11691

Owner/operator country: US

Owner/operator telephone: 718-327-8053
Owner/operator email: Not reported
Owner/operator fax: Not reported
Owner/operator extension: Not reported
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: 01/01/2001

Handler Activities Summary:

Owner/Op end date:

U.S. importer of hazardous waste: No Mixed waste (haz. and radioactive): No Recycler of hazardous waste: No Transporter of hazardous waste: No

Direction Distance

Elevation Site Database(s) EPA ID Number

NEW MYLES FRENCH CLEANERS (Continued)

1000220551

EDR ID Number

Treater, storer or disposer of HW: No Underground injection activity: No On-site burner exemption: No Furnace exemption: No Used oil fuel burner: No Used oil processor: No User oil refiner: No Used oil fuel marketer to burner: Nο Used oil Specification marketer: No Used oil transfer facility: No Used oil transporter: No

Historical Generators:

Date form received by agency: 01/01/2006

Site name: MYLES FRENCH CLEANERS

Classification: Conditionally Exempt Small Quantity Generator

Date form received by agency: 10/05/2001

Site name: MYLES FRENCH CLEANERS

Classification: Conditionally Exempt Small Quantity Generator

. Waste code: D007
. Waste name: CHROMIUM

Waste code: D008
Waste name: LEAD

Waste code: D039

Waste name: TETRACHLOROETHYLENE

Waste code: D040

Waste name: TRICHLOROETHYLENE

Waste code: F002

Waste name: THE FOLLOWING SPENT HALOGENATED SOLVENTS: TETRACHLOROETHYLENE,

METHYLENE CHLORIDE, TRICHLOROETHYLENE, 1,1,1-TRICHLOROETHANE,

CHLOROBENZENE, 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE, ORTHO-DICHLOROBENZENE, TRICHLOROFLUOROMETHANE, AND

1,1,2-TRICHLOROETHANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE LISTED IN F001, F004, OR F005, AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND

SPENT SOLVENT MIXTURES.

Date form received by agency: 09/04/1997

Site name: MYLES FRENCH CLEANERS

Classification: Conditionally Exempt Small Quantity Generator

Date form received by agency: 04/18/1995

Site name: MYLES FRENCH CLEANERS
Classification: Not a generator, verified

Waste code: NONE
Waste name: None

Violation Status: No violations found

Direction Distance

Elevation Site Database(s) EPA ID Number

NEW MYLES FRENCH CLEANERS (Continued)

1000220551

EDR ID Number

ICIS:

Enforcement Action ID: NY000A0000263080031400310

FRS ID: 110001615422

Action Name: NEW MYLES FRENCH CLEANERS 36081R043600310

Facility Name: NEW MYLES FRENCH CLEANERS
Facility Address: 11-59 BEACH CHANNEL DR
FAR ROCKAWAY, NY 116912499

Enforcement Action Type: Notice of Violation

Facility County: QUEENS

Program System Acronym: AIR

Enforcement Action Forum Desc: Administrative - Informal

EA Type Code: NOV
Facility SIC Code: 7216
Federal Facility ID: Not reported
Latitude in Decimal Degrees: 40.605427
Longitude in Decimal Degrees: -73.755266
Permit Type Desc: Not reported

Program System Acronym: NY0000002630800314

Facility NAICS Code: 812320
Tribal Land Code: Not reported

Enforcement Action ID: NY000A0000263080031400301

FRS ID: 110001615422

Action Name: NEW MYLES FRENCH CLEANERS 36081R043600301

Facility Name: NEW MYLES FRENCH CLEANERS
Facility Address: 11-59 BEACH CHANNEL DR
FAR ROCKAWAY, NY 116912499

Enforcement Action Type: Notice of Violation

Facility County: QUEENS
Program System Acronym: AIR

Enforcement Action Forum Desc: Administrative - Informal

EA Type Code: NOV
Facility SIC Code: 7216
Federal Facility ID: Not reported
Latitude in Decimal Degrees: 40.605427
Longitude in Decimal Degrees: -73.755266
Permit Type Desc: Not reported

Program System Acronym: NY0000002630800314

Facility NAICS Code: 812320
Tribal Land Code: Not reported

US AIRS MINOR:

Envid: 1000220551

Region Code: 02

Programmatic ID: AIR NY0000002630800314

Facility Registry ID: 110001615422
D and B Number: Not reported
Primary SIC Code: 7216
NAICS Code: 812320
Default Air Classification Code: MIN
Facility Type of Ownership Code: POF
Air CMS Category Code: Not reported
HPV Status: Not reported

US AIRS MINOR:

Region Code: 02

Direction Distance

Elevation Site Database(s) EPA ID Number

NEW MYLES FRENCH CLEANERS (Continued)

1000220551

EDR ID Number

Programmatic ID: AIR NY0000002630800314

Facility Registry ID: 110001615422

Air Operating Status Code: OPR Default Air Classification Code: MIN

Air Program: MACT Standards (40 CFR Part 63)

Activity Date: 1999-06-29 00:00:00
Activity Status Date: Not reported

Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation

Activity Status: Not reported

Region Code: 02

Programmatic ID: AIR NY0000002630800314

Facility Registry ID: 110001615422

Air Operating Status Code: OPR Default Air Classification Code: MIN

Air Program: MACT Standards (40 CFR Part 63)

Activity Date: 2001-09-04 00:00:00

Activity Status Date: Not reported

Activity Group: Compliance Monitoring Activity Type: Inspection/Evaluation

Activity Status: Not reported

Region Code: 02

Programmatic ID: AIR NY0000002630800314

Facility Registry ID: 110001615422

Air Operating Status Code: OPR Default Air Classification Code: MIN

Air Program: MACT Standards (40 CFR Part 63)

Activity Date: 2000-03-10 00:00:00
Activity Status Date: 2000-03-10 00:00:00
Activity Group: Enforcement Action
Activity Type: Administrative - Informal

Activity Status: Achieved

Region Code: 02

Programmatic ID: AIR NY0000002630800314

Facility Registry ID: 110001615422

Air Operating Status Code: OPR Default Air Classification Code: MIN

Air Program: MACT Standards (40 CFR Part 63)

Activity Date: 2005-08-16 00:00:00
Activity Status Date: 2005-08-16 00:00:00
Activity Group: Enforcement Action
Activity Type: Administrative - Informal

Activity Status: Achieved

Region Code: 02

Programmatic ID: AIR NY0000002630800314

Facility Registry ID: 110001615422

Air Operating Status Code: OPR Default Air Classification Code: MIN

Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards

Activity Date: 2001-09-04 00:00:00
Activity Status Date: Not reported

Activity Group: Compliance Monitoring Activity Type: Inspection/Evaluation

Direction Distance

Elevation Site Database(s) EPA ID Number

NEW MYLES FRENCH CLEANERS (Continued)

1000220551

EDR ID Number

US AIRS MINOR:

Activity Status:

Envid: 1000220551

Region Code: 02

Programmatic ID: AIR NY0000002630800314

Not reported

Facility Registry ID: 110001615422
D and B Number: Not reported
Primary SIC Code: 7216
NAICS Code: 812320
Default Air Classification Code: MIN
Facility Type of Ownership Code: POF
Air CMS Category Code: Not reported
HPV Status: Not reported

US AIRS MINOR:

Region Code: 02

Programmatic ID: AIR NY0000002630800314

Facility Registry ID: 110001615422

Air Operating Status Code: OPR
Default Air Classification Code: MIN

Air Program: MACT Standards (40 CFR Part 63)

Activity Date: 1999-06-29 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation

Activity Status: Not reported

Region Code: 02

Programmatic ID: AIR NY0000002630800314

Facility Registry ID: 110001615422

Air Operating Status Code: OPR Default Air Classification Code: MIN

Air Program: MACT Standards (40 CFR Part 63)

Activity Date: 2001-09-04 00:00:00

Activity Status Date: Not reported
Activity Group: Compliance Monitoring

Activity Group: Compilance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 02

Programmatic ID: AIR NY0000002630800314

Facility Registry ID: 110001615422

Air Operating Status Code: OPR Default Air Classification Code: MIN

Air Program: MACT Standards (40 CFR Part 63)

Activity Date: 2000-03-10 00:00:00
Activity Status Date: 2000-03-10 00:00:00
Activity Group: Enforcement Action
Activity Type: Administrative - Informal

Activity Status: Achieved

Region Code: 02

Programmatic ID: AIR NY0000002630800314

Facility Registry ID: 110001615422

Air Operating Status Code: OPR

Direction Distance Elevation

evation Site Database(s) EPA ID Number

NEW MYLES FRENCH CLEANERS (Continued)

1000220551

EDR ID Number

Default Air Classification Code: MIN

Air Program: MACT Standards (40 CFR Part 63)

Activity Date: 2005-08-16 00:00:00
Activity Status Date: 2005-08-16 00:00:00
Activity Group: Enforcement Action
Activity Type: Administrative - Informal

Activity Status: Achieved

Region Code: 02

Programmatic ID: AIR NY0000002630800314

Facility Registry ID: 110001615422

Air Operating Status Code: OPR Default Air Classification Code: MIN

Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards

Activity Date: 2001-09-04 00:00:00

Activity Status Date: Not reported

Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation

Activity Status: Not reported

FINDS:

Registry ID: 110001615422

Environmental Interest/Information System

AFS (Aerometric Information Retrieval System (AIRS) Facility Subsystem) replaces the former Compliance Data System (CDS), the National Emission Data System (NEDS), and the Storage and Retrieval of Aerometric Data (SAROAD). AIRS is the national repository for information concerning airborne pollution in the United States. AFS is used to track emissions and compliance data from industrial plants. AFS data are utilized by states to prepare State Implementation Plans to comply with regulatory programs and by EPA as an input for the estimation of total national emissions. AFS is undergoing a major redesign to support facility operating permits required under Title V of the Clean Air Act.

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

FIS (New York - Facility Information System) is New York's Department of Environmental Conservation (DEC) information system for tracking environmental facility information found across the State.

AIR MINOR

<u>Click this hyperlink</u> while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

NEW MYLES FRENCH CLEANERS (Continued)

1000220551

Envid: 1000220551 110001615422 Registry ID:

DFR URL: http://echo.epa.gov/detailed-facility-report?fid=110001615422

NY MANIFEST:

USA Country:

EPA ID: NYD981141468 Facility Status: Not reported

Location Address 1: 11-59 BEACH CHANNEL DRIVE

Code: ΒP

Location Address 2: Not reported Total Tanks: Not reported Location City: FAR ROCKAWAY

Location State: NY Location Zip: 11691 Location Zip 4: Not reported

NY MANIFEST:

EPAID: NYD981141468 Mailing Name: **MYLES CLEANER** Mailing Contact: MYLES CLEANER

Mailing Address 1: 11-59 BEACH CHANNEL DRIVE

Mailing Address 2: Not reported Mailing City: **FAR ROCKAWAY**

Mailing State: NYMailing Zip: 11691 Mailing Zip 4: Not reported Mailing Country: USA

Mailing Phone: 7183278053

NY MANIFEST:

Document ID: NYC7513942 Manifest Status: Not reported Not reported seq:

Year: 2005

Discr Full Reject Indicator:

Manifest Ref Number:

Trans1 State ID: TXR000050930 NJD071629976 Trans2 State ID: Generator Ship Date: 04/20/2005 Trans1 Recv Date: 04/20/2005 Trans2 Recv Date: 04/25/2005 TSD Site Recv Date: 04/26/2005 Part A Recv Date: Not reported Part B Recv Date: Not reported NYD981141468 Generator EPA ID: Trans1 EPA ID: NY89930JE Trans2 EPA ID: TBA95RNJ TSDF ID 1: OHD980587364 TSDF ID 2: Not reported Manifest Tracking Number: Not reported Import Indicator: Not reported **Export Indicator:** Not reported Discr Quantity Indicator: Not reported Discr Type Indicator: Not reported Discr Residue Indicator: Not reported Discr Partial Reject Indicator: Not reported

Not reported

Not reported

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

NEW MYLES FRENCH CLEANERS (Continued)

1000220551

Alt Facility RCRA ID: Not reported Alt Facility Sign Date: Not reported MGMT Method Type Code: Not reported

Waste Code: F002 - HALO SOLV + STILL BOTTOMS FM REC OF SOLV

Waste Code: Not reported Waste Code: Not reported Waste Code: Not reported Waste Code: Not reported Waste Code: Not reported Quantity: 00195 P - Pounds Units: Number of Containers: 001

Container Type: DF - Fiberboard or plastic drums (glass) Handling Method: B Incineration, heat recovery, burning.

Specific Gravity:

Waste Code: F002 - HALO SOLV + STILL BOTTOMS FM REC OF SOLV

Waste Code: Not reported Waste Code: Not reported Waste Code: Not reported Waste Code: Not reported Quantity: 00120 Units: P - Pounds Number of Containers: 001

Container Type: DF - Fiberboard or plastic drums (glass)

Handling Method: Not reported Specific Gravity: 01.00 Waste Code: Not reported Quantity: Not reported Units: Not reported Not reported Number of Containers: Container Type: Not reported

Handling Method: B Incineration, heat recovery, burning.

Specific Gravity: Not reported

> Click this hyperlink while viewing on your computer to access -1 additional NY MANIFEST: record(s) in the EDR Site Report.

SE **BEACH 21ST ST AND MOTT AVE**

DRUM RUN

< 1/8 QUEENS, NY

0.082 mi. 435 ft.

23

SPILLS: Relative:

Higher Facility ID: 1204054 Facility Type: ER Actual: Spill Number: 1204054 26 ft. DER Facility ID: 421252 Site ID: 466912

DEC Region: Closed Date: 2012-08-02 Spill Cause: **Abandoned Drums**

Spill Class: C4 SWIS: 4101 Spill Date: 2012-07-25 **RMPIPER** Investigator: Referred To: Not reported S112148028

N/A

NY Spills

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

DRUM RUN (Continued) S112148028

Reported to Dept: 2012-07-25 CID: Not reported Water Affected: Not reported

Spill Source: Commercial/Industrial

Spill Notifier: Other Cleanup Ceased: Not reported Cleanup Meets Std: False Last Inspection: Not reported Recommended Penalty: False **UST Trust:** False Remediation Phase: 0

Date Entered In Computer: 2012-07-25 Spill Record Last Update: 2012-08-02 Spiller Name: Not reported

Spiller Company: ABANDONED DRUM

Spiller Address: Not reported

Spiller Company: 999

Contact Name: JEREMY HILLER

DEC Memo: "8/1/12- 55 gal pumped. spill closed. "

"in parking lot for Train Station - blue 55 gallon plastic drum - not Remarks:

leaking -"

All Materials:

Oxygenate:

Site ID: 466912 Operable Unit ID: 1216889 Operable Unit: 01 Material ID: 2215106 Material Code: 0060A Material Name: wastewater Case No.: Not reported Material FA: Other Quantity: 55.00 Units: Not reported Recovered: Not reported

Not reported

E24 LOT 50, TAXBLOCK 15537 NY E DESIGNATION \$121343953 ΝE 17-27 REDFERN AVENUE N/A

< 1/8 **QUEENS, NY 11691** 0.084 mi.

445 ft. Site 2 of 3 in cluster E

E DESIGNATION: Relative:

Lower Tax Lot(s): 50 Tax Block: 15537 Actual: Borough Code: QN 20 ft. E-No: E-415 Effective Date: 9/7/2017

Satisfaction Date: Not reported Ceqr Number: 16DME010Q

Ulurp Number: 170243AZMQ, 170244AZRQ

Zoning Map No: 25b, 31a

Description: Air Quality - HVAC fuel limited to natural gas

Lot Remediation Date: Not reported

Description: Exhaust stack location limitations

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

LOT 50, TAXBLOCK 15537 (Continued)

S121343953

Lot Remediation Date: Not reported

Hazardous Materials* Phase I and Phase II Testing Protocol Description:

Lot Remediation Date: Not reported

Description: Window Wall Attenuation & Alternate Ventilation

Lot Remediation Date: Not reported

E25 ON EMPTY LOT NY Spills S110308260 N/A

17-25 17-27 REDFERN AVENUE ΝE FAR ROCKAWAY, NY 11691 < 1/8

0.084 mi.

445 ft. Site 3 of 3 in cluster E

Relative: SPILLS: Lower Facility ID: 1000860 Facility Type: ER Actual: Spill Number: 1000860 20 ft. DER Facility ID: 388453

433544 Site ID: DEC Region:

Closed Date: 2010-07-01 Spill Cause: **Abandoned Drums**

Spill Class: C3 SWIS: 4101 Spill Date: 2010-04-22 Investigator: vszhune Referred To: Not reported Reported to Dept: 2010-04-22 CID: Not reported Water Affected: Not reported

Spill Source: Commercial/Industrial

Spill Notifier: Other Cleanup Ceased: Not reported Cleanup Meets Std: False Last Inspection: Not reported Recommended Penalty: False **UST Trust:** False Remediation Phase: 0

2010-04-22 Date Entered In Computer: Spill Record Last Update: 2010-07-01 Spiller Name: Not reported Spiller Company: Not reported Not reported Spiller Address: Spiller Company: Not reported Contact Name: SAL RUSSO DEC Memo:

"4/22/10 - Raphael Ketani. Mr. Russo of A. Russo Wrecking (718) 978-5600 called in a report of 10 fiberglass containers containing liquid that had been abandoned on a property where he is tearing down the homes. Each container is 10 by 10 by 10. He said that they just appeared today. Mr. Russo added that the NYC DEP had looked at the containers and had labeled some marine pollutant - non-hazardous. He said that the containers sit on the property 17-25 and 17-27 Redfern Avenue in Far Rockaway. He added that the property is across from the Redfern Housing project and there are lots of kids in the project. He is afraid that someone may come along and open the valves on the containers and spill whatever liquid is inside. Mr. Russo said that he will put a chain link fence around the property on monday, but he

Direction Distance

EDR ID Number Elevation **EPA ID Number** Site Database(s)

ON EMPTY LOT (Continued)

S110308260

is concerned as to what might happen over the weekend. I told him that we will contact the property owner and get them to remove the containers. I checked Property Shark and ACRIS and found the owner to be Fred Stark. Mr. Stark runs Fred Stark Real Estate at 198-10 Jamaica Avenue, Hollis, 11423, (718) 465-3600. The block and lots are: 15537/50 and 51. Two private homes are on the site. I called up Fred Stark Real Estate and spoke to Liz Farrell and Rita Stark. They told me that Mr. Stark is deceased and that they are managing his estate. I told them about the 10 containers that the DEC is very concerned that some kids may come by and open up the valves on the containers and spill the contents. I told them that the DEC wants the containers removed immediately. They said that they were told by Mr. Russo that the DEC would take the containers away. I told her that the DEC can't take the containers as they are on private property. I told them that it's the responsibility of the property owner to hire someone to take the containers and dispose of them properly. They said that they will find a transporter. I told them to send the bill of lading to Veronica Zhune, the case manager. They said that they will. 07/01/10- ABC Tank repair & Lining Inc. sent letter dated 07/01/10 describing work performed at this site and the waste mamnifest. On April 27,2010 ABC Tabk pumped out and clened (13) containers from 117-25 Redfern Ave. ,Queens. Each container was cup up and placed in(26) drums for proper disposal. On June 29,2010 ABM-American Bio Mass Picked up the (26) drums along with drums from other jobs to be disposed of properly. Spill Closed.

Remarks: "10-4X4X4 FIBERGLASS CONTAINERS LEFT ON LOT.DEP HAS TAGGED THEM-

MARINE POLLUTANT"

All Materials:

Site ID: 433544 Operable Unit ID: 1184428 Operable Unit: 01 Material ID: 2178691 Material Code: 0064A

unknown material Material Name: Case No.: Not reported Material FA: Other Quantity: Not reported Units: Not reported Recovered: Not reported Not reported Oxygenate:

G26 DRY CLEANERS NY Spills \$108297235 SW 1159 BEACH CHANNEL DRIVE N/A

< 1/8 **ROCKAWAY, NY**

0.088 mi.

Site 4 of 4 in cluster G 464 ft.

Relative: SPILLS:

Lower Facility ID: 0611066 Facility Type: ER Actual: Spill Number: 0611066 17 ft. DER Facility ID: 325252 375635 Site ID: DEC Region:

2007-01-04 Closed Date: Spill Cause: **Equipment Failure**

Direction Distance

Elevation Site Database(s) EPA ID Number

DRY CLEANERS (Continued)

S108297235

EDR ID Number

Spill Class: Not reported SWIS: 4101
Spill Date: 2007-01-04
Investigator: rvketani
Referred To: Not reported Reported to Dept: 2007-01-04
CID: 444

Water Affected: Not reported

Spill Source: Institutional, Educational, Gov., Other

Spill Notifier:

Cleanup Ceased:

Cleanup Meets Std:

Last Inspection:

Recommended Penalty:

UST Trust:

Remediation Phase:

Other

Not reported

False

False

0

Date Entered In Computer: 2007-01-04
Spill Record Last Update: 2007-01-04
Spiller Name: RICH TURCHIANO

Spiller Company: DRY CLEANERS
Spiller Address: 1159 BEACH CHANNEL DRIVE

Spiller Address: 1159 Spiller Company: 001

Contact Name: RICH TURCHIANO

DEC Memo: "1/4/07 - Raphael Ketani. I spoke to Rich Turchiano of Madison Oil.

He said that his driver was cleaning up the sidewalk right now. He said that no drains were affected and all of the oil landed on the sidewalk. He said that there was back pressure on the vent pipe. He said that it is probably rust and scale on the inside of the pipe that is at least partially blocking the venting. Based upon the information above and the small size of the spill, I am closing the

case. "

Remarks: "BETWEEN A 1/4 - 1/2 GALLON: IN PROCESS OF CLEANING UP BACK PRESSURE

ON VENT LINE"

All Materials:

Site ID: 375635 Operable Unit ID: 1133256 Operable Unit: 01 2123059 Material ID: Material Code: 0001A Material Name: #2 fuel oil Case No.: Not reported Material FA: Petroleum Quantity: .00 Units: G Recovered: .00

Oxygenate: Not reported

Direction Distance

Distance Elevation Site EDR ID Number

Database(s) EPA ID Number

H27 LOT 51,TAXBLOCK 15537 NY E DESIGNATION S121343955
NE 17-25 REDFERN AVENUE N/A

NE 17-25 REDFERN AVENUE < 1/8 QUEENS, NY 11691

0.090 mi.

473 ft. Site 1 of 5 in cluster H

Cegr Number:

Relative: E DESIGNATION:
Lower Tax Lot(s):

Actual: 20 ft.

 Tax Lot(s):
 51

 Tax Block:
 15537

 Borough Code:
 QN

 E-No:
 E-415

 Effective Date:
 9/7/2017

 Satisfaction Date:
 Not reported

Ulurp Number: 170243AZMQ, 170244AZRQ

Zoning Map No: 25b, 31a

Description: Exhaust stack location limitations

Lot Remediation Date: Not reported

Description: Hazardous Materials* Phase I and Phase II Testing Protocol

Lot Remediation Date: Not reported

Description: Window Wall Attenuation & Alternate Ventilation

16DME010Q

Lot Remediation Date: Not reported

Description: Air Quality - HVAC fuel limited to natural gas

Lot Remediation Date: Not reported

I28 NOBO CORPORATION NY AST U003396729
South 10-74 BEACH 22ND STREET N/A

< 1/8 0.094 mi.

498 ft. Site 1 of 2 in cluster I

Relative: AST: Lower Re

 Lower
 Region:
 STATE

 Actual:
 DEC Region:
 2

 23 ft.
 Site Status:
 Active

 Facility Id:
 2-602577

 Program Type:
 PBS

FAR ROCKAWAY, NY 11691

UTM X: 605369.89114 UTM Y: 4495564.54331 Expiration Date: 12/28/2000 Site Type: Other

Affiliation Records:

Site Id: 24534

Affiliation Type: Facility Owner

Company Name: NOBO CORPORATION

Contact Type: Not reported Contact Name: Not reported

Address1: 10-74 BEACH 22ND STREET

Address2: Not reported City: FAR ROCKAWAY

State: NY
Zip Code: 11691
Country Code: 001

Phone: (718) 471-1264 EMail: Not reported

Direction Distance Elevation

on Site Database(s) EPA ID Number

NOBO CORPORATION (Continued)

U003396729

EDR ID Number

Fax Number: Not reported Modified By: TRANSLAT Date Last Modified: 2004-03-04

Site Id: 24534 Affiliation Type: Mail Contact

Company Name: NOBO CORPORATION

Contact Type: Not reported Contact Name: Not reported

Address1: 10-74 BEACH 22ND STREET

Address2: Not reported City: FAR ROCKAWAY

State: NY
Zip Code: 11691
Country Code: 001

Phone: (718) 471-1264
EMail: Not reported
Fax Number: Not reported
Modified By: TRANSLAT
Date Last Modified: 2004-03-04

Site Id: 24534

Affiliation Type: Facility Operator
Company Name: NOBO CORPORATION
Contact Type: Not reported

Contact Type: Not reported

Contact Name: ANDREW BONNOT

Address1: Not reported

Address2: Not reported City: Not reported State: NN

Zip Code: Not reported

Country Code: 001 Phone: (718

Phone: (718) 471-1264
EMail: Not reported
Fax Number: Not reported
Modified By: TRANSLAT
Date Last Modified: 2004-03-04

Site Id: 24534

Affiliation Type: Emergency Contact
Company Name: NOBO CORPORATION

Contact Type: Not reported
Contact Name: ANDREW BONNOT

Address1: Not reported Address2: Not reported City: Not reported

State: NN

Zip Code: Not reported

Country Code: 001

Phone: (718) 471-1264
EMail: Not reported
Fax Number: Not reported
Modified By: TRANSLAT
Date Last Modified: 2004-03-04

Tank Info:

Direction Distance

Elevation Site Database(s) EPA ID Number

NOBO CORPORATION (Continued)

U003396729

EDR ID Number

 Tank Number:
 001

 Tank Id:
 50527

 Material Code:
 0001

Common Name of Substance: #2 Fuel Oil (On-Site Consumption)

Equipment Records:

C01 - Pipe Location - Aboveground J02 - Dispenser - Suction Dispenser H00 - Tank Leak Detection - None

F01 - Pipe External Protection - Painted/Asphalt Coating

G99 - Tank Secondary Containment - Other

I01 - Overfill - Float Vent Valve A00 - Tank Internal Protection - None

B01 - Tank External Protection - Painted/Asphalt Coating

D02 - Pipe Type - Galvanized Steel

Tank Location:

Tank Type: Steel/Carbon Steel/Iron

Tank Status: Tank Converted to Non-Regulated Use

Pipe Model: Not reported Install Date: 05/01/1995
Capacity Gallons: 275
Tightness Test Method: NN

Date Test:
Not reported
Next Test Date:
Not reported
Date Tank Closed:
O8/01/1996
Register:
True
Modified By:
TRANSLAT
Last Modified:
O4/14/2017

Material Name: #2 fuel oil (on-site consumption)

 Tank Number:
 002

 Tank Id:
 50528

 Material Code:
 0022

Common Name of Substance: Waste Oil/Used Oil

Equipment Records:

J02 - Dispenser - Suction Dispenser

L09 - Piping Leak Detection - Exempt Suction Piping

H00 - Tank Leak Detection - None

F01 - Pipe External Protection - Painted/Asphalt Coating

G99 - Tank Secondary Containment - Other

I01 - Overfill - Float Vent Valve A00 - Tank Internal Protection - None

B01 - Tank External Protection - Painted/Asphalt Coating

D02 - Pipe Type - Galvanized Steel C01 - Pipe Location - Aboveground

Tank Location:

Tank Type: Steel/Carbon Steel/Iron
Tank Status: Temporarily Out of Service

Pipe Model: Not reported Install Date: 05/01/1995
Capacity Gallons: 275
Tightness Test Method: NN

Date Test: Not reported
Next Test Date: Not reported

Direction Distance

Distance Elevation Site EDR ID Number

Database(s) EPA ID Number

NOBO CORPORATION (Continued)

U003396729

S121343851

N/A

NY E DESIGNATION

Date Tank Closed:
Register:
Modified By:
Last Modified:
Material Name:
Not reported
True
TRANSLAT
04/14/2017
waste oil/used oil

I29 LOT 140,TAXBLOCK 15705 South 10-74 BEACH 22 STREET

< 1/8 QUEENS, NY 11691

0.094 mi.

498 ft. Site 2 of 2 in cluster I Relative: E DESIGNATION:

 Lower
 Tax Lot(s):
 140

 Actual:
 Tax Block:
 15705

 23 ft.
 Borough Code:
 QN

 E-No:
 E-415

E-No: E-415
Effective Date: 9/7/2017
Satisfaction Date: Not reported
Ceqr Number: 16DME010Q

Ulurp Number: 170243AZMQ, 170244AZRQ

Zoning Map No: 25b, 31a

Description: Hazardous Materials* Phase I and Phase II Testing Protocol

Lot Remediation Date: Not reported

53

H30 LOT 53,TAXBLOCK 15537 NY E DESIGNATION S121343961
NE 17-21 REDFERN AVENUE N/A

< 1/8 0.095 mi.

501 ft. Site 2 of 5 in cluster H

QUEENS, NY 11691

Relative: E DESIGNATION: Lower Tax Lot(s):

 Actual:
 Tax Block:
 15537

 19 ft.
 Borough Code:
 QN

 E-No:
 E-415

 Effective Date:
 9/7/2017

 Satisfaction Date:
 Not reported

Ceqr Number:

Ulurp Number: 170243AZMQ, 170244AZRQ

Zoning Map No: 25b, 31a

Description: Air Quality - HVAC fuel limited to natural gas

16DME010Q

Lot Remediation Date: Not reported

Description: Exhaust stack location limitations

Lot Remediation Date: Not reported

Description: Hazardous Materials* Phase I and Phase II Testing Protocol

Lot Remediation Date: Not reported

Description: Window Wall Attenuation & Alternate Ventilation

Lot Remediation Date: Not reported

Direction Distance

Elevation Site Database(s) EPA ID Number

31 2230-40 MOTT AVENUE NY Spills S102961916
West 2230-40 MOTT AVENUE N/A

West 2230-40 MOTT AVENUE < 1/8 FAR ROCKAWAY, NY

0.099 mi. 524 ft.

Relative: SPILLS:

 Lower
 Facility ID:
 9710254

 Actual:
 Facility Type:
 ER

 11 ft.
 Spill Number:
 9710254

 DER Facility ID:
 201074

 Site ID:
 244791

DEC Region: 2
Closed Date: 2003-02-25
Spill Cause: Human Error

Spill Class: C3
SWIS: 4101
Spill Date: 1997-12-06
Investigator: TOMASELLO
Referred To: Not reported
Reported to Dept: 1997-12-06
CID: 266

Water Affected: Not reported
Spill Source: Private Dwellir

Spill Source: Private Dwelling
Spill Notifier: Other
Cleanup Ceased: Not reported
Cleanup Meets Std: False
Last Inspection: Not reported
Recommended Penalty: False
UST Trust: False

Remediation Phase: 0
Date Entered In Computer: 1997-12-06
Spill Record Last Update: 2003-02-25
Spiller Name: Not reported

Spiller Company: Not reported
Spiller Address: 2230-40 MOTT AVENUE

Spiller Company: 001
Contact Name: Not reported

DEC Memo: ""

Remarks: "APARTMENT BUILDING. STICK LINE CAP LEFT OFF OF TOP OF TANK BY

SUPERINTENDANT. SPILLED INTO TANK ROOM. NO DRAINS. BEING CLEANED UP."

All Materials:

Site ID: 244791 Operable Unit ID: 1056647 Operable Unit: 01 Material ID: 328566 Material Code: 0003A Material Name: #6 fuel oil Case No.: Not reported Material FA: Petroleum Quantity: 100.00 Units: G Recovered: 100.00 Oxygenate: Not reported **EDR ID Number**

Direction Distance

Distance EDR ID Number Elevation Site EDR ID Number Database(s) EPA ID Number

32 LOT 5,TAXBLOCK 15537 NY E DESIGNATION S121343948 SE 20-10 MOTT AVENUE N/A

SE 20-10 MOTT AVENUE < 1/8 QUEENS, NY 11691

0.099 mi. 525 ft.

Relative: E DESIGNATION:

 Higher
 Tax Lot(s):
 5

 Actual:
 Tax Block:
 15537

 26 ft.
 Borough Code:
 QN

 E-No:
 E-415

 Effective Date:
 97/203

E-No: E-415
Effective Date: 9/7/2017
Satisfaction Date: Not reported
Ceqr Number: 16DME010Q

Ulurp Number: 170243AZMQ, 170244AZRQ

Zoning Map No: 25b, 31a

Description: Air Quality - HVAC natural gas with low Nox only

Lot Remediation Date: Not reported

Description: Exhaust stack location limitations

Lot Remediation Date: Not reported

Description: Hazardous Materials* Phase I and Phase II Testing Protocol

Lot Remediation Date: Not reported

Description: Window Wall Attenuation & Alternate Ventilation

Lot Remediation Date: Not reported

H33 LOT 54,TAXBLOCK 15537 NY E DESIGNATION \$121343962 NE 17-19 REDFERN AVENUE N/A

NE 17-19 REDFERN AVENUE < 1/8 QUEENS, NY 11691

0.100 mi.

527 ft. Site 3 of 5 in cluster H

Relative: E DESIGNATION:

 Lower
 Tax Lot(s):
 54

 Actual:
 Tax Block:
 15537

 19 ft.
 Borough Code:
 QN

 E-No:
 E-415

 Effective Date:
 9/7/2013

Effective Date: 9/7/2017
Satisfaction Date: Not reported
Ceqr Number: 16DME010Q

Ulurp Number: 170243AZMQ, 170244AZRQ

Zoning Map No: 25b, 31a

Description: Air Quality - HVAC fuel limited to natural gas

Lot Remediation Date: Not reported

Description: Exhaust stack location limitations

Lot Remediation Date: Not reported

Description: Hazardous Materials* Phase I and Phase II Testing Protocol

Lot Remediation Date: Not reported

Description: Window Wall Attenuation & Alternate Ventilation

Lot Remediation Date: Not reported

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

34 **BELL BOY DRIVE IN CLEANERS INC EDR Hist Cleaner** 1019937090

1361 BCH CHANNEL DR N/A

North < 1/8 FAR ROCKAWAY, NY 11691

0.108 mi. 571 ft.

Relative: **EDR Hist Cleaner**

Lower

Year: Name: Type: Actual:

BELL BOY DRIVE IN CLEANERS INC 1971 Drycleaning Plants, Except Rugs 10 ft. BELL BOY DRIVE IN CLEANERS INC Drycleaning Plants, Except Rugs 1972

H35 LOT 56, TAXBLOCK 15537 **NY E DESIGNATION** S121343968

ΝE **17-15 REDFERN AVENUE**

< 1/8 **QUEENS, NY 11691**

0.109 mi.

576 ft. Site 4 of 5 in cluster H

Relative: **E DESIGNATION:** Lower Tax Lot(s):

56 Tax Block: 15537 Actual: Borough Code: QN 17 ft. E-No: E-415

Effective Date: 9/7/2017 Not reported Satisfaction Date: Ceqr Number: 16DME010Q

Ulurp Number: 170243AZMQ, 170244AZRQ

Zoning Map No: 25b, 31a

Description: Exhaust stack location limitations

Lot Remediation Date: Not reported

Description: Hazardous Materials* Phase I and Phase II Testing Protocol

Lot Remediation Date: Not reported

Window Wall Attenuation & Alternate Ventilation Description:

Lot Remediation Date: Not reported

Description: Air Quality - HVAC fuel limited to natural gas

Lot Remediation Date: Not reported

H36 LOT 57, TAXBLOCK 15537 **NY E DESIGNATION** S121343970 17-11 REDFERN AVENUE NE N/A

< 1/8 **QUEENS, NY 11691**

0.113 mi.

598 ft.

Site 5 of 5 in cluster H

Relative: E DESIGNATION: Lower Tax Lot(s): 57 Tax Block: 15537 Actual: Borough Code: QN 16 ft.

E-415 E-No: 9/7/2017 Effective Date: Satisfaction Date: Not reported Cear Number: 16DME010Q

Ulurp Number: 170243AZMQ, 170244AZRQ

Zoning Map No: 25b, 31a

TC5471477.6s Page 74

N/A

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

LOT 57, TAXBLOCK 15537 (Continued)

S121343970

Description: Hazardous Materials* Phase I and Phase II Testing Protocol

Lot Remediation Date: Not reported

Description: Window Wall Attenuation & Alternate Ventilation

Lot Remediation Date: Not reported

Air Quality - HVAC fuel limited to natural gas Description:

Lot Remediation Date: Not reported

Description: Exhaust stack location limitations

Lot Remediation Date: Not reported

ACTION CENTER FOR DEUCATION & COMMUNITY DEV. 37

ESE **16-12 CENTRAL AVENUE** NY AST A100300898

N/A

< 1/8 **QUEENS, NY 11691**

0.117 mi. 617 ft.

Relative: AST: Higher Region:

STATE DEC Region: Actual:

Site Status: Unregulated/Closed 25 ft.

Facility Id: 2-610219 Program Type: **PBS**

UTM X: 606153.97412 UTM Y: 4496210.77404

Expiration Date: N/A Site Type: Other

Affiliation Records:

Site Id: 364396 Affiliation Type: **Facility Owner** Company Name: JUDD LLC Contact Type: V. PRES

Contact Name: MITCHELL KURK

Address1: 497 BEACH 20TH STREET

Address2: Not reported **QUEENS** City: State: NYZip Code: 11691 Country Code: 001

Phone: (718) 327-2450 EMail: Not reported Not reported Fax Number: Modified By: KXTANG Date Last Modified: 2006-05-24

Site Id: 364396 Affiliation Type: Mail Contact JUDD LLC Company Name: Contact Type: Not reported

MR. LARRY SCHLAU Contact Name: Address1: 497 BEACH 20TH STREET

Address2: Not reported Citv: **QUEENS** State: NY Zip Code: 11691 Country Code: 001

Direction Distance

Elevation Site Database(s) EPA ID Number

ACTION CENTER FOR DEUCATION & COMMUNITY DEV. (Continued)

A100300898

EDR ID Number

Phone: (718) 327-2450
EMail: Not reported
Fax Number: Not reported
Modified By: KXTANG
Date Last Modified: 2006-05-24

Site Id: 364396

Affiliation Type: Facility Operator

Company Name: ACTION CENTER FOR DEUCATION & COMMUNITY DEV.

Contact Type: Not reported
Contact Name: OREA DOL
Address1: Not reported
Address2: Not reported
City: Not reported
State: NN

Zip Code: Not reported

Country Code: 001

Phone: (718) 337-5040
EMail: Not reported
Fax Number: Not reported
Modified By: KXTANG
Date Last Modified: 2006-05-24

Site Id: 364396

Affiliation Type: Emergency Contact

Company Name: JUDD LLC
Contact Type: Not reported
Contact Name: LARRY SCHLAU
Address1: Not reported
Address2: Not reported
City: Not reported

State: NN

Zip Code: Not reported

Country Code: 001

Phone: (516) 318-0990
EMail: Not reported
Fax Number: Not reported
Modified By: KXTANG
Date Last Modified: 2006-05-24

Tank Info:

 Tank Number:
 01

 Tank Id:
 211960

 Material Code:
 0001

Common Name of Substance: #2 Fuel Oil (On-Site Consumption)

Equipment Records:

L00 - Piping Leak Detection - None A00 - Tank Internal Protection - None D01 - Pipe Type - Steel/Carbon Steel/Iron

K00 - Spill Prevention - None

G00 - Tank Secondary Containment - None J02 - Dispenser - Suction Dispenser C01 - Pipe Location - Aboveground

E00 - Piping Secondary Containment - None

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

ACTION CENTER FOR DEUCATION & COMMUNITY DEV. (Continued)

A100300898

H00 - Tank Leak Detection - None 102 - Overfill - High Level Alarm B00 - Tank External Protection - None F00 - Pipe External Protection - None

Tank Location:

Tank Type: Steel/Carbon Steel/Iron Tank Status: Closed - Removed Pipe Model: Not reported Install Date: 05/01/2006 Capacity Gallons: 2000 Tightness Test Method: NN

Date Test: Not reported Not reported Next Test Date: Date Tank Closed: 05/01/2006 Register: True Modified By: **KXTANG** Last Modified: 04/14/2017

Material Name: #2 fuel oil (on-site consumption)

Tank Number: 02 Tank Id: 211959 Material Code: 0001

Common Name of Substance: #2 Fuel Oil (On-Site Consumption)

Equipment Records:

L00 - Piping Leak Detection - None B00 - Tank External Protection - None F00 - Pipe External Protection - None G00 - Tank Secondary Containment - None J02 - Dispenser - Suction Dispenser A00 - Tank Internal Protection - None D01 - Pipe Type - Steel/Carbon Steel/Iron

K00 - Spill Prevention - None

E00 - Piping Secondary Containment - None

H00 - Tank Leak Detection - None 102 - Overfill - High Level Alarm C01 - Pipe Location - Aboveground

Tank Location:

Tank Type: Steel/Carbon Steel/Iron Tank Status: Closed - Removed Pipe Model: Not reported Install Date: 04/01/2000

Capacity Gallons: 275 Tightness Test Method: NN

Date Test: Not reported Next Test Date: Not reported Date Tank Closed: 04/01/2000 Register: True Modified By: **KXTANG** Last Modified: 04/14/2017

Material Name: #2 fuel oil (on-site consumption)

Tank Number: 03 Tank Id: 211958 Material Code: 0001

Direction Distance

Elevation Site Database(s) EPA ID Number

ACTION CENTER FOR DEUCATION & COMMUNITY DEV. (Continued)

A100300898

EDR ID Number

Common Name of Substance: #2 Fuel Oil (On-Site Consumption)

Equipment Records:

A00 - Tank Internal Protection - None D01 - Pipe Type - Steel/Carbon Steel/Iron

K00 - Spill Prevention - None

B00 - Tank External Protection - None F00 - Pipe External Protection - None L00 - Piping Leak Detection - None G00 - Tank Secondary Containment - None J02 - Dispenser - Suction Dispenser C01 - Pipe Location - Aboveground E00 - Piping Secondary Containment - None

H00 - Tank Leak Detection - None I02 - Overfill - High Level Alarm

Tank Location:

Tank Type: Steel/Carbon Steel/Iron
Tank Status: Closed - Removed
Pipe Model: Not reported
Install Date: 04/01/2000
Capacity Gallons: 275

Capacity Gallons: 275
Tightness Test Method: NN
Date Test: Not reported

Next Test Date: Not reported
Date Tank Closed: 04/01/2000
Register: True
Modified By: KXTANG
Last Modified: 04/14/2017

Material Name: #2 fuel oil (on-site consumption)

J38 LOT 58,TAXBLOCK 15537 NY E DESIGNATION \$121343973
NE 17-09 REDFERN AVENUE N/A

< 1/8 0.118 mi.

16 ft.

622 ft. Site 1 of 2 in cluster J

QUEENS, NY 11691

Relative: E DESIGNATION:

Lower Tax Lot(s):
Actual: Tax Block:

Borough Code: QN
E-No: E-415
Effective Date: 9/7/2017
Satisfaction Date: Not reported
Ceqr Number: 16DME010Q

Ulurp Number: 170243AZMQ, 170244AZRQ

58

15537

Zoning Map No: 25b, 31a

Description: Air Quality - HVAC fuel limited to natural gas

Lot Remediation Date: Not reported

Description: Exhaust stack location limitations

Lot Remediation Date: Not reported

Description: Hazardous Materials* Phase I and Phase II Testing Protocol

Lot Remediation Date: Not reported

Description: Window Wall Attenuation & Alternate Ventilation

Direction Distance

Distance Elevation Site EDR ID Number

Database(s) EPA ID Number

LOT 58, TAXBLOCK 15537 (Continued)

S121343973

Lot Remediation Date: Not reported

39 BRAVO FASHION (RETAIL STORE) SSE 1057 BEACH 20TH STREET NY AST A100293199 N/A

SSE 1057 BEACH 20TH STREET 1/8-1/4 FAR ROCKAWAY, NY 11691

0.129 mi. 682 ft.

Relative: AST: Higher Re

 Higher
 Region:
 STATE

 Actual:
 DEC Region:
 2

 26 ft.
 Site Status:
 Active

 Facility Id:
 2-607761

 Program Type:
 PBS

UTM X: 605490.44161 UTM Y: 4495477.53852 Expiration Date: 05/14/2022

Site Type: Other Wholesale/Retail Sales

Affiliation Records:

Site Id: 29613
Affiliation Type: Facility Owner
Company Name: D-MART INC

Contact Type: PRESIDENT, D-MART INC.

Contact Name: EDWARD DWECK
Address1: PO BOX 887
Address2: Not reported
City: PALM BEACH

State: FL

Zip Code: 33480-0887 Country Code: 001

Phone: (561) 685-5177
EMail: Not reported
Fax Number: Not reported
Modified By: MRBARROW
Date Last Modified: 2018-01-18

Site Id: 29613
Affiliation Type: Mail Contact
Company Name: D-MART INC
Contact Type: Not reported

Contact Name: EDWARD C. DWECK

Address1: PO BOX 887
Address2: Not reported
City: PALM BEACH

State: FL

 Zip Code:
 33480-0887

 Country Code:
 001

Phone: (561) 685-5177

EMail: EDWARDDWECK@BELLSOUTH.NET

Fax Number: Not reported Modified By: MRBARROW Date Last Modified: 2018-01-18

Site Id: 29613

Affiliation Type: Facility Operator

Company Name: BRAVO FASHION (RETAIL STORE)

Contact Type: Not reported

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

BRAVO FASHION (RETAIL STORE) (Continued)

A100293199

EDWARD DWECK Contact Name: Address1: Not reported Address2: Not reported City: Not reported State: NN

Zip Code: Not reported

Country Code: 001

Phone: (561) 685-5177 EMail: Not reported Fax Number: Not reported Modified By: **MRBARROW** Date Last Modified: 2018-01-18

Site Id: 29613

Affiliation Type: **Emergency Contact** D-MART INC C/O RAINES Company Name:

Contact Type: Not reported Contact Name: **EDWARD DWECK** Address1: Not reported Address2: Not reported City: Not reported NN

State:

Zip Code: Not reported

Country Code: (561) 734-7240 Phone: Not reported EMail: Fax Number: Not reported Modified By: **TRANSLAT**

Tank Info:

Tank Number: 0001 63472 Tank Id: Material Code: 0001

Common Name of Substance: #2 Fuel Oil (On-Site Consumption)

2004-03-04

Equipment Records:

Date Last Modified:

A00 - Tank Internal Protection - None H00 - Tank Leak Detection - None

L09 - Piping Leak Detection - Exempt Suction Piping

G00 - Tank Secondary Containment - None J02 - Dispenser - Suction Dispenser C01 - Pipe Location - Aboveground

B00 - Tank External Protection - None F00 - Pipe External Protection - None

105 - Overfill - Vent Whistle D00 - Pipe Type - No Piping

Tank Location:

Steel/Carbon Steel/Iron Tank Type:

Tank Status: In Service Pipe Model: Not reported Install Date: 05/01/1966 Capacity Gallons: 1500 Tightness Test Method:

Date Test: Not reported

Direction Distance

Distance Elevation Site EDR ID Number

EDR ID Number

EPA ID Number

BRAVO FASHION (RETAIL STORE) (Continued)

A100293199

Next Test Date: Not reported
Date Tank Closed: Not reported
Register: True
Modified By: MRBARROW

Material Name: #2 fuel oil (on-site consumption)

01/18/2018

40 ENGINE 328 AND ENGINE 264 NY AST U003394377 ESE 16-15 CENTRAL AVENUE N/A

1/8-1/4 0.135 mi. 715 ft.

 Relative:
 AST:

 Higher
 Region:
 STATE

 Actual:
 DEC Region:
 2

FAR ROCKAWAY, NY 11691

Last Modified:

27 ft. Site Status: Unregulated/Closed

Facility Id: 2-358037
Program Type: PBS
UTM X: 605587.27171

UTM Y: 4495661.10810
Expiration Date: N/A
Site Type: Other

Affiliation Records:

Site Id: 17947 Affiliation Type: **Facility Owner** Company Name: FIRE DEPARTMENT Contact Type: Not reported Contact Name: Not reported Address1: 9 METROTECH Address2: Not reported City: **BROOKLYN**

State: NY
Zip Code: 11201-3857
Country Code: 001

Phone: (718) 999-2094
EMail: Not reported
Fax Number: Not reported
Modified By: DAFRANCI
Date Last Modified: 2016-09-15

Site Id: 17947
Affiliation Type: Mail Contact

Company Name: BUILDINGS MAINTENANCE DIVISION

Contact Type: Not reported

Contact Name: JOSEPH M. MASTROPIETRO, ASST. COMMISSIONER

Address1: FIRE DEPARTMENT
Address2: 48-34 35TH STREET
City: LONG ISLAND CITY

State:NYZip Code:11101Country Code:001

Phone: (718) 784-6510

EMail: MASTROJ@FDNY.NYC.GOV

Fax Number: Not reported Modified By: NRLOMBAR Date Last Modified: 2009-12-29

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

ENGINE 328 AND ENGINE 264 (Continued)

U003394377

Site Id: 17947

Affiliation Type: **Facility Operator**

Company Name: **ENGINE 328 AND ENGINE 264**

Contact Type: Not reported

COMPANY OFFICER Contact Name:

Address1: Not reported Not reported Address2: City: Not reported State: NN

Zip Code: Not reported

Country Code: 001

(718) 476-6264 Phone: Not reported EMail: Fax Number: Not reported **NRLOMBAR** Modified By: Date Last Modified: 2007-11-20

Site Id: 17947

Affiliation Type: **Emergency Contact** FIRE DEPARTMENT Company Name:

Contact Type: Not reported

EOC/NOTIFICATION DESK Contact Name:

Address1: Not reported Address2: Not reported City: Not reported State: NN Zip Code: Not reported

Country Code:

(718) 999-2094 Phone: EMail: Not reported Fax Number: Not reported Modified By: **MFLEONAR** Date Last Modified: 2018-03-12

Tank Info:

Tank Number: 001 Tank Id: 35086 8000 Material Code: Common Name of Substance: Diesel

Equipment Records:

B00 - Tank External Protection - None C00 - Pipe Location - No Piping D02 - Pipe Type - Galvanized Steel F00 - Pipe External Protection - None J02 - Dispenser - Suction Dispenser G00 - Tank Secondary Containment - None A00 - Tank Internal Protection - None 104 - Overfill - Product Level Gauge (A/G)

H00 - Tank Leak Detection - None

Tank Location:

Tank Type: Steel/Carbon Steel/Iron

Tank Status: In Service Pipe Model: Not reported Install Date: 01/01/1976

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

ENGINE 328 AND ENGINE 264 (Continued)

U003394377

Capacity Gallons: 550 Tightness Test Method: NN

Date Test: Not reported Next Test Date: Not reported Date Tank Closed: Not reported Register: True **TRANSLAT** Modified By: Last Modified: 04/14/2017 Material Name: diesel

Tank Number: 002 Tank Id: 35087 Material Code: 0001

Common Name of Substance: #2 Fuel Oil (On-Site Consumption)

Equipment Records:

B00 - Tank External Protection - None C00 - Pipe Location - No Piping D02 - Pipe Type - Galvanized Steel F00 - Pipe External Protection - None A00 - Tank Internal Protection - None 104 - Overfill - Product Level Gauge (A/G)

G03 - Tank Secondary Containment - Vault (w/o access)

H00 - Tank Leak Detection - None

Tank Location:

Tank Type: Steel/Carbon Steel/Iron Tank Status: Closed - Removed Pipe Model: Not reported 01/01/1980 Install Date: Capacity Gallons: 2550 Tightness Test Method: NN

Date Test: Not reported Not reported Next Test Date: 09/20/2007 Date Tank Closed: Register: True Modified By: **NRLOMBAR** Last Modified: 04/14/2017

Material Name: #2 fuel oil (on-site consumption)

JACK COLETTA INC./COLETTA RECYCLING 1629 REDFERN AVE

ΝE 1/8-1/4 FAR ROCKAWAY, NY 11691

0.138 mi.

J41

731 ft. Site 2 of 2 in cluster J

SWF/LF: Relative:

Lower **INACTIVE** Flag:

Region Code: Actual: Phone Number: 7183274740 14 ft.

Jack Coletta Inc./Coletta Recycling Owner Name:

Owner Type: Not reported Owner Address: 1629 Redfern Ave Owner Addr2: Not reported

Owner City,St,Zip: Far Rockaway, NY 11691

Owner Email: Not reported Owner Phone: 7183274740 S111378403

N/A

NY SWF/LF

NY SWRCY

Direction Distance

Elevation Site Database(s) EPA ID Number

JACK COLETTA INC./COLETTA RECYCLING (Continued)

S111378403

EDR ID Number

Contact Name: Not reported
Contact Address: Not reported
Contact Addr2: Not reported
Contact City, St, Zip: Not reported
Contact Email: Not reported
Contact Phone: Not reported

Activity Desc: Waste tire storage - permit

Activity Number: [41K62] Active: No

East Coordinate: Not reported North Coordinate: Not reported Accuracy Code: Not reported Regulatory Status: Not reported Waste Type: Not reported Authorization #: Not reported Authorization Date: Not reported Expiration Date: Not reported Not reported Operator Name: Operator Type: Not reported Laste Date: Not reported

SWRCY:

Region: 2

Facility Address 2: Not reported 7188681011 Owner Type: Private

Owner Name: Redfern Recycling LLC
Owner Address: 1629 Redfern Avenue

Owner Address 2: Not reported

Owner City, St, Zip: Far Rockaway, NY 11691

Owner Email: Not reported 7186195053 Contact Name: Joe Ricardo Contact Address: Not reported Contact Address 2: Not reported Contact City,St,Zip: Not reported

Contact Email: joe@nassaureadymix.com

Contact Phone: 5165266033
Activity Desc: RHRF - registration

Activity Number: [41MB2] Active: No East Coordinate: 604700 North Coordinate: 4495200 Accuracy Code: Not reported Regulatory Status: Registration Permit #: 41MB2 Auth. Date: Not reported **Expiration Date:** Not reported

Waste Types: Commingled Containers; Metals (Ferrous); Metals (Non-Ferrous)

Operator Name: Redfern Recycling LLC

Operator Type: Private
Last Date: Not reported

Direction Distance

Elevation Site Database(s) **EPA ID Number**

K42 **ROCKAWAY CO** NY UST U004078073 SE **19-31 MOTT AVENUE** N/A

1/8-1/4 FAR ROCKAWAY, NY 11691

0.147 mi.

777 ft. Site 1 of 2 in cluster K

UST: Relative:

Higher 2-309060 / Active Id/Status:

Program Type: PBS Actual: STATE Region: 27 ft. DEC Region: 2

> **Expiration Date:** 10/02/2022 UTM X: 605558.63141 UTM Y: 4495532.46445

Apartment Building/Office Building Site Type:

Affiliation Records:

Site Id: 14072 Affiliation Type: **Facility Owner** Company Name: **ROCKAWAY CO**

Contact Type: **OPERATIONS DIRECTOR**

Contact Name: **CHARLES REID** Address1: 450 SEVENTH AVE Address2: Not reported **NEW YORK** City: State: NY Zip Code: 10123

Country Code: 001

Phone: (212) 563-6252

EMail: CREIDJR@KAUFMANORGANIZATION.COM

Fax Number: Not reported Modified By: **ACDANIEL** 2017-11-01 Date Last Modified:

Site Id: 14072 Affiliation Type: Mail Contact **ROCKAWAY CO** Company Name:

Contact Type: **OPERATIONS DIRECTOR**

Contact Name: **CHARLES REID** Address1: 450 SEVENTH AVE Address2: Not reported **NEW YORK** City: State: NY Zip Code: 10123

Country Code: 001

Phone: (212) 563-6252

EMail: CREIDJR@KAUFMANORGANIZATION.COM

Fax Number: Not reported **ACDANIEL** Modified By: Date Last Modified: 2017-11-01

Site Id: 14072

Facility Operator Affiliation Type: Company Name: **ROCKAWAY CO** Contact Type: Not reported Contact Name: ISRAEL FERRAR Address1: Not reported Address2: Not reported City: Not reported

State: NN **EDR ID Number**

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

ROCKAWAY CO (Continued)

U004078073

Zip Code: Not reported

Country Code: 999

Phone: (718) 327-1132 EMail: Not reported Fax Number: Not reported Modified By: **ACDANIEL** Date Last Modified: 2017-11-01

Site Id: 14072

Affiliation Type: **Emergency Contact ROCKAWAY CO** Company Name: Contact Type: Not reported Contact Name: ISRAEL FERRAR Address1: Not reported Address2: Not reported City: Not reported State: NN

Zip Code: Not reported

Country Code: 999

(718) 327-1132 Phone: EMail: Not reported Fax Number: Not reported Modified By: **ACDANIEL** Date Last Modified: 2017-11-01

Tank Info:

Tank Number: 001 Tank ID: 17772

Closed - In Place Tank Status: Material Name: Closed - In Place

Capacity Gallons: 2000

Install Date: Not reported Date Tank Closed: 05/01/1992 Registered: True

Tank Location: Underground Tank Type: Steel/carbon steel

Material Code: 0001

#2 Fuel Oil (On-Site Consumption) Common Name of Substance:

NN Tightness Test Method:

Date Test: Not reported Next Test Date: Not reported Pipe Model: Not reported Modified By: **TRANSLAT** 04/14/2017 Last Modified:

Equipment Records:

104 - Overfill - Product Level Gauge (A/G) A00 - Tank Internal Protection - None D01 - Pipe Type - Steel/Carbon Steel/Iron B00 - Tank External Protection - None C00 - Pipe Location - No Piping F00 - Pipe External Protection - None G00 - Tank Secondary Containment - None J02 - Dispenser - Suction Dispenser H00 - Tank Leak Detection - None

Direction Distance

Distance Elevation Site EDR ID Number

EDR ID Number

EPA ID Number

K43 ROCKAWAY CO NY AST U001836214
SE 19-31 MOTT AVENUE N/A

1/8-1/4 FAR ROCKAWAY, NY 11691

0.147 mi.

777 ft. Site 2 of 2 in cluster K

 Relative:
 AST:

 Higher
 Region:
 STATE

 Actual:
 DEC Region:
 2

 27 ft.
 Site Status:
 Active

 Facility Id:
 2-309060

 Program Type:
 PBS

UTM X: 605558.63141 UTM Y: 4495532.46445 Expiration Date: 10/02/2022

Site Type: Apartment Building/Office Building

Affiliation Records:

Site Id: 14072
Affiliation Type: Facility Owner
Company Name: ROCKAWAY CO

Contact Type: OPERATIONS DIRECTOR

Contact Name: CHARLES REID
Address1: 450 SEVENTH AVE
Address2: Not reported
City: NEW YORK
State: NY
Zip Code: 10133

State: NY
Zip Code: 10123
Country Code: 001

Phone: (212) 563-6252

EMail: CREIDJR@KAUFMANORGANIZATION.COM

Fax Number: Not reported Modified By: ACDANIEL Date Last Modified: 2017-11-01

Site Id: 14072
Affiliation Type: Mail Contact
Company Name: ROCKAWAY CO

Contact Type: OPERATIONS DIRECTOR

Contact Name: CHARLES REID
Address1: 450 SEVENTH AVE
Address2: Not reported
City: NEW YORK

State: NY
Zip Code: 10123
Country Code: 001

Phone: (212) 563-6252

EMail: CREIDJR@KAUFMANORGANIZATION.COM

Fax Number: Not reported Modified By: ACDANIEL Date Last Modified: 2017-11-01

Site Id: 14072

Affiliation Type: Facility Operator
Company Name: ROCKAWAY CO
Contact Type: Not reported
Contact Name: ISRAEL FERRAR
Address1: Not reported
Address2: Not reported
City: Not reported

Direction Distance

Elevation Site Database(s) EPA ID Number

ROCKAWAY CO (Continued)

U001836214

EDR ID Number

State: NN

Zip Code: Not reported

Country Code: 999

Phone: (718) 327-1132
EMail: Not reported
Fax Number: Not reported
Modified By: ACDANIEL
Date Last Modified: 2017-11-01

Site Id: 14072

Affiliation Type: **Emergency Contact** Company Name: **ROCKAWAY CO** Contact Type: Not reported Contact Name: **ISRAEL FERRAR** Address1: Not reported Address2: Not reported Not reported City: State: NN

Zip Code: Not reported

Country Code: 999

Phone: (718) 327-1132
EMail: Not reported
Fax Number: Not reported
Modified By: ACDANIEL
Date Last Modified: 2017-11-01

Tank Info:

 Tank Number:
 002

 Tank Id:
 54411

 Material Code:
 0001

Common Name of Substance: #2 Fuel Oil (On-Site Consumption)

Equipment Records:

J02 - Dispenser - Suction Dispenser G00 - Tank Secondary Containment - None

L09 - Piping Leak Detection - Exempt Suction Piping E00 - Piping Secondary Containment - None

H00 - Tank Leak Detection - None K00 - Spill Prevention - None

D01 - Pipe Type - Steel/Carbon Steel/Iron

F01 - Pipe External Protection - Painted/Asphalt Coating

A00 - Tank Internal Protection - None

B01 - Tank External Protection - Painted/Asphalt Coating

104 - Overfill - Product Level Gauge (A/G)C01 - Pipe Location - Aboveground

Tank Location:

Tank Type: Steel/Carbon Steel/Iron

Tank Status: In Service
Pipe Model: Not reported
Install Date: 05/01/1992
Capacity Gallons: 2000
Tightness Test Method: NN

Date Test: Not reported Next Test Date: Not reported Date Tank Closed: Not reported

Direction Distance

Elevation Site Database(s) **EPA ID Number**

ROCKAWAY CO (Continued) U001836214

Register: True **MSBAPTIS** Modified By: Last Modified: 04/14/2017

Material Name: #2 fuel oil (on-site consumption)

L44 FRESH EXPRESSIONS COSMETICS INC RCRA NonGen / NLR 1001090434

FINDS NYR000022715 East **1522 CENTRAL AVE**

1/8-1/4 FAR ROCKAWAY, NY 11694 **ECHO** 0.155 mi. **NY MANIFEST**

820 ft. Site 1 of 2 in cluster L Relative: RCRA NonGen / NLR:

Lower Date form received by agency: 01/01/2007

FRESH EXPRESSIONS COSMETICS INC Facility name: Actual:

Facility address: 21 ft. 1522 CENTRAL AVE

FAR ROCKAWAY, NY 11694

EPA ID: NYR000022715 Mailing address:

CENTRAL AVE

FAR ROCKAWAY, NY 11694 Contact:

Not reported Contact address: **CENTRAL AVE**

FAR ROCKAWAY, NY 11694

Contact country: US

Not reported Contact telephone: Contact email: Not reported

EPA Region:

Classification: Non-Generator

Description: Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:

Owner/operator name: **NEW HORIZON COMMERCIAL PROPERTIES**

Owner/operator address: **PO BOX 435**

LAWRENCE, NY 11559

US Owner/operator country:

Owner/operator telephone: 516-791-6043 Owner/operator email: Not reported Owner/operator fax: Not reported Owner/operator extension: Not reported Private Legal status: Owner/Operator Type: Owner Owner/Op start date: Not reported Owner/Op end date: Not reported

NEW HORIZON COMMERCIAL PROPERTIES Owner/operator name:

Owner/operator address: PO BOX 435

LAWRENCE, NY 11559

Owner/operator country: US

Owner/operator telephone: 516-791-6043 Owner/operator email: Not reported Owner/operator fax: Not reported Owner/operator extension: Not reported Legal status: Private Owner/Operator Type: Operator Owner/Op start date: Not reported Owner/Op end date: Not reported

EDR ID Number

Direction Distance

Elevation Site Database(s) EPA ID Number

FRESH EXPRESSIONS COSMETICS INC (Continued)

1001090434

EDR ID Number

Handler Activities Summary:

U.S. importer of hazardous waste: No Mixed waste (haz. and radioactive): No Recycler of hazardous waste: No Transporter of hazardous waste: No Treater, storer or disposer of HW: No Underground injection activity: No On-site burner exemption: No Furnace exemption: Nο Used oil fuel burner: No Used oil processor: No User oil refiner: Nο Used oil fuel marketer to burner: No Used oil Specification marketer: No Used oil transfer facility: No Used oil transporter: No

Historical Generators:

Date form received by agency: 01/01/2006

Site name: FRESH EXPRESSIONS COSMETICS INC

Classification: Not a generator, verified

Date form received by agency: 07/08/1999

Site name: FRESH EXPRESSIONS COSMETICS INC

Classification: Not a generator, verified

Date form received by agency: 04/24/1996

Site name: FRESH EXPRESSIONS COSMETICS INC

Classification: Small Quantity Generator

. Waste code: D001

. Waste name: IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF

LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT

WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.

. Waste code: D002

. Waste name: A WASTE WHICH HAS A PH OF LESS THAN 2 OR GREATER THAN 12.5 IS

CONSIDERED TO BE A CORROSIVE HAZARDOUS WASTE. SODIUM HYDROXIDE, A CAUSTIC SOLUTION WITH A HIGH PH, IS OFTEN USED BY INDUSTRIES TO CLEAN OR DEGREASE PARTS. HYDROCHLORIC ACID, A SOLUTION WITH A LOW PH, IS USED BY MANY INDUSTRIES TO CLEAN METAL PARTS PRIOR TO PAINTING. WHEN THESE CAUSTIC OR ACID SOLUTIONS BECOME CONTAMINATED AND MUST BE DISPOSED, THE WASTE WOULD BE A CORROSIVE HAZARDOUS WASTE.

Waste code: F003

. Waste name: THE FOLLOWING SPENT NON-HALOGENATED SOLVENTS: XYLENE, ACETONE, ETHYL

ACETATE, ETHYL BENZENE, ETHYL ETHER, METHYL ISOBUTYL KETONE, N-BUTYL

ALCOHOL, CYCLOHEXANONE, AND METHANOL; ALL SPENT SOLVENT
MIXTURES/BLENDS CONTAINING, BEFORE USE, ONLY THE ABOVE SPENT
NON-HALOGENATED SOLVENTS; AND ALL SPENT SOLVENT MIXTURES/BLENDS
CONTAINING, BEFORE USE, ONE OR MORE OF THE ABOVE NON-HALOGENATED
SOLVENTS, AND, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR

Direction Distance

Elevation Site Database(s) EPA ID Number

FRESH EXPRESSIONS COSMETICS INC (Continued)

1001090434

EDR ID Number

MORE OF THOSE SOLVENTS LISTED IN F001, F002, F004, AND F005, AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT

MIXTURES.

Violation Status: No violations found

FINDS:

Registry ID: 110004524257

Environmental Interest/Information System

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and

corrective action activities required under RCRA.

<u>Click this hyperlink</u> while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:

Envid: 1001090434 Registry ID: 110004524257

DFR URL: http://echo.epa.gov/detailed-facility-report?fid=110004524257

NY MANIFEST:

Country: USA

EPA ID: NYR000022715
Facility Status: Not reported

Location Address 1: 1522 CENTRAL AVENUE

Code: BP

Location Address 2: Not reported Total Tanks: Not reported Location City: QUEENS Location State: NY Location Zip: 11691 Location Zip 4: Not reported

NY MANIFEST:

EPAID: NYR000022715

Mailing Name: FRESH EXPRESSIONS

Mailing Contact: MARK DANA

Mailing Address 1: 1522 CENTRAL AVENUE

Mailing Address 2: Not reported Mailing City: QUEENS Mailing State: NY Mailing Zip: 11691 Mailing Zip 4: Not reported Mailing Country: USA Mailing Phone: 7184715651

NY MANIFEST:

Document ID: NJA2521265

Manifest Status: K

seq: Not reported

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

FRESH EXPRESSIONS COSMETICS INC (Continued)

1001090434

Year: 1996 Trans1 State ID: 08690 Trans2 State ID: S00602 Generator Ship Date: 06/28/1996 Trans1 Recv Date: 06/28/1996 Trans2 Recv Date: 07/02/1996 TSD Site Recv Date: 07/02/1996 Part A Recv Date: 08/07/1996 Part B Recv Date: 07/23/1996 Generator EPA ID: NYR000022715 Trans1 EPA ID: ILD984908202 Trans2 EPA ID: NYD980769947 TSDF ID 1: NJD002182897 TSDF ID 2: Not reported Manifest Tracking Number: Not reported Import Indicator: Not reported Not reported **Export Indicator:** Discr Quantity Indicator: Not reported Discr Type Indicator: Not reported Discr Residue Indicator: Not reported Discr Partial Reject Indicator: Not reported Discr Full Reject Indicator: Not reported Manifest Ref Number: Not reported Alt Facility RCRA ID: Not reported Alt Facility Sign Date: Not reported MGMT Method Type Code: Not reported F003 - UNKNOWN Waste Code: Waste Code: Not reported Waste Code: Not reported Not reported Waste Code: Waste Code: Not reported Waste Code: Not reported Quantity: 00202 Units: P - Pounds

Container Type: DM - Metal drums, barrels

Handling Method: B Incineration, heat recovery, burning.

001

Specific Gravity: 100

Number of Containers:

Click this hyperlink while viewing on your computer to access -1 additional NY MANIFEST: record(s) in the EDR Site Report.

M45 **VERIZON NEW YORK INC-NY-37367**

ENE 13-11 BAYPORT PLACE 1/8-1/4 FAR ROCKAWAY, NY 11691

0.157 mi.

830 ft. Site 1 of 2 in cluster M

Relative: TANKS: Lower Facility Id: 2-343986 Region: STATE Actual: DEC Region: 2 17 ft. Site Status: Active Program Type: **PBS**

12/14/2022 **Expiration Date:** UTM X: 605643.89316 UTM Y: 4495761.83663 S102402083

N/A

NY TANKS

NY Spills

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

VERIZON NEW YORK INC-NY-37367 (Continued)

S102402083

SPILLS:

9608080 Facility ID: Facility Type: ER Spill Number: 9608080 DER Facility ID: 220405 Site ID: 270747

DEC Region:

Closed Date: 1996-10-02 Spill Cause: **Equipment Failure**

Spill Class: C4 4101 SWIS: 1996-09-27 Spill Date: Investigator: **ADZHITOM** Referred To: Not reported Reported to Dept: 1996-09-28 CID: 267

Water Affected: Not reported

Spill Source: Commercial/Industrial

Spill Notifier: Other Cleanup Ceased: Not reported Cleanup Meets Std: False Last Inspection: Not reported Recommended Penalty: False **UST Trust:** False Remediation Phase:

Date Entered In Computer: 1996-09-28 Spill Record Last Update: 1996-10-17 Spiller Name: MIKE COLONE

Spiller Company: **NYNEX**

13-11 BAYPORT PLACE Spiller Address:

Spiller Company: 001

Contact Name: JOHN OSWALD

"Prior to Sept, 2004 data translation this spill Lead_DEC Field was DEC Memo:

ZHITOMIRSKY/TIBBE "

"pump malfunctioned and shut down spilling 150 gallons into the Remarks:

containment area spill was cleaned up and john oswall will follow up

in days to check the seepage into the area "

All Materials:

270747 Site ID: 1036340 Operable Unit ID: Operable Unit: 01 Material ID: 343823 Material Code: 0001A Material Name: #2 fuel oil Case No.: Not reported Material FA: Petroleum Quantity: 150.00 Units: G Recovered: 150.00 Oxygenate: Not reported

Direction Distance

Distance Elevation Site EDR ID Number Database(s) EPA ID Number

M46 VERIZON NEW YORK - FAR ROCKAWAY RCRA NonGen / NLR 1005905773

ENE 13-11 BAYPORT PL FINDS NYR000108571

1/8-1/4 FAR ROCKAWAY, NY 11691 ECHO

0.157 mi.

830 ft. Site 2 of 2 in cluster M

Relative: RCRA NonGen / NLR:

Lower Date form received by agency: 01/01/2007

Actual: Facility name: VERIZON
17 ft. Facility address: 13-11 BAYPORT PL

FAR ROCKAWAY, NY 11691-3926

EPA ID: NYR000108571

Mailing address: E 37TH ST

NEW YORK, NY 10016

Contact: LEO BUSINELLI

Contact address: E 37TH ST

NEW YORK, NY 10016

Contact country: US

Contact telephone: 212-338-7675 Contact email: Not reported

EPA Region: 02

Classification: Non-Generator

Description: Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:

Owner/operator name: VERIZON

Owner/operator address: 13-11 BAYPORT PL

FAR ROCKAWAY, NY 11691

Owner/operator country: US

Owner/operator telephone: 212-555-1212
Owner/operator email: Not reported
Owner/operator fax: Not reported
Owner/operator extension: Not reported
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: 01/01/2001

Owner/Op start date: 01/01/2001 Owner/Op end date: Not reported

Owner/operator name: VERIZON

Owner/operator address: 13-11 BAYPORT PL

FAR ROCKAWAY, NY 11691

Owner/operator country: US

Owner/operator telephone: 212-555-1212 Owner/operator email: Not reported Owner/operator fax: Not reported Owner/operator extension: Not reported Private Legal status: Owner/Operator Type: Operator Owner/Op start date: 01/01/2001 Owner/Op end date: Not reported

Handler Activities Summary:

U.S. importer of hazardous waste: No Mixed waste (haz. and radioactive): No Recycler of hazardous waste: No Transporter of hazardous waste: No Treater, storer or disposer of HW: No Underground injection activity: No

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

VERIZON NEW YORK - FAR ROCKAWAY (Continued)

1005905773

On-site burner exemption: No Furnace exemption: No Used oil fuel burner: No Used oil processor: No User oil refiner: No Used oil fuel marketer to burner: No Used oil Specification marketer: No Used oil transfer facility: No Used oil transporter: No

Historical Generators:

Date form received by agency: 01/01/2006 Site name: VERIZON

Classification: Not a generator, verified

Date form received by agency: 08/13/2002 Site name: VERIZON

Classification: Small Quantity Generator

Violation Status: No violations found

FINDS:

Registry ID: 110013290722

Environmental Interest/Information System

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

FIS (New York - Facility Information System) is New York's Department of Environmental Conservation (DEC) information system for tracking environmental facility information found across the State.

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:

Envid: 1005905773 Registry ID: 110013290722

DFR URL: http://echo.epa.gov/detailed-facility-report?fid=110013290722

1136-1138 MCBRIDE ST. CORP. NY UST U003127737

1136-1138 MCBRIDE STREET West 1/8-1/4 FAR ROCKAWAY, NY 11691

0.161 mi.

N47

849 ft. Site 1 of 2 in cluster N

UST: Relative:

Lower Id/Status: 2-291846 / Unregulated/Closed

Program Type: **PBS** Actual: Region: STATE 10 ft. DEC Region: 2

TC5471477.6s Page 95

N/A

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

1136-1138 MCBRIDE ST. CORP. (Continued)

U003127737

Expiration Date: N/A

605100.70869 UTM X: UTM Y: 4495642.34497

Site Type: Apartment Building/Office Building

Affiliation Records:

Site Id: 13250 Affiliation Type: Facility Owner

Company Name: 1136-1138 MCBRIDE ST. CORP.

Contact Type: **PRESIDENT** Contact Name: **GABRIEL DROR**

Address1: 98 WASHINGTON AVENUE

Address2: Not reported LAWRENCE City: State: NYZip Code: 11559 Country Code: 001

Phone: (516) 369-6564 EMail: Not reported Fax Number: Not reported Modified By: **NRLOMBAR** Date Last Modified: 2011-03-25

Site Id: 13250 Mail Contact Affiliation Type:

Company Name: 1136-1138 MCBRIDE ST. CORP.

Contact Type: Not reported Contact Name: **GABRIEL DROR**

Address1: 98 WASHINGTON AVENSUE

Address2: Not reported LAWRENCE City: State: NY Zip Code: 11559 Country Code: 001

(516) 369-6564 Phone: EMail: Not reported Fax Number: Not reported Modified By: **NRLOMBAR** Date Last Modified: 2011-03-25

Site Id: 13250

Affiliation Type: **Facility Operator**

Company Name: 1136-1138 MCBRIDE ST. CORP.

Contact Type: Not reported GABRIEL DROR Contact Name: Address1: Not reported Address2: Not reported City: Not reported NN State:

Zip Code: Not reported Country Code: 001

Phone: (516) 295-7808 EMail: Not reported Fax Number: Not reported Modified By: **NRLOMBAR** Date Last Modified: 2011-03-25

13250 Site Id:

Direction Distance

Elevation Site Database(s) EPA ID Number

1136-1138 MCBRIDE ST. CORP. (Continued)

U003127737

EDR ID Number

Affiliation Type: Emergency Contact

Company Name: 1136-1138 MCBRIDE ST. CORP.

Contact Type: Not reported
Contact Name: GABRIEL DROR
Address1: Not reported
Address2: Not reported
City: Not reported
State: NN

Zip Code: Not reported

Country Code: 999

Phone: (516) 369-6564
EMail: Not reported
Fax Number: Not reported
Modified By: NRLOMBAR
Date Last Modified: 2011-03-25

Tank Info:

 Tank Number:
 001

 Tank ID:
 11928

Tank Status: Closed - In Place Material Name: Closed - In Place

Capacity Gallons: 2500
Install Date: 12/01/1955
Date Tank Closed: 02/28/2011
Registered: True
Tank Location: Underground
Tank Type: Steel/carbon steel

Material Code: 0001

Common Name of Substance: #2 Fuel Oil (On-Site Consumption)

Tightness Test Method: 21

Date Test: 12/30/2008
Next Test Date: Not reported
Pipe Model: Not reported
Modified By: NRLOMBAR
Last Modified: 04/14/2017

Equipment Records:

105 - Overfill - Vent Whistle

F00 - Pipe External Protection - None

C03 - Pipe Location - Aboveground/Underground Combination

G00 - Tank Secondary Containment - None E00 - Piping Secondary Containment - None

H00 - Tank Leak Detection - None A00 - Tank Internal Protection - None

B01 - Tank External Protection - Painted/Asphalt Coating

D01 - Pipe Type - Steel/Carbon Steel/Iron

K00 - Spill Prevention - None J03 - Dispenser - Gravity

L00 - Piping Leak Detection - None

Direction Distance

Distance Elevation Site EDR ID Number

EDR ID Number

EPA ID Number

O48 ROCKAWAY COMPANY NY AST U003390607
SE 19-20 MOTT AVENUE N/A

1/8-1/4 FAR ROCKAWAY, NY 11691

0.168 mi.

887 ft. Site 1 of 2 in cluster O

 Relative:
 AST:

 Higher
 Region:
 STATE

 Actual:
 DEC Region:
 2

 28 ft.
 Site Status:
 Active

 Facility Id:
 2-159263

 Program Type:
 PBS

UTM X: 605570.72971 UTM Y: 4495538.63147 Expiration Date: 08/26/2022

Site Type: Apartment Building/Office Building

Affiliation Records:

Site Id: 5376 Affiliation Type: Facility Owner

Company Name: ROCKAWAY COMPANY
Contact Type: DIRECTOR OF OPERATIONS

Contact Name: CHARLES REID
Address1: 450 SEVENTH AVE
Address2: Not reported
City: NEW YORK
State: NY
Zip Code: 10123
Country Code: 001

Phone: (212) 563-6252
EMail: Not reported
Fax Number: Not reported
Modified By: ACDANIEL
Date Last Modified: 2017-09-18

Site Id: 5376

Affiliation Type: Mail Contact

Company Name: ROCKAWAY COMPANY

Contact Type: Not reported
Contact Name: CHARLES REID

Address1: 450 SEVENTH AVENUE Address2: Not reported

 City:
 NEW YORK

 State:
 NY

 Zip Code:
 10123

 Country Code:
 001

Phone: (718) 327-1132

EMail: CREID@KAUFMANORGANIZATION.COM

Fax Number: Not reported Modified By: ACDANIEL Date Last Modified: 2017-09-18

Site Id: 5376

Affiliation Type: Facility Operator

Company Name: ROCKAWAY COMPANY

Contact Type: Not reported
Contact Name: KAUFMAN REALTY
Address1: Not reported

Address1: Not reported Not reported City: Not reported

Direction Distance

Elevation Site Database(s) EPA ID Number

ROCKAWAY COMPANY (Continued)

U003390607

EDR ID Number

State: NN

Zip Code: Not reported

Country Code: 001

Phone: (718) 327-1132
EMail: Not reported
Fax Number: Not reported
Modified By: TRANSLAT
Date Last Modified: 2004-03-04

Site Id: 5376

Affiliation Type: Emergency Contact
Company Name: ROCKAWAY COMPANY

Contact Type: Not reported

Contact Name: ROBERT ROTHENBERG

Address1: Not reported Address2: Not reported City: Not reported State: NN

Zip Code: Not reported

Country Code: 001

Phone: (718) 327-1132
EMail: Not reported
Fax Number: Not reported
Modified By: TRANSLAT
Date Last Modified: 2004-03-04

Tank Info:

 Tank Number:
 001

 Tank Id:
 19645

 Material Code:
 0001

Common Name of Substance: #2 Fuel Oil (On-Site Consumption)

Equipment Records:

E00 - Piping Secondary Containment - None

G03 - Tank Secondary Containment - Vault (w/o access)

H00 - Tank Leak Detection - None

L09 - Piping Leak Detection - Exempt Suction Piping

J02 - Dispenser - Suction Dispenser I04 - Overfill - Product Level Gauge (A/G) B00 - Tank External Protection - None C00 - Pipe Location - No Piping F00 - Pipe External Protection - None A00 - Tank Internal Protection - None D01 - Pipe Type - Steel/Carbon Steel/Iron

K00 - Spill Prevention - None

Tank Location:

Tank Type: Steel/Carbon Steel/Iron

Tank Status: In Service
Pipe Model: Not reported
Install Date: 08/07/1958
Capacity Gallons: 2000
Tightness Test Method: NN

Date Test:
Not reported
Next Test Date:
Not reported
Date Tank Closed:
Not reported
Not reported

Direction Distance

Distance Elevation Site EDR ID Number

Database(s) EPA ID Number

ROCKAWAY COMPANY (Continued)

U003390607

Register: True
Modified By: KAKYER
Last Modified: 04/14/2017

Material Name: #2 fuel oil (on-site consumption)

Unregistered

L49 CENTRAL ASSISTED LIVING, LLC NY AST A100433689
East 1509 CENTRAL AVENUE N/A

1/8-1/4 0.168 mi.

888 ft. Site 2 of 2 in cluster L

Relative: AST:

LowerRegion:STATEActual:DEC Region:2

FAR ROCKAWAY, NY 11691

21 ft. Site Status: Facility Id:

Facility Id: 2-612713
Program Type: PBS
UTM X: Not reported
UTM Y: Not reported

Expiration Date: N/A

Site Type: Hospital/Nursing Home/Health Care

Affiliation Records:

Site Id: 549973
Affiliation Type: Facility Owner

Company Name: PRIME HEALTH SERVICES, LLC

Contact Type: OWNER
Contact Name: ERIC MENDEL

Address1: 1509 CENTRAL AVENUE

Address2: Not reported City: FAR ROCKAWAY

State: NY
Zip Code: 11691
Country Code: 001

Phone: (718) 471-7700
EMail: Not reported
Fax Number: Not reported
Modified By: MRBARROW
Date Last Modified: 2017-05-25

Site Id: 549973

Affiliation Type: Facility Operator

Company Name: CENTRAL ASSISTED LIVING, LLC

Contact Type: Not reported

Contact Name: NA

Address1: Not reported Address2: Not reported City: Not reported State: NN Zip Code: Not reported Not reported

Country Code: 001

Phone: (718) 471-7700
EMail: Not reported
Fax Number: Not reported
Modified By: MRBARROW
Date Last Modified: 2017-05-25

Direction Distance Elevation

EDR ID Number tion Site Database(s) EPA ID Number

CENTRAL ASSISTED LIVING, LLC (Continued)

A100433689

Tank Info:

 Tank Number:
 001

 Tank Id:
 269452

Equipment Records:

A00 - Tank Internal Protection - None

B01 - Tank External Protection - Painted/Asphalt Coating G09 - Tank Secondary Containment - Modified Double-Walled

(Aboveground)

K00 - Spill Prevention - None

E00 - Piping Secondary Containment - None

H00 - Tank Leak Detection - None C01 - Pipe Location - Aboveground F05 - Pipe External Protection - Jacketed

J05 - Dispenser - On Site Heating System (Supply/Return)

D11 - Pipe Type - Flexible Piping I05 - Overfill - Vent Whistle L00 - Piping Leak Detection - None

Tank Location: 3

Tank Type: Steel/Carbon Steel/Iron

Tank Status: Unregistered Pipe Model: Not reported Install Date: Not reported Capacity Gallons: 1475

Tightness Test Method: -

Date Test: Not reported
Next Test Date: Not reported
Date Tank Closed: Not reported
Register: True

Modified By: MRBARROW
Last Modified: 05/25/2017
Material Name: diesel

Tank Number: 002 Tank Id: 269453

Equipment Records:

J05 - Dispenser - On Site Heating System (Supply/Return)

A00 - Tank Internal Protection - None

B01 - Tank External Protection - Painted/Asphalt Coating

D01 - Pipe Type - Steel/Carbon Steel/Iron

F01 - Pipe External Protection - Painted/Asphalt Coating

K00 - Spill Prevention - None

E00 - Piping Secondary Containment - None

C01 - Pipe Location - Aboveground

G02 - Tank Secondary Containment - Vault (w/access)

105 - Overfill - Vent Whistle

H06 - Tank Leak Detection - Impervious Barrier/Concrete Pad (A/G)

L00 - Piping Leak Detection - None

Tank Location: 3

Tank Type: Steel/Carbon Steel/Iron

Tank Status: Unregistered
Pipe Model: Not reported
Install Date: Not reported

Capacity Gallons: 960
Tightness Test Method: -

Direction Distance

Distance Elevation Site EDR ID Number

Database(s) EPA ID Number

CENTRAL ASSISTED LIVING, LLC (Continued)

A100433689

Date Test:

Not reported

Next Test Date:

Not reported

Not reported

Not reported

Not reported

True

Modified By:

MRBARROW

Last Modified: MRBARROW 05/25/2017

Material Name: #2 fuel oil (on-site consumption)

P50 OWEN AUTO SERVICE NY UST U003749723
South 1017 BEACH 21ST STREET N/A

South 1017 BEACH 21ST STREET 1/8-1/4 FAR ROCKAWAY, NY 11691

0.173 mi.

914 ft. Site 1 of 2 in cluster P

Relative: UST:

Lower Id/Status: 2-604688 / Unregulated/Closed

 Actual:
 Program Type:
 PBS

 24 ft.
 Region:
 STATE

 DEC Region:
 2

 Expiration Date:
 N/A

UTM X: 605410.91281 UTM Y: 4495398.58165 Site Type: Retail Gasoline Sales

Affiliation Records:

Site Id: 26559
Affiliation Type: Facility Owner
Company Name: OWEN BRERETON
Contact Type: Not reported
Contact Name: Not reported

Address1: 14-30 GIPSON STREET

Address2: Not reported City: FAR ROCKAWAY

State: NY
Zip Code: 11691
Country Code: 001

Phone: (718) 471-3533
EMail: Not reported
Fax Number: Not reported
Modified By: TRANSLAT
Date Last Modified: 2004-03-04

Site Id: 26559
Affiliation Type: Mail Contact

Company Name: OWEN AUTO SERVICE

Contact Type: Not reported Contact Name: Not reported

Address1: 1017 BEACH 21ST STREET

Address2: Not reported City: FAR ROCKAWAY

State: NY
Zip Code: 11691
Country Code: 001

Phone: (718) 327-5927
EMail: Not reported
Fax Number: Not reported
Modified By: TRANSLAT
Date Last Modified: 2004-03-04

Direction Distance

Elevation Site Database(s) EPA ID Number

OWEN AUTO SERVICE (Continued)

U003749723

EDR ID Number

Site Id: 26559

Affiliation Type: Facility Operator
Company Name: OWEN AUTO SERVICE

Contact Type: Not reported
Contact Name: OWEN BRERETON
Address1: Not reported
Address2: Not reported
City: Not reported

State: NN

Zip Code: Not reported

Country Code: 001

Phone: (718) 327-5927
EMail: Not reported
Fax Number: Not reported
Modified By: TRANSLAT
Date Last Modified: 2004-03-04

Site Id: 26559

Affiliation Type: Emergency Contact
Company Name: OWEN BRERETON
Contact Type: Not reported
Contact Name: RITA BRERETON
Address1: Not reported
Address2: Not reported

Address1: Not reported
Address2: Not reported
City: Not reported
State: NN
Zip Code: Not reported
Country Code: 001

Phone: (718) 327-2254
EMail: Not reported
Fax Number: Not reported
Modified By: TRANSLAT
Date Last Modified: 2004-03-04

Tank Info:

Tank Number: 01 Tank ID: 58606

Tank Status: Closed - Removed Material Name: Closed - Removed

Capacity Gallons: 550
Install Date: Not reported
Date Tank Closed: 08/01/2000
Registered: True

Tank Location: Underground Tank Type: Steel/carbon steel

Material Code: 0009 Common Name of Substance: Gasoline

Tightness Test Method: NN

Date Test: Not reported Next Test Date: Not reported Pipe Model: Not reported Modified By: TRANSLAT Last Modified: 04/14/2017

Equipment Records:

Direction Distance

Elevation Site Database(s) EPA ID Number

OWEN AUTO SERVICE (Continued)

U003749723

EDR ID Number

C02 - Pipe Location - Underground/On-ground
G00 - Tank Secondary Containment - None

H00 - Tank Leak Detection - None

100 - Overfill - None J00 - Dispenser - None

A00 - Tank Internal Protection - None D01 - Pipe Type - Steel/Carbon Steel/Iron

F01 - Pipe External Protection - Painted/Asphalt Coating

B00 - Tank External Protection - None

Tank Number: 02 Tank ID: 58607

Tank Status: Closed - Removed Material Name: Closed - Removed

Capacity Gallons: 550
Install Date: Not reported
Date Tank Closed: 08/01/2000
Registered: True

Tank Location: Underground Tank Type: Steel/carbon steel

Material Code: 0009 Common Name of Substance: Gasoline

Tightness Test Method: NN

Date Test:
Not reported
Next Test Date:
Pipe Model:
Modified By:
Last Modified:
Not reported
TRANSLAT
Ud/14/2017

Equipment Records:

C02 - Pipe Location - Underground/On-ground G00 - Tank Secondary Containment - None J02 - Dispenser - Suction Dispenser A00 - Tank Internal Protection - None D01 - Pipe Type - Steel/Carbon Steel/Iron

F01 - Pipe External Protection - Painted/Asphalt Coating

B00 - Tank External Protection - None H00 - Tank Leak Detection - None

100 - Overfill - None

Gasoline

 Tank Number:
 03

 Tank ID:
 58608

Tank Status: Closed - Removed Material Name: Closed - Removed

Capacity Gallons: 550
Install Date: Not reported
Date Tank Closed: 08/01/2000
Registered: True
Tank Location: Underground

Tank Type: Steel/carbon steel
Material Code: 0009

Tightness Test Method: NN

Common Name of Substance:

Date Test: Not reported

Direction Distance

Elevation Site Database(s) EPA ID Number

OWEN AUTO SERVICE (Continued)

U003749723

EDR ID Number

Next Test Date: Not reported Pipe Model: Not reported Modified By: TRANSLAT Last Modified: 04/14/2017

Equipment Records:

H00 - Tank Leak Detection - None

100 - Overfill - None

A00 - Tank Internal Protection - None D01 - Pipe Type - Steel/Carbon Steel/Iron

F01 - Pipe External Protection - Painted/Asphalt Coating

G00 - Tank Secondary Containment - None C02 - Pipe Location - Underground/On-ground B00 - Tank External Protection - None

J00 - Dispenser - None

Tank Number: 04 Tank ID: 58609

Tank Status: Closed - Removed Material Name: Closed - Removed

Capacity Gallons: 550

Install Date: Not reported
Date Tank Closed: 08/01/2000
Registered: True
Tank Location: Underground

Tank Location: Underground Tank Type: Steel/carbon steel

Material Code: 0009
Common Name of Substance: Gasoline

Tightness Test Method: NN

Date Test:
Not reported
Next Test Date:
Not reported
Pipe Model:
Modified By:
TRANSLAT
Last Modified:

Not reported
Not reported
Od/14/2017

Equipment Records:

C02 - Pipe Location - Underground/On-ground G00 - Tank Secondary Containment - None

H00 - Tank Leak Detection - None

100 - Overfill - None J00 - Dispenser - None

A00 - Tank Internal Protection - None D01 - Pipe Type - Steel/Carbon Steel/Iron

F01 - Pipe External Protection - Painted/Asphalt Coating

B00 - Tank External Protection - None

Tank Number: 05 Tank ID: 58610

Tank Status: Closed - Removed Material Name: Closed - Removed

Capacity Gallons: 550
Install Date: Not reported
Date Tank Closed: 08/01/2000
Registered: True
Tank Location: Underground

Direction Distance

Elevation Site Database(s) **EPA ID Number**

OWEN AUTO SERVICE (Continued)

EDR ID Number

U003749723

Tank Type: Steel/carbon steel 0009

Material Code: Common Name of Substance: Gasoline

Tightness Test Method: NN

Date Test: Not reported Next Test Date: Not reported Pipe Model: Not reported Modified By: **TRANSLAT** Last Modified: 04/14/2017

Equipment Records:

A00 - Tank Internal Protection - None D01 - Pipe Type - Steel/Carbon Steel/Iron

F01 - Pipe External Protection - Painted/Asphalt Coating

C02 - Pipe Location - Underground/On-ground G00 - Tank Secondary Containment - None

H00 - Tank Leak Detection - None

100 - Overfill - None J00 - Dispenser - None

B00 - Tank External Protection - None

P51 NY UST U003652098 **RCL SERVICE CENTER** 1009 BEACH 21ST STREET South N/A

1/8-1/4

FAR ROCKAWAY, NY 11691

0.177 mi.

935 ft. Site 2 of 2 in cluster P

UST: Relative:

Lower 2-604080 / Unregulated/Closed Id/Status:

Program Type: **PBS** Actual: Region: STATE 24 ft. DEC Region: **Expiration Date:** N/A

UTM X: 605407.29738 UTM Y: 4495378.98953 Site Type: Retail Gasoline Sales

Affiliation Records:

25965 Site Id: Affiliation Type: Facility Owner Company Name: **BASSER-KAUFMAN**

Contact Type: Not reported Contact Name: Not reported

Address1: 335 CENTRAL AVENUE

Address2: Not reported City: **LAWRENCE** State: NY Zip Code: 11559 Country Code: 001

Phone: (516) 569-3700 EMail: Not reported Not reported Fax Number: Modified By: **TRANSLAT** Date Last Modified: 2004-03-04

25965 Site Id: Affiliation Type: Mail Contact

Company Name: **BASSER-KAUFMAN**

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

RCL SERVICE CENTER (Continued)

U003652098

Contact Type: Not reported MR. MARK KEMP Contact Name: Address1: 335 CENTRAL AVENUE

Address2: Not reported **LAWRENCE** City: State: NY Zip Code: 11559 Country Code: 001

Phone: (516) 569-3700 EMail: Not reported Not reported Fax Number: Modified By: **TRANSLAT** Date Last Modified: 2004-03-04

Site Id: 25965

Facility Operator Affiliation Type:

RCL SERVICE CENTER Company Name:

Contact Type: Not reported

BASSER-KAUFMAN Contact Name:

Not reported Address1: Not reported Address2: City: Not reported State: NN

Zip Code: Not reported

Country Code: 001

Phone: (516) 569-3700 Not reported EMail: Fax Number: Not reported Modified By: **TRANSLAT** Date Last Modified: 2004-03-04

Site Id: 25965

Affiliation Type: **Emergency Contact** BASSER-KAUFMAN Company Name:

Contact Type: Not reported Contact Name: MARK KEMP Address1: Not reported Address2: Not reported Not reported City: State: NN

Zip Code: Not reported

Country Code: 001

Phone: (516) 569-3700 Not reported EMail: Fax Number: Not reported Modified By: TRANSLAT Date Last Modified: 2004-03-04

Tank Info:

Tank Number: 001 Tank ID: 56580

Tank Status: Closed - Removed Closed - Removed Material Name:

Capacity Gallons: 4000 Install Date: Not reported Date Tank Closed: 03/01/1999

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

RCL SERVICE CENTER (Continued)

Registered: True Tank Location: Underground

Steel/carbon steel Tank Type: Material Code: 0009 Common Name of Substance: Gasoline

NN Tightness Test Method:

Date Test: Not reported Next Test Date: Not reported Pipe Model: Not reported Modified By: **TRANSLAT** 04/14/2017 Last Modified:

Equipment Records:

H00 - Tank Leak Detection - None

100 - Overfill - None

A00 - Tank Internal Protection - None D01 - Pipe Type - Steel/Carbon Steel/Iron C02 - Pipe Location - Underground/On-ground G00 - Tank Secondary Containment - None B00 - Tank External Protection - None F00 - Pipe External Protection - None J01 - Dispenser - Pressurized Dispenser

Tank Number: 002 Tank ID: 56581

Tank Status: Closed - Removed Material Name: Closed - Removed

Capacity Gallons: 500

Not reported Install Date: Date Tank Closed: 03/01/1999 Registered: True

Tank Location: Underground Tank Type: Steel/carbon steel

Material Code: 0009 Common Name of Substance: Gasoline

Tightness Test Method: NN

Date Test: Not reported Next Test Date: Not reported Not reported Pipe Model: Modified By: **TRANSLAT** Last Modified: 04/14/2017

Equipment Records:

A00 - Tank Internal Protection - None H00 - Tank Leak Detection - None

100 - Overfill - None

D01 - Pipe Type - Steel/Carbon Steel/Iron C02 - Pipe Location - Underground/On-ground G00 - Tank Secondary Containment - None B00 - Tank External Protection - None F00 - Pipe External Protection - None J01 - Dispenser - Pressurized Dispenser

Tank Number: 003 U003652098

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

RCL SERVICE CENTER (Continued)

Tank ID:

56582

Tank Status: Closed - Removed Material Name: Closed - Removed

500 Capacity Gallons: Install Date: Not reported 03/01/1999 Date Tank Closed: Registered: True

Tank Location: Underground Tank Type: Steel/carbon steel

Material Code: 0009 Common Name of Substance: Gasoline

Tightness Test Method: NN

Date Test: Not reported Next Test Date: Not reported Pipe Model: Not reported Modified By: **TRANSLAT** 04/14/2017 Last Modified:

Equipment Records:

C02 - Pipe Location - Underground/On-ground G00 - Tank Secondary Containment - None A00 - Tank Internal Protection - None D01 - Pipe Type - Steel/Carbon Steel/Iron B00 - Tank External Protection - None F00 - Pipe External Protection - None J01 - Dispenser - Pressurized Dispenser H00 - Tank Leak Detection - None

100 - Overfill - None

Tank Number: 004 Tank ID: 56583

Closed - Removed Tank Status: Closed - Removed Material Name:

Capacity Gallons: 500 Install Date: Not reported Date Tank Closed: 03/01/1999 Registered: True Tank Location: Underground Steel/carbon steel Tank Type:

Material Code: 0009 Common Name of Substance: Gasoline

Tightness Test Method: NN

Date Test: Not reported Not reported Next Test Date: Pipe Model: Not reported Modified By: **TRANSLAT** Last Modified: 04/14/2017

Equipment Records:

H00 - Tank Leak Detection - None

100 - Overfill - None

A00 - Tank Internal Protection - None D01 - Pipe Type - Steel/Carbon Steel/Iron C02 - Pipe Location - Underground/On-ground B00 - Tank External Protection - None

U003652098

Direction Distance Elevation

vation Site Database(s) EPA ID Number

RCL SERVICE CENTER (Continued)

U003652098

EDR ID Number

F00 - Pipe External Protection - None J01 - Dispenser - Pressurized Dispenser G00 - Tank Secondary Containment - None

Tank Number: 005 Tank ID: 56584

Tank Status: Closed - Removed Material Name: Closed - Removed

Capacity Gallons: 500
Install Date: Not reported
Date Tank Closed: 03/01/1999
Registered: True
Tank Location: Underground

Tank Type: Steel/carbon steel

Material Code: 0009 Common Name of Substance: Gasoline

Tightness Test Method: NN

Date Test:
Not reported
Next Test Date:
Not reported
Pipe Model:
Modified By:
TRANSLAT
Last Modified:

Not reported
Not reported
Value 12017

Equipment Records:

G00 - Tank Secondary Containment - None C02 - Pipe Location - Underground/On-ground J01 - Dispenser - Pressurized Dispenser B00 - Tank External Protection - None F00 - Pipe External Protection - None H00 - Tank Leak Detection - None

100 - Overfill - None

A00 - Tank Internal Protection - None D01 - Pipe Type - Steel/Carbon Steel/Iron

Tank Number: 006 Tank ID: 56585

Tank Status: Closed - Removed Material Name: Closed - Removed

Capacity Gallons: 500
Install Date: Not reported
Date Tank Closed: 03/01/1999
Registered: True

Tank Location: Underground Tank Type: Steel/carbon steel

Material Code: 0009 Common Name of Substance: Gasoline

Tightness Test Method: NN

Date Test:
Not reported
Next Test Date:
Pipe Model:
Modified By:
Last Modified:
Not reported
TRANSLAT
U4/14/2017

Equipment Records:

Direction Distance Elevation

tance EDR ID Number vation Site Database(s) EPA ID Number

RCL SERVICE CENTER (Continued)

U003652098

H00 - Tank Leak Detection - None

100 - Overfill - None

C02 - Pipe Location - Underground/On-ground G00 - Tank Secondary Containment - None B00 - Tank External Protection - None F00 - Pipe External Protection - None J01 - Dispenser - Pressurized Dispenser A00 - Tank Internal Protection - None D01 - Pipe Type - Steel/Carbon Steel/Iron

Tank Number: 007 Tank ID: 56586

Tank Status: Closed - Removed Material Name: Closed - Removed

Capacity Gallons: 500
Install Date: Not reported
Date Tank Closed: 03/01/1999
Registered: True

Tank Location: Underground Tank Type: Steel/carbon steel

Material Code: 0009 Common Name of Substance: Gasoline

Tightness Test Method: NN

Date Test:
Not reported
Next Test Date:
Pipe Model:
Modified By:
Last Modified:
Not reported
TRANSLAT
Ud/14/2017

Equipment Records:

H00 - Tank Leak Detection - None

100 - Overfill - None

A00 - Tank Internal Protection - None
D01 - Pipe Type - Steel/Carbon Steel/Iron
C02 - Pipe Location - Underground/On-ground
G00 - Tank Secondary Containment - None
B00 - Tank External Protection - None
F00 - Pipe External Protection - None
J01 - Dispenser - Pressurized Dispenser

Tank Number: 008 Tank ID: 56587

Tank Status: Closed - Removed Material Name: Closed - Removed

Capacity Gallons: 500
Install Date: Not reported
Date Tank Closed: 03/01/1999
Registered: True
Tank Location: Underground
Tank Type: Steel/carbon steel

Material Code: 0009 Common Name of Substance: Gasoline

Tightness Test Method: NN

Date Test: Not reported

Direction Distance

Elevation Site Database(s) EPA ID Number

RCL SERVICE CENTER (Continued)

U003652098

EDR ID Number

Next Test Date: Not reported Pipe Model: Not reported Modified By: TRANSLAT Last Modified: 04/14/2017

Equipment Records:

B00 - Tank External Protection - None F00 - Pipe External Protection - None J01 - Dispenser - Pressurized Dispenser H00 - Tank Leak Detection - None

100 - Overfill - None

C02 - Pipe Location - Underground/On-ground G00 - Tank Secondary Containment - None A00 - Tank Internal Protection - None D01 - Pipe Type - Steel/Carbon Steel/Iron

 Tank Number:
 009

 Tank ID:
 56588

Tank Status: Closed - Removed Material Name: Closed - Removed

Capacity Gallons: 500

Install Date: Not reported Date Tank Closed: 03/01/1999 Registered: True Tank Location: Underground

Tank Location: Underground Tank Type: Steel/carbon steel

Material Code: 0009 Common Name of Substance: Gasoline

Tightness Test Method: NN

Date Test:
Not reported
Next Test Date:
Not reported
Pipe Model:
Modified By:
TRANSLAT
Last Modified:
O4/14/2017

Equipment Records:

H00 - Tank Leak Detection - None

100 - Overfill - None

C02 - Pipe Location - Underground/On-ground G00 - Tank Secondary Containment - None B00 - Tank External Protection - None F00 - Pipe External Protection - None J01 - Dispenser - Pressurized Dispenser A00 - Tank Internal Protection - None D01 - Pipe Type - Steel/Carbon Steel/Iron

SE 19-12 MOTT AVENUE 1/8-1/4 FAR ROCKAWAY, NY 11691

0.177 mi.

935 ft. Site 2 of 2 in cluster O

Relative: UST:

Higher Id/Status: 2-612280 / Active

 Actual:
 Program Type:
 PBS

 28 ft.
 Region:
 STATE

 DEC Region:
 2

Direction Distance

Elevation Site Database(s) EPA ID Number

JP MORGAN CHASE (Continued)

U004224040

EDR ID Number

Expiration Date: 08/20/2019
UTM X: 599755.73290
UTM Y: 4495533.47498

Site Type: Apartment Building/Office Building

Affiliation Records:

Site Id: 498923
Affiliation Type: Facility Owner

Company Name: ROCKAWAY KB COMPANY LLC

Contact Type: FACILITY MANAGER
Contact Name: MAURIZIO BERTOLOTTI

Address1: 450 SEVENTH AVE., PENTHOUSE N

Address2: Not reported
City: NEW YORK
State: NY
Zip Code: 10123
Country Code: 001

Phone: (212) 471-4319
EMail: Not reported
Fax Number: Not reported
Modified By: CGFREEDM
Date Last Modified: 2014-09-19

Site Id: 498923 Affiliation Type: Mail Contact

Company Name: J.P. MORGAN CHASE

Contact Type: MGR

Contact Name: MAURIZIO BERTOLOTTI
Address1: 1985 MARCUS AVE.
Address2: Not reported
City: NEW HYDE PARK

State: NY
Zip Code: 11042
Country Code: 001

Phone: (646) 772-9339

EMail: MAURIZIO.BERTOLOTTI@CHASE.COM

Fax Number: Not reported Modified By: CGFREEDM Date Last Modified: 2014-09-19

Site Id: 498923

Affiliation Type: Facility Operator
Company Name: JP MORGAN CHASE

Contact Type: Not reported

Contact Name: MAURIZIO BERTOLOTTI

Address1: Not reported Address2: Not reported City: Not reported State: NN

Zip Code: Not reported Country Code: 001

Phone: (646) 772-9339
EMail: Not reported
Fax Number: Not reported
Modified By: MSBAPTIS

Date Last Modified: 2014-08-20

Site Id: 498923

Direction Distance

Elevation Site Database(s) EPA ID Number

JP MORGAN CHASE (Continued)

U004224040

EDR ID Number

Affiliation Type: Emergency Contact
Company Name: J.P. MORGAN
Contact Type: Not reported

Contact Name: MAURIZIO BERTOLOTTI

Address1: Not reported Address2: Not reported City: Not reported State: NN

Zip Code: Not reported

Country Code: 001

Phone: (999) 999-999
EMail: Not reported
Fax Number: Not reported
Modified By: MSBAPTIS
Date Last Modified: 2014-08-20

Tank Info:

Tank Number: 001 Tank ID: 252804 Tank Status: In Service Material Name: In Service Capacity Gallons: 1100 01/01/1955 Install Date: Date Tank Closed: Not reported Registered: True

Tank Location: Underground Tank Type: Steel/carbon steel

Tightness Test Method: 99

Date Test: 11/05/2013
Next Test Date: 10/11/2016
Pipe Model: Not reported
Modified By: BKFALVEY
Last Modified: 04/14/2017

Equipment Records:

E00 - Piping Secondary Containment - None

H00 - Tank Leak Detection - None

100 - Overfill - None

A00 - Tank Internal Protection - None

K00 - Spill Prevention - None

C03 - Pipe Location - Aboveground/Underground Combination

G00 - Tank Secondary Containment - None B00 - Tank External Protection - None F00 - Pipe External Protection - None

D10 - Pipe Type - Copper

J04 - Dispenser - On Site Heating System (Suction)

L00 - Piping Leak Detection - None

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

N53 1141 MCBRIDE ST **NY LTANKS** S102672772 N/A

West 1141 MCBRIDE ST 1/8-1/4 **FAR ROCKAWAY, NY**

0.182 mi.

963 ft. Site 2 of 2 in cluster N

Relative: LTANKS: Lower Facility ID: 9413371 Site ID: 300613 Actual: Closed Date: 9 ft.

2004-01-26 Spill Number: 9413371 Spill Date: 1995-01-07 Spill Cause: Tank Overfill

Spill Source: Commercial/Industrial

Spill Class: D4

Cleanup Ceased: Not reported SWIS: 4101 **RWAUSTIN** Investigator: Referred To: Not reported Reported to Dept: 1995-01-07 CID: Not reported Water Affected: Not reported Spill Notifier: Affected Persons Last Inspection: Not reported Recommended Penalty: False Meets Standard: False **UST Involvement:** False

Remediation Phase: Date Entered In Computer: 1995-03-16 Spill Record Last Update: 2004-01-26 Spiller Name: Not reported Spiller Company: SAME Spiller Address: Not reported Spiller County: 999

Spiller Contact: Not reported Spiller Phone: Not reported Not reported Spiller Extention:

DEC Region: DER Facility ID: 243153

DEC Memo: "Prior to Sept, 2004 data translation this spill Lead_DEC Field was

AUSTIN 1/26/04 - AUSTIN - SURF. SPILL - CLOSED - ORIG. ASSIGNED TO

ENGELHARDT - END"

"APPARENT BROKEN GAUGE ON TANK" Remarks:

0

All Materials:

300613 Site ID: Operable Unit ID: 1010931 Operable Unit: 01 Material ID: 372108 Material Code: 0002A Material Name: #4 fuel oil Not reported Case No.: Petroleum Material FA: Quantity: 10.00 Units: G .00 Recovered:

Not reported Oxygenate:

Direction Distance

Elevation Site Database(s) **EPA ID Number**

54 **CENTRAL BAYPORT LLC** NY AST U003393926 **ENE** 13-06 BAYPORT PLACE N/A

1/8-1/4 0.185 mi. 978 ft.

Relative: AST: Lower Region:

QUEENS, NY 11691

STATE DEC Region: 2 Actual: Site Status: Active 19 ft. Facility Id: 2-348473 Program Type: **PBS**

UTM X: 605653.00155 UTM Y: 4495769.95989 **Expiration Date:** 04/29/2020

Site Type: Apartment Building/Office Building

Affiliation Records:

Site Id: 17118 Affiliation Type: Mail Contact

Company Name: CENTRAL BAYPORT LLC

Contact Type: **MEMBER**

Contact Name: EARNEST SHEMITSCH Address1: 176 UNION STREET #1-L

Address2: Not reported City: **BROOKLYN** NY State: Zip Code: 11231 Country Code: 001

Phone: (718) 875-3603 EMail: Not reported Fax Number: Not reported DMPOKRZY Modified By: Date Last Modified: 2018-03-26

Site Id: 17118

Affiliation Type: **Facility Operator**

CENTRAL BAYPORT LLC Company Name:

Contact Type: Not reported

Contact Name: **EARNEST SHEMITSCH**

Address1: Not reported Address2: Not reported City: Not reported State: NN

Zip Code: Not reported

Country Code: 001

(718) 875-3603 Phone: EMail: Not reported Fax Number: Not reported Modified By: **DMPOKRZY** Date Last Modified: 2018-03-26

Site Id: 17118

Affiliation Type: **Emergency Contact** Company Name: MR SADIK MUSTAFA

Contact Type: Not reported Contact Name: SADIK MUSTAFA Not reported Address1: Address2: Not reported City: Not reported

EDR ID Number

Direction Distance

Elevation Site Database(s) EPA ID Number

CENTRAL BAYPORT LLC (Continued)

U003393926

EDR ID Number

State: NN

Zip Code: Not reported

Country Code: 001

Phone: (718) 471-0593
EMail: Not reported
Fax Number: Not reported
Modified By: TRANSLAT
Date Last Modified: 2004-03-04

Site Id: 17118
Affiliation Type: Facility Owner

Company Name: CENTRAL BAYPORT LLC

Contact Type: MEMBER

Contact Name: EARNEST SHEMITSCH
Address1: 176 UNION STREET #1-L

 Address2:
 Not reported

 City:
 BROOKLYN

 State:
 NY

 Zip Code:
 11231

 Country Code:
 001

Phone: (718) 875-3603
EMail: Not reported
Fax Number: Not reported
Modified By: DMPOKRZY
Date Last Modified: 2018-03-26

Tank Info:

 Tank Number:
 001

 Tank Id:
 33175

 Material Code:
 0001

Common Name of Substance: #2 Fuel Oil (On-Site Consumption)

Equipment Records:

E00 - Piping Secondary Containment - None

G03 - Tank Secondary Containment - Vault (w/o access)

H00 - Tank Leak Detection - None

L09 - Piping Leak Detection - Exempt Suction Piping

F00 - Pipe External Protection - None A00 - Tank Internal Protection - None D01 - Pipe Type - Steel/Carbon Steel/Iron

K00 - Spill Prevention - None J02 - Dispenser - Suction Dispenser C01 - Pipe Location - Aboveground I04 - Overfill - Product Level Gauge (A/G) B05 - Tank External Protection - Jacketed

Tank Location:

Tank Type: Steel/Carbon Steel/Iron

Tank Status: In Service
Pipe Model: Not reported
Install Date: 01/01/1943
Capacity Gallons: 2000
Tightness Test Method: NN

Date Test: Not reported Next Test Date: Not reported Date Tank Closed: Not reported

Direction Distance

Elevation Site Database(s) EPA ID Number

CENTRAL BAYPORT LLC (Continued)

U003393926

EDR ID Number

Register: True
Modified By: DMPOKRZY
Last Modified: 03/26/2018

Material Name: #2 fuel oil (on-site consumption)

Q55 METROPOLITAN RUBBER CO. NY SWF/LF S105912835 ENE 1406 AUGUSTINA AVENUE N/A

1/8-1/4 FAR ROCKAWAY, NY 11691 0.190 mi.

1001 ft. Site 1 of 3 in cluster Q

Relative: SWF/LF:

Lower Flag: INACTIVE

Actual: Region Code: 2
14 ft. Phone Number: 7

Phone Number: 7183275610 Owner Name: Not reported Owner Type: Not reported Owner Address: Not reported Owner Addr2: Not reported Owner City,St,Zip: Not reported Owner Email: Not reported Owner Phone: Not reported **CLIFFORD BRAND** Contact Name: Not reported Contact Address:

Contact Address: Not reported Contact Addr2: Not reported Contact City,St,Zip: Not reported Contact Email: Not reported Contact Phone: Not reported

Activity Desc: Waste tire storage - permit

Activity Number: [41K68] Active: No

East Coordinate: Not reported North Coordinate: Not reported Accuracy Code: Not reported Regulatory Status: Not reported Waste Type: Not reported Authorization #: Not reported Not reported Authorization Date: Not reported **Expiration Date:** Not reported Operator Name: Operator Type: Not reported Laste Date: Not reported

Q56 FAR ROCKAWAY AUTO GLASS & REPAIR INC.

ENE 14-06 AUGUSTINA AVENUE 1/8-1/4 FAR ROCKAWAY, NY 11691

0.190 mi.

1001 ft. Site 2 of 3 in cluster Q

Relative: AST:

 Lower
 Region:
 STATE

 Actual:
 DEC Region:
 2

 14 ft.
 Site Status:
 Active

 Facility Id:
 2-610132

 Program Type:
 PBS

UTM X: 605652.58306

NY AST A100293982

N/A

Direction Distance

Elevation Site Database(s) EPA ID Number

FAR ROCKAWAY AUTO GLASS & REPAIR INC. (Continued)

A100293982

EDR ID Number

UTM Y: 4495876.98528
Expiration Date: 07/02/2023
Site Type: Other

Affiliation Records:

Site Id: 360138
Affiliation Type: Mail Contact

Company Name: FAR ROCKAWAY AUTO GLASS & REPAIR INC.

Contact Type: Not reported

Contact Name: LOOKRAM JAGDEO

Address1: 14-06 AUGUSTINA AVENUE

Address2: Not reported
City: FAR ROCKAWAY

State: NY
Zip Code: 11691
Country Code: 001

Phone: (718) 337-1697

EMail: SAVITAJAG@AOL.COM

Fax Number: Not reported Modified By: NTFREEMA Date Last Modified: 2016-01-15

Site Id: 360138

Affiliation Type: Facility Operator

Company Name: FAR ROCKAWAY AUTO GLASS & REPAIR INC.

Contact Type: Not reported
Contact Name: LOOKRAM JAGDEO

Address1: Not reported Address2: Not reported City: Not reported

State: NN

Zip Code: Not reported Country Code: 001

Phone: (718) 337-1697
EMail: Not reported
Fax Number: Not reported
Modified By: NTFREEMA
Date Last Modified: 2016-01-15

Site Id: 360138

Affiliation Type: Emergency Contact

Company Name: DEVENDRA K PARASRAM

Contact Type: Not reported

Contact Name: LOOKRAM JAGDEO

Address1: Not reported
Address2: Not reported
City: Not reported
State: NN

Zip Code: Not reported Country Code: 999

Phone: (516) 322-3085
EMail: Not reported
Fax Number: Not reported
Modified By: NTFREEMA
Date Last Modified: 2016-01-15

Site Id: 360138
Affiliation Type: Facility Owner

Direction Distance

Elevation Site Database(s) EPA ID Number

FAR ROCKAWAY AUTO GLASS & REPAIR INC. (Continued)

A100293982

EDR ID Number

Company Name: DEVENDRA K PARASRAM

Contact Type: OWNER

Contact Name: LOOKRAM JAGDEO Address1: LOOKRAM JAGDEO 14-06 AUGUSTINE AVE.

Address2: Not reported
City: FAR ROCKAWAY

State: NY
Zip Code: 11691
Country Code: 001
Phone: (718)

Phone: (718) 337-1697
EMail: Not reported
Fax Number: Not reported
Modified By: DAFRANCI
Date Last Modified: 2018-04-10

Tank Info:

 Tank Number:
 001

 Tank Id:
 210170

 Material Code:
 0022

Common Name of Substance: Waste Oil/Used Oil

Equipment Records:

G00 - Tank Secondary Containment - None E00 - Piping Secondary Containment - None B00 - Tank External Protection - None F00 - Pipe External Protection - None

D00 - Pipe Type - No Piping

Private Dwelling

Tank Location:

Tank Type: Steel/Carbon Steel/Iron

Tank Status: In Service
Pipe Model: Not reported
Install Date: 01/05/2005
Capacity Gallons: 275
Tightness Test Method: NN

Date Test:
Not reported
Next Test Date:
Not reported
Date Tank Closed:
Register:
Modified By:
Last Modified:
Motreported
Not reported
True
NTFREEMA
D4/14/2017
Material Name:
Waste oil/used oil

57 ETWARU RESIDENCE NNE 2122 NAMEOKE AVE 1/8-1/4 FAR ROCKAWAY, NY

1/8-1/4 FAR RO 0.193 mi. 1021 ft.

Relative: LTANKS:

 Lower
 Facility ID:
 9512756

 Actual:
 Site ID:
 242927

 10 ft.
 Closed Date:
 1996-01-16

 Spill Number:
 9512756

 Spill Date:
 1996-01-13

 Spill Cause:
 Tank Overfill

Spill Source:

TC5471477.6s Page 120

NY LTANKS \$102673185 N/A

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

ETWARU RESIDENCE (Continued)

S102673185

Spill Class: C3

Cleanup Ceased: Not reported SWIS: 4101 Investigator: **MCTIBBE** Referred To: Not reported Reported to Dept: 1996-01-13 CID: 257

Water Affected: Not reported Spill Notifier: Responsible Party Last Inspection: Not reported

Recommended Penalty: False Meets Standard: False **UST Involvement:** False Remediation Phase: Date Entered In Computer: 1996-01-13

Spill Record Last Update: 1998-01-27 Spiller Name: FRANK ODONNELL

Spiller Company: BAERENKLU OIL CO Spiller Address: 740 JAMACA AVE

Spiller County: 001

Spiller Contact: MR ETWARU Spiller Phone: (718) 337-3740 Spiller Extention: Not reported DEC Region: DER Facility ID:

199555

DEC Memo: "Prior to Sept, 2004 data translation this spill Lead_DEC Field was

TIBBE CLEANED BY RP."

Remarks: "cust ordered from caller then also ordered from another company"

All Materials:

242927 Site ID: Operable Unit ID: 1027089 Operable Unit: 01 566907 Material ID: Material Code: 0001A Material Name: #2 fuel oil Case No.: Not reported Material FA: Petroleum Quantity: 2.00 Units: G Recovered: 2.00 Oxygenate: Not reported

Q58 **ARTIES COLLISION INC** RCRA NonGen / NLR 1000248565 **ENE 1402 AUGUSTINA AVE FINDS** NYD137916953

FAR ROCKAWAY, NY 11691 1/8-1/4 **ECHO** 0.199 mi. NY MANIFEST

1050 ft. Site 3 of 3 in cluster Q Relative: RCRA NonGen / NLR:

Lower Date form received by agency: 01/01/2007

Facility name: ARTIES COLLISION INC Actual: Facility address: 1402 AUGUSTINA AVE 14 ft. FAR ROCKAWAY, NY 11691

> EPA ID: NYD137916953 Mailing address: AUGUSTINA AVE

FAR ROCKAWAY, NY 11691

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

ARTIES COLLISION INC (Continued)

1000248565

Contact: ARTHUR VALENTI Contact address: AUGUSTINA AVE

FAR ROCKAWAY, NY 11691

Contact country: US

Contact telephone: 718-471-7059 Contact email: Not reported

EPA Region: 02

Classification: Non-Generator

Description: Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:

Owner/operator name: ARTHUR VALENTI Owner/operator address: **NOT REQUIRED**

NOT REQUIRED, WY 99999

Owner/operator country: US

Owner/operator telephone: 212-555-1212 Owner/operator email: Not reported Owner/operator fax: Not reported Owner/operator extension: Not reported Legal status: Private Owner/Operator Type: Owner Owner/Op start date: Not reported Owner/Op end date: Not reported

ARTHUR VALENTI Owner/operator name: Owner/operator address: NOT REQUIRED

NOT REQUIRED, WY 99999

Owner/operator country: US

Owner/operator telephone: 212-555-1212 Owner/operator email: Not reported Owner/operator fax: Not reported Owner/operator extension: Not reported Legal status: Private Owner/Operator Type: Operator Owner/Op start date: Not reported Owner/Op end date: Not reported

Handler Activities Summary:

U.S. importer of hazardous waste: No Mixed waste (haz. and radioactive): No Recycler of hazardous waste: No Transporter of hazardous waste: No Treater, storer or disposer of HW: No Underground injection activity: No On-site burner exemption: No Furnace exemption: No Used oil fuel burner: No Used oil processor: No User oil refiner: No Used oil fuel marketer to burner: No Used oil Specification marketer: No Used oil transfer facility: No Used oil transporter: No

Historical Generators:

Date form received by agency: 01/01/2006

Direction Distance

Elevation Site Database(s) EPA ID Number

ARTIES COLLISION INC (Continued)

1000248565

EDR ID Number

Site name: ARTIES COLLISION INC Classification: Not a generator, verified

Date form received by agency: 09/25/1986

Site name: ARTIES COLLISION INC Classification: Small Quantity Generator

. Waste code: D001

. Waste name: IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF

LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT

WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.

Violation Status: No violations found

FINDS:

Registry ID: 110004383088

Environmental Interest/Information System

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport,

and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA

program staff to track the notification, permit, compliance, and

corrective action activities required under RCRA.

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:

Envid: 1000248565 Registry ID: 110004383088

DFR URL: http://echo.epa.gov/detailed-facility-report?fid=110004383088

NY MANIFEST:

Country: USA

EPA ID: NYD137916953
Facility Status: Not reported

Location Address 1: 1402 AUGUSTINA AVENUE

Code: BP

Location Address 2: Not reported
Total Tanks: Not reported
Location City: FAR ROCKAWAY

Location State: NY
Location Zip: 11691
Location Zip 4: Not reported

NY MANIFEST:

EPAID: NYD137916953

Mailing Name: ARTIE'S COLLISION INCORPORATED
Mailing Contact: ARTIE'S COLLISION INCORPORATED

Mailing Address 1: 353 CENTRAL AVENUE

Direction Distance

Elevation Site Database(s) **EPA ID Number**

ARTIES COLLISION INC (Continued)

1000248565

EDR ID Number

Mailing Address 2: Not reported LAWRENCE Mailing City: Mailing State: NY Mailing Zip: 11559 Mailing Zip 4: Not reported Mailing Country: USA Mailing Phone: 5165690388

NY MANIFEST:

Document ID: NJA2892290 Manifest Status: Not reported

seq: 01 Year: 1999 Trans1 State ID: 10339 Trans2 State ID: Not reported 01/20/1999 Generator Ship Date: Trans1 Recv Date: 01/20/1999 Trans2 Recv Date: Not reported TSD Site Recv Date: 01/21/1999 Part A Recv Date: Not reported Part B Recv Date: Not reported NYD137916953 Generator EPA ID: Trans1 EPA ID: NJD986608941 Trans2 EPA ID: Not reported TSDF ID 1: NJD002454544 TSDF ID 2: Not reported Not reported Manifest Tracking Number: Import Indicator: Not reported **Export Indicator:** Not reported Not reported Discr Quantity Indicator: Discr Type Indicator: Not reported Discr Residue Indicator: Not reported Discr Partial Reject Indicator: Not reported Discr Full Reject Indicator: Not reported Manifest Ref Number: Not reported Alt Facility RCRA ID: Not reported Alt Facility Sign Date: Not reported MGMT Method Type Code: Not reported F005 - UNKNOWN Waste Code: Waste Code: Not reported Waste Code: Not reported Waste Code: Not reported Waste Code: Not reported

00200 Units: G - Gallons (liquids only)* (8.3 pounds)

Not reported

Number of Containers: 001

Waste Code:

Quantity:

TT - Cargo tank, tank trucks Container Type:

R Material recovery of more than 75 percent of the total material. Handling Method:

Specific Gravity: 01.00

Click this hyperlink while viewing on your computer to access

-1 additional NY MANIFEST: record(s) in the EDR Site Report.

Direction Distance

Elevation Site Database(s) EPA ID Number

59 SHOREVIEW COOPERATIVE APTS INC NY AST U003383943
West 22-87 MOTT AVENUE N/A

West 22-87 MOTT AVENUE 1/8-1/4 FAR ROCKAWAY, NY 11691

0.206 mi. 1089 ft.

Relative: AST: Lower Region:

 Lower
 Region:
 STATE

 Actual:
 DEC Region:
 2

 10 ft.
 Site Status:
 Active

 Facility Id:
 2-070165

 Program Type:
 PBS

UTM X: 605000.56955 UTM Y: 4495758.62196 Expiration Date: 10/17/2017

Site Type: Apartment Building/Office Building

Affiliation Records:

Site Id: 1537 Affiliation Type: Facility Owner

Company Name: SHOREVIEW COOPERATIVE APTS., INC.

Contact Type: PRESIDENT

Contact Name: NORMAN SILVERMAN
Address1: 1141 MCBRIDE ST., APT. 5E

Address2: Not reported City: FAR ROCKAWAY

State: NY
Zip Code: 11691
Country Code: 001

Phone: (718) 327-1577
EMail: Not reported
Fax Number: Not reported
Modified By: DMMOLOUG
Date Last Modified: 2013-11-25

Site Id: 1537

Affiliation Type: Mail Contact

Company Name: SHOREVIEW COOPERATIVE APTS. INC.

Contact Type: Not reported

Contact Name: NORMAN SILVERMAN Address1: 1141 MCBRIDE STREET

Address2: APT. 5E

City: FAR ROCKAWAY

State: NY
Zip Code: 11691
Country Code: 001

Phone: (718) 327-1577
EMail: Not reported
Fax Number: Not reported
Modified By: DMMOLOUG
Date Last Modified: 2013-11-25

Site Id: 1537

Affiliation Type: Facility Operator

Company Name: SHOREVIEW COOPERATIVE APTS INC

Contact Type: Not reported
Contact Name: ELLIOT JORDAN
Address1: Not reported
Address2: Not reported
City: Not reported

EDR ID Number

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

SHOREVIEW COOPERATIVE APTS INC (Continued)

U003383943

State: NN

Not reported Zip Code:

Country Code: 001

Phone: (718) 327-7967 EMail: Not reported Fax Number: Not reported KXTANG Modified By: Date Last Modified: 2007-10-10

Site Id: 1537

Affiliation Type: **Emergency Contact**

Company Name: SHOREVIEW COOP APTS.

Contact Type: Not reported Contact Name: STUYVESANT OIL Address1: Not reported Address2: Not reported Not reported City:

State: NN

Zip Code: Not reported

Country Code: 001

Phone: (718) 665-5700 Not reported EMail: Fax Number: Not reported Modified By: **TRANSLAT** Date Last Modified: 2004-03-04

Tank Info:

Tank Number: 001 Tank Id: 2610 Material Code: 0003

Common Name of Substance: #6 Fuel Oil (On-Site Consumption)

Equipment Records:

H05 - Tank Leak Detection - In-Tank System (ATG) L09 - Piping Leak Detection - Exempt Suction Piping

G99 - Tank Secondary Containment - Other A00 - Tank Internal Protection - None D01 - Pipe Type - Steel/Carbon Steel/Iron F00 - Pipe External Protection - None B00 - Tank External Protection - None C00 - Pipe Location - No Piping

J02 - Dispenser - Suction Dispenser 104 - Overfill - Product Level Gauge (A/G)

Tank Location:

Tank Type: Steel/Carbon Steel/Iron

Tank Status: In Service Pipe Model: Not reported Install Date: 01/01/1954 Capacity Gallons: 7500 Tightness Test Method: NN

Date Test: Not reported Next Test Date: Not reported Date Tank Closed: Not reported Register: True **DMMOLOUG** Modified By:

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

SHOREVIEW COOPERATIVE APTS INC (Continued)

Last Modified: 04/14/2017

Material Name: #6 fuel oil (on-site consumption)

R60 22-88 MOTT AVENUE NY LTANKS U000405583 WNW 22-88 MOTT AVENUE N/A

1/8-1/4 **FAR ROCKAWAY, NY**

0.208 mi.

1100 ft. Site 1 of 3 in cluster R

Relative: LTANKS: Lower Facility ID:

9809570 Site ID: 94420 Actual: Closed Date: 10 ft. 1998-12-07 Spill Number: 9809570

Spill Date: 1998-10-30 Spill Cause: Tank Failure Spill Source: Private Dwelling

Spill Class:

Cleanup Ceased: Not reported SWIS: 4101

Investigator: **MMMULQUE** Referred To: Not reported Reported to Dept: 1998-10-30 204 CID:

Water Affected: Not reported Spill Notifier: Responsible Party 1998-11-03

Last Inspection: Recommended Penalty: False Meets Standard: True UST Involvement: False Remediation Phase: Date Entered In Computer:

1998-10-30 Spill Record Last Update: 1998-12-07 Spiller Name: **RUSSELL FURIA** Spiller Company: 22-88 MOTT AVENUE Spiller Address: 22-88 MOTT AVENUE

Spiller County: 001

Spiller Contact: **RUSSELL FURIA** Spiller Phone: (516) 493-3400 Spiller Extention: Not reported

DEC Region: **DER Facility ID:** 84532

DEC Memo: "Prior to Sept, 2004 data translation this spill Lead_DEC Field was

MULQUEEN DEC WAS NOT NOTIFIED FOR TANK REMOVAL MR. RUSSELL FURIA SAID THE TANK IS 5,000 GAL. CAPACITY (OUR DATABASE SHOWS 3,000) WAS USED FOR #5,6 OIL IS NOW #2 OIL. CONTAMINATED SOIL CONTAINED #6, NOT #2

CONSULTING FIRM WILL SUBMIT APPLICATION FOR TANK REMOVAL. CONSULTANT REMOVED CONTAMINATED SOILS. ENDPOINT SAMPLES ARE BELOW DETECTION

LIMITS. NO FURTHER ACTIONS REQUIRED."

Remarks: "UNDERGROUND TANK BEING REMOVED"

All Materials:

Site ID: 94420 Operable Unit ID: 1066836 Operable Unit: 01 Material ID: 313477 Material Code: 0001A Material Name: #2 fuel oil U003383943

Direction Distance

Distance Elevation Site EDR ID Number

Database(s) EPA ID Number

22-88 MOTT AVENUE (Continued)

U000405583

Case No.:

Material FA:

Quantity:

Units:

G

Recovered:

Not reported

Petroleum

.00

G

.00

Oxygenate: Not reported

R61 TWICE MIGHT LLC NY UST U004078093
WNW 22-88 MOTT AVENUE N/A

1/8-1/4 FAR ROCKAWAY, NY 11691

0.208 mi.

1100 ft. Site 2 of 3 in cluster R

Relative: UST:

Lower Id/Status: 2-405183 / Active

 Actual:
 Program Type:
 PBS

 10 ft.
 Region:
 STATE

 DEC Region:
 2

 Expiration Date:
 09/06/2022

 UTM X:
 605002.09100

 UTM Y:
 4495770.74547

Site Type: Apartment Building/Office Building

Affiliation Records:

Site Id: 19523
Affiliation Type: Mail Contact
Company Name: TWICE MIGHT LLC
Contact Type: Not reported
Contact Name: DAVID MARASOW
Address1: 619 EASTERN PARKWAY

 Address2:
 Not reported

 City:
 BROOKLYN

 State:
 NY

 Zip Code:
 11213

 Country Code:
 001

Phone: (347) 512-0042

EMail: UPREALTYLLC@GMAIL.COM

Fax Number: Not reported Modified By: CGFREEDM Date Last Modified: 2014-06-24

Site Id: 19523

Affiliation Type: Facility Operator
Company Name: TWICE MIGHT LLC
Contact Type: Not reported

Contact Type: Not reported
Contact Name: STEVEN GRANT
Address1: Not reported
Address2: Not reported
City: Not reported
State: NN

Zip Code: Not reported Country Code: 001

Phone: (646) 450-4407
EMail: Not reported
Fax Number: Not reported
Modified By: CGFREEDM
Date Last Modified: 2014-06-24

Direction Distance Elevation

stance EDR ID Number evation Site Database(s) EPA ID Number

TWICE MIGHT LLC (Continued)

U004078093

Site Id: 19523

Affiliation Type: **Emergency Contact** Company Name: TWICE MIGHT LLC Contact Type: Not reported Contact Name: DAVID MARASOW Address1: Not reported Address2: Not reported Not reported City: State: NN

Zip Code: Not reported

Country Code: 999
Phone: (347)

Phone: (347) 512-0042
EMail: Not reported
Fax Number: Not reported
Modified By: CGFREEDM
Date Last Modified: 2014-06-24

Site Id: 19523

Affiliation Type: Facility Owner
Company Name: TWICE MIGHT LLC

Contact Type: OWNER

Contact Name: GERSHON EICHORN Address1: 619 EASTERN PARKWAY

 Address2:
 Not reported

 City:
 BROOKLYN

 State:
 NY

 Zip Code:
 11213

 Country Code:
 001

Phone: (646) 450-4407
EMail: Not reported
Fax Number: Not reported
Modified By: CGFREEDM
Date Last Modified: 2014-06-24

Tank Info:

Tank Number: 001 Tank ID: 23059

Tank Status: Closed - Removed Material Name: Closed - Removed

Capacity Gallons: 3000
Install Date: Not reported
Date Tank Closed: 01/01/2002
Registered: True
Tank Location: Underground
Tank Type: Steel/carbon steel

Material Code: 0003

Common Name of Substance: #6 Fuel Oil (On-Site Consumption)

Tightness Test Method: NN

Date Test:
Not reported
Next Test Date:
Pipe Model:
Modified By:
Last Modified:
Not reported
KXTANG
04/14/2017

Equipment Records:

Direction Distance

Distance Elevation Site EDR ID Number

EDR ID Number

EPA ID Number

TWICE MIGHT LLC (Continued)

U004078093

NY AST A100295165

N/A

A01 - Tank Internal Protection - Epoxy Liner

H00 - Tank Leak Detection - None

L09 - Piping Leak Detection - Exempt Suction Piping

G00 - Tank Secondary Containment - None

J02 - Dispenser - Suction Dispenser

B00 - Tank External Protection - None

C00 - Pipe Location - No Piping

F00 - Pipe External Protection - None

D01 - Pipe Type - Steel/Carbon Steel/Iron

104 - Overfill - Product Level Gauge (A/G)

R62 TWICE MIGHT LLC
WNW 22-88 MOTT AVENUE
1/8-1/4 FAR ROCKAWAY, NY 11691

0.208 mi.

1100 ft. Site 3 of 3 in cluster R

Relative: AST:

 Lower
 Region:
 STATE

 Actual:
 DEC Region:
 2

 10 ft.
 Site Status:
 Active

 Facility Id:
 2-405183

 Program Type:
 PBS

UTM X: 605002.09100 UTM Y: 4495770.74547 Expiration Date: 09/06/2022

Site Type: Apartment Building/Office Building

Affiliation Records:

Site Id: 19523
Affiliation Type: Mail Contact
Company Name: TWICE MIGHT LLC
Contact Type: Not reported
Contact Name: DAVID MARASOW
Address1: 619 EASTERN PARKWAY

 Address2:
 Not reported

 City:
 BROOKLYN

 State:
 NY

 Zip Code:
 11213

 Country Code:
 001

Phone: (347) 512-0042

EMail: UPREALTYLLC@GMAIL.COM

Fax Number: Not reported Modified By: CGFREEDM Date Last Modified: 2014-06-24

Site Id: 19523

Affiliation Type: **Facility Operator** Company Name: TWICE MIGHT LLC Contact Type: Not reported Contact Name: STEVEN GRANT Address1: Not reported Address2: Not reported City: Not reported State: NN

Zip Code: Not reported

Country Code: 001

Phone: (646) 450-4407

Direction Distance Elevation

vation Site Database(s) EPA ID Number

TWICE MIGHT LLC (Continued)

A100295165

EDR ID Number

EMail: Not reported Fax Number: Not reported Modified By: CGFREEDM Date Last Modified: 2014-06-24

Site Id: 19523

Emergency Contact Affiliation Type: Company Name: TWICE MIGHT LLC Contact Type: Not reported Contact Name: DAVID MARASOW Address1: Not reported Address2: Not reported City: Not reported State: NN

Zip Code: Not reported

Country Code: 999

Phone: (347) 512-0042
EMail: Not reported
Fax Number: Not reported
Modified By: CGFREEDM
Date Last Modified: 2014-06-24

Site Id: 19523
Affiliation Type: Facility Owner
Company Name: TWICE MIGHT LLC

Contact Type: OWNER

Contact Name: GERSHON EICHORN Address1: 619 EASTERN PARKWAY

 Address2:
 Not reported

 City:
 BROOKLYN

 State:
 NY

 Zip Code:
 11213

 Country Code:
 001

Phone: (646) 450-4407
EMail: Not reported
Fax Number: Not reported
Modified By: CGFREEDM
Date Last Modified: 2014-06-24

Tank Info:

 Tank Number:
 002

 Tank Id:
 209275

 Material Code:
 0001

Common Name of Substance: #2 Fuel Oil (On-Site Consumption)

Equipment Records:

L00 - Piping Leak Detection - None

105 - Overfill - Vent Whistle

E00 - Piping Secondary Containment - None

H00 - Tank Leak Detection - None A00 - Tank Internal Protection - None D01 - Pipe Type - Steel/Carbon Steel/Iron

K00 - Spill Prevention - None

B00 - Tank External Protection - None C00 - Pipe Location - No Piping

Direction Distance

Distance Elevation Site EDR ID Number

Database(s) EPA ID Number

TWICE MIGHT LLC (Continued)

A100295165

NY UST U001839697

N/A

F00 - Pipe External Protection - None G00 - Tank Secondary Containment - None J02 - Dispenser - Suction Dispenser

Tank Location:

Tank Type: Steel/Carbon Steel/Iron

Tank Status: In Service
Pipe Model: Not reported
Install Date: 01/01/2002
Capacity Gallons: 3000
Tightness Test Method: NN

Date Test:

Not reported

Next Test Date:

Not reported

Not reported

Not reported

Not reported

True

Modified By:

CGFREEDM

Last Modified:

04/14/2017

Material Name: #2 fuel oil (on-site consumption)

S63 MEL CHEVROLET SALES CORP

ENE 14-14 CENTRAL AVE 1/8-1/4 FAR ROCKAWAY, NY 11691

0.212 mi.

1119 ft. Site 1 of 2 in cluster S

Relative: UST:

Lower Id/Status: 2-349925 / Unregulated/Closed

 Actual:
 Program Type:
 PBS

 19 ft.
 Region:
 STATE

 DEC Region:
 2

DEC Region: 2
Expiration Date: N/A

UTM X: 605702.40922 UTM Y: 4495818.40326 Site Type: Unknown

Affiliation Records:

Site Id: 17246
Affiliation Type: Facility Owner
Company Name: JOSEPH J NATHAN

Contact Type: Not reported Contact Name: Not reported

Address1: 271-33 W GRAND CENTRAL PKWY

Address2: Not reported City: FLORAL PARK

State: NY
Zip Code: 11005
Country Code: 001

Phone: (718) 327-4700
EMail: Not reported
Fax Number: Not reported
Modified By: NRLOMBAR
Date Last Modified: 2008-12-22

Site Id: 17246
Affiliation Type: Mail Contact
Company Name: JOSEPH J NATHAN
Contact Type: Not reported

Contact Type: Not reported Contact Name: Not reported

Address1: 271-33 W GRAND CENTRAL PKWY

Direction Distance

Elevation Site Database(s) **EPA ID Number**

MEL CHEVROLET SALES CORP (Continued)

U001839697

EDR ID Number

Address2: Not reported FLORAL PARK City:

NY State: Zip Code: 11005 Country Code: 001

Phone: (718) 327-4700 EMail: Not reported Not reported Fax Number: Modified By: **NRLOMBAR** Date Last Modified: 2008-12-22

Site Id: 17246

Facility Operator Affiliation Type:

Company Name: MEL CHEVROLET SALES CORP

Contact Type: Not reported Contact Name: JOSEPH J NATHAN

Address1: Not reported Address2: Not reported City: Not reported

State: NY

Zip Code: Not reported Country Code: 001 Phone: (718) 327-4700 EMail: Not reported Not reported Fax Number: Modified By: **NRLOMBAR** Date Last Modified: 2008-12-22

Site Id: 17246

Affiliation Type: **Emergency Contact** Company Name: JOSEPH J NATHAN

Contact Type: Not reported

Contact Name: ALL SERVICE ALARM

Address1: Not reported Address2: Not reported Not reported City: State: NN Not reported

Zip Code:

Country Code: 999

(516) 374-3868 Phone: EMail: Not reported Fax Number: Not reported Modified By: **NRLOMBAR** Date Last Modified: 2008-12-22

Tank Info:

Tank Number: 001 Tank ID: 33664

Tank Status: Tank Converted to Non-Regulated Use Material Name: Tank Converted to Non-Regulated Use

Capacity Gallons: 550 Install Date: 12/01/1966 Date Tank Closed: 08/01/1996 Registered: True

Tank Location: Underground Tank Type: Steel/carbon steel

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

MEL CHEVROLET SALES CORP (Continued)

0001

#2 Fuel Oil (On-Site Consumption) Common Name of Substance:

Tightness Test Method:

Date Test: Not reported Next Test Date: Not reported Not reported Pipe Model: TRANSLAT Modified By: Last Modified: 04/14/2017

Equipment Records:

Material Code:

A00 - Tank Internal Protection - None D01 - Pipe Type - Steel/Carbon Steel/Iron B00 - Tank External Protection - None C00 - Pipe Location - No Piping F00 - Pipe External Protection - None 104 - Overfill - Product Level Gauge (A/G)

G03 - Tank Secondary Containment - Vault (w/o access)

H00 - Tank Leak Detection - None

002 Tank Number: Tank ID: 33665

Tank Status: Tank Converted to Non-Regulated Use Material Name: Tank Converted to Non-Regulated Use

Capacity Gallons: 550 Install Date: 12/01/1966 Date Tank Closed: 08/01/1996 Registered: True Tank Location: Underground Steel/carbon steel Tank Type:

Material Code: 0001

Common Name of Substance: #2 Fuel Oil (On-Site Consumption)

Tightness Test Method: NN

Date Test: Not reported Next Test Date: Not reported Pipe Model: Not reported Modified By: **TRANSLAT** 04/14/2017 Last Modified:

Equipment Records:

B00 - Tank External Protection - None C00 - Pipe Location - No Piping F00 - Pipe External Protection - None A00 - Tank Internal Protection - None D01 - Pipe Type - Steel/Carbon Steel/Iron

G03 - Tank Secondary Containment - Vault (w/o access)

H00 - Tank Leak Detection - None

100 - Overfill - None

Tank Number: 003 33666 Tank ID:

Tank Status: Closed - Removed Closed - Removed Material Name:

Capacity Gallons: 550 Install Date: 12/01/1964 U001839697

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

MEL CHEVROLET SALES CORP (Continued)

Date Tank Closed: 01/31/2000 Registered: True Tank Location: Underground Tank Type: Steel/carbon steel

Material Code: 9999 Common Name of Substance: Other

Tightness Test Method: NN

Date Test: Not reported Next Test Date: Not reported Pipe Model: Not reported Modified By: **LXZIELIN** 04/14/2017 Last Modified:

Equipment Records:

B00 - Tank External Protection - None C00 - Pipe Location - No Piping D02 - Pipe Type - Galvanized Steel F00 - Pipe External Protection - None A00 - Tank Internal Protection - None H00 - Tank Leak Detection - None

100 - Overfill - None

L09 - Piping Leak Detection - Exempt Suction Piping G00 - Tank Secondary Containment - None

J02 - Dispenser - Suction Dispenser

Tank Number: 004 Tank ID: 33667

Tank Status: Closed - Removed Closed - Removed Material Name:

Capacity Gallons: 550 Install Date: 12/01/1964 Date Tank Closed: 01/31/2000

Registered: True

Tank Location: Underground Tank Type: Steel/carbon steel

Material Code: 9999 Common Name of Substance: Other

NN Tightness Test Method:

Date Test: Not reported Next Test Date: Not reported Pipe Model: Not reported Modified By: **LXZIELIN** Last Modified: 04/14/2017

Equipment Records:

A00 - Tank Internal Protection - None G00 - Tank Secondary Containment - None J02 - Dispenser - Suction Dispenser B00 - Tank External Protection - None C00 - Pipe Location - No Piping D02 - Pipe Type - Galvanized Steel F00 - Pipe External Protection - None H00 - Tank Leak Detection - None

100 - Overfill - None

L09 - Piping Leak Detection - Exempt Suction Piping

U001839697

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

MEL CHEVROLET SALES CORP (Continued)

Tank Number: 005 Tank ID: 33668

Tank Status: Closed - Removed Material Name: Closed - Removed

Capacity Gallons: 275 12/01/1964 Install Date: Date Tank Closed: 01/31/2000 Registered: True

Tank Location: Underground Tank Type: Steel/carbon steel

Material Code: 9999 Common Name of Substance: Other

Tightness Test Method: NN

Date Test: Not reported Next Test Date: Not reported Pipe Model: Not reported Modified By: **LXZIELIN** Last Modified: 04/14/2017

Equipment Records:

B00 - Tank External Protection - None C00 - Pipe Location - No Piping D02 - Pipe Type - Galvanized Steel F00 - Pipe External Protection - None A00 - Tank Internal Protection - None G00 - Tank Secondary Containment - None J02 - Dispenser - Suction Dispenser

H00 - Tank Leak Detection - None 100 - Overfill - None

L09 - Piping Leak Detection - Exempt Suction Piping

S64 EL PAIS AUTO REPAIR

ENE 14-17 CENTRAL AVE FAR ROCKAWAY, NY 11561 1/8-1/4

0.227 mi.

Actual: 21 ft.

1197 ft. Site 2 of 2 in cluster S

Relative: AST: Lower

STATE Region: DEC Region: Site Status: Active Facility Id: 2-605889 Program Type: **PBS**

UTM X: 605709.33032 UTM Y: 4495807.73176 **Expiration Date:** 04/02/2009 Site Type: Other

Affiliation Records:

Site Id: 27755 Affiliation Type: Mail Contact

Company Name: EL PAIS AUTO REPAIR **PROPRIETOR** Contact Type:

Contact Name: WALTER ULLOA Address1: 14-17 CENTRAL AVENUE

Address2: Not reported City: **FAR ROCKAWAY**

State: NY U001839697

NY AST A100178136

N/A

Direction Distance

Elevation Site Database(s) EPA ID Number

EL PAIS AUTO REPAIR (Continued)

Zip Code: 11561 Country Code: 001

Phone: (917) 254-9910
EMail: Not reported
Fax Number: Not reported
Modified By: dxliving
Date Last Modified: 2004-04-02

Site Id: 27755

Affiliation Type: Facility Operator
Company Name: EL PAIS AUTO REPAIR

Contact Type: Not reported
Contact Name: WALTER ULLOA
Address1: Not reported
Address2: Not reported
City: Not reported
State: NN

Zip Code: Not reported

Country Code: Not repor

Phone: (917) 254-9910
EMail: Not reported
Fax Number: Not reported
Modified By: dxliving
Date Last Modified: 2004-04-02

Site Id: 27755

Affiliation Type: Emergency Contact
Company Name: EL PAIS AUTO REPAIR

Contact Type: Not reported
Contact Name: WALTER ULLOA
Address1: Not reported
Address2: Not reported
City: Not reported
State: NN

Zip Code: Not reported

Country Code: 999

Phone: (917) 254-9910
EMail: Not reported
Fax Number: Not reported
Modified By: dxliving
Date Last Modified: 2004-04-02

Site Id: 27755

Affiliation Type: Facility Owner
Company Name: EL PAIS AUTO REPAIR

Contact Type: PROPRIETOR
Contact Name: WALTER ULLOA

Address1: 14-17 CENTRAL AVENUE

Address2: Not reported City: FAR ROCKAWAY

State: NY
Zip Code: 11561
Country Code: 001

Phone: (917) 254-9910
EMail: Not reported
Fax Number: Not reported
Modified By: dxliving

EDR ID Number

A100178136

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

EL PAIS AUTO REPAIR (Continued)

A100178136

Date Last Modified: 2004-04-02

Tank Info:

Tank Number: 01 60669 Tank Id: 0022 Material Code:

Waste Oil/Used Oil Common Name of Substance:

Equipment Records:

H00 - Tank Leak Detection - None

100 - Overfill - None

B00 - Tank External Protection - None C00 - Pipe Location - No Piping F00 - Pipe External Protection - None

J00 - Dispenser - None

A00 - Tank Internal Protection - None

G01 - Tank Secondary Containment - Diking (Aboveground)

D00 - Pipe Type - No Piping

Tank Location:

Tank Type: Steel/Carbon Steel/Iron

Tank Status: In Service Pipe Model: Not reported Install Date: Not reported Capacity Gallons: 275

Tightness Test Method: NN

Date Test: Not reported Next Test Date: Not reported Date Tank Closed: Not reported Register: True dxliving Modified By: Last Modified: 04/14/2017 Material Name: waste oil/used oil

NY AST A100296169 65 **STEVEN AUTO REPAIRS ENE 1338 CENTRAL AVENUE** N/A

1/8-1/4 0.232 mi. 1224 ft.

Relative: AST: Lower Region:

DEC Region: 2 Actual: Site Status: Active 19 ft. Facility Id: 2-610023 Program Type: **PBS**

FAR ROCKAWAY, NY 11691

605802.65814 UTM X: UTM Y: 4495927.41355 **Expiration Date:** 10/05/2020 Site Type: Other

Affiliation Records:

Site Id: 353567 Affiliation Type: Facility Owner

STEVEN AUTO REPAIRS CORP DBA ALBERTO TORRES Company Name:

Contact Type: ASST. STORE MANAGER

STATE

STEVEN TORRES Contact Name:

Direction Distance

Elevation Site Database(s) EPA ID Number

STEVEN AUTO REPAIRS (Continued)

A100296169

EDR ID Number

Address1: 1338 CENTRAL AVENUE

Address2: Not reported City: FAR ROCKAWAY

State: NY
Zip Code: 11691
Country Code: 001

Phone: (516) 710-0761
EMail: Not reported
Fax Number: Not reported
Modified By: NTFREEMA
Date Last Modified: 2015-08-14

Site ld: 353567
Affiliation Type: Mail Contact

Company Name: STEVEN AUTO REPAIRS

Contact Type: Not reported
Contact Name: ALBERTO TORRES
Address1: 1338 CENTRAL AVENUE

Address2: Not reported City: FAR ROCKAWAY

State: NY
Zip Code: 11691
Country Code: 001

Phone: (718) 471-5328
EMail: Not reported
Fax Number: Not reported
Modified By: NRLOMBAR
Date Last Modified: 2005-10-05

Site Id: 353567

Affiliation Type: Facility Operator

Company Name: STEVEN AUTO REPAIRS

NN

Contact Type: Not reported
Contact Name: ALBERTO TORRES
Address1: Not reported
Address2: Not reported
City: Not reported

Zip Code: Not reported

State:

Country Code: 001

Phone: (718) 471-5328
EMail: Not reported
Fax Number: Not reported
Modified By: NRLOMBAR
Date Last Modified: 2005-10-05

Site Id: 353567

Affiliation Type: Emergency Contact
Company Name: STEVEN AUTO REPAIRS

Contact Type: Not reported
Contact Name: ALBERTO TORRES
Address1: Not reported
Address2: Not reported
City: Not reported

State: NN

Zip Code: Not reported

Country Code: 001

Direction Distance

Elevation Site Database(s) EPA ID Number

STEVEN AUTO REPAIRS (Continued)

A100296169

EDR ID Number

Phone: (718) 471-5328
EMail: Not reported
Fax Number: Not reported
Modified By: NRLOMBAR
Date Last Modified: 2005-10-05

Tank Info:

 Tank Number:
 001

 Tank Id:
 208210

 Material Code:
 0022

Common Name of Substance: Waste Oil/Used Oil

Equipment Records:

A00 - Tank Internal Protection - None

B01 - Tank External Protection - Painted/Asphalt Coating

H03 - Tank Leak Detection - Vapor Well C00 - Pipe Location - No Piping F00 - Pipe External Protection - None E00 - Piping Secondary Containment - None

K01 - Spill Prevention - Catch Basin

G05 - Tank Secondary Containment - Synthetic Liner

104 - Overfill - Product Level Gauge (A/G)

J00 - Dispenser - None D00 - Pipe Type - No Piping L00 - Piping Leak Detection - None

Tank Location: 2

Tank Type: Steel/Carbon Steel/Iron

Tank Status: In Service
Pipe Model: Not reported
Install Date: 09/08/2005
Capacity Gallons: 275
Tightness Test Method: NN

Date Test:

Not reported

Next Test Date:

Not reported

N

66 OTHMAN SERVICE STATION ENE 1401 CENTRAL AVE

FAR ROCKAWAY, NY 11691

RCRA NonGen / NLR 1000295147
FINDS NYD982719288
ECHO
NY MANIFEST

0.232 mi. 1227 ft.

1/8-1/4

Relative: RCRA NonGen / NLR:

Lower Date form received by agency: 01/01/2007

Actual: Facility name: OTHMAN SERVICE STATION

21 ft. Facility address: 1401 CENTRAL AVE

FAR ROCKAWAY, NY 11691-3910

EPA ID: NYD982719288
Mailing address: CENTRAL AVE

FAR ROCKAWAY, NY 11609

Contact: Not reported Contact address: CENTRAL AVE

Map ID MAP FINDINGS
Direction

Distance

Elevation Site Database(s) EPA ID Number

OTHMAN SERVICE STATION (Continued)

1000295147

EDR ID Number

FAR ROCKAWAY, NY 11609

Contact country: US

Contact telephone: Not reported Contact email: Not reported

EPA Region: 02

Classification: Non-Generator

Description: Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:

Owner/operator name: SAMUEL OTHMAN Owner/operator address: NOT REQUIRED

NOT REQUIRED, WY 99999

Owner/operator country: US

Owner/operator telephone: 212-555-1212 Owner/operator email: Not reported Owner/operator fax: Not reported Owner/operator extension: Not reported Legal status: Private Owner/Operator Type: Owner Owner/Op start date: Not reported Owner/Op end date: Not reported

Owner/operator name: SAMUEL OTHMAN Owner/operator address: NOT REQUIRED

NOT REQUIRED, WY 99999

Not reported

Owner/operator country: US

Owner/operator telephone: 212-555-1212
Owner/operator email: Not reported
Owner/operator fax: Not reported
Owner/operator extension: Not reported
Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: Not reported

Handler Activities Summary:

Owner/Op end date:

U.S. importer of hazardous waste: No Mixed waste (haz. and radioactive): No Recycler of hazardous waste: No Transporter of hazardous waste: Nο Treater, storer or disposer of HW: No Underground injection activity: No On-site burner exemption: No Furnace exemption: No Used oil fuel burner: No Used oil processor: No User oil refiner: No Used oil fuel marketer to burner: No Used oil Specification marketer: No Used oil transfer facility: No Used oil transporter: No

Historical Generators:

Date form received by agency: 01/01/2006

Site name: OTHMAN SERVICE STATION
Classification: Not a generator, verified

Direction Distance

Elevation Site Database(s) EPA ID Number

OTHMAN SERVICE STATION (Continued)

1000295147

EDR ID Number

Date form received by agency: 07/08/1999

Site name: OTHMAN SERVICE STATION
Classification: Not a generator, verified

Date form received by agency: 12/01/1988

Site name: OTHMAN SERVICE STATION
Classification: Large Quantity Generator

Waste code: D001

. Waste name: IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF

LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT

WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.

Violation Status: No violations found

FINDS:

Registry ID: 110004426381

Environmental Interest/Information System

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and

corrective action activities required under RCRA.

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:

Envid: 1000295147 Registry ID: 110004426381

DFR URL: http://echo.epa.gov/detailed-facility-report?fid=110004426381

NY MANIFEST:

Country: USA

EPA ID: NYD982719288
Facility Status: Not reported

Location Address 1: 1401 CENTRAL AVENUE

Code: BP

Location Address 2: Not reported Total Tanks: Not reported Location City: ROCKAWAY

Location State: NY

Location Zip: Not reported Location Zip 4: Not reported

NY MANIFEST:

EPAID: NYD982719288
Mailing Name: OTHMAN S/S
Mailing Contact: OTHMAN S/S

Direction Distance Elevation

stance EDR ID Number evation Site Database(s) EPA ID Number

OTHMAN SERVICE STATION (Continued)

1000295147

Mailing Address 1: 1401 CENTRAL AVENUE

Mailing Address 2: Not reported Mailing City: ROCKAWAY

Mailing State: NY
Mailing Zip: 11693
Mailing Zip 4: Not reported
Mailing Country: USA
Mailing Phone: 7183279070

NY MANIFEST:

Document ID: NYA7119774

Manifest Status: C

 seq:
 Not reported

 Year:
 1989

 Trans1 State ID:
 00000000

 Trans2 State ID:
 000000000

 Generator Ship Date:
 01/12/1989

 Trans1 Recv Date:
 01/12/1989

Trans2 Recv Date: //
TSD Site Recv Date: 01/13/1989

Part A Recv Date: 01/19/1989 Part B Recv Date: 01/24/1989 Generator EPA ID: NYD982719288 Trans1 EPA ID: NYD006801245 Trans2 EPA ID: Not reported TSDF ID 1: NYD082785429 TSDF ID 2: Not reported Manifest Tracking Number: Not reported Import Indicator: Not reported Not reported **Export Indicator:** Discr Quantity Indicator: Not reported Discr Type Indicator: Not reported Discr Residue Indicator: Not reported Discr Partial Reject Indicator: Not reported Discr Full Reject Indicator: Not reported Manifest Ref Number: Not reported Alt Facility RCRA ID: Not reported Alt Facility Sign Date: Not reported MGMT Method Type Code: Not reported

Waste Code: D001 - NON-LISTED IGNITABLE WASTES

Waste Code:
Woot reported
Not reported
Quantity:
00200

Units: G - Gallons (liquids only)* (8.3 pounds)

Number of Containers: 004

Container Type: DM - Metal drums, barrels

Handling Method: B Incineration, heat recovery, burning.

Specific Gravity: 100

Click this hyperlink while viewing on your computer to access

-1 additional NY MANIFEST: record(s) in the EDR Site Report.

Direction Distance

Elevation Site Database(s) EPA ID Number

67 NEXT TO NY LTANKS \$107417123 NNW 22-54 NAMEOKE AVE. N/A

1/8-1/4 0.233 mi.

1231 ft.

Relative: LTANKS: Lower Facility

ROCKAWAY, NY

Actual: 8 ft.

0509035 Facility ID: Site ID: 354749 Closed Date: 2006-02-02 Spill Number: 0509035 Spill Date: 2005-10-27 Spill Cause: Tank Failure Spill Source: Unknown Spill Class: C4

Cleanup Ceased: Not reported SWIS: 4101
Investigator: SFRAHMAN Referred To: Not reported Reported to Dept: 2005-10-28
CID: 74

Water Affected:
Spill Notifier:
Last Inspection:
Recommended Penalty:
Meets Standard:
UST Involvement:
Remediation Phase:

Not reported
Fire Department
Ret Penalty:
False
False
False
0

Date Entered In Computer: 2005-10-28
Spill Record Last Update: 2006-02-02
Spiller Name: Not reported

Spiller Company: CHANDLER DEVELOPMENT CORP

Spiller Address: 189-07 JAMAICA AVE

Spiller County: 001

Spiller Contact: MICHAEL MONACO
Spiller Phone: (347) 203-6886
Spiller Extention: Not reported

DEC Region: 2
DER Facility ID: 304763

DEC Memo: "10.28.05 Sharif -I spoke with Michael Monaco of FDNY. He said they

put speedy dry and soak pad to absorb the oil. It was a tank leaking on a construction site. No responsible party was available at night to start the clean up.An ECO was sent out to hold the PR for clean up and necessary law inforcement. Later today I called the RP's office and told them to start the clean up immediately. A CSL letter was also sent to Chandler Development Corp 189-07 Jamaica Avenue, Hollis,

also sent to Chandler Development Corp 189-07 Jamaica Avenue, Hollis, NY 11423 Ph: 718-217-4900, Fax: 718-217-4929 02/02/06 Shariff/Report

from PTC. They pumped out the oil water mix from the site.

Contaminated soil was removed for disposal.End point sample result indicated minor presence of VOC/SVOC'S.Waste disposal manifest and

lab result were included.NFA required."

Remarks: "50-100 gallons spilled. Some puddling - putting down oil pads 250

gallon tank leaking outside - construction site possibly from previous home that was on the site or someone dumped it here. possibly all the way down to water table Attempted to contact the

company - unable to possibly due to the hour. "

All Materials:

Site ID: 354749
Operable Unit ID: 1112140

EDR ID Number

Direction Distance

Elevation Site Database(s) EPA ID Number

NEXT TO (Continued) S107417123

Operable Unit: 01 2102181 Material ID: Material Code: 0001A Material Name: #2 fuel oil Case No.: Not reported Material FA: Petroleum Quantity: 100.00 Units: G Recovered: .00

Oxygenate: Not reported

T68 AUTO MAVEN DENT DR INC
SE 10-16 BEACH 19TH STREET
1/8-1/4 FAR ROCKAWAY, NY 11691

0.235 mi.

1243 ft. Site 1 of 2 in cluster T

 Relative:
 AST:

 Higher
 Region:
 STATE

 Actual:
 DEC Region:
 2

 27 ft.
 Site Status:
 Active

 Facility Id:
 2-609946

 Program Type:
 PBS

UTM X: 599761.46891 UTM Y: 4495201.99849 Expiration Date: 05/25/2010

Site Type: Other Wholesale/Retail Sales

Affiliation Records:

Site Id: 346538

Affiliation Type: Facility Owner

Company Name: DAVID D. STERN

Contact Type: PRESIDENT

Contact Name: DAVID D. STERN

Address1: 525 JARVIS AVENUE

Address2: Not reported City: FAR ROCKAWAY

State: NY
Zip Code: 11691
Country Code: 001

Phone: (516) 870-2177
EMail: Not reported
Fax Number: Not reported
Modified By: NRLOMBAR
Date Last Modified: 2005-05-25

Site Id: 346538

Affiliation Type: Mail Contact

Company Name: DAVID D. STERN

Contact Type: Not reported

Contact Name: Not reported

Address1: 525 JARVIS AVENUE
Address2: Not reported
City: FAR ROCKAWAY

State: NY
Zip Code: 11691
Country Code: 001

EDR ID Number

NY AST A100293139

N/A

Direction Distance Elevation

ation Site Database(s) EPA ID Number

AUTO MAVEN DENT DR INC (Continued)

A100293139

EDR ID Number

Phone: (516) 870-2177
EMail: Not reported
Fax Number: Not reported
Modified By: NRLOMBAR
Date Last Modified: 2005-05-25

Site Id: 346538

Affiliation Type: Facility Operator

Company Name: AUTO MAVEN DENT DR INC

Contact Type: Not reported
Contact Name: JACK STERN
Address1: Not reported
Address2: Not reported
City: Not reported
State: NN

Zip Code: Not reported

Country Code: 001

Phone: (718) 327-8630
EMail: Not reported
Fax Number: Not reported
Modified By: NRLOMBAR
Date Last Modified: 2005-05-25

Site Id: 346538

Affiliation Type: Emergency Contact
Company Name: DAVID D. STERN
Contact Type: Not reported
Contact Name: JACK STERN
Address1: Not reported
Address2: Not reported
City: Not reported

State: NN

Zip Code: Not reported

Country Code: 001

Phone: (516) 996-5555
EMail: Not reported
Fax Number: Not reported
Modified By: NRLOMBAR
Date Last Modified: 2005-05-25

Tank Info:

 Tank Number:
 001

 Tank Id:
 206542

 Material Code:
 0022

Common Name of Substance: Waste Oil/Used Oil

Equipment Records:

D00 - Pipe Type - No Piping

H06 - Tank Leak Detection - Impervious Barrier/Concrete Pad (A/G)

L00 - Piping Leak Detection - None

J00 - Dispenser - None

A00 - Tank Internal Protection - None

B01 - Tank External Protection - Painted/Asphalt Coating

E00 - Piping Secondary Containment - None

100 - Overfill - None

Direction Distance

Elevation Site Database(s) EPA ID Number

AUTO MAVEN DENT DR INC (Continued)

A100293139

S108145681

N/A

NY SWF/LF

EDR ID Number

K01 - Spill Prevention - Catch Basin C00 - Pipe Location - No Piping F00 - Pipe External Protection - None G00 - Tank Secondary Containment - None

Tank Location: 3

Tank Type: Steel/Carbon Steel/Iron

Tank Status: In Service
Pipe Model: Not reported
Install Date: Not reported
Consoits College: 350

Capacity Gallons: 250
Tightness Test Method: NN

Date Test:

Not reported

Next Test Date:

Not reported

Not reported

Not reported

Not reported

Not reported

Not reported

Register:

True

Modified By:

NRLOMBAR

Last Modified:

04/14/2017

Material Name:

waste oil/used oil

INACTIVE

T69 AUTO MAVEN DENT DR INC SE 1016 BEACH 19TH STREET 1/8-1/4 FAR ROCKAWAY, NY 11691

0.235 mi.

1243 ft. Site 2 of 2 in cluster T

Relative: SWF/LF: Higher Flag:

Actual: Region Code: 2

Actual: Region Code. 2 **27 ft.** Phone Number: Not reported

Owner Name: Not reported Owner Type: Not reported Owner Address: Not reported Not reported Owner Addr2: Owner City,St,Zip: Not reported Owner Email: Not reported Not reported Owner Phone: Contact Name: Not reported Not reported Contact Address: Not reported Contact Addr2: Not reported Contact City, St, Zip: Contact Email: Not reported Contact Phone: Not reported

Activity Desc: Vehicle Dismantling Facility

Activity Number: Not reported

Active: No East Coordinate: 605595 4495381 North Coordinate: Not reported Accuracy Code: Regulatory Status: Not reported Waste Type: Not reported Authorization #: Not reported Authorization Date: Not reported Not reported **Expiration Date:** Operator Name: Not reported Operator Type: Not reported Laste Date: Not reported

Direction Distance

Distance Elevation Site EDR ID Number

EDR ID Number

EPA ID Number

70 1124 BAYPORT PLACE NY AST U003391569
East 11-24 BAYPORT PLACE N/A

1/8-1/4 0.235 mi. 1243 ft.

 Relative:
 AST:

 Higher
 Region:
 STATE

 Actual:
 DEC Region:
 2

FAR ROCKAWAY, NY 11691

25 ft. Site Status: Unregulated/Closed

Facility Id: 2-401153
Program Type: PBS

UTM X: 605759.43490 UTM Y: 4495640.23526

Expiration Date: N/A
Site Type: Other

Affiliation Records:

Site Id: 19168
Affiliation Type: Mail Contact

Company Name: NAMEOKE HOLDING LLC

Contact Type: OWNER

Contact Name: GERSHON EICHORN
Address1: 619 EASTERN PARKWAY

 Address2:
 Not reported

 City:
 BROOKLYN

 State:
 NY

 Zip Code:
 11213

 Country Code:
 001

Phone: (646) 450-4407

EMail: DAVID@UPREALTYLLC.COM

Fax Number: Not reported Modified By: NTFREEMA Date Last Modified: 2015-04-20

Site Id: 19168

Affiliation Type: Facility Operator
Company Name: 1124 BAYPORT PLACE

Contact Type: Not reported
Contact Name: N/A
Address1: Not reported

Address1: Not reported Address2: Not reported City: Not reported State: NN

Zip Code: Not reported
Country Code: 001
Phone: N/A

EMail: Not reported Fax Number: Not reported Modified By: NTFREEMA Date Last Modified: 2015-04-20

Site Id: 19168

Affiliation Type: Emergency Contact
Company Name: NAMEOKE HOLDING LLC

Contact Type: Not reported Contact Name: N/A

Address1: Not reported Address2: Not reported City: Not reported

Direction Distance

Elevation Site Database(s) EPA ID Number

1124 BAYPORT PLACE (Continued)

U003391569

EDR ID Number

State: NN

Zip Code: Not reported
Country Code: 999
Phone: N/A

EMail: Not reported Fax Number: Not reported Modified By: NTFREEMA Date Last Modified: 2015-04-20

Site Id: 19168
Affiliation Type: Facility Owner

Company Name: NAMEOKE HOLDING LLC

Contact Type: OWNER

Contact Name: GERSHON EICHORN
Address1: 619 EASTERN PARKWAY

 Address2:
 Not reported

 City:
 BROOKLYN

 State:
 NY

 Zip Code:
 11213

 Country Code:
 001

Phone: (646) 450-4407

EMail: DAVID@UPREALTYLLC.COM

Fax Number: Not reported Modified By: NTFREEMA Date Last Modified: 2015-04-20

Tank Info:

 Tank Number:
 001

 Tank Id:
 21770

 Material Code:
 0001

Common Name of Substance: #2 Fuel Oil (On-Site Consumption)

Equipment Records:

J02 - Dispenser - Suction Dispenser B00 - Tank External Protection - None C00 - Pipe Location - No Piping F00 - Pipe External Protection - None E00 - Piping Secondary Containment - None

G03 - Tank Secondary Containment - Vault (w/o access)

H00 - Tank Leak Detection - None

L09 - Piping Leak Detection - Exempt Suction Piping

A00 - Tank Internal Protection - None
D01 - Pipe Type - Steel/Carbon Steel/Iron

K00 - Spill Prevention - None

104 - Overfill - Product Level Gauge (A/G)

Tank Location:

Tank Type: Steel/Carbon Steel/Iron
Tank Status: Closed - Removed
Pipe Model: Not reported
Install Date: 11/08/1923
Capacity Gallons: 2000
Tightness Test Method: NN

Date Test: Not reported
Next Test Date: Not reported
Date Tank Closed: 04/06/2015

Direction Distance

Distance Elevation Site EDR ID Number

EDR ID Number

EPA ID Number

1124 BAYPORT PLACE (Continued)

U003391569

FINDS

ECHO NY MANIFEST NYD986939601

Register: True
Modified By: NTFREEMA
Last Modified: 04/14/2017

Material Name: #2 fuel oil (on-site consumption)

U71 NASSAU BEACH CLEANERS NY DRYCLEANERS S110247382
South 2105 CORNAGA AVE. N/A

South 2105 CORNAGA AVE. 1/8-1/4 FAR ROCKAWAY, NY 11691

0.236 mi.

1244 ft. Site 1 of 2 in cluster U

Relative: DRYCLEANERS:

 Higher
 Facility ID:
 2-6308-00444

 Actual:
 Phone Number:
 718-327-2000

 27 ft.
 Region:
 Not reported

 Registration Effective Date:
 N/A

Inspection Date: N/A
Inspection Date: 01NOV19
Install Date: 94

Drop Shop: Not reported

Shutdown:

Alternate Solvent: Not reported Current Business: Not reported

U72 NASSAU BEACH CLEANERS RCRA-CESQG 1004757518

South 2105 CORNAGA AVE 1/8-1/4 FAR ROCKAWAY, NY 11691

0.236 mi.

0.236 mi. 1244 ft. Site 2 of 2 in cluster U

Relative: RCRA-CESQG:

Higher Date form received by agency: 01/01/2007

Actual: Facility name: NASSAU BEACH CLEANERS

27 ft. Facility address: 2105 CORNAGA AVE FAR ROCKAWAY, NY 11691

PAR ROCKAWAT, NT 11

EPA ID: NYD986939601 Mailing address: CORNAGA AVE

FAR ROCKAWAY, NY 11691

Contact: ROSE STAROPOLI Contact address: CORNAGA AVE

FAR ROCKAWAY, NY 11691

Contact country: US

Contact telephone: 718-327-2000 Contact email: Not reported

EPA Region: 02

Classification: Conditionally Exempt Small Quantity Generator

Description: Handler: generates 100 kg or less of hazardous waste per calendar

month, and accumulates 1000 kg or less of hazardous waste at any time; or generates 1 kg or less of acutely hazardous waste per calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of

Direction Distance Elevation

vation Site Database(s) EPA ID Number

NASSAU BEACH CLEANERS (Continued)

1004757518

EDR ID Number

any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste

Owner/Operator Summary:

Owner/operator name: ROSE M STAROPOLI
Owner/operator address: 2105 CORNAGE AVE
FAR ROCKAWAY, NY 11691

Owner/operator country: US

718-327-2000 Owner/operator telephone: Owner/operator email: Not reported Owner/operator fax: Not reported Owner/operator extension: Not reported Legal status: Private Owner/Operator Type: Operator Owner/Op start date: Not reported Owner/Op end date: Not reported

Owner/operator name: ROSE M STAROPOLI
Owner/operator address: 2105 CORNAGE AVE

FAR ROCKAWAY, NY 11691

Owner/operator country: US

Owner/operator telephone: 718-327-2000 Owner/operator email: Not reported Owner/operator fax: Not reported Owner/operator extension: Not reported Legal status: Private Owner/Operator Type: Owner Owner/Op start date: Not reported Owner/Op end date: Not reported

Handler Activities Summary:

U.S. importer of hazardous waste: No Mixed waste (haz. and radioactive): No Recycler of hazardous waste: No Transporter of hazardous waste: No Treater, storer or disposer of HW: No Underground injection activity: No On-site burner exemption: No No Furnace exemption: Used oil fuel burner: No Used oil processor: No User oil refiner: No Used oil fuel marketer to burner: No Used oil Specification marketer: No Used oil transfer facility: No Used oil transporter: No

Historical Generators:

Date form received by agency: 01/01/2006

Site name: NASSAU BEACH CLEANERS

Classification: Conditionally Exempt Small Quantity Generator

Date form received by agency: 11/23/1993

Site name: NASSAU BEACH CLEANERS

Classification: Conditionally Exempt Small Quantity Generator

Direction Distance

Elevation Site Database(s) EPA ID Number

NASSAU BEACH CLEANERS (Continued)

1004757518

EDR ID Number

. Waste code: D000
. Waste name: Not Defined

. Waste code: F002

. Waste name: THE FOLLOWING SPENT HALOGENATED SOLVENTS: TETRACHLOROETHYLENE,

METHYLENE CHLORIDE, TRICHLOROETHYLENE, 1,1,1-TRICHLOROETHANE,

CHLOROBENZENE, 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE, ORTHO-DICHLOROBENZENE, TRICHLOROFLUOROMETHANE, AND

1,1,2-TRICHLOROETHANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE LISTED IN F001, F004, OR F005, AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND

SPENT SOLVENT MIXTURES.

Violation Status: No violations found

FINDS:

Registry ID: 110004460226

Environmental Interest/Information System

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport,

and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA

program staff to track the notification, permit, compliance, and

corrective action activities required under RCRA.

<u>Click this hyperlink</u> while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:

Envid: 1004757518 Registry ID: 110004460226

DFR URL: http://echo.epa.gov/detailed-facility-report?fid=110004460226

NY MANIFEST:

Country: USA

EPA ID: NYD986939601 Facility Status: Not reported

Location Address 1: 2105 CORNAGA AVENUE

Code: BP

Location Address 2: Not reported
Total Tanks: Not reported
Location City: FAR ROCKAWAY

Location State: NY
Location Zip: 11691
Location Zip 4: Not reported

NY MANIFEST:

EPAID: NYD986939601

Mailing Name: NASSAU BEACH CLEANERS
Mailing Contact: NASSAU BEACH CLEANERS
Mailing Address 1: 2105 CORNAGA AVENUE

Mailing Address 2: Not reported
Mailing City: FAR ROCKAWAY

Direction Distance

Elevation Site Database(s) EPA ID Number

NASSAU BEACH CLEANERS (Continued)

1004757518

EDR ID Number

Mailing State:NYMailing Zip:11691Mailing Zip 4:Not reportedMailing Country:USAMailing Phone:7183272000

NY MANIFEST:

Document ID: NYG3230946
Manifest Status: Not reported

seq: 01 Year: 2003 Trans1 State ID: 0440375ME Trans2 State ID: Not reported Generator Ship Date: 08/07/2003 Trans1 Recv Date: 08/07/2003 Trans2 Recv Date: Not reported 08/18/2003 TSD Site Recv Date: Part A Recv Date: Not reported Part B Recv Date: Not reported NYD986939601 Generator EPA ID: Trans1 EPA ID: NJD054126164 Trans2 EPA ID: Not reported TSDF ID 1: OHD066060609 TSDF ID 2: Not reported Manifest Tracking Number: Not reported Import Indicator: Not reported Not reported Export Indicator: Discr Quantity Indicator: Not reported Discr Type Indicator: Not reported

MGMT Method Type Code: Not reported

Waste Code: Not reported

F002 - HALO SOLV + STILL BOTTOMS FM REC OF SOLV

Not reported

Not reported

Not reported

Not reported

Not reported

Not reported

Waste Code:
Wot reported
Quantity:
00165

Units: G - Gallons (liquids only)* (8.3 pounds)

Number of Containers: 003

Discr Residue Indicator:

Manifest Ref Number:

Alt Facility RCRA ID:

Alt Facility Sign Date:

Discr Partial Reject Indicator:

Discr Full Reject Indicator:

Container Type: DM - Metal drums, barrels

Handling Method: B Incineration, heat recovery, burning.

Specific Gravity: 01.30

Click this hyperlink while viewing on your computer to access

-1 additional NY MANIFEST: record(s) in the EDR Site Report.

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

V73 **US POSTAL SERVICE** PA MANIFEST S109247872 SE **1836 MOTT AVENUE** N/A

1/8-1/4 **FAR ROCKAWAY, NY** 0.238 mi.

1255 ft. Site 1 of 2 in cluster V

Relative: Manifest Details: Higher Year:

000533022JJK Manifest Number: Actual: Manifest Type: Not reported 29 ft. Generator EPA Id:

NYD986974426 Generator Date: 06/05/2007 Mailing Address: Not reported Mailing City, St, Zip: Not reported

Contact Name: VINCENT POTENCIANO

2007

Contact Phone: 718-327-7700 TSD EPA Id: PAD067098822 TSD Date: Not reported TSD Facility Name: CYCLE CHEM INC 550 INDUSTRIAL DRIVE TSD Facility Address:

TSD Facility City: **LEWISBERRY**

TSD Facility State: PΑ

Facility Telephone: Not reported

Page Number: 1 Line Number: 4 Waste Number: NONE Container Number:

Container Type: Fiberboard or plastic drums, barrels, kegs

Waste Quantity: 48 Unit: Pounds Handling Code: Not reported TSP EPA Id: Not reported Date TSP Sig: Not reported

2007 Year:

Manifest Number: 000533022JJK Not reported Manifest Type: Generator EPA Id: NYD986974426 Generator Date: 06/05/2007 Mailing Address: Not reported Mailing City, St, Zip: Not reported

VINCENT POTENCIANO Contact Name:

Contact Phone: 718-327-7700 TSD EPA Id: PAD067098822 TSD Date: Not reported TSD Facility Name: CYCLE CHEM INC TSD Facility Address: 550 INDUSTRIAL DRIVE

TSD Facility City: **LEWISBERRY**

TSD Facility State: PΑ

Facility Telephone: Not reported

Page Number: 1 Line Number: 3 Waste Number: D001 Container Number:

Container Type: Metal drums, barrels, kegs

Waste Quantity: Unit: Pounds Handling Code: Not reported TSP EPA Id: Not reported

Direction Distance Elevation

tion Site Database(s) EPA ID Number

US POSTAL SERVICE (Continued)

S109247872

EDR ID Number

Date TSP Sig: Not reported

Year: 2007

Manifest Number: 000533022JJK
Manifest Type: Not reported
Generator EPA Id: NYD986974426
Generator Date: 06/05/2007
Mailing Address: Not reported
Mailing City,St,Zip: Not reported

Contact Name: VINCENT POTENCIANO

Contact Phone: 718-327-7700
TSD EPA Id: PAD067098822
TSD Date: Not reported
TSD Facility Name: CYCLE CHEM INC
TSD Facility Address: 550 INDUSTRIAL DRIVE

TSD Facility City: LEWISBERRY

TSD Facility State: PA

Facility Telephone: Not reported

Page Number: 1
Line Number: 2
Waste Number: D001
Container Number: 1

Container Type: Fiberboard or plastic drums, barrels, kegs

Waste Quantity: 75
Unit: Pounds

Handling Code: Not reported TSP EPA Id: Not reported Date TSP Sig: Not reported

Year: 2007

Manifest Number: 000533022JJK
Manifest Type: Not reported
Generator EPA Id: NYD986974426
Generator Date: 06/05/2007
Mailing Address: Not reported
Mailing City,St,Zip: Not reported

Contact Name: VINCENT POTENCIANO

Contact Phone: 718-327-7700
TSD EPA Id: PAD067098822
TSD Date: Not reported
TSD Facility Name: CYCLE CHEM INC
TSD Facility Address: 550 INDUSTRIAL DRIVE

TSD Facility City: LEWISBERRY

TSD Facility State: PA

Facility Telephone: Not reported

Page Number: 1
Line Number: 1
Waste Number: D001
Container Number: 1

Container Type: Fiberboard or plastic drums, barrels, kegs

Waste Quantity: 3

Unit: Pounds
Handling Code: Not reported
TSP EPA Id: Not reported
Date TSP Sig: Not reported

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

V74 **US POSTAL SERVICE NY UST** 1000554950 SE **1836 MOTT AVE** NY AST NYD986974426

1/8-1/4 FAR ROCKAWAY, NY 11691 RCRA NonGen / NLR

0.238 mi. **FINDS ECHO** 1255 ft. Site 2 of 2 in cluster V **NY MANIFEST**

Relative:

Higher UST:

2-350273 / Unregulated/Closed Id/Status: Actual:

Program Type: **PBS** 29 ft. Region: STATE DEC Region: **Expiration Date:** N/A

UTM X: 605715.47691 UTM Y: 4495440.31529 Site Type: Unknown

Affiliation Records:

Site Id: 17278 Facility Owner Affiliation Type: Company Name: U S POSTAL SERV Contact Type: Not reported Contact Name: Not reported Address1: 1836 MOTT AV Address2: Not reported City: **FAR ROCKAWAY**

NY State: Zip Code: 11691 Country Code: 001

Phone: (718) 327-7700 EMail: Not reported Fax Number: Not reported Modified By: **TRANSLAT** Date Last Modified: 2004-03-04

Site Id: 17278 Affiliation Type: Mail Contact Company Name: U S POSTAL SERV Contact Type: Not reported Contact Name: Not reported Address1: 1836 MOTT AV Address2: Not reported FAR ROCKAWAY

City: State: NY Zip Code: 11691 Country Code: 001

(718) 327-7700 Phone: EMail: Not reported Not reported Fax Number: Modified By: **TRANSLAT** Date Last Modified: 2004-03-04

Site Id: 17278

Affiliation Type: **Facility Operator** Company Name: U S POSTAL SERVICE

Contact Type: Not reported U S POSTAL SERV Contact Name: Address1: Not reported Address2: Not reported City: Not reported

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

US POSTAL SERVICE (Continued)

1000554950

State: NN

Not reported Zip Code:

Country Code: 001

Phone: (718) 327-7700 EMail: Not reported Fax Number: Not reported Modified By: TRANSLAT Date Last Modified: 2004-03-04

Site Id: 17278

Affiliation Type: **Emergency Contact** Company Name: U S POSTAL SERV Contact Type: Not reported Contact Name: **POSTMASTER** Address1: Not reported Address2: Not reported Not reported City:

State: NN

Zip Code: Not reported

Country Code: 001

(718) 327-7700 Phone: Not reported EMail: Fax Number: Not reported **TRANSLAT** Modified By: Date Last Modified: 2004-03-04

Tank Info:

Tank Number: 001 33797 Tank ID:

Tank Status: Closed - Removed Material Name: Closed - Removed

Capacity Gallons: 4000

Install Date: Not reported Date Tank Closed: 12/01/1990 Registered: True Tank Location: Underground

Tank Type: Equivalent technology

Material Code: 0009 Common Name of Substance: Gasoline

Tightness Test Method: NN

Date Test: Not reported Next Test Date: Not reported Pipe Model: Not reported **TRANSLAT** Modified By: Last Modified: 04/14/2017

Equipment Records:

D00 - Pipe Type - No Piping

G00 - Tank Secondary Containment - None J02 - Dispenser - Suction Dispenser B00 - Tank External Protection - None C00 - Pipe Location - No Piping F00 - Pipe External Protection - None H00 - Tank Leak Detection - None

100 - Overfill - None

Direction Distance

Elevation Site Database(s) EPA ID Number

US POSTAL SERVICE (Continued)

1000554950

EDR ID Number

A00 - Tank Internal Protection - None

AST:

Region: STATE
DEC Region: 2
Site Status: Active
Facility Id: 2-602468
Program Type: PBS

UTM X: 605715.47691 UTM Y: 4495440.31529 Expiration Date: 10/03/2020 Site Type: Other

Affiliation Records:

Site Id: 24425 Affiliation Type: Facility Owner

Company Name: U.S. POSTAL SERVICE

Contact Type: ENVIRONMENTAL SPECIALIST

Contact Name: ANN MARIE BYRNES
Address1: 18-36 MOTT AVENUE

Address2: Not reported City: FAR ROCKAWAY

State: NY
Zip Code: 11691
Country Code: 001

Phone: (718) 327-1038
EMail: Not reported
Fax Number: Not reported
Modified By: MFLEONAR
Date Last Modified: 2017-08-17

Site Id: 24425 Affiliation Type: Mail Contact

Company Name: U.S. POSTAL SERVICE

Contact Type: Not reported

Contact Name: ANN MARIE BYRNES
Address1: 830 STEWART AVENUE

Address2: Not reported City: GARDEN CITY

State: NY
Zip Code: 11599
Country Code: 001

Phone: (347) 326-0210

EMail: ANNMARIE.BYRNES@USPS.GOV

Fax Number: Not reported Modified By: MFLEONAR Date Last Modified: 2017-08-17

Site Id: 24425

Affiliation Type: Facility Operator

Company Name: FAR ROCKAWAY POST OFFICE

Contact Type: Not reported Contact Name: N/A

Address1: Not reported Address2: Not reported City: Not reported

State: NN

Direction Distance

Elevation Site Database(s) EPA ID Number

US POSTAL SERVICE (Continued)

1000554950

EDR ID Number

Zip Code: Not reported

Country Code: 001

Phone: (718) 327-7700
EMail: Not reported
Fax Number: Not reported
Modified By: MFLEONAR
Date Last Modified: 2017-08-17

Site Id: 24425

Affiliation Type: Emergency Contact
Company Name: U.S. POSTAL SERVICE

Contact Type: Not reported
Contact Name: POSTAL POLICE
Address1: Not reported
Address2: Not reported
City: Not reported
State: NN

Zip Code: Not reported

Country Code: 999

Phone: (212) 330-3900
EMail: Not reported
Fax Number: Not reported
Modified By: MFLEONAR
Date Last Modified: 2017-08-17

Tank Info:

Tank Number: 1
Tank Id: 50206
Material Code: 0001

Common Name of Substance: #2 Fuel Oil (On-Site Consumption)

Equipment Records:

H01 - Tank Leak Detection - Interstitial - Electronic Monitoring

K00 - Spill Prevention - None A00 - Tank Internal Protection - None

B01 - Tank External Protection - Painted/Asphalt Coating

D01 - Pipe Type - Steel/Carbon Steel/Iron

102 - Overfill - High Level Alarm

E00 - Piping Secondary Containment - None

G12 - Tank Secondary Containment - Double-Walled (AG only)

F04 - Pipe External Protection - Fiberglass C01 - Pipe Location - Aboveground

J04 - Dispenser - On Site Heating System (Suction)

L00 - Piping Leak Detection - None

Tank Location:

Tank Type: Steel/Carbon Steel/Iron

Tank Status: In Service
Pipe Model: Not reported
Install Date: 01/01/1973
Capacity Gallons: 3000
Tightness Test Method: -

Date Test: Not reported
Next Test Date: Not reported
Date Tank Closed: Not reported
Register: True

Direction Distance Elevation

vation Site Database(s) EPA ID Number

US POSTAL SERVICE (Continued)

1000554950

EDR ID Number

Modified By: MFLEONAR Last Modified: 08/17/2017

Material Name: #2 fuel oil (on-site consumption)

RCRA NonGen / NLR:

Date form received by agency: 01/01/2007

Facility name: US POSTAL SERVICE Facility address: US POSTAL SERVICE 1836 MOTT AVE

FAR ROCKAWAY, NY 11691

EPA ID: NYD986974426

Mailing address: MOTT AVE

FAR ROCKAWAY, NY 11691

Contact: VINCENT POTENCIANO

Contact address: MOTT AVE

FAR ROCKAWAY, NY 11691

Contact country: US

Contact telephone: 718-327-7700 Contact email: Not reported

EPA Region: 02
Land type: Federal
Classification: Non-Generator

Description: Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:

Owner/operator name: US POSTAL SERVICE Owner/operator address: 1836 MOTT AVE

FAR ROCKAWAY, NY 11691

Owner/operator country: US

Owner/operator telephone: 718-327-7700 Owner/operator email: Not reported Owner/operator fax: Not reported Owner/operator extension: Not reported Legal status: Federal Owner/Operator Type: Owner Owner/Op start date: Not reported Owner/Op end date: Not reported

Owner/operator name: US POSTAL SERVICE Owner/operator address: 1836 MOTT AVE

FAR ROCKAWAY, NY 11691

Owner/operator country: US

Owner/operator telephone: 718-327-7700 Owner/operator email: Not reported Not reported Owner/operator fax: Not reported Owner/operator extension: Legal status: Federal Owner/Operator Type: Operator Owner/Op start date: Not reported Owner/Op end date: Not reported

Handler Activities Summary:

U.S. importer of hazardous waste: No Mixed waste (haz. and radioactive): No Recycler of hazardous waste: No Transporter of hazardous waste: No Treater, storer or disposer of HW: No

Direction Distance

Elevation Site Database(s) EPA ID Number

US POSTAL SERVICE (Continued)

1000554950

EDR ID Number

Underground injection activity: No On-site burner exemption: No Furnace exemption: No Used oil fuel burner: No Used oil processor: No User oil refiner: No Used oil fuel marketer to burner: No Used oil Specification marketer: Nο Used oil transfer facility: No Used oil transporter: No

Historical Generators:

Date form received by agency: 01/01/2006

Site name: US POSTAL SERVICE Classification: Not a generator, verified

Date form received by agency: 07/30/2003

Site name: US POSTAL SERVICE Classification: Not a generator, verified

. Waste code: D001

. Waste name: IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF

LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT

WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.

. Waste code: D009
. Waste name: MERCURY

Waste code: D018
Waste name: BENZENE

Date form received by agency: 10/13/1998

Site name: US POSTAL SERVICE

Classification: Conditionally Exempt Small Quantity Generator

. Waste code: D000 . Waste name: Not Defined

. Waste code: D001

Waste name: IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF

LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT

WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.

. Waste code: D009
. Waste name: MERCURY

. Waste code: D018
. Waste name: BENZENE

Direction Distance

Elevation Site Database(s) EPA ID Number

US POSTAL SERVICE (Continued)

1000554950

EDR ID Number

Violation Status: No violations found

Evaluation Action Summary:

Evaluation date: 02/02/1993

Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE

Area of violation: Not reported Date achieved compliance: Not reported

Evaluation lead agency: EPA Contractor/Grantee

FINDS:

Registry ID: 110004477851

Environmental Interest/Information System

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and

corrective action activities required under RCRA.

<u>Click this hyperlink</u> while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:

Envid: 1000554950 Registry ID: 110004477851

DFR URL: http://echo.epa.gov/detailed-facility-report?fid=110004477851

NY MANIFEST:

Country: USA

EPA ID: NYD986974426
Facility Status: Not reported
Location Address 1: 1836 MOTT AVE

Code: BP

Location Address 2: Not reported
Total Tanks: Not reported
Location City: FAR ROCKAWAY

Location State: NY
Location Zip: 11351
Location Zip 4: Not reported

NY MANIFEST:

EPAID: NYD986974426

Mailing Name: UNITED STATES POSTAL SERVICE

Mailing Contact: VICTOR M. ARROYO JR.
Mailing Address 1: QUEENS GEN MAIL FAC

Mailing Address 2: Not reported

Mailing City: FLUSHING 142-02 20TH AV

Mailing State: NY
Mailing Zip: 11351
Mailing Zip 4: Not reported
Mailing Country: USA

Mailing Phone: 7187291438

Direction Distance Elevation

EDR ID Number Site Database(s) **EPA ID Number**

US POSTAL SERVICE (Continued)

1000554950

NY MANIFEST:

Document ID: Not reported Manifest Status: Not reported seq: Not reported Year: 2018

Trans1 State ID: NYD986980753 MAC300098397 Trans2 State ID: Generator Ship Date: 05/20/2018 Trans1 Recv Date: 05/20/2018 Trans2 Recv Date: 05/21/2018 TSD Site Recv Date: 06/04/2018 Part A Recv Date: Not reported Part B Recv Date: Not reported Generator EPA ID: NYD986974426 Trans1 EPA ID: Not reported Trans2 EPA ID: Not reported TSDF ID 1: VTR000517052 TSDF ID 2: Not reported Manifest Tracking Number: 003466367GBF

Import Indicator: Ν Export Indicator: Ν Discr Quantity Indicator: Ν Discr Type Indicator: Ν Discr Residue Indicator: Ν Discr Partial Reject Indicator: Ν Discr Full Reject Indicator: Ν

Manifest Ref Number:

Not reported Alt Facility RCRA ID: Not reported Alt Facility Sign Date: Not reported MGMT Method Type Code: H141 Waste Code: Not reported Waste Code: Not reported Waste Code: Not reported Waste Code: Not reported

Not reported Waste Code: Waste Code: Not reported Quantity: 125 Units: P - Pounds

Number of Containers:

Container Type: DM - Metal drums, barrels

Handling Method: L Landfill. Specific Gravity: Waste Code: D008 Waste Code 1_2: Not reported Waste Code 1_3: Not reported Waste Code 1 4: Not reported Waste Code 1_5: Not reported Waste Code 1_6: Not reported

> Click this hyperlink while viewing on your computer to access additional NY MANIFEST: detail in the EDR Site Report.

Direction Distance

Distance Elevation Site EDR ID Number

EDR ID Number

EPA ID Number

75 23-08 MOTT AVE NY UST U000403164 WNW 23-08 MOTT AVENUE N/A

1/8-1/4 FAR ROCKAWAY, NY 11691

0.243 mi. 1284 ft.

Relative: UST:

Lower Id/Status: 2-212709 / Unregulated/Closed

 Actual:
 Program Type:
 PBS

 13 ft.
 Region:
 STATE

 DEC Region:
 2

 Expiration Date:
 N/A

UTM X: 604955.31499 UTM Y: 4495781.41088

Site Type: Apartment Building/Office Building

Affiliation Records:

Site Id: 7815 Affiliation Type: Facility Owner

Company Name: DIVERSIFIED EQUITIES LLC

Contact Type: Not reported Contact Name: Not reported Address1: POB 1200 Address2: Not reported **JERICHO** City: State: NYZip Code: 11753 Country Code: 001

Phone: (516) 822-5900
EMail: Not reported
Fax Number: Not reported
Modified By: NRLOMBAR
Date Last Modified: 2012-02-22

Site Id: 7815

Affiliation Type: Mail Contact

Company Name: DIVERSIFIED EQUITIES LLC

Contact Type: Not reported Contact Name: KEVIN CULLEN Address1: **POB 1200** Address2: Not reported **JERICHO** City: State: NY Zip Code: 11753 Country Code: 001

Phone: (516) 822-5900
EMail: Not reported
Fax Number: Not reported
Modified By: NRLOMBAR
Date Last Modified: 2012-02-22

Site Id: 7815

Affiliation Type: Facility Operator
Company Name: 23-08 MOTT AVE
Contact Type: Not reported
Contact Name: VICTOR NAVARRO

Address1: Not reported Address2: Not reported City: Not reported

State: NN

Direction Distance

Elevation Site Database(s) EPA ID Number

23-08 MOTT AVE (Continued)

U000403164

EDR ID Number

Zip Code: Not reported

Country Code: 001

Phone: (718) 471-4016
EMail: Not reported
Fax Number: Not reported
Modified By: NRLOMBAR
Date Last Modified: 2012-02-22

Site Id: 7815

Affiliation Type: Emergency Contact

Company Name: DIVERSIFIED EQUITIES LLC

Contact Type: Not reported
Contact Name: KEVIN CULLEN
Address1: Not reported
Address2: Not reported
City: Not reported
State: NN

Zip Code: Not reported

Country Code: 999

Phone: (516) 822-5900
EMail: Not reported
Fax Number: Not reported
Modified By: BVCAMPBE
Date Last Modified: 2012-03-29

Tank Info:

Tank Number: 001 Tank ID: 18785

Tank Status: Closed - In Place Material Name: Closed - In Place

 Capacity Gallons:
 7500

 Install Date:
 10/01/1971

 Date Tank Closed:
 11/30/2011

 Registered:
 True

Tank Location: Underground
Tank Type: Steel/carbon steel

Material Code: 0003

Common Name of Substance: #6 Fuel Oil (On-Site Consumption)

Tightness Test Method: NN

Date Test:
Not reported
Next Test Date:
Pipe Model:
Modified By:
NRLOMBAR
Last Modified:
Not reported
NRLOMBAR
04/14/2017

Equipment Records:

E00 - Piping Secondary Containment - None

H00 - Tank Leak Detection - None

C03 - Pipe Location - Aboveground/Underground Combination

G00 - Tank Secondary Containment - None J02 - Dispenser - Suction Dispenser F00 - Pipe External Protection - None L00 - Piping Leak Detection - None I05 - Overfill - Vent Whistle

A00 - Tank Internal Protection - None

Direction Distance

Elevation Site Database(s) EPA ID Number

23-08 MOTT AVE (Continued) U000403164

B01 - Tank External Protection - Painted/Asphalt Coating

D01 - Pipe Type - Steel/Carbon Steel/Iron

K00 - Spill Prevention - None

76 SORRENTINO REC CENTER NY LTANKS S121102040 SE 18-48 CORNAGA AVENUE N/A

1/4-1/2 FAR ROCKAWAY, NY 11691 0.273 mi. 1443 ft.

Relative: LTANKS: Higher Facility ID:

 Actual:
 Site ID:
 551772

 26 ft.
 Closed Date:
 Not reported

 Spill Number:
 1702628

 Spill Date:
 2017-06-16

Spill Date: 2017-06-16
Spill Cause: Tank Test Failure

Spill Source: Institutional, Educational, Gov., Other

1702628

Spill Class: Not reported Cleanup Ceased: Not reported SWIS: 4101 Investigator: **RMPIPER** Referred To: Not reported Reported to Dept: 2017-06-16 CID: Not reported Water Affected: Not reported Spill Notifier: Other Last Inspection: Not reported Recommended Penalty: False Meets Standard: False **UST Involvement:** False Remediation Phase:

Date Entered In Computer: 2017-06-16
Spill Record Last Update: 2017-06-16
Spiller Name: Not reported
Spiller Company: NYC PARKS
Spiller Address: Not reported

Spiller County: 999
Spiller Contact: JUSTIN BAUER
Spiller Phone: 2123) 603-433
Spiller Extention: Not reported

DEC Region: 2
DER Facility ID: 505389

DEC Memo: "6/16/17 TJD Teleconference with Justin Bauer at NYC Parks.

Contractor did not provide the physical address of spill site, only an intersection - requested actual address and tank size. Mr. Bauer was unable to access this information immediately and was provided contact information (email and phone) to provide info. received email from Mr. Bauer as follows: The tank at Sorrentino Recreation Center is at 18-48 Cornaga Avenue, Far Rockaway NY 11691. The tank is unregistered. Unfortunately the Parks database in incomplete on this tank so I do not know it s size. Speaking with AARCO they said it appears to be an 1,080 gallon steel tank. Sergey Kadinsky, CCed on this email, will visit the site Monday and will let you know what

information he finds. The gentleman from AARCO who performed the test on the tank said he spoke with staff at the center and was told the vent pipe was damaged when a crew repaired the sidewalk. I have asked AARCO to drain the tank, this will most likely happen on Monday. Once

EDR ID Number

Direction Distance

Elevation Site Database(s) EPA ID Number

SORRENTINO REC CENTER (Continued)

S121102040

EDR ID Number

drained we will isolate and retest the tank and piping. discussed project with FDO (Piper) no TTF letter sent as identified issue is to be addressed by NYC parks and their contractor. Address modified to reflect actual address. "

"it is a tank test failure."

Remarks:
All Materials:

Site ID: 551772 Operable Unit ID: 1299857 Operable Unit: 01 Material ID: 2306103 Material Code: 0001A Material Name: #2 fuel oil Not reported Case No.: Material FA: Petroleum Quantity: Not reported Units: Not reported Recovered: Not reported Oxygenate: Not reported

 W77
 12-13 NEILSON ST
 NY LTANKS
 U003074305

 ENE
 12-13 NEILSON ST
 NY AST
 N/A

1/4-1/2 FAR ROCKAWAY, NY

0.280 mi.

20 ft.

1476 ft. Site 1 of 2 in cluster W

 Relative:
 LTANKS:

 Lower
 Facility ID:
 9303442

 Actual:
 Site ID:
 69128

Closed Date: 1993-06-16
Spill Number: 9303442
Spill Date: 1993-06-15
Spill Cause: Tank Failure
Spill Source: Private Dwelling

Spill Class: 1993-06-16 Cleanup Ceased: SWIS: 4101 Investigator: **CAMMISA** Referred To: Not reported Reported to Dept: 1993-06-15 CID: Not reported Water Affected: Not reported Spill Notifier: Responsible Party Last Inspection: Not reported

Recommended Penalty: False
Meets Standard: True
UST Involvement: False
Remediation Phase: 0
Date Entered In Computer: 1993-

Date Entered In Computer: 1993-06-16
Spill Record Last Update: 2003-10-02
Spiller Name: Not reported
Spiller Company: RELATED MGT CO.

Spiller Address: Not reported

Spiller County: 001

Spiller Contact: Not reported
Spiller Phone: Not reported
Spiller Extention: Not reported

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

12-13 NEILSON ST (Continued)

U003074305

DEC Region: 2 DER Facility ID: 65762

DEC Memo: "Prior to Sept, 2004 data translation this spill Lead_DEC Field was

S. CAMMISA '

"SPILL IN BASEMENT - IS CONTAINED - WOULD LIKE CALL BACK. WILL HAVE Remarks:

TANK COMPANY REPAIR SMALL LEAK."

All Materials:

Site ID: 69128 Operable Unit ID: 981773 Operable Unit: 01 Material ID: 397017 Material Code: 0001A Material Name: #2 fuel oil Case No.: Not reported Material FA: Petroleum Quantity: .00 Units: L Recovered: .00

Oxygenate: Not reported

AST:

Region: STATE DEC Region: Site Status: Active Facility Id: 2-061174 Program Type: **PBS**

UTM X: 605829.52246 4495847.18866 UTM Y: Expiration Date: 01/14/2022

Site Type: Apartment Building/Office Building

Affiliation Records:

Site Id: 1063

Affiliation Type: Facility Owner

Company Name: GREENPORT ASSOCIATES C/O RELATED MANAGEMENT

Contact Type: SUPERINTENDENT

Contact Name: **RELATED MANAGEMENT CO** Address1: 203 EAST 86TH STREET

Address2: Not reported City: **NEW YORK** State: NY Zip Code: 10028 Country Code: 001

Phone: (212) 421-5333 Not reported EMail: Fax Number: Not reported Modified By: **KXTANG** Date Last Modified: 2007-02-16

Site Id: 1063 Affiliation Type: Mail Contact

Company Name: **RELATED MANAGEMENT**

Contact Type: Not reported Contact Name: DANIEL CAMEO Address1: 1450 GATEWAY BLVD

Address2: Not reported

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

12-13 NEILSON ST (Continued)

U003074305

City: **FAR ROCKAWAY**

State: NY Zip Code: 11691 Country Code: 001

Phone: (718) 327-6047

EMail: DCAMEO@RELATED.COM

Fax Number: Not reported Modified By: **DMPOKRZY** Date Last Modified: 2017-04-04

Site Id: 1063

Affiliation Type: Facility Operator Company Name: THE GATEWAYS Contact Type: Not reported

RELATED MANAGEMENT CORPORATION Contact Name:

Address1: Not reported Address2: Not reported City: Not reported State: NN

Zip Code: Not reported Country Code: 001

Phone: (718) 327-6047 EMail: Not reported Fax Number: Not reported DMPOKRZY Modified By: Date Last Modified: 2017-04-04

Site Id: 1063

Affiliation Type: **Emergency Contact**

GREENPORT ASSOCIATES C/O RELATED MANAGEMENT Company Name:

Contact Type: Not reported Contact Name: **CAZIM MEHANVIC** Address1: Not reported Address2: Not reported Not reported City: State: NN Zip Code: Not reported

Country Code: 999

(718) 327-6047 Phone: Not reported EMail: Not reported Fax Number: Modified By: **DMPOKRZY** Date Last Modified: 2017-04-04

Tank Info:

Tank Number: 002 2103 Tank Id: Material Code: 0001

#2 Fuel Oil (On-Site Consumption) Common Name of Substance:

Equipment Records:

J02 - Dispenser - Suction Dispenser B00 - Tank External Protection - None C00 - Pipe Location - No Piping F00 - Pipe External Protection - None

Direction Distance

Elevation Site Database(s) EPA ID Number

12-13 NEILSON ST (Continued)

U003074305

S100560375

N/A

NY LTANKS

EDR ID Number

G03 - Tank Secondary Containment - Vault (w/o access)

H00 - Tank Leak Detection - None

L09 - Piping Leak Detection - Exempt Suction Piping

A00 - Tank Internal Protection - None D01 - Pipe Type - Steel/Carbon Steel/Iron I04 - Overfill - Product Level Gauge (A/G)

Tank Location:

Tank Type: Steel/Carbon Steel/Iron

Tank Status: In Service
Pipe Model: Not reported
Install Date: 12/01/1987
Capacity Gallons: 5000
Tightness Test Method: NN

Date Test:

Not reported

Next Test Date:

Not reported

Date Tank Closed:

Register:

Modified By:

DMPOKRZY

Last Modified:

Not reported

True

DMPOKRZY

04/14/2017

Material Name: #2 fuel oil (on-site consumption)

W78 12-13 NELSON ST ENE 12-13 NELSON ST

1/4-1/2 QUEENS, NY

0.282 mi.

1490 ft. Site 2 of 2 in cluster W

Relative: LTANKS: Lower Facility

 Lower
 Facility ID:
 9303657

 Actual:
 Site ID:
 249108

 20 ft.
 Closed Date:
 1993-06-21

 Spill Number:
 9303657

 Spill Date:
 1993-06-15

Spill Date: 1993-06-15
Spill Cause: Tank Failure
Spill Source: Private Dwelling
Spill Class: D4

Cleanup Ceased: 1993-06-21 SWIS: 4101 Investigator: **CAMMISA** Referred To: Not reported Reported to Dept: 1993-06-21 CID: Not reported Water Affected: Not reported Spill Notifier: Local Agency Not reported Last Inspection: Recommended Penalty: False Meets Standard: True **UST Involvement:** False

Remediation Phase:

Date Entered In Computer:

Spill Record Last Update:

Spiller Name:

Spiller Company:

Spiller Address:

UNK

Not reported

Not reported

Spiller County: 999

Spiller Contact: Not reported
Spiller Phone: Not reported
Spiller Extention: Not reported

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

12-13 NELSON ST (Continued)

S100560375

S102672840

N/A

NY LTANKS

DEC Region: 2 DER Facility ID: 204267 DEC Memo:

Remarks: "TANK LEAKING IN BASEMENT NYC DEP HAZMAT WAS NOTIFIED (718)595-4670."

All Materials:

249108 Site ID: Operable Unit ID: 985424 Operable Unit: 01 Material ID: 397212 Material Code: 0066A

Material Name: unknown petroleum Case No.: Not reported Material FA: Petroleum Quantity: .00 Units: Not reported

Recovered: .00

Oxygenate: Not reported

11-41 MCBRIDE ST 79 NNW 11041 MCBRIDE ST 1/4-1/2 **FAR ROCKAWAY, NY**

0.284 mi. 1502 ft.

Lower

Relative: LTANKS:

9415199 Facility ID: Site ID: 126185 Actual: Closed Date: 2004-01-26 8 ft. Spill Number: 9415199

Spill Date: 1995-02-20 Spill Cause: Tank Overfill Spill Source: Private Dwelling

Spill Class: C4

Cleanup Ceased: Not reported SWIS: 4101 Investigator: **RWAUSTIN** Referred To: Not reported Reported to Dept: 1995-02-20 CID: Not reported Water Affected: Not reported Spill Notifier: Responsible Party

Last Inspection: Not reported Recommended Penalty: False Meets Standard: False **UST Involvement:** False Remediation Phase: 0 Date Entered In Computer: 1995-03-27 Spill Record Last Update: 2004-01-26

MYSTIC TRANSPORTATION Spiller Company:

Not reported

Spiller Address: 19001 STEINWAY ST

Spiller County: 001

Spiller Name:

Spiller Contact: Not reported Spiller Phone: Not reported Spiller Extention: Not reported

DEC Region: 2

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

11-41 MCBRIDE ST (Continued)

S102672840

S102662657

N/A

NY Spills

DER Facility ID: 109133

"Prior to Sept, 2004 data translation this spill Lead_DEC Field was DEC Memo:

AUSTIN 1/26/04 - AUSTIN - SURF. SPILL - CLOSED - ORIG. ASSIGNED TO

ENGELHARDT - END"

"SPILLEED THROUGH VENT LINE - SPILL CREW ON WAY" Remarks:

All Materials:

126185 Site ID: Operable Unit ID: 1012544 Operable Unit: 01 370382 Material ID: Material Code: 0002A Material Name: #4 fuel oil Not reported Case No.: Material FA: Petroleum Quantity: 10.00 Units: G Recovered: .00

Oxygenate: Not reported

X80 **MYCO GAS STATION NY LTANKS**

SE **18-11 MOTT AVENUE** 1/4-1/2 **FAR ROCKAWAY, NY**

0.288 mi.

1521 ft. Site 1 of 3 in cluster X

LTANKS:

Relative: Higher Actual: 26 ft.

Facility ID: 9608090 Site ID: 224387 Closed Date: 1996-10-02 Spill Number: 9608090 Spill Date: 1996-09-28 Spill Cause: Tank Overfill

Spill Source: Gasoline Station or other PBS Facility

Spill Class: C4 Cleanup Ceased: Not reported SWIS: 4101 **ADZHITOM** Investigator: Referred To: Not reported Reported to Dept: 1996-09-28 CID: 365

Water Affected: Not reported Spill Notifier: Other Last Inspection: Not reported Recommended Penalty: False Meets Standard: False **UST Involvement:** False Remediation Phase:

Date Entered In Computer: 1996-09-28 Spill Record Last Update: 1996-10-17 Spiller Name: HARIK VERAMA Spiller Company: MYCO GAS STATION Spiller Address: 18-11 MOTT AV

Spiller County: 001

Spiller Contact: HARIK VERAMA Spiller Phone: Not reported Spiller Extention: Not reported

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

MYCO GAS STATION (Continued)

S102662657

DEC Region: 2 DER Facility ID: 219899

DEC Memo: "Prior to Sept, 2004 data translation this spill Lead_DEC Field was

ZHITOMIRSKY '

Remarks: "overfilled tank onto the pavement - fire dept stated 50 gallons,

caller states it looks more like 10 or 15 - all cleaned up"

All Materials:

224387 Site ID: Operable Unit ID: 1036351 Operable Unit: 01 343834 Material ID: Material Code: 0009 Material Name: gasoline Case No.: Not reported Material FA: Petroleum Quantity: 50.00 Units: G Recovered: 50.00 Oxygenate: Not reported

SPILLS:

Facility ID:

Facility Type: ER Spill Number: 9707778 DER Facility ID: 219899 Site ID: 270014 DEC Region: Closed Date: 2008-11-21 Spill Cause: Unknown Spill Class: C2 SWIS: 4101 Spill Date: 1997-03-28 Investigator: hrpatel Referred To: Not reported Reported to Dept: 1997-10-01 CID: 266 Water Affected:

Gasoline Station or other PBS Facility Spill Source:

Not reported

9707778

Spill Notifier: DEC Cleanup Ceased: Not reported Cleanup Meets Std: False Last Inspection: Not reported Recommended Penalty: False **UST Trust:** False Remediation Phase:

1997-10-01 Date Entered In Computer: Spill Record Last Update: 2008-11-21 Spiller Name: MR SAQIB

Spiller Company: HI AUTO SERVICE Spiller Address: 18-11 MOTT AVENUE

Spiller Company: 001

Contact Name: RICHARD PARK

DEC Memo: "Prior to Sept, 2004 data translation this spill Lead DEC Field was

ROMMEL OWNER OF GAS STATION ASKED TO PERFORM ASSESSMENT OF CLOSED

TANKS. YELLOWSTONE WILL DO ASSMT. WILL SUBMIT SITE PLAN SHOWING

Map ID MAP FINDINGS
Direction

Elevation Site

Distance

Site Dat

Database(s) EPA

EDR ID Number EPA ID Number

MYCO GAS STATION (Continued)

S102662657

PROPOSED WELL/BORING LOCATIONS PRIOR TO WORK. 4/12/04-Vought-Spill transferred from Tibbe to Rommel as per Rommel. 11/14/08 - Austin -Transferred from C.O. back to Region - reassigned to Patel for followup - end 11/17/08-Hiralkumar Patel. PBS #: 2-201286. PBS shows site as waste oil storer and had 275 gal waste oil tank in 2004 and at that time two 2000 gal gasoline tanks and six 550 gal other tanks were closed in place. visited site. site currently has retails stores. alternate addresses: 18-03 to 18-17 Mott Avenue, 18-06 to 18-18 Cornaga Ave spoke to one of the tenants and as per him, there was an abandoned gas station and an active repair shop at the corner of Mott ave and Cornaga Ave about six years ago when he started his business. then owner demolished gas station and repair shop structure and built new retail stores. gas station/repair shop was located at the corner of Mott Ave and Cornaga AVe: running from 18-03 to 18-07 along Mott ave and from 18-06 to 18-18 along Cornaga Ave. fill box and vent pipe was observed in front of 18-15 and 18-17 Mott Ave 101st Precinct is located across the subject site on Mott ave. inspected sidewalk along precinct and found two monitoring wells in front of garage entrance. Lt. Marrow or Sgt. Hartman 101st Precinct Ph. (718) 868-3400 spoke with Mr. Alkaifi, president of Tarik Holdings, building owner. as per him, site was redeveloped in 2005 and they have reports available. asked him to submit reports. Abdo Alkaifi **site owner** President Tarik Holding Corp. 1077 Bay 24th Street Far Rockaway, NY 11691-1801 contact: Khalil Alkaifi **owner's son** Ph. (516) 668-7172 email: kalkaifi@aol.com, kalkaifi@yahoo.com sent email to Khalil Alkaifi requiring submission of all avilable reports regarding cleanup. 11/21/08-Hiralkumar Patel. received fax from Mr. Alkaifi with tank closure report, abstract: - removed six 550 gal gasoline USTs, two 2000 gal gasoline USTs and one 275 gal waste oil UST - all tanks were single wall steel tanks - tanks found to be in good condition after removal, no holes or pitting were observed - noo PID readings were observed during excavation or in any endpoint sample locations - all ancillary piping was removed and disposed of total of 12 endpoint samples were taken - groundwater sample was collected from existing monitoring well on site - no contamination found in any endpoint samples or groundwater sample discussed with DEC Austin. based on findings during tank removal, Austin asked to close the case. case closed.'

Remarks:

"DURING SITE ASSESSMENT OF POLICE PRECINCT ACROSS STREET, WELLS PUT IN AT POLICE STATION AND IN SIDEWALK BY GAS STATION FOUND CONTAMINATED GROUNDWATER. DATA SUGGESTS GAS STATION MAY BE SOURCE. GAS STATION HAS SIX OUT-OF-SERVICE TANKS. NO INFORMATION ON WHEN, HOW OR WHY TANKS WERE CLOSED."

All Materials:

Recovered:

 Site ID:
 270014

 Operable Unit ID:
 1054275

 Operable Unit:
 01

 Material ID:
 329773

 Material Code:
 0066A

Material Name: unknown petroleum
Case No.: Not reported
Material FA: Petroleum
Quantity: .00
Units: G

.00

Oxygenate: Not reported

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

X81 **101ST POLICE PRECINT NY LTANKS** S101341268 SE **16-12 MOTT AVENUE**

N/A

1/4-1/2 QUEENS, NY

0.296 mi.

1561 ft. Site 2 of 3 in cluster X

Relative: LTANKS: Higher

Actual: 26 ft.

Facility ID: 9412991 Site ID: 164731 Closed Date: 1997-10-02 Spill Number: 9412991 Spill Date: 1994-12-22 Spill Cause: Tank Test Failure

Spill Source: Non Major Facility > 1,100 gal

Not reported

Spill Class: C3

Referred To:

Cleanup Ceased: Not reported SWIS: 4101 **GUTIERREZ** Investigator:

Reported to Dept: 1994-12-29 CID: Not reported Water Affected: Not reported Spill Notifier: Responsible Party Last Inspection: Not reported Recommended Penalty: False

Meets Standard: False **UST Involvement:** True Remediation Phase: 0

Date Entered In Computer: 1995-01-05 Spill Record Last Update: 2008-11-14 Spiller Name: Not reported Spiller Company: NYPD

Spiller Address: 16-12 MOTT AVENUE

Spiller County: 001

Spiller Contact: Not reported Spiller Phone: Not reported Spiller Extention: Not reported

DEC Region: DER Facility ID: 138877 DEC Memo:

"1 - 550 GALLON TANK VAC TESTED BELOW MIN. ALLOWED" Remarks:

All TTF:

Facility ID: 9412991 Spill Number: 9412991 Spill Tank Test: 1543489 Site ID: 164731 Tank Number: Not reported

Tank Size: Material: 0009 **EPA UST:** Not reported Not reported UST: Not reported Cause: Source: Not reported Test Method: 00 Test Method 2: Unknown

Leak Rate: .00 Gross Fail: Not reported Modified By: Spills Last Modified Date: Not reported

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

101ST POLICE PRECINT (Continued)

S101341268

All Materials:

Site ID: 164731 Operable Unit ID: 1006621 Operable Unit: 01 Material ID: 375274 Material Code: 0009 Material Name: gasoline Not reported Case No.: Material FA: Petroleum Quantity: .00 Units: L

Recovered: .00 Not reported Oxygenate:

9413260

X82 **1612 MOTT AVE NY LTANKS** S102146402 SE **1612 MOTT AVE NY Spills** N/A

1/4-1/2 **FAR ROCKAWAY, NY**

0.297 mi.

1569 ft. Site 3 of 3 in cluster X

Relative: LTANKS: Higher Facility ID:

Site ID: 316046 Actual: Closed Date: 1995-06-14 26 ft. Spill Number: 9413260 Spill Date: 1995-01-05 Spill Cause: Tank Overfill Spill Source: Commercial Vehicle

Spill Class: Not reported Cleanup Ceased: 1995-06-14 SWIS: 4101 Investigator: **GUTIERREZ** Referred To: Not reported Reported to Dept: 1995-01-05 CID: Not reported Water Affected: Not reported Spill Notifier: Responsible Party

Last Inspection: Not reported Recommended Penalty: False Meets Standard: True **UST Involvement:** False Remediation Phase: 0 Date Entered In Computer:

1995-03-17 Spill Record Last Update: 1996-01-16 Spiller Name: Not reported

MYSTIC BULK CARRIERS Spiller Company: Spiller Address: 1901 STEINWAY BLVD

Spiller County: 001

Spiller Contact: Not reported Spiller Phone: Not reported Spiller Extention: Not reported

DEC Region: 2 DER Facility ID: 254792 DEC Memo:

"550 GAL TANK - PD SAID WAS EMPTY- FD PUT SAND ON IT- MYSTIC ON WAY Remarks:

TO CLEAN UP"

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

1612 MOTT AVE (Continued)

S102146402

All Materials:

Site ID: 316046 Operable Unit ID: 1006909 Operable Unit: 01 Material ID: 372007 Material Code: 0009 Material Name: gasoline Case No.: Not reported Material FA: Petroleum Quantity: 3.00 Units: G Recovered: .00

Not reported Oxygenate:

SPILLS:

Facility ID: 9301017 Facility Type: ER Spill Number: 9301017 229159 DER Facility ID: Site ID: 282275 DEC Region: Closed Date: 1993-04-21 Spill Cause:

Equipment Failure Spill Class: C2 SWIS: 4101 Spill Date: 1993-04-21 Investigator: **CAMMISA** Referred To: Not reported Reported to Dept: 1993-04-21 CID: Not reported

Spill Source: Institutional, Educational, Gov., Other

Not reported

Spill Notifier: Other Cleanup Ceased: 1993-04-21 Cleanup Meets Std: True Last Inspection: Not reported Recommended Penalty: False **UST Trust:** False Remediation Phase: 0 Date Entered In Computer: 1993-04-21

Spill Record Last Update: 1993-07-20 Spiller Name: Not reported Spiller Company: SAME Not reported Spiller Address: Spiller Company: 999 Contact Name: Not reported

DEC Memo:

"1300 GAL READ IN TANK FROM -PUT 800 IN & SPILLED OUT FILLED IN ALLEY Remarks:

WAY-COASTAL TO SEND CLEANUP SERVICE.FAULTY TANK OR GAGE"

All Materials:

Water Affected:

Site ID: 282275 Operable Unit ID: 982755 Operable Unit: 01 Material ID: 401751 Material Code: 0001A

Direction Distance

Elevation Site Database(s) EPA ID Number

1612 MOTT AVE (Continued) S102146402

Material Name: #2 fuel oil
Case No.: Not reported
Material FA: Petroleum
Quantity: 3.00
Units: G
Recovered: .00

Oxygenate: Not reported

Y83 CLOSED-LACKOF RECENT INFO NY LTANKS S100144859 SSE 19020 NEW HAVEN AVE. N/A

SSE 19020 NEW HAVEN AVE. 1/4-1/2 NEW YORK CITY, NY

0.341 mi.

1798 ft. Site 1 of 2 in cluster Y

 Relative:
 LTANKS:

 Higher
 Facility ID:
 8706832

 Actual:
 Site ID:
 300940

 25 ft.
 Closed Date:
 2003-03

Closed Date: 2003-03-04
Spill Number: 8706832
Spill Date: 1987-11-11
Spill Cause: Tank Test Failure

Spill Source: Institutional, Educational, Gov., Other

Spill Class: C4

Cleanup Ceased: Not reported SWIS: 4101

Investigator: ADMIN. CLOSED
Referred To: Not reported
Reported to Dept: 1987-11-11
CID: Not reported
Water Affected: Not reported

Spill Notifier: Tank Tester
Last Inspection: Not reported
Recommended Penalty: False
Meets Standard: False
UST Involvement: False
Remediation Phase: 0

Date Entered In Computer: 1987-11-17
Spill Record Last Update: 2003-03-04
Spiller Name: Not reported

Spiller Company: ST. MARY'S CHURCH Spiller Address: 19-20 NEW HAVEN AVE.

Spiller County: 001

Spiller Contact: Not reported
Spiller Phone: Not reported
Spiller Extention: Not reported

DEC Region: 2
DER Facility ID: 243382

DEC Memo: "Prior to Sept, 2004 data translation this spill Lead_DEC Field was

ADMIN.CLOSED 03/04/2003-Closed Due To The Nature / Extent Of The

Spill Report

Remarks: "5K TANK FAILED WITH A LEAK RATE OF - 151 G/HR CLOSED DUE TO LACK OF

ANY RECENT INFO- DOES NOT MEET ANY CLEAN UP REQUIREMENTS."

All TTF:

 Facility ID:
 8706832

 Spill Number:
 8706832

 Spill Tank Test:
 1532239

EDR ID Number

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

CLOSED-LACKOF RECENT INFO (Continued)

S100144859

Site ID: 300940 Tank Number: Not reported Tank Size: 0 Material: 0001 EPA UST: Not reported UST: Not reported Cause: Not reported Not reported Source: Test Method: 00 Test Method 2: Unknown Leak Rate: .00

Gross Fail: Not reported Modified By: Spills Last Modified Date: Not reported

All Materials:

Site ID: 300940 Operable Unit ID: 910711 Operable Unit: 01 Material ID: 465825 Material Code: 0001A Material Name: #2 fuel oil Case No.: Not reported Material FA: Petroleum -1.00 Quantity: Units: L .00 Recovered:

Oxygenate: Not reported

Y84 **CLOSED-LACKOF RECENT INFO** SSE 19-20 NEW HAVEN AVENUE 1/4-1/2

FAR ROCKAWAY, NY

0.342 mi.

1804 ft. Site 2 of 2 in cluster Y

LTANKS:

Relative: Higher Actual: 25 ft.

0307675 Facility ID: Site ID: 274033 Closed Date: 2004-09-14 Spill Number: 0307675 Spill Date: 2003-10-21 Spill Cause: Tank Test Failure

Spill Source: Institutional, Educational, Gov., Other

Spill Class: Cleanup Ceased: Not reported SWIS: 4101 **MXTIPPLE** Investigator: Referred To: Not reported Reported to Dept: 2003-10-21

CID: 204 Water Affected: Not reported Spill Notifier: Tank Tester Last Inspection: Not reported Recommended Penalty: False Meets Standard: False **UST Involvement:** False

NY LTANKS \$106719531

N/A

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

CLOSED-LACKOF RECENT INFO (Continued)

S106719531

Remediation Phase:

2003-10-21 Date Entered In Computer: Spill Record Last Update: 2004-09-14 Spiller Name: PHIL FAZIN

Spiller Company: SAINT MARYS STAR OF SEA Spiller Address: 19-20 NEW HAVEN AVENUE

Spiller County: 001

Spiller Contact: PHIL FAZIN Spiller Phone: (516) 375-5890 Spiller Extention: Not reported

DEC Region: DER Facility ID: 222879

DEC Memo: "Prior to Sept, 2004 data translation this spill Lead_DEC Field was

TIPPLE 10/21/03 TJD @ Duty Desk TTF letter sent to facility representative. 11/13/2003 Sangesland spoke with James Menzies (facilities manager for the site). He had not received a prior letter, so Sangesland faxed a new TTF letter to his office.

(718-327-3276) 7/9/04 Tipple called James Menzies to inquire on the status of the work to date. Repairs made//line to a boiler that had been removed had not been properly sealed/// James will forward paperwork to DEC. 9/14/04 Tank exposed..as per conversation with J Menzies bld. Mgr. the old lines were on top of the tank, and were exposed and removed at the time of excavation. Visual inspection

revealed no contamination// letter received///NFA"

Remarks:

All TTF:

Facility ID: 0307675 Spill Number: 0307675 Spill Tank Test: 1528749 Site ID: 274033 Tank Number: 1 Tank Size: 5000 Material: 0001

EPA UST: Not reported Not reported UST: Cause: Not reported Not reported Source:

Test Method: 03

Horner EZ Check I or II Test Method 2:

Leak Rate: .00

Not reported Gross Fail: Modified By: Spills Last Modified Date: Not reported

All Materials:

Site ID: 274033 Operable Unit ID: 876270 Operable Unit: 01 Material ID: 501200 Material Code: 0001A Material Name: #2 fuel oil Case No.: Not reported Material FA: Petroleum .00

Quantity: Units: G Recovered: .00

Direction Distance

Elevation Site Database(s) **EPA ID Number**

CLOSED-LACKOF RECENT INFO (Continued)

S106719531

EDR ID Number

Oxygenate: Not reported

Facility ID: 8706791 Site ID: 154311 Closed Date: 2003-03-04 Spill Number: 8706791 Spill Date: 1987-11-10 Spill Cause: Tank Test Failure

Spill Source: Institutional, Educational, Gov., Other

Spill Class: C4

Cleanup Ceased: Not reported

SWIS: 4101

Investigator: ADMIN. CLOSED Referred To: Not reported 1987-11-10 Reported to Dept: CID: Not reported Water Affected: Not reported Spill Notifier: Tank Tester Last Inspection: Not reported Recommended Penalty: False Meets Standard: False **UST Involvement:** False Remediation Phase: 1987-11-13 Date Entered In Computer:

Spill Record Last Update: 2003-03-04 Spiller Name: Not reported

Spiller Company: ST.MARY'S STAR OF THE SEA Spiller Address: 19-20 NEW HAVEN AVE.

Spiller County: 001

Spiller Contact: Not reported Spiller Phone: Not reported Spiller Extention: Not reported

DEC Region: DER Facility ID: 222879

DEC Memo: "Prior to Sept, 2004 data translation this spill Lead_DEC Field was

ADMIN.CLOSED 03/04/2003-Closed Due To The Nature / Extent Of The

Spill Report"

"5K TANK SYSTEM, COULDN'T MAINTAIN LEVEL IN STANDPIPE.CLOSED DUE TO Remarks:

LACK OF ANY RECENT INFO-DOES NOT MEET ANY CLEAN UP REQUIREMENTS."

All TTF:

Facility ID: 8706791 Spill Number: 8706791 Spill Tank Test: 1532220 Site ID: 154311 Tank Number: Not reported

Tank Size: 0001 Material: EPA UST: Not reported UST: Not reported Cause: Not reported Source: Not reported Test Method: 00

Test Method 2: Unknown Leak Rate: .00

Gross Fail: Not reported Modified By: Spills

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

CLOSED-LACKOF RECENT INFO (Continued)

S106719531

U003383719

N/A

NY LTANKS

NY AST

Last Modified Date: Not reported

All Materials:

Site ID: 154311 Operable Unit ID: 910514 Operable Unit: 01 Material ID: 465787 Material Code: 0001A Material Name: #2 fuel oil Case No.: Not reported Material FA: Petroleum Quantity: -1.00 Units: L Recovered: .00

Oxygenate: Not reported

85 **APARTMENT BUILDING TTF** SE 15-02 MOTT AVENUE 1/4-1/2 FAR ROCKAWAY, NY 11691

0.364 mi. 1922 ft.

Relative: LTANKS:

Lower Facility ID: 0904364 Site ID: 416519 Actual: 2009-10-29 Closed Date: 22 ft. Spill Number: 0904364

Spill Date: 2009-07-14 Spill Cause: Tank Test Failure Spill Source: Commercial/Industrial

Spill Class: C4

Cleanup Ceased: Not reported SWIS: 4101 Investigator: **JMKRIMGO** Referred To: Not reported Reported to Dept: 2009-07-14 CID: Not reported Water Affected: Not reported

Spill Notifier: Other Last Inspection: Not reported Recommended Penalty: False Meets Standard: True **UST Involvement:** False Remediation Phase:

2009-07-14 Date Entered In Computer: Spill Record Last Update: 2009-10-29 Spiller Name: Not reported Spiller Company: UNK Spiller Address: Not reported Spiller County: 999

MARLIN JOESPH Spiller Contact: Spiller Phone: (718) 624-4842 Spiller Extention: Not reported

DEC Region: 2 DER Facility ID: 1064

DEC Memo: "Sangesland spoke to PTC. Tanks were pumped out, PTC provided a

Direction Distance Elevation

vation Site Database(s) EPA ID Number

APARTMENT BUILDING TTF (Continued)

U003383719

EDR ID Number

proposal to repair the lines and retest. TTF Letter sent to Property Manager: Related Management Attn: Peter Hoyle 423 West 55th St - 9th FIr New York, NY 10019 8/11/09. John from ATC (consultant) called. 2x5000 gal #2 oil tanks failed test (dry leak). Both tanks encased in concrete and all piping above ground. Tanks were tested isolated from piping. Leak most likely at the top part of tanks. They proposed clean up tanks, breake and remove concrete from the top and visually inspect them form inside. If holes found close to the top, then repair or close tanks. If holes close to the middle of the tanks then concrete encasing should be removed and tanks examined for evidence of leaks. The proposed scope of work will be submitted before August 27. JK. 1029/09. J.Krimgold reviewed the Closure report submitted by ATC and dated 10/23/09. Based on the data presented, both tanks and associated piping were aboveground. However tanks were incased in the concrete. Both tanks, associated piping and incasement were removed. No evidance of of relese was found. Case closed."

Remarks: "Tank test failure of two 5,000 gallon tanks at above address. Small

leakage in the fuel lines, unk of amount spilled. Will evacuate tanks

to detirmine the problem fix lines if needed."

All Materials:

416519 Site ID: Operable Unit ID: 1172822 Operable Unit: 01 Material ID: 2164700 Material Code: 0001A Material Name: #2 fuel oil Not reported Case No.: Material FA: Petroleum Quantity: Not reported Units: Not reported Not reported Recovered: Oxygenate: Not reported

AST:

Region: STATE DEC Region: 2

Site Status: Unregulated/Closed

Facility Id: 2-061182 Program Type: PBS

UTM X: 605860.03785 UTM Y: 4495331.56249

Expiration Date: N/A

Site Type: Apartment Building/Office Building

Affiliation Records:

Site Id: 1064
Affiliation Type: Facility Owner

Company Name: GREENPORT PRESERVATION, LP

Contact Type: Not reported Contact Name: Not reported

Address1: 60 COLUMBUS CIR, 18TH FLR

Address2: Not reported City: NEW YORK State: NY Zip Code: 10023 Country Code: 001

Direction Distance

Elevation Site Database(s) **EPA ID Number**

APARTMENT BUILDING TTF (Continued)

U003383719

EDR ID Number

Phone: (212) 801-3788 EMail: Not reported Fax Number: Not reported Modified By: **NRLOMBAR** Date Last Modified: 2009-10-30

1064 Site Id: Affiliation Type: Mail Contact

Company Name: GREENPORT PRESERVATION, LP

Contact Type: Not reported JEFF ALLEN Contact Name:

Address1: % RELATED AFFORDABLE

Address2: 60 COLUMBUS CIRCLE, 18TH FLOOR

City: **NEW YORK** State: NYZip Code: 10023 Country Code: 001

Phone: (212) 801-3788

EMail: J.ALLEN@RELATED.COM

Fax Number: Not reported Modified By: **NRLOMBAR** Date Last Modified: 2009-10-30

Site Id: 1064

Facility Operator Affiliation Type: THE GATEWAYS Company Name: Contact Type: Not reported

Contact Name: **BEVERLY BOUNSAM**

Address1: Not reported Address2: Not reported Not reported City: State: NN

Zip Code: Not reported

Country Code: 001

Phone: (718) 827-6047 EMail: Not reported Fax Number: Not reported Modified By: **NRLOMBAR** Date Last Modified: 2009-10-30

1064 Site Id:

Affiliation Type: **Emergency Contact**

GREENPORT PRESERVATION, LP Company Name:

Contact Type: Not reported Contact Name: STEVEN BHIM Address1: Not reported Address2: Not reported City: Not reported State: NN

Zip Code: Not reported

Country Code: 999

(718) 327-6047 Phone: EMail: Not reported Fax Number: Not reported NRLOMBAR Modified By: Date Last Modified: 2009-10-30

Direction Distance

Elevation Site Database(s) EPA ID Number

APARTMENT BUILDING TTF (Continued)

U003383719

EDR ID Number

Tank Info:

 Tank Number:
 001

 Tank Id:
 2104

 Material Code:
 0001

Common Name of Substance: #2 Fuel Oil (On-Site Consumption)

1

Equipment Records:

D01 - Pipe Type - Steel/Carbon Steel/Iron

F01 - Pipe External Protection - Painted/Asphalt Coating

K00 - Spill Prevention - None

A01 - Tank Internal Protection - Epoxy Liner E00 - Piping Secondary Containment - None

H00 - Tank Leak Detection - None

100 - Overfill - None

B00 - Tank External Protection - None C01 - Pipe Location - Aboveground

J00 - Dispenser - None

G02 - Tank Secondary Containment - Vault (w/access)

L00 - Piping Leak Detection - None

Tank Location:

Tank Type: Steel/Carbon Steel/Iron
Tank Status: Closed - In Place
Pipe Model: Not reported
Install Date: 12/01/1984
Capacity Gallons: 5000
Tightness Test Method: NN

Date Test:
Not reported
Next Test Date:
Not reported
Date Tank Closed:
O9/21/2009
Register:
True
Modified By:
NRLOMBAR
Last Modified:
O4/14/2017

Material Name: #2 fuel oil (on-site consumption)

 Tank Number:
 002

 Tank Id:
 2105

 Material Code:
 0001

Common Name of Substance: #2 Fuel Oil (On-Site Consumption)

Equipment Records:

A00 - Tank Internal Protection - None D01 - Pipe Type - Steel/Carbon Steel/Iron

F01 - Pipe External Protection - Painted/Asphalt Coating

K00 - Spill Prevention - None

E00 - Piping Secondary Containment - None

H00 - Tank Leak Detection - None

100 - Overfill - None

C01 - Pipe Location - Aboveground

J00 - Dispenser - None

B00 - Tank External Protection - None L00 - Piping Leak Detection - None

G02 - Tank Secondary Containment - Vault (w/access)

Tank Location: 1

Tank Type: Steel/Carbon Steel/Iron

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

APARTMENT BUILDING TTF (Continued)

U003383719

1001756989

N/A

NY MOSF UST

NY MOSF AST

Tank Status: Closed - In Place Pipe Model: Not reported Install Date: 12/01/1984 Capacity Gallons: 5000 Tightness Test Method: NN

Date Test: Not reported Next Test Date: Not reported 09/21/2009 Date Tank Closed: Register: True Modified By: **NRLOMBAR** Last Modified: 04/14/2017

Material Name: #2 fuel oil (on-site consumption)

Z86 OIL CO., INC.

North ONE SHERIDAN BLVD. 1/4-1/2 **INWOOD, NY 11696**

0.370 mi.

Site 1 of 3 in cluster Z 1951 ft.

MOSF UST: Relative:

Lower Id/Status: 1-1660 / INACTIVE FACILITY

SWIS Code: Actual: 7 ft.

Facility Town: **NEW YORK CITY** Contact Phone: (516) 239-8800 **Emergency Contact:** WILLIAM NAPPO (718) 858-6038 Emergency Telephone:

CBS Number:

SPDES Num: 0-23299 Total Tanks: 15 **Total Capacity:** 1631666 Avg Throughput: 250000 License Stat:

STORAGE TERMINAL/PETROLEUM DISTRIBUTOR Facility Type:

Prod Xfer Options: Vessel/Barge (Including off-shore platform)

Expiration Date: 11

Applic Rcvd: 01/07/1992 WILLIAM NAPPO Operator: Owner Name: LISBON VENTURES ONE SHERIDAN BLVD. Owner Address: Owner City, St, Zip: INWOOD, NY 11696-Owner Telephone: (516) 239-8800 Owner Type: Corporate/Commercial

Owner Status:

Owner Mark: First Owner

EAGLE OIL COMPANY Mail To Name: Mail To Address: ONE SHERIDAN BLVD.

Mail To Address 2: Not reported

INWOOD, NY 11696-Mail City, St, Zip: Mail To Contact: **BILL NAPPO** Mail To Telephone: (516) 239-8800 Legal Agent Name: MARVIN KRAMMER Legal Agent Address: 305 AVENUE U Legal Agent City,St,Zip: BROOKLYN, NY 11223-

Date Filed: 08/87 Latitude: 40|37|25 Longitude: 73|44|50

Tank ID: 15

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

OIL CO., INC. (Continued)

1001756989

Tank Location: **UNDERGROUND**

Install Date: 01/33 139944 Capacity (Gal):

Product: **UNLEADED GASOLINE**

Tank Status: In Service Tank Type: Steel/carbon steel Tank Internal: **Epoxy Liner** Tank External: None

Pipe Location: Aboveground/Underground Combination

STEEL/IRON Pipe Type:

Pipe Internal: None

Pipe External: Painted/Asphalt Coating

Second Contain:

Leak Detection: Groundwater Well Overfill Protection: **Product Level Gauge**

Dispenser: Suction Test Date: 07/80 Date Closed: Not reported Status of Data: Complete 02/02/1994 Inspected Date: Inspector Initials: Not reported Inspector Status: Not reported Pipe Flag: True

License Issued: Vessel Id: Not reported Renew Flag: True Renew Date: 11/07/1997 Federal Id No: Not reported

COI Date:

Tank ID: 18

Tank Location: **UNDERGROUND**

Install Date: 01/33 192596 Capacity (Gal):

UNLEADED GASOLINE Product:

Tank Status: In Service Tank Type: Steel/carbon steel Tank Internal: **Epoxy Liner** Tank External: None

Pipe Location: Aboveground/Underground Combination

STEEL/IRON Pipe Type:

Pipe Internal: None

Pipe External: Painted/Asphalt Coating

Second Contain:

Groundwater Well Leak Detection: Overfill Protection: **Product Level Gauge**

Dispenser: Suction Test Date: 06/79 Date Closed: Not reported Complete Status of Data: 02/02/1994 Inspected Date: Not reported Inspector Initials: Inspector Status: Not reported Pipe Flag: True License Issued: 11

Vessel Id: Not reported

Direction Distance

Elevation Site Database(s) EPA ID Number

OIL CO., INC. (Continued)

1001756989

EDR ID Number

Renew Flag: True
Renew Date: 11/07/1997
Federal Id No: Not reported

COI Date: / /

Tank ID: 19

Tank Location: UNDERGROUND

Install Date: 01/33 Capacity (Gal): 190699

Product: UNLEADED GASOLINE

Tank Status: In Service
Tank Type: Steel/carbon steel
Tank Internal: Epoxy Liner
Tank External: None

Pipe Location: Aboveground/Underground Combination

Pipe Type: STEEL/IRON

Pipe Internal: None

Pipe External: Painted/Asphalt Coating

Second Contain: 8

Leak Detection: Groundwater Well
Overfill Protection: Product Level Gauge

Dispenser: Suction Test Date: 06/79 Date Closed: Not reported Status of Data: Complete 02/02/1994 Inspected Date: Inspector Initials: Not reported Not reported Inspector Status: Pipe Flag: True License Issued:

Vessel Id: Not reported Renew Flag: True Renew Date: 11/07/1997 Federal Id No: Not reported

COI Date: / /

Tank ID: 20

Tank Location: UNDERGROUND

Install Date: 01/33 Capacity (Gal): 190735

Product: UNLEADED GASOLINE

Tank Status: In Service
Tank Type: Steel/carbon steel
Tank Internal: Epoxy Liner
Tank External: None

Pipe Location: Aboveground/Underground Combination

Pipe Type: STEEL/IRON

Pipe Internal: None

Pipe External: Painted/Asphalt Coating

Second Contain: 8

Leak Detection: Groundwater Well
Overfill Protection: Product Level Gauge

Dispenser: Suction
Test Date: 06/79
Date Closed: Not reported

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

OIL CO., INC. (Continued)

1001756989

Status of Data: Complete 02/02/1994 Inspected Date: Inspector Initials: Not reported Inspector Status: Not reported Pipe Flag: True License Issued: //

Vessel Id: Not reported Renew Flag: True Renew Date: 11/07/1997 Federal Id No: Not reported

COI Date: //

Tank ID: 21

UNDERGROUND Tank Location:

Install Date: 01/33 139926 Capacity (Gal):

UNLEADED GASOLINE Product:

Tank Status: In Service Steel/carbon steel Tank Type: Tank Internal: **Epoxy Liner** Tank External: None

Pipe Location: Aboveground/Underground Combination

STEEL/IRON Pipe Type:

Pipe Internal: None

Pipe External: Painted/Asphalt Coating

Second Contain:

Leak Detection: Groundwater Well Overfill Protection: **Product Level Gauge**

Dispenser: Suction Test Date: 01/80 Date Closed: Not reported Status of Data: Complete 02/02/1994 Inspected Date: Not reported Inspector Initials: Inspector Status: Not reported Pipe Flag: True License Issued:

Vessel Id: Not reported Renew Flag: True 11/07/1997 Renew Date: Federal Id No: Not reported

COI Date:

Tank ID: 22

Tank Location: **UNDERGROUND**

Install Date: 01/33 97205 Capacity (Gal):

Product: NOS 1,2, OR 4 FUEL OIL

Tank Status: In Service Tank Type: Steel/carbon steel Tank Internal: **Epoxy Liner** Tank External: None

Pipe Location: Aboveground/Underground Combination

Pipe Type: STEEL/IRON Pipe Internal: None

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

OIL CO., INC. (Continued)

1001756989

Pipe External: Painted/Asphalt Coating

Second Contain: 8

Groundwater Well Leak Detection: Overfill Protection: Product Level Gauge

Dispenser: Suction Test Date: 06/83 Not reported Date Closed: Complete Status of Data: Inspected Date: 02/02/1994 Inspector Initials: Not reported Inspector Status: Not reported Pipe Flag: True License Issued:

Vessel Id: Not reported Renew Flag: True 11/07/1997 Renew Date: Federal Id No: Not reported

COI Date:

Tank ID: 23

UNDERGROUND Tank Location:

Install Date: 01/33 Capacity (Gal): 62155

NOS 1,2, OR 4 FUEL OIL Product:

Tank Status: In Service Tank Type: Steel/carbon steel Tank Internal: **Epoxy Liner** Tank External: None

Pipe Location: Aboveground/Underground Combination

STEEL/IRON Pipe Type: Pipe Internal: None

Pipe External: Painted/Asphalt Coating

Second Contain:

Groundwater Well Leak Detection: Overfill Protection: Product Level Gauge

Dispenser: Suction Test Date: 06/84 Not reported Date Closed: Complete Status of Data: 02/02/1994 Inspected Date: Inspector Initials: Not reported Inspector Status: Not reported Pipe Flag: True

License Issued: 11 Vessel Id: Not reported Renew Flag: True 11/07/1997 Renew Date:

Federal Id No: Not reported COI Date:

Tank ID: 26

UNDERGROUND Tank Location:

Install Date: 06/76 1500 Capacity (Gal):

Product: NOS 1,2, OR 4 FUEL OIL

Direction Distance Elevation

nce EDR ID Number ation Site Database(s) EPA ID Number

OIL CO., INC. (Continued)

1001756989

Tank Status: In Service
Tank Type: Steel/carbon steel

Tank Internal: None Tank External: None

Pipe Location: Underground
Pipe Type: STEEL/IRON
Pipe Internal: None

Pipe External: Painted/Asphalt Coating

Second Contain: None

Leak Detection: Groundwater Well
Overfill Protection: Product Level Gauge

Dispenser: Suction
Test Date: 06/76
Date Closed: Not reported
Status of Data: Complete
Inspected Date: 02/02/1994
Inspector Initials: Not reported
Inspector Status: Not reported
Dispersion of the state of the stat

Pipe Flag: True License Issued: //

Vessel Id: Not reported Renew Flag: True Renew Date: 11/07/1997 Federal Id No: Not reported

COI Date: / /

Tank ID: 28

Tank Location: UNDERGROUND

Install Date: 00/00 Capacity (Gal): 500 Product: UNKNOWN

Tank Status: In Service Tank Type: Steel/carbon steel Tank Internal: Not reported Not reported Tank External: Pipe Location: Not reported Pipe Type: Not reported Not reported Pipe Internal: Not reported Pipe External: Second Contain: Not reported Leak Detection: None Overfill Protection: None Not reported Dispenser: Test Date: 07/80 Date Closed: UNKWN

Status of Data: Minor Errors
Inspected Date: 02/02/1994
Inspector Initials: Not reported
Inspector Status: Not reported
Pipe Flag: True
License Issued: / /

Vessel Id: Not reported Renew Flag: True Renew Date: 11/07/1997 Federal Id No: Not reported

COI Date: / /

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

OIL CO., INC. (Continued)

1001756989

Tank ID: 29

UNDERGROUND Tank Location:

Install Date: 01/77 4000 Capacity (Gal): **UNKNOWN** Product: Tank Status: In Service Tank Type: Steel/carbon steel

Tank Internal: None Tank External: None

Pipe Location: Aboveground/Underground Combination

Pipe Type: STEEL/IRON

Pipe Internal: None Pipe External: None Second Contain:

Leak Detection: Groundwater Well

Overfill Protection: None Suction Dispenser: Test Date: 01/77 Date Closed: Not reported Complete Status of Data: 02/02/1994 Inspected Date: Inspector Initials: Not reported Inspector Status: Not reported Pipe Flag: True

License Issued: Vessel Id: Not reported Renew Flag: True Renew Date: 11/07/1997 Federal Id No: Not reported

COI Date: / /

Tank ID:

Tank Location: UNDERGROUND

01/77 Install Date: 1000 Capacity (Gal): Product: UNKNOWN Tank Status: In Service

Tank Type: Steel/carbon steel

Tank Internal: None Tank External: None Pipe Location: None

Pipe Type: STEEL/IRON

Pipe Internal: None Pipe External: None Second Contain: None Leak Detection: None Overfill Protection: None Dispenser: Suction Test Date: 01/77 Date Closed: Not reported

Status of Data: Complete 02/02/1994 Inspected Date: Inspector Initials: Not reported Inspector Status: Not reported

Pipe Flag: True License Issued:

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

OIL CO., INC. (Continued)

1001756989

Vessel Id: Not reported Renew Flag: True Renew Date: 11/07/1997 Federal Id No: Not reported

COI Date:

MOSF AST:

MOSF Number: 1-1660 SWIS Code: 28

Facility Town: **NEW YORK CITY** Facility Phone: (516) 239-8800 **Emergency Contact Name:** WILLIAM NAPPO **Emergency Contact Phone:** (718) 858-6038

Total Tanks: 15 **Total Capacity:** 1631666 Daily Throughput: 250000 License Status: 3

Facility Type: STORAGE TERMINAL/PETROLEUM DISTRIBUTOR

Product Transfer Operation: Vessel/Barge (Including off-shore platform TEMPORARILY OUT-OF-SERVICE Facility Status:

Operator Name: WILLIAM NAPPO LISBON VENTURES Owner Name: Owner Address: ONE SHERIDAN BLVD. Owner City, St, Zip: INWOOD, NY 11696-Owner Phone: (516) 239-8800 Owner Type: Corporate/Commercial

Owner Status:

Owner Mark: First Owner

EAGLE OIL COMPANY Mailing Name: Mailing Address: ONE SHERIDAN BLVD.

Mailing Address 2: Not reported

Mailing City, St, Zip: INWOOD, NY 11696-Mailing Contact: **BILL NAPPO** Mailing Phone: (516) 239-8800 Legal Agent Name: MARVIN KRAMMER Legal Agent Address: 305 AVENUE U Legal Agent City, St, Zip: BROOKLYN, NY 11223-

LIC Expires: / /

Tank ID: 10

ABOVEGROUND Tank Location:

Install Date: 09/28

Product: **UNLEADED GASOLINE** Tank Type: Steel/carbon steel

Tank Internal: None

CATHODIC PROTECTION Tank External:

Pipe Location: Underground Steel/Iron Pipe Type: Pipe Internal: None

Pipe External: Painted/Asphalt Coating

Secondary Containment: Concrete Dike

Leak Detection: 09 None Overfill Protection: Dispensing Mthd: Suction Test Date: 07/81 Date Closed: Not reported Status of Data: Complete

Direction
Distance

Elevation Site Database(s) EPA ID Number

OIL CO., INC. (Continued)

1001756989

EDR ID Number

Capacity (gal): 18674

40|37|25 / 73|44|50 Lat/Long: Federal ID: Not reported Inspected Date: 02/02/1994 Inspector: Not reported 11/07/1997 Renew Date: Not reported Inspected State: Pipe Flag: True Vessel ID: Not reported Reserve Flag: True Tank Status: In Service COI Date: //

Date License Issued: //

Date License Application Received: 01/07/1992

Chemical Bulk Storage Number: -

Pollution Discharge Elimination System Num: 0-23299
Date Legal Agent Filed with Secretary of State: 08/87

Tank ID: 11

Tank Location: ABOVEGROUND

Install Date: 09/28

Product: UNLEADED GASOLINE Tank Type: Steel/carbon steel

Tank Internal: None

Tank External: CATHODIC PROTECTION

Pipe Location: Underground
Pipe Type: Steel/Iron
Pipe Internal: None

Pipe External: Painted/Asphalt Coating

Secondary Containment: Concrete Dike

Leak Detection: 09

Overfill Protection: Product Level Gauge

Dispensing Mthd:

Test Date:

Date Closed:

Status of Data:

Capacity (gal):

Suction

07/81

Not reported

Complete

18674

40|37|25 / 73|44|50 Lat/Long: Not reported Federal ID: 02/02/1994 Inspected Date: Inspector: Not reported Renew Date: 11/07/1997 Inspected State: Not reported Pipe Flag: True Vessel ID: Not reported Reserve Flag: True Tank Status: In Service

Date License Issued: /

Date License Application Received: 01/07/1992 Chemical Bulk Storage Number: -

11

Pollution Discharge Elimination System Num: 0-23299
Date Legal Agent Filed with Secretary of State: 08/87

Tank ID: 12

COI Date:

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

OIL CO., INC. (Continued)

Tank Location: **ABOVEGROUND**

Install Date: 04/77

UNLEADED GASOLINE Product: Tank Type: Steel/carbon steel

Tank Internal: None

Tank External: CATHODIC PROTECTION

Underground Pipe Location: Pipe Type: Steel/Iron Pipe Internal: None

Pipe External: Painted/Asphalt Coating

Secondary Containment: Concrete Dike

Leak Detection: 09

Overfill Protection: Product Level Gauge

Dispensing Mthd: Suction Test Date: 10/79 Date Closed: Not reported Complete Status of Data: 217973 Capacity (gal):

Lat/Long: 40|37|25 / 73|44|50 Not reported Federal ID: Inspected Date: 02/02/1994 Inspector: Not reported 11/07/1997 Renew Date: Inspected State: Not reported Pipe Flag: True Vessel ID: Not reported Reserve Flag: True Tank Status: In Service COI Date:

Date License Issued:

Date License Application Received: 01/07/1992

Chemical Bulk Storage Number:

Pollution Discharge Elimination System Num: 0-23299 Date Legal Agent Filed with Secretary of State: 08/87

Tank ID: 13

ABOVEGROUND Tank Location:

Install Date: 09/27

UNLEADED GASOLINE Product: Tank Type: Steel/carbon steel Tank Internal: Fiberglass Liner (FRP Tank External: CATHODIC PROTECTION

Underground Pipe Location: Steel/Iron Pipe Type: Pipe Internal: None

Pipe External: Painted/Asphalt Coating

Secondary Containment: Concrete Dike

Leak Detection: 09

Overfill Protection: Product Level Gauge

Dispensing Mthd: Suction Test Date: 11/86 Date Closed: Not reported Status of Data: Complete Capacity (gal): 190617

40|37|25 / 73|44|50 Lat/Long: Federal ID: Not reported

1001756989

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

OIL CO., INC. (Continued)

1001756989

Inspected Date: 02/02/1994 Not reported Inspector: Renew Date: 11/07/1997 Inspected State: Not reported Pipe Flag: True Vessel ID: Not reported Reserve Flag: True Tank Status: In Service COI Date:

Date License Issued:

01/07/1992 Date License Application Received:

Chemical Bulk Storage Number:

Pollution Discharge Elimination System Num: 0-23299 Date Legal Agent Filed with Secretary of State: 08/87

Tank ID: 14

Tank Location: **ABOVEGROUND**

Install Date: 09/79

UNLEADED GASOLINE Product: Tank Type: Steel/carbon steel

Tank Internal: None

Tank External: CATHODIC PROTECTION

Pipe Location: Underground Pipe Type: Steel/Iron Pipe Internal: None

Pipe External: Painted/Asphalt Coating

Secondary Containment: Concrete Dike

Leak Detection: 09

Overfill Protection: Product Level Gauge

Dispensing Mthd: Suction Test Date: 11/79 Date Closed: Not reported Status of Data: Complete 165968 Capacity (gal):

40|37|25 / 73|44|50 Lat/Long: Federal ID: Not reported Inspected Date: 02/02/1994 Inspector: Not reported Renew Date: 11/07/1997 Inspected State: Not reported Pipe Flag: True Vessel ID: Not reported Reserve Flag: True Tank Status: In Service COI Date:

Date License Issued:

01/07/1992 Date License Application Received:

Chemical Bulk Storage Number:

Pollution Discharge Elimination System Num: 0-23299 Date Legal Agent Filed with Secretary of State: 08/87

Direction Distance

Distance Elevation Site EDR ID Number

Database(s) EPA ID Number

Z87 OIL CO., INC. NY MOSF S108413467
North ONE SHERIDAN BLVD N/A

North ONE SHERIDAN BLVD 1/4-1/2 INWOOD, NY 11696

0.370 mi.

1951 ft. Site 2 of 3 in cluster Z

Relative: MOSF:

 Lower
 Facility ID:
 1-1660

 Actual:
 Program Type:
 MOSF

 7 ft.
 Tank Status:
 Inactive

 Expiration Date:
 Not reported

Dec Region: 1

UTMX: 605447.15371 UTMY: 4496300.34802

Z88 OIL CO, INC-DBA EAGLE OIL NY SWF/LF

Z88 OIL CO, INC-DBA EAGLE OIL
North 1 SHERIDAN BOULEVARD
1/4-1/2 INWOOD, NY 11696

0.370 mi.

1951 ft. Site 3 of 3 in cluster Z

Relative: SWF/LF:

LowerFlag:ACTIVEActual:Region Code:1

7 ft. Phone Number: 5163719700 Owner Name: William Haugland

Owner Type: Private

Owner Address: 11 Commercial Street

Owner Addr2: Not reported
Owner City,St,Zip: Plainview, FL 11803
Owner Email: bill@hauglandllc.com
Owner Phone: 5163366720
Contact Name: Billy Haugland

Contact Address: 1 Sheridan Blvd.
Contact Addr2: Not reported
Contact City,St,Zip: Inwood, FL 11096
Contact Email: billyh@hauglandllc.com

Contact Phone: 5163711842

Activity Desc: C&D processing - registration

Activity Number: [30W39R]
Active: Yes
East Coordinate: 605445
North Coordinate: 4496300
Accuracy Code: Not reported
Regulatory Status: Registration

Waste Type: Rock;Brick;Concrete;Asphalt;Soil (Clean)

Authorization #: 30W39R
Authorization Date: 02/06/2015
Expiration Date: Not reported
Operator Name: Not reported
Operator Type: Not reported
Laste Date: 2016-10-12 00:00:00

LIENS:

Region: 1

Spill No: 86-07001

Tax Map Id: 40-L-652,653,2586,154&54

Lien Request Received: 06/05/2001 Request Sent To APA Or Vendor: 06/06/2001 S104646011

N/A

NY LIENS

NY Spills

NY SPDES

NY MANIFEST

Direction Distance

Elevation Site Database(s) EPA ID Number

OIL CO, INC-DBA EAGLE OIL (Continued)

S104646011

EDR ID Number

Draft Lien Received From Vendor: 08/03/2001 Not reported Approved Lien To Administrator: Signed By Administrator: Not reported Received From Administrator: Not reported Sent For Filing: Not reported Resent For Filing: Not reported Not reported Proof Of Service Received: 08/03/2001 Sent To OAG: \$10,731.71 Amount: Release Required: 10/25/2004 Sent To Administrator: Not reported Signed By Adminstrator: Not reported Received From Adminsitrator: Not reported Release Sent To OAG: 10/27/2004 Complete: True Release: True Withdrawn: False

SPILLS:

 Facility ID:
 8602121

 Facility Type:
 ER

 Spill Number:
 8602121

 DER Facility ID:
 309247

 Site ID:
 160156

 DEC Region:
 1

Closed Date: 1986-07-07 Spill Cause: Human Error Spill Class: Not reported SWIS: 3020 Spill Date: 1986-06-28 Investigator: **WXOBRIEN** Referred To: Not reported 1986-06-28 Reported to Dept: CID: Not reported Water Affected: Not reported

Spill Source: Major Facility (MOSF) > 400,000 gal

Spill Notifier:

Cleanup Ceased:

Cleanup Meets Std:

Last Inspection:

Recommended Penalty:

UST Trust:

Remediation Phase:

Fire Department

1986-07-07

True

Not reported

False

False

0

Date Entered In Computer: 1986-07-15 Spill Record Last Update: 2007-03-06 Spiller Name: Not reported

Spiller Company: WECHTER PETROLEUM

Spiller Address: Not reported
Spiller Company: 001
Contact Name: Not reported

DEC Memo: "Prior to Sept, 2004 data translation this spill Lead_DEC Field was

O'BRIEN FD / / : NCHD/NCFM INVEST. FILE HAS BEEN DESTROYED ACCORDING TO STATE ARCHIVE AND RECORD ADMINISTRATOR RETENTION/DISPOSAL

PROCEDURES"

Remarks:

All Materials:

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

OIL CO, INC-DBA EAGLE OIL (Continued)

S104646011

Site ID: 160156 Operable Unit ID: 898687 Operable Unit: 01 Material ID: 478577 Material Code: 0009 Material Name: gasoline Case No.: Not reported Material FA: Petroleum Quantity: 100.00 Units: G .00 Recovered:

Not reported Oxygenate:

Facility ID: 8607001 Facility Type: ER Spill Number: 8607001 DER Facility ID: 309247 Site ID: 160157 DEC Region:

Closed Date: 2016-09-29 Spill Cause: Unknown Spill Class: B2 SWIS: 3020 Spill Date: 1987-02-16 Investigator: **NJACAMPO** Referred To: Not reported Reported to Dept: 1987-02-17 CID: Not reported Water Affected: Not reported

Spill Source: Major Facility (MOSF) > 400,000 gal

Spill Notifier: Responsible Party Cleanup Ceased: Not reported Cleanup Meets Std: False Last Inspection: Not reported Recommended Penalty: False **UST Trust:** False Remediation Phase:

Date Entered In Computer: 1987-02-17 Spill Record Last Update: 2017-05-15 Spiller Name: Not reported Spiller Company: **DOT EQUITIES** Spiller Address: Not reported

Spiller Company: 001

Contact Name: Not reported

DEC Memo: "Prior to Sept, 2004 data translation this spill Lead_DEC Field was

ACAMPORA WELL MOSF THREE MORE WELLS INSTALLED. BELOW IS A COMPILATION

OF NOTES FROM THE SPILL FILE. 02/17/87: A: DOT EQUITIES REPORTS NINE FT OF FLOATING PRODUCT IN ONE OF 4 RECENTLY INSTALLED SITE WELLS. WILL INSTALL EJECTORS. 02/17/87: B: DEC (O'NEILL) CHECKS- CONFIRMS 9FT OF PRODUCT. HAS SKETCH. AREA IS TIDAL. 02/17/87: C: ***NOTE: AT

LEAST ONE PRIOR HERE-8201877 WECHTER. LATER INVESTIGATION REVEALS THE TWO PLUMES TO BE SEPARATE. 02/25/87: DEC (MAYTROTT) ON SITE TO CHECK WELLS. 02/27/87: DEC (ACAMPORA) TAKES SAMPLES OF SOIL CUTTINGS FROM WELLS 5-7, AND PRODUCT IN WELL 4. PEDNEAULT TO CHECK FOR PETRO IN SOIL, FLASHPOINT, AND LEAD, 03/02/87; MAYTROTT LETTER TO DOT: CITES 25FEB DATA (TWO OF THE NEW WELLS HAVE FLOATING PRODUCT). BEGIN

Map ID MAP FINDINGS
Direction

Elevation Site

Distance

Site Database(s) EPA ID Number

OIL CO, INC-DBA EAGLE OIL (Continued)

S104646011

EDR ID Number

RECOVERING THE PRODUCT WITH EJECTORS. ID THE PRODUCT. 03/12/87: RECEIVE DATA OF 27FEB: 50/50 MIXTURE OF GASOLINE AND FUEL OIL. 06/24/87: EPA INSPECTS THE SITE. 08/04/87: MAYTROTT LETTER TO NYS TAXATION AND FINANCE: HAVE BEEN ADVISED THIS SITE HAS BEEN CLOSED. PLEASE GIVE CURRENT NAME/CONTACT AND STATUS. 08/07/87: TAXATION & FINANCE LETTER TO MAYTROTT: LICENSED UNDER NAME OIL CO INC. WILLIAM NAPPO PRESIDENT/TREASURER. 11/11/87: EAGLE OIL 1 SHERIDAN BLVD 718-327-8855 OR 516-239-8800 SUBMITS MOSF APPLICATION TO ALBANY. 04/20/88: MAYTROTT INSPECTS SITE: 5 RECOVERY WELLS W/PNEUMATIC EJECTORS. 04/29/88: MAYTROTT LETTER TO EAGLE: CONTINUE RECOVERY, TEST UNDERGROUND TANKS BY 30JUN, ETC. RECOMMENDS LICENSE RENEWAL. 05/05/88: MAYTROTT LETTER TO EAGLE RE 29APR INSPECTION: FOUND WASTE OIL IN WELL 13. CLEAN OUT AND PREVENT FROM OCCURRING AGAIN. 05/23/88: EAGLE LETTER TO MAYTROTT RE 29APR INSPECTION. 07/11/88: MAYTROTT LETTER TO EAGLE: STATUS OF TANK TESTING? ONE 550, ONE 1K, AND ONE 4K MUST BE ABANDONED PROPERLY OR REMOVED. 07/27/88: EAGLE LETTER TO MAYTROTT: ENCLOSES F&N BID FOR WORK. KNOWS ONLY OF THE 550 TANK!. 06/21/89: NY TELEPHONE LETTER TO EAGLE: LEAKS DAMAGED LINES ON 17MAY. EXPECT REIMBURSEMENT. 06/30/89: EAGLE LETTER TO NY TEL: DENY THEY CAUSED THE PROBLEM. 07/05/89: BARBATO LETTER TO EAGLE: CONDITIONS STILL OUTSTANDING (E.G. DELINEATION OF FLOATING & DISSOLVED PLUMES). UNTIL DONE, WILL NOT ISSUE LICENSE. 09/28/89: BARBATO LETTER TO EAGLE: STATUS OF CONDITIONS? CANNOT ISSUE LICENSE UNTIL THESE ARE MET. 05/25/90: MAYTROTT INSPECTS SITE. 06/21/90: BARBATO LETTER TO EAGLE: CONDITIONS STILL OUTSTANDING. LICENSE DENIED. NEW CONDITIONS-MONITOR/BAIL WELLS, RUN RECOVERY, DO 10YR INTERNAL INSPECTION OF TANKS. ETC. TELECONS WITH CONSULTANT DOING SITE ASSESSMENT FOR POTENTIAL BUYER. 07/25/91: DEC (HOFMANN & PARISH) INSPECT SITE: TYREE IS CONTRACTOR FOR THIS RECOVERY. (NOTE THAT THE 82 PLUME IS HANDLED BY F&N FOR DEC). FIVE EJECTORS ON SITE. 08/02/91: REG 1 ORDERS EAGLE TO TEST TANKS OR WE WILL. 07/07/92: MPC DISPOSES OF 5018GAL COMBUSTIBLE LIQUID. (WORKING FOR DEC), 07/08/92: MPC DISPOSES OF 1832GAL FLAMMABLE LIQUID 07/10/92: HOFMANN ON SITE. 07/13/92: HOFMANN ON SITE- WELLS A & B SAMPLED. PEDNEAULT TO ID. HAS SKETCH. 07/15/92: MPC DISPOSES OF 1652GAL OF FLAMMABLE LIQUID. 07/16/92: HOFMANN ON SITE. 07/20/92: HOFMANN ON SITE. 07/20/92: RECEIVE 13JUL DATA: BOTH SAMPLES ARE MIXTURE OF GAS AND OIL. 07/21/92: HOFMANN ON SITE 07/22/92: HOFMANN ON SITE 07/29/92: HOFMANN MEETS WITH NAPPO AND MPC 08/04/92: HOFMANN ON SITE. 08/05/92: HOFMANN ON SITE. 08/07/92: HOFMANN LETTER TO NAPPO RE VARIOUS DEFICIENCIES 08/27/92: HOFMANN AND MPC ON SITE: SHEEN AT BULKHEAD. 09/01/92: NAPPO LETTER TO ATTORNEY GENERAL'S OFFICE: ARE REMEDIATING SITE. 09/03/92: HOFMANN ON SITE. 09/16/92: HOFMANN ON SITE. 09/22/92: HOFMANN ON SITE. 09/25/92: KRAMER LETTER RE 7AUG LETTER: ARE WORKING ON REMEDIATION. 09/25/92: KRAMER LETTER: GIVES STATUS. 09/29/92: HOFMANN ON SITE. 10/05/92: DEC (LEUNG) ON SITE. MPC DISPOSES OF 775GAL FLAMMABLE LIQUID. 11/16/92: LEUNG ON SITE. 02/01/93: LEUNG CHECKS SITE."

Remarks:

"NINE FT OF FLOATING PRODUCT FOUND IN MONITORING WELL. ***AT LEAST ONE PRIOR HERE: 8201877 WECHTER (THIS IS A SEPARATE PLUME)."

All Materials:

 Site ID:
 160157

 Operable Unit ID:
 903748

 Operable Unit:
 01

 Material ID:
 472545

 Material Code:
 0001A

 Material Name:
 #2 fuel oil

 Case No.:
 Not reported

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

OIL CO, INC-DBA EAGLE OIL (Continued)

S104646011

Material FA: Petroleum .00 Quantity: Units: G Recovered: .00

Oxygenate: Not reported

Facility ID: 8909117 Facility Type: ER Spill Number: 8909117 DER Facility ID: 309247 160158 Site ID: DEC Region:

Closed Date: 1990-10-18 Spill Cause: Other Spill Class: C1 SWIS: 3020 Spill Date: 1989-12-16 Investigator: **MAYTROTT** Referred To: Not reported Reported to Dept: 1989-12-16 CID: Not reported Water Affected: Not reported

Major Facility (MOSF) > 400,000 gal Spill Source:

Spill Notifier: Fire Department Cleanup Ceased: 1990-10-18 Cleanup Meets Std: True Last Inspection: Not reported Recommended Penalty: False **UST Trust:** False Remediation Phase: 0

Date Entered In Computer: 1989-12-19 Spill Record Last Update: 2011-04-21 Spiller Name: Not reported Spiller Company: **EAGLE OIL** Spiller Address: Not reported Spiller Company: 001 Contact Name: Not reported

DEC Memo:

"SPILL OCCURRED AT LOADING RACK, SPILLAGE ON GROUND & INTO DRAINS, Remarks:

LEADING TO OIL/WATER SEPARATOR. INWOOD FD,NCFM ON SCENE, SPEEDY DRY

APPLIED. NO EMERGENCY RESPONSE FROM DEC NEEDED"

All Materials:

Site ID: 160158 936289 Operable Unit ID: Operable Unit: 01 442294 Material ID: Material Code: 0001A #2 fuel oil Material Name: Case No.: Not reported Material FA: Petroleum Quantity: 40.00 Units: G Recovered: .00

Oxygenate: Not reported

Direction Distance

Distance Elevation Site EDR ID Number

Database(s) EPA ID Number

OIL CO, INC-DBA EAGLE OIL (Continued)

S104646011

 Facility ID:
 9207417

 Facility Type:
 ER

 Spill Number:
 9207417

 DER Facility ID:
 135262

 Site ID:
 160159

 DEC Region:
 1

Closed Date: 2000-10-02 Spill Cause: Housekeeping

Spill Class: C4 SWIS: 3000 Spill Date: 1992-09-26 Investigator: **NJACAMPO** Referred To: Not reported Reported to Dept: 1992-09-26 CID: Not reported Water Affected: Not reported

Spill Source: Commercial/Industrial

Spill Notifier: Local Agency Cleanup Ceased: Not reported

Cleanup Meets Std: True

Last Inspection:
Recommended Penalty:
UST Trust:
Remediation Phase:
Date Entered In Computer:
Spill Record Last Undate:
2000-10-03

Spill Record Last Update: 2000-10-03
Spiller Name: Not reported

Spiller Company: ULTIMATE TRANSPORT TRUCKI

Spiller Address: Not reported

Spiller Company: 001
Contact Name: Not reported

DEC Memo: "Prior to Sept, 2004 data translation this spill Lead_DEC Field was

ACAMPORA "

Remarks: "BAY CONSTABLE WITNESSED MR SEHMELZMAN PUMPING WATER FROM SUMP INTO

STORM DRAIN ON SHERIDAN BLVD, NCFM NOTIFIED"

All Materials:

 Site ID:
 160159

 Operable Unit ID:
 971052

 Operable Unit:
 01

 Material ID:
 408057

 Material Code:
 0022

Material Name: waste oil/used oil
Case No.: Not reported
Material FA: Petroleum
Quantity: .00
Units: G
Recovered: .00

Oxygenate: Not reported

 Facility ID:
 9414039

 Facility Type:
 ER

 Spill Number:
 9414039

 DER Facility ID:
 135262

 Site ID:
 160160

 DEC Region:
 1

Closed Date: 2000-10-02

Direction Distance

Elevation Site Database(s) EPA ID Number

OIL CO, INC-DBA EAGLE OIL (Continued)

S104646011

EDR ID Number

Spill Cause: Housekeeping

Spill Class: **B**3 SWIS: 3000 Spill Date: 1995-01-20 Investigator: **NJACAMPO** Referred To: Not reported Reported to Dept: 1995-01-20 CID: Not reported Water Affected: MOTT BASIN

Spill Source: Major Facility (MOSF) > 400,000 gal

Spill Notifier: DEC
Cleanup Ceased: 1995-01-20
Cleanup Meets Std: True
Last Inspection: 1995-01-20
Recommended Penalty: True
UST Trust: False
Remediation Phase: 0

Date Entered In Computer: 1995-01-23
Spill Record Last Update: 2000-10-03
Spiller Name: Not reported

Spiller Company: EAGLE OIL TERMINAL
Spiller Address: 1 SHERIDAN BLVD
Spiller Company: 001

Contact Name: Not reported

DEC Memo: "Prior to Sept, 2004 data translation this spill Lead_DEC Field was

ACAMPORA 03-01-95 LEUNG WROTE MEMO TO ANDY YERMAN OF THE SPDES GROUP AND INFORMED HIM OF FINDINGS. 02-21-95 RECEIVED LAB RESULTS FROM PEDNEAULT ASSOCIAITES, INC.: GASOLINE AND DIESEL FUEL PRODUCTS ARE IDENTIFIED IN THE SAMPLES. 01-24-95 LEUNG FAXED FIELD NOTES TO PETTY OFFICER STEVE DOOLEY OF THE USCG PER HIS REQUEST. 01-23-95 LEUNG NOTIFIED USCG OF FINDINGS, PETTY OFFICER JERRY MOTYKN TOOK THE REPORT. 01-20-95 LEUNG AND W. PARISH ARRIVED ON SITE TO PERFORM SPOT INSPECTION. SOME AREAS OF THE TERMINAL ARE FLOODED BECAUSE OF HEAVY RAIN. OBSERVED SHEEN ON THE BAY AND SHEEN ON THE LAST CHAMBER OF THE OIL/WATER SEPARATOR. EFFLUENT WATER CONTAINED SHEEN AS IT IS BEING DISCHARGED. DEC TOOK SAMPLES OF THE DISCHARGE. PICTURES TAKEN OF THE SURFACE WATER NEAR THE OUTFALL. OIL PUDDLES ALSO OBSERVED AS THE OIL/WATER SEPARATOR IS BACKED UP TO THE ON SITE DRAINS. DEC NOTIFIED TERMINAL PERSONNEL TO STOP DISCHARGE. SERGIO (TERMINAL WORKER) SHUT

TO PUMP O/W SEPARATOR AT 12:25. AT 13:30 PREMIUM TRANSPORTATION ARRIVED TO PUMP OUT THE SEPARATOR AND TRANSFER THE CONTENT TO ON-SITE TANK TRUCKS. AT 13:54 DEC OBSERVED STORM WATER DISCHARGE COMING FROM THE TANK FARM AREA AND WATER CONTAINED PETROLEUM SHEEN. DEC TOLD EAGLE OIL PERSONNEL TO STOP DISCHARGE. SERGIO (ANOTHER WORKER AT THE TERMINAL) STOPPED THE DISCHARGE BY BOLTING DOWN THE DRAIN PIPE. PERSONNEL CONTINUED TO CLEAN O/W SEPARATOR AND BAY TANKS WITH

ABSORBENT PADS. DEC ISSUED CLEANUP LETTER TO EAGLE OIL. DEC DEPARTED

SYSTEM OFF. MIKE CRAWFORD (TERMINAL SUPERVISOR) CALLED FOR CONTRACTOR

SITE AT 14:10 TO DROP SAMPLES OFF AT THE LAB. "

Remarks: "DEC FOUND OILY WATER BEING DISCHARGED FROM THE OUTFALL OF THE O/W

SEPARATOR DURING SITE INSPECTION, NOTIFIED USCG OF OBSERVATION ON

1/23/95"

All Materials:

 Site ID:
 160160

 Operable Unit ID:
 1007621

 Operable Unit:
 01

 Material ID:
 372787

Direction Distance

Elevation Site Database(s) EPA ID Number

OIL CO, INC-DBA EAGLE OIL (Continued)

S104646011

EDR ID Number

Material Code: 0066A

Material Name: unknown petroleum
Case No.: Not reported
Material FA: Petroleum
Quantity: .00
Units: G
Recovered: .00

Oxygenate: Not reported

 Facility ID:
 9702994

 Facility Type:
 ER

 Spill Number:
 9702994

 DER Facility ID:
 309247

 Site ID:
 160161

 DEC Region:
 1

Closed Date: 1998-02-05 Spill Cause: Unknown Spill Class: В3 SWIS: 3020 1997-06-10 Spill Date: Investigator: **AYLEUNG** Referred To: Not reported 1997-06-10 Reported to Dept: CID: 252 Water Affected: Not reported Unknown Spill Source: Spill Notifier: DEC Cleanup Ceased: Not reported Cleanup Meets Std: True Last Inspection: Not reported Recommended Penalty: False **UST Trust:** False Remediation Phase:

Date Entered In Computer: 1997-06-10
Spill Record Last Update: 2011-08-23
Spiller Name: UNKNOWN
Spiller Company: Unknown
Spiller Address: UNKNOWN
Spiller Company: 999
Contact Name: UNK

DEC Memo: "Prior to Sept, 2004 data translation this spill Lead_DEC Field was

LEUNG PER TONY LEUNG, LILCO IS DOING WORK AND THEY ARE ALLOWED TO BACKFILL WITH CONTAMINATED SOIL SOIL STOCKPILED ON SITE AND DISPOSED

OF BY F&N"

Remarks: "CONTRACTOR IS EXPOSING PIPES AND THEN USING CONTAMINATED SOIL TO

BACKFILL-THE CONTRACTOR IS RICI-570 GARDINEER AVE-BROOKLYN NY THIS

INFO PER FAX REG 1"

All Materials:

 Site ID:
 160161

 Operable Unit ID:
 1045727

 Operable Unit:
 01

 Material ID:
 335909

 Material Code:
 0066A

Material Name: unknown petroleum
Case No.: Not reported
Material FA: Petroleum

Direction Distance

Elevation Site Database(s) EPA ID Number

OIL CO, INC-DBA EAGLE OIL (Continued)

S104646011

EDR ID Number

Quantity: .00
Units: G
Recovered: .00

Oxygenate: Not reported

NY MANIFEST:

Country: USA

EPA ID: NYP000301994
Facility Status: Not reported
Location Address 1: 1 SHERIDAN BLVD

Code: BP

Location Address 2: Not reported Total Tanks: Not reported Location City: INWOOD Location State: NY Location Zip: 11096 Location Zip 4: 1807

NY MANIFEST:

EPAID: NYP000301994
Mailing Name: NYSDEC
Mailing Contact: JOHN

Mailing Address 1: 50 WOLF RD RM 423

Mailing Address 2: Not reported Mailing City: ALBANY Mailing State: NY Mailing Zip: 12233 Mailing Zip 4: Not reported Mailing Country: USA

Mailing Phone: 5184579280

NY MANIFEST:

 Document ID:
 CTF0181612

 Manifest Status:
 C

 seq:
 Not reported

 Year:
 1992

 Trans1 State ID:
 72281ZNY

 Trans2 State ID:
 Not reported

 Generator Ship Date:
 10/05/1992

 Trans1 Recv Date:
 10/05/1992

Trans2 Recv Date: / /

TSD Site Recv Date: 10/05/1992

Part A Recv Date: / /

Part B Recv Date: 10/20/1992 Generator EPA ID: NYP000301994 Trans1 EPA ID: NYD986908085 Not reported Trans2 EPA ID: CTD021816889 TSDF ID 1: TSDF ID 2: Not reported Manifest Tracking Number: Not reported Import Indicator: Not reported Not reported **Export Indicator:** Discr Quantity Indicator: Not reported Discr Type Indicator: Not reported Discr Residue Indicator: Not reported Discr Partial Reject Indicator: Not reported

Direction
Distance

Elevation Site Database(s) EPA ID Number

OIL CO, INC-DBA EAGLE OIL (Continued)

S104646011

EDR ID Number

Discr Full Reject Indicator:

Manifest Ref Number:

Alt Facility RCRA ID:

Alt Facility Sign Date:

MGMT Method Type Code:

Not reported

Not reported

Not reported

Not reported

Waste Code: D001 - NON-LISTED IGNITABLE WASTES

Waste Code:
Wot reported
Quantity:
00775

Units: G - Gallons (liquids only)* (8.3 pounds)

Number of Containers: 00

Container Type: TT - Cargo tank, tank trucks

Handling Method: B Incineration, heat recovery, burning.

Specific Gravity: 100

Country: USA

EPA ID: NYP000865279
Facility Status: Not reported
Location Address 1: 1 SHERIDAN BLVD

Code: BP

Location Address 2: Not reported
Total Tanks: Not reported
Location City: INWOOD
Location State: NY
Location Zip: 11696
Location Zip 4: Not reported

NY MANIFEST:

EPAID: NYP000865279

Mailing Name: GENERAL OIL CORPORATION
Mailing Contact: GENERAL OIL CORPORATION

Mailing Address 1: 1 SHERIDAN BLVD
Mailing Address 2: Not reported
Mailing City: INWOOD
Mailing State: NY
Mailing Zip: 11696
Mailing Zip 4: Not reported
Mailing Country: USA

Mailing Phone: 5162398800

NY MANIFEST:

Document ID: NYA5433219

Manifest Status: C

 seq:
 Not reported

 Year:
 1987

 Trans1 State ID:
 69873-GU

 Trans2 State ID:
 Not reported

 Generator Ship Date:
 02/24/1987

 Trans1 Recv Date:
 02/24/1987

Trans2 Recv Date: / /

TSD Site Recv Date: 02/24/1987
Part A Recv Date: 03/06/1987
Part B Recv Date: 03/06/1987

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

OIL CO, INC-DBA EAGLE OIL (Continued)

S104646011

Generator EPA ID: NYP000865279 NYD981185903 Trans1 EPA ID: Trans2 EPA ID: Not reported TSDF ID 1: NYD082785429 TSDF ID 2: Not reported Manifest Tracking Number: Not reported Import Indicator: Not reported **Export Indicator:** Not reported Discr Quantity Indicator: Not reported Discr Type Indicator: Not reported Discr Residue Indicator: Not reported Discr Partial Reject Indicator: Not reported Discr Full Reject Indicator: Not reported Manifest Ref Number: Not reported Alt Facility RCRA ID: Not reported Alt Facility Sign Date: Not reported MGMT Method Type Code: Not reported

D001 - NON-LISTED IGNITABLE WASTES Waste Code:

Waste Code: Not reported Waste Code: Not reported Waste Code: Not reported Waste Code: Not reported Waste Code: Not reported Quantity: 02000 P - Pounds Units:

Number of Containers: 005

Container Type: DM - Metal drums, barrels

Handling Method: L Landfill. Specific Gravity: 100

> Click this hyperlink while viewing on your computer to access -1 additional NY MANIFEST: record(s) in the EDR Site Report.

SPDES:

Permit Number: NY0023299

State-Region: 01

03/01/1993 **Expiration Date:** Current Major Minor Status: Minor Primary Facility SIC Code: 5171

State Water Body Name: MOTTS BASIN

Limit Set Status Flag: Active Total Actual Average Flow(MGD): 0.288 Total App Design Flow(MGD): Not reported UDF1: Not reported Lat/Long: 40.6115 / -73.753639

DMR Cognizant Official: WM K NAPPO UDF2: 001701 UDF3:

FIPS County Code: NY059

Non-Gov Permit Affiliation Type Desc: **DMR Mailing Address** Non-Gov Permit Org Formal Name: OIL CO, INC-DBA EAGLE OIL Non-Gov Permit Street Address: OIL CO, INC-DBA EAGLE OIL Non-Gov Permit Supplemental Location: 1 SHERIDAN BOULEVARD

INWOOD Non-Gov Permit City:

Map ID MAP FINDINGS
Direction

Distance Elevation

n Site Database(s) EPA ID Number

OIL CO, INC-DBA EAGLE OIL (Continued)

S104646011

EDR ID Number

Non-Gov Permit State Code: NY
Non-Gov Permit Zip Code: 11696

Non-Gov Facility Affiliation Type Desc: Mailing Address

Non-Gov Facility Org Formal Name: OIL CO, INC-DBA EAGLE OIL Non-Gov Facility Street Address: OIL CO, INC-DBA EAGLE OIL Non-Gov Facility Supplemental Location: 1 SHERIDAN BOULEVARD

Non-Gov Facility City: INWOOD

Non-Gov Facility State Code: NY

Non-Gov Facility Zip Code: 11696

State Water Body: 02030202030

 UDF2:
 001701

 UDF3:
 I

 FIPS County Code:
 NY059

Non-Gov Permit Affiliation Type Desc:
Non-Gov Permit Org Formal Name:
Non-Gov Permit Street Address:
Oll CO, INC-DBA EAGLE OIL
On-Gov Permit Supplemental Location:
1 SHERIDAN BOULEVARD

Non-Gov Permit City: INWOOD
Non-Gov Permit State Code: NY
Non-Gov Permit Zip Code: 11696
Non-Gov Facility Affiliation Type Desc: Owner

Non-Gov Facility Org Formal Name: OIL CO, INC-DBA EAGLE OIL Non-Gov Facility Street Address: OIL CO, INC-DBA EAGLE OIL

Non-Gov Facility Supplemental Location: 1 SHERIDAN BLVD

Non-Gov Facility City: INWOOD
Non-Gov Facility State Code: NY
Non-Gov Facility Zip Code: 11696
State Water Body: 02030202030

 UDF2:
 001701

 UDF3:
 I

 FIPS County Code:
 NY059

Non-Gov Permit Affiliation Type Desc: Permittee

Non-Gov Permit Org Formal Name: OIL CO, INC-DBA EAGLE OIL Non-Gov Permit Street Address: 1 SHERIDAN BOULEVARD

Non-Gov Permit Supplemental Location: Not reported Non-Gov Permit City: INWOOD Non-Gov Permit State Code: NY Non-Gov Permit Zip Code: 11696

Non-Gov Facility Affiliation Type Desc: Mailing Address

Non-Gov Facility Org Formal Name: OIL CO, INC-DBA EAGLE OIL Non-Gov Facility Street Address: OIL CO, INC-DBA EAGLE OIL Non-Gov Facility Supplemental Location: 1 SHERIDAN BOULEVARD

Non-Gov Facility City: INWOOD

Non-Gov Facility State Code: NY

Non-Gov Facility Zip Code: 11696

State Water Body: 02030202030

 UDF2:
 001701

 UDF3:
 I

 FIPS County Code:
 NY059

Non-Gov Permit Affiliation Type Desc: Permittee

Non-Gov Permit Org Formal Name: OIL CO, INC-DBA EAGLE OIL

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

OIL CO, INC-DBA EAGLE OIL (Continued)

S104646011

S105996475

N/A

NY LTANKS

NY MANIFEST

Non-Gov Permit Street Address: 1 SHERIDAN BOULEVARD

Non-Gov Permit Supplemental Location: Not reported Non-Gov Permit City: INWOOD Non-Gov Permit State Code: NY Non-Gov Permit Zip Code: 11696 Non-Gov Facility Affiliation Type Desc: Owner

Non-Gov Facility Org Formal Name: OIL CO, INC-DBA EAGLE OIL Non-Gov Facility Street Address: OIL CO. INC-DBA EAGLE OIL

Non-Gov Facility Supplemental Location: 1 SHERIDAN BLVD

Non-Gov Facility City: **INWOOD** Non-Gov Facility State Code: NY Non-Gov Facility Zip Code: 11696 02030202030 State Water Body:

ST JOHNS EPISCOPAL HOSPITAL

South 327 BEACH 19TH ST 1/4-1/2

0.373 mi. 1970 ft.

89

FAR ROCKAWAY, NY 11691

Relative: LTANKS: Higher Facility ID:

0204866 Site ID: 228027 Actual: Closed Date: 2006-07-11 25 ft. Spill Number: 0204866

Spill Date: 2002-08-07 Spill Cause: Tank Test Failure

Spill Source: Institutional, Educational, Gov., Other

Spill Class: **B**3

Cleanup Ceased: Not reported SWIS: 4101 Investigator: iabeilby Referred To: Not reported 2002-08-07 Reported to Dept: CID: 233 Water Affected: Not reported Tank Tester Spill Notifier: Last Inspection: Not reported Recommended Penalty: False Meets Standard: False **UST Involvement:** False Remediation Phase:

Date Entered In Computer: 2002-08-07 Spill Record Last Update: 2006-07-11 Spiller Name: Not reported

Spiller Company: ST JOHNS EPISCOPAL HOSPIT

Spiller Address: 327 BEACH 19TH ST

Spiller County: 001

Spiller Contact: Not reported Spiller Phone: Not reported Spiller Extention: Not reported

DEC Region: **DER Facility ID:** 188088

DEC Memo: "Prior to Sept, 2004 data translation this spill Lead_DEC Field was

DEMEO 7/11/06 - iabeilby: closed. Spill due to tank test failure on

8/7/02. Retested and passed tank test on 4/16/03."

Remarks: "u/g tank failed vacum test tank will be uncovered and retested dry

leak problem at top of tank"

Direction
Distance

Elevation Site Database(s) EPA ID Number

ST JOHNS EPISCOPAL HOSPITAL (Continued)

S105996475

EDR ID Number

All TTF:

 Facility ID:
 0204866

 Spill Number:
 0204866

 Spill Tank Test:
 1527360

 Site ID:
 228027

 Tank Number:
 1

 Tank Size:
 20000

 Material:
 0001

EPA UST: Not reported UST: Not reported Cause: Not reported Source: Not reported

Test Method: 99

Test Method 2: Alternate Test per former 613.5(a)(2)(v)

Leak Rate: .00

Gross Fail: Not reported Modified By: Spills
Last Modified Date: Not reported

All Materials:

Site ID: 228027 Operable Unit ID: 856146 Operable Unit: 01 Material ID: 519088 Material Code: 0001A #2 fuel oil Material Name: Case No.: Not reported Petroleum Material FA: Quantity: .00 Units: G Recovered: .00

Oxygenate: Not reported

NY MANIFEST:

Country: USA

EPA ID: NYD986975274
Facility Status: Not reported

Location Address 1: 327 BEACH ST & 19TH ST

Code: E

Location Address 2: Not reported
Total Tanks: Not reported
Location City: FAR ROCKAWAY

Location State: NY
Location Zip: 11691
Location Zip 4: Not reported

NY MANIFEST:

EPAID: NYD986975274

Mailing Name: ST JOHNS EPISCOPAL HOSPITAL

Mailing Contact: ASZAL SIDDIQUI
Mailing Address 1: 327 BEACH ST & 19TH ST

Mailing Address 2: Not reported
Mailing City: FAR ROCKAWAY

Mailing State: NY
Mailing Zip: 11691

Direction Distance

Elevation Site Database(s) **EPA ID Number**

ST JOHNS EPISCOPAL HOSPITAL (Continued)

S105996475

EDR ID Number

Mailing Zip 4: Not reported Mailing Country: USA Mailing Phone: 7188697683

NY MANIFEST:

Document ID: Not reported Manifest Status: Not reported seq: Not reported

Year: 2018

Trans1 State ID: MAC300016672 Trans2 State ID: OHD980614374 Generator Ship Date: 05/18/2018 Trans1 Recv Date: 05/18/2018 Trans2 Recv Date: 05/22/2018 TSD Site Recv Date: 06/01/2018 Part A Recv Date: Not reported Part B Recv Date: Not reported Generator EPA ID: NYD986975274 Trans1 EPA ID: Not reported Trans2 EPA ID: Not reported TSDF ID 1: OHD048415665 TSDF ID 2: Not reported Manifest Tracking Number: 011672175FLE

Import Indicator: Ν **Export Indicator:** Ν Discr Quantity Indicator: Ν Discr Type Indicator: Ν Discr Residue Indicator: Ν Discr Partial Reject Indicator: Ν Discr Full Reject Indicator: Ν

Manifest Ref Number: Not reported Alt Facility RCRA ID: Not reported Alt Facility Sign Date: Not reported MGMT Method Type Code: H040

Waste Code:

Not reported Waste Code: Not reported Waste Code: Not reported Waste Code: Not reported Waste Code: Not reported Waste Code: Not reported Quantity: 312 Units: P - Pounds

Number of Containers:

Container Type: DF - Fiberboard or plastic drums (glass) Handling Method: B Incineration, heat recovery, burning.

Specific Gravity: Waste Code: D001 F003 Waste Code 1_2: Not reported Waste Code 1_3: Waste Code 1 4: Not reported Waste Code 1_5: Not reported Waste Code 1_6: Not reported

> Click this hyperlink while viewing on your computer to access 37 additional NY MANIFEST: record(s) in the EDR Site Report.

Direction Distance

Elevation Site Database(s) EPA ID Number

 90
 NIELSON GARDENS
 NY LTANKS
 U001838269

 ESE
 10-14 NEILSON STREET
 NY UST
 N/A

1/4-1/2 0.383 mi. 2024 ft.

Relative: LTANKS:

 Lower
 Facility ID:
 0800413

 Actual:
 Site ID:
 396163

 23 ft.
 Closed Date:
 2008-06-18

 Spill Number:
 0800413

 Spill Date:
 2008-04-10

 Spill Cause:
 Tank Test Failure

FAR ROCKAWAY, NY 11691

Spill Source: Commercial/Industrial Spill Class: C4

Cleanup Ceased: Not reported SWIS: 4101 Investigator: bkfalvey Referred To: Not reported Reported to Dept: 2008-04-10 CID: 444

Water Affected:

Spill Notifier:

Last Inspection:

Recommended Penalty:

Meets Standard:

UST Involvement:

Not reported
False
False
Not reported
Not reported

Remediation Phase:

Date Entered In Computer: 2008-04-10
Spill Record Last Update: 2008-06-18
Spiller Name: MANAGER
Spiller Company: APART

Spiller Address: 10-14 NEILSON STREET

Spiller County: 001

Spiller Contact: MANAGER
Spiller Phone: (212) 873-4919
Spiller Extention: Not reported

DEC Region: 2
DER Facility ID: 345662

DEC Memo: "5/6/08 received call from Bernie of NYC Tank Testing (917)648-5551.

closure application. Working with Rene Lewis on tank removal. Will call me when tank is to be removed. bf 5/7/08 bf: sent ttf letter to: Ohad Badani Neilson Gardens, Inc. 155 Riverside Drive New York, NY 10024 5/30/08 Received messages from Rene Lewis (917)214-6670 on 5/28 and 5/29. Tank was removed. He was told that the closure application was submitted. No application received yet as per DEC database. When he arrived on-site, holes were already cut in tank and oil was entering through holes. 65 tons contaminated soil removed. 10 endpoint samples taken. They will be installing new tank. He will tell them they need to supply application. Spill closure report will follow within 10 days. bf 6/18/08 Received hansd delivered closure report from Rene Lewis on 6/13/08. Sampled through tank bottom and tank sides. Removed tank. Excavated approx. 65 tons of contaminated soil. All contaminaants non-detect. Tank closure application and application for new AST attached and sent for processing. Rene called today and requested NFA letter after closure. faxed letter to him at

(718)638-3181. Mailed letter to Mr. Badani at the address above. NFA.

Tank to be pulled and endpoint samples to be taken. Will submit PBS

bf"

EDR ID Number

NY AST

Direction Distance

Elevation Site Database(s) EPA ID Number

NIELSON GARDENS (Continued)

U001838269

EDR ID Number

Remarks: "FAILED TEST: WILL EMPTY TANK"

All TTF:

 Facility ID:
 0800413

 Spill Number:
 0800413

 Spill Tank Test:
 2453484

 Site ID:
 396163

 Tank Number:
 Not reported

 Tank Size:
 10000

 Material:
 0001

EPA UST: Not reported UST: True Cause: Not reported Source: Not reported

Test Method: 03

Test Method 2: Horner EZ Check I or II

Leak Rate: .00
Gross Fail: Not reported
Modified By: Watchdog
Last Modified Date: Not reported

All Materials:

Site ID: 396163 Operable Unit ID: 1153110 Operable Unit: 01 2143887 Material ID: Material Code: 0001A Material Name: #2 fuel oil Not reported Case No.: Material FA: Petroleum Quantity: .00 Units: G Recovered: .00

Oxygenate: Not reported

UST:

Id/Status: 2-200034 / Active

Program Type: PBS
Region: STATE
DEC Region: 2
Expiration Date: 10/23/2022

UTM Y: 599776.46294 UTM Y: 4495357.03872

Site Type: Apartment Building/Office Building

Affiliation Records:

Site Id: 6716
Affiliation Type: Facility Owner

Company Name: NIELSON GARDENS INC
Contact Type: MANAGING AGENT
Contact Name: ANDY EAGLE

Address1: 155 RIVERSIDE DRIVE

Address2: Not reported City: NEW YORK

State: NY Zip Code: 10024

Direction Distance Elevation

Site Database(s) **EPA ID Number**

NIELSON GARDENS (Continued)

U001838269

EDR ID Number

Country Code: 001

Phone: (212) 873-4919 EMail: Not reported Fax Number: Not reported **MFLEONAR** Modified By: Date Last Modified: 2017-10-10

Site Id: 6716

Affiliation Type: Mail Contact

Company Name: **NIELSON GARDENS INC** Contact Type: MANAGING AGENT Contact Name: ANDY EAGLE

Address1: 155 RIVERSIDE DRIVE

Address2: Not reported **NEW YORK** City: State: NY Zip Code: 10024 Country Code: 001

(212) 873-4919 Phone: EMail: Not reported Fax Number: Not reported **MFLEONAR** Modified By: Date Last Modified: 2017-10-10

Site Id: 6716

Facility Operator Affiliation Type: Company Name: **NIELSON GARDENS**

Contact Type: Not reported **EMERSON** Contact Name: Address1: Not reported Address2: Not reported City: Not reported State: NN

Zip Code: Not reported

Country Code: 001

Phone: (347) 368-3258 EMail: Not reported Fax Number: Not reported Modified By: **NRLOMBAR** Date Last Modified: 2008-07-14

Site Id: 6716

Affiliation Type: **Emergency Contact NIELSON GARDENS INC** Company Name:

Contact Type: Not reported Contact Name: ANDY EAGLE Address1: Not reported Address2: Not reported City: Not reported State: NN

Zip Code: Not reported

Country Code:

Phone: (212) 873-4919 EMail: Not reported Fax Number: Not reported Modified By: **MFLEONAR** Date Last Modified: 2017-10-10

Direction Distance

Elevation Site Database(s) EPA ID Number

NIELSON GARDENS (Continued)

U001838269

EDR ID Number

Tank Info:

Tank Number: 001 Tank ID: 24844

Tank Status: Closed - Removed Material Name: Closed - Removed

 Capacity Gallons:
 10000

 Install Date:
 01/01/1953

 Date Tank Closed:
 05/21/2008

 Registered:
 True

Tank Location: Underground
Tank Type: Steel/carbon steel

Material Code: 0003

Common Name of Substance: #6 Fuel Oil (On-Site Consumption)

Tightness Test Method: -

Date Test:
Not reported
Next Test Date:
Not reported
Pipe Model:
Modified By:
MFLEONAR
Last Modified:
Not reported
MFLEONAR
10/10/2017

Equipment Records:

H00 - Tank Leak Detection - None

L09 - Piping Leak Detection - Exempt Suction Piping

A00 - Tank Internal Protection - None
D01 - Pipe Type - Steel/Carbon Steel/Iron
G00 - Tank Secondary Containment - None
J02 - Dispenser - Suction Dispenser
B00 - Tank External Protection - None
C00 - Pipe Location - No Piping
F00 - Pipe External Protection - None
I04 - Overfill - Product Level Gauge (A/G)

AST:

Region: STATE
DEC Region: 2
Site Status: Active
Facility Id: 2-200034
Program Type: PBS

UTM X: 599776.46294 UTM Y: 4495357.03872 Expiration Date: 10/23/2022

Site Type: Apartment Building/Office Building

Affiliation Records:

Site Id: 6716

Affiliation Type: Facility Owner

Company Name: NIELSON GARDENS INC
Contact Type: MANAGING AGENT
Contact Name: ANDY EAGLE

Address1: 155 RIVERSIDE DRIVE

Address2: Not reported City: NEW YORK

State: NY
Zip Code: 10024
Country Code: 001

Direction Distance Elevation

Site Database(s) **EPA ID Number**

NIELSON GARDENS (Continued)

U001838269

EDR ID Number

Phone: (212) 873-4919 EMail: Not reported Fax Number: Not reported Modified By: **MFLEONAR** Date Last Modified: 2017-10-10

6716 Site Id: Affiliation Type: Mail Contact

Company Name: **NIELSON GARDENS INC** Contact Type: MANAGING AGENT Contact Name: ANDY EAGLE

Address1: 155 RIVERSIDE DRIVE

Address2: Not reported City: **NEW YORK** State: NYZip Code: 10024 Country Code: 001

Phone: (212) 873-4919 EMail: Not reported Fax Number: Not reported Modified By: **MFLEONAR** Date Last Modified: 2017-10-10

Site Id: 6716

Facility Operator Affiliation Type: Company Name: **NIELSON GARDENS**

Contact Type: Not reported Contact Name: **EMERSON** Address1: Not reported Address2: Not reported Not reported City: State: NN

Zip Code: Not reported

Country Code: 001

Phone: (347) 368-3258 EMail: Not reported Fax Number: Not reported Modified By: **NRLOMBAR** Date Last Modified: 2008-07-14

6716 Site Id:

Affiliation Type: **Emergency Contact** Company Name: **NIELSON GARDENS INC**

Contact Type: Not reported Contact Name: ANDY EAGLE Address1: Not reported Address2: Not reported City: Not reported State: NN

Zip Code:

Not reported

Country Code: 999

(212) 873-4919 Phone: EMail: Not reported Fax Number: Not reported **MFLEONAR** Modified By: Date Last Modified: 2017-10-10

Direction Distance

Elevation Site Database(s) **EPA ID Number**

NIELSON GARDENS (Continued)

U001838269

EDR ID Number

Tank Info:

002 Tank Number: Tank Id: 224126 Material Code: 0003

Common Name of Substance: #6 Fuel Oil (On-Site Consumption)

Equipment Records:

F00 - Pipe External Protection - None A00 - Tank Internal Protection - None

B01 - Tank External Protection - Painted/Asphalt Coating

D01 - Pipe Type - Steel/Carbon Steel/Iron

K00 - Spill Prevention - None J02 - Dispenser - Suction Dispenser

E00 - Piping Secondary Containment - None

H00 - Tank Leak Detection - None C01 - Pipe Location - Aboveground

G02 - Tank Secondary Containment - Vault (w/access)

105 - Overfill - Vent Whistle L00 - Piping Leak Detection - None

Tank Location: 3

Tank Type: Steel/Carbon Steel/Iron

Tank Status: In Service Pipe Model: Not reported Install Date: 06/20/2008 Capacity Gallons: 5500 Tightness Test Method:

Date Test: Not reported Next Test Date: Not reported Date Tank Closed: Not reported Register: True Modified By: **MFLEONAR** Last Modified: 10/10/2017

Material Name: #2 fuel oil (on-site consumption)

9412343

JAMAICA BAY PEAKING FACILITY, LLC

AA91 WNW 1425 BAY 24TH STREET 1/4-1/2 FAR ROCKAWAY, NY 11691

0.410 mi.

2167 ft. Site 1 of 2 in cluster AA

Relative:

Lower LTANKS: Facility ID: Actual:

Site ID: 182470 6 ft. 1996-10-10 Closed Date: Spill Number: 9412343 Spill Date: 1994-12-14 Spill Cause: Tank Test Failure Spill Source: Commercial/Industrial

Spill Class: C3

Cleanup Ceased: Not reported SWIS: 4101 Investigator: **SIGONA** Referred To: Not reported Reported to Dept: 1994-12-14 CID: Not reported

NY LTANKS

NY MOSF

NY TANKS

NY Spills NY SPDES

NY CBS

S101103078

N/A

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

JAMAICA BAY PEAKING FACILITY, LLC (Continued)

S101103078

Water Affected: Not reported Spill Notifier: Tank Tester Last Inspection: Not reported Recommended Penalty: False Meets Standard: False **UST Involvement:** False Remediation Phase: 0

Date Entered In Computer: 1995-01-30 Spill Record Last Update: 1996-10-10

Spiller Name: PATRICK J. VAN ROSSEM

Spiller Company: LILCO

Spiller Address: 445 BROAD HOLLOW ROAD

Spiller County:

Spiller Contact: RALPH FANIZZI, CHIEF ENGR

Spiller Phone: (718) 868-7900 Spiller Extention: Not reported DEC Region:

DER Facility ID: 159082 DEC Memo:

"EX- INVEST" Remarks:

All TTF:

Facility ID: 9412343 Spill Number: 9412343 Spill Tank Test: 1543453 Site ID: 182470 Tank Number: Not reported

Tank Size: Material: 0001 **EPA UST:** Not reported UST: Not reported Cause: Not reported Source: Not reported

Test Method: 00 Test Method 2: Unknown Leak Rate: .00 Gross Fail: Not reported Modified By: Spills

Not reported

All Materials:

Last Modified Date:

Site ID: 182470 Operable Unit ID: 1006013 Operable Unit: 01 Material ID: 556742 Material Code: 0001A Material Name: #2 fuel oil Case No.: Not reported Material FA: Petroleum Quantity: -1.00 Units: G Recovered: .00

Not reported Oxygenate:

MOSF:

2-1560 Facility ID:

Direction Distance

Elevation Site Database(s) **EPA ID Number**

JAMAICA BAY PEAKING FACILITY, LLC (Continued)

S101103078

EDR ID Number

MOSF Program Type: Tank Status: Inactive Expiration Date: Not reported

Dec Region:

UTMX: 604813.12205 UTMY: 4496306.85526

CBS:

CBS Number: 2-000396 Program Type: CBS Facility Status: Active 03/30/2019 **Expiration Date:** Dec Region: 2

604777.22402 UTMX: UTMY: 4496044.04251

TANKS:

Facility Id: 2-608895 Region: STATE DEC Region: 2 Site Status: Active Program Type: **PBS** 04/22/2023 **Expiration Date:** UTM X: 604736.44744 UTM Y: 4496229.43548

SPILLS:

Facility ID: 0030017 Facility Type: ER Spill Number: 0030017 DER Facility ID: 159082 Site ID: 190727 DEC Region:

Closed Date: 2002-04-16 Spill Cause: Housekeeping

Spill Class: B1 SWIS: 4101 Spill Date: 2000-08-22 Investigator: **SIGONA** Referred To: Not reported Reported to Dept: 2000-08-22 CID: Not reported Water Affected: Not reported

Major Facility (MOSF) > 400,000 gal Spill Source:

Spill Notifier: Responsible Party Cleanup Ceased: Not reported

Cleanup Meets Std: True Last Inspection: Not reported Recommended Penalty: False **UST Trust:** False Remediation Phase:

Date Entered In Computer: 2000-08-25 Spill Record Last Update: 2002-04-16 Spiller Name: **ROB LOWE** Spiller Company: **KEYSPAN**

Spiller Address: 175 EAST OLD COUNTRY ROAD

Direction Distance

Elevation Site Database(s) EPA ID Number

JAMAICA BAY PEAKING FACILITY, LLC (Continued)

S101103078

EDR ID Number

Spiller Company: 001

Contact Name: ROB LOWE

DEC Memo:

Remarks: "PERFORMING GENERAL CLEANUP AT SUBSTATION.HAVE BEEN HISTORICAL SPILLS

HERE (STAINS). AT ONE TRANSFORMER, DUG DOWN APPROX 4 FT- SOIL STILL COMTAMINATED. TOOK SOIL SAMPLE. THERE IS WATER IN EXCA- VATION AT THIS DEPTH (TIDAL AREA)SLIGHT SHEEN. DEC REQUESTED WATER SAMPLE BE

ANALYZED FOR PCBS. LIPA NOT"

All Materials:

Site ID: 190727 Operable Unit ID: 835556 Operable Unit: 01 Material ID: 540907 Material Code: 0020A Material Name: transformer oil Case No.: Not reported Material FA: Petroleum Quantity: .00 Units: G Recovered: .00

Oxygenate: Not reported

 Facility ID:
 0203231

 Facility Type:
 ER

 Spill Number:
 0203231

 DER Facility ID:
 159082

 Site ID:
 190728

 DEC Region:
 2

Closed Date: 2007-01-22 Spill Cause: Unknown Spill Class: C3 SWIS: 4101 Spill Date: 2002-06-26 LXZIELIN Investigator: Referred To: Not reported Reported to Dept: 2002-06-26 CID: 204 Water Affected: Not reported Spill Source: Unknown

Spill Notifier: Responsible Party
Cleanup Ceased: Not reported
Cleanup Meets Std: False
Last Inspection: Not reported
Recommended Penalty: False
UST Trust: False
Remediation Phase: 0

Date Entered In Computer: 2002-06-26

Spill Record Last Update: 2007-01-22

Spiller Name: ROBERT KOCAJ

Spiller Company: KEY SPAN ENERGY

Spiller Address: 175 EAST OLD COUNTRY RD

Spiller Company: 001

Contact Name: JOHN SIEDLECKI

DEC Memo: "01/12/07 - Zielinski During a MOSF inspection, I reviewed

information (eDocs) the facility has regarding the spill and are are provided by Obligado in his below comments. The excavation area has

Map ID MAP FINDINGS
Direction

Distance Elevation S

Site Database(s) EPA ID Number

JAMAICA BAY PEAKING FACILITY, LLC (Continued)

S101103078

EDR ID Number

been backfilled and paved. The case is closed. 09/29/06 - Zielinski The case assigned to Leszek Zielinski. Prior to Sept, 2004 data translation this spill Lead DEC Field was VOUGHT 6/26/02- JOHN -ROBERT KOCAJ- REPLACING H2O LINES- OIL ON DIRT - WAITING FOR CONSULTANT - 1) ENDPOINT SAMPLES - SOIL & WATER 2) DISPOSAL MANIFEST-SOIL - HE WILL CALL BACK 9/27/05 - Obligado - SPILL TRANSFERRED FROM VOUGHT TO OBLIGADO 1/19/06 - Obligado - Call Robert Kocaj, (718-868-7939), not in, spoke with Keith Adams about spill number. He will give message to Charlie Tyler (718-868-7920), who is the regulatory compliance specialist who will call me back. Charlie Tyelr calls back, says he wasn't working there at time but he asked around and found out the spill was called in in response to product that was encountered during excavation for a water line. The product was an oil with a high sulfur odor and was probably an remnants of an older spill. He said he will try to dig up information about the file and he will get back to me late next week. 9/19/06 - Obligado - Called Charlie Tyler again, left message to call back DEC. 9/21/06 -Obligado - Spoke with Charlie Tyler, he will email documentation related to the above spill number. Received Email from Charlie Tyler. It occurred during an excavation below an old oil line. As the tide rose the excavation filled with water, and oil gobules began to form on the water surface. Oil was removed using absorbant pads and pigs until no more oil appeared on water table. Contaminated pads and pigs were disposed of in a 55 gallon drum. Manifest enclosed. No contaminated soil was evident. Contaminated soil probably below the water table. No contaminated soil was disposed of. Included anayltical data showing soil endpoint samples analyzed for TPH at 1.71 mg/Kg and 34 mg/Kg and a ground water sampled which measured at 2.64 mg/L TPH. Petroleum ID of product showed to be No. 6 fuel Oil. ND for pcbs and 0.048 mg/Kg Lead, total Halogens at 38.8 mg/Kg. No analysis for VOCS/SVOCS. Keyspan requested closure based on historic spill and oil removed and disposed of. 9/22/06 - Obligado - Discuss with Koon. He said he will reassign to Randy Austin group because site is a MOSF facility. MOSF #2-1560. I transferred this site to Koon."

Remarks: "ESCAVATION FOUND CONTAMINATED SOIL"

All Materials:

 Site ID:
 190728

 Operable Unit ID:
 856186

 Operable Unit:
 01

 Material ID:
 521058

 Material Code:
 0064A

Material Name: unknown material
Case No.: Not reported
Material FA: Other
Quantity: 5.00
Units: G
Recovered: .00

Oxygenate: Not reported

 Facility ID:
 8504100

 Facility Type:
 ER

 Spill Number:
 8504100

 DER Facility ID:
 278930

 Site ID:
 190729

 DEC Region:
 2

Direction Distance

Elevation Site Database(s) EPA ID Number

JAMAICA BAY PEAKING FACILITY, LLC (Continued)

S101103078

EDR ID Number

Closed Date: 1997-07-31 Spill Cause: Unknown Spill Class: D4 SWIS: 4101 Spill Date: 1986-02-21 Investigator: **KSTANG** Referred To: Not reported Reported to Dept: 1986-02-21 CID: Not reported

Water Affected: BAYWATER CHANNEL

Spill Source: Unknown
Spill Notifier: Other
Cleanup Ceased: Not reported
Cleanup Meets Std: False
Last Inspection: Not reported
Recommended Penalty: False
UST Trust: False
Remediation Phase: 0

Date Entered In Computer: 1992-05-18
Spill Record Last Update: 1997-08-06
Spiller Name: Not reported
Spiller Company: UNKNOWN
Spiller Address: Not reported
Spiller Company: 999
Contact Name: Not reported

DEC Memo: "Prior to Sept, 2004 data translation this spill Lead_DEC Field was

TANG AFTER CONSIDERING THE FACT THAT THE SPILL HAPPENED A LONG TIME AGO, AND THE REMARKS INDICATE NO LONG TERM FOLLOW UP IS NEEDED. THE

SPILL HAS BEEN CLOSED."

Remarks: "LILCO BLOCKED DRAIN WITH ABSORBANT AND PUT OUT BOOM"

All Materials:

 Site ID:
 190729

 Operable Unit ID:
 895987

 Operable Unit:
 01

 Material ID:
 479879

 Material Code:
 0064A

Material Name: unknown material
Case No.: Not reported
Material FA: Other
Quantity: .00
Units: L
Recovered: .00

Oxygenate: Not reported

 Facility ID:
 9312539

 Facility Type:
 ER

 Spill Number:
 9312539

 DER Facility ID:
 159082

 Site ID:
 190730

 DEC Region:
 2

Closed Date: 1994-01-25 Spill Cause: Equipment Failure

Spill Class: C4
SWIS: 4101
Spill Date: 1994-01-25
Investigator: MCTIBBE

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

JAMAICA BAY PEAKING FACILITY, LLC (Continued)

S101103078

Referred To: Not reported Reported to Dept: 1994-01-25 CID: Not reported Water Affected: Not reported

Spill Source: Commercial/Industrial Spill Notifier: Responsible Party Cleanup Ceased: 1994-01-25

Cleanup Meets Std: True Last Inspection: Not reported Recommended Penalty: False UST Trust: False Remediation Phase: 0

Date Entered In Computer: 1994-01-26 Spill Record Last Update: 2004-09-30 Spiller Name: Not reported Spiller Company: LILCO Spiller Address: Not reported Spiller Company: 001

Contact Name: Not reported

DEC Memo: "Prior to Sept, 2004 data translation this spill Lead_DEC Field was

TIBBE "

Remarks: "RADIATOR LEAK - ON BLUE STONE - LILCO MAINTENANCE AT SITE FOR CLEAN

UP."

All Materials:

Site ID: 190730 Operable Unit ID: 994538 Operable Unit: 01 Material ID: 387965 Material Code: 0016A Material Name: non PCB oil Case No.: Not reported Material FA: Petroleum -2.00 Quantity: Units: G Recovered: .00

Oxygenate: Not reported

Facility ID: 9315393 Facility Type: ER Spill Number: 9315393 **DER Facility ID:** 159082 Site ID: 190731 DEC Region:

Closed Date: 1994-03-29 Spill Cause: Other Spill Class: C3 SWIS: 4101 Spill Date: 1994-03-29 Investigator: **SJMILLER** Referred To: Not reported 1994-03-29 Reported to Dept: CID: Not reported Water Affected: MOTT BASIN

Spill Source: Vessel

Spill Notifier: Federal Government

Cleanup Ceased: Not reported

Direction Distance

Elevation Site Database(s) EPA ID Number

JAMAICA BAY PEAKING FACILITY, LLC (Continued)

S101103078

EDR ID Number

Cleanup Meets Std: True
Last Inspection: Not reported
Recommended Penalty: False
UST Trust: False
Remediation Phase: 0
Data Entered In Computer: 1994 03 30

Date Entered In Computer: 1994-03-30
Spill Record Last Update: 2002-12-31
Spiller Name: Not reported
Spiller Company: UNK OWNER
Spiller Address: Not reported
Spiller Company: 999

Contact Name: Not reported

DEC Memo: "Prior to Sept, 2004 data translation this spill Lead_DEC Field was

MILLER 3/29/02 @1640HRS, MILLER SPOKE WITH PO PUMA, USCG: ON SCENE;

NO RELEASE OBSERVED; ARRANGING SALVAGE OF VESSEL."

Remarks: "BOAT SUNKIN IN AREA - USCG INVEST."

All Materials:

 Site ID:
 190731

 Operable Unit ID:
 997455

 Operable Unit:
 01

 Material ID:
 387148

 Material Code:
 0066A

Material Name: unknown petroleum
Case No.: Not reported
Material FA: Petroleum
Quantity: .00
Units: G
Recovered: .00

Oxygenate: Not reported

Facility ID: 1207322 Facility Type: ER Spill Number: 1207322 DER Facility ID: 159082 Site ID: 470372 DEC Region: Closed Date: 2012-10-25 Spill Cause: Other Spill Class: Not reported SWIS: 4101 Spill Date: 2012-10-25 Investigator: **JBVOUGHT** Referred To: Not reported Reported to Dept: 2012-10-25 CID: Not reported Water Affected: Not reported Spill Source: Commercial/Industrial

Spill Notifier:

Cleanup Ceased:

Cleanup Meets Std:

Last Inspection:

Recommended Penalty:

UST Trust:

Remediation Phase:

O

Page Entered In Computer:

Other

Not reported

False

Palse

2012-10-25

Date Entered In Computer: 2012-10-25 Spill Record Last Update: 2012-10-25

Direction Distance

Elevation Site Database(s) EPA ID Number

JAMAICA BAY PEAKING FACILITY, LLC (Continued)

S101103078

EDR ID Number

Spiller Name: GARY ANDRES

Spiller Company: LIPA

Spiller Address: 1425 BAY 24 ST

Spiller Company: 999

Contact Name: GARY ANDRES

DEC Memo: "10/25/12-Vought-Called and spoke to DEP Hazmat Chris Haas

(Ph:718-595-4664) who noted that they have an asbestos response unit and that call should be referred to 311 so that the Unit may respond. Vought called and spoke to caller FNDY Gary Andres and he will call spill into DEP Hazmat. Vought received inquiry from and informed DEC

Austin of same. Spill closed by Vought."

Remarks: "5 contained barrels of asbestos on LIPA property, FD would like DEC

Rep on site today @ 0842 - Gary from FDNY - called back to report

that quantity is now 10-12 barrells behind LIPA Plant"

All Materials:

 Site ID:
 470372

 Operable Unit ID:
 1220234

 Operable Unit:
 01

 Material ID:
 2218841

 Material Code:
 0026A

 Material Name:
 asbestos

 Case No.:
 01332214

Material FA: Hazardous Material

Quantity: 250.00 Units: G

Recovered: Not reported Oxygenate: Not reported

 Facility ID:
 0813481

 Facility Type:
 ER

 Spill Number:
 0813481

 DER Facility ID:
 360396

 Site ID:
 411173

 DEC Region:
 2

 Closed Date:
 2009-03-20

 Spill Class:
 Human Error

Spill Class: C4 SWIS: 4101 Spill Date: 2009-03-13 Investigator: smsanges Referred To: Not reported Reported to Dept: 2009-03-13 CID: Not reported Water Affected: MOTT BASIN Spill Source: Commercial/Industrial

Spill Notifier:

Cleanup Ceased:

Cleanup Meets Std:

Last Inspection:

Recommended Penalty:

UST Trust:

Remediation Phase:

Other

Not reported

Not reported

False

Palse

0

Date Entered In Computer: 2009-03-13
Spill Record Last Update: 2009-03-20
Spiller Name: HARRY PENNY
Spiller Company: NATIONAL GRID

Direction Distance Elevation

evation Site Database(s) EPA ID Number

JAMAICA BAY PEAKING FACILITY, LLC (Continued)

S101103078

EDR ID Number

Spiller Address: 1425 BAY 24TH ST

Spiller Company: 999

Contact Name: HARRY PENNY

DEC Memo: "DEC received a writeup of what happened and how it was cleaned up

and how it will be protected from happening in the future. see eDocs"
"During a boiler clean out some solution escaped from a roof vent and

approx 5 gallons went into the bay. 1744 hrs: Charles Tyler from National Grid contacted dispatch to update the quantaty spilled as being between 25 and 50 gallons. The spill has been contained at this time and there is no longer any discharge. The spill has been cleaned

up."

All Materials:

Remarks:

 Site ID:
 411173

 Operable Unit ID:
 1167637

 Operable Unit:
 01

 Material ID:
 2159221

 Material Code:
 9999

Material Name: other - Ammoniated citric acid solutio

Case No.:

Material FA:

Quantity:

Units:

Not reported
Other
50.00

G

Recovered: Not reported Oxygenate: Not reported

 Facility ID:
 0503946

 Facility Type:
 ER

 Spill Number:
 0503946

 DER Facility ID:
 159082

 Site ID:
 348658

 DEC Region:
 2

Closed Date: 2006-01-24 Spill Cause: Equipment Failure

Spill Class: D4
SWIS: 4101
Spill Date: 2005-07-02
Investigator: SFRAHMAN
Referred To: Not reported
Reported to Dept: 2005-07-02

CID: 73

Water Affected: Not reported Spill Source: Commercial/Industrial

Spill Notifier: Responsible Party
Cleanup Ceased: Not reported
Cleanup Meets Std: False
Last Inspection: Not reported
Recommended Penalty: False
UST Trust: False
Remediation Phase: 0

Date Entered In Computer: 2005-07-02
Spill Record Last Update: 2006-01-24
Spiller Name: Not reported
Spiller Company: KEY SPAN
Spiller Address: Not reported

Spiller Company: 001

Contact Name: WATCH ENGINEER

Direction Distance Elevation

Site Database(s) EPA ID Number

JAMAICA BAY PEAKING FACILITY, LLC (Continued)

S101103078

EDR ID Number

DEC Memo: "08.01.05..SR// Will send the clean up and soil analytical results.

To fix the problem, transformer needs to take off from service which will be done later on. 09.26.05 SR// Sharif spoke with operation people. They said the leak has been stopped, samples were taken, clean up is pending till the transformer goes out of service. Will send DEC the analytical. 10.03.05 SR// Sharif got a call from the Power Station saying that the leak has been stopped, the contaminated area has been dug out and soil samples were taken. Mr. Bart polizotti, 516-545-5511 will send DEC the closure report. 11.18.05 Sharif// Spoke with Mr. Bart Polizotti. He informed me he is going to send me the clean up statement and TPH analyticals. 01/24/06 Sharif//

Rec'd factsheet from Keyspan Energy.Non Hazardous waste manifest was provided. NFA required."

Remarks: "TRANSFORMER LEAKED - SPILL WAS ONTO BLUE STONE. CLEAN UP TUESDAY

JULY 5 BY KEYSPAN. STILL LEAKING (DRIP CONTAINMENT SYSTEM IN PLACE -

WITH HOURLY MONITORING)."

All Materials:

Site ID: 348658 Operable Unit ID: 1106309 Operable Unit: 01 Material ID: 1971234 Material Code: 0541A Material Name: dielectric fluid Case No.: Not reported Material FA: Petroleum Quantity: 1.00 Units: G Recovered: .00 Oxygenate: Not reported

Facility ID: 0511001 Facility Type: ER Spill Number: 0511001 159082 DER Facility ID: Site ID: 357066 DEC Region: Closed Date: 2005-12-20 Spill Cause: Other Spill Class: C4 SWIS: 4101 Spill Date: 2005-12-20 Investigator: **SMSANGES** Referred To: Not reported

Reported to Dept:

CID: 444 Water Affected: Not reported Spill Source: Unknown Spill Notifier: Other Cleanup Ceased: Not reported Cleanup Meets Std: False Last Inspection: Not reported Recommended Penalty: False **UST Trust:** False Remediation Phase: 0

2005-12-20

Date Entered In Computer: 2005-12-20 Spill Record Last Update: 2005-12-20

Direction Distance

Elevation Site Database(s) **EPA ID Number**

JAMAICA BAY PEAKING FACILITY, LLC (Continued)

S101103078

EDR ID Number

Spiller Name: Not reported Spiller Company: UNKNOWN] Spiller Address: Not reported 001

Spiller Company:

Contact Name: **CHARLES TYLER**

DEC Memo:

"LOOKS LIKE SOMEONE DUMPED MOTOR OIL FROM A CAR ON THE PROPERTY IS Remarks:

OUTSIDE FENCE LINE: BUT ARE CLEANING UP:"

All Materials:

Site ID: 357066 Operable Unit ID: 1114355 Operable Unit: 01 Material ID: 2104430 Material Code: 0015 Material Name: motor oil Case No.: Not reported Petroleum Material FA: Quantity: 1.00 Units: G .00 Recovered:

Not reported Oxygenate:

Facility ID: 9800623 Facility Type: ER Spill Number: 9800623 **DER Facility ID:** 159082 Site ID: 180823 DEC Region:

Closed Date: 1998-04-15 Spill Cause: Unknown Spill Class: E5 SWIS: 4101 Spill Date: 1998-04-15

Investigator: LUCE Referred To: Not reported Reported to Dept: 1998-04-15 CID: 257

Water Affected: Not reported Spill Source: Commercial/Industrial Spill Notifier: Responsible Party

Cleanup Ceased: Not reported Cleanup Meets Std: False Last Inspection: Not reported Recommended Penalty: False **UST Trust:** False Remediation Phase:

Date Entered In Computer: 1998-04-15 Spill Record Last Update: 1998-04-24 Spiller Name: **KEITH ADAMS**

Spiller Company: FAR ROCKAWAY POWER STATIO

Spiller Address: 1425 BAY 24TH ST

Spiller Company: 001

Contact Name: KEITH ADAMS

DEC Memo:

"****** THIS IS A DRILL ******* ONE INJURED SUBJECT ON SCENE" Remarks:

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

JAMAICA BAY PEAKING FACILITY, LLC (Continued)

S101103078

All Materials:

Site ID: 180823 Operable Unit ID: 1061105 Operable Unit: 01 Material ID: 556193 0039A Material Code: sulfuric acid Material Name: 07664939 Case No.:

Material FA: Hazardous Material

Quantity: 200.00 Units: G Recovered: .00

Not reported Oxygenate:

9800649 Facility ID: Facility Type: ER Spill Number: 9800649 DER Facility ID: 159082 180824 Site ID: DEC Region:

Closed Date: 1998-04-15 Spill Cause: Other Spill Class: E5 SWIS: 4101 Spill Date: 1998-04-15 Investigator: LUCE Referred To: Not reported Reported to Dept: 1998-04-15

CID: 365

Water Affected: MOTT BASIN Spill Source: Commercial/Industrial Spill Notifier: Responsible Party Cleanup Ceased: Not reported Cleanup Meets Std: False Last Inspection: Not reported Recommended Penalty: False **UST Trust:** False Remediation Phase:

Date Entered In Computer: 1998-04-15 Spill Record Last Update: 1998-04-16 Spiller Name: Not reported

Spiller Company: LONG ISLAND LIGHTING

Spiller Address: Not reported

Spiller Company: 001

Contact Name: KEITH ADAMS

DEC Memo:

"***DRILL ONLY - DO NOT RESPOND*** DRUM FELL OFF A TRUCK CAUSING Remarks: SPILL OF 40+ GALLONS - 35 GALS WENT INTO WATER & HAS BEEN BOOMED"

All Materials:

Site ID: 180824 Operable Unit ID: 1061131 Operable Unit: 01 322604 Material ID: Material Code: 0022

Material Name: waste oil/used oil

Direction Distance

Elevation Site Database(s) **EPA ID Number**

JAMAICA BAY PEAKING FACILITY, LLC (Continued)

S101103078

EDR ID Number

Case No.: Not reported Material FA: Petroleum Quantity: 40.00 Units: G Recovered: .00

Not reported Oxygenate:

> Click this hyperlink while viewing on your computer to access 4 additional NY SPILL: record(s) in the EDR Site Report.

SPDES:

NY0005924 Permit Number: State-Region: 02 **Expiration Date:** 11/30/2010 **Current Major Minor Status:** Major Primary Facility SIC Code: 4911

State Water Body Name: MOTTS BASIN Limit Set Status Flag: Active

Total Actual Average Flow(MGD): 3.413 Total App Design Flow(MGD): Not reported UDF1: Not reported

Lat/Long: 40.610722 / -73.762028 **TIMOTHY CURT** DMR Cognizant Official:

UDF2: 001701

UDF3: FIPS County Code: NY081

Non-Gov Permit Affiliation Type Desc: **DMR Mailing Address**

Non-Gov Permit Org Formal Name: NATIONAL GRID GENERATION, LLC Non-Gov Permit Street Address: FAR ROCKAWAY POWER STATION Non-Gov Permit Supplemental Location: 175 EAST OLD COUNTRY ROAD

Non-Gov Permit City: **HICKSVILLE** Non-Gov Permit State Code: NY Non-Gov Permit Zip Code: 11801

Mailing Address Non-Gov Facility Affiliation Type Desc:

Non-Gov Facility Org Formal Name: NATIONAL GRID GENERATION, LLC Non-Gov Facility Street Address: FAR ROCKAWAY POWER STATION Non-Gov Facility Supplemental Location: 1425 BAY 24TH STREET

FAR ROCKAWAY

Non-Gov Facility City:

Non-Gov Facility State Code: NY Non-Gov Facility Zip Code: 11691 02030202020 State Water Body:

UDF2: 001701 UDF3: FIPS County Code: NY081

Non-Gov Permit Affiliation Type Desc: **DMR Mailing Address**

Non-Gov Permit Org Formal Name: NATIONAL GRID GENERATION, LLC Non-Gov Permit Street Address: FAR ROCKAWAY POWER STATION Non-Gov Permit Supplemental Location: 175 EAST OLD COUNTRY ROAD

Non-Gov Permit City: **HICKSVILLE**

Non-Gov Permit State Code: NY Non-Gov Permit Zip Code: 11801 Non-Gov Facility Affiliation Type Desc: Owner

Direction Distance

EDR ID Number Elevation Site **EPA ID Number** Database(s)

JAMAICA BAY PEAKING FACILITY, LLC (Continued)

S101103078

Non-Gov Facility Org Formal Name: NATIONAL GRID GENERATION, LLC FAR ROCKAWAY POWER STATION Non-Gov Facility Street Address: Non-Gov Facility Supplemental Location: 175 EAST OLD COUNTRY ROAD

Non-Gov Facility City: **HICKSVILLE** Non-Gov Facility State Code: NY Non-Gov Facility Zip Code: 11801 02030202020 State Water Body:

UDF2: 001701 UDF3: FIPS County Code: NY081

Non-Gov Permit Affiliation Type Desc: Permittee

Non-Gov Permit Org Formal Name: NATIONAL GRID GENERATION, LLC Non-Gov Permit Street Address: 175 EAST OLD COUNTRY RD

Non-Gov Permit Supplemental Location: Not reported Non-Gov Permit City: **HICKSVILLE** Non-Gov Permit State Code: NY Non-Gov Permit Zip Code: 11801

Mailing Address Non-Gov Facility Affiliation Type Desc:

NATIONAL GRID GENERATION, LLC Non-Gov Facility Org Formal Name: Non-Gov Facility Street Address: FAR ROCKAWAY POWER STATION

Non-Gov Facility Supplemental Location: 1425 BAY 24TH STREET Non-Gov Facility City: **FAR ROCKAWAY**

Non-Gov Facility State Code: NY Non-Gov Facility Zip Code: 11691 State Water Body: 02030202020

UDF2: 001701 UDF3: FIPS County Code: NY081

Non-Gov Permit Affiliation Type Desc: Permittee

Non-Gov Permit Org Formal Name: NATIONAL GRID GENERATION, LLC 175 EAST OLD COUNTRY RD Non-Gov Permit Street Address:

Non-Gov Permit Supplemental Location: Not reported Non-Gov Permit City: HICKSVILLE Non-Gov Permit State Code: NY Non-Gov Permit Zip Code: 11801 Non-Gov Facility Affiliation Type Desc:

Non-Gov Facility Org Formal Name: NATIONAL GRID GENERATION, LLC Non-Gov Facility Street Address: FAR ROCKAWAY POWER STATION Non-Gov Facility Supplemental Location: 175 EAST OLD COUNTRY ROAD

Owner

HICKSVILLE Non-Gov Facility City: Non-Gov Facility State Code: NY Non-Gov Facility Zip Code: 11801 State Water Body: 02030202020

AA92 **FAR ROCKAWAY POWER STATION**

WNW 1425 BAY 24TH STREET 1/4-1/2 FAR ROCKAWAY, NY 11691

0.410 mi.

2167 ft. Site 2 of 2 in cluster AA

MOSF UST: Relative:

Lower Id/Status: 2-1560 / ACTIVE FACILITY

SWIS Code: Actual:

NEW YORK CITY Facility Town: 6 ft. Contact Phone: (718) 868-7900

S102633652

N/A

NY MOSF UST

NY MOSF AST

Direction Distance

Elevation Site Database(s) EPA ID Number

FAR ROCKAWAY POWER STATION (Continued)

S102633652

EDR ID Number

Emergency Contact: WATCH ENGINEER
Emergency Telephone: (718) 868-7900
CBS Number: 2-000083
SPDES Num: 0-005924
Total Tanks: 5
Total Capacity: 2112330
Avg Throughput: 0

Facility Type: MANUFACTURING

Prod Xfer Options: Vessel/Barge (Including off-shore platform)

Expiration Date: 03/31/2004
Applic Rcvd: 08/03/1999
Operator: SEAN MOORE

Owner Name: KEYSPAN GENERATION, LLC
Owner Address: 175 E. OLD COUNTRY ROAD
Owner City, St, Zip: HICKSVILLE, NY 11801-

Owner Telephone: (516) 420-6140
Owner Type: Corporate/Commercial

Owner Status: 3

License Stat:

Owner Mark: First Owner Mail To Name: Not reported

Mail To Address: 445 BROADHOLLOW ROAD

Mail To Address 2: Not reported

Mail City,St,Zip: MELVILLE, NY 11747Mail To Contact: ROBERT D. TEETZ

Mail To Telephone: (516) 391-6133

Legal Agent Name: DONNA RICCOBONO

Legal Agent Address: 175 E. OLD COUNTRY ROAD

Legal Agent City,St,Zip: HICKSVILLE, NY 11801-

Date Filed:

Latitude: 40|36|35 Longitude: 73|45|42

Tank ID: 100-101-001
Tank Location: UNDERGROUND

Install Date: 12/54
Capacity (Gal): 2000000
Product: EMPTY
Tank Status: In Service
Tank Type: Steel/carbon steel

Tank Internal: None

Tank External: Impressed Current

Pipe Location: Aboveground/Underground Combination

Pipe Type: STEEL/IRON

Pipe Internal: None

Pipe External: Impressed Current

Second Contain: 6B Leak Detection: 30

Overfill Protection: High Level Alarm

Dispenser: Suction
Test Date: 12/86
Date Closed: Not reported
Status of Data: Complete
Inspected Date: 07/20/1999

Inspector Initials: AS

Inspector Status: Not reported Pipe Flag: True

Direction
Distance
Elevation

stance EDR ID Number evation Site Database(s) EPA ID Number

FAR ROCKAWAY POWER STATION (Continued)

S102633652

License Issued: 08/27/1999

Vessel Id: Not reported
Renew Flag: True
Renew Date: 07/02/1999

Federal Id No: Not reported

COI Date: / /

Tank ID: 100-101-003
Tank Location: UNDERGROUND

Install Date: 12/69 Capacity (Gal): 10000

Product: NOS 1,2, OR 4 FUEL OIL

Tank Status: In Service
Tank Type: Steel/carbon steel

Tank Internal: None

Tank External: Impressed Current

Pipe Location: Aboveground/Underground Combination

Pipe Type: STEEL/IRON

Pipe Internal: None

Pipe External: Impressed Current

Second Contain: None

Leak Detection: Groundwater Well
Overfill Protection: Product Level Gauge

Dispenser: Suction
Test Date: 09/92
Date Closed: 06/95
Status of Data: Complete
Inspected Date: 07/20/1999

Inspector Initials:
Inspector Status:
Pipe Flag:
License Issued:
Vessel Id:
Renew Flag:
Renew Date:

AS
Not reported
True
Not reported
True

07/02/1999

COI Date: / /

Federal Id No:

Tank ID: 100-101-004
Tank Location: UNDERGROUND

Install Date: 12/73
Capacity (Gal): 2000
Product: UNKNOWN
Tank Status: In Service
Tank Type: Steel/carbon steel
Tank Internal: None

Tank External: None

Pipe Location: Aboveground/Underground Combination

Not reported

Pipe Type: STEEL/IRON

Pipe Internal: None
Pipe External: None
Second Contain: None
Leak Detection: None
Overfill Protection: None
Dispenser: Suction

Direction Distance

Elevation Site Database(s) **EPA ID Number**

FAR ROCKAWAY POWER STATION (Continued)

S102633652

EDR ID Number

Test Date: 10/92 06/95 Date Closed: Status of Data: Complete Inspected Date: 07/20/1999

Inspector Initials: AS Inspector Status: Not reported Pipe Flag: True License Issued: 08/27/1999 Vessel Id: Not reported Renew Flag: True 07/02/1999 Renew Date: Federal Id No: Not reported

COI Date:

MOSF AST:

MOSF Number: 2-1560 SWIS Code: 63

Facility Town: **NEW YORK CITY** Facility Phone: (718) 868-7900 WATCH ENGINEER **Emergency Contact Name: Emergency Contact Phone:** (718) 868-7900

Total Tanks: **Total Capacity:** 2112330 Daily Throughput: License Status:

Facility Type: MANUFACTURING

Product Transfer Operation: Vessel/Barge (Including off-shore platform

Facility Status: IN SERVICE Operator Name: SEAN MOORE

KEYSPAN GENERATION, LLC Owner Name: Owner Address: 175 E. OLD COUNTRY ROAD Owner City, St, Zip: HICKSVILLE, NY 11801-Owner Phone: (516) 420-6140

Owner Type: Corporate/Commercial

Owner Status:

Owner Mark: First Owner Mailing Name: Not reported

Mailing Address: 445 BROADHOLLOW ROAD

Mailing Address 2: Not reported

Mailing City, St, Zip: MELVILLE, NY 11747-Mailing Contact: ROBERT D. TEETZ Mailing Phone: (516) 391-6133 Legal Agent Name: DONNA RICCOBONO 175 E. OLD COUNTRY ROAD Legal Agent Address:

Legal Agent City, St, Zip: HICKSVILLE, NY 11801-

LIC Expires: 03/31/2004

Tank ID: 100-201-002 Tank Location: **ABOVEGROUND**

Install Date: 12/53 Product: **EMPTY**

Tank Type: Steel/carbon steel

Tank Internal: None Tank External: NONE Pipe Location: Aboveground Pipe Type: Steel/Iron Pipe Internal: None

Direction Distance

Elevation Site Database(s) EPA ID Number

FAR ROCKAWAY POWER STATION (Continued)

S102633652

EDR ID Number

Pipe External: None 8B Secondary Containment: Leak Detection: 03 Overfill Protection: 32 Dispensing Mthd: Gravity 10/86 Test Date: Date Closed: Not reported Complete Status of Data: Capacity (gal): 100000

Lat/Long: 40|36|35 / 73|45|42 Not reported Federal ID: 07/20/1999 Inspected Date: Inspector: AS Renew Date: 07/02/1999 Inspected State: Not reported Pipe Flag: True Vessel ID: Not reported Reserve Flag: True Tank Status: In Service COI Date:

Date License Issued: 08/27/1999
Date License Application Received: 08/03/1999
Chemical Bulk Storage Number: 2-000083
Pollution Discharge Elimination System Num: 0-005924

Date Legal Agent Filed with Secretary of State: /

Tank ID: 100-201-010

Tank Location: ABOVEGROUND ON SADDLES LEGS, STILTS, RACK, OR CRADLE

Install Date: 10/96
Product: UNKNOWN
Tank Type: Steel/carbon steel

Tank Internal: None Tank External: 00

Pipe Location: Aboveground
Pipe Type: Steel/Iron
Pipe Internal: None
Pipe External: 01
Secondary Containment: 00
Leak Detection: 00

Overfill Protection: Product Level Gauge

Dispensing Mthd: Suction
Test Date: Not reported
Date Closed: 10/96
Status of Data: Complete
Capacity (gal): 9000

40|36|35 / 73|45|42 Lat/Long: Not reported Federal ID: Inspected Date: 07/20/1999 Inspector: AS 07/02/1999 Renew Date: Inspected State: Not reported Pipe Flag: True Vessel ID: Not reported Reserve Flag: True Tank Status: In Service COI Date:

Direction Distance

Elevation Site Database(s) EPA ID Number

FAR ROCKAWAY POWER STATION (Continued)

S102633652

EDR ID Number

Date License Issued: 08/27/1999
Date License Application Received: 08/03/1999
Chemical Bulk Storage Number: 2-000083
Pollution Discharge Elimination System Num: 0-005924
Date Legal Agent Filed with Secretary of State: /

Tank ID: 100-201-009
Tank Location: ABOVEGROUND

Install Date: 12/54
Product: UNKNOWN
Tank Type: Steel/carbon steel

Tank Internal: None Tank External: NONE Pipe Location: Aboveground Pipe Type: Steel/Iron Pipe Internal: None Pipe External: None Secondary Containment: None Leak Detection: None

Overfill Protection: Product Level Gauge

Dispensing Mthd: 0
Test Date: /

Date Closed: Not reported Status of Data: Complete Capacity (gal): 9000

Lat/Long: 40|36|35 / 73|45|42 Federal ID: Not reported 07/20/1999 Inspected Date: Inspector: AS 07/02/1999 Renew Date: Inspected State: Not reported Pipe Flag: True Vessel ID: Not reported Reserve Flag: True Tank Status: In Service COI Date:

Date License Issued: 08/27/1999
Date License Application Received: 08/03/1999
Chemical Bulk Storage Number: 2-000083
Pollution Discharge Elimination System Num: 0-005924

Date Legal Agent Filed with Secretary of State:

Tank ID: 100-201-014

Tank Location: ABOVEGROUND ON SADDLES LEGS, STILTS, RACK, OR CRADLE

Install Date: 12/54
Product: UNKNOWN
Tank Type: Steel/carbon steel

Tank Internal: None

Tank External: NONE/CATHODIC PROTECTION

Pipe Location: Aboveground
Pipe Type: Steel/Iron
Pipe Internal: None
Pipe External: 01
Secondary Containment: 09
Leak Detection: 09

Map ID MAP FINDINGS
Direction

Distance

Elevation Site Database(s) EPA ID Number

FAR ROCKAWAY POWER STATION (Continued)

Overfill Protection: High Level Alarm

Dispensing Mthd: Gravity
Test Date: Not reported
Date Closed: Not reported
Status of Data: Complete
Capacity (gal): 3180

40|36|35 / 73|45|42 Lat/Long: Not reported Federal ID: Inspected Date: 07/20/1999 Inspector: AS 07/02/1999 Renew Date: Inspected State: Not reported Pipe Flag: True Vessel ID: Not reported Reserve Flag: True Tank Status: In Service COI Date:

Date License Issued: 08/27/1999
Date License Application Received: 08/03/1999
Chemical Bulk Storage Number: 2-000083
Pollution Discharge Elimination System Num: 0-005924

Date Legal Agent Filed with Secretary of State: /

Tank ID: 100-201-015

Tank Location: ABOVEGROUND ON SADDLES LEGS, STILTS, RACK, OR CRADLE

Install Date: 12/54
Product: UNKNOWN
Tank Type: Steel/carbon steel

Tank Internal: None

Tank External: NONE/CATHODIC PROTECTION

Pipe Location: Aboveground
Pipe Type: Steel/Iron
Pipe Internal: None
Pipe External: 01
Secondary Containment: 09
Leak Detection: 09

Overfill Protection: High Level Alarm

Dispensing Mthd: Gravity
Test Date: Not reported
Date Closed: Not reported
Status of Data: Complete
Capacity (gal): 150

40|36|35 / 73|45|42 Lat/Long: Federal ID: Not reported 07/20/1999 Inspected Date: Inspector: AS Renew Date: 07/02/1999 Inspected State: Not reported Pipe Flag: True Vessel ID: Not reported Reserve Flag: True Tank Status: In Service

COI Date: //

Date License Issued:08/27/1999Date License Application Received:08/03/1999Chemical Bulk Storage Number:2-000083

S102633652

EDR ID Number

Direction Distance

Distance Elevation Site EDR ID Number

Database(s) EPA ID Number

FAR ROCKAWAY POWER STATION (Continued)

S102633652

1008407927

N/A

EDR MGP

Pollution Discharge Elimination System Num: 0-005924

Date Legal Agent Filed with Secretary of State: /

93 FAR ROCKAWAY MGP
NE CORNER OF BRUNSWICK AVE. AND BEACH 12TH ST.

1/4-1/2 FAR ROCKAWAY, NY 11691

0.429 mi. 2266 ft.

Relative: Manufactured Gas Plants:

Lower No additional information available

Actual: 18 ft.

94 KINGDOM HALL JEHOVA WIT NY LTANKS S104516762 SW 2360 BROOKHAVEN AVE N/A

SW 2360 BROOKHAVEN AVE 1/4-1/2 FAR ROCKAWAY, NY

0.429 mi. 2266 ft.

Relative: LTANKS:

 Lower
 Facility ID:
 9914058

 Actual:
 Site ID:
 136480

 19 ft.
 Closed Date:
 2005-11-03

 Spill Number:
 9914058

 Spill Date:
 2000-03-13

 Spill Cause:
 Tank Test Failure

Spill Source: Gasoline Station or other PBS Facility

Spill Class: B3

Cleanup Ceased: Not reported SWIS: 4101 Investigator: RHFILKIN Referred To: Not reported Reported to Dept: 2000-03-13 CID: 207

Water Affected:

Spill Notifier:

Last Inspection:

Recommended Penalty:

Meets Standard:

UST Involvement:

Remediation Phase:

Not reported

False

False

False

0

Date Entered In Computer: 2000-03-13
Spill Record Last Update: 2005-11-03
Spiller Name: Not reported
Spiller Company: Not reported
Spiller Address: Not reported

Spiller County: 001

Spiller Contact: ERROL ST MARIE
Spiller Phone: (718) 337-5812
Spiller Extention: Not reported

DEC Region: 2
DER Facility ID: 116788

DEC Memo: "Prior to Sept, 2004 data translation this spill Lead_DEC Field was

SANGESLAND 11/3/05 - Owner says tank failed test but then was retested and passed. He has no documentation though. PBS system has

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

KINGDOM HALL JEHOVA WIT (Continued)

S104516762

S118953655

N/A

NY LTANKS

the 3/13/2000 failure, no mention of a retest or replacement, but shows tank passed test 4/4/05. Since tank appears to now pass tests without having been replaced, I'll assume original failure was incorrect and there was no spill. Closed 11/3/05 - Filkins"

Remarks: "gross failure"

All TTF:

9914058 Facility ID: Spill Number: 9914058 Spill Tank Test: 1548131 Site ID: 136480 Tank Number: 1 Tank Size: 2500 Material: Not reported EPA UST: Not reported

UST: Not reported Not reported Cause: Source: Not reported

Test Method:

Test Method 2: Horner EZ Check I or II

Leak Rate: .00

Gross Fail: Not reported Modified By: Spills Last Modified Date: Not reported

8710031

95 **U HAUL**

20A SHERIDAN BLVD

NNE INWOOD, NY 1/4-1/2

0.440 mi. 2322 ft.

Relative: LTANKS: Lower Facility ID:

Site ID: 217885 Actual: Closed Date: 1988-05-16 6 ft. Spill Number:

8710031 Spill Date: 1988-02-29 Spill Cause: Tank Test Failure Spill Source: Commercial/Industrial

Spill Class: Not reported Cleanup Ceased: 1988-05-16 SWIS: 3020

Investigator: **KDGOERTZ** Referred To: Not reported Reported to Dept: 1988-02-29 CID: Not reported Water Affected: Not reported Spill Notifier: Tank Tester Last Inspection: Not reported Recommended Penalty: False Meets Standard: True **UST Involvement:** True Remediation Phase: 0

Date Entered In Computer: 1988-03-01 Spill Record Last Update: 2006-07-06 Spiller Name: Not reported Spiller Company: **U HAUL**

Direction Distance

Elevation Site Database(s) EPA ID Number

U HAUL (Continued) S118953655

Spiller Address: Not reported

Spiller County: 001

Spiller Contact: Not reported
Spiller Phone: Not reported
Spiller Extention: Not reported

DEC Region: 1

DER Facility ID: 180265

DEC Memo: "Prior to Sept, 2004 data translation this spill Lead_DEC Field was

GOERTZ FD 03/24/88: TYREE RETESTED SYSTEM AFTER NEW VENTS WERE INSTALLED & PIPE UNDER PUMP WAS REPAIRED. SYSTEM PASSED RETEST. DEC NOT PRESENT DURING RETEST. ***SEE ALSO THE FOLLOWING SPILLS HERE (MAY BE OTHERS?): 9303942 UHAUL 20 SHERIDAN: CONTAMINATION FOUND DURING REMOVAL OF 2 5K GAS TANKS. SMALL AMOUNT OF SOIL REMOVED; NO OTHER ACTION BY SPILLER. ACTIVE AS OF AUG99. SEE IT FOR HISTORY. ***SEE ALSO THE FOLLOWING SPILLS NEARBY (MAY BE OTHERS?): 7900634 MOORE S/S

ALSO THE FOLLOWING SPILLS NEARBY (MAY BE OTHERS?): 7900634 MOORE S/S STATION 20 SHERIDAN: SURFACE SPILL OF 20 - 200GAL GAS. 8201877 WECHTER OIL TERMINAL: STATE-FUNDED REMEDIATION ON WEST SIDE OF SHERIDAN. SEE IT FOR HISTORY. 8607001 EAGLE OIL TERMINAL: SAME SITE AS WECHTER. STATE-FUNDED REMEDIATION. DEC ALSO INITIATED ENFORCEMENT

ACTION TO CLOSE TERMINAL. SEE IT FOR HISTORY. 8806431 MORE GAS

STATION 20 SHERIDAN: NOZZLES ACCIDENTALLY TURNED ON AT ABANDONED GAS STATION, APPROX 100GAL GAS SPILLED, WAS THEN FLUSHED INTO

STATION. APPROX 100GAL GAS SPILLED. WAS THEN FLUSHED INTO DRAINAGE/BAY? DEC HIRED CONTRACTOR TO CLEAN OUT DRAIN. ACTIVE AS OF

AUG99. SEE IT FOR HISTORY. 8901640 SHERIDAN & CARVEL: NYTEL FOUND PETRO IN VAULT IN FRONT OF THE GAS STATION. NYTEL HAD VAULT PUMPED OUT. DEC HAD WELLS INSTALLED. A NEW OWNER LATER HAD FIVE TANKS AND APPROX 100CY SOIL LATER REMOVED. ACTIVE AS OF AUG99. SEE IT FOR HISTORY. 9011522 MORE S/S 20 SHERIDAN: CONTAMINATION FOUND DURING EXCAVATION FOR NEW TANKS; APPROX 120CY SOIL REMOVED (NOTES INCLUDED

UNDER 8901640). CLOSED 7FEB91. 9800618 CITY GAS 20 SHERIDAN:

CONTAMINATION FOUND DURING STATION UPGRADE. ACTIVE AS OF AUG99. SEE IT FOR HISTORY. FILE HAS BEEN DESTROYED ACCORDING TO STATE ARCHIVE

AND RECORD ADMINISTRATOR RETENTION/DISPOSAL PROCEDURES"

Remarks: "2-5K FAILED PETROTITE SYSTEM TEST WITH GROSS LEAK"

All TTF:

 Facility ID:
 8710031

 Spill Number:
 8710031

 Spill Tank Test:
 1533336

 Site ID:
 217885

 Tank Number:
 Not reported

Tank Size: 0

Material: 0009

EPA UST: Not reported
UST: Not reported
Cause: Not reported
Source: Not reported

Test Method: 00
Test Method 2: Unknown
Leak Rate: .00

Gross Fail: Not reported Modified By: Spills Last Modified Date: Not reported

All Materials:

 Site ID:
 217885

 Operable Unit ID:
 915612

EDR ID Number

Direction Distance

Elevation Site Database(s) **EPA ID Number**

U HAUL (Continued) S118953655

Operable Unit: 01 461818 Material ID: Material Code: 0009 Material Name: gasoline Case No.: Not reported Petroleum Material FA: Quantity: .00 Units: G Recovered: .00

Oxygenate: Not reported

WAVECREST APARTMENTS NY LTANKS S106472022 96 **NY Spills** N/A

South **20-30 ELK DRIVE**

1/4-1/2 FAR ROCKAWAY, NY 11691 0.474 mi.

2503 ft.

Relative: LTANKS: Higher Facility ID: Site ID:

250586 Actual: Closed Date: 2008-10-06 25 ft. Spill Number: 0403513 2004-07-01 Spill Date: Spill Cause: Tank Test Failure

> Spill Source: Institutional, Educational, Gov., Other

0403513

Spill Class: C4

Cleanup Ceased: Not reported SWIS: 4101

Investigator: **MJHAGGER** Referred To: Not reported 2004-07-01 Reported to Dept: CID: 406

Water Affected: Not reported Spill Notifier: Tank Tester Last Inspection: Not reported Recommended Penalty: False Meets Standard: False **UST Involvement:** False

Date Entered In Computer: 2004-07-01 Spill Record Last Update: 2009-10-02 Spiller Name: JIM MELNICK Spiller Company: APARTMENT BLDG. Spiller Address: 20-30 ELK DR.

Spiller County: 001

Remediation Phase:

Spiller Contact: JIM MELNICK Spiller Phone: (631) 321-4670 Spiller Extention: Not reported

DEC Region: DER Facility ID:

DEC Memo: "9/15/2005 - Jim Melnick of Pro Test stated that their was a new tank

installed at the site about a month ago and they will be removing the existing tank and testing the soils within the next 30-days. Prior to Sept, 2004 data translation this spill Lead_DEC Field was KRIMGOLD send TTF letter to: Avi Slansky 20-30 Elk Assoc. 129-09 26th Street, Suite 301 Flushing, NY 11354 07/22/04. Pro Test sent a letter stating that they will EIR the tank by 7/26/04. YK. 9/28/07 - Haggerty - I

EDR ID Number

Direction Distance Elevation

Site Database(s) EPA ID Number

WAVECREST APARTMENTS (Continued)

S106472022

EDR ID Number

asked Brian Falvey from our PBS unit in NYC to accompany me to the site for an inspection. I had previously made countless attempts to get Mr. Slansky (718-463-1200), property manager from Wavecrest, to take care of this open spill. Before I took over management of this site in January '07, Ralph Keating made multiple attempts to get spill addressed over the course a year. Old tank partially uncovered with boards over it for the past 3 years (located directly in the walkway to the building) According to the Building Super, nothing has changed since the tank was tested on 7/1/04. The tank should have been closed out before the registration expired. Also, a new tank was installed approximately 2.5yrs ago inside the apartment complex basement. This tank was never registered or Tightness Tested. I attached a picture in edocs showing the tanks condition PBS Conference scheduled for 10/23/07. 10/23/07 - Haggerty - Met with DEC lawyer Scott Owens, DEC Inspector Brian Falvey, and Property Manager Avi Slansky at PBS conference. Wavecrest Management fined \$10,000 and ordered to complete tank removal by the end of the year. 12/28/07 -Haggerty - Excavation and Tank removal begins began the day before. Spoke with John Leddy of Protest (631-321-4670). Over-excavation completed creating a 18*30ft trench. Informed John that for every linear 15ft of trench, 5 grab samples must be collected for analysis. Therefore, a total of 10 samples (2 bottom and 8 sidewall) 10/6/08 -Haggerty - Received Spill Closure Report. All endpoint samples clean. Spill Closed"

Remarks: "Tank Test failure."

All TTF:

 Facility ID:
 0403513

 Spill Number:
 0403513

 Spill Tank Test:
 1529404

 Site ID:
 250586

 Tank Number:
 1

 Tank Size:
 4000

 Material:
 0003

EPA UST: Not reported UST: Not reported Cause: Not reported Source: Not reported

Test Method: 03

Test Method 2: Horner EZ Check I or II

Leak Rate: .00

Gross Fail: Not reported Modified By: Spills Last Modified Date: Not reported

All Materials:

Site ID: 250586 Operable Unit ID: 885764 Operable Unit: 01 Material ID: 491093 Material Code: 0003A Material Name: #6 fuel oil Case No.: Not reported Material FA: Petroleum Quantity:

Quantity: .00
Units: G
Recovered: .00

Direction Distance

Elevation Site Database(s) **EPA ID Number**

Not reported

WAVECREST APARTMENTS (Continued)

S106472022

EDR ID Number

Oxygenate:

SPILLS: Facility ID: 1010730 Facility Type: ER Spill Number: 1010730 DER Facility ID: 399235 Site ID: 444344

DEC Region:

Closed Date: 2011-01-19 Spill Cause: **Equipment Failure** Not reported

Spill Class: SWIS: 4101

Spill Date: 2011-01-18 Investigator: **JBVOUGHT** Referred To: Not reported Reported to Dept: 2011-01-18 CID: Not reported Water Affected: Not reported Spill Source: Private Dwelling Spill Notifier: Responsible Party

Cleanup Ceased: Not reported Cleanup Meets Std: False Last Inspection: Not reported Recommended Penalty: False **UST Trust:** False Remediation Phase:

Date Entered In Computer: 2011-01-18 Spill Record Last Update: 2011-01-19 Spiller Name: ALEX ZEDLOVICH

Spiller Company: **ESF TRANSPORT INC**

Spiller Address: 20 ELK DR Spiller Company:

999

ALEX ZEDLOVICH Contact Name:

DEC Memo: "1/19/11-Vought-Primary off-hours responder. Called ESF Transport

> (Alex Zedlovich 347-865-2536) and cause of the spill was a loose coupling on fill pipe and when he blew line their was a spray of six. Slight impact to dirt and soil will be excavated for top 2 and soil will be shipped to Jamaica Recycling for proper disposal. No sewers or drains affected and spill pads and booms on site. No spill inside building and no endpoint samples required due to high viscosity of #6 and removal of all visual contamination by oil company. Vought provided cell phone contact in case further questions arose. Spill

closed by Vought."

Remarks: "Spill onto concrete. Area has been contained & boomed. Cleanup in

prgress."

All Materials:

Site ID: 444344 Operable Unit ID: 1194791 Operable Unit: Material ID: 2190657 Material Code: 0003A Material Name: #6 fuel oil Not reported Case No.: Material FA: Petroleum

Direction Distance

Distance Elevation Site EDR ID Number

EDR ID Number

EPA ID Number

WAVECREST APARTMENTS (Continued)

S106472022

N/A

Quantity: 20.00 Units: G

Recovered: Not reported Oxygenate: Not reported

97 327 BCH 19TH ST NY LTANKS \$100146881

South 327 BEACH 19TH STREET 1/4-1/2 NEW YORK CITY, NY

0.487 mi. 2573 ft.

Relative: LTANKS: Lower Facility ID:

 Actual:
 Site ID:
 216311

 23 ft.
 Closed Date:
 1993-02-23

 Spill Number:
 9013017

 Spill Date:
 1991-03-21

Spill Cause: Tank Test Failure

Spill Source: Institutional, Educational, Gov., Other

9013017

Spill Class: Cleanup Ceased: 1993-02-23 SWIS: 4101 O'DOWD Investigator: Referred To: Not reported Reported to Dept: 1991-03-21 CID: Not reported Water Affected: Not reported Spill Notifier: Tank Tester Last Inspection: Not reported Recommended Penalty: False Meets Standard: False **UST Involvement:** False Remediation Phase: O

Date Entered In Computer: 1991-04-02 Spill Record Last Update: 1994-05-12 Spiller Name: Not reported

Spiller Company: ST. JOHN'S HOSPITAL
Spiller Address: 327 BEACH 19TH STREET

Spiller County: 001

Spiller Contact: Not reported
Spiller Phone: Not reported
Spiller Extention: Not reported

DEC Region: 2
DER Facility ID: 179083
DEC Memo: ""

Remarks: "20K TANK FAILED HORNER EZY CHECK,SYSTEM TEST, VISUAL GROSS LEAK,WILL

REPAIR VISUAL LEAK AT PUMP FLANGE IN BASEMENT, WILL RETEST, SPEEDY DRY

APPLIED & WILL PICK UP & DISPOSE."

All TTF:

 Facility ID:
 9013017

 Spill Number:
 9013017

 Spill Tank Test:
 1538353

 Site ID:
 216311

 Tank Number:
 Not reported

Tank Size: 0
Material: 0001

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

327 BCH 19TH ST (Continued)

S100146881

EPA UST: Not reported UST: Not reported Cause: Not reported Source: Not reported Test Method: 00

Test Method 2: Unknown Leak Rate: .00 Gross Fail: Not reported Modified By: Spills Last Modified Date: Not reported

All Materials:

Site ID: 216311 Operable Unit ID: 950265 Operable Unit: 01 Material ID: 429459 Material Code: 0001A Material Name: #2 fuel oil Case No.: Not reported Material FA: Petroleum Quantity: -1.00 Not reported Units:

Recovered: .00

Oxygenate: Not reported

EDR MGP 1008407954 98 **INWOOD HOLDER**

W. OF SHERIDAN BLVD. AND S. OF NASSAU AVE. North

1/2-1 INWOOD (V), NY 11096

0.562 mi. 2968 ft.

Relative: Manufactured Gas Plants:

Lower No additional information available

Actual: 9 ft.

99 **ROCKAWAY METAL** SEMS 1000268052 **NY SHWS** NYD002059202

North 175 ROGER AVE **INWOOD, NY 11096** 1/2-1 0.684 mi.

NY CBS 3611 ft. **NY BROWNFIELDS NY Spills** Relative: RCRA NonGen / NLR Lower

Actual: ICIS 11 ft. **US AIRS FINDS**

ECHO NY MANIFEST

SEMS:

Site ID: 203710 EPA ID: NYD002059202

Cong District: FIPS Code: 36081 N/A

NY CBS UST

PRP

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

ROCKAWAY METAL (Continued)

1000268052

Latitude: Not reported Not reported Longitude: Ν

FF:

NPL: Not on the NPL

Non NPL Status: Other Cleanup Activity: State-Lead Cleanup

SEMS Detail:

2 Region: Site ID: 203710 EPA ID: NYD002059202

Site Name: **ROCKAWAY METAL PRODUCTS**

NPL: FF: Ν OU: 0 Action Code: 00

Action Name: SITE REASS

SEQ:

Not reported Start Date: Finish Date: 8/9/2010 Qual:

Current Action Lead: EPA Perf In-Hse

Region: Site ID: 203710 EPA ID: NYD002059202

Site Name: **ROCKAWAY METAL PRODUCTS**

NPL: FF: Ν OU: 0 Action Code: AR

Action Name: ADMIN REC

SEQ:

Start Date: 1993-04-19 00:00:00 Finish Date: Not reported Qual:

Current Action Lead: **EPA Perf**

Region: Site ID: 203710 NYD002059202 EPA ID:

Site Name: **ROCKAWAY METAL PRODUCTS**

NPL: Ν FF: Ν OU: 0 Action Code: RS

Action Name: **RV ASSESS**

SEQ:

1992-06-08 00:00:00 Start Date:

Finish Date: 1/14/1993 Not reported Qual: **Current Action Lead: EPA** Perf

Region: Site ID: 203710 EPA ID: NYD002059202

Site Name: **ROCKAWAY METAL PRODUCTS**

NPL: Ν FF: Ν

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

ROCKAWAY METAL (Continued)

1000268052

OU: 0 Action Code: РΑ Action Name: PΑ SEQ:

Start Date: Not reported 8/9/2010 Finish Date: Qual: Н Current Action Lead: **EPA Perf**

Region: Site ID: 203710 EPA ID: NYD002059202

Site Name: **ROCKAWAY METAL PRODUCTS**

NPL: FF: Ν OU: 0 Action Code: RV Action Name: **RMVL** SEQ:

1993-04-26 00:00:00 Start Date:

Finish Date: 4/26/1993 Qual:

Current Action Lead: EPA Perf

Region: Site ID: 203710 EPA ID: NYD002059202

Site Name: **ROCKAWAY METAL PRODUCTS**

NPL: Ν FF: Ν OU: 0 Action Code: BB Action Name: PRP RV SEQ:

Start Date: 1993-04-26 00:00:00

Finish Date: 4/21/1995 Qual:

Current Action Lead: EPA Ovrsght

2 Region: Site ID: 203710 EPA ID: NYD002059202

Site Name: **ROCKAWAY METAL PRODUCTS**

NPL: Ν FF: Ν OU: 0 Action Code: ВВ PRP RV Action Name: SEQ:

Start Date: 1992-11-09 00:00:00

Finish Date: 4/26/1993 Qual:

Current Action Lead: **EPA Ovrsght**

Region: 2 Site ID: 203710 NYD002059202 EPA ID:

Direction Distance Elevation

evation Site Database(s) EPA ID Number

ROCKAWAY METAL (Continued)

1000268052

EDR ID Number

Site Name: ROCKAWAY METAL PRODUCTS

 NPL:
 N

 FF:
 N

 OU:
 0

 Action Code:
 DS

 Action Name:
 DISCVRY

SEQ:

Start Date: 1992-06-17 00:00:00

Finish Date: 6/17/1992
Qual: Not reported
Current Action Lead: St Perf

SHWS:

Program: HW Site Code: 479943

Classification: Significant threat to the public health or environment - action

required.

 Region:
 1

 Acres:
 4.85

 HW Code:
 130164

 Record Add:
 03/20/2013

 Record Upd:
 03/10/2017

 Updated By:
 WJPARISH

Site Description:

Location: The 175 Roger Avenue site is located at 175 Roger Avenue, Inwood, Town of Hempstead, Nassau County. The Site is bordered to the north by Roger Avenue, with a parking lot (former Shell terminal) to the northwest, a gravel/soil recycling facility and Sony Pictures and Entertainment to the northeast. Further north is the Negro Bar Channel, a waterway to Jamaica Bay. South of the Site are residential properties, followed by Bayview Avenue. The Site is bordered to the east by Gates Avenue, followed by commercial buildings. Immediately west of the Site is a freight and cargo company. Site Features: The site consists of a 4.85 acre parcel of land that is developed with a 155,000 square foot one-story, warehouse building with a partial mezzanine. The remainder of the site consists of asphalt and concrete paved driveway/parking area with limited areas of grass. Current Zoning/Use(s): This site is currently zoned for commercial use in a primarily commercial and residential urban area. Historic Use(s) and Source(s): Historical site documentation indicates that the Site was built in three stages from 1954 through 1967. The Site was used as a Sheet Metal Fabrication factory since at least 1961. Rockaway Metal Products occupied the Site from approximately 1971 until circa 1987. In 1987, Rockaway Metal Products abandoned the Site and left hazardous waste materials improperly stored and disposed of on-Site. On June 15 and 16, 1992, the United States Environmental Protection Agency (USEPA) personnel conducted a site inspection and discovered the following: approximately 240 55-gallon deteriorated and leaking drums, a 5,000-gallon tanker trailer in poor condition, dry wells that appeared to contain sludge materials and USTs that contained potentially flammable liquids. To address the hazardous condition, the EPA conducted an Emergency Removal Action from August 1993 through April 1995. Approximately 240 55-gallon drums of waste materials were removed. The tanker trailer, one 1,000-gallon heating oil UST located in the southeast portion of the Site and UST piping/ dispenser systems were removed. Following the removal action, the Site was used as a warehouse by various tenants from 1990 through

Map ID Direction Distance Elevation

Site

MAP FINDINGS

Database(s)

ROCKAWAY METAL (Continued)

1000268052

EDR ID Number

EPA ID Number

2004, including Gunter Auto Shop, an auto repair shop. The Site was acquired by Nassau County Department of Real Estate in 1995 because of nonpayment of taxes and continues to own the Site. Since 2004 the site has remained vacant. The site building was damaged by a fire in February 2011 and has been condemned and needs to be demolished. Site Geology/Hydrogeology: The Site ground surface is approximately 10 feet above mean sea level. The Site is generally flat and has a gentle slope towards the northwest. The Site contains no areas classified as wetlands, and is covered with concrete, asphalt and surrounded by paved roadways and sidewalks. Depth to groundwater throughout the Site ranges from 4 to 6 feet bgs and appears to be tidally influenced. A groundwater divide appears to run through the center of the Site, with an apparent groundwater flow direction towards both the northwest and southeast. March 2013: The applicant, Expeditors International, has elected to terminate the Brownfield Cleanup Agreement and cease participating in the BCP. Termination letter was received from Applicant March 8, 2013. Central Office issued withdrawal acceptance letter March 19, 2013. Nassau County currently owns the property. February 2015: Expeditors International was onsidering buying the property from Nassau County. The Department's attorney assigned to the project was in negotiations with Expeditors regarding executing a Consent Order. February 2016: It appears Expeditors International's purchase of the property from Nassau County is on hold. February 2017: OGC has issued PRP letters to eight identified PRPs.

Env Problem:

Nature and Extent of Contamination: The primary contaminants of concern at the site at this time include petroleum hydrocarbons. chlorinated volatile organic compound (VOCs), semi-volatile organic compounds (SVOCs) and metals. The media impacted include soil, soil vapor and groundwater. Site Soils: Soil impacts appear to be limited to the area immediately surrounding the three abandoned USTs in the north central area of the site. Shallow soil samples were found to contain levels of VOCs, including 1,2,4-trimethylbenzene (870,000 micrograms per kilogram, ug/kg), 1,3,5-trimethylbenzene (390,000 ug/kg) and several petroleum related compounds above the commercial SCOs. Site dry wells have been impacted by selected metals, such as cadmium, chromium, lead and mercury. These compounds were detected above protection of groundwater SCOs. Groundwater: A petroleum hydrocarbon plume is centered along the northeast section of the Site and appears to extend off-site to the northwest and southeast at depths greater than 20 feet below ground surface (bgs). The plume appears to be emanating from the area of the abandoned USTs. A chlorinated VOC plume is widespread throughout the Site, with elevated levels of vinyl chloride (340 micrograms per Liter, ug/L), cis-1,2-dichloroethylene (6,400 ug/L), trichloroethylene (TCE) (6,100 ug/L) and tetrachloroethylene (PCE) (9,800 ug/L)in groundwater. The chlorinated VOC levels increase with depth throughout the Site. The plume appears to extend off-Site to the southeast and northwest. In addition, arsenic (29 ug/L), thallium (55 ug/L) and lead (69 ug/L), were identified in the Site groundwater at levels above the standards. Soil Vapor: Several VOCs, such as PCE and TCE, were measured in the soil vapor samples collected under the asphalt pavement outside of the site building. VOCs were also measured in sub-slab vapor samples collected beneath the existing Site building. PCE and TCE were detected in sub-slab soil vapor samples at levels ranging up to 4.300 micrograms per cubic meter (ug/m3) to 170 ug/m3. Additionally, acetone, 2-butanone (MEK), ethylbenzene,

Direction Distance Elevation

Site Database(s) EPA ID Number

ROCKAWAY METAL (Continued)

1000268052

EDR ID Number

4-ethyltoluene, toluene, 1,2,4- trimethylbenzene,

1,3,5-trimethylbenzene, m- and p-xylene, and o-xylene were detected in soil vapor samples. PCE and TCE were not detected in indoor air samples at levels above the New York State Department of Health (NYSDOH) Air Guidance Value (AGV). Based on an evaluation of the data collected as part of the site investigations, the existence of

shallow groundwater at the site (approximately 4 to 6 feet below grade) and the presence of several residential dwellings adjacent to the site property boundary, the Department, in concurrence with the NYSDOH, concluded that the 175 Roger Avenue site poses a significant threat to the environment and public health. Special Resources Impacted: No special resource impacts have occurred on-site. Contaminated groundwater appears to be migrating off-site towards

downgradient water bodies.

Health Problem: People are not drinking the contaminated groundwater because the area

is served by a public water supply that is not affected by this contamination. Since the site is fenced and covered by asphalt or concrete, people will not come into contact with site-related soil and groundwater contamination unless they dig below the surface. Volatile organic compounds in the groundwater or soil may move into the soil vapor (air spaces within the soil), which in turn may move into overlying buildings and affect the indoor air quality. This process, which is similar to the movement of radon gas from the subsurface into the indoor air of buildings, is referred to as soil vapor intrusion. Because the site is vacant, the inhalation of site-related contaminants due to soil vapor intrusion does not represent a concern for the site in its current condition. However, the potential exists for the inhalation of site contaminants due to soil vapor intrusion for any future on-site redevelopment and occupancy. The potential exists for inhalation of site-related contaminants in indoor air via soil vapor intrusion in adjacent off-site buildings.

Dump: False Structure: True Lagoon: False Landfill: False Pond: False Disp Start: Not reported Disp Term: Not reported Lat/Long: Not reported Dell: Not reported

Record Add: 3/20/2013 3:22:00 PM Record Upd: 4/10/2013 11:36:00 AM

Updated By: JCSHEEHA
Own Op: Owner
Sub Type: 01

Owner Name: Dept of Public Works - Division of Real Estate

Owner Company: Nassau County
Owner Address: 1 West Street
Owner Addr2: Room 200
Owner City,St,Zip: Mineola, NY 11501
Owner Country: United States of America

HW Code: 130164

Waste Type: tetrachloroethene (PCE)

Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: 130164

Direction Distance Elevation

EDR ID Number Site Database(s) **EPA ID Number**

ROCKAWAY METAL (Continued)

1000268052

Waste Type: 1,1 Dichloroethene UNKNOWN Waste Quantity: Waste Code: Not reported HW Code: 130164

Waste Type: XYLENE (MIXED) Waste Quantity: UNKNOWN Not reported Waste Code: 130164 HW Code: Waste Type: **ARSENIC** Waste Quantity: UNKNOWN Waste Code: Not reported HW Code: 130164

ETHYLBENZENE Waste Type: Waste Quantity: UNKNOWN Waste Code: Not reported HW Code: 130164 Waste Type: LEAD UNKNOWN Waste Quantity: Waste Code: Not reported 130164 HW Code:

Waste Type: NAPHTHALENE Waste Quantity: UNKNOWN Waste Code: Not reported HW Code: 130164 Waste Type: **THALLIUM** Waste Quantity: UNKNOWN Waste Code: Not reported HW Code: 130164

TETRACHLOROETHYLENE (PCE) Waste Type:

UNKNOWN Waste Quantity: Not reported Waste Code: HW Code: 130164 Waste Type: **CADMIUM** Waste Quantity: **UNKNOWN** Waste Code: Not reported HW Code: 130164 **MERCURY** Waste Type: Waste Quantity: UNKNOWN Waste Code: Not reported HW Code: 130164

1,2,4-TRIMETHYLBENZENE Waste Type:

Waste Quantity: UNKNOWN Waste Code: Not reported HW Code: 130164

VINYL CHLORIDE Waste Type: Waste Quantity: UNKNOWN Waste Code: Not reported HW Code: 130164 Waste Type: **CHROMIUM** UNKNOWN Waste Quantity: Waste Code: Not reported HW Code: 130164 TOLUENE Waste Type: Waste Quantity: UNKNOWN Waste Code: Not reported

HW Code:

130164 Waste Type: TRICHLOROETHENE (TCE)

Direction Distance Elevation

levation Site Database(s) EPA ID Number

ROCKAWAY METAL (Continued)

1000268052

EDR ID Number

Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: 130164

Waste Type: DICHLOROETHYLENE

Waste Quantity: UNKNOWN
Waste Code: Not reported
Crossref ID: Not reported
Cross Ref Type Code: Not reported
Cross Ref Type: Not reported
Record Added Date: Not reported
Record Updated: Not reported
Updated By: UNKNOWN
Not reported
Not reported

CBS UST:

Detail As of 1/1/2012:

Id/Status: 1-000460 / NO LONGER A MAJOR FACILITY

Facility Type: MANUFACTURING Facility Tel: (718) 897-0631

Total Tanks: 0
Region: STATE
ICS No: Not reported
PBS No: Not reported
MOSF No: Not reported
SPDES No: Not reported
Town: HEMPSTEAD

Operator: INWOOD ASSOCIATES

Emergency Contact: PT&L ENVIRONMENTAL CONSULTANTS

Emergency Contact Phone: (201) 262-4141 Certification Date: 04/28/1994 Expiration Date: 04/28/1996

Owner Name: ABRAHAM WOLDIBER
Owner Address: 98-11 QUEENS BOULEVARD
Owner City,St,Zip: REGO PARK, NY 11374

Owner Phone: (718) 897-0631

Owner Type: 5

Owner Subtype: Not reported

Mail To Name: PT&L ENVIRONMENTAL CONSULTANTS

Mail To Contact: MARC REMBISH
Mail To Address: 411 SETTE DRIVE
Mail To Address 2: Not reported
Mail To City, St, Zip: PARAMUS, NJ 07652

Mail To City,St,Zip: PARAMUS, NJ 07652 Mail To Telephone: (201) 262-4141

Tank Number: UST#003
Date Entered: 04/22/1994
Capacity: 1000
Chemical: m-Xylene
Tank Closed: 00/00

Tank Status: Temporarily Out Of Service

Tank Type: Steel/carbon steel

Install Date: 04/94 CAS No: 108383

Substance: More than one Hazardous Substance on DEC List

Tank Location: Outdoors, Belowground

Tank Internal: None
Tank External: NONE

Direction Distance

Elevation Site Database(s) EPA ID Number

ROCKAWAY METAL (Continued)

1000268052

EDR ID Number

Pipe Location: Underground Pipe Internal: None Pipe External: None Leak Detection: None Secondary Containmentt: None Overfill Protection: None Haz Percent: 100 Pipe Containment: None Pipe Type: STEEL/IRON Tank Error Status: No Missing Data

Tank Secret: False Date Entered: 12:29:08 Last Test: Not reported Due Date: Not reported SWIS Code: 2820 False Cert Flag: Is it There: False Is Updated: False Owners Mark: First Owner 40|37|00 / 73|45|30 Lat/Long:

Renew Date: Not reported
Deliquent: False

Total Capacity: False

Date Expired: Not reported
Case No: Not reported
Federal Amt: True
Pipe Flag: False

Pipe Flag: False Reserve Flag: True

CBS:

CBS Number: 1-000460 Program Type: CBS

Facility Status: Unregulated/Closed
Expiration Date: Not reported
Dec Region: 1

UTMX: 605121.14166 UTMY: 4496813.91933

BROWNFIELDS:

BCP Program: Site Code: 456811 Acres: Not reported HW Code: C130164A SWIS: 3020 Town: Hempstead Record Added Date: 10/18/2011 Record Updated Date: 05/21/2018 Update By: **WJPARISH** Site Description:

Location: The off-site area of the 175 Roger Avenue LLC that requires investigation is the areas immediately North and south of the site. Due to a groundwater divide that appears to run through the center of the Site, with an apparent groundwater flow direction towards both the northwest and southeast, to separate areas require evaluation. The areas are north of the Site along Roger Avenue and South of the site along Bayview Avenue in Inwood, Town of Hempstead, Nassau County. The areas include north by Roger Avenue in a parking lot

Map ID MAP FINDINGS
Direction

Distance Elevation Site

Data

Database(s)

EDR ID Number EPA ID Number

ROCKAWAY METAL (Continued)

1000268052

(former Shell terminal) to the northwest, a gravel/soil recycling facility and Sony Pictures and Entertainment to the northeast. Further north is the Negro Bar Channel, a waterway to Jamaica Bay. South of the Site are residential properties, followed by Bayview Avenue and additional residential and commercial properties. The Site is bordered to the east by Gates Avenue, followed by commercial buildings occupied by D. Daniels Sanitation and MGR Equipment Corporation. Immediately west of the Site is Expeditors, a freight and cargo company. Site Features: The off-site investigation area is comprised of approximately 10.0 acres of land that is developed with mixed residential and commercial properties. Current Zoning/Use(s): This off-site investigative area consists of primarily commercial and residential urban properties. Historic Use(s) and Source(s): Historical site documentation indicates that the off-site area to the north was occupied by a Shell petroium bulk storage area as well as several other bulk storage facilities. South of the site consists of residential and varied commercial operations. Site Geology/Hydrogeology: The Site ground surface is approximately 10 to 5 feet above mean sea level. The off-site area is generally flat and has a gentle slope towards Negro Bar Channel in the north and Motts cove to the south. Depth to groundwater throughout the area ranges

from 4 to 1 foot bgs and appears to be tidally influenced.

Env Problem: The environmental condition at the site is available. No data is

currently available regarding off site.

Health Problem: Information submitted with the BCP application regarding the conditions at the site are currently under review and will be revised

as additional information becomes available.

Dump: Not reported Structure: Not reported Not reported Lagoon: Landfill: Not reported Pond: Not reported Disp Start: Not reported Disp Term: Not reported Not reported Lat/Long: Not reported Dell: Record Add: Not reported Record Upd: Not reported Updated By: Not reported Own Op: Not reported Sub Type: Not reported Owner Name: Not reported Owner Company: Not reported Owner Address: Not reported Owner Addr2: Not reported Owner City, St, Zip: Not reported Owner Country: Not reported HW Code: Not reported Waste Type: Not reported Not reported Waste Quantity: Waste Code: Not reported Crossref ID: Not reported Cross Ref Type Code: Not reported Cross Ref Type: Not reported Record Added Date: Not reported Record Updated: Not reported Updated By: Not reported Map ID MAP FINDINGS
Direction

Distance EDR ID Number Elevation Site EDR ID Number Database(s) EPA ID Number

ROCKAWAY METAL (Continued)

1000268052

 Program:
 BCP

 Site Code:
 357019

 Acres:
 4.85

 HW Code:
 C130164

 SWIS:
 3020

 Town:
 Hempstead

 Record Added Date:
 12/19/2005

Record Added Date: 12/19/2005
Record Updated Date: 05/02/2013
Update By: JCSHEEHA
Site Description: Location: Th

Location: The 175 Roger Avenue LLC site is located at 175 Roger Avenue, Inwood, Town of Hempstead, Nassau County. The Site is bordered to the north by Roger Avenue, with a parking lot (former Shell terminal) to the northwest, a gravel/soil recycling facility and Sony Pictures and Entertainment to the northeast. Further north is the Negro Bar Channel, a waterway to Jamaica Bay. South of the Site are residential properties, followed by Bayview Avenue. The Site is bordered to the east by Gates Avenue, followed by commercial buildings occupied by D. Daniels Sanitation and MGR Equipment Corporation. Immediately west of the Site is Expeditors, a freight and cargo company. Site Features: The site consists of a 4.85 acre parcel of land that is developed with a 155,000 square foot one-story, warehouse building with a partial mezzanine. The remainder of the site consists of asphalt and concrete paved driveway/parking area with limited areas of grass. Current Zoning/Use(s): This site, which is currently zoned for commercial use, is located at the southwest corner of the intersection of Roger Avenue and Gates Avenue in a primarily commercial and residential urban area. Historic Use(s) and Source(s): Historical site documentation indicates that the Site was built in three stages from 1954 through 1967. The Site was used as a Sheet Metal Fabrication factory since at least 1961. Rockaway Metal Products occupied the Site from approximately 1971 until circa 1987. In 1987, Rockaway Metal Products abandoned the Site and left hazardous waste materials improperly stored and disposed of on-Site. On June 15 and 16, 1992, the United States Environmental Protection Agency (USEPA) personnel conducted a site inspection and discovered the following: approximately 235-240 55-gallon deteriorated and leaking drums, a 5,000-gallon tanker trailer in poor condition, dry wells that appeared to contain sludge materials and USTs that contained potentially flammable liquids. To address the hazardous condition, the EPA conducted an Emergency Removal Action from August 1993 through April 1995. Approximately 240 55-gallon drums of waste materials were removed. The tanker trailer, one 1,000-gallon heating oil UST located in the southeast portion of the Site and UST piping/ dispenser systems were removed. Following the removal action, the Site was used as a warehouse by various tenants from 1990 through 2004, including Gunter Auto Shop, an auto repair shop. The Site was acquired by Nassau County Department of Real Estate in 1995 because of nonpayment of taxes and continues to own the Site. Site Geology/Hydrogeology: The Site ground surface is approximately 10 feet above mean sea level. The Site is generally flat and has a gentle slope towards the northwest. The Site contains no areas classified as wetlands, and is covered with concrete, asphalt and surrounded by paved roadways and sidewalks. Depth to groundwater throughout the Site ranges from 4 to 6 feet bgs and appears to be tidally influenced. A groundwater divide appears to run through the center of the Site, with an apparent groundwater flow direction towards both the northwest and southeast. March 2013: The applicant,

Map ID Direction Distance Elevation

Site

MAP FINDINGS

Database(s)

ROCKAWAY METAL (Continued)

1000268052

Env Problem:

EDR ID Number

EPA ID Number

currently owns the property. Nature and Extent of Contamination: The primary contaminants of concern at the site at this time include petroleum hydrocarbons, chlorinated volatile organic compound (VOCs), semi-volatile organic compounds (SVOCs) and metals. The media impacted include soil, soil vapor and groundwater. Site Soils: Soil impacts appear to be limited to the area immediately surrounding the three abandoned USTs in the northcentral area of the site. Shallow soil samples were found to contain levels of VOCs, including 1,2,4-trimethylbenzene (870,000 micrograms per kilogram, ug/kg), 1,3,5-trimethylbenzene (390,000 ug/kg) and several petroleum related compounds above the commercial SCOs. Site dry wells have been impacted by selected metals, such as cadmium, chromium, lead and mercury. Those compounds were detected above protection of groundwater SCOs. Groundwater: A petroleum hydrocarbon plume appears to be centered along the northeast section of the Site and extends off-site to the northeast and southwest at depths greater than 20 feet below ground surface (bgs). The plume appears to be emanating from the area of the abandoned USTs. A chlorinated VOC plume is widespread throughout the Site, with elevated levels of vinyl chloride (340 micrograms per Liter, ug/L), cis-1,2-dichloroethylene (6,400 ug/L), trichloroethylene (TCE) (6,100 ug/L) and tetrachloroethylene (PCE) (9,800 ug/L)in groundwater. The chlorinated VOC levels increase with depth throughout the Site. The plume appears to extend off-Site to the southeast and northwest. In addition, arsenic (29 ug/L), thallium (55 ug/L) and lead (69 ug/L), were identified in the Site groundwater at levels above the standards. Soil Vapor: Several VOCs, such as PCE and TCE, were measured in the soil vapor samples collected under the asphalt pavement outside of the site building. VOCs were also measured in sub-slab vapor samples collected beneath the existing Site building. PCE and TCE were detected in sub-slab soil vapor samples at levels ranging up to 4,300 micrograms per cubic meter (ug/m3) to 170 ug/m3. Additionally, acetone, 2-butanone (MEK), ethylbenzene, 4-ethyltoluene, toluene, 1,2,4- trimethylbenzene, 1,3,5-trimethylbenzene, m- and p-xylene, and o-xylene were detected in soil vapor samples. PCE and TCE were not detected in indoor air samples at levels above the New York State Department of Health (NYSDOH) Air Guidance Value (AGV). Based on an evaluation of the data collected as part of the site investigations, the existence of

Expeditors International, has elected to terminate the Brownfield Cleanup Agreement and cease participating in the BCP. Termination letter was received from Applicant March 8, 2013. Central Office issued withdrawal acceptance letter March 19, 2013. Nassau County

People are not drinking the contaminated groundwater because the area is served by a public water supply that is not affected by this contamination. Since the site is fenced and covered by asphalt or concrete, people will not come into contact with site-related soil and groundwater contamination unless they dig below the surface. Volatile organic compounds in the groundwater or soil may move into the soil

shallow groundwater at the site (approximately 6 feet below grade) and the presence of several residential dwellings adjacent to the site property boundary, the Department, in concurrence with the NYSDOH, concluded that the 175 Roger Avenue site poses a positive significant threat to the environment and public health. Special Resources Impacted: No special resource impacts have occurred on-site. A groundwater plume appears to be migrating off-site towards

adjacent water bodies.

Health Problem:

Direction
Distance

Elevation Site Database(s) EPA ID Number

ROCKAWAY METAL (Continued)

1000268052

EDR ID Number

vapor (air spaces within the soil), which in turn may move into overlying buildings and affect the indoor air quality. This process, which is similar to the movement of radon gas from the subsurface into the indoor air of buildings, is referred to as soil vapor intrusion.

contaminants due to soil vapor intrusion does not represent a concern for the site in its current condition. However, the potential exists for the inhalation of site contaminants due to soil vapor intrusion for any future on-site redevelopment and occupancy. The potential exists for inhalation of site-related contaminants in indoor air via

soil vapor intrusion in adjacent off-site buildings.

Because the site is vacant, the inhalation of site-related

Dump: Not reported Structure: Not reported Lagoon: Not reported Landfill: Not reported Pond: Not reported Disp Start: Not reported Disp Term: Not reported Lat/Long: Not reported Dell: Not reported Record Add: Not reported Record Upd: Not reported Updated By: Not reported

Own Op: Document Repository

Sub Type: P03

Owner Name: Peninsula Public Library
Owner Company: Peninsula Public Library
Owner Address: 280 Central Avenue
Owner Addr2: Not reported

Owner City,St,Zip: Lawrence, NY 11559
Owner Country: United States of America

Own Op: Owner Sub Type: NNN

Owner Name: 175 ROGER AVENUE LLC
Owner Company: C/O CARGO VENTURES LLC 17

Owner Address: 17 STATE STREET
Owner Addr2: Not reported

Owner City,St,Zip:

Owner Country:

Own Op:

NEW YORK, NY 10004

United States of America

Applicant/Requestor

Sub Type: P03

Owner Name: 175 ROGER AVENUE LLC
Owner Company: C/O CARGO VENTURES LLC

Owner Address: 17 STATE STREET

Owner Addr2: Not reported Owner City,St,Zip: NY 10004

Owner Country: United States of America

HW Code: Not reported Waste Type: Not reported Waste Quantity: Not reported Waste Code: Not reported Crossref ID: Not reported Cross Ref Type Code: Not reported Cross Ref Type: Not reported Record Added Date: Not reported Record Updated: Not reported Updated By: Not reported

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

ROCKAWAY METAL (Continued)

1000268052

SPILLS:

1213527 Facility ID: Facility Type: ER Spill Number: 1213527 DER Facility ID: 296155 Site ID: 476714

DEC Region:

2012-12-14 Closed Date: Spill Cause: Unknown Spill Class: D5 SWIS: 3020 Spill Date: 2012-12-14 Investigator: Unassigned

MATERIALS MANAGEMENT Referred To:

Reported to Dept: 2012-12-14 CID: Not reported Water Affected: Not reported

Spill Source: Commercial/Industrial

Spill Notifier: Citizen Cleanup Ceased: Not reported Cleanup Meets Std: False Last Inspection: Not reported Recommended Penalty: False **UST Trust:** False Remediation Phase:

Date Entered In Computer: 2012-12-14 2013-04-27 Spill Record Last Update: Spiller Name: Not reported

Spiller Company: **CARTING COMPANY** Spiller Address: 175 ROGER AVENUE

Spiller Company: 999

Contact Name: **ANONYMOUS**

DEC Memo: "12/14/12 am: Checked the Remediation database- 175 Rogers has TWO

Superfund site numbers (C130164 for ONSITE contamination and C130164A for OFFSITE contamination; the project manager is John Sheehan). DR 12/14/12 am (A): Spoke to Sheehan- he said he believes there IS a

carter storing waste NEXT DOOR, AND THAT THE WASTE IS ENCROACHING ONTO 175. 12/14/12 am (B): THE PROPERTY OWNER FOR 175 IS NASSAU

COUNTY. DR 12/14/12 am: Spoke to Solid Waste to determine whether they had any knowledge of this property- was advised to speak to Ernie Lampro, but he was not in. DR 12/14/12 am: Spoke to the ECOs to determine whether they had been dispatched to the site- they had not.

DR"

Remarks: "The following information was received through the DEC website

> Report an Environmental Violation Online or sent directly by the complainant to an OPP dispatch mailbox: >>> 12/13/2012 9:38 PM >>> Toxic Dumping at abandoned empty factory facility. Believe the Address is: 75 Roger Avenue Inwood NY 11096 Property is Located on

The Southwest Corner of Roger Avenue & Gates Avenue Inwood 11096 From: Central Dispatch To: Wpop2002 Sent: Thu, Dec 13, 2012 10:57 pm Subject: Re: Report an environmental violation Thank you for your

email, Can you elaborate on toxic dumping? It would be helpful if you could provide as much information as possible. You may also contact our Statewide Dispatch Center at 1-877-457-5680 24 hours a day if you would like to speak to a dispatcher. Thank you, Dispatcher 28 New York State Department of Environmental Conservation Office of Public Protection Central Dispatch 1-800-457-5680 www.dec.ny.gov >>>

Direction Distance Elevation

levation Site Database(s) EPA ID Number

ROCKAWAY METAL (Continued)

1000268052

EDR ID Number

12/14/2012 8:09 AM >>> Carting Company across the Street is dumping and storing Dumpsters in abandoned Factory property which is a superfund site which is located at 175 Roger Avenue Inwood NY. Funny smell in the air. Water runoff in street has oil slick in it."

All Materials:

 Site ID:
 476714

 Operable Unit ID:
 1226539

 Operable Unit:
 01

 Material ID:
 2223806

 Material Code:
 0064A

Material Name: unknown material
Case No.: Not reported
Material FA: Other
Quantity: Not reported
Units: Not reported
Recovered: Not reported
Oxygenate: Not reported

 Facility ID:
 8908328

 Facility Type:
 ER

 Spill Number:
 8908328

 DER Facility ID:
 296155

 Site ID:
 243308

 DEC Region:
 1

Closed Date: 1995-02-08 Spill Cause: Housekeeping

Spill Class: B2 SWIS: 3020 Spill Date: 1989-11-20 Investigator: **KDGOERTZ** Referred To: Not reported 1989-11-21 Reported to Dept: CID: Not reported Not reported Water Affected:

Spill Source: Commercial/Industrial

Spill Notifier:

Cleanup Ceased:

Cleanup Meets Std:

Local Agency
1995-02-08

True

Last Inspection:

Recommended Penalty:

UST Trust:

Remediation Phase:

Local Agency
1995-02-08

True

False

Not reported

False

False

Date Entered In Computer: 1989-11-27
Spill Record Last Update: 2011-04-21
Spiller Name: ABE WOLDIGEL

Spiller Company: FORMER ROCKAWAY METALS

Spiller Address: 175 ROGER AVENUE

Spiller Company: 001

Contact Name: Not reported

DEC Memo: "DET:JOHN VANMAENAN 4TH SQUAD 374-4400 DA: BOB OWENS 535-2164 NCFM:

BOB BUESMAN"

Remarks: "SEVERAL ABANDONED DRUMS ON SITE LEAKING, SLOPPY HOUSEKEEPING. 3 S.D.

AFFECTED W/WASTE OIL (1/2 PRODUCT) 2 U/G STORAGE 1-XYLENE 1-NAPTHA"

All Materials:

Site ID: 243308

MAP FINDINGS Map ID

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

ROCKAWAY METAL (Continued)

1000268052

Operable Unit ID: 935739 Operable Unit: 01 Material ID: 445076 Material Code: 0022

Material Name: waste oil/used oil Case No.: Not reported Petroleum Material FA: Quantity: .00 Units: G Recovered: .00

Not reported Oxygenate:

Facility ID: 0504807 Facility Type: ER Spill Number: 0504807 DER Facility ID: 296155 Site ID: 349722 DEC Region:

Not reported Closed Date: Spill Cause: Other Spill Class: B3 SWIS: 3020 Spill Date: 2005-07-21 Investigator: **WJGABIN** Referred To: Not reported 2005-07-21 Reported to Dept: CID: 444

Water Affected: Not reported

Spill Source: Institutional, Educational, Gov., Other

Spill Notifier: Other Cleanup Ceased: Not reported Cleanup Meets Std: False Last Inspection: Not reported Recommended Penalty: False **UST Trust:** False Remediation Phase: Date Entered In Computer: 2005-07-21 Spill Record Last Update: 2005-07-22

Spiller Name: SHARRISSA Spiller Company: **COMMERCIAL SITE** Spiller Address: 175 ROGER AVE

Spiller Company: 001

Contact Name: **SHARRISSA**

"7/21 13:05 CALLED ATC, LEFT MESSAGE 7/21 15:35 SHARISSA CALLED, DEC Memo:

SOLVENTS, BTEX, METALS IN GW, VOC'S, METALS IN SOIL LONG ISLAND PARTY

RENTALS NOW, FORMERLY ROCKAWAY METALS, EPA HAD BEEN INVOLVED"

Remarks: "DURING SOIL TESTING FOUND CONTAMINATION:"

RCRA NonGen / NLR:

Date form received by agency: 01/01/2007

Facility name: ROCKAWAY METAL PRODUCTS CORP

Facility address: 175 ROGER AVE

INWOOD, NY 11096-1623

EPA ID: NYD002059202 Mailing address: ROGER AVE

INWOOD, NY 11696

MAP FINDINGS Map ID

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

ROCKAWAY METAL (Continued)

1000268052

Contact: Not reported ROGER AVE Contact address:

INWOOD, NY 11696

US Contact country:

Contact telephone: Not reported Contact email: Not reported EPA Region: 02

Land type: Private Classification: Non-Generator

Description: Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:

175 ROGER CORP C/O FRANKEL & HERSHKOWITZ Owner/operator name:

Owner/operator address: 16 E 34TH ST

NEW YORK, NY 10016

Owner/operator country: US

Owner/operator telephone: 718-897-0631 Owner/operator email: Not reported Owner/operator fax: Not reported Owner/operator extension: Not reported Private Legal status: Owner Owner/Operator Type: Owner/Op start date: Not reported Owner/Op end date: Not reported

Owner/operator name: 175 ROGER CORP C/O FRANKEL & HERSHKOWITZ

Owner/operator address: 16 E 34TH ST

NEW YORK, NY 10016

Owner/operator country: US

718-897-0631 Owner/operator telephone: Owner/operator email: Not reported Owner/operator fax: Not reported Owner/operator extension: Not reported Legal status: Private Operator Owner/Operator Type: Owner/Op start date: Not reported Owner/Op end date: Not reported

Handler Activities Summary:

U.S. importer of hazardous waste: Nο Mixed waste (haz. and radioactive): No Recycler of hazardous waste: No Transporter of hazardous waste: No Treater, storer or disposer of HW: No Underground injection activity: No On-site burner exemption: No Furnace exemption: No Used oil fuel burner: No Used oil processor: No User oil refiner: No Used oil fuel marketer to burner: No Used oil Specification marketer: No Used oil transfer facility: No Used oil transporter: No

Direction Distance Elevation

ation Site Database(s) EPA ID Number

ROCKAWAY METAL (Continued)

1000268052

EDR ID Number

Historical Generators:

Date form received by agency: 01/01/2006

Site name: ROCKAWAY METAL PRODUCTS CORP

Classification: Not a generator, verified

Date form received by agency: 07/08/1999

Site name: ROCKAWAY METAL PRODUCTS CORP

Classification: Not a generator, verified

Date form received by agency: 11/04/1993

Site name: ROCKAWAY METAL PRODUCTS CORP

Classification: Small Quantity Generator

. Waste code: D000 . Waste name: Not Defined

. Waste code: D001

. Waste name: IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF

LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT

WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.

Waste code: D008
Waste name: LEAD

. Waste code: F017
. Waste name: Not Defined

Facility Has Received Notices of Violations:

Regulation violated: Not reported

Area of violation: Generators - General

Date violation determined: 09/25/1984
Date achieved compliance: 03/29/1985
Violation lead agency: State

Enforcement action: WRITTEN INFORMAL

Enforcement action date: 02/13/1985
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Evaluation Action Summary:

Evaluation date: 09/25/1984

Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE

Area of violation: Generators - General

Date achieved compliance: 03/29/1985 Evaluation lead agency: State

PRP:

PRP name: 175 INWOOD ASSOCIATES

175 INWOOD ASSOCIATES

Direction Distance

Elevation Site Database(s) EPA ID Number

ROCKAWAY METAL (Continued)

1000268052

EDR ID Number

ABRAHAM TAUB ABRAHAM WOLDIGER PETER HOFFMAN

ICIS:

Enforcement Action ID: NY000A0000128200074700016

FRS ID: 110001984773

Action Name: ROCKAWAY METAL PRODUCTS CORP 360590020100016

Facility Name: ROCKAWAY METAL PRODUCTS CORP

Facility Address: 175 ROGER AVE INWOOD, NY 11696
Enforcement Action Type: Administrative Order

Facility County: NASSAU

Program System Acronym: AIR
Enforcement Action Forum Desc: Administrative - Formal

EA Type Code: SCAAAO
Facility SIC Code: 2542
Federal Facility ID: Not reported
Latitude in Decimal Degrees: 40.61557
Longitude in Decimal Degrees: -73.75811
Permit Type Desc: Not reported

Program System Acronym: NY0000001282000747

Facility NAICS Code: 337127
Tribal Land Code: Not reported

Enforcement Action ID: NY000A0000128200074700015

FRS ID: 110001984773

Action Name: ROCKAWAY METAL PRODUCTS CORP 360590020100015

Facility Name: ROCKAWAY METAL PRODUCTS CORP

Facility Address: 175 ROGER AVE INWOOD, NY 11696
Enforcement Action Type: Administrative Order

Facility County: NASSAU

Program System Acronym: AIR

Enforcement Action Forum Desc: Administrative - Formal

EA Type Code: SCAAAO
Facility SIC Code: 2542
Federal Facility ID: Not reported
Latitude in Decimal Degrees: 40.61557
Longitude in Decimal Degrees: -73.75811
Permit Type Desc: Not reported

Program System Acronym: NY0000001282000747

Facility NAICS Code: 337127
Tribal Land Code: Not reported

Enforcement Action ID: NY000A0000128200074700012

FRS ID: 110001984773

Action Name: ROCKAWAY METAL PRODUCTS CORP 360590020100012

Facility Name: ROCKAWAY METAL PRODUCTS CORP

Facility Address: 175 ROGER AVE INWOOD, NY 11696
Enforcement Action Type: Administrative Order

Facility County: NASSAU
Program System Acronym: AIR

Enforcement Action Forum Desc: Administrative - Formal

EA Type Code: SCAAAO Facility SIC Code: 2542

Direction Distance

Elevation Site Database(s) EPA ID Number

ROCKAWAY METAL (Continued)

1000268052

EDR ID Number

Federal Facility ID: Not reported Latitude in Decimal Degrees: 40.61557 Longitude in Decimal Degrees: -73.75811 Permit Type Desc: Not reported

Program System Acronym: NY0000001282000747

Facility NAICS Code: 337127
Tribal Land Code: Not reported

Enforcement Action ID: NY000A0000128200074700008

FRS ID: 110001984773

Action Name: ROCKAWAY METAL PRODUCTS CORP 360590020100008

Facility Name: ROCKAWAY METAL PRODUCTS CORP

Facility Address: 175 ROGER AVE INWOOD, NY 11696

Enforcement Action Type: Administrative Order

Facility County: NASSAU Program System Acronym: AIR

Enforcement Action Forum Desc: Administrative - Formal

EA Type Code: SCAAAO
Facility SIC Code: 2542
Federal Facility ID: Not reported
Latitude in Decimal Degrees: 40.61557
Longitude in Decimal Degrees: -73.75811
Permit Type Desc: Not reported

Program System Acronym: NY0000001282000747

Facility NAICS Code: 337127
Tribal Land Code: Not reported

Enforcement Action ID: NY000A0000128200074700002

FRS ID: 110001984773

Action Name: ROCKAWAY METAL PRODUCTS CORP 360590020100002

Facility Name: ROCKAWAY METAL PRODUCTS CORP

Facility Address: 175 ROGER AVE

INWOOD, NY 11696 Notice of Violation

Facility County: NASSAU Program System Acronym: AIR

Enforcement Action Type:

Enforcement Action Forum Desc: Administrative - Informal

EA Type Code: NOV
Facility SIC Code: 2542
Federal Facility ID: Not reported
Latitude in Decimal Degrees: 40.61557
Longitude in Decimal Degrees: -73.75811
Permit Type Desc: Not reported

Program System Acronym: NY0000001282000747

Facility NAICS Code: 337127
Tribal Land Code: Not reported

Enforcement Action ID: 02-1994-0194 FRS ID: 110001984773

Action Name: 175 INWOOD ASSOCIATES et al.

Facility Name: ROCKAWAY METAL Facility Address: 175 ROGER AVE INWOOD, NY 11096

Enforcement Action Type: Civil Judicial Action Facility County: NASSAU

Facility County: NASSAL Program System Acronym: ICIS

Direction Distance

Elevation Site Database(s) EPA ID Number

ROCKAWAY METAL (Continued)

1000268052

EDR ID Number

Enforcement Action Forum Desc: Judicial EA Type Code: CIV

Facility SIC Code: Not reported Federal Facility ID: Not reported Latitude in Decimal Degrees: 40.615521 Longitude in Decimal Degrees: -73.757299 Permit Type Desc: Not reported Program System Acronym: 8622 Facility NAICS Code: Not reported Tribal Land Code: Not reported

Enforcement Action ID: 02-1993-0072 FRS ID: 110001984773

Action Name: 175 INWOOD ASSOCIATES, ET AL.

Facility Name: ROCKAWAY METAL Facility Address: 175 ROGER AVE INWOOD, NY 11096

Enforcement Action Type: CERCLA 104E5A AO For Access And/Or Info

Facility County: NASSAU
Program System Acronym: ICIS

Enforcement Action Forum Desc: Administrative - Formal

EA Type Code: 104E5A Facility SIC Code: Not reported Federal Facility ID: Not reported Latitude in Decimal Degrees: 40.615521 -73.757299 Longitude in Decimal Degrees: Permit Type Desc: Not reported Program System Acronym: 8622 Facility NAICS Code: Not reported Tribal Land Code: Not reported

Enforcement Action ID: 02-1992-0269 FRS ID: 110001984773

Action Name: 175 INWOOD ASSOCIATES
Facility Name: ROCKAWAY METAL
Facility Address: 175 ROGER AVE

175 ROGER AVE INWOOD, NY 11096

Enforcement Action Type: CERCLA 106 AO For Resp Action/Imm Haz

Facility County: NASSAU Program System Acronym: ICIS

Enforcement Action Forum Desc: Administrative - Formal

EA Type Code: 106

Facility SIC Code:

Federal Facility ID:

Latitude in Decimal Degrees:

Longitude in Decimal Degrees:

Permit Type Desc:

Program System Acronym:

Not reported
40.615521
-73.757299
Not reported
8622

Facility NAICS Code: Not reported Tribal Land Code: Not reported

Facility Name: ROCKAWAY METAL PRODUCTS C

Address: 175 ROGER AVE

Tribal Indicator: N Fed Facility: No

NAIC Code: Not reported

MAP FINDINGS Map ID

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

ROCKAWAY METAL (Continued)

1000268052

SIC Code: Not reported

Facility Name: ROCKAWAY METAL PRODUCTS C

Address: 175 ROGER AVE

Tribal Indicator: Ν Fed Facility: No

NAIC Code: Not reported SIC Code: Not reported

Facility Name: ROCKAWAY METAL PRODUCTS C

175 ROGER AVE Address:

Tribal Indicator: Ν Fed Facility: No

NAIC Code: Not reported SIC Code: Not reported

ROCKAWAY METAL PRODUCTS C Facility Name:

Address: 175 ROGER AVE

Tribal Indicator: Ν Fed Facility: No

NAIC Code: Not reported SIC Code: Not reported

ROCKAWAY METAL PRODUCTS C Facility Name:

Address: 175 ROGER AVE

Tribal Indicator: Ν Fed Facility: No

NAIC Code: Not reported SIC Code: Not reported

Facility Name: ROCKAWAY METAL PRODUCTS C

Address: 175 ROGER AVE

Tribal Indicator: Fed Facility: No

NAIC Code: Not reported SIC Code: Not reported

ROCKAWAY METAL PRODUCTS C Facility Name:

Address: 175 ROGER AVE

Tribal Indicator: Ν Fed Facility: No

NAIC Code: Not reported SIC Code: Not reported

Facility Name: **ROCKAWAY METAL PRODUCTS C**

Address: 175 ROGER AVE

Tribal Indicator: Ν Fed Facility: No

NAIC Code: Not reported SIC Code: Not reported

ROCKAWAY METAL PRODUCTS C Facility Name:

175 ROGER AVE Address:

Tribal Indicator: Ν Fed Facility: No

NAIC Code: Not reported SIC Code: Not reported

Direction Distance

Elevation Site Database(s) EPA ID Number

ROCKAWAY METAL (Continued)

1000268052

EDR ID Number

US AIRS (AFS):

Envid: 1000268052
Region Code: 02
County Code: NY059

Programmatic ID: AIR NY0000001282000747

Facility Registry ID: 110001984773
D and B Number: Not reported

Facility Site Name: ROCKAWAY METAL PRODUCTS CORP

Primary SIC Code: 2542

NAICS Code: 337127

Default Air Classification Code: SMI

Facility Type of Ownership Code: POF

Air CMS Category Code: Not reported

HPV Status: Not reported

US AIRS (AFS):

Region Code: 02

Programmatic ID: AIR NY0000001282000747

Facility Registry ID: 110001984773

Air Operating Status Code: OPR
Default Air Classification Code: SMI

Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards

Activity Date: 1984-01-12 00:00:00

Activity Status Date: Not reported

Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation

Activity Status: Not reported

Region Code: 02

Programmatic ID: AIR NY0000001282000747

Facility Registry ID: 110001984773

Air Operating Status Code: OPR Default Air Classification Code: SMI

Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards

Activity Date: 1984-07-20 00:00:00

Activity Status Date: Not reported

Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation

Activity Status: Not reported

Region Code: 02

Programmatic ID: AIR NY0000001282000747

Facility Registry ID: 110001984773

Air Operating Status Code: OPR Default Air Classification Code: SMI

Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards

Activity Date: 1985-05-15 00:00:00

Activity Status Date: Not reported

Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation

Activity Status: Not reported

Region Code: 02

Programmatic ID: AIR NY0000001282000747

Facility Registry ID: 110001984773

Air Operating Status Code: OPR
Default Air Classification Code: SMI

Direction Distance

Elevation Site Database(s) EPA ID Number

ROCKAWAY METAL (Continued)

1000268052

EDR ID Number

Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards

Activity Date: 1986-04-14 00:00:00
Activity Status Date: Not reported

Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation

Activity Status: Not reported

Region Code: 02

Programmatic ID: AIR NY0000001282000747

Facility Registry ID: 110001984773

Air Operating Status Code: OPR
Default Air Classification Code: SMI

Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards

Activity Date: 1987-04-13 00:00:00

Activity Status Date: Not reported

Activity Group: Compliance Monitoring Activity Type: Inspection/Evaluation

Activity Status: Not reported

Region Code: 02

Programmatic ID: AIR NY0000001282000747

Facility Registry ID: 110001984773
Air Operating Status Code: OPR

Default Air Classification Code: SMI

Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards

Activity Date: 1988-04-20 00:00:00

Activity Status Date: Not reported

Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation

Activity Status: Not reported

Region Code: 02

Programmatic ID: AIR NY0000001282000747

Facility Registry ID: 110001984773

Air Operating Status Code: OPR Default Air Classification Code: SMI

Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards

Activity Date: 1988-04-22 00:00:00

Activity Status Date: Not reported

Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation

Activity Status: Not reported

Region Code: 02

Programmatic ID: AIR NY0000001282000747

Facility Registry ID: 110001984773
Air Operating Status Code: OPR

Default Air Classification Code: SMI

Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards

Activity Date: 1989-05-19 00:00:00

Activity Status Date: Not reported

Activity Group: Compliance Monitoring Activity Type: Inspection/Evaluation

Activity Status: Not reported

Region Code: 02

Programmatic ID: AIR NY0000001282000747

Direction Distance

Elevation Site Database(s) EPA ID Number

ROCKAWAY METAL (Continued)

1000268052

EDR ID Number

Facility Registry ID: 110001984773

Air Operating Status Code: OPR Default Air Classification Code: SMI

Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards

Activity Date: 1984-05-10 00:00:00
Activity Status Date: 1984-05-10 00:00:00
Activity Group: Enforcement Action
Activity Type: Administrative - Formal
Activity Status: Final Order Issued

Region Code: 02

Programmatic ID: AIR NY0000001282000747

Facility Registry ID: 110001984773

Air Operating Status Code: OPR Default Air Classification Code: SMI

Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards

Activity Date: 1985-05-15 00:00:00
Activity Status Date: 1985-05-15 00:00:00
Activity Group: Enforcement Action
Activity Type: Administrative - Formal
Activity Status: Final Order Issued

Region Code: 02

Programmatic ID: AIR NY0000001282000747

Facility Registry ID: 110001984773

Air Operating Status Code: OPR Default Air Classification Code: SMI

Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards

Activity Date: 1986-04-14 00:00:00
Activity Status Date: 1986-04-14 00:00:00
Activity Group: Enforcement Action
Activity Type: Administrative - Formal
Activity Status: Final Order Issued

Region Code: 02

Programmatic ID: AIR NY0000001282000747

Facility Registry ID: 110001984773

Air Operating Status Code: OPR Default Air Classification Code: SMI

Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards

Activity Date: 1984-01-12 00:00:00
Activity Status Date: 1984-01-12 00:00:00
Activity Group: Enforcement Action
Activity Type: Administrative - Informal

Activity Status: Achieved

FINDS:

Registry ID: 110001984773

Environmental Interest/Information System

AFS (Aerometric Information Retrieval System (AIRS) Facility Subsystem) replaces the former Compliance Data System (CDS), the National Emission Data System (NEDS), and the Storage and Retrieval of Aerometric Data (SAROAD). AIRS is the national repository for information concerning airborne pollution in the United States. AFS is

Direction Distance Elevation

Site Database(s) EPA ID Number

ROCKAWAY METAL (Continued)

1000268052

EDR ID Number

used to track emissions and compliance data from industrial plants. AFS data are utilized by states to prepare State Implementation Plans to comply with regulatory programs and by EPA as an input for the estimation of total national emissions. AFS is undergoing a major redesign to support facility operating permits required under Title V of the Clean Air Act.

AIR SYNTHETIC MINOR

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

SUPERFUND (NON-NPL)

ICIS (Integrated Compliance Information System) is the Integrated Compliance Information System and provides a database that, when complete, will contain integrated Enforcement and Compliance information across most of EPA's programs. The vision for ICIS is to replace EPA's independent databases that contain Enforcement data with a single repository for that information. Currently, ICIS contains all Federal Administrative and Judicial enforcement actions. This information is maintained in ICIS by EPA in the Regional offices and it Headquarters. A future release of ICIS will replace the Permit Compliance System (PCS) which supports the NPDES and will integrate that information with Federal actions already in the system. ICIS also has the capability to track other activities occurring in the Region that support Compliance and Enforcement programs. These include; Incident Tracking, Compliance Assistance, and Compliance Monitoring.

<u>Click this hyperlink</u> while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:

Envid: 1000268052 Registry ID: 110001984773

DFR URL: http://echo.epa.gov/detailed-facility-report?fid=110001984773

NY MANIFEST:

Country: USA

EPA ID: NYD002059202
Facility Status: Not reported

Location Address 1: 175 ROGER AVENUE

Code: BP

Location Address 2: Not reported
Total Tanks: Not reported
Location City: INWOOD
Location State: NY
Location Zip: 11696
Location Zip 4: Not reported

NY MANIFEST:

EPAID: NYD002059202

Direction Distance Elevation

stance EDR ID Number evation Site Database(s) EPA ID Number

ROCKAWAY METAL (Continued)

1000268052

Mailing Name: ROCKAWAY METAL PRODUCTS CORP
Mailing Contact: MACALUSO JOSEPH PLANT MAN

Mailing Address 1: 175 ROGER AVENUE

Mailing Address 2: Not reported
Mailing City: INWOOD
Mailing State: NY
Mailing Zip: 11696
Mailing Zip 4: Not reported
Mailing Country: USA

Mailing Phone: 212GR11100

NY MANIFEST:

Document ID: NJA2265513

Manifest Status: C

 seq:
 Not reported

 Year:
 1996

 Trans1 State ID:
 \$5811

 Trans2 State ID:
 Not reported

 Generator Ship Date:
 01/31/1996

 Trans1 Recv Date:
 01/31/1996

Trans2 Recv Date: / /

TSD Site Recy Date: 01/31/1996 Part A Recv Date: 02/16/1996 02/12/1996 Part B Recv Date: NYD002059202 Generator EPA ID: Trans1 EPA ID: NJ0000027193 Trans2 EPA ID: Not reported TSDF ID 1: NJD002200046 TSDF ID 2: Not reported Manifest Tracking Number: Not reported Not reported Import Indicator: **Export Indicator:** Not reported Discr Quantity Indicator: Not reported Discr Type Indicator: Not reported Discr Residue Indicator: Not reported Discr Partial Reject Indicator: Not reported Discr Full Reject Indicator: Not reported Manifest Ref Number: Not reported Alt Facility RCRA ID: Not reported Alt Facility Sign Date: Not reported MGMT Method Type Code: Not reported Waste Code: F003 - UNKNOWN Waste Code: Not reported Waste Code: Not reported Waste Code: Not reported

Quantity: 00055
Units: G - Gallons (liquids only)* (8.3 pounds)
Number of Containers: 001

Not reported

Not reported

Container Type: DM - Metal drums, barrels

Handling Method: B Incineration, heat recovery, burning.

Specific Gravity: 100

Waste Code:

Waste Code:

Waste Code: F001 - UNKNOWN
Waste Code: Not reported
Waste Code: Not reported
Waste Code: Not reported

Map ID MAP FINDINGS Direction

Distance

Elevation Site Database(s) EPA ID Number

ROCKAWAY METAL (Continued)

1000268052

EDR ID Number

Waste Code: Not reported Quantity: 00055

Units: G - Gallons (liquids only)* (8.3 pounds)

Number of Containers: 00°

Container Type: DM - Metal drums, barrels

Handling Method: B Incineration, heat recovery, burning.

Specific Gravity: 100

Click this hyperlink while viewing on your computer to access

-1 additional NY MANIFEST: record(s) in the EDR Site Report.

Count: 3 records. ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
FAR ROCKAWAY	S112818540	34-11 BEACH CHANNEL DRIVE	34-11 BEACH & FAR ROCKAWAY BLV	11691	NY ENG CONTROLS, NY INST CONTROL, NY BROWNFIELDS
FAR ROCKAWAY INWOOD		FAR ROCKAWAY MGP FAR ROCKAWAY (INWOOD) F03 (LIRR)	1300 BLOCK OF BRUNSWICK AVE REDFERN AVENUE		NY VCP, NY BROWNFIELDS NY VCP

To maintain currency of the following federal and state databases, EDR contacts the appropriate governmental agency on a monthly or quarterly basis, as required.

Number of Days to Update: Provides confirmation that EDR is reporting records that have been updated within 90 days from the date the government agency made the information available to the public.

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

NPL: National Priority List

National Priorities List (Superfund). The NPL is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund Program. NPL sites may encompass relatively large areas. As such, EDR provides polygon coverage for over 1,000 NPL site boundaries produced by EPA's Environmental Photographic Interpretation Center (EPIC) and regional EPA offices.

Date of Government Version: 07/17/2018 Source: EPA Telephone: N/A Date Data Arrived at EDR: 08/09/2018

Last EDR Contact: 10/04/2018 Date Made Active in Reports: 09/07/2018

Number of Days to Update: 29 Next Scheduled EDR Contact: 01/14/2019 Data Release Frequency: Quarterly

NPL Site Boundaries

EPA's Environmental Photographic Interpretation Center (EPIC)

Telephone: 202-564-7333

EPA Region 1 EPA Region 6

Telephone 617-918-1143 Telephone: 214-655-6659

EPA Region 3 EPA Region 7

Telephone 215-814-5418 Telephone: 913-551-7247

EPA Region 4 **EPA Region 8**

Telephone 404-562-8033 Telephone: 303-312-6774

EPA Region 5 EPA Region 9

Telephone 312-886-6686 Telephone: 415-947-4246

EPA Region 10

Telephone 206-553-8665

Proposed NPL: Proposed National Priority List Sites

A site that has been proposed for listing on the National Priorities List through the issuance of a proposed rule in the Federal Register. EPA then accepts public comments on the site, responds to the comments, and places on the NPL those sites that continue to meet the requirements for listing.

Date of Government Version: 07/17/2018 Date Data Arrived at EDR: 08/09/2018

Date Made Active in Reports: 09/07/2018

Number of Days to Update: 29

Source: EPA Telephone: N/A

Last EDR Contact: 10/04/2018

Next Scheduled EDR Contact: 01/14/2019 Data Release Frequency: Quarterly

NPL LIENS: Federal Superfund Liens

Federal Superfund Liens. Under the authority granted the USEPA by CERCLA of 1980, the USEPA has the authority to file liens against real property in order to recover remedial action expenditures or when the property owner received notification of potential liability. USEPA compiles a listing of filed notices of Superfund Liens.

Date of Government Version: 10/15/1991 Date Data Arrived at EDR: 02/02/1994 Date Made Active in Reports: 03/30/1994

Number of Days to Update: 56

Source: EPA

Telephone: 202-564-4267 Last EDR Contact: 08/15/2011

Next Scheduled EDR Contact: 11/28/2011 Data Release Frequency: No Update Planned

Federal Delisted NPL site list

Delisted NPL: National Priority List Deletions

The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL where no further response is appropriate.

Date of Government Version: 07/17/2018 Date Data Arrived at EDR: 08/09/2018 Date Made Active in Reports: 09/07/2018

Number of Days to Update: 29

Source: EPA Telephone: N/A

Last EDR Contact: 10/04/2018

Next Scheduled EDR Contact: 01/14/2019 Data Release Frequency: Quarterly

Federal CERCLIS list

FEDERAL FACILITY: Federal Facility Site Information listing

A listing of National Priority List (NPL) and Base Realignment and Closure (BRAC) sites found in the Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) Database where EPA Federal Facilities Restoration and Reuse Office is involved in cleanup activities.

Date of Government Version: 11/07/2016 Date Data Arrived at EDR: 01/05/2017 Date Made Active in Reports: 04/07/2017

Number of Days to Update: 92

Source: Environmental Protection Agency Telephone: 703-603-8704

Last EDR Contact: 07/06/2018 Next Scheduled EDR Contact: 10/15/2018

Data Release Frequency: Varies

SEMS: Superfund Enterprise Management System

SEMS (Superfund Enterprise Management System) tracks hazardous waste sites, potentially hazardous waste sites, and remedial activities performed in support of EPA's Superfund Program across the United States. The list was formerly know as CERCLIS, renamed to SEMS by the EPA in 2015. The list contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). This dataset also contains sites which are either proposed to or on the National Priorities List (NPL) and the sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 07/17/2018 Date Data Arrived at EDR: 08/09/2018 Date Made Active in Reports: 09/07/2018

Number of Days to Update: 29

Source: EPA Telephone: 800-424-9346 Last EDR Contact: 10/04/2018

Next Scheduled EDR Contact: 01/28/2019 Data Release Frequency: Quarterly

Federal CERCLIS NFRAP site list

SEMS-ARCHIVE: Superfund Enterprise Management System Archive

SEMS-ARCHIVE (Superfund Enterprise Management System Archive) tracks sites that have no further interest under the Federal Superfund Program based on available information. The list was formerly known as the CERCLIS-NFRAP, renamed to SEMS ARCHIVE by the EPA in 2015. EPA may perform a minimal level of assessment work at a site while it is archived if site conditions change and/or new information becomes available. Archived sites have been removed and archived from the inventory of SEMS sites. Archived status indicates that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list the site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. The decision does not necessarily mean that there is no hazard associated with a given site; it only means that based upon available information, the location is not judged to be potential NPL site.

Date of Government Version: 07/17/2018 Date Data Arrived at EDR: 08/09/2018 Date Made Active in Reports: 09/07/2018

Number of Days to Update: 29

Source: EPA

Telephone: 800-424-9346 Last EDR Contact: 10/04/2018

Next Scheduled EDR Contact: 01/28/2019 Data Release Frequency: Quarterly

Federal RCRA CORRACTS facilities list

CORRACTS: Corrective Action Report

CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

Date of Government Version: 03/01/2018 Date Data Arrived at EDR: 03/28/2018 Date Made Active in Reports: 06/22/2018

Number of Days to Update: 86

Source: EPA

Telephone: 800-424-9346 Last EDR Contact: 09/19/2018

Next Scheduled EDR Contact: 01/07/2019 Data Release Frequency: Quarterly

Federal RCRA non-CORRACTS TSD facilities list

RCRA-TSDF: RCRA - Treatment, Storage and Disposal

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Transporters are individuals or entities that move hazardous waste from the generator offsite to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.

Date of Government Version: 03/01/2018 Date Data Arrived at EDR: 03/28/2018 Date Made Active in Reports: 06/22/2018

Number of Days to Update: 86

Source: Environmental Protection Agency

Telephone: (212) 637-3660 Last EDR Contact: 09/19/2018

Next Scheduled EDR Contact: 01/07/2019 Data Release Frequency: Quarterly

Federal RCRA generators list

RCRA-LQG: RCRA - Large Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Large quantity generators (LQGs) generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month.

Date of Government Version: 03/01/2018 Date Data Arrived at EDR: 03/28/2018 Date Made Active in Reports: 06/22/2018

Number of Days to Update: 86

Source: Environmental Protection Agency Telephone: (212) 637-3660

Last EDR Contact: 09/19/2018

Next Scheduled EDR Contact: 01/07/2019 Data Release Frequency: Quarterly

RCRA-SQG: RCRA - Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

Date of Government Version: 03/01/2018 Date Data Arrived at EDR: 03/28/2018 Date Made Active in Reports: 06/22/2018

Number of Days to Update: 86

Source: Environmental Protection Agency

Telephone: (212) 637-3660 Last EDR Contact: 09/19/2018

Next Scheduled EDR Contact: 01/07/2019
Data Release Frequency: Quarterly

RCRA-CESQG: RCRA - Conditionally Exempt Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Conditionally exempt small quantity generators (CESQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.

Date of Government Version: 03/01/2018 Date Data Arrived at EDR: 03/28/2018 Date Made Active in Reports: 06/22/2018

Number of Days to Update: 86

Source: Environmental Protection Agency

Telephone: (212) 637-3660 Last EDR Contact: 09/19/2018

Next Scheduled EDR Contact: 01/07/2019 Data Release Frequency: Quarterly

Federal institutional controls / engineering controls registries

LUCIS: Land Use Control Information System

LUCIS contains records of land use control information pertaining to the former Navy Base Realignment and Closure properties.

Date of Government Version: 05/14/2018 Date Data Arrived at EDR: 05/18/2018 Date Made Active in Reports: 07/20/2018

Number of Days to Update: 63

Source: Department of the Navy Telephone: 843-820-7326 Last EDR Contact: 07/16/2018

Next Scheduled EDR Contact: 11/26/2018 Data Release Frequency: Varies

US ENG CONTROLS: Engineering Controls Sites List

A listing of sites with engineering controls in place. Engineering controls include various forms of caps, building foundations, liners, and treatment methods to create pathway elimination for regulated substances to enter environmental media or effect human health.

Date of Government Version: 07/31/2018 Date Data Arrived at EDR: 08/28/2018 Date Made Active in Reports: 09/14/2018

Number of Days to Update: 17

Source: Environmental Protection Agency

Telephone: 703-603-0695 Last EDR Contact: 08/28/2018

Next Scheduled EDR Contact: 12/10/2018 Data Release Frequency: Varies

US INST CONTROL: Sites with Institutional Controls

A listing of sites with institutional controls in place. Institutional controls include administrative measures, such as groundwater use restrictions, construction restrictions, property use restrictions, and post remediation care requirements intended to prevent exposure to contaminants remaining on site. Deed restrictions are generally required as part of the institutional controls.

Date of Government Version: 07/31/2018 Date Data Arrived at EDR: 08/28/2018 Date Made Active in Reports: 09/14/2018

Number of Days to Update: 17

Source: Environmental Protection Agency

Telephone: 703-603-0695 Last EDR Contact: 08/28/2018

Next Scheduled EDR Contact: 12/10/2018

Data Release Frequency: Varies

Federal ERNS list

ERNS: Emergency Response Notification System

Emergency Response Notification System. ERNS records and stores information on reported releases of oil and hazardous

substances.

Date of Government Version: 06/18/2018 Date Data Arrived at EDR: 06/27/2018 Date Made Active in Reports: 09/14/2018

Number of Days to Update: 79

Source: National Response Center, United States Coast Guard

Telephone: 202-267-2180 Last EDR Contact: 09/25/2018

Next Scheduled EDR Contact: 01/07/2019 Data Release Frequency: Quarterly

State- and tribal - equivalent CERCLIS

SHWS: Inactive Hazardous Waste Disposal Sites in New York State

Referred to as the State Superfund Program, the Inactive Hazardous Waste Disposal Site Remedial Program is the cleanup program for inactive hazardous waste sites and now includes hazardous substance sites

Date of Government Version: 08/09/2018 Date Data Arrived at EDR: 08/10/2018 Date Made Active in Reports: 08/30/2018

Number of Days to Update: 20

Source: Department of Environmental Conservation

Telephone: 518-402-9622 Last EDR Contact: 08/10/2018

Next Scheduled EDR Contact: 11/26/2018 Data Release Frequency: Annually

State and tribal landfill and/or solid waste disposal site lists

SWF/LF: Facility Register

Solid Waste Facilities/Landfill Sites. SWF/LF type records typically contain an inventory of solid waste disposal facilities or landfills in a particular state. Depending on the state, these may be active or inactive facilities or open dumps that failed to meet RCRA Subtitle D Section 4004 criteria for solid waste landfills or disposal sites.

Date of Government Version: 12/08/2017 Date Data Arrived at EDR: 01/02/2018 Date Made Active in Reports: 01/31/2018

Number of Days to Update: 29

Source: Department of Environmental Conservation

Telephone: 518-457-2051 Last EDR Contact: 07/06/2018

Next Scheduled EDR Contact: 10/15/2018 Data Release Frequency: Quarterly

State and tribal leaking storage tank lists

INDIAN LUST R10: Leaking Underground Storage Tanks on Indian Land LUSTs on Indian land in Alaska, Idaho, Oregon and Washington.

Date of Government Version: 04/12/2018 Date Data Arrived at EDR: 05/18/2018 Date Made Active in Reports: 07/20/2018

Number of Days to Update: 63

Source: EPA Region 10 Telephone: 206-553-2857 Last EDR Contact: 10/26/2018

Next Scheduled EDR Contact: 02/04/2019 Data Release Frequency: Varies

INDIAN LUST R9: Leaking Underground Storage Tanks on Indian Land LUSTs on Indian land in Arizona, California, New Mexico and Nevada

Date of Government Version: 04/10/2018 Date Data Arrived at EDR: 05/18/2018 Date Made Active in Reports: 07/20/2018

Number of Days to Update: 63

Source: Environmental Protection Agency

Telephone: 415-972-3372 Last EDR Contact: 10/26/2018

Next Scheduled EDR Contact: 02/04/2019 Data Release Frequency: Varies

INDIAN LUST R8: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Colorado, Montana, North Dakota, South Dakota, Utah and Wyoming.

Date of Government Version: 04/25/2018 Date Data Arrived at EDR: 05/18/2018 Date Made Active in Reports: 07/20/2018

Number of Days to Update: 63

Source: EPA Region 8 Telephone: 303-312-6271 Last EDR Contact: 10/26/2018

Next Scheduled EDR Contact: 02/04/2019 Data Release Frequency: Varies

INDIAN LUST R7: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Iowa, Kansas, and Nebraska

Date of Government Version: 04/24/2018 Date Data Arrived at EDR: 05/18/2018 Date Made Active in Reports: 07/20/2018

Number of Days to Update: 63

Source: EPA Region 7 Telephone: 913-551-7003 Last EDR Contact: 10/26/2018

Next Scheduled EDR Contact: 02/04/2019 Data Release Frequency: Varies

INDIAN LUST R6: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in New Mexico and Oklahoma.

Date of Government Version: 04/01/2018 Date Data Arrived at EDR: 05/18/2018 Date Made Active in Reports: 07/20/2018

Number of Days to Update: 63

Source: EPA Region 6 Telephone: 214-665-6597 Last EDR Contact: 10/26/2018

Next Scheduled EDR Contact: 02/04/2019 Data Release Frequency: Varies

INDIAN LUST R5: Leaking Underground Storage Tanks on Indian Land

Leaking underground storage tanks located on Indian Land in Michigan, Minnesota and Wisconsin.

Date of Government Version: 04/12/2018 Date Data Arrived at EDR: 05/18/2018 Date Made Active in Reports: 07/20/2018

Number of Days to Update: 63

Source: EPA, Region 5 Telephone: 312-886-7439 Last EDR Contact: 10/26/2018

Next Scheduled EDR Contact: 02/04/2019 Data Release Frequency: Varies

INDIAN LUST R1: Leaking Underground Storage Tanks on Indian Land
A listing of leaking underground storage tank locations on Indian Land.

Date of Government Version: 04/13/2018 Date Data Arrived at EDR: 05/18/2018 Date Made Active in Reports: 07/20/2018

Number of Days to Update: 63

Source: EPA Region 1 Telephone: 617-918-1313 Last EDR Contact: 10/26/2018

Next Scheduled EDR Contact: 02/04/2019 Data Release Frequency: Varies

INDIAN LUST R4: Leaking Underground Storage Tanks on Indian Land LUSTs on Indian land in Florida, Mississippi and North Carolina.

Date of Government Version: 05/08/2018 Date Data Arrived at EDR: 05/18/2018 Date Made Active in Reports: 07/20/2018

Number of Days to Update: 63

Source: EPA Region 4 Telephone: 404-562-8677 Last EDR Contact: 10/26/2018

Next Scheduled EDR Contact: 02/04/2019 Data Release Frequency: Varies

LTANKS: Spills Information Database

Leaking Storage Tank Incident Reports. These records contain an inventory of reported leaking storage tank incidents reported from 4/1/86 through the most recent update. They can be either leaking underground storage tanks or leaking aboveground storage tanks. The causes of the incidents are tank test failures, tank failures or tank overfills.

Date of Government Version: 10/16/2018 Date Data Arrived at EDR: 10/16/2018 Date Made Active in Reports: 10/22/2018

Number of Days to Update: 6

Source: Department of Environmental Conservation

Telephone: 518-402-9549 Last EDR Contact: 10/16/2018

Next Scheduled EDR Contact: 11/26/2018 Data Release Frequency: Varies

HIST LTANKS: Listing of Leaking Storage Tanks

A listing of leaking underground and aboveground storage tanks. The causes of the incidents are tank test failures, tank failures or tank overfills. In 2002, the Department of Environmental Conservation stopped providing updates to its original Spills Information Database. This database includes fields that are no longer available from the NYDEC as of January 1, 2002. Current information may be found in the NY LTANKS database. Department of Environmental Conservation.

Date of Government Version: 01/01/2002 Date Data Arrived at EDR: 07/08/2005 Date Made Active in Reports: 07/14/2005

Number of Days to Update: 6

Source: Department of Environmental Conservation

Telephone: 518-402-9549 Last EDR Contact: 07/07/2005 Next Scheduled EDR Contact: N/A

Data Release Frequency: No Update Planned

State and tribal registered storage tank lists

FEMA UST: Underground Storage Tank Listing

A listing of all FEMA owned underground storage tanks.

Date of Government Version: 05/15/2017 Date Data Arrived at EDR: 05/30/2017 Date Made Active in Reports: 10/13/2017

Number of Days to Update: 136

Source: FEMA

Telephone: 202-646-5797 Last EDR Contact: 10/10/2018

Next Scheduled EDR Contact: 01/21/2019 Data Release Frequency: Varies

UST: Petroleum Bulk Storage (PBS) Database

Facilities that have petroleum storage capacities in excess of 1,100 gallons and less than 400,000 gallons.

Date of Government Version: 09/25/2018 Date Data Arrived at EDR: 09/26/2018 Date Made Active in Reports: 10/12/2018

Number of Days to Update: 16

Source: Department of Environmental Conservation

Telephone: 518-402-9549 Last EDR Contact: 09/26/2018

Next Scheduled EDR Contact: 01/07/2019 Data Release Frequency: No Update Planned

CBS UST: Chemical Bulk Storage Database

Facilities that store regulated hazardous substances in underground tanks of any size

Date of Government Version: 01/01/2002 Date Data Arrived at EDR: 02/20/2002 Date Made Active in Reports: 03/22/2002

Number of Days to Update: 30

Source: NYSDEC Telephone: 518-402-9549 Last EDR Contact: 10/24/2005

Next Scheduled EDR Contact: 01/23/2006 Data Release Frequency: No Update Planned

MOSF UST: Major Oil Storage Facilities Database

Facilities that may be onshore facilities or vessels, with petroleum storage capacities of 400,000 gallons or greater.

Date of Government Version: 01/01/2002 Date Data Arrived at EDR: 02/20/2002 Date Made Active in Reports: 03/22/2002

Number of Days to Update: 30

Source: NYSDEC Telephone: 518-402-9549 Last EDR Contact: 07/25/2005

Next Scheduled EDR Contact: 10/24/2005 Data Release Frequency: No Update Planned

MOSF: Major Oil Storage Facility Site Listing

These facilities may be onshore facilities or vessels, with petroleum storage capacities of 400,000 gallons or

Date of Government Version: 09/25/2018 Date Data Arrived at EDR: 09/26/2018 Date Made Active in Reports: 10/12/2018

Number of Days to Update: 16

Source: Department of Environmental Conservation

Telephone: 518-402-9549 Last EDR Contact: 09/26/2018

Next Scheduled EDR Contact: 01/07/2019 Data Release Frequency: Quarterly

CBS: Chemical Bulk Storage Site Listing

These facilities store regulated hazardous substances in aboveground tanks with capacities of 185 gallons or greater,

and/or in underground tanks of any size

Date of Government Version: 09/25/2018 Date Data Arrived at EDR: 09/26/2018 Date Made Active in Reports: 10/12/2018

Number of Days to Update: 16

Source: Department of Environmental Conservation

Telephone: 518-402-9549 Last EDR Contact: 09/26/2018

Next Scheduled EDR Contact: 01/07/2019 Data Release Frequency: Quarterly

AST: Petroleum Bulk Storage

Registered Aboveground Storage Tanks.

Date of Government Version: 09/25/2018 Date Data Arrived at EDR: 09/26/2018 Date Made Active in Reports: 10/12/2018

Number of Days to Update: 16

Source: Department of Environmental Conservation

Telephone: 518-402-9549 Last EDR Contact: 09/26/2018

Next Scheduled EDR Contact: 01/07/2019
Data Release Frequency: No Update Planned

CBS AST: Chemical Bulk Storage Database

Facilities that store regulated hazardous substances in aboveground tanks with capacities of 185 gallons or greater,

and/or in underground tanks of any size.

Date of Government Version: 01/01/2002 Date Data Arrived at EDR: 02/20/2002 Date Made Active in Reports: 03/22/2002

Number of Days to Update: 30

Source: NYSDEC Telephone: 518-402-9549 Last EDR Contact: 07/25/2005

Next Scheduled EDR Contact: 10/24/2005 Data Release Frequency: No Update Planned

MOSF AST: Major Oil Storage Facilities Database

Facilities that may be onshore facilities or vessels, with petroleum storage capacities of 400,000 gallons or

greater.

Date of Government Version: 01/01/2002 Date Data Arrived at EDR: 02/20/2002 Date Made Active in Reports: 03/22/2002

Number of Days to Update: 30

Source: NYSDEC Telephone: 518-402-9549 Last EDR Contact: 07/25/2005

Next Scheduled EDR Contact: 10/24/2005 Data Release Frequency: No Update Planned

INDIAN UST R6: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian

land in EPA Region 6 (Louisiana, Arkansas, Oklahoma, New Mexico, Texas and 65 Tribes).

Date of Government Version: 04/01/2018 Date Data Arrived at EDR: 05/18/2018 Date Made Active in Reports: 07/20/2018

Number of Days to Update: 63

Source: EPA Region 6 Telephone: 214-665-7591 Last EDR Contact: 10/26/2018

Next Scheduled EDR Contact: 02/04/2019 Data Release Frequency: Varies

INDIAN UST R10: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 10 (Alaska, Idaho, Oregon, Washington, and Tribal Nations).

Date of Government Version: 04/12/2018 Date Data Arrived at EDR: 05/18/2018 Date Made Active in Reports: 07/20/2018

Number of Days to Update: 63

Source: EPA Region 10 Telephone: 206-553-2857 Last EDR Contact: 10/26/2018

Next Scheduled EDR Contact: 02/04/2019 Data Release Frequency: Varies

INDIAN UST R9: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 9 (Arizona, California, Hawaii, Nevada, the Pacific Islands, and Tribal Nations).

Date of Government Version: 04/10/2018 Date Data Arrived at EDR: 05/18/2018 Date Made Active in Reports: 07/20/2018

Number of Days to Update: 63

Source: EPA Region 9 Telephone: 415-972-3368 Last EDR Contact: 10/26/2018

Next Scheduled EDR Contact: 02/04/2019 Data Release Frequency: Varies

INDIAN UST R8: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 8 (Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming and 27 Tribal Nations).

Date of Government Version: 04/25/2018 Date Data Arrived at EDR: 05/18/2018 Date Made Active in Reports: 07/20/2018

Number of Days to Update: 63

Source: EPA Region 8 Telephone: 303-312-6137 Last EDR Contact: 10/26/2018

Next Scheduled EDR Contact: 02/04/2019 Data Release Frequency: Varies

INDIAN UST R7: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 7 (Iowa, Kansas, Missouri, Nebraska, and 9 Tribal Nations).

Date of Government Version: 04/24/2018 Date Data Arrived at EDR: 05/18/2018 Date Made Active in Reports: 07/20/2018

Number of Days to Update: 63

Source: EPA Region 7 Telephone: 913-551-7003 Last EDR Contact: 10/26/2018

Next Scheduled EDR Contact: 02/04/2019 Data Release Frequency: Varies

INDIAN UST R1: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 1 (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont and ten Tribal Nations).

Date of Government Version: 04/13/2018 Date Data Arrived at EDR: 05/18/2018 Date Made Active in Reports: 07/20/2018

Number of Days to Update: 63

Source: EPA, Region 1 Telephone: 617-918-1313 Last EDR Contact: 10/26/2018

Next Scheduled EDR Contact: 02/04/2019 Data Release Frequency: Varies

INDIAN UST R4: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 4 (Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee and Tribal Nations)

Date of Government Version: 05/08/2018 Date Data Arrived at EDR: 05/18/2018 Date Made Active in Reports: 07/20/2018

Number of Days to Update: 63

Source: EPA Region 4 Telephone: 404-562-9424 Last EDR Contact: 10/26/2018

Next Scheduled EDR Contact: 02/04/2019 Data Release Frequency: Varies

INDIAN UST R5: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 5 (Michigan, Minnesota and Wisconsin and Tribal Nations).

Date of Government Version: 04/12/2018 Date Data Arrived at EDR: 05/18/2018 Date Made Active in Reports: 07/20/2018

Number of Days to Update: 63

Source: EPA Region 5 Telephone: 312-886-6136 Last EDR Contact: 10/26/2018

Next Scheduled EDR Contact: 02/04/2019 Data Release Frequency: Varies

TANKS: Storage Tank Faciliy Listing

This database contains records of facilities that are or have been regulated under Bulk Storage Program. Tank information for these facilities may not be releasable by the state agency.

Date of Government Version: 09/25/2018 Date Data Arrived at EDR: 09/26/2018 Date Made Active in Reports: 10/12/2018

Number of Days to Update: 16

Source: Department of Environmental Conservation

Telephone: 518-402-9543 Last EDR Contact: 09/26/2018

Next Scheduled EDR Contact: 01/07/2019 Data Release Frequency: Quarterly

State and tribal institutional control / engineering control registries

ENV RES DECL: Environmental Restrictive Declarations

The Environmental Restrictive Declarations (ERD) listed were recorded in connection with a zoning action against the noted Tax Blocks and Tax Lots, or portion thereof, and are available in the property records on file at the Office of the City Register for Bronx, Kings, New York and Queens counties or at the Richmond County Clerk's office. They contain environmental requirements with respect to hazardous materials, air quality and/or noise in accordance with Section 11-15 of this Resolution.

Date of Government Version: 05/15/2018 Date Data Arrived at EDR: 06/26/2018 Date Made Active in Reports: 08/07/2018

Number of Days to Update: 42

Source: New York City Department of City Planning

Telephone: 212-720-3300 Last EDR Contact: 09/18/2018

Next Scheduled EDR Contact: 12/31/2018
Data Release Frequency: Varies

RES DECL: Restrictive Declarations Listing

A restrictive declaration is a covenant running with the land which binds the present and future owners of the property. As a condition of certain special permits, the City Planning Commission may require an applicant to sign and record a restrictive declaration that places specified conditions on the future use and development of the property. Certain restrictive declarations are indicated by a D on zoning maps.

Date of Government Version: 11/18/2010 Date Data Arrived at EDR: 06/30/2014 Date Made Active in Reports: 07/21/2014

Number of Days to Update: 21

Source: NYC Department of City Planning

Telephone: 212-720-3401 Last EDR Contact: 09/21/2018

Next Scheduled EDR Contact: 12/31/2018 Data Release Frequency: Varies

ENG CONTROLS: Registry of Engineering Controls

Environmental Remediation sites that have engineering controls in place.

Date of Government Version: 08/09/2018 Date Data Arrived at EDR: 08/10/2018 Date Made Active in Reports: 08/31/2018

Number of Days to Update: 21

Source: Department of Environmental Conservation

Telephone: 518-402-9553 Last EDR Contact: 08/10/2018

Next Scheduled EDR Contact: 11/26/2018 Data Release Frequency: Quarterly

INST CONTROL: Registry of Institutional Controls

Environmental Remediation sites that have institutional controls in place.

Date of Government Version: 08/09/2018 Date Data Arrived at EDR: 08/10/2018 Date Made Active in Reports: 08/31/2018

Number of Days to Update: 21

Source: Department of Environmental Conservation

Telephone: 518-402-9553 Last EDR Contact: 08/10/2018

Next Scheduled EDR Contact: 11/26/2018 Data Release Frequency: Quarterly

State and tribal voluntary cleanup sites

VCP: Voluntary Cleanup Agreements

New York established its Voluntary Cleanup Program (VCP) to address the environmental, legal and financial barriers that often hinder the redevelopment and reuse of contaminated properties. The Voluntary Cleanup Program was developed to enhance private sector cleanup of brownfields by enabling parties to remediate sites using private rather than public funds and to reduce the development pressures on "greenfield" sites.

Date of Government Version: 08/09/2018 Date Data Arrived at EDR: 08/10/2018 Date Made Active in Reports: 08/31/2018

Number of Days to Update: 21

Source: Department of Environmental Conservation

Telephone: 518-402-9711 Last EDR Contact: 08/10/2018

Next Scheduled EDR Contact: 11/26/2018 Data Release Frequency: Semi-Annually

INDIAN VCP R7: Voluntary Cleanup Priority Lisitng

A listing of voluntary cleanup priority sites located on Indian Land located in Region 7.

Date of Government Version: 03/20/2008 Date Data Arrived at EDR: 04/22/2008 Date Made Active in Reports: 05/19/2008

Number of Days to Update: 27

Source: EPA, Region 7 Telephone: 913-551-7365 Last EDR Contact: 04/20/2009

Next Scheduled EDR Contact: 07/20/2009 Data Release Frequency: Varies

VCP NYC: Voluntary Cleanup Program Listing NYC New York City voluntary cleanup program sites.

> Date of Government Version: 03/26/2018 Date Data Arrived at EDR: 03/29/2018 Date Made Active in Reports: 05/14/2018

Number of Days to Update: 46

Source: New York City Office of Environmental Protection

Telephone: 212-788-8841 Last EDR Contact: 09/17/2018

Next Scheduled EDR Contact: 12/31/2018 Data Release Frequency: Varies

INDIAN VCP R1: Voluntary Cleanup Priority Listing

A listing of voluntary cleanup priority sites located on Indian Land located in Region 1.

Date of Government Version: 07/27/2015 Date Data Arrived at EDR: 09/29/2015 Date Made Active in Reports: 02/18/2016

Number of Days to Update: 142

Source: EPA, Region 1 Telephone: 617-918-1102 Last EDR Contact: 09/24/2018

Next Scheduled EDR Contact: 01/07/2019 Data Release Frequency: Varies

State and tribal Brownfields sites

BROWNFIELDS: Brownfields Site List

A Brownfield is any real property where redevelopment or re-use may be complicated by the presence or potential presence of a hazardous waste, petroleum, pollutant, or contaminant.

Date of Government Version: 08/09/2018 Date Data Arrived at EDR: 08/10/2018 Date Made Active in Reports: 08/30/2018

Number of Days to Update: 20

Source: Department of Environmental Conservation

Telephone: 518-402-9764 Last EDR Contact: 08/10/2018

Next Scheduled EDR Contact: 11/26/2018 Data Release Frequency: Semi-Annually

ERP: Environmental Restoration Program Listing

In an effort to spur the cleanup and redevelopment of brownfields, New Yorkers approved a \$200 million Environmental Restoration or Brownfields Fund as part of the \$1.75 billion Clean Water/Clean Air Bond Act of 1996 (1996 Bond Act). Enhancements to the program were enacted on October 7, 2003. Under the Environmental Restoration Program, the State provides grants to municipalities to reimburse up to 90 percent of on-site eligible costs and 100% of off-site eligible costs for site investigation and remediation activities. Once remediated, the property may then be reused for commercial, industrial, residential or public use.

Date of Government Version: 08/09/2018 Date Data Arrived at EDR: 08/10/2018 Date Made Active in Reports: 08/31/2018

Number of Days to Update: 21

Source: Department of Environmental Conservation

Telephone: 518-402-9622 Last EDR Contact: 08/10/2018

Next Scheduled EDR Contact: 11/26/2018 Data Release Frequency: Quarterly

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS: A Listing of Brownfields Sites

Brownfields are real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. Cleaning up and reinvesting in these properties takes development pressures off of undeveloped, open land, and both improves and protects the environment. Assessment, Cleanup and Redevelopment Exchange System (ACRES) stores information reported by EPA Brownfields grant recipients on brownfields properties assessed or cleaned up with grant funding as well as information on Targeted Brownfields Assessments performed by EPA Regions. A listing of ACRES Brownfield sites is obtained from Cleanups in My Community. Cleanups in My Community provides information on Brownfields properties for which information is reported back to EPA, as well as areas served by Brownfields grant programs.

Date of Government Version: 06/18/2018 Date Data Arrived at EDR: 06/20/2018 Date Made Active in Reports: 09/14/2018

Number of Days to Update: 86

Source: Environmental Protection Agency Telephone: 202-566-2777

Last EDR Contact: 09/18/2018

Next Scheduled EDR Contact: 12/31/2018 Data Release Frequency: Semi-Annually

Local Lists of Landfill / Solid Waste Disposal Sites

SWTIRE: Registered Waste Tire Storage & Facility List A listing of facilities registered to accept waste tires.

Date of Government Version: 02/27/2018 Date Data Arrived at EDR: 04/06/2018 Date Made Active in Reports: 06/08/2018

Number of Days to Update: 63

Source: Department of Environmental Conservation

Telephone: 518-402-8694 Last EDR Contact: 09/10/2018

Next Scheduled EDR Contact: 12/24/2018

Data Release Frequency: No Update Planned

SWRCY: Registered Recycling Facility List A listing of recycling facilities.

Date of Government Version: 12/08/2017 Date Data Arrived at EDR: 01/02/2018 Date Made Active in Reports: 01/31/2018

Number of Days to Update: 29

Source: Department of Environmental Conservation

Telephone: 518-402-8705 Last EDR Contact: 07/06/2018

Next Scheduled EDR Contact: 10/15/2018 Data Release Frequency: Quarterly

INDIAN ODI: Report on the Status of Open Dumps on Indian Lands

Location of open dumps on Indian land.

Date of Government Version: 12/31/1998 Date Data Arrived at EDR: 12/03/2007 Date Made Active in Reports: 01/24/2008

Number of Days to Update: 52

Source: Environmental Protection Agency

Telephone: 703-308-8245 Last EDR Contact: 10/25/2018

Next Scheduled EDR Contact: 02/11/2019 Data Release Frequency: Varies

DEBRIS REGION 9: Torres Martinez Reservation Illegal Dump Site Locations

A listing of illegal dump sites location on the Torres Martinez Indian Reservation located in eastern Riverside County and northern Imperial County, California.

Date of Government Version: 01/12/2009 Date Data Arrived at EDR: 05/07/2009 Date Made Active in Reports: 09/21/2009

Number of Days to Update: 137

Source: EPA, Region 9 Telephone: 415-947-4219 Last EDR Contact: 10/22/2018

Next Scheduled EDR Contact: 02/04/2019 Data Release Frequency: No Update Planned

ODI: Open Dump Inventory

An open dump is defined as a disposal facility that does not comply with one or more of the Part 257 or Part 258 Subtitle D Criteria.

Date of Government Version: 06/30/1985 Date Data Arrived at EDR: 08/09/2004 Date Made Active in Reports: 09/17/2004

Number of Days to Update: 39

Source: Environmental Protection Agency

Telephone: 800-424-9346 Last EDR Contact: 06/09/2004 Next Scheduled EDR Contact: N/A

Data Release Frequency: No Update Planned

IHS OPEN DUMPS: Open Dumps on Indian Land

A listing of all open dumps located on Indian Land in the United States.

Date of Government Version: 04/01/2014
Date Data Arrived at EDR: 08/06/2014
Date Made Active in Reports: 01/29/2015

Number of Days to Update: 176

Source: Department of Health & Human Serivces, Indian Health Service

Telephone: 301-443-1452 Last EDR Contact: 08/03/2018

Next Scheduled EDR Contact: 11/12/2018 Data Release Frequency: Varies

Local Lists of Hazardous waste / Contaminated Sites

US HIST CDL: National Clandestine Laboratory Register

A listing of clandestine drug lab locations that have been removed from the DEAs National Clandestine Laboratory Register.

Date of Government Version: 05/18/2018 Date Data Arrived at EDR: 06/20/2018 Date Made Active in Reports: 09/14/2018

Number of Days to Update: 86

Source: Drug Enforcement Administration

Telephone: 202-307-1000 Last EDR Contact: 08/28/2018

Next Scheduled EDR Contact: 12/10/2018
Data Release Frequency: No Update Planned

DEL SHWS: Delisted Registry Sites

A database listing of sites delisted from the Registry of Inactive Hazardous Waste Disposal Sites.

Date of Government Version: 08/09/2018 Date Data Arrived at EDR: 08/10/2018 Date Made Active in Reports: 08/31/2018

Number of Days to Update: 21

Source: Department of Environmental Conservation

Telephone: 518-402-9622 Last EDR Contact: 08/10/2018

Next Scheduled EDR Contact: 11/26/2018 Data Release Frequency: Quarterly

US CDL: Clandestine Drug Labs

A listing of clandestine drug lab locations. The U.S. Department of Justice ("the Department") provides this web site as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments.

Date of Government Version: 05/18/2018 Date Data Arrived at EDR: 06/20/2018 Date Made Active in Reports: 09/14/2018

Number of Days to Update: 86

Source: Drug Enforcement Administration

Telephone: 202-307-1000 Last EDR Contact: 08/28/2018

Next Scheduled EDR Contact: 12/10/2018 Data Release Frequency: Quarterly

Local Lists of Registered Storage Tanks

HIST UST: Historical Petroleum Bulk Storage Database

These facilities have petroleum storage capacities in excess of 1,100 gallons and less than 400,000 gallons. This database contains detailed information per site. It is no longer updated due to the sensitive nature of the information involved. See UST for more current data.

Date of Government Version: 01/01/2002 Date Data Arrived at EDR: 06/02/2006 Date Made Active in Reports: 07/20/2006

Number of Days to Update: 48

Source: Department of Environmental Conservation

Telephone: 518-402-9549 Last EDR Contact: 10/23/2006

Next Scheduled EDR Contact: 01/22/2007

Data Release Frequency: Varies

HIST AST: Historical Petroleum Bulk Storage Database

These facilities have petroleum storage capabilities in excess of 1,100 gallons and less than 400,000 gallons. This database contains detailed information per site. No longer updated due to the sensitive nature of the information involved. See AST for more current data.

Date of Government Version: 01/01/2002 Date Data Arrived at EDR: 06/02/2006 Date Made Active in Reports: 07/20/2006

Number of Days to Update: 48

Source: Department of Environmental Conservation

Telephone: 518-402-9549 Last EDR Contact: 10/23/2006

Next Scheduled EDR Contact: 01/22/2007 Data Release Frequency: No Update Planned

Local Land Records

LIENS: Spill Liens Information

Lien information from the Oil Spill Fund.

Date of Government Version: 08/08/2018 Date Data Arrived at EDR: 08/09/2018 Date Made Active in Reports: 08/31/2018

Number of Days to Update: 22

Source: Office of the State Comptroller

Telephone: 518-474-9034 Last EDR Contact: 08/01/2018

Next Scheduled EDR Contact: 11/19/2018 Data Release Frequency: Quarterly

LIENS 2: CERCLA Lien Information

A Federal CERCLA ('Superfund') lien can exist by operation of law at any site or property at which EPA has spent Superfund monies. These monies are spent to investigate and address releases and threatened releases of contamination. CERCLIS provides information as to the identity of these sites and properties.

Date of Government Version: 07/17/2018 Date Data Arrived at EDR: 08/09/2018 Date Made Active in Reports: 10/05/2018

Number of Days to Update: 57

Source: Environmental Protection Agency

Telephone: 202-564-6023 Last EDR Contact: 10/04/2018

Next Scheduled EDR Contact: 02/04/2019 Data Release Frequency: Semi-Annually

Records of Emergency Release Reports

HMIRS: Hazardous Materials Information Reporting System

Hazardous Materials Incident Report System. HMIRS contains hazardous material spill incidents reported to DOT.

Date of Government Version: 03/26/2018 Date Data Arrived at EDR: 03/27/2018 Date Made Active in Reports: 06/08/2018

Number of Days to Update: 73

Source: U.S. Department of Transportation

Telephone: 202-366-4555 Last EDR Contact: 09/25/2018

Next Scheduled EDR Contact: 01/07/2019 Data Release Frequency: Quarterly

SPILLS: Spills Information Database

Data collected on spills reported to NYSDEC as required by one or more of the following: Article 12 of the Navigation Law, 6 NYCRR Section 613.8 (from PBS regs), or 6 NYCRR Section 595.2 (from CBS regs). It includes spills active as of April 1, 1986, as well as spills occurring since this date.

Date of Government Version: 10/16/2018 Date Data Arrived at EDR: 10/16/2018 Date Made Active in Reports: 10/22/2018

Number of Days to Update: 6

Source: Department of Environmental Conservation

Telephone: 518-402-9549 Last EDR Contact: 10/16/2018

Next Scheduled EDR Contact: 11/26/2018 Data Release Frequency: Varies

HIST SPILLS: SPILLS Database

This database contains records of chemical and petroleum spill incidents. Under State law, petroleum and hazardous chemical spills that can impact the waters of the state must be reported by the spiller (and, in some cases, by anyone who has knowledge of the spills). In 2002, the Department of Environmental Conservation stopped providing updates to its original Spills Information Database. This database includes fields that are no longer available from the NYDEC as of January 1, 2002. Current information may be found in the NY SPILLS database. Department of Environmental Conservation.

Date of Government Version: 01/01/2002 Date Data Arrived at EDR: 07/08/2005 Date Made Active in Reports: 07/14/2005

Number of Days to Update: 6

Source: Department of Environmental Conservation

Telephone: 518-402-9549 Last EDR Contact: 07/07/2005 Next Scheduled EDR Contact: N/A

Data Release Frequency: No Update Planned

SPILLS 90: SPILLS90 data from FirstSearch

Spills 90 includes those spill and release records available exclusively from FirstSearch databases. Typically, they may include chemical, oil and/or hazardous substance spills recorded after 1990. Duplicate records that are already included in EDR incident and release records are not included in Spills 90.

Date of Government Version: 12/14/2012 Date Data Arrived at EDR: 01/03/2013 Date Made Active in Reports: 02/12/2013

Number of Days to Update: 40

Source: FirstSearch Telephone: N/A

Last EDR Contact: 01/03/2013 Next Scheduled EDR Contact: N/A

Data Release Frequency: No Update Planned

SPILLS 80: SPILLS80 data from FirstSearch

Spills 80 includes those spill and release records available from FirstSearch databases prior to 1990. Typically, they may include chemical, oil and/or hazardous substance spills recorded before 1990. Duplicate records that are already included in EDR incident and release records are not included in Spills 80.

Date of Government Version: 11/02/2010 Date Data Arrived at EDR: 01/03/2013 Date Made Active in Reports: 03/07/2013

Number of Days to Update: 63

Source: FirstSearch Telephone: N/A

Last EDR Contact: 01/03/2013 Next Scheduled EDR Contact: N/A

Data Release Frequency: No Update Planned

Other Ascertainable Records

RCRA NonGen / NLR: RCRA - Non Generators / No Longer Regulated

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

Date of Government Version: 03/01/2018 Date Data Arrived at EDR: 03/28/2018 Date Made Active in Reports: 06/22/2018

Number of Days to Update: 86

Source: Environmental Protection Agency

Telephone: (212) 637-3660 Last EDR Contact: 09/19/2018

Next Scheduled EDR Contact: 01/07/2019 Data Release Frequency: Quarterly

FUDS: Formerly Used Defense Sites

The listing includes locations of Formerly Used Defense Sites properties where the US Army Corps of Engineers is actively working or will take necessary cleanup actions.

Date of Government Version: 01/31/2015 Date Data Arrived at EDR: 07/08/2015 Date Made Active in Reports: 10/13/2015

Number of Days to Update: 97

Source: U.S. Army Corps of Engineers

Telephone: 202-528-4285 Last EDR Contact: 08/24/2018

Next Scheduled EDR Contact: 12/03/2018 Data Release Frequency: Varies

DOD: Department of Defense Sites

This data set consists of federally owned or administered lands, administered by the Department of Defense, that have any area equal to or greater than 640 acres of the United States, Puerto Rico, and the U.S. Virgin Islands.

Date of Government Version: 12/31/2005 Date Data Arrived at EDR: 11/10/2006 Date Made Active in Reports: 01/11/2007

Number of Days to Update: 62

Source: USGS

Telephone: 888-275-8747 Last EDR Contact: 10/12/2018

Next Scheduled EDR Contact: 01/21/2019 Data Release Frequency: Semi-Annually

FEDLAND: Federal and Indian Lands

Federally and Indian administrated lands of the United States. Lands included are administrated by: Army Corps of Engineers, Bureau of Reclamation, National Wild and Scenic River, National Wildlife Refuge, Public Domain Land, Wilderness, Wilderness Study Area, Wildlife Management Area, Bureau of Indian Affairs, Bureau of Land Management, Department of Justice, Forest Service, Fish and Wildlife Service, National Park Service.

Date of Government Version: 12/31/2005 Date Data Arrived at EDR: 02/06/2006 Date Made Active in Reports: 01/11/2007

Number of Days to Update: 339

Source: U.S. Geological Survey Telephone: 888-275-8747 Last EDR Contact: 10/12/2018

Next Scheduled EDR Contact: 01/21/2019

Data Release Frequency: N/A

SCRD DRYCLEANERS: State Coalition for Remediation of Drycleaners Listing

The State Coalition for Remediation of Drycleaners was established in 1998, with support from the U.S. EPA Office of Superfund Remediation and Technology Innovation. It is comprised of representatives of states with established drycleaner remediation programs. Currently the member states are Alabama, Connecticut, Florida, Illinois, Kansas, Minnesota, Missouri, North Carolina, Oregon, South Carolina, Tennessee, Texas, and Wisconsin.

Date of Government Version: 01/01/2017 Date Data Arrived at EDR: 02/03/2017 Date Made Active in Reports: 04/07/2017

Number of Days to Update: 63

Source: Environmental Protection Agency

Telephone: 615-532-8599 Last EDR Contact: 08/17/2018

Next Scheduled EDR Contact: 11/26/2018 Data Release Frequency: Varies

US FIN ASSUR: Financial Assurance Information

All owners and operators of facilities that treat, store, or dispose of hazardous waste are required to provide proof that they will have sufficient funds to pay for the clean up, closure, and post-closure care of their facilities.

Date of Government Version: 05/31/2018 Date Data Arrived at EDR: 06/27/2018 Date Made Active in Reports: 10/05/2018

Number of Days to Update: 100

Source: Environmental Protection Agency

Telephone: 202-566-1917 Last EDR Contact: 09/25/2018

Next Scheduled EDR Contact: 01/07/2019 Data Release Frequency: Quarterly

EPA WATCH LIST: EPA WATCH LIST

EPA maintains a "Watch List" to facilitate dialogue between EPA, state and local environmental agencies on enforcement matters relating to facilities with alleged violations identified as either significant or high priority. Being on the Watch List does not mean that the facility has actually violated the law only that an investigation by EPA or a state or local environmental agency has led those organizations to allege that an unproven violation has in fact occurred. Being on the Watch List does not represent a higher level of concern regarding the alleged violations that were detected, but instead indicates cases requiring additional dialogue between EPA, state and local agencies - primarily because of the length of time the alleged violation has gone unaddressed or unresolved.

Date of Government Version: 08/30/2013 Date Data Arrived at EDR: 03/21/2014 Date Made Active in Reports: 06/17/2014

Number of Days to Update: 88

Source: Environmental Protection Agency

Telephone: 617-520-3000 Last EDR Contact: 08/03/2018

Next Scheduled EDR Contact: 11/19/2018 Data Release Frequency: Quarterly

2020 COR ACTION: 2020 Corrective Action Program List

The EPA has set ambitious goals for the RCRA Corrective Action program by creating the 2020 Corrective Action Universe. This RCRA cleanup baseline includes facilities expected to need corrective action. The 2020 universe contains a wide variety of sites. Some properties are heavily contaminated while others were contaminated but have since been cleaned up. Still others have not been fully investigated yet, and may require little or no remediation. Inclusion in the 2020 Universe does not necessarily imply failure on the part of a facility to meet its RCRA obligations.

Date of Government Version: 09/30/2017 Date Data Arrived at EDR: 05/08/2018 Date Made Active in Reports: 07/20/2018

Number of Days to Update: 73

Source: Environmental Protection Agency

Telephone: 703-308-4044 Last EDR Contact: 08/10/2018

Next Scheduled EDR Contact: 11/19/2018 Data Release Frequency: Varies

TSCA: Toxic Substances Control Act

Toxic Substances Control Act. TSCA identifies manufacturers and importers of chemical substances included on the TSCA Chemical Substance Inventory list. It includes data on the production volume of these substances by plant

Date of Government Version: 12/31/2016 Date Data Arrived at EDR: 06/21/2017 Date Made Active in Reports: 01/05/2018

Number of Days to Update: 198

Source: EPA

Telephone: 202-260-5521 Last EDR Contact: 09/21/2018

Next Scheduled EDR Contact: 12/31/2018 Data Release Frequency: Every 4 Years

TRIS: Toxic Chemical Release Inventory System

Toxic Release Inventory System. TRIS identifies facilities which release toxic chemicals to the air, water and land in reportable quantities under SARA Title III Section 313.

Date of Government Version: 12/31/2016 Date Data Arrived at EDR: 01/10/2018 Date Made Active in Reports: 01/12/2018

Number of Days to Update: 2

Source: EPA

Telephone: 202-566-0250 Last EDR Contact: 08/24/2018

Next Scheduled EDR Contact: 12/03/2018 Data Release Frequency: Annually

SSTS: Section 7 Tracking Systems

Section 7 of the Federal Insecticide, Fungicide and Rodenticide Act, as amended (92 Stat. 829) requires all registered pesticide-producing establishments to submit a report to the Environmental Protection Agency by March 1st each year. Each establishment must report the types and amounts of pesticides, active ingredients and devices being produced, and those having been produced and sold or distributed in the past year.

Date of Government Version: 12/31/2009 Date Data Arrived at EDR: 12/10/2010 Date Made Active in Reports: 02/25/2011

Number of Days to Update: 77

Source: EPA

Telephone: 202-564-4203 Last EDR Contact: 10/24/2018

Next Scheduled EDR Contact: 02/04/2019 Data Release Frequency: Annually

ROD: Records Of Decision

Record of Decision. ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid in the cleanup.

Date of Government Version: 07/17/2018 Date Data Arrived at EDR: 08/09/2018 Date Made Active in Reports: 10/05/2018

Number of Days to Update: 57

Source: EPA

Telephone: 703-416-0223 Last EDR Contact: 10/04/2018

Next Scheduled EDR Contact: 12/17/2018 Data Release Frequency: Annually

RMP: Risk Management Plans

When Congress passed the Clean Air Act Amendments of 1990, it required EPA to publish regulations and guidance for chemical accident prevention at facilities using extremely hazardous substances. The Risk Management Program Rule (RMP Rule) was written to implement Section 112(r) of these amendments. The rule, which built upon existing industry codes and standards, requires companies of all sizes that use certain flammable and toxic substances to develop a Risk Management Program, which includes a(n): Hazard assessment that details the potential effects of an accidental release, an accident history of the last five years, and an evaluation of worst-case and alternative accidental releases; Prevention program that includes safety precautions and maintenance, monitoring, and employee training measures; and Emergency response program that spells out emergency health care, employee training measures and procedures for informing the public and response agencies (e.g the fire department) should an accident occur.

Date of Government Version: 08/01/2018 Date Data Arrived at EDR: 08/22/2018 Date Made Active in Reports: 10/05/2018

Number of Days to Update: 44

Source: Environmental Protection Agency

Telephone: 202-564-8600 Last EDR Contact: 10/23/2018

Next Scheduled EDR Contact: 02/04/2019 Data Release Frequency: Varies

RAATS: RCRA Administrative Action Tracking System

RCRA Administration Action Tracking System. RAATS contains records based on enforcement actions issued under RCRA pertaining to major violators and includes administrative and civil actions brought by the EPA. For administration actions after September 30, 1995, data entry in the RAATS database was discontinued. EPA will retain a copy of the database for historical records. It was necessary to terminate RAATS because a decrease in agency resources made it impossible to continue to update the information contained in the database.

Date of Government Version: 04/17/1995 Date Data Arrived at EDR: 07/03/1995 Date Made Active in Reports: 08/07/1995

Number of Days to Update: 35

Source: EPA

Telephone: 202-564-4104 Last EDR Contact: 06/02/2008

Next Scheduled EDR Contact: 09/01/2008 Data Release Frequency: No Update Planned

PRP: Potentially Responsible Parties

A listing of verified Potentially Responsible Parties

Date of Government Version: 10/25/2013 Date Data Arrived at EDR: 10/17/2014 Date Made Active in Reports: 10/20/2014

Number of Days to Update: 3

Source: EPA

Telephone: 202-564-6023 Last EDR Contact: 10/04/2018

Next Scheduled EDR Contact: 11/19/2018 Data Release Frequency: Quarterly

PADS: PCB Activity Database System

PCB Activity Database. PADS Identifies generators, transporters, commercial storers and/or brokers and disposers of PCB's who are required to notify the EPA of such activities.

Date of Government Version: 06/01/2017 Date Data Arrived at EDR: 06/09/2017 Date Made Active in Reports: 10/13/2017

Number of Days to Update: 126

Source: EPA

Telephone: 202-566-0500 Last EDR Contact: 10/11/2018

Next Scheduled EDR Contact: 01/21/2019 Data Release Frequency: Annually

ICIS: Integrated Compliance Information System

The Integrated Compliance Information System (ICIS) supports the information needs of the national enforcement and compliance program as well as the unique needs of the National Pollutant Discharge Elimination System (NPDES) program.

Date of Government Version: 11/18/2016 Date Data Arrived at EDR: 11/23/2016 Date Made Active in Reports: 02/10/2017

Number of Days to Update: 79

Source: Environmental Protection Agency

Telephone: 202-564-2501 Last EDR Contact: 10/09/2018

Next Scheduled EDR Contact: 01/21/2019 Data Release Frequency: Quarterly

FTTS: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)

FTTS tracks administrative cases and pesticide enforcement actions and compliance activities related to FIFRA, TSCA and EPCRA (Emergency Planning and Community Right-to-Know Act). To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 04/09/2009 Date Data Arrived at EDR: 04/16/2009 Date Made Active in Reports: 05/11/2009

Number of Days to Update: 25

Source: EPA/Office of Prevention, Pesticides and Toxic Substances

Telephone: 202-566-1667 Last EDR Contact: 08/18/2017

Next Scheduled EDR Contact: 12/04/2017 Data Release Frequency: Quarterly

FTTS INSP: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act) A listing of FIFRA/TSCA Tracking System (FTTS) inspections and enforcements.

Date of Government Version: 04/09/2009 Date Data Arrived at EDR: 04/16/2009 Date Made Active in Reports: 05/11/2009

Number of Days to Update: 25

Source: EPA Telephone: 202-566-1667 Last EDR Contact: 08/18/2017

Next Scheduled EDR Contact: 12/04/2017 Data Release Frequency: Quarterly

MLTS: Material Licensing Tracking System

MLTS is maintained by the Nuclear Regulatory Commission and contains a list of approximately 8,100 sites which possess or use radioactive materials and which are subject to NRC licensing requirements. To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 08/30/2016 Date Data Arrived at EDR: 09/08/2016 Date Made Active in Reports: 10/21/2016

Number of Days to Update: 43

Source: Nuclear Regulatory Commission

Telephone: 301-415-7169 Last EDR Contact: 10/11/2018

Next Scheduled EDR Contact: 02/04/2019 Data Release Frequency: Quarterly

COAL ASH DOE: Steam-Electric Plant Operation Data

A listing of power plants that store ash in surface ponds.

Date of Government Version: 12/31/2005 Date Data Arrived at EDR: 08/07/2009 Date Made Active in Reports: 10/22/2009

Number of Days to Update: 76

Source: Department of Energy Telephone: 202-586-8719 Last EDR Contact: 09/07/2018

Next Scheduled EDR Contact: 12/17/2018 Data Release Frequency: Varies

COAL ASH EPA: Coal Combustion Residues Surface Impoundments List

A listing of coal combustion residues surface impoundments with high hazard potential ratings.

Date of Government Version: 07/01/2014 Date Data Arrived at EDR: 09/10/2014 Date Made Active in Reports: 10/20/2014

Number of Days to Update: 40

Source: Environmental Protection Agency

Telephone: N/A

Last EDR Contact: 09/04/2018

Next Scheduled EDR Contact: 12/17/2018 Data Release Frequency: Varies

PCB TRANSFORMER: PCB Transformer Registration Database

The database of PCB transformer registrations that includes all PCB registration submittals.

Date of Government Version: 05/24/2017 Date Data Arrived at EDR: 11/30/2017 Date Made Active in Reports: 12/15/2017

Number of Days to Update: 15

Source: Environmental Protection Agency

Telephone: 202-566-0517 Last EDR Contact: 10/26/2018

Next Scheduled EDR Contact: 02/04/2019 Data Release Frequency: Varies

RADINFO: Radiation Information Database

The Radiation Information Database (RADINFO) contains information about facilities that are regulated by U.S. Environmental Protection Agency (EPA) regulations for radiation and radioactivity.

Date of Government Version: 07/02/2018 Date Data Arrived at EDR: 07/05/2018 Date Made Active in Reports: 10/05/2018

Number of Days to Update: 92

Source: Environmental Protection Agency

Telephone: 202-343-9775 Last EDR Contact: 10/03/2018

Next Scheduled EDR Contact: 01/14/2019 Data Release Frequency: Quarterly

HIST FTTS: FIFRA/TSCA Tracking System Administrative Case Listing

A complete administrative case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006 Date Data Arrived at EDR: 03/01/2007 Date Made Active in Reports: 04/10/2007

Number of Days to Update: 40

Source: Environmental Protection Agency

Telephone: 202-564-2501 Last EDR Contact: 12/17/2007

Next Scheduled EDR Contact: 03/17/2008 Data Release Frequency: No Update Planned

HIST FTTS INSP: FIFRA/TSCA Tracking System Inspection & Enforcement Case Listing

A complete inspection and enforcement case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006 Date Data Arrived at EDR: 03/01/2007 Date Made Active in Reports: 04/10/2007

Number of Days to Update: 40

Source: Environmental Protection Agency

Telephone: 202-564-2501 Last EDR Contact: 12/17/2008

Next Scheduled EDR Contact: 03/17/2008 Data Release Frequency: No Update Planned

DOT OPS: Incident and Accident Data

Department of Transporation, Office of Pipeline Safety Incident and Accident data.

Date of Government Version: 07/31/2012 Date Data Arrived at EDR: 08/07/2012 Date Made Active in Reports: 09/18/2012

Number of Days to Update: 42

Source: Department of Transporation, Office of Pipeline Safety

Telephone: 202-366-4595 Last EDR Contact: 10/30/2018

Next Scheduled EDR Contact: 02/11/2019 Data Release Frequency: Varies

CONSENT: Superfund (CERCLA) Consent Decrees

Major legal settlements that establish responsibility and standards for cleanup at NPL (Superfund) sites. Released periodically by United States District Courts after settlement by parties to litigation matters.

Date of Government Version: 06/30/2018 Date Data Arrived at EDR: 07/17/2018 Date Made Active in Reports: 10/05/2018

Number of Days to Update: 80

Source: Department of Justice, Consent Decree Library

Telephone: Varies

Last EDR Contact: 10/01/2018

Next Scheduled EDR Contact: 12/31/2018 Data Release Frequency: Varies

BRS: Biennial Reporting System

The Biennial Reporting System is a national system administered by the EPA that collects data on the generation and management of hazardous waste. BRS captures detailed data from two groups: Large Quantity Generators (LQG) and Treatment, Storage, and Disposal Facilities.

Date of Government Version: 12/31/2015 Date Data Arrived at EDR: 02/22/2017 Date Made Active in Reports: 09/28/2017

Number of Days to Update: 218

Source: EPA/NTIS Telephone: 800-424-9346 Last EDR Contact: 08/24/2018

Next Scheduled EDR Contact: 12/03/2018 Data Release Frequency: Biennially

INDIAN RESERV: Indian Reservations

This map layer portrays Indian administered lands of the United States that have any area equal to or greater

than 640 acres.

Date of Government Version: 12/31/2014 Date Data Arrived at EDR: 07/14/2015 Date Made Active in Reports: 01/10/2017

Number of Days to Update: 546

Source: USGS

Telephone: 202-208-3710 Last EDR Contact: 10/09/2018

Next Scheduled EDR Contact: 01/21/2019 Data Release Frequency: Semi-Annually

FUSRAP: Formerly Utilized Sites Remedial Action Program

DOE established the Formerly Utilized Sites Remedial Action Program (FUSRAP) in 1974 to remediate sites where radioactive contamination remained from Manhattan Project and early U.S. Atomic Energy Commission (AEC) operations.

Date of Government Version: 08/08/2017 Date Data Arrived at EDR: 09/11/2018 Date Made Active in Reports: 09/14/2018

Number of Days to Update: 3

Source: Department of Energy Telephone: 202-586-3559 Last EDR Contact: 09/11/2018

Next Scheduled EDR Contact: 11/19/2018 Data Release Frequency: Varies

UMTRA: Uranium Mill Tailings Sites

Uranium ore was mined by private companies for federal government use in national defense programs. When the mills shut down, large piles of the sand-like material (mill tailings) remain after uranium has been extracted from the ore. Levels of human exposure to radioactive materials from the piles are low; however, in some cases tailings were used as construction materials before the potential health hazards of the tailings were recognized.

Date of Government Version: 06/23/2017 Date Data Arrived at EDR: 10/11/2017 Date Made Active in Reports: 11/03/2017

Number of Days to Update: 23

Source: Department of Energy Telephone: 505-845-0011 Last EDR Contact: 08/20/2018

Next Scheduled EDR Contact: 12/03/2018

Data Release Frequency: Varies

LEAD SMELTER 1: Lead Smelter Sites

A listing of former lead smelter site locations.

Date of Government Version: 07/17/2018 Date Data Arrived at EDR: 08/09/2018 Date Made Active in Reports: 10/05/2018

Number of Days to Update: 57

Source: Environmental Protection Agency

Telephone: 703-603-8787 Last EDR Contact: 10/04/2018

Next Scheduled EDR Contact: 01/14/2019

Data Release Frequency: Varies

LEAD SMELTER 2: Lead Smelter Sites

A list of several hundred sites in the U.S. where secondary lead smelting was done from 1931and 1964. These sites may pose a threat to public health through ingestion or inhalation of contaminated soil or dust

Date of Government Version: 04/05/2001 Date Data Arrived at EDR: 10/27/2010 Date Made Active in Reports: 12/02/2010

Number of Days to Update: 36

Source: American Journal of Public Health

Telephone: 703-305-6451 Last EDR Contact: 12/02/2009 Next Scheduled EDR Contact: N/A

Data Release Frequency: No Update Planned

US AIRS (AFS): Aerometric Information Retrieval System Facility Subsystem (AFS)

The database is a sub-system of Aerometric Information Retrieval System (AIRS). AFS contains compliance data on air pollution point sources regulated by the U.S. EPA and/or state and local air regulatory agencies. This information comes from source reports by various stationary sources of air pollution, such as electric power plants, steel mills, factories, and universities, and provides information about the air pollutants they produce. Action, air program, air program pollutant, and general level plant data. It is used to track emissions and compliance data from industrial plants.

Telephone: 202-564-2496

Last EDR Contact: 09/26/2017

Date of Government Version: 10/12/2016 Date Data Arrived at EDR: 10/26/2016 Date Made Active in Reports: 02/03/2017

Number of Days to Update: 100

US AIRS MINOR: Air Facility System Data A listing of minor source facilities.

Date of Government Version: 10/12/2016 Date Data Arrived at EDR: 10/26/2016 Date Made Active in Reports: 02/03/2017

Number of Days to Update: 100

Source: EPA

Source: EPA

Telephone: 202-564-2496 Last EDR Contact: 09/26/2017

Next Scheduled EDR Contact: 01/08/2018 Data Release Frequency: Annually

Next Scheduled EDR Contact: 01/08/2018
Data Release Frequency: Annually

US MINES: Mines Master Index File

Contains all mine identification numbers issued for mines active or opened since 1971. The data also includes violation information.

Date of Government Version: 08/01/2018 Date Data Arrived at EDR: 08/29/2018 Date Made Active in Reports: 10/05/2018

Number of Days to Update: 37

Source: Department of Labor, Mine Safety and Health Administration

Telephone: 303-231-5959 Last EDR Contact: 08/29/2018

Next Scheduled EDR Contact: 12/10/2018 Data Release Frequency: Semi-Annually

US MINES 2: Ferrous and Nonferrous Metal Mines Database Listing

This map layer includes ferrous (ferrous metal mines are facilities that extract ferrous metals, such as iron ore or molybdenum) and nonferrous (Nonferrous metal mines are facilities that extract nonferrous metals, such as gold, silver, copper, zinc, and lead) metal mines in the United States.

Date of Government Version: 12/05/2005 Date Data Arrived at EDR: 02/29/2008 Date Made Active in Reports: 04/18/2008

Number of Days to Update: 49

Source: USGS Telephone: 703-648-7709 Last EDR Contact: 08/31/2018

Next Scheduled EDR Contact: 12/10/2018 Data Release Frequency: Varies

US MINES 3: Active Mines & Mineral Plants Database Listing

Active Mines and Mineral Processing Plant operations for commodities monitored by the Minerals Information Team of the USGS.

Date of Government Version: 04/14/2011 Date Data Arrived at EDR: 06/08/2011 Date Made Active in Reports: 09/13/2011

Number of Days to Update: 97

Source: USGS

Telephone: 703-648-7709 Last EDR Contact: 08/31/2018

Next Scheduled EDR Contact: 12/10/2018 Data Release Frequency: Varies

ABANDONED MINES: Abandoned Mines

An inventory of land and water impacted by past mining (primarily coal mining) is maintained by OSMRE to provide information needed to implement the Surface Mining Control and Reclamation Act of 1977 (SMCRA). The inventory contains information on the location, type, and extent of AML impacts, as well as, information on the cost associated with the reclamation of those problems. The inventory is based upon field surveys by State, Tribal, and OSMRE program officials. It is dynamic to the extent that it is modified as new problems are identified and existing problems are reclaimed.

Date of Government Version: 09/10/2018 Date Data Arrived at EDR: 09/11/2018 Date Made Active in Reports: 09/14/2018

Number of Days to Update: 3

Source: Department of Interior Telephone: 202-208-2609 Last EDR Contact: 09/10/2018

Next Scheduled EDR Contact: 12/24/2018 Data Release Frequency: Quarterly

FINDS: Facility Index System/Facility Registry System

Facility Index System. FINDS contains both facility information and 'pointers' to other sources that contain more detail. EDR includes the following FINDS databases in this report: PCS (Permit Compliance System), AIRS (Aerometric Information Retrieval System), DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes), FURS (Federal Underground Injection Control), C-DOCKET (Criminal Docket System used to track criminal enforcement actions for all environmental statutes), FFIS (Federal Facilities Information System), STATE (State Environmental Laws and Statutes), and PADS (PCB Activity Data System).

Date of Government Version: 08/07/2018 Date Data Arrived at EDR: 09/05/2018 Date Made Active in Reports: 10/05/2018

Number of Days to Update: 30

Source: EPA Telephone: (212) 637-3000 Last EDR Contact: 09/18/2018

Next Scheduled EDR Contact: 12/17/2018 Data Release Frequency: Quarterly

DOCKET HWC: Hazardous Waste Compliance Docket Listing

A complete list of the Federal Agency Hazardous Waste Compliance Docket Facilities.

Date of Government Version: 05/31/2018 Date Data Arrived at EDR: 07/26/2018 Date Made Active in Reports: 10/05/2018

Number of Days to Update: 71

Source: Environmental Protection Agency

Telephone: 202-564-0527 Last EDR Contact: 08/31/2018

Next Scheduled EDR Contact: 12/10/2018 Data Release Frequency: Varies

UXO: Unexploded Ordnance Sites

A listing of unexploded ordnance site locations

Date of Government Version: 09/30/2017 Date Data Arrived at EDR: 06/19/2018 Date Made Active in Reports: 09/14/2018

Number of Days to Update: 87

Source: Department of Defense Telephone: 703-704-1564 Last EDR Contact: 10/15/2018

Next Scheduled EDR Contact: 01/28/2019 Data Release Frequency: Varies

ECHO: Enforcement & Compliance History Information

ECHO provides integrated compliance and enforcement information for about 800,000 regulated facilities nationwide.

Date of Government Version: 09/02/2018 Date Data Arrived at EDR: 09/05/2018 Date Made Active in Reports: 09/14/2018

Number of Days to Update: 9

Source: Environmental Protection Agency

Telephone: 202-564-2280 Last EDR Contact: 09/05/2018

Next Scheduled EDR Contact: 12/17/2018
Data Release Frequency: Quarterly

FUELS PROGRAM: EPA Fuels Program Registered Listing

This listing includes facilities that are registered under the Part 80 (Code of Federal Regulations) EPA Fuels Programs. All companies now are required to submit new and updated registrations.

Date of Government Version: 08/22/2018 Date Data Arrived at EDR: 08/22/2018 Date Made Active in Reports: 10/05/2018

Number of Days to Update: 44

Source: EPA

Telephone: 800-385-6164 Last EDR Contact: 08/22/2018

Next Scheduled EDR Contact: 12/03/2018 Data Release Frequency: Quarterly

AIRS: Air Emissions Data

Point source emissions inventory data.

Date of Government Version: 07/23/2018 Date Data Arrived at EDR: 07/23/2018 Date Made Active in Reports: 08/07/2018

Number of Days to Update: 15

Source: Department of Environmental Conservation

Telephone: 518-402-8452 Last EDR Contact: 11/22/2018

Next Scheduled EDR Contact: 02/04/2019 Data Release Frequency: Annually

COAL ASH: Coal Ash Disposal Site Listing
A listing of coal ash disposal site locations.

Date of Government Version: 06/29/2018 Date Data Arrived at EDR: 07/03/2018 Date Made Active in Reports: 08/07/2018

Number of Days to Update: 35

Source: Department of Environmental Conservation

Telephone: 518-402-8660 Last EDR Contact: 06/28/2018

Next Scheduled EDR Contact: 10/15/2018 Data Release Frequency: Quarterly

DRYCLEANERS: Registered Drycleaners

A listing of all registered drycleaning facilities.

Date of Government Version: 03/07/2018 Date Data Arrived at EDR: 03/30/2018 Date Made Active in Reports: 06/05/2018

Number of Days to Update: 67

Source: Department of Environmental Conservation

Telephone: 518-402-8403 Last EDR Contact: 09/10/2018

Next Scheduled EDR Contact: 12/24/2018 Data Release Frequency: Annually

E DESIGNATION: E DESIGNATION SITE LISTING

The (E (Environmental)) designation would ensure that sampling and remediation take place on the subject properties, and would avoid any significant impacts related to hazardous materials at these locations. The (E) designations would require that the fee owner of the sites conduct a testing and sampling protocol, and remediation where appropriate, to the satisfaction of the NYCDEP before the issuance of a building permit by the Department of Buildings pursuant to the provisions of Section 11-15 of the Zoning Resolution (Environmental Requirements). The (E) designations also include a mandatory construction-related health and safety plan which must be approved by NYCDEP.

Date of Government Version: 08/21/2018 Date Data Arrived at EDR: 09/20/2018 Date Made Active in Reports: 10/12/2018

Number of Days to Update: 22

Source: New York City Department of City Planning

Telephone: 718-595-6658 Last EDR Contact: 09/18/2018

Next Scheduled EDR Contact: 12/31/2018 Data Release Frequency: Semi-Annually

Financial Assurance 1: Financial Assurance Information Listing

Financial assurance information.

Date of Government Version: 12/01/2017 Date Data Arrived at EDR: 01/02/2018 Date Made Active in Reports: 01/31/2018

Number of Days to Update: 29

Source: Department of Environmental Conservation

Telephone: 518-402-8660 Last EDR Contact: 10/15/2018

Next Scheduled EDR Contact: 01/14/2019
Data Release Frequency: Quarterly

Financial Assurance 2: Financial Assurance Information Listing

A listing of financial assurance information for hazardous waste facilities. Financial assurance is intended to ensure that resources are available to pay for the cost of closure, post-closure care, and corrective measures if the owner or operator of a regulated facility is unable or unwilling to pay.

Date of Government Version: 12/29/2017 Date Data Arrived at EDR: 04/06/2018 Date Made Active in Reports: 06/05/2018

Number of Days to Update: 60

Source: Department of Environmental Conservation

Telephone: 518-402-8712 Last EDR Contact: 09/10/2018

Next Scheduled EDR Contact: 12/24/2018 Data Release Frequency: Varies

HSWDS: Hazardous Substance Waste Disposal Site Inventory

The list includes any known or suspected hazardous substance waste disposal sites. Also included are sites delisted from the Registry of Inactive Hazardous Waste Disposal Sites and non-Registry sites that U.S. EPA Preliminary Assessment (PA) reports or Site Investigation (SI) reports were prepared. Hazardous Substance Waste Disposal Sites are eligible to be Superfund sites now that the New York State Superfund has been refinanced and changed. This means that the study inventory has served its purpose and will no longer be maintained as a separate entity. The last version of the study inventory is frozen in time. The sites on the study will not automatically be made Superfund sites, rather each site will be further evaluated for listing on the Registry. So overtime they will be added to the registry or not.

Date of Government Version: 01/01/2003 Date Data Arrived at EDR: 10/20/2006 Date Made Active in Reports: 11/30/2006

Number of Days to Update: 41

Source: Department of Environmental Conservation

Telephone: 518-402-9564 Last EDR Contact: 05/26/2009

Next Scheduled EDR Contact: 08/24/2009 Data Release Frequency: No Update Planned

NY MANIFEST: Facility and Manifest Data

Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a TSD

facility.

Date of Government Version: 07/01/2018 Date Data Arrived at EDR: 08/01/2018 Date Made Active in Reports: 08/31/2018

Number of Days to Update: 30

Source: Department of Environmental Conservation

Telephone: 518-402-8651 Last EDR Contact: 08/01/2018

Next Scheduled EDR Contact: 11/12/2018 Data Release Frequency: Quarterly

SPDES: State Pollutant Discharge Elimination System

New York State has a state program which has been approved by the United States Environmental Protection Agency for the control of wastewater and stormwater discharges in accordance with the Clean Water Act. Under New York State law the program is known as the State Pollutant Discharge Elimination System (SPDES) and is broader in scope than that required by the Clean Water Act in that it controls point source discharges to groundwaters as well as surface waters.

Date of Government Version: 07/18/2018 Date Data Arrived at EDR: 07/31/2018 Date Made Active in Reports: 08/07/2018

Number of Days to Update: 7

Source: Department of Environmental Conservation

Telephone: 518-402-8233 Last EDR Contact: 10/22/2018

Next Scheduled EDR Contact: 02/04/2019
Data Release Frequency: No Update Planned

VAPOR REOPENED: Vapor Intrusion Legacy Site List

New York is currently re-evaluating previous assumptions and decisions regarding the potential for soil vapor intrusion exposures at sites. As a result, all past, current, and future contaminated sites will be evaluated to determine whether these sites have the potential for exposures related to soil vapor intrusion.

Date of Government Version: 01/01/2018 Date Data Arrived at EDR: 02/15/2018 Date Made Active in Reports: 03/27/2018

Number of Days to Update: 40

Source: Department of Environmenal Conservation

Telephone: 518-402-9814 Last EDR Contact: 08/17/2018

Next Scheduled EDR Contact: 11/26/2018 Data Release Frequency: Varies

UIC: Underground Injection Control Wells

A listing of enhanced oil recovery underground injection wells.

Date of Government Version: 09/04/2018 Date Data Arrived at EDR: 09/06/2018 Date Made Active in Reports: 10/12/2018

Number of Days to Update: 36

Source: Department of Environmental Conservation

Telephone: 518-402-8056 Last EDR Contact: 09/06/2018

Next Scheduled EDR Contact: 12/17/2018 Data Release Frequency: Quarterly

COOLING TOWERS: Registered Cooling Towers

This data includes the location of cooling towers registered with New York State. The data is self-reported by owners/property managers of cooling towers in service in New York State. In August 2015, the New York State Department of Health released emergency regulations requiring the owners of cooling towers to register them with New York State.

Date of Government Version: 07/10/2018 Date Data Arrived at EDR: 07/20/2018 Date Made Active in Reports: 09/14/2018

Number of Days to Update: 56

Source: Department of Health Telephone: 518-402-7650 Last EDR Contact: 10/17/2018

Next Scheduled EDR Contact: 01/28/2019

Data Release Frequency: Varies

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP: EDR Proprietary Manufactured Gas Plants

The EDR Proprietary Manufactured Gas Plant Database includes records of coal gas plants (manufactured gas plants) compiled by EDR's researchers. Manufactured gas sites were used in the United States from the 1800's to 1950's to produce a gas that could be distributed and used as fuel. These plants used whale oil, rosin, coal, or a mixture of coal, oil, and water that also produced a significant amount of waste. Many of the byproducts of the gas production, such as coal tar (oily waste containing volatile and non-volatile chemicals), sludges, oils and other compounds are potentially hazardous to human health and the environment. The byproduct from this process was frequently disposed of directly at the plant site and can remain or spread slowly, serving as a continuous source of soil and groundwater contamination.

Date of Government Version: N/A Source: EDR, Inc.
Date Data Arrived at EDR: N/A Telephone: N/A
Date Made Active in Reports: N/A Last EDR Contact: N/A

Number of Days to Update: N/A Next Scheduled EDR Contact: N/A

Data Release Frequency: No Update Planned

EDR Hist Auto: EDR Exclusive Historical Auto Stations

EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A Source: EDR, Inc.
Date Data Arrived at EDR: N/A Telephone: N/A
Date Made Active in Reports: N/A Last EDR Contact: N/A

Number of Days to Update: N/A Next Scheduled EDR Contact: N/A

Data Release Frequency: Varies

EDR Hist Cleaner: EDR Exclusive Historical Cleaners

EDR has searched selected national collections of business directories and has collected listings of potential dry cleaner sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include dry cleaning establishments. The categories reviewed included, but were not limited to dry cleaners, cleaners, laundry, laundromat, cleaning/laundry, wash & dry etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A
Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR C

e: N/A Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

RGA HWS: Recovered Government Archive State Hazardous Waste Facilities List

The EDR Recovered Government Archive State Hazardous Waste database provides a list of SHWS incidents derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of Environmental Conservation in New York.

Date of Government Version: N/A Date Data Arrived at EDR: 07/01/2013 Date Made Active in Reports: 12/30/2013

Number of Days to Update: 182

Source: Department of Environmental Conservation

Telephone: N/A

Last EDR Contact: 06/01/2012 Next Scheduled EDR Contact: N/A Data Release Frequency: Varies

RGA LF: Recovered Government Archive Solid Waste Facilities List

The EDR Recovered Government Archive Landfill database provides a list of landfills derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of Environmental Conservation in New York.

Date of Government Version: N/A Date Data Arrived at EDR: 07/01/2013 Date Made Active in Reports: 01/10/2014 Number of Days to Update: 193

Source: Department of Environmental Conservation Telephone: N/A Last EDR Contact: 06/01/2012

Next Scheduled EDR Contact: N/A Data Release Frequency: Varies

COUNTY RECORDS

CORTLAND COUNTY:

AST - CORTLAND: Cortland County Storage Tank Listing A listing of aboveground storage tank sites located in Cortland County.

Date of Government Version: 07/11/2018 Date Data Arrived at EDR: 09/19/2018 Date Made Active in Reports: 10/12/2018

Number of Days to Update: 23

Source: Cortland County Health Department

Telephone: 607-753-5035 Last EDR Contact: 10/29/2018

Next Scheduled EDR Contact: 02/11/2019 Data Release Frequency: Quarterly

UST - CORTLAND: Cortland County Storage Tank Listing

A listing of underground storage tank sites located in Cortland County.

Date of Government Version: 07/11/2018 Date Data Arrived at EDR: 09/19/2018 Date Made Active in Reports: 10/12/2018

Number of Days to Update: 23

Source: Cortland County Health Department

Telephone: 607-753-5035 Last EDR Contact: 10/29/2018

Next Scheduled EDR Contact: 02/11/2019 Data Release Frequency: Quarterly

NASSAU COUNTY:

AST - NASSAU: Registered Tank Database

A listing of aboveground storage tank sites located in Nassau County.

Date of Government Version: 01/09/2017 Date Data Arrived at EDR: 01/11/2017 Date Made Active in Reports: 02/15/2017

Number of Days to Update: 35

Source: Nassau County Health Department

Telephone: 516-571-3314 Last EDR Contact: 10/29/2018

Next Scheduled EDR Contact: 02/11/2019 Data Release Frequency: No Update Planned

AST NCFM: Storage Tank Database

A listing of aboveground storage tank sites located in Nassau County.

Date of Government Version: 02/15/2011 Date Data Arrived at EDR: 02/23/2011 Date Made Active in Reports: 03/29/2011

Number of Days to Update: 34

Source: Nassau County Office of the Fire Marshal

Telephone: 516-572-1000 Last EDR Contact: 10/25/2018

Next Scheduled EDR Contact: 02/11/2019

Data Release Frequency: Varies

TANKS NASSAU: Registered Tank Database in Nassau County A listing of facilities in Nassau County with storage tanks.

Date of Government Version: 01/09/2017 Date Data Arrived at EDR: 01/11/2017 Date Made Active in Reports: 02/15/2017

Number of Days to Update: 35

Source: Nassau County Department of Health

Telephone: 516-227-9691 Last EDR Contact: 10/29/2018

Next Scheduled EDR Contact: 02/11/2019 Data Release Frequency: Varies

UST - NASSAU: Registered Tank Database

A listing of underground storage tank sites located in Nassau County.

Date of Government Version: 01/09/2017 Date Data Arrived at EDR: 01/11/2017 Date Made Active in Reports: 02/15/2017

Number of Days to Update: 35

Source: Nassau County Health Department

Telephone: 516-571-3314 Last EDR Contact: 10/29/2018

Next Scheduled EDR Contact: 02/11/2019 Data Release Frequency: No Update Planned

UST NCFM: Storage Tank Database

A listing of underground storage tank sites located in Nassau County.

Date of Government Version: 02/15/2011 Date Data Arrived at EDR: 02/23/2011 Date Made Active in Reports: 03/29/2011

Number of Days to Update: 34

Source: Nassau County Office of the Fire Marshal

Telephone: 516-572-1000 Last EDR Contact: 10/25/2018

Next Scheduled EDR Contact: 02/11/2019

Data Release Frequency: Varies

ROCKLAND COUNTY:

AST - ROCKLAND: Petroleum Bulk Storage Database

A listing of aboveground storage tank sites located in Rockland County. Rockland County?s Petroleum Bulk Storage (PBS) program is no longer in service. All related operations/duties are now wholly overseen by the New York State Dept. of Environmental Conservation (NYSDEC).

Date of Government Version: 02/02/2017 Date Data Arrived at EDR: 03/17/2017 Date Made Active in Reports: 09/22/2017

Number of Days to Update: 189

Source: Rockland County Health Department

Telephone: 914-364-2605 Last EDR Contact: 08/29/2018

Next Scheduled EDR Contact: 12/17/2018

Data Release Frequency: No Update Planned

UST - ROCKLAND: Petroleum Bulk Storage Database

A listing of underground storage tank sites located in Rockland County. Rockland County?s Petroleum Bulk Storage (PBS) program is no longer in service. All related operations/duties are now wholly overseen by the New York State Dept. of Environmental Conservation (NYSDEC).

Date of Government Version: 02/02/2017 Date Data Arrived at EDR: 03/17/2017 Date Made Active in Reports: 09/22/2017

Number of Days to Update: 189

Source: Rockland County Health Department

Telephone: 914-364-2605 Last EDR Contact: 08/29/2018

Next Scheduled EDR Contact: 12/17/2018

Data Release Frequency: No Update Planned

SUFFOLK COUNTY:

AST - SUFFOLK: Storage Tank Database

A listing of aboveground storage tank sites located in Suffolk County.

Date of Government Version: 03/03/2015 Date Data Arrived at EDR: 03/10/2015 Date Made Active in Reports: 03/23/2015

Number of Days to Update: 13

Source: Suffolk County Department of Health Services

Telephone: 631-854-2521 Last EDR Contact: 10/29/2018

Next Scheduled EDR Contact: 02/11/2019
Data Release Frequency: No Update Planned

UST - SUFFOLK: Storage Tank Database

A listing of underground storage tank sites located in Suffolk County.

Date of Government Version: 03/03/2015 Date Data Arrived at EDR: 03/10/2015 Date Made Active in Reports: 03/23/2015

Number of Days to Update: 13

Source: Suffolk County Department of Health Services

Telephone: 631-854-2521 Last EDR Contact: 10/29/2018

Next Scheduled EDR Contact: 02/11/2019 Data Release Frequency: No Update Planned

WESTCHESTER COUNTY:

AST - WESTCHESTER: Listing of Storage Tanks

A listing of aboveground storage tank sites located in Westchester County.

Date of Government Version: 07/20/2018 Date Data Arrived at EDR: 08/21/2018 Date Made Active in Reports: 08/30/2018

Number of Days to Update: 9

Source: Westchester County Department of Health

Telephone: 914-813-5161 Last EDR Contact: 10/29/2018

Next Scheduled EDR Contact: 02/11/2019 Data Release Frequency: Semi-Annually

UST - WESTCHESTER: Listing of Storage Tanks

A listing of underground storage tank sites located in Westchester County.

Date of Government Version: 07/20/2018 Date Data Arrived at EDR: 08/21/2018 Date Made Active in Reports: 08/30/2018

Number of Days to Update: 9

Source: Westchester County Department of Health

Telephone: 914-813-5161 Last EDR Contact: 10/29/2018

Next Scheduled EDR Contact: 02/11/2019 Data Release Frequency: Semi-Annually

OTHER DATABASE(S)

Depending on the geographic area covered by this report, the data provided in these specialty databases may or may not be complete. For example, the existence of wetlands information data in a specific report does not mean that all wetlands in the area covered by the report are included. Moreover, the absence of any reported wetlands information does not necessarily mean that wetlands do not exist in the area covered by the report.

CT MANIFEST: Hazardous Waste Manifest Data

Facility and manifest data. Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a tsd facility.

Date of Government Version: 08/10/2018 Date Data Arrived at EDR: 08/10/2018 Date Made Active in Reports: 09/10/2018

Number of Days to Update: 31

Source: Department of Energy & Environmental Protection

Telephone: 860-424-3375 Last EDR Contact: 08/09/2018

Next Scheduled EDR Contact: 11/26/2018 Data Release Frequency: No Update Planned

NJ MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 12/31/2017 Date Data Arrived at EDR: 07/13/2018 Date Made Active in Reports: 08/01/2018

Number of Days to Update: 19

Source: Department of Environmental Protection

Telephone: N/A

Last EDR Contact: 10/09/2018

Next Scheduled EDR Contact: 01/21/2019 Data Release Frequency: Annually

PA MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 12/31/2016 Date Data Arrived at EDR: 07/25/2017 Date Made Active in Reports: 09/25/2017

Number of Days to Update: 62

Source: Department of Environmental Protection

Telephone: 717-783-8990 Last EDR Contact: 10/15/2018

Next Scheduled EDR Contact: 01/28/2019 Data Release Frequency: Annually

RI MANIFEST: Manifest information
Hazardous waste manifest information

Date of Government Version: 12/31/2017 Date Data Arrived at EDR: 02/23/2018 Date Made Active in Reports: 04/09/2018

Number of Days to Update: 45

Source: Department of Environmental Management

Telephone: 401-222-2797 Last EDR Contact: 08/21/2018

Next Scheduled EDR Contact: 12/03/2018 Data Release Frequency: Annually

VT MANIFEST: Hazardous Waste Manifest Data Hazardous waste manifest information.

Date of Government Version: 08/23/2018 Date Data Arrived at EDR: 08/23/2018 Date Made Active in Reports: 09/18/2018

Number of Days to Update: 26

Source: Department of Environmental Conservation

Telephone: 802-241-3443 Last EDR Contact: 10/15/2018

Next Scheduled EDR Contact: 01/28/2019 Data Release Frequency: Annually

WI MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 12/31/2017 Date Data Arrived at EDR: 06/15/2018 Date Made Active in Reports: 07/09/2018

Number of Days to Update: 24

Source: Department of Natural Resources

Telephone: N/A

Last EDR Contact: 09/06/2018

Next Scheduled EDR Contact: 12/24/2018 Data Release Frequency: Annually

Oil/Gas Pipelines

Source: PennWell Corporation

Petroleum Bundle (Crude Oil, Refined Products, Petrochemicals, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)) N = Natural Gas Bundle (Natural Gas, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)). This map includes information copyrighted by PennWell Corporation. This information is provided on a best effort basis and PennWell Corporation does not guarantee its accuracy nor warrant its fitness for any particular purpose. Such information has been reprinted with the permission of PennWell.

Electric Power Transmission Line Data

Source: PennWell Corporation

This map includes information copyrighted by PennWell Corporation. This information is provided on a best effort basis and PennWell Corporation does not guarantee its accuracy nor warrant its fitness for any particular purpose. Such information has been reprinted with the permission of PennWell.

Sensitive Receptors: There are individuals deemed sensitive receptors due to their fragile immune systems and special sensitivity to environmental discharges. These sensitive receptors typically include the elderly, the sick, and children. While the location of all sensitive receptors cannot be determined, EDR indicates those buildings and facilities - schools, daycares, hospitals, medical centers, and nursing homes - where individuals who are sensitive receptors are likely to be located.

AHA Hospitals:

Source: American Hospital Association, Inc.

Telephone: 312-280-5991

The database includes a listing of hospitals based on the American Hospital Association's annual survey of hospitals.

Medical Centers: Provider of Services Listing

Source: Centers for Medicare & Medicaid Services

Telephone: 410-786-3000

A listing of hospitals with Medicare provider number, produced by Centers of Medicare & Medicaid Services,

a federal agency within the U.S. Department of Health and Human Services.

Nursing Homes

Source: National Institutes of Health

Telephone: 301-594-6248

Information on Medicare and Medicaid certified nursing homes in the United States.

Public Schools

Source: National Center for Education Statistics

Telephone: 202-502-7300

The National Center for Education Statistics' primary database on elementary

and secondary public education in the United States. It is a comprehensive, annual, national statistical database of all public elementary and secondary schools and school districts, which contains data that are

comparable across all states.

Private Schools

Source: National Center for Education Statistics

Telephone: 202-502-7300

The National Center for Education Statistics' primary database on private school locations in the United States.

Daycare Centers: Day Care Providers Source: Department of Health Telephone: 212-676-2444

Flood Zone Data: This data was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.

Source: FEMA

Telephone: 877-336-2627

Date of Government Version: 2003, 2015

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

State Wetlands Data: Freshwater Wetlands

Source: Department of Environmental Conservation

Telephone: 518-402-8961

Current USGS 7.5 Minute Topographic Map Source: U.S. Geological Survey

STREET AND ADDRESS INFORMATION

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September 21, 2018

Cross River Bank 885 Teaneck Road Teaneck, NJ 07666

Re: 13-24 Beach Channel Drive, Far Rockaway, NY 11691, Block 15528, Lot 9

To whom it may concern:

As per your request we have reviewed Phase I Environmental Site Assessment (ESA) conducted by Tenen Environmental. dated July, 2018. The ESA states in part as follows:

Findings/Opinions

"The Site, located at 13-24 to 13-30 Beach Channel Drive, Far Rockaway, New York (Tax Block 15528, Lots 9, 12, and 112) is an irregularly shaped parcel on the east side of Beach Channel Drive. The total Site area is approximately 17,235 square feet (SF). The Site is currently developed with one-story commercial buildings, and occupied by a car wash, salon, barber, deli, and fast food restaurant.

Site reconnaissance identified a car wash on the Site and a filling station with underground gasoline storage occupying the north adjoining property (northeast corner of Beach Channel Drive and Mott Avenue). These current uses of the Site and north adjoining property are considered RECs.

The earliest Sanborn maps (1895-1912) show portions of small sheds and a barn on the Site. These buildings were demolished prior to 1933, and by 1951 the Site was developed with multiple one-story commercial buildings, including an auto laundry (1951-2006) and auto repair (1981-2006). Auto laundry and auto repair were also documented in the 1992 and 1993 C of Os, respectively. By 2006, the northernmost Site building was redeveloped, and the Site uses appear similar through 2017. The city directory listings indicate commercial use, including a car wash. The NYCDOB Property Profile Overview and the regulatory database listings indicate that an E-restriction for hazardous material, noise, and air has been placed on the Site (Lot 9). The presence of the E-designation is not considered a REC.

The 1895-1901 Sanborn maps show barns and sheds on the west and northeast adjoining properties, dwellings on south and southwest adjoining lots, a carpenter shop on a north adjoining lot (1901), and a railway company on the east adjoining property (1901). The northwest adjoining property was developed by 1912 and shown as primarily residential through 2017 and some commercial use (1981-2005). The north adjoining property beyond Dix Avenue was depicted with a filling station (1933-2017), an auto laundry (1933-1951), and auto repair (1981-1988). By 1981, the east and west adjoining properties were developed with commercial buildings and a public use building and parking lot were shown on a west adjoining property. The south adjoining building was shown with an animal hospital (1981-1988) and commercial use (1990-2006)...."

13-24 Beach Channel Drive

Review Page 2

"...The south adjoining building was shown with an animal hospital (1981-1988) and commercial use (1990-2006). A community center was depicted on a west adjoining property from 1996-2006, and the northeast adjoining building was shown as commercial in 2006. The available city directory listings for the adjoining/surrounding properties indicate long-term residential and commercial use, the latter including gas stations and auto repair operations on the north adjoining property.

All Sanborn maps show the surrounding area as predominantly residential with some commercial and industrial use. Railroad tracks were depicted southwest of the Site from 1895 to 1951. A L.I. Express Co. garage with a 1,000-gallon UST was identified east of the Site on the 1912 Sanborn map. A dress factory (1951) was identified southwest of the Site and waste paper and rag processing to the northeast (1951-2006). Other surrounding non-residential uses include hotels, theaters, banks, a hospital, and a shopping center. While uses of individual lots may have changed, the nature of the surrounding area is depicted as relatively constant through 2006, the date of the most recent map.

Regarding the Site and adjoining/surrounding properties, the results of the city directory, historic topographic map and aerial photograph review are generally consistent with the usage depicted on the historic Sanborn maps, although the city directory listings provide additional information on adjoining property uses. Historic commercial use of the Site, including an auto laundry and auto repair, was documented since at least 1951. A filling station, gasoline storage, and auto repair were identified on the north adjoining property. These historic uses of the Site and north adjoining property are considered RECs. Uses of the surrounding properties have included manufacturing and gasoline storage. The historic use of the surrounding properties likely involved the use and disposal of hazardous materials and petroleum; based upon our review of the relative distances and hydrogeology, these uses are not considered RECs.

The Site was listed on the EDR proprietary E-DESIGNATION database with E-designation E-232 for Air Quality – HVAC fuel limited to natural gas, Window Wall Attenuation and Alternate Ventilation, and Hazardous Materials Phase I and Phase II Testing Protocol. The listing of the Site on the E-DESIGNATION database is not considered a REC. Listings for the north adjacent property (13-46 Beach Channel Drive) were identified on the AST, UST, and EDR Hist Auto databases and document historic use of this property for gasoline storage, a filling station and for auto repair."

The database search indicated numerous listings of properties within the standard search radii on multiple regulatory databases. Many of these listings are located a significant distance from and/or downgradient of the Site. All but one upgradient leaking tank case and all spill cases are closed and are not considered RECs. The historic use of the north adjoining property as a gasoline service station with underground gasoline storage and for auto repair, as documented in the regulatory database listings is considered a REC.

13-24 Beach Channel Drive

Review Page 3

The report reviewed renders findings and opinions, however, does not render any recommendations. The report states that the subject property is occupied by a car wash and is considered a Recognized Environmental Condition (REC). Singer Environmental Group (SEG), does not consider a car wash a REC. The subject property is an "E" Designated site with the NYC Department of City Planning. Tenen Environmental's report does not consider the "E" Designation to be a REC. SEG considers this a REC.

Due to the fact that the site has an E-Designation for Hazardous Materials, in accordance with OER's (Office of Environmental Remediation) requirements, prior to obtaining a building permit for redevelopment of the Site, the following must be performed: a) preparation of a Phase II Investigation Work Plan, 2) implementation of an OER-approved Phase II Investigation, 3) preparation of a Phase II Investigation/Remedial Investigation report, and 4) preparation of an OER approved Remedial Action Work Plan. The foregoing must address all environmental subsurface conditions at the site, including soil, soil vapor, ground water and vapor intrusion.

While the Noise and Air E-Designation of the site is not considered a recognized environmental condition, in accordance with OER's requirements, prior to obtaining a building permit for redevelopment of the Site, a Noise and Air Remedial Work Plan must be prepared and approved by OER.

If you have any further questions,	please feel free to contact us.
	Sincerely,
	Shemon Singer



September 18, 2018

Cross River Bank 885 Teaneck Road Teaneck, NJ 07666

Re: 1316 Beach Channel Drive, Far Rockaway, NY 11691

To whom it may concern:

As per your request we have reviewed Phase I Environmental Site Assessment (ESA) conducted by Environmental Business Consultants. dated November 6, 2017. The ESA states in part as follows:

- ➤ "The subject property is identified by the street address of 13-16 Beach Channel Drive and as Borough 4-Block 15528-Lot No. 6...The site was a portion of a larger residential property and developed with a small shed (center) from at least 1895. Between 1924 and 1933, the shed was demolished and the property developed with the existing 3-story building, utilized as a residence, with a small detached garage adjacent to the east. The garage was demolished in the late-1950's and the building partially converted for commercial use, with an animal hospital present by at least 1962. The animal hospital vacated the building circa 1990, with the building occupied by multiple commercial/retail and residential tenants since that time...The property is currently developed with a 3-story mixed use (commercial/residential) building, with a basement. The building is occupied by World Outreach Evangelical Ministry (basement) and six residential apartments."
- ➤ "Underground and Aboveground Storage Tanks-No evidence of ASTs or USTs (eg., vent or fill pipes) was observed on the property at the time of the site inspection. The EDR database report did not identify any registered ASTs or USTs for the site."
- ➤ "One ARA/LAA job is listed for this property. The listed...ARA/LAA jobs are summarized as follows: No.420408598 dated September 28, 2011 permit was issued for the installation of a new boiler and conversion from oil to gas."
- ➤ "Based on the results of the site inspection, records review and interview, it was determined that there were no REC's, historic recognized environmental conditions (HRECs) or controlled recognized environmental conditions (CRECs) identified for the site. However, EBC identified several environmental concerns (ASTM Non-Scope issues/Business Environmental Risks)."

SEG reviewed the non scope issues referenced in the Phase I Environmental Site Assessment. As far as the asbestos containing materials and lead based paint concerns, the title report should be reviewed for any violations. In the event of change in present status, eg, demolition, alteration, modification, all materials should tested and verified free of any ACM. In the event of change in present status, eg, demolition, alteration, modification, renovations should be conducted in accordance with the EPA's Lead Renovation, Repair and Painting Rule (RRP Rule). The other non scope issued mentioned were basic housekeeping/maintenance clean up issues.

Page 10 of the report states that "one ARA/LAA job is listed for this property. The listed...ARA/LAA jobs are summarized as follows: No.420408598 dated September 28, 2011 permit was issued for the installation of a new boiler and conversion from oil to gas." Page 27 of the report states, "No evidence of ASTs or USTs (eg., vent or fill pipes) was observed on the property at the time of the site inspection. The EDR database report did not identify any registered ASTs or USTs for the site."

SEG recommends that clarification is warranted to identify the current heating system of the building and an opinion be rendered on the former oil tank located at the subject property.

Sincerely,
Shemon Singer

If you have any questions, please feel free to contact us.

Appendix C

New York City Department of Buildings Certificate of Occupancies NYSDEC BCP Site Number C241254



IMPACT ENVIRONMENTAL 170 Keyland Court Bohemia, New York 11716 TEL: (631) 268-8800

DEPARTMENT OF HOUSING AND BUILDINGS

BOROUGH OF

QUEEIS

, CITY OF NEW YORK

CERTIFICATE OF OCCUPANCY

(Standard form adopted by the Board of Standards and Appeals and issued pursuant to Section 646 of the New York Charter, and Sections C.26-181.0 to C26-187.0 inclusive Administrative Code 2.1.3.1 to 2.1.3.7. Building Code.)

This certificate supersedes C. O. No.

To the owner or owners of the building or premises:

THIS CERTIFIES that the new altered existing building premises located at

13-10 Beach Channel Drive, NEC. Mott Ave.

Block 11

, conforms substantially to the approved plans and specifications, and to the requirements of the building code and all other laws and ordinances, and of the rules and regulations of the Board of Standards and Appeals, applicable to a building of its class and kind at the time the permit was issued; and CERTIFIES FURTHER that, any provisions of Section 646F of the New York Charter have been complied with as certified by a report of the Fire Commissioner to the Borough Superintendent.

NYG. At No. Alt. 2244/57

Construction classification-

Occupancy classification Commercial

. Height

stories.

Date of completion—12/31/57 . Located in

Business Use District.

D Area 1 . Height Zone at time of issuance of permit

This certificate is issued subject to the limitations hereinafter specified and to the following resolutions of the Board of Standards and Appeals: (Calendar numbers to be inserted here)

PERMISSIBLE USE AND OCCUPANCY

	LIVE LOADS	PERSONS ACCOMMODATED			
STORY	Line per Sq. Ft.	MALE	FEMALE	TOTAL	USE CONTROL OF THE PROPERTY OF
	on pre				Open parking Lot for
					more than five motor vehicles.
					Plot- N80.93', NE 32.91', N.80.5' E. 178.98', S. 140.97', NW 92.18' SW 100' & NW 59.51'.
호영 (1985년 - 1984년) 1987년 - 1985년 - 1982년 1987년 - 1982년 -					
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Borough Superintendent

CERTIFICATE WILL BE NULL AND VOID IF ALTERED IN ANY MANNER OR ADDITIONS ARE MADE THERETO.

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NO CHANGES OF USE OF OCCUPANCY NOT CONSISTENT WITH THIS CERTIFICATE SHALL BE MADE UNLESS FIRST APPROVED BY THE BOROUGH SUPERINTENDENT

Unless an approval for the same has been obtained from the Borough Superintendent, no change or rearrangement in the structural parts of the building, or affecting the light and ventilation of any part thereof, for in the exit facilities, shall be made; no enlargement, whether by extending on any side or by increasing in height shall be made; nor shall the building be me— I from one location or position to another; nor shall there be any reduction or diminution of the area of the lot or plot on which the building is located.

The building or any part thereof shall not be used for any purpose other than that for which it is certified.

The superimposed, uniformly distributed loads, or concentrated loads producing the same stresses in the construction in any story shall not exceed the trye loads specified on reverse side; the number of persons of either sex in any story shall not exceed that specified when sex is indicated, nor shall the aggregate number of persons in any story exceed the specified total; and the use to which any story may be put shall be restricted to that fixed by this certificate except as specifically stated.

This certificate does not in any way relieve the owner or owners or any other person or persons in possession or control of the building, or any part thereof from obtaining such other permits, licenses or approvals as may be prescribed by law for the uses or purposes for which the building is designed or intended; nor from obtaining the special certificates required for the use and operation of elevators; nor from the installation of fire alarm systems where required by law; nor from complying with any lawful order for additional fire extinguishing appliances under the discretionary powers of the fire commissioner; nor from complying with any lawful order issue; with the object of maintaining the building in a safe or lawful condition; nor from complying with any authorized direction to remove encroachments into a public highway or other public place, whether attached to or part of the building or not.

If this certificate is marked "Temporary", it is applicable only to those parts of the building indicated on its face, and certifies to the legal use and occur may of only such parts of the building; it is subject to all the provisions and conditions applying to a final or permanent certificate; it is not applicable to any building under the jurisdiction of the Housing Division indees it is also approved and endorsed by them, and it must be replaced by a full certificate at the date of expiration.

If this certificate is for an existing building, erected prior to March 14, 1916, it has been duly inspected and it has been found to have been occupied or arranged to be occupied prior to March 14, 1916, as noted on the reverse side, and that on information and belief, since that date there has been no alteration or conversion to a use that changed its classification as defined in the Building Code, or that would necessitate compliance with some special requirement or with the State Labor Law or any other law or ordinance; that there are no notices of violations or orders pending in the Department of Housing and Buildings at this time; that Section 646F of the New York City Charter has been complied with as certained by a report of the Fire Conanissioner to the Borough Superintendent, and that, so long as the building is at altered, except by permission of the Borough Superintendent, the existing use and occupancy may be continued.

"§ 646 F. No certificate of occupancy shall be issued for any building, structure, enclosure, place or premises wherein containers for combustibles, chemicals, explosives, inflammables and other dangerous substances, erticles, compounds or mixtures are stored, or wherein automatic or other fire alarm systems or fire extinguishing equipment are required by law to be or are installed, until the substances, systems or equipment to the Borough Superintendent of the borough in which the installation has been made. Such approval shall be recorded on the certificate of occupancy."

Additional copies of this certificate will be formished to persons having an interest in the building or

premises, upon payment of a fee of fifty tents per or

Service description

9/23/70

DEPARTMENT OF BUILDINGS

BOROUGH OF

QUEENS

, THE CITY OF NEW YORK

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179220

CERTIFICATE OF OCCUPANCY

O CHANGES OF USE OR OCCUPANCY NOT CONSISTENT WITH THIS CERTIFICATE SHALL BE MADE UNLESS FIRST APPROVED BY THE BOROUGH SUPERINTENDENT

THIS CE	RTIFIES that the 2 Beach Cha		Sesting—building—premises located at Block 15523 Lot 5
That the ze	oning lot and prem	ises above referred	to are situated, bounded and described as follows:
	a point on the		side of _ Beach Channel Drive
istant 91.73	Exist.	feet 201	the from the corner formed by the intersection of
81.27		ott Avenue	and Beach Channel Drive
mning thence	N 40.29 Ir	regular	feet; thence E 173-44 Irragular feet
ence			feet; thence ¥ 175.31 Irrogular feet
			feet; thence
			intially to the approved plans and specifications, and to the require
		•	nd all other laws and ordinances, and of the rules of the Board of class and kind at the time the permit was issued; and
			as of Section 646F of the New York Charter have been complied
	and the second s		to the Borough Superintendent.
Promise No.			Construction classification— Non-Tire
	cation— Commo		Height 1 stories, 11:-6" feet.
ate of completion		/U	Located in C1-2 in R5 Zoning District.
time of issuance	•	shiect to the lim	itations hereinafter specified and to the following reso-
		rds and Appeals	
	lanning Commis		(Calendar numbers to be inserted here)
		PERMISSIBLE	USE AND OCCUPANCY
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THE CITY OF NEW YORK



DEPARTMENT OF BUILDINGS CERTIFICATE OF OCCUPANCY



BOROUGH

Queens

DATE ₁₀₋₂₇₋₉₂

This certificate supersedes C.O. NO

NO. Q ZI7974 ZONING DISTRICT C1-2/R-5

THIS CERTIFIES that the new-altered-existing-building-premises located at

13-24 Beach Channel Dr

Block 15528

CONFORMS SUBSTANTIALLY TO THE APPROVED PLANS AND SPECIFICATIONS AND TO THE REQUIREMENTS OF ALL APPLICABLE LAWS, RULES, AND REGULATIONS FOR THE USES AND OCCUPANCIES SPECIFIED HEREIN

PERMISSIBLE USE AND OCCUPANCY Alt 1516/88

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OPEN SPACE		PACES, LOADING BERTHS, OTHER	USES, NONE)	
THIS CE SPECIF		SE OR OCCUPANCY SHA CERTIFICATE OF OCCU SUED SUBJECT TO FURT SE SIDE.	PANCY IS OBTAINE	=D
	BOROUGH SUPERINTENDENT	Judy 1	COMMISSIONER	1.0
ORIGINAL	OFFICE COPY - DEPARTE	MENT OF BUILDINGS	COPY	<i>[*</i>

THAT THE ZONING LOT ON WHICH THE PREMISE	S IS LOC	ATED	IS BOUNDED AS FOLLOWS	
BEG!NNING at a point on the East distant 114.81 South		fe	side of Beach Channel Dr eet from the corner formed by the intersection of	
Ech Channel Dr			and Dix Ave	
running thence E 178.			c c c c c	eet
W 168/79	•••••		N 66-63	
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thence			feet; thence	leet
to the point or place of beginning.				
MB or ALT. No. 1516/88 DATE OF COMPLETE	ON 8-	2-9:	CONSTRUCTION CLASSIFICATION NF	
BUILDING OCCUPANCY GROUP CLASSIFICATION	Con		HEIGHT 1 STORIES, 14 FEET	
THE FOLLOWING FIRE DETECTION AND EXTINGS APPLICABLE LAWS.	NONE		EMS ARE REQUIRED AND WERE INSTALLED IN COMPLIANCE WITH NONE YES NO	
STANDPIPE SYSTEM	+		AUTOMATIC SPRINKLER SYSTEM	\dashv
YARD HYDRANT SYSTEM			<u> </u>	
STANDPIPE FIRE TELEPHONE AND SIGNALLING SYSTEM				
SMOKE DETECTOR				
FIRE ALARM AND SIGNAL SYSTEM				
STORM DRAINAGE DISCHARGES INTO:				
A) STORM SEWER B) COMB	NED SE	WER	C) PRIVATE SEWAGE DISPOSAL SYSTEM	
SANITARY DRAINAGE DISCHARGES INT	r o :			
A) SANITARY SEWER B) COMB	INED SE	WER	C) PRIVATE SEWAGE DISPOSAL SYSTEM	

LIMITATIONS OR RESTRICTIONS
BOARD OF STANDARDS AND APPEALS CAL IND
CITY PLANNING COMMISSION CAL IND
OTHERS

Appendix D

EDR Radius Report NYSDEC BCP Site Number C241254



IMPACT ENVIRONMENTAL 170 Keyland Court Bohemia, New York 11716 TEL: (631) 268-8800

1312 Beach Channel Drive 1312 Beach Channel Drive Far Rockaway, NY 11691

Inquiry Number: 5471477.6s

October 31, 2018

The EDR Radius Map™ Report



6 Armstrong Road, 4th floor Shelton, CT 06484 Toll Free: 800.352.0050 www.edrnet.com

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GEOCHECK ADDENDUM	

GeoCheck - Not Requested

Thank you for your business.
Please contact EDR at 1-800-352-0050

with any questions or comments.

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A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E 1527-13), the ASTM Standard Practice for Environmental Site Assessments for Forestland or Rural Property (E 2247-16), the ASTM Standard Practice for Limited Environmental Due Diligence: Transaction Screen Process (E 1528-14) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

TARGET PROPERTY INFORMATION

ADDRESS

1312 BEACH CHANNEL DRIVE FAR ROCKAWAY, NY 11691

COORDINATES

Latitude (North): 40.6054990 - 40° 36' 19.79" Longitude (West): 73.7545270 - 73° 45' 16.29"

Universal Tranverse Mercator: Zone 18 UTM X (Meters): 605372.3 UTM Y (Meters): 4495499.5

Elevation: 25 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property Map: 5940603 FAR ROCKAWAY, NY

Version Date: 2013

Southeast Map: 5940613 LAWRENCE, NY

Version Date: 2013

AERIAL PHOTOGRAPHY IN THIS REPORT

Portions of Photo from: 20150522, 20150610

Source: USDA

MAPPED SITES SUMMARY

Target Property Address: 1312 BEACH CHANNEL DRIVE FAR ROCKAWAY, NY 11691

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
A1	LOT 5,TAXBLOCK 15528	13-12 BEACH CHANNEL	NY E DESIGNATION		TP
A2	GEORGE/&CHRIS CLEANE	21-40 MOTT AVE.	NY DRYCLEANERS	Lower	77, 0.015, SSW
A3	GEORGE & CHRIS CLEAN	21-40 MOTT AVE	EDR Hist Cleaner	Lower	77, 0.015, SSW
A4	GEORGE & CHRIS CLEAN	2140 MOTT AVE	RCRA-CESQG, ICIS, US AIRS, NY MANIFEST	Lower	77, 0.015, SSW
5	LOT 9,TAXBLOCK 15528	13-24 BEACH CHANNEL	NY E DESIGNATION	Lower	139, 0.026, NNW
B6	LOT 101,TAXBLOCK 157	21-41 MOTT AVENUE	NY E DESIGNATION	Lower	167, 0.032, SSW
B7	LOT 109,TAXBLOCK 157	21-23 MOTT AVENUE	NY E DESIGNATION	Lower	198, 0.038, South
C8	LOT 1,TAXBLOCK 15661	22-02 MOTT AVENUE	NY E DESIGNATION	Lower	251, 0.048, West
C9	LOT 80,TAXBLOCK 1566	13-15 BEACH CHANNEL	NY E DESIGNATION	Lower	253, 0.048, WNW
D10	SNOW WHITE DRY CLEAN	20-88 MOTT AVE	EDR Hist Cleaner	Higher	257, 0.049, SSE
D11	SNOW WHITE DRY CLEAN	20-88 MOTT AVE.	NY DRYCLEANERS	Higher	257, 0.049, SSE
D12	SNOW WHITE CLEANERS	20-88 MOTT AVE	RCRA NonGen / NLR, US AIRS, NY MANIFEST	Higher	257, 0.049, SSE
D13	MTA NYCT - MOTT AVEN	MOTT AVE & BEACH 22N	RCRA-SQG, NJ MANIFEST, NY MANIFEST	Higher	299, 0.057, SSE
D14	LOT 1,TAXBLOCK 15537	20-02 MOTT AVENUE	NY E DESIGNATION	Higher	323, 0.061, SE
E15	LOT 40,TAXBLOCK 1553	18-01 REDFERN AVENUE	NY E DESIGNATION	Lower	327, 0.062, NE
F16	HI AUTO SVCE	1346 BCH CHANL DR	EDR Hist Auto	Lower	376, 0.071, North
F17	BP #36611	13-46 BEACH CHANNEL	NY AST	Lower	376, 0.071, North
F18	BP #36611	13-46 BEACH CHANNEL	NY UST	Lower	376, 0.071, North
F19	BP PRODUCTS NORTH AM	13-46 BEACH CHANNEL	RCRA-SQG, NY MANIFEST	Lower	376, 0.071, North
G20	MYLES FRENCH CLEANER	11-59 BEACH CHANNEL	EDR Hist Cleaner	Lower	383, 0.073, SW
G21	NEW MYLES FRENCH CLE	11-59 BEACH CHANNEL	NY DRYCLEANERS	Lower	383, 0.073, SW
G22	NEW MYLES FRENCH CLE	11-59 BEACH CHANNEL	RCRA-CESQG, ICIS, US AIRS, FINDS, ECHO, NY	Lower	383, 0.073, SW
23	DRUM RUN	BEACH 21ST ST AND MO	NY Spills	Higher	435, 0.082, SE
E24	LOT 50,TAXBLOCK 1553	17-27 REDFERN AVENUE	NY E DESIGNATION	Lower	445, 0.084, NE
E25	ON EMPTY LOT	17-25 17-27 REDFERN	NY Spills	Lower	445, 0.084, NE
G26	DRY CLEANERS	1159 BEACH CHANNEL D	NY Spills	Lower	464, 0.088, SW
H27	LOT 51,TAXBLOCK 1553	17-25 REDFERN AVENUE	NY E DESIGNATION	Lower	473, 0.090, NE
128	NOBO CORPORATION	10-74 BEACH 22ND STR	NY AST	Lower	498, 0.094, South
129	LOT 140,TAXBLOCK 157	10-74 BEACH 22 STREE	NY E DESIGNATION	Lower	498, 0.094, South
H30	LOT 53,TAXBLOCK 1553	17-21 REDFERN AVENUE	NY E DESIGNATION	Lower	501, 0.095, NE
31	2230-40 MOTT AVENUE	2230-40 MOTT AVENUE	NY Spills	Lower	524, 0.099, West
32	LOT 5,TAXBLOCK 15537	20-10 MOTT AVENUE	NY E DESIGNATION	Higher	525, 0.099, SE
H33	LOT 54,TAXBLOCK 1553	17-19 REDFERN AVENUE	NY E DESIGNATION	Lower	527, 0.100, NE
34	BELL BOY DRIVE IN CL	1361 BCH CHANNEL DR	EDR Hist Cleaner	Lower	571, 0.108, North
H35	LOT 56,TAXBLOCK 1553	17-15 REDFERN AVENUE	NY E DESIGNATION	Lower	576, 0.109, NE
H36	LOT 57,TAXBLOCK 1553	17-11 REDFERN AVENUE	NY E DESIGNATION	Lower	598, 0.113, NE
37	ACTION CENTER FOR DE	16-12 CENTRAL AVENUE	NY AST	Higher	617, 0.117, ESE
J38	LOT 58,TAXBLOCK 1553	17-09 REDFERN AVENUE	NY E DESIGNATION	Lower	622, 0.118, NE
39	BRAVO FASHION (RETAI	1057 BEACH 20TH STRE	NY AST	Higher	682, 0.129, SSE

MAPPED SITES SUMMARY

Target Property Address: 1312 BEACH CHANNEL DRIVE FAR ROCKAWAY, NY 11691

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS		RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
40	ENGINE 328 AND ENGIN	16-15 CENTRAL AVENUE	NY AST	Higher	715, 0.135, ESE
J41	JACK COLETTA INC./CO	1629 REDFERN AVE	NY SWF/LF, NY SWRCY	Lower	731, 0.138, NE
K42	ROCKAWAY CO	19-31 MOTT AVENUE	NY UST	Higher	777, 0.147, SE
K43	ROCKAWAY CO	19-31 MOTT AVENUE	NY AST	Higher	777, 0.147, SE
L44	FRESH EXPRESSIONS CO	1522 CENTRAL AVE	RCRA NonGen / NLR, FINDS, ECHO, NY MANIFEST	Lower	820, 0.155, East
M45	VERIZON NEW YORK INC	13-11 BAYPORT PLACE	NY TANKS, NY Spills	Lower	830, 0.157, ENE
M46	VERIZON NEW YORK - F	13-11 BAYPORT PL	RCRA NonGen / NLR, FINDS, ECHO	Lower	830, 0.157, ENE
N47	1136-1138 MCBRIDE ST	1136-1138 MCBRIDE ST	NY UST	Lower	849, 0.161, West
O48	ROCKAWAY COMPANY	19-20 MOTT AVENUE	NY AST	Higher	887, 0.168, SE
L49	CENTRAL ASSISTED LIV	1509 CENTRAL AVENUE	NY AST	Lower	888, 0.168, East
P50	OWEN AUTO SERVICE	1017 BEACH 21ST STRE	NY UST	Lower	914, 0.173, South
P51	RCL SERVICE CENTER	1009 BEACH 21ST STRE	NY UST	Lower	935, 0.177, South
O52	JP MORGAN CHASE	19-12 MOTT AVENUE	NY UST	Higher	935, 0.177, SE
N53	1141 MCBRIDE ST	1141 MCBRIDE ST	NY LTANKS	Lower	963, 0.182, West
54	CENTRAL BAYPORT LLC	13-06 BAYPORT PLACE	NY AST	Lower	978, 0.185, ENE
Q55	METROPOLITAN RUBBER	1406 AUGUSTINA AVENU	NY SWF/LF	Lower	1001, 0.190, ENE
Q56	FAR ROCKAWAY AUTO GL	14-06 AUGUSTINA AVEN	NY AST	Lower	1001, 0.190, ENE
57	ETWARU RESIDENCE	2122 NAMEOKE AVE	NY LTANKS	Lower	1021, 0.193, NNE
Q58	ARTIES COLLISION INC	1402 AUGUSTINA AVE	RCRA NonGen / NLR, FINDS, ECHO, NY MANIFEST	Lower	1050, 0.199, ENE
59	SHOREVIEW COOPERATIV	22-87 MOTT AVENUE	NY AST	Lower	1089, 0.206, West
R60	22-88 MOTT AVENUE	22-88 MOTT AVENUE	NY LTANKS	Lower	1100, 0.208, WNW
R61	TWICE MIGHT LLC	22-88 MOTT AVENUE	NY UST	Lower	1100, 0.208, WNW
R62	TWICE MIGHT LLC	22-88 MOTT AVENUE	NY AST	Lower	1100, 0.208, WNW
S 63	MEL CHEVROLET SALES	14-14 CENTRAL AVE	NY UST	Lower	1119, 0.212, ENE
S64	EL PAIS AUTO REPAIR	14-17 CENTRAL AVE	NY AST	Lower	1197, 0.227, ENE
65	STEVEN AUTO REPAIRS	1338 CENTRAL AVENUE	NY AST	Lower	1224, 0.232, ENE
66	OTHMAN SERVICE STATI	1401 CENTRAL AVE	RCRA NonGen / NLR, FINDS, ECHO, NY MANIFEST	Lower	1227, 0.232, ENE
67	NEXT TO	22-54 NAMEOKE AVE.	NY LTANKS	Lower	1231, 0.233, NNW
T68	AUTO MAVEN DENT DR I	10-16 BEACH 19TH STR	NY AST	Higher	1243, 0.235, SE
T69	AUTO MAVEN DENT DR I	1016 BEACH 19TH STRE	NY SWF/LF	Higher	1243, 0.235, SE
70	1124 BAYPORT PLACE	11-24 BAYPORT PLACE	NY AST	Higher	1243, 0.235, East
U71	NASSAU BEACH CLEANER	2105 CORNAGA AVE.	NY DRYCLEANERS	Higher	1244, 0.236, South
U72	NASSAU BEACH CLEANER	2105 CORNAGA AVE	RCRA-CESQG, FINDS, ECHO, NY MANIFEST	Higher	1244, 0.236, South
V73	US POSTAL SERVICE	1836 MOTT AVENUE	PA MANIFEST	Higher	1255, 0.238, SE
V74	US POSTAL SERVICE	1836 MOTT AVE	NY UST, NY AST, RCRA NonGen / NLR, FINDS, ECHO, NY	Higher	1255, 0.238, SE
75	23-08 MOTT AVE	23-08 MOTT AVENUE	NY UST	Lower	1284, 0.243, WNW
76	SORRENTINO REC CENTE	18-48 CORNAGA AVENUE	NY LTANKS	Higher	1443, 0.273, SE
W77	12-13 NEILSON ST	12-13 NEILSON ST	NY LTANKS, NY AST	Lower	1476, 0.280, ENE
W78	12-13 NELSON ST	12-13 NELSON ST	NY LTANKS	Lower	1490, 0.282, ENE

MAPPED SITES SUMMARY

Target Property Address: 1312 BEACH CHANNEL DRIVE FAR ROCKAWAY, NY 11691

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
79	11-41 MCBRIDE ST	11041 MCBRIDE ST	NY LTANKS	Lower	1502, 0.284, NNW
X80	MYCO GAS STATION	18-11 MOTT AVENUE	NY LTANKS, NY Spills	Higher	1521, 0.288, SE
X81	101ST POLICE PRECINT	16-12 MOTT AVENUE	NY LTANKS	Higher	1561, 0.296, SE
X82	1612 MOTT AVE	1612 MOTT AVE	NY LTANKS, NY Spills	Higher	1569, 0.297, SE
Y83	CLOSED-LACKOF RECENT	19020 NEW HAVEN AVE.	NY LTANKS	Higher	1798, 0.341, SSE
Y84	CLOSED-LACKOF RECENT	19-20 NEW HAVEN AVEN	NY LTANKS	Higher	1804, 0.342, SSE
85	APARTMENT BUILDING T	15-02 MOTT AVENUE	NY LTANKS, NY AST	Lower	1922, 0.364, SE
Z86	OIL CO., INC.	ONE SHERIDAN BLVD.	NY MOSF UST, NY MOSF AST	Lower	1951, 0.370, North
Z87	OIL CO., INC.	ONE SHERIDAN BLVD	NY MOSF	Lower	1951, 0.370, North
Z88	OIL CO, INC-DBA EAGL	1 SHERIDAN BOULEVARD	NY SWF/LF, NY LIENS, NY Spills, NY MANIFEST, NY	Lower	1951, 0.370, North
89	ST JOHNS EPISCOPAL H	327 BEACH 19TH ST	NY LTANKS, NY MANIFEST	Higher	1970, 0.373, South
90	NIELSON GARDENS	10-14 NEILSON STREET	NY LTANKS, NY UST, NY AST	Lower	2024, 0.383, ESE
AA91	JAMAICA BAY PEAKING	1425 BAY 24TH STREET	NY LTANKS, NY MOSF, NY CBS, NY TANKS, NY Spills,	Lower	2167, 0.410, WNW
AA92	FAR ROCKAWAY POWER S	1425 BAY 24TH STREET	NY MOSF UST, NY MOSF AST	Lower	2167, 0.410, WNW
93	FAR ROCKAWAY MGP	CORNER OF BRUNSWICK	EDR MGP	Lower	2266, 0.429, NE
94	KINGDOM HALL JEHOVA	2360 BROOKHAVEN AVE	NY LTANKS	Lower	2266, 0.429, SW
95	U HAUL	20A SHERIDAN BLVD	NY LTANKS	Lower	2322, 0.440, NNE
96	WAVECREST APARTMENTS	20-30 ELK DRIVE	NY LTANKS, NY Spills	Higher	2503, 0.474, South
97	327 BCH 19TH ST	327 BEACH 19TH STREE	NY LTANKS	Lower	2573, 0.487, South
98	INWOOD HOLDER	W. OF SHERIDAN BLVD.	EDR MGP	Lower	2968, 0.562, North
99	ROCKAWAY METAL	175 ROGER AVE	SEMS, NY SHWS, NY CBS UST, NY CBS, NY BROWNFIE	ELDS,Lower	3611, 0.684, North

TARGET PROPERTY SEARCH RESULTS

The target property was identified in the following records. For more information on this property see page 8 of the attached EDR Radius Map report:

Site Database(s) EPA ID

LOT 5,TAXBLOCK 15528 13-12 BEACH CHANNEL QUEENS, NY 11691 NY E DESIGNATION

N/A

DATABASES WITH NO MAPPED SITES

No mapped sites were found in EDR's search of available ("reasonably ascertainable ") government records either on the target property or within the search radius around the target property for the following databases:

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list	
NPL Proposed NPL NPL LIENS	. Proposed National Priority List Sites
Federal Delisted NPL site lis	st
Delisted NPL	National Priority List Deletions
Federal CERCLIS list	
FEDERAL FACILITY	Federal Facility Site Information listing
Federal CERCLIS NFRAP si	te list
SEMS-ARCHIVE	Superfund Enterprise Management System Archive
Federal RCRA CORRACTS	facilities list
CORRACTS	Corrective Action Report
Federal RCRA non-CORRA	CTS TSD facilities list
RCRA-TSDF	RCRA - Treatment, Storage and Disposal
Federal RCRA generators lis	st
RCRA-LQG	RCRA - Large Quantity Generators
Federal institutional control	ls / engineering controls registries
LUCIS	Land Use Control Information System

US ENG CONTROLS..... Engineering Controls Sites List US INST CONTROL..... Sites with Institutional Controls

Federal ERNS list

ERNS..... Emergency Response Notification System

State and tribal leaking storage tank lists

INDIAN LUST..... Leaking Underground Storage Tanks on Indian Land

NY HIST LTANKS..... Listing of Leaking Storage Tanks

State and tribal registered storage tank lists

FEMA UST..... Underground Storage Tank Listing NY CBS AST..... Chemical Bulk Storage Database

INDIAN UST..... Underground Storage Tanks on Indian Land

State and tribal institutional control / engineering control registries

NY RES DECL...... Restrictive Declarations Listing NY ENG CONTROLS...... Registry of Engineering Controls NY INST CONTROL...... Registry of Institutional Controls

State and tribal voluntary cleanup sites

NY VCP..... Voluntary Cleanup Agreements INDIAN VCP..... Voluntary Cleanup Priority Listing

State and tribal Brownfields sites

NY ERP..... Environmental Restoration Program Listing

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS..... A Listing of Brownfields Sites

Local Lists of Landfill / Solid Waste Disposal Sites

NY SWTIRE..... Registered Waste Tire Storage & Facility List

INDIAN ODI...... Report on the Status of Open Dumps on Indian Lands

ODI______Open Dump Inventory
DEBRIS REGION 9._____Torres Martinez Reservation Illegal Dump Site Locations

IHS OPEN DUMPS..... Open Dumps on Indian Land

Local Lists of Hazardous waste / Contaminated Sites

US HIST CDL..... Delisted National Clandestine Laboratory Register

NY DEL SHWS..... Delisted Registry Sites

US CDL...... National Clandestine Laboratory Register

Local Lists of Registered Storage Tanks

NY HIST UST..... Historical Petroleum Bulk Storage Database

NY HIST AST..... Historical Petroleum Bulk Storage Database

Local Land Records

LIENS 2..... CERCLA Lien Information

Records of Emergency Release Reports

HMIRS_____ Hazardous Materials Information Reporting System

NY Hist Spills..... SPILLS Database

Other Ascertainable Records

FUDS....... Formerly Used Defense Sites

DOD..... Department of Defense Sites

SCRD DRYCLEANERS...... State Coalition for Remediation of Drycleaners Listing

US FIN ASSUR..... Financial Assurance Information

EPA WATCH LIST..... EPA WATCH LIST

2020 COR ACTION 2020 Corrective Action Program List

TSCA..... Toxic Substances Control Act

TRIS...... Toxic Chemical Release Inventory System

SSTS_______Section 7 Tracking Systems
ROD______Records Of Decision
RMP______Risk Management Plans

RAATS______RCRA Administrative Action Tracking System

PADS...... PCB Activity Database System

FTTS......FIFRA/ TSČA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide

Act)/TSCA (Toxic Substances Control Act)

COAL ASH EPA...... Coal Combustion Residues Surface Impoundments List

PCB TRANSFORMER_____PCB Transformer Registration Database

RADINFO...... Radiation Information Database

HIST FTTS..... FIFRA/TSCA Tracking System Administrative Case Listing

DOT OPS..... Incident and Accident Data

CONSENT..... Superfund (CERCLA) Consent Decrees

INDIAN RESERV..... Indian Reservations

FUSRAP..... Formerly Utilized Sites Remedial Action Program

UMTRA...... Uranium Mill Tailings Sites
LEAD SMELTERS.... Lead Smelter Sites
US MINES..... Mines Master Index File
ABANDONED MINES..... Abandoned Mines

UXO...... Unexploded Ordnance Sites

DOCKET HWC..... Hazardous Waste Compliance Docket Listing

FUELS PROGRAM..... EPA Fuels Program Registered Listing

NY AIRS..... Air Emissions Data

NY COAL ASH...... Coal Ash Disposal Site Listing

NY Financial Assurance Information Listing

NY HSWDS..... Hazardous Substance Waste Disposal Site Inventory

NY VAPOR REOPENED...... Vapor Intrusion Legacy Site List NY UIC....... Underground Injection Control Wells

NY COOLING TOWERS...... Registered Cooling Towers

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

NY RGA HWS...... Recovered Government Archive State Hazardous Waste Facilities List

NY RGA LF...... Recovered Government Archive Solid Waste Facilities List

SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified in the following databases.

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property.

Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in **bold italics** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

STANDARD ENVIRONMENTAL RECORDS

Federal RCRA generators list

RCRA-SQG: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

A review of the RCRA-SQG list, as provided by EDR, and dated 03/01/2018 has revealed that there are 2 RCRA-SQG sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
MTA NYCT - MOTT AVEN EPA ID:: NYR000150961	MOTT AVE & BEACH 22N	SSE 0 - 1/8 (0.057 mi.)	D13	24
Lower Elevation	Address	Direction / Distance	Map ID	Page
BP PRODUCTS NORTH AM FPA ID:: NYD986909505	13-46 BEACH CHANNEL	N 0 - 1/8 (0.071 mi.)	F19	51

RCRA-CESQG: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Conditionally exempt small quantity generators (CESQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.

A review of the RCRA-CESQG list, as provided by EDR, and dated 03/01/2018 has revealed that there are 3 RCRA-CESQG sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
NASSAU BEACH CLEANER EPA ID:: NYD986939601	2105 CORNAGA AVE	S 1/8 - 1/4 (0.236 mi.)	U72	150
Lower Elevation	Address	Direction / Distance	Map ID	Page
GEORGE & CHRIS CLEAN	2140 MOTT AVE	SSW 0 - 1/8 (0.015 mi.)	A4	9

EPA ID:: NYD077444206

NEW MYLES FRENCH CLE 11-59 BEACH CHANNEL SW 0 - 1/8 (0.073 mi.) G22 55

EPA ID:: NYD981141468

State- and tribal - equivalent CERCLIS

NY SHWS: The State Hazardous Waste Sites records are the states' equivalent to CERCLIS. These sites may or may not already be listed on the federal CERCLIS list. Priority sites planned for cleanup using state funds (state equivalent of Superfund) are identified along with sites where cleanup will be paid for by potentially responsible parties. The data come from the Department of Environmental Conservation's Inactive Hazardous waste Disposal Sites in New York State.

A review of the NY SHWS list, as provided by EDR, and dated 08/09/2018 has revealed that there is 1 NY SHWS site within approximately 1 mile of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
ROCKAWAY METAL	175 ROGER AVE	N 1/2 - 1 (0.684 mi.)	99	245
Site Code: 479943				

Class Code: Significant threat to the public health or environment - action required.

State and tribal landfill and/or solid waste disposal site lists

NY SWF/LF: The Solid Waste Facilities/Landfill Sites records typically contain an inventory of solid waste disposal facilities or landfills in a particular state. The data come from the list.

A review of the NY SWF/LF list, as provided by EDR, and dated 12/08/2017 has revealed that there are 4 NY SWF/LF sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
AUTO MAVEN DENT DR I	1016 BEACH 19TH STRE	SE 1/8 - 1/4 (0.235 mi.)	T69	147
Lower Elevation	Address	Direction / Distance	Map ID	Page
JACK COLETTA INC./CO	1629 REDFERN AVE	NE 1/8 - 1/4 (0.138 mi.)	J41	83
METROPOLITAN RUBBER	1406 AUGUSTINA AVENU	ENE 1/8 - 1/4 (0.190 mi.)	Q55	118
OIL CO, INC-DBA EAGL	1 SHERIDAN BOULEVARD	N 1/4 - 1/2 (0.370 mi.)	Z 88	197

State and tribal leaking storage tank lists

NY LTANKS: Leaking Storage Tank Incident Reports. These records contain an inventory of reported leaking storage tank incidents reported from 4/1/86 through the most recent update. They can be either leaking underground storage tanks or leaking aboveground storage tanks. The causes of the incidents are tank test failures, tank failures or tank overfills

A review of the NY LTANKS list, as provided by EDR, and dated 10/16/2018 has revealed that there are 21 NY LTANKS sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
SORRENTINO REC CENTE Site ID: 551772 Program Number: 1702628	18-48 CORNAGA AVENUE	SE 1/4 - 1/2 (0.273 mi.)	76	166
MYCO GAS STATION Date Closed: 1996-10-02 Site ID: 224387 Program Number: 9608090	18-11 MOTT AVENUE	SE 1/4 - 1/2 (0.288 mi.)	X80	172
101ST POLICE PRECINT Date Closed: 1997-10-02 Site ID: 164731 Program Number: 9412991	16-12 MOTT AVENUE	SE 1/4 - 1/2 (0.296 mi.)	X81	175
1612 MOTT AVE Date Closed: 1995-06-14 Site ID: 316046 Program Number: 9413260	1612 MOTT AVE	SE 1/4 - 1/2 (0.297 mi.)	X82	176
CLOSED-LACKOF RECENT Date Closed: 2003-03-04 Site ID: 300940 Program Number: 8706832	19020 NEW HAVEN AVE.	SSE 1/4 - 1/2 (0.341 mi.)	Y83	178
CLOSED-LACKOF RECENT Date Closed: 2004-09-14 Date Closed: 2003-03-04 Site ID: 274033 Site ID: 154311 Program Number: 0307675 Program Number: 8706791	19-20 NEW HAVEN AVEN	SSE 1/4 - 1/2 (0.342 mi.)	Y84	179
ST JOHNS EPISCOPAL H Date Closed: 2006-07-11 Site ID: 228027 Program Number: 0204866	327 BEACH 19TH ST	S 1/4 - 1/2 (0.373 mi.)	89	209
WAVECREST APARTMENTS Date Closed: 2008-10-06 Site ID: 250586 Program Number: 0403513	20-30 ELK DRIVE	S 1/4 - 1/2 (0.474 mi.)	96	241
Lower Elevation	Address	Direction / Distance	Map ID	Page
1141 MCBRIDE ST Date Closed: 2004-01-26 Site ID: 300613 Program Number: 9413371	1141 MCBRIDE ST	W 1/8 - 1/4 (0.182 mi.)	N53	115
ETWARU RESIDENCE Date Closed: 1996-01-16 Site ID: 242927 Program Number: 9512756	2122 NAMEOKE AVE	NNE 1/8 - 1/4 (0.193 mi.)	57	120
22-88 MOTT AVENUE Date Closed: 1998-12-07 Site ID: 94420 Program Number: 9809570	22-88 MOTT AVENUE	WNW 1/8 - 1/4 (0.208 mi.)	R60	127
NEXT TO	22-54 NAMEOKE AVE.	NNW 1/8 - 1/4 (0.233 mi.)	67	144

Date Closed: 2006-02-02 Site ID: 354749 Program Number: 0509035				
12-13 NEILSON ST Date Closed: 1993-06-16 Site ID: 69128 Program Number: 9303442	12-13 NEILSON ST	ENE 1/4 - 1/2 (0.280 mi.)	W77	167
12-13 NELSON ST Date Closed: 1993-06-21 Site ID: 249108 Program Number: 9303657	12-13 NELSON ST	ENE 1/4 - 1/2 (0.282 mi.)	W78	170
11-41 MCBRIDE ST Date Closed: 2004-01-26 Site ID: 126185 Program Number: 9415199	11041 MCBRIDE ST	NNW 1/4 - 1/2 (0.284 mi.)	79	171
APARTMENT BUILDING T Date Closed: 2009-10-29 Site ID: 416519 Program Number: 0904364	15-02 MOTT AVENUE	SE 1/4 - 1/2 (0.364 mi.)	85	182
NIELSON GARDENS Date Closed: 2008-06-18 Site ID: 396163 Program Number: 0800413	10-14 NEILSON STREET	ESE 1/4 - 1/2 (0.383 mi.)	90	212
JAMAICA BAY PEAKING Date Closed: 1996-10-10 Site ID: 182470 Program Number: 9412343	1425 BAY 24TH STREET	WNW 1/4 - 1/2 (0.410 mi.)	AA91	217
KINGDOM HALL JEHOVA Date Closed: 2005-11-03 Site ID: 136480 Program Number: 9914058	2360 BROOKHAVEN AVE	SW 1/4 - 1/2 (0.429 mi.)	94	238
U HAUL Date Closed: 1988-05-16 Site ID: 217885 Program Number: 8710031	20A SHERIDAN BLVD	NNE 1/4 - 1/2 (0.440 mi.)	95	239
327 BCH 19TH ST Date Closed: 1993-02-23 Site ID: 216311 Program Number: 9013017	327 BEACH 19TH STREE	S 1/4 - 1/2 (0.487 mi.)	97	244

State and tribal registered storage tank lists

NY UST: The Underground Storage Tank database contains registered USTs. USTs are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA). The data come from the Department of Environmental Conservation's Petroleum Bulk Storage (PBS) Database

A review of the NY UST list, as provided by EDR, has revealed that there are 10 NY UST sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
ROCKAWAY CO Database: UST, Date of Governme	19-31 MOTT AVENUE ent Version: 09/25/2018	SE 1/8 - 1/4 (0.147 mi.)	K42	85
JP MORGAN CHASE Database: UST, Date of Government	19-12 MOTT AVENUE ent Version: 09/25/2018	SE 1/8 - 1/4 (0.177 mi.)	O52	112
US POSTAL SERVICE Database: UST, Date of Government	1836 MOTT AVE ent Version: 09/25/2018	SE 1/8 - 1/4 (0.238 mi.)	V74	156
Lower Elevation	Address	Direction / Distance	Map ID	Page
BP #36611 Database: UST, Date of Governme	13-46 BEACH CHANNEL ent Version: 09/25/2018	N 0 - 1/8 (0.071 mi.)	F18	37
1136-1138 MCBRIDE ST Database: UST, Date of Governme	1136-1138 MCBRIDE ST ent Version: 09/25/2018	W 1/8 - 1/4 (0.161 mi.)	N47	95
OWEN AUTO SERVICE Database: UST, Date of Government	1017 BEACH 21ST STRE ent Version: 09/25/2018	S 1/8 - 1/4 (0.173 mi.)	P50	102
RCL SERVICE CENTER Database: UST, Date of Government	1009 BEACH 21ST STRE ent Version: 09/25/2018	S 1/8 - 1/4 (0.177 mi.)	P51	106
TWICE MIGHT LLC Database: UST, Date of Government	22-88 MOTT AVENUE ent Version: 09/25/2018	WNW 1/8 - 1/4 (0.208 mi.)	R61	128
MEL CHEVROLET SALES Database: UST, Date of Government	14-14 CENTRAL AVE ent Version: 09/25/2018	ENE 1/8 - 1/4 (0.212 mi.)	S63	132
23-08 MOTT AVE Database: UST, Date of Governme	23-08 MOTT AVENUE ent Version: 09/25/2018	WNW 1/8 - 1/4 (0.243 mi.)	75	164

NY MOSF UST: Major Oil Storage Facilities Database. Facilities are licensed pursuant to Article 12 of the Navigation Law, 6 NYCRR Part 610 and 17 NYCRR Part 30. These facilities may be onshore facilities or vessels, with petroleum storage capacities of 400,000 gallons or greater. Includes MOSF's licensed or closed since April 1, 1986, (responsibility was transferred from DOT on October 13, 1985) plus available data obtained from DOT facilities licensed since Article 12 became law on April 1, 1978.

A review of the NY MOSF UST list, as provided by EDR, and dated 01/01/2002 has revealed that there are 2 NY MOSF UST sites within approximately 0.5 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
OIL CO., INC.	ONE SHERIDAN BLVD.	N 1/4 - 1/2 (0.370 mi.)	Z 86	186
FAR ROCKAWAY POWER S	1425 BAY 24TH STREET	WNW 1/4 - 1/2 (0.410 mi.)	AA92	231

NY MOSF: These facilities may be onshore facilities or vessels, with petroleum storage capacities of 400,000 gallons or greater.

A review of the NY MOSF list, as provided by EDR, and dated 09/25/2018 has revealed that there are 2 NY MOSF sites within approximately 0.5 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
OIL CO., INC.	ONE SHERIDAN BLVD	N 1/4 - 1/2 (0.370 mi.)	Z87	197
Tank Status: Inactive				

Facility Id: 1-1660

JAMAICA BAY PEAKING 1425 BAY 24TH STREET WNW 1/4 - 1/2 (0.410 mi.) AA91 217

Tank Status: Inactive Facility Id: 2-1560

NY AST: The Aboveground Storage Tank database contains registered ASTs. The data come from the Department of Environmental Conservation's Petroleum Bulk Storage (PBS) Database.

A review of the NY AST list, as provided by EDR, has revealed that there are 17 NY AST sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
ACTION CENTER FOR DE Database: AST, Date of Government \ Facility Id: 2-610219	16-12 CENTRAL AVENUE /ersion: 09/25/2018	ESE 0 - 1/8 (0.117 mi.)	37	75
BRAVO FASHION (RETAI Database: AST, Date of Government \ Facility Id: 2-607761	1057 BEACH 20TH STRE /ersion: 09/25/2018	SSE 1/8 - 1/4 (0.129 mi.)	39	79
ENGINE 328 AND ENGIN Database: AST, Date of Government \ Facility Id: 2-358037	16-15 CENTRAL AVENUE /ersion: 09/25/2018	ESE 1/8 - 1/4 (0.135 mi.)	40	81
ROCKAWAY CO Database: AST, Date of Government \ Facility Id: 2-309060	19-31 MOTT AVENUE /ersion: 09/25/2018	SE 1/8 - 1/4 (0.147 mi.)	K43	87
ROCKAWAY COMPANY Database: AST, Date of Government \ Facility Id: 2-159263	19-20 MOTT AVENUE /ersion: 09/25/2018	SE 1/8 - 1/4 (0.168 mi.)	O48	98
AUTO MAVEN DENT DR I Database: AST, Date of Government \ Facility Id: 2-609946	10-16 BEACH 19TH STR /ersion: 09/25/2018	SE 1/8 - 1/4 (0.235 mi.)	T68	145
1124 BAYPORT PLACE Database: AST, Date of Government \ Facility Id: 2-401153	11-24 BAYPORT PLACE /ersion: 09/25/2018	E 1/8 - 1/4 (0.235 mi.)	70	148
US POSTAL SERVICE Database: AST, Date of Government \ Facility Id: 2-602468	1836 MOTT AVE /ersion: 09/25/2018	SE 1/8 - 1/4 (0.238 mi.)	V74	156
Lower Elevation	Address	Direction / Distance	Map ID	Page
BP #36611 Database: AST, Date of Government \ Facility Id: 2-285862	13-46 BEACH CHANNEL /ersion: 09/25/2018	N 0 - 1/8 (0.071 mi.)	F17	35
NOBO CORPORATION Database: AST, Date of Government \ Facility Id: 2-602577	10-74 BEACH 22ND STR /ersion: 09/25/2018	S 0 - 1/8 (0.094 mi.)	I28	68
CENTRAL ASSISTED LIV Database: AST, Date of Government \ Facility Id: 2-612713	1509 CENTRAL AVENUE /ersion: 09/25/2018	E 1/8 - 1/4 (0.168 mi.)	L49	100
CENTRAL BAYPORT LLC Database: AST, Date of Government \	13-06 BAYPORT PLACE /ersion: 09/25/2018	ENE 1/8 - 1/4 (0.185 mi.)	54	116

Facility Id: 2-348473				
FAR ROCKAWAY AUTO GL Database: AST, Date of Government Versi Facility Id: 2-610132	14-06 AUGUSTINA AVEN ion: 09/25/2018	ENE 1/8 - 1/4 (0.190 mi.)	Q56	118
SHOREVIEW COOPERATIV Database: AST, Date of Government Versi Facility Id: 2-070165	22-87 MOTT AVENUE ion: 09/25/2018	W 1/8 - 1/4 (0.206 mi.)	59	125
TWICE MIGHT LLC Database: AST, Date of Government Versi Facility Id: 2-405183	22-88 MOTT AVENUE ion: 09/25/2018	WNW 1/8 - 1/4 (0.208 mi.)	R62	130
EL PAIS AUTO REPAIR Database: AST, Date of Government Versi Facility Id: 2-605889	14-17 CENTRAL AVE ion: 09/25/2018	ENE 1/8 - 1/4 (0.227 mi.)	S64	136
STEVEN AUTO REPAIRS Database: AST, Date of Government Versi Facility Id: 2-610023	1338 CENTRAL AVENUE on: 09/25/2018	ENE 1/8 - 1/4 (0.232 mi.)	65	138

NY MOSF AST: Major Oil Storage Facilities Database. Facilities are licensed pursuant to Article 12 of the Navigation Law, 6 NYCRR Part 610 and 17 NYCRR Part 30. These facilities may be onshore facilities or vessels, with petroleum storage capacities of 400,000 gallons or greater. Includes MOSF's licensed or closed since April 1, 1986, (responsibility was transferred from DOT on October 13, 1985) plus available data obtained from DOT facilities licensed since Article 12 became law on April 1, 1978.

A review of the NY MOSF AST list, as provided by EDR, and dated 01/01/2002 has revealed that there are 2 NY MOSF AST sites within approximately 0.5 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
OIL CO., INC. Facility Status: 2 Facility Status: 1	ONE SHERIDAN BLVD.	N 1/4 - 1/2 (0.370 mi.)	Z 86	186
FAR ROCKAWAY POWER S Facility Status: 1 Facility Status: 1 Facility Status: 3	1425 BAY 24TH STREET	WNW 1/4 - 1/2 (0.410 mi.)	AA92	231

NY TANKS: This database contains records of facilities that are or have been regulated under Bulk Storage Program. Tank information for these facilities may not be releasable by the state agency.

A review of the NY TANKS list, as provided by EDR, has revealed that there is 1 NY TANKS site within approximately 0.25 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
VERIZON NEW YORK INC	13-11 BAYPORT PLACE	ENE 1/8 - 1/4 (0.157 mi.)	M45	92
Database: TANKS, Date of Government Version: 00/25/2018				

Database: TANKS, Date of Government Version: 09/25/2018

Facility Id: 2-343986 Site Status: Active

ADDITIONAL ENVIRONMENTAL RECORDS

Local Lists of Landfill / Solid Waste Disposal Sites

Registered Recycling Facility List from the Department of Environmental Conservation.

A review of the NY SWRCY list, as provided by EDR, and dated 12/08/2017 has revealed that there is 1 NY SWRCY site within approximately 0.5 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
JACK COLETTA INC./CO	1629 REDFERN AVE	NE 1/8 - 1/4 (0.138 mi.)	J41	83

Records of Emergency Release Reports

NY Spills: Data collected on spills reported to NYSDEC. is required by one or more of the following: Article 12 of the Navigation Law, 6 NYCRR Section 613.8 (from PBS regs), or 6 NYCRR Section 595.2 (from CBS regs). It includes spills active as of April 1, 1986, as well as spills occurring since this date.

A review of the NY Spills list, as provided by EDR, and dated 10/16/2018 has revealed that there are 4 NY Spills sites within approximately 0.125 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
DRUM RUN Date Closed: 2012-08-02 Spill Number: 1204054 Site ID: 466912	BEACH 21ST ST AND MO	SE 0 - 1/8 (0.082 mi.)	23	63
Lower Elevation	Address	Direction / Distance	Map ID	Page
ON EMPTY LOT Date Closed: 2010-07-01 Spill Number: 1000860 Site ID: 433544	17-25 17-27 REDFERN	NE 0 - 1/8 (0.084 mi.)	E25	65
DRY CLEANERS Date Closed: 2007-01-04 Spill Number: 0611066 Site ID: 375635	1159 BEACH CHANNEL D	SW 0 - 1/8 (0.088 mi.)	G26	66
2230-40 MOTT AVENUE Date Closed: 2003-02-25 Spill Number: 9710254 Site ID: 244791	2230-40 MOTT AVENUE	W 0 - 1/8 (0.099 mi.)	31	72

Other Ascertainable Records

RCRA NonGen / NLR: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA)

of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

A review of the RCRA NonGen / NLR list, as provided by EDR, and dated 03/01/2018 has revealed that there are 6 RCRA NonGen / NLR sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
SNOW WHITE CLEANERS EPA ID:: NYD982180663	20-88 MOTT AVE	SSE 0 - 1/8 (0.049 mi.)	D12	19
US POSTAL SERVICE EPA ID:: NYD986974426	1836 MOTT AVE	SE 1/8 - 1/4 (0.238 mi.)	V74	156
Lower Elevation	Address	Direction / Distance	Map ID	Page
FRESH EXPRESSIONS CO EPA ID:: NYR000022715	1522 CENTRAL AVE	E 1/8 - 1/4 (0.155 mi.)	L44	89
VERIZON NEW YORK - F EPA ID:: NYR000108571	13-11 BAYPORT PL	ENE 1/8 - 1/4 (0.157 mi.)	M46	94
ARTIES COLLISION INC EPA ID:: NYD137916953	1402 AUGUSTINA AVE	ENE 1/8 - 1/4 (0.199 mi.)	Q58	121
OTHMAN SERVICE STATI EPA ID:: NYD982719288	1401 CENTRAL AVE	ENE 1/8 - 1/4 (0.232 mi.)	66	140

NY DRYCLEANERS: A listing of all registered drycleaning facilities.

A review of the NY DRYCLEANERS list, as provided by EDR, and dated 03/07/2018 has revealed that there are 4 NY DRYCLEANERS sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
SNOW WHITE DRY CLEAN Facility Id: 2-6308-00464	20-88 MOTT AVE.	SSE 0 - 1/8 (0.049 mi.)	D11	18
NASSAU BEACH CLEANER Facility Id: 2-6308-00444	2105 CORNAGA AVE.	S 1/8 - 1/4 (0.236 mi.)	U71	150
Lower Elevation	Address	Direction / Distance	Map ID	Page
GEORGE/&CHRIS CLEANE Facility Id: 2-6308-00344	Address 21-40 MOTT AVE.	Direction / Distance SSW 0 - 1/8 (0.015 mi.)	Map ID A2	Page 8

NY E DESIGNATION: Lots designation with an ?E? on the Zoning Maps of the City of New York for potential hazardous material contamination, air and/or noise quality impacts.

A review of the NY E DESIGNATION list, as provided by EDR, and dated 08/21/2018 has revealed that there are 16 NY E DESIGNATION sites within approximately 0.125 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
LOT 1,TAXBLOCK 15537	20-02 MOTT AVENUE	SE 0 - 1/8 (0.061 mi.)	D14	33

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
LOT 5,TAXBLOCK 15537	20-10 MOTT AVENUE	SE 0 - 1/8 (0.099 mi.)	32	73
Lower Elevation	Address	Direction / Distance	Map ID	Page
LOT 9,TAXBLOCK 15528 LOT 101,TAXBLOCK 157 LOT 109,TAXBLOCK 157 LOT 1,TAXBLOCK 15661 LOT 80,TAXBLOCK 1566 LOT 40,TAXBLOCK 1553 LOT 50,TAXBLOCK 1553 LOT 51,TAXBLOCK 1553 LOT 51,TAXBLOCK 1553 LOT 53,TAXBLOCK 1553 LOT 54,TAXBLOCK 1553 LOT 54,TAXBLOCK 1553 LOT 56,TAXBLOCK 1553	13-24 BEACH CHANNEL 21-41 MOTT AVENUE 21-23 MOTT AVENUE 22-02 MOTT AVENUE 13-15 BEACH CHANNEL 18-01 REDFERN AVENUE 17-27 REDFERN AVENUE 17-25 REDFERN AVENUE 10-74 BEACH 22 STREE 17-21 REDFERN AVENUE 17-19 REDFERN AVENUE 17-15 REDFERN AVENUE	NNW 0 - 1/8 (0.026 mi.) SSW 0 - 1/8 (0.032 mi.) S 0 - 1/8 (0.038 mi.) W 0 - 1/8 (0.048 mi.) WNW 0 - 1/8 (0.048 mi.) NE 0 - 1/8 (0.062 mi.) NE 0 - 1/8 (0.084 mi.) NE 0 - 1/8 (0.090 mi.) S 0 - 1/8 (0.094 mi.) NE 0 - 1/8 (0.095 mi.) NE 0 - 1/8 (0.100 mi.) NE 0 - 1/8 (0.100 mi.)	5 B6 B7 C8 C9 E15 E24 H27 I29 H30 H33 H35	15 15 16 17 17 33 64 68 71 71 73 74
LOT 57,TAXBLOCK 1553 LOT 58,TAXBLOCK 1553	17-11 REDFERN AVENUE 17-09 REDFERN AVENUE	NE 0 - 1/8 (0.113 mi.) NE 0 - 1/8 (0.118 mi.)	H36 J38	74 78

NY MANIFEST: Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a TSD facility.

A review of the NY MANIFEST list, as provided by EDR, and dated 07/01/2018 has revealed that there are 10 NY MANIFEST sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
SNOW WHITE CLEANERS EPA ID: NYD982180663	20-88 MOTT AVE	SSE 0 - 1/8 (0.049 mi.)	D12	19
MTA NYCT - MOTT AVEN EPA ID: NYR000150961	MOTT AVE & BEACH 22N	SSE 0 - 1/8 (0.057 mi.)	D13	24
NASSAU BEACH CLEANER EPA ID: NYD986939601	2105 CORNAGA AVE	S 1/8 - 1/4 (0.236 mi.)	U72	150
US POSTAL SERVICE EPA ID: NYD986974426	1836 MOTT AVE	SE 1/8 - 1/4 (0.238 mi.)	V74	156
Lower Elevation	Address	Direction / Distance	Map ID	Page
GEORGE & CHRIS CLEAN EPA ID: NYD077444206	2140 MOTT AVE	SSW 0 - 1/8 (0.015 mi.)	A4	9
BP PRODUCTS NORTH AM EPA ID: NYD986909505	13-46 BEACH CHANNEL	N 0 - 1/8 (0.071 mi.)	F19	51
NEW MYLES FRENCH CLE EPA ID: NYD981141468	11-59 BEACH CHANNEL	SW 0 - 1/8 (0.073 mi.)	G22	55
FRESH EXPRESSIONS CO EPA ID: NYR000022715	1522 CENTRAL AVE	E 1/8 - 1/4 (0.155 mi.)	L44	89
ARTIES COLLISION INC EPA ID: NYD137916953	1402 AUGUSTINA AVE	ENE 1/8 - 1/4 (0.199 mi.)	Q58	121
OTHMAN SERVICE STATI EPA ID: NYD982719288	1401 CENTRAL AVE	ENE 1/8 - 1/4 (0.232 mi.)	66	140

PA MANIFEST: Hazardous waste manifest information.

A review of the PA MANIFEST list, as provided by EDR, and dated 12/31/2016 has revealed that there is 1 PA MANIFEST site within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
US POSTAL SERVICE	1836 MOTT AVENUE	SE 1/8 - 1/4 (0.238 mi.)	V73	154
Generator EPA ld: NYD986974426				

NJ MANIFEST: Hazardous waste manifest information.

A review of the NJ MANIFEST list, as provided by EDR, and dated 12/31/2017 has revealed that there is 1 NJ MANIFEST site within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
MTA NYCT - MOTT AVEN	MOTT AVE & BEACH 22N	SSE 0 - 1/8 (0.057 mi.)	D13	24
EPA Id: NYR000150961				

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP: The EDR Proprietary Manufactured Gas Plant Database includes records of coal gas plants (manufactured gas plants) compiled by EDR's researchers. Manufactured gas sites were used in the United States from the 1800's to 1950's to produce a gas that could be distributed and used as fuel. These plants used whale oil, rosin, coal, or a mixture of coal, oil, and water that also produced a significant amount of waste. Many of the byproducts of the gas production, such as coal tar (oily waste containing volatile and non-volatile chemicals), sludges, oils and other compounds are potentially hazardous to human health and the environment. The byproduct from this process was frequently disposed of directly at the plant site and can remain or spread slowly, serving as a continuous source of soil and groundwater contamination.

A review of the EDR MGP list, as provided by EDR, has revealed that there are 2 EDR MGP sites within approximately 1 mile of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
FAR ROCKAWAY MGP	CORNER OF BRUNSWICK	NE 1/4 - 1/2 (0.429 mi.)	93	238
INWOOD HOLDER	W. OF SHERIDAN BLVD.	N 1/2 - 1 (0.562 mi.)	98	245

EDR Hist Auto: EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

A review of the EDR Hist Auto list, as provided by EDR, has revealed that there is 1 EDR Hist Auto

site within approximately 0.125 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
HI AUTO SVCE	1346 BCH CHANL DR	N 0 - 1/8 (0.071 mi.)	F16	34

EDR Hist Cleaner: EDR has searched selected national collections of business directories and has collected listings of potential dry cleaner sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include dry cleaning establishments. The categories reviewed included, but were not limited to dry cleaners, cleaners, laundry, laundromat, cleaning/laundry, wash & dry etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

A review of the EDR Hist Cleaner list, as provided by EDR, has revealed that there are 4 EDR Hist Cleaner sites within approximately 0.125 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
SNOW WHITE DRY CLEAN	20-88 MOTT AVE	SSE 0 - 1/8 (0.049 mi.)	D10	18
Lower Elevation	Address	Direction / Distance	Map ID	Page
GEORGE & CHRIS CLEAN MYLES FRENCH CLEANER BELL BOY DRIVE IN CL	21-40 MOTT AVE 11-59 BEACH CHANNEL 1361 BCH CHANNEL DR	SSW 0 - 1/8 (0.015 mi.) SW 0 - 1/8 (0.073 mi.) N 0 - 1/8 (0.108 mi.)	A3 G20 34	8 54 74

Due to poor or inadequate address information, the following sites were not mapped. Count: 3 records.

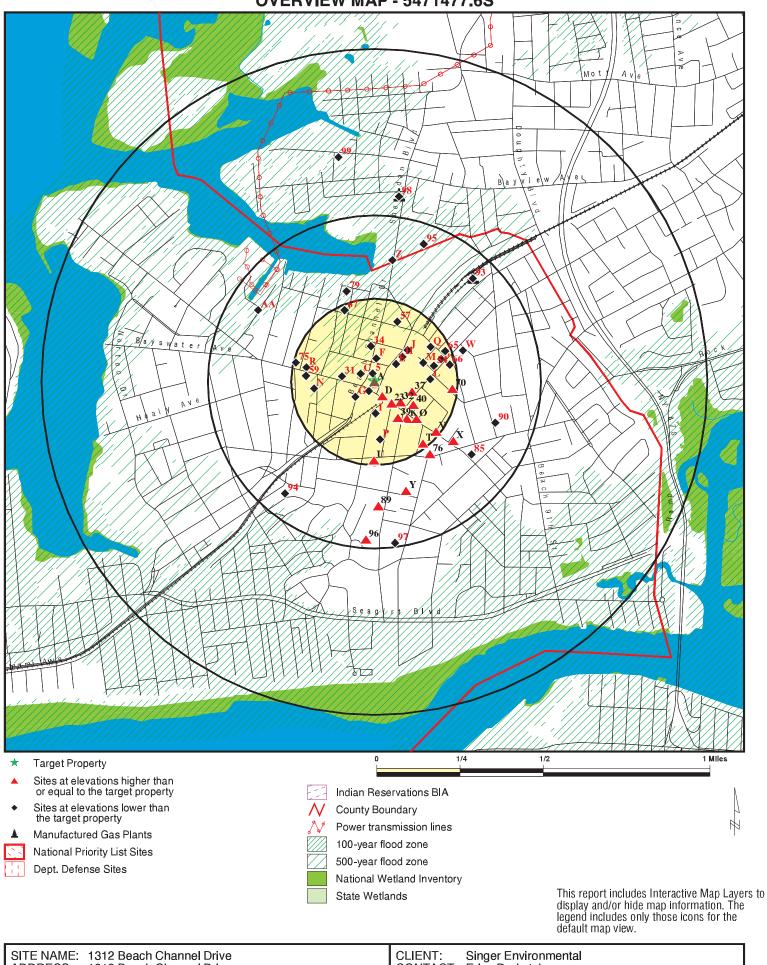
Site Name

34-11 BEACH CHANNEL DRIVE

FAR ROCKAWAY MGP FAR ROCKAWAY (INWOOD) F03 (LIRR) Database(s)

NY ENG CONTROLS, NY INST CONTROL, NY BROWNFIELDS NY VCP, NY BROWNFIELDS NY VCP

OVERVIEW MAP - 5471477.6S

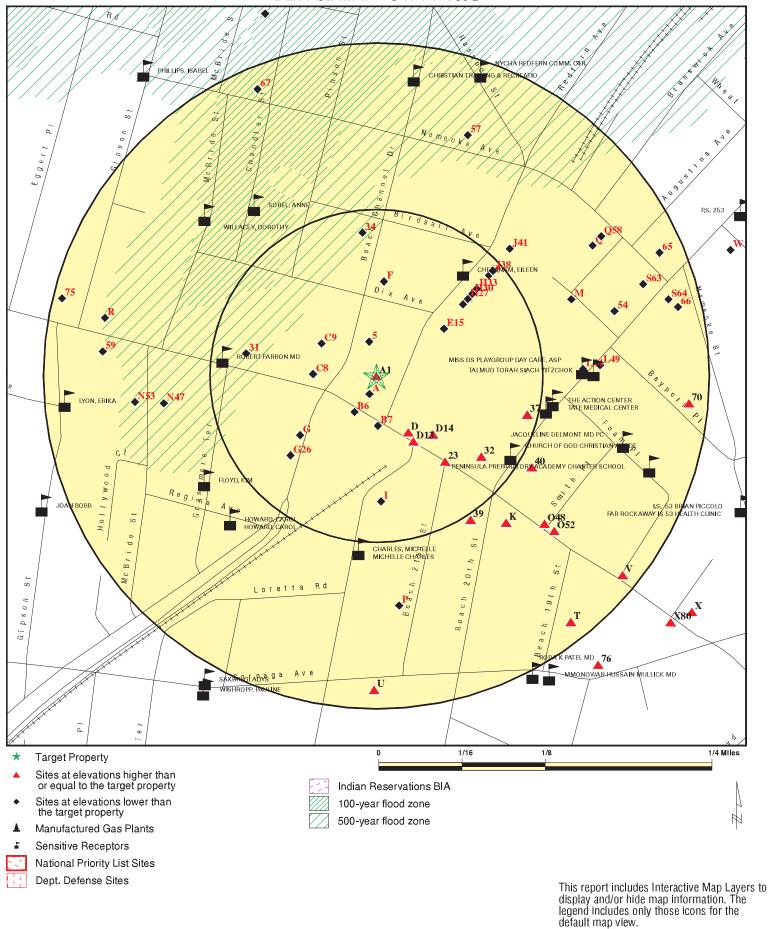


SITE NAME: 1312 Beach Channel Drive
ADDRESS: 1312 Beach Channel Drive
Far Rockaway NY 11691

CLIENT: Singer Environm
CONTACT: Erica Derkatch
INQUIRY #: 5471477.6s

LAT/LONG: 40.605499 / 73.754527 DATE: October 31, 2018 10:27 pm

DETAIL MAP - 5471477.6S



SITE NAME: 1312 Beach Channel Drive
ADDRESS: 1312 Beach Channel Drive
Far Rockaway NY 11691
LAT/LONG: 40.605499 / 73.754527

CLIENT: Singer Environmental
CONTACT: Erica Derkatch
INQUIRY #: 5471477.6s
DATE: October 31, 2018 10:28 pm

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
STANDARD ENVIRONMENT	TAL RECORDS							
Federal NPL site list								
NPL Proposed NPL NPL LIENS	1.000 1.000 TP		0 0 NR	0 0 NR	0 0 NR	0 0 NR	NR NR NR	0 0 0
Federal Delisted NPL sit	e list							
Delisted NPL	1.000		0	0	0	0	NR	0
Federal CERCLIS list								
FEDERAL FACILITY SEMS	0.500 0.500		0 0	0 0	0 0	NR NR	NR NR	0 0
Federal CERCLIS NFRA	P site list							
SEMS-ARCHIVE	0.500		0	0	0	NR	NR	0
Federal RCRA CORRAC	TS facilities lis	st						
CORRACTS	1.000		0	0	0	0	NR	0
Federal RCRA non-COR	RACTS TSD fa	cilities list						
RCRA-TSDF	0.500		0	0	0	NR	NR	0
Federal RCRA generator	rs list							
RCRA-LQG RCRA-SQG RCRA-CESQG	0.250 0.250 0.250		0 2 2	0 0 1	NR NR NR	NR NR NR	NR NR NR	0 2 3
Federal institutional con engineering controls reg								
LUCIS US ENG CONTROLS US INST CONTROL	0.500 0.500 0.500		0 0 0	0 0 0	0 0 0	NR NR NR	NR NR NR	0 0 0
Federal ERNS list								
ERNS	TP		NR	NR	NR	NR	NR	0
State- and tribal - equiva	alent CERCLIS							
NY SHWS	1.000		0	0	0	1	NR	1
State and tribal landfill a solid waste disposal site								
NY SWF/LF	0.500		0	3	1	NR	NR	4
State and tribal leaking	storage tank li	sts						
INDIAN LUST NY LTANKS NY HIST LTANKS	0.500 0.500 0.500		0 0 0	0 4 0	0 17 0	NR NR NR	NR NR NR	0 21 0
State and tribal registere	ed storage tan	k lists						
FEMA UST	0.250		0	0	NR	NR	NR	0

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
NY UST NY CBS UST NY MOSF UST NY CBS NY MOSF NY AST NY CBS AST NY MOSF AST INDIAN UST NY TANKS	0.250 0.250 0.500 0.250 0.500 0.250 0.250 0.250 0.250		1 0 0 0 0 3 0 0	9 0 0 0 14 0 0	NR NR 2 NR 2 NR NR 2 NR	NR NR NR NR NR NR NR NR	NR NR NR NR NR NR NR NR	10 0 2 0 2 17 0 2 0
State and tribal institutio control / engineering con		s						
NY RES DECL NY ENG CONTROLS NY INST CONTROL	0.125 0.500 0.500		0 0 0	NR 0 0	NR 0 0	NR NR NR	NR NR NR	0 0 0
State and tribal voluntary	/ cleanup site	es						
NY VCP INDIAN VCP	0.500 0.500		0 0	0 0	0 0	NR NR	NR NR	0 0
State and tribal Brownfie	lds sites							
NY BROWNFIELDS NY ERP	0.500 0.500		0 0	0 0	0 0	NR NR	NR NR	0 0
ADDITIONAL ENVIRONMEN	TAL RECORDS	<u> </u>						
Local Brownfield lists								
US BROWNFIELDS	0.500		0	0	0	NR	NR	0
Local Lists of Landfill / S Waste Disposal Sites	olid							
NY SWRCY NY SWTIRE INDIAN ODI ODI DEBRIS REGION 9 IHS OPEN DUMPS	0.500 0.500 0.500 0.500 0.500 0.500		0 0 0 0 0	1 0 0 0 0 0	0 0 0 0 0	NR NR NR NR NR	NR NR NR NR NR	1 0 0 0 0 0
Local Lists of Hazardous Contaminated Sites	waste/							
US HIST CDL NY DEL SHWS US CDL	TP 1.000 TP		NR 0 NR	NR 0 NR	NR 0 NR	NR 0 NR	NR NR NR	0 0 0
Local Lists of Registered	l Storage Tan	ıks						
NY HIST UST NY HIST AST	0.250 TP		0 NR	0 NR	NR NR	NR NR	NR NR	0 0
Local Land Records								
NY LIENS	TP		NR	NR	NR	NR	NR	0

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
LIENS 2	TP		NR	NR	NR	NR	NR	0
Records of Emergency F	Release Repo	rts						
HMIRS NY Spills NY Hist Spills NY SPILLS 90 NY SPILLS 80	TP 0.125 0.125 0.125 0.125		NR 4 0 0 0	NR NR NR NR NR	NR NR NR NR NR	NR NR NR NR NR	NR NR NR NR NR	0 4 0 0
Other Ascertainable Rec	ords							
RCRA NonGen / NLR FUDS DOD SCRD DRYCLEANERS US FIN ASSUR EPA WATCH LIST 2020 COR ACTION TSCA TRIS SSTS ROD RMP RAATS PRP PADS ICIS FTTS MLTS COAL ASH DOE COAL ASH EPA PCB TRANSFORMER RADINFO HIST FTTS DOT OPS CONSENT INDIAN RESERV FUSRAP UMTRA LEAD SMELTERS US AIRS US MINES ABANDONED MINES FINDS UXO ECHO DOCKET HWC FUELS PROGRAM	0.250 1.000 1.000 0.500 TP TP 0.250 TP TP 1.000 TP TP TP TP TP TP TP TP TP TP TP TP TP		1 0 0 0 RR O RR O RR NR RR RR RR O RR NR O O O O	5 0 0 0 RR 0 RRR 0 RR RRR NRR NR 0 NRRR 0 0 0 0	NOOORRRRROORRRRNNNOORRRROOOORRRRRONNN	N O O R R R R R R R R R R R R R R R R R	N N N N N N N N N N N N N N N N N N N	600000000000000000000000000000000000000
NY AIRS NY COAL ASH NY DRYCLEANERS NY E DESIGNATION	TP 0.500 0.250 0.125	1	NR 0 3 16	NR 0 1 NR	NR 0 NR NR	NR NR NR NR	NR NR NR NR	0 0 4 17

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
NY Financial Assurance	TP		NR	NR	NR	NR	NR	0
NY HSWDS	0.500		0	0	0	NR	NR	0
NY MANIFEST	0.250		5	5	NR	NR	NR	10
PA MANIFEST	0.250		0	1	NR	NR	NR	1
NJ MANIFEST	0.250		1	0	NR	NR	NR	1
NY SPDES	TP		NR	NR	NR	NR	NR	0
NY VAPOR REOPENED NY UIC	0.500 TP		0 NR	0 NR	0 NR	NR NR	NR NR	0
NY COOLING TOWERS	TP		NR NR	NR NR	NR NR	NR NR	NR NR	0 0
NT COOLING TOWERS	IF		INIX	INIX	INIX	INIX	INIX	U
EDR HIGH RISK HISTORICA	L RECORDS							
EDR Exclusive Records								
EDR MGP	1.000		0	0	1	1	NR	2
EDR Hist Auto	0.125		1	NR	NR	NR	NR	1
EDR Hist Cleaner	0.125		4	NR	NR	NR	NR	4
EDR RECOVERED GOVERN	MENT ARCHI\	/ES						
Exclusive Recovered Gov	vt. Archives							
NY RGA HWS	TP		NR	NR	NR	NR	NR	0
NY RGA LF	TP		NR	NR	NR	NR	NR	0
- Totals		1	43	45	25	2	0	116

NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

Direction Distance

Distance Elevation Site EDR ID Number

Database(s) EPA ID Number

A1 LOT 5,TAXBLOCK 15528 NY E DESIGNATION S121343947
Target 13-12 BEACH CHANNEL DRIVE N/A

13-12 BEACH CHANNEL DRIVE N/A
v QUEENS, NY 11691

Property QUEENS, NY 11691

Site 1 of 4 in cluster A

Actual: E DESIGNATION: 25 ft. Tax Lot(s):

Tax Block: 15528
Borough Code: QN
E-No: E-415
Effective Date: 9/7/2017
Satisfaction Date: Not reported
Cegr Number: 16DME010Q

Ulurp Number: 170243AZMQ, 170244AZRQ

Zoning Map No: 25b, 31a

Description: Hazardous Materials* Phase I and Phase II Testing Protocol

Lot Remediation Date: Not reported

Description: Window Wall Attenuation & Alternate Ventilation

Lot Remediation Date: Not reported

A2 GEORGE/&CHRIS CLEANERS NY DRYCLEANERS S106436629
SSW 21-40 MOTT AVE. N/A

SSW 21-40 MOTT AVE. < 1/8 FAR ROCKAWAY, NY 11691

0.015 mi.

77 ft. Site 2 of 4 in cluster A

Relative: DRYCLEANERS:

 Lower
 Facility ID:
 2-6308-00344

 Actual:
 Phone Number:
 718-327-4813

 24 ft.
 Region:
 Not reported

Registration Effective Date: 7/25/2002 11:02:45:476

Inspection Date: 07MAY21
Install Date: 91/98
Drop Shop: Not reported
Shutdown: Not reported
Alternate Solvent: Not reported
Current Business: Not reported

A3 GEORGE & CHRIS CLEANERS INC EDR Hist Cleaner 1019994858 SSW 21-40 MOTT AVE EDR HIST CLEANERS INC N/A

< 1/8 FAR ROCKAWAY, NY 11691

EDR Hist Cleaner

0.015 mi.

77 ft. Site 3 of 4 in cluster A

Relative: Lower Actual:

Year: Name: Type:

24 ft. 1975 GEORGE & CHRIS CLEANERS INC Drycleaning Plants, Except Rugs

GEORGE & CHRIS CLEANERS INC Drycleaning Plants, Except Rugs 1976 Drycleaning Plants, Except Rugs 1977 **GEORGE & CHRIS CLEANERS INC** Drycleaning Plants, Except Rugs 1978 **GEORGE & CHRIS CLEANERS INC GEORGE & CHRIS CLEANERS INC** Drycleaning Plants, Except Rugs 1979 Drycleaning Plants, Except Rugs 1980 GEORGE & CHRIS CLEANERS INC Drycleaning Plants, Except Rugs 1982 GEORGE & CHRIS CLEANERS INC 1983 GEORGE & CHRIS CLEANERS INC Drycleaning Plants, Except Rugs

MAP FINDINGS Map ID

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

GEORGE & CHRIS CLEANERS INC (Continued)

1019994858

1985	GEORGE & CHRIS CLEANERS INC	Drycleaning Plants, Except Rugs
1986	GEORGE & CHRIS CLEANERS INC	Drycleaning Plants, Except Rugs
1987	GEORGE & CHRIS CLEANERS INC	Drycleaning Plants, Except Rugs
1988	GEORGE & CHRIS CLEANERS INC	Drycleaning Plants, Except Rugs
1989	GEORGE & CHRIS CLEANERS INC	Drycleaning Plants, Except Rugs
1990	GEORGE & CHRIS CLEANERS INC	Drycleaning Plants, Except Rugs
1991	GEORGE & CHRIS CLEANERS INC	Drycleaning Plants, Except Rugs
1992	GEORGE & CHRIS CLEANERS INC	Drycleaning Plants, Except Rugs
1993	GEORGE & CHRIS CLEANERS INC	Drycleaning Plants, Except Rugs
1994	GEORGE & CHRIS CLEANERS INC	Drycleaning Plants, Except Rugs
1995	GEORGE & CHRIS CLEANERS INC	Drycleaning Plants, Except Rugs
1996	GEORGE & CHRIS CLEANERS INC	Drycleaning Plants, Except Rugs
1997	GEORGE & CHRIS CLEANERS INC	Drycleaning Plants, Except Rugs
1998	GEORGE & CHRIS CLEANERS INC	Drycleaning Plants, Except Rugs
1999	GEORGE & CHRIS CLEANERS INC	Drycleaning Plants, Except Rugs
2000	GEORGE & CHRIS CLEANERS INC	Drycleaning Plants, Except Rugs
2001	GEORGE & CHRIS CLEANERS INC	Drycleaning Plants, Except Rugs
2002	GEORGE & CHRIS CLEANERS INC	Drycleaning Plants, Except Rugs
2003	GEORGE & CHRIS CLEANERS INC	Drycleaning Plants, Except Rugs
2004	GEORGE & CHRIS CLEANERS INC	Drycleaning Plants, Except Rugs
2005	GEORGE & CHRIS CLEANERS INC	Drycleaning Plants, Except Rugs
2006	GEORGE & CHRIS CLEANERS INC	Drycleaning Plants, Except Rugs
2007	GEORGE & CHRIS CLEANERS INC	Drycleaning Plants, Except Rugs
2008	GEORGE & CHRIS CLEANERS INC	Drycleaning Plants, Except Rugs
2009	GEORGE & CHRIS CLEANERS INC	Drycleaning Plants, Except Rugs
2010	GEORGE & CHRIS CLEANERS INC	Drycleaning Plants, Except Rugs
2011	GEORGE & CHRIS CLEANERS INC	Drycleaning Plants, Except Rugs
2012	GEORGE & CHRIS CLEANERS INC	Drycleaning Plants, Except Rugs
2013	GEORGE & CHRIS CLEANERS INC	Drycleaning Plants, Except Rugs
2014	GEORGE & CHRIS CLEANERS INC	Drycleaning Plants, Except Rugs

Α4 **GEORGE & CHRIS CLEANERS INC** RCRA-CESQG 1000357190 ssw **2140 MOTT AVE** NYD077444206 ICIS

< 1/8 FAR ROCKAWAY, NY 11691

0.015 mi.

Site 4 of 4 in cluster A

Relative:

RCRA-CESQG:

Lower

77 ft.

Date form received by agency: 01/01/2007

Actual:

Facility name:

Facility address: 24 ft.

GEORGE & CHRIS CLEANERS INC 2140 MOTT AVE

FAR ROCKAWAY, NY 11691

EPA ID:

NYD077444206

Mailing address: MOTT AVE

FAR ROCKAWAY, NY 11691

Contact:

GEORGE MARKIDES

Contact address:

MOTT AVE FAR ROCKAWAY, NY 11691

Contact country: US

Contact telephone: 718-327-4813 Contact email: Not reported

EPA Region: 02

Classification: Conditionally Exempt Small Quantity Generator

Handler: generates 100 kg or less of hazardous waste per calendar Description:

month, and accumulates 1000 kg or less of hazardous waste at any time; or generates 1 kg or less of acutely hazardous waste per calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or

US AIRS

NY MANIFEST

Direction Distance Elevation

Site Database(s) EPA ID Number

GEORGE & CHRIS CLEANERS INC (Continued)

1000357190

EDR ID Number

other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste

Owner/Operator Summary:

Owner/operator name: GEORGE MARKIDES
Owner/operator address: NOT REQUIRED

NOT REQUIRED, WY 99999

Owner/operator country: US

Owner/operator telephone: 212-555-1212 Owner/operator email: Not reported Owner/operator fax: Not reported Owner/operator extension: Not reported Legal status: Private Owner/Operator Type: Owner Owner/Op start date: Not reported Owner/Op end date: Not reported

Owner/operator name: GEORGE MARKIDES
Owner/operator address: NOT REQUIRED

NOT REQUIRED, WY 99999

Not reported

Owner/operator country: US

Owner/operator telephone: 212-555-1212
Owner/operator email: Not reported
Owner/operator fax: Not reported
Owner/operator extension: Not reported
Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: Not reported

Handler Activities Summary:

Owner/Op end date:

U.S. importer of hazardous waste: No Mixed waste (haz. and radioactive): No Recycler of hazardous waste: No Transporter of hazardous waste: No Treater, storer or disposer of HW: No Underground injection activity: No On-site burner exemption: No Furnace exemption: No Used oil fuel burner: No Used oil processor: No User oil refiner: No Used oil fuel marketer to burner: No Used oil Specification marketer: No Used oil transfer facility: No Used oil transporter: No

Historical Generators:

Date form received by agency: 01/01/2006

MAP FINDINGS Map ID

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

GEORGE & CHRIS CLEANERS INC (Continued)

1000357190

GEORGE & CHRIS CLEANERS INC Site name:

Conditionally Exempt Small Quantity Generator Classification:

Date form received by agency: 11/30/1987

GEORGE & CHRIS CLEANERS INC Site name:

Classification: **Small Quantity Generator**

Waste code: F002

THE FOLLOWING SPENT HALOGENATED SOLVENTS: TETRACHLOROETHYLENE, Waste name:

METHYLENE CHLORIDE, TRICHLOROETHYLENE, 1,1,1-TRICHLOROETHANE,

CHLOROBENZENE, 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE, ORTHO-DICHLOROBENZENE, TRICHLOROFLUOROMETHANE, AND

1,1,2-TRICHLOROETHANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE LISTED IN F001, F004, OR F005, AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND

SPENT SOLVENT MIXTURES.

Violation Status: No violations found

ICIS:

Enforcement Action ID: NY000A0000263080034400313

FRS ID: 110002365636

Action Name: GEORGE CLEANERS 36081R033600313

Facility Name: **GEORGE CLEANERS** Facility Address: 21-40 MOTT AVE

FAR ROCKAWAY, NY 116913216

Enforcement Action Type: Notice of Violation

Facility County: **QUEENS** Program System Acronym: AIR

Enforcement Action Forum Desc: Administrative - Informal

EA Type Code: NOV Facility SIC Code: 7216 Federal Facility ID: Not reported Latitude in Decimal Degrees:

40.605304 Longitude in Decimal Degrees: -73.754714 Permit Type Desc: Not reported Program System Acronym:

NY0000002630800344

Facility NAICS Code: 812320 Tribal Land Code: Not reported

Enforcement Action ID: NY000A0000263080034400312

FRS ID: 110002365636

Action Name: GEORGE CLEANERS 36081R033600312

Facility Name: **GEORGE CLEANERS** Facility Address: 21-40 MOTT AVE

FAR ROCKAWAY, NY 116913216

Enforcement Action Type: Notice of Violation

QUEENS Facility County: Program System Acronym: **AIR**

Enforcement Action Forum Desc: Administrative - Informal

EA Type Code: NOV Facility SIC Code: 7216 Federal Facility ID: Not reported Latitude in Decimal Degrees: 40.605304 Longitude in Decimal Degrees: -73.754714 Permit Type Desc: Not reported

NY0000002630800344 Program System Acronym:

Direction Distance

Elevation Site Database(s) EPA ID Number

GEORGE & CHRIS CLEANERS INC (Continued)

1000357190

EDR ID Number

Facility NAICS Code: 812320
Tribal Land Code: Not reported

US AIRS MINOR:

Envid: 1000357190

Region Code: 02

Programmatic ID: AIR NY0000002630800344

Facility Registry ID: 110002365636
D and B Number: Not reported
Primary SIC Code: 7216
NAICS Code: 812320
Default Air Classification Code: MIN
Facility Type of Ownership Code: POF
Air CMS Category Code: Not reported
HPV Status: Not reported

US AIRS MINOR:

Region Code: 02

Programmatic ID: AIR NY0000002630800344

Facility Registry ID: 110002365636

Air Operating Status Code: OPR
Default Air Classification Code: MIN

Air Program: MACT Standards (40 CFR Part 63)

Activity Date: 2000-01-10 00:00:00

Activity Status Date: Not reported

Activity Group: Compliance Monitoring Activity Type: Inspection/Evaluation

Activity Status: Not reported

Region Code: 02

Programmatic ID: AIR NY0000002630800344

Facility Registry ID: 110002365636

Air Operating Status Code: OPR Default Air Classification Code: MIN

Air Program: MACT Standards (40 CFR Part 63)

Activity Date: 2005-08-16 00:00:00
Activity Status Date: 2005-08-16 00:00:00
Activity Group: Enforcement Action
Activity Type: Administrative - Informal

Activity Status: Achieved

Region Code: 02

Programmatic ID: AIR NY0000002630800344

Facility Registry ID: 110002365636

Air Operating Status Code: OPR
Default Air Classification Code: MIN

Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards

Activity Date: 2000-01-10 00:00:00

Activity Status Date: Not reported

Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation

Activity Status: Not reported

US AIRS MINOR:

Envid: 1000357190

Direction Distance

Elevation Site Database(s) EPA ID Number

GEORGE & CHRIS CLEANERS INC (Continued)

1000357190

EDR ID Number

Region Code: 02

Programmatic ID: AIR NY0000002630800344

Facility Registry ID: 110002365636
D and B Number: Not reported
Primary SIC Code: 7216
NAICS Code: 812320
Default Air Classification Code: MIN
Facility Type of Ownership Code: POF
Air CMS Category Code: Not reported
HPV Status: Not reported

US AIRS MINOR:

Region Code: 02

Programmatic ID: AIR NY0000002630800344

Facility Registry ID: 110002365636

Air Operating Status Code: OPR
Default Air Classification Code: MIN

Air Program: MACT Standards (40 CFR Part 63)

Activity Date: 2000-01-10 00:00:00

Activity Status Date: Not reported

Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation

Activity Status: Not reported

Region Code: 02

Programmatic ID: AIR NY0000002630800344

Facility Registry ID: 110002365636

Air Operating Status Code: OPR Default Air Classification Code: MIN

Air Program: MACT Standards (40 CFR Part 63)

Activity Date: 2005-08-16 00:00:00
Activity Status Date: 2005-08-16 00:00:00
Activity Group: Enforcement Action
Activity Type: Administrative - Informal

Activity Status: Achieved

Region Code: 02

Programmatic ID: AIR NY0000002630800344

Facility Registry ID: 110002365636

Air Operating Status Code: OPR Default Air Classification Code: MIN

Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards

Activity Date: 2000-01-10 00:00:00

Activity Status Date: Not reported

Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation

Activity Status: Not reported

NY MANIFEST:

Country: USA

EPA ID: NYD077444206 Facility Status: Not reported

Location Address 1: 2140 MOTT AVENUE

Code: BP

Location Address 2: Not reported Total Tanks: Not reported

Direction Distance

Elevation Site Database(s) EPA ID Number

GEORGE & CHRIS CLEANERS INC (Continued)

1000357190

EDR ID Number

Location City: FAR ROCKAWAY

Location State: NY
Location Zip: 11691
Location Zip 4: Not reported

NY MANIFEST:

EPAID: NYD077444206

Mailing Name: GEORGE L CHRIS CLEANERS

Mailing Contact: N/S

Mailing Address 1: 2140 MOTT AVENUE

Mailing Address 2: Not reported Mailing City: FAR ROCKAWAY

Mailing State: NY
Mailing Zip: 11691
Mailing Zip 4: Not reported
Mailing Country: USA
Mailing Phone: 7183274813

NY MANIFEST:

Document ID: NYG4447935 Manifest Status: Not reported

seq: 01

Year: 2006

Trans1 State ID: NJD000564906 Trans2 State ID: Not reported Generator Ship Date: 03/13/2006 Trans1 Recy Date: 03/13/2006 Trans2 Recv Date: Not reported TSD Site Recv Date: 03/17/2006 Part A Recv Date: Not reported Part B Recv Date: Not reported Generator EPA ID: NYD077444206

Trans1 EPA ID: NJ420 Trans2 EPA ID: Not reported TSDF ID 1: NJD000564906 TSDF ID 2: Not reported Manifest Tracking Number: Not reported Import Indicator: Not reported **Export Indicator:** Not reported Discr Quantity Indicator: Not reported Discr Type Indicator: Not reported Discr Residue Indicator: Not reported Discr Partial Reject Indicator: Not reported Discr Full Reject Indicator: Not reported Manifest Ref Number: Not reported Alt Facility RCRA ID: Not reported Alt Facility Sign Date: Not reported MGMT Method Type Code: Not reported

Waste Code: F002 - HALO SOLV + STILL BOTTOMS FM REC OF SOLV

Waste Code:
Waste Code:
Waste Code:
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Waste

Number of Containers: 002

Direction Distance

Distance Elevation Site EDR ID Number

EDR ID Number

EPA ID Number

GEORGE & CHRIS CLEANERS INC (Continued)

1000357190

Container Type: DM - Metal drums, barrels

Handling Method: T Chemical, physical, or biological treatment.

Specific Gravity: 01.00

Waste Code: F002 - HALO SOLV + STILL BOTTOMS FM REC OF SOLV

Waste Code:
Waste Code:
Waste Code:
Waste Code:
Waste Code:
Waste Code:
Waste Code:
Wor reported
Waste Code:
Quantity:
Units:
P - Pounds

Number of Containers: 001

Container Type: DM - Metal drums, barrels

Handling Method: T Chemical, physical, or biological treatment.

Specific Gravity: 01.00

Click this hyperlink while viewing on your computer to access -1 additional NY MANIFEST: record(s) in the EDR Site Report.

5 LOT 9,TAXBLOCK 15528 NY E DESIGNATION S121344038 NNW 13-24 BEACH CHANNEL DRIVE N/A

< 1/8

1/8 QUEENS, NY 11691

0.026 mi. 139 ft.

Relative: E DESIGNATION:

 Lower
 Tax Lot(s):
 9

 Actual:
 Tax Block:
 15528

 19 ft.
 Borough Code:
 QN

 E-No:
 E-415

 Effective Date:
 9/7/201

Effective Date: 9/7/2017
Satisfaction Date: Not reported
Ceqr Number: 16DME010Q

Ulurp Number: 170243AZMQ, 170244AZRQ

Zoning Map No: 25b, 31a

Description: Air Quality - HVAC fuel limited to natural gas

Lot Remediation Date: Not reported

Description: Hazardous Materials* Phase I and Phase II Testing Protocol

Lot Remediation Date: Not reported

Description: Window Wall Attenuation & Alternate Ventilation

Lot Remediation Date: Not reported

B6 LOT 101,TAXBLOCK 15709 NY E DESIGNATION S121343833

SSW 21-41 MOTT AVENUE < 1/8 QUEENS, NY 11691

0.032 mi.

167 ft. Site 1 of 2 in cluster B

Relative: E DESIGNATION:

 Lower
 Tax Lot(s):
 101

 Actual:
 Tax Block:
 15709

 21 ft.
 Borough Code:
 QN

 E-No:
 E-415

TC5471477.6s Page 15

N/A

Direction Distance

Elevation Site Database(s) EPA ID Number

LOT 101, TAXBLOCK 15709 (Continued)

S121343833

EDR ID Number

Effective Date: 9/7/2017
Satisfaction Date: Not reported
Ceqr Number: 16DME010Q

Ulurp Number: 170243AZMQ, 170244AZRQ

Zoning Map No: 25b, 31a

Description: Exhaust stack location limitations

Lot Remediation Date: Not reported

Description: Hazardous Materials* Phase I and Phase II Testing Protocol

Lot Remediation Date: Not reported

Description: Window Wall Attenuation & Alternate Ventilation

Lot Remediation Date: Not reported

Description: Air Quality - HVAC fuel limited to natural gas

Lot Remediation Date: Not reported

B7 LOT 109,TAXBLOCK 15709 NY E DESIGNATION S121343836 South 21-23 MOTT AVENUE N/A

South 21-23 MOTT AVENUE < 1/8 QUEENS, NY 11691 0.038 mi.

198 ft. Site 2 of 2 in cluster B

Relative: E DESIGNATION:

 Lower
 Tax Lot(s):
 109

 Actual:
 Tax Block:
 15709

 24 ft.
 Borough Code:
 QN

 E-No:
 E-415

Effective Date: 9/7/2017
Satisfaction Date: Not reported
Ceqr Number: 16DME010Q

Ulurp Number: 170243AZMQ, 170244AZRQ

Zoning Map No: 25b, 31a

Description: Exhaust stack location limitations

Lot Remediation Date: Not reported

Description: Hazardous Materials* Phase I and Phase II Testing Protocol

Lot Remediation Date: Not reported

Description: Window Wall Attenuation & Alternate Ventilation

Lot Remediation Date: Not reported

Description: Air Quality - HVAC fuel limited to natural gas

Lot Remediation Date: Not reported

Direction Distance

Distance EDR ID Number Elevation Site EDR ID Number Database(s) EPA ID Number

C8 LOT 1,TAXBLOCK 15661 NY E DESIGNATION S121343808

N/A

N/A

West 22-02 MOTT AVENUE < 1/8 QUEENS, NY 11691

0.048 mi.

251 ft. Site 1 of 2 in cluster C

Relative: E DESIGNATION: Lower Tax Lot(s):

Actual: Tax Block: 15661
15 ft. Borough Code: QN
E-No: E-415

E-No: E-415
Effective Date: 9/7/2017
Satisfaction Date: Not reported
Ceqr Number: 16DME010Q

Ulurp Number: 170243AZMQ, 170244AZRQ

Zoning Map No: 25b, 31a

Description: Air Quality - HVAC natural gas with low Nox only

Lot Remediation Date: Not reported

Description: Hazardous Materials* Phase I and Phase II Testing Protocol

Lot Remediation Date: Not reported

Description: Window Wall Attenuation & Alternate Ventilation

Lot Remediation Date: Not reported

C9 LOT 80,TAXBLOCK 15661 NY E DESIGNATION S121344030

WNW 13-15 BEACH CHANNEL DRIVE

< 1/8 QUEENS, NY 11691

0.048 mi.

253 ft. Site 2 of 2 in cluster C

Relative: E DESIGNATION: Lower Tax Lot(s):

 Actual:
 Tax Block:
 15661

 15 ft.
 Borough Code:
 QN

 E-No:
 E-415

 Effective Date:
 9/7/2017

 Selicitation Date:
 Not sense

Effective Date: 9/7/2017
Satisfaction Date: Not reported
Ceqr Number: 16DME010Q

Ulurp Number: 170243AZMQ, 170244AZRQ

80

Zoning Map No: 25b, 31a

Description: Hazardous Materials* Phase I and Phase II Testing Protocol

Lot Remediation Date: Not reported

Description: Window Wall Attenuation & Alternate Ventilation

Lot Remediation Date: Not reported

Direction Distance

EDR ID Number Elevation Site **EPA ID Number** Database(s)

D10 SNOW WHITE DRY CLEANING CORP **EDR Hist Cleaner** 1020089789 SSE

20-88 MOTT AVE N/A

< 1/8 0.049 mi.

257 ft. Site 1 of 5 in cluster D Relative: **EDR Hist Cleaner**

FAR ROCKAWAY, NY 11691

Higher

Year: Name: Type: Actual: 1986 SNOW WHITE DRY CLEANING CORP* Drycleaning Plants, Except Rugs 25 ft. SNOW WHITE DRY CLEANING CORP* Drycleaning Plants, Except Rugs 1987 1988 SNOW WHITE DRY CLEANING CORP Drycleaning Plants, Except Rugs 1989 SNOW WHITE DRY CLEANING CORP Drycleaning Plants, Except Rugs 1990 SNOW WHITE DRY CLEANING CORP 1991 SNOW WHITE DRY CLEANING CORP

Drycleaning Plants, Except Rugs Drycleaning Plants, Except Rugs 1992 SNOW WHITE DRY CLEANING CORP Drycleaning Plants, Except Rugs Drycleaning Plants, Except Rugs 1993 SNOW WHITE DRY CLEANING CORP Drycleaning Plants, Except Rugs 1994 SNOW WHITE DRY CLEANING CORP 1995 SNOW WHITE DRY CLEANING CORP Drycleaning Plants, Except Rugs Drycleaning Plants, Except Rugs 1996 SNOW WHITE DRY CLEANING CORP 1997 SNOW WHITE DRY CLEANING CORP Drycleaning Plants, Except Rugs Drycleaning Plants, Except Rugs 1998 SNOW WHITE DRY CLEANING CORP 1999 SNOW WHITE DRY CLEANING CORP Drycleaning Plants, Except Rugs 2000 SNOW WHITE DRY CLEANING CORP Drycleaning Plants, Except Rugs Drycleaning Plants, Except Rugs 2001 SNOW WHITE DRY CLEANING CORP 2002 SNOW WHITE DRY CLEANING CORP Drycleaning Plants, Except Rugs Drycleaning Plants, Except Rugs 2003 SNOW WHITE DRY CLEANING CORP 2004 SNOW WHITE DRY CLEANING CORP Drycleaning Plants, Except Rugs Drycleaning Plants, Except Rugs 2005 SNOW WHITE DRY CLEANING CORP 2006 SNOW WHITE DRY CLEANING CORP Drycleaning Plants, Except Rugs

Drycleaning Plants, Except Rugs 2007 SNOW WHITE DRY CLEANING CORP 2008 SNOW WHITE DRY CLEANING CORP Drycleaning Plants, Except Rugs 2009 SNOW WHITE DRY CLEANING CORP Drycleaning Plants, Except Rugs 2010 SNOW WHITE DRY CLEANING CORP Drycleaning Plants, Except Rugs 2011 SNOW WHITE DRY CLEANING CORP Drycleaning Plants, Except Rugs 2012 SNOW WHITE DRY CLEANING CORP Drycleaning Plants, Except Rugs

SNOW WHITE DRY CLEANING CORP Drycleaning Plants, Except Rugs 2013 SNOW WHITE DRY CLEANING CORP Drycleaning Plants, Except Rugs 2014

D11 NY DRYCLEANERS **SNOW WHITE DRY CLEANERS**

SSE 20-88 MOTT AVE.

< 1/8 FAR ROCKAWAY, NY 11691

0.049 mi.

257 ft. Site 2 of 5 in cluster D Relative: DRYCLEANERS:

Higher Facility ID: 2-6308-00464 Phone Number: 718-471-3770 Actual: Region: Not reported 25 ft.

> Registration Effective Date: 8/13/2001 15:28:53:156

Inspection Date: 05APR11 Install Date: 86/05 Drop Shop:

Shutdown: Not reported Alternate Solvent: Not reported Current Business: Not reported S110247931

N/A

Direction Distance

Elevation Site Database(s) EPA ID Number

D12 SNOW WHITE CLEANERS RCRA NonGen / NLR 1000434911
SSE 20-88 MOTT AVE US AIRS NYD982180663

< 1/8 FAR ROCKAWAY, NY 11691 NY MANIFEST

0.049 mi.

257 ft. Site 3 of 5 in cluster D

Relative: RCRA NonGen / NLR:

Higher Date form received by agency: 01/01/2007

Actual: Facility name: SNOW WHITE CLEANERS

25 ft. Facility address: 20-88 MOTT AVE

FAR ROCKAWAY, NY 11691 EPA ID: NYD982180663

Mailing address: MOTT AVE

FAR ROCKAWAY, NY 11691

Contact: Not reported Contact address: MOTT AVE

FAR ROCKAWAY, NY 11691

Contact country: US

Contact telephone: Not reported Contact email: Not reported

EPA Region: 02

Classification: Non-Generator

Description: Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:

Owner/operator name: BUN KUN MOON Owner/operator address: NOT REQUIRED

NOT REQUIRED, WY 99999

Owner/operator country: US

Owner/operator telephone: 212-555-1212 Owner/operator email: Not reported Not reported Owner/operator fax: Owner/operator extension: Not reported Legal status: Private Owner/Operator Type: Owner Owner/Op start date: Not reported Owner/Op end date: Not reported

Owner/operator name: BUN KUN MOON Owner/operator address: NOT REQUIRED

NOT REQUIRED, WY 99999

Owner/operator country: US

Owner/operator telephone: 212-555-1212 Owner/operator email: Not reported Owner/operator fax: Not reported Owner/operator extension: Not reported Private Legal status: Owner/Operator Type: Operator Owner/Op start date: Not reported Owner/Op end date: Not reported

Handler Activities Summary:

U.S. importer of hazardous waste: No Mixed waste (haz. and radioactive): No Recycler of hazardous waste: No Transporter of hazardous waste: No Treater, storer or disposer of HW: No Underground injection activity: No

Direction Distance

Elevation Site Database(s) EPA ID Number

SNOW WHITE CLEANERS (Continued)

1000434911

EDR ID Number

On-site burner exemption: No Furnace exemption: No Used oil fuel burner: No Used oil processor: No User oil refiner: No Used oil fuel marketer to burner: No Used oil Specification marketer: No Used oil transfer facility: Nο Used oil transporter: No

Historical Generators:

Date form received by agency: 01/01/2006

Site name: SNOW WHITE CLEANERS

Classification: Conditionally Exempt Small Quantity Generator

Date form received by agency: 05/22/1995

Site name: SNOW WHITE CLEANERS
Classification: Small Quantity Generator

. Waste code: NONE . Waste name: None

Date form received by agency: 04/27/1987

Site name: SNOW WHITE CLEANERS
Classification: Small Quantity Generator

Waste code: D000
Waste name: Not Defined

Waste code: D001

. Waste name: IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF

LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT

WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.

. Waste code: F002

Waste name: THE FOLLOWING SPENT HALOGENATED SOLVENTS: TETRACHLOROETHYLENE,

METHYLENE CHLORIDE, TRICHLOROETHYLENE, 1,1,1-TRICHLOROETHANE,

CHLOROBENZENE, 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE, ORTHO-DICHLOROBENZENE, TRICHLOROFLUOROMETHANE, AND

1,1,2-TRICHLOROETHANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE LISTED IN F001, F004, OR F005, AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND

SPENT SOLVENT MIXTURES.

Violation Status: No violations found

US AIRS MINOR:

Envid: 1000434911

Region Code: 02

Programmatic ID: AIR NY0000002630800464

Facility Registry ID: 110004414535
D and B Number: Not reported

Direction Distance

Elevation Site Database(s) EPA ID Number

SNOW WHITE CLEANERS (Continued)

1000434911

EDR ID Number

Primary SIC Code: 7216

NAICS Code: 812320

Default Air Classification Code: MIN

Facility Type of Ownership Code: POF

Air CMS Category Code: Not reported

HPV Status: Not reported

US AIRS MINOR:

Region Code: 02

Programmatic ID: AIR NY0000002630800464

Facility Registry ID: 110004414535

Air Operating Status Code: OPR Default Air Classification Code: MIN

Air Program: MACT Standards (40 CFR Part 63)

Activity Date: 2000-10-13 00:00:00
Activity Status Date: Not reported

Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation

Activity Status: Not reported

Region Code: 02

Programmatic ID: AIR NY0000002630800464

Facility Registry ID: 110004414535

Air Operating Status Code: OPR
Default Air Classification Code: MIN

Air Program: MACT Standards (40 CFR Part 63)

Activity Date: 2001-10-11 00:00:00

Activity Status Date: Not reported

Activity Group: Compliance Monitoring Activity Type: Inspection/Evaluation

Activity Status: Not reported

Region Code: 02

Programmatic ID: AIR NY0000002630800464

Facility Registry ID: 110004414535

Air Operating Status Code: OPR Default Air Classification Code: MIN

Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards

Activity Date: 2000-10-13 00:00:00

Activity Status Date: Not reported

Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation

Activity Status: Not reported

Region Code: 02

Programmatic ID: AIR NY0000002630800464

Facility Registry ID: 110004414535

Air Operating Status Code: OPR
Default Air Classification Code: MIN

Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards

Activity Date: 2001-10-11 00:00:00

Activity Status Date: Not reported

Activity Group: Compliance Monitoring Activity Type: Inspection/Evaluation

Activity Status: Not reported

Direction Distance

Elevation Site Database(s) EPA ID Number

SNOW WHITE CLEANERS (Continued)

1000434911

EDR ID Number

US AIRS MINOR:

Envid: 1000434911

Region Code: 02

Programmatic ID: AIR NY0000002630800464

Facility Registry ID: 110004414535
D and B Number: Not reported
Primary SIC Code: 7216
NAICS Code: 812320
Default Air Classification Code: MIN
Facility Type of Ownership Code: POF
Air CMS Category Code: Not reported
HPV Status: Not reported

US AIRS MINOR:

Region Code: 02

Programmatic ID: AIR NY0000002630800464

Facility Registry ID: 110004414535

Air Operating Status Code: OPR Default Air Classification Code: MIN

Air Program: MACT Standards (40 CFR Part 63)

Activity Date: 2000-10-13 00:00:00

Activity Status Date: Not reported

Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation

Activity Status: Not reported

Region Code: 02

Programmatic ID: AIR NY0000002630800464

Facility Registry ID: 110004414535

Air Operating Status Code: OPR Default Air Classification Code: MIN

Air Program: MACT Standards (40 CFR Part 63)

Activity Date: 2001-10-11 00:00:00

Activity Status Date: Not reported

Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation

Activity Status: Not reported

Region Code: 02

Programmatic ID: AIR NY0000002630800464

Facility Registry ID: 110004414535

Air Operating Status Code: OPR Default Air Classification Code: MIN

Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards

Activity Date: 2000-10-13 00:00:00

Activity Status Date: Not reported

Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation

Activity Status: Not reported

Region Code: 02

Programmatic ID: AIR NY0000002630800464

Facility Registry ID: 110004414535

Air Operating Status Code: OPR
Default Air Classification Code: MIN

Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards

Activity Date: 2001-10-11 00:00:00

Direction Distance

Elevation Site Database(s) EPA ID Number

SNOW WHITE CLEANERS (Continued)

1000434911

EDR ID Number

Activity Status Date: Not reported

Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

NY MANIFEST:

Country: USA

EPA ID: NYD982180663 Facility Status: Not reported

Location Address 1: 2088 MOTT AVENUE

Code: BP

Location Address 2: Not reported
Total Tanks: Not reported
Location City: FAR ROCKAWAY

Location State: NY
Location Zip: 11691
Location Zip 4: Not reported

NY MANIFEST:

EPAID: NYD982180663

Mailing Name: SNOW WHITE CLEANERS
Mailing Contact: SNOW WHITE CLEANERS
Mailing Address 1: 2088 MOTT AVENUE
Mailing Address 2: Not reported

Mailing Address 2: Not reported Mailing City: FAR ROCKAWAY

Mailing State: NY
Mailing Zip: 11691
Mailing Zip 4: Not reported
Mailing Country: USA
Mailing Phone: 7184713770

NY MANIFEST:

Discr Type Indicator:

Discr Residue Indicator:

Discr Partial Reject Indicator:

Document ID: NYC7079872
Manifest Status: Not reported

seq: 01 Year: 2003 Trans1 State ID: NYAP6277 Trans2 State ID: T364DANJ Generator Ship Date: 06/27/2003 Trans1 Recv Date: 06/27/2003 Trans2 Recv Date: 07/03/2003 TSD Site Recv Date: 07/07/2003 Part A Recv Date: Not reported Part B Recv Date: Not reported NYD982180663 Generator EPA ID: Trans1 EPA ID: TXR000050930 NJD071629976 Trans2 EPA ID: TSDF ID 1: OHD980587364 TSDF ID 2: Not reported Manifest Tracking Number: Not reported Import Indicator: Not reported Not reported **Export Indicator:** Discr Quantity Indicator: Not reported

Not reported

Not reported

Not reported

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

SNOW WHITE CLEANERS (Continued)

1000434911

Discr Full Reject Indicator: Not reported Manifest Ref Number: Not reported Alt Facility RCRA ID: Not reported Alt Facility Sign Date: Not reported MGMT Method Type Code: Not reported

Waste Code: F002 - HALO SOLV + STILL BOTTOMS FM REC OF SOLV

Waste Code: Not reported Waste Code: Not reported Waste Code: Not reported Waste Code: Not reported Waste Code: Not reported Quantity: 00120 Units: P - Pounds Number of Containers: 001

Container Type: DF - Fiberboard or plastic drums (glass) Handling Method: B Incineration, heat recovery, burning.

Specific Gravity: 01.00

Waste Code: F002 - HALO SOLV + STILL BOTTOMS FM REC OF SOLV

Waste Code: Not reported Waste Code: Not reported Waste Code: Not reported Waste Code: Not reported Quantity: 00120 Units: P - Pounds Number of Containers: 002

Container Type: DF - Fiberboard or plastic drums (glass) Handling Method: B Incineration, heat recovery, burning.

Specific Gravity:

Waste Code: F002 - HALO SOLV + STILL BOTTOMS FM REC OF SOLV

Waste Code: Not reported Waste Code: Not reported Waste Code: Not reported Waste Code: Not reported Quantity: 00195 P - Pounds Units: Number of Containers: 001

DF - Fiberboard or plastic drums (glass) Container Type: Handling Method: B Incineration, heat recovery, burning.

Specific Gravity: 01.00

> Click this hyperlink while viewing on your computer to access -1 additional NY MANIFEST: record(s) in the EDR Site Report.

D13 MTA NYCT - MOTT AVENUE STATION - A

SSE **MOTT AVE & BEACH 22ND ST** < 1/8 FAR ROCKAWAY, NY 11691

0.057 mi.

299 ft. Site 4 of 5 in cluster D

Relative: RCRA-SQG:

Higher Date form received by agency: 08/17/2007

MTA NYCT - MOTT AVENUE STATION - A Facility name: Actual:

Facility address: MOTT AVE & BEACH 22ND ST 25 ft.

FAR ROCKAWAY, NY 11691

EPA ID: NYR000150961

BROADWAY 5TH FLOOR Mailing address:

NEW YORK, NY 10004

RCRA-SQG 1010566447

NYR000150961

NJ MANIFEST

NY MANIFEST

Direction Distance Elevation

tion Site Database(s) EPA ID Number

MTA NYCT - MOTT AVENUE STATION - A (Continued)

1010566447

EDR ID Number

Contact: LUMINITA MARINESCU
Contact address: BROADWAY 5TH FLOOR

NEW YORK, NY 10004

Contact country: US

Contact telephone: 646-252-3506

Contact email: LUMINITA.MARINESCU@NYCT.COM

EPA Region: 02

Classification: Small Small Quantity Generator

Description: Handler: generates more than 100 and less than 1000 kg of hazardous

waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of

hazardous waste at any time

Owner/Operator Summary:

Owner/operator name: MTA NYCT

Owner/operator address: BROADWAY 5TH FLOOR

NEW YORK, NY 10004

Owner/operator country: US

Owner/operator telephone: Not reported Owner/operator email: Not reported Owner/operator fax: Not reported Owner/operator extension: Not reported Legal status: State Owner/Operator Type: Owner Owner/Op start date: 03/01/1968 Owner/Op end date: Not reported

Owner/operator address: MTA NYCT
Not reported

Not reported Not reported

Owner/operator telephone: Not reported Owner/operator email: Not reported Owner/operator fax: Not reported Owner/operator extension: Not reported Legal status: State Owner/Operator Type: Operator Owner/Op start date: 03/01/1968 Owner/Op end date: Not reported

Handler Activities Summary:

Owner/operator country:

U.S. importer of hazardous waste: No Mixed waste (haz. and radioactive): No Recycler of hazardous waste: No Transporter of hazardous waste: No Treater, storer or disposer of HW: No Underground injection activity: No On-site burner exemption: No Furnace exemption: No Used oil fuel burner: No Used oil processor: No User oil refiner: No Used oil fuel marketer to burner: No Used oil Specification marketer: No Used oil transfer facility: No

Direction Distance

Elevation Site Database(s) EPA ID Number

MTA NYCT - MOTT AVENUE STATION - A (Continued)

1010566447

EDR ID Number

Used oil transporter: No

. Waste code: D008 . Waste name: LEAD

Historical Generators:

Date form received by agency: 08/16/2007

Site name: MTA NYCT - MOTT AVENUE STATION - A

Classification: Small Quantity Generator

Violation Status: No violations found

NJ MANIFEST:

EPA Id: NYR000150961

Mail Address: BROADWAY 5TH FLOOR Mail City/State/Zip: NEW YORK, NY 10004

Facility Phone: Not reported Emergency Phone: Not reported

Contact: LUMINITA MARINESCU

Comments: Not reported SIC Code: Not reported County: NY081 Municipal: Not reported Previous EPA Id: Not reported Not reported Gen Flag: Not reported Trans Flag: TSDF Flag: Not reported Name Change: Not reported Date Change: Not reported

Manifest:

Manifest Number: 000199708WAS EPA ID: NYR000150961 Date Shipped: 05/10/2010 TSDF EPA ID: NJD991291105 Transporter EPA ID: NYD046765574 Transporter 2 EPA ID: Not reported Transporter 3 EPA ID: Not reported Transporter 4 EPA ID: Not reported Not reported Transporter 5 EPA ID: Transporter 6 EPA ID: Not reported Transporter 7 EPA ID: Not reported Transporter 8 EPA ID: Not reported Transporter 9 EPA ID: Not reported Not reported Transporter 10 EPA ID: Date Trans1 Transported Waste: 05/10/2010 Date Trans2 Transported Waste: Not reported Date Trans3 Transported Waste: Not reported Date Trans4 Transported Waste: Not reported Date Trans5 Transported Waste: Not reported Date Trans6 Transported Waste: Not reported Date Trans7 Transported Waste: Not reported Date Trans8 Transported Waste: Not reported Date Trans9 Transported Waste: Not reported Date Trans10 Transported Waste: Not reported Date TSDF Received Waste: 05/11/2010 TSDF EPA Facility Name: Not reported QTY Units: Not reported

Direction Distance Elevation

Site Database(s) EPA ID Number

MTA NYCT - MOTT AVENUE STATION - A (Continued)

1010566447

EDR ID Number

Transporter SEQ ID: Not reported Not reported Transporter-1 Date: Waste SEQ ID: Not reported Waste Type Code 2: Not reported Waste Type Code 3: Not reported Not reported Waste Type Code 4: Not reported Waste Type Code 5: Not reported Waste Type Code 6: Date Accepted: Not reported Manifest Discrepancy Type: Not reported Data Entry Number: Not reported

Was Load Rejected: NEW YORK, NY 10004

Reason Load Was Rejected: Not reported

Waste

Manifest Year:
Waste Code:
Hand Code:
Quantity:
Not reported
H008
H111
H111
H100 P

000199760WAS Manifest Number: EPA ID: NYR000150961 Date Shipped: 05/25/2010 TSDF EPA ID: NJD991291105 Transporter EPA ID: NYD046765574 Transporter 2 EPA ID: Not reported Transporter 3 EPA ID: Not reported Transporter 4 EPA ID: Not reported Transporter 5 EPA ID: Not reported Transporter 6 EPA ID: Not reported Transporter 7 EPA ID: Not reported Transporter 8 EPA ID: Not reported Transporter 9 EPA ID: Not reported Transporter 10 EPA ID: Not reported 05/25/2010 Date Trans1 Transported Waste: Date Trans2 Transported Waste: Not reported Date Trans3 Transported Waste: Not reported Date Trans4 Transported Waste: Not reported Date Trans5 Transported Waste: Not reported Date Trans6 Transported Waste: Not reported Date Trans7 Transported Waste: Not reported Date Trans8 Transported Waste: Not reported Date Trans9 Transported Waste: Not reported Date Trans10 Transported Waste: Not reported 05/25/2010 Date TSDF Received Waste: TSDF EPA Facility Name: Not reported QTY Units: Not reported Transporter SEQ ID: Not reported Transporter-1 Date: Not reported Not reported Waste SEQ ID: Waste Type Code 2: Not reported Waste Type Code 3: Not reported Not reported Waste Type Code 4: Not reported Waste Type Code 5: Waste Type Code 6: Not reported Date Accepted: Not reported Manifest Discrepancy Type: Not reported

Direction Distance Elevation

ion Site Database(s) EPA ID Number

MTA NYCT - MOTT AVENUE STATION - A (Continued)

1010566447

EDR ID Number

Data Entry Number: Not reported

Was Load Rejected: NEW YORK, NY 10004

Reason Load Was Rejected: Not reported

Waste:

Manifest Year:
Waste Code:
D008
Hand Code:
H111
Quantity:
400 P

Manifest Number: 000200280WAS EPA ID: NYR000150961 Date Shipped: 09/10/2010 TSDF EPA ID: NJD991291105 Transporter EPA ID: NYD046765574 Not reported Transporter 2 EPA ID: Transporter 3 EPA ID: Not reported Transporter 4 EPA ID: Not reported Transporter 5 EPA ID: Not reported Transporter 6 EPA ID: Not reported Transporter 7 EPA ID: Not reported Transporter 8 EPA ID: Not reported Transporter 9 EPA ID: Not reported Not reported Transporter 10 EPA ID: Date Trans1 Transported Waste: 09/10/2010 Date Trans2 Transported Waste: Not reported Not reported Date Trans3 Transported Waste: Date Trans4 Transported Waste: Not reported Date Trans5 Transported Waste: Not reported Date Trans6 Transported Waste: Not reported Date Trans7 Transported Waste: Not reported Date Trans8 Transported Waste: Not reported Date Trans9 Transported Waste: Not reported Date Trans10 Transported Waste: Not reported 09/13/2010 Date TSDF Received Waste: TSDF EPA Facility Name: Not reported QTY Units: Not reported Transporter SEQ ID: Not reported Not reported Transporter-1 Date: Waste SEQ ID: Not reported Not reported Waste Type Code 2: Waste Type Code 3: Not reported Waste Type Code 4: Not reported Waste Type Code 5: Not reported Waste Type Code 6: Not reported Date Accepted: Not reported Manifest Discrepancy Type: Not reported Data Entry Number: Not reported

Was Load Rejected: NEW YORK, NY 10004

Reason Load Was Rejected: Not reported

Waste:

Manifest Year:
Waste Code:
D008
Hand Code:
H111
Quantity:

Not reported
D008
H111
400 P

Direction Distance Elevation

ance EDR ID Number vation Site Database(s) EPA ID Number

MTA NYCT - MOTT AVENUE STATION - A (Continued)

1010566447

Manifest Number: 000457304WAS NYR000150961 EPA ID: Date Shipped: 3/27/2012 TSDF EPA ID: NJD991291105 Transporter EPA ID: NYD046765574 Transporter 2 EPA ID: Not reported Transporter 3 EPA ID: Not reported Not reported Transporter 4 EPA ID: Transporter 5 EPA ID: Not reported Transporter 6 EPA ID: Not reported Transporter 7 EPA ID: Not reported Transporter 8 EPA ID: Not reported Transporter 9 EPA ID: Not reported Transporter 10 EPA ID: Not reported Date Trans1 Transported Waste: Not reported Date Trans2 Transported Waste: Not reported Date Trans3 Transported Waste: Not reported Date Trans4 Transported Waste: Not reported Date Trans5 Transported Waste: Not reported Date Trans6 Transported Waste: Not reported Date Trans7 Transported Waste: Not reported Date Trans8 Transported Waste: Not reported Not reported Date Trans9 Transported Waste: Date Trans10 Transported Waste: Not reported Date TSDF Received Waste: Not reported Not reported TSDF EPA Facility Name: QTY Units: Not reported Transporter SEQ ID: Not reported Transporter-1 Date: Not reported Waste SEQ ID: Not reported Waste Type Code 2: Not reported Waste Type Code 3: Not reported Waste Type Code 4: Not reported Waste Type Code 5: Not reported Not reported Waste Type Code 6: Date Accepted: Not reported Manifest Discrepancy Type: Not reported Data Entry Number: Not reported

Was Load Rejected: NEW YORK, NY 10004

Reason Load Was Rejected: Not reported

Waste:

Manifest Year:
Waste Code:
Hand Code:
Quantity:
Not reported
Not reported
100.00 Pounds

Manifest Number: 000423494WAS NYR000150961 EPA ID: Date Shipped: 6/7/2011 TSDF EPA ID: NJD991291105 Transporter EPA ID: NYD046765574 Transporter 2 EPA ID: Not reported Not reported Transporter 3 EPA ID: Transporter 4 EPA ID: Not reported Transporter 5 EPA ID: Not reported Transporter 6 EPA ID: Not reported

Direction Distance Elevation

EDR ID Number Site Database(s) **EPA ID Number**

MTA NYCT - MOTT AVENUE STATION - A (Continued)

1010566447

Transporter 7 EPA ID: Not reported Not reported Transporter 8 EPA ID: Transporter 9 EPA ID: Not reported Transporter 10 EPA ID: Not reported Date Trans1 Transported Waste: Not reported Not reported Date Trans2 Transported Waste: Not reported Date Trans3 Transported Waste: Not reported Date Trans4 Transported Waste: Date Trans5 Transported Waste: Not reported Date Trans6 Transported Waste: Not reported Date Trans7 Transported Waste: Not reported Date Trans8 Transported Waste: Not reported Date Trans9 Transported Waste: Not reported Date Trans10 Transported Waste: Not reported Date TSDF Received Waste: Not reported TSDF EPA Facility Name: Not reported Not reported QTY Units: Transporter SEQ ID: Not reported Transporter-1 Date: Not reported Waste SEQ ID: Not reported Waste Type Code 2: Not reported Waste Type Code 3: Not reported Not reported Waste Type Code 4: Waste Type Code 5: Not reported Not reported Waste Type Code 6: Not reported Date Accepted: Manifest Discrepancy Type: Not reported Data Entry Number: Not reported NEW YORK, NY 10004 Was Load Rejected:

Reason Load Was Rejected: Not reported

Waste:

Manifest Year: Not reported Waste Code: D008 Hand Code: H111

100.00 Pounds Quantity:

Manifest Number: 000201883WAS EPA ID: NYR000150961 Date Shipped: 11/24/2010 TSDF EPA ID: NJD991291105 Transporter EPA ID: NYD046765574 Transporter 2 EPA ID: Not reported Not reported Transporter 3 EPA ID: Transporter 4 EPA ID: Not reported Transporter 5 EPA ID: Not reported Transporter 6 EPA ID: Not reported Transporter 7 EPA ID: Not reported Transporter 8 EPA ID: Not reported Transporter 9 EPA ID: Not reported Transporter 10 EPA ID: Not reported Date Trans1 Transported Waste: 11/24/2010 Date Trans2 Transported Waste: Not reported Not reported Date Trans3 Transported Waste: Date Trans4 Transported Waste: Not reported Date Trans5 Transported Waste: Not reported Date Trans6 Transported Waste: Not reported

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

MTA NYCT - MOTT AVENUE STATION - A (Continued)

1010566447

Date Trans7 Transported Waste: Not reported Date Trans8 Transported Waste: Not reported Date Trans9 Transported Waste: Not reported Date Trans10 Transported Waste: Not reported Date TSDF Received Waste: 11/24/2010 TSDF EPA Facility Name: Not reported QTY Units: Not reported Transporter SEQ ID: Not reported Transporter-1 Date: Not reported Waste SEQ ID: Not reported Not reported Waste Type Code 2: Waste Type Code 3: Not reported Not reported Waste Type Code 4: Not reported Waste Type Code 5: Waste Type Code 6: Not reported Not reported Date Accepted: Manifest Discrepancy Type: Not reported Data Entry Number: Not reported

Was Load Rejected: NEW YORK, NY 10004

Reason Load Was Rejected: Not reported

Waste:

Manifest Year: Not reported Waste Code: D008 Hand Code: H111 Quantity: 100 P

NY MANIFEST:

Country: USA

EPA ID: NYR000150961 Facility Status: Not reported

MOTT AVE & BEACH 22ND ST Location Address 1:

ΒP Code:

Location Address 2: Not reported Total Tanks: Not reported **FAR ROCKAWAY** Location City:

Location State: NY Location Zip: 11691 Location Zip 4: Not reported

NY MANIFEST:

EPAID: NYR000150961

Mailing Name: MTA NYCT - MOTT AVENUE STATION - A Mailing Contact: MTA NYCT - MOTT AVENUE STATION - A

Mailing Address 1: 2 BROADWAY ROOM A27.64

Mailing Address 2: Not reported **NEW YORK** Mailing City: Mailing State: NY Mailing Zip: 10004 Mailing Zip 4: Not reported Mailing Country: USA Mailing Phone: 6462525777

NY MANIFEST:

Direction Distance Elevation

n Site Database(s) EPA ID Number

MTA NYCT - MOTT AVENUE STATION - A (Continued)

1010566447

EDR ID Number

Document ID: Not reported Manifest Status: Not reported seq: Not reported Year: 2012

Trans1 State ID: NYD046785574 Trans2 State ID: Not reported 03/27/2012 Generator Ship Date: Trans1 Recv Date: 03/27/2012 Trans2 Recv Date: Not reported TSD Site Recv Date: 03/27/2012 Part A Recv Date: Not reported Part B Recv Date: Not reported NYR000150961 Generator EPA ID: Trans1 EPA ID: Not reported Trans2 EPA ID: Not reported TSDF ID 1: NJD991291105 TSDF ID 2: Not reported 000457304WAS Manifest Tracking Number:

Import Indicator: N
Export Indicator: N
Discr Quantity Indicator: N
Discr Type Indicator: N
Discr Residue Indicator: N
Discr Partial Reject Indicator: N
Discr Full Reject Indicator: N

Manifest Ref Number: Not reported
Alt Facility RCRA ID: Not reported
Alt Facility Sign Date: Not reported
MGMT Method Type Code: H111
Waste Code: Not reported
Waste Code: Not reported

Waste Code:
Waste Code:
Waste Code:
Waste Code:
Waste Code:
Waste Code:
Waste Code:
Waste Code:
Waste Code:
Waste Code:
Wot reported
Waste Code:
Quantity:
Units:
P - Pounds

Number of Containers: 1.0

Container Type: DM - Metal drums, barrels

Handling Method: T Chemical, physical, or biological treatment.

Specific Gravity:

Waste Code:

Waste Code 1_2:

Waste Code 1_3:

Waste Code 1_4:

Waste Code 1_5:

Waste Code 1_6:

Not reported

Not reported

Not reported

Not reported

<u>Click this hyperlink</u> while viewing on your computer to access -1 additional NY MANIFEST: record(s) in the EDR Site Report.

Direction Distance

Distance Elevation Site EDR ID Number

Database(s) EPA ID Number

D14 LOT 1,TAXBLOCK 15537 NY E DESIGNATION \$121343807

N/A

N/A

SE 20-02 MOTT AVENUE < 1/8 QUEENS, NY 11691

0.061 mi.

323 ft. Site 5 of 5 in cluster D

Relative: E DESIGNATION: Higher Tax Lot(s):

Actual: Tax Block:
25 ft. Borough Coo

Tax Block: 15537
Borough Code: QN
E-No: E-415
Effective Date: 9/7/2017
Satisfaction Date: Not reported
Ceqr Number: 16DME010Q

Ulurp Number: 170243AZMQ, 170244AZRQ

Zoning Map No: 25b, 31a

Description: Air Quality - HVAC natural gas with low Nox only

Lot Remediation Date: Not reported

Description: Exhaust stack location limitations

Lot Remediation Date: Not reported

Description: Hazardous Materials* Phase I and Phase II Testing Protocol

Lot Remediation Date: Not reported

Description: Window Wall Attenuation & Alternate Ventilation

Lot Remediation Date: Not reported

E15 LOT 40,TAXBLOCK 15537 NY E DESIGNATION S121343927

NE 18-01 REDFERN AVENUE < 1/8 QUEENS, NY 11691

0.062 mi.

327 ft. Site 1 of 3 in cluster E

Relative: E DESIGNATION:

 Lower
 Tax Lot(s):
 40

 Actual:
 Tax Block:
 15537

 24 ft.
 Borough Code:
 QN

 F-Mo:
 F-Mo:

E-No: E-415
Effective Date: 9/7/2017
Satisfaction Date: Not reported
Ceqr Number: 16DME010Q

Ulurp Number: 170243AZMQ, 170244AZRQ

Zoning Map No: 25b, 31a

Description: Air Quality - HVAC fuel limited to natural gas

Lot Remediation Date: Not reported

Description: Exhaust stack location limitations

Lot Remediation Date: Not reported

Description: Hazardous Materials* Phase I and Phase II Testing Protocol

Lot Remediation Date: Not reported

Description: Window Wall Attenuation & Alternate Ventilation

Lot Remediation Date: Not reported

Direction Distance

Distance EDR ID Number Elevation Site EDR ID Number Database(s) EPA ID Number

F16 HI AUTO SVCE EDR Hist Auto 1022010401
North 1346 BCH CHANL DR EDR Hist Auto N/A

< 1/8 FAR ROCKAWAY, NY 11691 0.071 mi.

376 ft. Site 1 of 4 in cluster F

Relative: Lower EDR Hist Auto

2013

2013

2014

2014

BEACH CHANNEL ISLAND CORP

BEACH CHANNEL ISLAND CORP

BP FAR ROCKAWAY

BP FAR ROCKAWAY

Gasoline Service Stations

Gasoline Service Stations

Gasoline Service Stations, NEC

Gasoline Service Stations. NEC

Year: Name: Type: Actual: 1983 M & Z SERVICE STATION INC General Automotive Repair Shops 14 ft. 1985 M & Z SERVICE STATION INC General Automotive Repair Shops 1986 M & Z SERVICE STATION INC General Automotive Repair Shops 1987 M & Z SERVICE STATION INC General Automotive Repair Shops MORTY FOREIGN & DOMESTIC AUTO 1992 General Automotive Repair Shops 1993 MORTY FOREIGN & DOMESTIC AUTO General Automotive Repair Shops HI AUTO SVCE General Automotive Repair Shops 1994 1994 MORTY FOREIGN & DOMESTIC AUTO General Automotive Repair Shops 1995 MORTY FOREIGN & DOMESTIC AUTO General Automotive Repair Shops HI AUTO SERVICE INC 1995 Gasoline Service Stations 1996 HI AUTO SERVICE INC Gasoline Service Stations 1997 HI AUTO SERVICE INC Gasoline Service Stations 1998 ASIF PETROLEUM CORP **Gasoline Service Stations** 1998 HI AUTO SERVICE INC **Gasoline Service Stations** 1999 ASIF PETROLEUM CORP Gasoline Service Stations 2000 ASIF PETROLEUM CORP Gasoline Service Stations 2001 ASIF PETROLEUM CORP Gasoline Service Stations 2001 BCD AUTO REPAIR INC General Automotive Repair Shops 2002 **BCD AUTO REPAIR INC** General Automotive Repair Shops 2002 ASIF PETROLEUM CORP Gasoline Service Stations 2002 1346 AMOCO STATION Gasoline Service Stations 2003 **BCD AUTO REPAIR INC** General Automotive Repair Shops 2003 1346 AMOCO STATION Gasoline Service Stations 2003 ASIF PETROLEUM CORP Gasoline Service Stations 2004 ASIF PETROLEUM CORP Gasoline Service Stations 2004 **BCD AUTO REPAIR INC** General Automotive Repair Shops 2004 1346 AMOCO STATION Gasoline Service Stations 2005 ASIF PETROLEUM CORP Gasoline Service Stations **BCD AUTO REPAIR INC** 2005 General Automotive Repair Shops 2005 1346 AMOCO STATION Gasoline Service Stations 2006 **BCD AUTO REPAIR INC** General Automotive Repair Shops 2006 ASIF PETROLEUM CORP **Gasoline Service Stations** 2007 ASIF PETROLEUM CORP Gasoline Service Stations 2007 **BCD AUTO REPAIR INC** General Automotive Repair Shops 2008 ASIF PETROLEUM CORP Gasoline Service Stations 2008 BEACH CHANNEL ISLAND CORP Gasoline Service Stations 2008 **BP FAR ROCKAWAY** Gasoline Service Stations, NEC 2009 **BP FAR ROCKAWAY** Gasoline Service Stations, NEC 2009 BEACH CHANNEL ISLAND CORP Gasoline Service Stations Gasoline Service Stations, NEC 2010 **BP FAR ROCKAWAY** 2010 BEACH CHANNEL ISLAND CORP Gasoline Service Stations 2011 **BP FAR ROCKAWAY** Gasoline Service Stations, NEC 2011 BEACH CHANNEL ISLAND CORP Gasoline Service Stations 2012 BEACH CHANNEL ISLAND CORP Gasoline Service Stations 2012 **BP FAR ROCKAWAY** Gasoline Service Stations, NEC

Direction Distance

Elevation Site Database(s) EPA ID Number

F17 BP #36611 NY AST U003297771
North 13-46 BEACH CHANNEL DRIVE N/A

North 13-46 BEACH CHANNEL DRIVE < 1/8 FAR ROCKAWAY, NY 11691

0.071 mi.

376 ft. Site 2 of 4 in cluster F

 Relative:
 AST:

 Lower
 Region:
 STATE

 Actual:
 DEC Region:
 2

 14 ft.
 Site Status:
 Active

 Facility Id:
 2-285862

 Program Type:
 PBS

UTM X: 605387.33891 UTM Y: 4495822.53645 Expiration Date: 03/01/2019 Site Type: Retail Gasoline Sales

Affiliation Records:

Site Id: 12726 Affiliation Type: Mail Contact

Company Name: BP PRODUCTS NORTH AMERICA INC

Contact Type: Not reported Contact Name: JOHN MAHONEY Address1: P.O. BOX 6038 Address2: Not reported City: **ARTESIA** State: CA 90702 Zip Code: Country Code: 001

Phone: (973) 392-6150

EMail: JOHN.MAHONEY@BP.COM

Fax Number: Not reported Modified By: DAFRANCI Date Last Modified: 2016-12-08

Site Id: 12726

Affiliation Type: Facility Operator
Company Name: BP #36611
Contact Type: Not reported

Contact Name: MUHAMMAD MUZAMMAL

Address1: Not reported Address2: Not reported City: Not reported State: NN

Zip Code: Not reported

Country Code: 001

Phone: (718) 868-8400
EMail: Not reported
Fax Number: Not reported
Modified By: EROBRECH
Date Last Modified: 2017-02-09

Site Id: 12726

Affiliation Type: Emergency Contact

Company Name: RODELEVEN SERVICE STATIONS, INC.

Contact Type: Not reported
Contact Name: JOHN MAHONEY
Address1: Not reported
Address2: Not reported
City: Not reported

Direction Distance

Elevation Site Database(s) EPA ID Number

BP #36611 (Continued) U003297771

State: NN

Zip Code: Not reported

Country Code: 999

Phone: (973) 392-6150
EMail: Not reported
Fax Number: Not reported
Modified By: MXLAY
Date Last Modified: 2016-10-06

Site Id: 12726
Affiliation Type: Facility Owner

Company Name: RODELEVEN SERVICE STATIONS, INC.

Contact Type: Not reported Contact Name: Not reported

Address1: 3333 NEW HYDE PARK RD., SUITE 201

Address2: Not reported City: NEW HYDE PARK

State: NY
Zip Code: 11042
Country Code: 001

Phone: (516) 365-8700
EMail: Not reported
Fax Number: Not reported
Modified By: NRLOMBAR
Date Last Modified: 2015-04-16

Tank Info:

 Tank Number:
 106

 Tank Id:
 53912

 Material Code:
 0022

Common Name of Substance: Waste Oil/Used Oil

Equipment Records:

A00 - Tank Internal Protection - None

B01 - Tank External Protection - Painted/Asphalt Coating H01 - Tank Leak Detection - Interstitial - Electronic Monitoring

104 - Overfill - Product Level Gauge (A/G)

J00 - Dispenser - None

G04 - Tank Secondary Containment - Double-Walled (Underground)

C00 - Pipe Location - No Piping

E04 - Piping Secondary Containment - Double walled UG

F00 - Pipe External Protection - None

D00 - Pipe Type - No Piping

Tank Location: 2

Tank Type: Fiberglass Reinforced Plastic

Tank Status: Closed - Removed
Pipe Model: Not reported
Install Date: 02/01/1998
Capacity Gallons: 280
Tightness Test Method: NN

Date Test:
Not reported
Next Test Date:
Not reported
Date Tank Closed:
O9/15/2007
Register:
True
Modified By:
NRLOMBAR

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

BP #36611 (Continued) U003297771

04/14/2017 Last Modified: waste oil/used oil Material Name:

NY UST U004062551 F18 **BP #36611** 13-46 BEACH CHANNEL DRIVE North N/A

FAR ROCKAWAY, NY 11691 < 1/8

0.071 mi.

376 ft. Site 3 of 4 in cluster F

UST: Relative:

Lower 2-285862 / Active Id/Status:

PBS Program Type: Actual: 14 ft. Region: STATE DEC Region:

Expiration Date: 03/01/2019 UTM X: 605387.33891 UTM Y: 4495822.53645 Site Type: Retail Gasoline Sales

Affiliation Records:

Site Id: 12726 Affiliation Type: Mail Contact

Company Name: BP PRODUCTS NORTH AMERICA INC

Contact Type: Not reported Contact Name: JOHN MAHONEY Address1: P.O. BOX 6038 Address2: Not reported **ARTESIA** City: State: CA 90702 Zip Code: Country Code: 001

Phone: (973) 392-6150

EMail: JOHN.MAHONEY@BP.COM

Fax Number: Not reported Modified By: **DAFRANCI** Date Last Modified: 2016-12-08

Site Id: 12726

Affiliation Type: **Facility Operator** Company Name: BP #36611 Contact Type: Not reported

Contact Name: MUHAMMAD MUZAMMAL

Address1: Not reported Not reported Address2: City: Not reported State: NN

Zip Code: Not reported Country Code: 001

Phone: (718) 868-8400 Not reported EMail: Fax Number: Not reported Modified By: **EROBRECH** Date Last Modified: 2017-02-09

Site Id: 12726

Affiliation Type: **Emergency Contact**

RODELEVEN SERVICE STATIONS, INC. Company Name:

Contact Type: Not reported

Direction Distance

Elevation Site Database(s) EPA ID Number

BP #36611 (Continued) U004062551

Contact Name: JOHN MAHONEY
Address1: Not reported
Address2: Not reported
City: Not reported
State: NN

Zip Code: Not reported

Country Code: 999

Phone: (973) 392-6150
EMail: Not reported
Fax Number: Not reported
Modified By: MXLAY
Date Last Modified: 2016-10-06

Site Id: 12726
Affiliation Type: Facility Owner

Company Name: RODELEVEN SERVICE STATIONS, INC.

Contact Type: Not reported Contact Name: Not reported

Address1: 3333 NEW HYDE PARK RD., SUITE 201

Address2: Not reported City: NEW HYDE PARK

State: NY
Zip Code: 11042
Country Code: 001

Phone: (516) 365-8700
EMail: Not reported
Fax Number: Not reported
Modified By: NRLOMBAR
Date Last Modified: 2015-04-16

Tank Info:

Tank Number: 001
Tank ID: 17612

Tank Status: Closed Prior to Micro Conversion, 03/91
Material Name: Closed Prior to Micro Conversion, 03/91

Gasoline

Capacity Gallons: 550
Install Date: 04/01/1970
Date Tank Closed: Not reported
Registered: True

Tank Location: Underground
Tank Type: Steel/carbon steel
Material Code: 0009

Tightness Test Method: NN

Common Name of Substance:

Date Test:
Not reported
Next Test Date:
Pipe Model:
Modified By:
Last Modified:
Not reported
TRANSLAT
Understanding 104/14/2017

Equipment Records:

H00 - Tank Leak Detection - None

100 - Overfill - None

B00 - Tank External Protection - None C00 - Pipe Location - No Piping

Direction Distance

Elevation Site Database(s) EPA ID Number

BP #36611 (Continued) U004062551

F00 - Pipe External Protection - None J02 - Dispenser - Suction Dispenser G00 - Tank Secondary Containment - None A00 - Tank Internal Protection - None D01 - Pipe Type - Steel/Carbon Steel/Iron

Tank Number: 002 Tank ID: 17613

Tank Status: Closed Prior to Micro Conversion, 03/91 Material Name: Closed Prior to Micro Conversion, 03/91

Capacity Gallons: 550
Install Date: 04/01/1970
Date Tank Closed: Not reported
Registered: True
Tank Location: Underground

Tank Location: Underground Tank Type: Steel/carbon steel

Material Code: 0009 Common Name of Substance: Gasoline

Tightness Test Method: NN

Date Test:
Not reported
Next Test Date:
Not reported
Pipe Model:
Modified By:
TRANSLAT
Last Modified:

Not reported
TRANSLAT
U4/14/2017

Equipment Records:

A00 - Tank Internal Protection - None
D01 - Pipe Type - Steel/Carbon Steel/Iron
B00 - Tank External Protection - None
C00 - Pipe Location - No Piping
F00 - Pipe External Protection - None
G00 - Tank Secondary Containment - None
J02 - Dispenser - Suction Dispenser
H00 - Tank Leak Detection - None

Tank Number: 003

Tank ID: 17614
Tank Status: Closed Prior to Micro Conversion, 03/91
Material Name: Closed Prior to Micro Conversion, 03/91

Gasoline

100 - Overfill - None

Capacity Gallons: 550
Install Date: 04/01/1970
Date Tank Closed: Not reported
Registered: True
Tank Location: Underground

Tank Type: Steel/carbon steel
Material Code: 0009

Tightness Test Method: NN

Common Name of Substance:

Date Test: Not reported
Next Test Date: Not reported
Pipe Model: Not reported
Modified By: TRANSLAT
Last Modified: 04/14/2017

MAP FINDINGS Map ID Direction

Distance

Elevation Site Database(s) **EPA ID Number**

BP #36611 (Continued) U004062551

Equipment Records:

H00 - Tank Leak Detection - None

100 - Overfill - None

B00 - Tank External Protection - None C00 - Pipe Location - No Piping F00 - Pipe External Protection - None G00 - Tank Secondary Containment - None J02 - Dispenser - Suction Dispenser A00 - Tank Internal Protection - None D01 - Pipe Type - Steel/Carbon Steel/Iron

Tank Number: 004 Tank ID: 17615

Tank Status: Closed Prior to Micro Conversion, 03/91 Material Name: Closed Prior to Micro Conversion, 03/91

Capacity Gallons: 550 Install Date: 04/01/1970 Date Tank Closed: Not reported Registered: True Tank Location: Underground

Tank Type: Steel/carbon steel

Material Code: 0009 Common Name of Substance: Gasoline

Tightness Test Method: NN

Date Test: Not reported Next Test Date: Not reported Pipe Model: Not reported **TRANSLAT** Modified By: Last Modified: 04/14/2017

Equipment Records:

A00 - Tank Internal Protection - None D01 - Pipe Type - Steel/Carbon Steel/Iron H00 - Tank Leak Detection - None

100 - Overfill - None

B00 - Tank External Protection - None C00 - Pipe Location - No Piping F00 - Pipe External Protection - None G00 - Tank Secondary Containment - None

J02 - Dispenser - Suction Dispenser

Tank Number: 005 Tank ID: 17616

Tank Status: Closed Prior to Micro Conversion, 03/91 Material Name: Closed Prior to Micro Conversion, 03/91

Capacity Gallons: 550

Install Date: 04/01/1970 Date Tank Closed: Not reported Registered: True Tank Location: Underground Tank Type: Steel/carbon steel

Material Code: 0009 Common Name of Substance: Gasoline

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

BP #36611 (Continued) U004062551

Tightness Test Method: NN

Date Test: Not reported Not reported Next Test Date: Pipe Model: Not reported Modified By: **TRANSLAT** 04/14/2017 Last Modified:

Equipment Records:

H00 - Tank Leak Detection - None

100 - Overfill - None

A00 - Tank Internal Protection - None D01 - Pipe Type - Steel/Carbon Steel/Iron B00 - Tank External Protection - None C00 - Pipe Location - No Piping F00 - Pipe External Protection - None G00 - Tank Secondary Containment - None J02 - Dispenser - Suction Dispenser

Tank Number: 006 Tank ID: 17617

Tank Status: Closed Prior to Micro Conversion, 03/91 Material Name: Closed Prior to Micro Conversion, 03/91

Capacity Gallons: 04/01/1970 Install Date: Date Tank Closed: Not reported Registered: True

Underground Tank Location: Tank Type: Steel/carbon steel

Material Code: 0009 Common Name of Substance: Gasoline

Tightness Test Method: NN

Date Test: Not reported Next Test Date: Not reported Not reported Pipe Model: TRANSLAT Modified By: Last Modified: 04/14/2017

Equipment Records:

H00 - Tank Leak Detection - None

100 - Overfill - None

B00 - Tank External Protection - None C00 - Pipe Location - No Piping F00 - Pipe External Protection - None G00 - Tank Secondary Containment - None J02 - Dispenser - Suction Dispenser A00 - Tank Internal Protection - None D01 - Pipe Type - Steel/Carbon Steel/Iron

007 Tank Number: Tank ID: 17618

Closed Prior to Micro Conversion, 03/91 Tank Status: Material Name: Closed Prior to Micro Conversion, 03/91

Capacity Gallons: 550 04/01/1970 Install Date: Date Tank Closed: Not reported

Direction Distance

Elevation Site Database(s) **EPA ID Number**

BP #36611 (Continued) U004062551

Registered: True

Tank Location: Underground Steel/carbon steel Tank Type:

0009 Material Code: Common Name of Substance: Gasoline

NN Tightness Test Method:

Date Test: Not reported Next Test Date: Not reported Pipe Model: Not reported Modified By: **TRANSLAT** 04/14/2017 Last Modified:

Equipment Records:

H00 - Tank Leak Detection - None

100 - Overfill - None

C00 - Pipe Location - No Piping F00 - Pipe External Protection - None B00 - Tank External Protection - None D01 - Pipe Type - Steel/Carbon Steel/Iron A00 - Tank Internal Protection - None J02 - Dispenser - Suction Dispenser G00 - Tank Secondary Containment - None

Tank Number: 800 Tank ID: 17619

Tank Status: Closed Prior to Micro Conversion, 03/91 Material Name: Closed Prior to Micro Conversion, 03/91

Capacity Gallons: 550 04/01/1970 Install Date: Date Tank Closed: Not reported Registered: True

Tank Location: Underground Tank Type: Steel/carbon steel

Material Code: 0009 Common Name of Substance: Gasoline

Tightness Test Method: NN

Date Test: Not reported Next Test Date: Not reported Not reported Pipe Model: Modified By: **TRANSLAT** Last Modified: 04/14/2017

Equipment Records:

H00 - Tank Leak Detection - None

100 - Overfill - None

A00 - Tank Internal Protection - None D01 - Pipe Type - Steel/Carbon Steel/Iron B00 - Tank External Protection - None C00 - Pipe Location - No Piping F00 - Pipe External Protection - None G00 - Tank Secondary Containment - None J02 - Dispenser - Suction Dispenser

Tank Number: 009

Direction Distance

Elevation Site Database(s) EPA ID Number

BP #36611 (Continued) U004062551

Tank ID: 17620

Tank Status: Closed Prior to Micro Conversion, 03/91 Material Name: Closed Prior to Micro Conversion, 03/91

Capacity Gallons: 550
Install Date: 04/01/1970
Date Tank Closed: Not reported
Registered: True
Tank Location: Underground
Tank Type: Steel/carbon steel

Material Code: 0009 Common Name of Substance: Gasoline

Tightness Test Method: NN

Date Test:
Not reported
Next Test Date:
Not reported
Pipe Model:
Not reported
Modified By:
TRANSLAT
Last Modified:
04/14/2017

Equipment Records:

B00 - Tank External Protection - None C00 - Pipe Location - No Piping F00 - Pipe External Protection - None H00 - Tank Leak Detection - None

100 - Overfill - None

G00 - Tank Secondary Containment - None J02 - Dispenser - Suction Dispenser A00 - Tank Internal Protection - None D01 - Pipe Type - Steel/Carbon Steel/Iron

Tank Number: 010 Tank ID: 17621

Tank Status: Closed Prior to Micro Conversion, 03/91 Material Name: Closed Prior to Micro Conversion, 03/91

Capacity Gallons: 550
Install Date: 04/01/1970
Date Tank Closed: Not reported
Registered: True
Tank Location: Underground
Tank Type: Steel/carbon steel

Material Code: 0009 Common Name of Substance: Gasoline

Tightness Test Method: NN

Date Test: Not reported
Next Test Date: Not reported
Pipe Model: Not reported
Modified By: TRANSLAT
Last Modified: 04/14/2017

Equipment Records:

H00 - Tank Leak Detection - None

100 - Overfill - None

B00 - Tank External Protection - None C00 - Pipe Location - No Piping F00 - Pipe External Protection - None A00 - Tank Internal Protection - None

Direction Distance

Elevation Site Database(s) EPA ID Number

BP #36611 (Continued) U004062551

D01 - Pipe Type - Steel/Carbon Steel/Iron G00 - Tank Secondary Containment - None J02 - Dispenser - Suction Dispenser

Tank Number: 011 Tank ID: 17622

Tank Status: Closed Prior to Micro Conversion, 03/91 Material Name: Closed Prior to Micro Conversion, 03/91

Capacity Gallons: 550
Install Date: 04/01/1970
Date Tank Closed: Not reported Registered: True

Tank Location: Underground Tank Type: Steel/carbon steel

Material Code: 0009 Common Name of Substance: Gasoline

Tightness Test Method: NN

Date Test:
Not reported
Next Test Date:
Not reported
Pipe Model:
Modified By:
TRANSLAT
Last Modified:

Not reported
Not reported
Value 12017

Equipment Records:

B00 - Tank External Protection - None C00 - Pipe Location - No Piping F00 - Pipe External Protection - None G00 - Tank Secondary Containment - None J02 - Dispenser - Suction Dispenser H00 - Tank Leak Detection - None

100 - Overfill - None

A00 - Tank Internal Protection - None D01 - Pipe Type - Steel/Carbon Steel/Iron

Tank Number: 012 Tank ID: 17623

Tank Status: Closed Prior to Micro Conversion, 03/91 Material Name: Closed Prior to Micro Conversion, 03/91

Capacity Gallons: 550
Install Date: 04/01/1970
Date Tank Closed: Not reported
Registered: True
Tank Location: Underground
Tank Type: Steel/carbon steel

Material Code: 0009 Common Name of Substance: Gasoline

Tightness Test Method: NN

Date Test:
Not reported
Next Test Date:
Pipe Model:
Modified By:
Last Modified:
Not reported
TRANSLAT
U4/2017

Equipment Records:

Direction Distance Elevation

vation Site Database(s) EPA ID Number

BP #36611 (Continued) U004062551

B00 - Tank External Protection - None C00 - Pipe Location - No Piping F00 - Pipe External Protection - None H00 - Tank Leak Detection - None

100 - Overfill - None

G00 - Tank Secondary Containment - None J02 - Dispenser - Suction Dispenser A00 - Tank Internal Protection - None D01 - Pipe Type - Steel/Carbon Steel/Iron

 Tank Number:
 013

 Tank ID:
 17624

Tank Status: Closed Prior to Micro Conversion, 03/91 Material Name: Closed Prior to Micro Conversion, 03/91

Capacity Gallons: 550

Install Date: Not reported Date Tank Closed: Not reported Registered: True

Tank Location: Underground Tank Type: Steel/carbon steel

Material Code: 9999 Common Name of Substance: Other

Tightness Test Method: NN

Date Test: Not reported
Next Test Date: Not reported
Pipe Model: Not reported
Modified By: TRANSLAT
Last Modified: 04/14/2017

Equipment Records:

H00 - Tank Leak Detection - None

100 - Overfill - None

A00 - Tank Internal Protection - None
D01 - Pipe Type - Steel/Carbon Steel/Iron
B00 - Tank External Protection - None
C00 - Pipe Location - No Piping
F00 - Pipe External Protection - None
G00 - Tank Secondary Containment - None

Tank Number: 014
Tank ID: 17625

Tank Status: Closed Prior to Micro Conversion, 03/91 Material Name: Closed Prior to Micro Conversion, 03/91

Capacity Gallons: 550

Install Date: Not reported
Date Tank Closed: Not reported
Registered: True
Tank Location: Underground
Tank Type: Steel/carbon steel

Material Code: 9999 Common Name of Substance: Other

Tightness Test Method: NN

Date Test: Not reported Next Test Date: Not reported

Direction Distance

Elevation Site Database(s) EPA ID Number

BP #36611 (Continued) U004062551

Pipe Model: Not reported Modified By: TRANSLAT Last Modified: 04/14/2017

Equipment Records:

H00 - Tank Leak Detection - None

100 - Overfill - None

B00 - Tank External Protection - None C00 - Pipe Location - No Piping F00 - Pipe External Protection - None G00 - Tank Secondary Containment - None A00 - Tank Internal Protection - None D01 - Pipe Type - Steel/Carbon Steel/Iron

 Tank Number:
 015

 Tank ID:
 17626

Tank Status: Closed Prior to Micro Conversion, 03/91 Material Name: Closed Prior to Micro Conversion, 03/91

Capacity Gallons: 550

Install Date: Not reported
Date Tank Closed: Not reported
Registered: True
Tank Location: Underground

Tank Type: Steel/carbon steel Material Code: 9999

Material Code: 9999
Common Name of Substance: Other

Tightness Test Method: NN

Date Test: Not reported
Next Test Date: Not reported
Pipe Model: Not reported
Modified By: TRANSLAT
Last Modified: 04/14/2017

Equipment Records:

H00 - Tank Leak Detection - None

100 - Overfill - None

B00 - Tank External Protection - None C00 - Pipe Location - No Piping F00 - Pipe External Protection - None G00 - Tank Secondary Containment - None A00 - Tank Internal Protection - None D01 - Pipe Type - Steel/Carbon Steel/Iron

 Tank Number:
 016

 Tank ID:
 17627

Tank Status: Closed Prior to Micro Conversion, 03/91 Material Name: Closed Prior to Micro Conversion, 03/91

Capacity Gallons: 550

Install Date: Not reported Date Tank Closed: Not reported Registered: True

Tank Location: Underground
Tank Type: Steel/carbon steel

Material Code: 9999 Common Name of Substance: Other

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

BP #36611 (Continued) U004062551

Tightness Test Method: NN

Not reported Date Test: Not reported Next Test Date: Pipe Model: Not reported Modified By: **TRANSLAT** 04/14/2017 Last Modified:

Equipment Records:

B00 - Tank External Protection - None C00 - Pipe Location - No Piping F00 - Pipe External Protection - None A00 - Tank Internal Protection - None D01 - Pipe Type - Steel/Carbon Steel/Iron H00 - Tank Leak Detection - None

100 - Overfill - None

G00 - Tank Secondary Containment - None

Tank Number: 017 Tank ID: 17628

Closed Prior to Micro Conversion, 03/91 Tank Status: Material Name: Closed Prior to Micro Conversion, 03/91

Capacity Gallons: 550

Install Date: Not reported Date Tank Closed: Not reported Registered: True

Tank Location: Underground Tank Type: Steel/carbon steel

Material Code: 9999 Common Name of Substance: Other

Tightness Test Method: NN

Date Test: Not reported Next Test Date: Not reported Not reported Pipe Model: Modified By: TRANSLAT Last Modified: 04/14/2017

Equipment Records:

H00 - Tank Leak Detection - None

100 - Overfill - None

B00 - Tank External Protection - None C00 - Pipe Location - No Piping F00 - Pipe External Protection - None G00 - Tank Secondary Containment - None A00 - Tank Internal Protection - None D01 - Pipe Type - Steel/Carbon Steel/Iron

Tank Number: 018 Tank ID: 17629

Closed Prior to Micro Conversion, 03/91 Tank Status: Material Name: Closed Prior to Micro Conversion, 03/91

Capacity Gallons: 550 Install Date: Not reported Date Tank Closed: Not reported Registered: True Tank Location: Underground

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

BP #36611 (Continued) U004062551

Tank Type: Steel/carbon steel

Material Code: 9999 Common Name of Substance: Other

Tightness Test Method: NN

Date Test: Not reported Next Test Date: Not reported Pipe Model: Not reported Modified By: **TRANSLAT** Last Modified: 04/14/2017

Equipment Records:

H00 - Tank Leak Detection - None

100 - Overfill - None

F00 - Pipe External Protection - None B00 - Tank External Protection - None C00 - Pipe Location - No Piping

G00 - Tank Secondary Containment - None D01 - Pipe Type - Steel/Carbon Steel/Iron A00 - Tank Internal Protection - None

Tank Number: 101 Tank ID: 17630 In Service Tank Status: Material Name: In Service Capacity Gallons: 4000 09/01/1990 Install Date: Date Tank Closed: Not reported Registered: True

Tank Location: Underground Tank Type: Equivalent technology

Material Code: 2712

Common Name of Substance: Gasoline/Ethanol

Tightness Test Method: 21

03/04/2015 Date Test: Next Test Date: Not reported Pipe Model: Not reported Modified By: **TLYE** Last Modified: 02/21/2018

Equipment Records:

G04 - Tank Secondary Containment - Double-Walled (Underground)

A00 - Tank Internal Protection - None

H01 - Tank Leak Detection - Interstitial - Electronic Monitoring

L99 - Piping Leak Detection - Other

E04 - Piping Secondary Containment - Double walled UG

C02 - Pipe Location - Underground/On-ground F04 - Pipe External Protection - Fiberglass J02 - Dispenser - Suction Dispenser B04 - Tank External Protection - Fiberglass

D06 - Pipe Type - Fiberglass Reinforced Plastic (FRP)

102 - Overfill - High Level Alarm K01 - Spill Prevention - Catch Basin

Tank Number: 102

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

BP #36611 (Continued) U004062551

Tank ID: 17631 Tank Status: In Service Material Name: In Service 4000 Capacity Gallons: Install Date: 09/01/1990 Date Tank Closed: Not reported Registered: True Tank Location: Underground

Tank Type: Equivalent technology

Material Code: 2712

Gasoline/Ethanol Common Name of Substance:

Tightness Test Method: 21

Date Test: 03/04/2015 Next Test Date: Not reported Pipe Model: Not reported Modified By: **TLYE** Last Modified: 02/21/2018

Equipment Records:

B04 - Tank External Protection - Fiberglass

D06 - Pipe Type - Fiberglass Reinforced Plastic (FRP)

102 - Overfill - High Level Alarm K01 - Spill Prevention - Catch Basin

G04 - Tank Secondary Containment - Double-Walled (Underground)

A00 - Tank Internal Protection - None

H01 - Tank Leak Detection - Interstitial - Electronic Monitoring

L99 - Piping Leak Detection - Other

E04 - Piping Secondary Containment - Double walled UG

J01 - Dispenser - Pressurized Dispenser

L07 - Piping Leak Detection - Pressurized Piping Leak Detector

C02 - Pipe Location - Underground/On-ground F04 - Pipe External Protection - Fiberglass

Tank Number: 103 Tank ID: 17632 Tank Status: In Service Material Name: In Service Capacity Gallons: 4000 Install Date: 09/01/1990 Date Tank Closed: Not reported Registered: True Tank Location: Underground

Tank Type: Equivalent technology

Material Code: 2712

Gasoline/Ethanol Common Name of Substance:

Tightness Test Method: 21

03/04/2015 Date Test: Next Test Date: Not reported Pipe Model: Not reported Modified By: **TLYE** 02/21/2018 Last Modified:

Equipment Records:

G04 - Tank Secondary Containment - Double-Walled (Underground) L07 - Piping Leak Detection - Pressurized Piping Leak Detector

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

BP #36611 (Continued) U004062551

B04 - Tank External Protection - Fiberglass

D06 - Pipe Type - Fiberglass Reinforced Plastic (FRP)

102 - Overfill - High Level Alarm K01 - Spill Prevention - Catch Basin

E04 - Piping Secondary Containment - Double walled UG

J01 - Dispenser - Pressurized Dispenser A00 - Tank Internal Protection - None L99 - Piping Leak Detection - Other

H01 - Tank Leak Detection - Interstitial - Electronic Monitoring

C02 - Pipe Location - Underground/On-ground F04 - Pipe External Protection - Fiberglass

Tank Number: 104 Tank ID: 17633 Tank Status: In Service Material Name: In Service Capacity Gallons: 4000 Install Date: 09/01/1990 Date Tank Closed: Not reported Registered: True

Tank Location: Underground

Equivalent technology Tank Type:

Material Code: 2712

Common Name of Substance: Gasoline/Ethanol

Tightness Test Method: 21

Date Test: 03/04/2015 Next Test Date: Not reported Pipe Model: Not reported Modified By: **TLYE** Last Modified: 02/21/2018

Equipment Records:

G04 - Tank Secondary Containment - Double-Walled (Underground)

A00 - Tank Internal Protection - None

H01 - Tank Leak Detection - Interstitial - Electronic Monitoring

L99 - Piping Leak Detection - Other

E04 - Piping Secondary Containment - Double walled UG

J01 - Dispenser - Pressurized Dispenser C02 - Pipe Location - Underground/On-ground F04 - Pipe External Protection - Fiberglass B04 - Tank External Protection - Fiberglass

D06 - Pipe Type - Fiberglass Reinforced Plastic (FRP)

102 - Overfill - High Level Alarm K01 - Spill Prevention - Catch Basin

L07 - Piping Leak Detection - Pressurized Piping Leak Detector

Tank Number: 105 Tank ID: 17634 Tank Status: In Service Material Name: In Service Capacity Gallons: 4000 Install Date: 09/01/1990 Not reported Date Tank Closed: Registered: True

Tank Location: Underground

Direction Distance

EDR ID Number Elevation Site **EPA ID Number** Database(s)

BP #36611 (Continued) U004062551

Tank Type: Equivalent technology

2712 Material Code:

Common Name of Substance: Gasoline/Ethanol

Tightness Test Method: 21

Date Test: 03/04/2015 Next Test Date: Not reported Pipe Model: Not reported Modified By: **TLYE** Last Modified: 02/21/2018

Equipment Records:

B04 - Tank External Protection - Fiberglass

D06 - Pipe Type - Fiberglass Reinforced Plastic (FRP)

102 - Overfill - High Level Alarm K01 - Spill Prevention - Catch Basin A00 - Tank Internal Protection - None

H01 - Tank Leak Detection - Interstitial - Electronic Monitoring

L99 - Piping Leak Detection - Other

E04 - Piping Secondary Containment - Double walled UG

J01 - Dispenser - Pressurized Dispenser

G04 - Tank Secondary Containment - Double-Walled (Underground)

RCRA-SQG

NY MANIFEST

1000446457

NYD986909505

C02 - Pipe Location - Underground/On-ground F04 - Pipe External Protection - Fiberglass

F19 **BP PRODUCTS NORTH AMERICA INC - BP 36611**

13-46 BEACH CHANNEL DR FAR ROCKAWAY, NY 11691

< 1/8 0.071 mi.

North

14 ft.

376 ft. Site 4 of 4 in cluster F

RCRA-SQG: Relative:

Lower Date form received by agency: 10/20/2015

BP PRODUCTS NORTH AMERICA INC - BP 36611 Facility name: Actual: 13-46 BEACH CHANNEL DR Facility address:

FAR ROCKAWAY, NY 11691

EPA ID: NYD986909505 Mailing address: PO BOX 80249

RANCHO SANTA MARGARITA, CA 92688

Contact: JOHN MAHONEY Contact address: PO BOX 6038 ARTESIA, CA 92688

Contact country: US

Contact telephone: 973-392-6150

Contact email: JOHN.MAHONEY@BP.COM

EPA Region:

Classification: Small Small Quantity Generator

Description: Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of

hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of

hazardous waste at any time

Owner/Operator Summary:

Owner/operator name: BP PRODUCTS NORTH AMERICA INC

Owner/operator address: Not reported

Not reported

Owner/operator country: US

Direction Distance

Elevation Site Database(s) EPA ID Number

BP PRODUCTS NORTH AMERICA INC - BP 36611 (Continued)

1000446457

EDR ID Number

Owner/operator telephone: Not reported Owner/operator email: Not reported Owner/operator fax: Not reported Owner/operator extension: Not reported Legal status: Private Owner/Operator Type: Operator Owner/Op start date: 11/01/1970 Owner/Op end date: Not reported

Owner/operator name: BP PRODUCTS NORTH AMERICA INC

Owner/operator address: PO BOX 6038

ARTESIA, CA 90702

Owner/operator country: US

Owner/operator telephone: 847-340-3092 Owner/operator email: Not reported Not reported Owner/operator fax: Owner/operator extension: Not reported Legal status: Private Owner/Operator Type: Owner 11/01/1970 Owner/Op start date: Owner/Op end date: Not reported

Handler Activities Summary:

U.S. importer of hazardous waste: No Mixed waste (haz. and radioactive): No Recycler of hazardous waste: Nο Transporter of hazardous waste: No Treater, storer or disposer of HW: No Underground injection activity: No On-site burner exemption: No Furnace exemption: Nο Used oil fuel burner: No Used oil processor: No User oil refiner: No Used oil fuel marketer to burner: No Used oil Specification marketer: No Used oil transfer facility: No Used oil transporter: No

. Waste code: D001

. Waste name: IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF

LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT

WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.

Historical Generators:

Date form received by agency: 01/01/2007

Site name: SPARTAN PETROLEUM
Classification: Not a generator, verified

Date form received by agency: 01/01/2006

Site name: SPARTAN PETROLEUM
Classification: Not a generator, verified

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

BP PRODUCTS NORTH AMERICA INC - BP 36611 (Continued)

1000446457

Date form received by agency: 04/19/1995

SPARTAN PETROLEUM Site name:

Classification: Unverified

Waste code: NONE Waste name: None

Date form received by agency: 08/09/1990

SPARTAN PETROLEUM Site name: Classification: Small Quantity Generator

Waste code: D001

IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF Waste name:

> LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT

WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.

Violation Status: No violations found

NY MANIFEST:

Country: USA

NYD986909505 EPA ID: Facility Status: Not reported

Location Address 1: AMOCO S/S 13-46 BEACH CHANNEL

Code:

Location Address 2: Not reported Total Tanks: Not reported FAR ROCKAWAY Location City:

Location State: NY Location Zip: 11694 Location Zip 4: Not reported

NY MANIFEST:

EPAID: NYD986909505

Mailing Name: SPARTAN PETROLEUM Mailing Contact: SPARTAN PETROLEUM Mailing Address 1: 1158 BROADWAY Mailing Address 2: Not reported Mailing City: **HEWLETT**

Mailing State: NY Mailing Zip: 11557 Mailing Zip 4: Not reported Mailing Country: USA

Mailing Phone: 000000000

NY MANIFEST:

Document ID: Not reported Manifest Status: Not reported Not reported seq: Year: 2017

Trans1 State ID: NJR000023036 Trans2 State ID: Not reported 10/18/2017 Generator Ship Date: Trans1 Recv Date: 10/18/2017 Trans2 Recv Date: Not reported

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

BP PRODUCTS NORTH AMERICA INC - BP 36611 (Continued)

1000446457

TSD Site Recv Date: 10/19/2017 Part A Recv Date: Not reported Part B Recv Date: Not reported Generator EPA ID: NYD986909505 Trans1 EPA ID: Not reported Trans2 EPA ID: Not reported TSDF ID 1: NJD991291105 TSDF ID 2: Not reported 012238337JJK Manifest Tracking Number:

Import Indicator: **Export Indicator:** Ν Discr Quantity Indicator: Ν Discr Type Indicator: Ν Discr Residue Indicator: Ν Discr Partial Reject Indicator: Ν Discr Full Reject Indicator: Ν

Manifest Ref Number: Not reported Alt Facility RCRA ID: Not reported Alt Facility Sign Date: Not reported

MGMT Method Type Code: H141

Waste Code: Not reported Waste Code: Not reported Waste Code: Not reported Waste Code: Not reported Waste Code: Not reported Waste Code: Not reported Quantity: 200

Units: P - Pounds

Number of Containers:

Container Type: DM - Metal drums, barrels

Handling Method: L Landfill. Specific Gravity: Waste Code: D018 Waste Code 1_2: D001 Waste Code 1_3: Not reported Waste Code 1_4: Not reported Waste Code 1 5: Not reported Waste Code 1_6: Not reported

> Click this hyperlink while viewing on your computer to access 1 additional NY MANIFEST: record(s) in the EDR Site Report.

G20 **MYLES FRENCH CLEANERS** 1018507400 **EDR Hist Cleaner** SW 11-59 BEACH CHANNEL DRIVE N/A

< 1/8 0.073 mi.

383 ft. Site 1 of 4 in cluster G

FAR ROCKAWAY, NY 11691

EDR Hist Cleaner

Relative: Lower Actual:

Year: Name: Type:

Drycleaning Plants, Except Rugs CHRISA CLEANERS INC 1974 16 ft. Drycleaning Plants, Except Rugs 1975 CHRISA CLEANERS INC

1976 CHRISA CLEANERS INC Drycleaning Plants, Except Rugs Drycleaning Plants, Except Rugs 1977 CHRISA CLEANERS INC 1978 CHRISA CLEANERS INC Drycleaning Plants, Except Rugs 1979 CHRISA CLEANERS INC Drycleaning Plants, Except Rugs

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

MYLES FRENCH CLEANERS (Continued)

1018507400

	,	
1979	CHRISA CLEANERS INC	Drycleaning Plants, Except Rugs
1987	MYLES FRENCH CLEANERS	Coin-Operated Laundries And Cleaning
1990	MYLES FRENCH CLEANERS	Coin-Operated Laundries And Cleaning, NEC
1991	MYLES FRENCH CLEANERS	Coin-Operated Laundries And Cleaning, NEC
1991	GIGI FRENCH CLEANERS NC	Drycleaning Plants, Except Rugs, NEC
1992	KIM MYLES INC	Coin-Operated Laundries And Cleaning, NEC
1993	KIM MYLES INC	Coin-Operated Laundries And Cleaning, NEC
1994	KIM MYLES INC	Coin-Operated Laundries And Cleaning, NEC
1995	KIM MYLES INC	Coin-Operated Laundries And Cleaning, NEC
1996	KIM MYLES INC	Coin-Operated Laundries And Cleaning, NEC
1997	KIM MYLES INC	Coin-Operated Laundries And Cleaning, NEC
1999	CHON-DH INC	Coin-Operated Laundries And Cleaning, NEC
2000	CHON-DH INC	Coin-Operated Laundries And Cleaning, NEC
2001	CHON-DH INC	Coin-Operated Laundries And Cleaning, NEC
2002	MYLES FRENCH CLEANERS	Coin-Operated Laundries And Cleaning, NEC
2003	MYLES FRENCH CLEANERS	Coin-Operated Laundries And Cleaning, NEC
2004	MYLES FRENCH CLEANERS	Coin-Operated Laundries And Cleaning, NEC
2005	MYLES FRENCH CLEANERS	Coin-Operated Laundries And Cleaning, NEC
2006	MYLES FRENCH CLEANERS	Coin-Operated Laundries And Cleaning, NEC
2009	LILY PARK DRY CLEANER INC	Drycleaning Plants, Except Rugs
2010	LILY PARK DRY CLEANER INC	Drycleaning Plants, Except Rugs
2013	MYLES FRENCH CLEANERS	Coin-Operated Laundries And Cleaning, NEC
2014	MYLES FRENCH CLEANERS	Coin-Operated Laundries And Cleaning, NEC

NY DRYCLEANERS \$110247446 G21 **NEW MYLES FRENCH CLEANERS** N/A

SW 11-59 BEACH CHANNEL DRIVE < 1/8 FAR ROCKAWAY, NY 11691

0.073 mi.

383 ft. Site 2 of 4 in cluster G

Relative: DRYCLEANERS:

Lower 2-6308-00314 Facility ID: Phone Number: 718-327-8053 Actual: Not reported Region: 16 ft.

Registration Effective Date: 4/25/2002 15:58:15:713

Inspection Date: 07DEC13 Install Date: 7/01 Drop Shop: Not reported Shutdown: Not reported Alternate Solvent: Not reported **Current Business:** Not reported

G22 **NEW MYLES FRENCH CLEANERS** RCRA-CESQG 1000220551 NYD981141468 SW 11-59 BEACH CHANNEL DR ICIS

FAR ROCKAWAY, NY 11691 < 1/8 0.073 mi. 383 ft. Site 3 of 4 in cluster G

Relative:

Lower RCRA-CESQG:

Date form received by agency: 01/01/2007 Actual:

Facility name: MYLES FRENCH CLEANERS 16 ft. Facility address: 11-59 BEACH CHANNEL DR

FAR ROCKAWAY, NY 11691

EPA ID: NYD981141468 Mailing address: BEACH CHANNEL DR **US AIRS**

FINDS

ECHO NY MANIFEST

Direction Distance

Elevation Site Database(s) EPA ID Number

NEW MYLES FRENCH CLEANERS (Continued)

1000220551

EDR ID Number

FAR ROCKAWAY, NY 11691

Contact: SUN PARK

Contact address: BEACH CHANNEL DR

FAR ROCKAWAY, NY 11691

Contact country: US

Contact telephone: 718-327-8053 Contact email: Not reported

EPA Region: 02

Classification: Conditionally Exempt Small Quantity Generator

Description: Handler: generates 100 kg or less of hazardous waste per calendar

month, and accumulates 1000 kg or less of hazardous waste at any time; or generates 1 kg or less of acutely hazardous waste per calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from

the cleanup of a spill, into or on any land or water, of acutely

hazardous waste

Owner/Operator Summary:

Owner/operator name: SUN-MOO PARK

Owner/operator address: 1159 BEACH CHANNEL DR

FAR ROCKAWAY, NY 11691

Owner/operator country: US

Owner/operator telephone: 718-327-8053 Owner/operator email: Not reported Owner/operator fax: Not reported Owner/operator extension: Not reported Legal status: Private Owner/Operator Type: Operator Owner/Op start date: 01/01/2001 Owner/Op end date: Not reported

Owner/operator name: SUN-MOO PARK

Owner/operator address: 1159 BEACH CHANNEL DR

Not reported

FAR ROCKAWAY, NY 11691

Owner/operator country: US

Owner/operator telephone: 718-327-8053
Owner/operator email: Not reported
Owner/operator fax: Not reported
Owner/operator extension: Not reported
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: 01/01/2001

Handler Activities Summary:

Owner/Op end date:

U.S. importer of hazardous waste: No Mixed waste (haz. and radioactive): No Recycler of hazardous waste: No Transporter of hazardous waste: No

Direction Distance

Elevation Site Database(s) EPA ID Number

NEW MYLES FRENCH CLEANERS (Continued)

1000220551

EDR ID Number

Treater, storer or disposer of HW: No Underground injection activity: No On-site burner exemption: No Furnace exemption: No Used oil fuel burner: No Used oil processor: No User oil refiner: No Used oil fuel marketer to burner: Nο Used oil Specification marketer: No Used oil transfer facility: No Used oil transporter: No

Historical Generators:

Date form received by agency: 01/01/2006

Site name: MYLES FRENCH CLEANERS

Classification: Conditionally Exempt Small Quantity Generator

Date form received by agency: 10/05/2001

Site name: MYLES FRENCH CLEANERS

Classification: Conditionally Exempt Small Quantity Generator

. Waste code: D007
. Waste name: CHROMIUM

Waste code: D008
Waste name: LEAD

Waste code: D039

Waste name: TETRACHLOROETHYLENE

Waste code: D040

. Waste name: TRICHLOROETHYLENE

Waste code: F002

Waste name: THE FOLLOWING SPENT HALOGENATED SOLVENTS: TETRACHLOROETHYLENE,

METHYLENE CHLORIDE, TRICHLOROETHYLENE, 1,1,1-TRICHLOROETHANE,

CHLOROBENZENE, 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE, ORTHO-DICHLOROBENZENE, TRICHLOROFLUOROMETHANE, AND

1,1,2-TRICHLOROETHANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE LISTED IN F001, F004, OR F005, AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND

SPENT SOLVENT MIXTURES.

Date form received by agency: 09/04/1997

Site name: MYLES FRENCH CLEANERS

Classification: Conditionally Exempt Small Quantity Generator

Date form received by agency: 04/18/1995

Site name: MYLES FRENCH CLEANERS
Classification: Not a generator, verified

Waste code: NONE
Waste name: None

Violation Status: No violations found

Direction Distance

Elevation Site Database(s) EPA ID Number

NEW MYLES FRENCH CLEANERS (Continued)

1000220551

EDR ID Number

ICIS:

Enforcement Action ID: NY000A0000263080031400310

FRS ID: 110001615422

Action Name: NEW MYLES FRENCH CLEANERS 36081R043600310

Facility Name: NEW MYLES FRENCH CLEANERS
Facility Address: 11-59 BEACH CHANNEL DR
FAR ROCKAWAY, NY 116912499

Enforcement Action Type: Notice of Violation

Facility County: QUEENS

Program System Acronym: AIR

Enforcement Action Forum Desc: Administrative - Informal

EA Type Code: NOV
Facility SIC Code: 7216
Federal Facility ID: Not reported
Latitude in Decimal Degrees: 40.605427
Longitude in Decimal Degrees: -73.755266
Permit Type Desc: Not reported

Program System Acronym: NY0000002630800314

Facility NAICS Code: 812320
Tribal Land Code: Not reported

Enforcement Action ID: NY000A0000263080031400301

FRS ID: 110001615422

Action Name: NEW MYLES FRENCH CLEANERS 36081R043600301

Facility Name: NEW MYLES FRENCH CLEANERS
Facility Address: 11-59 BEACH CHANNEL DR
FAR ROCKAWAY, NY 116912499

Enforcement Action Type: Notice of Violation

Facility County: QUEENS
Program System Acronym: AIR

Enforcement Action Forum Desc: Administrative - Informal

EA Type Code: NOV
Facility SIC Code: 7216
Federal Facility ID: Not reported
Latitude in Decimal Degrees: 40.605427
Longitude in Decimal Degrees: -73.755266
Permit Type Desc: Not reported

Program System Acronym: NY0000002630800314

Facility NAICS Code: 812320
Tribal Land Code: Not reported

US AIRS MINOR:

Envid: 1000220551

Region Code: 02

Programmatic ID: AIR NY0000002630800314

Facility Registry ID: 110001615422
D and B Number: Not reported
Primary SIC Code: 7216
NAICS Code: 812320
Default Air Classification Code: MIN
Facility Type of Ownership Code: POF
Air CMS Category Code: Not reported
HPV Status: Not reported

US AIRS MINOR:

Region Code: 02

Direction Distance

Elevation Site Database(s) EPA ID Number

NEW MYLES FRENCH CLEANERS (Continued)

1000220551

EDR ID Number

Programmatic ID: AIR NY0000002630800314

Facility Registry ID: 110001615422

Air Operating Status Code: OPR Default Air Classification Code: MIN

Air Program: MACT Standards (40 CFR Part 63)

Activity Date: 1999-06-29 00:00:00
Activity Status Date: Not reported

Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation

Activity Status: Not reported

Region Code: 02

Programmatic ID: AIR NY0000002630800314

Facility Registry ID: 110001615422

Air Operating Status Code: OPR Default Air Classification Code: MIN

Air Program: MACT Standards (40 CFR Part 63)

Activity Date: 2001-09-04 00:00:00

Activity Status Date: Not reported

Activity Group: Compliance Monitoring Activity Type: Inspection/Evaluation

Activity Status: Not reported

Region Code: 02

Programmatic ID: AIR NY0000002630800314

Facility Registry ID: 110001615422

Air Operating Status Code: OPR Default Air Classification Code: MIN

Air Program: MACT Standards (40 CFR Part 63)

Activity Date: 2000-03-10 00:00:00
Activity Status Date: 2000-03-10 00:00:00
Activity Group: Enforcement Action
Activity Type: Administrative - Informal

Activity Status: Achieved

Region Code: 02

Programmatic ID: AIR NY0000002630800314

Facility Registry ID: 110001615422

Air Operating Status Code: OPR Default Air Classification Code: MIN

Air Program: MACT Standards (40 CFR Part 63)

Activity Date: 2005-08-16 00:00:00
Activity Status Date: 2005-08-16 00:00:00
Activity Group: Enforcement Action
Activity Type: Administrative - Informal

Activity Status: Achieved

Region Code: 02

Programmatic ID: AIR NY0000002630800314

Facility Registry ID: 110001615422

Air Operating Status Code: OPR Default Air Classification Code: MIN

Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards

Activity Date: 2001-09-04 00:00:00
Activity Status Date: Not reported

Activity Group: Compliance Monitoring Activity Type: Inspection/Evaluation

Direction Distance

Elevation Site Database(s) EPA ID Number

NEW MYLES FRENCH CLEANERS (Continued)

1000220551

EDR ID Number

US AIRS MINOR:

Activity Status:

Envid: 1000220551

Region Code: 02

Programmatic ID: AIR NY0000002630800314
Facility Registry ID: 110001615422

Not reported

D and B Number: Not reported Primary SIC Code: 7216
NAICS Code: 812320
Default Air Classification Code: MIN
Facility Type of Ownership Code: POF
Air CMS Category Code: Not reported HPV Status: Not reported

US AIRS MINOR:

Region Code: 02

Programmatic ID: AIR NY0000002630800314

Facility Registry ID: 110001615422

Air Operating Status Code: OPR
Default Air Classification Code: MIN

Air Program: MACT Standards (40 CFR Part 63)

Activity Date: 1999-06-29 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation

Activity Status: Not reported

Region Code: 02

Programmatic ID: AIR NY0000002630800314

Facility Registry ID: 110001615422

Air Operating Status Code: OPR Default Air Classification Code: MIN

Air Program: MACT Standards (40 CFR Part 63)

Activity Date: 2001-09-04 00:00:00
Activity Status Date: Not reported

Activity Status Date. Not reported

Activity Group: Compliance Monitoring Activity Type: Inspection/Evaluation

Activity Status: Not reported

Region Code: 02

Programmatic ID: AIR NY0000002630800314

Facility Registry ID: 110001615422

Air Operating Status Code: OPR Default Air Classification Code: MIN

Air Program: MACT Standards (40 CFR Part 63)

Activity Date: 2000-03-10 00:00:00
Activity Status Date: 2000-03-10 00:00:00
Activity Group: Enforcement Action
Activity Type: Administrative - Informal

Activity Status: Achieved

Region Code: 02

Programmatic ID: AIR NY0000002630800314

Facility Registry ID: 110001615422

Air Operating Status Code: OPR

Direction Distance Elevation

evation Site Database(s) EPA ID Number

NEW MYLES FRENCH CLEANERS (Continued)

1000220551

EDR ID Number

Default Air Classification Code: MIN

Air Program: MACT Standards (40 CFR Part 63)

Activity Date: 2005-08-16 00:00:00
Activity Status Date: 2005-08-16 00:00:00
Activity Group: Enforcement Action
Activity Type: Administrative - Informal

Activity Status: Achieved

Region Code: 02

Programmatic ID: AIR NY0000002630800314

Facility Registry ID: 110001615422

Air Operating Status Code: OPR Default Air Classification Code: MIN

Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards

Activity Date: 2001-09-04 00:00:00

Activity Status Date: Not reported

Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation

Activity Status: Not reported

FINDS:

Registry ID: 110001615422

Environmental Interest/Information System

AFS (Aerometric Information Retrieval System (AIRS) Facility Subsystem) replaces the former Compliance Data System (CDS), the National Emission Data System (NEDS), and the Storage and Retrieval of Aerometric Data (SAROAD). AIRS is the national repository for information concerning airborne pollution in the United States. AFS is used to track emissions and compliance data from industrial plants. AFS data are utilized by states to prepare State Implementation Plans to comply with regulatory programs and by EPA as an input for the estimation of total national emissions. AFS is undergoing a major redesign to support facility operating permits required under Title V of the Clean Air Act.

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

FIS (New York - Facility Information System) is New York's Department of Environmental Conservation (DEC) information system for tracking environmental facility information found across the State.

AIR MINOR

<u>Click this hyperlink</u> while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

NEW MYLES FRENCH CLEANERS (Continued)

1000220551

Envid: 1000220551 110001615422 Registry ID:

DFR URL: http://echo.epa.gov/detailed-facility-report?fid=110001615422

NY MANIFEST:

USA Country:

EPA ID: NYD981141468 Facility Status: Not reported

Location Address 1: 11-59 BEACH CHANNEL DRIVE

Code: ΒP

Location Address 2: Not reported Total Tanks: Not reported Location City: FAR ROCKAWAY

Location State: NY Location Zip: 11691 Location Zip 4: Not reported

NY MANIFEST:

EPAID: NYD981141468 Mailing Name: **MYLES CLEANER** Mailing Contact: MYLES CLEANER

Mailing Address 1: 11-59 BEACH CHANNEL DRIVE

Mailing Address 2: Not reported Mailing City: **FAR ROCKAWAY**

Mailing State: NYMailing Zip: 11691 Mailing Zip 4: Not reported Mailing Country: USA

Mailing Phone: 7183278053

NY MANIFEST:

Document ID: NYC7513942 Manifest Status: Not reported Not reported seq:

Year: 2005

Discr Full Reject Indicator:

Manifest Ref Number:

Trans1 State ID: TXR000050930 NJD071629976 Trans2 State ID: Generator Ship Date: 04/20/2005 Trans1 Recv Date: 04/20/2005 Trans2 Recv Date: 04/25/2005 TSD Site Recv Date: 04/26/2005 Part A Recv Date: Not reported Part B Recv Date: Not reported NYD981141468 Generator EPA ID: Trans1 EPA ID: NY89930JE Trans2 EPA ID: TBA95RNJ TSDF ID 1: OHD980587364 TSDF ID 2: Not reported Manifest Tracking Number: Not reported Import Indicator: Not reported **Export Indicator:** Not reported Discr Quantity Indicator: Not reported Discr Type Indicator: Not reported Discr Residue Indicator: Not reported Discr Partial Reject Indicator: Not reported

Not reported

Not reported

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

NEW MYLES FRENCH CLEANERS (Continued)

1000220551

Alt Facility RCRA ID: Not reported Alt Facility Sign Date: Not reported MGMT Method Type Code: Not reported

Waste Code: F002 - HALO SOLV + STILL BOTTOMS FM REC OF SOLV

Waste Code: Not reported Waste Code: Not reported Waste Code: Not reported Waste Code: Not reported Waste Code: Not reported Quantity: 00195 P - Pounds Units: Number of Containers: 001

Container Type: DF - Fiberboard or plastic drums (glass) Handling Method: B Incineration, heat recovery, burning.

Specific Gravity:

Waste Code: F002 - HALO SOLV + STILL BOTTOMS FM REC OF SOLV

Waste Code: Not reported Waste Code: Not reported Waste Code: Not reported Waste Code: Not reported Quantity: 00120 Units: P - Pounds Number of Containers: 001

Container Type: DF - Fiberboard or plastic drums (glass)

Handling Method: Not reported Specific Gravity: 01.00 Waste Code: Not reported Quantity: Not reported Units: Not reported Not reported Number of Containers: Container Type: Not reported

Handling Method: B Incineration, heat recovery, burning.

Specific Gravity: Not reported

> Click this hyperlink while viewing on your computer to access -1 additional NY MANIFEST: record(s) in the EDR Site Report.

SE **BEACH 21ST ST AND MOTT AVE**

DRUM RUN

< 1/8 QUEENS, NY

0.082 mi. 435 ft.

23

SPILLS: Relative:

Higher Facility ID: 1204054 Facility Type: ER Actual: Spill Number: 1204054 26 ft. **DER Facility ID:** 421252 Site ID: 466912

DEC Region: Closed Date: 2012-08-02 Spill Cause: **Abandoned Drums**

Spill Class: C4 SWIS: 4101 Spill Date: 2012-07-25 **RMPIPER** Investigator: Referred To: Not reported S112148028

N/A

NY Spills

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

DRUM RUN (Continued) S112148028

Reported to Dept: 2012-07-25 CID: Not reported Water Affected: Not reported

Spill Source: Commercial/Industrial

Spill Notifier: Other Cleanup Ceased: Not reported Cleanup Meets Std: False Last Inspection: Not reported Recommended Penalty: False **UST Trust:** False Remediation Phase: 0

Date Entered In Computer: 2012-07-25 Spill Record Last Update: 2012-08-02 Spiller Name: Not reported

Spiller Company: ABANDONED DRUM

Spiller Address: Not reported

Spiller Company: 999

Contact Name: JEREMY HILLER

DEC Memo: "8/1/12- 55 gal pumped. spill closed. "

"in parking lot for Train Station - blue 55 gallon plastic drum - not Remarks:

leaking -"

All Materials:

Oxygenate:

Site ID: 466912 Operable Unit ID: 1216889 Operable Unit: 01 Material ID: 2215106 Material Code: 0060A Material Name: wastewater Case No.: Not reported Material FA: Other Quantity: 55.00 Units: Not reported Recovered: Not reported

Not reported

E24 LOT 50, TAXBLOCK 15537 NY E DESIGNATION \$121343953 ΝE 17-27 REDFERN AVENUE N/A

< 1/8 **QUEENS, NY 11691** 0.084 mi.

445 ft. Site 2 of 3 in cluster E

E DESIGNATION: Relative:

Lower Tax Lot(s): 50 Tax Block: 15537 Actual: Borough Code: QN 20 ft. E-No: E-415 Effective Date: 9/7/2017

Satisfaction Date: Not reported Ceqr Number: 16DME010Q

Ulurp Number: 170243AZMQ, 170244AZRQ

Zoning Map No: 25b, 31a

Description: Air Quality - HVAC fuel limited to natural gas

Lot Remediation Date: Not reported

Description: Exhaust stack location limitations

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

LOT 50, TAXBLOCK 15537 (Continued)

S121343953

Lot Remediation Date: Not reported

Hazardous Materials* Phase I and Phase II Testing Protocol Description:

Lot Remediation Date: Not reported

Description: Window Wall Attenuation & Alternate Ventilation

Lot Remediation Date: Not reported

E25 ON EMPTY LOT NY Spills S110308260 N/A

17-25 17-27 REDFERN AVENUE ΝE FAR ROCKAWAY, NY 11691 < 1/8

0.084 mi.

445 ft. Site 3 of 3 in cluster E

Relative: SPILLS: Lower Facility ID: 1000860 Facility Type: ER Actual: Spill Number: 1000860 20 ft. DER Facility ID: 388453

433544 Site ID: DEC Region:

Closed Date: 2010-07-01 Spill Cause: **Abandoned Drums**

Spill Class: C3 SWIS: 4101 Spill Date: 2010-04-22 Investigator: vszhune Referred To: Not reported Reported to Dept: 2010-04-22 CID: Not reported Water Affected: Not reported

Spill Source: Commercial/Industrial

Spill Notifier: Other Cleanup Ceased: Not reported Cleanup Meets Std: False Last Inspection: Not reported Recommended Penalty: False **UST Trust:** False Remediation Phase: 0

2010-04-22 Date Entered In Computer: Spill Record Last Update: 2010-07-01 Spiller Name: Not reported Spiller Company: Not reported Not reported Spiller Address: Spiller Company: Not reported Contact Name: SAL RUSSO DEC Memo:

"4/22/10 - Raphael Ketani. Mr. Russo of A. Russo Wrecking (718) 978-5600 called in a report of 10 fiberglass containers containing liquid that had been abandoned on a property where he is tearing down the homes. Each container is 10 by 10 by 10. He said that they just appeared today. Mr. Russo added that the NYC DEP had looked at the containers and had labeled some marine pollutant - non-hazardous. He said that the containers sit on the property 17-25 and 17-27 Redfern Avenue in Far Rockaway. He added that the property is across from the Redfern Housing project and there are lots of kids in the project. He is afraid that someone may come along and open the valves on the containers and spill whatever liquid is inside. Mr. Russo said that he will put a chain link fence around the property on monday, but he

Direction Distance

EDR ID Number Elevation **EPA ID Number** Site Database(s)

ON EMPTY LOT (Continued)

S110308260

is concerned as to what might happen over the weekend. I told him that we will contact the property owner and get them to remove the containers. I checked Property Shark and ACRIS and found the owner to be Fred Stark. Mr. Stark runs Fred Stark Real Estate at 198-10 Jamaica Avenue, Hollis, 11423, (718) 465-3600. The block and lots are: 15537/50 and 51. Two private homes are on the site. I called up Fred Stark Real Estate and spoke to Liz Farrell and Rita Stark. They told me that Mr. Stark is deceased and that they are managing his estate. I told them about the 10 containers that the DEC is very concerned that some kids may come by and open up the valves on the containers and spill the contents. I told them that the DEC wants the containers removed immediately. They said that they were told by Mr. Russo that the DEC would take the containers away. I told her that the DEC can't take the containers as they are on private property. I told them that it's the responsibility of the property owner to hire someone to take the containers and dispose of them properly. They said that they will find a transporter. I told them to send the bill of lading to Veronica Zhune, the case manager. They said that they will. 07/01/10- ABC Tank repair & Lining Inc. sent letter dated 07/01/10 describing work performed at this site and the waste mamnifest. On April 27,2010 ABC Tabk pumped out and clened (13) containers from 117-25 Redfern Ave. ,Queens. Each container was cup up and placed in(26) drums for proper disposal. On June 29,2010 ABM-American Bio Mass Picked up the (26) drums along with drums from other jobs to be disposed of properly. Spill Closed.

Remarks: "10-4X4X4 FIBERGLASS CONTAINERS LEFT ON LOT.DEP HAS TAGGED THEM-

MARINE POLLUTANT"

All Materials:

Site ID: 433544 Operable Unit ID: 1184428 Operable Unit: 01 Material ID: 2178691 Material Code: 0064A

unknown material Material Name: Case No.: Not reported Material FA: Other Quantity: Not reported Units: Not reported Recovered: Not reported Not reported Oxygenate:

G26 DRY CLEANERS NY Spills \$108297235 SW 1159 BEACH CHANNEL DRIVE N/A

< 1/8 **ROCKAWAY, NY**

0.088 mi.

Site 4 of 4 in cluster G 464 ft.

Relative: SPILLS:

Lower Facility ID: 0611066 Facility Type: ER Actual: Spill Number: 0611066 17 ft. **DER Facility ID:** 325252 375635 Site ID: DEC Region:

2007-01-04 Closed Date: Spill Cause: **Equipment Failure**

Direction Distance

Elevation Site Database(s) EPA ID Number

DRY CLEANERS (Continued)

S108297235

EDR ID Number

Spill Class:
SWIS:
Spill Date:
Spill Date:
Investigator:
Referred To:
Reported to Dept:
CID:

Not reported
2007-01-04
2007-01-04
444

Water Affected: Not reported

Spill Source: Institutional, Educational, Gov., Other

Spill Notifier:

Cleanup Ceased:

Cleanup Meets Std:

Last Inspection:

Recommended Penalty:

UST Trust:

Remediation Phase:

Other

Not reported

False

False

0

Date Entered In Computer: 2007-01-04
Spill Record Last Update: 2007-01-04
Spiller Name: RICH TURCHIANO

Spiller Company: DRY CLEANERS
Spiller Address: 1159 BEACH CHANNEL DRIVE

Spiller Address: 115 Spiller Company: 001

Contact Name: RICH TURCHIANO

DEC Memo: "1/4/07 - Raphael Ketani. I spoke to Rich Turchiano of Madison Oil.

He said that his driver was cleaning up the sidewalk right now. He said that no drains were affected and all of the oil landed on the sidewalk. He said that there was back pressure on the vent pipe. He said that it is probably rust and scale on the inside of the pipe that is at least partially blocking the venting. Based upon the information above and the small size of the spill, I am closing the

case. "

Remarks: "BETWEEN A 1/4 - 1/2 GALLON: IN PROCESS OF CLEANING UP BACK PRESSURE

ON VENT LINE"

All Materials:

Site ID: 375635 Operable Unit ID: 1133256 Operable Unit: 01 2123059 Material ID: Material Code: 0001A Material Name: #2 fuel oil Case No.: Not reported Material FA: Petroleum Quantity: .00 Units: G Recovered: .00

Oxygenate: Not reported

Direction Distance

Distance Elevation Site EDR ID Number

Database(s) EPA ID Number

H27 LOT 51,TAXBLOCK 15537 NY E DESIGNATION S121343955
NE 17-25 REDFERN AVENUE N/A

NE 17-25 REDFERN AVENUE < 1/8 QUEENS, NY 11691

0.090 mi.

473 ft. Site 1 of 5 in cluster H

Cegr Number:

Relative: E DESIGNATION:
Lower Tax Lot(s):

Actual: 20 ft.

 Tax Lot(s):
 51

 Tax Block:
 15537

 Borough Code:
 QN

 E-No:
 E-415

 Effective Date:
 9/7/2017

 Satisfaction Date:
 Not reported

Ulurp Number: 170243AZMQ, 170244AZRQ

Zoning Map No: 25b, 31a

Description: Exhaust stack location limitations

Lot Remediation Date: Not reported

Description: Hazardous Materials* Phase I and Phase II Testing Protocol

Lot Remediation Date: Not reported

Description: Window Wall Attenuation & Alternate Ventilation

16DME010Q

Lot Remediation Date: Not reported

Description: Air Quality - HVAC fuel limited to natural gas

Lot Remediation Date: Not reported

I28 NOBO CORPORATION NY AST U003396729
South 10-74 BEACH 22ND STREET N/A

< 1/8 0.094 mi.

498 ft. Site 1 of 2 in cluster I

Relative: AST: Lower Re

 Lower
 Region:
 STATE

 Actual:
 DEC Region:
 2

 23 ft.
 Site Status:
 Active

 Facility Id:
 2-602577

 Program Type:
 PBS

FAR ROCKAWAY, NY 11691

UTM X: 605369.89114 UTM Y: 4495564.54331 Expiration Date: 12/28/2000 Site Type: Other

Affiliation Records:

Site Id: 24534

Affiliation Type: Facility Owner

Company Name: NOBO CORPORATION

Contact Type: Not reported Contact Name: Not reported

Address1: 10-74 BEACH 22ND STREET

Address2: Not reported City: FAR ROCKAWAY

State: NY
Zip Code: 11691
Country Code: 001

Phone: (718) 471-1264 EMail: Not reported

Direction Distance Elevation

on Site Database(s) EPA ID Number

NOBO CORPORATION (Continued)

U003396729

EDR ID Number

Fax Number: Not reported Modified By: TRANSLAT Date Last Modified: 2004-03-04

Site Id: 24534 Affiliation Type: Mail Contact

Company Name: NOBO CORPORATION

Contact Type: Not reported Contact Name: Not reported

Address1: 10-74 BEACH 22ND STREET

Address2: Not reported City: FAR ROCKAWAY

State: NY
Zip Code: 11691
Country Code: 001

Phone: (718) 471-1264
EMail: Not reported
Fax Number: Not reported
Modified By: TRANSLAT
Date Last Modified: 2004-03-04

Site Id: 24534

Affiliation Type: Facility Operator
Company Name: NOBO CORPORATION
Contact Type: Not reported

Contact Type: Not reported

Contact Name: ANDREW BONNOT

Address1: Not reported

Address2: Not reported City: Not reported State: NN

Zip Code: Not reported

Country Code: 001 Phone: (718

Phone: (718) 471-1264
EMail: Not reported
Fax Number: Not reported
Modified By: TRANSLAT
Date Last Modified: 2004-03-04

Site Id: 24534

Affiliation Type: Emergency Contact
Company Name: NOBO CORPORATION

Contact Type: Not reported
Contact Name: ANDREW BONNOT

Address1: Not reported Address2: Not reported City: Not reported

State: NN

Zip Code: Not reported

Country Code: 001

Phone: (718) 471-1264
EMail: Not reported
Fax Number: Not reported
Modified By: TRANSLAT
Date Last Modified: 2004-03-04

Tank Info:

Direction Distance

Elevation Site Database(s) EPA ID Number

NOBO CORPORATION (Continued)

U003396729

EDR ID Number

 Tank Number:
 001

 Tank Id:
 50527

 Material Code:
 0001

Common Name of Substance: #2 Fuel Oil (On-Site Consumption)

Equipment Records:

C01 - Pipe Location - Aboveground J02 - Dispenser - Suction Dispenser H00 - Tank Leak Detection - None

F01 - Pipe External Protection - Painted/Asphalt Coating

G99 - Tank Secondary Containment - Other

I01 - Overfill - Float Vent Valve A00 - Tank Internal Protection - None

B01 - Tank External Protection - Painted/Asphalt Coating

D02 - Pipe Type - Galvanized Steel

Tank Location:

Tank Type: Steel/Carbon Steel/Iron

Tank Status: Tank Converted to Non-Regulated Use

Pipe Model: Not reported Install Date: 05/01/1995
Capacity Gallons: 275
Tightness Test Method: NN

Date Test:
Not reported
Next Test Date:
Not reported
Date Tank Closed:
O8/01/1996
Register:
True
Modified By:
TRANSLAT
Last Modified:
Vol/14/2017

Material Name: #2 fuel oil (on-site consumption)

 Tank Number:
 002

 Tank Id:
 50528

 Material Code:
 0022

Common Name of Substance: Waste Oil/Used Oil

Equipment Records:

J02 - Dispenser - Suction Dispenser

L09 - Piping Leak Detection - Exempt Suction Piping

H00 - Tank Leak Detection - None

F01 - Pipe External Protection - Painted/Asphalt Coating

G99 - Tank Secondary Containment - Other

I01 - Overfill - Float Vent Valve A00 - Tank Internal Protection - None

B01 - Tank External Protection - Painted/Asphalt Coating

D02 - Pipe Type - Galvanized Steel C01 - Pipe Location - Aboveground

Tank Location:

Tank Type: Steel/Carbon Steel/Iron
Tank Status: Temporarily Out of Service

Pipe Model: Not reported Install Date: 05/01/1995
Capacity Gallons: 275
Tightness Test Method: NN

Date Test: Not reported
Next Test Date: Not reported

Direction Distance

Elevation Site Database(s) **EPA ID Number**

NOBO CORPORATION (Continued)

U003396729

EDR ID Number

Date Tank Closed: Not reported Register: True Modified By: **TRANSLAT** Last Modified: 04/14/2017 Material Name: waste oil/used oil

129 **LOT 140, TAXBLOCK 15705** South 10-74 BEACH 22 STREET **QUEENS, NY 11691**

NY E DESIGNATION S121343851

N/A

S121343961

N/A

< 1/8 0.094 mi. 498 ft.

Site 2 of 2 in cluster I

E DESIGNATION: Relative:

Lower 140 Tax Lot(s): Tax Block: 15705 Actual: Borough Code: QN 23 ft. E-No: E-415

Effective Date: 9/7/2017 Satisfaction Date: Not reported Cegr Number: 16DME010Q

Ulurp Number: 170243AZMQ, 170244AZRQ

Zoning Map No: 25b, 31a

Description: Hazardous Materials* Phase I and Phase II Testing Protocol

Lot Remediation Date: Not reported

H30 NY E DESIGNATION

LOT 53,TAXBLOCK 15537 ΝE 17-21 REDFERN AVENUE < 1/8 **QUEENS, NY 11691**

53

0.095 mi.

Site 2 of 5 in cluster H 501 ft.

E DESIGNATION: Relative: Lower Tax Lot(s):

Tax Block: 15537 Actual: Borough Code: 19 ft. QN E-No: E-415 Effective Date: 9/7/2017 Satisfaction Date: Not reported Ceqr Number: 16DME010Q

> Ulurp Number: 170243AZMQ, 170244AZRQ

Zoning Map No: 25b, 31a

Description: Air Quality - HVAC fuel limited to natural gas

Lot Remediation Date: Not reported

Exhaust stack location limitations Description:

Lot Remediation Date: Not reported

Hazardous Materials* Phase I and Phase II Testing Protocol Description:

Lot Remediation Date: Not reported

Description: Window Wall Attenuation & Alternate Ventilation

Lot Remediation Date: Not reported

Direction Distance

Elevation Site Database(s) EPA ID Number

31 2230-40 MOTT AVENUE NY Spills S102961916
West 2230-40 MOTT AVENUE N/A

West 2230-40 MOTT AVENUE < 1/8 FAR ROCKAWAY, NY

0.099 mi. 524 ft.

Relative: SPILLS:

 Lower
 Facility ID:
 9710254

 Actual:
 Facility Type:
 ER

 11 ft.
 Spill Number:
 9710254

 DER Facility ID:
 201074

 Site ID:
 244791

DEC Region: 2
Closed Date: 2003-02-25
Spill Cause: Human Error

Spill Class: C3
SWIS: 4101
Spill Date: 1997-12-06
Investigator: TOMASELLO
Referred To: Not reported
Reported to Dept: 1997-12-06
CID: 266

Water Affected: Not reported
Spill Source: Private Dwellir

Spill Source: Private Dwelling
Spill Notifier: Other
Cleanup Ceased: Not reported
Cleanup Meets Std: False
Last Inspection: Not reported
Recommended Penalty: False
UST Trust: False

Remediation Phase: 0
Date Entered In Computer: 1997-12-06
Spill Record Last Update: 2003-02-25
Spiller Name: Not reported

Spiller Company: Not reported
Spiller Address: 2230-40 MOTT AVENUE

Spiller Company: 001
Contact Name: Not reported

DEC Memo: ""

Remarks: "APARTMENT BUILDING. STICK LINE CAP LEFT OFF OF TOP OF TANK BY

SUPERINTENDANT. SPILLED INTO TANK ROOM. NO DRAINS. BEING CLEANED UP."

All Materials:

Site ID: 244791 Operable Unit ID: 1056647 Operable Unit: 01 Material ID: 328566 Material Code: 0003A Material Name: #6 fuel oil Case No.: Not reported Material FA: Petroleum Quantity: 100.00 Units: G Recovered: 100.00 Oxygenate: Not reported **EDR ID Number**

Direction Distance

Distance EDR ID Number Elevation Site EDR ID Number Database(s) EPA ID Number

32 LOT 5,TAXBLOCK 15537 NY E DESIGNATION S121343948 SE 20-10 MOTT AVENUE N/A

SE 20-10 MOTT AVENUE < 1/8 QUEENS, NY 11691

0.099 mi. 525 ft.

Relative: E DESIGNATION:

 Higher
 Tax Lot(s):
 5

 Actual:
 Tax Block:
 15537

 26 ft.
 Borough Code:
 QN

 E-No:
 E-415

 Effective Date:
 97/203

E-No: E-415
Effective Date: 9/7/2017
Satisfaction Date: Not reported
Ceqr Number: 16DME010Q

Ulurp Number: 170243AZMQ, 170244AZRQ

Zoning Map No: 25b, 31a

Description: Air Quality - HVAC natural gas with low Nox only

Lot Remediation Date: Not reported

Description: Exhaust stack location limitations

Lot Remediation Date: Not reported

Description: Hazardous Materials* Phase I and Phase II Testing Protocol

Lot Remediation Date: Not reported

Description: Window Wall Attenuation & Alternate Ventilation

Lot Remediation Date: Not reported

H33 LOT 54,TAXBLOCK 15537 NY E DESIGNATION \$121343962 NE 17-19 REDFERN AVENUE N/A

NE 17-19 REDFERN AVENUE < 1/8 QUEENS, NY 11691

0.100 mi.

527 ft. Site 3 of 5 in cluster H

Relative: E DESIGNATION:

 Lower
 Tax Lot(s):
 54

 Actual:
 Tax Block:
 15537

 19 ft.
 Borough Code:
 QN

 E-No:
 E-415

 Effective Date:
 9/7/2013

Effective Date: 9/7/2017
Satisfaction Date: Not reported
Ceqr Number: 16DME010Q

Ulurp Number: 170243AZMQ, 170244AZRQ

Zoning Map No: 25b, 31a

Description: Air Quality - HVAC fuel limited to natural gas

Lot Remediation Date: Not reported

Description: Exhaust stack location limitations

Lot Remediation Date: Not reported

Description: Hazardous Materials* Phase I and Phase II Testing Protocol

Lot Remediation Date: Not reported

Description: Window Wall Attenuation & Alternate Ventilation

Lot Remediation Date: Not reported

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

34 **BELL BOY DRIVE IN CLEANERS INC EDR Hist Cleaner** 1019937090

1361 BCH CHANNEL DR N/A

North < 1/8 FAR ROCKAWAY, NY 11691

0.108 mi. 571 ft.

Relative: **EDR Hist Cleaner**

Lower

Year: Name: Type: Actual:

BELL BOY DRIVE IN CLEANERS INC 1971 Drycleaning Plants, Except Rugs 10 ft. BELL BOY DRIVE IN CLEANERS INC Drycleaning Plants, Except Rugs 1972

H35 LOT 56, TAXBLOCK 15537 **NY E DESIGNATION** S121343968

ΝE **17-15 REDFERN AVENUE**

< 1/8 **QUEENS, NY 11691**

0.109 mi.

576 ft. Site 4 of 5 in cluster H

Relative: **E DESIGNATION:** Lower Tax Lot(s):

56 Tax Block: 15537 Actual: Borough Code: QN 17 ft. E-No: E-415

Effective Date: 9/7/2017 Not reported Satisfaction Date: Ceqr Number: 16DME010Q

Ulurp Number: 170243AZMQ, 170244AZRQ

Zoning Map No: 25b, 31a

Description: Exhaust stack location limitations

Lot Remediation Date: Not reported

Description: Hazardous Materials* Phase I and Phase II Testing Protocol

Lot Remediation Date: Not reported

Window Wall Attenuation & Alternate Ventilation Description:

Lot Remediation Date: Not reported

Description: Air Quality - HVAC fuel limited to natural gas

Lot Remediation Date: Not reported

H36 LOT 57, TAXBLOCK 15537 **NY E DESIGNATION** S121343970 17-11 REDFERN AVENUE NE N/A

< 1/8 **QUEENS, NY 11691**

0.113 mi.

598 ft.

Site 5 of 5 in cluster H

Relative: E DESIGNATION: Lower Tax Lot(s): 57 Tax Block: 15537 Actual: Borough Code: QN 16 ft.

E-415 E-No: 9/7/2017 Effective Date: Satisfaction Date: Not reported Cear Number: 16DME010Q

Ulurp Number: 170243AZMQ, 170244AZRQ

Zoning Map No: 25b, 31a

TC5471477.6s Page 74

N/A

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

LOT 57, TAXBLOCK 15537 (Continued)

S121343970

Description: Hazardous Materials* Phase I and Phase II Testing Protocol

Lot Remediation Date: Not reported

Description: Window Wall Attenuation & Alternate Ventilation

Lot Remediation Date: Not reported

Air Quality - HVAC fuel limited to natural gas Description:

STATE

Lot Remediation Date: Not reported

Description: Exhaust stack location limitations

Lot Remediation Date: Not reported

ACTION CENTER FOR DEUCATION & COMMUNITY DEV. 37

ESE **16-12 CENTRAL AVENUE** NY AST A100300898 N/A

< 1/8 **QUEENS, NY 11691**

0.117 mi. 617 ft.

Relative: AST: Higher Region:

DEC Region: Actual:

Site Status: 25 ft.

Unregulated/Closed Facility Id: 2-610219

Program Type: **PBS**

UTM X: 606153.97412 UTM Y: 4496210.77404

Expiration Date: N/A Site Type: Other

Affiliation Records:

Site Id: 364396 Affiliation Type: **Facility Owner** Company Name: JUDD LLC Contact Type: V. PRES

Contact Name: MITCHELL KURK

Address1: 497 BEACH 20TH STREET

Address2: Not reported **QUEENS** City: State: NYZip Code: 11691 Country Code: 001

Phone: (718) 327-2450 EMail: Not reported Not reported Fax Number: Modified By: KXTANG Date Last Modified: 2006-05-24

Site Id: 364396 Affiliation Type: Mail Contact JUDD LLC Company Name: Contact Type: Not reported

MR. LARRY SCHLAU Contact Name: Address1: 497 BEACH 20TH STREET

Address2: Not reported Citv: **QUEENS** State: NY Zip Code: 11691 Country Code: 001

Direction Distance

Elevation Site Database(s) EPA ID Number

ACTION CENTER FOR DEUCATION & COMMUNITY DEV. (Continued)

A100300898

EDR ID Number

Phone: (718) 327-2450
EMail: Not reported
Fax Number: Not reported
Modified By: KXTANG
Date Last Modified: 2006-05-24

Site Id: 364396

Affiliation Type: Facility Operator

Company Name: ACTION CENTER FOR DEUCATION & COMMUNITY DEV.

Contact Type: Not reported
Contact Name: OREA DOL
Address1: Not reported
Address2: Not reported
City: Not reported
State: NN

Zip Code: Not reported

Country Code: 001

Phone: (718) 337-5040
EMail: Not reported
Fax Number: Not reported
Modified By: KXTANG
Date Last Modified: 2006-05-24

Site Id: 364396

Affiliation Type: Emergency Contact

Company Name: JUDD LLC
Contact Type: Not reported
Contact Name: LARRY SCHLAU
Address1: Not reported
Address2: Not reported
City: Not reported

State: NN

Zip Code: Not reported

Country Code: 001

Phone: (516) 318-0990
EMail: Not reported
Fax Number: Not reported
Modified By: KXTANG
Date Last Modified: 2006-05-24

Tank Info:

 Tank Number:
 01

 Tank Id:
 211960

 Material Code:
 0001

Common Name of Substance: #2 Fuel Oil (On-Site Consumption)

Equipment Records:

L00 - Piping Leak Detection - None A00 - Tank Internal Protection - None D01 - Pipe Type - Steel/Carbon Steel/Iron

K00 - Spill Prevention - None

G00 - Tank Secondary Containment - None J02 - Dispenser - Suction Dispenser C01 - Pipe Location - Aboveground

E00 - Piping Secondary Containment - None

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

ACTION CENTER FOR DEUCATION & COMMUNITY DEV. (Continued)

A100300898

H00 - Tank Leak Detection - None 102 - Overfill - High Level Alarm B00 - Tank External Protection - None F00 - Pipe External Protection - None

Tank Location:

Tank Type: Steel/Carbon Steel/Iron Tank Status: Closed - Removed Pipe Model: Not reported Install Date: 05/01/2006 Capacity Gallons: 2000 Tightness Test Method: NN

Date Test: Not reported Not reported Next Test Date: Date Tank Closed: 05/01/2006 Register: True Modified By: **KXTANG** Last Modified: 04/14/2017

Material Name: #2 fuel oil (on-site consumption)

Tank Number: 02 Tank Id: 211959 Material Code: 0001

Common Name of Substance: #2 Fuel Oil (On-Site Consumption)

Equipment Records:

L00 - Piping Leak Detection - None B00 - Tank External Protection - None F00 - Pipe External Protection - None G00 - Tank Secondary Containment - None J02 - Dispenser - Suction Dispenser A00 - Tank Internal Protection - None D01 - Pipe Type - Steel/Carbon Steel/Iron

K00 - Spill Prevention - None

E00 - Piping Secondary Containment - None

H00 - Tank Leak Detection - None 102 - Overfill - High Level Alarm C01 - Pipe Location - Aboveground

Tank Location:

Tank Type: Steel/Carbon Steel/Iron Tank Status: Closed - Removed Pipe Model: Not reported Install Date: 04/01/2000

Capacity Gallons: 275 Tightness Test Method: NN

Date Test: Not reported Next Test Date: Not reported Date Tank Closed: 04/01/2000 Register: True Modified By: **KXTANG** Last Modified: 04/14/2017

Material Name: #2 fuel oil (on-site consumption)

Tank Number: 03 Tank Id: 211958 Material Code: 0001

Direction Distance

Elevation Site Database(s) EPA ID Number

ACTION CENTER FOR DEUCATION & COMMUNITY DEV. (Continued)

A100300898

EDR ID Number

Common Name of Substance: #2 Fuel Oil (On-Site Consumption)

Equipment Records:

A00 - Tank Internal Protection - None D01 - Pipe Type - Steel/Carbon Steel/Iron

K00 - Spill Prevention - None

B00 - Tank External Protection - None F00 - Pipe External Protection - None L00 - Piping Leak Detection - None G00 - Tank Secondary Containment - None J02 - Dispenser - Suction Dispenser C01 - Pipe Location - Aboveground E00 - Piping Secondary Containment - None

H00 - Tank Leak Detection - None I02 - Overfill - High Level Alarm

Tank Location:

Tank Type: Steel/Carbon Steel/Iron
Tank Status: Closed - Removed
Pipe Model: Not reported
Install Date: 04/01/2000
Capacity Gallons: 275

Capacity Gallons: 275
Tightness Test Method: NN
Date Test: Not reported

Next Test Date: Not reported
Date Tank Closed: 04/01/2000
Register: True
Modified By: KXTANG
Last Modified: 04/14/2017

Material Name: #2 fuel oil (on-site consumption)

J38 LOT 58,TAXBLOCK 15537 NY E DESIGNATION \$121343973
NE 17-09 REDFERN AVENUE N/A

< 1/8 0.118 mi.

16 ft.

622 ft. Site 1 of 2 in cluster J

QUEENS, NY 11691

Relative: E DESIGNATION:

Lower Tax Lot(s):
Actual: Tax Block:

Borough Code: QN
E-No: E-415
Effective Date: 9/7/2017
Satisfaction Date: Not reported
Ceqr Number: 16DME010Q

Ulurp Number: 170243AZMQ, 170244AZRQ

58

15537

Zoning Map No: 25b, 31a

Description: Air Quality - HVAC fuel limited to natural gas

Lot Remediation Date: Not reported

Description: Exhaust stack location limitations

Lot Remediation Date: Not reported

Description: Hazardous Materials* Phase I and Phase II Testing Protocol

Lot Remediation Date: Not reported

Description: Window Wall Attenuation & Alternate Ventilation

Direction Distance

Distance Elevation Site EDR ID Number

Database(s) EPA ID Number

LOT 58, TAXBLOCK 15537 (Continued)

S121343973

Lot Remediation Date: Not reported

39 BRAVO FASHION (RETAIL STORE) SSE 1057 BEACH 20TH STREET NY AST A100293199 N/A

SSE 1057 BEACH 20TH STREET 1/8-1/4 FAR ROCKAWAY, NY 11691

0.129 mi. 682 ft.

Relative: AST: Higher Re

 Higher
 Region:
 STATE

 Actual:
 DEC Region:
 2

 26 ft.
 Site Status:
 Active

 Facility Id:
 2-607761

 Program Type:
 PBS

UTM X: 605490.44161 UTM Y: 4495477.53852 Expiration Date: 05/14/2022

Site Type: Other Wholesale/Retail Sales

Affiliation Records:

Site Id: 29613
Affiliation Type: Facility Owner
Company Name: D-MART INC

Contact Type: PRESIDENT, D-MART INC.

Contact Name: EDWARD DWECK
Address1: PO BOX 887
Address2: Not reported
City: PALM BEACH

State: FL

Zip Code: 33480-0887 Country Code: 001

Phone: (561) 685-5177
EMail: Not reported
Fax Number: Not reported
Modified By: MRBARROW
Date Last Modified: 2018-01-18

Site Id: 29613
Affiliation Type: Mail Contact
Company Name: D-MART INC
Contact Type: Not reported

Contact Name: EDWARD C. DWECK

Address1: PO BOX 887
Address2: Not reported
City: PALM BEACH

State: FL

 Zip Code:
 33480-0887

 Country Code:
 001

Phone: (561) 685-5177

EMail: EDWARDDWECK@BELLSOUTH.NET

Fax Number: Not reported Modified By: MRBARROW Date Last Modified: 2018-01-18

Site Id: 29613

Affiliation Type: Facility Operator

Company Name: BRAVO FASHION (RETAIL STORE)

Contact Type: Not reported

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

BRAVO FASHION (RETAIL STORE) (Continued)

A100293199

EDWARD DWECK Contact Name: Address1: Not reported Address2: Not reported City: Not reported State: NN

Zip Code: Not reported

Country Code: 001

Phone: (561) 685-5177 EMail: Not reported Fax Number: Not reported Modified By: **MRBARROW** Date Last Modified: 2018-01-18

Site Id: 29613

Affiliation Type: **Emergency Contact** D-MART INC C/O RAINES Company Name:

Contact Type: Not reported Contact Name: **EDWARD DWECK** Address1: Not reported Address2: Not reported City: Not reported NN

State:

Zip Code: Not reported

Country Code: (561) 734-7240 Phone: Not reported EMail: Fax Number: Not reported Modified By: **TRANSLAT**

Tank Info:

Tank Number: 0001 63472 Tank Id: Material Code: 0001

Common Name of Substance: #2 Fuel Oil (On-Site Consumption)

2004-03-04

Equipment Records:

Date Last Modified:

A00 - Tank Internal Protection - None H00 - Tank Leak Detection - None

L09 - Piping Leak Detection - Exempt Suction Piping

G00 - Tank Secondary Containment - None J02 - Dispenser - Suction Dispenser C01 - Pipe Location - Aboveground

B00 - Tank External Protection - None F00 - Pipe External Protection - None

105 - Overfill - Vent Whistle D00 - Pipe Type - No Piping

Tank Location:

Steel/Carbon Steel/Iron Tank Type:

Tank Status: In Service Pipe Model: Not reported Install Date: 05/01/1966 Capacity Gallons: 1500 Tightness Test Method:

Date Test: Not reported

Direction Distance

Distance Elevation Site EDR ID Number

EDR ID Number

EPA ID Number

BRAVO FASHION (RETAIL STORE) (Continued)

A100293199

Next Test Date: Not reported
Date Tank Closed: Not reported
Register: True
Modified By: MRBARROW

Material Name: #2 fuel oil (on-site consumption)

01/18/2018

40 ENGINE 328 AND ENGINE 264 NY AST U003394377 ESE 16-15 CENTRAL AVENUE N/A

1/8-1/4 0.135 mi. 715 ft.

 Relative:
 AST:

 Higher
 Region:
 STATE

 Actual:
 DEC Region:
 2

FAR ROCKAWAY, NY 11691

Last Modified:

27 ft. Site Status: Unregulated/Closed

Facility Id: 2-358037
Program Type: PBS
UTM X: 605587.27171

UTM Y: 4495661.10810
Expiration Date: N/A
Site Type: Other

Affiliation Records:

Site Id: 17947 Affiliation Type: **Facility Owner** Company Name: FIRE DEPARTMENT Contact Type: Not reported Contact Name: Not reported Address1: 9 METROTECH Address2: Not reported City: **BROOKLYN**

State: NY
Zip Code: 11201-3857
Country Code: 001

Phone: (718) 999-2094
EMail: Not reported
Fax Number: Not reported
Modified By: DAFRANCI
Date Last Modified: 2016-09-15

Site Id: 17947
Affiliation Type: Mail Contact

Company Name: BUILDINGS MAINTENANCE DIVISION

Contact Type: Not reported

Contact Name: JOSEPH M. MASTROPIETRO, ASST. COMMISSIONER

Address1: FIRE DEPARTMENT
Address2: 48-34 35TH STREET
City: LONG ISLAND CITY

State:NYZip Code:11101Country Code:001

Phone: (718) 784-6510

EMail: MASTROJ@FDNY.NYC.GOV

Fax Number: Not reported Modified By: NRLOMBAR Date Last Modified: 2009-12-29

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

ENGINE 328 AND ENGINE 264 (Continued)

U003394377

Site Id: 17947

Affiliation Type: **Facility Operator**

Company Name: **ENGINE 328 AND ENGINE 264**

Contact Type: Not reported

COMPANY OFFICER Contact Name:

Address1: Not reported Not reported Address2: City: Not reported State: NN

Zip Code: Not reported

Country Code: 001

(718) 476-6264 Phone: Not reported EMail: Fax Number: Not reported **NRLOMBAR** Modified By: Date Last Modified: 2007-11-20

Site Id: 17947

Affiliation Type: **Emergency Contact** FIRE DEPARTMENT Company Name:

Contact Type: Not reported

EOC/NOTIFICATION DESK Contact Name:

Address1: Not reported Address2: Not reported City: Not reported State: NN Zip Code: Not reported

Country Code:

(718) 999-2094 Phone: EMail: Not reported Fax Number: Not reported Modified By: **MFLEONAR** Date Last Modified: 2018-03-12

Tank Info:

Tank Number: 001 Tank Id: 35086 8000 Material Code: Common Name of Substance: Diesel

Equipment Records:

B00 - Tank External Protection - None C00 - Pipe Location - No Piping D02 - Pipe Type - Galvanized Steel F00 - Pipe External Protection - None J02 - Dispenser - Suction Dispenser G00 - Tank Secondary Containment - None A00 - Tank Internal Protection - None 104 - Overfill - Product Level Gauge (A/G)

H00 - Tank Leak Detection - None

Tank Location:

Tank Type: Steel/Carbon Steel/Iron

Tank Status: In Service Pipe Model: Not reported Install Date: 01/01/1976

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

ENGINE 328 AND ENGINE 264 (Continued)

U003394377

Capacity Gallons: 550 Tightness Test Method: NN

Date Test: Not reported Next Test Date: Not reported Date Tank Closed: Not reported Register: True **TRANSLAT** Modified By: Last Modified: 04/14/2017 Material Name: diesel

Tank Number: 002 Tank Id: 35087 Material Code: 0001

Common Name of Substance: #2 Fuel Oil (On-Site Consumption)

Equipment Records:

B00 - Tank External Protection - None C00 - Pipe Location - No Piping D02 - Pipe Type - Galvanized Steel F00 - Pipe External Protection - None A00 - Tank Internal Protection - None 104 - Overfill - Product Level Gauge (A/G)

G03 - Tank Secondary Containment - Vault (w/o access)

H00 - Tank Leak Detection - None

Tank Location:

Tank Type: Steel/Carbon Steel/Iron Tank Status: Closed - Removed Pipe Model: Not reported 01/01/1980 Install Date: Capacity Gallons: 2550 Tightness Test Method: NN

Date Test: Not reported Not reported Next Test Date: 09/20/2007 Date Tank Closed: Register: True Modified By: **NRLOMBAR** Last Modified: 04/14/2017

Material Name: #2 fuel oil (on-site consumption)

JACK COLETTA INC./COLETTA RECYCLING 1629 REDFERN AVE

ΝE 1/8-1/4 FAR ROCKAWAY, NY 11691

0.138 mi.

J41

731 ft. Site 2 of 2 in cluster J

SWF/LF: Relative:

Lower **INACTIVE** Flag:

Region Code: Actual: Phone Number: 7183274740 14 ft.

Jack Coletta Inc./Coletta Recycling Owner Name:

Owner Type: Not reported Owner Address: 1629 Redfern Ave Owner Addr2: Not reported

Owner City,St,Zip: Far Rockaway, NY 11691

Owner Email: Not reported Owner Phone: 7183274740 S111378403

N/A

NY SWF/LF

NY SWRCY

Direction Distance

Elevation Site Database(s) EPA ID Number

JACK COLETTA INC./COLETTA RECYCLING (Continued)

S111378403

EDR ID Number

Contact Name: Not reported
Contact Address: Not reported
Contact Addr2: Not reported
Contact City, St, Zip: Not reported
Contact Email: Not reported
Contact Phone: Not reported

Activity Desc: Waste tire storage - permit

Activity Number: [41K62] Active: No

East Coordinate: Not reported North Coordinate: Not reported Accuracy Code: Not reported Regulatory Status: Not reported Waste Type: Not reported Authorization #: Not reported Authorization Date: Not reported Expiration Date: Not reported Not reported Operator Name: Operator Type: Not reported Laste Date: Not reported

SWRCY:

Region: 2

Facility Address 2: Not reported 7188681011 Owner Type: Private

Owner Name: Redfern Recycling LLC
Owner Address: 1629 Redfern Avenue

Owner Address 2: Not reported

Owner City, St, Zip: Far Rockaway, NY 11691

Owner Email: Not reported 7186195053 Contact Name: Joe Ricardo Contact Address: Not reported Contact Address 2: Not reported Contact City,St,Zip: Not reported

Contact Email: joe@nassaureadymix.com

Contact Phone: 5165266033
Activity Desc: RHRF - registration

Activity Number: [41MB2] Active: No East Coordinate: 604700 North Coordinate: 4495200 Accuracy Code: Not reported Regulatory Status: Registration Permit #: 41MB2 Auth. Date: Not reported **Expiration Date:** Not reported

Waste Types: Commingled Containers; Metals (Ferrous); Metals (Non-Ferrous)

Operator Name: Redfern Recycling LLC

Operator Type: Private
Last Date: Not reported

Direction Distance

Elevation Site Database(s) **EPA ID Number**

K42 **ROCKAWAY CO** NY UST U004078073 SE **19-31 MOTT AVENUE** N/A

1/8-1/4 FAR ROCKAWAY, NY 11691

0.147 mi.

777 ft. Site 1 of 2 in cluster K

UST: Relative:

Higher 2-309060 / Active Id/Status:

Program Type: PBS Actual: STATE Region: 27 ft. DEC Region: 2

> **Expiration Date:** 10/02/2022 UTM X: 605558.63141 UTM Y: 4495532.46445

Apartment Building/Office Building Site Type:

Affiliation Records:

Site Id: 14072 Affiliation Type: **Facility Owner** Company Name: **ROCKAWAY CO**

Contact Type: **OPERATIONS DIRECTOR**

Contact Name: **CHARLES REID** Address1: 450 SEVENTH AVE Address2: Not reported **NEW YORK** City: State: NY Zip Code: 10123

Country Code: 001

Phone: (212) 563-6252

EMail: CREIDJR@KAUFMANORGANIZATION.COM

Fax Number: Not reported Modified By: **ACDANIEL** 2017-11-01 Date Last Modified:

Site Id: 14072 Affiliation Type: Mail Contact **ROCKAWAY CO** Company Name:

Contact Type: **OPERATIONS DIRECTOR**

Contact Name: **CHARLES REID** Address1: 450 SEVENTH AVE Address2: Not reported **NEW YORK** City: State: NY Zip Code: 10123

Country Code: 001

Phone: (212) 563-6252

EMail: CREIDJR@KAUFMANORGANIZATION.COM

Fax Number: Not reported **ACDANIEL** Modified By: Date Last Modified: 2017-11-01

Site Id: 14072

Facility Operator Affiliation Type: Company Name: **ROCKAWAY CO** Contact Type: Not reported Contact Name: ISRAEL FERRAR Address1: Not reported Address2: Not reported City: Not reported

State: NN **EDR ID Number**

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

ROCKAWAY CO (Continued)

U004078073

Zip Code: Not reported

Country Code: 999

Phone: (718) 327-1132 EMail: Not reported Fax Number: Not reported Modified By: **ACDANIEL** Date Last Modified: 2017-11-01

Site Id: 14072

Affiliation Type: **Emergency Contact ROCKAWAY CO** Company Name: Contact Type: Not reported Contact Name: ISRAEL FERRAR Address1: Not reported Address2: Not reported City: Not reported State: NN

Zip Code: Not reported

Country Code: 999

(718) 327-1132 Phone: EMail: Not reported Fax Number: Not reported Modified By: **ACDANIEL** Date Last Modified: 2017-11-01

Tank Info:

Tank Number: 001 Tank ID: 17772

Closed - In Place Tank Status: Material Name: Closed - In Place

Capacity Gallons: 2000

Install Date: Not reported Date Tank Closed: 05/01/1992 Registered: True

Tank Location: Underground Tank Type: Steel/carbon steel

Material Code: 0001

#2 Fuel Oil (On-Site Consumption) Common Name of Substance:

NN Tightness Test Method:

Date Test: Not reported Next Test Date: Not reported Pipe Model: Not reported Modified By: **TRANSLAT** 04/14/2017 Last Modified:

Equipment Records:

104 - Overfill - Product Level Gauge (A/G) A00 - Tank Internal Protection - None D01 - Pipe Type - Steel/Carbon Steel/Iron B00 - Tank External Protection - None C00 - Pipe Location - No Piping F00 - Pipe External Protection - None G00 - Tank Secondary Containment - None J02 - Dispenser - Suction Dispenser H00 - Tank Leak Detection - None

Direction Distance

Distance Elevation Site EDR ID Number

EDR ID Number

EPA ID Number

K43 ROCKAWAY CO NY AST U001836214 SE 19-31 MOTT AVENUE N/A

1/8-1/4 FAR ROCKAWAY, NY 11691

0.147 mi.

777 ft. Site 2 of 2 in cluster K

 Relative:
 AST:

 Higher
 Region:
 STATE

 Actual:
 DEC Region:
 2

 27 ft.
 Site Status:
 Active

 Facility Id:
 2-309060

 Program Type:
 PBS

UTM X: 605558.63141 UTM Y: 4495532.46445 Expiration Date: 10/02/2022

Site Type: Apartment Building/Office Building

Affiliation Records:

Site Id: 14072
Affiliation Type: Facility Owner
Company Name: ROCKAWAY CO

Contact Type: OPERATIONS DIRECTOR

Contact Name: CHARLES REID
Address1: 450 SEVENTH AVE
Address2: Not reported
City: NEW YORK
State: NY
Zip Code: 10133

State: NY
Zip Code: 10123
Country Code: 001

Phone: (212) 563-6252

EMail: CREIDJR@KAUFMANORGANIZATION.COM

Fax Number: Not reported Modified By: ACDANIEL Date Last Modified: 2017-11-01

Site Id: 14072
Affiliation Type: Mail Contact
Company Name: ROCKAWAY CO

Contact Type: OPERATIONS DIRECTOR

Contact Name: CHARLES REID
Address1: 450 SEVENTH AVE
Address2: Not reported
City: NEW YORK

State: NY
Zip Code: 10123
Country Code: 001

Phone: (212) 563-6252

EMail: CREIDJR@KAUFMANORGANIZATION.COM

Fax Number: Not reported Modified By: ACDANIEL Date Last Modified: 2017-11-01

Site Id: 14072

Affiliation Type: Facility Operator
Company Name: ROCKAWAY CO
Contact Type: Not reported
Contact Name: ISRAEL FERRAR
Address1: Not reported
Address2: Not reported
City: Not reported

Direction Distance

Elevation Site Database(s) EPA ID Number

ROCKAWAY CO (Continued)

U001836214

EDR ID Number

State: NN

Zip Code: Not reported

Country Code: 999

Phone: (718) 327-1132
EMail: Not reported
Fax Number: Not reported
Modified By: ACDANIEL
Date Last Modified: 2017-11-01

Site Id: 14072

Affiliation Type: **Emergency Contact** Company Name: **ROCKAWAY CO** Contact Type: Not reported Contact Name: ISRAEL FERRAR Address1: Not reported Address2: Not reported Not reported City: State: NN

Zip Code: Not reported

Country Code: 999

Phone: (718) 327-1132
EMail: Not reported
Fax Number: Not reported
Modified By: ACDANIEL
Date Last Modified: 2017-11-01

Tank Info:

 Tank Number:
 002

 Tank Id:
 54411

 Material Code:
 0001

Common Name of Substance: #2 Fuel Oil (On-Site Consumption)

Equipment Records:

J02 - Dispenser - Suction Dispenser G00 - Tank Secondary Containment - None

L09 - Piping Leak Detection - Exempt Suction Piping E00 - Piping Secondary Containment - None

H00 - Tank Leak Detection - None K00 - Spill Prevention - None

D01 - Pipe Type - Steel/Carbon Steel/Iron

F01 - Pipe External Protection - Painted/Asphalt Coating

A00 - Tank Internal Protection - None

B01 - Tank External Protection - Painted/Asphalt Coating

104 - Overfill - Product Level Gauge (A/G)C01 - Pipe Location - Aboveground

Tank Location:

Tank Type: Steel/Carbon Steel/Iron

Tank Status: In Service
Pipe Model: Not reported
Install Date: 05/01/1992
Capacity Gallons: 2000
Tightness Test Method: NN

Date Test: Not reported Next Test Date: Not reported Date Tank Closed: Not reported

Direction Distance

Elevation Site Database(s) **EPA ID Number**

ROCKAWAY CO (Continued) U001836214

Register: True **MSBAPTIS** Modified By: Last Modified: 04/14/2017

Material Name: #2 fuel oil (on-site consumption)

L44 FRESH EXPRESSIONS COSMETICS INC RCRA NonGen / NLR 1001090434

FINDS NYR000022715 East **1522 CENTRAL AVE**

1/8-1/4 FAR ROCKAWAY, NY 11694 **ECHO** 0.155 mi. **NY MANIFEST**

820 ft. Site 1 of 2 in cluster L Relative: RCRA NonGen / NLR:

Lower Date form received by agency: 01/01/2007

FRESH EXPRESSIONS COSMETICS INC Facility name: Actual:

Facility address: 21 ft. 1522 CENTRAL AVE

FAR ROCKAWAY, NY 11694

EPA ID: NYR000022715 Mailing address:

CENTRAL AVE

FAR ROCKAWAY, NY 11694 Contact:

Not reported Contact address: **CENTRAL AVE**

FAR ROCKAWAY, NY 11694

Contact country: US

Not reported Contact telephone: Contact email: Not reported

EPA Region:

Classification: Non-Generator

Description: Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:

Owner/operator name: **NEW HORIZON COMMERCIAL PROPERTIES**

Owner/operator address: **PO BOX 435**

LAWRENCE, NY 11559

US Owner/operator country:

Owner/operator telephone: 516-791-6043 Owner/operator email: Not reported Owner/operator fax: Not reported Owner/operator extension: Not reported Private Legal status: Owner/Operator Type: Owner Owner/Op start date: Not reported Owner/Op end date: Not reported

NEW HORIZON COMMERCIAL PROPERTIES Owner/operator name:

Owner/operator address: PO BOX 435

LAWRENCE, NY 11559

Owner/operator country: US

Owner/operator telephone: 516-791-6043 Owner/operator email: Not reported Owner/operator fax: Not reported Owner/operator extension: Not reported Legal status: Private Owner/Operator Type: Operator Owner/Op start date: Not reported Owner/Op end date: Not reported

EDR ID Number

Direction Distance

Elevation Site Database(s) EPA ID Number

FRESH EXPRESSIONS COSMETICS INC (Continued)

1001090434

EDR ID Number

Handler Activities Summary:

U.S. importer of hazardous waste: No Mixed waste (haz. and radioactive): No Recycler of hazardous waste: No Transporter of hazardous waste: No Treater, storer or disposer of HW: No Underground injection activity: No On-site burner exemption: No Furnace exemption: Nο Used oil fuel burner: No Used oil processor: No User oil refiner: Nο Used oil fuel marketer to burner: No Used oil Specification marketer: No Used oil transfer facility: No Used oil transporter: No

Historical Generators:

Date form received by agency: 01/01/2006

Site name: FRESH EXPRESSIONS COSMETICS INC

Classification: Not a generator, verified

Date form received by agency: 07/08/1999

Site name: FRESH EXPRESSIONS COSMETICS INC

Classification: Not a generator, verified

Date form received by agency: 04/24/1996

Site name: FRESH EXPRESSIONS COSMETICS INC

Classification: Small Quantity Generator

. Waste code: D001

. Waste name: IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF

LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT

WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.

. Waste code: D002

. Waste name: A WASTE WHICH HAS A PH OF LESS THAN 2 OR GREATER THAN 12.5 IS

CONSIDERED TO BE A CORROSIVE HAZARDOUS WASTE. SODIUM HYDROXIDE, A CAUSTIC SOLUTION WITH A HIGH PH, IS OFTEN USED BY INDUSTRIES TO CLEAN OR DEGREASE PARTS. HYDROCHLORIC ACID, A SOLUTION WITH A LOW PH, IS USED BY MANY INDUSTRIES TO CLEAN METAL PARTS PRIOR TO PAINTING. WHEN THESE CAUSTIC OR ACID SOLUTIONS BECOME CONTAMINATED AND MUST BE DISPOSED, THE WASTE WOULD BE A CORROSIVE HAZARDOUS WASTE.

Waste code: F003

. Waste name: THE FOLLOWING SPENT NON-HALOGENATED SOLVENTS: XYLENE, ACETONE, ETHYL

ACETATE, ETHYL BENZENE, ETHYL ETHER, METHYL ISOBUTYL KETONE, N-BUTYL

ALCOHOL, CYCLOHEXANONE, AND METHANOL; ALL SPENT SOLVENT
MIXTURES/BLENDS CONTAINING, BEFORE USE, ONLY THE ABOVE SPENT
NON-HALOGENATED SOLVENTS; AND ALL SPENT SOLVENT MIXTURES/BLENDS
CONTAINING, BEFORE USE, ONE OR MORE OF THE ABOVE NON-HALOGENATED
SOLVENTS, AND, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

FRESH EXPRESSIONS COSMETICS INC (Continued)

1001090434

MORE OF THOSE SOLVENTS LISTED IN F001, F002, F004, AND F005, AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT

MIXTURES.

Violation Status: No violations found

FINDS:

Registry ID: 110004524257

Environmental Interest/Information System

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and

corrective action activities required under RCRA.

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:

Envid: 1001090434 Registry ID: 110004524257

DFR URL: http://echo.epa.gov/detailed-facility-report?fid=110004524257

NY MANIFEST:

USA Country:

NYR000022715 EPA ID: Facility Status: Not reported

Location Address 1: 1522 CENTRAL AVENUE

ΒP Code:

Location Address 2: Not reported Total Tanks: Not reported QUEENS Location City: Location State: NY Location Zip: 11691 Location Zip 4: Not reported

NY MANIFEST:

EPAID: NYR000022715

FRESH EXPRESSIONS Mailing Name:

Mailing Contact: MARK DANA

Mailing Address 1: 1522 CENTRAL AVENUE

Mailing Address 2: Not reported Mailing City: **QUEENS** Mailing State: NY Mailing Zip: 11691 Mailing Zip 4: Not reported Mailing Country: USA Mailing Phone: 7184715651

NY MANIFEST:

Document ID: NJA2521265

Manifest Status:

seq: Not reported

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

FRESH EXPRESSIONS COSMETICS INC (Continued)

1001090434

Year: 1996 Trans1 State ID: 08690 Trans2 State ID: S00602 Generator Ship Date: 06/28/1996 Trans1 Recv Date: 06/28/1996 Trans2 Recv Date: 07/02/1996 TSD Site Recv Date: 07/02/1996 Part A Recv Date: 08/07/1996 Part B Recv Date: 07/23/1996 Generator EPA ID: NYR000022715 Trans1 EPA ID: ILD984908202 Trans2 EPA ID: NYD980769947 TSDF ID 1: NJD002182897 TSDF ID 2: Not reported Manifest Tracking Number: Not reported Import Indicator: Not reported Not reported **Export Indicator:** Discr Quantity Indicator: Not reported Discr Type Indicator: Not reported Discr Residue Indicator: Not reported Discr Partial Reject Indicator: Not reported Discr Full Reject Indicator: Not reported Manifest Ref Number: Not reported Alt Facility RCRA ID: Not reported Alt Facility Sign Date: Not reported MGMT Method Type Code: Not reported F003 - UNKNOWN Waste Code: Waste Code: Not reported Waste Code: Not reported Not reported Waste Code: Waste Code: Not reported Waste Code: Not reported Quantity: 00202 Units: P - Pounds

Container Type: DM - Metal drums, barrels

Handling Method: B Incineration, heat recovery, burning.

001

Specific Gravity: 100

Number of Containers:

Click this hyperlink while viewing on your computer to access -1 additional NY MANIFEST: record(s) in the EDR Site Report.

M45 **VERIZON NEW YORK INC-NY-37367**

ENE 13-11 BAYPORT PLACE 1/8-1/4 FAR ROCKAWAY, NY 11691

0.157 mi.

830 ft. Site 1 of 2 in cluster M

Relative: TANKS: Lower Facility Id: 2-343986 Region: STATE Actual: DEC Region: 2 17 ft. Site Status: Active Program Type: **PBS**

12/14/2022 **Expiration Date:** UTM X: 605643.89316 UTM Y: 4495761.83663 S102402083

N/A

NY TANKS

NY Spills

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

VERIZON NEW YORK INC-NY-37367 (Continued)

S102402083

SPILLS:

9608080 Facility ID: Facility Type: ER Spill Number: 9608080 DER Facility ID: 220405 Site ID: 270747

DEC Region:

Closed Date: 1996-10-02 Spill Cause: **Equipment Failure**

Spill Class: C4 4101 SWIS: 1996-09-27 Spill Date: Investigator: **ADZHITOM** Referred To: Not reported Reported to Dept: 1996-09-28 CID: 267

Water Affected: Not reported

Spill Source: Commercial/Industrial

Spill Notifier: Other Cleanup Ceased: Not reported Cleanup Meets Std: False Last Inspection: Not reported Recommended Penalty: False **UST Trust:** False Remediation Phase:

Date Entered In Computer: 1996-09-28 Spill Record Last Update: 1996-10-17 Spiller Name: MIKE COLONE

Spiller Company: **NYNEX**

13-11 BAYPORT PLACE Spiller Address:

Spiller Company: 001

Contact Name: JOHN OSWALD

"Prior to Sept, 2004 data translation this spill Lead_DEC Field was DEC Memo:

ZHITOMIRSKY/TIBBE "

"pump malfunctioned and shut down spilling 150 gallons into the Remarks:

containment area spill was cleaned up and john oswall will follow up

in days to check the seepage into the area "

All Materials:

270747 Site ID: 1036340 Operable Unit ID: Operable Unit: 01 Material ID: 343823 Material Code: 0001A Material Name: #2 fuel oil Case No.: Not reported Material FA: Petroleum Quantity: 150.00 Units: G Recovered: 150.00 Oxygenate: Not reported

Direction Distance

Distance Elevation Site EDR ID Number Database(s) EPA ID Number

M46 VERIZON NEW YORK - FAR ROCKAWAY RCRA NonGen / NLR 1005905773

ENE 13-11 BAYPORT PL FINDS NYR000108571

1/8-1/4 FAR ROCKAWAY, NY 11691 ECHO

0.157 mi.

830 ft. Site 2 of 2 in cluster M

Relative: RCRA NonGen / NLR:

Lower Date form received by agency: 01/01/2007

Actual: Facility name: VERIZON
17 ft. Facility address: 13-11 BAYPORT PL

FAR ROCKAWAY, NY 11691-3926

EPA ID: NYR000108571

Mailing address: E 37TH ST

NEW YORK, NY 10016

Contact: LEO BUSINELLI

Contact address: E 37TH ST

NEW YORK, NY 10016

Contact country: US

Contact telephone: 212-338-7675 Contact email: Not reported

EPA Region: 02

Classification: Non-Generator

Description: Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:

Owner/operator name: VERIZON

Owner/operator address: 13-11 BAYPORT PL

FAR ROCKAWAY, NY 11691

Owner/operator country: US

Owner/operator telephone: 212-555-1212
Owner/operator email: Not reported
Owner/operator fax: Not reported
Owner/operator extension: Not reported
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: 01/01/2001

Owner/Op start date: 01/01/2001 Owner/Op end date: Not reported

Owner/operator name: VERIZON

Owner/operator address: 13-11 BAYPORT PL

FAR ROCKAWAY, NY 11691

Owner/operator country: US

Owner/operator telephone: 212-555-1212 Owner/operator email: Not reported Owner/operator fax: Not reported Owner/operator extension: Not reported Private Legal status: Owner/Operator Type: Operator Owner/Op start date: 01/01/2001 Owner/Op end date: Not reported

Handler Activities Summary:

U.S. importer of hazardous waste: No Mixed waste (haz. and radioactive): No Recycler of hazardous waste: No Transporter of hazardous waste: No Treater, storer or disposer of HW: No Underground injection activity: No

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

VERIZON NEW YORK - FAR ROCKAWAY (Continued)

1005905773

On-site burner exemption: No Furnace exemption: No Used oil fuel burner: No Used oil processor: No User oil refiner: No Used oil fuel marketer to burner: No Used oil Specification marketer: No Used oil transfer facility: No Used oil transporter: No

Historical Generators:

Date form received by agency: 01/01/2006 Site name: VERIZON

Classification: Not a generator, verified

Date form received by agency: 08/13/2002 Site name: VERIZON

Classification: Small Quantity Generator

Violation Status: No violations found

FINDS:

Registry ID: 110013290722

Environmental Interest/Information System

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

FIS (New York - Facility Information System) is New York's Department of Environmental Conservation (DEC) information system for tracking environmental facility information found across the State.

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:

Envid: 1005905773 Registry ID: 110013290722

DFR URL: http://echo.epa.gov/detailed-facility-report?fid=110013290722

1136-1138 MCBRIDE ST. CORP. NY UST U003127737

1136-1138 MCBRIDE STREET West 1/8-1/4 FAR ROCKAWAY, NY 11691

0.161 mi.

N47

849 ft. Site 1 of 2 in cluster N

UST: Relative:

Lower Id/Status: 2-291846 / Unregulated/Closed

Program Type: **PBS** Actual: Region: STATE 10 ft. DEC Region: 2

TC5471477.6s Page 95

N/A

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

1136-1138 MCBRIDE ST. CORP. (Continued)

U003127737

Expiration Date: N/A

605100.70869 UTM X: UTM Y: 4495642.34497

Site Type: Apartment Building/Office Building

Affiliation Records:

Site Id: 13250 Affiliation Type: Facility Owner

Company Name: 1136-1138 MCBRIDE ST. CORP.

Contact Type: **PRESIDENT** Contact Name: **GABRIEL DROR**

Address1: 98 WASHINGTON AVENUE

Address2: Not reported LAWRENCE City: State: NYZip Code: 11559 Country Code: 001

Phone: (516) 369-6564 EMail: Not reported Fax Number: Not reported Modified By: **NRLOMBAR** Date Last Modified: 2011-03-25

Site Id: 13250 Mail Contact Affiliation Type:

Company Name: 1136-1138 MCBRIDE ST. CORP.

Contact Type: Not reported Contact Name: **GABRIEL DROR**

Address1: 98 WASHINGTON AVENSUE

Address2: Not reported LAWRENCE City: State: NY Zip Code: 11559 Country Code: 001

(516) 369-6564 Phone: EMail: Not reported Fax Number: Not reported Modified By: **NRLOMBAR** Date Last Modified: 2011-03-25

Site Id: 13250

Affiliation Type: **Facility Operator**

Company Name: 1136-1138 MCBRIDE ST. CORP.

Contact Type: Not reported GABRIEL DROR Contact Name: Address1: Not reported Address2: Not reported City: Not reported NN State:

Zip Code: Not reported Country Code: 001

Phone: (516) 295-7808 EMail: Not reported Fax Number: Not reported Modified By: **NRLOMBAR** Date Last Modified: 2011-03-25

13250 Site Id:

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

1136-1138 MCBRIDE ST. CORP. (Continued)

U003127737

Affiliation Type: **Emergency Contact**

1136-1138 MCBRIDE ST. CORP. Company Name:

Contact Type: Not reported Contact Name: GABRIEL DROR Address1: Not reported Not reported Address2: Not reported City: State: NN

Zip Code: Not reported

Country Code: 999

(516) 369-6564 Phone: EMail: Not reported Not reported Fax Number: Modified By: **NRLOMBAR** Date Last Modified: 2011-03-25

Tank Info:

Tank Number: 001 Tank ID: 11928

Closed - In Place Tank Status: Material Name: Closed - In Place

Capacity Gallons: 2500 12/01/1955 Install Date: Date Tank Closed: 02/28/2011 Registered: True Tank Location: Underground Tank Type: Steel/carbon steel

Material Code: 0001

Common Name of Substance: #2 Fuel Oil (On-Site Consumption)

Tightness Test Method: 21

12/30/2008 Date Test: Next Test Date: Not reported Not reported Pipe Model: NRLOMBAR Modified By: Last Modified: 04/14/2017

Equipment Records:

105 - Overfill - Vent Whistle

F00 - Pipe External Protection - None

C03 - Pipe Location - Aboveground/Underground Combination

G00 - Tank Secondary Containment - None E00 - Piping Secondary Containment - None

H00 - Tank Leak Detection - None A00 - Tank Internal Protection - None

B01 - Tank External Protection - Painted/Asphalt Coating

D01 - Pipe Type - Steel/Carbon Steel/Iron

K00 - Spill Prevention - None J03 - Dispenser - Gravity

L00 - Piping Leak Detection - None

Direction Distance

Distance Elevation Site EDR ID Number

EDR ID Number

EPA ID Number

O48 ROCKAWAY COMPANY NY AST U003390607
SE 19-20 MOTT AVENUE N/A

1/8-1/4 FAR ROCKAWAY, NY 11691

0.168 mi.

887 ft. Site 1 of 2 in cluster O

 Relative:
 AST:

 Higher
 Region:
 STATE

 Actual:
 DEC Region:
 2

 28 ft.
 Site Status:
 Active

 Facility Id:
 2-159263

 Program Type:
 PBS

UTM X: 605570.72971 UTM Y: 4495538.63147 Expiration Date: 08/26/2022

Site Type: Apartment Building/Office Building

Affiliation Records:

Site Id: 5376 Affiliation Type: Facility Owner

Company Name: ROCKAWAY COMPANY
Contact Type: DIRECTOR OF OPERATIONS

Contact Name: CHARLES REID
Address1: 450 SEVENTH AVE
Address2: Not reported
City: NEW YORK
State: NY
Zip Code: 10123
Country Code: 001

Phone: (212) 563-6252
EMail: Not reported
Fax Number: Not reported
Modified By: ACDANIEL
Date Last Modified: 2017-09-18

Site Id: 5376

Affiliation Type: Mail Contact

Company Name: ROCKAWAY COMPANY

Contact Type: Not reported
Contact Name: CHARLES REID

Address1: 450 SEVENTH AVENUE Address2: Not reported

 City:
 NEW YORK

 State:
 NY

 Zip Code:
 10123

 Country Code:
 001

Phone: (718) 327-1132

EMail: CREID@KAUFMANORGANIZATION.COM

Fax Number: Not reported Modified By: ACDANIEL Date Last Modified: 2017-09-18

Site Id: 5376

Affiliation Type: Facility Operator

Company Name: ROCKAWAY COMPANY

Contact Type: Not reported
Contact Name: KAUFMAN REALTY
Address1: Not reported

Address1: Not reported Not reported City: Not reported

Direction Distance

Elevation Site Database(s) EPA ID Number

ROCKAWAY COMPANY (Continued)

U003390607

EDR ID Number

State: NN

Zip Code: Not reported

Country Code: 001

Phone: (718) 327-1132
EMail: Not reported
Fax Number: Not reported
Modified By: TRANSLAT
Date Last Modified: 2004-03-04

Site Id: 5376

Affiliation Type: Emergency Contact
Company Name: ROCKAWAY COMPANY

Contact Type: Not reported

Contact Name: ROBERT ROTHENBERG

Address1: Not reported Address2: Not reported City: Not reported State: NN

Zip Code: Not reported

Country Code: 001

Phone: (718) 327-1132
EMail: Not reported
Fax Number: Not reported
Modified By: TRANSLAT
Date Last Modified: 2004-03-04

Tank Info:

 Tank Number:
 001

 Tank Id:
 19645

 Material Code:
 0001

Common Name of Substance: #2 Fuel Oil (On-Site Consumption)

Equipment Records:

E00 - Piping Secondary Containment - None

G03 - Tank Secondary Containment - Vault (w/o access)

H00 - Tank Leak Detection - None

L09 - Piping Leak Detection - Exempt Suction Piping

J02 - Dispenser - Suction Dispenser I04 - Overfill - Product Level Gauge (A/G) B00 - Tank External Protection - None C00 - Pipe Location - No Piping F00 - Pipe External Protection - None A00 - Tank Internal Protection - None D01 - Pipe Type - Steel/Carbon Steel/Iron

K00 - Spill Prevention - None

Tank Location:

Tank Type: Steel/Carbon Steel/Iron

Tank Status: In Service
Pipe Model: Not reported
Install Date: 08/07/1958
Capacity Gallons: 2000
Tightness Test Method: NN

Date Test:
Not reported
Next Test Date:
Not reported
Date Tank Closed:
Not reported
Not reported

Direction Distance

Distance Elevation Site EDR ID Number

Database(s) EPA ID Number

ROCKAWAY COMPANY (Continued)

U003390607

Register: True
Modified By: KAKYER
Last Modified: 04/14/2017

Material Name: #2 fuel oil (on-site consumption)

Unregistered

L49 CENTRAL ASSISTED LIVING, LLC NY AST A100433689
East 1509 CENTRAL AVENUE N/A

1/8-1/4 0.168 mi.

888 ft. Site 2 of 2 in cluster L

Relative: AST:

LowerRegion:STATEActual:DEC Region:2

FAR ROCKAWAY, NY 11691

21 ft. Site Status: Facility Id:

Facility Id: 2-612713
Program Type: PBS
UTM X: Not reported
UTM Y: Not reported

Expiration Date: N/A

Site Type: Hospital/Nursing Home/Health Care

Affiliation Records:

Site Id: 549973
Affiliation Type: Facility Owner

Company Name: PRIME HEALTH SERVICES, LLC

Contact Type: OWNER
Contact Name: ERIC MENDEL

Address1: 1509 CENTRAL AVENUE

Address2: Not reported City: FAR ROCKAWAY

State: NY
Zip Code: 11691
Country Code: 001

Phone: (718) 471-7700
EMail: Not reported
Fax Number: Not reported
Modified By: MRBARROW
Date Last Modified: 2017-05-25

Site Id: 549973

Affiliation Type: Facility Operator

Company Name: CENTRAL ASSISTED LIVING, LLC

Contact Type: Not reported

Contact Name: NA

Address1: Not reported Address2: Not reported City: Not reported State: NN
Zip Code: Not reported Not reported

Country Code: 001

Phone: (718) 471-7700
EMail: Not reported
Fax Number: Not reported
Modified By: MRBARROW
Date Last Modified: 2017-05-25

Direction Distance Elevation

EDR ID Number
tion Site Database(s) EPA ID Number

CENTRAL ASSISTED LIVING, LLC (Continued)

A100433689

Tank Info:

 Tank Number:
 001

 Tank Id:
 269452

Equipment Records:

A00 - Tank Internal Protection - None

B01 - Tank External Protection - Painted/Asphalt Coating G09 - Tank Secondary Containment - Modified Double-Walled

(Aboveground)

K00 - Spill Prevention - None

E00 - Piping Secondary Containment - None

H00 - Tank Leak Detection - None C01 - Pipe Location - Aboveground F05 - Pipe External Protection - Jacketed

J05 - Dispenser - On Site Heating System (Supply/Return)

D11 - Pipe Type - Flexible Piping I05 - Overfill - Vent Whistle L00 - Piping Leak Detection - None

Tank Location: 3

Tank Type: Steel/Carbon Steel/Iron

Tank Status: Unregistered Pipe Model: Not reported Install Date: Not reported Capacity Gallons: 1475

Tightness Test Method: -

Date Test:
Not reported
Next Test Date:
Not reported
Date Tank Closed:
Not reported
True
True

Modified By: MRBARROW
Last Modified: 05/25/2017
Material Name: diesel

Tank Number: 002 Tank Id: 269453

Equipment Records:

J05 - Dispenser - On Site Heating System (Supply/Return)

A00 - Tank Internal Protection - None

B01 - Tank External Protection - Painted/Asphalt Coating

D01 - Pipe Type - Steel/Carbon Steel/Iron

F01 - Pipe External Protection - Painted/Asphalt Coating

K00 - Spill Prevention - None

E00 - Piping Secondary Containment - None

C01 - Pipe Location - Aboveground

G02 - Tank Secondary Containment - Vault (w/access)

105 - Overfill - Vent Whistle

H06 - Tank Leak Detection - Impervious Barrier/Concrete Pad (A/G)

L00 - Piping Leak Detection - None

Tank Location: 3

Tank Type: Steel/Carbon Steel/Iron

Tank Status: Unregistered
Pipe Model: Not reported
Install Date: Not reported

Capacity Gallons: 960
Tightness Test Method: -

Direction Distance

Elevation Site Database(s) EPA ID Number

CENTRAL ASSISTED LIVING, LLC (Continued)

A100433689

EDR ID Number

Date Test:

Not reported

Next Test Date:

Not reported

Date Tank Closed:

Register:

True

Modified By:

MRBARROW

Last Modified: 05/25/2017

Material Name: #2 fuel oil (on-site consumption)

P50 OWEN AUTO SERVICE NY UST U003749723
South 1017 BEACH 21ST STREET N/A

South 1017 BEACH 21ST STREET 1/8-1/4 FAR ROCKAWAY, NY 11691

0.173 mi.

914 ft. Site 1 of 2 in cluster P

Relative: UST:

Lower Id/Status: 2-604688 / Unregulated/Closed

 Actual:
 Program Type:
 PBS

 24 ft.
 Region:
 STATE

 DEC Region:
 2

 Expiration Date:
 N/A

UTM X: 605410.91281 UTM Y: 4495398.58165 Site Type: Retail Gasoline Sales

Affiliation Records:

Site Id: 26559
Affiliation Type: Facility Owner
Company Name: OWEN BRERETON
Contact Type: Not reported
Contact Name: Not reported

Address1: 14-30 GIPSON STREET

Address2: Not reported City: FAR ROCKAWAY

State: NY
Zip Code: 11691
Country Code: 001

Phone: (718) 471-3533
EMail: Not reported
Fax Number: Not reported
Modified By: TRANSLAT
Date Last Modified: 2004-03-04

Site Id: 26559
Affiliation Type: Mail Contact

Company Name: OWEN AUTO SERVICE

Contact Type: Not reported Contact Name: Not reported

Address1: 1017 BEACH 21ST STREET

Address2: Not reported City: FAR ROCKAWAY

State: NY
Zip Code: 11691
Country Code: 001

Phone: (718) 327-5927
EMail: Not reported
Fax Number: Not reported
Modified By: TRANSLAT
Date Last Modified: 2004-03-04

Direction Distance

Elevation Site Database(s) EPA ID Number

OWEN AUTO SERVICE (Continued)

U003749723

EDR ID Number

Site Id: 26559

Affiliation Type: Facility Operator
Company Name: OWEN AUTO SERVICE

Contact Type: Not reported
Contact Name: OWEN BRERETON
Address1: Not reported
Address2: Not reported
City: Not reported

State: NN

Zip Code: Not reported

Country Code: 001

Phone: (718) 327-5927
EMail: Not reported
Fax Number: Not reported
Modified By: TRANSLAT
Date Last Modified: 2004-03-04

Site Id: 26559

Affiliation Type: Emergency Contact
Company Name: OWEN BRERETON
Contact Type: Not reported
Contact Name: RITA BRERETON
Address1: Not reported
Address2: Not reported

Address1: Not reported
Address2: Not reported
City: Not reported
State: NN
Zip Code: Not reported
Country Code: 001

Phone: (718) 327-2254
EMail: Not reported
Fax Number: Not reported
Modified By: TRANSLAT
Date Last Modified: 2004-03-04

Tank Info:

Tank Number: 01 Tank ID: 58606

Tank Status: Closed - Removed Material Name: Closed - Removed

Capacity Gallons: 550
Install Date: Not reported
Date Tank Closed: 08/01/2000
Registered: True

Tank Location: Underground Tank Type: Steel/carbon steel

Material Code: 0009 Common Name of Substance: Gasoline

Tightness Test Method: NN

Date Test: Not reported
Next Test Date: Not reported
Pipe Model: Not reported
Modified By: TRANSLAT
Last Modified: 04/14/2017

Equipment Records:

Direction Distance

Elevation Site Database(s) EPA ID Number

OWEN AUTO SERVICE (Continued)

U003749723

EDR ID Number

C02 - Pipe Location - Underground/On-ground
G00 - Tank Secondary Containment - None

H00 - Tank Leak Detection - None

100 - Overfill - None J00 - Dispenser - None

A00 - Tank Internal Protection - None D01 - Pipe Type - Steel/Carbon Steel/Iron

F01 - Pipe External Protection - Painted/Asphalt Coating

B00 - Tank External Protection - None

Tank Number: 02 Tank ID: 58607

Tank Status: Closed - Removed Material Name: Closed - Removed

Capacity Gallons: 550
Install Date: Not reported
Date Tank Closed: 08/01/2000
Registered: True

Tank Location: Underground Tank Type: Steel/carbon steel

Material Code: 0009 Common Name of Substance: Gasoline

Tightness Test Method: NN

Date Test:
Not reported
Next Test Date:
Pipe Model:
Modified By:
Last Modified:
Not reported
TRANSLAT
Ud/14/2017

Equipment Records:

C02 - Pipe Location - Underground/On-ground G00 - Tank Secondary Containment - None J02 - Dispenser - Suction Dispenser A00 - Tank Internal Protection - None D01 - Pipe Type - Steel/Carbon Steel/Iron

F01 - Pipe External Protection - Painted/Asphalt Coating

B00 - Tank External Protection - None H00 - Tank Leak Detection - None

100 - Overfill - None

Gasoline

 Tank Number:
 03

 Tank ID:
 58608

Tank Status: Closed - Removed Material Name: Closed - Removed

Capacity Gallons: 550
Install Date: Not reported
Date Tank Closed: 08/01/2000
Registered: True
Tank Location: Underground

Tank Type: Steel/carbon steel Material Code: 0009

Tightness Test Method: NN

Common Name of Substance:

Date Test: Not reported

Direction Distance

Elevation Site Database(s) EPA ID Number

OWEN AUTO SERVICE (Continued)

U003749723

EDR ID Number

Next Test Date: Not reported
Pipe Model: Not reported
Modified By: TRANSLAT
Last Modified: 04/14/2017

Equipment Records:

H00 - Tank Leak Detection - None

100 - Overfill - None

A00 - Tank Internal Protection - None D01 - Pipe Type - Steel/Carbon Steel/Iron

F01 - Pipe External Protection - Painted/Asphalt Coating

G00 - Tank Secondary Containment - None C02 - Pipe Location - Underground/On-ground B00 - Tank External Protection - None

J00 - Dispenser - None

Tank Number: 04 Tank ID: 58609

Tank Status: Closed - Removed Material Name: Closed - Removed

Capacity Gallons: 550

Install Date: Not reported
Date Tank Closed: 08/01/2000
Registered: True
Tank Location: Underground

Tank Location: Underground Tank Type: Steel/carbon steel

Material Code: 0009 Common Name of Substance: Gasoline

Tightness Test Method: NN

Date Test:
Not reported
Next Test Date:
Not reported
Pipe Model:
Modified By:
TRANSLAT
Last Modified:

Not reported
Not reported
Od/14/2017

Equipment Records:

C02 - Pipe Location - Underground/On-ground G00 - Tank Secondary Containment - None

H00 - Tank Leak Detection - None

100 - Overfill - None J00 - Dispenser - None

A00 - Tank Internal Protection - None D01 - Pipe Type - Steel/Carbon Steel/Iron

F01 - Pipe External Protection - Painted/Asphalt Coating

B00 - Tank External Protection - None

Tank Number: 05 Tank ID: 58610

Tank Status: Closed - Removed Material Name: Closed - Removed

Capacity Gallons: 550
Install Date: Not reported
Date Tank Closed: 08/01/2000
Registered: True
Tank Location: Underground

Direction Distance

Elevation Site Database(s) **EPA ID Number**

OWEN AUTO SERVICE (Continued)

EDR ID Number

U003749723

Tank Type: Steel/carbon steel 0009

Material Code: Common Name of Substance: Gasoline

Tightness Test Method: NN

Date Test: Not reported Next Test Date: Not reported Pipe Model: Not reported Modified By: **TRANSLAT** Last Modified: 04/14/2017

Equipment Records:

A00 - Tank Internal Protection - None D01 - Pipe Type - Steel/Carbon Steel/Iron

F01 - Pipe External Protection - Painted/Asphalt Coating

C02 - Pipe Location - Underground/On-ground G00 - Tank Secondary Containment - None

H00 - Tank Leak Detection - None

100 - Overfill - None J00 - Dispenser - None

B00 - Tank External Protection - None

P51 NY UST U003652098 **RCL SERVICE CENTER** 1009 BEACH 21ST STREET South N/A

1/8-1/4

FAR ROCKAWAY, NY 11691

0.177 mi.

935 ft. Site 2 of 2 in cluster P

UST: Relative:

Lower 2-604080 / Unregulated/Closed Id/Status:

Program Type: **PBS** Actual: Region: STATE 24 ft. DEC Region: **Expiration Date:** N/A

UTM X: 605407.29738 UTM Y: 4495378.98953 Site Type: Retail Gasoline Sales

Affiliation Records:

25965 Site Id: Affiliation Type: Facility Owner Company Name: **BASSER-KAUFMAN**

Contact Type: Not reported Contact Name: Not reported

Address1: 335 CENTRAL AVENUE

Address2: Not reported City: **LAWRENCE** State: NY Zip Code: 11559 Country Code: 001

Phone: (516) 569-3700 EMail: Not reported Not reported Fax Number: Modified By: **TRANSLAT** Date Last Modified: 2004-03-04

25965 Site Id: Affiliation Type: Mail Contact

Company Name: **BASSER-KAUFMAN**

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

RCL SERVICE CENTER (Continued)

U003652098

Contact Type: Not reported MR. MARK KEMP Contact Name: Address1: 335 CENTRAL AVENUE

Address2: Not reported **LAWRENCE** City: State: NY Zip Code: 11559 Country Code: 001

Phone: (516) 569-3700 EMail: Not reported Not reported Fax Number: Modified By: **TRANSLAT** Date Last Modified: 2004-03-04

Site Id: 25965

Facility Operator Affiliation Type:

RCL SERVICE CENTER Company Name:

Contact Type: Not reported

BASSER-KAUFMAN Contact Name:

Not reported Address1: Not reported Address2: City: Not reported State: NN

Zip Code: Not reported

Country Code: 001

Phone: (516) 569-3700 Not reported EMail: Fax Number: Not reported Modified By: **TRANSLAT** Date Last Modified: 2004-03-04

Site Id: 25965

Affiliation Type: **Emergency Contact** BASSER-KAUFMAN Company Name:

Contact Type: Not reported Contact Name: MARK KEMP Address1: Not reported Address2: Not reported Not reported City: State: NN

Zip Code: Not reported

Country Code: 001

Phone: (516) 569-3700 Not reported EMail: Fax Number: Not reported Modified By: TRANSLAT Date Last Modified: 2004-03-04

Tank Info:

Tank Number: 001 Tank ID: 56580

Tank Status: Closed - Removed Closed - Removed Material Name:

Capacity Gallons: 4000 Install Date: Not reported Date Tank Closed: 03/01/1999

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

RCL SERVICE CENTER (Continued)

Registered: True Tank Location: Underground

Steel/carbon steel Tank Type: Material Code: 0009 Common Name of Substance: Gasoline

NN Tightness Test Method:

Date Test: Not reported Next Test Date: Not reported Pipe Model: Not reported Modified By: **TRANSLAT** 04/14/2017 Last Modified:

Equipment Records:

H00 - Tank Leak Detection - None

100 - Overfill - None

A00 - Tank Internal Protection - None D01 - Pipe Type - Steel/Carbon Steel/Iron C02 - Pipe Location - Underground/On-ground G00 - Tank Secondary Containment - None B00 - Tank External Protection - None F00 - Pipe External Protection - None J01 - Dispenser - Pressurized Dispenser

Tank Number: 002 Tank ID: 56581

Tank Status: Closed - Removed Material Name: Closed - Removed

Capacity Gallons: 500

Not reported Install Date: Date Tank Closed: 03/01/1999 Registered: True

Tank Location: Underground Tank Type: Steel/carbon steel

Material Code: 0009 Common Name of Substance: Gasoline

Tightness Test Method: NN

Date Test: Not reported Next Test Date: Not reported Not reported Pipe Model: Modified By: **TRANSLAT** Last Modified: 04/14/2017

Equipment Records:

A00 - Tank Internal Protection - None H00 - Tank Leak Detection - None

100 - Overfill - None

D01 - Pipe Type - Steel/Carbon Steel/Iron C02 - Pipe Location - Underground/On-ground G00 - Tank Secondary Containment - None B00 - Tank External Protection - None F00 - Pipe External Protection - None J01 - Dispenser - Pressurized Dispenser

Tank Number: 003 U003652098

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

RCL SERVICE CENTER (Continued)

Tank ID:

56582

Tank Status: Closed - Removed Material Name: Closed - Removed

500 Capacity Gallons: Install Date: Not reported 03/01/1999 Date Tank Closed: Registered: True

Tank Location: Underground Tank Type: Steel/carbon steel

Material Code: 0009 Common Name of Substance: Gasoline

Tightness Test Method: NN

Date Test: Not reported Next Test Date: Not reported Pipe Model: Not reported Modified By: **TRANSLAT** 04/14/2017 Last Modified:

Equipment Records:

C02 - Pipe Location - Underground/On-ground G00 - Tank Secondary Containment - None A00 - Tank Internal Protection - None D01 - Pipe Type - Steel/Carbon Steel/Iron B00 - Tank External Protection - None F00 - Pipe External Protection - None J01 - Dispenser - Pressurized Dispenser H00 - Tank Leak Detection - None

100 - Overfill - None

Tank Number: 004 Tank ID: 56583

Closed - Removed Tank Status: Closed - Removed Material Name:

Capacity Gallons: 500 Install Date: Not reported Date Tank Closed: 03/01/1999 Registered: True Tank Location: Underground Steel/carbon steel Tank Type:

Material Code: 0009 Common Name of Substance: Gasoline

Tightness Test Method: NN

Date Test: Not reported Not reported Next Test Date: Pipe Model: Not reported Modified By: **TRANSLAT** Last Modified: 04/14/2017

Equipment Records:

H00 - Tank Leak Detection - None

100 - Overfill - None

A00 - Tank Internal Protection - None D01 - Pipe Type - Steel/Carbon Steel/Iron C02 - Pipe Location - Underground/On-ground B00 - Tank External Protection - None

U003652098

Direction Distance Elevation

vation Site Database(s) EPA ID Number

RCL SERVICE CENTER (Continued)

U003652098

EDR ID Number

F00 - Pipe External Protection - None J01 - Dispenser - Pressurized Dispenser G00 - Tank Secondary Containment - None

Tank Number: 005 Tank ID: 56584

Tank Status: Closed - Removed Material Name: Closed - Removed

Capacity Gallons: 500
Install Date: Not reported
Date Tank Closed: 03/01/1999
Registered: True
Tank Location: Underground

Tank Type: Steel/carbon steel

Material Code: 0009 Common Name of Substance: Gasoline

Tightness Test Method: NN

Date Test:
Not reported
Next Test Date:
Not reported
Pipe Model:
Modified By:
TRANSLAT
Last Modified:

Not reported
Not reported
Value 12017

Equipment Records:

G00 - Tank Secondary Containment - None C02 - Pipe Location - Underground/On-ground J01 - Dispenser - Pressurized Dispenser B00 - Tank External Protection - None F00 - Pipe External Protection - None H00 - Tank Leak Detection - None

100 - Overfill - None

A00 - Tank Internal Protection - None D01 - Pipe Type - Steel/Carbon Steel/Iron

Tank Number: 006 Tank ID: 56585

Tank Status: Closed - Removed Material Name: Closed - Removed

Capacity Gallons: 500
Install Date: Not reported
Date Tank Closed: 03/01/1999
Registered: True

Tank Location: Underground Tank Type: Steel/carbon steel

Material Code: 0009 Common Name of Substance: Gasoline

Tightness Test Method: NN

Date Test:
Not reported
Next Test Date:
Pipe Model:
Modified By:
Last Modified:
Not reported
TRANSLAT
U4/14/2017

Equipment Records:

Direction Distance Elevation

tance EDR ID Number vation Site Database(s) EPA ID Number

RCL SERVICE CENTER (Continued)

U003652098

H00 - Tank Leak Detection - None

100 - Overfill - None

C02 - Pipe Location - Underground/On-ground G00 - Tank Secondary Containment - None B00 - Tank External Protection - None F00 - Pipe External Protection - None J01 - Dispenser - Pressurized Dispenser A00 - Tank Internal Protection - None D01 - Pipe Type - Steel/Carbon Steel/Iron

Tank Number: 007 Tank ID: 56586

Tank Status: Closed - Removed Material Name: Closed - Removed

Capacity Gallons: 500
Install Date: Not reported
Date Tank Closed: 03/01/1999
Registered: True

Tank Location: Underground Tank Type: Steel/carbon steel

Material Code: 0009 Common Name of Substance: Gasoline

Tightness Test Method: NN

Date Test:
Not reported
Next Test Date:
Pipe Model:
Modified By:
Last Modified:
Not reported
TRANSLAT
Ud/14/2017

Equipment Records:

H00 - Tank Leak Detection - None

100 - Overfill - None

A00 - Tank Internal Protection - None
D01 - Pipe Type - Steel/Carbon Steel/Iron
C02 - Pipe Location - Underground/On-ground
G00 - Tank Secondary Containment - None
B00 - Tank External Protection - None
F00 - Pipe External Protection - None
J01 - Dispenser - Pressurized Dispenser

Tank Number: 008 Tank ID: 56587

Tank Status: Closed - Removed Material Name: Closed - Removed

Capacity Gallons: 500
Install Date: Not reported
Date Tank Closed: 03/01/1999
Registered: True
Tank Location: Underground
Tank Type: Steel/carbon steel

Material Code: 0009 Common Name of Substance: Gasoline

Tightness Test Method: NN

Date Test: Not reported

Direction Distance

Elevation Site Database(s) EPA ID Number

RCL SERVICE CENTER (Continued)

U003652098

EDR ID Number

Next Test Date: Not reported Pipe Model: Not reported Modified By: TRANSLAT Last Modified: 04/14/2017

Equipment Records:

B00 - Tank External Protection - None F00 - Pipe External Protection - None J01 - Dispenser - Pressurized Dispenser H00 - Tank Leak Detection - None

100 - Overfill - None

C02 - Pipe Location - Underground/On-ground G00 - Tank Secondary Containment - None A00 - Tank Internal Protection - None D01 - Pipe Type - Steel/Carbon Steel/Iron

 Tank Number:
 009

 Tank ID:
 56588

Tank Status: Closed - Removed Material Name: Closed - Removed

Capacity Gallons: 500

Install Date: Not reported Date Tank Closed: 03/01/1999 Registered: True Tank Location: Underground

Tank Location: Underground Tank Type: Steel/carbon steel

Material Code: 0009 Common Name of Substance: Gasoline

Tightness Test Method: NN

Date Test:
Not reported
Next Test Date:
Not reported
Pipe Model:
Modified By:
TRANSLAT
Last Modified:
O4/14/2017

Equipment Records:

H00 - Tank Leak Detection - None

100 - Overfill - None

C02 - Pipe Location - Underground/On-ground G00 - Tank Secondary Containment - None B00 - Tank External Protection - None F00 - Pipe External Protection - None J01 - Dispenser - Pressurized Dispenser A00 - Tank Internal Protection - None D01 - Pipe Type - Steel/Carbon Steel/Iron

SE 19-12 MOTT AVENUE 1/8-1/4 FAR ROCKAWAY, NY 11691

0.177 mi.

935 ft. Site 2 of 2 in cluster O

Relative: UST:

Higher Id/Status: 2-612280 / Active

 Actual:
 Program Type:
 PBS

 28 ft.
 Region:
 STATE

 DEC Region:
 2

Direction Distance

Elevation Site Database(s) EPA ID Number

JP MORGAN CHASE (Continued)

U004224040

EDR ID Number

Expiration Date: 08/20/2019
UTM X: 599755.73290
UTM Y: 4495533.47498

Site Type: Apartment Building/Office Building

Affiliation Records:

Site Id: 498923
Affiliation Type: Facility Owner

Company Name: ROCKAWAY KB COMPANY LLC

Contact Type: FACILITY MANAGER
Contact Name: MAURIZIO BERTOLOTTI

Address1: 450 SEVENTH AVE., PENTHOUSE N

Address2: Not reported City: NEW YORK State: NY Zip Code: 10123 Country Code: 001

Phone: (212) 471-4319
EMail: Not reported
Fax Number: Not reported
Modified By: CGFREEDM
Date Last Modified: 2014-09-19

Site Id: 498923 Affiliation Type: Mail Contact

Company Name: J.P. MORGAN CHASE

Contact Type: MGR

Contact Name: MAURIZIO BERTOLOTTI
Address1: 1985 MARCUS AVE.
Address2: Not reported
City: NEW HYDE PARK

State: NY
Zip Code: 11042
Country Code: 001

Phone: (646) 772-9339

EMail: MAURIZIO.BERTOLOTTI@CHASE.COM

Fax Number: Not reported Modified By: CGFREEDM Date Last Modified: 2014-09-19

Site Id: 498923

Affiliation Type: Facility Operator
Company Name: JP MORGAN CHASE

Contact Type: Not reported

Contact Name: MAURIZIO BERTOLOTTI

Address1: Not reported Address2: Not reported City: Not reported State: NN

Zip Code: Not reported Country Code: 001

Phone: (646) 772-9339
EMail: Not reported
Fax Number: Not reported
Modified By: MSBAPTIS

Date Last Modified: 2014-08-20

Site Id: 498923

Direction Distance

Elevation Site Database(s) EPA ID Number

JP MORGAN CHASE (Continued)

U004224040

EDR ID Number

Affiliation Type: Emergency Contact
Company Name: J.P. MORGAN
Contact Type: Not reported

Contact Name: MAURIZIO BERTOLOTTI

Address1: Not reported Address2: Not reported City: Not reported State: NN

Zip Code: Not reported

Country Code: 001

Phone: (999) 999-999
EMail: Not reported
Fax Number: Not reported
Modified By: MSBAPTIS
Date Last Modified: 2014-08-20

Tank Info:

Tank Number: 001 Tank ID: 252804 Tank Status: In Service Material Name: In Service Capacity Gallons: 1100 01/01/1955 Install Date: Date Tank Closed: Not reported Registered: True

Tank Location: Underground Tank Type: Steel/carbon steel

Tightness Test Method: 99

Date Test: 11/05/2013
Next Test Date: 10/11/2016
Pipe Model: Not reported
Modified By: BKFALVEY
Last Modified: 04/14/2017

Equipment Records:

E00 - Piping Secondary Containment - None

H00 - Tank Leak Detection - None

100 - Overfill - None

A00 - Tank Internal Protection - None

K00 - Spill Prevention - None

C03 - Pipe Location - Aboveground/Underground Combination

G00 - Tank Secondary Containment - None B00 - Tank External Protection - None F00 - Pipe External Protection - None

D10 - Pipe Type - Copper

J04 - Dispenser - On Site Heating System (Suction)

L00 - Piping Leak Detection - None

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

N53 1141 MCBRIDE ST **NY LTANKS** S102672772 N/A

West 1141 MCBRIDE ST 1/8-1/4 **FAR ROCKAWAY, NY**

0.182 mi.

963 ft. Site 2 of 2 in cluster N

Relative: LTANKS: Lower Facility ID: 9413371 Site ID: 300613 Actual: Closed Date: 9 ft.

2004-01-26 Spill Number: 9413371 Spill Date: 1995-01-07 Spill Cause: Tank Overfill

Spill Source: Commercial/Industrial

Spill Class: D4

Cleanup Ceased: Not reported SWIS: 4101 **RWAUSTIN** Investigator: Referred To: Not reported Reported to Dept: 1995-01-07 CID: Not reported Water Affected: Not reported Spill Notifier: Affected Persons Last Inspection: Not reported Recommended Penalty: False Meets Standard: False **UST Involvement:** False

Remediation Phase: Date Entered In Computer: 1995-03-16 Spill Record Last Update: 2004-01-26 Spiller Name: Not reported Spiller Company: SAME Spiller Address: Not reported Spiller County: 999

Spiller Contact: Not reported Spiller Phone: Not reported Not reported Spiller Extention:

DEC Region: DER Facility ID: 243153

DEC Memo: "Prior to Sept, 2004 data translation this spill Lead_DEC Field was

AUSTIN 1/26/04 - AUSTIN - SURF. SPILL - CLOSED - ORIG. ASSIGNED TO

ENGELHARDT - END"

"APPARENT BROKEN GAUGE ON TANK" Remarks:

0

All Materials:

300613 Site ID: Operable Unit ID: 1010931 Operable Unit: 01 Material ID: 372108 Material Code: 0002A Material Name: #4 fuel oil Not reported Case No.: Petroleum Material FA: Quantity: 10.00 Units: G .00 Recovered:

Not reported Oxygenate:

Direction Distance

Elevation Site Database(s) **EPA ID Number**

54 **CENTRAL BAYPORT LLC** NY AST U003393926 **ENE** 13-06 BAYPORT PLACE N/A

1/8-1/4 0.185 mi. 978 ft.

Relative: AST: Lower Region:

QUEENS, NY 11691

STATE DEC Region: 2 Actual: Site Status: Active 19 ft. Facility Id: 2-348473 Program Type: **PBS**

UTM X: 605653.00155 UTM Y: 4495769.95989 **Expiration Date:** 04/29/2020

Site Type: Apartment Building/Office Building

Affiliation Records:

Site Id: 17118 Affiliation Type: Mail Contact

Company Name: CENTRAL BAYPORT LLC

Contact Type: **MEMBER**

Contact Name: EARNEST SHEMITSCH Address1: 176 UNION STREET #1-L

Address2: Not reported City: **BROOKLYN** NY State: Zip Code: 11231 Country Code: 001

Phone: (718) 875-3603 EMail: Not reported Fax Number: Not reported DMPOKRZY Modified By: Date Last Modified: 2018-03-26

Site Id: 17118

Affiliation Type: **Facility Operator**

CENTRAL BAYPORT LLC Company Name:

Contact Type: Not reported

Contact Name: **EARNEST SHEMITSCH**

Address1: Not reported Address2: Not reported City: Not reported State: NN

Zip Code: Not reported

Country Code: 001

(718) 875-3603 Phone: EMail: Not reported Fax Number: Not reported Modified By: **DMPOKRZY** Date Last Modified: 2018-03-26

Site Id: 17118

Affiliation Type: **Emergency Contact** Company Name: MR SADIK MUSTAFA

Contact Type: Not reported Contact Name: SADIK MUSTAFA Not reported Address1: Address2: Not reported City: Not reported

EDR ID Number

Direction Distance

Elevation Site Database(s) EPA ID Number

CENTRAL BAYPORT LLC (Continued)

U003393926

EDR ID Number

State: NN

Zip Code: Not reported

Country Code: 001

Phone: (718) 471-0593
EMail: Not reported
Fax Number: Not reported
Modified By: TRANSLAT
Date Last Modified: 2004-03-04

Site Id: 17118
Affiliation Type: Facility Owner

Company Name: CENTRAL BAYPORT LLC

Contact Type: MEMBER

Contact Name: EARNEST SHEMITSCH
Address1: 176 UNION STREET #1-L

 Address2:
 Not reported

 City:
 BROOKLYN

 State:
 NY

 Zip Code:
 11231

 Country Code:
 001

Phone: (718) 875-3603
EMail: Not reported
Fax Number: Not reported
Modified By: DMPOKRZY
Date Last Modified: 2018-03-26

Tank Info:

 Tank Number:
 001

 Tank Id:
 33175

 Material Code:
 0001

Common Name of Substance: #2 Fuel Oil (On-Site Consumption)

Equipment Records:

E00 - Piping Secondary Containment - None

G03 - Tank Secondary Containment - Vault (w/o access)

H00 - Tank Leak Detection - None

L09 - Piping Leak Detection - Exempt Suction Piping

F00 - Pipe External Protection - None A00 - Tank Internal Protection - None D01 - Pipe Type - Steel/Carbon Steel/Iron

K00 - Spill Prevention - None J02 - Dispenser - Suction Dispenser C01 - Pipe Location - Aboveground I04 - Overfill - Product Level Gauge (A/G) B05 - Tank External Protection - Jacketed

Tank Location:

Tank Type: Steel/Carbon Steel/Iron

Tank Status: In Service
Pipe Model: Not reported
Install Date: 01/01/1943
Capacity Gallons: 2000
Tightness Test Method: NN

Date Test: Not reported Next Test Date: Not reported Date Tank Closed: Not reported

Direction Distance

Elevation Site Database(s) EPA ID Number

CENTRAL BAYPORT LLC (Continued)

U003393926

EDR ID Number

Register: True
Modified By: DMPOKRZY
Last Modified: 03/26/2018

Material Name: #2 fuel oil (on-site consumption)

Q55 METROPOLITAN RUBBER CO. NY SWF/LF S105912835 ENE 1406 AUGUSTINA AVENUE N/A

1/8-1/4 FAR ROCKAWAY, NY 11691 0.190 mi.

1001 ft. Site 1 of 3 in cluster Q

Relative: SWF/LF:

Lower Flag: INACTIVE

Actual: Region Code: 2
14 ft. Phone Number: 7

Phone Number: 7183275610 Owner Name: Not reported Owner Type: Not reported Owner Address: Not reported Owner Addr2: Not reported Owner City,St,Zip: Not reported Owner Email: Not reported Owner Phone: Not reported **CLIFFORD BRAND** Contact Name: Not reported Contact Address:

Contact Address: Not reported Contact Addr2: Not reported Contact City,St,Zip: Not reported Contact Email: Not reported Contact Phone: Not reported

Activity Desc: Waste tire storage - permit

Activity Number: [41K68] Active: No

East Coordinate: Not reported North Coordinate: Not reported Accuracy Code: Not reported Regulatory Status: Not reported Waste Type: Not reported Authorization #: Not reported Not reported Authorization Date: Not reported **Expiration Date:** Not reported Operator Name: Operator Type: Not reported Laste Date: Not reported

Q56 FAR ROCKAWAY AUTO GLASS & REPAIR INC.

ENE 14-06 AUGUSTINA AVENUE 1/8-1/4 FAR ROCKAWAY, NY 11691

0.190 mi.

1001 ft. Site 2 of 3 in cluster Q

Relative: AST:

 Lower
 Region:
 STATE

 Actual:
 DEC Region:
 2

 14 ft.
 Site Status:
 Active

 Facility Id:
 2-610132

 Program Type:
 PBS

UTM X: 605652.58306

NY AST A100293982

N/A

Direction Distance

Elevation Site Database(s) EPA ID Number

FAR ROCKAWAY AUTO GLASS & REPAIR INC. (Continued)

A100293982

EDR ID Number

UTM Y: 4495876.98528
Expiration Date: 07/02/2023
Site Type: Other

Affiliation Records:

Site Id: 360138
Affiliation Type: Mail Contact

Company Name: FAR ROCKAWAY AUTO GLASS & REPAIR INC.

Contact Type: Not reported

Contact Name: LOOKRAM JAGDEO

Address1: 14-06 AUGUSTINA AVENUE

Address2: Not reported
City: FAR ROCKAWAY

State: NY
Zip Code: 11691
Country Code: 001

Phone: (718) 337-1697

EMail: SAVITAJAG@AOL.COM

Fax Number: Not reported Modified By: NTFREEMA Date Last Modified: 2016-01-15

Site Id: 360138

Affiliation Type: Facility Operator

Company Name: FAR ROCKAWAY AUTO GLASS & REPAIR INC.

Contact Type: Not reported
Contact Name: LOOKRAM JAGDEO

Address1: Not reported Address2: Not reported City: Not reported

State: NN

Zip Code: Not reported Country Code: 001

Phone: (718) 337-1697
EMail: Not reported
Fax Number: Not reported
Modified By: NTFREEMA
Date Last Modified: 2016-01-15

Site Id: 360138

Affiliation Type: Emergency Contact

Company Name: DEVENDRA K PARASRAM

Contact Type: Not reported

Contact Name: LOOKRAM JAGDEO

Address1: Not reported
Address2: Not reported
City: Not reported
State: NN

Zip Code: Not reported Country Code: 999

Phone: (516) 322-3085
EMail: Not reported
Fax Number: Not reported
Modified By: NTFREEMA
Date Last Modified: 2016-01-15

Site Id: 360138
Affiliation Type: Facility Owner

Direction Distance

Elevation Site Database(s) EPA ID Number

FAR ROCKAWAY AUTO GLASS & REPAIR INC. (Continued)

A100293982

EDR ID Number

Company Name: DEVENDRA K PARASRAM

Contact Type: OWNER

Contact Name: LOOKRAM JAGDEO Address1: LOOKRAM JAGDEO 14-06 AUGUSTINE AVE.

Address2: Not reported
City: FAR ROCKAWAY

State: NY
Zip Code: 11691
Country Code: 001
Phone: (718)

Phone: (718) 337-1697
EMail: Not reported
Fax Number: Not reported
Modified By: DAFRANCI
Date Last Modified: 2018-04-10

Tank Info:

 Tank Number:
 001

 Tank Id:
 210170

 Material Code:
 0022

Common Name of Substance: Waste Oil/Used Oil

Equipment Records:

G00 - Tank Secondary Containment - None E00 - Piping Secondary Containment - None B00 - Tank External Protection - None F00 - Pipe External Protection - None

D00 - Pipe Type - No Piping

Private Dwelling

Tank Location:

Tank Type: Steel/Carbon Steel/Iron

Tank Status: In Service
Pipe Model: Not reported
Install Date: 01/05/2005
Capacity Gallons: 275
Tightness Test Method: NN

Date Test:
Not reported
Next Test Date:
Not reported
Date Tank Closed:
Register:
Modified By:
Last Modified:
Motreported
Not reported
True
NTFREEMA
D4/14/2017
Material Name:
Waste oil/used oil

57 ETWARU RESIDENCE NNE 2122 NAMEOKE AVE 1/8-1/4 FAR ROCKAWAY, NY

1/8-1/4 FAR RO 0.193 mi. 1021 ft.

Relative: LTANKS:

 Lower
 Facility ID:
 9512756

 Actual:
 Site ID:
 242927

 10 ft.
 Closed Date:
 1996-01-16

 Spill Number:
 9512756

 Spill Date:
 1996-01-13

 Spill Cause:
 Tank Overfill

Spill Source:

TC5471477.6s Page 120

NY LTANKS \$102673185 N/A

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

ETWARU RESIDENCE (Continued)

S102673185

Spill Class: C3

Cleanup Ceased: Not reported SWIS: 4101 Investigator: **MCTIBBE** Referred To: Not reported Reported to Dept: 1996-01-13 CID: 257

Water Affected: Not reported Spill Notifier: Responsible Party Last Inspection: Not reported

Recommended Penalty: False Meets Standard: False **UST Involvement:** False Remediation Phase: Date Entered In Computer: 1996-01-13

Spill Record Last Update: 1998-01-27 Spiller Name: FRANK ODONNELL

Spiller Company: BAERENKLU OIL CO Spiller Address: 740 JAMACA AVE

Spiller County: 001

Spiller Contact: MR ETWARU Spiller Phone: (718) 337-3740 Spiller Extention: Not reported DEC Region: **DER Facility ID:**

199555

DEC Memo: "Prior to Sept, 2004 data translation this spill Lead_DEC Field was

TIBBE CLEANED BY RP."

Remarks: "cust ordered from caller then also ordered from another company"

All Materials:

242927 Site ID: Operable Unit ID: 1027089 Operable Unit: 01 566907 Material ID: Material Code: 0001A #2 fuel oil Material Name: Case No.: Not reported Material FA: Petroleum Quantity: 2.00 Units: G Recovered: 2.00 Oxygenate: Not reported

Q58 **ARTIES COLLISION INC** RCRA NonGen / NLR 1000248565 **ENE 1402 AUGUSTINA AVE FINDS** NYD137916953

FAR ROCKAWAY, NY 11691 1/8-1/4 **ECHO** 0.199 mi. NY MANIFEST

1050 ft. Site 3 of 3 in cluster Q Relative: RCRA NonGen / NLR:

Lower Date form received by agency: 01/01/2007

Facility name: ARTIES COLLISION INC Actual: Facility address: 1402 AUGUSTINA AVE 14 ft. FAR ROCKAWAY, NY 11691

> EPA ID: NYD137916953 Mailing address: AUGUSTINA AVE

FAR ROCKAWAY, NY 11691

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

ARTIES COLLISION INC (Continued)

1000248565

Contact: ARTHUR VALENTI Contact address: AUGUSTINA AVE

FAR ROCKAWAY, NY 11691

Contact country: US

Contact telephone: 718-471-7059 Contact email: Not reported

EPA Region: 02

Classification: Non-Generator

Description: Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:

Owner/operator name: ARTHUR VALENTI Owner/operator address: **NOT REQUIRED**

NOT REQUIRED, WY 99999

Owner/operator country: US

Owner/operator telephone: 212-555-1212 Owner/operator email: Not reported Owner/operator fax: Not reported Owner/operator extension: Not reported Legal status: Private Owner/Operator Type: Owner Owner/Op start date: Not reported Owner/Op end date: Not reported

ARTHUR VALENTI Owner/operator name: Owner/operator address: NOT REQUIRED

NOT REQUIRED, WY 99999

Owner/operator country: US

Owner/operator telephone: 212-555-1212 Owner/operator email: Not reported Owner/operator fax: Not reported Owner/operator extension: Not reported Legal status: Private Owner/Operator Type: Operator Owner/Op start date: Not reported Owner/Op end date: Not reported

Handler Activities Summary:

U.S. importer of hazardous waste: No Mixed waste (haz. and radioactive): No Recycler of hazardous waste: No Transporter of hazardous waste: No Treater, storer or disposer of HW: No Underground injection activity: No On-site burner exemption: No Furnace exemption: No Used oil fuel burner: No Used oil processor: No User oil refiner: No Used oil fuel marketer to burner: No Used oil Specification marketer: No Used oil transfer facility: No Used oil transporter: No

Historical Generators:

Date form received by agency: 01/01/2006

Direction Distance

Elevation Site Database(s) EPA ID Number

ARTIES COLLISION INC (Continued)

1000248565

EDR ID Number

Site name: ARTIES COLLISION INC Classification: Not a generator, verified

Date form received by agency: 09/25/1986

Site name: ARTIES COLLISION INC Classification: Small Quantity Generator

. Waste code: D001

. Waste name: IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF

LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT

WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.

Violation Status: No violations found

FINDS:

Registry ID: 110004383088

Environmental Interest/Information System

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport,

and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA

program staff to track the notification, permit, compliance, and

corrective action activities required under RCRA.

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:

Envid: 1000248565 Registry ID: 110004383088

DFR URL: http://echo.epa.gov/detailed-facility-report?fid=110004383088

NY MANIFEST:

Country: USA

EPA ID: NYD137916953
Facility Status: Not reported

Location Address 1: 1402 AUGUSTINA AVENUE

Code: BP

Location Address 2: Not reported
Total Tanks: Not reported
Location City: FAR ROCKAWAY

Location State: NY
Location Zip: 11691
Location Zip 4: Not reported

NY MANIFEST:

EPAID: NYD137916953

Mailing Name: ARTIE'S COLLISION INCORPORATED
Mailing Contact: ARTIE'S COLLISION INCORPORATED

Mailing Address 1: 353 CENTRAL AVENUE

Direction Distance

Elevation Site Database(s) **EPA ID Number**

ARTIES COLLISION INC (Continued)

1000248565

EDR ID Number

Mailing Address 2: Not reported LAWRENCE Mailing City: Mailing State: NY Mailing Zip: 11559 Mailing Zip 4: Not reported Mailing Country: USA Mailing Phone: 5165690388

NY MANIFEST:

Document ID: NJA2892290 Manifest Status: Not reported

seq: 01 Year: 1999 Trans1 State ID: 10339 Trans2 State ID: Not reported 01/20/1999 Generator Ship Date: Trans1 Recv Date: 01/20/1999 Trans2 Recv Date: Not reported TSD Site Recv Date: 01/21/1999 Part A Recv Date: Not reported Part B Recv Date: Not reported NYD137916953 Generator EPA ID: Trans1 EPA ID: NJD986608941 Trans2 EPA ID: Not reported TSDF ID 1: NJD002454544 TSDF ID 2: Not reported Not reported Manifest Tracking Number: Import Indicator: Not reported **Export Indicator:** Not reported Not reported Discr Quantity Indicator: Discr Type Indicator: Not reported Discr Residue Indicator: Not reported Discr Partial Reject Indicator: Not reported Discr Full Reject Indicator: Not reported Manifest Ref Number: Not reported Alt Facility RCRA ID: Not reported Alt Facility Sign Date: Not reported MGMT Method Type Code: Not reported F005 - UNKNOWN Waste Code: Waste Code: Not reported Waste Code: Not reported Waste Code: Not reported Waste Code: Not reported

00200 Units: G - Gallons (liquids only)* (8.3 pounds)

Not reported

Number of Containers: 001

Waste Code:

Quantity:

TT - Cargo tank, tank trucks Container Type:

R Material recovery of more than 75 percent of the total material. Handling Method:

Specific Gravity: 01.00

Click this hyperlink while viewing on your computer to access

-1 additional NY MANIFEST: record(s) in the EDR Site Report.

Direction Distance

Elevation Site Database(s) EPA ID Number

59 SHOREVIEW COOPERATIVE APTS INC NY AST U003383943
West 22-87 MOTT AVENUE N/A

West 22-87 MOTT AVENUE 1/8-1/4 FAR ROCKAWAY, NY 11691

0.206 mi. 1089 ft.

Relative: AST:

 Lower
 Region:
 STATE

 Actual:
 DEC Region:
 2

 10 ft.
 Site Status:
 Active

 Facility Id:
 2-070165

 Program Type:
 PBS

UTM X: 605000.56955 UTM Y: 4495758.62196 Expiration Date: 10/17/2017

Site Type: Apartment Building/Office Building

Affiliation Records:

Site Id: 1537 Affiliation Type: Facility Owner

Company Name: SHOREVIEW COOPERATIVE APTS., INC.

Contact Type: PRESIDENT

Contact Name: NORMAN SILVERMAN
Address1: 1141 MCBRIDE ST., APT. 5E

Address2: Not reported City: FAR ROCKAWAY

State: NY
Zip Code: 11691
Country Code: 001

Phone: (718) 327-1577
EMail: Not reported
Fax Number: Not reported
Modified By: DMMOLOUG
Date Last Modified: 2013-11-25

Site Id: 1537

Affiliation Type: Mail Contact

Company Name: SHOREVIEW COOPERATIVE APTS. INC.

Contact Type: Not reported

Contact Name: NORMAN SILVERMAN Address1: 1141 MCBRIDE STREET

Address2: APT. 5E

City: FAR ROCKAWAY

State: NY
Zip Code: 11691
Country Code: 001

Phone: (718) 327-1577
EMail: Not reported
Fax Number: Not reported
Modified By: DMMOLOUG
Date Last Modified: 2013-11-25

Site Id: 1537

Affiliation Type: Facility Operator

Company Name: SHOREVIEW COOPERATIVE APTS INC

Contact Type: Not reported
Contact Name: ELLIOT JORDAN
Address1: Not reported
Address2: Not reported
City: Not reported

EDR ID Number

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

SHOREVIEW COOPERATIVE APTS INC (Continued)

U003383943

State: NN

Not reported Zip Code:

Country Code: 001

Phone: (718) 327-7967 EMail: Not reported Fax Number: Not reported KXTANG Modified By: Date Last Modified: 2007-10-10

Site Id: 1537

Affiliation Type: **Emergency Contact**

Company Name: SHOREVIEW COOP APTS.

Contact Type: Not reported Contact Name: STUYVESANT OIL Address1: Not reported Address2: Not reported Not reported City:

State: NN

Zip Code: Not reported

Country Code: 001

Phone: (718) 665-5700 Not reported EMail: Fax Number: Not reported Modified By: **TRANSLAT** Date Last Modified: 2004-03-04

Tank Info:

Tank Number: 001 Tank Id: 2610 Material Code: 0003

Common Name of Substance: #6 Fuel Oil (On-Site Consumption)

Equipment Records:

H05 - Tank Leak Detection - In-Tank System (ATG) L09 - Piping Leak Detection - Exempt Suction Piping

G99 - Tank Secondary Containment - Other A00 - Tank Internal Protection - None D01 - Pipe Type - Steel/Carbon Steel/Iron F00 - Pipe External Protection - None B00 - Tank External Protection - None C00 - Pipe Location - No Piping

J02 - Dispenser - Suction Dispenser 104 - Overfill - Product Level Gauge (A/G)

Tank Location:

Tank Type: Steel/Carbon Steel/Iron

Tank Status: In Service Pipe Model: Not reported Install Date: 01/01/1954 Capacity Gallons: 7500 Tightness Test Method: NN

Date Test: Not reported Next Test Date: Not reported Date Tank Closed: Not reported Register: True **DMMOLOUG** Modified By:

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

SHOREVIEW COOPERATIVE APTS INC (Continued)

Last Modified: 04/14/2017

Material Name: #6 fuel oil (on-site consumption)

R60 22-88 MOTT AVENUE NY LTANKS U000405583 WNW 22-88 MOTT AVENUE N/A

1/8-1/4 **FAR ROCKAWAY, NY**

0.208 mi.

1100 ft. Site 1 of 3 in cluster R

Relative: LTANKS: Lower

Facility ID: 9809570 Site ID: 94420 Actual: Closed Date: 10 ft. 1998-12-07 Spill Number: 9809570

Spill Date: 1998-10-30 Spill Cause: Tank Failure Spill Source: Private Dwelling

Spill Class:

Cleanup Ceased: Not reported SWIS: 4101

Investigator: **MMMULQUE** Referred To: Not reported Reported to Dept: 1998-10-30 204 CID:

Water Affected: Not reported Spill Notifier: Responsible Party Last Inspection: 1998-11-03

Recommended Penalty: False Meets Standard: True UST Involvement: False Remediation Phase:

Date Entered In Computer: 1998-10-30 Spill Record Last Update: 1998-12-07 Spiller Name: **RUSSELL FURIA** Spiller Company: 22-88 MOTT AVENUE Spiller Address: 22-88 MOTT AVENUE

Spiller County: 001

Spiller Contact: **RUSSELL FURIA** Spiller Phone: (516) 493-3400 Spiller Extention: Not reported

DEC Region: **DER Facility ID:** 84532

DEC Memo: "Prior to Sept, 2004 data translation this spill Lead_DEC Field was

MULQUEEN DEC WAS NOT NOTIFIED FOR TANK REMOVAL MR. RUSSELL FURIA SAID THE TANK IS 5,000 GAL. CAPACITY (OUR DATABASE SHOWS 3,000) WAS USED FOR #5,6 OIL IS NOW #2 OIL. CONTAMINATED SOIL CONTAINED #6, NOT #2

CONSULTING FIRM WILL SUBMIT APPLICATION FOR TANK REMOVAL. CONSULTANT REMOVED CONTAMINATED SOILS. ENDPOINT SAMPLES ARE BELOW DETECTION

LIMITS. NO FURTHER ACTIONS REQUIRED."

Remarks: "UNDERGROUND TANK BEING REMOVED"

All Materials:

Site ID: 94420 Operable Unit ID: 1066836 Operable Unit: 01 Material ID: 313477 Material Code: 0001A Material Name: #2 fuel oil U003383943

Direction Distance

Distance Elevation Site EDR ID Number

Database(s) EPA ID Number

22-88 MOTT AVENUE (Continued)

U000405583

Case No.:

Material FA:

Quantity:

Units:

G

Recovered:

Not reported

Petroleum

.00

G

.00

Oxygenate: Not reported

R61 TWICE MIGHT LLC NY UST U004078093
WNW 22-88 MOTT AVENUE N/A

1/8-1/4 FAR ROCKAWAY, NY 11691

0.208 mi.

1100 ft. Site 2 of 3 in cluster R

Relative: UST:

Lower Id/Status: 2-405183 / Active

 Actual:
 Program Type:
 PBS

 10 ft.
 Region:
 STATE

 DEC Region:
 2

 Expiration Date:
 09/06/2022

 UTM X:
 605002.09100

 UTM Y:
 4495770.74547

Site Type: Apartment Building/Office Building

Affiliation Records:

Site Id: 19523
Affiliation Type: Mail Contact
Company Name: TWICE MIGHT LLC
Contact Type: Not reported
Contact Name: DAVID MARASOW
Address1: 619 EASTERN PARKWAY

 Address2:
 Not reported

 City:
 BROOKLYN

 State:
 NY

 Zip Code:
 11213

 Country Code:
 001

Phone: (347) 512-0042

EMail: UPREALTYLLC@GMAIL.COM

Fax Number: Not reported Modified By: CGFREEDM Date Last Modified: 2014-06-24

Site Id: 19523

Affiliation Type: Facility Operator
Company Name: TWICE MIGHT LLC
Contact Type: Not reported

Contact Type: Not reported
Contact Name: STEVEN GRANT
Address1: Not reported
Address2: Not reported
City: Not reported
State: NN

Zip Code: Not reported Country Code: 001

Phone: (646) 450-4407
EMail: Not reported
Fax Number: Not reported
Modified By: CGFREEDM
Date Last Modified: 2014-06-24

Direction Distance Elevation

EDR ID Number Site Database(s) **EPA ID Number**

TWICE MIGHT LLC (Continued)

U004078093

Site Id: 19523

Affiliation Type: **Emergency Contact** Company Name: TWICE MIGHT LLC Contact Type: Not reported Contact Name: DAVID MARASOW Address1: Not reported Address2: Not reported Not reported City: State: NN

Zip Code: Not reported Country Code: 999

(347) 512-0042 Phone: Not reported EMail: Fax Number: Not reported **CGFREEDM** Modified By: Date Last Modified: 2014-06-24

Site Id: 19523

Affiliation Type: **Facility Owner** TWICE MIGHT LLC Company Name:

Contact Type: **OWNER**

Contact Name: **GERSHON EICHORN** Address1: 619 EASTERN PARKWAY

Address2: Not reported BROOKLYN City: NY State: Zip Code: 11213 Country Code:

(646) 450-4407 Phone: EMail: Not reported Fax Number: Not reported Modified By: **CGFREEDM** Date Last Modified: 2014-06-24

Tank Info:

Tank Number: 001 Tank ID: 23059

Tank Status: Closed - Removed Material Name: Closed - Removed

3000 Capacity Gallons: Install Date: Not reported Date Tank Closed: 01/01/2002 Registered: True Tank Location: Underground

Steel/carbon steel Tank Type:

Material Code: 0003

Common Name of Substance: #6 Fuel Oil (On-Site Consumption)

Tightness Test Method: NN

Date Test: Not reported Next Test Date: Not reported Not reported Pipe Model: **KXTANG** Modified By: 04/14/2017 Last Modified:

Equipment Records:

Direction Distance

Distance Elevation Site EDR ID Number

EDR ID Number

EPA ID Number

TWICE MIGHT LLC (Continued)

U004078093

NY AST A100295165

N/A

A01 - Tank Internal Protection - Epoxy Liner

H00 - Tank Leak Detection - None

L09 - Piping Leak Detection - Exempt Suction Piping

G00 - Tank Secondary Containment - None

J02 - Dispenser - Suction Dispenser

B00 - Tank External Protection - None

C00 - Pipe Location - No Piping

F00 - Pipe External Protection - None

D01 - Pipe Type - Steel/Carbon Steel/Iron

104 - Overfill - Product Level Gauge (A/G)

R62 TWICE MIGHT LLC
WNW 22-88 MOTT AVENUE
1/8-1/4 FAR ROCKAWAY, NY 11691

0.208 mi.

1100 ft. Site 3 of 3 in cluster R

Relative: AST:

 Lower
 Region:
 STATE

 Actual:
 DEC Region:
 2

 10 ft.
 Site Status:
 Active

 Facility Id:
 2-405183

 Program Type:
 PBS

UTM X: 605002.09100 UTM Y: 4495770.74547 Expiration Date: 09/06/2022

Site Type: Apartment Building/Office Building

Affiliation Records:

Site Id: 19523
Affiliation Type: Mail Contact
Company Name: TWICE MIGHT LLC
Contact Type: Not reported
Contact Name: DAVID MARASOW
Address1: 619 EASTERN PARKWAY

 Address2:
 Not reported

 City:
 BROOKLYN

 State:
 NY

 Zip Code:
 11213

 Country Code:
 001

Phone: (347) 512-0042

EMail: UPREALTYLLC@GMAIL.COM

Fax Number: Not reported Modified By: CGFREEDM Date Last Modified: 2014-06-24

Site Id: 19523

Affiliation Type: **Facility Operator** Company Name: TWICE MIGHT LLC Contact Type: Not reported Contact Name: STEVEN GRANT Address1: Not reported Address2: Not reported City: Not reported State: NN

Zip Code: Not reported

Country Code: 001

Phone: (646) 450-4407

Direction Distance Elevation

vation Site Database(s) EPA ID Number

TWICE MIGHT LLC (Continued)

A100295165

EDR ID Number

EMail: Not reported Fax Number: Not reported Modified By: CGFREEDM Date Last Modified: 2014-06-24

Site Id: 19523

Emergency Contact Affiliation Type: Company Name: TWICE MIGHT LLC Contact Type: Not reported Contact Name: DAVID MARASOW Address1: Not reported Address2: Not reported City: Not reported State: NN

Zip Code: Not reported

Country Code: 999

Phone: (347) 512-0042
EMail: Not reported
Fax Number: Not reported
Modified By: CGFREEDM
Date Last Modified: 2014-06-24

Site Id: 19523
Affiliation Type: Facility Owner
Company Name: TWICE MIGHT LLC

Contact Type: OWNER

Contact Name: GERSHON EICHORN Address1: 619 EASTERN PARKWAY

 Address2:
 Not reported

 City:
 BROOKLYN

 State:
 NY

 Zip Code:
 11213

 Country Code:
 001

Phone: (646) 450-4407
EMail: Not reported
Fax Number: Not reported
Modified By: CGFREEDM
Date Last Modified: 2014-06-24

Tank Info:

 Tank Number:
 002

 Tank Id:
 209275

 Material Code:
 0001

Common Name of Substance: #2 Fuel Oil (On-Site Consumption)

Equipment Records:

L00 - Piping Leak Detection - None

105 - Overfill - Vent Whistle

E00 - Piping Secondary Containment - None

H00 - Tank Leak Detection - None A00 - Tank Internal Protection - None D01 - Pipe Type - Steel/Carbon Steel/Iron

K00 - Spill Prevention - None

B00 - Tank External Protection - None C00 - Pipe Location - No Piping

Direction Distance

Distance Elevation Site EDR ID Number

Database(s) EPA ID Number

TWICE MIGHT LLC (Continued)

A100295165

NY UST U001839697

N/A

F00 - Pipe External Protection - None G00 - Tank Secondary Containment - None J02 - Dispenser - Suction Dispenser

Tank Location:

Tank Type: Steel/Carbon Steel/Iron

Tank Status: In Service
Pipe Model: Not reported
Install Date: 01/01/2002
Capacity Gallons: 3000
Tightness Test Method: NN

Date Test:

Not reported

Next Test Date:

Not reported

Not reported

Not reported

Not reported

True

Modified By:

CGFREEDM

Last Modified:

04/14/2017

Material Name: #2 fuel oil (on-site consumption)

S63 MEL CHEVROLET SALES CORP

ENE 14-14 CENTRAL AVE 1/8-1/4 FAR ROCKAWAY, NY 11691

0.212 mi.

1119 ft. Site 1 of 2 in cluster S

Relative: UST:

Lower Id/Status: 2-349925 / Unregulated/Closed

 Actual:
 Program Type:
 PBS

 19 ft.
 Region:
 STATE

 DEC Region:
 2

DEC Region: 2
Expiration Date: N/A

UTM X: 605702.40922 UTM Y: 4495818.40326 Site Type: Unknown

Affiliation Records:

Site Id: 17246
Affiliation Type: Facility Owner
Company Name: JOSEPH J NATHAN

Contact Type: Not reported Contact Name: Not reported

Address1: 271-33 W GRAND CENTRAL PKWY

Address2: Not reported City: FLORAL PARK

State: NY
Zip Code: 11005
Country Code: 001

Phone: (718) 327-4700
EMail: Not reported
Fax Number: Not reported
Modified By: NRLOMBAR
Date Last Modified: 2008-12-22

Site Id: 17246
Affiliation Type: Mail Contact
Company Name: JOSEPH J NATHAN
Contact Type: Not reported

Contact Type: Not reported Contact Name: Not reported

Address1: 271-33 W GRAND CENTRAL PKWY

Direction Distance

Elevation Site Database(s) **EPA ID Number**

MEL CHEVROLET SALES CORP (Continued)

U001839697

EDR ID Number

Address2: Not reported FLORAL PARK City:

NY State: Zip Code: 11005 Country Code: 001

Phone: (718) 327-4700 EMail: Not reported Not reported Fax Number: Modified By: **NRLOMBAR** Date Last Modified: 2008-12-22

Site Id: 17246

Facility Operator Affiliation Type:

Company Name: MEL CHEVROLET SALES CORP

Contact Type: Not reported Contact Name: JOSEPH J NATHAN

Address1: Not reported Address2: Not reported City: Not reported

State: NY

Zip Code: Not reported Country Code: 001 Phone: (718) 327-4700 EMail: Not reported Not reported Fax Number: Modified By: **NRLOMBAR** Date Last Modified: 2008-12-22

Site Id: 17246

Affiliation Type: **Emergency Contact** Company Name: JOSEPH J NATHAN

Contact Type: Not reported

Contact Name: ALL SERVICE ALARM

Address1: Not reported Address2: Not reported Not reported City: State: NN Not reported

Zip Code:

Country Code: 999

(516) 374-3868 Phone: EMail: Not reported Fax Number: Not reported Modified By: **NRLOMBAR** Date Last Modified: 2008-12-22

Tank Info:

Tank Number: 001 Tank ID: 33664

Tank Status: Tank Converted to Non-Regulated Use Material Name: Tank Converted to Non-Regulated Use

Capacity Gallons: 550 Install Date: 12/01/1966 Date Tank Closed: 08/01/1996 Registered: True

Tank Location: Underground Tank Type: Steel/carbon steel

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

MEL CHEVROLET SALES CORP (Continued)

Material Code: 0001

#2 Fuel Oil (On-Site Consumption) Common Name of Substance:

Tightness Test Method:

Date Test: Not reported Next Test Date: Not reported Not reported Pipe Model: TRANSLAT Modified By: Last Modified: 04/14/2017

Equipment Records:

A00 - Tank Internal Protection - None D01 - Pipe Type - Steel/Carbon Steel/Iron B00 - Tank External Protection - None C00 - Pipe Location - No Piping F00 - Pipe External Protection - None 104 - Overfill - Product Level Gauge (A/G)

G03 - Tank Secondary Containment - Vault (w/o access)

H00 - Tank Leak Detection - None

002 Tank Number: Tank ID: 33665

Tank Status: Tank Converted to Non-Regulated Use Material Name: Tank Converted to Non-Regulated Use

Capacity Gallons: 550 Install Date: 12/01/1966 Date Tank Closed: 08/01/1996 Registered: True Tank Location: Underground Steel/carbon steel Tank Type:

Material Code: 0001

Common Name of Substance: #2 Fuel Oil (On-Site Consumption)

Tightness Test Method: NN

Date Test: Not reported Next Test Date: Not reported Pipe Model: Not reported Modified By: **TRANSLAT** 04/14/2017 Last Modified:

Equipment Records:

B00 - Tank External Protection - None C00 - Pipe Location - No Piping F00 - Pipe External Protection - None A00 - Tank Internal Protection - None D01 - Pipe Type - Steel/Carbon Steel/Iron

G03 - Tank Secondary Containment - Vault (w/o access)

H00 - Tank Leak Detection - None

100 - Overfill - None

Tank Number: 003 33666 Tank ID:

Tank Status: Closed - Removed Closed - Removed Material Name:

Capacity Gallons: 550 Install Date: 12/01/1964 U001839697

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

MEL CHEVROLET SALES CORP (Continued)

Date Tank Closed: 01/31/2000 Registered: True Tank Location: Underground Tank Type: Steel/carbon steel

Material Code: 9999 Common Name of Substance: Other

Tightness Test Method: NN

Date Test: Not reported Next Test Date: Not reported Pipe Model: Not reported Modified By: **LXZIELIN** 04/14/2017 Last Modified:

Equipment Records:

B00 - Tank External Protection - None C00 - Pipe Location - No Piping D02 - Pipe Type - Galvanized Steel F00 - Pipe External Protection - None A00 - Tank Internal Protection - None H00 - Tank Leak Detection - None

100 - Overfill - None

L09 - Piping Leak Detection - Exempt Suction Piping G00 - Tank Secondary Containment - None

J02 - Dispenser - Suction Dispenser

Tank Number: 004 Tank ID: 33667

Tank Status: Closed - Removed Closed - Removed Material Name:

Capacity Gallons: 550 Install Date: 12/01/1964 Date Tank Closed: 01/31/2000

Registered: True

Tank Location: Underground Tank Type: Steel/carbon steel

Material Code: 9999 Common Name of Substance: Other

NN Tightness Test Method:

Date Test: Not reported Next Test Date: Not reported Pipe Model: Not reported Modified By: **LXZIELIN** Last Modified: 04/14/2017

Equipment Records:

A00 - Tank Internal Protection - None G00 - Tank Secondary Containment - None J02 - Dispenser - Suction Dispenser B00 - Tank External Protection - None C00 - Pipe Location - No Piping D02 - Pipe Type - Galvanized Steel F00 - Pipe External Protection - None H00 - Tank Leak Detection - None

100 - Overfill - None

L09 - Piping Leak Detection - Exempt Suction Piping

U001839697

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

MEL CHEVROLET SALES CORP (Continued)

Tank Number: 005 Tank ID: 33668

Tank Status: Closed - Removed Material Name: Closed - Removed

Capacity Gallons: 275 12/01/1964 Install Date: Date Tank Closed: 01/31/2000 Registered: True

Tank Location: Underground Tank Type: Steel/carbon steel

Material Code: 9999 Common Name of Substance: Other

Tightness Test Method: NN

Date Test: Not reported Next Test Date: Not reported Pipe Model: Not reported Modified By: **LXZIELIN** Last Modified: 04/14/2017

Equipment Records:

B00 - Tank External Protection - None C00 - Pipe Location - No Piping D02 - Pipe Type - Galvanized Steel F00 - Pipe External Protection - None A00 - Tank Internal Protection - None G00 - Tank Secondary Containment - None J02 - Dispenser - Suction Dispenser

H00 - Tank Leak Detection - None 100 - Overfill - None

L09 - Piping Leak Detection - Exempt Suction Piping

S64 EL PAIS AUTO REPAIR

ENE 14-17 CENTRAL AVE FAR ROCKAWAY, NY 11561 1/8-1/4

0.227 mi.

Actual: 21 ft.

1197 ft. Site 2 of 2 in cluster S

Relative: AST: Lower

STATE Region: DEC Region: Site Status: Active Facility Id: 2-605889 Program Type: **PBS**

UTM X: 605709.33032 UTM Y: 4495807.73176 **Expiration Date:** 04/02/2009 Site Type: Other

Affiliation Records:

Site Id: 27755 Affiliation Type: Mail Contact

Company Name: EL PAIS AUTO REPAIR **PROPRIETOR** Contact Type:

Contact Name: WALTER ULLOA Address1: 14-17 CENTRAL AVENUE

Address2: Not reported City: **FAR ROCKAWAY**

State: NY U001839697

NY AST A100178136

N/A

Direction Distance

Elevation Site Database(s) EPA ID Number

EL PAIS AUTO REPAIR (Continued)

Zip Code: 11561 Country Code: 001

Phone: (917) 254-9910
EMail: Not reported
Fax Number: Not reported
Modified By: dxliving
Date Last Modified: 2004-04-02

Site Id: 27755

Affiliation Type: Facility Operator
Company Name: EL PAIS AUTO REPAIR

Contact Type: Not reported
Contact Name: WALTER ULLOA
Address1: Not reported
Address2: Not reported
City: Not reported
State: NN

Zip Code: Not reported

Country Code: Not repor

Phone: (917) 254-9910
EMail: Not reported
Fax Number: Not reported
Modified By: dxliving
Date Last Modified: 2004-04-02

Site Id: 27755

Affiliation Type: Emergency Contact
Company Name: EL PAIS AUTO REPAIR

Contact Type: Not reported
Contact Name: WALTER ULLOA
Address1: Not reported
Address2: Not reported
City: Not reported
State: NN

Zip Code: Not reported

Country Code: 999

Phone: (917) 254-9910
EMail: Not reported
Fax Number: Not reported
Modified By: dxliving
Date Last Modified: 2004-04-02

Site Id: 27755

Affiliation Type: Facility Owner
Company Name: EL PAIS AUTO REPAIR

Contact Type: PROPRIETOR
Contact Name: WALTER ULLOA

Address1: 14-17 CENTRAL AVENUE

Address2: Not reported City: FAR ROCKAWAY

State: NY
Zip Code: 11561
Country Code: 001

Phone: (917) 254-9910
EMail: Not reported
Fax Number: Not reported
Modified By: dxliving

EDR ID Number

A100178136

Direction Distance

Elevation Site Database(s) EPA ID Number

EL PAIS AUTO REPAIR (Continued)

Date Last Modified:

A100178136

EDR ID Number

Tank Info:

 Tank Number:
 01

 Tank Id:
 60669

 Material Code:
 0022

Common Name of Substance: Waste Oil/Used Oil

Equipment Records:

H00 - Tank Leak Detection - None

100 - Overfill - None

2004-04-02

B00 - Tank External Protection - None C00 - Pipe Location - No Piping F00 - Pipe External Protection - None

J00 - Dispenser - None

A00 - Tank Internal Protection - None

G01 - Tank Secondary Containment - Diking (Aboveground)

D00 - Pipe Type - No Piping

Tank Location: 3

Tank Type: Steel/Carbon Steel/Iron

Tank Status: In Service
Pipe Model: Not reported
Install Date: Not reported
Capacity Gallons: 275

Tightness Test Method: NN

Date Test:
Not reported
Next Test Date:
Not reported
Date Tank Closed:
Not reported
Register:
True
Modified By:
Last Modified:
O4/14/2017
Material Name:
Not reported
Not reported
Adviving
O4/14/2017
Waste oil/used oil

65 STEVEN AUTO REPAIRS NY AST A100296169 ENE 1338 CENTRAL AVENUE N/A

1/8-1/4 0.232 mi. 1224 ft.

Relative: AST: Lower Region:

 Actual:
 DEC Region:
 2

 19 ft.
 Site Status:
 Active

 Facility Id:
 2-610023

 Program Type:
 PBS

FAR ROCKAWAY, NY 11691

UTM X: 605802.65814 UTM Y: 4495927.41355 Expiration Date: 10/05/2020 Site Type: Other

Affiliation Records:

Site Id: 353567
Affiliation Type: Facility Owner

Company Name: STEVEN AUTO REPAIRS CORP DBA ALBERTO TORRES

Contact Type: ASST. STORE MANAGER

STATE

Contact Name: STEVEN TORRES

Direction Distance

Elevation Site Database(s) EPA ID Number

STEVEN AUTO REPAIRS (Continued)

A100296169

EDR ID Number

Address1: 1338 CENTRAL AVENUE

Address2: Not reported City: FAR ROCKAWAY

State: NY
Zip Code: 11691
Country Code: 001

Phone: (516) 710-0761
EMail: Not reported
Fax Number: Not reported
Modified By: NTFREEMA
Date Last Modified: 2015-08-14

Site ld: 353567
Affiliation Type: Mail Contact

Company Name: STEVEN AUTO REPAIRS

Contact Type: Not reported
Contact Name: ALBERTO TORRES
Address1: 1338 CENTRAL AVENUE

Address2: Not reported City: FAR ROCKAWAY

State: NY
Zip Code: 11691
Country Code: 001

Phone: (718) 471-5328
EMail: Not reported
Fax Number: Not reported
Modified By: NRLOMBAR
Date Last Modified: 2005-10-05

Site Id: 353567

Affiliation Type: Facility Operator

Company Name: STEVEN AUTO REPAIRS

NN

Contact Type: Not reported
Contact Name: ALBERTO TORRES
Address1: Not reported
Address2: Not reported
City: Not reported

Zip Code: Not reported

State:

Country Code: 001

Phone: (718) 471-5328
EMail: Not reported
Fax Number: Not reported
Modified By: NRLOMBAR
Date Last Modified: 2005-10-05

Site Id: 353567

Affiliation Type: Emergency Contact
Company Name: STEVEN AUTO REPAIRS

Contact Type: Not reported
Contact Name: ALBERTO TORRES
Address1: Not reported
Address2: Not reported
City: Not reported

State: NN

Zip Code: Not reported

Country Code: 001

Direction Distance

Elevation Site Database(s) EPA ID Number

STEVEN AUTO REPAIRS (Continued)

A100296169

EDR ID Number

Phone: (718) 471-5328
EMail: Not reported
Fax Number: Not reported
Modified By: NRLOMBAR
Date Last Modified: 2005-10-05

Tank Info:

 Tank Number:
 001

 Tank Id:
 208210

 Material Code:
 0022

Common Name of Substance: Waste Oil/Used Oil

Equipment Records:

A00 - Tank Internal Protection - None

B01 - Tank External Protection - Painted/Asphalt Coating

H03 - Tank Leak Detection - Vapor Well C00 - Pipe Location - No Piping F00 - Pipe External Protection - None E00 - Piping Secondary Containment - None

K01 - Spill Prevention - Catch Basin

G05 - Tank Secondary Containment - Synthetic Liner

104 - Overfill - Product Level Gauge (A/G)

J00 - Dispenser - None D00 - Pipe Type - No Piping L00 - Piping Leak Detection - None

Tank Location: 2

Tank Type: Steel/Carbon Steel/Iron

Tank Status: In Service
Pipe Model: Not reported
Install Date: 09/08/2005
Capacity Gallons: 275
Tightness Test Method: NN

Date Test:

Not reported

Next Test Date:

Not reported

N

66 OTHMAN SERVICE STATION ENE 1401 CENTRAL AVE

FAR ROCKAWAY, NY 11691

RCRA NonGen / NLR 1000295147 FINDS NYD982719288 ECHO NY MANIFEST

0.232 mi. 1227 ft.

1/8-1/4

Relative: RCRA NonGen / NLR:

Lower Date form received by agency: 01/01/2007

Actual: Facility name: OTHMAN SERVICE STATION

21 ft. Facility address: 1401 CENTRAL AVE

FAR ROCKAWAY, NY 11691-3910

EPA ID: NYD982719288
Mailing address: CENTRAL AVE

FAR ROCKAWAY, NY 11609

Contact: Not reported Contact address: CENTRAL AVE

Distance

Elevation Site Database(s) EPA ID Number

OTHMAN SERVICE STATION (Continued)

1000295147

EDR ID Number

FAR ROCKAWAY, NY 11609

Contact country: US

Contact telephone: Not reported Contact email: Not reported

EPA Region: 02

Classification: Non-Generator

Description: Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:

Owner/operator name: SAMUEL OTHMAN Owner/operator address: NOT REQUIRED

NOT REQUIRED, WY 99999

Owner/operator country: US

Owner/operator telephone: 212-555-1212 Owner/operator email: Not reported Owner/operator fax: Not reported Owner/operator extension: Not reported Legal status: Private Owner/Operator Type: Owner Owner/Op start date: Not reported Owner/Op end date: Not reported

Owner/operator name: SAMUEL OTHMAN Owner/operator address: NOT REQUIRED

NOT REQUIRED, WY 99999

Not reported

Owner/operator country: US

Owner/operator telephone: 212-555-1212
Owner/operator email: Not reported
Owner/operator fax: Not reported
Owner/operator extension: Not reported
Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: Not reported

Handler Activities Summary:

Owner/Op end date:

U.S. importer of hazardous waste: No Mixed waste (haz. and radioactive): No Recycler of hazardous waste: No Transporter of hazardous waste: Nο Treater, storer or disposer of HW: No Underground injection activity: No On-site burner exemption: No Furnace exemption: No Used oil fuel burner: No Used oil processor: No User oil refiner: No Used oil fuel marketer to burner: No Used oil Specification marketer: No Used oil transfer facility: No Used oil transporter: No

Historical Generators:

Date form received by agency: 01/01/2006

Site name: OTHMAN SERVICE STATION
Classification: Not a generator, verified

Direction Distance

Elevation Site Database(s) EPA ID Number

OTHMAN SERVICE STATION (Continued)

1000295147

EDR ID Number

Date form received by agency: 07/08/1999

Site name: OTHMAN SERVICE STATION
Classification: Not a generator, verified

Date form received by agency: 12/01/1988

Site name: OTHMAN SERVICE STATION
Classification: Large Quantity Generator

Waste code: D001

. Waste name: IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF

LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT

WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.

Violation Status: No violations found

FINDS:

Registry ID: 110004426381

Environmental Interest/Information System

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and

corrective action activities required under RCRA.

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:

Envid: 1000295147 Registry ID: 110004426381

DFR URL: http://echo.epa.gov/detailed-facility-report?fid=110004426381

NY MANIFEST:

Country: USA

EPA ID: NYD982719288
Facility Status: Not reported

Location Address 1: 1401 CENTRAL AVENUE

Code: BP

Location Address 2: Not reported Total Tanks: Not reported Location City: ROCKAWAY

Location State: NY

Location Zip: Not reported Location Zip 4: Not reported

NY MANIFEST:

EPAID: NYD982719288
Mailing Name: OTHMAN S/S
Mailing Contact: OTHMAN S/S

Direction Distance Elevation

stance EDR ID Number evation Site Database(s) EPA ID Number

OTHMAN SERVICE STATION (Continued)

1000295147

Mailing Address 1: 1401 CENTRAL AVENUE

Mailing Address 2: Not reported Mailing City: ROCKAWAY

Mailing State: NY
Mailing Zip: 11693
Mailing Zip 4: Not reported
Mailing Country: USA
Mailing Phone: 7183279070

NY MANIFEST:

Document ID: NYA7119774

Manifest Status: C

 seq:
 Not reported

 Year:
 1989

 Trans1 State ID:
 00000000

 Trans2 State ID:
 000000000

 Generator Ship Date:
 01/12/1989

 Trans1 Recv Date:
 01/12/1989

Trans2 Recv Date: //
TSD Site Recv Date: 01/13/1989

Part A Recv Date: 01/19/1989 Part B Recv Date: 01/24/1989 Generator EPA ID: NYD982719288 Trans1 EPA ID: NYD006801245 Trans2 EPA ID: Not reported TSDF ID 1: NYD082785429 TSDF ID 2: Not reported Manifest Tracking Number: Not reported Import Indicator: Not reported Not reported **Export Indicator:** Discr Quantity Indicator: Not reported Discr Type Indicator: Not reported Discr Residue Indicator: Not reported Discr Partial Reject Indicator: Not reported Discr Full Reject Indicator: Not reported Manifest Ref Number: Not reported Alt Facility RCRA ID: Not reported Alt Facility Sign Date: Not reported MGMT Method Type Code: Not reported

Waste Code: D001 - NON-LISTED IGNITABLE WASTES

Waste Code:
Waste Code:
Waste Code:
Waste Code:
Waste Code:
Waste Code:
Waste Code:
Waste Code:
Waste Code:
Waste Code:
Woot reported
Not reported
Quantity:
00200

Units: G - Gallons (liquids only)* (8.3 pounds)

Number of Containers: 004

Container Type: DM - Metal drums, barrels

Handling Method: B Incineration, heat recovery, burning.

Specific Gravity: 100

Click this hyperlink while viewing on your computer to access

-1 additional NY MANIFEST: record(s) in the EDR Site Report.

Direction Distance

Elevation Site Database(s) EPA ID Number

67 NEXT TO NY LTANKS \$107417123 NNW 22-54 NAMEOKE AVE. N/A

1/8-1/4 0.233 mi.

1231 ft.

Relative: LTANKS: Lower Facility

ROCKAWAY, NY

Actual: 8 ft.

0509035 Facility ID: Site ID: 354749 Closed Date: 2006-02-02 Spill Number: 0509035 Spill Date: 2005-10-27 Spill Cause: Tank Failure Spill Source: Unknown Spill Class: C4

Cleanup Ceased: Not reported SWIS: 4101
Investigator: SFRAHMAN Referred To: Not reported Reported to Dept: 2005-10-28
CID: 74

Water Affected:
Spill Notifier:
Last Inspection:
Recommended Penalty:
Meets Standard:
UST Involvement:
Remediation Phase:

Not reported
Fire Department
Ret Penalty:
False
False
False
0

Date Entered In Computer: 2005-10-28
Spill Record Last Update: 2006-02-02
Spiller Name: Not reported

Spiller Company: CHANDLER DEVELOPMENT CORP

Spiller Address: 189-07 JAMAICA AVE

Spiller County: 001

Spiller Contact: MICHAEL MONACO
Spiller Phone: (347) 203-6886
Spiller Extention: Not reported

DEC Region: 2 DER Facility ID: 304763

DEC Memo: "10.28.05 Sharif -I spoke with Michael Monaco of FDNY. He said they

put speedy dry and soak pad to absorb the oil. It was a tank leaking on a construction site. No responsible party was available at night to start the clean up.An ECO was sent out to hold the PR for clean up and necessary law inforcement. Later today I called the RP's office and told them to start the clean up immediately. A CSL letter was also sent to Chandler Development Corp 189-07 Jamaica Avenue, Hollis,

also sent to Chandler Development Corp 189-07 Jamaica Avenue, Hollis, NY 11423 Ph: 718-217-4900, Fax: 718-217-4929 02/02/06 Shariff/Report

from PTC. They pumped out the oil water mix from the site.

Contaminated soil was removed for disposal.End point sample result indicated minor presence of VOC/SVOC'S.Waste disposal manifest and

lab result were included.NFA required."

Remarks: "50-100 gallons spilled. Some puddling - putting down oil pads 250

gallon tank leaking outside - construction site possibly from previous home that was on the site or someone dumped it here. possibly all the way down to water table Attempted to contact the

company - unable to possibly due to the hour. "

All Materials:

Site ID: 354749
Operable Unit ID: 1112140

EDR ID Number

Direction Distance

Elevation Site Database(s) EPA ID Number

NEXT TO (Continued) S107417123

Operable Unit: 01 2102181 Material ID: Material Code: 0001A Material Name: #2 fuel oil Case No.: Not reported Material FA: Petroleum Quantity: 100.00 Units: G Recovered: .00

Oxygenate: Not reported

T68 AUTO MAVEN DENT DR INC NY AST A100293139

SE 10-16 BEACH 19TH STREET 1/8-1/4 FAR ROCKAWAY, NY 11691 0.235 mi.

0.235 mi.

1243 ft. Site 1 of 2 in cluster T

 Relative:
 AST:

 Higher
 Region:
 STATE

 Actual:
 DEC Region:
 2

 27 ft.
 Site Status:
 Active

 Facility Id:
 2-609946

 Program Type:
 PBS

UTM X: 599761.46891 UTM Y: 4495201.99849 Expiration Date: 05/25/2010

Site Type: Other Wholesale/Retail Sales

Affiliation Records:

Site Id: 346538

Affiliation Type: Facility Owner

Company Name: DAVID D. STERN

Contact Type: PRESIDENT

Contact Name: DAVID D. STERN

Address1: 525 JARVIS AVENUE

Address2: Not reported City: FAR ROCKAWAY

State: NY
Zip Code: 11691
Country Code: 001

Phone: (516) 870-2177
EMail: Not reported
Fax Number: Not reported
Modified By: NRLOMBAR
Date Last Modified: 2005-05-25

Site Id: 346538

Affiliation Type: Mail Contact

Company Name: DAVID D. STERN

Contact Type: Not reported

Contact Name: Not reported

Address1: 525 JARVIS AVENUE
Address2: Not reported
City: FAR ROCKAWAY

State: NY
Zip Code: 11691
Country Code: 001

EDR ID Number

N/A

Direction
Distance
Elevation

stance EDR ID Number evation Site Database(s) EPA ID Number

AUTO MAVEN DENT DR INC (Continued)

A100293139

Phone: (516) 870-2177
EMail: Not reported
Fax Number: Not reported
Modified By: NRLOMBAR
Date Last Modified: 2005-05-25

Site Id: 346538

Affiliation Type: Facility Operator

Company Name: AUTO MAVEN DENT DR INC

Contact Type: Not reported
Contact Name: JACK STERN
Address1: Not reported
Address2: Not reported
City: Not reported
State: NN

Zip Code: Not reported

Country Code: 001

Phone: (718) 327-8630
EMail: Not reported
Fax Number: Not reported
Modified By: NRLOMBAR
Date Last Modified: 2005-05-25

Site Id: 346538

Affiliation Type: Emergency Contact
Company Name: DAVID D. STERN
Contact Type: Not reported
Contact Name: JACK STERN
Address1: Not reported
Address2: Not reported
City: Not reported

State: NN

Zip Code: Not reported

Country Code: 001

Phone: (516) 996-5555
EMail: Not reported
Fax Number: Not reported
Modified By: NRLOMBAR
Date Last Modified: 2005-05-25

Tank Info:

 Tank Number:
 001

 Tank Id:
 206542

 Material Code:
 0022

Common Name of Substance: Waste Oil/Used Oil

Equipment Records:

D00 - Pipe Type - No Piping

H06 - Tank Leak Detection - Impervious Barrier/Concrete Pad (A/G)

L00 - Piping Leak Detection - None

J00 - Dispenser - None

A00 - Tank Internal Protection - None

B01 - Tank External Protection - Painted/Asphalt Coating

E00 - Piping Secondary Containment - None

100 - Overfill - None

Direction Distance

Elevation Site Database(s) EPA ID Number

AUTO MAVEN DENT DR INC (Continued)

A100293139

S108145681

N/A

NY SWF/LF

EDR ID Number

K01 - Spill Prevention - Catch Basin C00 - Pipe Location - No Piping F00 - Pipe External Protection - None G00 - Tank Secondary Containment - None

Tank Location: 3

Tank Type: Steel/Carbon Steel/Iron

Tank Status: In Service
Pipe Model: Not reported
Install Date: Not reported
Consoits College: 350

Capacity Gallons: 250 Tightness Test Method: NN

Date Test:

Not reported

Next Test Date:

Not reported

Not reported

Not reported

Not reported

Not reported

Not reported

Register:

True

Modified By:

NRLOMBAR

Last Modified:

04/14/2017

Material Name:

waste oil/used oil

INACTIVE

T69 AUTO MAVEN DENT DR INC SE 1016 BEACH 19TH STREET 1/8-1/4 FAR ROCKAWAY, NY 11691

0.235 mi.

1243 ft. Site 2 of 2 in cluster T

Relative: SWF/LF: Higher Flag:

Actual: Region Code: 2

Actual: Region Code. 2 **27 ft.** Phone Number: Not reported

Owner Name: Not reported Owner Type: Not reported Owner Address: Not reported Not reported Owner Addr2: Owner City,St,Zip: Not reported Owner Email: Not reported Not reported Owner Phone: Contact Name: Not reported Not reported Contact Address: Not reported Contact Addr2: Not reported Contact City, St, Zip: Contact Email: Not reported Contact Phone: Not reported

Activity Desc: Vehicle Dismantling Facility

Activity Number: Not reported

Active: No East Coordinate: 605595 4495381 North Coordinate: Not reported Accuracy Code: Regulatory Status: Not reported Waste Type: Not reported Authorization #: Not reported Authorization Date: Not reported Not reported **Expiration Date:** Operator Name: Not reported Operator Type: Not reported Laste Date: Not reported

Direction Distance

Elevation Site Database(s) EPA ID Number

70 1124 BAYPORT PLACE NY AST U003391569
East 11-24 BAYPORT PLACE N/A

1/8-1/4 0.235 mi. 1243 ft.

 Relative:
 AST:

 Higher
 Region:
 STATE

 Actual:
 DEC Region:
 2

FAR ROCKAWAY, NY 11691

25 ft. Site Status: Unregulated/Closed

Facility Id: 2-401153
Program Type: PBS

UTM X: 605759.43490 UTM Y: 4495640.23526

Expiration Date: N/A
Site Type: Other

Affiliation Records:

Site Id: 19168
Affiliation Type: Mail Contact

Company Name: NAMEOKE HOLDING LLC

Contact Type: OWNER

Contact Name: GERSHON EICHORN
Address1: 619 EASTERN PARKWAY

 Address2:
 Not reported

 City:
 BROOKLYN

 State:
 NY

 Zip Code:
 11213

 Country Code:
 001

Phone: (646) 450-4407

EMail: DAVID@UPREALTYLLC.COM

Fax Number: Not reported Modified By: NTFREEMA Date Last Modified: 2015-04-20

Site Id: 19168

Affiliation Type: Facility Operator
Company Name: 1124 BAYPORT PLACE

Contact Type: Not reported Contact Name: N/A

Address1: Not reported Address2: Not reported City: Not reported State: NN

Zip Code: Not reported Country Code: 001

Phone: N/A
EMail: Not reported
Fax Number: Not reported
Modified By: NTFREEMA

Site Id: 19168

Date Last Modified:

Affiliation Type: Emergency Contact
Company Name: NAMEOKE HOLDING LLC

2015-04-20

Contact Type: Not reported

Contact Name: N/A
Address1: Not reported
Address2: Not reported
City: Not reported

EDR ID Number

Direction Distance

Elevation Site Database(s) EPA ID Number

1124 BAYPORT PLACE (Continued)

U003391569

EDR ID Number

State: NN

Zip Code: Not reported
Country Code: 999
Phone: N/A

EMail: Not reported Fax Number: Not reported Modified By: NTFREEMA Date Last Modified: 2015-04-20

Site Id: 19168
Affiliation Type: Facility Owner

Company Name: NAMEOKE HOLDING LLC

Contact Type: OWNER

Contact Name: GERSHON EICHORN
Address1: 619 EASTERN PARKWAY

 Address2:
 Not reported

 City:
 BROOKLYN

 State:
 NY

 Zip Code:
 11213

 Country Code:
 001

Phone: (646) 450-4407

EMail: DAVID@UPREALTYLLC.COM

Fax Number: Not reported Modified By: NTFREEMA Date Last Modified: 2015-04-20

Tank Info:

 Tank Number:
 001

 Tank Id:
 21770

 Material Code:
 0001

Common Name of Substance: #2 Fuel Oil (On-Site Consumption)

Equipment Records:

J02 - Dispenser - Suction Dispenser B00 - Tank External Protection - None C00 - Pipe Location - No Piping F00 - Pipe External Protection - None E00 - Piping Secondary Containment - None

G03 - Tank Secondary Containment - Vault (w/o access)

H00 - Tank Leak Detection - None

L09 - Piping Leak Detection - Exempt Suction Piping

A00 - Tank Internal Protection - None D01 - Pipe Type - Steel/Carbon Steel/Iron

K00 - Spill Prevention - None

104 - Overfill - Product Level Gauge (A/G)

Tank Location:

Tank Type: Steel/Carbon Steel/Iron
Tank Status: Closed - Removed
Pipe Model: Not reported
Install Date: 11/08/1923
Capacity Gallons: 2000
Tightness Test Method: NN

Date Test: Not reported
Next Test Date: Not reported
Date Tank Closed: 04/06/2015

Direction Distance

Distance Elevation Site EDR ID Number

EDR ID Number

EPA ID Number

1124 BAYPORT PLACE (Continued)

U003391569

FINDS

ECHO NY MANIFEST NYD986939601

Register: True
Modified By: NTFREEMA
Last Modified: 04/14/2017

Material Name: #2 fuel oil (on-site consumption)

U71 NASSAU BEACH CLEANERS NY DRYCLEANERS S110247382
South 2105 CORNAGA AVE. N/A

South 2105 CORNAGA AVE. 1/8-1/4 FAR ROCKAWAY, NY 11691

0.236 mi.

1244 ft. Site 1 of 2 in cluster U

Relative: DRYCLEANERS:

 Higher
 Facility ID:
 2-6308-00444

 Actual:
 Phone Number:
 718-327-2000

 27 ft.
 Region:
 Not reported

 Registration Effective Date:
 N/A

Inspection Date: N/A
Inspection Date: 01NOV19
Install Date: 94

Drop Shop: Not reported

Shutdown:

Alternate Solvent: Not reported Current Business: Not reported

U72 NASSAU BEACH CLEANERS RCRA-CESQG 1004757518

South 2105 CORNAGA AVE 1/8-1/4 FAR ROCKAWAY, NY 11691

0.236 mi.

0.236 mi. 1244 ft. Site 2 of 2 in cluster U

Relative: RCRA-CESQG:

Higher Date form received by agency: 01/01/2007

Actual: Facility name: NASSAU BEACH CLEANERS

27 ft. Facility address: 2105 CORNAGA AVE FAR ROCKAWAY, NY 11691

PAR ROCKAWAT, NT 11

EPA ID: NYD986939601 Mailing address: CORNAGA AVE

FAR ROCKAWAY, NY 11691

Contact: ROSE STAROPOLI Contact address: CORNAGA AVE

FAR ROCKAWAY, NY 11691

Contact country: US

Contact telephone: 718-327-2000 Contact email: Not reported

EPA Region: 02

Classification: Conditionally Exempt Small Quantity Generator

Description: Handler: generates 100 kg or less of hazardous waste per calendar

month, and accumulates 1000 kg or less of hazardous waste at any time; or generates 1 kg or less of acutely hazardous waste per calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of

Direction Distance Elevation

vation Site Database(s) EPA ID Number

NASSAU BEACH CLEANERS (Continued)

1004757518

EDR ID Number

any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste

Owner/Operator Summary:

Owner/operator name: ROSE M STAROPOLI
Owner/operator address: 2105 CORNAGE AVE
FAR ROCKAWAY, NY 11691

Owner/operator country: US

718-327-2000 Owner/operator telephone: Owner/operator email: Not reported Owner/operator fax: Not reported Owner/operator extension: Not reported Legal status: Private Owner/Operator Type: Operator Owner/Op start date: Not reported Owner/Op end date: Not reported

Owner/operator name: ROSE M STAROPOLI
Owner/operator address: 2105 CORNAGE AVE

FAR ROCKAWAY, NY 11691

Owner/operator country: US

Owner/operator telephone: 718-327-2000 Owner/operator email: Not reported Owner/operator fax: Not reported Owner/operator extension: Not reported Legal status: Private Owner/Operator Type: Owner Owner/Op start date: Not reported Owner/Op end date: Not reported

Handler Activities Summary:

U.S. importer of hazardous waste: No Mixed waste (haz. and radioactive): No Recycler of hazardous waste: No Transporter of hazardous waste: No Treater, storer or disposer of HW: No Underground injection activity: No On-site burner exemption: No No Furnace exemption: Used oil fuel burner: No Used oil processor: No User oil refiner: No Used oil fuel marketer to burner: No Used oil Specification marketer: No Used oil transfer facility: No Used oil transporter: No

Historical Generators:

Date form received by agency: 01/01/2006

Site name: NASSAU BEACH CLEANERS

Classification: Conditionally Exempt Small Quantity Generator

Date form received by agency: 11/23/1993

Site name: NASSAU BEACH CLEANERS

Classification: Conditionally Exempt Small Quantity Generator

Direction Distance

Elevation Site Database(s) EPA ID Number

NASSAU BEACH CLEANERS (Continued)

1004757518

EDR ID Number

. Waste code: D000
. Waste name: Not Defined

. Waste code: F002

. Waste name: THE FOLLOWING SPENT HALOGENATED SOLVENTS: TETRACHLOROETHYLENE,

METHYLENE CHLORIDE, TRICHLOROETHYLENE, 1,1,1-TRICHLOROETHANE,

CHLOROBENZENE, 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE, ORTHO-DICHLOROBENZENE, TRICHLOROFLUOROMETHANE, AND

1,1,2-TRICHLOROETHANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE LISTED IN F001, F004, OR F005, AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND

SPENT SOLVENT MIXTURES.

Violation Status: No violations found

FINDS:

Registry ID: 110004460226

Environmental Interest/Information System

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport,

and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA

program staff to track the notification, permit, compliance, and

corrective action activities required under RCRA.

<u>Click this hyperlink</u> while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:

Envid: 1004757518 Registry ID: 110004460226

DFR URL: http://echo.epa.gov/detailed-facility-report?fid=110004460226

NY MANIFEST:

Country: USA

EPA ID: NYD986939601 Facility Status: Not reported

Location Address 1: 2105 CORNAGA AVENUE

Code: BP

Location Address 2: Not reported
Total Tanks: Not reported
Location City: FAR ROCKAWAY

Location State: NY
Location Zip: 11691
Location Zip 4: Not reported

NY MANIFEST:

EPAID: NYD986939601

Mailing Name: NASSAU BEACH CLEANERS
Mailing Contact: NASSAU BEACH CLEANERS
Mailing Address 1: 2105 CORNAGA AVENUE

Mailing Address 2: Not reported
Mailing City: FAR ROCKAWAY

Direction Distance

Elevation Site Database(s) EPA ID Number

NASSAU BEACH CLEANERS (Continued)

1004757518

EDR ID Number

Mailing State: NY
Mailing Zip: 11691
Mailing Zip 4: Not reported
Mailing Country: USA
Mailing Phone: 7183272000

NY MANIFEST:

Document ID: NYG3230946
Manifest Status: Not reported

seq: 01 Year: 2003 Trans1 State ID: 0440375ME Trans2 State ID: Not reported Generator Ship Date: 08/07/2003 Trans1 Recv Date: 08/07/2003 Trans2 Recv Date: Not reported 08/18/2003 TSD Site Recv Date: Part A Recv Date: Not reported Part B Recv Date: Not reported NYD986939601 Generator EPA ID: Trans1 EPA ID: NJD054126164 Trans2 EPA ID: Not reported TSDF ID 1: OHD066060609 TSDF ID 2: Not reported Manifest Tracking Number: Not reported Import Indicator: Not reported Not reported Export Indicator: Discr Quantity Indicator: Not reported Discr Type Indicator: Not reported

MGMT Method Type Code: Not reported

Waste Code: Not reported

F002 - HALO SOLV + STILL BOTTOMS FM REC OF SOLV

Not reported

Not reported

Not reported

Not reported

Not reported

Not reported

Waste Code:
Waste Code:
Waste Code:
Waste Code:
Waste Code:
Waste Code:
Waste Code:
Waste Code:
Waste Code:
Waste Code:
Waste Code:
Wot reported
Quantity:
00165

Units: G - Gallons (liquids only)* (8.3 pounds)

Number of Containers: 003

Discr Residue Indicator:

Manifest Ref Number:

Alt Facility RCRA ID:

Alt Facility Sign Date:

Discr Partial Reject Indicator:

Discr Full Reject Indicator:

Container Type: DM - Metal drums, barrels

Handling Method: B Incineration, heat recovery, burning.

Specific Gravity: 01.30

Click this hyperlink while viewing on your computer to access

-1 additional NY MANIFEST: record(s) in the EDR Site Report.

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

V73 **US POSTAL SERVICE** PA MANIFEST S109247872 SE **1836 MOTT AVENUE** N/A

1/8-1/4 **FAR ROCKAWAY, NY** 0.238 mi.

1255 ft. Site 1 of 2 in cluster V

Relative: Manifest Details: Higher Year:

000533022JJK Manifest Number: Actual: Manifest Type: Not reported 29 ft. Generator EPA Id:

NYD986974426 Generator Date: 06/05/2007 Mailing Address: Not reported Mailing City, St, Zip: Not reported

Contact Name: VINCENT POTENCIANO

2007

Contact Phone: 718-327-7700 TSD EPA Id: PAD067098822 TSD Date: Not reported TSD Facility Name: CYCLE CHEM INC 550 INDUSTRIAL DRIVE TSD Facility Address:

TSD Facility City: **LEWISBERRY**

TSD Facility State: PΑ

Facility Telephone: Not reported

Page Number: 1 Line Number: 4 Waste Number: NONE Container Number:

Container Type: Fiberboard or plastic drums, barrels, kegs

Waste Quantity: 48 Unit: **Pounds** Handling Code: Not reported TSP EPA Id: Not reported Date TSP Sig: Not reported

2007 Year:

Manifest Number: 000533022JJK Not reported Manifest Type: Generator EPA Id: NYD986974426 Generator Date: 06/05/2007 Mailing Address: Not reported Mailing City, St, Zip: Not reported

VINCENT POTENCIANO Contact Name:

Contact Phone: 718-327-7700 TSD EPA Id: PAD067098822 TSD Date: Not reported TSD Facility Name: CYCLE CHEM INC TSD Facility Address: 550 INDUSTRIAL DRIVE

TSD Facility City: **LEWISBERRY**

TSD Facility State: PΑ

Facility Telephone: Not reported

Page Number: 1 Line Number: 3 Waste Number: D001 Container Number:

Container Type: Metal drums, barrels, kegs

Waste Quantity: Unit: **Pounds** Handling Code: Not reported TSP EPA Id: Not reported

Direction Distance Elevation

tion Site Database(s) EPA ID Number

US POSTAL SERVICE (Continued)

S109247872

EDR ID Number

Date TSP Sig: Not reported

Year: 2007

Manifest Number: 000533022JJK
Manifest Type: Not reported
Generator EPA Id: NYD986974426
Generator Date: 06/05/2007
Mailing Address: Not reported
Mailing City,St,Zip: Not reported

Contact Name: VINCENT POTENCIANO

Contact Phone: 718-327-7700
TSD EPA Id: PAD067098822
TSD Date: Not reported
TSD Facility Name: CYCLE CHEM INC
TSD Facility Address: 550 INDUSTRIAL DRIVE

TSD Facility City: LEWISBERRY

TSD Facility State: PA

Facility Telephone: Not reported

Page Number: 1
Line Number: 2
Waste Number: D001
Container Number: 1

Container Type: Fiberboard or plastic drums, barrels, kegs

Waste Quantity: 75
Unit: Pounds

Handling Code: Not reported TSP EPA Id: Not reported Date TSP Sig: Not reported

Year: 2007

Manifest Number: 000533022JJK
Manifest Type: Not reported
Generator EPA Id: NYD986974426
Generator Date: 06/05/2007
Mailing Address: Not reported
Mailing City,St,Zip: Not reported

Contact Name: VINCENT POTENCIANO

Contact Phone: 718-327-7700
TSD EPA Id: PAD067098822
TSD Date: Not reported
TSD Facility Name: CYCLE CHEM INC
TSD Facility Address: 550 INDUSTRIAL DRIVE

TSD Facility City: LEWISBERRY

TSD Facility State: PA

Facility Telephone: Not reported

Page Number: 1
Line Number: 1
Waste Number: D001
Container Number: 1

Container Type: Fiberboard or plastic drums, barrels, kegs

Waste Quantity: 3

Unit: Pounds
Handling Code: Not reported
TSP EPA Id: Not reported
Date TSP Sig: Not reported

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

V74 **US POSTAL SERVICE NY UST** 1000554950 SE **1836 MOTT AVE** NY AST NYD986974426

1/8-1/4 FAR ROCKAWAY, NY 11691 RCRA NonGen / NLR

0.238 mi. **FINDS ECHO** 1255 ft. Site 2 of 2 in cluster V **NY MANIFEST**

Relative:

Higher UST:

2-350273 / Unregulated/Closed Id/Status: Actual:

Program Type: **PBS** 29 ft. Region: STATE DEC Region: **Expiration Date:** N/A

UTM X: 605715.47691 UTM Y: 4495440.31529 Site Type: Unknown

Affiliation Records:

Site Id: 17278 Facility Owner Affiliation Type: Company Name: U S POSTAL SERV Contact Type: Not reported Contact Name: Not reported Address1: 1836 MOTT AV Address2: Not reported City: **FAR ROCKAWAY**

NY State: Zip Code: 11691 Country Code: 001

Phone: (718) 327-7700 EMail: Not reported Fax Number: Not reported Modified By: **TRANSLAT** Date Last Modified: 2004-03-04

Site Id: 17278 Affiliation Type: Mail Contact Company Name: U S POSTAL SERV Contact Type: Not reported Contact Name: Not reported Address1: 1836 MOTT AV Address2: Not reported FAR ROCKAWAY

City: State: NY Zip Code: 11691 Country Code: 001

(718) 327-7700 Phone: EMail: Not reported Not reported Fax Number: Modified By: **TRANSLAT** Date Last Modified: 2004-03-04

Site Id: 17278

Affiliation Type: **Facility Operator** Company Name: U S POSTAL SERVICE

Contact Type: Not reported U S POSTAL SERV Contact Name: Address1: Not reported Address2: Not reported City: Not reported

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

US POSTAL SERVICE (Continued)

1000554950

State: NN

Not reported Zip Code:

Country Code: 001

Phone: (718) 327-7700 EMail: Not reported Fax Number: Not reported Modified By: TRANSLAT Date Last Modified: 2004-03-04

Site Id: 17278

Affiliation Type: **Emergency Contact** Company Name: U S POSTAL SERV Contact Type: Not reported Contact Name: **POSTMASTER** Address1: Not reported Address2: Not reported Not reported City:

State: NN

Zip Code: Not reported

Country Code: 001

(718) 327-7700 Phone: Not reported EMail: Fax Number: Not reported **TRANSLAT** Modified By: Date Last Modified: 2004-03-04

Tank Info:

Tank Number: 001 33797 Tank ID:

Tank Status: Closed - Removed Material Name: Closed - Removed

Capacity Gallons: 4000

Install Date: Not reported Date Tank Closed: 12/01/1990 Registered: True Tank Location: Underground

Tank Type: Equivalent technology

Material Code: 0009 Common Name of Substance: Gasoline

Tightness Test Method: NN

Date Test: Not reported Next Test Date: Not reported Pipe Model: Not reported **TRANSLAT** Modified By: Last Modified: 04/14/2017

Equipment Records:

D00 - Pipe Type - No Piping

G00 - Tank Secondary Containment - None J02 - Dispenser - Suction Dispenser B00 - Tank External Protection - None C00 - Pipe Location - No Piping F00 - Pipe External Protection - None H00 - Tank Leak Detection - None

100 - Overfill - None

Direction Distance

Elevation Site Database(s) EPA ID Number

US POSTAL SERVICE (Continued)

1000554950

EDR ID Number

A00 - Tank Internal Protection - None

AST:

Region: STATE
DEC Region: 2
Site Status: Active
Facility Id: 2-602468
Program Type: PBS

UTM X: 605715.47691 UTM Y: 4495440.31529 Expiration Date: 10/03/2020 Site Type: Other

Affiliation Records:

Site Id: 24425 Affiliation Type: Facility Owner

Company Name: U.S. POSTAL SERVICE

Contact Type: ENVIRONMENTAL SPECIALIST

Contact Name: ANN MARIE BYRNES
Address1: 18-36 MOTT AVENUE

Address2: Not reported City: FAR ROCKAWAY

State: NY
Zip Code: 11691
Country Code: 001

Phone: (718) 327-1038
EMail: Not reported
Fax Number: Not reported
Modified By: MFLEONAR
Date Last Modified: 2017-08-17

Site Id: 24425 Affiliation Type: Mail Contact

Company Name: U.S. POSTAL SERVICE

Contact Type: Not reported

Contact Name: ANN MARIE BYRNES
Address1: 830 STEWART AVENUE

Address2: Not reported City: GARDEN CITY

State: NY
Zip Code: 11599
Country Code: 001

Phone: (347) 326-0210

EMail: ANNMARIE.BYRNES@USPS.GOV

Fax Number: Not reported Modified By: MFLEONAR Date Last Modified: 2017-08-17

Site Id: 24425

Affiliation Type: Facility Operator

Company Name: FAR ROCKAWAY POST OFFICE

Contact Type: Not reported Contact Name: N/A

Address1: Not reported Address2: Not reported City: Not reported

State: NN

Direction Distance

Elevation Site Database(s) EPA ID Number

US POSTAL SERVICE (Continued)

1000554950

EDR ID Number

Zip Code: Not reported

Country Code: 001

Phone: (718) 327-7700
EMail: Not reported
Fax Number: Not reported
Modified By: MFLEONAR
Date Last Modified: 2017-08-17

Site Id: 24425

Affiliation Type: Emergency Contact
Company Name: U.S. POSTAL SERVICE

Contact Type: Not reported
Contact Name: POSTAL POLICE
Address1: Not reported
Address2: Not reported
City: Not reported
State: NN

Zip Code: Not reported

Country Code: 999

Phone: (212) 330-3900
EMail: Not reported
Fax Number: Not reported
Modified By: MFLEONAR
Date Last Modified: 2017-08-17

Tank Info:

Tank Number: 1
Tank Id: 50206
Material Code: 0001

Common Name of Substance: #2 Fuel Oil (On-Site Consumption)

Equipment Records:

H01 - Tank Leak Detection - Interstitial - Electronic Monitoring

K00 - Spill Prevention - None A00 - Tank Internal Protection - None

B01 - Tank External Protection - Painted/Asphalt Coating

D01 - Pipe Type - Steel/Carbon Steel/Iron

102 - Overfill - High Level Alarm

E00 - Piping Secondary Containment - None

G12 - Tank Secondary Containment - Double-Walled (AG only)

F04 - Pipe External Protection - Fiberglass C01 - Pipe Location - Aboveground

J04 - Dispenser - On Site Heating System (Suction)

L00 - Piping Leak Detection - None

Tank Location:

Tank Type: Steel/Carbon Steel/Iron

Tank Status: In Service
Pipe Model: Not reported
Install Date: 01/01/1973
Capacity Gallons: 3000
Tightness Test Method: -

Date Test:
Not reported
Next Test Date:
Not reported
Date Tank Closed:
Not reported
Register:
True

Direction Distance Elevation

vation Site Database(s) EPA ID Number

US POSTAL SERVICE (Continued)

1000554950

EDR ID Number

Modified By: MFLEONAR Last Modified: 08/17/2017

Material Name: #2 fuel oil (on-site consumption)

RCRA NonGen / NLR:

Date form received by agency: 01/01/2007

Facility name: US POSTAL SERVICE Facility address: US POSTAL SERVICE 1836 MOTT AVE

FAR ROCKAWAY, NY 11691

EPA ID: NYD986974426

Mailing address: MOTT AVE

FAR ROCKAWAY, NY 11691

Contact: VINCENT POTENCIANO

Contact address: MOTT AVE

FAR ROCKAWAY, NY 11691

Contact country: US

Contact telephone: 718-327-7700 Contact email: Not reported

EPA Region: 02
Land type: Federal
Classification: Non-Generator

Description: Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:

Owner/operator name: US POSTAL SERVICE Owner/operator address: 1836 MOTT AVE

FAR ROCKAWAY, NY 11691

Owner/operator country: US

Owner/operator telephone: 718-327-7700 Owner/operator email: Not reported Owner/operator fax: Not reported Owner/operator extension: Not reported Legal status: Federal Owner/Operator Type: Owner Owner/Op start date: Not reported Owner/Op end date: Not reported

Owner/operator name: US POSTAL SERVICE Owner/operator address: 1836 MOTT AVE

FAR ROCKAWAY, NY 11691

Owner/operator country: US

Owner/operator telephone: 718-327-7700 Owner/operator email: Not reported Not reported Owner/operator fax: Not reported Owner/operator extension: Legal status: Federal Owner/Operator Type: Operator Owner/Op start date: Not reported Owner/Op end date: Not reported

Handler Activities Summary:

U.S. importer of hazardous waste: No Mixed waste (haz. and radioactive): No Recycler of hazardous waste: No Transporter of hazardous waste: No Treater, storer or disposer of HW: No

Direction Distance

Elevation Site Database(s) EPA ID Number

US POSTAL SERVICE (Continued)

1000554950

EDR ID Number

Underground injection activity: No On-site burner exemption: No Furnace exemption: No Used oil fuel burner: No Used oil processor: No User oil refiner: No Used oil fuel marketer to burner: No Used oil Specification marketer: Nο Used oil transfer facility: No Used oil transporter: No

Historical Generators:

Date form received by agency: 01/01/2006

Site name: US POSTAL SERVICE Classification: Not a generator, verified

Date form received by agency: 07/30/2003

Site name: US POSTAL SERVICE Classification: Not a generator, verified

. Waste code: D001

. Waste name: IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF

LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT

WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.

. Waste code: D009
. Waste name: MERCURY

Waste code: D018
Waste name: BENZENE

Date form received by agency: 10/13/1998

Site name: US POSTAL SERVICE

Classification: Conditionally Exempt Small Quantity Generator

. Waste code: D000 . Waste name: Not Defined

. Waste code: D001

Waste name: IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF

LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT

WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.

. Waste code: D009 . Waste name: MERCURY

. Waste code: D018
. Waste name: BENZENE

Direction Distance

Elevation Site Database(s) EPA ID Number

US POSTAL SERVICE (Continued)

1000554950

EDR ID Number

Violation Status: No violations found

Evaluation Action Summary:

Evaluation date: 02/02/1993

Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE

Area of violation: Not reported Date achieved compliance: Not reported

Evaluation lead agency: EPA Contractor/Grantee

FINDS:

Registry ID: 110004477851

Environmental Interest/Information System

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and

corrective action activities required under RCRA.

<u>Click this hyperlink</u> while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:

Envid: 1000554950 Registry ID: 110004477851

DFR URL: http://echo.epa.gov/detailed-facility-report?fid=110004477851

NY MANIFEST:

Country: USA

EPA ID: NYD986974426
Facility Status: Not reported
Location Address 1: 1836 MOTT AVE

Code: BP

Location Address 2: Not reported
Total Tanks: Not reported
Location City: FAR ROCKAWAY

Location State: NY
Location Zip: 11351
Location Zip 4: Not reported

NY MANIFEST:

EPAID: NYD986974426

Mailing Name: UNITED STATES POSTAL SERVICE

Mailing Contact: VICTOR M. ARROYO JR.
Mailing Address 1: QUEENS GEN MAIL FAC

Mailing Address 2: Not reported

Mailing City: FLUSHING 142-02 20TH AV

Mailing State: NY
Mailing Zip: 11351
Mailing Zip 4: Not reported
Mailing Country: USA

Mailing Phone: 7187291438

Direction Distance Elevation

EDR ID Number Site Database(s) **EPA ID Number**

US POSTAL SERVICE (Continued)

1000554950

NY MANIFEST:

Document ID: Not reported Manifest Status: Not reported seq: Not reported Year: 2018

Trans1 State ID: NYD986980753 MAC300098397 Trans2 State ID: Generator Ship Date: 05/20/2018 Trans1 Recv Date: 05/20/2018 Trans2 Recv Date: 05/21/2018 TSD Site Recv Date: 06/04/2018 Part A Recv Date: Not reported Part B Recv Date: Not reported Generator EPA ID: NYD986974426 Trans1 EPA ID: Not reported Trans2 EPA ID: Not reported TSDF ID 1: VTR000517052 TSDF ID 2: Not reported Manifest Tracking Number: 003466367GBF

Import Indicator: Ν Export Indicator: Ν Discr Quantity Indicator: Ν Discr Type Indicator: Ν Discr Residue Indicator: Ν Discr Partial Reject Indicator: Ν Discr Full Reject Indicator: Ν

Manifest Ref Number:

Not reported Alt Facility RCRA ID: Not reported Alt Facility Sign Date: Not reported MGMT Method Type Code: H141 Waste Code: Not reported Waste Code: Not reported Waste Code: Not reported Waste Code: Not reported

Not reported Waste Code: Waste Code: Not reported Quantity: 125 Units: P - Pounds

Number of Containers:

Container Type: DM - Metal drums, barrels

Handling Method: L Landfill. Specific Gravity: Waste Code: D008 Waste Code 1_2: Not reported Waste Code 1_3: Not reported Waste Code 1 4: Not reported Waste Code 1_5: Not reported Waste Code 1_6: Not reported

> Click this hyperlink while viewing on your computer to access additional NY MANIFEST: detail in the EDR Site Report.

Direction Distance

Distance Elevation Site EDR ID Number

EDR ID Number

EPA ID Number

75 23-08 MOTT AVE NY UST U000403164 WNW 23-08 MOTT AVENUE N/A

1/8-1/4 FAR ROCKAWAY, NY 11691

0.243 mi. 1284 ft.

Relative: UST:

Lower Id/Status: 2-212709 / Unregulated/Closed

 Actual:
 Program Type:
 PBS

 13 ft.
 Region:
 STATE

 DEC Region:
 2

 Expiration Date:
 N/A

UTM X: 604955.31499 UTM Y: 4495781.41088

Site Type: Apartment Building/Office Building

Affiliation Records:

Site Id: 7815 Affiliation Type: Facility Owner

Company Name: DIVERSIFIED EQUITIES LLC

Contact Type: Not reported Contact Name: Not reported Address1: POB 1200 Address2: Not reported **JERICHO** City: State: NYZip Code: 11753 Country Code: 001

Phone: (516) 822-5900
EMail: Not reported
Fax Number: Not reported
Modified By: NRLOMBAR
Date Last Modified: 2012-02-22

Site Id: 7815

Affiliation Type: Mail Contact

Company Name: DIVERSIFIED EQUITIES LLC

Contact Type: Not reported Contact Name: KEVIN CULLEN Address1: **POB 1200** Address2: Not reported **JERICHO** City: State: NY Zip Code: 11753 Country Code: 001

Phone: (516) 822-5900
EMail: Not reported
Fax Number: Not reported
Modified By: NRLOMBAR
Date Last Modified: 2012-02-22

Site Id: 7815

Affiliation Type: Facility Operator
Company Name: 23-08 MOTT AVE
Contact Type: Not reported
Contact Name: VICTOR NAVARRO

Address1: Not reported Address2: Not reported City: Not reported

State: NN

Direction Distance

Elevation Site Database(s) EPA ID Number

23-08 MOTT AVE (Continued)

U000403164

EDR ID Number

Zip Code: Not reported

Country Code: 001

Phone: (718) 471-4016
EMail: Not reported
Fax Number: Not reported
Modified By: NRLOMBAR
Date Last Modified: 2012-02-22

Site Id: 7815

Affiliation Type: Emergency Contact

Company Name: DIVERSIFIED EQUITIES LLC

Contact Type: Not reported
Contact Name: KEVIN CULLEN
Address1: Not reported
Address2: Not reported
City: Not reported
State: NN

Zip Code: Not reported

Country Code: 999

Phone: (516) 822-5900
EMail: Not reported
Fax Number: Not reported
Modified By: BVCAMPBE
Date Last Modified: 2012-03-29

Tank Info:

Tank Number: 001 Tank ID: 18785

Tank Status: Closed - In Place Material Name: Closed - In Place

 Capacity Gallons:
 7500

 Install Date:
 10/01/1971

 Date Tank Closed:
 11/30/2011

 Registered:
 True

Tank Location: Underground
Tank Type: Steel/carbon steel

Material Code: 0003

Common Name of Substance: #6 Fuel Oil (On-Site Consumption)

Tightness Test Method: NN

Date Test:
Not reported
Next Test Date:
Pipe Model:
Modified By:
NRLOMBAR
Last Modified:
Not reported
NRLOMBAR
04/14/2017

Equipment Records:

E00 - Piping Secondary Containment - None

H00 - Tank Leak Detection - None

C03 - Pipe Location - Aboveground/Underground Combination

G00 - Tank Secondary Containment - None J02 - Dispenser - Suction Dispenser F00 - Pipe External Protection - None L00 - Piping Leak Detection - None I05 - Overfill - Vent Whistle

A00 - Tank Internal Protection - None

Direction Distance

Elevation Site Database(s) EPA ID Number

23-08 MOTT AVE (Continued) U000403164

B01 - Tank External Protection - Painted/Asphalt Coating

D01 - Pipe Type - Steel/Carbon Steel/Iron

K00 - Spill Prevention - None

76 SORRENTINO REC CENTER NY LTANKS S121102040 SE 18-48 CORNAGA AVENUE N/A

1/4-1/2 0.273 mi. 1443 ft.

Relative: LTANKS: Higher Facility ID:

 Actual:
 Site ID:
 551772

 26 ft.
 Closed Date:
 Not reported

 Spill Number:
 1702628

 Spill Date:
 2017-06-16

FAR ROCKAWAY, NY 11691

Spill Date: 2017-06-16
Spill Cause: Tank Test Failure

Spill Source: Institutional, Educational, Gov., Other

1702628

Spill Class: Not reported Cleanup Ceased: Not reported SWIS: 4101 Investigator: **RMPIPER** Referred To: Not reported Reported to Dept: 2017-06-16 CID: Not reported Water Affected: Not reported Spill Notifier: Other Last Inspection: Not reported Recommended Penalty: False Meets Standard: False **UST Involvement:** False Remediation Phase:

Date Entered In Computer: 2017-06-16
Spill Record Last Update: 2017-06-16
Spiller Name: Not reported
Spiller Company: NYC PARKS
Spiller Address: Not reported

Spiller County: 999

Spiller Contact: JUSTIN BAUER
Spiller Phone: 2123) 603-433
Spiller Extention: Not reported

DEC Region: 2
DER Facility ID: 505389

DEC Memo: "6/16/17 TJD Teleconference with Justin Bauer at NYC Parks.

Contractor did not provide the physical address of spill site, only an intersection - requested actual address and tank size. Mr. Bauer was unable to access this information immediately and was provided contact information (email and phone) to provide info. received email from Mr. Bauer as follows: The tank at Sorrentino Recreation Center is at 18-48 Cornaga Avenue, Far Rockaway NY 11691. The tank is unregistered. Unfortunately the Parks database in incomplete on this tank so I do not know it s size. Speaking with AARCO they said it appears to be an 1,080 gallon steel tank. Sergey Kadinsky, CCed on this email, will visit the site Monday and will let you know what

information he finds. The gentleman from AARCO who performed the test on the tank said he spoke with staff at the center and was told the vent pipe was damaged when a crew repaired the sidewalk. I have asked AARCO to drain the tank, this will most likely happen on Monday. Once

EDR ID Number

Direction Distance

Elevation Site Database(s) EPA ID Number

SORRENTINO REC CENTER (Continued)

S121102040

EDR ID Number

drained we will isolate and retest the tank and piping. discussed project with FDO (Piper) no TTF letter sent as identified issue is to be addressed by NYC parks and their contractor. Address modified to reflect actual address. "

"it is a tank test failure."

Remarks:
All Materials:

Site ID: 551772 Operable Unit ID: 1299857 Operable Unit: 01 Material ID: 2306103 Material Code: 0001A Material Name: #2 fuel oil Not reported Case No.: Material FA: Petroleum Quantity: Not reported Units: Not reported Recovered: Not reported Oxygenate: Not reported

 W77
 12-13 NEILSON ST
 NY LTANKS
 U003074305

 ENE
 12-13 NEILSON ST
 NY AST
 N/A

1/4-1/2 FAR ROCKAWAY, NY

0.280 mi.

20 ft.

1476 ft. Site 1 of 2 in cluster W

 Relative:
 LTANKS:

 Lower
 Facility ID:
 9303442

 Actual:
 Site ID:
 69128

Closed Date: 1993-06-16
Spill Number: 9303442
Spill Date: 1993-06-15
Spill Cause: Tank Failure
Spill Source: Private Dwelling

Spill Class: 1993-06-16 Cleanup Ceased: SWIS: 4101 Investigator: **CAMMISA** Referred To: Not reported Reported to Dept: 1993-06-15 CID: Not reported Water Affected: Not reported Spill Notifier: Responsible Party Last Inspection: Not reported

Recommended Penalty: False
Meets Standard: True
UST Involvement: False
Remediation Phase: 0
Date Entered In Computer: 1993-

Date Entered In Computer: 1993-06-16
Spill Record Last Update: 2003-10-02
Spiller Name: Not reported
Spiller Company: RELATED MGT CO.

Spiller Address: Not reported

Spiller County: 001

Spiller Contact: Not reported
Spiller Phone: Not reported
Spiller Extention: Not reported

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

12-13 NEILSON ST (Continued)

U003074305

DEC Region: 2 DER Facility ID: 65762

DEC Memo: "Prior to Sept, 2004 data translation this spill Lead_DEC Field was

S. CAMMISA '

"SPILL IN BASEMENT - IS CONTAINED - WOULD LIKE CALL BACK. WILL HAVE Remarks:

TANK COMPANY REPAIR SMALL LEAK."

All Materials:

Site ID: 69128 Operable Unit ID: 981773 Operable Unit: 01 Material ID: 397017 Material Code: 0001A Material Name: #2 fuel oil Case No.: Not reported Material FA: Petroleum Quantity: .00 Units: L Recovered: .00

Oxygenate: Not reported

AST:

Region: STATE DEC Region: Site Status: Active Facility Id: 2-061174 Program Type: **PBS**

UTM X: 605829.52246 4495847.18866 UTM Y: Expiration Date: 01/14/2022

Site Type: Apartment Building/Office Building

Affiliation Records:

Site Id: 1063

Affiliation Type: Facility Owner

Company Name: GREENPORT ASSOCIATES C/O RELATED MANAGEMENT

Contact Type: SUPERINTENDENT

Contact Name: **RELATED MANAGEMENT CO** Address1: 203 EAST 86TH STREET

Address2: Not reported City: **NEW YORK** State: NY Zip Code: 10028 Country Code: 001

Phone: (212) 421-5333 Not reported EMail: Fax Number: Not reported Modified By: **KXTANG** Date Last Modified: 2007-02-16

Site Id: 1063 Affiliation Type: Mail Contact

Company Name: **RELATED MANAGEMENT**

Contact Type: Not reported Contact Name: DANIEL CAMEO Address1: 1450 GATEWAY BLVD

Address2: Not reported

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

12-13 NEILSON ST (Continued)

U003074305

City: **FAR ROCKAWAY**

State: NY Zip Code: 11691 Country Code: 001

Phone: (718) 327-6047

EMail: DCAMEO@RELATED.COM

Fax Number: Not reported Modified By: **DMPOKRZY** Date Last Modified: 2017-04-04

Site Id: 1063

Affiliation Type: Facility Operator Company Name: THE GATEWAYS Contact Type: Not reported

RELATED MANAGEMENT CORPORATION Contact Name:

Address1: Not reported Address2: Not reported City: Not reported State: NN

Zip Code: Not reported Country Code: 001

Phone: (718) 327-6047 EMail: Not reported Fax Number: Not reported DMPOKRZY Modified By:

Date Last Modified: 2017-04-04

Site Id: 1063

Affiliation Type: **Emergency Contact**

GREENPORT ASSOCIATES C/O RELATED MANAGEMENT Company Name:

Contact Type: Not reported Contact Name: **CAZIM MEHANVIC** Address1: Not reported Address2: Not reported Not reported City: State: NN

Zip Code: Not reported

Country Code: 999

(718) 327-6047 Phone: Not reported EMail: Not reported Fax Number: Modified By: **DMPOKRZY** Date Last Modified: 2017-04-04

Tank Info:

Tank Number: 002 2103 Tank Id: Material Code: 0001

#2 Fuel Oil (On-Site Consumption) Common Name of Substance:

Equipment Records:

J02 - Dispenser - Suction Dispenser B00 - Tank External Protection - None C00 - Pipe Location - No Piping F00 - Pipe External Protection - None

Direction Distance

Elevation Site Database(s) EPA ID Number

12-13 NEILSON ST (Continued)

U003074305

S100560375

N/A

NY LTANKS

EDR ID Number

G03 - Tank Secondary Containment - Vault (w/o access)

H00 - Tank Leak Detection - None

L09 - Piping Leak Detection - Exempt Suction Piping

A00 - Tank Internal Protection - None D01 - Pipe Type - Steel/Carbon Steel/Iron I04 - Overfill - Product Level Gauge (A/G)

Tank Location:

Tank Type: Steel/Carbon Steel/Iron

Tank Status: In Service
Pipe Model: Not reported
Install Date: 12/01/1987
Capacity Gallons: 5000
Tightness Test Method: NN

Date Test:

Not reported

Next Test Date:

Not reported

Date Tank Closed:

Register:

Modified By:

DMPOKRZY

Last Modified:

Not reported

True

DMPOKRZY

04/14/2017

Material Name: #2 fuel oil (on-site consumption)

W78 12-13 NELSON ST ENE 12-13 NELSON ST

1/4-1/2 QUEENS, NY

0.282 mi.

1490 ft. Site 2 of 2 in cluster W

Relative: LTANKS: Lower Facility

 Lower
 Facility ID:
 9303657

 Actual:
 Site ID:
 249108

 20 ft.
 Closed Date:
 1993-06-21

 Spill Number:
 9303657

 Spill Date:
 1993-06-15

Spill Date: 1993-06-15
Spill Cause: Tank Failure
Spill Source: Private Dwelling
Spill Class: D4

Cleanup Ceased: 1993-06-21 SWIS: 4101 Investigator: **CAMMISA** Referred To: Not reported Reported to Dept: 1993-06-21 CID: Not reported Water Affected: Not reported Spill Notifier: Local Agency Not reported Last Inspection: Recommended Penalty: False Meets Standard: True **UST Involvement:** False

Remediation Phase:

Date Entered In Computer:

Spill Record Last Update:

Spiller Name:

Spiller Company:

Spiller Address:

UNK

Not reported

Not reported

Spiller County: 999

Spiller Contact: Not reported
Spiller Phone: Not reported
Spiller Extention: Not reported

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

12-13 NELSON ST (Continued)

S100560375

S102672840

N/A

NY LTANKS

DEC Region: 2 DER Facility ID: 204267 DEC Memo:

Remarks: "TANK LEAKING IN BASEMENT NYC DEP HAZMAT WAS NOTIFIED (718)595-4670."

All Materials:

249108 Site ID: Operable Unit ID: 985424 Operable Unit: 01 Material ID: 397212 Material Code: 0066A

Material Name: unknown petroleum Case No.: Not reported Material FA: Petroleum Quantity: .00 Units: Not reported

Recovered: .00

Oxygenate: Not reported

11-41 MCBRIDE ST 79 NNW 11041 MCBRIDE ST 1/4-1/2 **FAR ROCKAWAY, NY**

0.284 mi. 1502 ft.

Relative: LTANKS: Lower

9415199 Facility ID: Site ID: 126185 Actual: Closed Date: 2004-01-26 8 ft. Spill Number: 9415199

Spill Date: 1995-02-20 Spill Cause: Tank Overfill Spill Source: Private Dwelling

Spill Class: C4

Cleanup Ceased: Not reported SWIS: 4101 Investigator: **RWAUSTIN** Referred To: Not reported Reported to Dept: 1995-02-20 CID: Not reported Water Affected: Not reported Spill Notifier: Responsible Party

Last Inspection: Not reported Recommended Penalty: False Meets Standard: False **UST Involvement:** False Remediation Phase: 0 Date Entered In Computer: 1995-03-27 Spill Record Last Update: 2004-01-26

MYSTIC TRANSPORTATION Spiller Company:

Not reported

Spiller Address: 19001 STEINWAY ST

Spiller County: 001

Spiller Name:

Spiller Contact: Not reported Spiller Phone: Not reported Spiller Extention: Not reported

DEC Region: 2

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

11-41 MCBRIDE ST (Continued)

S102672840

S102662657

N/A

NY Spills

DER Facility ID: 109133

"Prior to Sept, 2004 data translation this spill Lead_DEC Field was DEC Memo:

AUSTIN 1/26/04 - AUSTIN - SURF. SPILL - CLOSED - ORIG. ASSIGNED TO

ENGELHARDT - END"

"SPILLEED THROUGH VENT LINE - SPILL CREW ON WAY" Remarks:

All Materials:

126185 Site ID: Operable Unit ID: 1012544 Operable Unit: 01 370382 Material ID: Material Code: 0002A Material Name: #4 fuel oil Not reported Case No.: Material FA: Petroleum Quantity: 10.00 Units: G Recovered: .00

Oxygenate: Not reported

X80 **MYCO GAS STATION NY LTANKS**

SE **18-11 MOTT AVENUE** 1/4-1/2 **FAR ROCKAWAY, NY**

0.288 mi.

1521 ft. Site 1 of 3 in cluster X

LTANKS:

Relative: Higher Actual: 26 ft.

Facility ID: 9608090 Site ID: 224387 Closed Date: 1996-10-02 Spill Number: 9608090 Spill Date: 1996-09-28 Spill Cause: Tank Overfill

Spill Source: Gasoline Station or other PBS Facility

Spill Class: C4 Cleanup Ceased: Not reported SWIS: 4101 **ADZHITOM** Investigator: Referred To: Not reported Reported to Dept: 1996-09-28 CID: 365

Water Affected: Not reported Spill Notifier: Other Last Inspection: Not reported Recommended Penalty: False Meets Standard: False **UST Involvement:** False Remediation Phase:

Date Entered In Computer: 1996-09-28 Spill Record Last Update: 1996-10-17 Spiller Name: HARIK VERAMA Spiller Company: MYCO GAS STATION Spiller Address: 18-11 MOTT AV

Spiller County: 001

Spiller Contact: HARIK VERAMA Spiller Phone: Not reported Spiller Extention: Not reported

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

MYCO GAS STATION (Continued)

S102662657

DEC Region: 2 DER Facility ID: 219899

DEC Memo: "Prior to Sept, 2004 data translation this spill Lead_DEC Field was

ZHITOMIRSKY '

Remarks: "overfilled tank onto the pavement - fire dept stated 50 gallons,

caller states it looks more like 10 or 15 - all cleaned up"

All Materials:

224387 Site ID: Operable Unit ID: 1036351 Operable Unit: 01 343834 Material ID: Material Code: 0009 Material Name: gasoline Case No.: Not reported Material FA: Petroleum Quantity: 50.00 Units: G Recovered: 50.00 Oxygenate: Not reported

SPILLS:

Facility ID:

Facility Type: ER Spill Number: 9707778 DER Facility ID: 219899 Site ID: 270014 DEC Region: Closed Date: 2008-11-21 Spill Cause: Unknown Spill Class: C2 SWIS: 4101 Spill Date: 1997-03-28 Investigator: hrpatel Referred To: Not reported Reported to Dept: 1997-10-01 CID: 266 Water Affected:

Gasoline Station or other PBS Facility Spill Source:

Not reported

9707778

Spill Notifier: DEC Cleanup Ceased: Not reported Cleanup Meets Std: False Last Inspection: Not reported Recommended Penalty: False **UST Trust:** False Remediation Phase:

1997-10-01 Date Entered In Computer: Spill Record Last Update: 2008-11-21 Spiller Name: MR SAQIB

Spiller Company: HI AUTO SERVICE Spiller Address: 18-11 MOTT AVENUE

Spiller Company: 001

Contact Name: RICHARD PARK

DEC Memo: "Prior to Sept, 2004 data translation this spill Lead DEC Field was

ROMMEL OWNER OF GAS STATION ASKED TO PERFORM ASSESSMENT OF CLOSED

TANKS. YELLOWSTONE WILL DO ASSMT. WILL SUBMIT SITE PLAN SHOWING

Map ID MAP FINDINGS
Direction

Elevation Site

Distance

Site Dat

Database(s) EPA

EDR ID Number EPA ID Number

MYCO GAS STATION (Continued)

S102662657

PROPOSED WELL/BORING LOCATIONS PRIOR TO WORK. 4/12/04-Vought-Spill transferred from Tibbe to Rommel as per Rommel. 11/14/08 - Austin -Transferred from C.O. back to Region - reassigned to Patel for followup - end 11/17/08-Hiralkumar Patel. PBS #: 2-201286. PBS shows site as waste oil storer and had 275 gal waste oil tank in 2004 and at that time two 2000 gal gasoline tanks and six 550 gal other tanks were closed in place. visited site. site currently has retails stores. alternate addresses: 18-03 to 18-17 Mott Avenue, 18-06 to 18-18 Cornaga Ave spoke to one of the tenants and as per him, there was an abandoned gas station and an active repair shop at the corner of Mott ave and Cornaga Ave about six years ago when he started his business. then owner demolished gas station and repair shop structure and built new retail stores. gas station/repair shop was located at the corner of Mott Ave and Cornaga AVe: running from 18-03 to 18-07 along Mott ave and from 18-06 to 18-18 along Cornaga Ave. fill box and vent pipe was observed in front of 18-15 and 18-17 Mott Ave 101st Precinct is located across the subject site on Mott ave. inspected sidewalk along precinct and found two monitoring wells in front of garage entrance. Lt. Marrow or Sgt. Hartman 101st Precinct Ph. (718) 868-3400 spoke with Mr. Alkaifi, president of Tarik Holdings, building owner. as per him, site was redeveloped in 2005 and they have reports available. asked him to submit reports. Abdo Alkaifi **site owner** President Tarik Holding Corp. 1077 Bay 24th Street Far Rockaway, NY 11691-1801 contact: Khalil Alkaifi **owner's son** Ph. (516) 668-7172 email: kalkaifi@aol.com, kalkaifi@yahoo.com sent email to Khalil Alkaifi requiring submission of all avilable reports regarding cleanup. 11/21/08-Hiralkumar Patel. received fax from Mr. Alkaifi with tank closure report, abstract: - removed six 550 gal gasoline USTs, two 2000 gal gasoline USTs and one 275 gal waste oil UST - all tanks were single wall steel tanks - tanks found to be in good condition after removal, no holes or pitting were observed - noo PID readings were observed during excavation or in any endpoint sample locations - all ancillary piping was removed and disposed of total of 12 endpoint samples were taken - groundwater sample was collected from existing monitoring well on site - no contamination found in any endpoint samples or groundwater sample discussed with DEC Austin. based on findings during tank removal, Austin asked to close the case. case closed.'

Remarks:

"DURING SITE ASSESSMENT OF POLICE PRECINCT ACROSS STREET, WELLS PUT IN AT POLICE STATION AND IN SIDEWALK BY GAS STATION FOUND CONTAMINATED GROUNDWATER. DATA SUGGESTS GAS STATION MAY BE SOURCE. GAS STATION HAS SIX OUT-OF-SERVICE TANKS. NO INFORMATION ON WHEN, HOW OR WHY TANKS WERE CLOSED."

All Materials:

Recovered:

 Site ID:
 270014

 Operable Unit ID:
 1054275

 Operable Unit:
 01

 Material ID:
 329773

 Material Code:
 0066A

Material Name: unknown petroleum
Case No.: Not reported
Material FA: Petroleum
Quantity: .00
Units: G

.00

Oxygenate: Not reported

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

X81 **101ST POLICE PRECINT NY LTANKS** S101341268 SE **16-12 MOTT AVENUE**

N/A

1/4-1/2 QUEENS, NY

0.296 mi.

1561 ft. Site 2 of 3 in cluster X

Relative: LTANKS: Higher

Actual: 26 ft.

Facility ID: 9412991 Site ID: 164731 Closed Date: 1997-10-02 Spill Number: 9412991 Spill Date: 1994-12-22 Spill Cause: Tank Test Failure

Spill Source: Non Major Facility > 1,100 gal

Not reported

Spill Class: C3

Referred To:

Cleanup Ceased: Not reported SWIS: 4101 **GUTIERREZ** Investigator:

Reported to Dept: 1994-12-29 CID: Not reported Water Affected: Not reported Spill Notifier: Responsible Party Last Inspection: Not reported Recommended Penalty: False

Meets Standard: False **UST Involvement:** True Remediation Phase: 0

Date Entered In Computer: 1995-01-05 Spill Record Last Update: 2008-11-14 Spiller Name: Not reported Spiller Company: NYPD

Spiller Address: 16-12 MOTT AVENUE

Spiller County: 001

Spiller Contact: Not reported Spiller Phone: Not reported Spiller Extention: Not reported

DEC Region: DER Facility ID: 138877 DEC Memo:

"1 - 550 GALLON TANK VAC TESTED BELOW MIN. ALLOWED" Remarks:

All TTF:

Facility ID: 9412991 Spill Number: 9412991 Spill Tank Test: 1543489 Site ID: 164731 Tank Number: Not reported

Tank Size: Material: 0009 **EPA UST:** Not reported Not reported UST: Not reported Cause: Source: Not reported Test Method: 00 Test Method 2: Unknown

Leak Rate: .00 Gross Fail: Not reported Modified By: Spills Last Modified Date: Not reported

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

101ST POLICE PRECINT (Continued)

S101341268

All Materials:

Recovered:

Site ID: 164731 Operable Unit ID: 1006621 Operable Unit: 01 Material ID: 375274 Material Code: 0009 Material Name: gasoline Not reported Case No.: Material FA: Petroleum Quantity: .00 Units: L

Not reported Oxygenate:

.00

9413260

X82 **1612 MOTT AVE NY LTANKS** S102146402 SE **1612 MOTT AVE NY Spills** N/A

1/4-1/2 **FAR ROCKAWAY, NY**

0.297 mi.

1569 ft. Site 3 of 3 in cluster X

Relative: LTANKS: Higher Facility ID:

Site ID: 316046 Actual: Closed Date: 1995-06-14 26 ft. Spill Number: 9413260 Spill Date: 1995-01-05 Spill Cause: Tank Overfill Spill Source: Commercial Vehicle Spill Class: Not reported

> Cleanup Ceased: 1995-06-14 SWIS: 4101 Investigator: **GUTIERREZ** Referred To: Not reported Reported to Dept: 1995-01-05 CID: Not reported Water Affected: Not reported Spill Notifier: Responsible Party Last Inspection: Not reported

Recommended Penalty: False Meets Standard: True **UST Involvement:** False Remediation Phase: 0 Date Entered In Computer: 1995-03-17

Spill Record Last Update: 1996-01-16 Spiller Name: Not reported

MYSTIC BULK CARRIERS Spiller Company: Spiller Address: 1901 STEINWAY BLVD

Spiller County: 001

Spiller Contact: Not reported Spiller Phone: Not reported Spiller Extention: Not reported

DEC Region: 2 DER Facility ID: 254792 DEC Memo:

"550 GAL TANK - PD SAID WAS EMPTY- FD PUT SAND ON IT- MYSTIC ON WAY Remarks:

TO CLEAN UP"

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

1612 MOTT AVE (Continued)

S102146402

All Materials:

Site ID: 316046 Operable Unit ID: 1006909 Operable Unit: 01 Material ID: 372007 Material Code: 0009 Material Name: gasoline Case No.: Not reported Material FA: Petroleum Quantity: 3.00 Units: G Recovered: .00

Not reported Oxygenate:

SPILLS:

Facility ID: 9301017 Facility Type: ER Spill Number: 9301017 229159 DER Facility ID: Site ID: 282275 DEC Region: Closed Date: 1993-04-21 Spill Cause:

Equipment Failure Spill Class: C2 SWIS: 4101 Spill Date: 1993-04-21 Investigator: **CAMMISA** Referred To: Not reported Reported to Dept: 1993-04-21 CID: Not reported

Spill Source: Institutional, Educational, Gov., Other

Not reported

Spill Notifier: Other Cleanup Ceased: 1993-04-21 Cleanup Meets Std: True Last Inspection: Not reported Recommended Penalty: False **UST Trust:** False Remediation Phase: 0 Date Entered In Computer: 1993-04-21

Spill Record Last Update: 1993-07-20 Spiller Name: Not reported Spiller Company: SAME Not reported Spiller Address: Spiller Company: 999 Contact Name: Not reported

DEC Memo:

"1300 GAL READ IN TANK FROM -PUT 800 IN & SPILLED OUT FILLED IN ALLEY Remarks:

WAY-COASTAL TO SEND CLEANUP SERVICE.FAULTY TANK OR GAGE"

All Materials:

Water Affected:

Site ID: 282275 Operable Unit ID: 982755 Operable Unit: 01 Material ID: 401751 Material Code: 0001A

Direction Distance

Elevation Site Database(s) **EPA ID Number**

1612 MOTT AVE (Continued) S102146402

Material Name: #2 fuel oil Not reported Case No.: Material FA: Petroleum Quantity: 3.00 Units: G Recovered: .00

Oxygenate: Not reported

Y83 **CLOSED-LACKOF RECENT INFO** NY LTANKS \$100144859 N/A

SSE 19020 NEW HAVEN AVE. 1/4-1/2 **NEW YORK CITY, NY**

0.341 mi.

1798 ft. Site 1 of 2 in cluster Y

LTANKS: Relative: Higher Facility ID: 8706832 Site ID: 300940 Actual: Closed Date: 2003-03-04 25 ft.

Meets Standard:

Spill Number: 8706832 Spill Date: 1987-11-11 Spill Cause: Tank Test Failure

Spill Source: Institutional, Educational, Gov., Other

Spill Class: C4

Cleanup Ceased: Not reported SWIS: 4101

Investigator: ADMIN. CLOSED Referred To: Not reported Reported to Dept: 1987-11-11 CID: Not reported Water Affected: Not reported Spill Notifier: Tank Tester Last Inspection: Not reported Recommended Penalty: False

False **UST Involvement:** False Remediation Phase: 0 Date Entered In Computer: 1987-11-17 Spill Record Last Update: 2003-03-04 Spiller Name: Not reported

Spiller Company: ST. MARY'S CHURCH Spiller Address: 19-20 NEW HAVEN AVE.

Spiller County: 001

Spiller Contact: Not reported Spiller Phone: Not reported Spiller Extention: Not reported

2 DEC Region: 243382 DER Facility ID:

DEC Memo: "Prior to Sept, 2004 data translation this spill Lead DEC Field was

ADMIN.CLOSED 03/04/2003-Closed Due To The Nature / Extent Of The

"5K TANK FAILED WITH A LEAK RATE OF -.151 G/HR.CLOSED DUE TO LACK OF Remarks:

ANY RECENT INFO- DOES NOT MEET ANY CLEAN UP REQUIREMENTS."

All TTF:

Facility ID: 8706832 8706832 Spill Number: Spill Tank Test: 1532239 **EDR ID Number**

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

CLOSED-LACKOF RECENT INFO (Continued)

S100144859

Site ID: 300940 Tank Number: Not reported Tank Size: 0 Material: 0001 EPA UST: Not reported UST: Not reported Cause: Not reported Not reported Source: Test Method: 00 Test Method 2: Unknown Leak Rate: .00

Gross Fail: Not reported Modified By: Spills Last Modified Date: Not reported

All Materials:

Site ID: 300940 Operable Unit ID: 910711 Operable Unit: 01 Material ID: 465825 Material Code: 0001A Material Name: #2 fuel oil Case No.: Not reported Material FA: Petroleum -1.00 Quantity: Units: L .00 Recovered:

Oxygenate: Not reported

Y84 **CLOSED-LACKOF RECENT INFO** SSE 19-20 NEW HAVEN AVENUE 1/4-1/2

FAR ROCKAWAY, NY

0.342 mi.

1804 ft. Site 2 of 2 in cluster Y

LTANKS:

Relative: Higher Actual: 25 ft.

0307675 Facility ID: Site ID: 274033 Closed Date: 2004-09-14 Spill Number: 0307675 Spill Date: 2003-10-21 Spill Cause: Tank Test Failure

Spill Source: Institutional, Educational, Gov., Other

Spill Class: Cleanup Ceased: Not reported SWIS: 4101 **MXTIPPLE** Investigator: Referred To: Not reported Reported to Dept: 2003-10-21

CID: 204 Water Affected: Not reported Spill Notifier: Tank Tester Last Inspection: Not reported Recommended Penalty: False Meets Standard: False **UST Involvement:** False

NY LTANKS \$106719531

N/A

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

CLOSED-LACKOF RECENT INFO (Continued)

S106719531

Remediation Phase:

2003-10-21 Date Entered In Computer: Spill Record Last Update: 2004-09-14 Spiller Name: PHIL FAZIN

Spiller Company: SAINT MARYS STAR OF SEA Spiller Address: 19-20 NEW HAVEN AVENUE

Spiller County: 001

Spiller Contact: PHIL FAZIN Spiller Phone: (516) 375-5890 Spiller Extention: Not reported

DEC Region: DER Facility ID: 222879

DEC Memo: "Prior to Sept, 2004 data translation this spill Lead_DEC Field was

TIPPLE 10/21/03 TJD @ Duty Desk TTF letter sent to facility representative. 11/13/2003 Sangesland spoke with James Menzies (facilities manager for the site). He had not received a prior letter, so Sangesland faxed a new TTF letter to his office.

(718-327-3276) 7/9/04 Tipple called James Menzies to inquire on the status of the work to date. Repairs made//line to a boiler that had been removed had not been properly sealed/// James will forward paperwork to DEC. 9/14/04 Tank exposed..as per conversation with J Menzies bld. Mgr. the old lines were on top of the tank, and were exposed and removed at the time of excavation. Visual inspection

revealed no contamination// letter received///NFA"

Remarks:

All TTF:

Facility ID: 0307675 Spill Number: 0307675 Spill Tank Test: 1528749 Site ID: 274033 Tank Number: 1 Tank Size: 5000 Material: 0001

EPA UST: Not reported Not reported UST: Cause: Not reported Not reported Source:

Test Method: 03

Horner EZ Check I or II Test Method 2:

Leak Rate: .00

Not reported Gross Fail: Modified By: Spills Last Modified Date: Not reported

All Materials:

Site ID: 274033 Operable Unit ID: 876270 Operable Unit: 01 Material ID: 501200 Material Code: 0001A Material Name: #2 fuel oil Case No.: Not reported Material FA: Petroleum .00

Quantity: Units: G Recovered: .00

Direction Distance

Elevation Site Database(s) **EPA ID Number**

CLOSED-LACKOF RECENT INFO (Continued)

S106719531

EDR ID Number

Oxygenate: Not reported

Facility ID: 8706791 Site ID: 154311 Closed Date: 2003-03-04 Spill Number: 8706791 Spill Date: 1987-11-10 Spill Cause: Tank Test Failure

Spill Source: Institutional, Educational, Gov., Other

Spill Class: C4

Cleanup Ceased: Not reported

SWIS: 4101

Investigator: ADMIN. CLOSED Referred To: Not reported 1987-11-10 Reported to Dept: CID: Not reported Water Affected: Not reported Spill Notifier: Tank Tester Last Inspection: Not reported Recommended Penalty: False Meets Standard: False **UST Involvement:** False Remediation Phase: 1987-11-13 Date Entered In Computer:

Spill Record Last Update: 2003-03-04 Spiller Name: Not reported

Spiller Company: ST.MARY'S STAR OF THE SEA Spiller Address: 19-20 NEW HAVEN AVE.

Spiller County: 001

Spiller Contact: Not reported Spiller Phone: Not reported Spiller Extention: Not reported

DEC Region: DER Facility ID: 222879

DEC Memo: "Prior to Sept, 2004 data translation this spill Lead_DEC Field was

ADMIN.CLOSED 03/04/2003-Closed Due To The Nature / Extent Of The

Spill Report"

"5K TANK SYSTEM, COULDN'T MAINTAIN LEVEL IN STANDPIPE.CLOSED DUE TO Remarks:

LACK OF ANY RECENT INFO-DOES NOT MEET ANY CLEAN UP REQUIREMENTS."

All TTF:

Facility ID: 8706791 Spill Number: 8706791 Spill Tank Test: 1532220 Site ID: 154311 Tank Number: Not reported

Tank Size: 0001 Material: EPA UST: Not reported UST: Not reported Cause: Not reported Source: Not reported Test Method: 00

Test Method 2: Unknown Leak Rate: .00

Gross Fail: Not reported Modified By: Spills

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

CLOSED-LACKOF RECENT INFO (Continued)

S106719531

U003383719

N/A

NY LTANKS

NY AST

Last Modified Date: Not reported

All Materials:

Site ID: 154311 Operable Unit ID: 910514 Operable Unit: 01 Material ID: 465787 Material Code: 0001A Material Name: #2 fuel oil Case No.: Not reported Material FA: Petroleum Quantity: -1.00 Units: L Recovered: .00

Oxygenate: Not reported

85 **APARTMENT BUILDING TTF** SE 15-02 MOTT AVENUE 1/4-1/2 FAR ROCKAWAY, NY 11691

0.364 mi. 1922 ft.

Relative: LTANKS:

Lower Facility ID: 0904364 Site ID: 416519 Actual: 2009-10-29 Closed Date: 22 ft. Spill Number: 0904364

Spill Date: 2009-07-14 Spill Cause: Tank Test Failure Spill Source: Commercial/Industrial

Spill Class: C4

Cleanup Ceased: Not reported SWIS: 4101 Investigator: **JMKRIMGO** Referred To: Not reported Reported to Dept: 2009-07-14 CID: Not reported Water Affected: Not reported

Spill Notifier: Other Last Inspection: Not reported Recommended Penalty: False Meets Standard: True **UST Involvement:** False Remediation Phase:

2009-07-14 Date Entered In Computer: Spill Record Last Update: 2009-10-29 Spiller Name: Not reported Spiller Company: UNK Spiller Address: Not reported Spiller County: 999

MARLIN JOESPH Spiller Contact: Spiller Phone: (718) 624-4842 Spiller Extention: Not reported

DEC Region: 2 DER Facility ID: 1064

DEC Memo: "Sangesland spoke to PTC. Tanks were pumped out, PTC provided a

Direction Distance Elevation

ion Site Database(s) EPA ID Number

APARTMENT BUILDING TTF (Continued)

U003383719

EDR ID Number

proposal to repair the lines and retest. TTF Letter sent to Property Manager: Related Management Attn: Peter Hoyle 423 West 55th St - 9th FIr New York, NY 10019 8/11/09. John from ATC (consultant) called. 2x5000 gal #2 oil tanks failed test (dry leak). Both tanks encased in concrete and all piping above ground. Tanks were tested isolated from piping. Leak most likely at the top part of tanks. They proposed clean up tanks, breake and remove concrete from the top and visually inspect them form inside. If holes found close to the top, then repair or close tanks. If holes close to the middle of the tanks then concrete encasing should be removed and tanks examined for evidence of leaks. The proposed scope of work will be submitted before August 27. JK. 1029/09. J.Krimgold reviewed the Closure report submitted by ATC and dated 10/23/09. Based on the data presented, both tanks and associated piping were aboveground. However tanks were incased in the concrete. Both tanks, associated piping and incasement were removed. No evidance of of relese was found. Case closed."

Remarks: "Tank test failure of two 5,000 gallon tanks at above address. Small

leakage in the fuel lines, unk of amount spilled. Will evacuate tanks

to detirmine the problem fix lines if needed."

All Materials:

416519 Site ID: Operable Unit ID: 1172822 Operable Unit: 01 Material ID: 2164700 Material Code: 0001A Material Name: #2 fuel oil Not reported Case No.: Material FA: Petroleum Quantity: Not reported Units: Not reported Not reported Recovered: Oxygenate: Not reported

AST:

Region: STATE DEC Region: 2

Site Status: Unregulated/Closed

Facility Id: 2-061182 Program Type: PBS

UTM X: 605860.03785 UTM Y: 4495331.56249

Expiration Date: N/A

Site Type: Apartment Building/Office Building

Affiliation Records:

Site Id: 1064
Affiliation Type: Facility Owner

Company Name: GREENPORT PRESERVATION, LP

Contact Type: Not reported Contact Name: Not reported

Address1: 60 COLUMBUS CIR, 18TH FLR

Address2: Not reported City: NEW YORK State: NY Zip Code: 10023 Country Code: 001

Direction Distance

Elevation Site Database(s) **EPA ID Number**

APARTMENT BUILDING TTF (Continued)

U003383719

EDR ID Number

Phone: (212) 801-3788 EMail: Not reported Fax Number: Not reported Modified By: **NRLOMBAR** Date Last Modified: 2009-10-30

1064 Site Id: Affiliation Type: Mail Contact

Company Name: GREENPORT PRESERVATION, LP

Contact Type: Not reported JEFF ALLEN Contact Name:

Address1: % RELATED AFFORDABLE

Address2: 60 COLUMBUS CIRCLE, 18TH FLOOR

City: **NEW YORK** State: NYZip Code: 10023 Country Code: 001

Phone: (212) 801-3788

EMail: J.ALLEN@RELATED.COM

Fax Number: Not reported Modified By: **NRLOMBAR** Date Last Modified: 2009-10-30

Site Id: 1064

Facility Operator Affiliation Type: THE GATEWAYS Company Name: Contact Type: Not reported

Contact Name: **BEVERLY BOUNSAM**

Address1: Not reported Address2: Not reported Not reported City: State: NN

Zip Code: Not reported

Country Code: 001

Phone: (718) 827-6047 EMail: Not reported Fax Number: Not reported Modified By: **NRLOMBAR** Date Last Modified: 2009-10-30

1064 Site Id:

Affiliation Type: **Emergency Contact**

GREENPORT PRESERVATION, LP Company Name:

Contact Type: Not reported Contact Name: STEVEN BHIM Address1: Not reported Address2: Not reported City: Not reported State: NN

Zip Code: Not reported

Country Code: 999

(718) 327-6047 Phone: EMail: Not reported Fax Number: Not reported NRLOMBAR Modified By: Date Last Modified: 2009-10-30

Direction Distance

Elevation Site Database(s) EPA ID Number

APARTMENT BUILDING TTF (Continued)

U003383719

EDR ID Number

Tank Info:

 Tank Number:
 001

 Tank Id:
 2104

 Material Code:
 0001

Common Name of Substance: #2 Fuel Oil (On-Site Consumption)

1

Equipment Records:

D01 - Pipe Type - Steel/Carbon Steel/Iron

F01 - Pipe External Protection - Painted/Asphalt Coating

K00 - Spill Prevention - None

A01 - Tank Internal Protection - Epoxy Liner E00 - Piping Secondary Containment - None

H00 - Tank Leak Detection - None

100 - Overfill - None

B00 - Tank External Protection - None C01 - Pipe Location - Aboveground

J00 - Dispenser - None

G02 - Tank Secondary Containment - Vault (w/access)

L00 - Piping Leak Detection - None

Tank Location:

Tank Type: Steel/Carbon Steel/Iron
Tank Status: Closed - In Place
Pipe Model: Not reported
Install Date: 12/01/1984
Capacity Gallons: 5000
Tightness Test Method: NN

Date Test:
Not reported
Next Test Date:
Not reported
Date Tank Closed:
O9/21/2009
Register:
True
Modified By:
NRLOMBAR
Last Modified:
O4/14/2017

Material Name: #2 fuel oil (on-site consumption)

 Tank Number:
 002

 Tank Id:
 2105

 Material Code:
 0001

Common Name of Substance: #2 Fuel Oil (On-Site Consumption)

Equipment Records:

A00 - Tank Internal Protection - None D01 - Pipe Type - Steel/Carbon Steel/Iron

F01 - Pipe External Protection - Painted/Asphalt Coating

K00 - Spill Prevention - None

E00 - Piping Secondary Containment - None

H00 - Tank Leak Detection - None

100 - Overfill - None

C01 - Pipe Location - Aboveground

J00 - Dispenser - None

B00 - Tank External Protection - None L00 - Piping Leak Detection - None

G02 - Tank Secondary Containment - Vault (w/access)

Tank Location: 1

Tank Type: Steel/Carbon Steel/Iron

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

APARTMENT BUILDING TTF (Continued)

U003383719

1001756989

N/A

NY MOSF UST

NY MOSF AST

Tank Status: Closed - In Place Pipe Model: Not reported Install Date: 12/01/1984 Capacity Gallons: 5000 Tightness Test Method: NN

Date Test: Not reported Next Test Date: Not reported 09/21/2009 Date Tank Closed: Register: True Modified By: **NRLOMBAR** Last Modified: 04/14/2017

Material Name: #2 fuel oil (on-site consumption)

Z86 OIL CO., INC.

North ONE SHERIDAN BLVD. 1/4-1/2 **INWOOD, NY 11696**

0.370 mi.

Site 1 of 3 in cluster Z 1951 ft.

MOSF UST: Relative:

Lower Id/Status: 1-1660 / INACTIVE FACILITY

SWIS Code: Actual: 7 ft.

Facility Town: **NEW YORK CITY** Contact Phone: (516) 239-8800 **Emergency Contact:** WILLIAM NAPPO (718) 858-6038 Emergency Telephone:

CBS Number:

SPDES Num: 0-23299 Total Tanks: 15 Total Capacity: 1631666 Avg Throughput: 250000 License Stat:

STORAGE TERMINAL/PETROLEUM DISTRIBUTOR Facility Type:

Prod Xfer Options: Vessel/Barge (Including off-shore platform)

Expiration Date: 11

Applic Rcvd: 01/07/1992 WILLIAM NAPPO Operator: Owner Name: LISBON VENTURES ONE SHERIDAN BLVD. Owner Address: Owner City, St, Zip: INWOOD, NY 11696-Owner Telephone: (516) 239-8800 Owner Type: Corporate/Commercial

Owner Status:

Owner Mark: First Owner

EAGLE OIL COMPANY Mail To Name: Mail To Address: ONE SHERIDAN BLVD.

Mail To Address 2: Not reported

INWOOD, NY 11696-Mail City, St, Zip: Mail To Contact: **BILL NAPPO** Mail To Telephone: (516) 239-8800 Legal Agent Name: MARVIN KRAMMER Legal Agent Address: 305 AVENUE U Legal Agent City,St,Zip: BROOKLYN, NY 11223-

Date Filed: 08/87 Latitude: 40|37|25 Longitude: 73|44|50

Tank ID: 15

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

OIL CO., INC. (Continued)

1001756989

Tank Location: **UNDERGROUND**

Install Date: 01/33 139944 Capacity (Gal):

Product: **UNLEADED GASOLINE**

Tank Status: In Service Tank Type: Steel/carbon steel Tank Internal: **Epoxy Liner** Tank External: None

Pipe Location: Aboveground/Underground Combination

STEEL/IRON Pipe Type:

Pipe Internal: None

Pipe External: Painted/Asphalt Coating

Second Contain:

Leak Detection: Groundwater Well Overfill Protection: **Product Level Gauge**

Dispenser: Suction Test Date: 07/80 Date Closed: Not reported Status of Data: Complete 02/02/1994 Inspected Date: Inspector Initials: Not reported Inspector Status: Not reported Pipe Flag: True

License Issued: Vessel Id: Not reported Renew Flag: True Renew Date: 11/07/1997 Federal Id No: Not reported

COI Date:

Tank ID: 18

Tank Location: **UNDERGROUND**

Install Date: 01/33 192596 Capacity (Gal):

UNLEADED GASOLINE Product:

Tank Status: In Service Tank Type: Steel/carbon steel Tank Internal: **Epoxy Liner** Tank External: None

Pipe Location: Aboveground/Underground Combination

STEEL/IRON Pipe Type:

Pipe Internal: None

Pipe External: Painted/Asphalt Coating

Second Contain:

Groundwater Well Leak Detection: Overfill Protection: **Product Level Gauge**

Dispenser: Suction Test Date: 06/79 Date Closed: Not reported Complete Status of Data: 02/02/1994 Inspected Date: Not reported Inspector Initials: Inspector Status: Not reported Pipe Flag: True License Issued: 11

Vessel Id: Not reported

Direction Distance

Elevation Site Database(s) EPA ID Number

OIL CO., INC. (Continued)

1001756989

EDR ID Number

Renew Flag: True
Renew Date: 11/07/1997
Federal Id No: Not reported

COI Date: / /

Tank ID: 19

Tank Location: UNDERGROUND

Install Date: 01/33 Capacity (Gal): 190699

Product: UNLEADED GASOLINE

Tank Status: In Service
Tank Type: Steel/carbon steel
Tank Internal: Epoxy Liner
Tank External: None

Pipe Location: Aboveground/Underground Combination

Pipe Type: STEEL/IRON

Pipe Internal: None

Pipe External: Painted/Asphalt Coating

Second Contain: 8

Leak Detection: Groundwater Well
Overfill Protection: Product Level Gauge

Dispenser: Suction Test Date: 06/79 Date Closed: Not reported Status of Data: Complete 02/02/1994 Inspected Date: Inspector Initials: Not reported Not reported Inspector Status: Pipe Flag: True License Issued:

Vessel Id: Not reported Renew Flag: True Renew Date: 11/07/1997 Federal Id No: Not reported

COI Date: / /

Tank ID: 20

Tank Location: UNDERGROUND

Install Date: 01/33 Capacity (Gal): 190735

Product: UNLEADED GASOLINE

Tank Status: In Service
Tank Type: Steel/carbon steel
Tank Internal: Epoxy Liner
Tank External: None

Pipe Location: Aboveground/Underground Combination

Pipe Type: STEEL/IRON

Pipe Internal: None

Pipe External: Painted/Asphalt Coating

Second Contain: 8

Leak Detection: Groundwater Well
Overfill Protection: Product Level Gauge

Dispenser: Suction
Test Date: 06/79
Date Closed: Not reported

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

OIL CO., INC. (Continued)

1001756989

Status of Data: Complete 02/02/1994 Inspected Date: Inspector Initials: Not reported Inspector Status: Not reported Pipe Flag: True License Issued: //

Vessel Id: Not reported Renew Flag: True Renew Date: 11/07/1997 Federal Id No: Not reported

COI Date: //

Tank ID: 21

UNDERGROUND Tank Location:

Install Date: 01/33 139926 Capacity (Gal):

UNLEADED GASOLINE Product:

Tank Status: In Service Steel/carbon steel Tank Type: Tank Internal: **Epoxy Liner** Tank External: None

Pipe Location: Aboveground/Underground Combination

STEEL/IRON Pipe Type:

Pipe Internal: None

Pipe External: Painted/Asphalt Coating

Second Contain:

Leak Detection: Groundwater Well Overfill Protection: **Product Level Gauge**

Dispenser: Suction Test Date: 01/80 Date Closed: Not reported Status of Data: Complete 02/02/1994 Inspected Date: Not reported Inspector Initials: Inspector Status: Not reported Pipe Flag: True License Issued:

Vessel Id: Not reported Renew Flag: True 11/07/1997 Renew Date: Federal Id No: Not reported

COI Date:

Tank ID: 22

Tank Location: **UNDERGROUND**

Install Date: 01/33 97205 Capacity (Gal):

Product: NOS 1,2, OR 4 FUEL OIL

Tank Status: In Service Tank Type: Steel/carbon steel Tank Internal: **Epoxy Liner** Tank External: None

Pipe Location: Aboveground/Underground Combination

Pipe Type: STEEL/IRON Pipe Internal: None

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

OIL CO., INC. (Continued)

1001756989

Pipe External: Painted/Asphalt Coating

Second Contain: 8

Groundwater Well Leak Detection: Overfill Protection: Product Level Gauge

Dispenser: Suction Test Date: 06/83 Not reported Date Closed: Complete Status of Data: Inspected Date: 02/02/1994 Inspector Initials: Not reported Inspector Status: Not reported Pipe Flag: True License Issued:

Vessel Id: Not reported Renew Flag: True 11/07/1997 Renew Date: Federal Id No: Not reported

COI Date:

Tank ID: 23

UNDERGROUND Tank Location:

Install Date: 01/33 Capacity (Gal): 62155

NOS 1,2, OR 4 FUEL OIL Product:

Tank Status: In Service Tank Type: Steel/carbon steel Tank Internal: **Epoxy Liner** Tank External: None

Pipe Location: Aboveground/Underground Combination

STEEL/IRON Pipe Type: Pipe Internal: None

Pipe External: Painted/Asphalt Coating

Second Contain:

Groundwater Well Leak Detection: Overfill Protection: Product Level Gauge

Dispenser: Suction Test Date: 06/84 Not reported Date Closed: Complete Status of Data: 02/02/1994 Inspected Date: Inspector Initials: Not reported Inspector Status: Not reported Pipe Flag: True

License Issued: 11 Vessel Id: Not reported Renew Flag: True 11/07/1997 Renew Date:

Federal Id No: Not reported COI Date:

Tank ID: 26

UNDERGROUND Tank Location:

Install Date: 06/76 1500 Capacity (Gal):

Product: NOS 1,2, OR 4 FUEL OIL

Direction Distance Elevation

nce EDR ID Number ation Site Database(s) EPA ID Number

OIL CO., INC. (Continued)

1001756989

Tank Status: In Service
Tank Type: Steel/carbon steel

Tank Internal: None Tank External: None

Pipe Location: Underground
Pipe Type: STEEL/IRON
Pipe Internal: None

Pipe External: Painted/Asphalt Coating

Second Contain: None

Leak Detection: Groundwater Well
Overfill Protection: Product Level Gauge

Dispenser: Suction
Test Date: 06/76
Date Closed: Not reported
Status of Data: Complete
Inspected Date: 02/02/1994
Inspector Initials: Not reported
Inspector Status: Not reported
Dispersion of the state of the stat

Pipe Flag: True License Issued: //

Vessel Id: Not reported Renew Flag: True Renew Date: 11/07/1997 Federal Id No: Not reported

COI Date: / /

Tank ID: 28

Tank Location: UNDERGROUND

Install Date: 00/00 Capacity (Gal): 500 Product: UNKNOWN

Tank Status: In Service Tank Type: Steel/carbon steel Tank Internal: Not reported Not reported Tank External: Pipe Location: Not reported Pipe Type: Not reported Not reported Pipe Internal: Not reported Pipe External: Second Contain: Not reported Leak Detection: None Overfill Protection: None Not reported Dispenser: Test Date: 07/80 Date Closed: UNKWN

Status of Data: Minor Errors
Inspected Date: 02/02/1994
Inspector Initials: Not reported
Inspector Status: Not reported
Pipe Flag: True
License Issued: / /

Vessel Id: Not reported Renew Flag: True Renew Date: 11/07/1997 Federal Id No: Not reported

COI Date: / /

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

OIL CO., INC. (Continued)

1001756989

Tank ID: 29

UNDERGROUND Tank Location:

Install Date: 01/77 4000 Capacity (Gal): **UNKNOWN** Product: Tank Status: In Service Tank Type: Steel/carbon steel

Tank Internal: None Tank External: None

Pipe Location: Aboveground/Underground Combination

Pipe Type: STEEL/IRON

Pipe Internal: None Pipe External: None Second Contain:

Leak Detection: Groundwater Well

Overfill Protection: None Suction Dispenser: Test Date: 01/77 Date Closed: Not reported Complete Status of Data: 02/02/1994 Inspected Date: Inspector Initials: Not reported Inspector Status: Not reported Pipe Flag: True

License Issued: Vessel Id: Not reported Renew Flag: True Renew Date: 11/07/1997 Federal Id No: Not reported

COI Date: / /

Tank ID:

Tank Location: UNDERGROUND

01/77 Install Date: 1000 Capacity (Gal): Product: UNKNOWN Tank Status: In Service

Tank Type: Steel/carbon steel

Tank Internal: None Tank External: None Pipe Location: None

Pipe Type: STEEL/IRON

Pipe Internal: None Pipe External: None Second Contain: None Leak Detection: None Overfill Protection: None Dispenser: Suction Test Date: 01/77 Date Closed: Not reported

Status of Data: Complete 02/02/1994 Inspected Date: Inspector Initials: Not reported Inspector Status: Not reported

Pipe Flag: True License Issued:

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

OIL CO., INC. (Continued)

1001756989

Vessel Id: Not reported Renew Flag: True Renew Date: 11/07/1997 Federal Id No: Not reported

COI Date:

MOSF AST:

MOSF Number: 1-1660 SWIS Code: 28

Facility Town: **NEW YORK CITY** Facility Phone: (516) 239-8800 **Emergency Contact Name:** WILLIAM NAPPO **Emergency Contact Phone:** (718) 858-6038

Total Tanks: 15 **Total Capacity:** 1631666 Daily Throughput: 250000 License Status: 3

Facility Type: STORAGE TERMINAL/PETROLEUM DISTRIBUTOR

Product Transfer Operation: Vessel/Barge (Including off-shore platform TEMPORARILY OUT-OF-SERVICE Facility Status:

Operator Name: WILLIAM NAPPO LISBON VENTURES Owner Name: Owner Address: ONE SHERIDAN BLVD. Owner City, St, Zip: INWOOD, NY 11696-Owner Phone: (516) 239-8800 Owner Type: Corporate/Commercial

Owner Status:

Owner Mark: First Owner

EAGLE OIL COMPANY Mailing Name: Mailing Address: ONE SHERIDAN BLVD.

Mailing Address 2: Not reported

Mailing City, St, Zip: INWOOD, NY 11696-Mailing Contact: **BILL NAPPO** Mailing Phone: (516) 239-8800 Legal Agent Name: MARVIN KRAMMER Legal Agent Address: 305 AVENUE U Legal Agent City, St, Zip: BROOKLYN, NY 11223-

LIC Expires: / /

Tank ID: 10

ABOVEGROUND Tank Location:

Install Date: 09/28

Product: **UNLEADED GASOLINE** Tank Type: Steel/carbon steel

Tank Internal: None

CATHODIC PROTECTION Tank External:

Pipe Location: Underground Steel/Iron Pipe Type: Pipe Internal: None

Pipe External: Painted/Asphalt Coating

Secondary Containment: Concrete Dike

Leak Detection: 09 None Overfill Protection: Dispensing Mthd: Suction Test Date: 07/81 Date Closed: Not reported Status of Data: Complete

Direction
Distance

Elevation Site Database(s) EPA ID Number

OIL CO., INC. (Continued)

1001756989

EDR ID Number

Capacity (gal): 18674

40|37|25 / 73|44|50 Lat/Long: Federal ID: Not reported Inspected Date: 02/02/1994 Inspector: Not reported 11/07/1997 Renew Date: Not reported Inspected State: Pipe Flag: True Vessel ID: Not reported Reserve Flag: True Tank Status: In Service COI Date: //

Date License Issued: //

Date License Application Received: 01/07/1992

Chemical Bulk Storage Number: -

Pollution Discharge Elimination System Num: 0-23299
Date Legal Agent Filed with Secretary of State: 08/87

Tank ID: 11

Tank Location: ABOVEGROUND

Install Date: 09/28

Product: UNLEADED GASOLINE Tank Type: Steel/carbon steel

Tank Internal: None

Tank External: CATHODIC PROTECTION

Pipe Location: Underground
Pipe Type: Steel/Iron
Pipe Internal: None

Pipe External: Painted/Asphalt Coating

Secondary Containment: Concrete Dike

Leak Detection: 09

Overfill Protection: Product Level Gauge

Dispensing Mthd:

Test Date:

Date Closed:

Status of Data:

Capacity (gal):

Suction

07/81

Not reported

Complete

18674

40|37|25 / 73|44|50 Lat/Long: Not reported Federal ID: 02/02/1994 Inspected Date: Inspector: Not reported Renew Date: 11/07/1997 Inspected State: Not reported Pipe Flag: True Vessel ID: Not reported Reserve Flag: True Tank Status: In Service

Date License Issued: /

Date License Application Received: 01/07/1992 Chemical Bulk Storage Number: -

11

Pollution Discharge Elimination System Num: 0-23299
Date Legal Agent Filed with Secretary of State: 08/87

Tank ID: 12

COI Date:

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

OIL CO., INC. (Continued)

Tank Location: **ABOVEGROUND**

Install Date: 04/77

UNLEADED GASOLINE Product: Tank Type: Steel/carbon steel

Tank Internal: None

Tank External: CATHODIC PROTECTION

Underground Pipe Location: Pipe Type: Steel/Iron Pipe Internal: None

Pipe External: Painted/Asphalt Coating

Secondary Containment: Concrete Dike

Leak Detection: 09

Overfill Protection: Product Level Gauge

Dispensing Mthd: Suction Test Date: 10/79 Date Closed: Not reported Complete Status of Data: 217973 Capacity (gal):

Lat/Long: 40|37|25 / 73|44|50 Not reported Federal ID: Inspected Date: 02/02/1994 Inspector: Not reported Renew Date: 11/07/1997 Inspected State: Not reported Pipe Flag: True Vessel ID: Not reported Reserve Flag: True Tank Status: In Service COI Date:

Date License Issued:

Date License Application Received: 01/07/1992

Chemical Bulk Storage Number:

Pollution Discharge Elimination System Num: 0-23299 Date Legal Agent Filed with Secretary of State: 08/87

Tank ID: 13

ABOVEGROUND Tank Location:

Install Date: 09/27

UNLEADED GASOLINE Product: Tank Type: Steel/carbon steel Tank Internal: Fiberglass Liner (FRP Tank External: CATHODIC PROTECTION

Underground Pipe Location: Steel/Iron Pipe Type: Pipe Internal: None

Pipe External: Painted/Asphalt Coating

Secondary Containment: Concrete Dike

Leak Detection: 09

Overfill Protection: Product Level Gauge

Dispensing Mthd: Suction Test Date: 11/86 Date Closed: Not reported Status of Data: Complete Capacity (gal): 190617

40|37|25 / 73|44|50 Lat/Long: Federal ID: Not reported

1001756989

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

OIL CO., INC. (Continued)

1001756989

Inspected Date: 02/02/1994 Not reported Inspector: Renew Date: 11/07/1997 Inspected State: Not reported Pipe Flag: True Vessel ID: Not reported Reserve Flag: True Tank Status: In Service COI Date:

Date License Issued:

01/07/1992 Date License Application Received:

Chemical Bulk Storage Number:

Pollution Discharge Elimination System Num: 0-23299 Date Legal Agent Filed with Secretary of State: 08/87

Tank ID: 14

Tank Location: **ABOVEGROUND**

Install Date: 09/79

UNLEADED GASOLINE Product: Tank Type: Steel/carbon steel

Tank Internal: None

Tank External: CATHODIC PROTECTION

Pipe Location: Underground Pipe Type: Steel/Iron Pipe Internal: None

Pipe External: Painted/Asphalt Coating

Secondary Containment: Concrete Dike

Leak Detection: 09

Overfill Protection: **Product Level Gauge**

Dispensing Mthd: Suction Test Date: 11/79 Date Closed: Not reported Status of Data: Complete 165968 Capacity (gal):

40|37|25 / 73|44|50 Lat/Long: Federal ID: Not reported Inspected Date: 02/02/1994 Inspector: Not reported Renew Date: 11/07/1997 Inspected State: Not reported Pipe Flag: True Vessel ID: Not reported Reserve Flag: True Tank Status: In Service COI Date:

Date License Issued:

01/07/1992 Date License Application Received:

Chemical Bulk Storage Number:

Pollution Discharge Elimination System Num: 0-23299 Date Legal Agent Filed with Secretary of State: 08/87

Direction Distance

Distance Elevation Site EDR ID Number

Database(s) EPA ID Number

Z87 OIL CO., INC. NY MOSF S108413467
North ONE SHERIDAN BLVD N/A

North ONE SHERIDAN BLVD 1/4-1/2 INWOOD, NY 11696

0.370 mi.

1951 ft. Site 2 of 3 in cluster Z

Relative: MOSF:

 Lower
 Facility ID:
 1-1660

 Actual:
 Program Type:
 MOSF

 7 ft.
 Tank Status:
 Inactive

 Expiration Date:
 Not reported

Dec Region: 1

UTMX: 605447.15371 UTMY: 4496300.34802

Z88 OIL CO, INC-DBA EAGLE OIL NY SWF/LF

Z88 OIL CO, INC-DBA EAGLE OIL
North 1 SHERIDAN BOULEVARD
1/4-1/2 INWOOD, NY 11696

0.370 mi.

1951 ft. Site 3 of 3 in cluster Z

Relative: SWF/LF:

LowerFlag:ACTIVEActual:Region Code:1

7 ft. Phone Number: 5163719700 Owner Name: William Haugland

Owner Type: Private

Owner Address: 11 Commercial Street

Owner Addr2: Not reported
Owner City,St,Zip: Plainview, FL 11803
Owner Email: bill@hauglandllc.com
Owner Phone: 5163366720
Contact Name: Billy Haugland

Contact Address: 1 Sheridan Blvd.
Contact Addr2: Not reported
Contact City,St,Zip: Inwood, FL 11096
Contact Email: billyh@hauglandllc.com

Contact Phone: 5163711842

Activity Desc: C&D processing - registration

Activity Number: [30W39R]
Active: Yes
East Coordinate: 605445
North Coordinate: 4496300
Accuracy Code: Not reported
Regulatory Status: Registration

Waste Type: Rock;Brick;Concrete;Asphalt;Soil (Clean)

Authorization #: 30W39R
Authorization Date: 02/06/2015
Expiration Date: Not reported
Operator Name: Not reported
Operator Type: Not reported
Laste Date: 2016-10-12 00:00:00

LIENS:

Region: 1

Spill No: 86-07001

Tax Map Id: 40-L-652,653,2586,154&54

Lien Request Received: 06/05/2001 Request Sent To APA Or Vendor: 06/06/2001 S104646011

N/A

NY LIENS

NY Spills

NY SPDES

NY MANIFEST

Direction Distance

Elevation Site Database(s) EPA ID Number

OIL CO, INC-DBA EAGLE OIL (Continued)

S104646011

EDR ID Number

Draft Lien Received From Vendor: 08/03/2001 Not reported Approved Lien To Administrator: Signed By Administrator: Not reported Received From Administrator: Not reported Sent For Filing: Not reported Resent For Filing: Not reported Not reported Proof Of Service Received: 08/03/2001 Sent To OAG: \$10,731.71 Amount: Release Required: 10/25/2004 Sent To Administrator: Not reported Signed By Adminstrator: Not reported Received From Adminsitrator: Not reported Release Sent To OAG: 10/27/2004 Complete: True Release: True Withdrawn: False

SPILLS:

 Facility ID:
 8602121

 Facility Type:
 ER

 Spill Number:
 8602121

 DER Facility ID:
 309247

 Site ID:
 160156

 DEC Region:
 1

Closed Date: 1986-07-07 Spill Cause: Human Error Spill Class: Not reported SWIS: 3020 Spill Date: 1986-06-28 Investigator: **WXOBRIEN** Referred To: Not reported 1986-06-28 Reported to Dept: CID: Not reported Water Affected: Not reported

Spill Source: Major Facility (MOSF) > 400,000 gal

Spill Notifier:

Cleanup Ceased:

Cleanup Meets Std:

Last Inspection:

Recommended Penalty:

UST Trust:

Remediation Phase:

Fire Department

1986-07-07

True

Not reported

False

False

0

Date Entered In Computer: 1986-07-15 Spill Record Last Update: 2007-03-06 Spiller Name: Not reported

Spiller Company: WECHTER PETROLEUM

Spiller Address: Not reported
Spiller Company: 001
Contact Name: Not reported

DEC Memo: "Prior to Sept, 2004 data translation this spill Lead_DEC Field was

O'BRIEN FD / / : NCHD/NCFM INVEST. FILE HAS BEEN DESTROYED ACCORDING TO STATE ARCHIVE AND RECORD ADMINISTRATOR RETENTION/DISPOSAL

PROCEDURES"

Remarks:

All Materials:

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

OIL CO, INC-DBA EAGLE OIL (Continued)

S104646011

Site ID: 160156 Operable Unit ID: 898687 Operable Unit: 01 Material ID: 478577 Material Code: 0009 Material Name: gasoline Case No.: Not reported Material FA: Petroleum Quantity: 100.00 Units: G .00 Recovered:

Not reported Oxygenate:

Facility ID: 8607001 Facility Type: ER Spill Number: 8607001 DER Facility ID: 309247 Site ID: 160157 DEC Region:

Closed Date: 2016-09-29 Spill Cause: Unknown Spill Class: B2 SWIS: 3020 Spill Date: 1987-02-16 Investigator: **NJACAMPO** Referred To: Not reported Reported to Dept: 1987-02-17 CID: Not reported Water Affected: Not reported

Spill Source: Major Facility (MOSF) > 400,000 gal

Spill Notifier: Responsible Party Cleanup Ceased: Not reported Cleanup Meets Std: False Last Inspection: Not reported Recommended Penalty: False **UST Trust:** False Remediation Phase:

Date Entered In Computer: 1987-02-17 Spill Record Last Update: 2017-05-15 Spiller Name: Not reported Spiller Company: **DOT EQUITIES** Spiller Address: Not reported

Spiller Company: 001

Contact Name: Not reported

DEC Memo: "Prior to Sept, 2004 data translation this spill Lead_DEC Field was

ACAMPORA WELL MOSF THREE MORE WELLS INSTALLED. BELOW IS A COMPILATION

OF NOTES FROM THE SPILL FILE. 02/17/87: A: DOT EQUITIES REPORTS NINE FT OF FLOATING PRODUCT IN ONE OF 4 RECENTLY INSTALLED SITE WELLS. WILL INSTALL EJECTORS. 02/17/87: B: DEC (O'NEILL) CHECKS- CONFIRMS 9FT OF PRODUCT. HAS SKETCH. AREA IS TIDAL. 02/17/87: C: ***NOTE: AT

LEAST ONE PRIOR HERE-8201877 WECHTER. LATER INVESTIGATION REVEALS THE TWO PLUMES TO BE SEPARATE. 02/25/87: DEC (MAYTROTT) ON SITE TO CHECK WELLS. 02/27/87: DEC (ACAMPORA) TAKES SAMPLES OF SOIL CUTTINGS FROM WELLS 5-7, AND PRODUCT IN WELL 4. PEDNEAULT TO CHECK FOR PETRO IN SOIL, FLASHPOINT, AND LEAD, 03/02/87; MAYTROTT LETTER TO DOT: CITES 25FEB DATA (TWO OF THE NEW WELLS HAVE FLOATING PRODUCT). BEGIN

Map ID MAP FINDINGS
Direction

Distance Elevation Site

Site

EDR ID Number
Database(s) EPA ID Number

OIL CO, INC-DBA EAGLE OIL (Continued)

S104646011

RECOVERING THE PRODUCT WITH EJECTORS. ID THE PRODUCT. 03/12/87: RECEIVE DATA OF 27FEB: 50/50 MIXTURE OF GASOLINE AND FUEL OIL. 06/24/87: EPA INSPECTS THE SITE. 08/04/87: MAYTROTT LETTER TO NYS TAXATION AND FINANCE: HAVE BEEN ADVISED THIS SITE HAS BEEN CLOSED. PLEASE GIVE CURRENT NAME/CONTACT AND STATUS. 08/07/87: TAXATION & FINANCE LETTER TO MAYTROTT: LICENSED UNDER NAME OIL CO INC. WILLIAM NAPPO PRESIDENT/TREASURER. 11/11/87: EAGLE OIL 1 SHERIDAN BLVD 718-327-8855 OR 516-239-8800 SUBMITS MOSF APPLICATION TO ALBANY. 04/20/88: MAYTROTT INSPECTS SITE: 5 RECOVERY WELLS W/PNEUMATIC EJECTORS. 04/29/88: MAYTROTT LETTER TO EAGLE: CONTINUE RECOVERY, TEST UNDERGROUND TANKS BY 30JUN, ETC. RECOMMENDS LICENSE RENEWAL. 05/05/88: MAYTROTT LETTER TO EAGLE RE 29APR INSPECTION: FOUND WASTE OIL IN WELL 13. CLEAN OUT AND PREVENT FROM OCCURRING AGAIN. 05/23/88: EAGLE LETTER TO MAYTROTT RE 29APR INSPECTION. 07/11/88: MAYTROTT LETTER TO EAGLE: STATUS OF TANK TESTING? ONE 550, ONE 1K, AND ONE 4K MUST BE ABANDONED PROPERLY OR REMOVED. 07/27/88: EAGLE LETTER TO MAYTROTT: ENCLOSES F&N BID FOR WORK. KNOWS ONLY OF THE 550 TANK!. 06/21/89: NY TELEPHONE LETTER TO EAGLE: LEAKS DAMAGED LINES ON 17MAY. EXPECT REIMBURSEMENT. 06/30/89: EAGLE LETTER TO NY TEL: DENY THEY CAUSED THE PROBLEM. 07/05/89: BARBATO LETTER TO EAGLE: CONDITIONS STILL OUTSTANDING (E.G. DELINEATION OF FLOATING & DISSOLVED PLUMES). UNTIL DONE, WILL NOT ISSUE LICENSE. 09/28/89: BARBATO LETTER TO EAGLE: STATUS OF CONDITIONS? CANNOT ISSUE LICENSE UNTIL THESE ARE MET. 05/25/90: MAYTROTT INSPECTS SITE. 06/21/90: BARBATO LETTER TO EAGLE: CONDITIONS STILL OUTSTANDING. LICENSE DENIED. NEW CONDITIONS-MONITOR/BAIL WELLS, RUN RECOVERY, DO 10YR INTERNAL INSPECTION OF TANKS. ETC. TELECONS WITH CONSULTANT DOING SITE ASSESSMENT FOR POTENTIAL BUYER. 07/25/91: DEC (HOFMANN & PARISH) INSPECT SITE: TYREE IS CONTRACTOR FOR THIS RECOVERY. (NOTE THAT THE 82 PLUME IS HANDLED BY F&N FOR DEC). FIVE EJECTORS ON SITE. 08/02/91: REG 1 ORDERS EAGLE TO TEST TANKS OR WE WILL. 07/07/92: MPC DISPOSES OF 5018GAL COMBUSTIBLE LIQUID. (WORKING FOR DEC), 07/08/92: MPC DISPOSES OF 1832GAL FLAMMABLE LIQUID 07/10/92: HOFMANN ON SITE. 07/13/92: HOFMANN ON SITE- WELLS A & B SAMPLED. PEDNEAULT TO ID. HAS SKETCH. 07/15/92: MPC DISPOSES OF 1652GAL OF FLAMMABLE LIQUID. 07/16/92: HOFMANN ON SITE. 07/20/92: HOFMANN ON SITE. 07/20/92: RECEIVE 13JUL DATA: BOTH SAMPLES ARE MIXTURE OF GAS AND OIL. 07/21/92: HOFMANN ON SITE 07/22/92: HOFMANN ON SITE 07/29/92: HOFMANN MEETS WITH NAPPO AND MPC 08/04/92: HOFMANN ON SITE. 08/05/92: HOFMANN ON SITE. 08/07/92: HOFMANN LETTER TO NAPPO RE VARIOUS DEFICIENCIES 08/27/92: HOFMANN AND MPC ON SITE: SHEEN AT BULKHEAD. 09/01/92: NAPPO LETTER TO ATTORNEY GENERAL'S OFFICE: ARE REMEDIATING SITE. 09/03/92: HOFMANN ON SITE. 09/16/92: HOFMANN ON SITE. 09/22/92: HOFMANN ON SITE. 09/25/92: KRAMER LETTER RE 7AUG LETTER: ARE WORKING ON REMEDIATION. 09/25/92: KRAMER LETTER: GIVES STATUS. 09/29/92: HOFMANN ON SITE. 10/05/92: DEC (LEUNG) ON SITE. MPC DISPOSES OF 775GAL FLAMMABLE LIQUID. 11/16/92: LEUNG ON SITE. 02/01/93: LEUNG CHECKS SITE."

Remarks:

"NINE FT OF FLOATING PRODUCT FOUND IN MONITORING WELL. ***AT LEAST ONE PRIOR HERE: 8201877 WECHTER (THIS IS A SEPARATE PLUME)."

All Materials:

 Site ID:
 160157

 Operable Unit ID:
 903748

 Operable Unit:
 01

 Material ID:
 472545

 Material Code:
 0001A

 Material Name:
 #2 fuel oil

 Case No.:
 Not reported

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

OIL CO, INC-DBA EAGLE OIL (Continued)

S104646011

Material FA: Petroleum .00 Quantity: Units: G Recovered: .00

Oxygenate: Not reported

Facility ID: 8909117 Facility Type: ER Spill Number: 8909117 DER Facility ID: 309247 160158 Site ID: DEC Region:

Closed Date: 1990-10-18 Spill Cause: Other Spill Class: C1 SWIS: 3020 Spill Date: 1989-12-16 Investigator: **MAYTROTT** Referred To: Not reported Reported to Dept: 1989-12-16 CID: Not reported Water Affected: Not reported

Major Facility (MOSF) > 400,000 gal Spill Source:

Spill Notifier: Fire Department Cleanup Ceased: 1990-10-18 Cleanup Meets Std: True Last Inspection: Not reported Recommended Penalty: False **UST Trust:** False Remediation Phase: 0

Date Entered In Computer: 1989-12-19 Spill Record Last Update: 2011-04-21 Spiller Name: Not reported Spiller Company: **EAGLE OIL** Spiller Address: Not reported Spiller Company: 001 Contact Name: Not reported

DEC Memo:

"SPILL OCCURRED AT LOADING RACK, SPILLAGE ON GROUND & INTO DRAINS, Remarks:

LEADING TO OIL/WATER SEPARATOR. INWOOD FD,NCFM ON SCENE, SPEEDY DRY

APPLIED. NO EMERGENCY RESPONSE FROM DEC NEEDED"

All Materials:

Site ID: 160158 936289 Operable Unit ID: Operable Unit: 01 442294 Material ID: Material Code: 0001A #2 fuel oil Material Name: Case No.: Not reported Material FA: Petroleum Quantity: 40.00 Units: G Recovered: .00

Oxygenate: Not reported

Direction Distance

Distance Elevation Site EDR ID Number

Database(s) EPA ID Number

OIL CO, INC-DBA EAGLE OIL (Continued)

S104646011

 Facility ID:
 9207417

 Facility Type:
 ER

 Spill Number:
 9207417

 DER Facility ID:
 135262

 Site ID:
 160159

 DEC Region:
 1

Closed Date: 2000-10-02 Spill Cause: Housekeeping

Spill Class: C4 SWIS: 3000 Spill Date: 1992-09-26 Investigator: **NJACAMPO** Referred To: Not reported Reported to Dept: 1992-09-26 CID: Not reported Water Affected: Not reported

Spill Source: Commercial/Industrial

Spill Notifier: Local Agency Cleanup Ceased: Not reported

Cleanup Meets Std: True

Last Inspection:
Recommended Penalty:
UST Trust:
Remediation Phase:
Date Entered In Computer:

Spill Record Last Undete:
2000, 10, 03

Spill Record Last Update: 2000-10-03 Spiller Name: Not reported

Spiller Company: ULTIMATE TRANSPORT TRUCKI

Spiller Address: Not reported Spiller Company: 001

Contact Name: Not reported

DEC Memo: "Prior to Sept, 2004 data translation this spill Lead_DEC Field was

ACAMPORA "

Remarks: "BAY CONSTABLE WITNESSED MR SEHMELZMAN PUMPING WATER FROM SUMP INTO

STORM DRAIN ON SHERIDAN BLVD, NCFM NOTIFIED"

All Materials:

 Site ID:
 160159

 Operable Unit ID:
 971052

 Operable Unit:
 01

 Material ID:
 408057

 Material Code:
 0022

Material Name: waste oil/used oil
Case No.: Not reported
Material FA: Petroleum
Quantity: .00
Units: G
Recovered: .00

Oxygenate: Not reported

 Facility ID:
 9414039

 Facility Type:
 ER

 Spill Number:
 9414039

 DER Facility ID:
 135262

 Site ID:
 160160

 DEC Region:
 1

Closed Date: 2000-10-02

Direction Distance

Elevation Site Database(s) EPA ID Number

OIL CO, INC-DBA EAGLE OIL (Continued)

S104646011

EDR ID Number

Spill Cause: Housekeeping

Spill Class: B3 SWIS: 3000 Spill Date: 1995-01-20 Investigator: **NJACAMPO** Referred To: Not reported Reported to Dept: 1995-01-20 CID: Not reported Water Affected: MOTT BASIN

Spill Source: Major Facility (MOSF) > 400,000 gal

Spill Notifier: DEC
Cleanup Ceased: 1995-01-20
Cleanup Meets Std: True
Last Inspection: 1995-01-20
Recommended Penalty: True
UST Trust: False
Remediation Phase: 0

Date Entered In Computer: 1995-01-23
Spill Record Last Update: 2000-10-03
Spiller Name: Not reported

Spiller Company: EAGLE OIL TERMINAL
Spiller Address: 1 SHERIDAN BLVD
Spiller Company: 001

Contact Name: Not reported

DEC Memo: "Prior to Sept, 2004 data translation this spill Lead_DEC Field was

ACAMPORA 03-01-95 LEUNG WROTE MEMO TO ANDY YERMAN OF THE SPDES GROUP AND INFORMED HIM OF FINDINGS. 02-21-95 RECEIVED LAB RESULTS FROM PEDNEAULT ASSOCIAITES, INC.: GASOLINE AND DIESEL FUEL PRODUCTS ARE IDENTIFIED IN THE SAMPLES. 01-24-95 LEUNG FAXED FIELD NOTES TO PETTY OFFICER STEVE DOOLEY OF THE USCG PER HIS REQUEST. 01-23-95 LEUNG NOTIFIED USCG OF FINDINGS, PETTY OFFICER JERRY MOTYKN TOOK THE REPORT. 01-20-95 LEUNG AND W. PARISH ARRIVED ON SITE TO PERFORM SPOT INSPECTION. SOME AREAS OF THE TERMINAL ARE FLOODED BECAUSE OF HEAVY RAIN. OBSERVED SHEEN ON THE BAY AND SHEEN ON THE LAST CHAMBER OF THE OIL/WATER SEPARATOR. EFFLUENT WATER CONTAINED SHEEN AS IT IS BEING DISCHARGED. DEC TOOK SAMPLES OF THE DISCHARGE. PICTURES TAKEN OF THE SURFACE WATER NEAR THE OUTFALL. OIL PUDDLES ALSO OBSERVED AS THE OIL/WATER SEPARATOR IS BACKED UP TO THE ON SITE DRAINS. DEC NOTIFIED TERMINAL PERSONNEL TO STOP DISCHARGE. SERGIO (TERMINAL WORKER) SHUT

TO PUMP O/W SEPARATOR AT 12:25. AT 13:30 PREMIUM TRANSPORTATION ARRIVED TO PUMP OUT THE SEPARATOR AND TRANSFER THE CONTENT TO ON-SITE TANK TRUCKS. AT 13:54 DEC OBSERVED STORM WATER DISCHARGE COMING FROM THE TANK FARM AREA AND WATER CONTAINED PETROLEUM SHEEN. DEC TOLD EAGLE OIL PERSONNEL TO STOP DISCHARGE. SERGIO (ANOTHER WORKER AT THE TERMINAL) STOPPED THE DISCHARGE BY BOLTING DOWN THE DRAIN PIPE. PERSONNEL CONTINUED TO CLEAN O/W SEPARATOR AND BAY TANKS WITH

ABSORBENT PADS. DEC ISSUED CLEANUP LETTER TO EAGLE OIL. DEC DEPARTED

SYSTEM OFF. MIKE CRAWFORD (TERMINAL SUPERVISOR) CALLED FOR CONTRACTOR

SITE AT 14:10 TO DROP SAMPLES OFF AT THE LAB. "

Remarks: "DEC FOUND OILY WATER BEING DISCHARGED FROM THE OUTFALL OF THE O/W

SEPARATOR DURING SITE INSPECTION, NOTIFIED USCG OF OBSERVATION ON

1/23/95"

All Materials:

 Site ID:
 160160

 Operable Unit ID:
 1007621

 Operable Unit:
 01

 Material ID:
 372787

Direction Distance

Elevation Site Database(s) EPA ID Number

OIL CO, INC-DBA EAGLE OIL (Continued)

S104646011

EDR ID Number

Material Code: 0066A

Material Name: unknown petroleum
Case No.: Not reported
Material FA: Petroleum
Quantity: .00
Units: G
Recovered: .00

Oxygenate: Not reported

 Facility ID:
 9702994

 Facility Type:
 ER

 Spill Number:
 9702994

 DER Facility ID:
 309247

 Site ID:
 160161

 DEC Region:
 1

Closed Date: 1998-02-05 Spill Cause: Unknown Spill Class: В3 SWIS: 3020 1997-06-10 Spill Date: Investigator: **AYLEUNG** Referred To: Not reported 1997-06-10 Reported to Dept: CID: 252 Water Affected: Not reported Unknown Spill Source: Spill Notifier: DEC Cleanup Ceased: Not reported Cleanup Meets Std: True Last Inspection: Not reported Recommended Penalty: False **UST Trust:** False Remediation Phase:

Date Entered In Computer: 1997-06-10
Spill Record Last Update: 2011-08-23
Spiller Name: UNKNOWN
Spiller Company: Unknown
Spiller Address: UNKNOWN
Spiller Company: 999
Contact Name: UNK

DEC Memo: "Prior to Sept, 2004 data translation this spill Lead_DEC Field was

LEUNG PER TONY LEUNG, LILCO IS DOING WORK AND THEY ARE ALLOWED TO BACKFILL WITH CONTAMINATED SOIL SOIL STOCKPILED ON SITE AND DISPOSED

OF BY F&N"

Remarks: "CONTRACTOR IS EXPOSING PIPES AND THEN USING CONTAMINATED SOIL TO

BACKFILL-THE CONTRACTOR IS RICI-570 GARDINEER AVE-BROOKLYN NY THIS

INFO PER FAX REG 1"

All Materials:

 Site ID:
 160161

 Operable Unit ID:
 1045727

 Operable Unit:
 01

 Material ID:
 335909

 Material Code:
 0066A

Material Name: unknown petroleum
Case No.: Not reported
Material FA: Petroleum

Direction Distance

Elevation Site Database(s) EPA ID Number

OIL CO, INC-DBA EAGLE OIL (Continued)

S104646011

EDR ID Number

Quantity: .00
Units: G
Recovered: .00

Oxygenate: Not reported

NY MANIFEST:

Country: USA

EPA ID: NYP000301994
Facility Status: Not reported
Location Address 1: 1 SHERIDAN BLVD

Code: BP

Location Address 2: Not reported Total Tanks: Not reported Location City: INWOOD Location State: NY Location Zip: 11096 Location Zip 4: 1807

NY MANIFEST:

EPAID: NYP000301994
Mailing Name: NYSDEC
Mailing Contact: JOHN

Mailing Address 1: 50 WOLF RD RM 423

Mailing Address 2: Not reported Mailing City: ALBANY Mailing State: NY Mailing Zip: 12233 Mailing Zip 4: Not reported Mailing Country: USA

Mailing Phone: 5184579280

NY MANIFEST:

 Document ID:
 CTF0181612

 Manifest Status:
 C

 seq:
 Not reported

 Year:
 1992

 Trans1 State ID:
 72281ZNY

 Trans2 State ID:
 Not reported

 Generator Ship Date:
 10/05/1992

 Trans1 Recv Date:
 10/05/1992

Trans2 Recv Date: //
TSD Site Recv Date: 10/05/1992

TSD Site Recv Date: 10/05/ Part A Recv Date: / /

Part B Recv Date: 10/20/1992 Generator EPA ID: NYP000301994 Trans1 EPA ID: NYD986908085 Not reported Trans2 EPA ID: CTD021816889 TSDF ID 1: TSDF ID 2: Not reported Manifest Tracking Number: Not reported Import Indicator: Not reported Not reported **Export Indicator:** Discr Quantity Indicator: Not reported Discr Type Indicator: Not reported Discr Residue Indicator: Not reported Discr Partial Reject Indicator: Not reported

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

OIL CO, INC-DBA EAGLE OIL (Continued)

S104646011

Discr Full Reject Indicator: Not reported Manifest Ref Number: Not reported Alt Facility RCRA ID: Not reported Alt Facility Sign Date: Not reported MGMT Method Type Code: Not reported

D001 - NON-LISTED IGNITABLE WASTES Waste Code:

Waste Code: Not reported Waste Code: Not reported Waste Code: Not reported Waste Code: Not reported Waste Code: Not reported Quantity: 00775

G - Gallons (liquids only)* (8.3 pounds) Units:

Number of Containers:

Container Type: TT - Cargo tank, tank trucks

Handling Method: B Incineration, heat recovery, burning.

Specific Gravity:

USA Country:

EPA ID: NYP000865279 Facility Status: Not reported Location Address 1: 1 SHERIDAN BLVD

Code: ΒP

Location Address 2: Not reported Total Tanks: Not reported INWOOD Location City: Location State: NY Location Zip: 11696 Location Zip 4: Not reported

NY MANIFEST:

EPAID: NYP000865279

Mailing Name: **GENERAL OIL CORPORATION** Mailing Contact: **GENERAL OIL CORPORATION**

Mailing Address 1: 1 SHERIDAN BLVD Mailing Address 2: Not reported Mailing City: **INWOOD** Mailing State: NY Mailing Zip: 11696 Mailing Zip 4: Not reported Mailing Country: USA

Mailing Phone: 5162398800

NY MANIFEST:

NYA5433219 Document ID:

Manifest Status:

seq: Not reported Year: 1987 Trans1 State ID: 69873-GU Not reported Trans2 State ID: Generator Ship Date: 02/24/1987 02/24/1987 Trans1 Recv Date:

Trans2 Recv Date:

02/24/1987 TSD Site Recy Date: 03/06/1987 Part A Recv Date: Part B Recv Date: 03/06/1987

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

OIL CO, INC-DBA EAGLE OIL (Continued)

S104646011

Generator EPA ID: NYP000865279 NYD981185903 Trans1 EPA ID: Trans2 EPA ID: Not reported TSDF ID 1: NYD082785429 TSDF ID 2: Not reported Manifest Tracking Number: Not reported Import Indicator: Not reported **Export Indicator:** Not reported Discr Quantity Indicator: Not reported Discr Type Indicator: Not reported Discr Residue Indicator: Not reported Discr Partial Reject Indicator: Not reported Discr Full Reject Indicator: Not reported Manifest Ref Number: Not reported Alt Facility RCRA ID: Not reported Alt Facility Sign Date: Not reported MGMT Method Type Code: Not reported

D001 - NON-LISTED IGNITABLE WASTES Waste Code:

Waste Code: Not reported Waste Code: Not reported Waste Code: Not reported Waste Code: Not reported Waste Code: Not reported Quantity: 02000 P - Pounds Units:

Number of Containers: 005

Container Type: DM - Metal drums, barrels

Handling Method: L Landfill. Specific Gravity: 100

> Click this hyperlink while viewing on your computer to access -1 additional NY MANIFEST: record(s) in the EDR Site Report.

SPDES:

Permit Number: NY0023299

State-Region: 01

03/01/1993 **Expiration Date:** Current Major Minor Status: Minor Primary Facility SIC Code: 5171

State Water Body Name: MOTTS BASIN

Limit Set Status Flag: Active Total Actual Average Flow(MGD): 0.288 Total App Design Flow(MGD): Not reported UDF1: Not reported Lat/Long: 40.6115 / -73.753639

DMR Cognizant Official: WM K NAPPO UDF2: 001701 UDF3:

FIPS County Code: NY059

Non-Gov Permit Affiliation Type Desc: **DMR Mailing Address** Non-Gov Permit Org Formal Name: OIL CO, INC-DBA EAGLE OIL Non-Gov Permit Street Address: OIL CO, INC-DBA EAGLE OIL Non-Gov Permit Supplemental Location: 1 SHERIDAN BOULEVARD

INWOOD Non-Gov Permit City:

Map ID MAP FINDINGS
Direction

Distance Elevation

n Site Database(s) EPA ID Number

OIL CO, INC-DBA EAGLE OIL (Continued)

S104646011

EDR ID Number

Non-Gov Permit State Code: NY
Non-Gov Permit Zip Code: 11696

Non-Gov Facility Affiliation Type Desc: Mailing Address

Non-Gov Facility Org Formal Name: OIL CO, INC-DBA EAGLE OIL Non-Gov Facility Street Address: OIL CO, INC-DBA EAGLE OIL Non-Gov Facility Supplemental Location: 1 SHERIDAN BOULEVARD

Non-Gov Facility City: INWOOD

Non-Gov Facility State Code: NY

Non-Gov Facility Zip Code: 11696

State Water Body: 02030202030

 UDF2:
 001701

 UDF3:
 I

 FIPS County Code:
 NY059

Non-Gov Permit Affiliation Type Desc:
Non-Gov Permit Org Formal Name:
Non-Gov Permit Street Address:
Oll CO, INC-DBA EAGLE OIL
On-Gov Permit Supplemental Location:
1 SHERIDAN BOULEVARD

Non-Gov Permit City: INWOOD
Non-Gov Permit State Code: NY
Non-Gov Permit Zip Code: 11696
Non-Gov Facility Affiliation Type Desc: Owner

Non-Gov Facility Org Formal Name: OIL CO, INC-DBA EAGLE OIL Non-Gov Facility Street Address: OIL CO, INC-DBA EAGLE OIL

Non-Gov Facility Supplemental Location: 1 SHERIDAN BLVD

Non-Gov Facility City: INWOOD
Non-Gov Facility State Code: NY
Non-Gov Facility Zip Code: 11696
State Water Body: 02030202030

 UDF2:
 001701

 UDF3:
 I

 FIPS County Code:
 NY059

Non-Gov Permit Affiliation Type Desc: Permittee

Non-Gov Permit Org Formal Name: OIL CO, INC-DBA EAGLE OIL Non-Gov Permit Street Address: 1 SHERIDAN BOULEVARD

Non-Gov Permit Supplemental Location: Not reported Non-Gov Permit City: INWOOD Non-Gov Permit State Code: NY Non-Gov Permit Zip Code: 11696

Non-Gov Facility Affiliation Type Desc: Mailing Address

Non-Gov Facility Org Formal Name: OIL CO, INC-DBA EAGLE OIL Non-Gov Facility Street Address: OIL CO, INC-DBA EAGLE OIL Non-Gov Facility Supplemental Location: 1 SHERIDAN BOULEVARD

Non-Gov Facility City: INWOOD

Non-Gov Facility State Code: NY

Non-Gov Facility Zip Code: 11696

State Water Body: 02030202030

 UDF2:
 001701

 UDF3:
 I

 FIPS County Code:
 NY059

Non-Gov Permit Affiliation Type Desc: Permittee

Non-Gov Permit Org Formal Name: OIL CO, INC-DBA EAGLE OIL

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

OIL CO, INC-DBA EAGLE OIL (Continued)

S104646011

S105996475

N/A

NY LTANKS

NY MANIFEST

Non-Gov Permit Street Address: 1 SHERIDAN BOULEVARD

Non-Gov Permit Supplemental Location: Not reported Non-Gov Permit City: INWOOD Non-Gov Permit State Code: NY Non-Gov Permit Zip Code: 11696 Non-Gov Facility Affiliation Type Desc: Owner

Non-Gov Facility Org Formal Name: OIL CO, INC-DBA EAGLE OIL Non-Gov Facility Street Address: OIL CO. INC-DBA EAGLE OIL

Non-Gov Facility Supplemental Location: 1 SHERIDAN BLVD

Non-Gov Facility City: **INWOOD** Non-Gov Facility State Code: NY Non-Gov Facility Zip Code: 11696 02030202030 State Water Body:

ST JOHNS EPISCOPAL HOSPITAL

South **327 BEACH 19TH ST** 1/4-1/2

0.373 mi. 1970 ft.

89

FAR ROCKAWAY, NY 11691

Relative: LTANKS: Higher Facility ID:

0204866 Site ID: 228027 Actual: Closed Date: 2006-07-11 25 ft. Spill Number: 0204866

Spill Date: 2002-08-07 Spill Cause: Tank Test Failure

Spill Source: Institutional, Educational, Gov., Other

Spill Class: **B**3

Cleanup Ceased: Not reported SWIS: 4101 Investigator: iabeilby Referred To: Not reported 2002-08-07 Reported to Dept: CID: 233 Water Affected: Not reported Tank Tester Spill Notifier: Last Inspection: Not reported Recommended Penalty: False Meets Standard: False **UST Involvement:** False Remediation Phase:

Date Entered In Computer: 2002-08-07 Spill Record Last Update: 2006-07-11 Spiller Name: Not reported

Spiller Company: ST JOHNS EPISCOPAL HOSPIT

Spiller Address: 327 BEACH 19TH ST

Spiller County: 001

Spiller Contact: Not reported Spiller Phone: Not reported Spiller Extention: Not reported

DEC Region: DER Facility ID: 188088

DEC Memo: "Prior to Sept, 2004 data translation this spill Lead_DEC Field was

DEMEO 7/11/06 - iabeilby: closed. Spill due to tank test failure on

8/7/02. Retested and passed tank test on 4/16/03."

Remarks: "u/g tank failed vacum test tank will be uncovered and retested dry

leak problem at top of tank"

Direction
Distance

Elevation Site Database(s) EPA ID Number

ST JOHNS EPISCOPAL HOSPITAL (Continued)

S105996475

EDR ID Number

All TTF:

 Facility ID:
 0204866

 Spill Number:
 0204866

 Spill Tank Test:
 1527360

 Site ID:
 228027

 Tank Number:
 1

 Tank Size:
 20000

 Material:
 0001

EPA UST: Not reported UST: Not reported Cause: Not reported Source: Not reported

Test Method: 99

Test Method 2: Alternate Test per former 613.5(a)(2)(v)

Leak Rate: .00

Gross Fail: Not reported Modified By: Spills
Last Modified Date: Not reported

All Materials:

Site ID: 228027 Operable Unit ID: 856146 Operable Unit: 01 Material ID: 519088 Material Code: 0001A #2 fuel oil Material Name: Case No.: Not reported Petroleum Material FA: Quantity: .00 Units: G Recovered: .00

Oxygenate: Not reported

NY MANIFEST:

Country: USA

EPA ID: NYD986975274
Facility Status: Not reported

Location Address 1: 327 BEACH ST & 19TH ST

Code: E

Location Address 2: Not reported
Total Tanks: Not reported
Location City: FAR ROCKAWAY

Location State: NY
Location Zip: 11691
Location Zip 4: Not reported

NY MANIFEST:

EPAID: NYD986975274

Mailing Name: ST JOHNS EPISCOPAL HOSPITAL

Mailing Contact: ASZAL SIDDIQUI
Mailing Address 1: 327 BEACH ST & 19TH ST

Mailing Address 2: Not reported
Mailing City: FAR ROCKAWAY

Mailing State: NY
Mailing Zip: 11691

Direction Distance

Elevation Site Database(s) **EPA ID Number**

ST JOHNS EPISCOPAL HOSPITAL (Continued)

S105996475

EDR ID Number

Mailing Zip 4: Not reported Mailing Country: USA Mailing Phone: 7188697683

NY MANIFEST:

Document ID: Not reported Manifest Status: Not reported seq: Not reported

Year: 2018

Trans1 State ID: MAC300016672 Trans2 State ID: OHD980614374 Generator Ship Date: 05/18/2018 Trans1 Recv Date: 05/18/2018 Trans2 Recv Date: 05/22/2018 TSD Site Recv Date: 06/01/2018 Part A Recv Date: Not reported Part B Recv Date: Not reported Generator EPA ID: NYD986975274 Trans1 EPA ID: Not reported Trans2 EPA ID: Not reported TSDF ID 1: OHD048415665 TSDF ID 2: Not reported Manifest Tracking Number: 011672175FLE

Import Indicator: Ν **Export Indicator:** Ν Discr Quantity Indicator: Ν Discr Type Indicator: Ν Discr Residue Indicator: Ν Discr Partial Reject Indicator: Ν Discr Full Reject Indicator: Ν

Manifest Ref Number: Not reported Alt Facility RCRA ID: Not reported Alt Facility Sign Date: Not reported MGMT Method Type Code: H040

Waste Code:

Not reported Waste Code: Not reported Waste Code: Not reported Waste Code: Not reported Waste Code: Not reported Waste Code: Not reported Quantity: 312 Units: P - Pounds

Number of Containers:

Container Type: DF - Fiberboard or plastic drums (glass) Handling Method: B Incineration, heat recovery, burning.

Specific Gravity: Waste Code: D001 F003 Waste Code 1_2: Not reported Waste Code 1_3: Waste Code 1 4: Not reported Waste Code 1_5: Not reported Waste Code 1_6: Not reported

> Click this hyperlink while viewing on your computer to access 37 additional NY MANIFEST: record(s) in the EDR Site Report.

Direction Distance

Elevation Site Database(s) EPA ID Number

 90
 NIELSON GARDENS
 NY LTANKS
 U001838269

 ESE
 10-14 NEILSON STREET
 NY UST
 N/A

1/4-1/2 0.383 mi. 2024 ft.

Relative: LTANKS:

 Lower
 Facility ID:
 0800413

 Actual:
 Site ID:
 396163

 23 ft.
 Closed Date:
 2008-06-18

 Spill Number:
 0800413

 Spill Date:
 2008-04-10

 Spill Cause:
 Tank Test Failure

FAR ROCKAWAY, NY 11691

Spill Source: Commercial/Industrial Spill Class: C4

Cleanup Ceased: Not reported SWIS: 4101 Investigator: bkfalvey Referred To: Not reported Reported to Dept: 2008-04-10 CID: 444

Water Affected:

Spill Notifier:

Last Inspection:

Recommended Penalty:

Meets Standard:

UST Involvement:

Not reported
False
False
Not reported
Not reported

Remediation Phase:

Date Entered In Computer: 2008-04-10
Spill Record Last Update: 2008-06-18
Spiller Name: MANAGER
Spiller Company: APART

Spiller Address: 10-14 NEILSON STREET

Spiller County: 001

Spiller Contact: MANAGER
Spiller Phone: (212) 873-4919
Spiller Extention: Not reported

DEC Region: 2
DER Facility ID: 345662

DEC Memo: "5/6/08 received call from Bernie of NYC Tank Testing (917)648-5551.

closure application. Working with Rene Lewis on tank removal. Will call me when tank is to be removed. bf 5/7/08 bf: sent ttf letter to: Ohad Badani Neilson Gardens, Inc. 155 Riverside Drive New York, NY 10024 5/30/08 Received messages from Rene Lewis (917)214-6670 on 5/28 and 5/29. Tank was removed. He was told that the closure application was submitted. No application received yet as per DEC database. When he arrived on-site, holes were already cut in tank and oil was entering through holes. 65 tons contaminated soil removed. 10 endpoint samples taken. They will be installing new tank. He will tell them they need to supply application. Spill closure report will follow within 10 days. bf 6/18/08 Received hansd delivered closure report from Rene Lewis on 6/13/08. Sampled through tank bottom and tank sides. Removed tank. Excavated approx. 65 tons of contaminated soil. All contaminaants non-detect. Tank closure application and application for new AST attached and sent for processing. Rene called today and requested NFA letter after closure. faxed letter to him at

(718)638-3181. Mailed letter to Mr. Badani at the address above. NFA.

Tank to be pulled and endpoint samples to be taken. Will submit PBS

bf"

EDR ID Number

NY AST

Direction Distance

Elevation Site Database(s) EPA ID Number

NIELSON GARDENS (Continued)

U001838269

EDR ID Number

Remarks: "FAILED TEST: WILL EMPTY TANK"

All TTF:

 Facility ID:
 0800413

 Spill Number:
 0800413

 Spill Tank Test:
 2453484

 Site ID:
 396163

 Tank Number:
 Not reported

 Tank Size:
 10000

 Material:
 0001

EPA UST: Not reported UST: True Cause: Not reported Source: Not reported

Test Method: 03

Test Method 2: Horner EZ Check I or II

Leak Rate: .00
Gross Fail: Not reported
Modified By: Watchdog
Last Modified Date: Not reported

All Materials:

Site ID: 396163 Operable Unit ID: 1153110 Operable Unit: 01 2143887 Material ID: Material Code: 0001A Material Name: #2 fuel oil Not reported Case No.: Material FA: Petroleum Quantity: .00 Units: G Recovered: .00

Oxygenate: Not reported

UST:

Id/Status: 2-200034 / Active

Program Type: PBS
Region: STATE
DEC Region: 2
Expiration Date: 10/23/2022

UTM Y: 599776.46294 UTM Y: 4495357.03872

Site Type: Apartment Building/Office Building

Affiliation Records:

Site Id: 6716
Affiliation Type: Facility Owner

Company Name: NIELSON GARDENS INC
Contact Type: MANAGING AGENT
Contact Name: ANDY EAGLE

Address1: 155 RIVERSIDE DRIVE

Address2: Not reported City: NEW YORK

State: NY Zip Code: 10024

Direction Distance Elevation

Site Database(s) **EPA ID Number**

NIELSON GARDENS (Continued)

U001838269

EDR ID Number

Country Code: 001

Phone: (212) 873-4919 EMail: Not reported Fax Number: Not reported **MFLEONAR** Modified By: Date Last Modified: 2017-10-10

Site Id: 6716

Affiliation Type: Mail Contact

Company Name: **NIELSON GARDENS INC** Contact Type: MANAGING AGENT Contact Name: ANDY EAGLE

Address1: 155 RIVERSIDE DRIVE

Address2: Not reported **NEW YORK** City: State: NY Zip Code: 10024 Country Code: 001

(212) 873-4919 Phone: EMail: Not reported Fax Number: Not reported **MFLEONAR** Modified By: Date Last Modified: 2017-10-10

Site Id: 6716

Facility Operator Affiliation Type: Company Name: **NIELSON GARDENS**

Contact Type: Not reported **EMERSON** Contact Name: Address1: Not reported Address2: Not reported City: Not reported State: NN

Zip Code: Not reported

Country Code: 001

Phone: (347) 368-3258 EMail: Not reported Fax Number: Not reported Modified By: **NRLOMBAR** Date Last Modified: 2008-07-14

Site Id: 6716

Affiliation Type: **Emergency Contact NIELSON GARDENS INC** Company Name:

Contact Type: Not reported Contact Name: ANDY EAGLE Address1: Not reported Address2: Not reported City: Not reported State: NN

Zip Code: Not reported

Country Code:

Phone: (212) 873-4919 EMail: Not reported Fax Number: Not reported Modified By: **MFLEONAR** Date Last Modified: 2017-10-10

Direction Distance

Elevation Site Database(s) EPA ID Number

NIELSON GARDENS (Continued)

U001838269

EDR ID Number

Tank Info:

Tank Number: 001 Tank ID: 24844

Tank Status: Closed - Removed Material Name: Closed - Removed

 Capacity Gallons:
 10000

 Install Date:
 01/01/1953

 Date Tank Closed:
 05/21/2008

 Registered:
 True

Tank Location: Underground Tank Type: Steel/carbon steel

Material Code: 0003

Common Name of Substance: #6 Fuel Oil (On-Site Consumption)

Tightness Test Method: -

Date Test:
Not reported
Next Test Date:
Not reported
Pipe Model:
Modified By:
MFLEONAR
Last Modified:
Not reported
MFLEONAR
10/10/2017

Equipment Records:

H00 - Tank Leak Detection - None

L09 - Piping Leak Detection - Exempt Suction Piping

A00 - Tank Internal Protection - None
D01 - Pipe Type - Steel/Carbon Steel/Iron
G00 - Tank Secondary Containment - None
J02 - Dispenser - Suction Dispenser
B00 - Tank External Protection - None
C00 - Pipe Location - No Piping
F00 - Pipe External Protection - None
I04 - Overfill - Product Level Gauge (A/G)

AST:

Region: STATE
DEC Region: 2
Site Status: Active
Facility Id: 2-200034
Program Type: PBS

UTM X: 599776.46294 UTM Y: 4495357.03872 Expiration Date: 10/23/2022

Site Type: Apartment Building/Office Building

Affiliation Records:

Site Id: 6716

Affiliation Type: Facility Owner

Company Name: NIELSON GARDENS INC
Contact Type: MANAGING AGENT
Contact Name: ANDY EAGLE

Address1: 155 RIVERSIDE DRIVE

Address2: Not reported City: NEW YORK State: NY

Zip Code: NY
Country Code: 001

Direction Distance Elevation

Site Database(s) **EPA ID Number**

NIELSON GARDENS (Continued)

U001838269

EDR ID Number

Phone: (212) 873-4919 EMail: Not reported Fax Number: Not reported Modified By: **MFLEONAR** Date Last Modified: 2017-10-10

6716 Site Id: Affiliation Type: Mail Contact

Company Name: **NIELSON GARDENS INC** Contact Type: MANAGING AGENT Contact Name: ANDY EAGLE

Address1: 155 RIVERSIDE DRIVE

Address2: Not reported City: **NEW YORK** State: NYZip Code: 10024 Country Code: 001

Phone: (212) 873-4919 EMail: Not reported Fax Number: Not reported Modified By: **MFLEONAR** Date Last Modified: 2017-10-10

Site Id: 6716

Facility Operator Affiliation Type: Company Name: **NIELSON GARDENS**

Contact Type: Not reported Contact Name: **EMERSON** Address1: Not reported Address2: Not reported Not reported City: State: NN

Zip Code: Not reported

Country Code: 001

Phone: (347) 368-3258 EMail: Not reported Fax Number: Not reported Modified By: **NRLOMBAR** Date Last Modified: 2008-07-14

6716 Site Id:

Affiliation Type: **Emergency Contact** Company Name: **NIELSON GARDENS INC**

Contact Type: Not reported Contact Name: ANDY EAGLE Address1: Not reported Address2: Not reported City: Not reported State: NN

Zip Code:

Not reported

Country Code: 999

(212) 873-4919 Phone: EMail: Not reported Fax Number: Not reported **MFLEONAR** Modified By: Date Last Modified: 2017-10-10

Direction Distance

Elevation Site Database(s) **EPA ID Number**

NIELSON GARDENS (Continued)

U001838269

EDR ID Number

Tank Info:

002 Tank Number: Tank Id: 224126 Material Code: 0003

Common Name of Substance: #6 Fuel Oil (On-Site Consumption)

Equipment Records:

F00 - Pipe External Protection - None A00 - Tank Internal Protection - None

B01 - Tank External Protection - Painted/Asphalt Coating

D01 - Pipe Type - Steel/Carbon Steel/Iron

K00 - Spill Prevention - None J02 - Dispenser - Suction Dispenser

E00 - Piping Secondary Containment - None

H00 - Tank Leak Detection - None C01 - Pipe Location - Aboveground

G02 - Tank Secondary Containment - Vault (w/access)

105 - Overfill - Vent Whistle L00 - Piping Leak Detection - None

Tank Location: 3

Tank Type: Steel/Carbon Steel/Iron

Tank Status: In Service Pipe Model: Not reported Install Date: 06/20/2008 Capacity Gallons: 5500 Tightness Test Method:

Date Test: Not reported Next Test Date: Not reported Date Tank Closed: Not reported Register: True Modified By: **MFLEONAR** Last Modified: 10/10/2017

Material Name: #2 fuel oil (on-site consumption)

9412343

Commercial/Industrial

JAMAICA BAY PEAKING FACILITY, LLC

AA91 WNW 1425 BAY 24TH STREET 1/4-1/2 FAR ROCKAWAY, NY 11691

Spill Source:

0.410 mi.

2167 ft. Site 1 of 2 in cluster AA

Relative:

Lower LTANKS: Facility ID: Actual:

Site ID: 182470 6 ft. 1996-10-10 Closed Date: Spill Number: 9412343 Spill Date: 1994-12-14 Spill Cause: Tank Test Failure

> Spill Class: C3

Cleanup Ceased: Not reported SWIS: 4101 Investigator: **SIGONA** Referred To: Not reported Reported to Dept: 1994-12-14 CID: Not reported

NY LTANKS

NY MOSF

NY TANKS

NY Spills NY SPDES

NY CBS

S101103078

N/A

Direction Distance Elevation

stance EDR ID Number evation Site Database(s) EPA ID Number

JAMAICA BAY PEAKING FACILITY, LLC (Continued)

S101103078

Water Affected:

Spill Notifier:

Last Inspection:

Recommended Penalty:

Meets Standard:

UST Involvement:

Remediation Phase:

Not reported

False

False

False

0

Date Entered In Computer: 1995-01-30 Spill Record Last Update: 1996-10-10

Spiller Name: PATRICK J. VAN ROSSEM

Spiller Company: LILCO

Spiller Address: 445 BROAD HOLLOW ROAD

Spiller County: 001

Spiller Contact: RALPH FANIZZI, CHIEF ENGR

Spiller Phone: (718) 868-7900
Spiller Extention: Not reported
DEC Region: 2

DER Facility ID: 159082 DEC Memo: ""

Remarks: "EX- INVEST"

All TTF:

 Facility ID:
 9412343

 Spill Number:
 9412343

 Spill Tank Test:
 1543453

 Site ID:
 182470

 Tank Number:
 Not reported

Tank Size: 0

Material: 0001

EPA UST: Not reported

UST: Not reported

Cause: Not reported

Source: Not reported

Test Method: 00
Test Method 2: Unknown
Leak Rate: .00
Gross Fail: Not reported
Modified By: Spills

Last Modified Date: Not reported

All Materials:

Site ID: 182470 Operable Unit ID: 1006013 Operable Unit: 01 Material ID: 556742 Material Code: 0001A Material Name: #2 fuel oil Case No.: Not reported Material FA: Petroleum Quantity: -1.00 Units: G Recovered: .00

Oxygenate: Not reported

MOSF:

Facility ID: 2-1560

MAP FINDINGS Map ID Direction

Distance

Elevation Site Database(s) **EPA ID Number**

JAMAICA BAY PEAKING FACILITY, LLC (Continued)

S101103078

EDR ID Number

MOSF Program Type: Tank Status: Inactive Expiration Date: Not reported

Dec Region:

UTMX: 604813.12205 UTMY: 4496306.85526

CBS:

CBS Number: 2-000396 Program Type: CBS Facility Status: Active 03/30/2019 **Expiration Date:** Dec Region: 2

604777.22402 UTMX: UTMY: 4496044.04251

TANKS:

Facility Id: 2-608895 Region: STATE DEC Region: 2 Site Status: Active Program Type: **PBS** 04/22/2023 **Expiration Date:** UTM X: 604736.44744 UTM Y: 4496229.43548

SPILLS:

Facility ID: 0030017 Facility Type: ER Spill Number: 0030017 DER Facility ID: 159082 Site ID: 190727 DEC Region:

Closed Date:

2002-04-16 Spill Cause: Housekeeping

Spill Class: B1 SWIS: 4101 Spill Date: 2000-08-22 Investigator: **SIGONA** Referred To: Not reported Reported to Dept: 2000-08-22 CID: Not reported Water Affected: Not reported

Major Facility (MOSF) > 400,000 gal Spill Source:

Spill Notifier: Responsible Party Cleanup Ceased: Not reported Cleanup Meets Std: True

Last Inspection: Not reported Recommended Penalty: False **UST Trust:** False Remediation Phase:

Date Entered In Computer: 2000-08-25 Spill Record Last Update: 2002-04-16 Spiller Name: **ROB LOWE** Spiller Company: **KEYSPAN**

Spiller Address: 175 EAST OLD COUNTRY ROAD

Direction Distance

Elevation Site Database(s) EPA ID Number

JAMAICA BAY PEAKING FACILITY, LLC (Continued)

S101103078

EDR ID Number

Spiller Company: 001

Contact Name: ROB LOWE

DEC Memo:

Remarks: "PERFORMING GENERAL CLEANUP AT SUBSTATION.HAVE BEEN HISTORICAL SPILLS

HERE (STAINS). AT ONE TRANSFORMER, DUG DOWN APPROX 4 FT- SOIL STILL COMTAMINATED. TOOK SOIL SAMPLE. THERE IS WATER IN EXCA- VATION AT THIS DEPTH (TIDAL AREA)SLIGHT SHEEN. DEC REQUESTED WATER SAMPLE BE

ANALYZED FOR PCBS. LIPA NOT"

All Materials:

Site ID: 190727 Operable Unit ID: 835556 Operable Unit: 01 Material ID: 540907 Material Code: 0020A Material Name: transformer oil Case No.: Not reported Material FA: Petroleum Quantity: .00 Units: G Recovered: .00

Oxygenate: Not reported

 Facility ID:
 0203231

 Facility Type:
 ER

 Spill Number:
 0203231

 DER Facility ID:
 159082

 Site ID:
 190728

 DEC Region:
 2

Closed Date: 2007-01-22 Spill Cause: Unknown Spill Class: C3 SWIS: 4101 Spill Date: 2002-06-26 LXZIELIN Investigator: Referred To: Not reported Reported to Dept: 2002-06-26 CID: 204 Water Affected: Not reported Spill Source: Unknown

Spill Notifier: Responsible Party
Cleanup Ceased: Not reported
Cleanup Meets Std: False
Last Inspection: Not reported
Recommended Penalty: False
UST Trust: False
Remediation Phase: 0

Date Entered In Computer: 2002-06-26

Spill Record Last Update: 2007-01-22

Spiller Name: ROBERT KOCAJ

Spiller Company: KEY SPAN ENERGY

Spiller Address: 175 EAST OLD COUNTRY RD

Spiller Company: 001

Contact Name: JOHN SIEDLECKI

DEC Memo: "01/12/07 - Zielinski During a MOSF inspection, I reviewed

information (eDocs) the facility has regarding the spill and are are provided by Obligado in his below comments. The excavation area has

Map ID MAP FINDINGS
Direction

Distance Elevation S

Site Database(s) EPA ID Number

JAMAICA BAY PEAKING FACILITY, LLC (Continued)

S101103078

EDR ID Number

been backfilled and paved. The case is closed. 09/29/06 - Zielinski The case assigned to Leszek Zielinski. Prior to Sept, 2004 data translation this spill Lead DEC Field was VOUGHT 6/26/02- JOHN -ROBERT KOCAJ- REPLACING H2O LINES- OIL ON DIRT - WAITING FOR CONSULTANT - 1) ENDPOINT SAMPLES - SOIL & WATER 2) DISPOSAL MANIFEST-SOIL - HE WILL CALL BACK 9/27/05 - Obligado - SPILL TRANSFERRED FROM VOUGHT TO OBLIGADO 1/19/06 - Obligado - Call Robert Kocaj, (718-868-7939), not in, spoke with Keith Adams about spill number. He will give message to Charlie Tyler (718-868-7920), who is the regulatory compliance specialist who will call me back. Charlie Tyelr calls back, says he wasn't working there at time but he asked around and found out the spill was called in in response to product that was encountered during excavation for a water line. The product was an oil with a high sulfur odor and was probably an remnants of an older spill. He said he will try to dig up information about the file and he will get back to me late next week. 9/19/06 - Obligado - Called Charlie Tyler again, left message to call back DEC. 9/21/06 -Obligado - Spoke with Charlie Tyler, he will email documentation related to the above spill number. Received Email from Charlie Tyler. It occurred during an excavation below an old oil line. As the tide rose the excavation filled with water, and oil gobules began to form on the water surface. Oil was removed using absorbant pads and pigs until no more oil appeared on water table. Contaminated pads and pigs were disposed of in a 55 gallon drum. Manifest enclosed. No contaminated soil was evident. Contaminated soil probably below the water table. No contaminated soil was disposed of. Included anayltical data showing soil endpoint samples analyzed for TPH at 1.71 mg/Kg and 34 mg/Kg and a ground water sampled which measured at 2.64 mg/L TPH. Petroleum ID of product showed to be No. 6 fuel Oil. ND for pcbs and 0.048 mg/Kg Lead, total Halogens at 38.8 mg/Kg. No analysis for VOCS/SVOCS. Keyspan requested closure based on historic spill and oil removed and disposed of. 9/22/06 - Obligado - Discuss with Koon. He said he will reassign to Randy Austin group because site is a MOSF facility. MOSF #2-1560. I transferred this site to Koon."

Remarks: "ESCAVATION FOUND CONTAMINATED SOIL"

All Materials:

 Site ID:
 190728

 Operable Unit ID:
 856186

 Operable Unit:
 01

 Material ID:
 521058

 Material Code:
 0064A

Material Name: unknown material
Case No.: Not reported
Material FA: Other
Quantity: 5.00
Units: G
Recovered: .00

Oxygenate: Not reported

 Facility ID:
 8504100

 Facility Type:
 ER

 Spill Number:
 8504100

 DER Facility ID:
 278930

 Site ID:
 190729

 DEC Region:
 2

Direction Distance

Elevation Site Database(s) EPA ID Number

JAMAICA BAY PEAKING FACILITY, LLC (Continued)

S101103078

EDR ID Number

Closed Date: 1997-07-31 Spill Cause: Unknown Spill Class: D4 SWIS: 4101 Spill Date: 1986-02-21 Investigator: **KSTANG** Referred To: Not reported Reported to Dept: 1986-02-21 CID: Not reported

Water Affected: BAYWATER CHANNEL

Spill Source: Unknown
Spill Notifier: Other
Cleanup Ceased: Not reported
Cleanup Meets Std: False
Last Inspection: Not reported
Recommended Penalty: False
UST Trust: False
Remediation Phase: 0

Date Entered In Computer: 1992-05-18
Spill Record Last Update: 1997-08-06
Spiller Name: Not reported
Spiller Company: UNKNOWN
Spiller Address: Not reported
Spiller Company: 999
Contact Name: Not reported

DEC Memo: "Prior to Sept, 2004 data translation this spill Lead_DEC Field was

TANG AFTER CONSIDERING THE FACT THAT THE SPILL HAPPENED A LONG TIME AGO, AND THE REMARKS INDICATE NO LONG TERM FOLLOW UP IS NEEDED. THE

SPILL HAS BEEN CLOSED."

Remarks: "LILCO BLOCKED DRAIN WITH ABSORBANT AND PUT OUT BOOM"

All Materials:

 Site ID:
 190729

 Operable Unit ID:
 895987

 Operable Unit:
 01

 Material ID:
 479879

 Material Code:
 0064A

Material Name: unknown material
Case No.: Not reported
Material FA: Other
Quantity: .00
Units: L
Recovered: .00

Oxygenate: Not reported

 Facility ID:
 9312539

 Facility Type:
 ER

 Spill Number:
 9312539

 DER Facility ID:
 159082

 Site ID:
 190730

 DEC Region:
 2

Closed Date: 1994-01-25 Spill Cause: Equipment Failure

Spill Class: C4
SWIS: 4101
Spill Date: 1994-01-25
Investigator: MCTIBBE

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

JAMAICA BAY PEAKING FACILITY, LLC (Continued)

S101103078

Referred To: Not reported Reported to Dept: 1994-01-25 CID: Not reported Water Affected: Not reported

Spill Source: Commercial/Industrial Spill Notifier: Responsible Party Cleanup Ceased: 1994-01-25

Cleanup Meets Std: True Last Inspection: Not reported Recommended Penalty: False UST Trust: False Remediation Phase: 0

Date Entered In Computer: 1994-01-26 Spill Record Last Update: 2004-09-30 Spiller Name: Not reported Spiller Company: LILCO Spiller Address: Not reported Spiller Company: 001

Contact Name: Not reported

DEC Memo: "Prior to Sept, 2004 data translation this spill Lead_DEC Field was

TIBBE "

Remarks: "RADIATOR LEAK - ON BLUE STONE - LILCO MAINTENANCE AT SITE FOR CLEAN

UP."

All Materials:

Site ID: 190730 Operable Unit ID: 994538 Operable Unit: 01 Material ID: 387965 Material Code: 0016A Material Name: non PCB oil Case No.: Not reported Material FA: Petroleum -2.00 Quantity: Units: G Recovered: .00

Oxygenate: Not reported

Facility ID: 9315393 Facility Type: ER Spill Number: 9315393 **DER Facility ID:** 159082 Site ID: 190731 DEC Region:

Closed Date: 1994-03-29 Spill Cause: Other Spill Class: C3 SWIS: 4101 Spill Date: 1994-03-29 Investigator: **SJMILLER** Referred To: Not reported 1994-03-29 Reported to Dept: CID: Not reported Water Affected: MOTT BASIN

Spill Source: Vessel

Spill Notifier: Federal Government

Cleanup Ceased: Not reported

Direction Distance

Elevation Site Database(s) EPA ID Number

JAMAICA BAY PEAKING FACILITY, LLC (Continued)

S101103078

EDR ID Number

Cleanup Meets Std: True
Last Inspection: Not reported
Recommended Penalty: False
UST Trust: False
Remediation Phase: 0
Data Entered In Computer: 1994 03 30

Date Entered In Computer: 1994-03-30
Spill Record Last Update: 2002-12-31
Spiller Name: Not reported
Spiller Company: UNK OWNER
Spiller Address: Not reported
Spiller Company: 999

Contact Name: Not reported

DEC Memo: "Prior to Sept, 2004 data translation this spill Lead_DEC Field was

MILLER 3/29/02 @1640HRS, MILLER SPOKE WITH PO PUMA, USCG: ON SCENE;

NO RELEASE OBSERVED; ARRANGING SALVAGE OF VESSEL."

Remarks: "BOAT SUNKIN IN AREA - USCG INVEST."

All Materials:

 Site ID:
 190731

 Operable Unit ID:
 997455

 Operable Unit:
 01

 Material ID:
 387148

 Material Code:
 0066A

Material Name: unknown petroleum
Case No.: Not reported
Material FA: Petroleum
Quantity: .00
Units: G
Recovered: .00

Oxygenate: Not reported

Facility ID: 1207322 Facility Type: ER Spill Number: 1207322 DER Facility ID: 159082 Site ID: 470372 DEC Region: Closed Date: 2012-10-25 Spill Cause: Other Spill Class: Not reported SWIS: 4101 Spill Date: 2012-10-25 Investigator: **JBVOUGHT** Referred To: Not reported Reported to Dept: 2012-10-25 CID: Not reported Water Affected: Not reported Spill Source: Commercial/Industrial

Spill Notifier:

Cleanup Ceased:

Cleanup Meets Std:

Last Inspection:

Recommended Penalty:

UST Trust:

Remediation Phase:

O

Page Entered In Computer:

Other

Not reported

False

Palse

2012-10-25

Date Entered In Computer: 2012-10-25 Spill Record Last Update: 2012-10-25

Direction Distance

Elevation Site Database(s) EPA ID Number

JAMAICA BAY PEAKING FACILITY, LLC (Continued)

S101103078

EDR ID Number

Spiller Name: GARY ANDRES

Spiller Company: LIPA

Spiller Address: 1425 BAY 24 ST

Spiller Company: 999

Contact Name: GARY ANDRES

DEC Memo: "10/25/12-Vought-Called and spoke to DEP Hazmat Chris Haas

(Ph:718-595-4664) who noted that they have an asbestos response unit and that call should be referred to 311 so that the Unit may respond. Vought called and spoke to caller FNDY Gary Andres and he will call spill into DEP Hazmat. Vought received inquiry from and informed DEC

Austin of same. Spill closed by Vought."

Remarks: "5 contained barrels of asbestos on LIPA property, FD would like DEC

Rep on site today @ 0842 - Gary from FDNY - called back to report

that quantity is now 10-12 barrells behind LIPA Plant"

All Materials:

 Site ID:
 470372

 Operable Unit ID:
 1220234

 Operable Unit:
 01

 Material ID:
 2218841

 Material Code:
 0026A

 Material Name:
 asbestos

 Case No.:
 01332214

Material FA: Hazardous Material

Quantity: 250.00 Units: G

Recovered: Not reported Oxygenate: Not reported

 Facility ID:
 0813481

 Facility Type:
 ER

 Spill Number:
 0813481

 DER Facility ID:
 360396

 Site ID:
 411173

 DEC Region:
 2

 Closed Date:
 2009-03-20

 Spill Class:
 Human Error

Spill Class: C4 SWIS: 4101 Spill Date: 2009-03-13 Investigator: smsanges Referred To: Not reported Reported to Dept: 2009-03-13 CID: Not reported Water Affected: MOTT BASIN Spill Source: Commercial/Industrial

Spill Notifier:

Cleanup Ceased:

Cleanup Meets Std:

Last Inspection:

Recommended Penalty:

UST Trust:

Remediation Phase:

Other

Not reported

Not reported

False

Palse

0

Date Entered In Computer: 2009-03-13
Spill Record Last Update: 2009-03-20
Spiller Name: HARRY PENNY
Spiller Company: NATIONAL GRID

Direction Distance Elevation

evation Site Database(s) EPA ID Number

JAMAICA BAY PEAKING FACILITY, LLC (Continued)

S101103078

EDR ID Number

Spiller Address: 1425 BAY 24TH ST

Spiller Company: 999

Contact Name: HARRY PENNY

DEC Memo: "DEC received a writeup of what happened and how it was cleaned up

and how it will be protected from happening in the future. see eDocs"
"During a boiler clean out some solution escaped from a roof vent and

approx 5 gallons went into the bay. 1744 hrs: Charles Tyler from National Grid contacted dispatch to update the quantaty spilled as being between 25 and 50 gallons. The spill has been contained at this time and there is no longer any discharge. The spill has been cleaned

up."

All Materials:

Remarks:

 Site ID:
 411173

 Operable Unit ID:
 1167637

 Operable Unit:
 01

 Material ID:
 2159221

 Material Code:
 9999

Material Name: other - Ammoniated citric acid solutio

Case No.:

Material FA:

Quantity:

Units:

Not reported
Other
50.00

G

Recovered: Not reported Oxygenate: Not reported

 Facility ID:
 0503946

 Facility Type:
 ER

 Spill Number:
 0503946

 DER Facility ID:
 159082

 Site ID:
 348658

 DEC Region:
 2

Closed Date: 2006-01-24 Spill Cause: Equipment Failure

Spill Class: D4
SWIS: 4101
Spill Date: 2005-07-02
Investigator: SFRAHMAN
Referred To: Not reported
Reported to Dept: 2005-07-02

CID: 73

Water Affected: Not reported Spill Source: Commercial/Industrial

Spill Notifier: Responsible Party
Cleanup Ceased: Not reported
Cleanup Meets Std: False
Last Inspection: Not reported
Recommended Penalty: False
UST Trust: False
Remediation Phase: 0

Date Entered In Computer: 2005-07-02
Spill Record Last Update: 2006-01-24
Spiller Name: Not reported
Spiller Company: KEY SPAN
Spiller Address: Not reported

Spiller Company: 001

Contact Name: WATCH ENGINEER

Direction Distance Elevation

Site Database(s) EPA ID Number

JAMAICA BAY PEAKING FACILITY, LLC (Continued)

S101103078

EDR ID Number

DEC Memo: "08.01.05..SR// Will send the clean up and soil analytical results.

To fix the problem, transformer needs to take off from service which will be done later on. 09.26.05 SR// Sharif spoke with operation people. They said the leak has been stopped, samples were taken, clean up is pending till the transformer goes out of service. Will send DEC the analytical. 10.03.05 SR// Sharif got a call from the Power Station saying that the leak has been stopped, the contaminated area has been dug out and soil samples were taken. Mr. Bart polizotti, 516-545-5511 will send DEC the closure report. 11.18.05 Sharif// Spoke with Mr. Bart Polizotti. He informed me he is going to send me the clean up statement and TPH analyticals. 01/24/06 Sharif//

Rec'd factsheet from Keyspan Energy.Non Hazardous waste manifest was provided. NFA required."

Remarks: "TRANSFORMER LEAKED - SPILL WAS ONTO BLUE STONE. CLEAN UP TUESDAY

JULY 5 BY KEYSPAN. STILL LEAKING (DRIP CONTAINMENT SYSTEM IN PLACE -

WITH HOURLY MONITORING)."

All Materials:

Site ID: 348658 Operable Unit ID: 1106309 Operable Unit: 01 Material ID: 1971234 Material Code: 0541A Material Name: dielectric fluid Case No.: Not reported Material FA: Petroleum Quantity: 1.00 Units: G Recovered: .00 Oxygenate: Not reported

Facility ID: 0511001 Facility Type: ER Spill Number: 0511001 159082 DER Facility ID: Site ID: 357066 DEC Region: Closed Date: 2005-12-20 Spill Cause: Other Spill Class: C4 SWIS: 4101 Spill Date: 2005-12-20 Investigator: **SMSANGES** Referred To: Not reported

Reported to Dept:

CID: 444 Water Affected: Not reported Spill Source: Unknown Spill Notifier: Other Cleanup Ceased: Not reported Cleanup Meets Std: False Last Inspection: Not reported Recommended Penalty: False **UST Trust:** False Remediation Phase: 0

2005-12-20

Date Entered In Computer: 2005-12-20 Spill Record Last Update: 2005-12-20

Direction Distance

Elevation Site Database(s) **EPA ID Number**

JAMAICA BAY PEAKING FACILITY, LLC (Continued)

S101103078

EDR ID Number

Spiller Name: Not reported Spiller Company: UNKNOWN] Spiller Address: Not reported 001

Spiller Company:

Contact Name: **CHARLES TYLER**

DEC Memo:

"LOOKS LIKE SOMEONE DUMPED MOTOR OIL FROM A CAR ON THE PROPERTY IS Remarks:

OUTSIDE FENCE LINE: BUT ARE CLEANING UP:"

All Materials:

Site ID: 357066 Operable Unit ID: 1114355 Operable Unit: 01 Material ID: 2104430 Material Code: 0015 Material Name: motor oil Case No.: Not reported Petroleum Material FA: Quantity: 1.00 Units: G .00 Recovered:

Not reported Oxygenate:

Facility ID: 9800623 Facility Type: ER Spill Number: 9800623 **DER Facility ID:** 159082 Site ID: 180823 DEC Region:

Closed Date: 1998-04-15 Spill Cause: Unknown Spill Class: E5 SWIS: 4101 Spill Date: 1998-04-15

Investigator: LUCE Referred To: Not reported Reported to Dept: 1998-04-15 CID: 257

Water Affected: Not reported Spill Source: Commercial/Industrial Spill Notifier: Responsible Party

Cleanup Ceased: Not reported Cleanup Meets Std: False Last Inspection: Not reported Recommended Penalty: False **UST Trust:** False Remediation Phase:

Date Entered In Computer: 1998-04-15 Spill Record Last Update: 1998-04-24 Spiller Name: **KEITH ADAMS**

Spiller Company: FAR ROCKAWAY POWER STATIO

Spiller Address: 1425 BAY 24TH ST

Spiller Company: 001

Contact Name: KEITH ADAMS

DEC Memo:

"****** THIS IS A DRILL ******* ONE INJURED SUBJECT ON SCENE" Remarks:

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

JAMAICA BAY PEAKING FACILITY, LLC (Continued)

S101103078

All Materials:

Site ID: 180823 Operable Unit ID: 1061105 Operable Unit: 01 Material ID: 556193 0039A Material Code: sulfuric acid Material Name: 07664939 Case No.:

Material FA: Hazardous Material

Quantity: 200.00 Units: G Recovered: .00

Not reported Oxygenate:

9800649 Facility ID: Facility Type: ER Spill Number: 9800649 DER Facility ID: 159082 180824 Site ID: DEC Region:

Closed Date: 1998-04-15 Spill Cause: Other Spill Class: E5 SWIS: 4101 Spill Date: 1998-04-15 Investigator: LUCE Referred To: Not reported Reported to Dept: 1998-04-15

CID: 365

Water Affected: MOTT BASIN Spill Source: Commercial/Industrial Spill Notifier: Responsible Party Cleanup Ceased: Not reported Cleanup Meets Std: False Last Inspection: Not reported Recommended Penalty: False **UST Trust:** False Remediation Phase:

Date Entered In Computer: 1998-04-15 Spill Record Last Update: 1998-04-16 Spiller Name: Not reported

Spiller Company: LONG ISLAND LIGHTING

Spiller Address: Not reported

Spiller Company: 001

Contact Name: KEITH ADAMS

DEC Memo:

"***DRILL ONLY - DO NOT RESPOND*** DRUM FELL OFF A TRUCK CAUSING Remarks: SPILL OF 40+ GALLONS - 35 GALS WENT INTO WATER & HAS BEEN BOOMED"

All Materials:

Site ID: 180824 Operable Unit ID: 1061131 Operable Unit: 01 322604 Material ID: Material Code: 0022

Material Name: waste oil/used oil

Direction Distance

Elevation Site Database(s) **EPA ID Number**

JAMAICA BAY PEAKING FACILITY, LLC (Continued)

S101103078

EDR ID Number

Case No.: Not reported Material FA: Petroleum Quantity: 40.00 Units: G Recovered: .00

Not reported Oxygenate:

> Click this hyperlink while viewing on your computer to access 4 additional NY SPILL: record(s) in the EDR Site Report.

SPDES:

NY0005924 Permit Number: State-Region: 02 **Expiration Date:** 11/30/2010 **Current Major Minor Status:** Major Primary Facility SIC Code: 4911

State Water Body Name: MOTTS BASIN Limit Set Status Flag: Active

Total Actual Average Flow(MGD): 3.413 Total App Design Flow(MGD): Not reported UDF1: Not reported

Lat/Long: 40.610722 / -73.762028 **TIMOTHY CURT** DMR Cognizant Official:

UDF2: 001701

UDF3: FIPS County Code: NY081

Non-Gov Permit Affiliation Type Desc: **DMR Mailing Address**

Non-Gov Permit Org Formal Name: NATIONAL GRID GENERATION, LLC Non-Gov Permit Street Address: FAR ROCKAWAY POWER STATION Non-Gov Permit Supplemental Location: 175 EAST OLD COUNTRY ROAD

Non-Gov Permit City: **HICKSVILLE** Non-Gov Permit State Code: NY Non-Gov Permit Zip Code: 11801

Mailing Address Non-Gov Facility Affiliation Type Desc:

Non-Gov Facility Org Formal Name: NATIONAL GRID GENERATION, LLC Non-Gov Facility Street Address: FAR ROCKAWAY POWER STATION Non-Gov Facility Supplemental Location: 1425 BAY 24TH STREET

FAR ROCKAWAY

Non-Gov Facility City:

Non-Gov Facility State Code: NY Non-Gov Facility Zip Code: 11691 02030202020 State Water Body:

UDF2: 001701 UDF3: FIPS County Code: NY081

Non-Gov Permit Affiliation Type Desc: **DMR Mailing Address**

Non-Gov Permit Org Formal Name: NATIONAL GRID GENERATION, LLC Non-Gov Permit Street Address: FAR ROCKAWAY POWER STATION Non-Gov Permit Supplemental Location: 175 EAST OLD COUNTRY ROAD

Non-Gov Permit City: **HICKSVILLE**

Non-Gov Permit State Code: NY Non-Gov Permit Zip Code: 11801 Non-Gov Facility Affiliation Type Desc: Owner

Direction Distance

EDR ID Number Elevation Site **EPA ID Number** Database(s)

JAMAICA BAY PEAKING FACILITY, LLC (Continued)

S101103078

Non-Gov Facility Org Formal Name: NATIONAL GRID GENERATION, LLC FAR ROCKAWAY POWER STATION Non-Gov Facility Street Address: Non-Gov Facility Supplemental Location: 175 EAST OLD COUNTRY ROAD

Non-Gov Facility City: **HICKSVILLE** Non-Gov Facility State Code: NY Non-Gov Facility Zip Code: 11801 02030202020 State Water Body:

UDF2: 001701 UDF3: FIPS County Code: NY081

Non-Gov Permit Affiliation Type Desc: Permittee

Non-Gov Permit Org Formal Name: NATIONAL GRID GENERATION, LLC Non-Gov Permit Street Address: 175 EAST OLD COUNTRY RD

Non-Gov Permit Supplemental Location: Not reported Non-Gov Permit City: **HICKSVILLE** Non-Gov Permit State Code: NY Non-Gov Permit Zip Code: 11801

Mailing Address Non-Gov Facility Affiliation Type Desc:

NATIONAL GRID GENERATION, LLC Non-Gov Facility Org Formal Name: Non-Gov Facility Street Address: FAR ROCKAWAY POWER STATION

Non-Gov Facility Supplemental Location: 1425 BAY 24TH STREET Non-Gov Facility City: **FAR ROCKAWAY**

Non-Gov Facility State Code: NY Non-Gov Facility Zip Code: 11691 State Water Body: 02030202020

UDF2: 001701 UDF3: FIPS County Code: NY081

Non-Gov Permit Affiliation Type Desc: Permittee

Non-Gov Permit Org Formal Name: NATIONAL GRID GENERATION, LLC 175 EAST OLD COUNTRY RD Non-Gov Permit Street Address:

Non-Gov Permit Supplemental Location: Not reported Non-Gov Permit City: HICKSVILLE Non-Gov Permit State Code: NY Non-Gov Permit Zip Code: 11801 Non-Gov Facility Affiliation Type Desc: Owner

Non-Gov Facility Org Formal Name: NATIONAL GRID GENERATION, LLC Non-Gov Facility Street Address: FAR ROCKAWAY POWER STATION Non-Gov Facility Supplemental Location: 175 EAST OLD COUNTRY ROAD

HICKSVILLE Non-Gov Facility City: Non-Gov Facility State Code: NY Non-Gov Facility Zip Code: 11801 State Water Body: 02030202020

AA92 **FAR ROCKAWAY POWER STATION** WNW

1425 BAY 24TH STREET FAR ROCKAWAY, NY 11691

1/4-1/2 0.410 mi.

2167 ft. Site 2 of 2 in cluster AA

MOSF UST: Relative:

Lower Id/Status: 2-1560 / ACTIVE FACILITY

SWIS Code: Actual:

NEW YORK CITY Facility Town: 6 ft. Contact Phone: (718) 868-7900

S102633652

N/A

NY MOSF UST

NY MOSF AST

Direction Distance

Elevation Site Database(s) EPA ID Number

FAR ROCKAWAY POWER STATION (Continued)

S102633652

EDR ID Number

Emergency Contact: WATCH ENGINEER
Emergency Telephone: (718) 868-7900
CBS Number: 2-000083
SPDES Num: 0-005924
Total Tanks: 5
Total Capacity: 2112330
Avg Throughput: 0

Facility Type: MANUFACTURING

Prod Xfer Options: Vessel/Barge (Including off-shore platform)

Expiration Date: 03/31/2004
Applic Rcvd: 08/03/1999
Operator: SEAN MOORE

Owner Name: KEYSPAN GENERATION, LLC
Owner Address: 175 E. OLD COUNTRY ROAD
Owner City, St, Zip: HICKSVILLE, NY 11801-

Owner Telephone: (516) 420-6140
Owner Type: Corporate/Commercial

Owner Status: 3

License Stat:

Owner Mark: First Owner Mail To Name: Not reported

Mail To Address: 445 BROADHOLLOW ROAD

Mail To Address 2: Not reported

Mail City,St,Zip: MELVILLE, NY 11747Mail To Contact: ROBERT D. TEETZ

Mail To Telephone: (516) 391-6133

Legal Agent Name: DONNA RICCOBONO

Legal Agent Address: 175 E. OLD COUNTRY ROAD

Legal Agent City,St,Zip: HICKSVILLE, NY 11801-

Date Filed:

Latitude: 40|36|35 Longitude: 73|45|42

Tank ID: 100-101-001
Tank Location: UNDERGROUND

Install Date: 12/54
Capacity (Gal): 2000000
Product: EMPTY
Tank Status: In Service
Tank Type: Steel/carbon steel

Tank Internal: None

Tank External: Impressed Current

Pipe Location: Aboveground/Underground Combination

Pipe Type: STEEL/IRON

Pipe Internal: None

Pipe External: Impressed Current

Second Contain: 6B Leak Detection: 30

Overfill Protection: High Level Alarm

Dispenser: Suction
Test Date: 12/86
Date Closed: Not reported
Status of Data: Complete
Inspected Date: 07/20/1999

Inspector Initials: AS

Inspector Status: Not reported Pipe Flag: True

Direction
Distance
Elevation

stance EDR ID Number evation Site Database(s) EPA ID Number

FAR ROCKAWAY POWER STATION (Continued)

S102633652

License Issued: 08/27/1999

Vessel Id: Not reported
Renew Flag: True
Renew Date: 07/02/1999

Federal Id No: Not reported

COI Date: / /

Tank ID: 100-101-003
Tank Location: UNDERGROUND

Install Date: 12/69 Capacity (Gal): 10000

Product: NOS 1,2, OR 4 FUEL OIL

Tank Status: In Service
Tank Type: Steel/carbon steel

Tank Internal: None

Tank External: Impressed Current

Pipe Location: Aboveground/Underground Combination

Pipe Type: STEEL/IRON

Pipe Internal: None

Pipe External: Impressed Current

Second Contain: None

Leak Detection: Groundwater Well
Overfill Protection: Product Level Gauge

Dispenser: Suction
Test Date: 09/92
Date Closed: 06/95
Status of Data: Complete
Inspected Date: 07/20/1999

Inspector Initials:
Inspector Status:
Pipe Flag:
License Issued:
Vessel Id:
Renew Flag:
Renew Date:

AS
Not reported
True
Not reported
True

07/02/1999

COI Date: / /

Federal Id No:

Tank ID: 100-101-004
Tank Location: UNDERGROUND

Install Date: 12/73
Capacity (Gal): 2000
Product: UNKNOWN
Tank Status: In Service
Tank Type: Steel/carbon steel
Tank Internal: None

Tank External: None

Pipe Location: Aboveground/Underground Combination

Not reported

Pipe Type: STEEL/IRON

Pipe Internal: None
Pipe External: None
Second Contain: None
Leak Detection: None
Overfill Protection: None
Dispenser: Suction

Direction Distance

Elevation Site Database(s) EPA ID Number

FAR ROCKAWAY POWER STATION (Continued)

S102633652

EDR ID Number

Test Date: 10/92
Date Closed: 06/95
Status of Data: Complete
Inspected Date: 07/20/1999
Inspector Initials: AS

Inspector Status: Not reported Pipe Flag: True
License Issued: 08/27/1999
Vessel Id: Not reported Renew Flag: True
Renew Date: 07/02/1999
Federal Id No: Not reported

COI Date: / /

MOSF AST:

MOSF Number: 2-1560 SWIS Code: 63

Facility Town:
NEW YORK CITY
Facility Phone:
(718) 868-7900
Emergency Contact Name:
Emergency Contact Phone:
(718) 868-7900

Total Tanks: 5
Total Capacity: 2112330
Daily Throughput: 0
License Status: 1

Facility Type: MANUFACTURING

Product Transfer Operation: Vessel/Barge (Including off-shore platform

Facility Status: IN SERVICE
Operator Name: SEAN MOORE

Owner Name: KEYSPAN GENERATION, LLC
Owner Address: 175 E. OLD COUNTRY ROAD
Owner City, St, Zip: HICKSVILLE, NY 11801Owner Phone: (516) 420-6140

Owner Type: (516) 420-6140

Corporate/Commercial

Owner Status:

Owner Mark: First Owner Mailing Name: Not reported

Mailing Address: 445 BROADHOLLOW ROAD

Mailing Address 2: Not reported

Mailing City,St,Zip: MELVILLE, NY 11747Mailing Contact: ROBERT D. TEETZ
Mailing Phone: (516) 391-6133
Legal Agent Name: DONNA RICCOBONO
Legal Agent Address: 175 E. OLD COUNTRY ROAD
Legal Agent City,St,Zip: HICKSVILLE, NY 11801-

LIC Expires: 03/31/2004

Tank ID: 100-201-002 Tank Location: ABOVEGROUND

Install Date: 12/53
Product: EMPTY

Tank Type: Steel/carbon steel

Tank Internal:

Tank External:

Pipe Location:

Pipe Type:

Pipe Internal:

None

None

None

Direction Distance

Elevation Site Database(s) EPA ID Number

FAR ROCKAWAY POWER STATION (Continued)

S102633652

EDR ID Number

Pipe External: None 8B Secondary Containment: Leak Detection: 03 Overfill Protection: 32 Dispensing Mthd: Gravity 10/86 Test Date: Date Closed: Not reported Complete Status of Data: Capacity (gal): 100000

Lat/Long: 40|36|35 / 73|45|42 Not reported Federal ID: 07/20/1999 Inspected Date: Inspector: AS Renew Date: 07/02/1999 Inspected State: Not reported Pipe Flag: True Vessel ID: Not reported Reserve Flag: True Tank Status: In Service COI Date:

Date License Issued: 08/27/1999
Date License Application Received: 08/03/1999
Chemical Bulk Storage Number: 2-000083
Pollution Discharge Elimination System Num: 0-005924

Date Legal Agent Filed with Secretary of State: /

Tank ID: 100-201-010

Tank Location: ABOVEGROUND ON SADDLES LEGS, STILTS, RACK, OR CRADLE

Install Date: 10/96
Product: UNKNOWN
Tank Type: Steel/carbon steel

Tank Internal: None Tank External: 00

Pipe Location: Aboveground
Pipe Type: Steel/Iron
Pipe Internal: None
Pipe External: 01
Secondary Containment: 00
Leak Detection: 00

Overfill Protection: Product Level Gauge

Dispensing Mthd: Suction
Test Date: Not reported
Date Closed: 10/96
Status of Data: Complete
Capacity (gal): 9000

40|36|35 / 73|45|42 Lat/Long: Not reported Federal ID: Inspected Date: 07/20/1999 Inspector: AS 07/02/1999 Renew Date: Inspected State: Not reported Pipe Flag: True Vessel ID: Not reported Reserve Flag: True Tank Status: In Service COI Date:

Direction Distance

Elevation Site Database(s) EPA ID Number

FAR ROCKAWAY POWER STATION (Continued)

S102633652

EDR ID Number

Date License Issued: 08/27/1999
Date License Application Received: 08/03/1999
Chemical Bulk Storage Number: 2-000083
Pollution Discharge Elimination System Num: 0-005924
Date Legal Agent Filed with Secretary of State: /

Tank ID: 100-201-009
Tank Location: ABOVEGROUND

Install Date: 12/54
Product: UNKNOWN
Tank Type: Steel/carbon steel

Tank Internal: None Tank External: NONE Pipe Location: Aboveground Pipe Type: Steel/Iron Pipe Internal: None Pipe External: None Secondary Containment: None Leak Detection: None

Overfill Protection: Product Level Gauge

Dispensing Mthd: 0
Test Date: /

Date Closed: Not reported Status of Data: Complete Capacity (gal): 9000

Lat/Long: 40|36|35 / 73|45|42 Federal ID: Not reported 07/20/1999 Inspected Date: Inspector: AS 07/02/1999 Renew Date: Inspected State: Not reported Pipe Flag: True Vessel ID: Not reported Reserve Flag: True Tank Status: In Service COI Date:

Date License Issued: 08/27/1999
Date License Application Received: 08/03/1999
Chemical Bulk Storage Number: 2-000083
Pollution Discharge Elimination System Num: 0-005924

Date Legal Agent Filed with Secretary of State:

Tank ID: 100-201-014

Tank Location: ABOVEGROUND ON SADDLES LEGS, STILTS, RACK, OR CRADLE

Install Date: 12/54
Product: UNKNOWN
Tank Type: Steel/carbon steel

Tank Internal: None

Tank External: NONE/CATHODIC PROTECTION

Pipe Location: Aboveground
Pipe Type: Steel/Iron
Pipe Internal: None
Pipe External: 01
Secondary Containment: 09
Leak Detection: 09

Distance

Elevation Site Database(s) EPA ID Number

FAR ROCKAWAY POWER STATION (Continued)

Overfill Protection: High Level Alarm

Dispensing Mthd: Gravity
Test Date: Not reported
Date Closed: Not reported
Status of Data: Complete
Capacity (gal): 3180

40|36|35 / 73|45|42 Lat/Long: Not reported Federal ID: Inspected Date: 07/20/1999 Inspector: AS 07/02/1999 Renew Date: Inspected State: Not reported Pipe Flag: True Vessel ID: Not reported Reserve Flag: True Tank Status: In Service COI Date:

Date License Issued: 08/27/1999
Date License Application Received: 08/03/1999
Chemical Bulk Storage Number: 2-000083
Pollution Discharge Elimination System Num: 0-005924

Date Legal Agent Filed with Secretary of State: /

Tank ID: 100-201-015

Tank Location: ABOVEGROUND ON SADDLES LEGS, STILTS, RACK, OR CRADLE

Install Date: 12/54
Product: UNKNOWN
Tank Type: Steel/carbon steel

Tank Internal: None

Tank External: NONE/CATHODIC PROTECTION

Pipe Location: Aboveground
Pipe Type: Steel/Iron
Pipe Internal: None
Pipe External: 01
Secondary Containment: 09
Leak Detection: 09

Overfill Protection: High Level Alarm

Dispensing Mthd: Gravity
Test Date: Not reported
Date Closed: Not reported
Status of Data: Complete
Capacity (gal): 150

40|36|35 / 73|45|42 Lat/Long: Federal ID: Not reported 07/20/1999 Inspected Date: Inspector: AS Renew Date: 07/02/1999 Inspected State: Not reported Pipe Flag: True Vessel ID: Not reported Reserve Flag: True Tank Status: In Service

COI Date: //

Date License Issued:08/27/1999Date License Application Received:08/03/1999Chemical Bulk Storage Number:2-000083

S102633652

EDR ID Number

Direction Distance

Elevation Site Database(s) **EPA ID Number**

FAR ROCKAWAY POWER STATION (Continued)

S102633652

1008407927

N/A

EDR ID Number

Pollution Discharge Elimination System Num: 0-005924

Date Legal Agent Filed with Secretary of State:

EDR MGP

NE CORNER OF BRUNSWICK AVE. AND BEACH 12TH ST.

FAR ROCKAWAY MGP 1/4-1/2 FAR ROCKAWAY, NY 11691

0.429 mi. 2266 ft.

93

Relative: Manufactured Gas Plants:

Lower No additional information available

Actual: 18 ft.

94 KINGDOM HALL JEHOVA WIT NY LTANKS \$104516762 N/A

SW 2360 BROOKHAVEN AVE 1/4-1/2 **FAR ROCKAWAY, NY**

0.429 mi. 2266 ft.

Relative: LTANKS: Lower

Facility ID: 9914058 Site ID: 136480 Actual: Closed Date: 2005-11-03 19 ft. Spill Number: 9914058 Spill Date: 2000-03-13 Spill Cause:

Spill Source: Gasoline Station or other PBS Facility

Tank Test Failure

Spill Class: ВЗ

Cleanup Ceased: Not reported SWIS: 4101 RHFILKIN Investigator: Referred To: Not reported Reported to Dept: 2000-03-13 CID: 207

Water Affected: Not reported Spill Notifier: Tank Tester Last Inspection: Not reported Recommended Penalty: False Meets Standard: False **UST Involvement:** False Remediation Phase: 0

2000-03-13 Date Entered In Computer: Spill Record Last Update: 2005-11-03 Spiller Name: Not reported Spiller Company: Not reported Spiller Address: Not reported

Spiller County: 001

ERROL ST MARIE Spiller Contact: (718) 337-5812 Spiller Phone: Spiller Extention: Not reported

DEC Region: 2 DER Facility ID: 116788

DEC Memo: "Prior to Sept, 2004 data translation this spill Lead_DEC Field was

SANGESLAND 11/3/05 - Owner says tank failed test but then was retested and passed. He has no documentation though. PBS system has

MAP FINDINGS Map ID

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

KINGDOM HALL JEHOVA WIT (Continued)

S104516762

S118953655

N/A

NY LTANKS

the 3/13/2000 failure, no mention of a retest or replacement, but shows tank passed test 4/4/05. Since tank appears to now pass tests without having been replaced, I'll assume original failure was incorrect and there was no spill. Closed 11/3/05 - Filkins"

Remarks: "gross failure"

All TTF:

9914058 Facility ID: Spill Number: 9914058 Spill Tank Test: 1548131 Site ID: 136480 Tank Number: 1 Tank Size: 2500 Material: Not reported EPA UST: Not reported

UST: Not reported Not reported Cause: Source: Not reported

Test Method:

Test Method 2: Horner EZ Check I or II

Leak Rate: .00

Gross Fail: Not reported Modified By: Spills Last Modified Date: Not reported

8710031

95 **U HAUL**

20A SHERIDAN BLVD

NNE INWOOD, NY 1/4-1/2

0.440 mi. 2322 ft.

Relative: LTANKS: Lower Facility ID:

Site ID: 217885 Actual: Closed Date: 1988-05-16 6 ft. Spill Number:

8710031 Spill Date: 1988-02-29 Spill Cause: Tank Test Failure Spill Source: Commercial/Industrial

Spill Class: Not reported Cleanup Ceased: 1988-05-16 SWIS: 3020

Investigator: **KDGOERTZ** Referred To: Not reported Reported to Dept: 1988-02-29 CID: Not reported Water Affected: Not reported Spill Notifier: **Tank Tester** Last Inspection: Not reported Recommended Penalty: False Meets Standard: True **UST Involvement:** True Remediation Phase: 0

Date Entered In Computer: 1988-03-01 Spill Record Last Update: 2006-07-06 Spiller Name: Not reported Spiller Company: **U HAUL**

Direction Distance

Elevation Site Database(s) EPA ID Number

U HAUL (Continued) S118953655

Spiller Address: Not reported

Spiller County: 001

Spiller Contact: Not reported
Spiller Phone: Not reported
Spiller Extention: Not reported

DEC Region: 1

DER Facility ID: 180265

DEC Memo: "Prior to Sept, 2004 data translation this spill Lead_DEC Field was

GOERTZ FD 03/24/88: TYREE RETESTED SYSTEM AFTER NEW VENTS WERE INSTALLED & PIPE UNDER PUMP WAS REPAIRED. SYSTEM PASSED RETEST. DEC NOT PRESENT DURING RETEST. ***SEE ALSO THE FOLLOWING SPILLS HERE (MAY BE OTHERS?): 9303942 UHAUL 20 SHERIDAN: CONTAMINATION FOUND DURING REMOVAL OF 2 5K GAS TANKS. SMALL AMOUNT OF SOIL REMOVED; NO OTHER ACTION BY SPILLER. ACTIVE AS OF AUG99. SEE IT FOR HISTORY. ***SEE ALSO THE FOLLOWING SPILLS NEARBY (MAY BE OTHERS?): 7900634 MOORE S/S

ALSO THE FOLLOWING SPILLS NEARBY (MAY BE OTHERS?): 7900634 MOORE S/S STATION 20 SHERIDAN: SURFACE SPILL OF 20 - 200GAL GAS. 8201877 WECHTER OIL TERMINAL: STATE-FUNDED REMEDIATION ON WEST SIDE OF SHERIDAN. SEE IT FOR HISTORY. 8607001 EAGLE OIL TERMINAL: SAME SITE AS WECHTER. STATE-FUNDED REMEDIATION. DEC ALSO INITIATED ENFORCEMENT

ACTION TO CLOSE TERMINAL. SEE IT FOR HISTORY. 8806431 MORE GAS

STATION 20 SHERIDAN: NOZZLES ACCIDENTALLY TURNED ON AT ABANDONED GAS STATION, APPROX 100GAL GAS SPILLED, WAS THEN FLUSHED INTO

STATION. APPROX 100GAL GAS SPILLED. WAS THEN FLUSHED INTO DRAINAGE/BAY? DEC HIRED CONTRACTOR TO CLEAN OUT DRAIN. ACTIVE AS OF

AUG99. SEE IT FOR HISTORY. 8901640 SHERIDAN & CARVEL: NYTEL FOUND PETRO IN VAULT IN FRONT OF THE GAS STATION. NYTEL HAD VAULT PUMPED OUT. DEC HAD WELLS INSTALLED. A NEW OWNER LATER HAD FIVE TANKS AND APPROX 100CY SOIL LATER REMOVED. ACTIVE AS OF AUG99. SEE IT FOR HISTORY. 9011522 MORE S/S 20 SHERIDAN: CONTAMINATION FOUND DURING EXCAVATION FOR NEW TANKS; APPROX 120CY SOIL REMOVED (NOTES INCLUDED

UNDER 8901640). CLOSED 7FEB91. 9800618 CITY GAS 20 SHERIDAN:

CONTAMINATION FOUND DURING STATION UPGRADE. ACTIVE AS OF AUG99. SEE IT FOR HISTORY. FILE HAS BEEN DESTROYED ACCORDING TO STATE ARCHIVE

AND RECORD ADMINISTRATOR RETENTION/DISPOSAL PROCEDURES"

Remarks: "2-5K FAILED PETROTITE SYSTEM TEST WITH GROSS LEAK"

All TTF:

 Facility ID:
 8710031

 Spill Number:
 8710031

 Spill Tank Test:
 1533336

 Site ID:
 217885

 Tank Number:
 Not reported

Tank Size: 0

Material: 0009

EPA UST: Not reported
UST: Not reported
Cause: Not reported
Source: Not reported

Test Method: 00
Test Method 2: Unknown
Leak Rate: .00

Gross Fail: Not reported Modified By: Spills Last Modified Date: Not reported

All Materials:

 Site ID:
 217885

 Operable Unit ID:
 915612

EDR ID Number

MAP FINDINGS Map ID

Direction Distance

Elevation Site Database(s) **EPA ID Number**

U HAUL (Continued) S118953655

Operable Unit: 01 461818 Material ID: Material Code: 0009 Material Name: gasoline Case No.: Not reported Petroleum Material FA: Quantity: .00 Units: G Recovered: .00

Oxygenate: Not reported

WAVECREST APARTMENTS NY LTANKS S106472022 96 **NY Spills** N/A

South **20-30 ELK DRIVE**

1/4-1/2 FAR ROCKAWAY, NY 11691 0.474 mi.

2503 ft.

Relative: LTANKS: Higher Facility ID: Site ID:

250586 Actual: Closed Date: 2008-10-06 25 ft. Spill Number: 0403513 2004-07-01 Spill Date: Spill Cause: Tank Test Failure

> Spill Source: Institutional, Educational, Gov., Other

0403513

Spill Class: C4

Cleanup Ceased: Not reported SWIS: 4101

Investigator: **MJHAGGER** Referred To: Not reported 2004-07-01 Reported to Dept: CID: 406

Water Affected: Not reported Spill Notifier: Tank Tester Last Inspection: Not reported Recommended Penalty: False Meets Standard: False **UST Involvement:** False

Date Entered In Computer: 2004-07-01 Spill Record Last Update: 2009-10-02 Spiller Name: JIM MELNICK Spiller Company: APARTMENT BLDG. Spiller Address: 20-30 ELK DR.

Spiller County: 001

Remediation Phase:

Spiller Contact: JIM MELNICK Spiller Phone: (631) 321-4670 Spiller Extention: Not reported

DEC Region: DER Facility ID:

DEC Memo: "9/15/2005 - Jim Melnick of Pro Test stated that their was a new tank

installed at the site about a month ago and they will be removing the existing tank and testing the soils within the next 30-days. Prior to Sept, 2004 data translation this spill Lead_DEC Field was KRIMGOLD send TTF letter to: Avi Slansky 20-30 Elk Assoc. 129-09 26th Street, Suite 301 Flushing, NY 11354 07/22/04. Pro Test sent a letter stating that they will EIR the tank by 7/26/04. YK. 9/28/07 - Haggerty - I

EDR ID Number

Direction Distance Elevation

Site Database(s) EPA ID Number

WAVECREST APARTMENTS (Continued)

S106472022

EDR ID Number

asked Brian Falvey from our PBS unit in NYC to accompany me to the site for an inspection. I had previously made countless attempts to get Mr. Slansky (718-463-1200), property manager from Wavecrest, to take care of this open spill. Before I took over management of this site in January '07, Ralph Keating made multiple attempts to get spill addressed over the course a year. Old tank partially uncovered with boards over it for the past 3 years (located directly in the walkway to the building) According to the Building Super, nothing has changed since the tank was tested on 7/1/04. The tank should have been closed out before the registration expired. Also, a new tank was installed approximately 2.5yrs ago inside the apartment complex basement. This tank was never registered or Tightness Tested. I attached a picture in edocs showing the tanks condition PBS Conference scheduled for 10/23/07. 10/23/07 - Haggerty - Met with DEC lawyer Scott Owens, DEC Inspector Brian Falvey, and Property Manager Avi Slansky at PBS conference. Wavecrest Management fined \$10,000 and ordered to complete tank removal by the end of the year. 12/28/07 -Haggerty - Excavation and Tank removal begins began the day before. Spoke with John Leddy of Protest (631-321-4670). Over-excavation completed creating a 18*30ft trench. Informed John that for every linear 15ft of trench, 5 grab samples must be collected for analysis. Therefore, a total of 10 samples (2 bottom and 8 sidewall) 10/6/08 -Haggerty - Received Spill Closure Report. All endpoint samples clean. Spill Closed"

Remarks: "Tank Test failure."

All TTF:

 Facility ID:
 0403513

 Spill Number:
 0403513

 Spill Tank Test:
 1529404

 Site ID:
 250586

 Tank Number:
 1

 Tank Size:
 4000

 Material:
 0003

EPA UST: Not reported UST: Not reported Cause: Not reported Source: Not reported

Test Method: 03

Test Method 2: Horner EZ Check I or II

Leak Rate: .00

Gross Fail: Not reported Modified By: Spills Last Modified Date: Not reported

All Materials:

Site ID: 250586 Operable Unit ID: 885764 Operable Unit: 01 Material ID: 491093 Material Code: 0003A Material Name: #6 fuel oil Case No.: Not reported Material FA: Petroleum Quantity:

Quantity: .00
Units: G
Recovered: .00

Direction Distance

Elevation Site Database(s) EPA ID Number

Not reported

WAVECREST APARTMENTS (Continued)

S106472022

EDR ID Number

Oxygenate:

 SPILLS:
 Facility ID:
 1010730

 Facility Type:
 ER

 Spill Number:
 1010730

 DER Facility ID:
 399235

 Site ID:
 444344

 DEC Region:
 2

Closed Date: 2011-01-19
Spill Cause: Equipment Failure
Spill Class: Not reported

SWIS: 4101 Spill Date: 2011-01-18 Investigator: **JBVOUGHT** Referred To: Not reported Reported to Dept: 2011-01-18 CID: Not reported Water Affected: Not reported Spill Source: Private Dwelling Spill Notifier: Responsible Party

Cleanup Ceased:

Cleanup Meets Std:

Last Inspection:

Recommended Penalty:

UST Trust:

Remediation Phase:

Not reported
False
False

False

0

Date Entered In Computer: 2011-01-18
Spill Record Last Update: 2011-01-19
Spiller Name: ALEX ZEDLOVICH
Spiller Company: ESF TRANSPORT INC

Spiller Address: 20 ELK DR Spiller Company: 999

Contact Name: ALEX ZEDLOVICH

DEC Memo: "1/19/11-Vought-Primary off-hours responder. Called ESF Transport

(Alex Zedlovich 347-865-2536) and cause of the spill was a loose coupling on fill pipe and when he blew line their was a spray of six. Slight impact to dirt and soil will be excavated for top 2 and soil will be shipped to Jamaica Recycling for proper disposal. No sewers or drains affected and spill pads and booms on site. No spill inside building and no endpoint samples required due to high viscosity of #6 and removal of all visual contamination by oil company. Vought provided cell phone contact in case further questions arose. Spill

closed by Vought."

Remarks: "Spill onto concrete. Area has been contained & boomed. Cleanup in

prgress."

All Materials:

 Site ID:
 444344

 Operable Unit ID:
 1194791

 Operable Unit:
 01

 Material ID:
 2190657

 Material Code:
 0003A

 Material Name:
 #6 fuel oil

 Case No.:
 Not reported

 Material FA:
 Petroleum

Direction Distance

Distance Elevation Site EDR ID Number

EDR ID Number

EPA ID Number

WAVECREST APARTMENTS (Continued)

S106472022

N/A

Quantity: 20.00 Units: G

Recovered: Not reported Oxygenate: Not reported

97 327 BCH 19TH ST NY LTANKS \$100146881

South 327 BEACH 19TH STREET 1/4-1/2 NEW YORK CITY, NY

0.487 mi. 2573 ft.

Relative: LTANKS: Lower Facility ID:

 Actual:
 Site ID:
 216311

 23 ft.
 Closed Date:
 1993-02-23

 Spill Number:
 9013017

 Spill Date:
 1991-03-21

Spill Cause: Tank Test Failure

Spill Source: Institutional, Educational, Gov., Other

9013017

Spill Class: Cleanup Ceased: 1993-02-23 SWIS: 4101 O'DOWD Investigator: Referred To: Not reported Reported to Dept: 1991-03-21 CID: Not reported Water Affected: Not reported Spill Notifier: Tank Tester Last Inspection: Not reported Recommended Penalty: False Meets Standard: False **UST Involvement:** False Remediation Phase: O

Date Entered In Computer: 1991-04-02 Spill Record Last Update: 1994-05-12 Spiller Name: Not reported

Spiller Company: ST. JOHN'S HOSPITAL
Spiller Address: 327 BEACH 19TH STREET

Spiller County: 001

Spiller Contact: Not reported
Spiller Phone: Not reported
Spiller Extention: Not reported

DEC Region: 2
DER Facility ID: 179083
DEC Memo: ""

Remarks: "20K TANK FAILED HORNER EZY CHECK,SYSTEM TEST, VISUAL GROSS LEAK,WILL

REPAIR VISUAL LEAK AT PUMP FLANGE IN BASEMENT, WILL RETEST, SPEEDY DRY

APPLIED & WILL PICK UP & DISPOSE."

All TTF:

 Facility ID:
 9013017

 Spill Number:
 9013017

 Spill Tank Test:
 1538353

 Site ID:
 216311

 Tank Number:
 Not reported

Tank Size: 0
Material: 0001

MAP FINDINGS Map ID

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

327 BCH 19TH ST (Continued)

S100146881

EPA UST: Not reported UST: Not reported Cause: Not reported Source: Not reported Test Method: 00

Test Method 2: Unknown Leak Rate: .00 Gross Fail: Not reported Modified By: Spills Last Modified Date: Not reported

All Materials:

Site ID: 216311 Operable Unit ID: 950265 Operable Unit: 01 Material ID: 429459 Material Code: 0001A Material Name: #2 fuel oil Case No.: Not reported Material FA: Petroleum Quantity: -1.00 Not reported Units:

Recovered: .00

Oxygenate: Not reported

EDR MGP 1008407954 98 **INWOOD HOLDER**

W. OF SHERIDAN BLVD. AND S. OF NASSAU AVE. North

1/2-1 INWOOD (V), NY 11096

0.562 mi. 2968 ft.

Relative: Manufactured Gas Plants:

Lower No additional information available

Actual: 9 ft.

99 **ROCKAWAY METAL** SEMS 1000268052 **NY SHWS** NYD002059202

North 175 ROGER AVE **INWOOD, NY 11096** 1/2-1 0.684 mi.

NY CBS 3611 ft. **NY BROWNFIELDS NY Spills** Relative: RCRA NonGen / NLR Lower

Actual: ICIS 11 ft. **US AIRS FINDS**

ECHO NY MANIFEST

SEMS:

Site ID: 203710 EPA ID: NYD002059202

Cong District: FIPS Code: 36081 N/A

NY CBS UST

PRP

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

ROCKAWAY METAL (Continued)

1000268052

Latitude: Not reported Not reported Longitude: FF: Ν

NPL: Not on the NPL

Non NPL Status: Other Cleanup Activity: State-Lead Cleanup

SEMS Detail:

2 Region: Site ID: 203710 EPA ID: NYD002059202

Site Name: **ROCKAWAY METAL PRODUCTS**

NPL: FF: Ν OU: 0 Action Code: 00

Action Name: SITE REASS

SEQ:

Not reported Start Date: Finish Date: 8/9/2010 Qual:

Current Action Lead: EPA Perf In-Hse

Region: Site ID: 203710 EPA ID: NYD002059202

Site Name: **ROCKAWAY METAL PRODUCTS**

NPL: FF: Ν OU: 0 Action Code: AR

Action Name: ADMIN REC

SEQ:

Start Date: 1993-04-19 00:00:00 Finish Date: Not reported Qual:

Current Action Lead: **EPA Perf**

Region: Site ID: 203710 NYD002059202 EPA ID:

Site Name: **ROCKAWAY METAL PRODUCTS**

NPL: Ν FF: Ν OU: 0 Action Code: RS

Action Name: **RV ASSESS**

SEQ:

1992-06-08 00:00:00 Start Date:

Finish Date: 1/14/1993 Not reported Qual: **Current Action Lead: EPA** Perf

Region: Site ID: 203710 EPA ID: NYD002059202

Site Name: **ROCKAWAY METAL PRODUCTS**

NPL: Ν FF: Ν

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

ROCKAWAY METAL (Continued)

1000268052

OU: 0 Action Code: РΑ Action Name: PΑ SEQ:

Start Date: Not reported 8/9/2010 Finish Date: Qual: Н **Current Action Lead: EPA Perf**

Region: Site ID: 203710 EPA ID: NYD002059202

Site Name: **ROCKAWAY METAL PRODUCTS**

NPL: FF: Ν OU: 0 Action Code: RV Action Name: **RMVL** SEQ:

1993-04-26 00:00:00 Start Date:

Finish Date: 4/26/1993

Qual:

Current Action Lead: EPA Perf

Region: Site ID: 203710 EPA ID: NYD002059202

Site Name: **ROCKAWAY METAL PRODUCTS**

NPL: Ν FF: Ν OU: 0 Action Code: BB Action Name: PRP RV SEQ:

Start Date: 1993-04-26 00:00:00

Finish Date: 4/21/1995 Qual:

Current Action Lead: EPA Ovrsght

2 Region: Site ID: 203710 EPA ID: NYD002059202

Site Name: **ROCKAWAY METAL PRODUCTS**

NPL: Ν FF: Ν OU: 0 Action Code: ВВ PRP RV Action Name: SEQ:

Start Date: 1992-11-09 00:00:00

Finish Date: 4/26/1993 Qual:

Current Action Lead: **EPA Ovrsght**

Region: 2 Site ID: 203710 NYD002059202 EPA ID:

Direction Distance

Elevation Site Database(s) EPA ID Number

ROCKAWAY METAL (Continued)

1000268052

EDR ID Number

Site Name: ROCKAWAY METAL PRODUCTS

 NPL:
 N

 FF:
 N

 OU:
 0

 Action Code:
 DS

 Action Name:
 DISCVRY

SEQ:

Start Date: 1992-06-17 00:00:00

Finish Date: 6/17/1992
Qual: Not reported
Current Action Lead: St Perf

SHWS:

Program: HW Site Code: 479943

Classification: Significant threat to the public health or environment - action

required.

 Region:
 1

 Acres:
 4.85

 HW Code:
 130164

 Record Add:
 03/20/2013

 Record Upd:
 03/10/2017

 Updated By:
 WJPARISH

Site Description:

Location: The 175 Roger Avenue site is located at 175 Roger Avenue, Inwood, Town of Hempstead, Nassau County. The Site is bordered to the north by Roger Avenue, with a parking lot (former Shell terminal) to the northwest, a gravel/soil recycling facility and Sony Pictures and Entertainment to the northeast. Further north is the Negro Bar Channel, a waterway to Jamaica Bay. South of the Site are residential properties, followed by Bayview Avenue. The Site is bordered to the east by Gates Avenue, followed by commercial buildings. Immediately west of the Site is a freight and cargo company. Site Features: The site consists of a 4.85 acre parcel of land that is developed with a 155,000 square foot one-story, warehouse building with a partial mezzanine. The remainder of the site consists of asphalt and concrete paved driveway/parking area with limited areas of grass. Current Zoning/Use(s): This site is currently zoned for commercial use in a primarily commercial and residential urban area. Historic Use(s) and Source(s): Historical site documentation indicates that the Site was built in three stages from 1954 through 1967. The Site was used as a Sheet Metal Fabrication factory since at least 1961. Rockaway Metal Products occupied the Site from approximately 1971 until circa 1987. In 1987, Rockaway Metal Products abandoned the Site and left hazardous waste materials improperly stored and disposed of on-Site. On June 15 and 16, 1992, the United States Environmental Protection Agency (USEPA) personnel conducted a site inspection and discovered the following: approximately 240 55-gallon deteriorated and leaking drums, a 5,000-gallon tanker trailer in poor condition, dry wells that appeared to contain sludge materials and USTs that contained potentially flammable liquids. To address the hazardous condition, the EPA conducted an Emergency Removal Action from August 1993 through April 1995. Approximately 240 55-gallon drums of waste materials were removed. The tanker trailer, one 1,000-gallon heating oil UST located in the southeast portion of the Site and UST piping/ dispenser systems were removed. Following the removal action, the Site was used as a warehouse by various tenants from 1990 through

Map ID Direction Distance Elevation

Site

MAP FINDINGS

Database(s)

ROCKAWAY METAL (Continued)

1000268052

EDR ID Number

EPA ID Number

2004, including Gunter Auto Shop, an auto repair shop. The Site was acquired by Nassau County Department of Real Estate in 1995 because of nonpayment of taxes and continues to own the Site. Since 2004 the site has remained vacant. The site building was damaged by a fire in February 2011 and has been condemned and needs to be demolished. Site Geology/Hydrogeology: The Site ground surface is approximately 10 feet above mean sea level. The Site is generally flat and has a gentle slope towards the northwest. The Site contains no areas classified as wetlands, and is covered with concrete, asphalt and surrounded by paved roadways and sidewalks. Depth to groundwater throughout the Site ranges from 4 to 6 feet bgs and appears to be tidally influenced. A groundwater divide appears to run through the center of the Site, with an apparent groundwater flow direction towards both the northwest and southeast. March 2013: The applicant, Expeditors International, has elected to terminate the Brownfield Cleanup Agreement and cease participating in the BCP. Termination letter was received from Applicant March 8, 2013. Central Office issued withdrawal acceptance letter March 19, 2013. Nassau County currently owns the property. February 2015: Expeditors International was onsidering buying the property from Nassau County. The Department's attorney assigned to the project was in negotiations with Expeditors regarding executing a Consent Order. February 2016: It appears Expeditors International's purchase of the property from Nassau County is on hold. February 2017: OGC has issued PRP letters to eight identified PRPs.

Env Problem:

Nature and Extent of Contamination: The primary contaminants of concern at the site at this time include petroleum hydrocarbons. chlorinated volatile organic compound (VOCs), semi-volatile organic compounds (SVOCs) and metals. The media impacted include soil, soil vapor and groundwater. Site Soils: Soil impacts appear to be limited to the area immediately surrounding the three abandoned USTs in the north central area of the site. Shallow soil samples were found to contain levels of VOCs, including 1,2,4-trimethylbenzene (870,000 micrograms per kilogram, ug/kg), 1,3,5-trimethylbenzene (390,000 ug/kg) and several petroleum related compounds above the commercial SCOs. Site dry wells have been impacted by selected metals, such as cadmium, chromium, lead and mercury. These compounds were detected above protection of groundwater SCOs. Groundwater: A petroleum hydrocarbon plume is centered along the northeast section of the Site and appears to extend off-site to the northwest and southeast at depths greater than 20 feet below ground surface (bgs). The plume appears to be emanating from the area of the abandoned USTs. A chlorinated VOC plume is widespread throughout the Site, with elevated levels of vinyl chloride (340 micrograms per Liter, ug/L), cis-1,2-dichloroethylene (6,400 ug/L), trichloroethylene (TCE) (6,100 ug/L) and tetrachloroethylene (PCE) (9,800 ug/L)in groundwater. The chlorinated VOC levels increase with depth throughout the Site. The plume appears to extend off-Site to the southeast and northwest. In addition, arsenic (29 ug/L), thallium (55 ug/L) and lead (69 ug/L), were identified in the Site groundwater at levels above the standards. Soil Vapor: Several VOCs, such as PCE and TCE, were measured in the soil vapor samples collected under the asphalt pavement outside of the site building. VOCs were also measured in sub-slab vapor samples collected beneath the existing Site building. PCE and TCE were detected in sub-slab soil vapor samples at levels ranging up to 4.300 micrograms per cubic meter (ug/m3) to 170 ug/m3. Additionally, acetone, 2-butanone (MEK), ethylbenzene,

Direction Distance Elevation

Site Database(s) EPA ID Number

ROCKAWAY METAL (Continued)

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4-ethyltoluene, toluene, 1,2,4- trimethylbenzene,

1,3,5-trimethylbenzene, m- and p-xylene, and o-xylene were detected in soil vapor samples. PCE and TCE were not detected in indoor air samples at levels above the New York State Department of Health (NYSDOH) Air Guidance Value (AGV). Based on an evaluation of the data collected as part of the site investigations, the existence of

shallow groundwater at the site (approximately 4 to 6 feet below grade) and the presence of several residential dwellings adjacent to the site property boundary, the Department, in concurrence with the NYSDOH, concluded that the 175 Roger Avenue site poses a significant threat to the environment and public health. Special Resources Impacted: No special resource impacts have occurred on-site. Contaminated groundwater appears to be migrating off-site towards

downgradient water bodies.

Health Problem: People are not drinking the contaminated groundwater because the area

is served by a public water supply that is not affected by this contamination. Since the site is fenced and covered by asphalt or concrete, people will not come into contact with site-related soil and groundwater contamination unless they dig below the surface. Volatile organic compounds in the groundwater or soil may move into the soil vapor (air spaces within the soil), which in turn may move into overlying buildings and affect the indoor air quality. This process, which is similar to the movement of radon gas from the subsurface into the indoor air of buildings, is referred to as soil vapor intrusion. Because the site is vacant, the inhalation of site-related contaminants due to soil vapor intrusion does not represent a concern for the site in its current condition. However, the potential exists for the inhalation of site contaminants due to soil vapor intrusion for any future on-site redevelopment and occupancy. The potential exists for inhalation of site-related contaminants in indoor air via soil vapor intrusion in adjacent off-site buildings.

Dump: False Structure: True Lagoon: False Landfill: False Pond: False Disp Start: Not reported Disp Term: Not reported Lat/Long: Not reported Dell: Not reported

Record Add: 3/20/2013 3:22:00 PM Record Upd: 4/10/2013 11:36:00 AM

Updated By: JCSHEEHA
Own Op: Owner
Sub Type: 01

Owner Name: Dept of Public Works - Division of Real Estate

Owner Company: Nassau County
Owner Address: 1 West Street
Owner Addr2: Room 200
Owner City,St,Zip: Mineola, NY 11501
Owner Country: United States of America

HW Code: 130164

Waste Type: tetrachloroethene (PCE)

Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: 130164

Direction Distance

Elevation Site Database(s) EPA ID Number

ROCKAWAY METAL (Continued)

1000268052

EDR ID Number

Waste Type: 1,1 Dichloroethene
Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: 130164

Waste Type: XYLENE (MIXED) Waste Quantity: UNKNOWN Not reported Waste Code: 130164 HW Code: Waste Type: **ARSENIC** Waste Quantity: UNKNOWN Waste Code: Not reported HW Code: 130164

ETHYLBENZENE Waste Type: Waste Quantity: UNKNOWN Waste Code: Not reported HW Code: 130164 Waste Type: LEAD UNKNOWN Waste Quantity: Waste Code: Not reported 130164 HW Code:

Waste Type: NAPHTHALENE Waste Quantity: UNKNOWN Waste Code: Not reported HW Code: 130164 Waste Type: **THALLIUM** Waste Quantity: UNKNOWN Waste Code: Not reported HW Code: 130164

Waste Type: TETRACHLOROETHYLENE (PCE)

UNKNOWN Waste Quantity: Not reported Waste Code: HW Code: 130164 Waste Type: **CADMIUM** Waste Quantity: **UNKNOWN** Waste Code: Not reported HW Code: 130164 **MERCURY** Waste Type: Waste Quantity: UNKNOWN Waste Code: Not reported HW Code: 130164

Waste Type: 1,2,4-TRIMETHYLBENZENE

Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: 130164

VINYL CHLORIDE Waste Type: Waste Quantity: UNKNOWN Waste Code: Not reported HW Code: 130164 Waste Type: **CHROMIUM** UNKNOWN Waste Quantity: Waste Code: Not reported HW Code: 130164 TOLUENE Waste Type: Waste Quantity: UNKNOWN Waste Code: Not reported HW Code: 130164

Waste Type: TRICHLOROETHENE (TCE)

Direction Distance Elevation

levation Site Database(s) EPA ID Number

ROCKAWAY METAL (Continued)

1000268052

EDR ID Number

Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: 130164

Waste Type: DICHLOROETHYLENE

Waste Quantity: UNKNOWN
Waste Code: Not reported
Crossref ID: Not reported
Cross Ref Type Code: Not reported
Cross Ref Type: Not reported
Record Added Date: Not reported
Record Updated: Not reported
Updated By: UNKNOWN
Not reported
Not reported

CBS UST:

Detail As of 1/1/2012:

Id/Status: 1-000460 / NO LONGER A MAJOR FACILITY

Facility Type: MANUFACTURING Facility Tel: (718) 897-0631

Total Tanks: 0
Region: STATE
ICS No: Not reported
PBS No: Not reported
MOSF No: Not reported
SPDES No: Not reported
Town: HEMPSTEAD

Operator: INWOOD ASSOCIATES

Emergency Contact: PT&L ENVIRONMENTAL CONSULTANTS

Emergency Contact Phone: (201) 262-4141 Certification Date: 04/28/1994 Expiration Date: 04/28/1996

Owner Name: ABRAHAM WOLDIBER
Owner Address: 98-11 QUEENS BOULEVARD
Owner City,St,Zip: REGO PARK, NY 11374

Owner Phone: (718) 897-0631

Owner Type: 5

Owner Subtype: Not reported

Mail To Name: PT&L ENVIRONMENTAL CONSULTANTS

Mail To Contact: MARC REMBISH
Mail To Address: 411 SETTE DRIVE
Mail To Address 2: Not reported
Mail To City, St, Zip: PARAMUS, NJ 07652

Mail To City,St,Zip: PARAMUS, NJ 07652 Mail To Telephone: (201) 262-4141

Tank Number: UST#003
Date Entered: 04/22/1994
Capacity: 1000
Chemical: m-Xylene
Tank Closed: 00/00

Tank Status: Temporarily Out Of Service

Tank Type: Steel/carbon steel

Install Date: 04/94 CAS No: 108383

Substance: More than one Hazardous Substance on DEC List

Tank Location: Outdoors, Belowground

Tank Internal: None
Tank External: NONE

Direction Distance

Elevation Site Database(s) EPA ID Number

ROCKAWAY METAL (Continued)

1000268052

EDR ID Number

Pipe Location: Underground Pipe Internal: None Pipe External: None Leak Detection: None Secondary Containmentt: None Overfill Protection: None Haz Percent: 100 Pipe Containment: None Pipe Type: STEEL/IRON Tank Error Status: No Missing Data

Tank Secret: False
Date Entered: 12:29:08
Last Test: Not reported
Due Date: Not reported
SWIS Code: 2820
Cert Flag: False

Cert Flag: False
Is it There: False
Is Updated: False
Owners Mark: First Owner
Lat/Long: 40|37|00 / 73|45|30
Renew Date: Not reported

Deliquent: False
Total Capacity: 0

Date Expired: Not reported
Case No: Not reported
Federal Amt: True

Pipe Flag: False
Reserve Flag: True

CBS:

CBS Number: 1-000460 Program Type: CBS

Facility Status: Unregulated/Closed
Expiration Date: Not reported

Dec Region:

UTMX: 605121.14166 UTMY: 4496813.91933

BROWNFIELDS:

BCP Program: Site Code: 456811 Acres: Not reported HW Code: C130164A SWIS: 3020 Town: Hempstead Record Added Date: 10/18/2011 Record Updated Date: 05/21/2018 Update By: **WJPARISH**

Site Description: Location: The off-site area of the 175 Roger Avenue LLC that requires investigation is the areas immediately North and south of the site.

Due to a groundwater divide that appears to run through the center of the Site, with an apparent groundwater flow direction towards both the northwest and southeast, to separate areas require evaluation. The areas are north of the Site along Roger Avenue and South of the site along Bayview Avenue in Inwood, Town of Hempstead, Nassau County. The areas include north by Roger Avenue in a parking lot

Map ID MAP FINDINGS
Direction

Distance
Elevation Site Database(s)

ROCKAWAY METAL (Continued)

1000268052

EDR ID Number

EPA ID Number

(former Shell terminal) to the northwest, a gravel/soil recycling facility and Sony Pictures and Entertainment to the northeast. Further north is the Negro Bar Channel, a waterway to Jamaica Bay. South of the Site are residential properties, followed by Bayview Avenue and additional residential and commercial properties. The Site is bordered to the east by Gates Avenue, followed by commercial buildings occupied by D. Daniels Sanitation and MGR Equipment Corporation. Immediately west of the Site is Expeditors, a freight and cargo company. Site Features: The off-site investigation area is comprised of approximately 10.0 acres of land that is developed with mixed residential and commercial properties. Current Zoning/Use(s): This off-site investigative area consists of primarily commercial and residential urban properties. Historic Use(s) and Source(s): Historical site documentation indicates that the off-site area to the north was occupied by a Shell petroium bulk storage area as well as several other bulk storage facilities. South of the site consists of residential and varied commercial operations. Site Geology/Hydrogeology: The Site ground surface is approximately 10 to 5 feet above mean sea level. The off-site area is generally flat and has a gentle slope towards Negro Bar Channel in the north and Motts cove to the south. Depth to groundwater throughout the area ranges

from 4 to 1 foot bgs and appears to be tidally influenced.

Env Problem: The environmental condition at the site is available. No data is

currently available regarding off site.

Health Problem: Information submitted with the BCP application regarding the conditions at the site are currently under review and will be revised

as additional information becomes available.

Dump: Not reported Structure: Not reported Not reported Lagoon: Landfill: Not reported Pond: Not reported Disp Start: Not reported Disp Term: Not reported Not reported Lat/Long: Not reported Dell: Record Add: Not reported Record Upd: Not reported Updated By: Not reported Own Op: Not reported Sub Type: Not reported Owner Name: Not reported Owner Company: Not reported Owner Address: Not reported Owner Addr2: Not reported Owner City, St, Zip: Not reported Owner Country: Not reported HW Code: Not reported Waste Type: Not reported Not reported Waste Quantity: Waste Code: Not reported Crossref ID: Not reported Cross Ref Type Code: Not reported Cross Ref Type: Not reported Record Added Date: Not reported Record Updated: Not reported Updated By: Not reported

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Map ID MAP FINDINGS
Direction

Distance EDR ID Number Elevation Site EDR ID Number Database(s) EPA ID Number

JCSHEEHA

ROCKAWAY METAL (Continued)

Update By:

Site Description:

1000268052

Program: **BCP** Site Code: 357019 4.85 Acres: HW Code: C130164 SWIS: 3020 Town: Hempstead 12/19/2005 Record Added Date: Record Updated Date: 05/02/2013

> Location: The 175 Roger Avenue LLC site is located at 175 Roger Avenue, Inwood, Town of Hempstead, Nassau County. The Site is bordered to the north by Roger Avenue, with a parking lot (former Shell terminal) to the northwest, a gravel/soil recycling facility and Sony Pictures and Entertainment to the northeast. Further north is the Negro Bar Channel, a waterway to Jamaica Bay. South of the Site are residential properties, followed by Bayview Avenue. The Site is bordered to the east by Gates Avenue, followed by commercial buildings occupied by D. Daniels Sanitation and MGR Equipment Corporation. Immediately west of the Site is Expeditors, a freight and cargo company. Site Features: The site consists of a 4.85 acre parcel of land that is developed with a 155,000 square foot one-story, warehouse building with a partial mezzanine. The remainder of the site consists of asphalt and concrete paved driveway/parking area with limited areas of grass. Current Zoning/Use(s): This site, which is currently zoned for commercial use, is located at the southwest corner of the intersection of Roger Avenue and Gates Avenue in a primarily commercial and residential urban area. Historic Use(s) and Source(s): Historical site documentation indicates that the Site was built in three stages from 1954 through 1967. The Site was used as a Sheet Metal Fabrication factory since at least 1961. Rockaway Metal Products occupied the Site from approximately 1971 until circa 1987. In 1987, Rockaway Metal Products abandoned the Site and left hazardous waste materials improperly stored and disposed of on-Site. On June 15 and 16, 1992, the United States Environmental Protection Agency (USEPA) personnel conducted a site inspection and discovered the following: approximately 235-240 55-gallon deteriorated and leaking drums, a 5,000-gallon tanker trailer in poor condition, dry wells that appeared to contain sludge materials and USTs that contained potentially flammable liquids. To address the hazardous condition, the EPA conducted an Emergency Removal Action from August 1993 through April 1995. Approximately 240 55-gallon drums of waste materials were removed. The tanker trailer, one 1,000-gallon heating oil UST located in the southeast portion of the Site and UST piping/ dispenser systems were removed. Following the removal action, the Site was used as a warehouse by various tenants from 1990 through 2004, including Gunter Auto Shop, an auto repair shop. The Site was acquired by Nassau County Department of Real Estate in 1995 because of nonpayment of taxes and continues to own the Site. Site Geology/Hydrogeology: The Site ground surface is approximately 10 feet above mean sea level. The Site is generally flat and has a gentle slope towards the northwest. The Site contains no areas classified as wetlands, and is covered with concrete, asphalt and surrounded by paved roadways and sidewalks. Depth to groundwater throughout the Site ranges from 4 to 6 feet bgs and appears to be tidally influenced. A groundwater divide appears to run through the center of the Site, with an apparent groundwater flow direction towards both the northwest and southeast. March 2013: The applicant,

Map ID Direction Distance Elevation

Site

MAP FINDINGS

Database(s)

ROCKAWAY METAL (Continued)

1000268052

Env Problem:

EDR ID Number

EPA ID Number

currently owns the property. Nature and Extent of Contamination: The primary contaminants of concern at the site at this time include petroleum hydrocarbons, chlorinated volatile organic compound (VOCs), semi-volatile organic compounds (SVOCs) and metals. The media impacted include soil, soil vapor and groundwater. Site Soils: Soil impacts appear to be limited to the area immediately surrounding the three abandoned USTs in the northcentral area of the site. Shallow soil samples were found to contain levels of VOCs, including 1,2,4-trimethylbenzene (870,000 micrograms per kilogram, ug/kg), 1,3,5-trimethylbenzene (390,000 ug/kg) and several petroleum related compounds above the commercial SCOs. Site dry wells have been impacted by selected metals, such as cadmium, chromium, lead and mercury. Those compounds were detected above protection of groundwater SCOs. Groundwater: A petroleum hydrocarbon plume appears to be centered along the northeast section of the Site and extends off-site to the northeast and southwest at depths greater than 20 feet below ground surface (bgs). The plume appears to be emanating from the area of the abandoned USTs. A chlorinated VOC plume is widespread throughout the Site, with elevated levels of vinyl chloride (340 micrograms per Liter, ug/L), cis-1,2-dichloroethylene (6,400 ug/L), trichloroethylene (TCE) (6,100 ug/L) and tetrachloroethylene (PCE) (9,800 ug/L)in groundwater. The chlorinated VOC levels increase with depth throughout the Site. The plume appears to extend off-Site to the southeast and northwest. In addition, arsenic (29 ug/L), thallium (55 ug/L) and lead (69 ug/L), were identified in the Site groundwater at levels above the standards. Soil Vapor: Several VOCs, such as PCE and TCE, were measured in the soil vapor samples collected under the asphalt pavement outside of the site building. VOCs were also measured in sub-slab vapor samples collected beneath the existing Site building. PCE and TCE were detected in sub-slab soil vapor samples at levels ranging up to 4,300 micrograms per cubic meter (ug/m3) to 170 ug/m3. Additionally, acetone, 2-butanone (MEK), ethylbenzene, 4-ethyltoluene, toluene, 1,2,4- trimethylbenzene, 1,3,5-trimethylbenzene, m- and p-xylene, and o-xylene were detected in soil vapor samples. PCE and TCE were not detected in indoor air samples at levels above the New York State Department of Health (NYSDOH) Air Guidance Value (AGV). Based on an evaluation of the data collected as part of the site investigations, the existence of

Expeditors International, has elected to terminate the Brownfield Cleanup Agreement and cease participating in the BCP. Termination letter was received from Applicant March 8, 2013. Central Office issued withdrawal acceptance letter March 19, 2013. Nassau County

People are not drinking the contaminated groundwater because the area is served by a public water supply that is not affected by this contamination. Since the site is fenced and covered by asphalt or concrete, people will not come into contact with site-related soil and groundwater contamination unless they dig below the surface. Volatile organic compounds in the groundwater or soil may move into the soil

shallow groundwater at the site (approximately 6 feet below grade) and the presence of several residential dwellings adjacent to the site property boundary, the Department, in concurrence with the NYSDOH, concluded that the 175 Roger Avenue site poses a positive significant threat to the environment and public health. Special Resources Impacted: No special resource impacts have occurred on-site. A groundwater plume appears to be migrating off-site towards

adjacent water bodies.

Health Problem:

Direction
Distance

Elevation Site Database(s) EPA ID Number

ROCKAWAY METAL (Continued)

1000268052

EDR ID Number

vapor (air spaces within the soil), which in turn may move into overlying buildings and affect the indoor air quality. This process, which is similar to the movement of radon gas from the subsurface into the indoor air of buildings, is referred to as soil vapor intrusion.

contaminants due to soil vapor intrusion does not represent a concern for the site in its current condition. However, the potential exists for the inhalation of site contaminants due to soil vapor intrusion for any future on-site redevelopment and occupancy. The potential exists for inhalation of site-related contaminants in indoor air via

soil vapor intrusion in adjacent off-site buildings.

Because the site is vacant, the inhalation of site-related

Dump: Not reported Structure: Not reported Lagoon: Not reported Landfill: Not reported Pond: Not reported Disp Start: Not reported Disp Term: Not reported Lat/Long: Not reported Dell: Not reported Record Add: Not reported Record Upd: Not reported Updated By: Not reported

Own Op: Document Repository

Sub Type: P03

Owner Name: Peninsula Public Library
Owner Company: Peninsula Public Library
Owner Address: 280 Central Avenue
Owner Addr2: Not reported

Owner City,St,Zip: Lawrence, NY 11559
Owner Country: United States of America

Own Op: Owner Sub Type: NNN

Owner Name: 175 ROGER AVENUE LLC
Owner Company: C/O CARGO VENTURES LLC 17

Owner Address: 17 STATE STREET
Owner Addr2: Not reported

Owner City,St,Zip:

Owner Country:

Own Op:

NEW YORK, NY 10004

United States of America

Applicant/Requestor

Sub Type: P03

Owner Name: 175 ROGER AVENUE LLC
Owner Company: C/O CARGO VENTURES LLC

Owner Address: 17 STATE STREET

Owner Addr2: Not reported Owner City,St,Zip: NY 10004

Owner Country: United States of America

HW Code: Not reported Waste Type: Not reported Waste Quantity: Not reported Waste Code: Not reported Crossref ID: Not reported Cross Ref Type Code: Not reported Cross Ref Type: Not reported Record Added Date: Not reported Record Updated: Not reported Updated By: Not reported

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

ROCKAWAY METAL (Continued)

1000268052

SPILLS:

1213527 Facility ID: Facility Type: ER Spill Number: 1213527 DER Facility ID: 296155 Site ID: 476714

DEC Region:

2012-12-14 Closed Date: Spill Cause: Unknown Spill Class: D5 SWIS: 3020 Spill Date: 2012-12-14 Investigator: Unassigned

MATERIALS MANAGEMENT Referred To:

Reported to Dept: 2012-12-14 CID: Not reported Water Affected: Not reported

Spill Source: Commercial/Industrial

Spill Notifier: Citizen Cleanup Ceased: Not reported Cleanup Meets Std: False Last Inspection: Not reported Recommended Penalty: False **UST Trust:** False Remediation Phase:

Date Entered In Computer: 2012-12-14 2013-04-27 Spill Record Last Update: Spiller Name: Not reported

Spiller Company: **CARTING COMPANY** Spiller Address: 175 ROGER AVENUE

Spiller Company: 999

Contact Name: **ANONYMOUS**

DEC Memo: "12/14/12 am: Checked the Remediation database- 175 Rogers has TWO

Superfund site numbers (C130164 for ONSITE contamination and C130164A for OFFSITE contamination; the project manager is John Sheehan). DR 12/14/12 am (A): Spoke to Sheehan- he said he believes there IS a

carter storing waste NEXT DOOR, AND THAT THE WASTE IS ENCROACHING ONTO 175. 12/14/12 am (B): THE PROPERTY OWNER FOR 175 IS NASSAU

COUNTY. DR 12/14/12 am: Spoke to Solid Waste to determine whether they had any knowledge of this property- was advised to speak to Ernie Lampro, but he was not in. DR 12/14/12 am: Spoke to the ECOs to determine whether they had been dispatched to the site- they had not.

DR"

Remarks: "The following information was received through the DEC website

> Report an Environmental Violation Online or sent directly by the complainant to an OPP dispatch mailbox: >>> 12/13/2012 9:38 PM >>> Toxic Dumping at abandoned empty factory facility. Believe the Address is: 75 Roger Avenue Inwood NY 11096 Property is Located on

The Southwest Corner of Roger Avenue & Gates Avenue Inwood 11096 From: Central Dispatch To: Wpop2002 Sent: Thu, Dec 13, 2012 10:57 pm Subject: Re: Report an environmental violation Thank you for your

email, Can you elaborate on toxic dumping? It would be helpful if you could provide as much information as possible. You may also contact our Statewide Dispatch Center at 1-877-457-5680 24 hours a day if you would like to speak to a dispatcher. Thank you, Dispatcher 28 New York State Department of Environmental Conservation Office of Public Protection Central Dispatch 1-800-457-5680 www.dec.ny.gov >>>

Direction Distance Elevation

levation Site Database(s) EPA ID Number

ROCKAWAY METAL (Continued)

1000268052

EDR ID Number

12/14/2012 8:09 AM >>> Carting Company across the Street is dumping and storing Dumpsters in abandoned Factory property which is a superfund site which is located at 175 Roger Avenue Inwood NY. Funny smell in the air. Water runoff in street has oil slick in it."

All Materials:

 Site ID:
 476714

 Operable Unit ID:
 1226539

 Operable Unit:
 01

 Material ID:
 2223806

 Material Code:
 0064A

Material Name: unknown material
Case No.: Not reported
Material FA: Other
Quantity: Not reported
Units: Not reported
Recovered: Not reported
Oxygenate: Not reported

 Facility ID:
 8908328

 Facility Type:
 ER

 Spill Number:
 8908328

 DER Facility ID:
 296155

 Site ID:
 243308

 DEC Region:
 1

Closed Date: 1995-02-08 Spill Cause: Housekeeping

Spill Class: B2 SWIS: 3020 Spill Date: 1989-11-20 Investigator: **KDGOERTZ** Referred To: Not reported 1989-11-21 Reported to Dept: CID: Not reported Not reported Water Affected:

Spill Source: Commercial/Industrial

Spill Notifier:

Cleanup Ceased:

Cleanup Meets Std:

Local Agency
1995-02-08

True

Last Inspection:

Recommended Penalty:

UST Trust:

Remediation Phase:

Local Agency
1995-02-08

True

False

Not reported

False

False

Date Entered In Computer: 1989-11-27
Spill Record Last Update: 2011-04-21
Spiller Name: ABE WOLDIGEL

Spiller Company: FORMER ROCKAWAY METALS

Spiller Address: 175 ROGER AVENUE

Spiller Company: 001

Contact Name: Not reported

DEC Memo: "DET:JOHN VANMAENAN 4TH SQUAD 374-4400 DA: BOB OWENS 535-2164 NCFM:

BOB BUESMAN"

Remarks: "SEVERAL ABANDONED DRUMS ON SITE LEAKING, SLOPPY HOUSEKEEPING. 3 S.D.

AFFECTED W/WASTE OIL (1/2 PRODUCT) 2 U/G STORAGE 1-XYLENE 1-NAPTHA"

All Materials:

Site ID: 243308

MAP FINDINGS Map ID

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

ROCKAWAY METAL (Continued)

1000268052

Operable Unit ID: 935739 Operable Unit: 01 Material ID: 445076 Material Code: 0022

Material Name: waste oil/used oil Case No.: Not reported Petroleum Material FA: Quantity: .00 Units: G Recovered: .00

Not reported Oxygenate:

Facility ID: 0504807 Facility Type: ER Spill Number: 0504807 DER Facility ID: 296155 Site ID: 349722 DEC Region:

Not reported Closed Date: Spill Cause: Other Spill Class: B3 SWIS: 3020 Spill Date: 2005-07-21 Investigator: **WJGABIN** Referred To: Not reported 2005-07-21 Reported to Dept: CID: 444

Water Affected: Not reported

Spill Source: Institutional, Educational, Gov., Other

Spill Notifier: Other Cleanup Ceased: Not reported Cleanup Meets Std: False Last Inspection: Not reported Recommended Penalty: False **UST Trust:** False Remediation Phase: Date Entered In Computer: 2005-07-21 Spill Record Last Update: 2005-07-22

Spiller Name: SHARRISSA Spiller Company: **COMMERCIAL SITE** Spiller Address: 175 ROGER AVE

Spiller Company: 001

Contact Name: **SHARRISSA**

"7/21 13:05 CALLED ATC, LEFT MESSAGE 7/21 15:35 SHARISSA CALLED, DEC Memo:

SOLVENTS, BTEX, METALS IN GW, VOC'S, METALS IN SOIL LONG ISLAND PARTY

RENTALS NOW, FORMERLY ROCKAWAY METALS, EPA HAD BEEN INVOLVED"

Remarks: "DURING SOIL TESTING FOUND CONTAMINATION:"

RCRA NonGen / NLR:

Date form received by agency: 01/01/2007

Facility name: ROCKAWAY METAL PRODUCTS CORP

Facility address: 175 ROGER AVE

INWOOD, NY 11096-1623

EPA ID: NYD002059202 Mailing address: ROGER AVE

INWOOD, NY 11696

MAP FINDINGS Map ID

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

ROCKAWAY METAL (Continued)

1000268052

Contact: Not reported ROGER AVE Contact address:

INWOOD, NY 11696

US Contact country:

Contact telephone: Not reported Contact email: Not reported EPA Region: 02

Land type: Private Classification: Non-Generator

Description: Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:

175 ROGER CORP C/O FRANKEL & HERSHKOWITZ Owner/operator name:

Owner/operator address: 16 E 34TH ST

NEW YORK, NY 10016

Owner/operator country: US

Owner/operator telephone: 718-897-0631 Owner/operator email: Not reported Owner/operator fax: Not reported Owner/operator extension: Not reported Private Legal status: Owner Owner/Operator Type: Owner/Op start date: Not reported Owner/Op end date: Not reported

Owner/operator name: 175 ROGER CORP C/O FRANKEL & HERSHKOWITZ

Owner/operator address: 16 E 34TH ST

NEW YORK, NY 10016

Owner/operator country: US

718-897-0631 Owner/operator telephone: Owner/operator email: Not reported Owner/operator fax: Not reported Owner/operator extension: Not reported Legal status: Private Operator Owner/Operator Type: Owner/Op start date: Not reported Owner/Op end date: Not reported

Handler Activities Summary:

U.S. importer of hazardous waste: Nο Mixed waste (haz. and radioactive): No Recycler of hazardous waste: No Transporter of hazardous waste: No Treater, storer or disposer of HW: No Underground injection activity: No On-site burner exemption: No Furnace exemption: No Used oil fuel burner: No Used oil processor: No User oil refiner: No Used oil fuel marketer to burner: No Used oil Specification marketer: No Used oil transfer facility: No Used oil transporter: No

Direction Distance Elevation

ation Site Database(s) EPA ID Number

ROCKAWAY METAL (Continued)

1000268052

EDR ID Number

Historical Generators:

Date form received by agency: 01/01/2006

Site name: ROCKAWAY METAL PRODUCTS CORP

Classification: Not a generator, verified

Date form received by agency: 07/08/1999

Site name: ROCKAWAY METAL PRODUCTS CORP

Classification: Not a generator, verified

Date form received by agency: 11/04/1993

Site name: ROCKAWAY METAL PRODUCTS CORP

Classification: Small Quantity Generator

. Waste code: D000 . Waste name: Not Defined

. Waste code: D001

. Waste name: IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF

LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT

WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.

Waste code: D008
Waste name: LEAD

. Waste code: F017
. Waste name: Not Defined

Facility Has Received Notices of Violations:

Regulation violated: Not reported

Area of violation: Generators - General

Date violation determined: 09/25/1984
Date achieved compliance: 03/29/1985
Violation lead agency: State

Enforcement action: WRITTEN INFORMAL

Enforcement action date: 02/13/1985
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Evaluation Action Summary:

Evaluation date: 09/25/1984

Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE

Area of violation: Generators - General

Date achieved compliance: 03/29/1985 Evaluation lead agency: State

PRP:

PRP name: 175 INWOOD ASSOCIATES

175 INWOOD ASSOCIATES

Direction Distance

Elevation Site Database(s) EPA ID Number

ROCKAWAY METAL (Continued)

1000268052

EDR ID Number

ABRAHAM TAUB ABRAHAM WOLDIGER PETER HOFFMAN

ICIS:

Enforcement Action ID: NY000A0000128200074700016

FRS ID: 110001984773

Action Name: ROCKAWAY METAL PRODUCTS CORP 360590020100016

Facility Name: ROCKAWAY METAL PRODUCTS CORP

Facility Address: 175 ROGER AVE INWOOD, NY 11696
Enforcement Action Type: Administrative Order

Facility County: NASSAU

Program System Acronym: AIR
Enforcement Action Forum Desc: Administrative - Formal

EA Type Code: SCAAAO
Facility SIC Code: 2542
Federal Facility ID: Not reported
Latitude in Decimal Degrees: 40.61557
Longitude in Decimal Degrees: -73.75811
Permit Type Desc: Not reported

Program System Acronym: NY0000001282000747

Facility NAICS Code: 337127
Tribal Land Code: Not reported

Enforcement Action ID: NY000A0000128200074700015

FRS ID: 110001984773

Action Name: ROCKAWAY METAL PRODUCTS CORP 360590020100015

Facility Name: ROCKAWAY METAL PRODUCTS CORP

Facility Address: 175 ROGER AVE INWOOD, NY 11696
Enforcement Action Type: Administrative Order

Facility County: NASSAU

Program System Acronym: AIR

Enforcement Action Forum Desc: Administrative - Formal

EA Type Code: SCAAAO
Facility SIC Code: 2542
Federal Facility ID: Not reported
Latitude in Decimal Degrees: 40.61557
Longitude in Decimal Degrees: -73.75811
Permit Type Desc: Not reported

Program System Acronym: NY0000001282000747

Facility NAICS Code: 337127
Tribal Land Code: Not reported

Enforcement Action ID: NY000A0000128200074700012

FRS ID: 110001984773

Action Name: ROCKAWAY METAL PRODUCTS CORP 360590020100012

Facility Name: ROCKAWAY METAL PRODUCTS CORP

Facility Address: 175 ROGER AVE INWOOD, NY 11696
Enforcement Action Type: Administrative Order

Facility County: NASSAU
Program System Acronym: AIR

Enforcement Action Forum Desc: Administrative - Formal

EA Type Code: SCAAAO Facility SIC Code: 2542

Direction Distance

Elevation Site Database(s) EPA ID Number

ROCKAWAY METAL (Continued)

1000268052

EDR ID Number

Federal Facility ID: Not reported Latitude in Decimal Degrees: 40.61557 Longitude in Decimal Degrees: -73.75811 Permit Type Desc: Not reported

Program System Acronym: NY0000001282000747

Facility NAICS Code: 337127
Tribal Land Code: Not reported

Enforcement Action ID: NY000A0000128200074700008

FRS ID: 110001984773

Action Name: ROCKAWAY METAL PRODUCTS CORP 360590020100008

Facility Name: ROCKAWAY METAL PRODUCTS CORP

Facility Address: 175 ROGER AVE INWOOD, NY 11696

Enforcement Action Type: Administrative Order

Facility County: NASSAU Program System Acronym: AIR

Enforcement Action Forum Desc: Administrative - Formal

EA Type Code: SCAAAO
Facility SIC Code: 2542
Federal Facility ID: Not reported
Latitude in Decimal Degrees: 40.61557
Longitude in Decimal Degrees: -73.75811
Permit Type Desc: Not reported

Program System Acronym: NY0000001282000747

Facility NAICS Code: 337127
Tribal Land Code: Not reported

Enforcement Action ID: NY000A0000128200074700002

FRS ID: 110001984773

Action Name: ROCKAWAY METAL PRODUCTS CORP 360590020100002

Facility Name: ROCKAWAY METAL PRODUCTS CORP

Facility Address: 175 ROGER AVE

INWOOD, NY 11696 Notice of Violation

Facility County: NASSAU Program System Acronym: AIR

Enforcement Action Type:

Enforcement Action Forum Desc: Administrative - Informal

EA Type Code: NOV
Facility SIC Code: 2542
Federal Facility ID: Not reported
Latitude in Decimal Degrees: 40.61557
Longitude in Decimal Degrees: -73.75811
Permit Type Desc: Not reported

Program System Acronym: NY0000001282000747

Facility NAICS Code: 337127
Tribal Land Code: Not reported

Enforcement Action ID: 02-1994-0194 FRS ID: 110001984773

Action Name: 175 INWOOD ASSOCIATES et al.

Facility Name: ROCKAWAY METAL Facility Address: 175 ROGER AVE INWOOD, NY 11096

Enforcement Action Type: Civil Judicial Action Facility County: NASSAU

Facility County: NASSAL Program System Acronym: ICIS

Direction Distance

Elevation Site Database(s) EPA ID Number

ROCKAWAY METAL (Continued)

1000268052

EDR ID Number

Enforcement Action Forum Desc: Judicial EA Type Code: CIV

Facility SIC Code: Not reported Federal Facility ID: Not reported Latitude in Decimal Degrees: 40.615521 Longitude in Decimal Degrees: -73.757299 Permit Type Desc: Not reported Program System Acronym: 8622 Facility NAICS Code: Not reported Tribal Land Code: Not reported

Enforcement Action ID: 02-1993-0072 FRS ID: 110001984773

Action Name: 175 INWOOD ASSOCIATES, ET AL.

Facility Name: ROCKAWAY METAL Facility Address: 175 ROGER AVE INWOOD, NY 11096

Enforcement Action Type: CERCLA 104E5A AO For Access And/Or Info

Facility County: NASSAU
Program System Acronym: ICIS

Enforcement Action Forum Desc: Administrative - Formal

EA Type Code: 104E5A Facility SIC Code: Not reported Federal Facility ID: Not reported Latitude in Decimal Degrees: 40.615521 -73.757299 Longitude in Decimal Degrees: Permit Type Desc: Not reported Program System Acronym: 8622 Facility NAICS Code: Not reported Tribal Land Code: Not reported

Enforcement Action ID: 02-1992-0269 FRS ID: 110001984773

Action Name: 175 INWOOD ASSOCIATES
Facility Name: ROCKAWAY METAL
Facility Address: 175 ROGER AVE

175 ROGER AVE INWOOD, NY 11096

Enforcement Action Type: CERCLA 106 AO For Resp Action/Imm Haz

Facility County: NASSAU Program System Acronym: ICIS

Enforcement Action Forum Desc: Administrative - Formal

EA Type Code: 106

Facility SIC Code:

Federal Facility ID:

Latitude in Decimal Degrees:

Longitude in Decimal Degrees:

Permit Type Desc:

Program System Acronym:

Not reported
40.615521
-73.757299
Not reported
8622

Facility NAICS Code: Not reported Tribal Land Code: Not reported

Facility Name: ROCKAWAY METAL PRODUCTS C

Address: 175 ROGER AVE

Tribal Indicator: N Fed Facility: No

NAIC Code: Not reported

MAP FINDINGS Map ID

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

ROCKAWAY METAL (Continued)

1000268052

SIC Code: Not reported

Facility Name: ROCKAWAY METAL PRODUCTS C

Address: 175 ROGER AVE

Tribal Indicator: Ν Fed Facility: No

NAIC Code: Not reported SIC Code: Not reported

Facility Name: ROCKAWAY METAL PRODUCTS C

175 ROGER AVE Address:

Tribal Indicator: Ν Fed Facility: No

NAIC Code: Not reported SIC Code: Not reported

ROCKAWAY METAL PRODUCTS C Facility Name:

Address: 175 ROGER AVE

Tribal Indicator: Ν Fed Facility: No

NAIC Code: Not reported SIC Code: Not reported

ROCKAWAY METAL PRODUCTS C Facility Name:

Address: 175 ROGER AVE

Tribal Indicator: Ν Fed Facility: No

NAIC Code: Not reported SIC Code: Not reported

Facility Name: ROCKAWAY METAL PRODUCTS C

Address: 175 ROGER AVE

Tribal Indicator: Fed Facility: No

NAIC Code: Not reported SIC Code: Not reported

ROCKAWAY METAL PRODUCTS C Facility Name:

Address: 175 ROGER AVE

Tribal Indicator: Ν Fed Facility: No

NAIC Code: Not reported SIC Code: Not reported

Facility Name: **ROCKAWAY METAL PRODUCTS C**

Address: 175 ROGER AVE

Tribal Indicator: Ν Fed Facility: No

NAIC Code: Not reported SIC Code: Not reported

ROCKAWAY METAL PRODUCTS C Facility Name:

175 ROGER AVE Address:

Tribal Indicator: Ν Fed Facility: No

NAIC Code: Not reported SIC Code: Not reported

Direction Distance

Elevation Site Database(s) EPA ID Number

ROCKAWAY METAL (Continued)

1000268052

EDR ID Number

US AIRS (AFS):

 Envid:
 1000268052

 Region Code:
 02

 County Code:
 NY059

Programmatic ID: AIR NY0000001282000747

Facility Registry ID: 110001984773
D and B Number: Not reported

Facility Site Name: ROCKAWAY METAL PRODUCTS CORP

Primary SIC Code: 2542

NAICS Code: 337127

Default Air Classification Code: SMI

Facility Type of Ownership Code: POF

Air CMS Category Code: Not reported

HPV Status: Not reported

US AIRS (AFS):

Region Code: 02

Programmatic ID: AIR NY0000001282000747

Facility Registry ID: 110001984773

Air Operating Status Code: OPR
Default Air Classification Code: SMI

Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards

Activity Date: 1984-01-12 00:00:00

Activity Status Date: Not reported

Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation

Activity Status: Not reported

Region Code: 02

Programmatic ID: AIR NY0000001282000747

Facility Registry ID: 110001984773

Air Operating Status Code: OPR
Default Air Classification Code: SMI

Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards

Activity Date: 1984-07-20 00:00:00

Activity Status Date: Not reported

Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation

Activity Status: Not reported

Region Code: 02

Programmatic ID: AIR NY0000001282000747

Facility Registry ID: 110001984773

Air Operating Status Code: OPR Default Air Classification Code: SMI

Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards

Activity Date: 1985-05-15 00:00:00

Activity Status Date: Not reported

Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation

Activity Status: Not reported

Region Code: 02

Programmatic ID: AIR NY0000001282000747

Facility Registry ID: 110001984773

Air Operating Status Code: OPR
Default Air Classification Code: SMI

Direction Distance

Elevation Site Database(s) EPA ID Number

ROCKAWAY METAL (Continued)

1000268052

EDR ID Number

Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards

Activity Date: 1986-04-14 00:00:00
Activity Status Date: Not reported

Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation

Activity Status: Not reported

Region Code: 02

Programmatic ID: AIR NY0000001282000747

Facility Registry ID: 110001984773

Air Operating Status Code: OPR
Default Air Classification Code: SMI

Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards

Activity Date: 1987-04-13 00:00:00

Activity Status Date: Not reported

Activity Group: Compliance Monitoring Activity Type: Inspection/Evaluation

Activity Status: Not reported

Region Code: 02

Programmatic ID: AIR NY0000001282000747

Facility Registry ID: 110001984773
Air Operating Status Code: OPR

Default Air Classification Code: SMI

Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards

Activity Date: 1988-04-20 00:00:00

Activity Status Date: Not reported

Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation

Activity Status: Not reported

Region Code: 02

Programmatic ID: AIR NY0000001282000747

Facility Registry ID: 110001984773

Air Operating Status Code: OPR Default Air Classification Code: SMI

Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards

Activity Date: 1988-04-22 00:00:00

Activity Status Date: Not reported

Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation

Activity Status: Not reported

Region Code: 02

Programmatic ID: AIR NY0000001282000747

Facility Registry ID: 110001984773
Air Operating Status Code: OPR

Default Air Classification Code: SMI

Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards

Activity Date: 1989-05-19 00:00:00

Activity Status Date: Not reported

Activity Group: Compliance Monitoring Activity Type: Inspection/Evaluation

Activity Status: Not reported

Region Code: 02

Programmatic ID: AIR NY0000001282000747

Direction Distance

Elevation Site Database(s) EPA ID Number

ROCKAWAY METAL (Continued)

1000268052

EDR ID Number

Facility Registry ID: 110001984773

Air Operating Status Code: OPR
Default Air Classification Code: SMI

Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards

Activity Date: 1984-05-10 00:00:00
Activity Status Date: 1984-05-10 00:00:00
Activity Group: Enforcement Action
Activity Type: Administrative - Formal
Activity Status: Final Order Issued

Region Code: 02

Programmatic ID: AIR NY0000001282000747

Facility Registry ID: 110001984773

Air Operating Status Code: OPR Default Air Classification Code: SMI

Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards

Activity Date: 1985-05-15 00:00:00
Activity Status Date: 1985-05-15 00:00:00
Activity Group: Enforcement Action
Activity Type: Administrative - Formal
Activity Status: Final Order Issued

Region Code: 02

Programmatic ID: AIR NY0000001282000747

Facility Registry ID: 110001984773

Air Operating Status Code: OPR Default Air Classification Code: SMI

Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards

Activity Date: 1986-04-14 00:00:00
Activity Status Date: 1986-04-14 00:00:00
Activity Group: Enforcement Action
Activity Type: Administrative - Formal
Activity Status: Final Order Issued

Region Code: 02

Programmatic ID: AIR NY0000001282000747

Facility Registry ID: 110001984773

Air Operating Status Code: OPR Default Air Classification Code: SMI

Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards

Activity Date: 1984-01-12 00:00:00
Activity Status Date: 1984-01-12 00:00:00
Activity Group: Enforcement Action
Activity Type: Administrative - Informal

Activity Status: Achieved

FINDS:

Registry ID: 110001984773

Environmental Interest/Information System

AFS (Aerometric Information Retrieval System (AIRS) Facility Subsystem) replaces the former Compliance Data System (CDS), the National Emission Data System (NEDS), and the Storage and Retrieval of Aerometric Data (SAROAD). AIRS is the national repository for information concerning airborne pollution in the United States. AFS is

Direction Distance Elevation

Site Database(s) EPA ID Number

ROCKAWAY METAL (Continued)

1000268052

EDR ID Number

used to track emissions and compliance data from industrial plants. AFS data are utilized by states to prepare State Implementation Plans to comply with regulatory programs and by EPA as an input for the estimation of total national emissions. AFS is undergoing a major redesign to support facility operating permits required under Title V of the Clean Air Act.

AIR SYNTHETIC MINOR

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

SUPERFUND (NON-NPL)

ICIS (Integrated Compliance Information System) is the Integrated Compliance Information System and provides a database that, when complete, will contain integrated Enforcement and Compliance information across most of EPA's programs. The vision for ICIS is to replace EPA's independent databases that contain Enforcement data with a single repository for that information. Currently, ICIS contains all Federal Administrative and Judicial enforcement actions. This information is maintained in ICIS by EPA in the Regional offices and it Headquarters. A future release of ICIS will replace the Permit Compliance System (PCS) which supports the NPDES and will integrate that information with Federal actions already in the system. ICIS also has the capability to track other activities occurring in the Region that support Compliance and Enforcement programs. These include; Incident Tracking, Compliance Assistance, and Compliance Monitoring.

<u>Click this hyperlink</u> while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:

Envid: 1000268052 Registry ID: 110001984773

DFR URL: http://echo.epa.gov/detailed-facility-report?fid=110001984773

NY MANIFEST:

Country: USA

EPA ID: NYD002059202
Facility Status: Not reported

Location Address 1: 175 ROGER AVENUE

Code: BP

Location Address 2: Not reported
Total Tanks: Not reported
Location City: INWOOD
Location State: NY
Location Zip: 11696
Location Zip 4: Not reported

NY MANIFEST:

EPAID: NYD002059202

Direction Distance Elevation

stance EDR ID Number evation Site Database(s) EPA ID Number

ROCKAWAY METAL (Continued)

1000268052

Mailing Name: ROCKAWAY METAL PRODUCTS CORP
Mailing Contact: MACALUSO JOSEPH PLANT MAN

Mailing Address 1: 175 ROGER AVENUE

Mailing Address 2: Not reported
Mailing City: INWOOD
Mailing State: NY
Mailing Zip: 11696
Mailing Zip 4: Not reported
Mailing Country: USA

Mailing Phone: 212GR11100

NY MANIFEST:

Document ID: NJA2265513

Manifest Status: C

 seq:
 Not reported

 Year:
 1996

 Trans1 State ID:
 \$5811

 Trans2 State ID:
 Not reported

 Generator Ship Date:
 01/31/1996

 Trans1 Recv Date:
 01/31/1996

Trans2 Recv Date: / /

TSD Site Recy Date: 01/31/1996 Part A Recv Date: 02/16/1996 02/12/1996 Part B Recv Date: NYD002059202 Generator EPA ID: Trans1 EPA ID: NJ0000027193 Trans2 EPA ID: Not reported TSDF ID 1: NJD002200046 TSDF ID 2: Not reported Manifest Tracking Number: Not reported Not reported Import Indicator: **Export Indicator:** Not reported Discr Quantity Indicator: Not reported Discr Type Indicator: Not reported Discr Residue Indicator: Not reported Discr Partial Reject Indicator: Not reported Discr Full Reject Indicator: Not reported Manifest Ref Number: Not reported Alt Facility RCRA ID: Not reported Alt Facility Sign Date: Not reported MGMT Method Type Code: Not reported Waste Code: F003 - UNKNOWN Waste Code: Not reported Waste Code: Not reported Waste Code: Not reported

Quantity: 00055
Units: G - Gallons (liquids only)* (8.3 pounds)
Number of Containers: 001

Not reported

Not reported

Container Type: DM - Metal drums, barrels

Handling Method: B Incineration, heat recovery, burning.

Specific Gravity: 100

Waste Code:

Waste Code:

Waste Code: F001 - UNKNOWN
Waste Code: Not reported
Waste Code: Not reported
Waste Code: Not reported

Map ID MAP FINDINGS Direction

Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

ROCKAWAY METAL (Continued)

1000268052

Waste Code: Not reported 00055 Quantity:

Units: G - Gallons (liquids only)* (8.3 pounds)

Number of Containers:

Container Type: DM - Metal drums, barrels

Handling Method: B Incineration, heat recovery, burning.

Specific Gravity: 100

Click this hyperlink while viewing on your computer to access

-1 additional NY MANIFEST: record(s) in the EDR Site Report.

Count: 3 records. ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
FAR ROCKAWAY	S112818540	34-11 BEACH CHANNEL DRIVE	34-11 BEACH & FAR ROCKAWAY BLV	11691	NY ENG CONTROLS, NY INST CONTROL, NY BROWNFIELDS
FAR ROCKAWAY INWOOD		FAR ROCKAWAY MGP FAR ROCKAWAY (INWOOD) F03 (LIRR)	1300 BLOCK OF BRUNSWICK AVE REDFERN AVENUE		NY VCP, NY BROWNFIELDS NY VCP

To maintain currency of the following federal and state databases, EDR contacts the appropriate governmental agency on a monthly or quarterly basis, as required.

Number of Days to Update: Provides confirmation that EDR is reporting records that have been updated within 90 days from the date the government agency made the information available to the public.

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

NPL: National Priority List

National Priorities List (Superfund). The NPL is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund Program. NPL sites may encompass relatively large areas. As such, EDR provides polygon coverage for over 1,000 NPL site boundaries produced by EPA's Environmental Photographic Interpretation Center (EPIC) and regional EPA offices.

Date of Government Version: 07/17/2018 Source: EPA Telephone: N/A Date Data Arrived at EDR: 08/09/2018

Last EDR Contact: 10/04/2018 Date Made Active in Reports: 09/07/2018

Number of Days to Update: 29 Next Scheduled EDR Contact: 01/14/2019 Data Release Frequency: Quarterly

NPL Site Boundaries

EPA's Environmental Photographic Interpretation Center (EPIC)

Telephone: 202-564-7333

EPA Region 1 EPA Region 6

Telephone 617-918-1143 Telephone: 214-655-6659

EPA Region 3 EPA Region 7

Telephone 215-814-5418 Telephone: 913-551-7247

EPA Region 4 **EPA Region 8**

Telephone 404-562-8033 Telephone: 303-312-6774

EPA Region 5 EPA Region 9

Telephone 312-886-6686 Telephone: 415-947-4246

EPA Region 10

Telephone 206-553-8665

Proposed NPL: Proposed National Priority List Sites

A site that has been proposed for listing on the National Priorities List through the issuance of a proposed rule in the Federal Register. EPA then accepts public comments on the site, responds to the comments, and places on the NPL those sites that continue to meet the requirements for listing.

Date of Government Version: 07/17/2018 Date Data Arrived at EDR: 08/09/2018

Date Made Active in Reports: 09/07/2018

Number of Days to Update: 29

Source: EPA Telephone: N/A

Last EDR Contact: 10/04/2018

Next Scheduled EDR Contact: 01/14/2019 Data Release Frequency: Quarterly

NPL LIENS: Federal Superfund Liens

Federal Superfund Liens. Under the authority granted the USEPA by CERCLA of 1980, the USEPA has the authority to file liens against real property in order to recover remedial action expenditures or when the property owner received notification of potential liability. USEPA compiles a listing of filed notices of Superfund Liens.

Date of Government Version: 10/15/1991 Date Data Arrived at EDR: 02/02/1994 Date Made Active in Reports: 03/30/1994

Number of Days to Update: 56

Source: EPA

Telephone: 202-564-4267 Last EDR Contact: 08/15/2011

Next Scheduled EDR Contact: 11/28/2011 Data Release Frequency: No Update Planned

Federal Delisted NPL site list

Delisted NPL: National Priority List Deletions

The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL where no further response is appropriate.

Date of Government Version: 07/17/2018 Date Data Arrived at EDR: 08/09/2018 Date Made Active in Reports: 09/07/2018

Number of Days to Update: 29

Source: EPA Telephone: N/A

Last EDR Contact: 10/04/2018

Next Scheduled EDR Contact: 01/14/2019 Data Release Frequency: Quarterly

Federal CERCLIS list

FEDERAL FACILITY: Federal Facility Site Information listing

A listing of National Priority List (NPL) and Base Realignment and Closure (BRAC) sites found in the Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) Database where EPA Federal Facilities Restoration and Reuse Office is involved in cleanup activities.

Date of Government Version: 11/07/2016 Date Data Arrived at EDR: 01/05/2017 Date Made Active in Reports: 04/07/2017

Number of Days to Update: 92

Source: Environmental Protection Agency Telephone: 703-603-8704

Last EDR Contact: 07/06/2018 Next Scheduled EDR Contact: 10/15/2018

Data Release Frequency: Varies

SEMS: Superfund Enterprise Management System

SEMS (Superfund Enterprise Management System) tracks hazardous waste sites, potentially hazardous waste sites, and remedial activities performed in support of EPA's Superfund Program across the United States. The list was formerly know as CERCLIS, renamed to SEMS by the EPA in 2015. The list contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). This dataset also contains sites which are either proposed to or on the National Priorities List (NPL) and the sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 07/17/2018 Date Data Arrived at EDR: 08/09/2018 Date Made Active in Reports: 09/07/2018

Number of Days to Update: 29

Source: EPA Telephone: 800-424-9346 Last EDR Contact: 10/04/2018

Next Scheduled EDR Contact: 01/28/2019 Data Release Frequency: Quarterly

Federal CERCLIS NFRAP site list

SEMS-ARCHIVE: Superfund Enterprise Management System Archive

SEMS-ARCHIVE (Superfund Enterprise Management System Archive) tracks sites that have no further interest under the Federal Superfund Program based on available information. The list was formerly known as the CERCLIS-NFRAP, renamed to SEMS ARCHIVE by the EPA in 2015. EPA may perform a minimal level of assessment work at a site while it is archived if site conditions change and/or new information becomes available. Archived sites have been removed and archived from the inventory of SEMS sites. Archived status indicates that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list the site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. The decision does not necessarily mean that there is no hazard associated with a given site; it only means that based upon available information, the location is not judged to be potential NPL site.

Date of Government Version: 07/17/2018 Date Data Arrived at EDR: 08/09/2018 Date Made Active in Reports: 09/07/2018

Number of Days to Update: 29

Source: EPA

Telephone: 800-424-9346 Last EDR Contact: 10/04/2018

Next Scheduled EDR Contact: 01/28/2019 Data Release Frequency: Quarterly

Federal RCRA CORRACTS facilities list

CORRACTS: Corrective Action Report

CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

Date of Government Version: 03/01/2018 Date Data Arrived at EDR: 03/28/2018 Date Made Active in Reports: 06/22/2018

Number of Days to Update: 86

Source: EPA

Telephone: 800-424-9346 Last EDR Contact: 09/19/2018

Next Scheduled EDR Contact: 01/07/2019 Data Release Frequency: Quarterly

Federal RCRA non-CORRACTS TSD facilities list

RCRA-TSDF: RCRA - Treatment, Storage and Disposal

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Transporters are individuals or entities that move hazardous waste from the generator offsite to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.

Date of Government Version: 03/01/2018 Date Data Arrived at EDR: 03/28/2018 Date Made Active in Reports: 06/22/2018

Number of Days to Update: 86

Source: Environmental Protection Agency

Telephone: (212) 637-3660 Last EDR Contact: 09/19/2018

Next Scheduled EDR Contact: 01/07/2019 Data Release Frequency: Quarterly

Federal RCRA generators list

RCRA-LQG: RCRA - Large Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Large quantity generators (LQGs) generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month.

Date of Government Version: 03/01/2018 Date Data Arrived at EDR: 03/28/2018 Date Made Active in Reports: 06/22/2018

Number of Days to Update: 86

Source: Environmental Protection Agency Telephone: (212) 637-3660

Last EDR Contact: 09/19/2018

Next Scheduled EDR Contact: 01/07/2019 Data Release Frequency: Quarterly

RCRA-SQG: RCRA - Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

Date of Government Version: 03/01/2018 Date Data Arrived at EDR: 03/28/2018 Date Made Active in Reports: 06/22/2018

Number of Days to Update: 86

Source: Environmental Protection Agency

Telephone: (212) 637-3660 Last EDR Contact: 09/19/2018

Next Scheduled EDR Contact: 01/07/2019
Data Release Frequency: Quarterly

RCRA-CESQG: RCRA - Conditionally Exempt Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Conditionally exempt small quantity generators (CESQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.

Date of Government Version: 03/01/2018 Date Data Arrived at EDR: 03/28/2018 Date Made Active in Reports: 06/22/2018

Number of Days to Update: 86

Source: Environmental Protection Agency

Telephone: (212) 637-3660 Last EDR Contact: 09/19/2018

Next Scheduled EDR Contact: 01/07/2019 Data Release Frequency: Quarterly

Federal institutional controls / engineering controls registries

LUCIS: Land Use Control Information System

LUCIS contains records of land use control information pertaining to the former Navy Base Realignment and Closure properties.

Date of Government Version: 05/14/2018 Date Data Arrived at EDR: 05/18/2018 Date Made Active in Reports: 07/20/2018

Number of Days to Update: 63

Source: Department of the Navy Telephone: 843-820-7326 Last EDR Contact: 07/16/2018

Next Scheduled EDR Contact: 11/26/2018 Data Release Frequency: Varies

US ENG CONTROLS: Engineering Controls Sites List

A listing of sites with engineering controls in place. Engineering controls include various forms of caps, building foundations, liners, and treatment methods to create pathway elimination for regulated substances to enter environmental media or effect human health.

Date of Government Version: 07/31/2018 Date Data Arrived at EDR: 08/28/2018 Date Made Active in Reports: 09/14/2018

Number of Days to Update: 17

Source: Environmental Protection Agency

Telephone: 703-603-0695 Last EDR Contact: 08/28/2018

Next Scheduled EDR Contact: 12/10/2018 Data Release Frequency: Varies

US INST CONTROL: Sites with Institutional Controls

A listing of sites with institutional controls in place. Institutional controls include administrative measures, such as groundwater use restrictions, construction restrictions, property use restrictions, and post remediation care requirements intended to prevent exposure to contaminants remaining on site. Deed restrictions are generally required as part of the institutional controls.

Date of Government Version: 07/31/2018 Date Data Arrived at EDR: 08/28/2018 Date Made Active in Reports: 09/14/2018

Number of Days to Update: 17

Source: Environmental Protection Agency

Telephone: 703-603-0695 Last EDR Contact: 08/28/2018

Next Scheduled EDR Contact: 12/10/2018

Data Release Frequency: Varies

Federal ERNS list

ERNS: Emergency Response Notification System

Emergency Response Notification System. ERNS records and stores information on reported releases of oil and hazardous

substances.

Date of Government Version: 06/18/2018 Date Data Arrived at EDR: 06/27/2018 Date Made Active in Reports: 09/14/2018

Number of Days to Update: 79

Source: National Response Center, United States Coast Guard

Telephone: 202-267-2180 Last EDR Contact: 09/25/2018

Next Scheduled EDR Contact: 01/07/2019 Data Release Frequency: Quarterly

State- and tribal - equivalent CERCLIS

SHWS: Inactive Hazardous Waste Disposal Sites in New York State

Referred to as the State Superfund Program, the Inactive Hazardous Waste Disposal Site Remedial Program is the cleanup program for inactive hazardous waste sites and now includes hazardous substance sites

Date of Government Version: 08/09/2018 Date Data Arrived at EDR: 08/10/2018 Date Made Active in Reports: 08/30/2018

Number of Days to Update: 20

Source: Department of Environmental Conservation

Telephone: 518-402-9622 Last EDR Contact: 08/10/2018

Next Scheduled EDR Contact: 11/26/2018 Data Release Frequency: Annually

State and tribal landfill and/or solid waste disposal site lists

SWF/LF: Facility Register

Solid Waste Facilities/Landfill Sites. SWF/LF type records typically contain an inventory of solid waste disposal facilities or landfills in a particular state. Depending on the state, these may be active or inactive facilities or open dumps that failed to meet RCRA Subtitle D Section 4004 criteria for solid waste landfills or disposal sites.

Date of Government Version: 12/08/2017 Date Data Arrived at EDR: 01/02/2018 Date Made Active in Reports: 01/31/2018

Number of Days to Update: 29

Source: Department of Environmental Conservation

Telephone: 518-457-2051 Last EDR Contact: 07/06/2018

Next Scheduled EDR Contact: 10/15/2018 Data Release Frequency: Quarterly

State and tribal leaking storage tank lists

INDIAN LUST R10: Leaking Underground Storage Tanks on Indian Land LUSTs on Indian land in Alaska, Idaho, Oregon and Washington.

Date of Government Version: 04/12/2018 Date Data Arrived at EDR: 05/18/2018 Date Made Active in Reports: 07/20/2018

Number of Days to Update: 63

Source: EPA Region 10 Telephone: 206-553-2857 Last EDR Contact: 10/26/2018

Next Scheduled EDR Contact: 02/04/2019 Data Release Frequency: Varies

INDIAN LUST R9: Leaking Underground Storage Tanks on Indian Land LUSTs on Indian land in Arizona, California, New Mexico and Nevada

Date of Government Version: 04/10/2018 Date Data Arrived at EDR: 05/18/2018 Date Made Active in Reports: 07/20/2018

Number of Days to Update: 63

Source: Environmental Protection Agency

Telephone: 415-972-3372 Last EDR Contact: 10/26/2018

Next Scheduled EDR Contact: 02/04/2019 Data Release Frequency: Varies

INDIAN LUST R8: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Colorado, Montana, North Dakota, South Dakota, Utah and Wyoming.

Date of Government Version: 04/25/2018 Date Data Arrived at EDR: 05/18/2018 Date Made Active in Reports: 07/20/2018

Number of Days to Update: 63

Source: EPA Region 8 Telephone: 303-312-6271 Last EDR Contact: 10/26/2018

Next Scheduled EDR Contact: 02/04/2019 Data Release Frequency: Varies

INDIAN LUST R7: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Iowa, Kansas, and Nebraska

Date of Government Version: 04/24/2018 Date Data Arrived at EDR: 05/18/2018 Date Made Active in Reports: 07/20/2018

Number of Days to Update: 63

Source: EPA Region 7 Telephone: 913-551-7003 Last EDR Contact: 10/26/2018

Next Scheduled EDR Contact: 02/04/2019 Data Release Frequency: Varies

INDIAN LUST R6: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in New Mexico and Oklahoma.

Date of Government Version: 04/01/2018 Date Data Arrived at EDR: 05/18/2018 Date Made Active in Reports: 07/20/2018

Number of Days to Update: 63

Source: EPA Region 6 Telephone: 214-665-6597 Last EDR Contact: 10/26/2018

Next Scheduled EDR Contact: 02/04/2019 Data Release Frequency: Varies

INDIAN LUST R5: Leaking Underground Storage Tanks on Indian Land

Leaking underground storage tanks located on Indian Land in Michigan, Minnesota and Wisconsin.

Date of Government Version: 04/12/2018 Date Data Arrived at EDR: 05/18/2018 Date Made Active in Reports: 07/20/2018

Number of Days to Update: 63

Source: EPA, Region 5 Telephone: 312-886-7439 Last EDR Contact: 10/26/2018

Next Scheduled EDR Contact: 02/04/2019 Data Release Frequency: Varies

INDIAN LUST R1: Leaking Underground Storage Tanks on Indian Land
A listing of leaking underground storage tank locations on Indian Land.

Date of Government Version: 04/13/2018 Date Data Arrived at EDR: 05/18/2018 Date Made Active in Reports: 07/20/2018

Number of Days to Update: 63

Source: EPA Region 1 Telephone: 617-918-1313 Last EDR Contact: 10/26/2018

Next Scheduled EDR Contact: 02/04/2019 Data Release Frequency: Varies

INDIAN LUST R4: Leaking Underground Storage Tanks on Indian Land LUSTs on Indian land in Florida, Mississippi and North Carolina.

Date of Government Version: 05/08/2018 Date Data Arrived at EDR: 05/18/2018 Date Made Active in Reports: 07/20/2018

Number of Days to Update: 63

Source: EPA Region 4 Telephone: 404-562-8677 Last EDR Contact: 10/26/2018

Next Scheduled EDR Contact: 02/04/2019 Data Release Frequency: Varies

LTANKS: Spills Information Database

Leaking Storage Tank Incident Reports. These records contain an inventory of reported leaking storage tank incidents reported from 4/1/86 through the most recent update. They can be either leaking underground storage tanks or leaking aboveground storage tanks. The causes of the incidents are tank test failures, tank failures or tank overfills.

Date of Government Version: 10/16/2018 Date Data Arrived at EDR: 10/16/2018 Date Made Active in Reports: 10/22/2018

Number of Days to Update: 6

Source: Department of Environmental Conservation

Telephone: 518-402-9549 Last EDR Contact: 10/16/2018

Next Scheduled EDR Contact: 11/26/2018 Data Release Frequency: Varies

HIST LTANKS: Listing of Leaking Storage Tanks

A listing of leaking underground and aboveground storage tanks. The causes of the incidents are tank test failures, tank failures or tank overfills. In 2002, the Department of Environmental Conservation stopped providing updates to its original Spills Information Database. This database includes fields that are no longer available from the NYDEC as of January 1, 2002. Current information may be found in the NY LTANKS database. Department of Environmental Conservation.

Date of Government Version: 01/01/2002 Date Data Arrived at EDR: 07/08/2005 Date Made Active in Reports: 07/14/2005

Number of Days to Update: 6

Source: Department of Environmental Conservation

Telephone: 518-402-9549 Last EDR Contact: 07/07/2005 Next Scheduled EDR Contact: N/A

Data Release Frequency: No Update Planned

State and tribal registered storage tank lists

FEMA UST: Underground Storage Tank Listing

A listing of all FEMA owned underground storage tanks.

Date of Government Version: 05/15/2017 Date Data Arrived at EDR: 05/30/2017 Date Made Active in Reports: 10/13/2017

Number of Days to Update: 136

Source: FEMA

Telephone: 202-646-5797 Last EDR Contact: 10/10/2018

Next Scheduled EDR Contact: 01/21/2019 Data Release Frequency: Varies

UST: Petroleum Bulk Storage (PBS) Database

Facilities that have petroleum storage capacities in excess of 1,100 gallons and less than 400,000 gallons.

Date of Government Version: 09/25/2018 Date Data Arrived at EDR: 09/26/2018 Date Made Active in Reports: 10/12/2018

Number of Days to Update: 16

Source: Department of Environmental Conservation

Telephone: 518-402-9549 Last EDR Contact: 09/26/2018

Next Scheduled EDR Contact: 01/07/2019 Data Release Frequency: No Update Planned

CBS UST: Chemical Bulk Storage Database

Facilities that store regulated hazardous substances in underground tanks of any size

Date of Government Version: 01/01/2002 Date Data Arrived at EDR: 02/20/2002 Date Made Active in Reports: 03/22/2002

Number of Days to Update: 30

Source: NYSDEC Telephone: 518-402-9549 Last EDR Contact: 10/24/2005

Next Scheduled EDR Contact: 01/23/2006 Data Release Frequency: No Update Planned

MOSF UST: Major Oil Storage Facilities Database

Facilities that may be onshore facilities or vessels, with petroleum storage capacities of 400,000 gallons or greater.

Date of Government Version: 01/01/2002 Date Data Arrived at EDR: 02/20/2002 Date Made Active in Reports: 03/22/2002

Number of Days to Update: 30

Source: NYSDEC Telephone: 518-402-9549 Last EDR Contact: 07/25/2005

Next Scheduled EDR Contact: 10/24/2005 Data Release Frequency: No Update Planned

MOSF: Major Oil Storage Facility Site Listing

These facilities may be onshore facilities or vessels, with petroleum storage capacities of 400,000 gallons or

Date of Government Version: 09/25/2018 Date Data Arrived at EDR: 09/26/2018 Date Made Active in Reports: 10/12/2018

Number of Days to Update: 16

Source: Department of Environmental Conservation

Telephone: 518-402-9549 Last EDR Contact: 09/26/2018

Next Scheduled EDR Contact: 01/07/2019 Data Release Frequency: Quarterly

CBS: Chemical Bulk Storage Site Listing

These facilities store regulated hazardous substances in aboveground tanks with capacities of 185 gallons or greater,

and/or in underground tanks of any size

Date of Government Version: 09/25/2018 Date Data Arrived at EDR: 09/26/2018 Date Made Active in Reports: 10/12/2018

Number of Days to Update: 16

Source: Department of Environmental Conservation

Telephone: 518-402-9549 Last EDR Contact: 09/26/2018

Next Scheduled EDR Contact: 01/07/2019 Data Release Frequency: Quarterly

AST: Petroleum Bulk Storage

Registered Aboveground Storage Tanks.

Date of Government Version: 09/25/2018 Date Data Arrived at EDR: 09/26/2018 Date Made Active in Reports: 10/12/2018

Number of Days to Update: 16

Source: Department of Environmental Conservation

Telephone: 518-402-9549 Last EDR Contact: 09/26/2018

Next Scheduled EDR Contact: 01/07/2019
Data Release Frequency: No Update Planned

CBS AST: Chemical Bulk Storage Database

Facilities that store regulated hazardous substances in aboveground tanks with capacities of 185 gallons or greater,

and/or in underground tanks of any size.

Date of Government Version: 01/01/2002 Date Data Arrived at EDR: 02/20/2002 Date Made Active in Reports: 03/22/2002

Number of Days to Update: 30

Source: NYSDEC Telephone: 518-402-9549 Last EDR Contact: 07/25/2005

Next Scheduled EDR Contact: 10/24/2005 Data Release Frequency: No Update Planned

MOSF AST: Major Oil Storage Facilities Database

Facilities that may be onshore facilities or vessels, with petroleum storage capacities of 400,000 gallons or

greater.

Date of Government Version: 01/01/2002 Date Data Arrived at EDR: 02/20/2002 Date Made Active in Reports: 03/22/2002

Number of Days to Update: 30

Source: NYSDEC Telephone: 518-402-9549 Last EDR Contact: 07/25/2005

Next Scheduled EDR Contact: 10/24/2005 Data Release Frequency: No Update Planned

INDIAN UST R6: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian

land in EPA Region 6 (Louisiana, Arkansas, Oklahoma, New Mexico, Texas and 65 Tribes).

Date of Government Version: 04/01/2018 Date Data Arrived at EDR: 05/18/2018 Date Made Active in Reports: 07/20/2018

Number of Days to Update: 63

Source: EPA Region 6 Telephone: 214-665-7591 Last EDR Contact: 10/26/2018

Next Scheduled EDR Contact: 02/04/2019 Data Release Frequency: Varies

INDIAN UST R10: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 10 (Alaska, Idaho, Oregon, Washington, and Tribal Nations).

Date of Government Version: 04/12/2018 Date Data Arrived at EDR: 05/18/2018 Date Made Active in Reports: 07/20/2018

Number of Days to Update: 63

Source: EPA Region 10 Telephone: 206-553-2857 Last EDR Contact: 10/26/2018

Next Scheduled EDR Contact: 02/04/2019 Data Release Frequency: Varies

INDIAN UST R9: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 9 (Arizona, California, Hawaii, Nevada, the Pacific Islands, and Tribal Nations).

Date of Government Version: 04/10/2018 Date Data Arrived at EDR: 05/18/2018 Date Made Active in Reports: 07/20/2018

Number of Days to Update: 63

Source: EPA Region 9 Telephone: 415-972-3368 Last EDR Contact: 10/26/2018

Next Scheduled EDR Contact: 02/04/2019 Data Release Frequency: Varies

INDIAN UST R8: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 8 (Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming and 27 Tribal Nations).

Date of Government Version: 04/25/2018 Date Data Arrived at EDR: 05/18/2018 Date Made Active in Reports: 07/20/2018

Number of Days to Update: 63

Source: EPA Region 8 Telephone: 303-312-6137 Last EDR Contact: 10/26/2018

Next Scheduled EDR Contact: 02/04/2019 Data Release Frequency: Varies

INDIAN UST R7: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 7 (Iowa, Kansas, Missouri, Nebraska, and 9 Tribal Nations).

Date of Government Version: 04/24/2018 Date Data Arrived at EDR: 05/18/2018 Date Made Active in Reports: 07/20/2018

Number of Days to Update: 63

Source: EPA Region 7 Telephone: 913-551-7003 Last EDR Contact: 10/26/2018

Next Scheduled EDR Contact: 02/04/2019 Data Release Frequency: Varies

INDIAN UST R1: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 1 (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont and ten Tribal Nations).

Date of Government Version: 04/13/2018 Date Data Arrived at EDR: 05/18/2018 Date Made Active in Reports: 07/20/2018

Number of Days to Update: 63

Source: EPA, Region 1 Telephone: 617-918-1313 Last EDR Contact: 10/26/2018

Next Scheduled EDR Contact: 02/04/2019 Data Release Frequency: Varies

INDIAN UST R4: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 4 (Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee and Tribal Nations)

Date of Government Version: 05/08/2018 Date Data Arrived at EDR: 05/18/2018 Date Made Active in Reports: 07/20/2018

Number of Days to Update: 63

Source: EPA Region 4 Telephone: 404-562-9424 Last EDR Contact: 10/26/2018

Next Scheduled EDR Contact: 02/04/2019 Data Release Frequency: Varies

INDIAN UST R5: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 5 (Michigan, Minnesota and Wisconsin and Tribal Nations).

Date of Government Version: 04/12/2018 Date Data Arrived at EDR: 05/18/2018 Date Made Active in Reports: 07/20/2018

Number of Days to Update: 63

Source: EPA Region 5 Telephone: 312-886-6136 Last EDR Contact: 10/26/2018

Next Scheduled EDR Contact: 02/04/2019 Data Release Frequency: Varies

TANKS: Storage Tank Faciliy Listing

This database contains records of facilities that are or have been regulated under Bulk Storage Program. Tank information for these facilities may not be releasable by the state agency.

Date of Government Version: 09/25/2018 Date Data Arrived at EDR: 09/26/2018 Date Made Active in Reports: 10/12/2018

Number of Days to Update: 16

Source: Department of Environmental Conservation

Telephone: 518-402-9543 Last EDR Contact: 09/26/2018

Next Scheduled EDR Contact: 01/07/2019 Data Release Frequency: Quarterly

State and tribal institutional control / engineering control registries

ENV RES DECL: Environmental Restrictive Declarations

The Environmental Restrictive Declarations (ERD) listed were recorded in connection with a zoning action against the noted Tax Blocks and Tax Lots, or portion thereof, and are available in the property records on file at the Office of the City Register for Bronx, Kings, New York and Queens counties or at the Richmond County Clerk's office. They contain environmental requirements with respect to hazardous materials, air quality and/or noise in accordance with Section 11-15 of this Resolution.

Date of Government Version: 05/15/2018 Date Data Arrived at EDR: 06/26/2018 Date Made Active in Reports: 08/07/2018

Number of Days to Update: 42

Source: New York City Department of City Planning

Telephone: 212-720-3300 Last EDR Contact: 09/18/2018

Next Scheduled EDR Contact: 12/31/2018
Data Release Frequency: Varies

RES DECL: Restrictive Declarations Listing

A restrictive declaration is a covenant running with the land which binds the present and future owners of the property. As a condition of certain special permits, the City Planning Commission may require an applicant to sign and record a restrictive declaration that places specified conditions on the future use and development of the property. Certain restrictive declarations are indicated by a D on zoning maps.

Date of Government Version: 11/18/2010 Date Data Arrived at EDR: 06/30/2014 Date Made Active in Reports: 07/21/2014

Number of Days to Update: 21

Source: NYC Department of City Planning

Telephone: 212-720-3401 Last EDR Contact: 09/21/2018

Next Scheduled EDR Contact: 12/31/2018 Data Release Frequency: Varies

ENG CONTROLS: Registry of Engineering Controls

Environmental Remediation sites that have engineering controls in place.

Date of Government Version: 08/09/2018 Date Data Arrived at EDR: 08/10/2018 Date Made Active in Reports: 08/31/2018

Number of Days to Update: 21

Source: Department of Environmental Conservation

Telephone: 518-402-9553 Last EDR Contact: 08/10/2018

Next Scheduled EDR Contact: 11/26/2018 Data Release Frequency: Quarterly

INST CONTROL: Registry of Institutional Controls

Environmental Remediation sites that have institutional controls in place.

Date of Government Version: 08/09/2018 Date Data Arrived at EDR: 08/10/2018 Date Made Active in Reports: 08/31/2018

Number of Days to Update: 21

Source: Department of Environmental Conservation

Telephone: 518-402-9553 Last EDR Contact: 08/10/2018

Next Scheduled EDR Contact: 11/26/2018 Data Release Frequency: Quarterly

State and tribal voluntary cleanup sites

VCP: Voluntary Cleanup Agreements

New York established its Voluntary Cleanup Program (VCP) to address the environmental, legal and financial barriers that often hinder the redevelopment and reuse of contaminated properties. The Voluntary Cleanup Program was developed to enhance private sector cleanup of brownfields by enabling parties to remediate sites using private rather than public funds and to reduce the development pressures on "greenfield" sites.

Date of Government Version: 08/09/2018 Date Data Arrived at EDR: 08/10/2018 Date Made Active in Reports: 08/31/2018

Number of Days to Update: 21

Source: Department of Environmental Conservation

Telephone: 518-402-9711 Last EDR Contact: 08/10/2018

Next Scheduled EDR Contact: 11/26/2018 Data Release Frequency: Semi-Annually

INDIAN VCP R7: Voluntary Cleanup Priority Lisitng

A listing of voluntary cleanup priority sites located on Indian Land located in Region 7.

Date of Government Version: 03/20/2008 Date Data Arrived at EDR: 04/22/2008 Date Made Active in Reports: 05/19/2008

Number of Days to Update: 27

Source: EPA, Region 7 Telephone: 913-551-7365 Last EDR Contact: 04/20/2009

Next Scheduled EDR Contact: 07/20/2009 Data Release Frequency: Varies

VCP NYC: Voluntary Cleanup Program Listing NYC New York City voluntary cleanup program sites.

> Date of Government Version: 03/26/2018 Date Data Arrived at EDR: 03/29/2018 Date Made Active in Reports: 05/14/2018

Number of Days to Update: 46

Source: New York City Office of Environmental Protection

Telephone: 212-788-8841 Last EDR Contact: 09/17/2018

Next Scheduled EDR Contact: 12/31/2018 Data Release Frequency: Varies

INDIAN VCP R1: Voluntary Cleanup Priority Listing

A listing of voluntary cleanup priority sites located on Indian Land located in Region 1.

Date of Government Version: 07/27/2015 Date Data Arrived at EDR: 09/29/2015 Date Made Active in Reports: 02/18/2016

Number of Days to Update: 142

Source: EPA, Region 1 Telephone: 617-918-1102 Last EDR Contact: 09/24/2018

Next Scheduled EDR Contact: 01/07/2019 Data Release Frequency: Varies

State and tribal Brownfields sites

BROWNFIELDS: Brownfields Site List

A Brownfield is any real property where redevelopment or re-use may be complicated by the presence or potential presence of a hazardous waste, petroleum, pollutant, or contaminant.

Date of Government Version: 08/09/2018 Date Data Arrived at EDR: 08/10/2018 Date Made Active in Reports: 08/30/2018

Number of Days to Update: 20

Source: Department of Environmental Conservation

Telephone: 518-402-9764 Last EDR Contact: 08/10/2018

Next Scheduled EDR Contact: 11/26/2018 Data Release Frequency: Semi-Annually

ERP: Environmental Restoration Program Listing

In an effort to spur the cleanup and redevelopment of brownfields, New Yorkers approved a \$200 million Environmental Restoration or Brownfields Fund as part of the \$1.75 billion Clean Water/Clean Air Bond Act of 1996 (1996 Bond Act). Enhancements to the program were enacted on October 7, 2003. Under the Environmental Restoration Program, the State provides grants to municipalities to reimburse up to 90 percent of on-site eligible costs and 100% of off-site eligible costs for site investigation and remediation activities. Once remediated, the property may then be reused for commercial, industrial, residential or public use.

Date of Government Version: 08/09/2018 Date Data Arrived at EDR: 08/10/2018 Date Made Active in Reports: 08/31/2018

Number of Days to Update: 21

Source: Department of Environmental Conservation

Telephone: 518-402-9622 Last EDR Contact: 08/10/2018

Next Scheduled EDR Contact: 11/26/2018 Data Release Frequency: Quarterly

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS: A Listing of Brownfields Sites

Brownfields are real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. Cleaning up and reinvesting in these properties takes development pressures off of undeveloped, open land, and both improves and protects the environment. Assessment, Cleanup and Redevelopment Exchange System (ACRES) stores information reported by EPA Brownfields grant recipients on brownfields properties assessed or cleaned up with grant funding as well as information on Targeted Brownfields Assessments performed by EPA Regions. A listing of ACRES Brownfield sites is obtained from Cleanups in My Community. Cleanups in My Community provides information on Brownfields properties for which information is reported back to EPA, as well as areas served by Brownfields grant programs.

Date of Government Version: 06/18/2018 Date Data Arrived at EDR: 06/20/2018 Date Made Active in Reports: 09/14/2018

Number of Days to Update: 86

Source: Environmental Protection Agency Telephone: 202-566-2777

Last EDR Contact: 09/18/2018

Next Scheduled EDR Contact: 12/31/2018 Data Release Frequency: Semi-Annually

Local Lists of Landfill / Solid Waste Disposal Sites

SWTIRE: Registered Waste Tire Storage & Facility List A listing of facilities registered to accept waste tires.

Date of Government Version: 02/27/2018 Date Data Arrived at EDR: 04/06/2018 Date Made Active in Reports: 06/08/2018

Number of Days to Update: 63

Source: Department of Environmental Conservation

Telephone: 518-402-8694 Last EDR Contact: 09/10/2018

Next Scheduled EDR Contact: 12/24/2018

Data Release Frequency: No Update Planned

SWRCY: Registered Recycling Facility List A listing of recycling facilities.

Date of Government Version: 12/08/2017 Date Data Arrived at EDR: 01/02/2018 Date Made Active in Reports: 01/31/2018

Number of Days to Update: 29

Source: Department of Environmental Conservation

Telephone: 518-402-8705 Last EDR Contact: 07/06/2018

Next Scheduled EDR Contact: 10/15/2018 Data Release Frequency: Quarterly

INDIAN ODI: Report on the Status of Open Dumps on Indian Lands

Location of open dumps on Indian land.

Date of Government Version: 12/31/1998 Date Data Arrived at EDR: 12/03/2007 Date Made Active in Reports: 01/24/2008

Number of Days to Update: 52

Source: Environmental Protection Agency

Telephone: 703-308-8245 Last EDR Contact: 10/25/2018

Next Scheduled EDR Contact: 02/11/2019 Data Release Frequency: Varies

DEBRIS REGION 9: Torres Martinez Reservation Illegal Dump Site Locations

A listing of illegal dump sites location on the Torres Martinez Indian Reservation located in eastern Riverside County and northern Imperial County, California.

Date of Government Version: 01/12/2009 Date Data Arrived at EDR: 05/07/2009 Date Made Active in Reports: 09/21/2009

Number of Days to Update: 137

Source: EPA, Region 9 Telephone: 415-947-4219 Last EDR Contact: 10/22/2018

Next Scheduled EDR Contact: 02/04/2019 Data Release Frequency: No Update Planned

ODI: Open Dump Inventory

An open dump is defined as a disposal facility that does not comply with one or more of the Part 257 or Part 258 Subtitle D Criteria.

Date of Government Version: 06/30/1985 Date Data Arrived at EDR: 08/09/2004 Date Made Active in Reports: 09/17/2004

Number of Days to Update: 39

Source: Environmental Protection Agency

Telephone: 800-424-9346 Last EDR Contact: 06/09/2004 Next Scheduled EDR Contact: N/A

Data Release Frequency: No Update Planned

IHS OPEN DUMPS: Open Dumps on Indian Land

A listing of all open dumps located on Indian Land in the United States.

Date of Government Version: 04/01/2014 Date Data Arrived at EDR: 08/06/2014 Date Made Active in Reports: 01/29/2015

Number of Days to Update: 176

Source: Department of Health & Human Serivces, Indian Health Service

Telephone: 301-443-1452 Last EDR Contact: 08/03/2018

Next Scheduled EDR Contact: 11/12/2018 Data Release Frequency: Varies

Local Lists of Hazardous waste / Contaminated Sites

US HIST CDL: National Clandestine Laboratory Register

A listing of clandestine drug lab locations that have been removed from the DEAs National Clandestine Laboratory Register.

Date of Government Version: 05/18/2018 Date Data Arrived at EDR: 06/20/2018 Date Made Active in Reports: 09/14/2018

Number of Days to Update: 86

Source: Drug Enforcement Administration

Telephone: 202-307-1000 Last EDR Contact: 08/28/2018

Next Scheduled EDR Contact: 12/10/2018 Data Release Frequency: No Update Planned

DEL SHWS: Delisted Registry Sites

A database listing of sites delisted from the Registry of Inactive Hazardous Waste Disposal Sites.

Date of Government Version: 08/09/2018 Date Data Arrived at EDR: 08/10/2018 Date Made Active in Reports: 08/31/2018

Number of Days to Update: 21

Source: Department of Environmental Conservation

Telephone: 518-402-9622 Last EDR Contact: 08/10/2018

Next Scheduled EDR Contact: 11/26/2018 Data Release Frequency: Quarterly

US CDL: Clandestine Drug Labs

A listing of clandestine drug lab locations. The U.S. Department of Justice ("the Department") provides this web site as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments.

Date of Government Version: 05/18/2018 Date Data Arrived at EDR: 06/20/2018 Date Made Active in Reports: 09/14/2018

Number of Days to Update: 86

Source: Drug Enforcement Administration

Telephone: 202-307-1000 Last EDR Contact: 08/28/2018

Next Scheduled EDR Contact: 12/10/2018 Data Release Frequency: Quarterly

Local Lists of Registered Storage Tanks

HIST UST: Historical Petroleum Bulk Storage Database

These facilities have petroleum storage capacities in excess of 1,100 gallons and less than 400,000 gallons. This database contains detailed information per site. It is no longer updated due to the sensitive nature of the information involved. See UST for more current data.

Date of Government Version: 01/01/2002 Date Data Arrived at EDR: 06/02/2006 Date Made Active in Reports: 07/20/2006

Number of Days to Update: 48

Source: Department of Environmental Conservation

Telephone: 518-402-9549 Last EDR Contact: 10/23/2006

Next Scheduled EDR Contact: 01/22/2007

Data Release Frequency: Varies

HIST AST: Historical Petroleum Bulk Storage Database

These facilities have petroleum storage capabilities in excess of 1,100 gallons and less than 400,000 gallons. This database contains detailed information per site. No longer updated due to the sensitive nature of the information involved. See AST for more current data.

Date of Government Version: 01/01/2002 Date Data Arrived at EDR: 06/02/2006 Date Made Active in Reports: 07/20/2006

Number of Days to Update: 48

Source: Department of Environmental Conservation

Telephone: 518-402-9549 Last EDR Contact: 10/23/2006

Next Scheduled EDR Contact: 01/22/2007 Data Release Frequency: No Update Planned

Local Land Records

LIENS: Spill Liens Information

Lien information from the Oil Spill Fund.

Date of Government Version: 08/08/2018 Date Data Arrived at EDR: 08/09/2018 Date Made Active in Reports: 08/31/2018

Number of Days to Update: 22

Source: Office of the State Comptroller

Telephone: 518-474-9034 Last EDR Contact: 08/01/2018

Next Scheduled EDR Contact: 11/19/2018 Data Release Frequency: Quarterly

LIENS 2: CERCLA Lien Information

A Federal CERCLA ('Superfund') lien can exist by operation of law at any site or property at which EPA has spent Superfund monies. These monies are spent to investigate and address releases and threatened releases of contamination. CERCLIS provides information as to the identity of these sites and properties.

Date of Government Version: 07/17/2018 Date Data Arrived at EDR: 08/09/2018 Date Made Active in Reports: 10/05/2018

Number of Days to Update: 57

Source: Environmental Protection Agency

Telephone: 202-564-6023 Last EDR Contact: 10/04/2018

Next Scheduled EDR Contact: 02/04/2019 Data Release Frequency: Semi-Annually

Records of Emergency Release Reports

HMIRS: Hazardous Materials Information Reporting System

Hazardous Materials Incident Report System. HMIRS contains hazardous material spill incidents reported to DOT.

Date of Government Version: 03/26/2018 Date Data Arrived at EDR: 03/27/2018 Date Made Active in Reports: 06/08/2018

Number of Days to Update: 73

Source: U.S. Department of Transportation

Telephone: 202-366-4555 Last EDR Contact: 09/25/2018

Next Scheduled EDR Contact: 01/07/2019 Data Release Frequency: Quarterly

SPILLS: Spills Information Database

Data collected on spills reported to NYSDEC as required by one or more of the following: Article 12 of the Navigation Law, 6 NYCRR Section 613.8 (from PBS regs), or 6 NYCRR Section 595.2 (from CBS regs). It includes spills active as of April 1, 1986, as well as spills occurring since this date.

Date of Government Version: 10/16/2018 Date Data Arrived at EDR: 10/16/2018 Date Made Active in Reports: 10/22/2018

Number of Days to Update: 6

Source: Department of Environmental Conservation

Telephone: 518-402-9549 Last EDR Contact: 10/16/2018

Next Scheduled EDR Contact: 11/26/2018 Data Release Frequency: Varies

HIST SPILLS: SPILLS Database

This database contains records of chemical and petroleum spill incidents. Under State law, petroleum and hazardous chemical spills that can impact the waters of the state must be reported by the spiller (and, in some cases, by anyone who has knowledge of the spills). In 2002, the Department of Environmental Conservation stopped providing updates to its original Spills Information Database. This database includes fields that are no longer available from the NYDEC as of January 1, 2002. Current information may be found in the NY SPILLS database. Department of Environmental Conservation.

Date of Government Version: 01/01/2002 Date Data Arrived at EDR: 07/08/2005 Date Made Active in Reports: 07/14/2005

Number of Days to Update: 6

Source: Department of Environmental Conservation

Telephone: 518-402-9549 Last EDR Contact: 07/07/2005 Next Scheduled EDR Contact: N/A

Data Release Frequency: No Update Planned

SPILLS 90: SPILLS90 data from FirstSearch

Spills 90 includes those spill and release records available exclusively from FirstSearch databases. Typically, they may include chemical, oil and/or hazardous substance spills recorded after 1990. Duplicate records that are already included in EDR incident and release records are not included in Spills 90.

Date of Government Version: 12/14/2012 Date Data Arrived at EDR: 01/03/2013 Date Made Active in Reports: 02/12/2013

Number of Days to Update: 40

Source: FirstSearch Telephone: N/A

Last EDR Contact: 01/03/2013 Next Scheduled EDR Contact: N/A

Data Release Frequency: No Update Planned

SPILLS 80: SPILLS80 data from FirstSearch

Spills 80 includes those spill and release records available from FirstSearch databases prior to 1990. Typically, they may include chemical, oil and/or hazardous substance spills recorded before 1990. Duplicate records that are already included in EDR incident and release records are not included in Spills 80.

Date of Government Version: 11/02/2010 Date Data Arrived at EDR: 01/03/2013 Date Made Active in Reports: 03/07/2013

Number of Days to Update: 63

Source: FirstSearch Telephone: N/A

Last EDR Contact: 01/03/2013 Next Scheduled EDR Contact: N/A

Data Release Frequency: No Update Planned

Other Ascertainable Records

RCRA NonGen / NLR: RCRA - Non Generators / No Longer Regulated

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

Date of Government Version: 03/01/2018 Date Data Arrived at EDR: 03/28/2018 Date Made Active in Reports: 06/22/2018

Number of Days to Update: 86

Source: Environmental Protection Agency

Telephone: (212) 637-3660 Last EDR Contact: 09/19/2018

Next Scheduled EDR Contact: 01/07/2019 Data Release Frequency: Quarterly

FUDS: Formerly Used Defense Sites

The listing includes locations of Formerly Used Defense Sites properties where the US Army Corps of Engineers is actively working or will take necessary cleanup actions.

Date of Government Version: 01/31/2015 Date Data Arrived at EDR: 07/08/2015 Date Made Active in Reports: 10/13/2015

Number of Days to Update: 97

Source: U.S. Army Corps of Engineers

Telephone: 202-528-4285 Last EDR Contact: 08/24/2018

Next Scheduled EDR Contact: 12/03/2018 Data Release Frequency: Varies

DOD: Department of Defense Sites

This data set consists of federally owned or administered lands, administered by the Department of Defense, that have any area equal to or greater than 640 acres of the United States, Puerto Rico, and the U.S. Virgin Islands.

Date of Government Version: 12/31/2005 Date Data Arrived at EDR: 11/10/2006 Date Made Active in Reports: 01/11/2007

Number of Days to Update: 62

Source: USGS

Telephone: 888-275-8747 Last EDR Contact: 10/12/2018

Next Scheduled EDR Contact: 01/21/2019 Data Release Frequency: Semi-Annually

FEDLAND: Federal and Indian Lands

Federally and Indian administrated lands of the United States. Lands included are administrated by: Army Corps of Engineers, Bureau of Reclamation, National Wild and Scenic River, National Wildlife Refuge, Public Domain Land, Wilderness, Wilderness Study Area, Wildlife Management Area, Bureau of Indian Affairs, Bureau of Land Management, Department of Justice, Forest Service, Fish and Wildlife Service, National Park Service.

Date of Government Version: 12/31/2005 Date Data Arrived at EDR: 02/06/2006 Date Made Active in Reports: 01/11/2007

Number of Days to Update: 339

Source: U.S. Geological Survey Telephone: 888-275-8747 Last EDR Contact: 10/12/2018

Next Scheduled EDR Contact: 01/21/2019

Data Release Frequency: N/A

SCRD DRYCLEANERS: State Coalition for Remediation of Drycleaners Listing

The State Coalition for Remediation of Drycleaners was established in 1998, with support from the U.S. EPA Office of Superfund Remediation and Technology Innovation. It is comprised of representatives of states with established drycleaner remediation programs. Currently the member states are Alabama, Connecticut, Florida, Illinois, Kansas, Minnesota, Missouri, North Carolina, Oregon, South Carolina, Tennessee, Texas, and Wisconsin.

Date of Government Version: 01/01/2017 Date Data Arrived at EDR: 02/03/2017 Date Made Active in Reports: 04/07/2017

Number of Days to Update: 63

Source: Environmental Protection Agency

Telephone: 615-532-8599 Last EDR Contact: 08/17/2018

Next Scheduled EDR Contact: 11/26/2018 Data Release Frequency: Varies

US FIN ASSUR: Financial Assurance Information

All owners and operators of facilities that treat, store, or dispose of hazardous waste are required to provide proof that they will have sufficient funds to pay for the clean up, closure, and post-closure care of their facilities.

Date of Government Version: 05/31/2018 Date Data Arrived at EDR: 06/27/2018 Date Made Active in Reports: 10/05/2018

Number of Days to Update: 100

Source: Environmental Protection Agency

Telephone: 202-566-1917 Last EDR Contact: 09/25/2018

Next Scheduled EDR Contact: 01/07/2019 Data Release Frequency: Quarterly

EPA WATCH LIST: EPA WATCH LIST

EPA maintains a "Watch List" to facilitate dialogue between EPA, state and local environmental agencies on enforcement matters relating to facilities with alleged violations identified as either significant or high priority. Being on the Watch List does not mean that the facility has actually violated the law only that an investigation by EPA or a state or local environmental agency has led those organizations to allege that an unproven violation has in fact occurred. Being on the Watch List does not represent a higher level of concern regarding the alleged violations that were detected, but instead indicates cases requiring additional dialogue between EPA, state and local agencies - primarily because of the length of time the alleged violation has gone unaddressed or unresolved.

Date of Government Version: 08/30/2013 Date Data Arrived at EDR: 03/21/2014 Date Made Active in Reports: 06/17/2014

Number of Days to Update: 88

Source: Environmental Protection Agency

Telephone: 617-520-3000 Last EDR Contact: 08/03/2018

Next Scheduled EDR Contact: 11/19/2018 Data Release Frequency: Quarterly

2020 COR ACTION: 2020 Corrective Action Program List

The EPA has set ambitious goals for the RCRA Corrective Action program by creating the 2020 Corrective Action Universe. This RCRA cleanup baseline includes facilities expected to need corrective action. The 2020 universe contains a wide variety of sites. Some properties are heavily contaminated while others were contaminated but have since been cleaned up. Still others have not been fully investigated yet, and may require little or no remediation. Inclusion in the 2020 Universe does not necessarily imply failure on the part of a facility to meet its RCRA obligations.

Date of Government Version: 09/30/2017 Date Data Arrived at EDR: 05/08/2018 Date Made Active in Reports: 07/20/2018

Number of Days to Update: 73

Source: Environmental Protection Agency

Telephone: 703-308-4044 Last EDR Contact: 08/10/2018

Next Scheduled EDR Contact: 11/19/2018 Data Release Frequency: Varies

TSCA: Toxic Substances Control Act

Toxic Substances Control Act. TSCA identifies manufacturers and importers of chemical substances included on the TSCA Chemical Substance Inventory list. It includes data on the production volume of these substances by plant

Date of Government Version: 12/31/2016 Date Data Arrived at EDR: 06/21/2017 Date Made Active in Reports: 01/05/2018

Number of Days to Update: 198

Source: EPA

Telephone: 202-260-5521 Last EDR Contact: 09/21/2018

Next Scheduled EDR Contact: 12/31/2018 Data Release Frequency: Every 4 Years

TRIS: Toxic Chemical Release Inventory System

Toxic Release Inventory System. TRIS identifies facilities which release toxic chemicals to the air, water and land in reportable quantities under SARA Title III Section 313.

Date of Government Version: 12/31/2016 Date Data Arrived at EDR: 01/10/2018 Date Made Active in Reports: 01/12/2018

Number of Days to Update: 2

Source: EPA

Telephone: 202-566-0250 Last EDR Contact: 08/24/2018

Next Scheduled EDR Contact: 12/03/2018 Data Release Frequency: Annually

SSTS: Section 7 Tracking Systems

Section 7 of the Federal Insecticide, Fungicide and Rodenticide Act, as amended (92 Stat. 829) requires all registered pesticide-producing establishments to submit a report to the Environmental Protection Agency by March 1st each year. Each establishment must report the types and amounts of pesticides, active ingredients and devices being produced, and those having been produced and sold or distributed in the past year.

Date of Government Version: 12/31/2009 Date Data Arrived at EDR: 12/10/2010 Date Made Active in Reports: 02/25/2011

Number of Days to Update: 77

Source: EPA

Telephone: 202-564-4203 Last EDR Contact: 10/24/2018

Next Scheduled EDR Contact: 02/04/2019 Data Release Frequency: Annually

ROD: Records Of Decision

Record of Decision. ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid in the cleanup.

Date of Government Version: 07/17/2018 Date Data Arrived at EDR: 08/09/2018 Date Made Active in Reports: 10/05/2018

Number of Days to Update: 57

Source: EPA

Telephone: 703-416-0223 Last EDR Contact: 10/04/2018

Next Scheduled EDR Contact: 12/17/2018 Data Release Frequency: Annually

RMP: Risk Management Plans

When Congress passed the Clean Air Act Amendments of 1990, it required EPA to publish regulations and guidance for chemical accident prevention at facilities using extremely hazardous substances. The Risk Management Program Rule (RMP Rule) was written to implement Section 112(r) of these amendments. The rule, which built upon existing industry codes and standards, requires companies of all sizes that use certain flammable and toxic substances to develop a Risk Management Program, which includes a(n): Hazard assessment that details the potential effects of an accidental release, an accident history of the last five years, and an evaluation of worst-case and alternative accidental releases; Prevention program that includes safety precautions and maintenance, monitoring, and employee training measures; and Emergency response program that spells out emergency health care, employee training measures and procedures for informing the public and response agencies (e.g the fire department) should an accident occur.

Date of Government Version: 08/01/2018 Date Data Arrived at EDR: 08/22/2018 Date Made Active in Reports: 10/05/2018

Number of Days to Update: 44

Source: Environmental Protection Agency

Telephone: 202-564-8600 Last EDR Contact: 10/23/2018

Next Scheduled EDR Contact: 02/04/2019 Data Release Frequency: Varies

RAATS: RCRA Administrative Action Tracking System

RCRA Administration Action Tracking System. RAATS contains records based on enforcement actions issued under RCRA pertaining to major violators and includes administrative and civil actions brought by the EPA. For administration actions after September 30, 1995, data entry in the RAATS database was discontinued. EPA will retain a copy of the database for historical records. It was necessary to terminate RAATS because a decrease in agency resources made it impossible to continue to update the information contained in the database.

Date of Government Version: 04/17/1995 Date Data Arrived at EDR: 07/03/1995 Date Made Active in Reports: 08/07/1995

Number of Days to Update: 35

Source: EPA

Telephone: 202-564-4104 Last EDR Contact: 06/02/2008

Next Scheduled EDR Contact: 09/01/2008 Data Release Frequency: No Update Planned

PRP: Potentially Responsible Parties

A listing of verified Potentially Responsible Parties

Date of Government Version: 10/25/2013 Date Data Arrived at EDR: 10/17/2014 Date Made Active in Reports: 10/20/2014

Number of Days to Update: 3

Source: EPA

Telephone: 202-564-6023 Last EDR Contact: 10/04/2018

Next Scheduled EDR Contact: 11/19/2018 Data Release Frequency: Quarterly

PADS: PCB Activity Database System

PCB Activity Database. PADS Identifies generators, transporters, commercial storers and/or brokers and disposers of PCB's who are required to notify the EPA of such activities.

Date of Government Version: 06/01/2017 Date Data Arrived at EDR: 06/09/2017 Date Made Active in Reports: 10/13/2017

Number of Days to Update: 126

Source: EPA

Telephone: 202-566-0500 Last EDR Contact: 10/11/2018

Next Scheduled EDR Contact: 01/21/2019 Data Release Frequency: Annually

ICIS: Integrated Compliance Information System

The Integrated Compliance Information System (ICIS) supports the information needs of the national enforcement and compliance program as well as the unique needs of the National Pollutant Discharge Elimination System (NPDES) program.

Date of Government Version: 11/18/2016 Date Data Arrived at EDR: 11/23/2016 Date Made Active in Reports: 02/10/2017

Number of Days to Update: 79

Source: Environmental Protection Agency

Telephone: 202-564-2501 Last EDR Contact: 10/09/2018

Next Scheduled EDR Contact: 01/21/2019 Data Release Frequency: Quarterly

FTTS: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)

FTTS tracks administrative cases and pesticide enforcement actions and compliance activities related to FIFRA, TSCA and EPCRA (Emergency Planning and Community Right-to-Know Act). To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 04/09/2009 Date Data Arrived at EDR: 04/16/2009 Date Made Active in Reports: 05/11/2009

Number of Days to Update: 25

Source: EPA/Office of Prevention, Pesticides and Toxic Substances

Telephone: 202-566-1667 Last EDR Contact: 08/18/2017

Next Scheduled EDR Contact: 12/04/2017 Data Release Frequency: Quarterly

FTTS INSP: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act) A listing of FIFRA/TSCA Tracking System (FTTS) inspections and enforcements.

Date of Government Version: 04/09/2009 Date Data Arrived at EDR: 04/16/2009 Date Made Active in Reports: 05/11/2009

Number of Days to Update: 25

Source: EPA Telephone: 202-566-1667 Last EDR Contact: 08/18/2017

Next Scheduled EDR Contact: 12/04/2017 Data Release Frequency: Quarterly

MLTS: Material Licensing Tracking System

MLTS is maintained by the Nuclear Regulatory Commission and contains a list of approximately 8,100 sites which possess or use radioactive materials and which are subject to NRC licensing requirements. To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 08/30/2016 Date Data Arrived at EDR: 09/08/2016 Date Made Active in Reports: 10/21/2016

Number of Days to Update: 43

Source: Nuclear Regulatory Commission

Telephone: 301-415-7169 Last EDR Contact: 10/11/2018

Next Scheduled EDR Contact: 02/04/2019 Data Release Frequency: Quarterly

COAL ASH DOE: Steam-Electric Plant Operation Data

A listing of power plants that store ash in surface ponds.

Date of Government Version: 12/31/2005 Date Data Arrived at EDR: 08/07/2009 Date Made Active in Reports: 10/22/2009

Number of Days to Update: 76

Source: Department of Energy Telephone: 202-586-8719 Last EDR Contact: 09/07/2018

Next Scheduled EDR Contact: 12/17/2018 Data Release Frequency: Varies

COAL ASH EPA: Coal Combustion Residues Surface Impoundments List

A listing of coal combustion residues surface impoundments with high hazard potential ratings.

Date of Government Version: 07/01/2014 Date Data Arrived at EDR: 09/10/2014 Date Made Active in Reports: 10/20/2014

Number of Days to Update: 40

Source: Environmental Protection Agency

Telephone: N/A

Last EDR Contact: 09/04/2018

Next Scheduled EDR Contact: 12/17/2018 Data Release Frequency: Varies

PCB TRANSFORMER: PCB Transformer Registration Database

The database of PCB transformer registrations that includes all PCB registration submittals.

Date of Government Version: 05/24/2017 Date Data Arrived at EDR: 11/30/2017 Date Made Active in Reports: 12/15/2017

Number of Days to Update: 15

Source: Environmental Protection Agency

Telephone: 202-566-0517 Last EDR Contact: 10/26/2018

Next Scheduled EDR Contact: 02/04/2019 Data Release Frequency: Varies

RADINFO: Radiation Information Database

The Radiation Information Database (RADINFO) contains information about facilities that are regulated by U.S. Environmental Protection Agency (EPA) regulations for radiation and radioactivity.

Date of Government Version: 07/02/2018 Date Data Arrived at EDR: 07/05/2018 Date Made Active in Reports: 10/05/2018

Number of Days to Update: 92

Source: Environmental Protection Agency

Telephone: 202-343-9775 Last EDR Contact: 10/03/2018

Next Scheduled EDR Contact: 01/14/2019 Data Release Frequency: Quarterly

HIST FTTS: FIFRA/TSCA Tracking System Administrative Case Listing

A complete administrative case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006 Date Data Arrived at EDR: 03/01/2007 Date Made Active in Reports: 04/10/2007

Number of Days to Update: 40

Source: Environmental Protection Agency

Telephone: 202-564-2501 Last EDR Contact: 12/17/2007

Next Scheduled EDR Contact: 03/17/2008 Data Release Frequency: No Update Planned

HIST FTTS INSP: FIFRA/TSCA Tracking System Inspection & Enforcement Case Listing

A complete inspection and enforcement case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006 Date Data Arrived at EDR: 03/01/2007 Date Made Active in Reports: 04/10/2007

Number of Days to Update: 40

Source: Environmental Protection Agency

Telephone: 202-564-2501 Last EDR Contact: 12/17/2008

Next Scheduled EDR Contact: 03/17/2008 Data Release Frequency: No Update Planned

DOT OPS: Incident and Accident Data

Department of Transporation, Office of Pipeline Safety Incident and Accident data.

Date of Government Version: 07/31/2012 Date Data Arrived at EDR: 08/07/2012 Date Made Active in Reports: 09/18/2012

Number of Days to Update: 42

Source: Department of Transporation, Office of Pipeline Safety

Telephone: 202-366-4595 Last EDR Contact: 10/30/2018

Next Scheduled EDR Contact: 02/11/2019 Data Release Frequency: Varies

CONSENT: Superfund (CERCLA) Consent Decrees

Major legal settlements that establish responsibility and standards for cleanup at NPL (Superfund) sites. Released periodically by United States District Courts after settlement by parties to litigation matters.

Date of Government Version: 06/30/2018 Date Data Arrived at EDR: 07/17/2018 Date Made Active in Reports: 10/05/2018

Number of Days to Update: 80

Source: Department of Justice, Consent Decree Library

Telephone: Varies

Last EDR Contact: 10/01/2018

Next Scheduled EDR Contact: 12/31/2018 Data Release Frequency: Varies

BRS: Biennial Reporting System

The Biennial Reporting System is a national system administered by the EPA that collects data on the generation and management of hazardous waste. BRS captures detailed data from two groups: Large Quantity Generators (LQG) and Treatment, Storage, and Disposal Facilities.

Date of Government Version: 12/31/2015 Date Data Arrived at EDR: 02/22/2017 Date Made Active in Reports: 09/28/2017

Number of Days to Update: 218

Source: EPA/NTIS Telephone: 800-424-9346 Last EDR Contact: 08/24/2018

Next Scheduled EDR Contact: 12/03/2018 Data Release Frequency: Biennially

INDIAN RESERV: Indian Reservations

This map layer portrays Indian administered lands of the United States that have any area equal to or greater

than 640 acres.

Date of Government Version: 12/31/2014 Date Data Arrived at EDR: 07/14/2015 Date Made Active in Reports: 01/10/2017

Number of Days to Update: 546

Source: USGS

Telephone: 202-208-3710 Last EDR Contact: 10/09/2018

Next Scheduled EDR Contact: 01/21/2019 Data Release Frequency: Semi-Annually

FUSRAP: Formerly Utilized Sites Remedial Action Program

DOE established the Formerly Utilized Sites Remedial Action Program (FUSRAP) in 1974 to remediate sites where radioactive contamination remained from Manhattan Project and early U.S. Atomic Energy Commission (AEC) operations.

Date of Government Version: 08/08/2017 Date Data Arrived at EDR: 09/11/2018 Date Made Active in Reports: 09/14/2018

Number of Days to Update: 3

Source: Department of Energy Telephone: 202-586-3559 Last EDR Contact: 09/11/2018

Next Scheduled EDR Contact: 11/19/2018 Data Release Frequency: Varies

UMTRA: Uranium Mill Tailings Sites

Uranium ore was mined by private companies for federal government use in national defense programs. When the mills shut down, large piles of the sand-like material (mill tailings) remain after uranium has been extracted from the ore. Levels of human exposure to radioactive materials from the piles are low; however, in some cases tailings were used as construction materials before the potential health hazards of the tailings were recognized.

Date of Government Version: 06/23/2017 Date Data Arrived at EDR: 10/11/2017 Date Made Active in Reports: 11/03/2017

Number of Days to Update: 23

Source: Department of Energy Telephone: 505-845-0011 Last EDR Contact: 08/20/2018

Next Scheduled EDR Contact: 12/03/2018

Data Release Frequency: Varies

LEAD SMELTER 1: Lead Smelter Sites

A listing of former lead smelter site locations.

Date of Government Version: 07/17/2018 Date Data Arrived at EDR: 08/09/2018 Date Made Active in Reports: 10/05/2018

Number of Days to Update: 57

Source: Environmental Protection Agency

Telephone: 703-603-8787 Last EDR Contact: 10/04/2018

Next Scheduled EDR Contact: 01/14/2019

Data Release Frequency: Varies

LEAD SMELTER 2: Lead Smelter Sites

A list of several hundred sites in the U.S. where secondary lead smelting was done from 1931and 1964. These sites may pose a threat to public health through ingestion or inhalation of contaminated soil or dust

Date of Government Version: 04/05/2001 Date Data Arrived at EDR: 10/27/2010 Date Made Active in Reports: 12/02/2010

Number of Days to Update: 36

Source: American Journal of Public Health

Telephone: 703-305-6451 Last EDR Contact: 12/02/2009 Next Scheduled EDR Contact: N/A

Data Release Frequency: No Update Planned

US AIRS (AFS): Aerometric Information Retrieval System Facility Subsystem (AFS)

The database is a sub-system of Aerometric Information Retrieval System (AIRS). AFS contains compliance data on air pollution point sources regulated by the U.S. EPA and/or state and local air regulatory agencies. This information comes from source reports by various stationary sources of air pollution, such as electric power plants, steel mills, factories, and universities, and provides information about the air pollutants they produce. Action, air program, air program pollutant, and general level plant data. It is used to track emissions and compliance data from industrial plants.

Telephone: 202-564-2496

Last EDR Contact: 09/26/2017

Date of Government Version: 10/12/2016 Date Data Arrived at EDR: 10/26/2016 Date Made Active in Reports: 02/03/2017

Number of Days to Update: 100

US AIRS MINOR: Air Facility System Data A listing of minor source facilities.

Date of Government Version: 10/12/2016 Date Data Arrived at EDR: 10/26/2016 Date Made Active in Reports: 02/03/2017

Number of Days to Update: 100

Source: EPA

Source: EPA

Telephone: 202-564-2496 Last EDR Contact: 09/26/2017

Next Scheduled EDR Contact: 01/08/2018 Data Release Frequency: Annually

Next Scheduled EDR Contact: 01/08/2018
Data Release Frequency: Annually

US MINES: Mines Master Index File

Contains all mine identification numbers issued for mines active or opened since 1971. The data also includes violation information.

Date of Government Version: 08/01/2018 Date Data Arrived at EDR: 08/29/2018 Date Made Active in Reports: 10/05/2018

Number of Days to Update: 37

Source: Department of Labor, Mine Safety and Health Administration

Telephone: 303-231-5959 Last EDR Contact: 08/29/2018

Next Scheduled EDR Contact: 12/10/2018 Data Release Frequency: Semi-Annually

US MINES 2: Ferrous and Nonferrous Metal Mines Database Listing

This map layer includes ferrous (ferrous metal mines are facilities that extract ferrous metals, such as iron ore or molybdenum) and nonferrous (Nonferrous metal mines are facilities that extract nonferrous metals, such as gold, silver, copper, zinc, and lead) metal mines in the United States.

Date of Government Version: 12/05/2005 Date Data Arrived at EDR: 02/29/2008 Date Made Active in Reports: 04/18/2008

Number of Days to Update: 49

Source: USGS Telephone: 703-648-7709 Last EDR Contact: 08/31/2018

Next Scheduled EDR Contact: 12/10/2018 Data Release Frequency: Varies

US MINES 3: Active Mines & Mineral Plants Database Listing

Active Mines and Mineral Processing Plant operations for commodities monitored by the Minerals Information Team of the USGS.

Date of Government Version: 04/14/2011 Date Data Arrived at EDR: 06/08/2011 Date Made Active in Reports: 09/13/2011

Number of Days to Update: 97

Source: USGS

Telephone: 703-648-7709 Last EDR Contact: 08/31/2018

Next Scheduled EDR Contact: 12/10/2018 Data Release Frequency: Varies

ABANDONED MINES: Abandoned Mines

An inventory of land and water impacted by past mining (primarily coal mining) is maintained by OSMRE to provide information needed to implement the Surface Mining Control and Reclamation Act of 1977 (SMCRA). The inventory contains information on the location, type, and extent of AML impacts, as well as, information on the cost associated with the reclamation of those problems. The inventory is based upon field surveys by State, Tribal, and OSMRE program officials. It is dynamic to the extent that it is modified as new problems are identified and existing problems are reclaimed.

Date of Government Version: 09/10/2018 Date Data Arrived at EDR: 09/11/2018 Date Made Active in Reports: 09/14/2018

Number of Days to Update: 3

Source: Department of Interior Telephone: 202-208-2609 Last EDR Contact: 09/10/2018

Next Scheduled EDR Contact: 12/24/2018 Data Release Frequency: Quarterly

FINDS: Facility Index System/Facility Registry System

Facility Index System. FINDS contains both facility information and 'pointers' to other sources that contain more detail. EDR includes the following FINDS databases in this report: PCS (Permit Compliance System), AIRS (Aerometric Information Retrieval System), DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes), FURS (Federal Underground Injection Control), C-DOCKET (Criminal Docket System used to track criminal enforcement actions for all environmental statutes), FFIS (Federal Facilities Information System), STATE (State Environmental Laws and Statutes), and PADS (PCB Activity Data System).

Date of Government Version: 08/07/2018 Date Data Arrived at EDR: 09/05/2018 Date Made Active in Reports: 10/05/2018

Number of Days to Update: 30

Source: EPA Telephone: (212) 637-3000 Last EDR Contact: 09/18/2018

Next Scheduled EDR Contact: 12/17/2018 Data Release Frequency: Quarterly

DOCKET HWC: Hazardous Waste Compliance Docket Listing

A complete list of the Federal Agency Hazardous Waste Compliance Docket Facilities.

Date of Government Version: 05/31/2018 Date Data Arrived at EDR: 07/26/2018 Date Made Active in Reports: 10/05/2018

Number of Days to Update: 71

Source: Environmental Protection Agency

Telephone: 202-564-0527 Last EDR Contact: 08/31/2018

Next Scheduled EDR Contact: 12/10/2018 Data Release Frequency: Varies

UXO: Unexploded Ordnance Sites

A listing of unexploded ordnance site locations

Date of Government Version: 09/30/2017 Date Data Arrived at EDR: 06/19/2018 Date Made Active in Reports: 09/14/2018

Number of Days to Update: 87

Source: Department of Defense Telephone: 703-704-1564 Last EDR Contact: 10/15/2018

Next Scheduled EDR Contact: 01/28/2019 Data Release Frequency: Varies

ECHO: Enforcement & Compliance History Information

ECHO provides integrated compliance and enforcement information for about 800,000 regulated facilities nationwide.

Date of Government Version: 09/02/2018 Date Data Arrived at EDR: 09/05/2018 Date Made Active in Reports: 09/14/2018

Number of Days to Update: 9

Source: Environmental Protection Agency

Telephone: 202-564-2280 Last EDR Contact: 09/05/2018

Next Scheduled EDR Contact: 12/17/2018
Data Release Frequency: Quarterly

FUELS PROGRAM: EPA Fuels Program Registered Listing

This listing includes facilities that are registered under the Part 80 (Code of Federal Regulations) EPA Fuels Programs. All companies now are required to submit new and updated registrations.

Date of Government Version: 08/22/2018 Date Data Arrived at EDR: 08/22/2018 Date Made Active in Reports: 10/05/2018

Number of Days to Update: 44

Source: EPA

Telephone: 800-385-6164 Last EDR Contact: 08/22/2018

Next Scheduled EDR Contact: 12/03/2018 Data Release Frequency: Quarterly

AIRS: Air Emissions Data

Point source emissions inventory data.

Date of Government Version: 07/23/2018 Date Data Arrived at EDR: 07/23/2018 Date Made Active in Reports: 08/07/2018

Number of Days to Update: 15

Source: Department of Environmental Conservation

Telephone: 518-402-8452 Last EDR Contact: 11/22/2018

Next Scheduled EDR Contact: 02/04/2019 Data Release Frequency: Annually

COAL ASH: Coal Ash Disposal Site Listing
A listing of coal ash disposal site locations.

Date of Government Version: 06/29/2018 Date Data Arrived at EDR: 07/03/2018 Date Made Active in Reports: 08/07/2018

Number of Days to Update: 35

Source: Department of Environmental Conservation

Telephone: 518-402-8660 Last EDR Contact: 06/28/2018

Next Scheduled EDR Contact: 10/15/2018 Data Release Frequency: Quarterly

DRYCLEANERS: Registered Drycleaners

A listing of all registered drycleaning facilities.

Date of Government Version: 03/07/2018 Date Data Arrived at EDR: 03/30/2018 Date Made Active in Reports: 06/05/2018

Number of Days to Update: 67

Source: Department of Environmental Conservation

Telephone: 518-402-8403 Last EDR Contact: 09/10/2018

Next Scheduled EDR Contact: 12/24/2018 Data Release Frequency: Annually

E DESIGNATION: E DESIGNATION SITE LISTING

The (E (Environmental)) designation would ensure that sampling and remediation take place on the subject properties, and would avoid any significant impacts related to hazardous materials at these locations. The (E) designations would require that the fee owner of the sites conduct a testing and sampling protocol, and remediation where appropriate, to the satisfaction of the NYCDEP before the issuance of a building permit by the Department of Buildings pursuant to the provisions of Section 11-15 of the Zoning Resolution (Environmental Requirements). The (E) designations also include a mandatory construction-related health and safety plan which must be approved by NYCDEP.

Date of Government Version: 08/21/2018 Date Data Arrived at EDR: 09/20/2018 Date Made Active in Reports: 10/12/2018

Number of Days to Update: 22

Source: New York City Department of City Planning

Telephone: 718-595-6658 Last EDR Contact: 09/18/2018

Next Scheduled EDR Contact: 12/31/2018 Data Release Frequency: Semi-Annually

Financial Assurance 1: Financial Assurance Information Listing

Financial assurance information.

Date of Government Version: 12/01/2017 Date Data Arrived at EDR: 01/02/2018 Date Made Active in Reports: 01/31/2018

Number of Days to Update: 29

Source: Department of Environmental Conservation

Telephone: 518-402-8660 Last EDR Contact: 10/15/2018

Next Scheduled EDR Contact: 01/14/2019
Data Release Frequency: Quarterly

Financial Assurance 2: Financial Assurance Information Listing

A listing of financial assurance information for hazardous waste facilities. Financial assurance is intended to ensure that resources are available to pay for the cost of closure, post-closure care, and corrective measures if the owner or operator of a regulated facility is unable or unwilling to pay.

Date of Government Version: 12/29/2017 Date Data Arrived at EDR: 04/06/2018 Date Made Active in Reports: 06/05/2018

Number of Days to Update: 60

Source: Department of Environmental Conservation

Telephone: 518-402-8712 Last EDR Contact: 09/10/2018

Next Scheduled EDR Contact: 12/24/2018 Data Release Frequency: Varies

HSWDS: Hazardous Substance Waste Disposal Site Inventory

The list includes any known or suspected hazardous substance waste disposal sites. Also included are sites delisted from the Registry of Inactive Hazardous Waste Disposal Sites and non-Registry sites that U.S. EPA Preliminary Assessment (PA) reports or Site Investigation (SI) reports were prepared. Hazardous Substance Waste Disposal Sites are eligible to be Superfund sites now that the New York State Superfund has been refinanced and changed. This means that the study inventory has served its purpose and will no longer be maintained as a separate entity. The last version of the study inventory is frozen in time. The sites on the study will not automatically be made Superfund sites, rather each site will be further evaluated for listing on the Registry. So overtime they will be added to the registry or not.

Date of Government Version: 01/01/2003 Date Data Arrived at EDR: 10/20/2006 Date Made Active in Reports: 11/30/2006

Number of Days to Update: 41

Source: Department of Environmental Conservation

Telephone: 518-402-9564 Last EDR Contact: 05/26/2009

Next Scheduled EDR Contact: 08/24/2009 Data Release Frequency: No Update Planned

NY MANIFEST: Facility and Manifest Data

Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a TSD

facility.

Date of Government Version: 07/01/2018 Date Data Arrived at EDR: 08/01/2018 Date Made Active in Reports: 08/31/2018

Number of Days to Update: 30

Source: Department of Environmental Conservation

Telephone: 518-402-8651 Last EDR Contact: 08/01/2018

Next Scheduled EDR Contact: 11/12/2018 Data Release Frequency: Quarterly

SPDES: State Pollutant Discharge Elimination System

New York State has a state program which has been approved by the United States Environmental Protection Agency for the control of wastewater and stormwater discharges in accordance with the Clean Water Act. Under New York State law the program is known as the State Pollutant Discharge Elimination System (SPDES) and is broader in scope than that required by the Clean Water Act in that it controls point source discharges to groundwaters as well as surface waters.

Date of Government Version: 07/18/2018 Date Data Arrived at EDR: 07/31/2018 Date Made Active in Reports: 08/07/2018

Number of Days to Update: 7

Source: Department of Environmental Conservation

Telephone: 518-402-8233 Last EDR Contact: 10/22/2018

Next Scheduled EDR Contact: 02/04/2019
Data Release Frequency: No Update Planned

VAPOR REOPENED: Vapor Intrusion Legacy Site List

New York is currently re-evaluating previous assumptions and decisions regarding the potential for soil vapor intrusion exposures at sites. As a result, all past, current, and future contaminated sites will be evaluated to determine whether these sites have the potential for exposures related to soil vapor intrusion.

Date of Government Version: 01/01/2018 Date Data Arrived at EDR: 02/15/2018 Date Made Active in Reports: 03/27/2018

Number of Days to Update: 40

Source: Department of Environmenal Conservation

Telephone: 518-402-9814 Last EDR Contact: 08/17/2018

Next Scheduled EDR Contact: 11/26/2018 Data Release Frequency: Varies

UIC: Underground Injection Control Wells

A listing of enhanced oil recovery underground injection wells.

Date of Government Version: 09/04/2018 Date Data Arrived at EDR: 09/06/2018 Date Made Active in Reports: 10/12/2018

Number of Days to Update: 36

Source: Department of Environmental Conservation

Telephone: 518-402-8056 Last EDR Contact: 09/06/2018

Next Scheduled EDR Contact: 12/17/2018 Data Release Frequency: Quarterly

COOLING TOWERS: Registered Cooling Towers

This data includes the location of cooling towers registered with New York State. The data is self-reported by owners/property managers of cooling towers in service in New York State. In August 2015, the New York State Department of Health released emergency regulations requiring the owners of cooling towers to register them with New York State.

Date of Government Version: 07/10/2018 Date Data Arrived at EDR: 07/20/2018 Date Made Active in Reports: 09/14/2018

Number of Days to Update: 56

Source: Department of Health Telephone: 518-402-7650 Last EDR Contact: 10/17/2018

Next Scheduled EDR Contact: 01/28/2019

Data Release Frequency: Varies

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP: EDR Proprietary Manufactured Gas Plants

The EDR Proprietary Manufactured Gas Plant Database includes records of coal gas plants (manufactured gas plants) compiled by EDR's researchers. Manufactured gas sites were used in the United States from the 1800's to 1950's to produce a gas that could be distributed and used as fuel. These plants used whale oil, rosin, coal, or a mixture of coal, oil, and water that also produced a significant amount of waste. Many of the byproducts of the gas production, such as coal tar (oily waste containing volatile and non-volatile chemicals), sludges, oils and other compounds are potentially hazardous to human health and the environment. The byproduct from this process was frequently disposed of directly at the plant site and can remain or spread slowly, serving as a continuous source of soil and groundwater contamination.

Date of Government Version: N/A Source: EDR, Inc.
Date Data Arrived at EDR: N/A Telephone: N/A
Date Made Active in Reports: N/A Last EDR Contact: N/A

Number of Days to Update: N/A Next Scheduled EDR Contact: N/A

Data Release Frequency: No Update Planned

EDR Hist Auto: EDR Exclusive Historical Auto Stations

EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A Source: EDR, Inc.
Date Data Arrived at EDR: N/A Telephone: N/A
Date Made Active in Reports: N/A Last EDR Contact: N/A

Number of Days to Update: N/A Next Scheduled EDR Contact: N/A

Data Release Frequency: Varies

EDR Hist Cleaner: EDR Exclusive Historical Cleaners

EDR has searched selected national collections of business directories and has collected listings of potential dry cleaner sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include dry cleaning establishments. The categories reviewed included, but were not limited to dry cleaners, cleaners, laundry, laundromat, cleaning/laundry, wash & dry etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A
Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR C

e: N/A Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

RGA HWS: Recovered Government Archive State Hazardous Waste Facilities List

The EDR Recovered Government Archive State Hazardous Waste database provides a list of SHWS incidents derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of Environmental Conservation in New York.

Date of Government Version: N/A Date Data Arrived at EDR: 07/01/2013 Date Made Active in Reports: 12/30/2013

Number of Days to Update: 182

Source: Department of Environmental Conservation

Telephone: N/A

Last EDR Contact: 06/01/2012 Next Scheduled EDR Contact: N/A Data Release Frequency: Varies

RGA LF: Recovered Government Archive Solid Waste Facilities List

The EDR Recovered Government Archive Landfill database provides a list of landfills derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of Environmental Conservation in New York.

Date of Government Version: N/A Date Data Arrived at EDR: 07/01/2013 Date Made Active in Reports: 01/10/2014 Number of Days to Update: 193

Source: Department of Environmental Conservation Telephone: N/A Last EDR Contact: 06/01/2012

Next Scheduled EDR Contact: N/A Data Release Frequency: Varies

COUNTY RECORDS

CORTLAND COUNTY:

AST - CORTLAND: Cortland County Storage Tank Listing A listing of aboveground storage tank sites located in Cortland County.

Date of Government Version: 07/11/2018 Date Data Arrived at EDR: 09/19/2018 Date Made Active in Reports: 10/12/2018

Number of Days to Update: 23

Source: Cortland County Health Department

Telephone: 607-753-5035 Last EDR Contact: 10/29/2018

Next Scheduled EDR Contact: 02/11/2019 Data Release Frequency: Quarterly

UST - CORTLAND: Cortland County Storage Tank Listing

A listing of underground storage tank sites located in Cortland County.

Date of Government Version: 07/11/2018 Date Data Arrived at EDR: 09/19/2018 Date Made Active in Reports: 10/12/2018

Number of Days to Update: 23

Source: Cortland County Health Department

Telephone: 607-753-5035 Last EDR Contact: 10/29/2018

Next Scheduled EDR Contact: 02/11/2019 Data Release Frequency: Quarterly

NASSAU COUNTY:

AST - NASSAU: Registered Tank Database

A listing of aboveground storage tank sites located in Nassau County.

Date of Government Version: 01/09/2017 Date Data Arrived at EDR: 01/11/2017 Date Made Active in Reports: 02/15/2017

Number of Days to Update: 35

Source: Nassau County Health Department

Telephone: 516-571-3314 Last EDR Contact: 10/29/2018

Next Scheduled EDR Contact: 02/11/2019 Data Release Frequency: No Update Planned

AST NCFM: Storage Tank Database

A listing of aboveground storage tank sites located in Nassau County.

Date of Government Version: 02/15/2011 Date Data Arrived at EDR: 02/23/2011 Date Made Active in Reports: 03/29/2011

Number of Days to Update: 34

Source: Nassau County Office of the Fire Marshal

Telephone: 516-572-1000 Last EDR Contact: 10/25/2018

Next Scheduled EDR Contact: 02/11/2019

Data Release Frequency: Varies

TANKS NASSAU: Registered Tank Database in Nassau County A listing of facilities in Nassau County with storage tanks.

Date of Government Version: 01/09/2017 Date Data Arrived at EDR: 01/11/2017 Date Made Active in Reports: 02/15/2017

Number of Days to Update: 35

Source: Nassau County Department of Health

Telephone: 516-227-9691 Last EDR Contact: 10/29/2018

Next Scheduled EDR Contact: 02/11/2019 Data Release Frequency: Varies

UST - NASSAU: Registered Tank Database

A listing of underground storage tank sites located in Nassau County.

Date of Government Version: 01/09/2017 Date Data Arrived at EDR: 01/11/2017 Date Made Active in Reports: 02/15/2017

Number of Days to Update: 35

Source: Nassau County Health Department

Telephone: 516-571-3314 Last EDR Contact: 10/29/2018

Next Scheduled EDR Contact: 02/11/2019 Data Release Frequency: No Update Planned

UST NCFM: Storage Tank Database

A listing of underground storage tank sites located in Nassau County.

Date of Government Version: 02/15/2011 Date Data Arrived at EDR: 02/23/2011 Date Made Active in Reports: 03/29/2011

Number of Days to Update: 34

Source: Nassau County Office of the Fire Marshal

Telephone: 516-572-1000 Last EDR Contact: 10/25/2018

Next Scheduled EDR Contact: 02/11/2019

Data Release Frequency: Varies

ROCKLAND COUNTY:

AST - ROCKLAND: Petroleum Bulk Storage Database

A listing of aboveground storage tank sites located in Rockland County. Rockland County?s Petroleum Bulk Storage (PBS) program is no longer in service. All related operations/duties are now wholly overseen by the New York State Dept. of Environmental Conservation (NYSDEC).

Date of Government Version: 02/02/2017 Date Data Arrived at EDR: 03/17/2017 Date Made Active in Reports: 09/22/2017

Number of Days to Update: 189

Source: Rockland County Health Department

Telephone: 914-364-2605 Last EDR Contact: 08/29/2018

Next Scheduled EDR Contact: 12/17/2018

Data Release Frequency: No Update Planned

UST - ROCKLAND: Petroleum Bulk Storage Database

A listing of underground storage tank sites located in Rockland County. Rockland County?s Petroleum Bulk Storage (PBS) program is no longer in service. All related operations/duties are now wholly overseen by the New York State Dept. of Environmental Conservation (NYSDEC).

Date of Government Version: 02/02/2017 Date Data Arrived at EDR: 03/17/2017 Date Made Active in Reports: 09/22/2017

Number of Days to Update: 189

Source: Rockland County Health Department

Telephone: 914-364-2605 Last EDR Contact: 08/29/2018

Next Scheduled EDR Contact: 12/17/2018

Data Release Frequency: No Update Planned

SUFFOLK COUNTY:

AST - SUFFOLK: Storage Tank Database

A listing of aboveground storage tank sites located in Suffolk County.

Date of Government Version: 03/03/2015 Date Data Arrived at EDR: 03/10/2015 Date Made Active in Reports: 03/23/2015

Number of Days to Update: 13

Source: Suffolk County Department of Health Services

Telephone: 631-854-2521 Last EDR Contact: 10/29/2018

Next Scheduled EDR Contact: 02/11/2019
Data Release Frequency: No Update Planned

UST - SUFFOLK: Storage Tank Database

A listing of underground storage tank sites located in Suffolk County.

Date of Government Version: 03/03/2015 Date Data Arrived at EDR: 03/10/2015 Date Made Active in Reports: 03/23/2015

Number of Days to Update: 13

Source: Suffolk County Department of Health Services

Telephone: 631-854-2521 Last EDR Contact: 10/29/2018

Next Scheduled EDR Contact: 02/11/2019 Data Release Frequency: No Update Planned

WESTCHESTER COUNTY:

AST - WESTCHESTER: Listing of Storage Tanks

A listing of aboveground storage tank sites located in Westchester County.

Date of Government Version: 07/20/2018 Date Data Arrived at EDR: 08/21/2018 Date Made Active in Reports: 08/30/2018

Number of Days to Update: 9

Source: Westchester County Department of Health

Telephone: 914-813-5161 Last EDR Contact: 10/29/2018

Next Scheduled EDR Contact: 02/11/2019 Data Release Frequency: Semi-Annually

UST - WESTCHESTER: Listing of Storage Tanks

A listing of underground storage tank sites located in Westchester County.

Date of Government Version: 07/20/2018 Date Data Arrived at EDR: 08/21/2018 Date Made Active in Reports: 08/30/2018

Number of Days to Update: 9

Source: Westchester County Department of Health

Telephone: 914-813-5161 Last EDR Contact: 10/29/2018

Next Scheduled EDR Contact: 02/11/2019 Data Release Frequency: Semi-Annually

OTHER DATABASE(S)

Depending on the geographic area covered by this report, the data provided in these specialty databases may or may not be complete. For example, the existence of wetlands information data in a specific report does not mean that all wetlands in the area covered by the report are included. Moreover, the absence of any reported wetlands information does not necessarily mean that wetlands do not exist in the area covered by the report.

CT MANIFEST: Hazardous Waste Manifest Data

Facility and manifest data. Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a tsd facility.

Date of Government Version: 08/10/2018 Date Data Arrived at EDR: 08/10/2018 Date Made Active in Reports: 09/10/2018

Number of Days to Update: 31

Source: Department of Energy & Environmental Protection

Telephone: 860-424-3375 Last EDR Contact: 08/09/2018

Next Scheduled EDR Contact: 11/26/2018 Data Release Frequency: No Update Planned

NJ MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 12/31/2017 Date Data Arrived at EDR: 07/13/2018 Date Made Active in Reports: 08/01/2018

Number of Days to Update: 19

Source: Department of Environmental Protection

Telephone: N/A

Last EDR Contact: 10/09/2018

Next Scheduled EDR Contact: 01/21/2019 Data Release Frequency: Annually

PA MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 12/31/2016 Date Data Arrived at EDR: 07/25/2017 Date Made Active in Reports: 09/25/2017

Number of Days to Update: 62

Source: Department of Environmental Protection

Telephone: 717-783-8990 Last EDR Contact: 10/15/2018

Next Scheduled EDR Contact: 01/28/2019 Data Release Frequency: Annually

RI MANIFEST: Manifest information
Hazardous waste manifest information

Date of Government Version: 12/31/2017 Date Data Arrived at EDR: 02/23/2018 Date Made Active in Reports: 04/09/2018

Number of Days to Update: 45

Source: Department of Environmental Management

Telephone: 401-222-2797 Last EDR Contact: 08/21/2018

Next Scheduled EDR Contact: 12/03/2018 Data Release Frequency: Annually

VT MANIFEST: Hazardous Waste Manifest Data Hazardous waste manifest information.

> Date of Government Version: 08/23/2018 Date Data Arrived at EDR: 08/23/2018 Date Made Active in Reports: 09/18/2018

Number of Days to Update: 26

Source: Department of Environmental Conservation

Telephone: 802-241-3443 Last EDR Contact: 10/15/2018

Next Scheduled EDR Contact: 01/28/2019 Data Release Frequency: Annually

WI MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 12/31/2017 Date Data Arrived at EDR: 06/15/2018 Date Made Active in Reports: 07/09/2018

Number of Days to Update: 24

Source: Department of Natural Resources

Telephone: N/A

Last EDR Contact: 09/06/2018

Next Scheduled EDR Contact: 12/24/2018 Data Release Frequency: Annually

Oil/Gas Pipelines

Source: PennWell Corporation

Petroleum Bundle (Crude Oil, Refined Products, Petrochemicals, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)) N = Natural Gas Bundle (Natural Gas, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)). This map includes information copyrighted by PennWell Corporation. This information is provided on a best effort basis and PennWell Corporation does not guarantee its accuracy nor warrant its fitness for any particular purpose. Such information has been reprinted with the permission of PennWell.

Electric Power Transmission Line Data

Source: PennWell Corporation

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Sensitive Receptors: There are individuals deemed sensitive receptors due to their fragile immune systems and special sensitivity to environmental discharges. These sensitive receptors typically include the elderly, the sick, and children. While the location of all sensitive receptors cannot be determined, EDR indicates those buildings and facilities - schools, daycares, hospitals, medical centers, and nursing homes - where individuals who are sensitive receptors are likely to be located.

AHA Hospitals:

Source: American Hospital Association, Inc.

Telephone: 312-280-5991

The database includes a listing of hospitals based on the American Hospital Association's annual survey of hospitals.

Medical Centers: Provider of Services Listing

Source: Centers for Medicare & Medicaid Services

Telephone: 410-786-3000

A listing of hospitals with Medicare provider number, produced by Centers of Medicare & Medicaid Services,

a federal agency within the U.S. Department of Health and Human Services.

Nursing Homes

Source: National Institutes of Health

Telephone: 301-594-6248

Information on Medicare and Medicaid certified nursing homes in the United States.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Public Schools

Source: National Center for Education Statistics

Telephone: 202-502-7300

The National Center for Education Statistics' primary database on elementary

and secondary public education in the United States. It is a comprehensive, annual, national statistical database of all public elementary and secondary schools and school districts, which contains data that are

comparable across all states.

Private Schools

Source: National Center for Education Statistics

Telephone: 202-502-7300

The National Center for Education Statistics' primary database on private school locations in the United States.

Daycare Centers: Day Care Providers Source: Department of Health Telephone: 212-676-2444

Flood Zone Data: This data was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.

Source: FEMA

Telephone: 877-336-2627

Date of Government Version: 2003, 2015

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

State Wetlands Data: Freshwater Wetlands

Source: Department of Environmental Conservation

Telephone: 518-402-8961

Current USGS 7.5 Minute Topographic Map Source: U.S. Geological Survey

STREET AND ADDRESS INFORMATION

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Appendix E

Health and Safety Plan (HASP) NYSDEC BCP Site Number C241254



IMPACT ENVIRONMENTAL 170 Keyland Court Bohemia, New York 11716

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HEALTH AND SAFETY PLAN

NYSDEC BROWNFIELD CLEANUP PROGRAM

Submitted for:

13-16 to 13-24 Beach Channel Drive
Far Rockaway, New York 11691
New York City Tax Map Designation: Block 15228; Lots 5, 6, and 9

Submitted to:

New York State Department of Environmental Conservation Chief, Site Control Section Region 2, Division of Environmental Remediation 47-40 21st Street Long Island City, NY

Prepared for:

Camber Property Group, LLC 419 Park Avenue South, 4th Floor New York, New York

February 2, 2021 *IEC Project Number:* #15209



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1 Introduction

This Health and Safety Plan (HASP) describes the procedures to be followed in order to reduce employee exposure to potential health and safety hazards that may be present during environmental investigation activities being performed at the Site. The emergency response procedures necessary to respond to such hazards are also described within this HASP. All activities performed under this HASP are targeted to comply with Occupational Safety and Health Administration (OSHA) Regulations 29 CFR Part 1910.1025.

This document is not, nor does it purport to be, a complete description of all safety and health requirements applicable to work performed at the site. Rather, the HASP is a general overview of the compliance policies and work practices applicable to the primary tasks and hazards associated with the environmental assessment portion of the development project, as well as a recitation of <u>minimum</u> safety and health compliance obligations for contractors, subcontractors and workers at the site. All subcontractors of any tier operating at the worksite are obligated to implement and maintain comprehensive safety and health plans for their own employees and to ensure that their employees comply with all applicable safety and health requirements. All subcontractors operating at the worksite should refer to the applicable specific OSHA Standards for detailed requirements.

1.1 Purpose

The purpose of this HASP is to provide the contractors' field personnel, as well as other site-occupants, with an understanding of the potential chemical and physical hazards that exist or may arise while portions of this project are being performed. To this end, this HASP also presents information on the progression of the environmental restoration activities and specific details regarding the handling of materials excavated from the Site.

The primary objective is to ensure the well being of all field personnel and the community surrounding this site. In order to accomplish this, project staff and approved subcontractors of any tier shall acknowledge and adhere to the policies and procedures established herein. Accordingly, all personnel assigned to the remediation activities associated with this project (Remedial Personnel) shall read this HASP and sign the Agreement and Acknowledgment Statement (Appendix A) to certify that they have read, understood, and agree to abide by its provisions. A copy of this HASP will be available to anyone that requests it. Personnel involved in construction activities (Construction Personnel) and other Personnel (e.g. government officials, administrators, bank inspectors, assessors, etc.) that will have limited exposure to the site native soil/fill material during construction activities will be instructed on how to reduce the probability of exposure to site contaminants, but will not be required read the HASP.

2 Application of Health and Safety Plan

The procedures of this HASP apply for any person that will enter the boundaries of the site or a portion of the Site during environmental investigation/remediation activities or construction, until the existing soil/fill material has been covered with either a paved surface or an uncontaminated soil cap. When the Project Manager has designated an area of the site as clear of any environmental issues, construction contractors and subcontractors of any tier will perform the balance of the work in accordance with their individual OSHA-compliant corporate HASP.

2.1 Restoration Personnel

Employees of contractors and subcontractors of any tier performing the following activities will be considered Restoration Personnel:

- Excavation of native soil/fill material
- Loading of native soil/fill onto vehicles
- Processing of native soil/fill into components
- Transporting of native soil/fill across the site
- Sampling of native soil/fill material for subsequent physical or chemical analysis
- Cleaning or decontaminating equipment or personnel
- Handling of ground waters

All subcontractors, of any tier, must submit a HASP to the Site Health and Safety Officer for review and approval prior to mobilizing to the site. Only HASPs that comply with this HASP will be approved. Where a subcontractors HASP is deficient, the Site Health and Safety Officer will provide written notification of any required changes. Approved HASPs will be submitted to the Project Manager and retained on-site for reference by the Site Health and Safety Officer.

2.2 Construction Personnel

For this document, "Construction Personnel" is the term given for those employees of contractors and subcontractors of any tier performing activities associated with site development other than those performed by the Remedial Personnel. This designation does not preclude that Construction Personnel will traverse or work upon native soil/fill material, rather, it infers that it will not involve performing tasks that will create a route of exposure to the contaminants contained therein. Construction Personnel will receive instruction to limit the potential for exposure to these contaminants. Construction Personnel will be prohibited from entering Environmental Remediation Areas (i.e., active excavation / handling / processing areas, loading areas, exclusion zones or support zones).

3 Key Personnel / Identification of Health & Safety Personnel

3.1 Key Personnel

A list of the pertinent personnel authorized to be present on site is as follows:

Title	Name	Telephone Number
Senior Project Manager	Greg Mendez-Chicas	(O) 631-269-8800 ext: 124
Impact Environmental		(C) 908-763-5095
Project Manager	Chris Connolly	(O) 631-269-8800 ext: 152
Impact Environmental		(C) (631) 664-4425
Field Operations Leader	Daniel Fruhauf	(O) 631-269-8800 ext: 141
Impact Environmental		(C) 631-901-2470
Site Health & Safety Officer	Leif Robertson	(O) 631-269-8800 ext: 121
Impact Environmental		(C) 631-275-4865

3.2 Organizational Responsibility

3.2.1 Senior Project Manager

The Senior Project Manager will be responsible for implementing the project and obtaining any necessary personnel or resources for the completion of the project. Specific duties will include:

- Selecting a Site Health and Safety Officer and field personnel for the work to be undertaken on site;
- Providing authority and resources to ensure that the Site Health and Safety Officer is able to implement and manage safety procedures;
- Preparing reports and recommendations about the project to clients and affected personnel;
- Ensuring that all persons allowed to enter the site (e.g.., EPA, contractors, state officials, visitors) are made aware of the potential hazards associated with the substances known or suspected to be on site, and are knowledgeable as to the on-site copy of the specific HASP; and
- Ensuring that the Site Health and Safety Officer is aware of all of the provisions of this HASP and is instructing all personnel on site about the safety practices and emergency procedures defined in the plan.

3.2.2 Project Manager

The Project Manager will be responsible for implementing the Senior Project Manager' duties as well as oversee activities regarding the project both in the field and in the office as well as interact with environmental regulatory agencies, sub-contractors and internal company personnel.

- Coordinating the activities of all construction and Remedial Personnel, to include informing them of the required Personal Protective Equipment (PPE) and ensuring their signature acknowledging this HASP;
- Ensuring that the tasks assigned are being completed as planned and on schedule; and
- Serving as liaison with public officials where there is no Public Affairs official designated.

3.2.3 Field Operations Leader

The Field Operations Leader will be responsible for field operations and safety. Specific duties will include, but are not limited to:

- Scheduling with the construction company and their subcontractors;
- Coordinating with the Site Health and Safety Officer in determining protection levels;
- Documenting field activities;
- Coordinate activities between environmental and construction personnel;
- Coordination with waste management contractors; and
- Review and approval of waste disposal facilities.

In the event that the Project Manager and the Site Health and Safety Officer are not on site, the Field Operations Leader will assume all responsibility of the Site Health and Safety Officer.

3.2.4 Site Health and Safety Officer

The Site Health and Safety Officer shall be responsible for the implementation of the HASP on site. Specific duties will include:

- Monitoring the compliance of construction and environmental remediation activities personnel (field personnel) for the routine and proper use of the PPE that has been designated for each task;
- Routinely inspecting PPE and clothing to ensure that it is in good condition and is being stored and maintained properly;
- Stopping work on the site or changing work assignments or procedures if any operation threatens the health and safety of workers or the public;
- Monitoring personnel who enter and exit the site and all controlled access points;

- Reporting any signs of fatigue, work-related stress, or chemical exposures to the Project Manager;
- Dismissing field personnel from the site if their actions or negligence endanger themselves, coworkers, or the public, and reporting the same to the Project Manager;
- Reporting any accidents or violations of the HASP plan to the Project Manager and documenting the same for the project in the records;
- Knowing emergency procedures, evacuation routes, and the telephone numbers of the ambulance,
 local hospital, poison control center, fire and police departments;
- Ensuring that all project-related personnel have signed the personnel agreement and acknowledgments form contained in this HASP; and
- Coordinate upgrading and downgrading PPE as necessary due to changes in exposure levels, monitoring results, weather, and other site conditions.

4 Chemical Hazard Analysis and Control Measures

Based on the patrial remedial investigation performed at the Site in October and November 2020 by Impact Environmental Closures, Inc., the contaminants of concern include the following:

- Volatile organic compounds (VOC's) identified in soil: Tetrachloroethene (PCE);
- Semi-volatile organic compounds (SVOC's) identified in soil: Benzo(a)anthracene, benzo(a)pyrene,
 benzo(b)fluoranthene, benzo(k)- fluoranthene, chrysene, dibenzo (a,h)-anthracene and indeno(1,2,3-cd)pyrene;
- Metals identified in soil: Lead, mercury, and zinc;
- VOCs identified in groundwater: Chloroform and PCE;
- SVOC's identified in groundwater: Benzo(b)fluoranthene and benzo(k)- fluoranthene;
- Metals identified in groundwater: Arsenic (total) and lead (total).
- VOCs identified in soil vapor: Trichloroethene (TCE) and PCE.

VOCs, SVOCs and metals were detected in both soil and groundwater samples. In addition, TCE and PCE were detected in soil vapor samples. A summary of the health hazards associated with the contaminant of concerns are shown below.

4.1 Volatile Organic Compounds

The partial remedial investigation performed at the Site have identified chlorinated solvent related VOC's in soil, groundwater and soil vapor.

Soil samples results indicated elevated concentrations of PCE in samples SB-4 (2-4) and SB-4A (2-4). In addition, groundwater sampling results indicate elevated concentrations of chloroform in TWP-1, MW-1, and MW-2 and PCE in TWP-1, MW-1, MW-3 TW-1 and MW-2. Lastly, soil vapor sampling results indicate elevated concentrations of PCE in samples SV-1, SV-2, SV-3, SV-4, and SV-5 and TCE in sample SV-2. Prolonged exposure to VOCs above their respective OSHA permissible exposure limits may result in irritation of the mucous membranes of the respiratory system, eyes, and mouth. Overexposure to VOCs may also result in the depression of the central nervous system. Symptoms may include drowsiness, headache, and fatigue.

4.2 Semi-Volatile Organic Compounds

The partial remedial investigation performed at the Site have identified Polycyclic Aromatic Hydrocarbons (PAHs) related SVOC's in soil and groundwater.

Several SVOC's were detected in soil sample SB-4 (0-2) above applicable standards. These SVOCs include Benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, chrysene, dibenzo (a,h)-

anthracene, and indeno(1,2,3-cd)pyrene. In addition, groundwater sampling results indicate elevated concentrations of benzo(b)fluoranthene in TWP-1, benzo(a)anthracene in TW-1 and benzo(k)fluoranthene in TWP-1. Prolonged exposure to SVOCs above OSHA permissible exposure limits may result in adverse health effects including endocrine and thyroid disruption, immunotoxicity, reproductive toxicity, cancer, and adverse effects on fetal and child development and neurologic function.

4.3 Total Metals

The partial remedial investigation performed at the Site have identified heavy metals in soil and groundwater.

Soil samples results indicated elevated concentrations of lead in samples SB-1 (0-2), SB-1 (0-2)*1, SB-2 (0-2)*, SB-4 (0-2), SB-4 (2-4) and SB-5 (0-2), mercury in samples SB-1 (0-2)*, SB-1 (0-2) SB-4 (0-2), SB-4 (2-4) and SB-5 (0-2) and zinc SB-1 (0-2)*, SB-2 (0-2)* and SB-4 (0-2). In addition, groundwater sampling results indicate elevated concentrations of total lead and total arsenic in TWP-1. Prolonged exposure to the above mentions metals above OSHA permissible exposure limits may result in adverse health effects including endocrine and thyroid disruption, immunotoxicity, reproductive toxicity, cancer, and adverse effects on fetal and child development and neurologic function.

7

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¹ Samples SB-1 (0-2)* and SB-2 (0-2)* were collected by Tenen in 2018.

5 Health and Safety Risk Analysis

The field tasks covered by the HASP will include supplemental investigated task such as, drilling, and containerization of soil/groundwater/soil vapor samples. Additionally, standard job task hazards that are inherent to an investigative project will exist.

5.1 Explosion and Fire

This Section is not, nor does it purport to be, a comprehensive recitation of safety and health requirements applicable to explosion and fire. Rather, contractors, subcontractors and workers at the site must refer to OSHA's Fire Protection and Prevention Standard, set forth at 29 C.F.R. § 1910 part 1926.35, as well as all supporting OSHA Compliance Directives and Letters of Interpretation, for complete information on safety and health compliance obligations. The following are possible fire and explosion hazards that may be encountered on the job site along with fire preventive measures to take.

5.1.1 Flammable Vapors

The presence of flammable vapors can pose a potential fire and health hazard. Hazard reduction procedures include monitoring the ambient air with an oxygen/LEL meter (combustible gas indicator). If the LEL reading exceeds 20%, all work will stop and employees will leave the site immediately and contact the fire department. For OSHA-defined "confined space" activities, work will stop if the LEL reading exceeds 10%.

5.1.2 High Oxygen Levels

Atmospheres that contain a level of oxygen greater than 23% pose an extreme fire hazard (the usual ambient oxygen level is approximately 20.5%). All personnel encountering atmospheres that contain a level of oxygen greater than 23% must evacuate the site immediately and must notify the Fire Department. If the oxygen level is less than 19.5%, do not enter the space without level B PPE.

5.1.3 Fire Prevention

- During equipment operation, periodic vapor concentration measurements should be taken with an
 explosimeter or combustimeter. If at any time the vapor concentrations exceed 20% of the lower
 explosive limit (LEL), then the Site Health and Safety Officer or designated field worker should
 immediately shut down all operations.
- Only approved safety cans will be used to transport and store flammable liquids.
- All gasoline and diesel-driven engines requiring refueling must be shut down and allowed to cool prior to filling.
- Smoking is not allowed during any operations within the work area in which petroleum products or solvents in free-floating, dissolved, or vapor forms, or other flammable liquids may be present.
- No open flame or spark is allowed in any area containing petroleum products or other flammable liquids.

5.2 Operational Safety Hazards

This Section is not, nor does it purport to be, a comprehensive recitation of safety and health requirements applicable to earth moving equipment. Rather, contractors, subcontractors and workers at the site must refer to OSHA's Excavation Standard, set forth at 29 C.F.R. § 1910 Subpart P as well as all supporting OSHA Compliance Directives and Letters of Interpretation, for complete information on safety and health compliance obligations.

5.2.1 Heavy Machinery / Equipment

All site employees must remain aware of those site activities that involve the use of heavy equipment and machinery. Respiratory protection and protective eyewear may be worn frequently during site activities. This protective equipment significantly reduces peripheral vision of the wearer. Therefore, it is essential that all employees at the site exercise extreme caution during operation of equipment and machinery to avoid physical injury to themselves or others.

5.2.2 Vehicular Traffic

All employees will be required to wear a fluorescent safety vest at all times while on site. In addition, supplemental traffic safety equipment use can be exercised when warranted by specific task. Supplemental equipment can be items such as cones, flags, barricades, and/or caution tape. Drivers of waste transportation vehicles will only exit vehicles in designated areas within the Support Zone. During this time, drivers will only be allowed to inspect the placement of waste loads and cover their trailers.

5.3 Noise Hazards

This Section is not, nor does it purport to be, a comprehensive recitation of safety and health requirements applicable to noise hazards. Rather, contractors, subcontractors and workers at the site must refer to OSHA's Occupational Noise Exposure Standard, set forth at 29 C.F.R. § 1910 part 1926.52, as well as all supporting OSHA Compliance Directives and Letters of Interpretation, for complete information on safety and health compliance obligations.

Hearing protection shall be provided to the employees where sound pressure levels exceed 85 dB. Hearing protection shall be worn where sound pressure levels in areas and/or on equipment exceeds 90 dB. Typical heavy excavation operations have been monitored with a sound level meter and indicate that hearing protection is required for all personnel while engaged in this action.

5.4 Safe Material Handling

This Section is not, nor does it purport to be, a comprehensive recitation of safety and health requirements applicable to safe material (soil/fill) handling. Rather, contractors, subcontractors and workers at the site must refer to OSHA's Eye and Face, and Respiratory Safety Standards, set forth at 29 C.F.R. § 1910 Parts 1926.102 and 1926.103

13-16 to 13-24 Beach Channel Drive, Far Rockaway, New York

as well as all supporting OSHA Compliance Directives and Letters of Interpretation, for complete information on safety and health compliance obligations.

Skin and eye contact with contaminated soil/fill or materials in contact with the soil/fill may occur during excavation, drilling, sampling, handling and decontamination activities. Nitrile gloves and approved safety glasses must be worn to prevent exposure to the associated contaminants. Employees working at or near (within ten feet of) excavation fronts could be required to wear respiratory protection. If necessary, all associated activities will be performed pursuant to 29 C.F.R. § 1910 Parts 1926.134 (a)(2) and 1926.55.

5.5 Temperature Hazards

This Section is not, nor does it purport to be, a comprehensive recitation of safety and health requirements applicable to temperature stresses. Rather, contractors, subcontractors and workers at the site must refer to OSHA's Technical Manual (TED 1-0.15A), Section III – Chapter 4 (1999) as well as all supporting OSHA Compliance Directives and Letters of Interpretation, for complete information on safety and health compliance obligations.

Since climatic changes cannot be avoided, work schedules will be adjusted to provide time intervals for intake of juices, juice products, and water in an area free from contamination and in quantities appropriate for fluid replacement to prevent heat stress conditions from occurring.

5.5.1 Types of Heat Stress

Heat stress may occur even in moderate temperature areas and may present any or all of the following:

5.5.1.1 Heat Rash

Result of continuous exposure to heat, humid air, and chafing clothes. Heat rash is uncomfortable and decreases the ability to tolerate heat.

5.5.1.2 Heat Cramps

Result of the inadequate replacement of body electrolytes lost through perspiration. Signs include severe spasms and pain in the extremities and abdomen.

5.5.1.3 Heat Exhaustion

Result of increased stress on the vital organs of the body in the effort to meet the body's cooling demands. Signs include shallow breathing; pale, cool, moist skin; profuse sweating; and dizziness.

5.5.1.4 Heat Stroke

Result of overworked cooling system. Heat stroke is the most serious form of heat stress. Body surfaces must be cooled and medical help must be obtained immediately to prevent severe injury and/or death. Signs include red,

hot, dry skin, absence of perspiration, nausea, dizziness and confusion, strong, rapid pulse that could lead to coma or death.

5.5.2 Heat Stress Prevention

- A. Replace body fluids (water and electrolytes) lost through perspiration. Solutions may include a 0.1% salt and water solution or commercial mixes such as "Gatorade". Employees must be encouraged to drink more than the amount required in order to satisfy thirst.
- B. Use cooling devices to aid the natural body ventilation. Cooling occurs through evaporation of perspiration and limited body contact with heat-absorbing protective clothing. Utilize fans and air conditioners to assist in evaporation. Long, cotton underwear is suggested to absorb perspiration and limit any contact with heat-absorbing protective clothing (i.e., coated Tyvek suits).
- C. Conduct non-emergency response activities in the early morning or evening during very hot weather.
- D. Provide shelter against heat and direct sunlight to protect personnel. Take breaks in shaded areas.
- E. Rotate workers utilizing protective clothing during hot weather.
- F. Establish a work regime that will provide adequate rest periods, with personnel working in shifts.

5.6 Cold Exposure Hazards

Work schedules will be adjusted to provide sufficient rest periods in a heated area for warming up during operations conducted in cold weather. Also, thermal protective clothing such as wind and/or moisture resistant outerwear is recommended to be worn.

If work is performed continuously in the cold at or below -7 °C (20 °F), including wind chill factor, heated warming shelters (tents, cabins, company vehicles, rest rooms, etc.) shall be made available nearby and the worker should be encouraged to use these shelters at regular intervals, the frequency depending on the severity of the environmental exposure. The onset of heavy shivering, frostnip, the feeling of excessive fatigue, drowsiness, irritability, or euphoria, are indications for immediate return to the shelter. When entering the heated shelter, the outer layer of clothing shall be removed and the remainder of the clothing loosened to permit sweat evaporation. A change of dry work clothing shall be provided as necessary to prevent workers from returning to their work with wet clothing.

Dehydration, or the loss of body fluids, occurs in the cold environment and may increase the susceptibility of the worker to cold injury due to a significant change in blood flow to the extremities. Warm sweet drinks and soups should be provided at the work site to provide caloric intake and fluid volume. The intake of coffee should be limited because of a diuretic and circulatory effect (adapted from TLV's and Biological Exposure Indices 1988-1989, ACGIH).

6 Personnel Training

6.1 Pre-assignment and OSHA Training

All Remedial Personnel that will be in direct contact (that is hand digging, sampling, processing) with the native soil/fill materials must complete an initial 40-hour Hazardous Waste Operations and Emergency Response (HAZWOPER) training course and, where necessary, a current eight hour refresher course (as required annually after initial 40-hour training completion). Restoration Personnel that will not be in direct contact with native soil/fill materials are only required to prove they have read and understood the procedures presented in this HASP.

On-site managers and supervisors of Restoration Personnel (Field Operations Leader, Site Health and Safety Officer) directly responsible for employees engaged in hazardous substance operations have received an initial 40-hour HAZWOPER training course and an additional (above the 40-hour HAZWOPER) eight hours of supervisory training. These training requirements comply with the OSHA Hazardous Waste Operations and Emergency Response Regulation, 29 CFR 1910.120. The Site Health and Safety Officer will be certified in First Aid and Cardiovascular Pulmonary Resuscitation.

The Site Health and Safety Officer will conduct an on-site training meeting for all Construction Personnel and observers that could potentially be exposed to the native soil/fill material during construction activities. Training meetings will be provided routinely for any new project personnel. This program will cover specific health and safety equipment and protocols and potential problems inherent to each project operation. The Site Health and Safety Officer will be present for any activities being performed by Construction Personnel that will involve the handling of soil/fill during construction activities to provide supervision on exposure reduction. This may include insuring the use of proper PPE and air quality monitoring.

6.2 Respirator Requirements

6.2.1 Respirator Requirements and Fit Testing

The OSHA respiratory protection standard, 29 CFR 1910.134, under paragraph (f)(2), requires fit testing for all employees using tight fitting respirators including filtering facepiece respirator. The fit test must be performed before the respirator is used and must be repeated at least annually and whenever a different respirator facepiece is used or a change in the employee's physical condition could affect the respirator fit.

The user seal check is a separate requirement under paragraph (g)(1)(iii) and must be performed each time the employee dons the respirator. Employers must adhere to the recommendations of the respirator's manufacturer; different manufacturers recommend different procedures.

6.2.2 Medical Surveillance

OSHA requires a medical evaluation to determine whether each employee required to wear a respirator is physically able to wear a respirator and perform the work. This evaluation can be a medical examination or an evaluation of employee responses to the OSHA Respirator Medical Evaluation Questionnaire located in **Appendix B** of the Respiratory Protection Standard. Either method must be performed by a physician or other licensed healthcare professional. **Appendix C** has a copy of the forms to be completed.

A medical examination may be necessary whenever the employee gives a positive response to any of questions 1 through 8 in Appendix B, Part A, Section 2.

7 Personal Protective Equipment

This Section is not, nor does it purport to be, a comprehensive recitation of safety and health requirements applicable to personal protective equipment. Rather, contractors, subcontractors and workers at the site must refer to OSHA's Personal Protective Equipment Standard, set forth at 29 C.F.R. § 1910.Part 1926.28(a) as well as all supporting OSHA Compliance Directives and Letters of Interpretation, for complete information on safety and health compliance obligations.

The purpose of personal protective clothing and equipment (PPE) is to shield or isolate individuals from the chemical, physical, and biological hazards that may be encountered on-site when engineering and other controls are not feasible or cannot provide adequate protection. Careful selection and use of adequate PPE should protect the health of all on-site workers. No single combination of PPE is capable of protecting against all hazards. Therefore, PPE should be used in conjunction with, not in place of, other protective methods, such as engineering controls and safe work practices.

Site-specific chemicals of concern include semi-volatile organic compounds. These chemicals are of moderate to low hazard. Therefore, level D personal protective equipment will be required at all times when on site. The following is a breakdown of the types of protective clothing and equipment to be used during the site activities.

7.1.1 Levels of Protection

The Site Health and Safety Officer will determine whether a level of protection should be upgraded or downgraded. Changes in the level of protection will be recorded in the dedicated site logbook along with the rationale for the changes (see Section 7.1.3 for additional information on PPE upgrades). Level D PPE will be the minimum requirement at all times during the environmental remediation portion of the project.

7.1.2 Level D Personal Protective Equipment

All initial site access and activities will be done in Level D attire. Level D protection is sufficient under conditions where no contaminants are present or those activities that do not pose a potential threat of unexpected inhalation of or contact with hazardous levels of any substances. Typical Level D activities may include sediment, logging and groundwater sampling, and as surficial site surveys.

- Hard hat
- Safety glasses (as appropriate)
- Steel toe and shank boots
- Fluorescent vest
- Hearing protection (as appropriate)

7.1.3 Modified Level D Personal Protective Equipment

- Hard hat
- Safety glasses
- Steel toe and shank boots
- Fluorescent vest
- Nitrile "N-Dex" inner gloves
- Latex outer boots (chemical resistant)
- Polyethylene coated Tyvek suit
- Hearing protection (as appropriate)

7.1.4 Level C Personal Protective Equipment

Level C protection, as described in this plan, will be available at a minimum for those activities that involve surface and subsurface soil (strata disturbance such as well installation, and all subsurface media sampling activities such as split-spoon sampling and borings). Level C protection equipment should be readily available at all times. Consistent with OSHA training, prior to donning Level C, oxygen percent must be continuously monitored.

- Buddy system required at all times
- Full face respirator with NIOSH approved OV/AG/HEPA combination cartridges (MSA GMC-H)
- Saranex coated Tyvek Suit
- Inner Nitrile "N-Dex" gloves
- Outer Nitrile (NBR) gloves
- Steel toe and shank boots
- Outer boots (chemical resistant)
- Hard hat
- Hearing protection (as appropriate)

7.1.5 Level B Personal Protective Equipment

Some activities may require Level B protection. In atmospheres potentially containing toluene and xylenes, the protective ensemble should include chemical resistant clothing since the two compounds have skin absorption potential.

Regional Health and Safety representatives must be on site upon start-up of <u>any</u> project requiring level B protection. This should be understood to include subcontractors conducting Level B activity.

- Buddy system required at all times
- Supplied air respirator or SCBA
- Saranex coated Tyvek Suit
- Inner Nitrile "N-Dex" gloves

- Outer Nitrile (NBR) gloves
- Steel toe and shank boots
- Outer boots (chemical resistant)
- Hard hat
- Hearing protection (as appropriate)

7.1.6 Personal Use Factors and Equipment Change Out Schedule

Prohibitive or precautionary measures should be taken as necessary to prevent workers from jeopardizing safety during equipment use.

If necessary, all respiratory protective equipment used will be approved by NIOSH/MSHA. Respirator cartridges will be changed once per eight-hour shift at a minimum. This can be accomplished at the end of the workday during respirator decontamination. Employees working within the excavation front should change the cartridge of their respirators once every four hours. If odor breakthrough is detected while wearing the respirator or if breathing becomes difficult, change cartridges immediately. A filter change out schedule is provided below.

Remedial Worker	Work Area	Filter Type	Replacement Rate
Site Screener	EZ – At Excavation Front	MSA GMC-H	Every 4 Hours
Laborer	EZ – At Excavation Front	MSA GMC-H	Every 2 Hours
	SZ, CRZ	MSA GMC-H	Every 8 Hours
Equipment Operator	EZ	MSA GMC-H	Every 4 Hours
	SZ, CRZ	MSA GMC-H	Every 8 Hours
Administrator	EZ	MSA GMC-H	Every 4 Hours
	SZ, CRZ	MSA GMC-H	Every 8 Hours

^{*}Work Area Definitions are discussed in the following Section (8.1)

When utilizing protective garments such as Tyvek suits, gloves, and booties, all seams between protective items will be sealed with duct tape.

Contact with contaminated surfaces, or surfaces suspected of being contaminated, should be avoided. This includes walking through, kneeling in, or placing equipment in puddles, mud, discolored surfaces, or on drums and other containers.

Eating, smoking, drinking, and/or the application of cosmetics in the immediate work area is prohibited. Ingestion of contaminants or absorption of contaminants into the skin may occur.

The use of contact lenses on the job site is strongly advised against. Contact lenses may trap contaminants and/or particulate between the lens and eye, causing irritation. However, when glasses are not available, contact lenses are preferred over faulty vision. When contact lenses are worn, safety glasses and/or goggles must be worn at all times while on the job site. Wearing contact lenses with a respirator in a contaminated atmosphere is prohibited under 29 CFR ss1910.134 (e)(5)(iii).

8 Work Zones

8.1 Work Zone Definitions

Work and support areas shall be established based on ambient air data and proposed work sites. They shall be established in order to contain contamination within the smallest areas possible and shall ensure that each employee has the proper PPE for the area or zone in which work is to be performed.

8.1.1 Exclusion Zone (EZ)

It is within this zone that the excavation or environmental remediation activities such as tank abandonment, system installation or other soil disturbance operations are performed. No one shall enter this zone unless the appropriate PPE is donned. The location of this zone will change as the construction-related excavation activities are performed.

8.1.2 Contaminant Reduction Zone (CRZ)

It is within this zone that the decontamination process is undertaken. Personnel and their equipment must be adequately decontaminated before leaving this zone for the support zone. This zone will be set up between the EZ (no less than 100 feet away) and the site boundary.

8.1.3 Support Zone (SZ)

The support zone is considered to be uncontaminated; as such, protective clothing and equipment are not required but should be available for use in emergencies. All equipment and materials are stored and maintained within this zone. Protective clothing is put on within the SZ before entering the EZ or the CRZ. The SZ will be established in a safe environment at least 50 feet away from the EZ.

9 General Safety and Health Provisions

This Section is not, nor does it purport to be, a comprehensive recitation of safety and health requirements applicable to general safety and health provisions. Rather, contractors, subcontractors and workers at the site must refer to OSHA's General Safety and Health Provision Standard, set forth at 29 C.F.R. § 1910 subparts C and G as well as all supporting OSHA Compliance Directives and Letters of Interpretation, for complete information on safety and health compliance obligations.

9.1 Safety Practices / Standing Orders

The following are important safety precautions that will be enforced during work activities.

- 1. Eating, drinking, chewing gum or tobacco, smoking, or any practice that increases the probability of hand-to-mouth transfer and ingestion of material is prohibited in any area designated as contaminated.
- 2. Hands and face must be thoroughly washed upon leaving the work area and before eating, drinking, or any other activity.
- 3. Whenever decontamination procedures for outer garments are in effect, the entire body should be thoroughly washed as soon as possible after the protective garments are removed.
- 4. No excessive facial hair that interferes with the effectiveness of a respirator will be permitted on personnel required to wear respiratory protection equipment. The respirator must seal against the face so that the wearer receives air only through the air purifying cartridges attached to the respirator. Fit testing shall be performed prior to respirator use to ensure the wearer obtains a proper seal.
- 5. Contact with potentially contaminated surfaces should be avoided whenever possible. One should not walk through puddles; kneel on the ground; lean, sit, or place equipment on drums, containers, vehicles, or the ground.
- 6. Medicine and alcohol can potentate the effect from exposure to certain compounds. Prescribed drugs and alcoholic beverages should not be consumed by personnel involved in the project.
- 7. Personnel and equipment in the work areas should be minimized, consistent with effective site operations.
- 8. Work areas for various operational activities should be established.
- 9. Procedures for leaving the work area must be planned and implemented prior to going to the site. Work areas and decontamination procedures must be established on the basis of prevailing site conditions.
- 10. Respirators will be issued for the exclusive use of one worker and will be cleaned and disinfected after each use.
- 11. Safety gloves and boots shall be taped to the disposable, chemical-protective suits as necessary.
- 12. All unsafe equipment left unattended will be identified by a "DANGER, DO NOT OPERATE" tag.
- 13. Noise mufflers or earplugs may be required for all site personnel working around heavy equipment. This requirement will be at the discretion of the Site Health and Safety Officer. Disposable, form-fitting plugs are preferred.

14. Cartridges for air-purifying respirators in use will be changed daily at a minimum.

9.2 Buddy System

Site personnel will employ the buddy system when working under certain circumstances, such as enclosed spacing.

Under the buddy system, each site worker is responsible for monitoring the well-being of another worker. No one will work alone when the buddy system is implemented. At no time will fewer than two employees be present at the site if activities are underway.

9.3 Site Communications Plan

Mobile telephone and/or two-way radios will be used to communicate between the work parties on the site. The following standard hand signals will be used in case of failure of radio communication:

Hands on top of head = Need assistance

Thumbs up = OK, I am alright, I understand

■ Thumbs down = No, negative

Personnel in the Contaminated Zone should remain in constant radio communication or within sight of the project team leader. Any failure of radio communication will require the team leader to evaluate whether personnel should leave the zone.

9.4 Retention of Records

The following records will be maintained on-site and in corporate records for no less than three years.

- · Fit test results
- OSHA Training Certification
- Medical Questionnaire and/or Medical Clearance
- Medical Data Sheets
- Accident Report Forms

10 Decontamination Plan

10.1 General

Personnel involved in work activities at the site may be exposed to compounds in a number of ways, despite the most stringent protective procedures. Site personnel may come in contact with vapors, gases, mists, particulates in the air, or other site media while performing site duties. Use of monitoring instruments and site equipment can also result in exposure and transmittal of hazardous substances.

In general, decontamination involves scrubbing with a detergent water solution followed by clean water rinses. All disposable items shall be disposed of in a dry container. Certain parts of contaminated respirators, such as harness assemblies and leather or cloth components, are difficult to decontaminate. If grossly contaminated, they may have to be discarded. Rubber components can be soaked in detergent and water and scrubbed with a brush. In addition to being contaminated, all respirators, non-disposable protective clothing, and other personal articles must be sanitized or replaced before they can be used again if they become soiled from exhalation, body oils, and perspiration. The manufacturer's instructions should be followed in sanitizing the respirator masks. The Site Health and Safety Officer will be responsible for the proper maintenance, decontamination, and sanitizing of any respirator equipment that may be used on-site. The decontamination zone layout and procedures should match the prescribed levels of personal protection.

The following procedures have been established to provide site personnel with minimum guidelines for proper decontamination. Personnel leaving the point of operations designated as the EZ must follow these minimum procedures. The decontamination process shall take place within the contaminant reduction zone.

10.2 Minimum Decontamination Procedure

Personnel leaving the point of operations should remove or change outer gloves. At a minimum, boots shall be cleaned of all accumulated soil/fill. Outer boots must be properly washed where gross contamination is evident or disposed of. If Tyvek suits are being utilized, they should be removed or changed. Personnel should remove the Tyvek suits so that the inner clothing does not come in contact with any contaminated surfaces. After Tyvek removal, personnel shall remove and discard outer Nitrile gloves. Personnel shall then remove the respirator, where applicable. Respirators shall be disinfected between uses with towelettes or other sanitary methods. Potable water, at a minimum, will be present so that site personnel can thoroughly wash hands and face after leaving the point of operations.

The Site Health and Safety Officer will monitor decontamination procedures to ensure their effectiveness. Modifications of the decontamination procedure may be necessary as determined by the Site Health and Safety Officer's observations.

10.3 Standard Decontamination Procedure

The following decontamination procedures should be implemented during site operations for the appropriate level of protection.

10.3.1 Level B

Segregated equipment	Deposit equipment (tools, sampling devices, notes, monitoring instruments,
drop	radios, etc.) used on the site onto plastic drop cloths.
Boot covers and glove	Outer boots and outer gloves should be scrubbed with a decontamination
wash	solution of detergent and water or replaced.
Rinse off boot covers and	Decontamination solution should be rinsed off boot covers and gloves using
gloves	generous amounts of water. Repeat as many times as necessary.
Tape removal	Remove tape from around boots and gloves and place into container with
	plastic liner.
Boot cover removal	Remove disposable boot covers and place into container with plastic liner.
Outer glove removal	Remove outer gloves and deposit in container with plastic liner.
Suit / safety boot wash	Completely wash splash suit, SCBA, gloves, and safety boots. Care should be
	exercised that no water is allowed into the SCBA regulator. It is suggested
	that the SCBA regulator be wrapped in plastic.
Suit / safety boot rinse	Thoroughly rinse off all decontamination solution from protective clothing.
Tank or canister changes	This is the last step in the decontamination procedure for those workers
	wishing to change air tanks and return to the EZ. The worker's air tank or
	cartridge is exchanged, new outer glove and boot covers are donned, and
	joints taped.
Removal of safety boots	Remove safety boots and deposit in container with a plastic liner.
SCBA backpack removal	Without removing the face piece, the SCBA backpack should be removed and
	placed on a table. The face piece should then be disconnected from the
	remaining SCBA unit and then proceed to the next station.
Splash suit removal	With care, remove the splash suit. The exterior of the splash suit should not
	come in contact with any inner layers of clothing.
Inner glove wash	The inner gloves should be washed with a mild decontamination solution
	(detergent / water).
Inner glove rinse	Generously rinse the inner gloves with water.
Face piece removal	Without touching the face with gloves, remove the face piece. The face piece
	should be deposited into a container that has a plastic liner.
Inner glove removal	Remove the inner glove and deposit into a container that has a plastic liner.
Field wash	Wash hands and face thoroughly. If highly toxic, skin corrosive, or skin
	absorbent materials are known or suspected to be present, a shower should
	be taken.

10.3.2 Level C and Level D

The decontamination procedure for Level C and Level D will be satisfied with the Minimum procedures outlined in section 8.2.

10.4 Heavy Equipment and Handling Equipment Decontamination

Equipment traversing the site and exiting the site will be subjected to a decontamination protocol. At a minimum the protocol will consist of an inspection of the truck fenders, tires and mud flaps for accumulated soil/fill, and removal of all accumulations using hand tools (brush, broom and scrapers). If deemed necessary by the Health and Safety Officer,

this inspection will be performed over a thirty by fifteen foot area that has been filled with ¾ inch crushed recycled concrete aggregate to facilitate the removal of soil/fill accumulations from the tires, and to immobilize soil/fill removed from the truck body. Additionally, all trucks hauling waste will be required to be covered prior to exiting the site.

At the conclusion of the use of each piece of excavation equipment on the site, it will be decontaminated with an Alconox / water solution followed by a clean water rinse within the Contaminant Reduction Zone. The rinsate will be allowed to charge into the site ground.

11 Emergency Response / Contingency Plan

11.1 Pre-Emergency Planning

In order to properly prepare for emergencies, Safety Data Sheets (SDS) will be maintained on-site for the type of contaminants to which workers may be exposed. Based upon the results of previous investigations, The COCs for the Site are

<u>Soil</u>: Benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, chrysene, dibenzo (a,h)-anthracene, PCE, indeno(1,2,3-cd)pyrene, lead, mercury, and zinc.

Groundwater: Benzo(b)fluoranthene, benzo(k)fluoranthene, chloroform, PCE, arsenic and lead.

Soil Vapor: TCE and PCE.

The MSDS are provided in **Appendix D**.

In the event a suspected or known hazardous substance or substance container is encountered during site activities, a contingency plan will be triggered (see Section 11.3).

11.2 Emergency Contact Information

In the event of an accident or emergency situation, emergency procedures will be executed. Said procedures can and will be executed by the first person to observe an accident or emergency situation. The Project Field Manager will be notified about the situation immediately after emergency procedures are implemented.

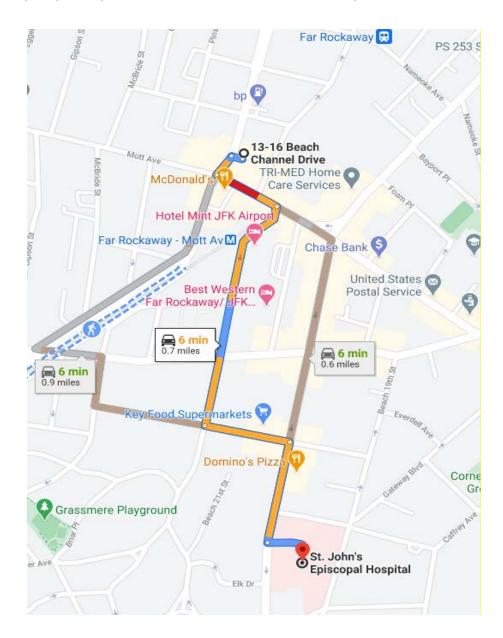
11.2.1 Emergency Contacts

Emergency:	911	
Hospital:	(718) 869-7000	St Johns Episcopal Hospital
Police:	911	Police
Fire Department:	911	NYFD
Chemtrec:	800-424-9300	
Poison Control Center:	800-336-6997	
National Response Center:	800-424-8802	
US EPA (24-hour hotline):	800-424-9346	

Start: 13-16 to 13-24 Beach Channel Drive

- Head south-southwest on Beach Channel Drive toward Mott Avenue 0.03mi
- Turn left onto Mott Avenue towards Beach 22nd Street 0.08mi
- Turn right onto Beach 22nd Street towards New Haven Avenue 0.3mi
- Turn left onto New Haven Avenue towards Beach 20th Street 0.1mi
- Turn right onto Beach 20th Street Destination will be on the left- 0.1 mi

End: St John's Episcopal Hospital - 327 Beach 19th Street, Far Rockaway, NY 11691



11.2.2 Utility Emergencies / Initiating Subsurface Investigation Work

Where necessary, utility markouts will be called in via the one call center or to the individual entities listed below.

Mark Out One-Call Center (811)	1-800-272-4480	No-Cuts
Gas Company:	718-643-4050	Con Edison
Telephone Company:	516-661-6000	Verizon
Electric Company:	718-643-4050	Con Edison

11.3 Contingency / Evacuation Plan

This Section is not, nor does it purport to be, a comprehensive recitation of safety and health requirements applicable to emergency procedures. Rather, contractors, subcontractors and workers at the site must refer to OSHA's Employee Emergency Action Plan Standard, set forth at 29 C.F.R. § 1910 Part 1926.35(a), as well as all supporting OSHA Compliance Directives and Letters of Interpretation, for complete information on safety and health compliance obligations.

If an unknown substance or substance container is encountered during site activities, the following contingency plan will be triggered.

- 1. The Site Health and Safety Officer, Project Manager and Field Operations Leader will be notified and an Exclusion Zone (the aerial extent of which will be determined by the above safety staff) will be established.
- 2. All staff will be evacuated from the Exclusion Zone.
- 3. Air monitoring will be conducted down-wind of the Exclusion Zone.
- 4. The NYSDEC, as well as any other Government regulatory agency whose need may be prompted by the particular situation, will be notified.
- 5. Upon arrival of the NYSDEC or Government regulatory agency representative(s), site control will transfer to the appropriate Government personnel.

It may be possible that a situation could develop site emergency could necessitate the evacuation of all personnel from the site. If such a situation develops, an audible alarm shall be given for site evacuation (consisting of an air horn). Personnel shall evacuate the site in a calm and controlled fashion and regroup at a predetermined location. The route of evacuation will be dependent on wind direction, severity, type of incident, etc. The site must not be re-entered until back-up help, monitoring equipment, and/or personal protective equipment are on hand and the appropriate regulatory agencies have been notified.

11.4 Emergency Medical Treatment Procedures

This Section is not, nor does it purport to be, a comprehensive recitation of safety and health requirements applicable to medical treatment and first aid. Rather, contractors, subcontractors and workers at the site must refer to OSHA's Medical Services and First Aid Standard, set forth at 29 C.F.R. § 1910 Part 1926.23 and 1926.50, as well as all supporting OSHA

Compliance Directives and Letters of Interpretation, for complete information on safety and health compliance obligations.

All injuries, no matter how slight, will be reported to the site safety supervisor immediately. The safety supervisor will complete an accident report for all incidents (**Appendix E**).

Some injuries, such as severe lacerations or burns, may require immediate treatment. Unless required due to immediate danger, seriously injured persons should not be moved without direction from attending medical personnel.

11.4.1 Standard Procedures for Injury

- 1. Notify the Site Health and Safety Officer, Project Manager, and the NYCDEP and NYCDHPD of all accidents, incidents, and near emergency situations.
- 2. If the injury is minor, trained personnel should proceed to administer appropriate first aid.
- 3. Telephone for ambulance/medical assistance if necessary. Whenever possible, notify the receiving hospital of the nature of physical injury or chemical overexposure. If no phone is available, transport the person to the nearest hospital. Refer to the map in section 11.2.1.
- 4. When transporting an injured person to a hospital, bring this Health and Safety Plan with the attached MSDS to assist medical personnel with diagnosis and treatment.

11.4.2 Chemical Overexposure

In all cases of chemical overexposure, follow standard procedures as outlined below for poison management, first aid, and, if applicable, cardiopulmonary resuscitation. Different routes of exposure and their respective first aid/poison management procedures are outlined below.

Ingestion	Do not induce vomiting unless prompted by a health professional. Transport	
	person to nearest hospital immediately.	
Inhalation / Confined	Do not enter a confined space to rescue someone who has been overcome	
Space	unless properly equipped and a standby person present.	
Inhalation / Other	Move the person from the contaminated environment. Initiate CPR if	
	necessary. Call or have someone call for medical assistance. Refer to MSDS	
	for additional specific information. If necessary, transport the victim to the	
	nearest hospital as soon as possible.	
Skin Contact / Non-	Wash off skin with a large amount of water immediately. Remove any	
Caustic Contaminant (Petroleum, Gasoline,	affected clothing and rewash skin using soap, if available. Transport person	
etc.)	to a medical facility if necessary.	

Skin Contact / Corrosive Contaminant (Acids, Hydrogen Peroxide, etc.)	Wash off skin with a large amount of water immediately. Remove any affected clothing and rewash skin with water. Transport person to a medical facility if necessary.
Eyes	Hold eyelids open and rinse the eyes immediately with large amounts of water for 15 minutes. Never permit the eyes to be rubbed. Transport person to a medical facility as soon as possible.

11.4.3 First Aid for Injuries Incurred During Field Work

A first aid kit and an emergency eyewash will be available on-site. Field crews, when performing field operations, will carry portable first aid kits that include emergency eye wash stations.

11.4.4 First Aid Equipment List

The first aid kit(s) kept at the site will consist of a weatherproof container with individually sealed packages for each type of item.

The kit will include at least the following items:

- Gauze roller bandages, 1-inch and 2-inch
- Gauze compress bandages, 4-inch
- Gauze pads, 2-inch
- Adhesive tape, 1-inch
- Bandage, 1-inch
- Butterfly bandages
- Triangular bandages, 40-inch
- Ampules of ammonia inhalants
- Antiseptic applicators or swabs
- Burn dressing and sterilized towels
- Surgical scissors
- Eye dressing
- Portable emergency eye wash
- Emergency oxygen supply
- Alcohol
- Hydrogen peroxide
- Clinical grade thermometer
- Tourniquet

11.4.5 Other Emergency Equipment

One portable fire extinguisher with a rating (ratio) of 20 pound A/B/C and one portable fire extinguisher with a rating of 2A will be conspicuously and centrally located between the restricted and non-restricted zones. In addition, similar extinguishers of the same size and class will be located in the site office trailer so that maximum travel distance to the nearest unit shall not exceed 50 feet. Portable extinguishers will be properly tagged with inspection dates and maintained in accordance with standard maintenance procedures for portable fire extinguishers. Field personnel will be trained in fire extinguisher use before field operations begin.

An emergency at any part of the site, such as fire or chemical release, might require that some appropriately trained site workers direct traffic on or near the site.

The following safety equipment to be used for traffic should be kept readily available on site in the field office:

- reflective/fluorescent vests
- flares
- traffic cones (and flags, or the equivalent, as needed)
- hazard tape (barricades as needed)
- working flashlights

11.5 Record of Injuries Incurred On-Site

11.5.1 Occupational Injuries and Illnesses Form (OSHA 200)

All occupational injuries and illnesses that are required to be recorded under the Occupational Safety and Health Act will be registered on OSHA Form 200 (see **Appendix C**). The site safety supervisor will record occupational injuries and illnesses within 48 hours of occurrence, as required by statute.

11.5.2 Employer's First Report of Injury

The site safety supervisor for all accidents involving work injury at the site will complete this form (**Appendix E**). Follow-up procedures will include investigation of each accident or near-miss by the safety supervisor to assure that no similar accidents occur in the future.

Appendix A:

Acknowledgment Statement

DATE	EMPLOYEE NAME	SAFETY OFFICER/SUPERVISOR	ACKNOLEDGEMENT THAT YOU HAVE READ AND UNDERSTSAND THE HASP SUPPLEMENT – TARGET SAFETY TOPIC FOR CONSTRUCTION PERSONNEL
200.50			

Appendix B:

OSHA Respirator Medical Evaluation Questionnaire

Attachment 4

$\label{lem:condition} \begin{tabular}{ll} Appendix C to 1910.134:OSHA Respirator Medical Evaluation Questionnaire (Mandatory) \end{tabular}$

To the employer: Answers to questions in Section 1, and to question 9 in Section 2 of Part A, do not require a medical examination.

To the employee:
Can you read (circle one): Yes No
Your employer must allow you to answer this questionnaire during normal working hours, or at a time and
place
that is convenient to you. To maintain your confidentiality, your employer or supervisor must not look at or
review your answers, and your employer must tell you how to deliver or send this questionnaire to the
health
care professional who will review it.
Part A. Section 1. (Mandatory) The following information must be provided by every employee who has
been
selected to use any type of respirator (please print).
1. Today's date:
2. Your name:
3. Your age (to nearest year):
4. Sex (circle one): Male Female
5. Your height: ft in. 6. Your weight: lbs.
6. Your weight: lbs.
7. Your job title:
8. A phone number where you can be reached by the health care professional who reviews this
questionnaire
(include the Area Code):
(include the Area Code): 9. The best time to phone you at this number:
10. Has your employer told you how to contact the health care professional who will review this
questionnaire
(circle one):
11. Check the type of respirator you will use (you can check more than one category):
a N, R, or P disposable respirator (filter-mask, non-cartridge type only).
b Other type (for example, half- or full-facepiece type, powered-air purifying, supplied-air, self-
contained
breathing apparatus).
12. Have you worn a respirator (circle one):
No
If "yes," what
type(s):

Part A. Section 2. (Mandatory) Questions 1 through 9 below must be answered by ever	y employee who
has been	
selected to use any type of respirator (please circle "yes" or "no").	
1. Do you currently smoke tobacco, or have you smoked tobacco in the last month:	Yes
No	
2. Have you ever had any of the following conditions?	
a. Seizures (fits):	
b. Diabetes (sugar disease):	
c. Allergic reactions that interfere with your breathing:	
d. Claustrophobia (fear of closed-in places):	
e. Trouble smelling odors (except when you had a cold):	Yes No
3. Have you ever had any of the following pulmonary or lung problems?	
a. Asbestosis:	. Yes No
b. Asthma:	Yes No
c. Chronic bronchitis:	. Yes No
d. Emphysema:	
e. Pneumonia:	
f. Tuberculosis:	
g. Silicosis:	
h. Pneumothorax (collapsed lung):	
i. Lung cancer:	
j. Broken ribs:	
k. Any chest injuries or surgeries:	
l. Any other lung problem that you've been told about:	
4. Do you currently have any of the following symptoms of pulmonary or lung illness?	1 05 110
a. Shortness of breath:	Vac No
b. Shortness of breath when walking fast on level ground or walking up a slight hill or inc	
c. Shortness of breath when walking with other people at an ordinary pace on level groun	
d. Have to stop for breath when walking at your own pace on level ground:	
e. Shortness of breath when washing or dressing yourself:	
f. Shortness of breath that interferes with your job:	
g. Coughing that produces phlegm (thick sputum):	
h. Coughing that wakes you early in the morning:	
i. Coughing that occurs mostly when you are lying down:	
j. Coughing up blood in the last month:	
k. Wheezing:	
1. Wheezing that interferes with your job:	
m. Chest pain when you breathe deeply:	Yes No
n. Any other symptoms that you think may be related to lung problems:	Yes No
5. Have you ever had any of the following cardiovascular or heart problems?	
a. Heart attack:	. Yes No
b. Stroke:	Yes No
c. Angina:	. Yes No
d. Heart failure:	Yes No
e. Swelling in your legs or feet (not caused by walking):	
f. Heart arrhythmia (heart beating irregularly):	
g. High blood pressure:	
h. Any other heart problem that you've been told about:	
,r , , ,	

6. Have you ever had any of the following cardiovascular or heart symptoms?	
a. Frequent pain or tightness in your chest:	
b. Pain or tightness in your chest during physical activity:	Yes No
c. Pain or tightness in your chest that interferes with your job:	
d. In the past two years, have you noticed your heart skipping or missing a beat:	
e. Heartburn or indigestion that is not related to eating:	
f. Any other symptoms that you think may be related to heart or circulation problem 7. Do you currently take medication for any of the following problems?	ns: Yes No
a. Breathing or lung problems:	Yes No
b. Heart trouble:	
c. Blood pressure:	
d. Seizures (fits):	
8. Has your wearing a respirator caused any of the following problems? (If you've r	
respirator, check the following space and go to question 9:)	iever used a
a. Eye irritation:	Yes No
b. Skin allergies or rashes:	
c. Anxiety that occurs only when you use the respirator:	
d. Unusual weakness or fatigue:	
e. Any other problem that interferes with your use of a respirator:	
9. Would you like to talk to the health care professional who will review this questi	
answers	omane about your
to this questionnaire:	Vac Na
www.io	1 es no
Questions 10 to 15 below must be answered by every employee who has been so full-facepiece respirator or a self-contained breathing apparatus (SCBA). For been	elected to use either a employees who have
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i. Difficulty climbing a flight of stairs or a ladder carrying more than 25 lbs: Yes No j. Any other muscle or skeletal problem that interferes with using a respirator: Yes No Part B Any of the following questions, and other questions not listed, may be added to the		
questionnaire at		
the discretion of the health care professional who will review the questionnaire. 1. In your present job, are you working at high altitudes (over 5,000 feet) or in a place that has lower that		
normal		
amounts of oxygen: Yes No If "yes," do you have feelings of dizziness, shortness of breath, pounding in your chest, or other symptoms when you're working under these conditions: Yes		
No 2. At work or at home, have you ever been exposed to hazardous solvents, hazardous airborne chemicals		
(e.g.,		
gases, fumes, or dust), or have you come into skin contact with hazardous chemicals: Yes		
If "yes," name the chemicals if you know them:		
3. Have you ever worked with any of the materials, or under any of the conditions, listed below:		
a. Asbestos: Yes No b. Silica (e.g., in sandblasting): Yes No c. Tungsten/cobalt (e.g., grinding or welding this material): Yes No d. Beryllium: Yes No		
e. Aluminum: Yes No f. Coal (for example, mining): Yes No		
g. Iron: Yes No		
h. Tin: Yes No		
i. Dusty environments: Yes No		
j. Any other hazardous exposures: Yes No		
If "yes," describe these		
exposures:		
		
4. List any second jobs or side businesses you have:		
have:		
5. List your previous occupations:		
6. List your current and previous hobbies:		
7. Have you been in the military services? Yes No If "yes," were you exposed to biological or chemical agents (either in training or combat): Yes No 8. Have you ever worked on a HAZMAT team?		
No		

them:	
them:	
a. HEPA Filters:	
b. Canisters (for example, gas masks):	Yes No
c. Cartridges:	Yes No
11. How often are you expected to use the respirator(s) (circle "yes" or "no" for	all answers that apply to
you)?:	
a. Escape only (no rescue):	Yes No
b. Emergency rescue only:	Yes No
c. Less than 5 hours per week:	Yes No
d. Less than 2 hours per day:	Yes No
e. 2 to 4 hours per day:	
f. Over 4 hours per day:	
12. During the period you are using the respirator(s), is your work effort:	
a. Light (less than 200 kcal per hour):	Yes No
If "yes," how long does this period last during the average shift:l	nrsmins.
Examples of a light work effort are sitting while writing, typing, drafting, or per	rforming light assembly
work; or	
standing while operating a drill press (1-3 lbs.) or controlling machines.	
b. Moderate (200 to 350 kcal per hour):	Yes No
If "yes," how long does this period last during the average shift:l	nrs. mins.
Examples of moderate work effort are sitting while nailing or filing; driving a ti	ruck or bus in urban traffic;
standing while drilling, nailing, performing assembly work, or transferring a mo	
at	,
trunk level; walking on a level surface about 2 mph or down a 5-degree grade a	bout 3 mph; or pushing a
wheelbarrow with a heavy load (about 100 lbs.) on a level surface.	1 / 1 &
c. Heavy (above 350 kcal per hour):	Yes No
If "yes," how long does this period last during the average shift:	nrs. mins.
Examples of heavy work are lifting a heavy load (about 50 lbs.) from the floor to	to your waist or shoulder.
working	, , , , , , , , , , , , , , , , , , , ,
on a loading dock; shoveling; standing while bricklaying or chipping castings;	walking un an 8-degree
grade	waiking up an o degree
about 7 mph, climbing stairs with a heavy load (about 50 lbs)	spirator) when you're using
	opilator, which you're using
13. Will you be wearing protective clothing and or equipment (other than the re	
13. Will you be wearing protective clothing and or equipment (other than the reyour	Vec No
13. Will you be wearing protective clothing and or equipment (other than the re your respirator:	Yes No
about 2 mph; climbing stairs with a heavy load (about 50 lbs.). 13. Will you be wearing protective clothing and or equipment (other than the re your respirator: If "yes," describe this protective clothing and or equipment:	Yes No

16. Describe the work you'll be doing while you're using your respirator(s):
17. Describe any special or hazardous conditions you might encounter when you're using your respirator(s) (for
example, confined spaces, life-threatening gases):
18. Provide the following information, if you know it, for each toxic substance that you'll be exposed to when
you're using your respirator(s):
Name of the first toxic substance:
Name of the first toxic substance: Estimated maximum exposure level per shift:
Duration of exposure per shift
Name of the second toxic substance:
Estimated maximum exposure level per shift:
Duration of exposure per shift:
Name of the third toxic substance:
Estimated maximum exposure level per shift:
Duration of exposure per shift:
Duration of exposure per shift: The name of any other toxic substances that you'll be exposed to while using your respirator:
19. Describe any special responsibilities you'll have while using your respirator(s) that may affect the safety and
well-being of others (for example, rescue, security):

Apéndice C: Cuestionario de Evaluación Médico obligado por la OSHA (La agencia de seguridad y salud ocupacional)

Parte 29 CFR 1910.134 Mandatorio para Proteccion del Sistema Respiratorio

Marque con un circulo para indicar sus respuestas a cada pregunta.

Para el empleado: Puede usted leer (circule uno): Sí o No

Su patrón debe dejarlo responder estas preguntas durante horas de trabajo o en un tiempo y lugar que sea conveniente para usted. Para mantener este cuestionario confidencial, su patrón o supervisor no debe ver o revisar sus respuestas. Su patrón debe informarle a quien dar o enviar este cuestionario para ser revisado

por un
profesional de sanidad con licencia autorizado por el estado.
Parte A. Sección 1. (Mandatorio). La siguiente información debe de ser proveida por cada empleado que
ha
sido seleccionado para usar cualquier tipo de respirador (escriba claro por favor).
1. Fecha:
2. Nombre:
3. Edad: 4. Su sexo (circule uno) Masculino o Femenino
4. Su sexo (circule uno) Masculino o Femenino
5. Altura:piespulgadas
6. Peso:libras
7. Su ocupación, título o tipo de trabajo:
8. Número de teléfono al donde pueda ser llamado por un profesional de sanidad con licencia que
revisara este cuestionario (incluva el área):
9. Indique la hora mas conveniente para llamarle a este numero:
10. ¿Le ha informado su patrón como comunicarse con el profesional de sanidad con licencia que va a
revisar
este cuestionario (circule una respuesta)?
No
11. Anote el tipo de equipo protector respíratorio que va utilizar (puede anotar mas de una categoría)
a Respirador disponible de clase N, R, o P (por ejemplo: respirador de filtro mécanico, respirado
sin
cartucho)
b Otros tipos (respirador con cartucho químico, máscara con cartucho químico, máscara con
manguera con soplador (PAPR), máscara con manguera sin soplador (SAR), aparato respiratorio autónomo
(SCBA)).
12. ¿Ha usado algun tipo de respirador?
No
Si ha usado equipo protector respíratorio, que tipo(s) ha utilizado:

Parte A. Seccion 2. (Mandatorio): Preguntas del 1 al 9 deben ser contestadas por cada	empleado que fue
seleccionado a usar cualquier tipo de respirador. Marque con un circulo para indicar su	s repuestas.
1. ¿Corrientemente fuma tabaco, o ha fumado tabaco durante el ultimo mes?	Sí o
No	
2. ¿Ha tenido algunas de las siguientes condiciones medicas?	
a. Convulsiones:	Sí o No
b. Diabetes (azucar en la sangre):	
c. Reacciones alergicas que no lo deja respirar:	
d. Claustrofobia (miedo de estar en espacios cerrados):	
e. Dificultad oliendo excepto cuando ha cogido un resfriado:	
3. ¿Ha tenido algunas de los siguientes problemas pulmonares?	
a. Asbestosis:	Sí o No
b. Asma:	
c. Bronquitis cronica:	
d. Emfisema:	
e. Pulmonía:	
f. Tuberculosis:	
g. Silicosis:	
h. Neumotorax (pulmon colapsado):	
i. Cáncer en los pulmones:	
j. Costillas quebradas:	
k. Injuria o cirujía en el pecho:	
l. Algun otro problema de los pulmones que le ha dicho su medico:	
4. ¿Corrientemente tiene alguno de los siguientes síntomas o enfermedades en sus puln	
a. Respiración dificultosa	
h Rechiración dificultosa cuando camina ranido cobre terreno hlano o cubiendo una co	1' 0' 3 T
b. Respiración difícultosa cuando camina rapido sobre terreno plano o subiendo una co	
c. Respiración dificultosa cuando camina normalmente con otras personas sobre terrence	o plano: Sí o No
c. Respiración dificultosa cuando camina normalmente con otras personas sobre terreno d. Cuando camina normalmente en terreno plano se encuentra corto de resuello?	o plano: Sí o No Sí o No
c. Respiración dificultosa cuando camina normalmente con otras personas sobre terreno d. Cuando camina normalmente en terreno plano se encuentra corto de resuello? e. Respiración dificultosa cuando se esta bañando o vistiendo:	o plano: Sí o No Sí o No Sí o No
c. Respiración dificultosa cuando camina normalmente con otras personas sobre terreno d. Cuando camina normalmente en terreno plano se encuentra corto de resuello? e. Respiración dificultosa cuando se esta bañando o vistiendo:	o plano: Sí o No Sí o No Sí o No Sí o No
c. Respiración dificultosa cuando camina normalmente con otras personas sobre terreno d. Cuando camina normalmente en terreno plano se encuentra corto de resuello? e. Respiración dificultosa cuando se esta bañando o vistiendo:	o plano: Sí o No Sí o No Sí o No Sí o No Sí o No
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c. Respiración dificultosa cuando camina normalmente con otras personas sobre terreno d. Cuando camina normalmente en terreno plano se encuentra corto de resuello? e. Respiración dificultosa cuando se esta bañando o vistiendo:	o plano: Sí o No Sí o No Sí o No Sí o No Sí o No Sí o No Sí o No Sí o No Sí o No Sí o No Sí o No Sí o No Sí o No Sí o No
c. Respiración dificultosa cuando camina normalmente con otras personas sobre terreno d. Cuando camina normalmente en terreno plano se encuentra corto de resuello? e. Respiración dificultosa cuando se esta bañando o vistiendo:	o plano: Sí o No Sí o No Sí o No Sí o No Sí o No Sí o No Sí o No Sí o No Sí o No Sí o No Sí o No Sí o No Sí o No Sí o No Sí o No
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c. Respiración dificultosa cuando camina normalmente con otras personas sobre terrend. Cuando camina normalmente en terreno plano se encuentra corto de resuello? e. Respiración dificultosa cuando se esta bañando o vistiendo: f. Respiración dificultosa que lo impede trabajar: g. Tos con flema: h. Tos que lo despierta temprano en la mañana: i. Tos que occure cuando esta acostado: j. Ha tosido sangre en el ultimo mes: k. Silbar o respirar con mucha dificultad: l. Silbar que lo impede trabajar: m. Dolor del pecho cuando respira profundamente: n. Otros símtomas que crea usted estar relacionados a los pulmones: 5. ¿Ha tenido algunos de los siguientes problemas con el corazón? a. Ataque cardiaco: b. Ataque cerebrovascular:	o plano: Sí o No Sí o No Sí o No Sí o No Sí o No Sí o No Sí o No Sí o No Sí o No Sí o No Sí o No Sí o No Sí o No Sí o No Sí o No Sí o No Sí o No
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c. Respiración dificultosa cuando camina normalmente con otras personas sobre terrend. Cuando camina normalmente en terreno plano se encuentra corto de resuello? e. Respiración dificultosa cuando se esta bañando o vistiendo: f. Respiración dificultosa que lo impede trabajar: g. Tos con flema: h. Tos que lo despierta temprano en la mañana: i. Tos que occure cuando esta acostado: j. Ha tosido sangre en el ultimo mes: k. Silbar o respirar con mucha dificultad: l. Silbar que lo impede trabajar: m. Dolor del pecho cuando respira profundamente: n. Otros símtomas que crea usted estar relacionados a los pulmones: 5. ¿Ha tenido algunos de los siguientes problemas con el corazón? a. Ataque cardiaco: b. Ataque cerebrovascular: c. Dolor en el pecho: d. Falla de corazón: e. Hinchazón en las piernas o pies (que no sea por caminar): f. Latidos irregulares del corazón:	o plano: Sí o No
c. Respiración difícultosa cuando camina normalmente con otras personas sobre terrend. Cuando camina normalmente en terreno plano se encuentra corto de resuello? e. Respiración difícultosa cuando se esta bañando o vistiendo: f. Respiración difícultosa que lo impede trabajar: g. Tos con flema: h. Tos que lo despierta temprano en la mañana: i. Tos que occure cuando esta acostado: j. Ha tosido sangre en el ultimo mes: k. Silbar o respirar con mucha difícultad: l. Silbar que lo impede trabajar: m. Dolor del pecho cuando respira profundamente: n. Otros símtomas que crea usted estar relacionados a los pulmones: 5. ¿Ha tenido algunos de los siguientes problemas con el corazón? a. Ataque cardiaco: b. Ataque cardiaco: b. Ataque cerebrovascular: c. Dolor en el pecho: d. Falla de corazón: e. Hinchazón en las piernas o pies (que no sea por caminar): f. Latidos irregulares del corazón: g. Alta presión:	o plano: Sí o No
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c. Respiración dificultosa cuando camina normalmente con otras personas sobre terrence. d. Cuando camina normalmente en terreno plano se encuentra corto de resuello? e. Respiración dificultosa cuando se esta bañando o vistiendo: f. Respiración dificultosa que lo impede trabajar: g. Tos con flema: h. Tos que lo despierta temprano en la mañana: i. Tos que occure cuando esta acostado: j. Ha tosido sangre en el ultimo mes: k. Silbar o respirar con mucha dificultad: l. Silbar que lo impede trabajar: m. Dolor del pecho cuando respira profundamente: n. Otros símtomas que crea usted estar relacionados a los pulmones: 5. ¿Ha tenido algunos de los siguientes problemas con el corazón? a. Ataque cardiaco: b. Ataque cerebrovascular: c. Dolor en el pecho: d. Falla de corazón: e. Hinchazón en las piernas o pies (que no sea por caminar): f. Latidos irregulares del corazón: g. Alta presión: h. Algun otro problema cardio-vascular o cardiaco: 6. ¿Ha tenido algunos de los siguientes síntomas causados por su corazón?	o plano: Sí o No
c. Respiración difícultosa cuando camina normalmente con otras personas sobre terrend. Cuando camina normalmente en terreno plano se encuentra corto de resuello? e. Respiración difícultosa cuando se esta bañando o vistiendo: f. Respiración difícultosa que lo impede trabajar: g. Tos con flema: h. Tos que lo despierta temprano en la mañana: i. Tos que occure cuando esta acostado: j. Ha tosido sangre en el ultimo mes: k. Silbar o respirar con mucha difícultad: l. Silbar que lo impede trabajar: m. Dolor del pecho cuando respira profundamente: n. Otros símtomas que crea usted estar relacionados a los pulmones: 5. ¿Ha tenido algunos de los siguientes problemas con el corazón? a. Ataque cardiaco: b. Ataque cerebrovascular: c. Dolor en el pecho: d. Falla de corazón: e. Hinchazón en las piernas o pies (que no sea por caminar): f. Latidos irregulares del corazón: g. Alta presión: h. Algun otro problema cardio-vascular o cardiaco:	o plano: Sí o No

c. Dolor o pecho apretado que no lo deja trabajar normalmente:	. Sí o No
e. Dolor en el pecho o indigestion que no es relacionado a la comida:	circulation.
7. ¿Esta tomando medicina por algunso de los siguientes problemas? a. Respiración dificultosa:	
b. Problemas del corazón: Síc. Alta presión: Sí	Sí o No
d. Convulsiones: S 8. ¿Le ha causado alguno de los siguientes problemas usando el respirador? (si no ha usado el seguina de los siguientes problemas usando el respirador).	Sí o No
deje esta pregunta en blanco y continue con pregunta 9).	
a. Irritación de los ojos:	
b. Alergias del cutis o sarpullido: c. Ansiedad que ocurre solamente cuando usa el respirado: d. Dabilidad. Gibs. de visca a fatiga de consecuente de de consecuente de c	. Sí o No
d. Debilidad, falta de vigor o fatiga desacostumbrada: e. Algun otro problema que le impida utilizar su respirador: 9. ¿Le gustaria hablar con el profesional de sanidad con licencia autorizado por el estado que	Sí o No
cuestionario sobre sus respuestas?	
Las preguntas del 10 al 15 deben ser contestadas por los empleados seleccionados para máscara	usar una
con cartucho químico o aparato respiratorio autónomo (SCBA). Los empleados que us respirador no tienen que contestar estas preguntas.	an otro tipo de
10. ¿Ha perdido la vista en cualquiera de sus ojos (temporalmente o permanente):	Sí o
11. ¿Corrientemente tiene algunos de los siguientes problemas con su vista?	
a. Usa lentes de contacto: S b. Usa lentes: Si	
c. Daltoniano (dificultad distinguiendo colores): d. Tiene algún problema con sus ojos o su vista:	Sí o No
12. ¿Ha tenido daño en sus oidos incluyendo rotura del tímpano:	Sí o
13. ¿Corrientemente tiene uno de las siguientes problemas para oir? a. Dificultad oyendo:	Sí o No
b. Usa un aparato para oir:	í o No
c. Tiene algun otro problema con sus oidos o dificultad escuchando:	
15. ¿Tiene uno de los siguientes problemas de su aparato muscular or eskeleto?	
a. Debilidad en sus brazos, manos, piernas o pies :	
c. Dificultad para mover sus brazos y piernas completamente:	Sí o No
d. Dolor o engarrotamiento cuando se inclina para adelante o para atras:	
e. Dificultad para mover su cabeza para arriba o para abajo completamente:	
f. Dificultad para mover su cabeza de lado a lado:	
g. Difficulted para agacharse doblando sus rodillas:	
h. Dificultad para agacharse hasta tocar el piso:	
i. Dificultad subiendo escaleras cargando mas de 25 libras:	. Sí o No . Sí o No

sanidad con licencia autorizado por el estado.	
1. ¿Esta trabajando en las alturas arriba de 5,000 pies o en sitios que tienen r	
Si la respuesta es "Sí", se ha sentido mareado, o ha tenido dificultad respirar otro	
síntoma que usted no tiene cuando no esta trabajando bajo estas condiciones	:
No	
2. ¿En el trabajo o en su casa, ha estado expuesto a solventes o contaminante ejemplo,	es peligrosos en el aire (por
humos, neblina o polvos) o ha tenido contacto del cutis con químicas peligro	osas? Sí o
No	
Escriba las químicas y productos con las que ha estado expuesto, si sabe cua	lles
son:	
3. ¿Ha trabajado con los siguientes materiales o las condiciones anotadas aba	ajo?:
a. Asbestos:	
b. Sílice (Limpiar mediante un chorro de arena):	
c. Tungsteno/Cobalto (pulverizar o soldadura):	
d. Berilio:	
e. Aluminio:	
f. Carbón de piedra (minando):	
g. Hierro:	
h. Estaño:	
i. Ambiente polvoriento:	
j. Otra exposicion peligrosa:	
Describa las exposiciones peligrosas:	
The same of the same	
4. ¿Tiene usted otro trabajo o un negocio aparte de este?	
5. Apunte su previos trabajos:	
6. Apunte sus pasatiempos:	
7. ¿Tiene servicio militar?	
	lurante entrenamiento o
Si la respuesta es "Sí", ha estado expuesto a agentes químicos o biologicos d	C' NI
Si la respuesta es "Sí", ha estado expuesto a agentes químicos o biologicos d combate:	
Si la respuesta es "Sí", ha estado expuesto a agentes químicos o biologicos d	r a incidentes de materiales

N _o	Sí o
No	
Si la respuesta es "Sí", cuales son	
10. ¿Va a usar algunas de las siguientes partes con su respirador?	′ C) C′ N
a. filtros HEPA (filtro de alta eficiencia que remueve partículas tóxicas en la atme	
b. Canastillo (por ejemplo, máscara para gas):	
c. Cartuchos:	S1 0 No
11. ¿Cuántas veces espera usar un respirador?	C/ N
a. Para salir de peligro solamente (no rescates):	
b. Recates de emergencia solamente:	
c. Menos de 5 horas <i>por semana</i> :	
d. Menos de 2 horas <i>por día</i> :	
e. 2 a 4 horas <i>por día</i> :	
f. Mas de 4 horas <i>por día</i> :	Sí o No
12. ¿Durante el tiempo de usar el respirador, su trabajo es?	
a. Ligero (menos de 200 kcal por hora):	Sí o
No	
Si la respuesta es "sí", cuanto tiempo dura la obrahorasn	ninutos
Ejemplos de trabajos ligeros: estar sentado escribiendo, escribiendo a máquina, d	iseñando, trabajando la
línea de	
montaje, o estar parado gobernando un taladro o máquinas:	
b. Moderado (200-350 kcal por hora):	Sí o N
Si la respuesta es "sí"cuanto tiempo dura en promedio por jornadahor	rasminutos
Ejemplos de trabajos moderados : sentado clavando o archivando; manejando un	camión o autobús en
trafico	
pesado; estar de pie taladrando, clavando, trabajando la línea de montaje, o transf libras)	Periendo una carga (de 35
a la altura de la cintura; caminando sobre tierra plana a 2 millas por hora o bajanc	lo a 3 millas por hora;
empujando una carretilla con una carga pesada (de 100 libras) sobre terreno plano	
c. Pesado (mas de 350 kcal por hora):	
No	
Si la respuesta es "sí"cuanto tiempo dura en promedio por jornadahor	ras minutos
Ejemplos de trabajos pesados: levantando cargas pesadas (mas de 50 libras) desd	
J. I () () ()	F
la	
	oie trabaiando de albañil
cintura o los hombros; trabajando cargando o descargando; transpalear; estar de p	
cintura o los hombros; trabajando cargando o descargando; transpalear; estar de pademenuzando moldes; subiendo a 2 millas por hora; subiendo la escalera con una	
la cintura o los hombros; trabajando cargando o descargando; transpalear; estar de p demenuzando moldes; subiendo a 2 millas por hora; subiendo la escalera con una libras).	carga pesada (mas de 50
cintura o los hombros; trabajando cargando o descargando; transpalear; estar de p demenuzando moldes; subiendo a 2 millas por hora; subiendo la escalera con una libras). 13. ¿Va a estar usando ropa o equipo protectivo cuando use el respirador?	carga pesada (mas de 50
cintura o los hombros; trabajando cargando o descargando; transpalear; estar de pedemenuzando moldes; subiendo a 2 millas por hora; subiendo la escalera con una libras). 13. ¿Va a estar usando ropa o equipo protectivo cuando use el respirador? No	carga pesada (mas de 50
cintura o los hombros; trabajando cargando o descargando; transpalear; estar de p demenuzando moldes; subiendo a 2 millas por hora; subiendo la escalera con una libras). 13. ¿Va a estar usando ropa o equipo protectivo cuando use el respirador? No Si la respuesta es "sí" describa que va a estar	carga pesada (mas de 50
cintura o los hombros; trabajando cargando o descargando; transpalear; estar de pedemenuzando moldes; subiendo a 2 millas por hora; subiendo la escalera con una libras). 13. ¿Va a estar usando ropa o equipo protectivo cuando use el respirador? No	carga pesada (mas de 50

7. Describa cualquier situacion especial o peligrosa que pueda encontrar cuando este usando el respi por					
ejemplo, espacios encerrados, gases que lo puedan matar, etc.)					
8. Provea la siguiente informacion si la sabe, por cada sustancia tóxica que usted va a estar expuesto cuando					
este usando el respirador(s):					
Nombre de la primera sustancia tóxica					
Maximo nivel de exposición por jornada de trabajo					
Tiempo de exposición por jornada					
Nombre de la segunda sustancia tóxica					
Maximo nivel de exposición por jornada de trabajo					
Fiempo de exposición por jornada					
Nombre de la tercera sustancia tóxica					
Máximo nivel de exposición por jornada de trabajo					
Fiempo de exposición por jornada					
El nombre de cualquier sustancia tóxica que usted va a estar expuesto cuando este usted usando el espirador					
9. Describa alguna responsabilidad especial que usted va a tener cuando usted este usado el respirad					
oueda afectar la seguridad o la vida de otros (por ejemplo, rescate, seguridad).					

Appendix C:

OSHA Form 200-Occupational Injuries & Illnesses

Log and	Summar	y of Occupational						
Injuries a		<u> </u>						
NOTE:	This form i	s required by Public Law 91-	596 and must be kept	RECORDABLE CASES: You are requ	uired to record information about every			
		olishment for 5 years. Failure		occupational death; every nonfatal occupational illness; and those nonfatal				
	can result in issuance of citations and assessment of penalties.			occupational injuries which involve one or more of the following: loss of				
	(See postii	ng requirements on the other	side of form)	conciousness, restriction of work or motion, transfer to another job, or				
				medical treatment (other than first aid)				
				(See definitions on the other side of for	m)			
Case or	Date of	Employee's Name	Occupation	Department	Description of Injury or Illness			
	Injury or		Сострано	- Sparanon	2 Societal of Injury of Infood			
	Onset of							
l	Illness							
	Enter	Enter first name or initial, middle initial, last name	Enter regular job title, not activity employee was performing when injury occurred or at onset of illness. In the absence of a formal title, enter a brief description of the employee's duties.	Enter department in which the employee is regularly employed or a description of normal workplace to which employee is assigned, even though temporarily working in another department at the time of injury or illness.	Enter a brief description of the injury or illness and indicate the part or parts of the body affected. Typical entries for this column might be: Amputation of 1st joint right forefinger; Strain of lower back; Contact dermatitis on both hands; Electrocution - body.			
(A)	(B)	(C)	(D)	(E)	(F)			
					PREVIOUS PAGE TOTALS =>			
					TOTALS (Instructions on other side of form) =>			
OSHA No. 20	00							

U.S. Dep	artment o	t Labor																
						For C	alendar	Year _			-		Page: _	of				>//
Company Name																	Form Approve	ed
Establishment Nam	е																O.M.B. No. 1	
Establishment Add	ress																See OMB Dis	sclosure
																	Statement on	reverse.
Extent of and Outco	ome of Injury					Type, Exte	ent of, and Ou	utcome of Illn	ess								-	
Fatalities	Nonfatal Injuries					Type of Illr	ness						Fatalities	Nonfatal Illne	sses			
Injury	Injuries with	h Lost Workd	lays		Injuries	CHEC	K Only C	ne Colu	mn for E	ach Illne	ess		Illness	Illnesses with	Lost Workda	ys		Illnesses
Related					Without Lost	(See of	her side	of form f	or termir	nations			Related	Enter a	Enter a	Enter	Enter	without Los
	Enter a	Enter a	Enter	Enter	Workdays	or pern	nanent tr	ansfers)						CHECK if	CHECK if	number of	number of	Workdays
Enter Date	Check	Check	number of	number of	Enter a									Illness	Illness	DAYS	DAYS of	
of death.	if injury	if injury	DAYS	DAYS of	Check if no								Enter	involves	involves	away from	restricted	Enter a
	involves	involves	away from	restricted	entry was								DATE	DAYS away	DAYS away	work.	work activity	CHECK if I
mm/dd/yy	DAYS away from	DAYS away from	work	work activity	made in column 1 or 2					ts			of death,	from work, or DAYS of	from work.			entry was made in
Ппп/ас/уу	work or	work.		activity	but the injury				o of	geu	,	ses		restricted				columns 8
	restricted				is recordable		sb	,	ects	<u>a</u>	₽	nes		work activity				9
	work				as defined		<u> </u>	SUS	eff	ysic	× p	<u>a</u>	mm/dd/yy	or both.				
	activity or				above.	äse	the	ditio	mic.	hd	iate	tion						
	both.					J Sk Dise	e of	Condition	yste als)	e tc	Soc	nba						
						ona	eas	Sic 8	g (s teris	s du	s as I tra	000						
						pati	Dis	iratc o to	ning ma	der	ders	other occupational illnesses						
						Occupational Skin Disorder or Disease	Dust Disease of the lungs	Respiratory Conditions due to toxic agents	Poisoning (systemic effects of toxic materials)	Disorders due to physical agents	Disorders associated with repeated trauma	■ Jan						
						00		_ 22 5			ے ۵	⋖	+					
(1)	(2)	(3)	(4)	(E)	(G)	(0)	(b)	(0)	(7) (d)	(0)	(f)	(a)	(8)	(0)	(10)	(11)	(12)	(13)
(1)	(2)	(3)	(4)	(5)	(6)	(a)	(0)	(c)	(u)	(e)	(1)	(g)	(0)	(9)	(10)	(11)	(12)	(13)
							 										+	
																	<u> </u>	
					<u> </u>												<u> </u>	
						<u> </u>												
Certification	of Annual Sur	mmary Totals	by:					Title: _									Date:	

OMB DISCLOSURE STATEMENT

Public reporting burden for this collection of information is estimated to vary from 4 to 30 (time in minutes) per response with an average of 15 (time in minutes) per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Persons are not required to respond to the collection of information unless it displays a currently valid OMB control number. If you have any comments regarding this estimate or any other aspect of this information collection, including suggestions for reducing this burden, please send them to the OSHA Office of Statistics, Room N-3644, 200 Constitution Avenue, N.W. Washington, D.C. 20210

Instructions for OSHA No. 200

I. Log and Summary of Occupational Injuries and Illnesses

Each employer who is subject to the recordkeeping requirements of the Occupational Safety and Health Act of 1970 must maintain for each establishment, a log of all recordable occupational injuries and illnesses. This form (OSHA No. 200) may be used for that purpose. A substitute for the OSHA No. 200 is acceptable if it is as detailed, easily readable, and understandable as the OSHA No. 200.

Enter each recordable case on the log within six (6) workdays after learning of its occurrence. Although other records must be maintained at the establishment to which they refer, it is possible to prepare and maintain the log at another location, using data processing equipment if desired. If the log is prepared elsewhere, a copy updated to within 45 calendar days must be present at all times in the establishment.

Logs must be maintained and retained for five (5) years following the end of the calendar year to which they relate. Logs must be available (normally at the establishment) for inspection and copying by representatives of the Department of Labor, or the Department of Health and Human Services, or States accorded jurisdiction under the Act. Access to the log is also provided to employees, former employees and their representatives.

II. Changes in Extent of or Outcome of Injury or Illness

If, during the 5-year period the log must be retained, there is a change in an extent and outcome of an injury or illness which affects entries in columns 1, 2, 6, 8, 9, or 13, the first entry should be lined out and a new entry made. For example, if an injured employee at first required only medical treatment but later lost workdays away from work, the check in column 6 should be lined out and checks entered in columns 2 and 3 and the number of lost workdays entered in column 4.

In another example, if an employee with an occupational illness lost wordays, returned to work, and then died of the illness, any entries in columns 9 through 12 would be lined out and the date of death entered in column 8.

The entire entry for an injury or illness should be lined out if later found to be nonrecordable. For example, an injury which is later determined not to be work related, or which was initially thought to involve medical treatement but later was determined to have involved only first aid.

III. Posting Requirements

A copy of the totals and information following the total line of the last page for the year, must be posted at each establishment in the place or places where notices to employees are customarily posted. This copy must be posted no later than February 1 and must remain in place until March 1. Even though there were no injuries or illnessed during the year, zeros must be entered on the totals line, and the form posted.

The person responsible for the annual summary totals shall certify that the totals are true and complete by signing at the bottom of the form.

IV. Instructions for Completing Log and Summary of Occupational injuries and illnesses

Column A - CASE OR FILE NUMBER. Self Expanatory

Column B - DATE OF INJURY OR ONSET OF ILLNESS

For occupational injuries, enter the date of the work accident which resulted in the injury. For occupational illnesses, enter the date of initial diagnosis of illness, or, if absence from work occurred before diagnosis, enter the first day of the absence attributable to the illness which was later diagnosed or recognized.

Columns C through F - Self Explanatory

Columns 1 and 8 - INJURY OR ILLNESS-RELATED DEATHS - Self Explanatory

Columns 2 and 9 - INJURIES OR ILLNESSES WITH LOST WORKDAYS - Self Explanatory

Any injury which involves days away from work, or days of restricted work activitiy, or both, must be recorded since it always involves one or more of the criteria for recordability.

Columns 3 and 10 - INJURIES OR ILLNESSES INVOLVING DAYS AWAY FROM WORK - Self Explanatory

Columns 4 and 11 - LOST WORKDAYS -- DAYS AWAY FROM WORK.

Enter the number of workdays (consecutive or not) on which the employee would have worked but could not because of occupational injury or illness. The number of lost workdays should not include the day of injury or onset of illness or any days on which the employee would not have worked even though able to work. NOTE: For employees not having a regularly scheduled shift, such as certain truck drivers, construction workers, farm labor, casual labor, part-time employees, etc., it may be necessary to estimate the number of lost workdays. Estimates of lost workdays shall be based on prior work history of the employee AND days worked by employees, not ill or injured, working in the department and/or occupation of the ill or injured employee.

Columns 5 and 12 - LOST WORKDAYS -- DAYS OF RESTRICTED WORK ACTIVITY.

Enter the number of workdays (consecutive or not) on which because of injury or illness:

- (1) the employee was assigned to another job on a temporary basis, or
- (2) the employee worked at a permanent job less than full time, or
- (3) the employee worked at a permanently assigned job but could not perform all duties normally connected with it.

The number of lost workdays should not include the day of injury or onset of illness or any days on which the employee would not have worked even though able to work.

Columns 6 and 13 - INJURIES OR ILLNESSES WITHOUT LOST WORKDAYS - Self Explanatory

Columns 7a through 7g - TYPE OF ILLNESS. Enter a check in only one column for each illness.

TERMINATION OR PERMANENT TRANSFER - Place an asterisk to the right of the entry in columns 7a through 7g (type of illness) which represented a termination of employment or permanent transfer.

V. Totals

Add number of entries in columns 1 and 8.

Add number of checks in columns 2, 3, 6, 7, 9, 10 and 13.

Add number of days in columns 4, 5, 11 and 12.

Yearly totals for each column (1-13) are required for posting. Running or page totals may be generated at the discretion of the employer.

In an employee's loss of workdays is continuing at the time the totals are summarized, estimate the number of future workdays the employee will lose and add that estimate to the workdays already lost and include this figure in the annual totals. No further entries are to be made with respect to such cases in the next year's log.

VI. Definitions

OCCUPATIONAL INJURY is any injury such as a cut, fracture, sprain, amputation, etc. which results from a work accident or from an exposure involving a single incident in the work environment. NOTE: Conditions resulting from animal bites, such as insect or snake bites or from one-time exposure to chemicals, are considered to be injuries.

OCCUPATIONAL ILLNESS of an amployee is any abnormal condition or disorder, other than one resulting from an occupational injury, caused by exposure to environmental factors associated with employment. It includes acute and chronic illnesses or diseases which may be caused by inhalation, absorption, ingestion, or direct contact.

The following listing gives the categories of occupational illnesses and disorders that will be utilized for the purpose of classifying recordable illnesses. For porposes of information, examples of each category are given. These are typical examples, however, and are not to be considered the complete listing of the types of illnesses and disorders that are to be counted under each category.

- 7a. Occupational Skin Diseases or Disorders. Examples: Contact dermatitis, eczema, or rash caused by primary irritants and sensitizers or poisonous plants; oil acne; chrome ulcers; chemical burns or inflamation, etc.
- 7b. Dust Diseases of the Lungs (Pneumaconioses). Examples: Silicosis, asbestosis and other asbestos-related diseases, coal worker's pneumaconioses, byssinosis, siderosis, and other pneumaconioses.
- 7c. Respiratory Conditions Due to Toxic Agents. Examples: Pneumonitis, pharyngitis, rhinitis or acute congestion due to chemicals, dusts, gases, or fumes; farmer's lung; etc.
- 7d. Poisoning (Systemic Effects of Toxic Materials). Examples: Poisoning by lead, mercury, cadmium, arsenic, or other metals; poisoning by

carbon monoxide, hydrogen sulfide, or other gases; poisoning by benzol, carbon tetrachloride, or other organic solvents; poisoning by insecticide sprays such as parathion, lead arsenate; poisoning by other chemicals such as formaldehyde, plastics, and resins; etc.

- 7e. Disorders Due to Physical Agents (Other than Toxic Materials). Examples: Heatstroke, sunstroke, heat exhaustion, and other effects of environmental heat, freezing, frostbite, and effects of exposure to low temperatures; caisson disease; effects of ionizing radiation (isotopes, X-rays, radium); effects of nonionizing radiation (welding flash, ultraviolet rays, microwaves, sunburn); etc.
- 7f. Disorders Associated with Repeated Trauma. Examples: Noise-induced hearing loss; synovitis, tenosynovitis, and bursitis. Raynaud's phenomena; and other conditions due to repeated motion, vibration, or pressure.
- 7g. All Other Occupational Illnesses. Examples: Anthrax, brucellosis, infectious hepatitis, malignant and benign tumors, food poisoning, histoplasmosis, coccidioidomycosis, etc.

MEDICAL TREATMENT includes treatment (other than first aid) administered by a physician or by registered professional personnel under the standing orders of a physician. Medical treatment does NOT include first aid treatment (one-time treatment and subsequent observation of minor scratches, cuts, burns, splinters, and so forth, which do not ordinarily require medical care) even though provided by a physician or registered professional personnel.

ESTABLISHMENT: A single physical location where business is conducted or where services or industrial operations are performed (for example: a factory, mill, store, hotel, resturant, movie theater, farm, ranch, bank, sales office, warehouse, or central administrative office). Where distinctly separate activities are performed at a single physicial location, such as construction activities operated from the same physical locations as a lumber yard, each activity shall be treated as a separate establishment.

For firms engaged in activities which may be physically dispersed, such as agriculture; construction; transportation; communications and electric, gas, and sanitary services, records may be maintained at a place to which employees report each day.

Records for personnel who do not primarily report or work at a single establishment, such as traveling salesmen, technicians, engineers, etc., shall be maintained at the location from which they are paid or the base from which personnel operate to carry out their activities.

WORK ENVIRONMENT is comprised of the physical location, equipment, materials processed or used, and the kinds of operations performed in the course of an employee's work, wether on or off the employer's premisis.

Appendix D: MSDS Sheets

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

Version 5.0 Revision Date 29.10.2012

Print Date 19.04.2017

GENERIC EU MSDS - NO COUNTRY SPECIFIC DATA - NO OEL DATA

1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product identifiers

Product name : Arsenic

Product Number : 267961
Brand : Aldrich
Index-No. : 033-001-00-X

CAS-No. : 7440-38-2

1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses : Laboratory chemicals, Manufacture of substances

1.3 Details of the supplier of the safety data sheet

Company : Sigma-Aldrich Israel Ltd.

3 PARK RABIN, PLAUT 7670603 REHOVOT

ISRAEL

Telephone : +972 8948-4222 Fax : +972 8948-4200

1.4 Emergency telephone number

Emergency Phone # : +972 (8) 948-4222

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 [EU-GHS/CLP]

Acute aquatic toxicity (Category 1) Chronic aquatic toxicity (Category 1) Acute toxicity, Inhalation (Category 3) Acute toxicity, Oral (Category 3)

Classification according to EU Directives 67/548/EEC or 1999/45/EC

Toxic by inhalation and if swallowed. Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

2.2 Label elements

Labelling according Regulation (EC) No 1272/2008 [CLP]

Pictogram

Signal word Danger

Hazard statement(s)

H301 Toxic if swallowed. H331 Toxic if inhaled.

H410 Very toxic to aquatic life with long lasting effects.

Precautionary statement(s)

P261 Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.

P273 Avoid release to the environment.

P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/

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physician.

P311 Call a POISON CENTER or doctor/ physician.

P501 Dispose of contents/ container to an approved waste disposal plant.

Supplemental Hazard

Statements

none

According to European Directive 67/548/EEC as amended.

Hazard symbol(s)

R-phrase(s)

R23/25 Toxic by inhalation and if swallowed.

R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in

the aquatic environment.

S-phrase(s)

S20/21 When using do not eat, drink or smoke.

S28 After contact with skin, wash immediately with plenty of soap and water.

S45 In case of accident or if you feel unwell, seek medical advice immediately

(show the label where possible).

S60 This material and its container must be disposed of as hazardous waste.
S61 Avoid release to the environment. Refer to special instructions/ Safety

data sheets.

2.3 Other hazards - none

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

Formula : As

Molecular Weight : 74,92 g/mol

Component		Concentration
Arsenic		
CAS-No.	7440-38-2	-
EC-No.	231-148-6	
Index-No.	033-001-00-X	

4. FIRST AID MEASURES

4.1 Description of first aid measures

General advice

Consult a physician. Show this safety data sheet to the doctor in attendance.

If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

In case of skin contact

Wash off with soap and plenty of water. Take victim immediately to hospital. Consult a physician.

In case of eye contact

Flush eyes with water as a precaution.

If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

4.2 Most important symptoms and effects, both acute and delayed

Absorption into the body leads to the formation of methemoglobin which in sufficient concentration causes cyanosis. Onset may be delayed 2 to 4 hours or longer.

4.3 Indication of any immediate medical attention and special treatment needed

no data available

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5. FIREFIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

5.2 Special hazards arising from the substance or mixture

Arsenic oxides

5.3 Advice for firefighters

Wear self contained breathing apparatus for fire fighting if necessary.

5.4 Further information

no data available

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Wear respiratory protection. Avoid dust formation. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.

6.2 Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

6.3 Methods and materials for containment and cleaning up

Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

6.4 Reference to other sections

For disposal see section 13.

7. HANDLING AND STORAGE

7.1 Precautions for safe handling

Avoid contact with skin and eyes. Avoid formation of dust and aerosols.

Provide appropriate exhaust ventilation at places where dust is formed.

7.2 Conditions for safe storage, including any incompatibilities

Store in cool place. Keep container tightly closed in a dry and well-ventilated place.

7.3 Specific end uses

no data available

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Components with workplace control parameters

8.2 Exposure controls

Appropriate engineering controls

Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product.

Personal protective equipment

Eye/face protection

Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

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The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

Immersion protection Material: Nitrile rubber

Minimum layer thickness: 0,11 mm Break through time: > 480 min

Material tested:Dermatril® (Aldrich Z677272, Size M)

Splash protection Material: Nitrile rubber

Minimum layer thickness: 0,11 mm Break through time: > 30 min

Material tested:Dermatril® (Aldrich Z677272, Size M)

data source: KCL GmbH, D-36124 Eichenzell, phone +49 (0)6659 873000, e-mail sales@kcl.de,

test method: EN374

If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an Industrial Hygienist familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

Body Protection

Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N99 (US) or type P2 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

a) Appearance Form: powder

Colour: grey

b) Odour no data availablec) Odour Threshold no data availabled) pH no data available

e) Melting point/freezing

point

Melting point/range: 817 °C - lit.

f) Initial boiling point and

.

613 °C - lit.

boiling range

) Flash point not applicable

h) Evaporation rate no data available

i) Flammability (solid, gas) no data available

Upper/lower flammability or explosive limits no data available

k) Vapour pressure no data available
 l) Vapour density no data available
 m) Relative density 5,727 g/mL at 25 °C

n) Water solubility no data available

) Partition coefficient: n-

no data available

octanol/water

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p) Autoignition no data available

temperature

q) Decomposition no data available

temperature

r) Viscosity no data available
 s) Explosive properties no data available
 t) Oxidizing properties no data available

9.2 Other safety information

no data available

10. STABILITY AND REACTIVITY

10.1 Reactivity

no data available

10.2 Chemical stability

no data available

10.3 Possibility of hazardous reactions

no data available

10.4 Conditions to avoid

Heat. Exposure to air may affect product quality.

10.5 Incompatible materials

Oxidizing agents, Halogens, Palladium undergoes a violent reaction with arsenic, Zinc, Platinum oxide, Nitrogen trichloride, Bromine azide

10.6 Hazardous decomposition products

Other decomposition products - no data available

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity

LD50 Oral - rat - 763 mg/kg

Remarks: Behavioral: Ataxia. Diarrhoea

LD50 Oral - mouse - 145 mg/kg

Remarks: Behavioral: Ataxia. Diarrhoea

Inhalation: no data available

Skin corrosion/irritation

no data available

Serious eye damage/eye irritation

no data available

Respiratory or skin sensitization

no data available

Germ cell mutagenicity

no data available

Carcinogenicity

This is or contains a component that has been reported to be carcinogenic based on its IARC, OSHA, ACGIH, NTP, or EPA classification.

IARC: 1 - Group 1: Carcinogenic to humans (Arsenic)

Reproductive toxicity

no data available

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Specific target organ toxicity - single exposure

no data available

Specific target organ toxicity - repeated exposure

no data available

Aspiration hazard

no data available

Potential health effects

Inhalation Toxic if inhaled. May cause respiratory tract irritation.

Ingestion Harmful if swallowed.

Skin May be harmful if absorbed through skin. May cause skin irritation.

Eyes May cause eye irritation.

Signs and Symptoms of Exposure

Absorption into the body leads to the formation of methemoglobin which in sufficient concentration causes cyanosis. Onset may be delayed 2 to 4 hours or longer.

Additional Information

RTECS: CG0525000

12. ECOLOGICAL INFORMATION

12.1 Toxicity

Toxicity to fish LC50 - Pimephales promelas (fathead minnow) - 9,9 mg/l - 96,0 h

Toxicity to daphnia and

EC50 - Daphnia magna (Water flea) - 3,8 mg/l - 48 h

other aquatic invertebrates

12.2 Persistence and degradability

no data available

12.3 Bioaccumulative potential

no data available

12.4 Mobility in soil

no data available

12.5 Results of PBT and vPvB assessment

no data available

12.6 Other adverse effects

Very toxic to aquatic life with long lasting effects.

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Product

Offer surplus and non-recyclable solutions to a licensed disposal company. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

Contaminated packaging

Dispose of as unused product.

14. TRANSPORT INFORMATION

14.1 UN number

ADR/RID: 1558 IMDG: 1558 IATA: 1558

14.2 UN proper shipping name

ADR/RID: ARSENIC IMDG: ARSENIC IATA: Arsenic

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14.3 Transport hazard class(es)

ADR/RID: 6.1 IMDG: 6.1 IATA: 6.1

14.4 Packaging group

ADR/RID: II IMDG: II IATA: II

14.5 Environmental hazards

ADR/RID: yes IMDG Marine pollutant: yes IATA: no

14.6 Special precautions for user

no data available

15. REGULATORY INFORMATION

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture no data available

15.2 Chemical Safety Assessment

no data available

16. OTHER INFORMATION

Further information

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The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Sigma-Aldrich Corporation and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See www.sigma-aldrich.com and/or the reverse side of invoice or packing slip for additional terms and conditions of sale.

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SAFETY DATA SHEET

Revision Date 19-Jan-2018 Revision Number 3

1. Identification

Product Name 1,2-Benzanthracene

Cat No.: AC105250000; AC105250010; AC105252500

Synonyms Benzóa!anthracene; Tetraphene

Recommended Use Laboratory chemicals.

Uses advised against Food, drug, pesticide or biocidal product use.

Details of the supplier of the safety data sheet

Company

Fisher Scientific Acros Organics
One Reagent Lane One Reagent Lane
Fair Lawn, NJ 07410 Fair Lawn, NJ 07410

Tel: (201) 796-7100

Emergency Telephone Number

For information **US** call: 001-800-ACROS-01 / **Europe** call: +32 14 57 52 11 Emergency Number **US**:001-201-796-7100 / **Europe**: +32 14 57 52 99 **CHEMTREC** Tel. No.**US**:001-800-424-9300 / **Europe**:001-703-527-3887

2. Hazard(s) identification

Classification

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Carcinogenicity Category 1B

Label Elements

Signal Word

Danger

Hazard Statements

May cause cancer



Precautionary Statements

Prevention

Obtain special instructions before use

Do not handle until all safety precautions have been read and understood

Use personal protective equipment as required

Response

IF exposed or concerned: Get medical attention/advice

Storage

Store locked up

Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

Very toxic to aquatic life with long lasting effects

WARNING. Cancer - https://www.p65warnings.ca.gov/.

3. Composition/Information on Ingredients

Component	CAS-No	Weight %	
Benz[a]anthracene	56-55-3	99	

4. First-aid measures

Eye Contact Immediate medical attention is required. Rinse immediately with plenty of water, also under

the eyelids, for at least 15 minutes.

Skin Contact Wash off immediately with soap and plenty of water while removing all contaminated

clothes and shoes. Immediate medical attention is required.

Inhalation Remove from exposure, lie down. Remove to fresh air. If not breathing, give artificial

respiration. Immediate medical attention is required.

Ingestion Call a physician immediately. Clean mouth with water.

Most important symptoms and

effects

No information available.

Notes to Physician Treat symptomatically

5. Fire-fighting measures

Suitable Extinguishing Media Water spray. Carbon dioxide (CO2). Dry chemical. Chemical foam.

Unsuitable Extinguishing Media No information available

Flash Point No information available Method - No information available

Autoignition Temperature

Explosion Limits

Upper

Not applicable

No data available

Revision Date 19-Jan-2018 1,2-Benzanthracene

Lower No data available Sensitivity to Mechanical Impact No information available Sensitivity to Static Discharge No information available

Specific Hazards Arising from the Chemical

Do not allow run-off from fire-fighting to enter drains or water courses.

Hazardous Combustion Products

Carbon monoxide (CO). Carbon dioxide (CO₂).

Protective Equipment and Precautions for Firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

NFPA

Health	Flammability	Instability	Physical hazards
0	1	0	N/A

6. Accidental release measures

Personal Precautions Environmental Precautions Ensure adequate ventilation. Use personal protective equipment as required. Do not flush into surface water or sanitary sewer system. Do not allow material to contaminate ground water system. Prevent product from entering drains. Local authorities should be advised if significant spillages cannot be contained.

Methods for Containment and Clean Sweep up and shovel into suitable containers for disposal. Up

	7. Handling and storage
Handling	Do not breathe dust. Do not get in eyes, on skin, or on clothing. Handle product only in closed system or provide appropriate exhaust ventilation.
Storage	Keep in a dry, cool and well-ventilated place. Refer product specification and/or product label for specific storage temperature requirement. Keep container tightly closed.

8. Exposure controls / personal protection

Exposure Guidelines

This product does not contain any hazardous materials with occupational exposure limitsestablished by the region specific regulatory bodies.

Ensure adequate ventilation, especially in confined areas. **Engineering Measures**

Personal Protective Equipment

Eye/face Protection Wear appropriate protective eyeglasses or chemical safety goggles as described by

OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard

EN166.

Skin and body protection Wear appropriate protective gloves and clothing to prevent skin exposure.

Respiratory Protection Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard

EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

Handle in accordance with good industrial hygiene and safety practice. **Hygiene Measures**

Physical and chemical properties

Powder Solid **Physical State**

AppearanceBeigeOdorOdorless

Odor Threshold

pH

No information available

No information available

Melting Point/Range 158 - 161 °C / 316.4 - 321.8 °F

Boiling Point/Range 437.6 °C / 819.7 °F Flash Point No information available Evaporation Rate Not applicable

Flammability (solid,gas)

No information available

Flammability or explosive limits

UpperNo data availableLowerNo data availableVapor PressureNo information availableVapor DensityNot applicable

Specific Gravity
Solubility
No information available
Partition coefficient; n-octanol/water
No data available
No data available

Autoignition Temperature Not applicable

Decomposition TemperatureNo information available

ViscosityNot applicableMolecular FormulaC18 H12Molecular Weight228.29

10. Stability and reactivity

Reactive Hazard None known, based on information available

Stability Stable under normal conditions.

Conditions to Avoid Incompatible products.

Incompatible Materials Strong oxidizing agents

Hazardous Decomposition Products Carbon monoxide (CO), Carbon dioxide (CO2)

Hazardous PolymerizationNo information available.

Hazardous Reactions None under normal processing.

11. Toxicological information

Acute Toxicity

Product InformationNo acute toxicity information is available for this product

Component Information

Toxicologically Synergistic No information available

Products

Delayed and immediate effects as well as chronic effects from short and long-term exposure

IrritationNo information availableSensitizationNo information available

CarcinogenicityThe table below indicates whether each agency has listed any ingredient as a carcinogen.

Component	CAS-No	IARC	NTP	ACGIH	OSHA	Mexico
Benz[a]anthracene	56-55-3	Group 2B	Reasonably	A2	X	A2
			Anticipated			

Mutagenic Effects Ames test: positive.

Reproductive EffectsNo information available.

Developmental EffectsNo information available.

Teratogenicity No information available.

STOT - single exposureSTOT - repeated exposure
None known

Aspiration hazard No information available

Symptoms / effects,both acute and No information available

delayed

Endocrine Disruptor Information

Component	EU - Endocrine Disrupters	EU - Endocrine Disruptors -	Japan - Endocrine Disruptor	
	Candidate List	Evaluated Substances	Information	
Benz[a]anthracene	Benz[a]anthracene Group III Chemical		Not applicable	

Other Adverse Effects The toxicological properties have not been fully investigated.

12. Ecological information

Ecotoxicity

The product contains following substances which are hazardous for the environment. Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Component	Freshwater Algae	Freshwater Fish	Microtox	Water Flea
Benz[a]anthracene	Not listed	Not listed	EC50 = 0.26 mg/L 15 min	LC50: = 0.01 mg/L, 96h Static (Daphnia magna) EC50: = 0.0042 mg/L, 48h
				(Daphnia magna)

Persistence and Degradability May persist

Bioaccumulation/ Accumulation No information available.

Mobility . Is not likely mobile in the environment due its low water solubility.

Component	log Pow
Benz[a]anthracene	5.61

13. Disposal considerations

Waste Disposal Methods

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

Component	RCRA - U Series Wastes	RCRA - P Series Wastes		
Benz[a]anthracene - 56-55-3	U018	=		

14. Transport information

DOT Not regulated Not regulated

IATA

JN-No UN3077

Proper Shipping Name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.*

Hazard Class 9
Packing Group III

IMDG/IMO

UN-No UN3077

Proper Shipping Name Environmentally hazardous substances, solid, n.o.s.

Hazard Class 9
Packing Group III

15. Regulatory information

United States of America Inventory

Component	CAS-No	TSCA	TSCA Inventory notification - Active/Inactive	TSCA - EPA Regulatory Flags
Benz[a]anthracene	56-55-3	Χ	ACTIVE	-

Legend:

TSCA - Toxic Substances Control Act, (40 CFR Part 710)

X - Listed '-' - Not Listed

TSCA 12(b) - Notices of Export Not applicable

International Inventories

Canada (DSL/NDSL), Europe (EINECS/ELINCS/NLP), Philippines (PICCS), Japan (ENCS), Australia (AICS), China (IECSC), Korea (ECL).

	Component	CAS-No	DSL	NDSL	EINECS	PICCS	ENCS	AICS	IECSC	KECL
ı	Benz[a]anthracene	56-55-3	-	X	200-280-6	-	-	-	Х	-

U.S. Federal Regulations

SARA 313

Component	CAS-No	Weight %	SARA 313 - Threshold Values %
Benz[a]anthracene	56-55-3	99	0.1

SARA 311/312 Hazard Categories See section 2 for more information

CWA (Clean Water Act)

Component CWA - Hazardous Substances		CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	
Benz[a]anthracene	-	-	-	X	

Clean Air Act Not applicable

OSHA - Occupational Safety and

Health Administration

Not applicable

CERCLA This material, as supplied, contains one or more substances regulated as a hazardous

substance under the Comprehensive Environmental Response Compensation and Liability

Act (CERCLA) (40 CFR 302)

Component	Hazardous Substances RQs	CERCLA EHS RQs	
Benz[a]anthracene	10 lb	-	

California Proposition 65 This product contains the following Proposition 65 chemicals.

Component	CAS-No	California Prop. 65	Prop 65 NSRL	Category
Benz[a]anthracene	56-55-3	Carcinogen	0.033 µg/day	Carcinogen

U.S. State Right-to-Know

Regulations

	Component	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
Γ	Benz[a]anthracene	X	X	X	X	Х

U.S. Department of Transportation

Reportable Quantity (RQ): N

DOT Marine Pollutant N
DOT Severe Marine Pollutant N

U.S. Department of Homeland

Security

This product does not contain any DHS chemicals.

Other International Regulations

Mexico - Grade No information available

16. Other information

Prepared By Regulatory Affairs

Thermo Fisher Scientific

Email: EMSDS.RA@thermofisher.com

Revision Date 19-Jan-2018 **Print Date** 19-Jan-2018

Revision Summary This document has been updated to comply with the US OSHA HazCom 2012 Standard

replacing the current legislation under 29 CFR 1910.1200 to align with the Globally

Harmonized System of Classification and Labeling of Chemicals (GHS).

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text

End of SDS



SAFETY DATA SHEET

Revision Date 14-Feb-2020 Revision Number 2

1. Identification

Product Name Benzo[a]pyrene

Cat No.: 15856

CAS-No 50-32-8

Synonyms Benzo[def]chrysene.; 3,4-Benzopyrene; 3,4-Benzpyrene

Recommended Use Laboratory chemicals.

Uses advised against Food, drug, pesticide or biocidal product use.

Details of the supplier of the safety data sheet

Company

Alfa Aesar

Thermo Fisher Scientific Chemicals, Inc.

30 Bond Street

Ward Hill, MA 01835-8099

Tel: 800-343-0660 Fax: 800-322-4757 **Email:** tech@alfa.com

www.alfa.com

Emergency Telephone Number

During normal business hours (Monday-Friday, 8am-7pm EST), call (800) 343-0660.

After normal business hours, call Carechem 24 at (866) 928-0789.

2. Hazard(s) identification

Classification

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Skin SensitizationCategory 1Germ Cell MutagenicityCategory 1BCarcinogenicityCategory 1AReproductive ToxicityCategory 1B

Label Elements

Signal Word

Danger

Hazard Statements

May cause an allergic skin reaction

May cause genetic defects

May cause cancer

May damage fertility. May damage the unborn child



Precautionary Statements

Prevention

Obtain special instructions before use

Do not handle until all safety precautions have been read and understood

Use personal protective equipment as required

Avoid breathing dust/fume/gas/mist/vapors/spray

Contaminated work clothing should not be allowed out of the workplace

Wear protective gloves

Response

IF exposed or concerned: Get medical attention/advice

Skin

IF ON SKIN: Wash with plenty of soap and water

If skin irritation or rash occurs: Get medical advice/attention

Wash contaminated clothing before reuse

Storage

Store locked up

Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

Very toxic to aquatic life with long lasting effects

WARNING. Cancer - https://www.p65warnings.ca.gov/.

3. Composition/Information on Ingredients

Component	CAS-No	Weight %
Benzo[a]pyrene	50-32-8	> 96

4. First-aid measures

General Advice If symptoms persist, call a physician.

Eye Contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get

medical attention.

Skin Contact Wash off immediately with plenty of water for at least 15 minutes. If skin irritation persists,

call a physician.

Inhalation Remove to fresh air. If not breathing, give artificial respiration. Get medical attention if

symptoms occur.

Ingestion Clean mouth with water and drink afterwards plenty of water. Get medical attention if

symptoms occur.

Most important symptoms and

effects

None reasonably foreseeable. May cause allergic skin reaction. Symptoms of allergic reaction may include rash, itching, swelling, trouble breathing, tingling of the hands and

feet, dizziness, lightheadedness, chest pain, muscle pain or flushing

Notes to Physician Treat symptomatically

5. Fire-fighting measures

Unsuitable Extinguishing Media No information available

Flash Point No information available Method - No information available

Autoignition Temperature

Explosion Limits

Not applicable

Upper No data available
Lower No data available
Sensitivity to Mechanical Impact No information available
Sensitivity to Static Discharge No information available

Specific Hazards Arising from the Chemical

Do not allow run-off from fire-fighting to enter drains or water courses.

Hazardous Combustion Products

Carbon monoxide (CO). Carbon dioxide (CO2).

Protective Equipment and Precautions for Firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

NFPA

HealthFlammabilityInstabilityPhysical hazards210N/A

6. Accidental release measures

Personal Precautions Ensure adequate ventilation. Use personal protective equipment as required. Avoid dust

formation.

Environmental PrecautionsDo not flush into surface water or sanitary sewer system. Do not allow material to

contaminate ground water system. Prevent product from entering drains. Local authorities

should be advised if significant spillages cannot be contained.

Methods for Containment and Clean Sweep up and shovel into suitable containers for disposal. Keep in suitable, closed **Up**

5

7. Handling and storage

Handling Wear personal protective equipment/face protection. Ensure adequate ventilation. Do not

get in eyes, on skin, or on clothing. Avoid ingestion and inhalation. Avoid dust formation.

Storage Keep containers tightly closed in a dry, cool and well-ventilated place.

8. Exposure controls / personal protection

Exposure Guidelines

Component	ACGIH TLV	OSHA PEL	NIOSH IDLH	Mexico OEL (TWA)
Benzo[a]pyrene		TWA: 0.2 mg/m ³		

Legend

OSHA - Occupational Safety and Health Administration

Engineering Measures Ensure adequate ventilation, especially in confined areas.

Personal Protective Equipment

Eye/face Protection Wear appropriate protective eyeglasses or chemical safety goggles as described by

OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard

EN166.

Skin and body protectionWear appropriate protective gloves and clothing to prevent skin exposure.

Respiratory Protection Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard

EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

Hygiene Measures Handle in accordance with good industrial hygiene and safety practice.

9. Physical and chemical properties

Physical StatePowder SolidAppearanceDark yellowOdoraromatic

Odor Threshold No information available

pH Not applicable

 Melting Point/Range
 175 - 179 °C / 347 - 354.2 °F

 Boiling Point/Range
 495 °C / 923 °F @ 760 mmHg

Flash Point No information available

Evaporation Rate Not applicable

Flammability (solid,gas)

No information available

Flammability or explosive limits

UpperNo data availableLowerNo data availableVapor PressureNo information available

Vapor Density Not applicable

Specific GravityNo information availableSolubilityInsoluble in waterPartition coefficient; n-octanol/waterNo data available

Autoignition Temperature Not applicable

Decomposition TemperatureNo information available

ViscosityNot applicableMolecular FormulaC20H12Molecular Weight252.31

10. Stability and reactivity

Reactive Hazard None known, based on information available

Stability Stable under normal conditions.

Conditions to Avoid Incompatible products.

Incompatible Materials Oxidizing agent

Hazardous Decomposition Products Carbon monoxide (CO), Carbon dioxide (CO2)

Hazardous Polymerization Hazardous polymerization does not occur.

Hazardous Reactions None under normal processing.

11. Toxicological information

Acute Toxicity

Product Information Component Information

Toxicologically Synergistic No information available

Products

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Revision Date 14-Feb-2020 Benzo[a]pyrene

Irritation No information available

Sensitization May cause sensitization by skin contact

Carcinogenicity The table below indicates whether each agency has listed any ingredient as a carcinogen.

Component	CAS-No	IARC	NTP	ACGIH	OSHA	Mexico
Benzo[a]pyrene	50-32-8	Group 1	Reasonably	A2	X	A2
			Anticipated			

IARC (International Agency for Research on Cancer)

IARC (International Agency for Research on Cancer)

Group 1 - Carcinogenic to Humans

Group 2A - Probably Carcinogenic to Humans Group 2B - Possibly Carcinogenic to Humans

NTP: (National Toxicity Program) NTP: (National Toxicity Program) Known - Known Carcinogen

Reasonably Anticipated - Reasonably Anticipated to be a Human

Carcinogen

A1 - Known Human Carcinogen ACGIH: (American Conference of Governmental Industrial

Hygienists)

A2 - Suspected Human Carcinogen

A3 - Animal Carcinogen

ACGIH: (American Conference of Governmental Industrial Hygienists)

Mutagenic Effects No information available

Reproductive Effects No information available.

No information available. **Developmental Effects**

Teratogenicity No information available.

STOT - single exposure None known STOT - repeated exposure None known

No information available **Aspiration hazard**

delayed

Symptoms / effects, both acute and Symptoms of allergic reaction may include rash, itching, swelling, trouble breathing, tingling of the hands and feet, dizziness, lightheadedness, chest pain, muscle pain or flushing

Endocrine Disruptor Information

Component	EU - Endocrine Disrupters	EU - Endocrine Disruptors -	Japan - Endocrine Disruptor
	Candidate List	Evaluated Substances	Information
Benzo[a]pyrene	Group III Chemical	Not applicable	Not applicable

Other Adverse Effects

The toxicological properties have not been fully investigated.

12. Ecological information

Ecotoxicity

Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. The product contains following substances which are hazardous for the environment.

Persistence and Degradability May persist

Bioaccumulation/ Accumulation No information available.

Mobility Is not likely mobile in the environment due its low water solubility.

Component	log Pow
Benzo[a]pyrene	6.06

13. Disposal considerations

Chemical waste generators must determine whether a discarded chemical is classified as a **Waste Disposal Methods**

hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

Component	RCRA - U Series Wastes	RCRA - P Series Wastes
Benzo[a]pyrene - 50-32-8	U022	-

14. Transport information

DOT

UN-No UN3077

Proper Shipping Name Environmentally hazardous substances, solid, n.o.s.

Technical Name Benzo[a]pyrene

Hazard Class 9
Packing Group III

TDG

UN-No UN3077

Proper Shipping Name Environmentally hazardous substances, solid, n.o.s.

Hazard Class 9
Packing Group III

<u>IATA</u>

UN-No UN3077

Proper Shipping Name Environmentally hazardous substances, solid, n.o.s.

Hazard Class 9
Packing Group III

IMDG/IMO

UN-No UN3077

Proper Shipping Name Environmentally hazardous substances, solid, n.o.s.

Hazard Class 9
Packing Group III

15. Regulatory information

United States of America Inventory

Component	CAS-No	TSCA	TSCA Inventory notification - Active/Inactive	TSCA - EPA Regulatory Flags
Benzo[a]pyrene	50-32-8	X	ACTIVE	-

Legend:

TSCA - Toxic Substances Control Act, (40 CFR Part 710)

X - Listed

'-' - Not Listed

TSCA 12(b) - Notices of Export Not applicable

International Inventories

Canada (DSL/NDSL), Europe (EINECS/ELINCS/NLP), Philippines (PICCS), Japan (ENCS), Australia (AICS), China (IECSC), Korea (ECL).

Component	CAS-No	DSL	NDSL	EINECS	PICCS	ENCS	AICS	IECSC	KECL
Benzo[a]pyrene	50-32-8	X	1	200-028-5	X	ı	1	Χ	KE-05-0184

U.S. Federal Regulations

SARA 313

Component	CAS-No	Weight %	SARA 313 - Threshold Values %
Benzo[a]pyrene	50-32-8	> 96	0.1

SARA 311/312 Hazard Categories See section 2 for more information

CWA (Clean Water Act)

CTTT (CTCAIT TTAICT TTCT)				
Component	CWA - Hazardous Substances	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants
Benzo[a]pyrene	=	-	X	X

Clean Air Act Not applicable

OSHA - Occupational Safety and

Health Administration

Not applicable

CERCLA Not applicable

Component	Hazardous Substances RQs	CERCLA EHS RQs
Benzo[a]pyrene	1 lb	-

California Proposition 65 This product contains the following Proposition 65 chemicals.

	Component	CAS-No	California Prop. 65	Prop 65 NSRL	Category
Γ	Benzo[a]pyrene	50-32-8	Carcinogen	0.06 μg/day	Carcinogen

U.S. State Right-to-Know

Regulations

	Component	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
Γ	Benzo[a]pyrene	Χ	X	Х	X	Χ

U.S. Department of Transportation

Reportable Quantity (RQ): N
DOT Marine Pollutant N
DOT Severe Marine Pollutant N

U.S. Department of Homeland

Security

This product does not contain any DHS chemicals.

Other International Regulations

Mexico - Grade No information available

16. Other information

Prepared By Health, Safety and Environmental Department

Email: tech@alfa.com

www.alfa.com

Revision Date 14-Feb-2020

Print Date 14-Feb-2020

Revision Summary SDS authoring systems update, replaces ChemGes SDS No. 50-32-8/1.

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text

End of SDS



Safety Data Sheet Revision Date: 07/31/19

www.restek.com

2 Letter ISO country code/language code: US/EN

1. IDENTIFICATION

Catalog Number / Product Name: 31272 / Benzo(b)fluoranthene Standard

Company:

Address:

Restek Corporation
110 Benner Circle
Bellefonte, Pa. 16823
Phone#:

814-353-1300

 Phone#:
 814-353-1300

 Fax#:
 814-353-1309

Emergency#: 800-424-9300 (CHEMTREC) 703-527-3887 (Outside the US)

Email: www.restek.com

Revision Number: 11

Intended use: For Laboratory use only

2. HAZARD(S)IDENTIFICATION

Emergency Overview:







Symbols:

GHS Hazard

GHS Carcinogenicity Category 1B Classification: Flammable Liquid Category 2

Serious Eye Damage/Eye Irritation Category 2

Specific Target Organ Systemic Toxicity (STOT) - Single Exposure Category 3

GHS Signal

Word:

GHS Hazard:

Danger

Highly flammable liquid and vapour.

Causes serious eye irritation. May cause drowsiness or dizziness.

May cause cancer.

GHS

Precautions:

Safety Obtain special instructions before use.

Precautions: Do not handle until all safety precautions have been read and understood.

Keep away from heat/sparks/open flames/hot surfaces. – No smoking.

Ground/bond container and receiving equipment.

Use explosion-proof electrical/ventilation and lighting equipment.

Use only non-sparking tools.

Take precautionary measures against static discharge. Avoid breathing dust/fume/gas/mist/vapours/spray. Wash hands and skin thoroughly after handling. Use only outdoors or in a well-ventilated area.

Wear protective gloves/protective clothing/eye protection/face protection.

First Aid Measures:

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.

Continue rinsing.

IF exposed or concerned: Get medical advice/attention.

Call a POISON CENTER or doctor/physician if you feel unwell.

If eye irritation persists: Get medical advice/attention.

In case of fire: Use extinguishing media in section 5 for extinction.

Storage: Store in a well-ventilated place. Keep container tightly closed.

Store in a well-ventilated place. Keep cool.

Store locked up.

Disposal: Dispose of contents/container according to section 13 of the SDS.

Single Exposure Specific target organ toxicity - Single exposure - STOT SE 3: H336 May cause drowsiness or dizziness.

Exposure Target Organs:

Repeated No data available

Exposure Target Organs:

3. COMPOSITION / INFORMATION ON INGREDIENT

Chemical Name	CAS#	EINEC #	% Composition
Acetone	67-64-1	200-662-2	99.9
benzo (b) fluoranthene	205-99-2	205-911-9	0.1

4. FIRST-AID MEASURES

Inhalation: Remove to fresh air. If breathing is difficult, have a trained individual administer oxygen. If not

breathing, give artificial respiration and have a trained individual administer oxygen. Get

medical attention immediately

Eyes: Flush eyes with plenty of water for at least 20 minutes retracting eyelids often. Tilt the head to

prevent chemical from transferring to the uncontaminated eye. Get immediate medical

attention.

Skin Contact: Wash with soap and water. Remove contaminated clothing and launder. Get medical

attention if irritation develops or persists.

Ingestion: Do not induce vomiting and seek medical attention immediately. Drink two glasses of water

or milk to dilute. Provide medical care provider with this SDS.

5. FIRE- FIGHTING MEASURES

Extinguishing Media: Use alcohol resistant foam, carbon dioxide, or dry chemical extinguishing

agents. Water spray or fog may also be effective for extinguishing if swept across the base of the fire. Water can also be used to absorb heat and keep exposed material from being damaged by fire. Flammable component(s) of this material may be lighter than water and burn while

floating on the surface.

Fire and/or Explosion Hazards: Vapors may be ignited by heat, sparks, flames or other sources of

ignition at or above the low flash point giving rise to a Class B fire. Vapors are heavier than air and may travel to a source of ignition and

flash back

Fire Fighting Methods and Protection: Do not enter fire area without proper protection including self-contained

toxic breathing apparatus and full protective equipment. Fight fire from a safe distance and a protected location due to the potential of hazardous vapors and decomposition products. Flammable component(s) of this material may be lighter than water and burn while floating on the surface. Use water spray/fog for cooling. Flammable component(s) of this

material may be lighter than water and burn while floating on the surface.

Hazardous Combustion Products: Carbon dioxide, Carbon monoxide

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions and Equipment: Exposure to the spilled material may be irritating or harmful. Follow

personal protective equipment recommendations found in Section 8 of this SDS. Additional precautions may be necessary based on special circumstances created by the spill including; the material spilled, the quantity of the spill, the area in which the spill occurred. Also consider the

expertise of employees in the area responding to the spill.

Methods for Clean-up: Prevent the spread of any spill to minimize harm to human health and the

environment if safe to do so. Wear complete and proper personal protective equipment following the recommendation of Section 8 at a minimum. Dike with suitable absorbent material like granulated clay. Gather and store in a sealed container pending a waste disposal

7. HANDLING AND STORAGE

Handling Technical Measures and Precautions: Harmful or irritating material. Avoid contacting and avoid

breathing the material. Use only in a well ventilated area. Use

spark-proof tools and explosion-proof equipment

Storage Technical Measures and Conditions: Store in a cool dry ventilated location. Isolate from

incompatible materials and conditions. Keep container(s)

closed. Keep away from sources of ignition

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

United States: Chemical Name	CAS No.	IDLH	ACGIH STEL	ACGIH TLV-TWA	OSHA Exposure Limit
Acetone	67-64-1	2500 ppm IDLH (10% LEL)	750 ppm STEL; 1782 mg/m3 STEL	500 ppm TWA; 1188 mg/m3 TWA	1000 ppm TWA; 2400 mg/m3 TWA
benzo (b) fluoranthene	205-99-2	Not established	None Known	Not established	No data available

Personal Protection:

Engineering Measures: Local exhaust ventilation is recommended when generating excessive levels of

vapours from handling or thermal processing.

Respiratory Protection: No respiratory protection required under normal conditions of use. Provide

general room exhaust ventilation if symptoms of overexposure occur as explained

Section 3. A respirator is not normally required.

Eye Protection: Wear chemically resistant safety glasses with side shields when handling this

product. Do not wear contact lenses.

Skin Protection: Wear protective gloves. Inspect gloves for chemical break-through and replace at

regular intervals. Clean protective equipment regularly. Wash hands and other exposed areas with mild soap and water before eating, drinking, and when

leaving work

Medical Conditions Aggravated By Exposure: Respiratory disease including asthma and bronchitis

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance, color: Depends upon product selection

Odor: Strong

Physical State:No data availablepH:Not applicableVapor Pressure:No data availableVapor Density:2.0 (air = 1)

Boiling Point (°C): 56.05 °C at 1013.25 hPa **Melting Point (°C):** -95.4 °C Melting Point

Flash Point (°F):

Flammability: Highly Flammable
Upper Flammable/Explosive Limit, % in air: No data available
Lower Flammable/Explosive Limit, % in air: No data available
Autoignition Temperature (°C): 465 deg C
Decomposition Temperature (°C): No data available
Specific Gravity: 0.7845 g/cm3 at 25 °C
Evaporation Rate: No data available

Odor Threshold: ND

Solubility: Complete; 100% Partition Coefficient: n-octanol in water: No data available

VOC % by weight: 99.9 Molecular Weight: 58.08

10. STABILITY AND REACTIVITY

Stability: Stable under normal conditions.

Conditions to Avoid: None known.

Materials to Avoid / Chemical Incompatiability:Strong oxidizing agents Strong acidsHazardous Decomposition Products:Carbon dioxide Carbon monoxide

11. TOXICOLOGICAL INFORMATION

Routes of Entry: Inhalation, Skin Contact, Eye Contact, Ingestion

Target Organs Potentially Affected By Exposure: Eyes, Central nervous system stimulation,

Respiratory Tract, Skin

Chemical Interactions That Change Toxicity: None Known

Immediate (Acute) Health Effects by Route of Exposure:

Inhalation Irritation: Can cause minor respiratory irritation, dizziness, weakness, fatigue, nausea,

and headache.

Skin Contact: Can cause minor skin irritation, defatting, and dermatitis. **Eye Contact:** Can cause minor irritation, tearing and reddening.

Ingestion Irritation: May be harmful if swallowed.

Ingestion Toxicity: Harmful if swallowed. May cause systemic poisoning.

Long-Term (Chronic) Health Effects:

Carcinogenicity: Contains a probable or known human carcinogen.

Reproductive and Developmental Toxicity:No data available to indicate product or any components present at greater than 0.1% may cause birth defects.

Inhalation:Upon prolonged and/or repeated exposure, can cause minor respiratory irritation, dizziness, weakness, fatigue,

nausea, and headache.

Skin Contact: Upon prolonged or repeated contact, can cause minor

skin irritation, defatting, and dermatitis.

Component Toxicological Data:

NIOSH:

Chemical Name CAS No. LD50/LC50

Acetone 67-64-1 Dermal LD50 Rabbit >15700 mg/kg; Inhalation

LC50 Rat 50100 mg/m3 8 h; Oral LD50 Rat

5800 mg/kg

Component Carcinogenic Data:

OSHA:

Chemical Name CAS No.

Benzo(b)fluoranthene 205-99-2 Present

ACGIH:

Chemical Name CAS No.

Benzo[b]fluoranthene 205-99-2 A2 - Suspected Human Carcinogen

Acetone 67-64-1 A4 - Not Classifiable as a Human Carcinogen

NIOSH:

Chemical Name CAS No.

No data available

NTP:

Chemical Name CAS No.

No data available

IARC:

 Chemical Name
 CAS No.
 Group No.

 Monograph 92 [2010]:
 205-99-2
 Group 2B

Supplement 7 [1987]; Monograph

32 [1983]

12. ECOLOGICAL INFORMATION

Overview: This material is not expected to be harmful to the ecology.

Mobility:No dataPersistence:No dataBioaccumulation:No dataDegradability:No data

Ecological Toxicity Data: No data available

13. DISPOSAL CONSIDERATIONS

Waste Description of Spent Product: Spent or discarded material is a hazardous waste. Mixing

spent or discarded material with other materials may render the mixture hazardous. Perform a hazardous

waste determination on mixtures.

Disposal Methods: Dispose of by incineration following Federal, State, Local,

or Provincial regulations.

Waste Disposal of Packaging: Comply with all Local, State, Federal, and Provincial

Environmental Regulations.

14. TRANSPORTATION INFORMATION

United States:

DOT Proper Shipping Name:
UN Number:
UN1090
Hazard Class:
Packing Group:

Acetone
UN1090
II

International:

IATA Proper Shipping Name:
UN Number:
UN1090
Hazard Class:
Packing Group:

II

Marine Pollutant: No

Chemical Name	CAS#	Marine Pollutant	Severe Marine Pollutant
No data available			

15. REGULATORY INFORMATION

United States: Chemical Name	CAS#	CERCLA	SARA 313	SARA EHS 313	TSCA
Acetone	67-64-1	Χ	-	-	Χ
benzo (b) fluoranthene	205-99-2	Χ	Χ	-	-

The following chemicals are listed on CA Prop 65:

Chemical Name	CAS#	Regulation
Benzo[b]fluoranthene	205-99-2	Prop 65 Cancer

State Right To Know Listing:

Chemical Name	CAS#	New Jersey	Massachusetts	Pennsylvania	California
Acetone	67-64-1	X	X	Χ	Χ
benzo (b) fluoranthene	205-99-2	X	X	Χ	Χ

16. OTHER INFORMATION

Prior Version Date: 08/13/18

Other Information: Any changes to the SDS compared to previous versions are marked by a vertical

line in front of the concerned paragraph.

References: No data available

Disclaimer: Restek Corporation provides the descriptions, data and information contained

herein in good faith but makes no representation as to its comprehensiveness or accuracy. It is provided for your guidance only. Because many factors may affect processing or application/use, Restek Corporation recommends you perform an assessment to determine the suitability of a product for your particular purpose prior to use. No warranties of any kind, either expressed or implied, including fitness for a particular purpose, are made regarding products described, data or information set forth. In no case shall the descriptions, information, or data provided be considered a part of our terms and conditions of sale. Further, the descriptions, data and information furnished hereunder are given gratis. No obligation or liability for the description, data and information given are assumed. All such being given

and accepted at your risk.



Safety Data Sheet Revision Date: 07/15/19

www.restek.com

2 Letter ISO country code/language code: US/EN

1. IDENTIFICATION

Catalog Number / Product Name: 31274 / Benzo(k)fluoranthene Standard

Company:

Address:

Restek Corporation
110 Benner Circle
Bellefonte, Pa. 16823
Phone#:

814-353-1300

 Phone#:
 814-353-1300

 Fax#:
 814-353-1309

Emergency#: 800-424-9300 (CHEMTREC) 703-527-3887 (Outside the US)

Email: www.restek.com

Revision Number: 12

Intended use: For Laboratory use only

2. HAZARD(S)IDENTIFICATION

Emergency Overview:

GHS Hazard Symbols:







GHS Carcinogenicity Category 1B Classification: Flammable Liquid Category 2

Serious Eye Damage/Eye Irritation Category 2

Specific Target Organ Systemic Toxicity (STOT) - Single Exposure Category 3

GHS Signal

Word:

GHS Hazard:

Danger

Highly flammable liquid and vapour. Causes serious eye irritation. May cause drowsiness or dizziness.

May cause cancer.

GHS

Precautions:

Safety Obtain special instructions before use.

Precautions: Do not handle until all safety precautions have been read and understood.

Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

Ground/bond container and receiving equipment.

Use explosion-proof electrical/ventilation and lighting equipment.

Use only non-sparking tools.

Take precautionary measures against static discharge. Avoid breathing dust/fume/gas/mist/vapours/spray. Wash hands and skin thoroughly after handling. Use only outdoors or in a well-ventilated area.

Wear protective gloves/protective clothing/eye protection/face protection.

First Aid Measures:

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.

Continue rinsing.

IF exposed or concerned: Get medical advice/attention.

Call a POISON CENTER or doctor/physician if you feel unwell.

If eye irritation persists: Get medical advice/attention.

In case of fire: Use extinguishing media in section 5 for extinction.

Storage: Store in a well-ventilated place. Keep container tightly closed.

Store in a well-ventilated place. Keep cool.

Store locked up.

Disposal: Dispose of contents/container according to section 13 of the SDS.

Single Exposure Specific target organ toxicity - Single exposure - STOT SE 3: H336 May cause drowsiness or dizziness.

Exposure
Target Organs:

Repeated No data available

Exposure Target Organs:

3. COMPOSITION / INFORMATION ON INGREDIENT

Chemical Name	CAS#	EINEC #	% Composition
Acetone	67-64-1	200-662-2	99.9
benzo (k) fluoranthene	207-08-9	205-916-6	0.1

4. FIRST-AID MEASURES

Inhalation: Remove to fresh air. If breathing is difficult, have a trained individual administer oxygen. If not

breathing, give artificial respiration and have a trained individual administer oxygen. Get

medical attention immediately

Eyes: Flush eyes with plenty of water for at least 20 minutes retracting eyelids often. Tilt the head to

prevent chemical from transferring to the uncontaminated eye. Get immediate medical

attention.

Skin Contact: Wash with soap and water. Remove contaminated clothing and launder. Get medical

attention if irritation develops or persists.

Ingestion: Do not induce vomiting and seek medical attention immediately. Drink two glasses of water

or milk to dilute. Provide medical care provider with this SDS.

5. FIRE- FIGHTING MEASURES

Extinguishing Media: Use alcohol resistant foam, carbon dioxide, or dry chemical extinguishing

agents. Water spray or fog may also be effective for extinguishing if swept across the base of the fire. Water can also be used to absorb heat and keep exposed material from being damaged by fire. Flammable component(s) of this material may be lighter than water and burn while

floating on the surface.

Fire and/or Explosion Hazards: Vapors may be ignited by heat, sparks, flames or other sources of

ignition at or above the low flash point giving rise to a Class B fire. Vapors are heavier than air and may travel to a source of ignition and

flash back

Fire Fighting Methods and Protection: Do not enter fire area without proper protection including self-contained

toxic breathing apparatus and full protective equipment. Fight fire from a safe distance and a protected location due to the potential of hazardous vapors and decomposition products. Flammable component(s) of this material may be lighter than water and burn while floating on the surface. Use water spray/fog for cooling. Flammable component(s) of this

material may be lighter than water and burn while floating on the surface.

Hazardous Combustion Products: Carbon dioxide, Carbon monoxide

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions and Equipment: Exposure to the spilled material may be irritating or harmful. Follow

personal protective equipment recommendations found in Section 8 of this SDS. Additional precautions may be necessary based on special circumstances created by the spill including; the material spilled, the quantity of the spill, the area in which the spill occurred. Also consider the

expertise of employees in the area responding to the spill.

Methods for Clean-up: Prevent the spread of any spill to minimize harm to human health and the

environment if safe to do so. Wear complete and proper personal protective equipment following the recommendation of Section 8 at a minimum. Dike with suitable absorbent material like granulated clay. Gather and store in a sealed container pending a waste disposal

7. HANDLING AND STORAGE

Handling Technical Measures and Precautions: Harmful or irritating material. Avoid contacting and avoid

breathing the material. Use only in a well ventilated area. Use

spark-proof tools and explosion-proof equipment

Storage Technical Measures and Conditions: Store in a cool dry ventilated location. Isolate from

incompatible materials and conditions. Keep container(s)

closed. Keep away from sources of ignition

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

United States: Chemical Name	CAS No.	IDLH	ACGIH STEL	ACGIH TLV-TWA	OSHA Exposure Limit
Acetone	67-64-1	2500 ppm IDLH (10% LEL)	750 ppm STEL; 1782 mg/m3 STEL	500 ppm TWA; 1188 mg/m3 TWA	1000 ppm TWA; 2400 mg/m3 TWA
benzo (k) fluoranthene	207-08-9	Not established	None Known	Not established	No data available

Personal Protection:

Engineering Measures: Local exhaust ventilation is recommended when generating excessive levels of

vapours from handling or thermal processing.

Respiratory Protection: No respiratory protection required under normal conditions of use. Provide

general room exhaust ventilation if symptoms of overexposure occur as explained

Section 3. A respirator is not normally required.

Eye Protection: Wear chemically resistant safety glasses with side shields when handling this

product. Do not wear contact lenses.

Skin Protection: Wear protective gloves. Inspect gloves for chemical break-through and replace at

regular intervals. Clean protective equipment regularly. Wash hands and other exposed areas with mild soap and water before eating, drinking, and when

leaving work

Medical Conditions Aggravated By Exposure: Respiratory disease including asthma and bronchitis

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance, color: Depends upon product selection

Odor: Strong

Physical State:No data availablepH:Not applicableVapor Pressure:No data availableVapor Density:2.0 (air = 1)

Boiling Point (°C): 480 °C 56.05 °C at 1013.25 hPa

Melting Point (°C): -95.4 °C Melting Point

Flash Point (°F): 39

Flammability: Highly Flammable
Upper Flammable/Explosive Limit, % in air: No data available
Lower Flammable/Explosive Limit, % in air: No data available
Autoignition Temperature (°C): 465 deg C
Decomposition Temperature (°C): No data available
Specific Gravity: 0.7845 g/cm3 at 25 °C
Evaporation Rate: No data available

Odor Threshold: ND

Solubility: Complete; 100% Partition Coefficient: n-octanol in water: No data available

VOC % by weight: 99.9 Molecular Weight: 58.08

10. STABILITY AND REACTIVITY

Stability: Stable under normal conditions.

Conditions to Avoid: None known.

Materials to Avoid / Chemical Incompatiability: Strong oxidizing agents Strong acids Hazardous Decomposition Products: Carbon dioxide Carbon monoxide

11. TOXICOLOGICAL INFORMATION

Routes of Entry: Inhalation, Skin Contact, Eye Contact, Ingestion

Target Organs Potentially Affected By Exposure: Eyes, Central nervous system stimulation,

Respiratory Tract, Skin

Chemical Interactions That Change Toxicity: None Known

Immediate (Acute) Health Effects by Route of Exposure:

Inhalation Irritation: Can cause minor respiratory irritation, dizziness, weakness, fatigue, nausea,

and headache.

Skin Contact: Can cause minor skin irritation, defatting, and dermatitis. **Eye Contact:** Can cause minor irritation, tearing and reddening.

Ingestion Irritation: May be harmful if swallowed.

Ingestion Toxicity: Harmful if swallowed. May cause systemic poisoning.

Long-Term (Chronic) Health Effects:

Carcinogenicity: Contains a probable or known human carcinogen.

Reproductive and Developmental Toxicity:No data available to indicate product or any components present at greater than 0.1% may cause birth defects.

Upon prolonged and/or repeated exposure, can cause minor respiratory irritation, dizziness, weakness, fatigue,

nausea, and headache.

Skin Contact: Upon prolonged or repeated contact, can cause minor

skin irritation, defatting, and dermatitis.

Component Toxicological Data:

NIOSH:

Inhalation:

Chemical Name CAS No. LD50/LC50

Acetone 67-64-1 Dermal LD50 Rabbit >15700 mg/kg; Inhalation

LC50 Rat 50100 mg/m3 8 h; Oral LD50 Rat

5800 mg/kg

Component Carcinogenic Data:

OSHA:

Chemical Name CAS No.

Benzo(k)fluoranthene 207-08-9 Present

ACGIH:

Chemical Name CAS No.

Acetone 67-64-1 A4 - Not Classifiable as a Human Carcinogen

NIOSH:

Chemical Name CAS No.

No data available

NTP:

Chemical Name CAS No.

No data available

IARC:

 Chemical Name
 CAS No.
 Group No.

 Monograph 92 [2010]:
 207-08-9
 Group 2B

Supplement 7 [1987]; Monograph

32 [1983]

12. ECOLOGICAL INFORMATION

Overview: This material is not expected to be harmful to the ecology.

Mobility:No dataPersistence:No dataBioaccumulation:No dataDegradability:No data

Ecological Toxicity Data: No data available

13. DISPOSAL CONSIDERATIONS

Waste Description of Spent Product: Spent or discarded material is a hazardous waste. Mixing

spent or discarded material with other materials may render the mixture hazardous. Perform a hazardous

waste determination on mixtures.

Disposal Methods: Dispose of by incineration following Federal, State, Local,

or Provincial regulations.

Waste Disposal of Packaging:

Comply with all Local, State, Federal, and Provincial

Environmental Regulations.

14. TRANSPORTATION INFORMATION

United States:

DOT Proper Shipping Name:
UN Number:
UN1090
Hazard Class:
Packing Group:

Acetone
UN1090
II

International:

IATA Proper Shipping Name:
UN Number:
UN1090
Hazard Class:
Packing Group:

Acetone
UN1090
II

Marine Pollutant: No

Chemical Name	CAS#	Marine Pollutant	Severe Marine Pollutant
No data available			

15. REGULATORY INFORMATION

United States: Chemical Name	CAS#	CERCLA	SARA 313	SARA EHS 313	TSCA	
Acetone	67-64-1	Χ	-	-	Χ	
benzo (k) fluoranthene	207-08-9	Χ	Χ	-	-	

The following chemicals are listed on CA Prop 65:

Chemical Name	CAS#	Regulation
Benzo[k]fluoranthene	207-08-9	Prop 65 Cancer

State Right To Know Listing:

Chemical Name	CAS#	New Jersey	Massachusetts	Pennsylvania	California
Acetone	67-64-1	X	X	Χ	Χ
benzo (k) fluoranthene	207-08-9	X	Χ	Χ	Χ

16. OTHER INFORMATION

Prior Version Date: 06/15/18

Other Information: Any changes to the SDS compared to previous versions are marked by a vertical

line in front of the concerned paragraph.

References: No data available

Disclaimer: Restek Corporation provides the descriptions, data and information contained

herein in good faith but makes no representation as to its comprehensiveness or accuracy. It is provided for your guidance only. Because many factors may affect processing or application/use, Restek Corporation recommends you perform an assessment to determine the suitability of a product for your particular purpose prior to use. No warranties of any kind, either expressed or implied, including fitness for a particular purpose, are made regarding products described, data or information set forth. In no case shall the descriptions, information, or data provided be considered a part of our terms and conditions of sale. Further, the descriptions, data and information furnished hereunder are given gratis. No obligation or liability for the description, data and information given are assumed. All such being given

and accepted at your risk.

according to 29CFR1910/1200 and GHS Rev. 3

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Chloroform, Reagent Grade

SECTION 1: Identification of the substance/mixture and of the supplier

Product name : Chloroform, Reagent Grade

Manufacturer/Supplier Trade name:

Manufacturer/Supplier Article number: S25248

Recommended uses of the product and uses restrictions on use:

Manufacturer Details:

AquaPhoenix Scientific 9 Barnhart Drive, Hanover, PA 17331

Supplier Details:

Fisher Science Education 15 Jet View Drive, Rochester, NY 14624

Emergency telephone number:

Fisher Science Education Emergency Telephone No.: 800-535-5053

SECTION 2: Hazards identification

Classification of the substance or mixture:



Health hazard

Specific target organ toxicity following repeated exposure, category 1 Reproductive toxicity, category 2 Carcinogenicity, category 2



Irritant

Acute toxicity (oral, dermal, inhalation), category 4 Skin irritation, category 2 Eye irritation, category 2A



Toxic

Acute toxicity (oral, dermal, inhalation), category 3

Acute toxicity - Oral - Acute Tox. 4
Acute toxicity - Inhalation - Acute Tox. 3
Skin corrosion/irritation - Skin Irrit. 2.
Serious Eye Damage/Eye Irritation - Eye Irrit. 2
Carcinogenicity - Carc. 2
Reproductive Toxicity - Repr. 2
Specific target organ toxicity - Repeated exposure - STOT RE 1

Signal word : Danger

Hazard statements:

Harmful if swallowed
Causes skin irritation
Causes serious eye irritation
Toxic if inhaled
Suspected of causing cancer
Suspected of damaging fertility or the unborn child

according to 29CFR1910/1200 and GHS Rev. 3

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Chloroform, Reagent Grade

Causes damage to organs through prolonged or repeated exposure

Precautionary statements:

If medical advice is needed, have product container or label at hand

Keep out of reach of children

Read label before use

Do not handle until all safety precautions have been read and understood

Obtain special instructions before use

Avoid breathing dust/fume/gas/mist/vapours/spray

Use only outdoors or in a well-ventilated area

Use personal protective equipment as required

Wash skin thoroughly after handling

Do not eat, drink or smoke when using this product

Wear protective gloves/protective clothing/eye protection/face protection

Call a POISON CENTER or doctor/physician

If skin irritation occurs: Get medical advice/attention

IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

IF exposed or concerned: Get medical advice/attention

Get Medical advice/attention if you feel unwell

Specific treatment (see supplemental first aid instructions on this label)

Rinse mouth

Take off contaminated clothing and wash before reuse

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do.

Continue rinsing

If eye irritation persists get medical advice/attention

IF ON SKIN: Wash with soap and water

Store in a well ventilated place. Keep container tightly closed

Store locked up

Dispose of contents and container as instructed in Section 13

Other Non-GHS Classification:

WHMIS





NFPA/HMIS





HMIS RATINGS (0-4)

SECTION 3: Composition/information on ingredients

according to 29CFR1910/1200 and GHS Rev. 3

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Chloroform, Reagent Grade

Ingredients:		
CAS 67-66-3	Chloroform	100 %
		Percentages are by weight

SECTION 4: First aid measures

Description of first aid measures

After inhalation: Loosen clothing as necessary and position individual in a comfortable position. Move exposed to fresh air. Give artificial respiration if necessary. If breathing is difficult give oxygen. Get medical assistance if cough or other symptoms appear. DO NOT use mouth-to-mouth resuscitation

After skin contact: Rinse/flush exposed skin gently using soap and water for 15-20 minutes. Seek medical advice if discomfort or irritation persists.

After eye contact: Protect unexposed eye.Rinse/flush exposed eye(s) gently using water for 15-20 minutes.Remove contact lens(es) if able to do so during rinsing.Seek medical attention if irritation persists or if concerned.

After swallowing: Rinse mouth thoroughly. Do not induce vomiting. Seek medical attention if irritation, discomfort, or vomiting persists. Never give anything by mouth to an unconscious person. Call Poison Control immediately

Most important symptoms and effects, both acute and delayed:

Aspiration hazard. May cause central nervous system effects. May cause gastrointestinal irritation, nausea, vomiting and diarrhea. Irritation- all routes of exposure. May cause irritation of respiratory tract. Inhalation may cause central nervous system effects. Headache. Shortness of breath.; Possible cancer hazard. Tumorigenic effects have been reported in experimental animals. May cause adverse liver and kidney effects. Central nervous system disorders. Cardiovascular. Preexisting eye disorders. Kidney disorders. Liver disorders. Skin disorders

Indication of any immediate medical attention and special treatment needed:

If seeking medical attention provide SDS document to physician. Physician should treat symptomatically.

SECTION 5 : Firefighting measures

Extinguishing media

Suitable extinguishing agents: Use water, dry chemical, chemical foam, carbon dioxide, or alcohol-resistant foam.

For safety reasons unsuitable extinguishing agents:

Special hazards arising from the substance or mixture:

Thermal decomposition can lead to release of irritating gases and vapors. Slight fire hazard when subjected to high heat

Advice for firefighters:

Protective equipment: Wear protective eyeware, gloves, and clothing. Refer to Section 8.Use NIOSH-approved respiratory protection/breathing apparatus.

Additional information (precautions): Avoid inhaling gases, fumes, dust, mist, vapor, and aerosols. Avoid contact with skin, eyes, and clothing.

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures:

Ensure adequate ventilation. Ensure that air-handling systems are operational.

Environmental precautions:

according to 29CFR1910/1200 and GHS Rev. 3

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Chloroform, Reagent Grade

Should not be released into environment. Prevent from reaching drains, sewer, or waterway.

Methods and material for containment and cleaning up:

Wear protective eyeware, gloves, and clothing. Refer to Section 8.Always obey local regulations. Containerize for disposal. Refer to Section 13.If necessary use trained response staff or contractor. Evacuate personnel to safe areas. Keep in suitable closed containers for disposal.

Reference to other sections:

SECTION 7: Handling and storage

Precautions for safe handling:

Avoid contact with skin, eyes, and clothing. Follow good hygiene procedures when handling chemical materials. Refer to Section 8. Follow proper disposal methods. Refer to Section 13. Do not eat, drink, smoke, or use personal products when handling chemical substances.

Conditions for safe storage, including any incompatibilities:

Store in a cool location. Keep away from food and beverages. Protect from freezing and physical damage. Provide ventilation for containers. Keep container tightly sealed. Store away from incompatible materials.

SECTION 8 : Exposure controls/personal protection





Control Parameters: 67-66-3, Chloroform, ACGIH TLV: 49 mg/m3

67-66-3, Chloroform, OSHA PEL: 240 mg/m3

67-66-3. Chloroform, OSHA PEL 50 ppm Ceiling: 240 mg/m3 Ceiling

67-66-3, Chloroform, ACGIH TLV TWA:10 ppm TWA

67-66-3, Chloroform, NIOSH REL: Ca ST 2 ppm (9.78 mg/m3) 60-minute

67-66-3, Chloroform, NIOSH IDLH: Ca 500 ppm

Appropriate Engineering controls: Emergency eye wash fountains and safety showers should be available in

the immediate vicinity of use or handling. Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapor and mists below the applicable workplace exposure limits (Occupational

Exposure Limits-OELs) indicated above.

Respiratory protection: Not required under normal conditions of use. Where risk assessment

shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. When necessary use NIOSH approved

breathing equipment.

Protection of skin: Select glove material impermeable and resistant to the substance. Select

glove material based on rates of diffusion and degradation. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Use proper glove removal technique without touching outer surface. Avoid skin contact with used gloves. Wear

protective clothing.

Eye protection: Wear equipment for eye protection tested and approved under

appropriate government standards such as NIOSH (US) or EN 166(EU). Safety glasses or goggles are appropriate eye protection.

according to 29CFR1910/1200 and GHS Rev. 3

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Chloroform, Reagent Grade

General hygienic measures:

Perform routine housekeeping. Wash hands before breaks and at the end of work. Avoid contact with skin, eyes, and clothing. Before wearing wash contaminated clothing.

SECTION 9: Physical and chemical properties

Appearance (physical state,color):	Clear Liquid	Explosion limit lower: Explosion limit upper:	Not determined Not determined
Odor:	Aromatic Chloroform Odor	Vapor pressure:	213 mbar @ 20 °C
Odor threshold:	Not determined	Vapor density:	4.12 (Air = 1.0)
pH-value:	Not determined	Relative density:	Not determined
Melting/Freezing point:	-63°C / -81.4°F	Solubilities:	Slightly soluble
Boiling point/Boiling range:	60.5 - 61.5°C / 140.9 - 142.7°F	Partition coefficient (noctanol/water):	Not determined
Flash point (closed cup):	Not determined	Auto/Self-ignition temperature:	Not determined
Evaporation rate:	11.6 (Butyl Acetate = 1.0)	Decomposition temperature:	290°C
Flammability (solid,gaseous):	Not determined	Viscosity:	a. Kinematic:Not determined b. Dynamic: Not determined

Density: Not determined **Specific Gravity**:1.480

SECTION 10: Stability and reactivity

Reactivity: Nonreactive under normal conditions.

Chemical stability:Stable under normal conditions.Light sensitive **Possible hazardous reactions:**None under normal processing. **Conditions to avoid:**Incompatible materials.Excess heat

Incompatible materials:Alkali metals, strong caustics and oxidizers

Hazardous decomposition products: Oxides of sodium. Emits very toxic fumes of chlorine and phosgene gas

SECTION 11: Toxicological information

Acute Toxicity:					
Oral:	67-66-3	LD50 oral-rat: 695mg/kg			
Chronic Toxicity:					
Inhalation:	67-66-3	May cause adverse liver effects. May cause adverse kidney effects			
Corrosion Irritation	Corrosion Irritation: No additional information.				
Sensitization:		No additional information.			

according to 29CFR1910/1200 and GHS Rev. 3

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Chloroform, Reagent Grade

Single Target Organ (STOT):	No additional information.
Numerical Measures: No additional information.	
Carcinogenicity:	Possible cancer hazard based on tests with laboratory animals.: Tumorigenic effects have been reported in experimental animals OSHA: Carcinogen (67-66-3)
Mutagenicity:	Mutagenic effects have occurred in experimental animals
Reproductive Toxicity:	Experiments have shown reproductive toxicity effects on laboratory animals. Developmental effects have occurred in experimental animals. Teratogenic effects have occurred in experimental animals

SECTION 12: Ecological information

Ecotoxicity Persistence and degradability:

Bioaccumulative potential: **Mobility in soil**: log Pow: 2

Other adverse effects: Chloroform has moderate acute and chronic toxicity to aquatic life, especially brittle roots

and chromosomal damage

SECTION 13: Disposal considerations

Waste disposal recommendations:

Contact a licensed professional waste disposal service to dispose of this material.U.S. - RCRA (Resource Conservation & Recovery Act) - U Series Wastes - Acutely Toxic Wastes & Other Hazardous Characteristics waste number U044 (Chloroform) . U.S. - RCRA (Resource Conservation & Recovery Act) - Basis for Listing - Appendix VII Included in waste streams: F024, F025, F039, K009, K010, K019, K020, K021, K029, K073, K116, K149, K150, K151, K158 (Chloroform) . U.S. - RCRA (Resource Conservation & Recovery Act) - D Series Wastes - Max Conc of Contaminants for the Tox Characteristic 6.0 mg/L regulatory level (Chloroform) . Dispose of empty containers as unused product.Product or containers must not be disposed with household garbage. It is the responsibility of the waste generator to properly characterize all waste materials according to applicable regulatory entities (US 40CFR262.11). Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations. Ensure complete and accurate classification.

SECTION 14: Transport information

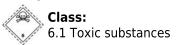
UN-Number

1888

UN proper shipping name

Poisonous material, Chloroform

Transport hazard class(es)



Packing group: III

according to 29CFR1910/1200 and GHS Rev. 3

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Chloroform, Reagent Grade

Environmental hazard:

Transport in bulk:

Special precautions for user:

SECTION 15: Regulatory information

United States (USA)

SARA Section 311/312 (Specific toxic chemical listings):

Acute, Chronic

SARA Section 313 (Specific toxic chemical listings):

67-66-3 Chloroform 0.1 % de minimis concentration

RCRA (hazardous waste code):

67-66-3 Chloroform waste codeU044

TSCA (Toxic Substances Control Act):

All ingredients are listed.

CERCLA (Comprehensive Environmental Response, Compensation, and Liability Act):

67-66-3 Chloroform

Proposition 65 (California):

Chemicals known to cause cancer:

67-66-3 Chloroform

Chemicals known to cause reproductive toxicity for females:

None of the ingredients is listed

Chemicals known to cause reproductive toxicity for males:

None of the ingredients is listed

Chemicals known to cause developmental toxicity:

67-66-3 Chloroform

Canada

Canadian Domestic Substances List (DSL):

All ingredients are listed.

Canadian NPRI Ingredient Disclosure list (limit 0.1%):

67-66-3 Chloroform

Canadian NPRI Ingredient Disclosure list (limit 1%):

None of the ingredients is listed

SECTION 16: Other information

This product has been classified in accordance with hazard criteria of the Controlled Products Regulations and the SDS contains all the information required by the Controlled Products Regulations.Note:. The responsibility to provide a safe workplace remains with the user.The user should consider the health hazards and safety information contained herein as a guide and should take those precautions required in an individual operation to instruct employees and develop work practice procedures for a safe work environment.The information contained herein is, to the best of our knowledge and belief, accurate.However, since the conditions of handling and use are beyond our control, we make no guarantee of results, and assume no liability for damages incurred by the use of this material.It is the responsibility of the user to comply with all applicable laws and regulations applicable to this

according to 29CFR1910/1200 and GHS Rev. 3

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Chloroform, Reagent Grade

material.

GHS Full Text Phrases:

Abbreviations and acronyms:

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

ACGIH: American Conference of Governmental Industrial Hygienists

CAS: Chemical Abstracts Service (division of the American Chemical Society)

NFPA: National Fire Protection Association (USA) HMIS: Hazardous Materials Identification System (USA)

WHMIS: Workplace Hazardous Materials Information System (Canada)

DNEL: Derived No-Effect Level (REACH)

PNEC: Predicted No-Effect Concentration (REACH)

CFR: Code of Federal Regulations (USA)

SARA: Superfund Amendments and Reauthorization Act (USA)

RCRA: Resource Conservation and Recovery Act (USA)

TSCA: Toxic Substances Control Act (USA)

NPRI: National Pollutant Release Inventory (Canada)

DOT: US Department of Transportation

Effective date : 02.12.2015 **Last updated** : 03.19.2015



Material Safety Data Sheet

Chrysene, 98%

MSDS# 95251

Section 1 - Chemical Product and Company Identification

MSDS Name: Chrysene, 98%

Catalog Numbers: AC224140000, AC224140010, AC224140050, AC224145000

Synonyms: 1,2-Benzophenanthrene; Benzo(a)phenanthrene; 1,2,5,6-Dibenzonaphthalene.

Acros Organics BVBA

Company Identification: Janssen Pharmaceuticalaan 3a

2440 Geel, Belgium

Acros Organics

Company Identification: (USA)

One Reagent Lane

Fair Lawn, NJ 07410

For information in the US, call:

For information in Europe, call:

Emergency Number, Europe:

Emergency Number US:

201-796-7100

CHEMTREC Phone Number, US: 800-424-9300 CHEMTREC Phone Number, Europe: 703-527-3887

Section 2 - Composition, Information on Ingredients

CAS#: 218-01-9 Chemical Name: Chrysene

%: 98

EINECS#: 205-923-4

Hazard Symbols: T



Risk Phrases: 45 50/53

Section 3 - Hazards Identification

EMERGENCY OVERVIEW

Caution! May cause respiratory tract irritation. May cause eye and skin irritation. May cause cancer in humans. Target Organs: Liver, skin.

Potential Health Effects

Eye: May cause eye irritation.
Skin: May cause skin irritation.

Ingestion: May cause gastrointestinal irritation with nausea, vomiting and diarrhea.

Inhalation: May cause respiratory tract irritation.

Chronic: May cause cancer according to animal studies.

Section 4 - First Aid Measures

Eyes: Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower

eyelids. Get medical aid.

Get medical aid. Immediately flush skin with plenty of water for at least 15 minutes while removing Skin:

contaminated clothing and shoes. Wash clothing before reuse.

Do not induce vomiting. If victim is conscious and alert, give 2-4 cupfuls of milk or water. Never give Ingestion:

anything by mouth to an unconscious person. Get medical aid immediately.

Get medical aid immediately. Remove from exposure and move to fresh air immediately. If not breathing, Inhalation:

give artificial respiration. If breathing is difficult, give oxygen.

Notes to Physician:

General

Section 5 - Fire Fighting Measures

As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved

or equivalent), and full protective gear. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. This material in sufficient quantity and reduced particle size is

capable of creating a dust explosion.

Extinguishing Media:

Information:

Use water spray, dry chemical, carbon dioxide, or chemical foam.

Autoignition Not available. Temperature:

Flash Point: Not applicable.

Explosion Not available Limits: Lower:

Explosion Not available Limits: Upper:

NFPA Rating: health: ; flammability: 1; instability: ;

Section 6 - Accidental Release Measures

General

Information:

Use proper personal protective equipment as indicated in Section 8.

Vacuum or sweep up material and place into a suitable disposal container. Clean up spills immediately,

Spills/Leaks:

observing precautions in the Protective Equipment section. Wear a self contained breathing apparatus and appropriate personal protection. (See Exposure Controls, Personal Protection section). Provide ventilation.

Section 7 - Handling and Storage

Handling: Wash thoroughly after handling. Wash thoroughly after handling. Avoid contact with eyes, skin, and clothing. Use only with adequate ventilation. Avoid breathing dust.

Storage: Store in a tightly closed container. Store in a cool, dry area away from incompatible substances.

Section 8 - Exposure Controls, Personal Protection

Chemical Name	+	+ NIOSH	++ OSHA - Final PELs
Chrysene	0.2 mg/m3 TWA (as benzene soluble aerosol) (listed under Coal tar pitches).	 	0.2 mg/m3 TWA (benzene soluble

OSHA Vacated PELs: Chrysene: 0.2 mg/m3 TWA (benzene soluble fraction) (listed under Coal tar pitches) **Engineering Controls:**

Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use process enclosure, local exhaust ventilation, or other engineering controls to control airborne levels.

Exposure Limits

Personal Protective Equipment

Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face Eyes:

protection regulations in 29 CFR 1910.133 or European Standard EN166.

Skin: Wear appropriate protective gloves to prevent skin exposure. Clothing: Wear appropriate protective clothing to prevent skin exposure.

Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a

Respirators: NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if

irritation or other symptoms are experienced.

Section 9 - Physical and Chemical Properties

Physical State: Solid

Color: very light beige Odor: Not available pH: Not available

Vapor Pressure: Not available Vapor Density: Not available Evaporation Rate: Not available Viscosity: Not available

Boiling Point: 448 deg C @ 760 mm Hg (838.40°F)

Freezing/Melting Point: 250-255 deg C Decomposition Temperature: Not available

Solubility in water: insoluble

Specific Gravity/Density:

Molecular Formula: C18H12 Molecular Weight: 228.29

Section 10 - Stability and Reactivity

Chemical Stability: Stable under normal temperatures and pressures.

Conditions to Avoid: Dust generation.

Incompatibilities with Other Materials Not available

Hazardous Decomposition Products Carbon monoxide, carbon dioxide.

Hazardous Polymerization Has not been reported.

Section 11 - Toxicological Information

RTECS#: CAS# 218-01-9: GC0700000

LD50/LC50: RTECS: Not available.

Carcinogenicity: Chrysene - ACGIH: A1 - Confirmed Human Carcinogen (Coal tar pitches). California: carcinogen, initial

date 1/1/90 NTP: Known carcinogen (Coal tar pitches). IARC: Group 1 carcinogen (Coal tar pitches).

Other: See actual entry in RTECS for complete information.

Section 12 - Ecological Information

Ecotoxicity: Water flea LC50 = 1.9 mg/L; 2 Hr.; Unspecified

Section 13 - Disposal Considerations

Dispose of in a manner consistent with federal, state, and local regulations.

Section 14 - Transport Information

US DOT

Shipping Name: Please contact Fisher Scientific for shipping information

Hazard Class: UN Number: Packing Group: Canada TDG

Shipping Name: Not available

Hazard Class: UN Number: Packing Group:

USA RQ: CAS# 218-01-9: 100 lb final RQ; 45.4 kg final RQ

Section 15 - Regulatory Information

European/International Regulations

European Labeling in Accordance with EC Directives

Hazard Symbols: T

Risk Phrases:

R 45 May cause cancer.

R 50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Safety Phrases:

- S 53 Avoid exposure obtain special instructions before use.
- S 45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
- S 60 This material and its container must be disposed of as hazardous waste.
- S 61 Avoid release to the environment. Refer to special instructions/safety data sheets.

WGK (Water Danger/Protection)

CAS# 218-01-9: Not available

Canada

CAS# 218-01-9 is listed on Canada's DSL List

Canadian WHMIS Classifications: D2A

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all of the information required by those regulations.

CAS# 218-01-9 is listed on Canada's Ingredient Disclosure List

US Federal

TSCA

CAS# 218-01-9 is listed on the TSCA Inventory.

Section 16 - Other Information

MSDS Creation Date: 6/30/1999 Revision #6 Date 7/20/2009

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantibility or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall the company be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential, or exemplary damages howsoever arising, even if the company has been advised of the possibility of such damages.



Safety Data Sheet Revision Date: 10/02/19

www.restek.com

2 Letter ISO country code/language code: US/EN

1. IDENTIFICATION

Catalog Number / Product Name: 31276 / Dibenzo(a,h)anthracene Standard

Company: **Restek Corporation** Address: 110 Benner Circle Bellefonte, Pa. 16823 Phone#: 814-353-1300 Fax#: 814-353-1309

Emergency#: 800-424-9300 (CHEMTREC) 703-527-3887 (Outside the US)

Email: www.restek.com

Revision Number: 9

Intended use: For Laboratory use only

2. HAZARD(S)IDENTIFICATION

Emergency Overview:



GHS Hazard Symbols:

GHS Carcinogenicity Category 2

Classification:

GHS Signal Warning

Word:

GHS Hazard: Suspected of causing cancer.

GHS

Precautions:

Safety Obtain special instructions before use.

Precautions: Do not handle until all safety precautions have been read and understood.

Wear protective gloves/protective clothing/eye protection/face protection.

First Aid IF exposed or concerned: Get medical advice/attention.

Measures:

Storage: Store locked up.

Disposal: Dispose of contents/container according to section 13 of the SDS.

No data available Single

Exposure **Target Organs:**

Repeated No data available

Exposure

Target Organs:

3. COMPOSITION / INFORMATION ON INGREDIENT

Chemical Name	CAS#	EINEC #	% Composition
Dichloromethane	75-09-2	200-838-9	99.9
dibenz (a,h) anthracene	53-70-3	200-181-8	0.1

4. FIRST-AID MEASURES

Inhalation: Remove to fresh air. If breathing is difficult, have a trained individual administer oxygen. If not

breathing, give artificial respiration and have a trained individual administer oxygen. Get

medical attention immediately

Eyes: Immediately flush eyes with plenty of water for at least 20 minutes retracting eyelids often.

Tilt the head to prevent chemical from transferring to the uncontaminated eye. Get immediate medical attention and monitor the eye daily as advised by your physician. Serious harm (damage) may result if treatment is delayed. Continue to flush eyes while awaiting medical

attention

Skin Contact: Wash with soap and water. Remove contaminated clothing, launder immediately, and discard

contaminated leather goods. Get medical attention immediately.

Ingestion: Do not induce vomiting and seek medical attention immediately. Drink two glasses of water

or milk to dilute. Provide medical care provider with this SDS. Never give anything by mouth

to an unconscious person

5. FIRE- FIGHTING MEASURES

Extinguishing Media: Use alcohol resistant foam, carbon dioxide, or dry chemical when fighting

fires. Water or foam may cause frothing if liquid is burning but it still may be a useful extinguishing agent if carefully applied to the surface of the fire. Do Not direct a stream of water into the hot burning liquid. Use

methods suitable to fight surrounding fire.

Fire and/or Explosion Hazards: No data.

Fire Fighting Methods and Protection: Use methods for the surrounding fire. **Hazardous Combustion Products:** Carbon dioxide, Carbon monoxide

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions and Equipment: Exposure to the spilled material may be severely irritating or toxic. Follow

personal protective equipment recommendations found in Section 8 of this SDS. Personal protective equipment needs must be evaluated based on information provided on this sheet and the special circumstances created by the spill including; the material spilled, the quantity of the spill, the area in which the spill occurred, and the expertise of employees in the area responding to the spill. Never exceed any occupational exposure

limits.

Methods for Clean-up: Prevent the spread of any spill to minimize harm to human health and the

environment if safe to do so. Wear complete and proper personal protective equipment following the recommendation of Section 8 at a minimum. Dike with suitable absorbent material like granulated clay. Gather and store in a sealed container pending a waste disposal

evaluation.

7. HANDLING AND STORAGE

Handling Technical Measures and Precautions: Toxic or severely irritating material. Avoid contacting and avoid

breathing the material. Use only in a well ventilated area. As with all chemicals, good industrial hygiene practices should be

followed when handling this material.

Storage Technical Measures and Conditions: Store in a cool dry place. Isolate from incompatible materials.

Keep container closed when not in use

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

United States: Chemical Name	CAS No.	IDLH	ACGIH STEL	ACGIH TLV-TWA	OSHA Exposure Limit
Dichloromethane	75-09-2	2300 ppm IDLH	None Known	50 ppm TWA	25 ppm TWA; 125 ppm STEL (15 min. TWA)
dibenz (a,h) anthracene	53-70-3	Not established	None Known	Not established	No data available

Personal Protection:

Engineering Measures: Local exhaust ventilation or other engineering controls are normally required

when handling or using this product to avoid overexposure.

Respiratory Protection: Respiratory protection may be required to avoid overexposure when handling this

product. General or local exhaust ventilation is the preferred means of protection.

Use a respirator if general room ventilation is not available or sufficient to

eliminate symptoms.

Eye Protection: Wear chemically resistant safety glasses with side shields when handling this

product. Wear additional eye protection such as chemical splash goggles and/or face shield when the possibility exists for eye contact with splashing or spraying liquid, or airborne material. Do not wear contact lenses. Have an eye wash

station available.

Skin Protection: Avoid skin contact by wearing chemically resistant gloves, an apron and other

protective equipment depending upon conditions of use. Inspect gloves for chemical break-through and replace at regular intervals. Clean protective equipment regularly. Wash hands and other exposed areas with mild soap and

water before eating, drinking, and when leaving work.

Medical Conditions Aggravated By Exposure: Eye disease Skin disease including eczema and sensitization Respiratory

disease including asthma and bronchitis

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance, color: Colorless Odor: Strong

Physical State:

pH:

No data available

Not applicable

No data available

Vapor Pressure:

Vapor Density:

Boiling Point (°C):

No data available

2.93 (air = 1)

524 °C Boiling Point

Melting Point (°C): -96.7 °C

Flash Point (°F):

Upper Flammable/Explosive Limit, % in air:

Lower Flammable/Explosive Limit, % in air:

Autoignition Temperature (°C):

Decomposition Temperature (°C):

No data available

556 deg C

No data available

Specific Gravity: 1.3254 - 1.3258 g/cm3 at 20 °C

Evaporation Rate:No data available

Odor Threshold: ND

Solubility: Moderate; 50-99% Partition Coefficient: n-octanol in water: No data available

VOC % by weight: 99.9

Molecular Weight: No data available

10. STABILITY AND REACTIVITY

Stability: Stable under normal conditions.

Conditions to Avoid:

Materials to Avoid / Chemical Incompatiability:
Hazardous Decomposition Products:

None known.Contamination High temperatures Strong oxidizing agents Caustics (bases)
Carbon dioxide Carbon monoxide

11. TOXICOLOGICAL INFORMATION

Routes of Entry: Inhalation Absorption Ingestion Skin contact Eye

contact

Target Organs Potentially Affected By Exposure: Skin, Cardiovascular System, Eyes, Liver

Chemical Interactions That Change Toxicity: None Known

Immediate (Acute) Health Effects by Route of Exposure:

Inhalation Irritation: Can cause moderate respiratory irritation, dizziness, weakness, fatigue, nausea

and headache.

Inhalation Toxicity: Harmful! Can cause systemic damage (see "Target Organs)Inhalation may

cause severe central nervous system depression (including unconsciousness).

Skin Contact: Contact causes severe skin irritation and possible burns.

Skin Absorption: Harmful if absorbed through the skin. May cause severe irritation and systemic

damage.

Eye Contact: Contact with the eyes may cause moderate to severe eye injury. Eye contact

may result in tearing and reddening, but not likely to permanently injure eye tissue. Temporary vision impairment (cloudy or blurred vision) is possible.

Ingestion Irritation: Irritating to mouth, throat, and stomach. Can cause abdominal discomfort,

nausea, vomiting and diarrhea.

Ingestion Toxicity: Harmful if swallowed. May cause systemic poisoning.

Long-Term (Chronic) Health Effects:

Carcinogenicity: Contains a probable or known human carcinogen.

Reproductive and Developmental Toxicity: No data available to indicate product or any components

present at greater than 0.1% may cause birth defects.

Inhalation:

Upon prolonged and/or repeated exposure, can cause

Upon prolonged and/or repeated exposure, can cause moderate respiratory irritation, dizziness, weakness, fatigue,

nausea and headache.Harmful! Can cause systemic damage upon prolonged and/or repeated exposure (see

"Target Organs)

Skin Absorption: Upon prolonged or repeated exposure, harmful if

absorbed through the skin. May cause severe irritation

and systemic damage

Component Toxicological Data:

NIOSH:

Chemical Name CAS No. LD50/LC50

Methane, dichloro- 75-09-2 Inhalation LC50 Rat 53 mg/L 6 h

Component Carcinogenic Data:

OSHA:

Chemical Name CAS No.

Dibenz[a,h]anthracene 53-70-3 Present
Methylene chloride 75-09-2 25 ppm TWA (8 hr.); 125 ppm STEL (15 min.);

12.5 ppm Action Level (see 29 CFR 1910.1051); effective date for respiratory protection for certain employers to acheive the 8-hour TWA PEL is August 31, 1998; the start up date to install engineering controls is December 10, 1998.; {OSHA - 29 CFR 1910

Specifically Regulate

ACGIH:

Chemical Name CAS No.

Dichloromethane 75-09-2 A3 - Confirmed Animal Carcinogen with

Unknown Relevance to Humans

NIOSH:

Chemical Name CAS No.

Methylene chloride 75-09-2 potential occupational carcinogen

NTP:

Chemical Name CAS No.

No data available

IARC:

 Chemical Name
 CAS No.
 Group No.

 Monograph 92 [2010];
 53-70-3
 Group 2A

Supplement 7 [1987]; Monograph 32 [1983] (overall evaluation upgraded from 2B to 2A with supporting evidence from other

relevant data)

Monograph 110 [in preparation]: 75-09-2 Group 2A

Monograph 71 [1999]

12. ECOLOGICAL INFORMATION

Overview: Moderate ecological hazard. This product may be dangerous

to plants and/or wildlife. Keep out of waterways.

Mobility:No dataPersistence:No dataBioaccumulation:No dataDegradability:No data

Ecological Toxicity Data: No data available

13. DISPOSAL CONSIDERATIONS

Waste Description of Spent Product: Spent or discarded material is a hazardous waste. Mixing

spent or discarded material with other materials may render the mixture hazardous. Perform a hazardous

waste determination on mixtures.

Disposal Methods: Incinerate spent or discarded material a permitted

hazardous waste facility.

Waste Disposal of Packaging: Comply with all Local, State, Federal, and Provincial

Environmental Regulations.

14. TRANSPORTATION INFORMATION

United States:

DOT Proper Shipping Name: Dichloromethane

UN Number: UN1593
Hazard Class: 6.1
Packing Group: III

International:

IATA Proper Shipping Name: Dichloromethane

UN Number: UN1593
Hazard Class: 6.1
Packing Group: III

Marine Pollutant: No

Chemical Name	CAS#	Marine Pollutant	Severe Marine Pollutant
No data available			

15. REGULATORY INFORMATION

United States: Chemical Name	CAS#	CERCLA	SARA 313	SARA EHS 313	TSCA	
Dichloromethane	75-09-2	Χ	Χ	-	Χ	
dibenz (a,h) anthracene	53-70-3	Χ	Χ	-	Χ	

The following chemicals are listed on CA Prop 65:

The femality discussions are noted on extrap out				
Chemical Name	CAS#	Regulation		
Dibenz[a,h]anthracene	53-70-3	Prop 65 Cancer		
Dichloromethane	75-09-2	Prop 65 Cancer		
Dichloromethane (Methylene chloride)				

State Right To Know Listing:

Chemical Name	CAS#	New Jersey	Massachusetts	Pennsylvania	California
Dichloromethane	75-09-2	X	X	Χ	Χ
dibenz (a.h) anthracene	53-70-3	X	X	Χ	Χ

16. OTHER INFORMATION

Prior Version Date: 06/20/18

Other Information: Any changes to the SDS compared to previous versions are marked by a vertical

line in front of the concerned paragraph.

References: No data available

Disclaimer: Restek Corporation provides the descriptions, data and information contained

herein in good faith but makes no representation as to its comprehensiveness or accuracy. It is provided for your guidance only. Because many factors may affect processing or application/use, Restek Corporation recommends you perform an assessment to determine the suitability of a product for your particular purpose prior to use. No warranties of any kind, either expressed or implied, including fitness for a particular purpose, are made regarding products described, data or information set forth. In no case shall the descriptions, information, or data provided be considered a part of our terms and conditions of sale. Further, the descriptions, data and information furnished hereunder are given gratis. No obligation or liability for the description, data and information given are assumed. All such being given

and accepted at your risk.



Safety Data Sheet Revision Date: 06/04/19

www.restek.com

2 Letter ISO country code/language code: US/EN

1. IDENTIFICATION

Catalog Number / Product Name: 31279 / Indeno(1,2,3-c,d)pyrene Standard

Company: **Restek Corporation** Address: 110 Benner Circle Bellefonte, Pa. 16823 Phone#: 814-353-1300 Fax#: 814-353-1309

Emergency#: 800-424-9300 (CHEMTREC) 703-527-3887 (Outside the US)

Email: www.restek.com

Revision Number: 11

Intended use: For Laboratory use only

2. HAZARD(S)IDENTIFICATION

Emergency Overview:



GHS Hazard Symbols:

GHS Carcinogenicity Category 2

Classification:

GHS Signal Warning

Word:

GHS Hazard: Suspected of causing cancer.

GHS

Precautions:

Safety Obtain special instructions before use.

Precautions: Do not handle until all safety precautions have been read and understood. Wear protective gloves/protective clothing/eye protection/face protection.

First Aid IF exposed or concerned: Get medical advice/attention.

Measures:

Storage: Store locked up.

Disposal: Dispose of contents/container according to section 13 of the SDS.

No data available Single

Exposure **Target Organs:**

Repeated No data available

Exposure

Target Organs:

3. COMPOSITION / INFORMATION ON INGREDIENT

Chemical Name	CAS#	EINEC #	% Composition
Dichloromethane	75-09-2	200-838-9	99.9
indeno (1,2,3-c,d) pyrene	193-39-5	205-893-2	0.1

4. FIRST-AID MEASURES

Inhalation: Remove to fresh air. If breathing is difficult, have a trained individual administer oxygen. If not

breathing, give artificial respiration and have a trained individual administer oxygen. Get

medical attention immediately

Eyes: Immediately flush eyes with plenty of water for at least 20 minutes retracting eyelids often.

Tilt the head to prevent chemical from transferring to the uncontaminated eye. Get immediate medical attention and monitor the eye daily as advised by your physician. Serious harm (damage) may result if treatment is delayed. Continue to flush eyes while awaiting medical

attention

Skin Contact: Wash with soap and water. Remove contaminated clothing, launder immediately, and discard

contaminated leather goods. Get medical attention immediately.

Ingestion: Do not induce vomiting and seek medical attention immediately. Drink two glasses of water

or milk to dilute. Provide medical care provider with this SDS. Never give anything by mouth

to an unconscious person

5. FIRE- FIGHTING MEASURES

Extinguishing Media: Use alcohol resistant foam, carbon dioxide, or dry chemical when fighting

fires. Water or foam may cause frothing if liquid is burning but it still may be a useful extinguishing agent if carefully applied to the surface of the fire. Do Not direct a stream of water into the hot burning liquid. Use

methods suitable to fight surrounding fire.

Fire and/or Explosion Hazards: No data.

Fire Fighting Methods and Protection: Use methods for the surrounding fire. **Hazardous Combustion Products:** Use methods for the surrounding fire. Carbon dioxide, Carbon monoxide

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions and Equipment: Exposure to the spilled material may be severely irritating or toxic. Follow

personal protective equipment recommendations found in Section 8 of this SDS. Personal protective equipment needs must be evaluated based on information provided on this sheet and the special circumstances created by the spill including; the material spilled, the quantity of the spill, the area in which the spill occurred, and the expertise of employees in the area responding to the spill. Never exceed any occupational exposure

limits.

Methods for Clean-up: Prevent the spread of any spill to minimize harm to human health and the

environment if safe to do so. Wear complete and proper personal protective equipment following the recommendation of Section 8 at a minimum. Dike with suitable absorbent material like granulated clay. Gather and store in a sealed container pending a waste disposal

evaluation.

7. HANDLING AND STORAGE

Handling Technical Measures and Precautions: Toxic or severely irritating material. Avoid contacting and avoid

breathing the material. Use only in a well ventilated area. As with all chemicals, good industrial hygiene practices should be

followed when handling this material.

Storage Technical Measures and Conditions: Store in a cool dry place. Isolate from incompatible materials.

Keep container closed when not in use

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

United States: Chemical Name	CAS No.	IDLH	ACGIH STEL	ACGIH TLV-TWA	OSHA Exposure Limit
Dichloromethane	75-09-2	2300 ppm IDLH	None Known	50 ppm TWA	25 ppm TWA; 125 ppm STEL (15 min. TWA)
indeno (1,2,3-c,d) pyrene	193-39-5	Not established	None Known	Not established	No data available

Personal Protection:

Engineering Measures: Local exhaust ventilation or other engineering controls are normally required

when handling or using this product to avoid overexposure.

Respiratory Protection: Respiratory protection may be required to avoid overexposure when handling this

product. General or local exhaust ventilation is the preferred means of protection.

Use a respirator if general room ventilation is not available or sufficient to

eliminate symptoms.

Eye Protection: Wear chemically resistant safety glasses with side shields when handling this

product. Wear additional eye protection such as chemical splash goggles and/or face shield when the possibility exists for eye contact with splashing or spraying liquid, or airborne material. Do not wear contact lenses. Have an eye wash

station available.

Skin Protection: Avoid skin contact by wearing chemically resistant gloves, an apron and other

protective equipment depending upon conditions of use. Inspect gloves for chemical break-through and replace at regular intervals. Clean protective equipment regularly. Wash hands and other exposed areas with mild soap and

water before eating, drinking, and when leaving work.

Medical Conditions Aggravated By Exposure: Eye disease Skin disease including eczema and sensitization Respiratory

disease including asthma and bronchitis

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance, color: Colorless Odor: Strong

Physical State:

pH:

Vapor Pressure:

Vapor Density:

Boiling Point (°C):

Melting Point (°C):

No data available

2.93 (air = 1)

530 °C

Melting Point (°C):

-96.7 °C

Flash Point (°F):

Upper Flammable/Explosive Limit, % in air:
Lower Flammable/Explosive Limit, % in air:
Autoignition Temperature (°C):

Decomposition Temperature (°C):

No data available
556 deg C
No data available

Specific Gravity: 1.3254 - 1.3258 g/cm3 at 20 °C

Evaporation Rate:No data available

Odor Threshold: ND

Solubility: Moderate; 50-99% Partition Coefficient: n-octanol in water: No data available

VOC % by weight: 99.9

Molecular Weight: No data available

10. STABILITY AND REACTIVITY

Stability: Stable under normal conditions.

Conditions to Avoid:

Materials to Avoid / Chemical Incompatiability:

Hazardous Decomposition Products:

None known.Contamination High temperatures
Strong oxidizing agents Caustics (bases)
Carbon dioxide Carbon monoxide

11. TOXICOLOGICAL INFORMATION

Routes of Entry: Inhalation Absorption Ingestion Skin contact Eye

contact

Target Organs Potentially Affected By Exposure: Skin, Cardiovascular System, Eyes, Liver

Chemical Interactions That Change Toxicity: None Known

Immediate (Acute) Health Effects by Route of Exposure:

Inhalation Irritation: Can cause moderate respiratory irritation, dizziness, weakness, fatigue, nausea

and headache.

Inhalation Toxicity: Harmful! Can cause systemic damage (see "Target Organs)Inhalation may

cause severe central nervous system depression (including unconsciousness).

Skin Contact: Contact causes severe skin irritation and possible burns.

Skin Absorption: Harmful if absorbed through the skin. May cause severe irritation and systemic

damage.

Eye Contact: Contact with the eyes may cause moderate to severe eye injury. Eye contact

may result in tearing and reddening, but not likely to permanently injure eye tissue. Temporary vision impairment (cloudy or blurred vision) is possible.

Ingestion Irritation: Irritating to mouth, throat, and stomach. Can cause abdominal discomfort,

nausea, vomiting and diarrhea.

Ingestion Toxicity: Harmful if swallowed. May cause systemic poisoning.

Long-Term (Chronic) Health Effects:

Carcinogenicity: Contains a probable or known human carcinogen.

Reproductive and Developmental Toxicity: No data available to indicate product or any components

present at greater than 0.1% may cause birth defects.

Inhalation:

Upon prolonged and/or repeated exposure, can cause

Upon prolonged and/or repeated exposure, can cause moderate respiratory irritation, dizziness, weakness, fatigue,

nausea and headache.Harmful! Can cause systemic damage upon prolonged and/or repeated exposure (see

"Target Organs)

Skin Absorption: Upon prolonged or repeated exposure, harmful if

absorbed through the skin. May cause severe irritation

and systemic damage

Component Toxicological Data:

NIOSH:

Chemical Name CAS No. LD50/LC50

Methane, dichloro- 75-09-2 Inhalation LC50 Rat 53 mg/L 6 h

Component Carcinogenic Data:

OSHA:

Chemical Name CAS No. Indeno[1,2,3-cd]pyrene 193-39-5

Indeno[1,2,3-cd]pyrene 193-39-5 Present
Methylene chloride 75-09-2 25 ppm TWA (8 hr.); 125 ppm STEL (15 min.);

12.5 ppm Action Level (see 29 CFR 1910.1051); effective date for respiratory protection for certain employers to acheive the 8-hour TWA PEL is August 31, 1998; the start up date to install engineering controls is December 10, 1998.; {OSHA - 29 CFR 1910

Specifically Regulate

ACGIH:

Chemical Name CAS No.

Dichloromethane 75-09-2 A3 - Confirmed Animal Carcinogen with

Unknown Relevance to Humans

NIOSH:

Chemical Name CAS No.

Methylene chloride 75-09-2 potential occupational carcinogen

NTP:

Chemical Name CAS No.

No data available

IARC:

Chemical NameCAS No.Group No.Monograph 110 [in preparation];75-09-2Group 2A

Monograph 71 [1999]

Monograph 92 [2010]; 193-39-5 Group 2B

Supplement 7 [1987]; Monograph

32 [1983]

12. ECOLOGICAL INFORMATION

Overview: Moderate ecological hazard. This product may be dangerous

to plants and/or wildlife. Keep out of waterways.

Mobility: No data
Persistence: No data
Bioaccumulation: No data
Degradability: No data

Ecological Toxicity Data: No data available

13. DISPOSAL CONSIDERATIONS

Waste Description of Spent Product: Spent or discarded material is a hazardous waste. Mixing

spent or discarded material with other materials may render the mixture hazardous. Perform a hazardous

waste determination on mixtures.

Disposal Methods: Incinerate spent or discarded material a permitted

hazardous waste facility.

Waste Disposal of Packaging: Comply with all Local, State, Federal, and Provincial

14. TRANSPORTATION INFORMATION

United States:

DOT Proper Shipping Name:Dichloromethane

UN Number: UN1593
Hazard Class: 6.1
Packing Group: III

International:

IATA Proper Shipping Name: Dichloromethane

UN Number: UN1593
Hazard Class: 6.1
Packing Group: III

Marine Pollutant: No

Chemical Name	CAS#	Marine Pollutant	Severe Marine Pollutant
No data available			

15. REGULATORY INFORMATION

United States: Chemical Name	CAS#	CERCLA	SARA 313	SARA EHS 313	TSCA
Dichloromethane	75-09-2	Χ	Χ	-	X
indeno (1,2,3-c,d) pyrene	193-39-5	X	Х	-	X

The following chemicals are listed on CA Prop 65:

Chemical Name	CAS#	Regulation
Indeno[1,2,3-cd]pyrene	193-39-5	Prop 65 Cancer
Dichloromethane	75-09-2	Prop 65 Cancer
Dichloromethane (Methylene chloride)		

State Right To Know Listing:

Chemical Name	CAS#	New Jersey	Massachusetts	Pennsylvania	California
Dichloromethane	75-09-2	X	Х	Χ	X
indeno (1,2,3-c,d)	193-39-5	Х	Х	Х	X
pyrene					

16. OTHER INFORMATION

Prior Version Date: 03/22/18

Other Information: Any changes to the SDS compared to previous versions are marked by a vertical

line in front of the concerned paragraph.

References: No data available

Disclaimer: Restek Corporation provides the descriptions, data and information contained

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Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Date of issue: 12/15/2014 Revision date: 12/15/2014 Version: 1.1

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product form : Substance
CAS No : 7439-92-1
Formula : Pb

Synonyms : C.I. 77575, in massive state / elemental lead, in massive state / glover, in massive state

BIG no : 10073

1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/mixture : Solder

Battery: component Construction Electrodes

1.3. Details of the supplier of the safety data sheet

GSC International, Inc. 1747 N. Deffer Drive Nixa.

MO 65714

United States of America

Tel: 417-374-7431 Fax: 417-374-7442

Email: info@gscinternationalinc.com

1.4. Emergency telephone number

Country	Organization/Company	Address	Emergency number
MEXICO	Servicio de Informacion Toxicologica Sintox	Tintoreto #32 Edif. a Desp. Col. Nochebuena Mixcoac México, D.F.	1 800 009 2800 +52 55 5611 2634 /+52 55 5598 9095
UNITED STATES OF AMERICA	American Association of Poison Control Centers		1-800-222-1222

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (GHS-US)

Acute Tox. 4 (Oral) H302
Acute Tox. 4 (Inhalation) H332
Carc. 1B H350
Repr. 1A H360
STOT RE 2 H373
Aquatic Acute 1 H400
Aquatic Chronic 1 H410
Full text of H-phrases: see section 16

2.2. Label elements

GHS-US labeling

Hazard pictograms (GHS-US)



GHS07



GHS08



GHS09

Signal word (GHS-US) : Danger

Hazard statements (GHS-US) : H302+H332 - Harmful if swallowed or if inhaled

H350 - May cause cancer

H360 - May damage fertility or the unborn child

H373 - May cause damage to organs through prolonged or repeated exposure

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H400 - Very toxic to aquatic life

H410 - Very toxic to aquatic life with long lasting effects

Precautionary statements (GHS-US) : P201 - Obtain special instructions before use

P202 - Do not handle until all safety precautions have been read and understood

P260 - Do not breathe dust, fume

P264 - Wash hands thoroughly after handling

P270 - Do not eat, drink or smoke when using this product

P273 - Avoid release to the environment

P304+P340 - If inhaled: Remove person to fresh air and keep comfortable for breathing

P308+P313 - If exposed or concerned: Get medical advice/attention

P314 - Get medical advice/attention if you feel unwell

P501 - Dispose of contents/container to a licensed hazardous-waste disposal contractor or collection site except for empty clean containers which can be disposed of as non-hazardous

waste

2.3. Other hazards

No additional information available

2.4. Unknown acute toxicity (GHS-US)

Not applicable

SECTION 3: Composition/information on ingredients

3.1. Substance

Name	Product identifier	%	Classification (GHS-US)
Lead (Main constituent)	(CAS No) 7439-92-1	> 99,9	Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Inhalation), H332 Carc. 1B, H350 Repr. 1A, H360 STOT RE 2, H373 Aquatic Acute 1, H400 Aquatic Chronic 1, H410

Full text of H-phrases: see section 16

3.2. Mixture

Not applicable

4.1. Description of first aid measures

First-aid measures general : If you feel unwell, seek medical advice. IF exposed or concerned: Get medical advice/attention.

Call a poison center/doctor/physician if you feel unwell.

First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing. Not applicable. Call a poison

center/doctor/physician if you feel unwell.

First-aid measures after skin contact : Not applicable. Wash skin with plenty of water.

First-aid measures after eye contact : Not applicable. Rinse eyes with water as a precaution.

First-aid measures after ingestion : Not applicable. Rinse mouth. Call a poison center/doctor/physician if you feel unwell.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/injuries after inhalation : No effects known.

Symptoms/injuries after skin contact : No effects known.

Symptoms/injuries after eye contact : No effects known.

Symptoms/injuries after ingestion : No effects known.

Chronic symptoms : No effects known.

4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Adapt extinguishing media to the environment.

Unsuitable extinguishing media : No unsuitable extinguishing media known.

5.2. Special hazards arising from the substance or mixture

Fire hazard : DIRECT FIRE HAZARD. Non combustible.

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Explosion hazard : DIRECT EXPLOSION HAZARD. No data available on direct explosion hazard. INDIRECT

EXPLOSION HAZARD. No data available on indirect explosion hazard.

Reactivity : On burning: formation of metallic fumes. Oxidizes on exposure to air.

5.3. Advice for firefighters

Precautionary measures fire : Exposure to fire/heat: keep upwind. Exposure to fire/heat: consider evacuation. Exposure to

heat: have neighborhood close doors and windows.

Firefighting instructions : Dilute toxic gases with water spray. Take account of toxic fire-fighting water. Use water

moderately and if possible collect or contain it.

Protection during firefighting : Heat/fire exposure: compressed air/oxygen apparatus. Do not attempt to take action without

suitable protective equipment. Self-contained breathing apparatus. Complete protective

clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Protective equipment : Gloves. Protective clothing. See "Material-Handling" to select protective clothing.

Emergency procedures : Mark the danger area. No naked flames.

6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information

refer to section 8: "Exposure controls/personal protection".

6.2. Environmental precautions

Avoid release to the environment. Prevent soil and water pollution. Prevent spreading in sewers. Notify authorities if product enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

For containment : Not applicable. Collect spillage.

Methods for cleaning up : Recover mechanically the product. Pick-up the material. Take collected spill to

manufacturer/competent authority. Notify authorities if product enters sewers or public waters.

Other information : Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling

: Meet the legal requirements. Do not discharge the waste into the drain. Handle unclean empty containers as full ones. Observe strict hygiene. Measure the concentration in the atmosphere. Carry out operations in the open/under local exhaust/ventilation or with respiratory protection. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not breathe dust, fume. Use only outdoors or in a well-ventilated area. Take all necessary technical measures to avoid or minimize the release of the product on the workplace. Limit quantities of product at the minimum necessary for handling and limit the number of exposed workers. Provide local exhaust or general room ventilation. Wear personal protective equipment. Floors, walls and other surfaces in the hazard area must be cleaned

regularly.

Hygiene measures : Separate working clothes from town clothes. Launder separately. Do not eat, drink or smoke

when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures : Does not require any specific or particular technical measures. Comply with applicable

regulations.

Storage conditions : Store locked up. Store in a well-ventilated place. Keep cool.

Incompatible materials : Strong acids, strong bases and oxidation agents.

Heat-ignition : KEEP SUBSTANCE AWAY FROM: heat sources.

Prohibitions on mixed storage : KEEP SUBSTANCE AWAY FROM: oxidizing agents. Strong acids. Strong bases.

Storage area : Meet the legal requirements.

Special rules on packaging : SPECIAL REQUIREMENTS: closing. correctly labeled. meet the legal requirements. Secure

fragile packaging in solid containers.

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7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Lead (7439-92-1)	ead (7439-92-1)		
ACGIH	ACGIH TWA (mg/m³)	0,05 mg/m³	
ACGIH	Remark (ACGIH)	CNS & PNS impair	
OSHA Not applicable			

8.2. Exposure controls

Appropriate engineering controls : Provide adequate general and local exhaust ventilation. Ensure good ventilation of the work

station.

Personal protective equipment : Protective goggles. Gloves.





Materials for protective clothing : GIVE EXCELLENT RESISTANCE: No data available. GIVE GOOD RESISTANCE: butyl

rubber. PVC. GIVE LESS RESISTANCE: No data available. GIVE POOR RESISTANCE: No

data available.

Hand protection : protective gloves. Eye protection : Safety glasses.

Skin and body protection : Not required for normal conditions of use.

Respiratory protection : Wear respiratory protection.

Environmental exposure controls : Avoid release to the environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Solid
Appearance : Metal.
Molecular mass : 207,20 g/mol
Color : White to blue-grey

Odor : Odorless

Odor threshold : No data available pH : No data available Relative evaporation rate (butyl acetate=1) : No data available

Melting point : 327 °C

Freezing point : No data available

Boiling point : 1740 °C

Flash point : Not applicable

Auto-ignition temperature : No data available

Decomposition temperature : No data available

Flammability (solid, gas) : No data available

Vapor pressure : < 0,1 hPa

Relative vapor density at 20 °C : No data available

Relative density : 11,3

Specific gravity / density : 11340 kg/m³

Solubility : insoluble in water. Substance sinks in water. Soluble in nitric acid. Insoluble in organic solvents.

Water: < 0,1 g/100ml

Log Pow : 0,73 (Estimated value)
Log Kow : No data available

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Viscosity, kinematic : Not applicable
Viscosity, dynamic : No data available
Explosive properties : No data available
Oxidizing properties : No data available
Explosive limits : No data available

9.2. Other information

VOC content : Not applicable (inorganic)

SECTION 10: Stability and reactivity

10.1. Reactivity

On burning: formation of metallic fumes. Oxidizes on exposure to air.

10.2. Chemical stability

Unstable on exposure to air.

10.3. Possibility of hazardous reactions

No additional information available

10.4. Conditions to avoid

No additional information available

10.5. Incompatible materials

Acids. Bases.

10.6. Hazardous decomposition products

Thermal decomposition generates: fume.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Oral: Harmful if swallowed. Inhalation: Harmful if inhaled.

Lead (\f)7439-92-1	
LD50 oral rat	> 2000 mg/kg body weight (Rat; Weight of evidence)
LD50 dermal rat	> 2000 mg/kg body weight (Rat; Experimental value; OECD 402: Acute Dermal Toxicity)
ATE US (oral)	500,000 mg/kg body weight
ATE US (gases)	4500,000 ppmV/4h
ATE US (vapors)	11,000 mg/l/4h
ATE US (dust, mist)	1,500 mg/l/4h
Additional information	Lead massive metal is not considered to be acutely toxic. It is not easily inhaled or ingested, and if it is accidentally ingested normally passes through the gastrointestinal system without significant absorption into the body. Lead is not easily absorbed through the skin.

Skin corrosion/irritation : Not classified

(Based on available data, the classification criteria are not met)

Serious eye damage/irritation : Not classified

(Based on available data, the classification criteria are not met)

Respiratory or skin sensitization : Not classified

(Based on available data, the classification criteria are not met)

Germ cell mutagenicity : Not classified

(Based on available data, the classification criteria are not met)

Carcinogenicity : May cause cancer.

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Lead (7439-92-1)	
Additional information	There is some evidence that inorganic lead compounds may have a carcinogenic effect, and they have been classified by IARC as probably carcinogenic to humans. However, it is considered that this classification does not apply to lead in articles, given the very low bioavailability of metallic lead. Carcinogenicity studies of lead metal powder have been negative. Epidemiology studies of workers exposed to inorganic lead compounds have found a limited association with stomach cancer. IARC has concluded that lead metal is possibly carcinogenic to humans (Group aB).
IARC group	2B - Possibly carcinogenic to humans
National Toxicology Program (NTP) Status	3 - Reasonably anticipated to be Human Carcinogen

Reproductive toxicity : May damage fertility or the unborn child.

Specific target organ toxicity (single exposure) : Not classified

(Based on available data, the classification criteria are not met)

Specific target organ toxicity (repeated

exposure)

: May cause damage to organs through prolonged or repeated exposure.

Lead (7439-92-1)	
Additional information	Lead is a cumulative poison and may be absorbed into the body through ingestion or inhalation. Although inhalation and ingestion of lead in massive form are unlikely, poor hygiene practises may result in hand to mouth transfer which maybe significant over a prolonged period of time. Inorganic lead compounds have been documented in observational human studies to produce toxicity in multiple organ systems and body function including the haemotopoetic (blood) system, kidney function, reproductive function and the central nervous system.
Aspiration hazard	: Not classified

(Based on available data, the classification criteria are not met)

Symptoms/injuries after inhalation : No effects known. Symptoms/injuries after skin contact : No effects known. Symptoms/injuries after eye contact : No effects known. Symptoms/injuries after ingestion : No effects known. Chronic symptoms : No effects known.

SECTION 12: Ecological information

12.1.	Toxicity	

Ecology - general	: Dangerous for the environment. Very toxic to aquatic life with long lasting effects.
Ecology - air	: Not dangerous for the ozone layer (Regulation (EC) No 1005/2009). Not included in the list of fluorinated greenhouse gases (Regulation (EC) No 842/2006). TA-Luft Klasse 5.2.2/II.
Ecology - water	No water pollutant (surface water). Maximum concentration in drinking water: 0.010 mg/l (lead).

No water pollutant (surface water). Maximum concentration in drinking water: 0.010 mg/l (lead) Ecology - water (Directive 98/83/EC). Highly toxic to aquatic organisms.

Lead (7439-92-1)	
LC50 fish 1	2,8 (0,44 - 542) mg/l (96h) Coughlan, D.J., S.P. Gloss, and J. Kubota 1986. Acute and Sub-Chronic Toxicity of Lead to the Early Life Stages of Small mouth Bass (Micropterus dolomieui). Water Air Soil Pollut. 28(3/4):265-275
EC50 Daphnia 1	4,46 (0,53 - 5,1) mg/l (48h) Govindarajan, S., C.P. Valsaraj, R. Mohan, V. Hariprasad, and R. Ramasubramanian 1993. Toxicity of Heavy Metals in Aquaculture Organisms: Penaeus indicus, Perna viridis, Artemia salina and Skeletonema costatum. Pollut.Res. 12(3):187-189

12.2. Persistence and degradability

Lead (7439-92-1)	
Persistence and degradability	Biodegradability: Not applicable. No (test)data available on mobility of the substance.
ThOD	Not applicable (inorganic)

12.3. **Bioaccumulative potential**

Lead (7439-92-1)			
Log Pow	0,73 (Estimated value)		
Bioaccumulative potential	Low bioaccumulation potential (Log Kow < 4).		

Mobility in soil

No additional information available

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12.5. Other adverse effects

Effect on ozone layer

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste disposal recommendations

: Dispose in a safe manner in accordance with local/national regulations. Hazardous waste shall not be mixed together with other waste. Different types of hazardous waste shall not be mixed together if this may entail a risk of pollution or create problems for the further management of the waste. Hazardous waste shall be managed responsibly. All entities that store, transport or handle hazardous waste shall take the necessary measures to prevent risks of pollution or damage to people or animals. Reuse or recycle following decontamination. Remove to an authorized dump (Class I). Do not discharge into surface water (2000/60/EC, Council decision 2455/2001/EC, O.J. L331 of 15/12/2001).

Additional information : LWCA (the Netherlands): KGA category 05. Hazardous waste according to Directive

2008/98/EC.

SECTION 14: Transport information

In accordance with DOT

Hazard labels (DOT)

Transport document description : UN3077 Environmentally hazardous substances, solid, n.o.s. Lead(7439-92-1), 9, III

UN-No.(DOT) : UN3077

Proper Shipping Name (DOT) : Environmentally hazardous substances, solid, n.o.s.

Lead(7439-92-1)

Department of Transportation (DOT) Hazard

Classes

: 9 - Class 9 - Miscellaneous hazardous material 49 CFR 173.140

: 9 - Class 9 (Miscellaneous dangerous materials)



DOT Symbols : G - Identifies PSN requiring a technical name

Packing group (DOT) : III - Minor Danger

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DOT Special Provisions (49 CFR 172.102)

- : 8 A hazardous substance that is not a hazardous waste may be shipped under the shipping description "Other regulated substances, liquid or solid, n.o.s.", as appropriate. In addition, for solid materials, special provision B54 applies.
 - 146 This description may be used for a material that poses a hazard to the environment but does not meet the definition for a hazardous waste or a hazardous substance, as defined in 171.8 of this subchapter, or any hazard class as defined in Part 173 of this subchapter, if it is designated as environmentally hazardous by the Competent Authority of the country of origin, transit or destination.
 - 335 Mixtures of solids that are not subject to this subchapter and environmentally hazardous liquids or solids may be classified as "Environmentally hazardous substances, solid, n.o.s," UN3077 and may be transported under this entry, provided there is no free liquid visible at the time the material is loaded or at the time the packaging or transport unit is closed. Each transport unit must be leak-proof when used as bulk packaging.

A112 - Notwithstanding the quantity limits shown in Column (9A) and (9B) for this entry, the following IBCs are authorized for transportation aboard passenger and cargo-only aircraft. Each IBC may not exceed a maximum net quantity of 1,000 kg:

- a. Metal: 11A, 11B, 11N, 21A, 21B and 21N
- b. Rigid plastics: 11H1, 11H2, 21H1 and 21H2
- c. Composite with plastic inner receptacle: 11HZ1, 11HZ2, 21HZ1 and 21HZ2
- d. Fiberboard: 11G
- e. Wooden: 11C, 11D and 11F (with inner liners)
- f. Flexible: 13H2, 13H3, 13H4, 13H5, 13L2, 13L3, 13L4, 13M1 and 13M2 (flexible IBCs must be sift-proof and water resistant or must be fitted with a sift-proof and water resistant liner). B54 Open-top, sift-proof rail cars are also authorized.
- IB8 Authorized IBCs: Metal (11A, 11B, 11N, 21A, 21B, 21N, 31A, 31B and 31N); Rigid plastics (11H1, 11H2, 21H1, 21H2, 31H1 and 31H2); Composite (11HZ1, 11HZ2, 21HZ1, 21HZ2, 31HZ1 and 31HZ2); Fiberboard (11G); Wooden (11C, 11D and 11F); Flexible (13H1, 13H2, 13H3, 13H4, 13H5, 13L1, 13L2, 13L3, 13L4, 13M1 or 13M2).
- IP3 Flexible IBCs must be sift-proof and water-resistant or must be fitted with a sift-proof and water-resistant liner.

N20 - A 5M1 multi-wall paper bag is authorized if transported in a closed transport vehicle. T1 - 1.5 178.274(d)(2) Normal...... 178.275(d)(2)

TP33 - The portable tank instruction assigned for this substance applies for granular and powdered solids and for solids which are filled and discharged at temperatures above their melting point which are cooled and transported as a solid mass. Solid substances transported or offered for transport above their melting point are authorized for transportation in portable tanks conforming to the provisions of portable tank instruction T4 for solid substances of packing group III or T7 for solid substances of packing group II, unless a tank with more stringent requirements for minimum shell thickness, maximum allowable working pressure, pressure-relief devices or bottom outlets are assigned in which case the more stringent tank instruction and special provisions shall apply. Filling limits must be in accordance with portable tank special provision TP3. Solids meeting the definition of an elevated temperature material must be transported in accordance with the applicable requirements of this subchapter.

DOT Packaging Exceptions (49 CFR 173.xxx) : 155
DOT Packaging Non Bulk (49 CFR 173.xxx) : 213
DOT Packaging Bulk (49 CFR 173.xxx) : 240
DOT Quantity Limitations Passenger aircraft/rail : No limit

(49 CFR 173.27)

DOT Quantity Limitations Cargo aircraft only (49 : No limit

CFR 175.75)

DOT Vessel Stowage Location : A - The material may be stowed "on deck" or "under deck" on a cargo vessel and on a

passenger vessel.

Additional information

Other information : No supplementary information available.

ADR

No additional information available

Transport by sea

UN-No. (IMDG) : 3077

Proper Shipping Name (IMDG) : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.

Class (IMDG) : 9 - Miscellaneous dangerous compounds
Packing group (IMDG) : III - substances presenting low danger

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Air transport

UN-No.(IATA) : 3077

Proper Shipping Name (IATA) : Environmentally hazardous substance, solid, n.o.s.

Class (IATA) : 9 - Miscellaneous Dangerous Goods

Packing group (IATA) : III - Minor Danger

SECTION 15: Regulatory information

15.1. US Federal regulations

Lead (7439-92-1)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

Listed on United States SARA Section 313 Not listed on the United States SARA Section 313

RQ (Reportable quantity, section 304 of EPA's List of Lists) 10 lb

15.2. International regulations

CANADA

No additional information available

EU-Regulations

No additional information available

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Repr. 1A H360Df
Acute Tox. 4 (Inhalation) H332
Acute Tox. 4 (Oral) H302
STOT RE 2 H373
Aquatic Acute 1 H400
Aquatic Chronic 1 H410
Full text of H-phrases: see section 16

Classification according to Directive 67/548/EEC [DSD] or 1999/45/EC [DPD]

Repr.Cat.1; R61 Repr.Cat.3; R62 Xn; R20/22 R33 N; R50/53

Full text of R-phrases: see section 16

15.2.2. National regulations

Lead (7439-92-1)

Listed on IARC (International Agency for Research on Cancer) Listed as carcinogen on NTP (National Toxicology Program)

15.3. US State regulations

No additional information available

SECTION 16: Other information

Revision date : 12/15/2014

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Full text of H-phrases:

Acute Tox. 4 (Inhalation)	Acute toxicity (inhalation) Category 4
Acute Tox. 4 (Oral)	Acute toxicity (oral) Category 4
Aquatic Acute 1	Hazardous to the aquatic environment - Acute Hazard Category 1
Aquatic Chronic 1	Hazardous to the aquatic environment - Chronic Hazard Category 1
Carc. 1B	Carcinogenicity Category 1B
Repr. 1A	Reproductive toxicity Category 1A
STOT RE 2	Specific target organ toxicity (repeated exposure) Category 2
H302	Harmful if swallowed
H332	Harmful if inhaled
H350	May cause cancer
H360	May damage fertility or the unborn child
H373	May cause damage to organs through prolonged or repeated
	exposure
H400	Very toxic to aquatic life
H410	Very toxic to aquatic life with long lasting effects

NFPA health hazard : 2 - Intense or continued exposure could cause temporary

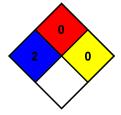
incapacitation or possible residual injury unless prompt

medical attention is given.

NFPA fire hazard : 0 - Materials that will not burn.

NFPA reactivity : 0 - Normally stable, even under fire exposure conditions,

and are not reactive with water.



HMIS III Rating

Health : * Chronic Hazard - Chronic (long-term) health effects may result from repeated overexposure

Flammability : 0 Minimal Hazard Physical : 0 Minimal Hazard

Personal Protection : B

SDS US (GHS HazCom 2012)

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product

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SAFETY DATA SHEET

Creation Date 20-Aug-2014 Revision Date 17-Jan-2018 Revision Number 3

1. Identification

Product Name Mercury (Certified ACS)

Cat No.: M141-1LB; M141-6LB

Synonyms Colloidal mercury; Hydrargyrum; Metallic mercury

Recommended Use Laboratory chemicals.

Uses advised against

Not for food, drug, pesticide or biocidal product use

Details of the supplier of the safety data sheet

Company

Fisher Scientific One Reagent Lane Fair Lawn, NJ 07410 Tel: (201) 796-7100

Emergency Telephone Number

CHEMTREC®, Inside the USA: 800-424-9300 CHEMTREC®, Outside the USA: 001-703-527-3887

2. Hazard(s) identification

Classification

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Corrosive to metals

Acute Inhalation Toxicity - Vapors

Reproductive Toxicity

Specific target organ toxicity - (repeated exposure)

Category 1

Category 1

Category 1

Target Organs - Central nervous system (CNS), Kidney.

Label Elements

Signal Word

Danger

Hazard Statements

May be corrosive to metals

Fatal if inhaled

May damage the unborn child

Causes damage to organs through prolonged or repeated exposure



Precautionary Statements

Prevention

Obtain special instructions before use

Do not handle until all safety precautions have been read and understood

Use personal protective equipment as required

Do not get in eyes, on skin, or on clothing

Wash face, hands and any exposed skin thoroughly after handling

Do not eat, drink or smoke when using this product

Do not breathe dust/fume/gas/mist/vapors/spray

Use only outdoors or in a well-ventilated area

Wear respiratory protection

Response

IF exposed or concerned: Get medical attention/advice

Inhalation

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

Immediately call a POISON CENTER or doctor/physician

Skin

Immediately call a POISON CENTER or doctor/physician

IF ON SKIN: Gently wash with plenty of soap and water

Remove/Take off immediately all contaminated clothing

Wash contaminated clothing before reuse

Storage

Store locked up

Store in a well-ventilated place. Keep container tightly closed

Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

Very toxic to aquatic life with long lasting effects

WARNING. Reproductive Harm - https://www.p65warnings.ca.gov/.

3. Composition/Information on Ingredients

Component	CAS-No	Weight %
Mercury	7439-97-6	100

4. First-aid measures

Eye Contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.

Immediate medical attention is required.

Skin Contact Wash off immediately with soap and plenty of water while removing all contaminated

clothes and shoes. Immediate medical attention is required.

Inhalation Move to fresh air. If breathing is difficult, give oxygen. Do not use mouth-to-mouth method if

victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Immediate

medical attention is required.

Ingestion Do not induce vomiting. Call a physician or Poison Control Center immediately.

Most important symptoms and

effects

No information available.

Notes to Physician Treat symptomatically

Fire-fighting measures

Substance is nonflammable; use agent most appropriate to extinguish surrounding fire. **Suitable Extinguishing Media**

Unsuitable Extinguishing Media No information available

Flash Point No information available Method -No information available

Autoignition Temperature

Explosion Limits

No information available

No data available Upper No data available Lower Sensitivity to Mechanical Impact No information available Sensitivity to Static Discharge No information available

Specific Hazards Arising from the Chemical

Very toxic. Non-combustible, substance itself does not burn but may decompose upon heating to produce corrosive and/or toxic fumes. Keep product and empty container away from heat and sources of ignition.

Hazardous Combustion Products

Mercury oxide Highly toxic fumes

Protective Equipment and Precautions for Firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

NFPA

Up

Health	Flammability	Instability	Physical hazards
4	0	0	N/A

6. Accidental release measures

Personal Precautions

Wear self-contained breathing apparatus and protective suit. Evacuate personnel to safe areas. Ensure adequate ventilation. Do not get in eyes, on skin, or on clothing. Should not be released into the environment. See Section 12 for additional ecological information.

Environmental Precautions

Methods for Containment and Clean Wear self-contained breathing apparatus and protective suit. Soak up with inert absorbent material. Keep in suitable, closed containers for disposal.

7. Handling and storage

Use only under a chemical fume hood. Wear personal protective equipment. Do not get in Handling

eyes, on skin, or on clothing. Do not breathe vapors or spray mist. Do not ingest.

Keep containers tightly closed in a dry, cool and well-ventilated place. Corrosives area. Storage

8. Exposure controls / personal protection

Exposure Guidelines

Component	ACGIH TLV	OSHA PEL	NIOSH IDLH	Mexico OEL (TWA)
Mercury	TWA: 0.025 mg/m ³	(Vacated) TWA: 0.05 mg/m ³	IDLH: 10 mg/m ³	TWA: 0.05 mg/m ³
	Skin	Ceiling: 0.1 mg/m ³	TWA: 0.05 mg/m ³	
		(Vacated) STEL: 0.03 mg/m ³	Ceiling: 0.1 mg/m ³	
		Skin		
		(Vacated) Ceiling: 0.1 mg/m ³		

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Legend

ACGIH - American Conference of Governmental Industrial Hygienists

OSHA - Occupational Safety and Health Administration

NIOSH IDLH: The National Institute for Occupational Safety and Health Immediately Dangerous to Life or Health

Engineering Measures Use only under a chemical fume hood. Ensure adequate ventilation, especially in confined

areas. Ensure that eyewash stations and safety showers are close to the workstation

location.

Personal Protective Equipment

Eye/face ProtectionWear appropriate protective eyeglasses or chemical safety goggles as described by

OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard

EN166.

Skin and body protection Wear appropriate protective gloves and clothing to prevent skin exposure.

Respiratory Protection Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard

EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

Hygiene Measures Handle in accordance with good industrial hygiene and safety practice.

9. Physical and chemical properties

Physical StateLiquidAppearanceSilverOdorOdorless

Odor ThresholdNo information availablepHNo information availableMelting Point/Range-38.87 °C / -38 °FBoiling Point/Range356.72 °C / 674.1 °FFlash PointNo information availableEvaporation RateNo information available

Flammability (solid,gas)

No information available

Flammability or explosive limits

UpperNo data availableLowerNo data availableVapor Pressure0.002 mmHg @ 25 °C

Vapor Density 7.0

Specific Gravity
13.59 (H2O=1)
Solubility
Insoluble in water
Partition coefficient: n-octanol/water
No data available

Autoignition TemperatureNo information availableDecomposition TemperatureNo information availableViscosityNo information available

Molecular Formula Hg
Molecular Weight 200.59

10. Stability and reactivity

Reactive Hazard None known, based on information available

Stability Stable under normal conditions.

Conditions to Avoid Incompatible products. Excess heat.

Incompatible Materials Strong oxidizing agents, Ammonia, Metals, Halogens

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Hazardous Decomposition Products Mercury oxide, Highly toxic fumes

Hazardous Polymerization Hazardous polymerization does not occur.

Hazardous Reactions None under normal processing.

Toxicological information

Acute Toxicity

Product Information

No acute toxicity information is available for this product

Component Information Toxicologically Synergistic

No information available

Products

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Irritation No information available

Sensitization No information available

Carcinogenicity The table below indicates whether each agency has listed any ingredient as a carcinogen.

Component	CAS-No	IARC	NTP	ACGIH	OSHA	Mexico
Mercury	7439-97-6	Not listed	Not listed	Not listed	Not listed	Not listed

Mutagenic Effects No information available

Reproductive Effects No information available.

Developmental Effects May cause harm to the unborn child.

Teratogenicity No information available.

STOT - single exposure

None known

STOT - repeated exposure Central nervous system (CNS) Kidney

Aspiration hazard No information available

Symptoms / effects, both acute and No information available

delayed

Endocrine Disruptor Information No information available

The toxicological properties have not been fully investigated. Other Adverse Effects

12. Ecological information

Ecotoxicity

This product contains the following substance(s) which are hazardous for the environment.

Component	Freshwater Algae	Freshwater Fish	Microtox	Water Flea
Mercury	Not listed	0.9 mg/L LC50 96h	Not listed	EC50: = 5.0 μg/L, 96h
•		0.18 mg/L LC50 96h		(water flea)
		0.16 mg/L LC50 96h		, ,
		0.5 mg/L LC50 96h		

Persistence and Degradability No information available

Bioaccumulation/ Accumulation No information available.

No information available. Mobility

13. Disposal considerations

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Mercury (Certified ACS)

Waste Disposal Methods

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

Component	RCRA - U Series Wastes	RCRA - P Series Wastes
Mercury - 7439-97-6	U151	-

14. Transport information

DOT

UN-No UN2809 Proper Shipping Name MERCURY

Hazard Class 8
Subsidiary Hazard Class 6.1
Packing Group III

<u>TDG</u>

UN-No UN2809
Proper Shipping Name MERCURY

Hazard Class 8
Subsidiary Hazard Class 6.1
Packing Group III

IATA

UN-No UN2809
Proper Shipping Name MERCURY

Hazard Class 8
Subsidiary Hazard Class 6.1
Packing Group III

IMDG/IMO

UN-No UN2809
Proper Shipping Name MERCURY

Hazard Class 8
Subsidiary Hazard Class 6.1
Packing Group III

15. Regulatory information

International Inventories

Component	TSCA	DSL	NDSL	EINECS	ELINCS	NLP	PICCS	ENCS	AICS	IECSC	KECL
Mercury	Х	Χ	-	231-106-7	-		Χ	-	Χ	Χ	Χ

Legend:

- X Listed
- E Indicates a substance that is the subject of a Section 5(e) Consent order under TSCA.
- F Indicates a substance that is the subject of a Section 5(f) Rule under TSCA.
- N Indicates a polymeric substance containing no free-radical initiator in its inventory name but is considered to cover the designated polymer made with any free-radical initiator regardless of the amount used.
- P Indicates a commenced PMN substance
- R Indicates a substance that is the subject of a Section 6 risk management rule under TSCA.
- S Indicates a substance that is identified in a proposed or final Significant New Use Rule
- T Indicates a substance that is the subject of a Section 4 test rule under TSCA.
- XU Indicates a substance exempt from reporting under the Inventory Update Rule, i.e. Partial Updating of the TSCA Inventory Data Base Production and Site Reports (40 CFR 710(B).
- Y1 Indicates an exempt polymer that has a number-average molecular weight of 1,000 or greater.
- Y2 Indicates an exempt polymer that is a polyester and is made only from reactants included in a specified list of low concern reactants that comprises one of the eligibility criteria for the exemption rule.

U.S. Federal Regulations

TSCA 12(b)

Component	TSCA 12(b)
Mercury	Section 5

SARA 313

Component	CAS-No	Weight %	SARA 313 - Threshold Values %
Mercury	7439-97-6	100	1.0

SARA 311/312 Hazard Categories See section 2 for more information

CWA (Clean Water Act)

Component	CWA - Hazardous Substances	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants
Mercury	-	-	X	X

Clean Air Act

Component	HAPS Data	Class 1 Ozone Depletors	Class 2 Ozone Depletors
Mercury	X		-

OSHA Occupational Safety and Health Administration Not applicable

CERCLA

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

Component	Hazardous Substances RQs	CERCLA EHS RQs
Mercury	1 lb	-

California Proposition 65

This product contains the following proposition 65 chemicals

Compone	ent	CAS-No	California Prop. 65	Prop 65 NSRL	Category
Mercury	/	7439-97-6	Developmental	-	Developmental

U.S. State Right-to-Know

Regulations

Component	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
Mercury	X	X	Χ	X	X

U.S. Department of Transportation

Reportable Quantity (RQ): N
DOT Marine Pollutant N
DOT Severe Marine Pollutant N

U.S. Department of Homeland Security

This product does not contain any DHS chemicals.

Other International Regulations

Mexico - Grade No information available

	16. Other information
D	Description Affects

Prepared By Regulatory Affairs

Thermo Fisher Scientific

Email: EMSDS.RA@thermofisher.com

 Creation Date
 20-Aug-2014

 Revision Date
 17-Jan-2018

 Print Date
 17-Jan-2018

Revision Summary

This document has been updated to comply with the US OSHA HazCom 2012 Standard

replacing the current legislation under 29 CFR 1910.1200 to align with the Globally

Harmonized System of Classification and Labeling of Chemicals (GHS).

Mercury (Certified ACS)

Revision Date 17-Jan-2018

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text

End of SDS

Prepared in accordance with Commission Regulation (EU) 2015/830



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Revision Date: 30-11-2020
This document replaces SDS dated: 31-05-2019

2 Letter ISO country code/language code: UK/EN

Tetrachloroethene Standard

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier: Tetrachloroethene Standard

Stock Number: 30413

Other means of identification:

Synonyms: None Known
REACH Registration No.: None Known
Molecular formula: CH3OH

1.2 Relevant identified uses of the substance or mixture and uses advised against:

Relevant identified uses: For Laboratory use only

Uses advised against: Uses other than recommended use.

1.3 Details of the Supplier of the Safety

Data Sheet:

Manufacturer Supplier

Restek Corporation Thames Restek UK LTD

110 Benner Circle Units 8-16, Ministry Wharf

Bellefonte, Pa. 16823 Wycombe Road, Saunderton

USA Buckinghamshire

00 1 814-353-1300 United Kingdom HP14 4HW

00 1 814-353-1309 01494 563377

sds@restek.com sales@thamesrestek.co.uk

1.4 Emergency telephone number: 00 1 800-424-9300 0870-8200418

(CHEMTREC within the US) (CHEMTREC within the UK)

00 1 703-741-5970 +1 703-741-5970

(Outside USA) (CHEMTREC International)

Poison Centre contact information: National Poisons Information Service (NPIS)

Email: director.birmingham.unit@npis.org

Website: http://www.npis.org/

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture:

Classification according to Regulation (EC)

No 1272/2008 [CLP]:

Specific Target Organ Systemic Toxicity (STOT) - Single Exposure Category 1 Flammable Liquid Category 2

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Acute Toxicity - Dermal Category 3
Acute Toxicity - Oral Category 3

2.2 Label elements:

Labelling according to Regulation (EC) No 1272/2008 [CLP]:

Hazard pictograms:







Signal Word: Danger

Hazard Statements: H225 - Highly flammable liquid and vapour

H301+H311 - Toxic if swallowed or in contact with skin

H370 - Causes damage to organs

Precautionary Statements: P210 - Keep away from heat, hot surfaces, sparks, open flames and other

ignition sources. No smoking.

P233 - Keep container tightly closed.

P260 - Do not breathe dust/fume/gas/mist/vapours/spray.

P280 - Wear protective gloves/protective clothing/eye protection/face

protection.

P301+P310 - IF SWALLOWED: Immediately call a POISON CENTER/doctor.

P303+P361+P353 - IF ON SKIN (or hair): Take off immediately all

contaminated clothing. Rinse skin with water/shower.

Supplemental Hazard information (EU): None Known

2.3 Other hazards: This substance does not meet the PBT or vPvB criteria of REACH, Annex XIII

SECTION 3: Composition/information on ingredients

3.1 Substances:

Not applicable

3.2 Mixtures:

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Tetrachloroethene Standard

Chemical Name	%	CAS#	EC No. REACH Registration No.	Classification (EC) No 1272/2008	M Factor	SCL	Acute Toxicity Estimates
Tetrachloroethylene	0.2	127-18-4	204-825-9 None Known	Aquatic Chronic 2; H411 Carc. 2; H351	No data available	No data available	Not determined
Methanol	99.8	67-56-1	200-659-6 None Known	Acute Tox. 3 (Dermal); H311 Acute Tox. 3 (Inh Dust/Mist); H331 Acute Tox. 3 (Oral); H301 Flam. Liq. 2; H225 STOT SE 1; H370	No data available	STOT SE 2: 3%<10% STOT SE 1: 10%	Not determined

For full text of H-statements see Section 16.

SECTION 4:	First aid	measures

Skin Contact:

4.1 Description of first aid measures:

Inhalation:	Remove to fresh air. If breathing is difficult, have a trained individual administer oxygen. If not breathing, give artificial respiration and have a trained individual administer oxygen. Get medical attention immediately
Eye contact:	Immediately flush eyes with plenty of water for at least 20 minutes retracting eyelids often. Tilt the head to prevent chemical from transferring to the uncontaminated eye. Get immediate medical attention and monitor the eye daily as advised by your physician. Flush eyes with plenty of water for at least 20 minutes retracting eyelids often. Tilt the head to prevent chemical from transferring to the uncontaminated eye. Get immediate medical attention.

Wash with soap and water. Remove contaminated clothing and launder. Get

medical attention if irritation develops or persists.

Ingestion: Do not induce vomiting and seek medical attention immediately. Drink two

glasses of water or milk to dilute. Provide medical care provider with this

SDS.

Self protection of the first aider: No data available

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Tetrachloroethene Standard

4.2 Most important symptoms and effects, both acute and delayed:

Coma and death

None Known

4.3 Indication of any immediate medical attention and special treatment needed:

IF exposed or concerned: Call a POISON CENTER/doctor. Call a POISON

CENTER/doctor if you feel unwell.

SECTION 5: Firefighting measures

5.1 Extinguishing media:

Suitable extinguishing media: Not combustible. Use extinguishing media appropriate for surrounding fire.

Use alcohol resistant foam, carbon dioxide, or dry chemical extinguishing agents. Water may be ineffective but water spray can be used extinguish a fire if swept across the base of the flames. Water can absorb heat and keep

exposed material from being damaged by fire.

Unsuitable extinguishing media:

5.2 Special hazards arising from the

substance or mixture:

5.3 Advice for firefighters:

Vapors may be ignited by sparks, flames or other sources of ignition if material is above the flash point giving rise to a fire (Class B). Vapors are

Hazardous Combustion Products:

nazardous combustion Products.

heavier than air and may travel to a source of ignition and flash back.

Carbon dioxide, Carbon monoxide

Do not enter fire area without proper protection including self-contained breathing apparatus and full protective equipment. Fight fire from a safe distance and a protected location due to the potential of hazardous vapors and decomposition products. Flammable component(s) of this material may

be lighter than water and burn while floating on the surface.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures:

Non-emergency personnel: Non-emergency personnel should be kept clear of the area

Emergency responders: Exposure to the spilled material may be severely irritating or toxic. Follow

personal protective equipment recommendations found in Section 8 of this SDS. Personal protective equipment needs must be evaluated based on information provided on this sheet and the special circumstances created by the spill including; the material spilled, the quantity of the spill, the area in which the spill occurred, and the expertise of employees in the area

responding to the spill. Never exceed any occupational exposure limits.

6.2 Environmental precautions:

No data available

6.3 Methods and material for containment and cleaning up:

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Tetrachloroethene Standard

Small spills: Refer to information provided for large spills

Large spills: Prevent the spread of any spill to minimize harm to human health and the

environment if safe to do so. Wear complete and proper personal protective equipment following the recommendation of Section 8 at a minimum. Dike with suitable absorbent material like granulated clay. Gather and store in a

sealed container pending a waste disposal evaluation.

6.4 Reference to other sections: Refer to section 13 for disposal information

SECTION 7: Handling and storage

7.1 Precautions for safe handling: Toxic or severely irritating material. Avoid contacting and avoid breathing

the material. Use only in a well ventilated area. Use spark-proof tools and

explosion-proof equipment

7.2 Conditions for safe storage, including

any incompatibilities:

Conditions for safe storage: Store in a cool dry ventilated location. Isolate from incompatible materials

and conditions. Keep container(s) closed. Keep away from sources of ignition

Materials to Avoid/Chemical

Incompatibility:

Strong oxidizing agents

7.3 Specific end use(s): For Laboratory use only

SECTION 8: Exposure controls/personal protection

8.1 Control parameters:

Occupational Exposure limit values:

	United Kingdom -	United Kingdom -	United Kingdom -
Chemical Name	Workplace Exposure	Workplace Exposure	Biological Monitoring
	Limits (WELs) - TWAs	Limits (WELs) - STELs	Guidance Values
Methanol	200 ppm TWA; 266	250 ppm STEL; 333	No data available
	mg/m3 TWA	mg/m3 STEL	
Tetrachloroethylene	50 ppm TWA; 345	100 ppm STEL; 689	No data available
·	mg/m3 TWA	mg/m3 STEL	

DNEL: None Known **PNEC:** None Known

8.2 Exposure controls:

Appropriate engineering controls: No exposure limits exist for the constituents of this product. Use local

exhaust ventilation or other engineering controls to minimize exposures and

maintain operator comfort.

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Individual protection measures, such as personal protective equipment:

Eye and face protection: Wear chemically resistant safety glasses with side shields when handling this

product. Do not wear contact lenses.

Skin Protection:

Hand protection: No information available

Other skin protection: Avoid skin contact by wearing chemically resistant gloves, an apron and

other protective equipment depending upon conditions of use. Inspect gloves for chemical break-through and replace at regular intervals. Clean protective equipment regularly. Wash hands and other exposed areas with mild soap and water before eating, drinking, and when leaving work. Wear protective gloves. Inspect gloves for chemical break-through and replace at regular intervals. Clean protective equipment regularly. Wash hands and other exposed areas with mild soap and water before eating, drinking, and

when leaving work

Respiratory Protection: If an exposure limit is exceeded or if an operator is experiencing symptoms

of inhalation overexposure as explained in Section 3, provide respiratory protection. Respiratory protection may be required to avoid overexposure when handling this product. General or local exhaust ventilation is the preferred means of protection. Use a respirator if general room ventilation is

not available or sufficient to eliminate symptoms.

Respirator Type(s): None required where adequate ventilation is provided. If airborne

concentrations are above the applicable exposure limits, use NIOSH/MSHA

approved respiratory protection.

Thermal Hazards: Not applicable

Environmental exposure controls:No data available

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties:

Appearance: Liquid

Colour: No data available

Odour: Mild

Odour threshold:

PH:

No data available

Not applicable

Melting Point/Freezing Point (°C):

Melting point (°C): No data available

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Freezing point (°C): No data available

Initial boiling point and boiling range (°C): 65 Flash point (°C): 11

Evaporation Rate (water = 1): No data available Flammability (solid, gas): No data available

Upper/lower flammability or explosive

limits:

Upper flammable or explosive limit, % 36

in air:

Lower flammable or explosive limit, %

in air:

Vapour pressure: No data available

Vapor Density (Air=1): 1.1

Relative density (water = 1): $0.791 - 0.792 \text{ g/cm}3 \text{ at } 20 ^{\circ}\text{C}$

Solubility(ies): Moderate; 50-99% **Partition coefficient: n-octanol/water:** No data available

Auto-ignition temperature (°C): 464

Decomposition temperature (°C):No data availableViscosity:No data availableExplosive properties:No data availableOxidizing properties:No data available

9.2 Other information:

Volatile Organic Chemicals: 100

Bulk density: 6.684

SECTION 10: Stability and reactivity

10.1 Reactivity: Not expected to be reactive

10.2 Chemical stability: Stable under normal conditions.

10.3 Possibility of hazardous reactions: None expected under standard conditions of storage

10.4 Conditions to avoid: No data available10.5 Incompatible materials: Strong oxidizing agents

10.6 Hazardous decomposition products: Carbon dioxide, Carbon monoxide

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Tetrachloroethene Standard

SECTION 11: Toxicological information

11.1 Information on toxicological effects:

Acute toxicity:

Chemical Name	ORAL LD50 (rat)	DERMAL LD50 (rabbit)	INHALATION LC50 (rat)
Methanol	No data available	No data available	INHALATION LC50-8H
Methanol		No data available	Rat 22500 ppm
Totrachloroothylono	ORAL LD50 Rat 2629	No data available	INHALATION LC50-4H
Tetrachloroethylene	mg/kg	NO data available	VAPOR Rat 27.8 MG/L

Classification has been based on toxicological information of the components in Section 3.

Skin corrosion/irritation:

Based on available data, the classification criteria are not met.

Serious eye damage/irritation:

Based on available data, the classification criteria are not met.

Respiratory or skin sensitisation:

Based on available data, the classification criteria are not met.

Germ cell mutagenicity:

Based on available data, the classification criteria are not met.

Carcinogenicity:

Based on available data, the classification criteria are not met.

Reproductive toxicity:

Based on available data, the classification criteria are not met.

STOT-single exposure:

Classification has been based on toxicological information of the components in Section 3.

STOT-repeated exposure:

Based on available data, the classification criteria are not met.

Aspiration hazard:

Based on available data, the classification criteria are not met.

SECTION 12: Ecological information

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Tetrachloroethene Standard

12.1 Toxicity: Moderate ecological hazard. This product may be dangerous to plants

and/or wildlife.

Ecological Toxicity Data:

Chemical Name	CAS#	Aquatic EC50 Crustacea	Aquatic ERC50 Algae	Aquatic LC50 Fish
No data available				

12.2 Persistence and degradability:Biodegrades slowly.12.3 Bioaccumulative potential:No data available12.4 Mobility in soil:No data available12.5 Results of PBT and vPvB assessment:No data available12.6 Other adverse effects:None Known12.7 Additional information:No data available

SECTION 13: Disposal considerations

13.1 Waste treatment methods:

Disposal methods: Spent or discarded material is a hazardous waste.

Dispose of by incineration following Federal, State, Local, or Provincial

regulations.

Waste codes / waste designations

according to LoW:

No data available

SECTION 14: Transport information

International carriage of dangerous goods by road (ADR), rail or inland waterways:

14.1 UN number: UN123014.2 UN proper shipping name: Methanol

14.3 Transport hazard class(es): 3(6.1)

14.4 Packing group:

International carriage of dangerous goods by air (IATA):

14.1 UN number: UN1230

14.2 UN proper shipping name: Methanol

14.3 Transport hazard class(es): 3(6.1)

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Tetrachloroethene Standard

14.4 Packing group:

14.5 Environmental hazards: No

14.6 Special precautions for user: No data available14.7 Transport in bulk according to Annex No data available

II of MARPOL and the IBC Code:

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture:

Chemical Name	EINECS	SVHC
Methanol	Yes	No
Tetrachloroethylene	Yes	No

15.2 Chemical Safety AssessmentNo Chemical Safety Assessment has been carried out for this

substance/mixture by the supplier.

SECTION 16: Other information

Revision Date: 30-11-2020

Indication of changes: Any changes to the SDS compared to previous versions are marked by a

vertical line in front of the concerned paragraph.

Abbreviations and acronyms: CAS = Chemical Abstract Service

DNEL= Derivative No Effect Level

EC= European Community

EINECS = European Inventory of Existing Chemical Substances

MSHA = Mine Safety Health Administration

NIOSH = National Institute of Occupational Safety & Health

OEL = Occupational Exposure Limit
PBT= Persistent, Bioaccumulative, Toxic
PNEC= Predicted No Effect Concentration

SCOEL= Scientific Committee on Occupational Exposure Limits

TLV = Threshold Limit Value TWA= Time Weighted Average

vPvB= Very Persistent, Very Bioaccumulative

Wt.% = Weight Percent

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Tetrachloroethene Standard

Key literature references and sources for No data:

No data available

Hazard phrase(s) referenced in section 3

H351 - Suspected of causing cancer.

H225 - Highly flammable liquid and vapour

H301+H311+H331 - Toxic if swallowed, in contact with skin or if inhaled

H370 - Causes damage to organs

H411 - Toxic to aquatic life with long lasting effects

Precautionary Statements:

Prevention: P210 - Keep away from heat, hot surfaces, sparks, open flames and other

ignition sources. No smoking.

P233 - Keep container tightly closed.

P240 - Ground/bond container and receiving equipment.

P241 - Use explosion-proof electrical/ventilating/lighting equipment.

P242 - Use only non-sparking tools.

P243 - Take precautionary measures against static discharge. P260 - Do not breathe dust/fume/gas/mist/vapours/spray.

P264 - Wash thoroughly after handling.

P270 - Do not eat, drink or smoke when using this product.

P280 - Wear protective gloves/protective clothing/eye protection/face

protection.

Response: P301+P310 - IF SWALLOWED: Immediately call a POISON CENTER/doctor.

P302+P352 - If on skin: Wash with plenty of water.

P303+P361+P353 - IF ON SKIN (or hair): Take off immediately all

contaminated clothing. Rinse skin with water/shower.

P308+P311 - IF exposed or concerned: Call a POISON CENTER/doctor.

P312 - Call a POISON CENTER/doctor if you feel unwell.

P321 - Specific treatment (see Sections 4 to 8 on this SDS and any additional

information on this label).

P330 - Rinse mouth.

P361+P364 - Take off immediately all contaminated clothing and wash it

before reuse.

P370+P378 - In case of fire: Use an appropriate extinguisher (see section 5)

to extinguish.

Storage: P233 - Keep container tightly closed.

Prepared in accordance with Commission Regulation (EU) 2015/830



Stock Number: 30413 **Revision Date:** 30-11-2020

This document replaces SDS dated: 31-05-2019

2 Letter ISO country code/language code: UK/EN

Tetrachloroethene Standard

P403+P235 - Store in a well-ventilated place. Keep cool.

P405 - Store locked up.

Disposal: P501 - Dispose of contents/container to a suitable disposal site in

accordance with local/national/international regulations.

Disclaimer of Liability:

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SAFETY DATA SHEET



Trichloroethylene

Section 1. Identification

GHS product identifier

: Trichloroethylene : trichloroethylene

Chemical name Other means of

identification

: trichloroethene; Ethene, 1,1,2-trichloro-; Ethene, trichloro-; Trichlorethylene; Ethylene,

trichloro-

Product use

: Synthetic/Analytical chemistry.

Synonym

: trichloroethene; Ethene, 1,1,2-trichloro-; Ethene, trichloro-; Trichlorethylene; Ethylene,

trichloro-

SDS#

: 001206

Supplier's details

: Airgas USA, LLC and its affiliates 259 North Radnor-Chester Road

Suite 100

Radnor, PA 19087-5283

1-610-687-5253

24-hour telephone

: 1-866-734-3438

Section 2. Hazards identification

OSHA/HCS status

: This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Classification of the substance or mixture : SKIN CORROSION/IRRITATION - Category 2 SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2A

GERM CELL MUTAGENICITY - Category 2

CARCINOGENICITY - Category 1

AQUATIC HAZARD (LONG-TERM) - Category 3

GHS label elements

Hazard pictograms





Signal word

Hazard statements

: Causes serious eye irritation. Causes skin irritation.

May cause cancer.

Suspected of causing genetic defects.

Harmful to aquatic life with long lasting effects.

Precautionary statements

General

: Read label before use. Keep out of reach of children. If medical advice is needed, have product container or label at hand.

Prevention

: Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves. Wear eye or face protection. Wear protective clothing. Avoid release to the environment. Wash hands thoroughly after handling.

Response

: IF exposed or concerned: Get medical attention. IF ON SKIN: Wash with plenty of soap and water. Take off contaminated clothing and wash it before reuse. If skin irritation occurs: Get medical attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical attention.

Storage

: Store locked up.

Disposal

: Dispose of contents and container in accordance with all local, regional, national and international regulations.

Date of issue/Date of revision : 11/21/2016 1/12 Date of previous issue Version: 0.01 : No previous validation

Trichloroethylene

Section 2. Hazards identification

Hazards not otherwise

: None known.

classified

Section 3. Composition/information on ingredients

Substance/mixture

: Substance

Chemical name

: trichloroethylene

Other means of identification

: trichloroethene; Ethene, 1,1,2-trichloro-; Ethene, trichloro-; Trichlorethylene; Ethylene,

trichloro-

CAS number/other identifiers

CAS number : 79-01-6 **Product code** : 001206

Ingredient name	%	CAS number
trichloroethylene	100	79-01-6

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

Description of necessary first aid measures

Eye contact

: Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.

Inhalation

: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

Skin contact

: Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Get medical attention. Wash clothing before reuse. Clean shoes thoroughly before reuse.

Ingestion

: Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Most important symptoms/effects, acute and delayed

Potential acute health effects

Eye contact : Causes serious eye irritation.

Inhalation : No known significant effects or critical hazards.

: Causes skin irritation. **Skin contact**

Frostbite : Try to warm up the frozen tissues and seek medical attention.

Ingestion : No known significant effects or critical hazards.

Date of issue/Date of revision : 11/21/2016 Version: 0.01 2/12 Date of previous issue : No previous validation

Trichloroethylene

Section 4. First aid measures

Over-exposure signs/symptoms

Eye contact: Adverse symptoms may include the following:, pain or irritation, watering, redness

Inhalation : No specific data.

Skin contact: Adverse symptoms may include the following:, irritation, redness

Ingestion: No specific data.

Indication of immediate medical attention and special treatment needed, if necessary

Notes to physician : In case of inhalation of decomposition products in a fire, symptoms may be delayed.

The exposed person may need to be kept under medical surveillance for 48 hours.

Specific treatments : No specific treatment.

Protection of first-aiders: No action shall be taken involving any personal risk or without suitable training. If it is

suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water

before removing it, or wear gloves.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media

Suitable extinguishing

media

Unsuitable extinguishing

media

: Use an extinguishing agent suitable for the surrounding fire.

: None known.

Specific hazards arising from the chemical

: In a fire or if heated, a pressure increase will occur and the container may burst. This material is harmful to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.

Hazardous thermal decomposition products

: Decomposition products may include the following materials:

carbon dioxide carbon monoxide

halogenated compounds

carbonyl halides

Special protective actions for fire-fighters

: Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable

training.

Special protective equipment for fire-fighters

: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

For emergency responders

: If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

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Section 6. Accidental release measures

Environmental precautions

: Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities.

Methods and materials for containment and cleaning up

Small spill

: Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

Large spill

: Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Section 7. Handling and storage

Precautions for safe handling

Protective measures

: Put on appropriate personal protective equipment (see Section 8). Avoid exposure - obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not ingest. Avoid breathing vapor or mist. Avoid release to the environment. If during normal use the material presents a respiratory hazard, use only with adequate ventilation or wear appropriate respirator. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.

Advice on general occupational hygiene

Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

Conditions for safe storage, including any incompatibilities

: Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

trichloroethylene

ACGIH TLV (United States, 3/2016).

STEL: 25 ppm 15 minutes. TWA: 10 ppm 8 hours.

OSHA PEL 1989 (United States, 3/1989).

STEL: 1080 mg/m³ 15 minutes. STEL: 200 ppm 15 minutes. TWA: 270 mg/m³ 8 hours. TWA: 50 ppm 8 hours.

OSHA PEL Z2 (United States, 2/2013).

AMP: 300 ppm 5 minutes.

CEIL: 200 ppm

TWA: 100 ppm 8 hours.

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Section 8. Exposure controls/personal protection

Appropriate engineering controls

: If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

Environmental exposure controls

: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Individual protection measures

Hygiene measures

: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period.

Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection

: Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles.

Skin protection

Hand protection

: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

Body protection

Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Other skin protection

: Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Respiratory protection

: Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Section 9. Physical and chemical properties

Appearance

Physical state : Liquid. [Watery liquid.]

Color : Colorless.

Molecular weight : 131.38 g/mole

Molecular formula : C2-H-Cl3

Boiling/condensation point : 86.7°C (188.1°F)

Melting/freezing point : -84.8°C (-120.6°F)

Critical temperature : Not available.

Odor : Characteristic.
Odor threshold : Not available.
pH : Not available.
Flash point : Not available.
Burning time : Not applicable.
Burning rate : Not applicable.

Evaporation rate : 6.39 (butyl acetate = 1)

Flammability (solid, gas) : Not available.

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Trichloroethylene

Section 9. Physical and chemical properties

Lower and upper explosive

(flammable) limits

: Lower: 8% Upper: 10.5%

Vapor pressure

: 9.9 kPa (74.256033302 mm Hg) [room temperature]

Vapor density

: 4.5 (Air = 1)

Specific Volume (ft 3/lb)

0.6849

Gas Density (lb/ft 3)

1.46

Relative density

: 1.5

Solubility

: Not available.

Solubility in water

: 1.1 g/l

Partition coefficient: n-

2.53

octanol/water

Auto-ignition temperature Decomposition temperature: Not available.

: 410°C (770°F)

SADT

: Not available.

Viscosity

: Dynamic (room temperature): 0.58 mPa·s (0.58 cP)

Section 10. Stability and reactivity

Reactivity

: No specific test data related to reactivity available for this product or its ingredients.

Chemical stability

: The product is stable.

Possibility of hazardous

reactions

: Under normal conditions of storage and use, hazardous reactions will not occur.

Conditions to avoid

: No specific data.

Incompatible materials

: No specific data.

Hazardous decomposition

products

: Under normal conditions of storage and use, hazardous decomposition products should

not be produced.

Hazardous polymerization : Under normal conditions of storage and use, hazardous polymerization will not occur.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
trichloroethylene	LC50 Inhalation Vapor	Rat	140700 mg/m³	1 hours
	LD50 Dermal	Rabbit	>20 g/kg	-
	LD50 Oral	Rat	4920 mg/kg	-

IDLH : 1000 ppm

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
trichloroethylene	Eyes - Moderate irritant	Rabbit	-	24 hours 20 milligrams	-
	Skin - Severe irritant	Rabbit	-	24 hours 2 milligrams	-

Sensitization

Not available.

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Section 11. Toxicological information

Mutagenicity

Not available.

Carcinogenicity

Not available.

Classification

Product/ingredient name	OSHA	IARC	NTP
trichloroethylene	-	1	Reasonably anticipated to be a human carcinogen.

Reproductive toxicity

Not available.

Teratogenicity

Not available.

Specific target organ toxicity (single exposure)

Not available.

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

Not available.

Information on the likely

routes of exposure

: Not available.

Potential acute health effects

Eye contact : Causes serious eye irritation.

Inhalation : No known significant effects or critical hazards.

Skin contact : Causes skin irritation.

Ingestion: No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact : Adverse symptoms may include the following:, pain or irritation, watering, redness

Inhalation : No specific data.

Skin contact: Adverse symptoms may include the following:, irritation, redness

Ingestion : No specific data.

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

Potential immediate : Not available.

effects

Potential delayed effects : Not available.

Long term exposure

Potential immediate : Not available.

effects

Potential delayed effects : Not available.

Potential chronic health effects

Not available.

General : No known significant effects or critical hazards.

Carcinogenicity: May cause cancer. Risk of cancer depends on duration and level of exposure.

Mutagenicity : Suspected of causing genetic defects.

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Trichloroethylene

Section 11. Toxicological information

Teratogenicity
Developmental effects

: No known significant effects or critical hazards.

Developmental effectsNo known significant effects or critical hazards.Fertility effectsNo known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

Not available.

Section 12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Exposure
trichloroethylene	Acute EC50 95000 µg/l Marine water Acute EC50 36.5 mg/l Fresh water	Algae - Skeletonema costatum Algae - Chlamydomonas reinhardtii - Exponential growth phase	96 hours 72 hours
	Acute LC50 20 mg/l Marine water Acute LC50 18 mg/l Fresh water Acute LC50 3100 µg/l Fresh water	Crustaceans - Elminius modestus Daphnia - Daphnia magna Fish - Jordanella floridae - Juvenile (Fledgling, Hatchling, Weanling)	48 hours 48 hours 96 hours
	Chronic EC10 12.3 mg/l Fresh water	Algae - Chlamydomonas reinhardtii - Exponential growth phase	72 hours
	Chronic NOEC 10 mg/l Fresh water	Daphnia - Daphnia magna	21 days

Persistence and degradability

Not available.

Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
trichloroethylene	2.53	17	low

Mobility in soil

Soil/water partition coefficient (Koc)

: Not available.

Other adverse effects

: No known significant effects or critical hazards.

Section 13. Disposal considerations

Disposal methods

: The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

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Trichloroethylene

Section 13. Disposal considerations

United States - RCRA Toxic hazardous waste "U" List

Ingredient	CAS#		Reference number
Trichloroethylene; Ethene, trichloro-	79-01-6	Listed	U228

Section 14. Transport information

	DOT	TDG	Mexico	IMDG	IATA
UN number	UN1710	UN1710	UN1710	UN1710	UN1710
UN proper shipping name	TRICHLOROETHYLENE	TRICHLOROETHYLENE	TRICHLOROETHYLENE	TRICHLOROETHYLENE	TRICHLOROETHYLENE
Transport hazard class(es)	6.1	6.1	6.1	6.1	6.1
Packing group	III	III	III	Ш	III
Environment	No.	No.	No.	No.	No.
Additional information	Reportable quantity 100 lbs / 45.4 kg [8. 2147 gal / 31.096 L] Package sizes shipped in quantities less than the product reportable quantity are not subject to the RQ (reportable quantity) transportation requirements. Limited quantity Yes. Packaging instruction Passenger aircraft Quantity limitation: 60 L Cargo aircraft Quantity limitation: 220 L Special provisions IB3, N36, T4, TP1, T1	Product classified as per the following sections of the Transportation of Dangerous Goods Regulations: 2.26-2.36 (Class 6). Explosive Limit and Limited Quantity Index 5			Passenger and Cargo AircraftQuantity Iimitation: 60 L Cargo Aircraft Only Quantity limitation: 220 L Limited Quantities - Passenger Aircraft Quantity limitation: 2 L

[&]quot;Refer to CFR 49 (or authority having jurisdiction) to determine the information required for shipment of the product."

Special precautions for user : Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Transport in bulk according : Not available. to Annex II of MARPOL

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73/78 and the IBC Code

Section 15. Regulatory information

U.S. Federal regulations

: TSCA 5(a)2 final significant new use rules: trichloroethylene

TSCA 8(a) CDR Exempt/Partial exemption: Not determined

TSCA 12(b) one-time export: trichloroethylene

United States inventory (TSCA 8b): This material is listed or exempted.

Clean Water Act (CWA) 307: trichloroethylene Clean Water Act (CWA) 311: trichloroethylene

Clean Air Act Section 112

(b) Hazardous Air **Pollutants (HAPs)**

: Listed

Clean Air Act Section 602

Class I Substances

: Not listed

Clean Air Act Section 602

Class II Substances

: Not listed

DEA List I Chemicals

: Not listed

(Precursor Chemicals)

DEA List II Chemicals

(Essential Chemicals)

: Not listed

SARA 302/304

Composition/information on ingredients

No products were found.

SARA 304 RQ : Not applicable.

SARA 311/312

Classification : Immediate (acute) health hazard

Delayed (chronic) health hazard

Composition/information on ingredients

Name	%	hazard	Sudden release of pressure		(acute)	Delayed (chronic) health hazard
trichloroethylene	100	No.	No.	No.	Yes.	Yes.

SARA 313

	Product name	CAS number	%
Form R - Reporting requirements	trichloroethylene	79-01-6	100
Supplier notification	trichloroethylene	79-01-6	100

SARA 313 notifications must not be detached from the SDS and any copying and redistribution of the SDS shall include copying and redistribution of the notice attached to copies of the SDS subsequently redistributed.

State regulations

Massachusetts : This material is listed. **New York** : This material is listed. **New Jersey** : This material is listed. : This material is listed. Pennsylvania

California Prop. 65

WARNING: This product contains a chemical known to the State of California to cause cancer and birth defects or other reproductive harm.

Date of issue/Date of revision 10/12 : 11/21/2016 Date of previous issue Version: 0.01 : No previous validation

Trichloroethylene

Section 15. Regulatory information

Ingredient name	Cancer	•		Maximum acceptable dosage level
trichloroethylene	Yes.		14 μg/day (ingestion) 50 μg/day (inhalation)	No.

International regulations

International lists

National inventory

Australia : This material is listed or exempted.

Canada : This material is listed or exempted.

China : This material is listed or exempted.

Europe : This material is listed or exempted.

Japan : This material is listed or exempted.

Malaysia : This material is listed or exempted.

New Zealand : This material is listed or exempted.

Philippines : This material is listed or exempted.

Republic of Korea : This material is listed or exempted.

Taiwan : This material is listed or exempted.

Canada

WHMIS (Canada) : Class D-1B: Material causing immediate and serious toxic effects (Toxic).

Class D-2A: Material causing other toxic effects (Very toxic). Class D-2B: Material causing other toxic effects (Toxic).

CEPA Toxic substances: This material is listed. **Canadian ARET**: This material is not listed. **Canadian NPRI**: This material is listed.

Alberta Designated Substances: This material is not listed.

Ontario Designated Substances: This material is not listed.

Quebec Designated Substances: This material is not listed.

Section 16. Other information

Canada Label requirements : Class D-1B: Material causing immediate and serious toxic effects (Toxic).

Class D-2A: Material causing other toxic effects (Very toxic). Class D-2B: Material causing other toxic effects (Toxic).

Hazardous Material Information System (U.S.A.)



Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks Although HMIS® ratings are not required on SDSs under 29 CFR 1910. 1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered mark of the National Paint & Coatings Association (NPCA). HMIS® materials may be purchased exclusively from J. J. Keller (800) 327-6868.

The customer is responsible for determining the PPE code for this material.

National Fire Protection Association (U.S.A.)



Trichloroethylene

Section 16. Other information

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Copyright ©2001, National Fire Protection Association, Quincy, MA 02269. This warning system is intended to be interpreted and applied only by properly trained individuals to identify fire, health and reactivity hazards of chemicals. The user is referred to certain limited number of chemicals with recommended classifications in NFPA 49 and NFPA 325, which would be used as a guideline only. Whether the chemicals are classified by NFPA or not, anyone using the 704 systems to classify chemicals does so at their own risk.

Procedure used to derive the classification

Classification	Justification
Skin Irrit. 2, H315	Expert judgment
Eye Irrit. 2A, H319	Expert judgment
Muta. 2, H341	Expert judgment
Carc. 1, H350	Expert judgment
Aquatic Chronic 3, H412	Expert judgment

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Key to abbreviations

: ATE = Acute Toxicity Estimate BCF = Bioconcentration Factor

GHS = Globally Harmonized System of Classification and Labelling of Chemicals

IATA = International Air Transport Association

IBC = Intermediate Bulk Container

IMDG = International Maritime Dangerous Goods

LogPow = logarithm of the octanol/water partition coefficient

MARPOL 73/78 = International Convention for the Prevention of Pollution From Ships,

1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)

UN = United Nations

References

: Not available.

▼ Indicates information that has changed from previously issued version.

Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

Date of issue/Date of revision : 11/21/2016 Date of previous issue : No previous validation Version : 0.01 12/12

according to 29CFR1910/1200 and GHS Rev. 3

Effective date: 10.24.2014 Page 1 of 8

Zinc Metal Mossy, Reagent

SECTION 1: Identification of the substance/mixture and of the supplier

Product name: Zinc Metal Mossy, Reagent

Manufacturer/Supplier Trade name:

Manufacturer/Supplier Article number: S25636A

Recommended uses of the product and restrictions on use:

Manufacturer Details:

AquaPhoenix Scientific, Inc 9 Barnhart Drive, Hanover, PA 17331 (717) 632-1291

Supplier Details:

Fisher Science Education 6771 Silver Crest Road, Nazareth, PA 18064 (724)517-1954

Emergency telephone number:

Fisher Science Education

Emergency Telephone No.: 800-535-5053

SECTION 2: Hazards identification

Classification of the substance or mixture:



Corrosive

Serious eye damage, category 1



Irritant

Acute toxicity (oral, dermal, inhalation), category 4



Environmentally Damaging

Acute hazards to the aquatic environment, category 1 Chronic hazards to the aquatic environment, category 1

Eye Damage 1.
Acute Toxicity 4 (oral).
Aquatic Acute Toxicity 1.
Aquatic Chronic Toxicity 1.

Signal word: Danger

Hazard statements:

Causes serious eye damage.

Harmful if swallowed.

Very toxic to aquatic life.

Very toxic to aquatic life with long lasting effects.

Precautionary statements:

If medical advice is needed, have product container or label at hand.

Keep out of reach of children.

Read label before use.

Do not eat, drink or smoke when using this product.

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Zinc Metal Mossy, Reagent

Wear protective gloves/protective clothing/eye protection/face protection.

Wash skin thoroughly after handling.

Avoid release to the environment.

Rinse mouth.

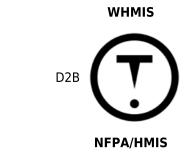
IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.

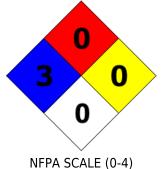
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.

Immediately call a POISON CENTER or doctor/physician.

Dispose of contents and container as instructed in Section 13.

Other Non-GHS Classification:







HMIS RATINGS (0-4)

SECTION 3: Composition/information on ingredients

Ingredients:					
CAS 7446-20-0	Zinc sulfate heptahydrate	100 %			
Percentages are by weight					

SECTION 4: First aid measures

Description of first aid measures

After inhalation:

Loosen clothing as necessary and position individual in a comfortable position. Move exposed to fresh air. Give artificial respiration if necessary. If breathing is difficult give oxygen. Get medical assistance if cough or other symptoms appear.

After skin contact:

Rinse/flush exposed skin gently using soap and water for 15-20 minutes. Seek medical advice if discomfort or irritation persists.

After eye contact:

Protect unexposed eye. Rinse/flush exposed eye(s) gently using water for 15-20 minutes. Remove contact lens(es) if able to do so during rinsing. Seek medical attention if irritation persists or if concerned.

according to 29CFR1910/1200 and GHS Rev. 3

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Zinc Metal Mossy, Reagent

After swallowing:

Rinse mouth thoroughly. Do not induce vomiting. Seek medical attention if irritation, discomfort, or vomiting persists. Never give anything by mouth to an unconscious person.

Most important symptoms and effects, both acute and delayed:

Irritation- all routes of exposure. Inhalation of fumes may cause metal fume fever, which is characterized by flulike symptoms with metallic taste, fever, chills, cough, weakness, chest pain, muscle pain and increased white blood cell count. Headache. Nausea. Shortness of breath. May cause bronchitis.

Indication of any immediate medical attention and special treatment needed:

If seeking medical attention provide SDS document to physician. Physician should treat symptomatically.

SECTION 5: Firefighting measures

Extinguishing media

Suitable extinguishing agents:

Use agent most suitable for extinguishing surrounding fire. Use water spray to keep fire-exposed containers cool.

Unsuitable extinguishing agents:

None identified.

Special hazards arising from the substance or mixture:

Thermal decomposition can lead to release of irritating gases and vapors. Containers may explode in the heat of a fire.

Advice for firefighters:

Protective equipment:

Wear protective eyeware, gloves, and clothing. Refer to Section 8. Use NIOSH-approved respiratory protection/breathing apparatus.

Additional information (precautions):

Avoid inhaling gases, fumes, dust, mist, vapor, and aerosols. Avoid contact with skin, eyes, and clothing.

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures:

Ensure adequate ventilation. Ensure that air-handling systems are operational.

Environmental precautions:

Should not be released into environment. Prevent from reaching drains, sewer, or waterway.

Methods and material for containment and cleaning up:

Wear protective eyeware, gloves, and clothing. Refer to Section 8. Always obey local regulations. Containerize for disposal. Refer to Section 13. Sweep up and containerize for disposal. Avoid generating dust. If necessary use trained response staff or contractor. Evacuate personnel to safe areas. Keep in suitable closed containers for disposal.

Reference to other sections: None

SECTION 7: Handling and storage

Precautions for safe handling:

Avoid contact with skin, eyes, and clothing. Follow good hygiene procedures when handling chemical materials. Refer to Section 8. Follow proper disposal methods. Refer to Section 13. Do not eat, drink, smoke, or use personal products when handling chemical substances.

Conditions for safe storage, including any incompatibilities:

Store in a cool location. Keep away from food and beverages. Protect from freezing and physical damage.

according to 29CFR1910/1200 and GHS Rev. 3

Effective date: 10.24.2014 Page 4 of 8

Zinc Metal Mossy, Reagent

Provide ventilation for containers. Keep container tightly sealed. Store away from incompatible materials.

SECTION 8: Exposure controls/personal protection





Control Parameters: 7446-20-0, Zinc, ACGIH TLV: NA, OSHA PEL: NA.

Appropriate Engineering controls: Emergency eye wash fountains and safety showers should be available in

the immediate vicinity of use or handling. Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapor and mists below the applicable workplace exposure limits (Occupational

Exposure Limits-OELs) indicated above.

Respiratory protection: Not required under normal conditions of use. Where risk assessment

shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. When necessary use NIOSH approved

breathing equipment.

Protection of skin: Select glove material impermeable and resistant to the substance. Select

glove material based on rates of diffusion and degradation. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Use proper glove removal technique without touching outer surface. Avoid skin contact with used gloves. Wear

protective clothing.

Eye protection: Wear equipment for eye protection tested and approved under

appropriate government standards such as NIOSH (US) or EN 166(EU).

Safety glasses or goggles are appropriate eye protection.

General hygienic measures: Perform routine housekeeping. Wash hands before breaks and at the end

of work. Avoid contact with skin, eyes, and clothing. Before wearing wash

contaminated clothing.

SECTION 9: Physical and chemical properties

Appearance (physical state, color):	Gray solid	Explosion limit lower: Not determined Not determined	
Odor:	Odorless	Vapor pressure at 20°C: 1 mmHg @ 487C	
Odor threshold:	Not determined	Vapor density:	Not determined
pH-value:	Not determined	Relative density:	Not determined
Melting/Freezing point:	419C	Solubilities:	Reacts with water.
Boiling point/Boiling range:	908C	Partition coefficient (noctanol/water):	Not determined
Flash point (closed cup):	INAT APTORMINAA	Auto/Self-ignition temperature:	460C
Evaporation rate:	Not determined	Decomposition temperature:	Not determined
Flammability (solid, gaseous):	Not determined	Viscosity:	a. Kinematic: Not determined b. Dynamic: Not determined
Density at 20°C:	7.14 g/cm3 at 20 °C Specific Gravity: :7.14		

according to 29CFR1910/1200 and GHS Rev. 3

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Zinc Metal Mossy, Reagent

SECTION 10: Stability and reactivity

Reactivity:

Nonreactive under normal conditions. Reacts with water.

Chemical stability:

Stable under normal conditions.

Possible hazardous reactions:

None under normal processing.

Conditions to avoid:

Incompatible materials. Excess heat.

Incompatible materials:

Oxidizing agents. Strong acids or bases.

Hazardous decomposition products:

Zinc oxides.

SECTION 11: Toxicological information

Acute Toxicity: No additional information.
Chronic Toxicity: No additional information.
Corrosion Irritation: No additional information.
Sensitization: No additional information.

Numerical Measures: No additional information.

Carcinogenicity:

EPA: IRIS Carcinogenicity Assessment- D (data are inadequate for an assessment of human carcinogenic potential; inadequate information to assess carcinogenic potential) Zinc

Mutagenicity: No additional information.

Reproductive Toxicity:

Reproductive effects shown in laboratory animals.

SECTION 12: Ecological information

Ecotoxicity:

Fish (acute 7440-66-6): : 96 Hr LC50 Pimephales promelas: 2.16 - 3.05 mg/L [flow-through]; 96 Hr LC50 Pimephales promelas: 0.211 - 0.269 mg/L [semi-static]; 96 Hr LC50 Pimephales promelas: 2.66 mg/L [static]; 96 Hr LC50 Cyprinus carpio: 30 mg/L; 96 Hr LC50 Cyprinus carpio: 0.45 mg/L [semi-static]; 96 Hr LC50 Cyprinus carpio: 7.8 mg/L [static]; 96 Hr LC50 Lepomis macrochirus: 3.5 mg/L [static]; 96 Hr LC50 Oncorhynchus mykiss: 0.24 mg/L [flow-through]; 96 Hr LC50 Oncorhynchus mykiss: 0.59 mg/L [semi-static]; 96 Hr LC50 Oncorhynchus mykiss: 0.41 mg/L [static]

Crustacea (acute 7440-66-6): : 48 Hr EC50 Daphnia magna: 0.139 - 0.908 mg/L [Static]

Algae (acute 7440-66-6): 96 Hr EC50 Pseudokirchneriella subcapitata: 0.11 - 0.271 mg/L [static]; 72 Hr EC50 Pseudokirchneriella subcapitata: 0.09 - 0.125 mg/L [static]

Persistence and degradability: No additional information. **Bioaccumulative potential**: No additional information.

Mobility in soil: No additional information.

Other adverse effects: No additional information.

according to 29CFR1910/1200 and GHS Rev. 3

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Zinc Metal Mossy, Reagent

SECTION 13: Disposal considerations

Waste disposal recommendations:

Contact a licensed professional waste disposal service to dispose of this material. Dispose of empty containers as unused product. Product or containers must not be disposed with household garbage. It is the responsibility of the waste generator to properly characterize all waste materials according to applicable regulatory entities (US 40CFR262.11). Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations. Ensure complete and accurate classification.

SECTION 14: Transport information

US DOT

UN Number:

ADR, ADN, DOT, IMDG, IATA

Not Regulated.

Limited Quantity Exception:

Bulk:

RQ (if applicable): None

Proper shipping Name: Not Regulated.

Hazard Class: None

Packing Group: Not Regulated.

Marine Pollutant (if applicable): No

additional information. **Comments:** None

Non Bulk:

None

RQ (if applicable): None

Proper shipping Name: Not Regulated.

Hazard Class: None

Packing Group: Not Regulated.

Marine Pollutant (if applicable): No

additional information. **Comments:** None

SECTION 15: Regulatory information

United States (USA)

SARA Section 311/312 (Specific toxic chemical listings):

None of the ingredients are listed.

SARA Section 313 (Specific toxic chemical listings):

7440-66-6 Zinc Compounds (N982).

RCRA (hazardous waste code):

7440-66-6 Zinc [Phase 4 LDR Rule - Universal Treatment Standards 2.61 mg/L (wastewater); 4.3 mg/L TCLP (nonwastewater)].

TSCA (Toxic Substances Control Act):

All ingredients are listed.

CERCLA (Comprehensive Environmental Response, Compensation, and Liability Act):

7440-66-6 Zinc 1000 lb final RQ (no reporting of releases of this hazardous substance is required if the diameter of the pieces of the solid metal released is &qt;100 µm).

Proposition 65 (California):

according to 29CFR1910/1200 and GHS Rev. 3

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Zinc Metal Mossy, Reagent

Chemicals known to cause cancer:

None of the ingredients are listed.

Chemicals known to cause reproductive toxicity for females:

None of the ingredients are listed.

Chemicals known to cause reproductive toxicity for males:

None of the ingredients are listed.

Chemicals known to cause developmental toxicity:

None of the ingredients are listed.

Canada

Canadian Domestic Substances List (DSL):

All ingredients are listed.

Canadian NPRI Ingredient Disclosure list (limit 0.1%):

None of the ingredients are listed.

Canadian NPRI Ingredient Disclosure list (limit 1%):

None of the ingredients are listed.

SECTION 16: Other information

This product has been classified in accordance with hazard criteria of the Controlled Products Regulations and the SDS contains all the information required by the Controlled Products Regulations. Note. The responsibility to provide a safe workplace remains with the user. The user should consider the health hazards and safety information contained herein as a guide and should take those precautions required in an individual operation to instruct employees and develop work practice procedures for a safe work environment. The information contained herein is, to the best of our knowledge and belief, accurate. However, since the conditions of handling and use are beyond our control, we make no guarantee of results, and assume no liability for damages incurred by the use of this material. It is the responsibility of the user to comply with all applicable laws and regulations applicable to this material.

GHS Full Text Phrases: None

Abbreviations and Acronyms:

IMDG International Maritime Code for Dangerous Goods.

IATA International Air Transport Association.

GHS Globally Harmonized System of Classification and Labelling of Chemicals.

ACGIH American Conference of Governmental Industrial Hygienists.

CAS Chemical Abstracts Service (division of the American Chemical Society).

NFPA National Fire Protection Association (USA).

HMIS Hazardous Materials Identification System (USA).

WHMIS Workplace Hazardous Materials Information System (Canada).

DNEL Derived No-Effect Level (REACH).

PNEC Predicted No-Effect Concentration (REACH).

CFR Code of Federal Regulations (USA).

SARA Superfund Amendments and Reauthorization Act (USA).

RCRA Resource Conservation and Recovery Act (USA).

TSCA Toxic Substances Control Act (USA).

NPRI National Pollutant Release Inventory (Canada).

DOT US Department of Transportation.

Safety Data Sheet according to 29CFR1910/1200 and GHS Rev. 3

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Zinc Metal Mossy, Reagent

Effective date: 10.24.2014 **Last updated**: 06.19.2015

Appendix E: Accident Report Form

Employee Accident Report

Name	SS#	EMPLOYEEEmp ID#			
Home Address					
Street	Age:	city Employment Status: Full time	zip code Part time	phone	
Job Title		Time in Present	Position Yrs _	Months	
Department		Work Address			
Supervisor			building/room#	phone	
name		building/room#		phone	
Accident Date Time What were you doing and using (tools, che	am/pm L micals, equipment,	etc.) when the accident occurred?	Describe what happened	ed.	
Was this part of your normal job duty?Parts of body affected or injured					
Witnesses:					
name Report prepared by (if different from the in	phone	name	phone		
report prepared by (it different from the fi	jureu employee)	name	phone		
I understand that it is my right to apply for more information regarding workers' compregarding this accident to the Prime Control EMPLOYEE SIGNATURE:	pensation, call the lactors claim admin	New York State Department of Lab istrators.	or. I also authorize rele	ease of medical in	nformation
	SUPER	VISOR/CHARGE PERSON			
This accident was reported to me on		atC	ost Center/Dept #		
IS FURTHER INVESTIGATION REQUIR	(date) RED? Yes l	(time)	5000 10 10 10 10 10 10 10 10 10 10 10 10		
		Supervisor/Charge I	Person Signature	Date	
	HEA	LTH CARE PROVIDER	T.		
Treated by:					
Address		signatu			
name of facility	str	eet city	state	zip code	phone
Hospitalized overnight as inpatient?	yesno	(if emergency room only mark r	10)		
Diagnosis/Assessment					
Parts of body affected					
Reaggravation of previous work injury?		U CONTRA TOTAL N			

Appendix F

Quality Assurance Project Plan (QAPP)
NYSDEC BCP Site Number C241254



IMPACT ENVIRONMENTAL 170 Keyland Court Bohemia, New York 11716 TEL: (631) 268-8800 FAX: (631) 269-1599

QUALITY ASSURANCE PROJECT PLAN

NYSDEC BROWNFIELD CLEANUP PROGRAM

Submitted for:

13-16 to 13-24 Beach Channel Drive
Far Rockaway, New York 11691
New York City Tax Map Designation: Block 15228; Lots 5, 6, and 9

Submitted to:

New York State Department of Environmental Conservation Chief, Site Control Section Region 2, Division of Environmental Remediation 47-40 21st Street Long Island City, NY

Prepared for:

Camber Property Group, LLC 419 Park Avenue South, 4th Floor New York, New York

February 2, 2021 *IEC Project Number:* #15209



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Table 2: Summary of Sample Parameters, Holding Times and Sample Container Requirements

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Appendix B: Project Quality Assurance Officer Resume

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1 INTRODUCTION

Impact Environmental Closures, Inc. (Impact) has been retained by Camber Property Group LLC to prepare a Remedial Investigation Work Plan (RIWP) for a property located at 13-12 to 13-24 Beach Channel Drive, within the Far Rockaway section of Queens County, New York ("Site"), in accordance with the provisions of the New York State Department of Environmental Conservation's Brownfield Cleanup Program.

This Quality Assurance Project Plan (QAPP) provides an outline of the field and laboratory procedures that will be used during the Remedial Investigation (RI) proposed for the Site. The QAPP is used to ensure the accuracy and precision of data collected and interpreted during the investigation in order to meet project requirements. The QAPP identifies procedures for sample collection to maintain consistency among datasets and mitigate the potential for cross-contamination, as well as analytical requirements necessary to allow for independent data validation. A Sampling and Analysis Plan (SAP) identifying methods for sample collection, decontamination, handling and shipping, is provided in the following sections.

This QAPP has been prepared in accordance with United States Environmental Protection Agency (USEPA) *Requirements for Quality Assurance Project Plans*; the USEPA Region II *CERCLA Quality Assurance Manual*, and New York State Department of Environmental Conservation (NYSDEC) *DER-10 Technical Guidance for Site Investigation and Remediation* (May 2010) and subsequent updates.

1.1 Scope and Goals

This QAPP has been prepared to support the remedial investigation activities planned for the Site. The goals of the RI are to delineate the extent of soil, groundwater and soil vapor contamination identified during previous Phase II Environmental Site Assessment activities and collect additional data to support determination of remedial strategies. This QAPP was prepared to provide quality assurance guidelines to be implemented during the RI activities to fulfill the RI goals for the Site. This document may be modified for subsequent phases of investigative work, as necessary. The QAPP provides:

- A means to communicate exactly what is to be done, by whom, and when to the individuals
 executing the various activities;
- A culmination to the planning process that ensures that the program includes provisions for obtaining quality data (e.g., suitable methods of field operations);
- A historical record that documents the investigation in terms of the methods used, calibration standards and frequencies planned, and auditing planned;
- A document that can be used by the Project Manager's and the QA Officer to assess if the activities planned are being implemented and their importance for accomplishing the goal of

quality data;

- A plan to document and track project data and results; and,
- Detailed descriptions of the data documentation materials and procedures, project files, and tabular and graphical reports.

The QAPP is primarily concerned with the quality assurance (QA) and quality control (QC) aspects of the procedures involved in the collection, preservation, packaging, and transportation of samples; field testing; record keeping; data management; chain-of-custody procedures; laboratory analyses; and other necessary matters to assure that the investigation activities, once completed, will yield data whose integrity can be defended.

QA refers to the conduct of all planned and systematic actions necessary to perform satisfactorily all task-specific activities and to provide information and data confidence as a result of such activities. The QA for task-specific activities includes the development of procedures, auditing, monitoring and surveillance of the performance.

QC refers to the activity performed to determine if the work activities conform to the requirements. This includes activities such as inspections of the work activities in the field (e.g., verification that the items and materials installed conform to applicable codes and design specifications). QA is an overview monitoring of the performance of QC activities through audits rather than first time inspections.

1.2 Cleanup Criteria and Laboratory Reporting Limits

The following soil cleanup criteria will be used to evaluate the analytical data collected as part of the RI:

Soil: 6 NYCRR Part 375 Restricted Residential Use Soil Cleanup Objectives (SCOs) listed in

Table 375-6.8(b), Protection of Public Health Restricted Use SCOs and the Protection of

Groundwater SCOs listed in Table 375-6.8(b).

The following groundwater cleanup criteria will be used to evaluate the analytical data collected as part of the RI:

Groundwater: 6 NYCRR Part 703 Groundwater Quality Standards and the NYSDEC Division of Water

Technical and Operational Guidance Series (TOGS) 1.1.1, Ambient Water Quality Stand-

ards and Guidance Values

The following criteria will be used for evaluation of the soil vapor and indoor air quality sample analytical data collected as part of the RI:

Soil Vapor/Indoor: NYSDOH Final Guidance for Evaluating Soil Vapor Intrusion in the State of New York and

Air Quality Subsequent Final Guidance Updates Air Guidance Values and Matrices.

For 1,4-dioxane and Per- and Polyfluoroalkyl substances (PFAS), NYSDEC issued sampling guidance in June 2019. More recently, NYSDEC issued Sampling, Analysis and Assessment of PFAS under NYSDEC's Part 375 Remedial Program Guidance dated October 2020. Sampling procedures, PFAS guidance values, QA/QC standards and reporting

objectives for these emerging contaminates will be implemented within this QAPP based on said NYSDEC documents. Soil vapor sampling for 1,4-Dioxane and PFAS are not required.

The environmental analytical laboratory selected for this RI must have reporting limits that are low enough to meet the above referenced cleanup standard and QA/QC objectives specified in NYSDEC DER-10 Remedial Program Guidance. As part of project planning and throughout the project life cycle, the environmental consultant will maintain close communications with the contracted laboratory to convey the necessity for establishing and achieving data reporting goals. Additional information regarding the contracted lab and reporting limits are provided in *Section 4.6* of this document.

2 QAPP ORGANIZATION AND RESPONSIBILITY

The principal organizations involved in verifying achievement of data collection goals for the Site include: the NYSDEC, NYSDOH, Applicant, Consultant, drilling subcontractor(s), independent environmental laboratory and the independent third-party data validator. Roles, responsibilities, and required qualifications of these organizations are discussed in the following subsections.

2.1 NYSDEC and NYSDOH

It is the responsibility of the NYSDEC, in conjunction with NYSDOH, to review the RIWP and supporting documents, for completeness and conformance with the site-specific cleanup objectives and to make a decision to accept or reject these documents based on this review. The NYSDEC also has the responsibility and authority to review and approve all QA documentation collected during brownfield cleanup construction and to confirm that the QAPP was followed.

2.2 Applicant

Camber Property Group LLC ("Applicant") will be responsible for complying with the QA requirements as specified herein and for monitoring and controlling the quality of the Brownfield cleanup construction either directly or through their designated environmental consultant and/or legal counsel. The Applicant will also have the authority to a select Remedial Action Contractor(s) to assist them in fulfilling these responsibilities. The designated Project Manager is responsible for implementing the project and has the authority to commit the resources necessary to meet project objectives and requirements.

2.3 Environmental Consultant

Impact is the prime consultant on this project and is responsible for the performance of the services required to implement each phase of the RIWP, including, but not limited to, field operations, laboratory testing, data management, data analysis and reporting. Any one member of Impact's staff may fill more than one of the identified project positions (e.g., field team leader and site safety and health officer). The various quality assurance, field, laboratory, and management responsibilities of key project personnel are defined below and the resumes are provided in **Appendix A**.

Impact Project Manager (PM): Chris Connolly

The Impact PM has the responsibility for ensuring that the project meets the Work Plan objectives. The PM will report directly to the by Camber Property Group LLC Project Coordinator and the NYSDEC/NYSDOH Project Coordinators and is responsible for technical and project oversight. The PM will:

• Define project objectives and develop a detailed work plan schedule.

- Establish project policy and procedures to address the specific needs of the project as a whole, as well as the objectives of each task.
- Acquire and apply technical and corporate resources as needed to assure performance within budget and schedule constraints.
- Develop and meet ongoing project and/or task staffing requirements, including mechanisms to review and evaluate each task product.
- Review the work performed on each task to assure its quality, responsiveness, and timeliness.
- Review and analyze overall task performance with respect to planned requirements and authorizations.
- Review and approve all deliverables before their submission to NYSDEC.
- Develop and meet ongoing project and/or task staffing requirements, including mechanisms to review and evaluate each task product.
- Ultimately be responsible for the preparation and quality of interim and final reports.
- Represent the project team at meetings.

Impact Field Team Leader: Leif Robertson

The Field Team Leader (FTL) has the responsibility for implementation of specific project tasks identified at the Site and is responsible for the supervision of project field personnel, subconsultants, and subcontractors. The FTL reports directly to the Project Manager. The FTL will:

- Define daily work activities.
- Orient field staff concerning the project's special considerations.
- Monitor and direct subcontractor personnel.
- Review the work performed on each task to ensure its quality, responsiveness, and timeliness.
- Assure that field activities, including sample collection and handling, are carried out in accordance with this QAPP.

For this project, the FTL will also serve as the Site Safety and Health Officer (SSHO). As such, he is responsible for implementing the procedures and required components of the Site Health and Safety Plan (HASP), determining levels of protection needed during field tasks, controlling site entry/exit, briefing the field team and subcontractors on site-specific health and safety issues, and all other responsibilities as identified in the HASP.

Impact Field Personnel:

The field personnel hold a minimum of a bachelor's degree in a relevant natural or physical science or engineering. The field personnel will complete the collection of environmental samples from the Site in accordance with the requirements of the remedial investigation work plan and the QAPP and oversee subcontractor work. The field personnel will:

- Implement sample collection protocols in accordance with applicable procedures for soil, soil vapor and groundwater sample collection.
- Ensure quality control procedures are being implemented.
- Ensure adherence to and successful completion of RIWP tasks.
- Oversee subcontractors to ensure field work is completed in accordance with the RAWP and QAPP.
- Record field notes and provide daily updates on work progress.

2.4 Quality Assurance (QA) Responsibilities

The QA Officer will have direct access to corporate executive staff as necessary, to resolve any QA dispute, and is responsible for auditing the implementation of the QA program in conformance with the demands of specific investigations and Impact policies, and NYSDEC requirements. The QA Officer has sufficient authority to stop work on the investigation as deemed necessary in the event of serious QA issues. The resume for the QA Officer is provided in **Appendix B**.

Impact Project QA Officer: Michael Bluight, PG

Specific function and duties include:

- Performing QA audits on various phases of the field operations.
- Reviewing and approving QA plans and procedures.
- Providing QA technical assistance to project staff.
- Reporting on the adequacy, status, and effectiveness of the QA program on a regular basis to the Project
 Manager for technical operations.
- Responsible for assuring third party data review of all sample results from the analytical laboratory.

2.5 Field Responsibilities

Impact field staff for this project is drawn from a pool of qualified resources. The Project Manager will use staff to gather and analyze data, and to prepare various task reports and support materials. The designated technical team members are experienced professionals who possess the degree of specialization and technical competence required to perform the required work effectively and efficiently. The resumes for field personnel are provided in

Appendix C.

3 QUALITY ASSURANCE OBJECTIVES FOR MEASUREMENT DATA

The overall objectives and criteria for assuring quality for this effort are discussed below. This QAPP addresses how the acquisition and handling of samples and the review and reporting of data will be documented. The objectives of this QAPP are to address the following:

- The procedures to be used to collect, preserve, package, and transport groundwater samples.
- Field data collection.
- Record keeping.
- Data management
- Chain-of-custody procedures.
- Precision, accuracy, completeness, representativeness, decision rules, comparability and level of quality control effort conformance for sample analysis and data management by Alpha Analytical under EPA analytical methods.

3.1 Level of QC Effort for Sample Parameters

Method blank, field duplicate, laboratory duplicate, laboratory control, standard reference materials (SRM) and matrix spike samples will be analyzed to assess the quality of the data resulting from the field sampling and analytical programs. QC samples are discussed below.

- Method blank samples are generated within the laboratory and used to assess contamination resulting from laboratory procedures.
- Duplicate samples are analyzed to check for sampling and analytical reproducibility.
- MS/MSD and MS/Duplicate samples provide information about the effect of the sample matrix
 on the digestion and measurement methodology. Depending on site-specific circumstances, one
 MS/MSD or MS/Duplicate should be collected for every 20 or fewer investigative samples to be
 analyzed for organic and inorganic chemicals of a given matrix.
- Equipment field blank samples are used to determine if specific materials utilized in sample collection can cross contaminate the sample.

The general level of QC effort will be one field (blind) duplicate and one equipment field blank (when non-dedicated equipment is used) for every 20 or fewer investigative samples of a given matrix. Additional sample volume will also be provided to the laboratory to allow site-specific MS/MSD or MS/Duplicate for every 20 or fewer investigative samples of a given matrix. One trip blank consisting of distilled, deionized water will be included along with each sample delivery group of aqueous VOC samples. Equipment field blanks will be collected at a frequency of 1 per day for all PFAS and 1,4-dioxane sampling for each matrix. Number of all QA samples are included in Table 1.

4 SAMPLING AND ANALYSIS PLAN

The selection, rationale and map for the RI sampling program are discussed and presented in Plate 7 of the RIWP. Methods and protocols to be used for collection of environmental samples (i.e., soil, groundwater, and soil vapor) for this investigation are described in the Impact Field Operating Procedures (FOPs) presented in **Appendix D**. The overall investigative planning process pursues to target specific matrices in locations of potential concern based on current/historical uses and/or site conditions. Once a sample group meets data quality objectives, analysis is considered valid and used to determine if values exceed state designated guidance values. Based on data evaluation the generated conceptual site model can inform the remedial strategy to better develop site-specific remedial action objectives.

The number and types of environmental samples to be collected are summarized on **Table 1.** Sample parameter lists, holding times and sample container requirements are summarized on **Table 2.** The sampling program and related site activities are discussed below. To the extent allowed by existing physical conditions at the facility, sample collection efforts will adhere to the specific methods presented herein. If alternative sampling locations or procedures are implemented in response to facility specific constraints, each will be selected on the basis of meeting data quality objectives. Such alternatives will be approved by NYSDEC before implementation and subsequently documented for inclusion in the project file.

4.1 Custody Procedures

Sample custody is controlled and maintained through the chain-of-custody procedures. Chain of custody is the means by which the possession and handling of samples will be tracked from the source (field) to their final disposition, the laboratory. A sample is considered to be in a person's custody if it is in the person's possession or it is in the person's view after being in his or her possession or it was in that person's possession and that person has locked it in a vehicle or room. Sample containers will be cleaned and preserved at the laboratory before shipment to the Site. The following section and FOPs for Sampling, Labeling, Storage, and Shipment, located in Appendix B, describe procedures for maintaining sample custody from the time samples are collected to the time they are received by the analytical laboratory.

4.2 Sample Storage

Samples are stored in secure limited-access areas. Walk-in coolers or refrigerators are maintained at 4 degrees Celsius (°C), or as required by the applicable regulatory program. The temperatures of all refrigerated storage areas are monitored and recorded a minimum of once per day. Deviations of temperature from the applicable range require corrective action, including moving samples to another storage location if necessary.

4.3 Sample Custody

Sample custody is defined by this document as when any of the following occur:

- It is in someone's actual possession.
- It is in someone's view after being in his or her physical possession.
- It was in someone's possession and then locked, sealed or secured in a manner that prevents unsuspected tampering.
- It is placed in a designated and secured area.

Samples are removed from storage areas by the sample custodian or analysts and transported to secure laboratory areas for analysis. Access to the laboratory and sample storage areas is restricted to laboratory personnel and escorted visitors only; all areas of the laboratory are therefore considered secure. If required by the applicable regulatory program, internal chain-of-custody is documented in a log by the person moving the samples between laboratory and storage areas.

Laboratory documentation used to establish COC and sample identification may include the following:

- Field COC forms or other paperwork that arrives with the sample.
- The laboratory COC.
- Sample labels or tags are attached to each sample container.
- Sample custody seals.
- Sample preparation logs (i.e., extraction and digestion information) recorded in hardbound laboratory books that are filled out in legible handwriting and signed and dated by the chemist.
- Sample analysis logs (e.g., metals, GC/MS, etc.) information recorded in hardbound laboratory books that are filled out in legible handwriting and signed and dated by the chemist.
- Sample storage log (same as the laboratory COC).
- Sample disposition log, which documents sample disposal by a contracted waste disposal company.

4.4 Sample Tracking

All samples are maintained in the appropriate coolers prior to and after analysis. The analysts remove and return their samples as needed. Samples that require internal COC are relinquished to the analysts by the sample custodians. The analyst and sample custodian must sign the original COC relinquishing custody of the samples from the sample custodian to the analyst. When the samples are returned, the analyst will sign the original COC returning sample custody to the sample custodian. Sample extracts are relinquished to the instrumentation analysts by the preparatory analysts. Each preparation department tracks internal COC through their logbooks/spreadsheets. Any change in the sample during the time of custody will be noted on the COC (e.g., sample breakage or depletion).

4.5 Field Instrument Calibration

This section describes the calibration procedures and the frequency at which these procedures will be performed for instruments.

4.5.1 Instrument Calibration and Tuning

Calibration of instrumentation is required to ensure that the analytical system is operating correctly and functioning at the proper sensitivity to meet established reporting limits. Each instrument is calibrated with standard solutions appropriate to the type of instrument and the linear range established for the analytical method. The frequency of calibration and the concentration of calibration standards is determined by the manufacturer's guidelines, the analytical method, and/or laboratory's internal Quality Assurance Plan.

4.5.2 Field Instrument Calibration

Calibration of the field instruments will be completed prior to each day's use in accordance with the manufacturer's instructions. The field equipment will be maintained, calibrated, and operated in a manner consistent with the manufacturer's guidelines and standard use methods. Quantitative field measurements will be limited to organic vapor readings (Photoionization Detector). Records of calibration, repair or replacement will be filed and maintained by the Field Team Leader.

4.6 Analytical Procedures

A single laboratory will be utilized for analysis of the soil, groundwater and soil vapor samples collected during the RI field sampling activities. The selected analytical laboratory for this project is Alpha Analytical of Westborough, Massachusetts. Alpha is certified by the NYSDOH Environmental Laboratory Approval Program (ELAP) Number 11148. The laboratory analyses will be in accordance with the most recent version of the NYSDEC Analytical Services Protocol (ASP) and the laboratory's internal Quality Assurance Plan. The lab will provide a Category B data deliverable.

The analytical methods Alpha will use for samples collected to delineate contaminants during this RI include:

Analytical Methods for Soil Samples		
USEPA Method 8260C/5035	Target Compound List (TCL) Volatile Organic Compounds (VOCs) + Tentatively Identified Compounds (TICs)	
USEPA Method 8270D	TCL Semi Volatile Organic Compounds (SVOCs)+ TICs	
USEPA Method 537.1 (M) LC-MS/MS	NY Per- and Polyfluoroalkyl Substances (PFAS) Analyte List	
USEPA 8270D-SIM	1,4-Dioxane	
USEPA 8082A	TCL Polychlorinated biphenyls (PCBs)	
USEPA 8081B	TCL Pesticides	
7196A	Hexavalent Chromium	
9010C/9012B	Total Cyanide	
6010D	TAL Metals	
7471B	Total Mercury	

Analytical Methods for Groundwater Samples	
USEPA Method 8260C	TCL VOCs + TICs
USEPA Method 8270D SIM LVI	TCL SVOCs + TICs
USEPA Method 537.1 (M) LC-MS/MS	NY PFAS Analyte List
USEPA 8270 -SIM	1,4-Dioxane
USEPA 8082A (LVI)	TCL PCBs
USEPA 8081B	TCL Pesticides
7196A	Hexavalent Chromium
9010C/9012B	Total Cyanide
6020B	TAL Metals
7470A	Total Mercury

Sim – Selective Ion Monitoring

LVI - Large Volume GC Injection Port

Analytical Methods for Soil Vapor/Air Samples	
USEPA Method TO-15	VOCs

All other reporting and deliverables (i.e. waste characterization samples, geochemistry data for remedial action evaluation) will be in accordance with Standard Laboratory Procedure.

Alpha has provided a series of tables that contain the analytical parameters for soil and soil vapor with the applicable reporting limits, method detection limits, containers and hold times. The Alpha tables are provided in **Appendix E**. Alpha has also provided the SOP for the PFAS analysis which is provided in **Appendix F**.

4.7 Data Validation/ Usability Evaluation

The analytical laboratory data package will be validated by Christina Rink-Ashdown with Laboratory Data Consultants, Inc of Carlsbad, CA (LDC, Inc.), an independent/third-party data validator subcontractor, in accordance with the NYSDEC Division of Environmental Remediation DER-10, Appendix 2B(b) DEC Analytical Services Protocol Category B Data Deliverable. Refer to **Appendix G** for resume of the third-party data validator.

4.7.1 Procedures Used to Evaluate Data Usability

The sample analytical data for each sample matrix shall be evaluated and include, but are not limited to:

- Lab Report Narrative Review
- Data Package Completeness and COC records
- Sample Preservation and Holding Times
- Initial and Continuing Calibration
- QC Blanks
- Laboratory Control Sample/Laboratory Control Sample Duplicate (LCS/LCSD)
- Matrix Spike/Matrix Spike Duplicates (MS/MSD)
- Surrogate Spikes
- Internal Standard Response and Retention Times
- Laboratory Duplicates
- Field Duplicates
- Raw Data (chromatograms), Calculation Checks and Transcription Verifications
- Reporting Limits

4.7.2 Data Usability Summary Report (DUSR)

The DUSR will provide an evaluation of the analytical data to determine whether the data meets the criteria of a NYSDEC ASP Category B data deliverable and meets the data quality objectives for the project.

4.7.3 Data Submissions/ Electronic Data Deliverables

The Analytical Services Protocol (ASP) Category B data packages and an electronic data deliverable (EDD) will be provided by the laboratory after receipt of a complete sample delivery group. The Project Manager will immediately arrange for archiving the results and preparation of result tables. These tables will form the database for assessment of the site contamination condition. Each EDD deliverable must be formatted using a Microsoft Windows operating system and the NYSDEC data deliverable format for EQuIS. To avoid transcription errors, data will be loaded directly into the ASCII format from the laboratory information management system. If this cannot be accomplished, the consultant should be notified via letter of transmittal indicating that manual entry of data is required for a particular method of analysis. All EDDs must also undergo a QC check by the laboratory before delivery. The original data, tabulations, and electronic media are stored in a secure and retrievable fashion. The Project Manager or Task Manager will maintain close contact with the QA reviewer to ensure all non-conformance issues are acted upon prior to data manipulation and assessment routines. Once the QA review has been completed, the Project Manager may direct the Team Leaders or others to initiate and finalize the analytical data assessment.



Table 1. Remedial Investigation Analytical Program Summary 13-16 to 13-24 Beach Channel Drive, Queens, New York

	Number of Samples and QA/QC Blanks					
Sample Media	Total Field Samples	Duplicates	MS/MSD Samples	Field Blanks	Trip Blanks	Analyses
Air/ Soil Vapor	6	1	0	0	0	VOCs USEPA Method TO-15
Soil Samples (6 shallow, 6 intermediate, and 2 deep soil samples)	14	1	1	1	1/Cooler Containing Volatiles	TCL VOCs plus TICs, TCL SVOCs plus TICs, TCL PCBs, TCL Pesticides, TAL Metals, Total Cyanide, Hexavalent Chromium
Step-out/exploratory soil samples (8 shallow, 8 intermediate and 8 deep and 2 exploratory soil samples)	26	2	2	2	1/Cooler Containing Volatiles	TCL VOCs plus TICs
Soil Samples (Emerging Contaminants)	6 (6 of 40 soil samples)	1	1	1 per day	0	NYSDEC PFAS Analyte List and 1,4-dioxane
Groundwater Samples	11	1	1	1	1/Cooler Containing Volatiles	TCL VOCs plus TICs, TCL SVOCs plus TICs, TCL PCBs, TCL Pesticides, TAL Metals, Total Cyanide, Hexavalent Chromium
Groundwater Samples (Emerging Contaminants)	4 (4 of 11 Groundwater Samples)	1	1	1 per day	0	NYSDEC PFAS Analyte List and 1,4-dioxane
NOTES	NAC NA-tuin Cuile-	·	CVOC- C: V-l-t			DCPs Polychlorinated Pinhonyls

NOTES:

MS = Matrix Spike

MSD = Matrix Spike Duplicate

TAL = Target Analyte List
TCL = Target Compound List

SVOCs = Semi Volatile Organic Compounds

TICs - Tentatively Identified Compounds

PCBs - Polychlorinated Biphenyls

ely Identified Compounds VOCs = Volatile Organic Compounds

 $\label{eq:NYSDEC-New York State Department of Environmental Conservation} \label{eq:NYSDEC-New York State Department of Environmental Conservation}$

PFAS - Per and Polyfluoroalkyl Substances

Table 2: Summary of Sample Parameters, Holding Times and Sample Container Requirements

Table 2. Summary of Sample Parameters, Holding Times and Sample Container Requirements 13-16 to 13-24 Beach Channel Drive, Queens, New York

Sample Matrix	Test Method	Parameters	Containers	Preservation	Holding Times
Soil - Gas (air) Analysis	USEPA Compendium TO-15	VOCs	6-Liter Summa Canister	Summa - NA	15 Days
	USEPA SW846 Method 5035A/8260C	TCL VOC+TICs	Terra Core	Water, 4 °C	48 Hours/14 Days*
	USEPA SW846 Method 8270D	TCL SVOCs+TICs	4oz glass jar	4 °C	14 Days (extraction)
	USEPA SW846 Method 8082A	TCL PCBs	4oz glass jar	4 °C	14 Days (extraction)
Soil	USEPA SW846 Method 8081B	TCL Organochlorine Pesticides	4oz glass jar	4 °C	14 Days (to extraction)
	USEPA Method 6010D	TAL Metals	4oz glass jar	4 °C	180 Days
	USEPA Method 7471B	TAL Metal - Mercury	4oz glass jar	4 °C	28 Days
	USEPA Method 7196A	Hexavelent Chromium	4oz glass jar	4 °C	30 Days
	USEPA Method 9010C	Total Cyanide	4oz glass jar	4 °C	14 Days
	Modified USEPA Method 537.1	PFAS	8oz HDPE Container	4 °C	14 days to Extraction, and 40 days After Extraction
	USEPA Method 8270 SIM	1,4-Dioxane	4oz glass jar	4 °C	14 Days (extraction)

^{*} The holding time for VOCs is soil is 48-hours, until the sample is aliquoted and extruded into two (2) sealed vials with DI water and frozen to -7°C and one (1) sealed vial with methanol, then the hole time is extended to 14 days.

Table 2. Summary of Sample Parameters, Holding Times and Sample Container Requirements
13-16 to 13-24 Beach Channel Drive, Queens, New York

Sample Matrix	Test Method	Parameters	Containers	Preservation	Holding Times
	USEPA SW846 Method 8260C	TCL VOC+TICs	3 - 40ml VOA Vials	HCL, pH<2, 4 °C	14 days
	USEPA SW846 Method 8270D	TCL SVOCs+TICs	2 - 1000 ml glass	4 °C	7 Days (extraction)
	USEPA SW846 Method 8082A	TCL PCBs	2 - 1000 ml glass	4 °C	7 Days (extraction)
	USEPA SW846 Method 8081B	TCL Pesticides	2 - 500 ml glass	4 °C	7 Days (extraction)
	USEPA Method 6010D	Total TAL Metals	500 ml plastic	HNO3, pH<2, 4 °C	180 Days
	USEPA Method 7471B	TAL Metal - Total Mercury	500 ml plastic	HNO ₃ , pH<2, 4 °C	28 Days
Groundwater	Lab Sample Filtration	TAL Dissolved Metals	-	-	Filtration in Lab within 24 hours
	USEPA Method 3015A	Acid Digestion for Filtered TAL Metals	-	-	After Filtration
	USEPA Method 6010D	Dissolved TAL Metals	500 ml plastic	4 °C	180 Days after digestion
	USEPA Method 7471B	TAL Metal - Dissolved Mercury	500 ml plastic	4 °C	28 Days after digestion
	USEPA Method 7196A	Hexavelent Chromium	500 ml plastic	4 °C	24 Hours
	USEPA Method 9010C	Total Cyanide	250 ml plastic	NaOH, pH>12, 4 °C	14 Days
	Modified USEPA Method 537.1	PFAS	2 - 250 ml HDPE	Trizma, 4 °C	14 Days (extraction)
	USEPA Method 8270D-SIM w/lsotope Dilution	1,4-Dioxane	2 - 1000 ml glass	4 °C	7 Days (extraction)



CHRISTOPHER CONNOLLY

PROJECT MANAGER



EDUCATION

Bachelor of Science, Music Technology and Studio Systems Design-, University of Rhode Island (2008)

EXPERIENCE

2015-Present IMPACT ENVIRONMENTAL Project Manager

- Conducts visual inspections and produces Phase I Environmental Site Assessments.
- Arranges, organizes, and oversees Phase II Environmental Site Assessments and Limited Subsurface Investigations.
- Arranges and oversees small, moderate and large-scale remediation projects, including communication with disposal facilities, subcontractors, Clients and regulatory agencies, as applicable.
- Produces Work Plans, Final Engineering Reports and other associated regulatory reports.
- Conducts various methods of soil and groundwater sampling, groundwater monitoring, well purging & sampling, and soil vapor sampling.

2010-2015 **Laurel Environmental Associates.** Environmental Scientist

- Conducts visual inspections of Phase I & II Environmental Site Assessments.
- Writes Transaction screen and Phase I, II, and III Environmental Site Assessments, Remedial Action Work Plans (RIWP), Environmental Assessment Statements (EAS) and Supplemental Studies reports, as well as New York City Office of Environmental Remediation Voluntary Cleanup Program Reports.
- Assists in Phase II site operations.
- Organizes, arranges logistics, and oversees small to large scale remediation projects, with accurate communication with disposal facility, trucking, developer and regulatory agency required. Conducts associated CAMP monitoring and writes Daily Reports.
- Conducts various methods of soil and groundwater sampling, groundwater monitoring, well purging & sampling, and soil vapor sampling.
- Experience operating and assisting with truck-mounted, track-mounted and portable Geoprobe® machines and tooling.
- Conducts ground penetrating radar, magnetic and utility surveys.
- Completed OSHA 24-Hour HAZWOPER Training program.
- Conducts Nuisance Noise and Excessive Vibration monitoring assessments.
- Project manages numerous NYC OER Voluntary Cleanup Projects, dealing with the remediation and continuing use of Brownfields sites.

KEY PROJECTS

- KENSINGTON ROAD, Bronxville, NY.
 - 1.63-acre New York State
 Department of Environmental
 Conservation Brownfields Cleanup
 Program (BCP) Remediation:
 Oversight, Reporting, Agency, client and developer coordination.
- RCRA Closure projects, activities and reports.
- CEQR EAS Reports, OER Work Plans, OER Final Engineering Reports.
- Gasoline Station Portfolio Phase I and II ESAs

- OSHA Health and Safety for Hazardous Waste Site Investigation Personnel Certification, 40 Hours
- OSHA Construction Safety Curse, 10 Hours



MICHAEL BLUIGHT, P.G.

Technical Manager



EDUCATION

Masters of Science, Hydrogeology SUNY at Stony Brook (In Progress) Bachelor of Science, Geology. SUNY at Stony Brook (2000)

EXPERIENCE

2013-Present **IMPACT ENVIRONMENTAL** *Technical Manager/Quality Service Manager/Project Manager*

- Directed environmental related tasks related to the redevelopment of New York State Voluntary Cleanup Program and Inactive Hazardous Waste sites for future retail and commercial use
- Managed a portfolio of retail petroleum/automotive service station remediation projects in the metropolitan New York City and Long Island regions.
- Constructed and implemented interim and operable unit remedial measures and performed contaminant migration investigations for New York State Superfund projects.
- Devised and implemented bioremediative and in-situ chemical oxidation subsurface injection remedial work for petroleum and chlorinated solvent impacted sites.
- Provided project manager support related to technical design and construction of soil, soil vapor and groundwater remediation systems.
- Mentored and provided support for junior-level staff related to Federal, State and local environmental regulations, protocols and procedures, remediation system design and technical specifications, regulatory report writing, contaminate transport and flow modeling software, and field work protocols and procedures.
- Conducted ultiple UST removal/replacement assessments, closures and remedial actions, Phase I and Phase II environmental site assessments and investigation and soil vapor intrusion investigation projects in the metropolitan New York City and Long Island regions.

2000-2013 Experience as a Project Manager and Senior Hydrogeologist at leading metropolitan New York based environmental and engineering firms

KEY PROJECTS

- Dzus Fasteners (NYS Inactive Hazardous Waste Disposal) Site, West Islip, NY
- Melody Cleaners (NYS Voluntary Cleanup Program) Site, East Meadow, NY
- Gerdau Steel/Anaconda Copper Site, Perth Amboy, NJ
- Cerro Wire (NYS Inactive Hazardous Waste Disposal) Site, Syosset, New York
- Sid Harvey Industries (NYS Voluntary Cleanup Program) Site, Valley Stream, New York
- General Dynamics Armament and Technical Products Site, Glen Cove, New York
- Fujicolor Processing, Inc. Sites, Nationwide locations
- Fairchild Republic Aircraft Main Plant (NYS Inactive Hazardous Waste Disposal) Site,
 Farmingdale, New York
- Commercial Envelope Manufacturing (NYS Inactive Hazardous Waste Disposal) Site, Deer Park, New York

ORGANIZATIONS

- National Ground Water Association
- Long Island Association of Professional Geologists
- New York State Council of Professional Geologists

- OSHA 40-hour HAZWOPER Training
- OSHA 10-hour Construction Safety
- CPR & First Aide Training
- Undergraduate Excellence in Teaching SUNY @ Stony Brook
- Professional Geologist NYS#000872



KEVIN KLEAKA, P.G.

Executive Vice President/Senior Environmental Scientist



EDUCATION

State University of New York at Plattsburg,

Bachelor of Science in Environmental Science, 1995 Applied Environmental Science Program

EXPERIENCE

(1997-Present) – **IMPACT ENVIRONMENTAL CLOSURES Inc.,** *Executive Vice President, Senior Environmental Scientist*

- Principally responsible for managing environmental assessment, investigation, construction and remediation projects in commercial and industrial markets for lenders, real estate investment/development firms, construction firms and government agencies.
- Manage Phase I and II Environmental Site Assessments, State Spill Investigation and Remediation, County and Federal Underground Injection Control Programs, State & City Voluntary/Brownfield Cleanup Programs, State & Federal Superfund Sites, Brownfield Environmental Restoration Programs, Federal RCRA Closure, City E-Designation Projects.
- Responsible for environmental compliance of construction projects for waste management.
- Quality control of work products and deliverables.
- Supervise staff of geologists, hydrogeologists, engineers, environmental scientists, and environmental technicians to develop and implement sampling and analysis plans, quality assurance programs, remedial action plans.
- Provide expert witness testimony/fact statements and support in litigation cases involving soil, air and/or groundwater pollution.

(1995-1997) – **WYETH AYERST LABORATORIES**, Chemist worked in chromatographic separations division performing quality assurance analysis.

 Performed laboratory procedures and analyses in accordance with USFDA analytical test methods by liquid, gas, and thin layer chromatography.

KEY PROJECTS

- East Side Access MTA LIRR
- Melody Cleaners
- · ExxonMobil Spill- Valley Stream, NY
- Spartan Petroleum
- JFK 1020, Runway 13R-31L
- · Rheingold Brewery Redevelopment Project
- WTC Greenwich Street Corridor Reconstruction
- Yankee Stadium Macomb's Park

ORGANIZATIONS

- New York City Brownfield Partnership
- New Partners for Community Revitalization
- ASTM Committee
- National Groundwater Association
- Environmental Bankers Association
- Vapor Intrusion Network
- Long Island Geologist Association
- Environmental Consulting Professionals
- Environmental Insurance Professionals

- Licensed Profession Geologist (NYS# 000735)
- Gold Certified Brownfield Professional 2012
- Advanced Tools for In-Situ Remediation Workshop
- ASTM Technical & Professional Training for Assessment of Vapor Intrusion into Structures of Property & New York State Department of Health, Vapor Intrusion Training
- New York Precision Equipment Global Survey Positioning Training
- MTBE & TBA Comprehensive Site Assessment and Successful Groundwater Remediation
- Environmental Data Resources, Due Diligence Workshop
- Advanced Technologies for Accelerated Natural Attenuation
- Eophysical Survey Systems, Theory and Practice of Applying Subsurface Interface Radar in Engineering and Geophysical Investigation.
- 40-Hour Occupational Safety & Health Administration

GREG MENDEZ-CHICAS

SENIOR PROJECT MANAGER



EDUCATION

Bachelor of Science, Environmental Science, SUNY at Plattsburgh (2007)

EXPERIENCE

IMPACT ENVIRONMENTAL, 2009-Present, Senior Project Manager

- Direct and supervise staff of geologists, hydrogeologists, and environmental engineers in development and implementation of environmental assessments, investigations, construction and remediation projects in commercial and industrial markets for lenders, real estate investment/development firms, construction firms and government agencies.
- · Provide regulatory and technical guidance and strategy
- Manage Phase I and Phase II assessments, State Spill
 Investigation and Remediation, County and Federal
 Underground Injection Control Programs, State & City
 Voluntary/Brownfield Cleanup Programs, State & Federal
 Superfund Sites, Brownfield Environmental Restoration
 Programs, Federal RCRA Closure, City E-Designation Projects.
- Quality control of project budgets, efficiencies, and profitability
- Maintain key relationships with existing clients, and cultivate the development of new business and growth.

APEX COMPANIES, 2007-2009, Environmental Scientist

- Prepared Phase I Environmental Assessments (ESAs) in general conformation with ASTM Practice E-1527-05 and USEPA ALL Appropriate Inquiries (AAI).
- Performed various aspects of Phase II scopes of work for commercial and industrial properties.
- Conducted microbiological sampling/investigations at a medical equipment manufacturing facility
- Preparation and implementation of sub-slab soil vapor sampling plans at former utilized gasoline and/or dry cleaning operations.

KEY PROJECTS

- LIRR/MTA East Side Access (five contracts)
- Briarcliff Manor
- Saint Barnabas Hospital Expansion

- OSHA 40-hour HAZWOPER Training
- OSHA 8-hour Refresher (2007-to-present)
- OSHA 10-hour Construction Training (2016)
- New York State Licensed Asbestos Inspector (2007-to-present)
- NYSDEC Erosion & Sediment Control Training (2016)
- Amtrak (2016) & LIRR Roadway Safety Training (2017)
- New York City Office of Environmental Remediation – Certified Brownfield Professional (Silver Certification)

DANIEL FRUHAUF

Associate Project Manager



EDUCATION

Bachelor of Arts, Ecosystems & Human Impact. SUNY at Stony Brook (2012)

EXPERIENCE

2014-Present IMPACT ENVIRONMENTAL Associate Project Manager

- Responsible for management and logistical coordination of investigative and remedial tasks, schedule and implementation quality on very large to small clean-up projects within NYC, Long Island, NY and East Chicago, Indiana
- Developed and prepared various environmental planning documents approved by regulators including, Remedial Action Work Plans, Corrective Measures Implementation Work Plan, Health and Safety Plans, Waste Characterization Work Plans, Community Air Monitoring Plans, Phase II ESA Work Plans, Underground Storage Tank Removal Work Plan, etc.
- Responsible for developing complex methods of tracking and incorporating innovative technology to measure remedial completion for adequate reporting purposes
- Assembled proposals, work orders, change orders and general contracts for multiple clients
- Performed complex Phase II Assessments and other Subsurface Investigations to detect and target specific contaminants for delineation purposes.
- Designed and constructed various remedial systems including sub-slab depressurization systems, soil vapor extraction systems.
- Conducted, presented and attended multiple regulator meetings with USEPA, NYSDEC, NYC OER.
- Provided a professional attitude of always learning, exploring new methods and teaching along the way

2013-2014 SOVEREIGN CONSULTING Inc. Environmental Scientist

- Collected field data, soil, groundwater samples from various NYSDEC regulated Spill Sites and other hazardous waste sites
- Assisted in construction and design of SVE, SSDS and product skim systems at multiple tri-state clean-up projects
- Prepared various reporting components specific to NYSDEC Quarterly Monitoring Reports, Phase I ESA, Phase II ESA and owner liability risk assessments
- Provided contractor oversight and split sampling with multiple environmental contractors on various clean-up and development projects
- Engaged in various meetings with regulators as to develop cleanup strategies for complex projects

KEY PROJECTS

- Former Du Pont East Chicago Facility RCRA CA Clean-up Project, East Chicago, IN
- Independent Metal Strapping NYSDEC/RCRA Closure, Roslyn, NY
- Multiple MTA/ LIRR Development Projects NYC, LI NY
- Saint Barnabas Hospital Development Project – Bronx NY
- Multiple NYC OER regulated Commercial Development Projects - NYC

- HAZWOPER 40hr + 8hr Refreshers
- OSHA 10hr Construction Safety
- OSHA 30hr Construction Safety
- Transportation Worker Identification Card (TWIC)
- NYC Office of Environmental Remediation (OER) Trained
- MTA/Amtrak Track Safety
- MTA/NYC Transit Track Safety
- LIRR Safety Blue Card
- NYSDEC SWPPP Certified Inspector
- · Certified NYSDOL Asbestos Inspector

LEIF ROBERTSON

ASSOCIATE PROJECT MANAGER



EDUCATION

Bachelor of Science, Geology, SUNY at Cortland (2012)

EXPERIENCE

2017-Present IMPACT ENVIRONMENTAL Associate Project Manager

- Prepares Phase I and Phase II Environmental Site Assessments (ESAs) in general conformance with ASTM Practice.
- Prepares Field Sampling Plans for NYSDEC Spill Sites.
- Carry out environmental investigative work including soil borings, soil sampling, groundwater monitoring well installation and groundwater collection, soil vapor and sub-slab soil vapor probe installation and sample collection and subsequent data analysis and presentation to client.
- Oversees logistics of small to moderate scale remediation projects, including drafting and modeling, communication with disposal facilities, subcontractors, Clients and regulatory agencies, as applicable.
- Coordinate and oversee remediation work in compliance with site-specific approved Remedial Action Work Plans and with Local, State, and Federal Regulations.

2015-2017 VHB ENGINEERING Project Scientist

- · Gather field data on NYSDEC spill sites.
- Performed Underground Storage Tank removal oversight and soil screening.
- Document environmental field work, and assist in preparing and completing reports.
- Maintain community air monitoring programs and document job site activities related to foundation construction phase projects.
- Conduct groundwater (low-flow) sampling events and real time water parameter data logging using various equipment
- Contamination concentration, plume direction reports related to petroleum spills.
- · Groundwater, soil & vapor sampling.
- Perform ASTM Phase I ESA Site Inspections and Prepare Reports.

KEY PROJECTS

- · Bill Wolf Petroleum
- Spartan Petroleum
- Atlantis Management Group
- Former DuPont Facility East Chicago

- OSHA 40-hour HAZWOPER Training
- · OSHA 8-hour Refresher
- OSHA 10-hour Construction Training
- OSHA 30-Hour Construction Training

XIN YUAN, P.E.

Quality Control Manager

EDUCATION

Masters of Science, Civil Engineering, UMass Amherst (2010)

Bachelor of Science, Environmental Engineering. Tsinghua University, Beijing, China (2008)

EXPERIENCE

2010-Present **IMPACT ENVIRONMENTAL** *Quality Control Manager/Environmental Analyst*

- Quality control of all waste management/brownfield redevelopment projects;
- Management of site remediation/waste management projects;
- Environmental compliance & permitting of waste management facilities
- Achieve and maintain appropriate and consistent application of environmental compliance for waste disposal/beneficial use facilities
- Achieve and maintain appropriate and consistent application of environmental compliance at the regional Levels for waste management projects
- Review & evaluate site investigation/waste characterization results for waste management projects and provide technical recommendations to project manager
- Authored a multitude of BUD petitions for various other solid waste related projects in NY,NJ &PA, including projects such as The East Side Access, The Air Rail Project and JFK International Jet Blue Terminal 5
- Design and perform waste characterization investigations for waste management projects

KEY PROJECTS

- Columbia University Manhattanville Development Project
- LIRR 3rd Track Expansion Project
- · Atlas Quarry Reclamation Project
- Former New Jersey Zinc Company-West Plant Remediation Project
- Morris Blanchard Redevelopment Project
- Brooklyn Bridge Park Pier 1 Redevelopment Project
- Southwest Brooklyn Marine Transfer Station Redevelopment Project
- Doremus Avenue Redevelopment Project

CERTIFICATIONS/ ACHIEVEMENTS

- Long Island Association of Professional Geologists
- American Chinese Real Estate Society

- US EPA 40hr Hazardous Materials Response for First Responders Training
- Professional Engineer in MA, PA, NJ & NY



FIELD OPERATING PROCEDURES

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B.1 FIELD SAMPLING PROCEDURES

B.1.1 Sampling Personnel

The activities associated with the remedial investigation will be performed by or under the auspices of a Quality Assurance Officer. The sample staff (samplers) will possess a minimum of a BA Degree in the Earth, Space or Biological Sciences or a BS Degree in Engineering. Samplers will have a minimum of one (1) year experience in environmental/geological fieldwork. Additionally, all samplers will have received mandatory forty-hour Occupational Safety and Health Administration (OSHA) training on working with potentially hazardous materials and appropriate Hazard Communication Program and "Right-To-Know" training.

B.1.2 Geophysical Survey

A geophysical survey will be performed over target portions of the planimetric surface of the subject property utilizing a GSSI model SIR-2 ground penetrating radar (GPR) system equipped with a 400MHz antenna. The survey will be performed to identify the presence of any abandoned and/or active underground injection wells associated with the on-site sanitary systems on the Site.

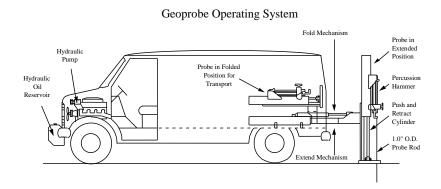
A GPR system consists of a radar control unit, control cable and a transducer (antenna). The control unit transmits a trigger pulse at a normal repetition rate of 50 KHz. The trigger pulse is sent to the transmitter electronics in the transducer via the control cable. The transmitter electronics amplify the trigger pulses into bipolar pulses that are radiated to the subsurface. The transformed pulses vary in shape and frequency according to the transducer used. In the subsurface, variations of the signal occur at boundaries where there is a dielectric contrast (void, steel, soil type, etc.). Signal reflections travel back to the control unit represented as color graphic images for interpolation. This system is capable of transmitting electromagnetic energy in the frequency range of 16MHz to 2000MHz.

A qualified Impact Environmental Consulting, Inc. technician will specify a coordinate system on the planimetric surface of the site to map any subsurface dielectric anomalies detected on the premises. The operator will use knowledge of the subsurface soil composition to calibrate the SIR-2 system to site-specific conditions. Factor settings such as range, gain, number of gain points, and scans per unit, may be modified to yield the most accurate data to describe the subsurface conditions.

Upon finding a dielectric anomaly, a more spatially specific coordinate system may be designed over the area to determine size, shape and orientation. The data collected during the survey will be reviewed by the operator and compared against past experience, technical judgment and prior site knowledge to classify any detected anomalies.

B.1.3 Subsurface Vapor Probe and Soil Boring Installation/Soil Sampling

Subsurface probes will be installed using a *Geoprobe* hydraulically powered probing tool. Mechanized, vehicle mounted probe systems apply both static force and hydraulically powered percussion hammers for tool placement (static down forces up to 18,000 pounds combined with percussion hammers of eight horsepower continuous output). Recovery of large sample volumes will be facilitated with a probe-driven sampler. The probe-driven sampler consists of a hollow probe, which opens via a remote-control mechanism at the selected sampling depth in the soil profile to allow soil to enter as it was advanced. Discrete media samples will be secured at the desired depths and contained within a non-reactive transparent plastic sleeve that lined the hollow probe. The plastic sleeves will be removed for subsequent inspection and sample aliquot acquisition.



B.1.4 Sample Characterization

A visual inspection of all soil samples recovered for the hydrogeological study will be conducted to classify the sample media. Color classifications will be made in accordance with the Munsell Classification System. Gradation classifications will be made in accordance with the Unified Soil Classification System.

B.1.5 Field Headspace Analysis

Headspace analysis will be performed on each of the acquired soil samples utilizing a portable photo ionization detection meter to measure what, if any, hydrocarbon concentrations were present in isolated portions of the secured samples. Calibration of the PID will be conducted prior to sampling using a span gas of known concentration. Headspace analysis will be conducted by partially filling a wide-mouth glass container with sample aliquot and sealing the top with aluminum foil, thereby creating a void. This void is referred to as the sample headspace. To facilitate the detection of any hydrocarbons contained within the headspace, the container will be agitated for a period of thirty (30) seconds. The probe of the vapor analyzer will then be injected through the foil into the headspace to measure the hydrocarbon concentrations present. A Photovac Micro-Tip, photo ionization detection meter (PID) will be the organic vapor analyzer selected for the headspace analysis. A PID utilizes the principle of photo ionization for detection and measurement of hydrocarbon compounds. A PID does not respond to all compounds similarly; rather, each compound has its own response factor relative to its calibration. For this investigation, the PID will be calibrated to isobutylene. Hydrocarbon relative response factors for a PID calibrated to isobutylene are published by the manufacturer.

B.1.6 Soil Gas Survey – Photoionization Detector

The concrete slab will be cored at the sampling points using an electric powered core drill. Subsurface probes will be installed using *Geoprobe* manual probing tools. The probes will be equipped with retractable points that allow for soil gas to be measured at discrete depths. Each soil gas sample will be collected from the retractable point utilizing 3/8-inch in diameter disposable tubing. The soil gas will be drawn (purged) for approximately 15 seconds using a portable vacuum pump. The photo ionization detector will then be attached to the tubing to secure a soil gas reading.

B.1.7 Soil Gas Survey –Laboratory Analysis

Subsurface probes will be installed using a Geoprobe operating system. The probes will be equipped with a port run tubing system that allows for soil gas to be measured at discrete depths (see diagram below). This soil-gas sampling device uses a vacuum tight seal that isolates the sample acquisition to the specified depth. This device will assure quality control of the multi-depth soil-gas samples and eliminate the potential for inaccurate data. Each soil gas sample will be collected from the port run tubing system-utilizing 3/8-inch in diameter disposable Teflon tubing. The soil gas will be drawn (purged) for approximately 30 seconds using a portable vacuum pump. The soil gas will be pumped into a decontaminated portable pump and collected within a tedlar bag for preservation. Purging and sample collection flow rates will not exceed 0.2 liters per minute.

Geoprobe Port Run Tubing System



Tracer gas field testing, using helium gas, will be performed on all implants prior to sampling, to verify the integrity of each implant seal and to limit the possibility of sample dilution from surface air. The tracer gas field test will consist of sealing the area surrounding the implant with plastic sheeting and then introduce the tracer gas underneath the sheeting, so that the area where the probe intersects the ground is immersed in the tracer gas. A Model MGD-2002 Multi-Gas Leak Locator or equivalently approved helium detector will be connected to the soil vapor implant and sub-slab vapor implant, in accordance with Section 2.7.5 of the *October 2006, Guidance for Evaluating Soil Vapor Intrusion in the State of New York* NYSDOH guidance document, and tracer gas concentrations in the well will be recorded in the sampling log sheet. This procedure will be duplicated at each implant, prior to sample collection. The laboratory will confirm the field tracer gas tests by first analyzing approximately 85 to 90% of each sample canister for VOC's via USEPA method TO-15 and then use a helium detector to analyze the remaining contents in the Summa Canisters.

The sampling logs with the recorded field tracer gas test measurements and the tracer gas measurements reported by the laboratory will be submitted to NYSDEC with the initial sampling round report. NYSDEC will review the field and laboratory tracer gas test results to determine if the bentonite/cement grout seal

for each implant will require repairs and/or replacement to reduce the infiltration of ambient air and if additional tracer gas field/laboratory testing is required in the subsequent soil vapor sampling round.

B.1.8 Permanent Well Installation

Permanent monitoring wells are installed to provide repeated access to groundwater for collecting samples, as well as for obtaining water-level and other field data. Because monitoring wells are used to collect samples, it is important that construction materials not interfere with sample quality either by contributing contaminants or by sorbing contaminants already present. Further, construction materials must be compatible with (i.e., not degraded by) contaminants present in soils or groundwater.

Monitoring wells are potential contaminant migration routes between aquifers or from the surface to the subsurface. Construction procedures and standards must ensure that neither passive nor active introduction of contaminants can occur. Properly installed hydraulic seals and locking well covers reduce the potential for cross-contamination of monitoring wells.

Equipment needed:

- Drilling or auguring equipment appropriate to site conditions, drilling depth, and other project requirements.
- Drill bits appropriate for the expected soil and rock type(s) to be encountered.
- Sufficient threaded flush-joint riser pipe of an approved material [stainless steel, polyvinyl chloride (PVC)] in convenient lengths. (NOTE: No glues are permitted.)
- Sufficient threaded flush-joint slotted screen of an approved material (stainless steel, PVC) to meet design criteria. (NOTE: No glues are permitted.)
- Properly sized and washed filter pack material (quartz sand) in sufficient volume to meet well design criteria.
- Powdered bentonite.
- Photoionization detector.
- Steel surface casing (if required).
- Steel protective casing with locking cap.
- Tremie pump and pipe.
- Protective clothing, as required.
- Weighted measuring tape.

The following steps will be followed when installing monitor wells:

Advance the borehole to the required depth using a bit or auger flight of a diameter sufficient to
allow for insertion of the tremie pipe when the casing is centered. It is preferred that the
borehole be at least 2 inches in diameter larger than the casing diameter. The borehole should
be drilled slightly deeper than required for the combined length of casing and screen. The final
completion depth should be sounded with a decontaminated, weighted tape before continuance
of well placement.

- 2. Make up the screen for installation. The casing and screen must be decontaminated. Tighten joints.
- 3. Withdraw the drill rods and bit through the auger flights. Check the borehole depth with a weighted surveyor's tape.
- 4. Lower the casing string into the drill casing.
- 5. Install the filter pack. Six inches or more of filter pack material should be spotted at the bottom of the hole, under the screen. Filter pack will be installed to 2 3 feet above the top of the screen.
- 6. Check the depth to the top of the filter pack with a weighted tape.
- 7. Tremie, or for shallow wells (<35 feet), gravity feed bentonite onto the top of the filter pack.
- 8. Pure bentonite grout (or equivalent) will be used as the annular seal, grout will be mechanically mixed with the appropriate amount of water. For shallow wells (<35 feet) granular bentonite may be substituted for grout.
- 9. Tremie the grout into the annulus using a tremie. Slowly withdraw the tremie pipe as the annulus fills. Grout the well to within 1 foot of the surface. Compare actual volume of grout placed with calculated volume. Both should be annotated in the field logbook.
- 10. After installing grout, dismantle and clean tremie equipment.
- 11. Finish the concrete pad so that it slopes away from the wellhead in all directions with a minimum thickness of 4 inches. If weather conditions warrant, cover the concrete until cured. Lock the well cover
- 12. If the well design specified guard posts, dig the holes and set the guard posts in concrete separate from the concrete pad. Posts and concrete must extend to a depth of 2 feet.
- 13. Record the appropriate construction/completion information in the field logbook and on the appropriate monitoring well installation.
- 14. If a form was used for the concrete pad, return to the well site after the concrete has cured for at least 24 hours and remove the form. Backfill around the pad with native soil. Drill a weep hole for protective casing and just above the concrete pad.
- 15. The well identification should be marked on the protective casing and PVC cap. Paint the well cover and posts, if required.

B.1.9 Well Development

Monitor wells are developed to remove fines from the filter pack. Wells should not be developed for 24 hours after completion when a bentonite grout is used to seal the annular space. However, wells may be developed before grouting if conditions warrant. Wells are purged immediately before groundwater sampling to remove stagnant water and a sample representative of groundwater conditions. Wells should be sampled within 3 hours of purging (optimum) to 24 hours after purging (maximum, for low recharge conditions).

Equipment needed:

- Pump, pump tubing, or bailer and rope or wire line
- Water-level meter
- Temperature, conductivity and pH meters
- Personnel protective equipment as specified in the site-specific HASP
- Decontamination supplies
- Disposal drums, if required
- Photoionization Detector

Procedures.

The following steps will be followed when developing wells:

- 1. Put on personnel protective clothing and equipment as specified in the site-specific HASP.
- Open and check the condition of the wellhead, including the condition of the surveyed reference mark, if any. Use photoionization detector at wellhead to determine the presence of VOCs (if applicable).
- 3. Determine the depth to static water level and depth to bottom of the casing.
- 4. Prepare the necessary equipment for developing the well. There are a number of techniques that can be used to develop a well. Some of the more common methods are bailing, surging and purge, and over pumping.
- 5. Continue well development until produced water is clear and free of suspended solids.
- 6. Remove the pump assembly or bailers from the well, decontaminate, and cleanup the site.
- 7. Lock the well cover before leaving. Dispose of produced water as required by the project work plan.

B.1.10 Monitoring Well Sampling

Monitoring well sampling is conducted with the goal of collecting data representative of groundwater conditions in the subsurface. The data obtained from a sampling event is typically very important for decision making, as it may be used to identify the presence of constituents of concern in groundwater, monitor the performance of a remedial measure, or evaluate the risks to potential receptors.

A written site specific monitoring or sampling plan is typically available that identifies the frequency of sampling, the wells to be monitored, equipment to be used, required laboratory analytical methods and parameters, sampling procedures, equipment decontamination procedures, sample quality

assurance/quality control (QA/QC) measures and data reporting requirements. Each monitoring or sampling plan will vary from one site to the next and should be reviewed when planning for a monitoring well sampling event.

Equipment:

The following is a list of standard equipment needed to conduct monitoring well sampling. Additional equipment may be required based on the sampling techniques and site conditions.

- Health and Safety Plan (HASP)
- Field Book
- Personal Protective Equipment
- Decontamination Equipment
- Traffic Control Devices
- Polyethylene Sheeting
- Bailers
- String
- Pumps
- Power Source to Operate Pumps
- Water Level Meter
- Tubing
- Buckets
- Sample Bottles
- Cooler
- Ice
- Bubble Wrap
- Calculator
- Disposable gloves

Procedures

Monitoring Well Gauging

Monitoring wells are typically gauged before sampling. Gauging includes measuring the depth to water (and/or non-aqueous phase liquids) and depth to bottom in the monitoring well with an electronic water level meter (WLM) or electronic interface probe (EIP). An EIP is used to gauge a well that contains non-aqueous phase liquids (NAPL-floating product). If wells do not contain NAPL, then a WLM is sufficient. The list of monitoring wells to be gauged should be provided in the monitoring or sampling plan and listed on the PTA. The entire network of monitoring wells should be gauged before sampling begins.

Sample Bottles

Groundwater samples are collected into laboratory supplied bottles. Bottles are typically ordered from the laboratory in advance of the sampling event. The size, bottle material (glass, plastic), and number of

bottles required for each sample will depend on the constituents being analyzed for and the analytical methods. Bottles delivered from the laboratory may contain a small amount of preservative. The preservative is to remain in the bottle. Overfilling the bottle may result in dilution of the preservative and should be avoided. When sampling for volatile compounds, no air (bubbles) may be present in the sample bottle.

Sampling Techniques

Many different techniques exist for sampling monitoring wells. The techniques vary depending on the constituents of concern, depth to groundwater, diameter of monitoring well and regulatory requirements. The technique appropriate for a specific site should be identified in the monitoring and sampling plan

Purging

Many of the sampling techniques include purging the monitoring well prior to sample collection. Purging is indented to remove stagnant water from the monitoring well after which a representative sample of the groundwater from the subsurface can be collected. During purging, three to five volumes of standing water in the well are removed. The volume of water in a monitoring can be calculated using the following equation:

Feet of standing water in well * Conversion factor = 1 well volume

Example:

10' * 0.65 = 6.5 gallons (1 well volume)
Well Diameter (in inches) Conversion Factor

1/2 0.01

1 0.04

2 0.16

3 0.37

4 0.65

6 1.50

Purge water must be managed in accordance with the monitoring or sampling plan and local regulations.

Field Monitoring

Monitor indicator parameters (main indicator parameter for VOCs is DO) during purging, monitor and record the field indicator parameters (turbidity, temperature, specific conductance, pH, Eh and DO) at three to five-minute intervals. The well is considered stabilized and ready for sample collection when the indicator parameters have stabilized for three consecutive readings as follows:

1. 50 NTUs for turbidity

+/-0.1 for pH

- 2. +/-3% for conductance
- 3. +/-10 mv for redox potential
- 4. +/-10% for DO and turbidity

Sample Chain of Custody

The chain of custody (COC) form is used to record the inventory of samples to be delivered to the laboratory and document the transfer of custody from the sampler to the laboratory. All samples, including QA/QC samples, to be delivered to the laboratory must be listed on the COC along with requested analytical methods and parameters. The COC is to remain with the samples from the time of collection until receipt at the laboratory.

Sample Handling, Storage and Shipment Samples should be stored in laboratory-supplied coolers immediately after sampling. The cooler must contain ice in order to bring the temperature of the sample to 4 degrees Celsius. Samples must remain on ice until received by the laboratory. Care must be exercised to ensure that bottles do not break during handling of the cooler. Glass-on-glass contact often leads to breakage and should be avoided by wrapping each bottle in bubble wrap material.

Samples are to be delivered to the laboratory in coolers as soon as possible after collection. Each laboratory analytical method has a unique holding time, which is defined as the maximum time between sample collection and analysis by the laboratory. Samples analyzed after the hold time are usually considered invalid. Hold times may vary from one day to 6 months depending on the laboratory analytical methods. Holding time information can be obtained from the laboratory. It is the responsibility of the sampler to confirm that the delivery method will ensure receipt of the samples by the laboratory within the allotted holding time.

Sample delivery options include: shipment by common courier, personal delivery to the laboratory and delivery by the laboratory's courier service. Each laboratory may have a preferred sample delivery process. Coolers must be packed with sufficient amounts of ice and bubble wrap material to ensure the samples will be received by the laboratory intact and at an acceptable temperature. A custody seal, provided by the laboratory, should be placed over the opening between the lid and the base of the cooler, and the seal ID number recorded on the chain of custody form. The custody seal provides a means of alerting the laboratory if the cooler has been opened, and potentially tampered with, between the time it was sealed by the sampler and received by the laboratory. Guidance on cooler packing may be obtained from the laboratory.

Decontamination

Decontamination is necessary to avoid cross-contaminating samples. Sampling equipment that is not dedicated to a specific well must be decontaminated before sampling and after each sample is collected. Decontamination procedures may be specific to the site's monitoring or sampling plan. Typical equipment decontamination procedures may include rinses in the following sequence:

- 1) Tap water rinse
- 2) Alconox rinse
- 3) Tap Water Rinse
- 4) Deionized water rinse

When possible, samples should be collected from the least contaminated wells first and progress onto the more contaminated wells in order to reduce chances of sample cross-contamination.

Documenting a Monitoring Well Sampling Event

Information from the monitoring well sampling event must be documented on a field data form or recorded in the site-specific field book. Information to be recorded includes weather conditions, well integrity issues, well gauging information, purge volumes, sampling equipment and supplies used, sample identifications, sample collection times and the presence of any conditions that may compromise the integrity of the samples.

B.1.11 Low Flow Well Purging and Sampling

Purpose

The purpose of the low flow (low formation stress) purging and sampling procedure is to collect groundwater samples from monitoring wells that are representative of ground water conditions in a particular geological formation. This is accomplished by setting the intake velocity of the sampling pump to a flow rate, which limits drawdown inside the well casing. The placement of the intake of the sampling pump should be midway within the most permeable zone of the formation.

Equipment

- Pump system (adjustable rate, positive displacement groundwater sampling pump e.g., bladder or centrifugal pump)
- Control box (with or without a built-in compressor)
- Compressed Nitrogen tank (if necessary)
- Indicator parameter monitoring device(s)

- Flow measurement device (Flow cell)
- Personal Protection Equipment (PPE)
- Field Book
- Health and Safety Plan (HASP)
- Tools to access monitoring wells
- Disposable gloves
- Kevlar gloves
- Safety cones
- Sample containers (provided by laboratory)
- Chains of Custody (provided by laboratory)
- Blank or Pre-printed labels
- Glassware with appropriate preservative (provided by the laboratory)
- Ice
- Calculator
- Adsorbent pads
- Electronic interface probe
- Decontamination equipment
- String
- Appropriate size bailers
- Tubing (preferably Teflon for organics)

Procedure

Remove the gripper cap at all well locations and allow the water table to equilibrate, take care to secure all wells by closing the flush mount covers. Start sampling at the well-known or believed to have the least contamination and systematically to the most contaminated well, remembering to conduct proper decon procedure. During gauging and sampling activities equipment should not come into direct contact with the ground surface, plastic sheeting may be utilized as a clean and disposable working surface.

Slowly lower the pump to the depth specified for that well, the pump intake should never be set within two feet of the bottom of any well. This prevents disturbance and resuspension of any sediment. Record the depth of the pump intake. Re-measure the water level and begin purging, keeping the purge rate within 200-500 millimeters per minute (ml/min). Water level should be measured and recorded at three to five-minute intervals. Ideally, a steady flow rate should be maintained that results in a stabilized water level (drawdown of 0.3 ft or less is desired). Monitor indicator parameters (main indicator parameter for VOCs is DO) during purging, monitor and record the field indicator parameters (turbidity, temperature,

specific conductance, pH, Eh and DO) at three to five-minute intervals. The well is considered stabilized and ready for sample collection when the indicator parameters have stabilized for three consecutive readings as follows:

- 1. 50 NTUs for turbidity
- 2. +/-0.1 for pH
- 3. +/-3% for conductance
- 4. +/-10 mv for redox potential
- 5. +/-10% for DO

Collect sample from dedicated or disposable tubing. Remove any non-dedicated equipment from the well. Secure all wells. Fill out the chain of custody. At the end of the sampling day, coolers will be taped shut with the custodian's initials placed on custody seals at points of entry. Samples will be shipped via lab courier to the contract laboratory for morning delivery, picked up by courier or delivered directly to the laboratory by the field personnel at the end of the sampling day.

Contact with the laboratory will be made within 24 hours after each sampling event to ensure that samples arrived safely and with proper integrity preserved.

B.1.12 Grouting Bore Holes

Subsequent to the completion of each soil and groundwater probe installed during the remedial investigation, bottom-up grouting of the borehole will be conducted to grade. The grouting system was designed specifically for direct push applications. With powerful reciprocating (piston) pumps, the Geoprobe Grout Machines will deliver standard ASTM grout materials through 1.25-inch diameter Geoprobe probe rods or through 3/8-inch (1/4-inch inside diameter) polyethylene tubing. The pump is rated at 1000 psi with flow rates from 0.9 to 2.3 gpm.

B.1.13 Emerging Contaminant PFAS

The NYSDEC requires analysis for Per- and Polyfluoroalkyl Substances (PFAS) for new remedial program Sites as part of the investigation of potentially affected media, including soil, groundwater, surface water and sediment as an addition to the standard TAL/TCL sampling. Soil vapor sampling for PFAS is not required.

The following is the list of the 21 PFAS compounds identified by the NYSDEC for investigation:

- Perfluorobutanoic Acid
- Perfluoropentanoic acid
- Perfluorohexanoic acid
- Perfluoroheptanoic acid
- Perfluorooctanoic acid (PFOA)
- Perfluorononanoic acid
- Perfluorodecanoic acid
- Perfluoroundecanoic acid
- Perfluorododecanoic acid
- Perfluoro-n-tridecanoic acid
- Perfluorotetradecanoic acid
- Perfluorobutane sulfonic acid
- Perfluorohexane sulfonic acid
- Perfluoroheptane sulfonic acid
- Perfluorooctane sulfonic acid (PFOS)
- Perfluorodecane sulfonic acid
- 6:2 Fluorotelomersulfonic acid
- 8:2 Fluorotelomersulfonic acid
- Perfluorooctanesulfonamide
- N-methyl perfluoro-1-octanesulfonamidoacetic acid
- N-ethyl perfluoro-1-octanesulfonamidoacetic acid

PFAS Sampling Protocol:

Since the probability of false positives is relatively high during PFAS sample collection, due to the potential for many sources of cross-contamination combined with the low laboratory detection limits, guidance is needed for staff who will perform subsurface investigation activities (i.e., soil borings, monitoring well installation) and for staff collecting and/or handling PFAS environmental samples.

There are many products/materials/supplies that contain PFAS which pose a greater risk for introducing PFAS contamination into a sample during the sample collection process. These sources include the water used during drilling or decontamination, materials used within the sampling environment, sampling equipment, field clothing and personal protective equipment, sun and biological protection products, personal hygiene and personal care products, food packaging and the environment itself.

Field Clothing and Personal Protective Equipment (PPE)

Due to the extensive use of PFAS in many industries and products, clothing and PPE are likely to contain PFAS. Personnel completing field investigation work that will include the collection of samples for PFAS

analysis will need to address the physical, chemical and biological hazards associated with the Site. Field planning is essential to mitigate the potential for PFAS cross-contamination and to maintain personal safety.

- No clothing or boots with protective coatings can be worn (e.g., waterproof, water-repellent, fire-repellant or stain-resistant clothing or footwear). No Gore-Tex® or Tyvek material clothing/boots.
- Clothing worn during the collection of samples for PFAS analysis should be made of natural fibers (preferable cotton) and must have been previously washed a minimum of 5 times (i.e. no new clothing), without fabric softener and not with other clothing that may contain coatings.
- Use disposable, coating-free polyethylene coveralls and boot as applicable.
- Do not use personal care products on the day of sample collection:
 - Use PFAS-free soap and shampoo when scheduled for sample collection.
 - Limit toothpaste, mouthwash and dental floss to fluoride free options.
 - Do not use lotions, moisturizers, cosmetics, sunscreen or insect repellents prior to sampling.
- Use disposable, nitrile gloves.
- Do not use aluminum foil, prepackaged food, fast food wrappers or containers.

Field Sampling Equipment/Materials:

Because of the potential presence of PFAS in equipment typically used for drilling and to collect soil, groundwater, surface water, sediment, and drinking water samples, as well as the need for very low reporting limits, special handling and care must be taken when collecting samples for PFAS analysis to avoid sample contamination. The following guidance should be considered when using field sampling equipment.

- A screening of the equipment and materials that will be used during field sampling activities must be completed to identify equipment/materials that may be potential PFAS sources.
- Identify and use a PFAS free water source for drilling and decontamination of equipment.
- Use high density polyethylene [HDPE] water holding tanks.
- Use HDPE or silicone tubing materials.
- Use HDPE or polypropylene containers with HDPE or polypropylene caps.
- Use regular ice and Ziploc bags where there is no direct contact with the sample.
- Use loose plain paper, metal clipboard, ballpoint pens.
- When feasible, utilize single-use, disposable polyethylene or silicone materials (tubing, bailers, etc.) for monitoring well purging and sampling.

- Consumable core liners and catchers must be PVC.
- When using positive displacement/submersible pumps, familiarize yourself with the sampling pump/accessory equipment specifications to confirm that the device components do not contain Teflon® or Polytetrafluoroethylene (PTFE). Do not use pumps and tubing that contain Teflon™ and other fluoropolymer-containing materials.
- Do not use waterproof/treated paper or field books, plastic clipboards, water proof markers, Post-its and other adhesive paper products.
- Do not use passive diffusion bags for groundwater sampling.
- Do not use low density polyethylene (LDPE) sampling equipment/materials.
- Do not use drill casing thread lubricants that contain PFAS. Verify with supplier.
- Do not use LDPE or glass bottles with Teflon[™]-lined caps.
- Do not use chemical ice packs (i.e., Blue ice®).
- Do not handle any packaged food or drinks, aluminum foil, adhesive labels, etc. at or around sampling site.

Equipment Prep and Decontamination Procedures

The following procedure should be used to decontaminate HPDE, polypropylene or stainless-steel equipment used to collect samples for PFAS analysis. Because of the extremely low detection and reporting levels required for PFAS analysis, precaution should be taken to ensure decontamination materials (e.g., soap, tap water, deionized water) are not contaminated with PFAS prior to use. Traditional best practice techniques and procedures shall be subject to modification to prevent the introduction of non-site-derived contaminants including PFAS. Sample containers will be new and used only once for each sample and disposable equipment (e.g., gloves, tubing, etc.) will not be reused, therefore; these items will not require decontamination. All non-dedicated or non-disposable sampling equipment (i.e., the stainless-steel compositing vessel(s), flow-through cell, etc.) will be decontaminated between sample locations. The following guidance should be considered when preparing equipment and decontamination of equipment.

- An equipment decontamination area with a decon pad should be set up in the field to accommodate the sampling and drilling equipment.
- General Sampling Equipment Decon:
 - o Rinse equipment with PFAS free municipal PFAS free water to remove solids.
 - Use a polyethylene or poly vinyl chloride (PVC) brush and a low-phosphate lab detergent
 (i.e., Alconox) to scrub the equipment to remove residue and particulates.
 - o Triple rinse clean equipment with <u>PFAS Free</u> deionized water and let air dry.

- Decontaminate sampling equipment after sampling at each location, or at the end of the field work day.
- o The decontamination water should be changed between equipment cleanings.
- Clean, decontaminated equipment will be placed on clean polyethylene plastic or HPDE sheets to air dry. Direct contact with the ground will be avoided.

Drilling Equipment Decon:

- Drilling equipment, including rig, tooling, augers, bits, samplers, tremie pipes, etc. will be cleaned with a hot water pressure washer within a decon pad constructed of on clean polyethylene plastic or HPDE sheets and barriers to contain liquid generated.
- The clean drilling equipment will be rinsed with <u>PFAS Free</u> deionized water and let air dry on clean polyethylene plastic or HPDE sheets.
- Drilling equipment must be cleaned before beginning work (when applicable), inbetween/following completion of borings, wells, and at the end of the field work day.
- Tools, drill rods, and augers will be placed on polyethylene plastic or HPDE sheets following pressure washing. Direct contact with the ground will be avoided.
- Decon water will be temporarily collected in 55-gallon drums and transported to a waste accumulation area for later disposal.

• Well Development Equipment Decon:

- o Prior to well development, non-dedicated equipment (e.g., bailers, PFOS-free pumps, etc.) will be washed with potable water and a PFC/phosphate-free detergent (i.e., Alconox®).
- The sampling equipment will then be rinsed with potable water followed by a triple rinse with PFAS Free deionized water.
- The clean/decontaminated equipment will be placed on polyethylene plastic or HPDE sheets to air dry. At no time, will washed equipment be placed directly on the ground.
- Decon water will be temporarily collected in 55-gallon drums and transported to a waste accumulation area for later disposal.

Sample Collection

PFAS are ubiquitous in consumer products and the pervasive presence of these chemicals coupled with very sensitive analytical methods makes contamination of samples both in the lab and the field a significant concern from sources extraneous of the environmental media being sampled. The following guidance should be considered when undertaking collection of samples for PFAS analysis.

Transport of sample collection supplies and equipment have the potential to come into contact
with carpets and fabric in vehicles which have likely been treated with stain-resistant/water
proofing containing PFAS. Steps should be taken to minimize this contact by packaging supplies

and equipment in the designated coolers and/or using polyethylene plastic or HPDE sheets as a barrier.

- Sample container labels should be prepared to the extent possible using a ball-point pen only before arrival at the sampling site and completed at the Site with a ball point pen; do not use sharpie or other permanent markers. No waterproof logbooks or plastic clipboards are to be used.
- Keep materials/equipment that may contain PFAS away from the sampling area and avoid physical contact with anything likely to contain PFAS (e.g., food, clothing, personal care products, etc.) during the sample collection process.
- Maintain an inventory of items used/maintained in the sampling area.
- If other sampling is to be performed, ALWAYS collect PFAS samples first. This avoids contact with any other type of sample container, bottles or package materials
- All sample containers use for PFAS sampling must come from the laboratory that will also be
 performing the PFAS analysis. Recommended sampling containers should be HDPE bottles fitted
 with unlined (no Teflon) polyethylene screw caps.
- Sample containers must be stored in a PFAS free container prior to sampling.
- For all environmental media, hands should be washed well before sampling.
- Wear disposable, powder free nitrile gloves to handle sampling equipment and sample containers. Clean nitrile gloves should be used when collecting the sample.
- Take precautions not to touch any surfaces prior to sample collection.
- As with all other samples, do not place the sample bottle cap on any surface when collecting the sample, and avoid all contact with the inside of the sample bottle or its cap.
- Sample directly into the provided HDPE bottle seal with cap. Place the bottles into individual sealed plastic bag (e.g. Ziploc®) separate from other samples in a clean, dedicated cooler for PFAS samples only.
- Use bagged ice (PFAS free) in the dedicated PFAS sample cooler; NO chemical ice packs in this
 cooler.
- No samples collected for other parameters can be stored with the PFAS samples.

PFAS Analysis and Reporting

The designated analytical laboratory must provide a full category B deliverable, and a DUSR will be prepared by an independent 3rd party data validator. QA/QC samples will be collected as required in DER-10, Section 2.3(c).

Modified EPA Method 537.1 is the preferred method to use for environmental samples due to its ability to achieve very low detection limits. Reporting limits for PFAS in groundwater and soil are to be 2 ng/L (ppt) and 0.5 ug/kg (ppb), respectively. If contract labs or work plans submitted by responsible parties indicate that they are not able to achieve these reporting limits for the entire list of 21 PFAS, site specific decisions will need to be made by the NYSDEC project manager in consultation with the NYSDEC remedial program chemist. Note: Reporting limits for PFOA and PFOS in groundwater should not exceed 2 ng/L.

The NYSDEC has developed a PFAS Analyte List for remedial programs. If lab and/or matrix specific issues are encountered for any compounds, the NYSDEC PM, in consul with the NYSDEC Remedial Program Chemist, will make case-by-case decisions as to whether certain analytes may be temporarily or permanently discontinued from analysis at each Site.

Summary of Prohibited and Acceptable Items for PFAS Sampling

Prohibited	Acceptable
Field Ed	uipment
Teflon/Silicone containing materials	HDPE, stainless steel, polypropylene materials
LDPE materials	Acetate liners
Waterproof field books/paper/bottle labels	Loose non-waterproof paper, and non-waterproof sample labels
Plastic Clipboards/binders/hard cover notebooks	Aluminum field clipboards or with Masonite
Waterproof markers/sharpies	Pens
Post-it-notes	Wet-ice
Chemical ice packs	
Field clothi	ng and PPE
New cotton clothing or synthetic water resistant, waterproof, or stain-treated clothing, clothing treated with Gore-Tex	Well laundered clothing made of natural fibers (preferably cotton)
Clothing laundered with fabric softener	No fabric softener
Boots containing Gore-Tex or treated with water resistant spray	Boots made with polyurethane and PVC
Tyvek	Laundered cotton clothing
Cosmetics, moisturizers, hand cream etc. as part of personal cleaning/showering routine, or non-natural toxic containing sunscreens and insecticides	Natural, non-toxic, and natural sunscreens/insect repellents.
Sample C	Containers
LDPE or glass containers	HDPE or polypropylene
Teflon-lined caps	Unlined polypropylene caps
Rain	events
Waterproof or resistant rain gear	Wet weather gear made from polyurethane and PVC only
	contamination
Decon 90 Liquinox	Alconox
Water from onsite well	7 th Generation Free & Clear Dish Soap
	 siderations
All food and drink with the exceptions of those noted on the right	Bottled water with hydration fluids (i.e. Gatorade and Powerade) to be brought and consumed only in staging areas
Vehicle Co	nsiderations
Vehicle fabrics, carpets and mats may contain PFAAs	Avoid utilizing areas inside vehicles as sample/staging areas

B.1.14 Emerging Contaminant 1,4-Dioxane

The NYSDEC requires analysis for 1-4 Dioxane for new remedial program Sites as part of the investigation of potentially affected media, including soil, groundwater, surface water and sediment as an addition to the standard TAL/TCL sampling. Soil vapor sampling for 1,4-Dioxane is not required. 1,4-Dioxane is used as a stabilizer and inhibitor in chlorinated solvents, and used for a wide variety of other industrial processes. It is present in adhesives, sealants, cosmetics, pharmaceuticals, rubber chemicals and surface coatings.

The NYSDEC reporting limit for 1,4-dioxane in groundwater should be no higher than 0.35 μ g/L (ppb) and no higher than 0.1 mg/kg (ppm) in soil. Materials used in environmental sampling can be a source of 1,4-dioxane contamination. 1,4-Dioxane also might be present in detergents used to decontaminate environmental sampling equipment.

Because of the potential presence of 1,4-dioxane in equipment typically used to collect environmental samples, as well as the need for very low reporting limits, special handling and care must be taken when collecting samples to avoid sample contamination. The best practice techniques and procedures provided in Section B.1.13 entitled *Emerging Contaminant PFAS* should be implemented when collecting samples for 1,4-dioxane analysis.

Although ELAP offers certification for both EPA Method 8260 SIM and EPA Method 8270 SIM in waters, the NYSDEC DER is advising the use of Method 8270 SIM because it provides a more robust extraction procedure, uses a larger sample volume, and is less vulnerable to interference from chlorinated solvents. The analysis currently performed for SVOCs in soil is adequate for evaluation of 1,4-dioxane in soil, which already has an established SCO.

B.2 QA/QC FIELD PROCEDURES

B.2.1 Decontamination Procedures

Prior to arrival on the Site and between sample locations, the probes will be decontaminated by steam cleaning, Alconox wash, and rinsing with distilled water. This will be followed by air drying as per project requirements. All sampling apparatus will be dedicated or disposable. A clean, new liner will be used for each sample. Parts will be inspected for wear and damage before each use.

B.2.2 Field Blanks

A field blank is a sample of analyte-free water transferred, at the project site, into an appropriate container for the purpose of distinguishing ambient air contamination from in-situ sample contamination. Field blanks are used to indicate potential cross contamination from sampling equipment as quality control of decontamination procedures. With regards to field sampling, one field blank will be collected for every work day. The procedures for obtaining a field blank sample are as follows:

- Collect two sets of sample vessels. One vessel shall contain analyte free water and the other is empty.
- Run the analyte free water through the decontaminated sampling equipment into the empty vessel.
 Analye the water of this collecting vessel for target analytes.

B.2.3 Trip Blanks

A trip blank is used to identify the presence of volatile compound contamination attributable to transfer across a sample container septum during shipping and storage of samples. A trip blank is a sample of analyte-free matrix that is transported from the laboratory to the sampling site with the sample containers. The trip blank is stored on-site with the sample containers and field samples and then transported back to the laboratory with the samples for analysis. The trip blank is received and processed as a sample by the laboratory. One trip blank shall be submitted per pickup from laboratory personnel.

B.2.4 Duplicate Samples

Duplicate sample collection will apply to groundwater, soil, soil vapor and ambient air samples collected at this Site. A duplicate (replicate) sample is collected to control the general sampling methodology that is being employed. This sample ensures that a representative sample is being collected. Duplicate samples may also be submitted to verify the accuracy of analytical results.

B.2.5 Matrix Spike/Matrix Spike Duplicate Samples

Matrix Spike/Matrix Spike Duplicate sample collection will apply to groundwater samples collected at this Site. A Matrix Spike and Spike Duplicate (MS/MSD) sample(s) are representative but randomly chosen client samples that have known concentrations of analytes of interest added to the samples prior to sample preparation and analysis. They are processed along with the same un-spiked sample. The purpose of the MS/MSD is to document the accuracy and precision of the method for that specific sample.

B.3 Record Keeping and Documentation Procedures

B.3.1 Sampling Documentation

The sample team or individual performing an activity shall be required to keep a weatherproof Site field notebook. The Site field notebook will be used on-site to record notes pertaining to the field sampling plan. Field notebooks are intended to provide sufficient data and observations to enable participants to reconstruct events that occurred during projects and to refresh the memory of the field personnel if called upon to give testimony during legal proceedings. In a legal proceeding, notes, if referred to, are subject to cross-examination and are admissible as evidence. The field notebook entries should be factual, detailed, and objective. All entries are to be signed and dated. All members of the field investigation team are to use this notebook, which shall be kept as a permanent record. The field notebook shall be filled out at the location of sample collection immediately after sampling. It shall contain sample descriptions including: sample number, sample collection time, sample location, sample description, sampling method used, daily weather conditions, field measurements, name of sampler, and other site-specific observations. The field notebook shall contain any deviations from the protocol contained herein, visitor's names, and community contacts made during sampling, and geologic and other site-specific information that may be noteworthy.

B.3.2 Sample Containers and Analytical Requirements

All sample vessels will be "level A" certified decontaminated containers supplied by a New York State Certified Commercial Laboratory. Samples analyzed for hydrocarbons will be placed in containers with Teflon lined caps. All samples will be preserved by cooling them to a temperature of approximately four degrees Celsius. If glass bottles are used, extra glass bottles will be obtained from the laboratory to allow for accidental breakage that may occur. Necessary preservatives will be placed in the sample bottles by the laboratory. The sample bottles will be handled carefully so that preservatives and glassware are not inadvertently spilled. All liquid samples will be put into 40-ml glass vials with Teflon liners.

B.3.3 Sample Tracking System

In order to provide for proper identification in the field, and proper tracking in the laboratory, all samples must be labeled clear and in a consistent fashion using the procedures and protocols described below and with the following subsections.

Sample labels will be waterproof and have a pre-assigned, unique number that is indelible.

Field personnel must maintain a field notebook. This notebook must be water resistant with sequentially numbered pages. Field activities shall be sequentially recorded at a later time. The notebook, along with the chain of custody form, must contain sufficient information to allow reconstruction of the sample collection and handling procedure at a later time. Each sample shall have a corresponding notebook entry that includes:

- Sample ID number
- Well location and number
- Date and time
- Analysis for which sample was collected
- Additional comments as necessary
- Sampler's name

Each sample must have a corresponding notebook entry on a chain-of-custody form. The manifest entry for sampling at any one location is to be completed before sampling is initiated by the same sampling team at any other location. In cases where the samples leave the immediate control of the sampling team, the samples must be sealed.

B.3.4 Sample Identification System

Each sample collected shall be designated by an alphanumeric code that shall identify the type of sampling location, the specific location, the matrix sampled, and a specific sample designation. Site specific procedures are described below.

Sample identifications shall contain a sequential code consisting of three segments. The first segment shall designate the project number. The second segment shall identify the location type. Location types shall be identified by a two-letter code. For example, MW will be used for monitoring well and GP for geoprobe. The third segment shall identify the specific sample location. The specific sampling location shall be identified using a three-digit number.

The fourth segment shall identify the matrix type and sample designation or identifier that identifies the sample depth, the sample event number, or other designation depending on the sample type. The matrix type shall be designated by a two-letter code. For example: GW will be used for groundwater. The sample identifier shall be represented by a two digit numeric code. Sampling events or rounds, such as for groundwater sampling shall be numbered in sequence beginning with "01" that corresponds to the round of sampling.

The following shall be a general guide for sample identification:

First Segment	Second Segment	Third Segment	Fourth Segment
NNN	AA	NNN	AANN
Project #	Location Type	Specific Type	Matrix Sample Identifier
455	GP	1	GW01

Symbol Definitions: Location Type: Matrix Type:

A = Alphabetic MW = Monitoring Well S = Soil

N = Numeric GP = Geoprobe GW = Groundwater

B.3.5 Sample Transfer

Samples shall be containerized and immediately transferred within a cooler to the mobile laboratory with minimal disturbance. Chain-of-custody forms will be completed at the time of sample collection and will accompany the samples inside a cooler for transfer from sample team to mobile laboratory representatives.

B.3.6 Chain-of-Custody Protocol

The primary objective of the sample custody procedures is to create an accurate written record that can be used to trace the possession and handling of all samples from the moment of their collection, through analysis, until their final disposition. Sample custody for samples collected during the investigation will be maintained by the field personnel collecting the samples. Field personnel are responsible for documenting each sample transfer and maintaining custody of all samples until they are transferred to the mobile laboratory.

Appendix E: Alpha Analytical I	Parameter Summary Tables	
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NY PFAAs via EPA 537(M)-Isotope Dilution (SOIL)

Holding Time: 14 days
Container/Sample Preservation: 1 - Plastic 8oz unpreserved

					LCS		MS		Duplicate	Surrogate	
Analyte	CAS #	RL	MDL	Units	Criteria	LCS RPD	Criteria	MS RPD	RPD	Criteria	
Perfluorobutanoic Acid (PFBA)	375-22-4	0.5	0.0227	ng/g	71-135	30	71-135	30	30		
Perfluoropentanoic Acid (PFPeA)	2706-90-3	0.5	0.046	ng/g	69-132	30	69-132	30	30		
Perfluorobutanesulfonic Acid (PFBS)	375-73-5	0.25	0.039	ng/g	72-128	30	72-128	30	30		
Perfluorohexanoic Acid (PFHxA)	307-24-4	0.5	0.0525	ng/g	70-132	30	70-132	30	30		
Perfluoroheptanoic Acid (PFHpA)	375-85-9	0.25	0.0451	ng/g	71-131	30	71-131	30	30		
Perfluorohexanesulfonic Acid (PFHxS)	355-46-4	0.25	0.0605	ng/g	67-130	30	67-130	30	30		
Perfluorooctanoic Acid (PFOA)	335-67-1	0.25	0.0419	ng/g	69-133	30	69-133	30	30		
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	27619-97-2	0.5	0.1795	ng/g	64-140	30	64-140	30	30		
Perfluoroheptanesulfonic Acid (PFHpS)	375-92-8	0.5	0.1365	ng/g	70-132	30	70-132	30	30		
Perfluorononanoic Acid (PFNA)	375-95-1	0.25	0.075	ng/g	72-129	30	72-129	30	30		
Perfluorooctanesulfonic Acid (PFOS)	1763-23-1	0.25	0.13	ng/g	68-136	30	68-136	30	30		
Perfluorodecanoic Acid (PFDA)	335-76-2	0.25	0.067	ng/g	69-133	30	69-133	30	30		
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	39108-34-4	0.5	0.287	ng/g	65-137	30	65-137	30	30		
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSA)	2355-31-9	0.5	0.2015	ng/g	63-144	30	63-144	30	30		
Perfluoroundecanoic Acid (PFUnA)	2058-94-8	0.5	0.0468	ng/g	64-136	30	64-136	30	30		
Perfluorodecanesulfonic Acid (PFDS)	335-77-3	0.5	0.153	ng/g	59-134	30	59-134	30	30		
Perfluorooctanesulfonamide (FOSA)	754-91-6	0.5	0.098	ng/g	67-137	30	67-137	30	30		
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	2991-50-6	0.5	0.0845	ng/g	61-139	30	61-139	30	30		
Perfluorododecanoic Acid (PFDoA)	307-55-1	0.5	0.07	ng/g	69-135	30	69-135	30	30		
Perfluorotridecanoic Acid (PFTrDA)	72629-94-8	0.5	0.2045	ng/g	66-139	30	66-139	30	30		
Perfluorotetradecanoic Acid (PFTA)	376-06-7	0.5	0.054	ng/g	69-133	30	69-133	30	30		
PFOA/PFOS, Total		0.25	0.0419	ng/g				30	30		
Perfluoro[13C4]Butanoic Acid (MPFBA)	NONE									61-135	
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	NONE									58-150	
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	NONE									74-139	
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	NONE									66-128	
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	NONE									71-129	
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	NONE									<i>78-139</i>	
Perfluoro[13C8]Octanoic Acid (M8PFOA)	NONE									<i>75-130</i>	
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6	NONE									20-154	
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	NONE									72-140	
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	NONE									<i>79-136</i>	
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	NONE									<i>75-130</i>	
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8	NONE									19-175	
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid	NONE									31-134	
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	NONE	1								61-155	
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	NONE	1						1		10-117	
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d	NONE	1								34-137	
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	NONE	1						1		54-150	
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	NONE									24-159	
		 									







1,4 Dioxane via EPA 8270D-SIM (SOIL)

Holding Time: 14 days
Container/Sample Preservation: 1 - Glass 250ml/8oz unpreserved

					LCS		MS		Duplicate RPD	Surrogate Criteria	T
Analyte	CAS #	RL	MDL	Units	Criteria	LCS RPD	Criteria	MS RPD	RPD	Criteria	
1,4-Dioxane	123-91-1	8	2.04	ug/kg	40-140	30	40-140	30	30		
1,4-Dioxane-d8 1,4-Dioxane-d8 (IS)	<i>17647-74-4</i> 17647-74-4			3, 3						15-110	
1,4-Dioxane-d8 (IS)	17647-74-4			ug/kg							
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METALS by 6010D (SOIL)

					LCS		MS		Duplicate	Surrogate	Holding	
Analyte	CAS #	RL	MDL	Units	Criteria	LCS RPD	Criteria	MS RPD	RPD	Criteria	Time	Container/Sample Preservation
Aluminum, Total	7429-90-5	4	1.08	mg/kg	48-151		75-125	20	20		180 days	1 - Metals Only-Glass 60mL/2oz unpreserved
Antimony, Total	7440-36-0	2	0.152	mg/kg	1-208		75-125	20	20		180 days	1 - Metals Only-Glass 60mL/2oz unpreserved
Arsenic, Total	7440-38-2	0.4	0.0832	mg/kg	79-121		75-125	20	20		180 days	1 - Metals Only-Glass 60mL/2oz unpreserved
Barium, Total	7440-39-3	0.4	0.0696	mg/kg	83-117		75-125	20	20		180 days	1 - Metals Only-Glass 60mL/2oz unpreserved
Beryllium, Total	7440-41-7	0.2	0.0132	mg/kg	83-117		75-125	20	20		180 days	1 - Metals Only-Glass 60mL/2oz unpreserved
Cadmium, Total	7440-43-9	0.4	0.0392	mg/kg	83-117		75-125	20	20		180 days	1 - Metals Only-Glass 60mL/2oz unpreserved
Calcium, Total	7440-70-2	4	1.4	mg/kg	81-119		75-125	20	20		180 days	1 - Metals Only-Glass 60mL/2oz unpreserved
Chromium, Total	7440-47-3	0.4	0.0384	mg/kg	80-120		75-125	20	20		180 days	1 - Metals Only-Glass 60mL/2oz unpreserved
Cobalt, Total	7440-48-4	0.8	0.0664	mg/kg	84-115		75-125	20	20		180 days	1 - Metals Only-Glass 60mL/2oz unpreserved
Copper, Total	7440-50-8	0.4	0.1032	mg/kg	81-118		75-125	20	20		180 days	1 - Metals Only-Glass 60mL/2oz unpreserved
Iron, Total	7439-89-6	2	0.3612	mg/kg	45-155		75-125	20	20		180 days	1 - Metals Only-Glass 60mL/2oz unpreserved
Lead, Total	7439-92-1	2	0.1072	mg/kg	81-117		75-125	20	20		180 days	1 - Metals Only-Glass 60mL/2oz unpreserved
Magnesium, Total	7439-95-4	4	0.616	mg/kg	76-124		75-125	20	20		180 days	1 - Metals Only-Glass 60mL/2oz unpreserved
Manganese, Total	7439-96-5	0.4	0.0636	mg/kg	81-117		75-125	20	20		180 days	1 - Metals Only-Glass 60mL/2oz unpreserved
Nickel, Total	7440-02-0	1	0.0968	mg/kg	83-117		75-125	20	20		180 days	1 - Metals Only-Glass 60mL/2oz unpreserved
Potassium, Total	7440-09-7	100	5.76	mg/kg	71-129		75-125	20	20		180 days	1 - Metals Only-Glass 60mL/2oz unpreserved
Selenium, Total	7782-49-2	0.8	0.1032	mg/kg	78-122		75-125	20	20		180 days	1 - Metals Only-Glass 60mL/2oz unpreserved
Silver, Total	7440-22-4	0.4	0.1132	mg/kg	75-124		75-125	20	20		180 days	1 - Metals Only-Glass 60mL/2oz unpreserved
Sodium, Total	7440-23-5	80	1.26	mg/kg	72-127		75-125	20	20		180 days	1 - Metals Only-Glass 60mL/2oz unpreserved
Thallium, Total	7440-28-0	0.8	0.126	mg/kg	80-120		75-125	20	20		180 days	1 - Metals Only-Glass 60mL/2oz unpreserved
Vanadium, Total	7440-62-2	0.4	0.0812	mg/kg	78-122		75-125	20	20		180 days	1 - Metals Only-Glass 60mL/2oz unpreserved
Zinc, Total	7440-66-6	2	0.1172	mg/kg	82-118		75-125	20	20		180 days	1 - Metals Only-Glass 60mL/2oz unpreserved
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METALS by 7471B (SOIL)

					LCS		MS		Duplicate	Surrogate Criteria	Holding Time	
Analyte	CAS #	RL	MDL	Units	Criteria	LCS RPD	Criteria	MS RPD	RPD	Criteria	Time	Container/Sample Preservation
Mercury, Total	7439-97-6	0.08	0.016896	mg/kg	72-128		80-120	20	20		28 days	Container/Sample Preservation 1 - Metals Only-Glass 60mL/2oz unpreserved
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TCL Pesticides - EPA 8081B (SOIL)

Holding Time: 14 days
Container/Sample Preservation: 1 - Glass 250ml/8oz unpreserved

Analyte Delta-BHC Lindane Alpha-BHC Beta-BHC Heptachlor Aldrin	CAS # 319-86-8 58-89-9 319-84-6 319-85-7 76-44-8	RL 0.0016008 0.000667 0.000667 0.0016008	MDL 0.00031349 0.000298149	Units mg/kg	LCS Criteria	LCS RPD	MS Criteria	MS RPD	Duplicate RPD	Surrogate Criteria	
Delta-BHC Lindane Alpha-BHC Beta-BHC Heptachlor	319-86-8 58-89-9 319-84-6 319-85-7 76-44-8	0.0016008 0.000667 0.000667	0.00031349 0.000298149	mg/kg			Circuia				
Lindane Alpha-BHC Beta-BHC Heptachlor	58-89-9 319-84-6 319-85-7 76-44-8	0.000667 0.000667	0.000298149			30	30-150	50	50		
Alpha-BHC Beta-BHC Heptachlor	319-84-6 319-85-7 76-44-8	0.000667		mg/kg	30-150	30	30-150	50	50		
Beta-BHC Heptachlor	319-85-7 76-44-8		0.000189428	mg/kg	30-150	30	30-150	50	50		
Heptachlor	76-44-8		0.00060697	mg/kg	30-150	30	30-150	50	50		
		0.0008004	0.000358846	mg/kg	30-150	30	30-150	50	50		
	309-00-2	0.0016008	0.000563615	mg/kg	30-150	30	30-150	50	50		
Heptachlor epoxide	1024-57-3	0.0030015	0.00090045	mg/kg	30-150	30	30-150	50	50		
Endrin	72-20-8	0.000667	0.00027347	mg/kg	30-150	30	30-150	50	50		
Endrin aldehyde	7421-93-4	0.002001	0.00070035	mg/kg	30-150	30	30-150	50	50		
Endrin ketone	53494-70-5	0.0016008	0.000412206	mg/kg	30-150	30	30-150	50	50		
Dieldrin	60-57-1	0.0010005	0.00050025	mg/kg	30-150	30	30-150	50	50		
4,4'-DDE	72-55-9	0.0016008	0.000370185	mg/kg	30-150	30	30-150	50	50		
4,4'-DDD	72-54-8	0.0016008	0.000570105	mg/kg	30-150	30	30-150	50	50		
4,4'-DDT	50-29-3	0.0030015	0.00128731	mg/kg	30-150	30	30-150	50	50		
Endosulfan I	959-98-8	0.0036013	0.000378189	mg/kg	30-150	30	30-150	50	50		
Endosulfan II	33213-65-9	0.0016008	0.000578189	mg/kg	30-150	30	30-150	50	50		
Endosulfan sulfate	1031-07-8	0.0016008	0.000334934	mg/kg	30-150	30	30-150	50	50		
Methoxychlor	72-43-5	0.0030015	0.000317492	ma/ka	30-150	30	30-150	50	50		
Toxaphene	8001-35-2	0.030015	0.0009338	mg/kg	30-150	30	30-150	50	50		
cis-Chlordane	5103-71-9		0.0084042				30-150				
		0.002001		mg/kg	30-150	30		50	50		
trans-Chlordane	5103-74-2	0.002001	0.000528264	mg/kg	30-150	30	30-150	50	50		
Chlordane	57-74-9	0.0130065	0.00530265	mg/kg	30-150	30	30-150	50	50		
2,4,5,6-Tetrachloro-m-xylene	877-09-8				-					30-150	
Decachlorobiphenyl	2051-24-3									30-150	







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TCL Volatiles - EPA 8260C/5035 High&Low (SOIL)

		I		I	LCS	I	MS	1	Duplicate	Surrogate	
Analyte	CAS#	RL	MDL	Units	Criteria	LCS RPD	Criteria	MS RPD	RPD	Criteria	
Methylene chloride	75-09-2	5	2.29	ug/kg	70-130	30	70-130	30	30		
1.1-Dichloroethane	75-34-3	1	0.145	ug/kg	70-130	30	70-130	30	30		
Chloroform	67-66-3	1.5	0.14	ug/kg	70-130	30	70-130	30	30		
Carbon tetrachloride	56-23-5	1	0.23	ug/kg	70-130	30	70-130	30	30		
1,2-Dichloropropane	78-87-5	1	0.125	ug/kg	70-130	30	70-130	30	30		
Dibromochloromethane	124-48-1	1	0.14	ug/kg	70-130	30	70-130	30	30		
1,1,2-Trichloroethane	79-00-5	1	0.267	ug/kg	70-130	30	70-130	30	30		
Tetrachloroethene	127-18-4	0.5	0.196	ug/kg	70-130	30	70-130	30	30		
Chlorobenzene	108-90-7	0.5	0.127	ug/kg	70-130	30	70-130	30	30		
Trichlorofluoromethane	75-69-4	4	0.695	ug/kg	70-139	30	70-139	30	30		
1,2-Dichloroethane	107-06-2	1	0.257	ug/kg	70-130	30	70-130	30	30		
1,1,1-Trichloroethane	71-55-6	0.5	0.167	ug/kg	70-130	30	70-130	30	30		
Bromodichloromethane	75-27-4	0.5	0.109	ug/kg	70-130	30	70-130	30	30		
trans-1,3-Dichloropropene	10061-02-6	1	0.273	ug/kg	70-130	30	70-130	30	30		
cis-1,3-Dichloropropene	10061-01-5	0.5	0.158	ug/kg	70-130	30	70-130	30	30		
1,3-Dichloropropene, Total	542-75-6	0.5	0.158	ug/kg				30	30		
1,1-Dichloropropene	563-58-6	0.5	0.159	ug/kg	70-130	30	70-130	30	30		
Bromoform	75-25-2	4	0.246	ug/kg	70-130	30	70-130	30	30		
1,1,2,2-Tetrachloroethane	79-34-5	0.5	0.166	ug/kg	70-130	30	70-130	30	30		
Benzene	71-43-2	0.5	0.166	ug/kg	70-130	30	70-130	30	30		
Toluene	108-88-3	1	0.543	ug/kg	70-130	30	70-130	30	30		
Ethylbenzene	100-41-4	1	0.141	ug/kg	70-130	30	70-130	30	30		
Chloromethane	74-87-3	4	0.932	ug/kg	52-130	30	52-130	30	30		
Bromomethane	74-83-9	2	0.581	ug/kg	57-147	30	57-147	30	30		
Vinyl chloride	75-01-4	1	0.335	ug/kg	67-130	30	67-130	30	30		
Chloroethane	75-00-3	2	0.452	ug/kg	50-151	30	50-151	30	30		
1,1-Dichloroethene	75-35-4	1	0.238	ug/kg	65-135	30	65-135	30	30		
trans-1,2-Dichloroethene	156-60-5	1.5	0.137	ug/kg	70-130	30	70-130	30	30		
Trichloroethene	79-01-6	0.5	0.137	ug/kg	70-130	30	70-130	30	30		
1,2-Dichlorobenzene	95-50-1	2	0.144	ug/kg	70-130	30	70-130	30	30		
1,3-Dichlorobenzene	541-73-1	2	0.148	ug/kg	70-130	30	70-130	30	30		
1,4-Dichlorobenzene	106-46-7	2	0.171	ug/kg	70-130	30	70-130	30	30		
Methyl tert butyl ether	1634-04-4	2	0.201	ug/kg	66-130	30	66-130	30	30		
p/m-Xylene	179601-23-1	2	0.56	ug/kg	70-130	30	70-130	30	30		
o-Xylene	95-47-6	1	0.291	ug/kg	70-130	30	70-130	30	30		
Xylene (Total)	1330-20-7	1	0.291	ug/kg				30	30		
cis-1,2-Dichloroethene	156-59-2	1	0.175	ug/kg	70-130	30	70-130	30	30		
1,2-Dichloroethene (total)	540-59-0	1	0.137	ug/kg				30	30		
Dibromomethane	74-95-3	2	0.238	ug/kg	70-130	30	70-130	30	30		
Styrene	100-42-5	1	0.196	ug/kg	70-130	30	70-130	30	30		
Dichlorodifluoromethane	75-71-8	10	0.915	ug/kg	30-146	30	30-146	30	30		
Acetone	67-64-1	10	4.811	ug/kg	54-140	30	54-140	30	30		







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TCL Volatiles - EPA 8260C/5035 High&Low (SOIL)

					LCS		MS		Duplicate	Surrogate	
Analyte	CAS #	RL	MDL	Units	Criteria	LCS RPD	Criteria	MS RPD	RPD	Criteria	
Carbon disulfide	75-15-0	10	4.55	ug/kg	59-130	30	59-130	30	30		
2-Butanone	78-93-3	10	2.22	ug/kg	70-130	30	70-130	30	30		
Vinyl acetate	108-05-4	10	2.15	ug/kg	70-130	30	70-130	30	30		
4-Methyl-2-pentanone	108-10-1	10	1.28	ug/kg	70-130	30	70-130	30	30		
1,2,3-Trichloropropane	96-18-4	2	0.127	ug/kg	68-130	30	68-130	30	30		
2-Hexanone	591-78-6	10	1.18	ug/kg	70-130	30	70-130	30	30		
Bromochloromethane	74-97-5	2	0.205	ug/kg	70-130	30	70-130	30	30		
2,2-Dichloropropane	594-20-7	2	0.202	ug/kg	70-130	30	70-130	30	30		
1,2-Dibromoethane	106-93-4	1	0.279	ug/kg	70-130	30	70-130	30	30		
1,3-Dichloropropane	142-28-9	2	0.167	ug/kg	69-130	30	69-130	30	30		
1,1,1,2-Tetrachloroethane	630-20-6	0.5	0.132	ug/kg	70-130	30	70-130	30	30		
Bromobenzene	108-86-1	2	0.145	ua/ka	70-130	30	70-130	30	30		
n-Butylbenzene	104-51-8	1	0.167	ug/kg	70-130	30	70-130	30	30		
sec-Butylbenzene	135-98-8	1	0.146	ug/kg	70-130	30	70-130	30	30		
tert-Butylbenzene	98-06-6	2	0.118	ug/kg	70-130	30	70-130	30	30		
o-Chlorotoluene	95-49-8	2	0.191	ug/kg	70-130	30	70-130	30	30		
p-Chlorotoluene	106-43-4	2	0.108	ug/kg	70-130	30	70-130	30	30		
1,2-Dibromo-3-chloropropane	96-12-8	3	0.998	ug/kg	68-130	30	68-130	30	30		
Hexachlorobutadiene	87-68-3	4	0.169	ug/kg	67-130	30	67-130	30	30		
Isopropylbenzene	98-82-8	1	0.109	ug/kg	70-130	30	70-130	30	30		
p-Isopropyltoluene	99-87-6	1	0.109	ug/kg	70-130	30	70-130	30	30		
Naphthalene	91-20-3	4	0.65	ug/kg	70-130	30	70-130	30	30		
Acrylonitrile	107-13-1	4	1.15	ug/kg	70-130	30	70-130	30	30		
n-Propylbenzene	103-65-1	1	0.171	ug/kg	70-130	30	70-130	30	30		
1,2,3-Trichlorobenzene	87-61-6	2	0.322	ug/kg	70-130	30	70-130	30	30		
1,2,4-Trichlorobenzene	120-82-1	2	0.272	ug/kg	70-130	30	70-130	30	30		
1,3,5-Trimethylbenzene	108-67-8	2	0.193	ug/kg	70-130	30	70-130	30	30		
1,2,4-Trimethylbenzene	95-63-6	2	0.334	ug/kg	70-130	30	70-130	30	30		
1,4-Dioxane	123-91-1	80	35.1	ug/kg	65-136	30	65-136	30	30		
1,4-Diethylbenzene	105-05-5	2	0.177	ug/kg	70-130	30	70-130	30	30		
4-Ethyltoluene	622-96-8	2	0.384	ug/kg	70-130	30	70-130	30	30		-
1,2,4,5-Tetramethylbenzene	95-93-2	2	0.191	ug/kg	70-130	30	70-130	30	30		
Ethyl ether	60-29-7	2	0.341	ug/kg	67-130	30	67-130	30	30		
trans-1.4-Dichloro-2-butene	110-57-6	5	1.42	ug/kg	70-130	30	70-130	30	30		
1.2-Dichloroethane-d4	17060-07-0	<u> </u>	T	51 5	1	1	1	1		70-130	
2-Chloroethoxyethane	1,000 0, 0									1 222	
Toluene-d8	2037-26-5					1				70-130	
4-Bromofluorobenzene	460-00-4							1		70-130	
Dibromofluoromethane	1868-53-7									70-130	
2 D. G. Torrado G. G. G. G. G. G. G. G. G. G. G. G. G.	1000 33 7							1		7,0 150	
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NYTCL Semivolatiles - EPA 8270D (SOIL)

Holding Time: 14 days
Container/Sample Preservation: 1 - Glass 250ml/8oz unpreserved

		1			LCS		MS	1	Duplicate	Surrogate	1
Analyte	CAS #	RL	MDL	Units	Criteria	LCS RPD	Criteria	MS RPD	RPD	Criteria	
Acenaphthene	83-32-9	133.6	17.3012	ug/kg	31-137	50	31-137	50	50		
1.2.4-Trichlorobenzene	120-82-1	167	19.1048	ug/kg	38-107	50	38-107	50	50		
Hexachlorobenzene	118-74-1	100.2	18.704	ug/kg	40-140	50	40-140	50	50		
Bis(2-chloroethyl)ether	111-44-4	150.3	22.6452	ug/kg	40-140	50	40-140	50	50		
2-Chloronaphthalene	91-58-7	167	16.5664	ug/kg	40-140	50	40-140	50	50		
1,2-Dichlorobenzene	95-50-1	167	29.9932	ug/kg	40-140	50	40-140	50	50		
1,3-Dichlorobenzene	541-73-1	167	28.724	ug/kg	40-140	50	40-140	50	50		
1,4-Dichlorobenzene	106-46-7	167	29.1582	ug/kg	28-104	50	28-104	50	50		
3,3'-Dichlorobenzidine	91-94-1	167	44.422	ug/kg	40-140	50	40-140	50	50		
2,4-Dinitrotoluene	121-14-2	167	33.4	ug/kg	40-132	50	40-132	50	50		
2,6-Dinitrotoluene	606-20-2	167	28.6572	ug/kg	40-140	50	40-140	50	50		
Fluoranthene	206-44-0	100.2	19.1716	ug/kg	40-140	50	40-140	50	50		
4-Chlorophenyl phenyl ether	7005-72-3	167	17.869	ug/kg	40-140	50	40-140	50	50		
4-Bromophenyl phenyl ether	101-55-3	167	25.4842	ug/kg	40-140	50	40-140	50	50		
Bis(2-chloroisopropyl)ether	108-60-1	200.4	28.5236	ug/kg	40-140	50	40-140	50	50		
Bis(2-chloroethoxy)methane	111-91-1	180.36	16.7334	ug/kg	40-117	50	40-117	50	50		
Hexachlorobutadiene	87-68-3	167	24.4488	ug/kg	40-140	50	40-140	50	50		
Hexachlorocyclopentadiene	77-47-4	477.62	151.302	ug/kg	40-140	50	40-140	50	50		
Hexachloroethane	67-72-1	133.6	27.0206	ug/kg	40-140	50	40-140	50	50		
Isophorone	78-59-1	150.3	21.6766	ug/kg	40-140	50	40-140	50	50		
Naphthalene	91-20-3	167	20.3406	ug/kg	40-140	50	40-140	50	50		
Nitrobenzene	98-95-3	150.3	24.716	ug/kg	40-140	50	40-140	50	50		
NitrosoDiPhenylAmine(NDPA)/DPA	86-30-6	133.6	19.0046	ug/kg	36-157	50	36-157	50	50		
n-Nitrosodi-n-propylamine	621-64-7	167	25.7848	ug/kg	32-121	50	32-121	50	50		
Bis(2-Ethylhexyl)phthalate	117-81-7	167	57.782	ug/kg	40-140	50	40-140	50	50		
Butyl benzyl phthalate	85-68-7	167	42.084	ug/kg	40-140	50	40-140	50	50		
Di-n-butylphthalate	84-74-2	167	31.6632	ug/kg	40-140	50	40-140	50	50		
Di-n-octylphthalate	117-84-0	167	56.78	ug/kg	40-140	50	40-140	50	50		
Diethyl phthalate	84-66-2	167	15.4642	ug/kg	40-140	50	40-140	50	50		
Dimethyl phthalate	131-11-3	167	35.07	ug/kg	40-140	50	40-140	50	50		
Benzo(a)anthracene	56-55-3	100.2	18.8042	ug/kg	40-140	50	40-140	50	50		
Benzo(a)pyrene	50-32-8	133.6	40.748	ug/kg	40-140	50	40-140	50	50		
Benzo(b)fluoranthene	205-99-2	100.2	28.1228	ug/kg	40-140	50	40-140	50	50		
Benzo(k)fluoranthene	207-08-9	100.2	26.72	ug/kg	40-140	50	40-140	50	50		
Chrysene	218-01-9	100.2	17.368	ug/kg	40-140	50	40-140	50	50		
Acenaphthylene	208-96-8	133.6	25.7848	ug/kg	40-140	50	40-140	50	50		
Anthracene	120-12-7	100.2	32.565	ug/kg	40-140	50	40-140	50	50		
Benzo(ghi)perylene	191-24-2	133.6	19.6392	ug/kg	40-140	50	40-140	50	50		
Fluorene	86-73-7	167	16.2324	ug/kg	40-140	50	40-140	50	50		
Phenanthrene	85-01-8	100.2	20.3072	ug/kg	40-140	50	40-140	50	50		
Dibenzo(a,h)anthracene	53-70-3	100.2	19.3052	ug/kg	40-140	50	40-140	50	50		
Indeno(1,2,3-cd)Pyrene	193-39-5	133.6	23.2798	ug/kg	40-140	50	40-140	50	50		







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NYTCL Semivolatiles - EPA 8270D (SOIL)

Holding Time: 14 days
Container/Sample Preservation: 1 - Glass 250ml/8oz unpreserved

					LCS	1	MS		Duplicate	Surrogate	
Analyte	CAS#	RL	MDL	Units	Criteria	LCS RPD	Criteria	MS RPD	RPD	Criteria	
Pyrene	129-00-0	100.2	16.5998	ug/kg	35-142	50	35-142	50	50		
Biphenyl	92-52-4	380.76	38.744	ug/kg	54-104	50	54-104	50	50		
4-Chloroaniline	106-47-8	167	30.394	ug/kg	40-140	50	40-140	50	50		
2-Nitroaniline	88-74-4	167	32.1976	ug/kg	47-134	50	47-134	50	50		
3-Nitroaniline	99-09-2	167	31.4962	ug/kg	26-129	50	26-129	50	50		
4-Nitroaniline	100-01-6	167	69.138	ug/kg	41-125	50	41-125	50	50		
Dibenzofuran	132-64-9	167	15.7982	ug/kg	40-140	50	40-140	50	50		
2-Methylnaphthalene	91-57-6	200.4	20.1736	ug/kg	40-140	50	40-140	50	50		
Acetophenone	98-86-2	167	20.6746	ug/kg	14-144	50	14-144	50	50		
2,4,6-Trichlorophenol	88-06-2	100.2	31.6632	ug/kg	30-130	50	30-130	50	50		
P-Chloro-M-Cresol	59-50-7	167	24.883	ug/kg	26-103	50	26-103	50	50		
2-Chlorophenol	95-57-8	167	19.7394	ug/kg	25-102	50	25-102	50	50		
2,4-Dichlorophenol	120-83-2	150.3	26.8536	ug/kg	30-130	50	30-130	50	50		
2,4-Dimethylphenol	105-67-9	167	55.11	ug/kg	30-130	50	30-130	50	50		
2-Nitrophenol	88-75-5	360.72	62.792	ug/kg	30-130	50	30-130	50	50		
4-Nitrophenol	100-02-7	233.8	68.136	ug/kg	11-114	50	11-114	50	50		
2,4-Dinitrophenol	51-28-5	801.6	77.822	ug/kg	4-130	50	4-130	50	50		
4,6-Dinitro-o-cresol	534-52-1	434.2	80.16	ug/kg	10-130	50	10-130	50	50		
Pentachlorophenol	87-86-5	133.6	36.74	ug/kg	17-109	50	17-109	50	50		
Phenol	108-95-2	167	25.217	ug/kg	26-90	50	26-90	50	50		
2-Methylphenol	95-48-7	167	25.885	ug/kg	30-130.	50	30-130.	50	50		
3-Methylphenol/4-Methylphenol	108-39-4/106-44-5	240.48	26.1522	ug/kg	30-130	50	30-130	50	50		
2,4,5-Trichlorophenol	95-95-4	167	31.9972	ug/kg	30-130	50	30-130	50	50		
Benzoic Acid	65-85-0	541.08	169.004	ug/kg	10-110	50	10-110	50	50		
Benzyl Alcohol	100-51-6	167	51.102	ug/kg	40-140	50	40-140	50	50		
Carbazole	86-74-8	167	16.2324	ug/kg	54-128	50	54-128	50	50		
2-Fluorophenol	367-12-4									25-120	
Phenol-d6	13127-88-3									10-120	
Nitrobenzene-d5	4165-60-0									23-120	
2-Fluorobiphenyl	321-60-8									30-120	
2,4,6-Tribromophenol	118-79-6									10-136	
4-Terphenyl-d14	1718-51-0									18-120	







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NY PFAAs via EPA 537(M)-Isotope Dilution (SOIL)

Holding Time: 28 days
Container/Sample Preservation: 1 - Plastic 8oz unpreserved

				1	LCS		MS		Duplicate	Surrogate	
Analyte	CAS #	RL	MDL	Units	Criteria	LCS RPD	Criteria	MS RPD	RPD	Criteria	
Perfluorobutanoic Acid (PFBA)	375-22-4	1	0.0213	ng/g	71-135	30	71-135	30	30	-	
Perfluoropentanoic Acid (PFPeA)	2706-90-3	1	0.01035	ng/g	69-132	30	69-132	30	30		
Perfluorobutanesulfonic Acid (PFBS)	375-73-5	1	0.0635	ng/g	72-128	30	72-128	30	30		
Perfluorohexanoic Acid (PFHxA)	307-24-4	1	0.064	ng/g	70-132	30	70-132	30	30		
Perfluoroheptanoic Acid (PFHpA)	375-85-9	1	0.064	ng/g	71-131	30	71-131	30	30		
Perfluorohexanesulfonic Acid (PFHxS)	355-46-4	1	0.057	ng/g	67-130	30	67-130	30	30		
Perfluorooctanoic Acid (PFOA)	335-67-1	1	0.04105	ng/g	69-133	30	69-133	30	30		
1H.1H.2H.2H-Perfluorooctanesulfonic Acid (6:2FTS)	27619-97-2	1	0.198	ng/g	64-140	30	64-140	30	30		
Perfluoroheptanesulfonic Acid (PFHpS)	375-92-8	1	0.136	ng/g	70-132	30	70-132	30	30		
Perfluorononanoic Acid (PFNA)	375-95-1	1	0.083	ng/g	72-129	30	72-129	30	30		
Perfluorooctanesulfonic Acid (PFOS)	1763-23-1	1	0.1205	ng/g	68-136	30	68-136	30	30		
Perfluorodecanoic Acid (PFDA)	335-76-2	1	0.072	ng/g	69-133	30	69-133	30	30		
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	39108-34-4	1	0.275	ng/g	65-137	30	65-137	30	30		
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSA)	2355-31-9	1	0.103	ng/g	63-144	30	63-144	30	30		
Perfluoroundecanoic Acid (PFUnA)	2058-94-8	1	0.056	ng/g	64-136	30	64-136	30	30		
Perfluorodecanesulfonic Acid (PFDS)	335-77-3	1	0.097	ng/g	59-134	30	59-134	30	30		
Perfluorooctanesulfonamide (FOSA)	754-91-6	1	0.1025	ng/g	67-137	30	67-137	30	30		
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	2991-50-6	1	0.09	ng/g	61-139	30	61-139	30	30		
Perfluorododecanoic Acid (PFDoA)	307-55-1	1	0.086	ng/g	69-135	30	69-135	30	30		
Perfluorotridecanoic Acid (PFTrDA)	72629-94-8	1	0.062	ng/g	66-139	30	66-139	30	30		
Perfluorotetradecanoic Acid (PFTA)	376-06-7	1	0.07	ng/g	69-133	30	69-133	30	30		
PFOA/PFOS, Total		1	0.04105	ng/g				30	30		
Perfluoro[13C4]Butanoic Acid (MPFBA)	NONE									60-153	
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	NONE									65-182	
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	NONE									70-151	
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	NONE									61-147	
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	NONE									62-149	
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	NONE									63-166	
Perfluoro[13C8]Octanoic Acid (M8PFOA)	NONE									62-152	
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6	NONE									32-182	
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	NONE									61-154	
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	NONE									65-151	
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	NONE									65-150	
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-&	NONE									25-186	
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid	NONE									45-137	
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	NONE									64-158	
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	NONE									1-125	
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (a	NONE									42-136	
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	NONE									56-148	
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	NONE									26-160	







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TCL PCBs - EPA 8082A (SOIL)

Holding Time: 14 days
Container/Sample Preservation: 1 - Glass 250ml/8oz unpreserved

		1		T	LCS	1	MS	1	Duplicate	Surrogate	
Analyte	CAS #	RL	MDL	Units	Criteria	LCS RPD	Criteria	MS RPD	RPD	Criteria	
Aroclor 1016	12674-11-2	33.5	2.9748	ug/kg	40-140	50	40-140	50	50		
Aroclor 1221	11104-28-2	33.5	3.3567	ug/kg	40-140	50	40-140	50	50		
Aroclor 1232	11141-16-5	33.5	7.102	ug/kg	40-140	50	40-140	50	50		
Aroclor 1242	53469-21-9	33.5	4.5158	ug/kg	40-140	50	40-140	50	50		
Aroclor 1248	12672-29-6	33.5	5.025	ug/kg	40-140	50	40-140	50	50		
Aroclor 1254	11097-69-1	33.5	3.6649	ug/kg	40-140	50	40-140	50	50		
Aroclor 1260	11096-82-5	33.5	6.1908	ug/kg	40-140	50	40-140	50	50		
Aroclor 1262	37324-23-5	33.5	4.2545	ug/kg	40-140	50	40-140	50	50		
Aroclor 1268	11100-14-4	33.5	3.4706	ug/kg	40-140	50	40-140	50	50		
PCBs, Total	1336-36-3	33.5	2.9748	ug/kg				50	50		
2,4,5,6-Tetrachloro-m-xylene	877-09-8			3, 3						30-150	
Decachlorobiphenyl	2051-24-3									30-150	
, ,											
					1						
				1		1	1				
				1		1	1				
								1			
											1







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WETCHEM (SOIL)

					LCS		MS		Duplicate		Holding	Container/Sample
Analyte	CAS #	RL	MDL	Units	Criteria	LCS RPD	Criteria	MS RPD	RPD	Method	Time	Preservation
Chromium, Hexavalent	18540-29-9	0.8	0.16	mg/kg	80-120	20	75-125	20	20	7196A	30 days	1 - Glass 120ml/4oz unpreserved
Cyanide, Total	57-12-5	1	0.212	mg/kg	80-120	35	75-125	35	20 35	9010C/9012B	14 days	1 - Glass 120ml/4oz unpreserved 1 - Glass 250ml/8oz unpreserved







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Volatile Organics in Air: TO-15 (SOIL_VAPOR)

Holding Time: 30 days
Container/Sample Preservation: 1 - Canister - 2.7 Liter

			1		LCS	I	MS	1	Duplicate	Surrogate	T
Analyte	CAS #	RL	MDL	Units	Criteria	LCS RPD	Criteria	MS RPD	RPD	Criteria	
1.1.1-Trichloroethane	71-55-6	0.2	0.0554	Vdqq	70-130		0	25	25	0.100.10	
1,1,2,2-Tetrachloroethane	79-34-5	0.2	0.0611	ppbV	70-130			25	25		
1,1,2-Trichloroethane	79-00-5	0.2	0.0694	ppbV	70-130			25	25		
1,1-Dichloroethane	75-34-3	0.2	0.0628	ppbV	70-130			25	25		
1,1-Dichloroethene	75-35-4	0.2	0.0613	ppbV	70-130			25	25		
1,2,3-Trimethylbenzene	526-73-8	0.2	0.0636	ppbV	70-130			25	25		
1,2,4-Trichlorobenzene	120-82-1	0.2	0.0759	ppbV	70-130			25	25		
1,2,4-Trimethylbenzene	95-63-6	0.2	0.0416	ppbV	70-130			25	25		
1,2,4,5-Tetramethylbenzene	95-93-2	0.2	0.068	ppbV	70-130			25	25		
1,2-Dibromoethane	106-93-4	0.2	0.0577	ppbV	70-130			25	25		
1,2-Dichlorobenzene	95-50-1	0.2	0.0653	ppbV	70-130			25	25		
1,2-Dichloroethane	107-06-2	0.2	0.0634	ppbV	70-130			25	25		
1,2-Dichloropropane	78-87-5	0.2	0.062	ppbV	70-130			25	25		
1,3,5-Trimethylbenzene	108-67-8	0.2	0.0737	ppbV	70-130			25	25		
1,3-Butadiene	106-99-0	0.2	0.063	ppbV	70-130			25	25		
1,3-Dichlorobenzene	541-73-1	0.2	0.0658	ppbV	70-130			25	25		
1,4-Dichlorobenzene	106-46-7	0.2	0.0681	ppbV	70-130			25	25		
1,4-Dioxane	123-91-1	0.2	0.0903	ppbV	70-130			25	25		
2,2,4-Trimethylpentane	540-84-1	0.2	0.0391	ppbV	70-130			25	25		
2-Butanone	78-93-3	0.5	0.0476	ppbV	70-130			25	25		
2-Hexanone	591-78-6	0.2	0.0662	ppbV	70-130			25	25		
2-Methylthiophene	554-14-3	0.2	0.0577	ppbV	70-130			25	25		
3-Methylthiophene	616-44-4	0.2	0.0577	ppbV	70-130			25	25		
3-Chloropropene	107-05-1	0.2	0.0517	ppbV	70-130			25	25		
2-Ethylthiophene	872-55-9	0.2	0.0455	ppbV	70-130			25	25		
4-Ethyltoluene	622-96-8	0.2	0.041	ppbV	70-130			25	25		
Acetone	67-64-1	1	0.544	ppbV	40-160			25	25		
Benzene	71-43-2	0.2	0.0494	ppbV	70-130			25	25		
Benzyl chloride	100-44-7	0.2	0.0545	ppbV	70-130			25	25		
Benzothiophene	95-15-8	0.5	0.0863	ppbV	70-130			25	25		
Bromodichloromethane	75-27-4	0.2	0.0534	ppbV	70-130			25	25		
Bromoform	75-25-2	0.2	0.0711	ppbV	70-130			25	25		
Bromomethane	74-83-9	0.2	0.0713	ppbV	70-130			25	25		
Carbon disulfide	75-15-0	0.2	0.0552	ppbV	70-130			25	25		
Carbon tetrachloride	56-23-5	0.2	0.0561	ppbV	70-130			25	25		
Chlorobenzene	108-90-7	0.2	0.0634	ppbV	70-130			25	25		
Chloroethane	75-00-3	0.2	0.0785	ppbV	70-130			25	25		
Chloroform	67-66-3	0.2	0.0632	ppbV	70-130			25	25		
Chloromethane	74-87-3	0.2	0.0735	ppbV	70-130			25	25		
cis-1,2-Dichloroethene	156-59-2	0.2	0.12	ppbV	70-130			25	25		
cis-1,3-Dichloropropene	10061-01-5	0.2	0.0461	ppbV	70-130			25	25		
Cyclohexane	110-82-7	0.2	0.0389	ppbV	70-130			25	25		







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Volatile Organics in Air: TO-15 (SOIL_VAPOR)

Holding Time: 30 days
Container/Sample Preservation: 1 - Canister - 2.7 Liter

					LCS		MS		Duplicate	Surrogate	
Analyte	CAS #	RL	MDL	Units	Criteria	LCS RPD	Criteria	MS RPD	RPD	Criteria	
Dibromochloromethane	124-48-1	0.2	0.0671	ppbV	70-130			25	25		
Dichlorodifluoromethane	75-71-8	0.2	0.0599	ppbV	70-130			25	25		
Ethyl Alcohol	64-17-5	5	0.788	ppbV	40-160			25	25		
Ethyl Acetate	141-78-6	0.5	0.137	ppbV	70-130			25	25		
Ethylbenzene	100-41-4	0.2	0.0467	ppbV	70-130			25	25		
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	0.2	0.0649	ppbV	70-130			25	25		
1,2-Dichloro-1,1,2,2-tetrafluoroethane	76-14-2	0.2	0.0609	ppbV	70-130			25	25		
Hexachlorobutadiene	87-68-3	0.2	0.0555	ppbV	70-130			25	25		
iso-Propyl Alcohol	67-63-0	0.5	0.348	ppbV	40-160			25	25		
Methylene chloride	75-09-2	0.5	0.07	ppbV	70-130			25	25		
4-Methyl-2-pentanone	108-10-1	0.5	0.0464	ppbV	70-130			25	25		
Methyl tert butyl ether	1634-04-4	0.2	0.0571	ppbV	70-130			25	25		
Methyl Methacrylate	80-62-6	0.5	0.06	ppbV	40-160			25	25		
p/m-Xylene	179601-23-1	0.4	0.101	ppbV	70-130			25	25		
o-Xylene	95-47-6	0.2	0.051	ppbV	70-130			25	25		
Xylene (Total)	1330-20-7	0.2	0.051	ppbV				25	25		
Heptane	142-82-5	0.2	0.0529	ppbV	70-130			25	25		
n-Heptane	142-82-5	0.2	0.0529	ppbV	70-130			25	25		
n-Hexane	110-54-3	0.2	0.0364	ppbV	70-130			25	25		
Propylene	115-07-1	0.5	0.0669	ppbV	70-130			25	25		
Styrene	100-42-5	0.2	0.0476	ppbV	70-130			25	25		
Tetrachloroethene	127-18-4	0.2	0.0673	ppbV	70-130			25	25		
Thiophene	110-02-1	0.2	0.0428	ppbV	70-130			25	25		
Tetrahydrofuran	109-99-9	0.5	0.0634	ppbV	70-130			25	25		
Toluene	108-88-3	0.2	0.0545	ppbV	70-130			25	25		
trans-1,2-Dichloroethene	156-60-5	0.2	0.0645	ppbV	70-130			25	25		
1,2-Dichloroethene (total)	540-59-0	0.2	0.0645	ppbV				25	25		
trans-1,3-Dichloropropene	10061-02-6	0.2	0.0491	ppbV	70-130			25	25		
1,3-Dichloropropene, Total	542-75-6	0.2	0.0461	ppbV				25	25		
Trichloroethene	79-01-6	0.2	0.0512	ppbV	70-130			25	25		
Trichlorofluoromethane	75-69-4	0.2	0.0755	ppbV	70-130			25	25		
Vinyl acetate	108-05-4	1	0.0508	ppbV	70-130			25	25		
Vinyl bromide	593-60-2	0.2	0.0696	ppbV	70-130			25	25		
Vinyl chloride	75-01-4	0.2	0.0598	ppbV	70-130			25	25		
Naphthalene	91-20-3	0.2	0.0984	ppbV	70-130			25	25		
Total HC As Hexane	NONE	10	0.0364	ppbV	70-130			25	25		
Total VOCs As Toluene	NONE	10	0.0545	ppbV	70-130			25	25		
Propane	74-98-6	0.5	0.149	ppbV	70-130			25	25		
Acrylonitrile	107-13-1	0.5	0.0544	ppbV	70-130			25	25		
Acrolein	107-02-8	0.5	0.0545	ppbV	70-130			25	25		
1,1,1,2-Tetrachloroethane	630-20-6	0.2	0.0591	ppbV	70-130			25	25		
Isopropylbenzene	98-82-8	0.2	0.0516	ppbV	70-130			25	25		







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Volatile Organics in Air: TO-15 (SOIL_VAPOR)

Holding Time: 30 days
Container/Sample Preservation: 1 - Canister - 2.7 Liter

Analyte 1,2,3-Trichloropropane Acetonitrile Bromobenzene Chlorodifluoromethane Dichlorofluoromethane Dibromomethane Pentane Octane Tertiary-Amyl Methyl Ether o-Chlorotoluene p-Chlorotoluene 2,2-Dichloropropane	CAS # 96-18-4 75-05-8 108-86-1 75-45-6 75-43-4 74-95-3 109-66-0 111-65-9 994-05-8 95-49-8 106-43-4 594-20-7	RL 0.2 0.2 0.2 0.2 0.2 0.2 0.2 0.2 0.2 0.2	MDL 0.0592 0.0745 0.064 0.0599 0.0835 0.0597 0.0656 0.0495 0.0532	ppbV ppbV ppbV ppbV ppbV ppbV ppbV ppbV	70-130 70-130 70-130 70-130 70-130 70-130 70-130 70-130	LCS RPD	Criteria	25 25 25 25 25 25 25	25 25 25 25 25 25	Criteria		
Acetonitrile Bromobenzene Chlorodifluoromethane Dichlorofluoromethane Dibromomethane Pentane Octane Tertiary-Amyl Methyl Ether o-Chlorotoluene p-Chlorotoluene	75-05-8 108-86-1 75-45-6 75-43-4 74-95-3 109-66-0 111-65-9 994-05-8 95-49-8 106-43-4 594-20-7	0.2 0.2 0.2 0.2 0.2 0.2 0.2 0.2	0.0745 0.064 0.0599 0.0835 0.0597 0.0656 0.0495	ppbV ppbV ppbV ppbV ppbV ppbV ppbV	70-130 70-130 70-130 70-130 70-130			25 25 25	25 25 25			
Bromobenzene Chlorodifluoromethane Dichlorofluoromethane Dibromomethane Dibromomethane Pentane Octane Tertiary-Amyl Methyl Ether o-Chlorotoluene p-Chlorotoluene	108-86-1 75-45-6 75-43-4 74-95-3 109-66-0 111-65-9 994-05-8 95-49-8 106-43-4 594-20-7	0.2 0.2 0.2 0.2 0.2 0.2 0.2 0.2 0.2	0.064 0.0599 0.0835 0.0597 0.0656 0.0495 0.0532	ppbV ppbV ppbV ppbV ppbV ppbV	70-130 70-130 70-130 70-130			25 25	25 25			
Chlorodifluoromethane Dichlorofluoromethane Dibromomethane Pentane Octane Tertiary-Amyl Methyl Ether o-Chlorotoluene p-Chlorotoluene	75-45-6 75-43-4 74-95-3 109-66-0 111-65-9 994-05-8 95-49-8 106-43-4 594-20-7	0.2 0.2 0.2 0.2 0.2 0.2 0.2	0.0599 0.0835 0.0597 0.0656 0.0495 0.0532	ppbV ppbV ppbV ppbV ppbV	70-130 70-130 70-130			25	25			
Dichlorofluoromethane Dibromomethane Pentane Octane Tertiary-Amyl Methyl Ether o-Chlorotoluene p-Chlorotoluene	75-43-4 74-95-3 109-66-0 111-65-9 994-05-8 95-49-8 106-43-4 594-20-7	0.2 0.2 0.2 0.2 0.2 0.2	0.0835 0.0597 0.0656 0.0495 0.0532	ppbV ppbV ppbV ppbV	70-130 70-130							
Dibromomethane Pentane Octane Tertiary-Amyl Methyl Ether o-Chlorotoluene p-Chlorotoluene	74-95-3 109-66-0 111-65-9 994-05-8 95-49-8 106-43-4 594-20-7	0.2 0.2 0.2 0.2 0.2	0.0597 0.0656 0.0495 0.0532	ppbV ppbV ppbV	70-130			25	25			
Pentane Octane Tertiary-Amyl Methyl Ether o-Chlorotoluene p-Chlorotoluene	109-66-0 111-65-9 994-05-8 95-49-8 106-43-4 594-20-7	0.2 0.2 0.2 0.2	0.0656 0.0495 0.0532	ppbV ppbV				23	23			
Octane Tertiary-Amyl Methyl Ether o-Chlorotoluene p-Chlorotoluene	111-65-9 994-05-8 95-49-8 106-43-4 594-20-7	0.2 0.2 0.2	0.0495 0.0532	ppbV	70-130			25	25			
Tertiary-Amyl Methyl Ether o-Chlorotoluene p-Chlorotoluene	994-05-8 95-49-8 106-43-4 594-20-7	0.2 0.2	0.0532					25	25			
o-Chlorotoluene p-Chlorotoluene	95-49-8 106-43-4 594-20-7	0.2			70-130			25	25			
p-Chlorotoluene	106-43-4 594-20-7		0.0517	ppbV	70-130			25	25			
	594-20-7	0.2	0.0517	ppbV	70-130			25	25			
2,2-Dichloropropane		J U.Z	0.0574	ppbV	70-130			25	25			
		0.2	0.0514	ppbV	70-130			25	25			
1,1-Dichloropropene	563-58-6	0.2	0.0512	ppbV	70-130			25	25			
Isopropyl Ether	108-20-3	0.2	0.0978	ppbV	70-130			25	25			
Ethyl-Tert-Butyl-Ether	637-92-3	0.2	0.0656	ppbV	70-130			25	25			
1,2,3-Trichlorobenzene	87-61-6	0.2	0.0756	ppbV	70-130			25	25			
Ethyl ether	60-29-7	0.2	0.0795	ppbV	70-130			25	25			
n-Butylbenzene	104-51-8	0.2	0.049	ppbV	70-130			25	25			
sec-Butylbenzene	135-98-8	0.2	0.0469	ppbV	70-130			25	25			
tert-Butylbenzene	98-06-6	0.2	0.0464	ppbV	70-130			25	25			
1,2-Dibromo-3-chloropropane	96-12-8	0.2	0.0557	ppbV	70-130			25	25			
p-Isopropyltoluene	99-87-6	0.2	0.058	ppbV	70-130			25	25			
n-Propylbenzene	103-65-1	0.2	0.0462	ppbV	70-130			25	25			
1,3-Dichloropropane	142-28-9	0.2	0.0601	ppbV	70-130			25	25			
Methanol	67-56-1	5	0.616	ppbV	70-130			25	25			
Acetaldehyde	75-07-0	2.5	0.499	ppbV	70-130			25	25			
Butane	106-97-8	0.2	0.0659	ppbV	70-130			25	25			
Nonane (C9)	111-84-2	0.2	0.0523	ppbV	70-130			25	25			
Decane (C10)	124-18-5	0.2	0.0448	ppbV	70-130			25	25			
Undecane	1120-21-4	0.2	0.0478	ppbV	70-130			25	25			
Indane	496-11-7	0.2	0.0534	ppbV	70-130			25	25			
Indene	95-13-6	0.2	0.0474	ppbV	70-130			25	25			
1-Methylnaphthalene	90-12-0	1	0.518	ppbV	70-130			25	25			
Dodecane (C12)	112-40-3	0.2	0.0719	ppbV	70-130			25	25			
Butyl Acetate	123-86-4	0.5	0.127	ppbV	70-130			25	25			
tert-Butyl Alcohol	75-65-0	0.5	0.0446	ppbV	70-130			25	25			
2-Methylnaphthalene	91-57-6	1	0.428	ppbV	70-130			25	25			
1,2-Dichloroethane-d4	17060-07-0									70-130		
Toluene-d8	2037-26-5									70-130		
Bromofluorobenzene	460-00-4									70-130		







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TCL Volatiles - EPA 8260C (WATER)

Holding Time: 14 days
Container/Sample Preservation: 3 - Vial HCl preserved

					LCS		MS		Duplicate	Surrogate	
Analyte	CAS #	RL	MDL	Units	Criteria	LCS RPD	Criteria	MS RPD	RPD	Criteria	
Methylene chloride	75-09-2	2.5	0.7	ug/l	70-130	20	70-130	20	20		
1,1-Dichloroethane	75-34-3	2.5	0.7	ug/l	70-130	20	70-130	20	20		
Chloroform	67-66-3	2.5	0.7	ug/l	70-130	20	70-130	20	20		
Carbon tetrachloride	56-23-5	0.5	0.134	ug/l	63-132	20	63-132	20	20		
1,2-Dichloropropane	78-87-5	1	0.133	ug/l	70-130	20	70-130	20	20		
Dibromochloromethane	124-48-1	0.5	0.149	ug/l	63-130	20	63-130	20	20		
1,1,2-Trichloroethane	79-00-5	1.5	0.5	ug/l	70-130	20	70-130	20	20		
Tetrachloroethene	127-18-4	0.5	0.181	ug/l	70-130	20	70-130	20	20		
Chlorobenzene	108-90-7	2.5	0.7	ug/l	75-130	20	75-130	20	20		
Trichlorofluoromethane	75-69-4	2.5	0.7	ug/l	62-150	20	62-150	20	20		
1,2-Dichloroethane	107-06-2	0.5	0.132	ug/l	70-130	20	70-130	20	20		
1,1,1-Trichloroethane	71-55-6	2.5	0.7	ug/l	67-130	20	67-130	20	20		
Bromodichloromethane	75-27-4	0.5	0.192	ug/l	67-130	20	67-130	20	20		
trans-1,3-Dichloropropene	10061-02-6	0.5	0.164	ug/l	70-130	20	70-130	20	20		
cis-1,3-Dichloropropene	10061-01-5	0.5	0.144	ug/l	70-130	20	70-130	20	20		
1,3-Dichloropropene, Total	542-75-6	0.5	0.144	ug/l				20	20		
1,1-Dichloropropene	563-58-6	2.5	0.7	ug/l	70-130	20	70-130	20	20		
Bromoform	75-25-2	2	0.65	ug/l	54-136	20	54-136	20	20		
1,1,2,2-Tetrachloroethane	79-34-5	0.5	0.144	ug/l	67-130	20	67-130	20	20		
Benzene	71-43-2	0.5	0.159	ug/l	70-130	20	70-130	20	20		
Toluene	108-88-3	2.5	0.7	ug/l	70-130	20	70-130	20	20		
Ethylbenzene	100-41-4	2.5	0.7	ug/l	70-130	20	70-130	20	20		
Chloromethane	74-87-3	2.5	0.7	ug/l	64-130	20	64-130	20	20		
Bromomethane	74-83-9	2.5	0.7	ug/l	39-139	20	39-139	20	20		
Vinyl chloride	75-01-4	1	0.0699	ug/l	55-140	20	55-140	20	20		
Chloroethane	75-00-3	2.5	0.7	ug/l	55-138	20	55-138	20	20		
1,1-Dichloroethene	75-35-4	0.5	0.142	ug/l	61-145	20	61-145	20	20		
trans-1,2-Dichloroethene	156-60-5	2.5	0.7	ug/l	70-130	20	70-130	20	20		
Trichloroethene	79-01-6	0.5	0.175	ug/l	70-130	20	70-130	20	20		
1,2-Dichlorobenzene	95-50-1	2.5	0.7	ug/l	70-130	20	70-130	20	20		
1,3-Dichlorobenzene	541-73-1	2.5	0.7	ug/l	70-130	20	70-130	20	20		
1,4-Dichlorobenzene	106-46-7	2.5	0.7	ug/l	70-130	20	70-130	20	20		
Methyl tert butyl ether	1634-04-4	2.5	0.7	ug/l	63-130	20	63-130	20	20		
p/m-Xylene	179601-23-1	2.5	0.7	ug/l	70-130	20	70-130	20	20		
o-Xylene	95-47-6	2.5	0.7	ug/l	70-130	20	70-130	20	20		
Xylene (Total)	1330-20-7	2.5	0.7	ug/l				20	20		
cis-1,2-Dichloroethene	156-59-2	2.5	0.7	ug/l	70-130	20	70-130	20	20		
1,2-Dichloroethene (total)	540-59-0	2.5	0.7	ug/l				20	20		
Dibromomethane	74-95-3	5	1	ug/l	70-130	20	70-130	20	20		
1,2,3-Trichloropropane	96-18-4	2.5	0.7	ug/l	64-130	20	64-130	20	20		
Acrylonitrile	107-13-1	5	1.5	ug/l	70-130	20	70-130	20	20		
Styrene	100-42-5	2.5	0.7	ug/l	70-130	20	70-130	20	20		







TCL Volatiles - EPA 8260C (WATER)

Holding Time: 14 days
Container/Sample Preservation: 3 - Vial HCl preserved

					LCS		MS		Duplicate	Surrogate	
Analyte	CAS #	RL	MDL	Units	Criteria	LCS RPD	Criteria	MS RPD	RPD	Criteria	
Dichlorodifluoromethane	75-71-8	5	1	ug/l	36-147	20	36-147	20	20		
Acetone	67-64-1	5	1.46	ug/l	58-148	20	58-148	20	20		
Carbon disulfide	75-15-0	5	1	ug/l	51-130	20	51-130	20	20		
2-Butanone	78-93-3	5	1.94	ug/l	63-138	20	63-138	20	20		
Vinyl acetate	108-05-4	5	1	ug/l	70-130	20	70-130	20	20		
4-Methyl-2-pentanone	108-10-1	5	1	ug/l	59-130	20	59-130	20	20		
2-Hexanone	591-78-6	5	1	ug/l	57-130	20	57-130	20	20		
Bromochloromethane	74-97-5	2.5	0.7	ug/l	70-130	20	70-130	20	20		
2,2-Dichloropropane	594-20-7	2.5	0.7	ug/l	63-133	20	63-133	20	20		
1,2-Dibromoethane	106-93-4	2	0.65	ug/l	70-130	20	70-130	20	20		
1,3-Dichloropropane	142-28-9	2.5	0.7	ug/l	70-130	20	70-130	20	20		
1,1,1,2-Tetrachloroethane	630-20-6	2.5	0.7	ug/l	64-130	20	64-130	20	20		
Bromobenzene	108-86-1	2.5	0.7	ug/l	70-130	20	70-130	20	20		
n-Butylbenzene	104-51-8	2.5	0.7	ug/l	53-136	20	53-136	20	20		
sec-Butylbenzene	135-98-8	2.5	0.7	ug/l	70-130	20	70-130	20	20		
tert-Butylbenzene	98-06-6	2.5	0.7	ug/l	70-130	20	70-130	20	20		
o-Chlorotoluene	95-49-8	2.5	0.7	ug/l	70-130	20	70-130	20	20		
p-Chlorotoluene	106-43-4	2.5	0.7	ug/l	70-130	20	70-130	20	20		
1,2-Dibromo-3-chloropropane	96-12-8	2.5	0.7	ug/l	41-144	20	41-144	20	20		
Hexachlorobutadiene	87-68-3	2.5	0.7	ug/l	63-130	20	63-130	20	20		
Isopropylbenzene	98-82-8	2.5	0.7	ug/l	70-130	20	70-130	20	20		
p-Isopropyltoluene	99-87-6	2.5	0.7	ug/l	70-130	20	70-130	20	20		
Naphthalene	91-20-3	2.5	0.7	ug/l	70-130	20	70-130	20	20		
n-Propylbenzene	103-65-1	2.5	0.7	ug/l	69-130	20	69-130	20	20		
1.2.3-Trichlorobenzene	87-61-6	2.5	0.7	ug/l	70-130	20	70-130	20	20		
1,2,4-Trichlorobenzene	120-82-1	2.5	0.7	ug/l	70-130	20	70-130	20	20		
1,3,5-Trimethylbenzene	108-67-8	2.5	0.7	ug/l	64-130	20	64-130	20	20		
1,2,4-Trimethylbenzene	95-63-6	2.5	0.7	ug/l	70-130	20	70-130	20	20		
1,4-Dioxane	123-91-1	250	41.1	ug/l	56-162	20	56-162	20	20		
1,4-Diethylbenzene	105-05-5	2	0.7	ug/l	70-130	20	70-130	20	20		
4-Ethyltoluene	622-96-8	2	0.7	ug/l	70-130	20	70-130	20	20		
1,2,4,5-Tetramethylbenzene	95-93-2	2	0.65	ug/l	70-130	20	70-130	20	20		
Ethyl ether	60-29-7	2.5	0.7	ug/l	59-134	20	59-134	20	20		
trans-1.4-Dichloro-2-butene	110-57-6	2.5	0.7	ug/l	70-130	20	70-130	20	20		
1.2-Dichloroethane-d4	17060-07-0		<u> </u>	-31.	1	 	1	1		70-130	
Toluene-d8	2037-26-5									70-130	
4-Bromofluorobenzene	460-00-4					1	1			70-130	
Dibromofluoromethane	1868-53-7									70-130	
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								1			
	Diagon Note th		1								







1,4 Dioxane via EPA 8270D-SIM (WATER)

Holding Time: 7 days
Container/Sample Preservation: 2 - Amber 250ml unpreserved

	l				LCS		MS		Duplicate	Surrogate	1
Analyte	CAS #	RL	MDL	Units	Criteria	LCS RPD	Criteria	MS RPD	RPD	Surrogate Criteria	1
1.4-Dioxane	123-91-1 17647-74-4 17647-74-4	150	33.9	ng/l	40-140	30	40-140	30	30		
1,4-Dioxane-d8 1,4-Dioxane-d8 (IS)	17647-74-4									15-110	
1.4-Dioxane-d8 (IS)	17647-74-4			ng/l						10 110	
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TCL PCBs - EPA 8082A (LVI) (WATER)

Holding Time: 7 days
Container/Sample Preservation: 2 - Amber 120ml unpreserved

		1		1	LCS		MS	1 1	Duplicate	Surrogate	
Analyte	CAS #	RL	MDL	Units	Criteria	LCS RPD		MS RPD	RPD	Criteria	
Aroclor 1016	12674-11-2	0.082824	0.0344148	ug/l	40-140	50	40-140	50	50	- C	
Aroclor 1221	11104-28-2	0.082824	0.0664734	ug/l	40-140	50	40-140	50	50		
Aroclor 1232	11141-16-5	0.082824	0.0455532	ug/l	40-140	50	40-140	50	50		
Aroclor 1242	53469-21-9	0.082824	0.0387702	ug/l	40-140	50	40-140	50	50		
Aroclor 1248	12672-29-6	0.082824	0.048909	ug/l	40-140	50	40-140	50	50		
Aroclor 1254	11097-69-1	0.082824	0.0390558	ug/l	40-140	50	40-140	50	50		
Aroclor 1260	11096-82-5	0.082824	0.0320586	ug/l	40-140	50	40-140	50	50		
Aroclor 1262	37324-23-5	0.082824	0.0347718	ug/l	40-140	50	40-140	50	50		
Aroclor 1268	11100-14-4	0.082824	0.0334866	ug/l	40-140	50	40-140	50	50		
PCBs, Total	1336-36-3	0.082824	0.0320586	ug/l				50	50		
2,4,5,6-Tetrachloro-m-xylene	877-09-8									30-150	
Decachlorobiphenyl	2051-24-3									30-150	







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METALS by 6020B (WATER)

					LCS		MS		Duplicate	Surrogate	Holding	Container/Sample
Analyte	CAS #	RL	MDL	Units	Criteria	LCS RPD	Criteria	MS RPD	RPD	Criteria	Time	Preservation
Aluminum, Total	7429-90-5	0.01	0.00327	mg/l	80-120		75-125	20	20		180 days	1 - Plastic 500ml HNO3 preserved
Antimony, Total	7440-36-0	0.004	0.000429	mg/l	80-120		75-125	20	20		180 days	1 - Plastic 500ml HNO3 preserved
Arsenic, Total	7440-38-2	0.0005	0.000165	mg/l	80-120		75-125	20	20		180 days	1 - Plastic 500ml HNO3 preserved
Barium, Total	7440-39-3	0.0005	0.000173	mg/l	80-120		75-125	20	20		180 days	1 - Plastic 500ml HNO3 preserved
Beryllium, Total	7440-41-7	0.0005	0.000107	mg/l	80-120		75-125	20	20		180 days	1 - Plastic 500ml HNO3 preserved
Cadmium, Total	7440-43-9	0.0002	0.0000599	mg/l	80-120		75-125	20	20		180 days	1 - Plastic 500ml HNO3 preserved
Calcium, Total	7440-70-2	0.1	0.0394	mg/l	80-120		75-125	20	20		180 days	1 - Plastic 500ml HNO3 preserved
Chromium, Total	7440-47-3	0.001	0.000178	mg/l	80-120		75-125	20	20		180 days	1 - Plastic 500ml HNO3 preserved
Cobalt, Total	7440-48-4	0.0005	0.000163	mg/l	80-120		75-125	20	20		180 days	1 - Plastic 500ml HNO3 preserved
Copper, Total	7440-50-8	0.001	0.000384	mg/l	80-120		75-125	20	20		180 days	1 - Plastic 500ml HNO3 preserved
Iron, Total	7439-89-6	0.05	0.0191	mg/l	80-120		75-125	20	20		180 days	1 - Plastic 500ml HNO3 preserved
Lead, Total	7439-92-1	0.001	0.000343	mg/l	80-120		75-125	20	20		180 days	1 - Plastic 500ml HNO3 preserved
Magnesium, Total	7439-95-4	0.07	0.0242	mg/l	80-120		75-125	20	20		180 days	1 - Plastic 500ml HNO3 preserved
Manganese, Total	7439-96-5	0.001	0.00044	mg/l	80-120		75-125	20	20		180 days	1 - Plastic 500ml HNO3 preserved
Nickel, Total	7440-02-0	0.002	0.000556	mg/l	80-120		75-125	20	20		180 days	1 - Plastic 500ml HNO3 preserved
Potassium, Total	7440-09-7	0.1	0.0309	mg/l	80-120		75-125	20	20		180 days	1 - Plastic 500ml HNO3 preserved
Selenium, Total	7782-49-2	0.005	0.00173	mg/l	80-120		75-125	20	20		180 days	1 - Plastic 500ml HNO3 preserved
Silver, Total	7440-22-4	0.0004	0.000163	mg/l	80-120		75-125	20	20		180 days	1 - Plastic 500ml HNO3 preserved
Sodium, Total	7440-23-5	0.1	0.0293	mg/l	80-120		75-125	20	20		180 days	1 - Plastic 500ml HNO3 preserved
Thallium, Total	7440-28-0	0.0005	0.000143	mg/l	80-120		75-125	20	20		180 days	1 - Plastic 500ml HNO3 preserved
Vanadium, Total	7440-62-2	0.005	0.00157	mg/l	80-120		75-125	20	20		180 days	1 - Plastic 500ml HNO3 preserved
Zinc, Total	7440-66-6	0.01	0.00341	mg/l	80-120		75-125	20	20		180 days	1 - Plastic 500ml HNO3 preserved







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METALS by 7470A (WATER)

Analysis	CAC #		MDI	11-24-	LCS	LCC DDD	MS	MC DDD	Duplicate	Surrogate Criteria	Holding Time	Container/Sample Preservation
Analyte	CAS #	RL	MDL	Units	Criteria	LCS RPD	Criteria	MS RPD	KPD	Criteria	Time	Preservation
Mercury, Total	7439-97-6	0.0002	0.0000915	mg/l	80-120		75-125	20	20		28 days	1 - Plastic 500ml HNO3 preserved
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TCL Pesticides - EPA 8081B (WATER)

Holding Time: 7 days
Container/Sample Preservation: 2 - Amber 120ml unpreserved

					LCS		MS		Duplicate	Surrogate		
Analyte	CAS #	RL	MDL	Units	Criteria	LCS RPD	Criteria	MS RPD	RPD	Criteria		
Delta-BHC	319-86-8	0.02	0.00467	ug/l	30-150	20	30-150	30	30			
Lindane	58-89-9	0.02	0.00434	ug/l	30-150	20	30-150	30	30			
Alpha-BHC	319-84-6	0.02	0.00439	ug/l	30-150	20	30-150	30	30			
Beta-BHC	319-85-7	0.02	0.0056	ug/l	30-150	20	30-150	30	30			
Heptachlor	76-44-8	0.02	0.0031	ug/l	30-150	20	30-150	30	30			
Aldrin	309-00-2	0.02	0.00216	ug/l	30-150	20	30-150	30	30			
Heptachlor epoxide	1024-57-3	0.02	0.00415	ug/l	30-150	20	30-150	30	30			
Endrin	72-20-8	0.04	0.00429	ug/l	30-150	20	30-150	30	30			
Endrin aldehyde	7421-93-4	0.04	0.0081	ug/l	30-150	20	30-150	30	30			
Endrin ketone	53494-70-5	0.04	0.00477	ug/l	30-150	20	30-150	30	30			
Dieldrin	60-57-1	0.04	0.00429	ug/l	30-150	20	30-150	30	30			
4,4'-DDE	72-55-9	0.04	0.00381	ug/l	30-150	20	30-150	30	30			
4,4'-DDD	72-54-8	0.04	0.00464	ug/l	30-150	20	30-150	30	30			
4,4'-DDT	50-29-3	0.04	0.00432	ug/l	30-150	20	30-150	30	30			
Endosulfan I	959-98-8	0.02	0.00345	ug/l	30-150	20	30-150	30	30			
Endosulfan II	33213-65-9	0.04	0.00519	ug/l	30-150	20	30-150	30	30			
Endosulfan sulfate	1031-07-8	0.04	0.00481	ug/l	30-150	20	30-150	30	30			
Methoxychlor	72-43-5	0.2	0.00684	ug/l	30-150	20	30-150	30	30			
Toxaphene	8001-35-2	0.2	0.0627	ug/l	30-150	20	30-150	30	30			
cis-Chlordane	5103-71-9	0.02	0.00666	ug/l	30-150	20	30-150	30	30			
trans-Chlordane	5103-74-2	0.02	0.00627	ug/l	30-150	20	30-150	30	30			
Chlordane	57-74-9	0.2	0.0463	ug/l	30-150	20	30-150	30	30			
2,4,5,6-Tetrachloro-m-xylene	877-09-8									30-150		
Decachlorobiphenyl	2051-24-3									30-150		
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NYTCL Semivolatiles -EPA 8270D-SIM (LVI) (WATER)

Holding Time: 7 days
Container/Sample Preservation: 2 - Amber 250ml unpreserved

		1			LCS		MS		Duplicate	Surrogate		
Analyte	CAS#	RL	MDL	Units	Criteria	LCS RPD	Criteria	MS RPD	RPD	Criteria		
Acenaphthene	83-32-9	0.1001	0.01442168	ug/l	40-140	40	40-140	40	40	Crittina		
2-Chloronaphthalene	91-58-7	0.2002	0.01804712	ug/l	40-140	40	40-140	40	40			
Fluoranthene	206-44-0	0.1001	0.02054052	ug/l	40-140	40	40-140	40	40			
Hexachlorobutadiene	87-68-3	0.5005	0.04674852	ug/l	40-140	40	40-140	40	40			
Naphthalene	91-20-3	0.1001	0.04882696	ug/l	40-140	40	40-140	40	40			
Benzo(a)anthracene	56-55-3	0.1001	0.0198198	ug/l	40-140	40	40-140	40	40			
Benzo(a)pyrene	50-32-8	0.1001	0.01493856	ug/l	40-140	40	40-140	40	40			
Benzo(b)fluoranthene	205-99-2	0.1001	0.01156792	ug/l	40-140	40	40-140	40	40			
Benzo(k)fluoranthene	207-08-9	0.1001	0.00889616	ug/l	40-140	40	40-140	40	40			
Chrysene	218-01-9	0.1001	0.01198288	ug/l	40-140	40	40-140	40	40			
Acenaphthylene	208-96-8	0.1001	0.01222676	ug/l	40-140	40	40-140	40	40			
Anthracene	120-12-7	0.1001	0.01450176	ug/l	40-140	40	40-140	40	40			
Benzo(ghi)perylene	191-24-2	0.1001	0.01365	ug/l	40-140	40	40-140	40	40			
Fluorene	86-73-7	0.1001	0.01456364	ug/l	40-140	40	40-140	40	40			
Phenanthrene	85-01-8	0.1001	0.02333604	ug/l	40-140	40	40-140	40	40			
Dibenzo(a,h)anthracene	53-70-3	0.1001	0.0127218	ug/l	40-140	40	40-140	40	40			
Indeno(1,2,3-cd)Pyrene	193-39-5	0.1001	0.01217216	ug/l	40-140	40	40-140	40	40			
Pyrene	129-00-0	0.1001	0.01902264	ug/l	40-140	40	40-140	40	40			
2-Methylnaphthalene	91-57-6	0.1001	0.02192372	ug/l	40-140	40	40-140	40	40			
Pentachlorophenol	87-86-5	0.8008	0.0143416	ug/l	40-140	40	40-140	40	40			
Hexachlorobenzene	118-74-1	0.8008	0.00938028	ug/l	40-140	40	40-140	40	40			
Hexachloroethane	67-72-1	0.8008	0.06320132	ug/l	40-140	40	40-140	40	40			
2-Fluorophenol	367-12-4			,						21-120		
Phenol-d6	13127-88-3									10-120		
Nitrobenzene-d5	4165-60-0									23-120		
2-Fluorobiphenyl	321-60-8									15-120		
2,4,6-Tribromophenol	118-79-6									10-120		
4-Terphenyl-d14	1718-51-0									41-149		







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NY PFAAs via EPA 537(M)-Isotope Dilution (WATER)

Holding Time: 14 days Container/Sample Preservation: 1 - 2 Plastic/1 Plastic/1 H20 Plastic

					LCS		MS		Duplicate	Surrogate	
Analyte	CAS #	RL	MDL	Units	Criteria	LCS RPD	Criteria	MS RPD	RPD	Criteria	
Perfluorobutanoic Acid (PFBA)	375-22-4	2	0.3732	ng/l	67-148	30	67-148	30	30		
Perfluoropentanoic Acid (PFPeA)	2706-90-3	2	0.464	ng/l	63-161	30	63-161	30	30		
Perfluorobutanesulfonic Acid (PFBS)	375-73-5	2	0.38	ng/l	65-157	30	65-157	30	30		
Perfluorohexanoic Acid (PFHxA)	307-24-4	2	0.492	ng/l	69-168	30	69-168	30	30		
Perfluoroheptanoic Acid (PFHpA)	375-85-9	2	0.372	ng/l	58-159	30	58-159	30	30		
Perfluorohexanesulfonic Acid (PFHxS)	355-46-4	2	0.436	ng/l	69-177	30	69-177	30	30		
Perfluorooctanoic Acid (PFOA)	335-67-1	2	0.46	ng/l	63-159	30	63-159	30	30		
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	27619-97-2	2	0.194	ng/l	49-187	30	49-187	30	30		
Perfluoroheptanesulfonic Acid (PFHpS)	375-92-8	2	0.52	ng/l	61-179	30	61-179	30	30		
Perfluorononanoic Acid (PFNA)	375-95-1	2	0.436	ng/l	68-171	30	68-171	30	30		
Perfluorooctanesulfonic Acid (PFOS)	1763-23-1	2	0.56	ng/l	52-151	30	52-151	30	30		
Perfluorodecanoic Acid (PFDA)	335-76-2	2	0.62	ng/I	63-171	30	63-171	30	30		
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	39108-34-4	2	0.2908	ng/l	56-173	30	56-173	30	30		
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSA)	2355-31-9	2	0.2504	ng/I	60-166	30	60-166	30	30		
Perfluoroundecanoic Acid (PFUnA)	2058-94-8	2	0.424	ng/l	60-153	30	60-153	30	30		
Perfluorodecanesulfonic Acid (PFDS)	335-77-3	2	0.386	ng/I	38-156	30	38-156	30	30		
Perfluorooctanesulfonamide (FOSA)	754-91-6	2	0.556	ng/I	46-170	30	46-170	30	30		
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	2991-50-6	2	0.3728	ng/I	45-170	30	45-170	30	30		
Perfluorododecanoic Acid (PFDoA)	307-55-1	2	0.592	ng/I	67-153	30	67-153	30	30		
Perfluorotridecanoic Acid (PFTrDA)	72629-94-8	2	0.314	ng/l	48-158	30	48-158	30	30		
Perfluorotetradecanoic Acid (PFTA)	376-06-7	2	0.988	ng/I	59-182	30	59-182	30	30		
PFOA/PFOS, Total		2	0.46	ng/I				30	30		
Perfluoro[13C4]Butanoic Acid (MPFBA)	NONE			,						2-156	
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	NONE									16-173	
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	NONE									31-159	
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	NONE									21-145	
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	NONE									30-139	
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	NONE									47-153	
Perfluoro[13C8]Octanoic Acid (M8PFOA)	NONE									36-149	
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6	NONE									1-244	
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	NONE									34-146	
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	NONE									42-146	
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	NONE									38-144	
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8	NONE									7-170	
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid	NONE									1-181	
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	NONE									40-144	
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	NONE									1-87	
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (a	NONE									23-146	
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	NONE									24-161	
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	NONE									33-143	
, ,											
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WETCHEM (WATER)

					LCS		MS		Duplicate		Holding	Container/Sample	
Analyte	CAS #	RL	MDL	Units	Criteria	LCS RPD	Criteria	MS RPD	RPD	Method	Time	Preservation	
Chromium, Hexavalent	18540-29-9	0.01	0.003	mg/l	85-115	20	85-115	20	20	7196A	24 hours	1 - Plastic 500ml unpreserved	
Cyanide, Total	57-12-5	0.005	0.0018	mg/l	85-115	20	80-120	20	20	9010C/9012B	14 days	1 - Plastic 500ml unpreserved 1 - Plastic 250ml NaOH preserved	







NYTCL Semivolatiles - EPA 8270D (LVI) (WATER)

Holding Time: 7 days
Container/Sample Preservation: 2 - Amber 250ml unpreserved

					LCS		MS		Duplicate	Surrogate	
Analyte	CAS #	RL	MDL	Units	Criteria	LCS RPD	Criteria	MS RPD	RPD	Criteria	
Acenaphthene	83-32-9	2.002	0.44408	ug/l	37-111	30	37-111	30	30		
1,2,4-Trichlorobenzene	120-82-1	5.0232	0.49868	ug/l	39-98	30	39-98	30	30		
Hexachlorobenzene	118-74-1	2.002	0.46592	ug/l	40-140	30	40-140	30	30		
Bis(2-chloroethyl)ether	111-44-4	2.002	0.50596	ug/l	40-140	30	40-140	30	30		
2-Chloronaphthalene	91-58-7	2.002	0.4368	ug/l	40-140	30	40-140	30	30		
1,2-Dichlorobenzene	95-50-1	2.002	0.455	ug/l	40-140	30	40-140	30	30		
1,3-Dichlorobenzene	541-73-1	2.002	0.40404	ug/l	40-140	30	40-140	30	30		
1,4-Dichlorobenzene	106-46-7	2.002	0.43316	ug/l	36-97	30	36-97	30	30		
3,3'-Dichlorobenzidine	91-94-1	5.0232	1.62344	ug/l	40-140	30	40-140	30	30		
2,4-Dinitrotoluene	121-14-2	5.0232	1.1648	ug/l	48-143	30	48-143	30	30		
2,6-Dinitrotoluene	606-20-2	5.0232	0.93184	ug/l	40-140	30	40-140	30	30		
Fluoranthene	206-44-0	2.002	0.257348	ug/l	40-140	30	40-140	30	30		
4-Chlorophenyl phenyl ether	7005-72-3	2.002	0.48776	ug/l	40-140	30	40-140	30	30		
4-Bromophenyl phenyl ether	101-55-3	2.002	0.37856	ug/l	40-140	30	40-140	30	30		
Bis(2-chloroisopropyl)ether	108-60-1	2.002	0.5278	ug/l	40-140	30	40-140	30	30		
Bis(2-chloroethoxy)methane	111-91-1	5.0232	0.50232	ug/l	40-140	30	40-140	30	30		
Hexachlorobutadiene	87-68-3	2.002	0.65884	ug/l	40-140	30	40-140	30	30		
Hexachlorocyclopentadiene	77-47-4	20.02	0.68796	ug/l	40-140	30	40-140	30	30		
Hexachloroethane	67-72-1	2.002	0.58604	ug/l	40-140	30	40-140	30	30		
Isophorone	78-59-1	5.0232	1.20484	ug/l	40-140	30	40-140	30	30		
Naphthalene	91-20-3	2.002	0.46592	ug/l	40-140	30	40-140	30	30		
Nitrobenzene	98-95-3	2.002	0.77168	ug/l	40-140	30	40-140	30	30		
NitrosoDiPhenylAmine(NDPA)/DPA	86-30-6	2.002	0.4186	ug/l	40-140	30	40-140	30	30		
n-Nitrosodi-n-propylamine	621-64-7	5.0232	0.64428	ug/l	29-132	30	29-132	30	30		
Bis(2-Ethylhexyl)phthalate	117-81-7	3.003	1.53608	ug/l	40-140	30	40-140	30	30		
Butyl benzyl phthalate	85-68-7	5.0232	1.17208	ug/l	40-140	30	40-140	30	30		
Di-n-butylphthalate	84-74-2	5.0232	0.38948	ug/l	40-140	30	40-140	30	30		
Di-n-octylphthalate	117-84-0	5.0232	1.274	ug/l	40-140	30	40-140	30	30		
Diethyl phthalate	84-66-2	5.0232	0.3822	ug/l	40-140	30	40-140	30	30		
Dimethyl phthalate	131-11-3	5.0232	1.82	ug/l	40-140	30	40-140	30	30		
Benzo(a)anthracene	56-55-3	2.002	0.32578	ug/l	40-140	30	40-140	30	30		
Benzo(a)pyrene	50-32-8	2.002	0.40768	ug/l	40-140	30	40-140	30	30		
Benzo(b)fluoranthene	205-99-2	2.002	0.355264	ug/l	40-140	30	40-140	30	30		
Benzo(k)fluoranthene	207-08-9	2.002	0.37492	ug/l	40-140	30	40-140	30	30		
Chrysene	218-01-9	2.002	0.341068	ug/l	40-140	30	40-140	30	30		
Acenaphthylene	208-96-8	2.002	0.46592	ug/l	45-123	30	45-123	30	30		
Anthracene	120-12-7	2.002	0.32942	ug/l	40-140	30	40-140	30	30		
Benzo(ghi)perylene	191-24-2	2.002	0.296296	ug/l	40-140	30	40-140	30	30		
Fluorene	86-73-7	2.002	0.41496	ug/l	40-140	30	40-140	30	30		
Phenanthrene	85-01-8	2.002	0.33124	ug/l	40-140	30	40-140	30	30		
Dibenzo(a,h)anthracene	53-70-3	2.002	0.323232	ug/l	40-140	30	40-140	30	30		
Indeno(1,2,3-cd)Pyrene	193-39-5	2.002	0.39676	ug/l	40-140	30	40-140	30	30		







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NYTCL Semivolatiles - EPA 8270D (LVI) (WATER)

Holding Time: 7 days
Container/Sample Preservation: 2 - Amber 250ml unpreserved

				I	LCS	1	MS		Duplicate	Surrogate		
Analyte	CAS#	RL	MDL	Units	Criteria	LCS RPD	Criteria	MS RPD	RPD	Criteria		
Pyrene	129-00-0	2.002	0.279552	ug/l	26-127	30	26-127	30	30	Crittina		
Biphenyl	92-52-4	2.002	0.45864	ug/l	40-140	30	40-140	30	30			
4-Chloroaniline	106-47-8	5.0232	1.07016	ug/l	40-140	30	40-140	30	30			
2-Nitroaniline	88-74-4	5.0232	0.49868	ug/l	52-143	30	52-143	30	30			
3-Nitroaniline	99-09-2	5.0232	0.81536	ug/l	25-145	30	25-145	30	30			
4-Nitroaniline	100-01-6	5.0232	0.8008	ug/l	51-143	30	51-143	30	30			
Dibenzofuran	132-64-9	2.002	0.49868	ug/l	40-140	30	40-140	30	30			
2-Methylnaphthalene	91-57-6	2.002	0.455	ug/l	40-140	30	40-140	30	30			
Acetophenone	98-86-2	5.0232	0.5278	ug/l	39-129	30	39-129	30	30			
2,4,6-Trichlorophenol	88-06-2	5.0232	0.61152	ug/l	30-130	30	30-130	30	30			
P-Chloro-M-Cresol	59-50-7	2.002	0.35126	ug/l	23-97	30	23-97	30	30			
2-Chlorophenol	95-57-8	2.002	0.48048	ug/l	27-123	30	27-123	30	30			
2,4-Dichlorophenol	120-83-2	5.0232	0.41132	ug/l	30-130	30	30-130	30	30			
2,4-Dimethylphenol	105-67-9	5.0232	1.77996	ug/l	30-130	30	30-130	30	30			
2-Nitrophenol	88-75-5	10.01	0.84812	ug/l	30-130	30	30-130	30	30			
4-Nitrophenol	100-02-7	10.01	0.6734	ug/l	10-80	30	10-80	30	30			-
2,4-Dinitrophenol	51-28-5	20.02	6.6612	ug/l	20-130	30	20-130	30	30			
4,6-Dinitro-o-cresol	534-52-1	10.01	1.81636	ug/l	20-164	30	20-164	30	30			
Pentachlorophenol	87-86-5	10.01	1.79452	ug/l	9-103	30	9-103	30	30			
Phenol	108-95-2	5.0232	0.56784	ug/l	12-110	30	12-110	30	30			
2-Methylphenol	95-48-7	5.0232	0.4914	ug/l	30-130	30	30-130	30	30			
3-Methylphenol/4-Methylphenol	108-39-4/106-44-5	5.0232	0.48048	ug/l	30-130	30	30-130	30	30			-
2,4,5-Trichlorophenol	95-95-4	5.0232	0.77532	ug/l	30-130	30	30-130	30	30			
Benzoic Acid	65-85-0	50.232	2.66084	ug/l	10-164	30	10-164	30	30			
Benzyl Alcohol	100-51-6	2.002	0.58968	ug/l	26-116	30	26-116	30	30			
Carbazole	86-74-8	2.002	0.4914	ug/l	55-144	30	55-144	30	30			
2-Fluorophenol	367-12-4			5,						21-120		
Phenol-d6	13127-88-3									10-120		
Nitrobenzene-d5	4165-60-0									23-120		
2-Fluorobiphenyl	321-60-8									15-120		
2,4,6-Tribromophenol	118-79-6									10-120		
4-Terphenyl-d14	1718-51-0									41-149		







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Determination of Selected Perfluorinated Alkyl Substances in Non-Potable Water by Solid Phase Extraction and Liquid Chromatography/Tandem Mass Spectrometry (LC/MS/MS)

Reference: EPA Method 537, Version 1.1, September 2009, EPA Document #: EPA/600/R-08/092

EPA Method 537.1, Version 1, November 2018, EPA Document #: EPA/600/R-18/352

Department of Defense, Quality Systems Manual for Environmental Laboratories, Version 5.2, 2018

1. Scope and Application

Matrices: Non-potable water

Definitions: Refer to Alpha Analytical Quality Manual.

- **1.1** This is a liquid chromatography/tandem mass spectrometry (LC/MS/MS) method for the determination of selected perfluorinated alkyl substances (PFASs) in Non-potable Water. Accuracy and precision data have been generated in reagent water, and finished ground and surface waters for the compounds listed in Table 1.
- 1.2 The data report packages present the documentation of any method modification related to the samples tested. Depending upon the nature of the modification and the extent of intended use, the laboratory may be required to demonstrate that the modifications will produce equivalent results for the matrix. Approval of all method modifications is by one or more of the following laboratory personnel before performing the modification: Area Supervisor, Department Supervisor, Laboratory Director, or Quality Assurance Officer.
- 1.3 This method is restricted to use by or under the supervision of analysts experienced in the operation of the LC/MS/MS and in the interpretation of LC/MS/MS data. Each analyst must demonstrate the ability to generate acceptable results with this method by performing an initial demonstration of capability.

Table 1

Parameter	Acronym	CAS
Hexafluoropropylene oxide dimer acid ¹	HFPO-DA	13252-13-6
N-ethyl perfluorooctanesulfonamidoacetic acid	NEtFOSAA	2991-50-6
N-methyl perfluorooctanesulfonamidoacetic acid	NMeFOSAA	2355-31-9
Perfluorobutanesulfonic acid	PFBS	375-73-5
Perfluorodecanoic acid	PFDA	335-76-2
Perfluorododecanoic acid	PFDoA	307-55-1
Perfluoroheptanoic acid	PFHpA	375-85-9
Perfluorohexanesulfonic acid	PFHxS	355-46-4
Perfluorohexanoic acid	PFHxA	307-24-4

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Table 1 (cont.)

Perfluorononanoic acid	PFNA	375-95-1
Perfluorooctanesulfonic acid	PFOS	1763-23-1
Perfluorooctanoic acid	PFOA	335-67-1
Perfluorotetradecanoic acid	PFTA	376-06-7
Perfluorotridecanoic acid	PFTrDA	72629-94-8
Perfluoroundecanoic acid	PFUnA	2058-94-8
11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid	11CI-PF3OUdS	763051-92-9
9-chlorohexadecafluoro-3-oxanone-1-sulfonic acid	9CI-PF3ONS	756426-58-1
4,8-dioxa-3H-perfluorononanoic acid	ADONA	919005-14-4

2. Summary of Method

2.1 A 250-mL water sample is fortified with surrogates and passed through a solid phase extraction (SPE) cartridge containing polystyrenedivinylbenzene (SDVB) to extract the method analytes and surrogates. The compounds are eluted from the solid phase with a small amount of methanol. The extract is concentrated to dryness with nitrogen in a heated water bath, and then adjusted to a 1-mL volume with 96:4% (vol/vol) methanol: water after adding the IS(s). A 3μL injection is made into an LC equipped with a C18 column that is interfaced to an MS/MS. The analytes are separated and identified by comparing the acquired mass spectra and retention times to reference spectra and retention times for calibration standards acquired under identical LC/MS/MS conditions. The concentration of each analyte is determined by using the internal standard technique. Surrogate analytes are added to all Field and QC Samples to monitor the extraction efficiency of the method analytes.

2.2 Method Modifications from Reference

2.2.1 None.

3. Reporting Limits

3.1 The reporting limit for PFAS's is 2 ng/L (4ng/L for HFPO-DA).

4. Interferences

- **4.1** PFAS standards, extracts and samples should not come in contact with any glass containers or pipettes as these analytes can potentially adsorb to glass surfaces. PFAS analyte, IS and SUR standards commercially purchased in glass ampoules are acceptable; however, all subsequent transfers or dilutions performed by the analyst must be prepared and stored in polypropylene containers.
- **4.2** Method interferences may be caused by contaminants in solvents, reagents (including reagent water), sample bottles and caps, and other sample processing hardware that lead to discrete artifacts and/or elevated baselines in the chromatograms. The method analytes in this method can also be found in many common laboratory supplies and equipment, such

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Alpha Analytical, Inc.

Facility: Mansfield, MA

Revision 1

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as PTFE (polytetrafluoroethylene) products, LC solvent lines, methanol, aluminum foil, SPE sample transfer lines, etc. All items such as these must be routinely demonstrated to be free from interferences (less than 1/3 the RL for each method analyte) under the conditions of the analysis by analyzing laboratory reagent blanks as described in Section 9.2. **Subtracting blank values from sample results is not permitted.**

- **4.3** Matrix interferences may be caused by contaminants that are co-extracted from the sample. The extent of matrix interferences will vary considerably from source to source, depending upon the nature of the water. Humic and/or fulvic material can be co-extracted during SPE and high levels can cause enhancement and/or suppression in the electrospray ionization source or low recoveries on the SPE sorbent. Total organic carbon (TOC) is a good indicator of humic content of the sample. Under the LC conditions used during method development, matrix effects due to total organic carbon (TOC) were not observed.
- **4.4** Relatively large quantities of the preservative (Sect. 6.2.1) are added to sample bottles. The potential exists for trace-level organic contaminants in these reagents. Interferences from these sources should be monitored by analysis of laboratory reagent blanks (Sect. 9.2.1), particularly when new lots of reagents are acquired.
- **4.5** SPE cartridges can be a source of interferences. The analysis of field and laboratory reagent blanks can provide important information regarding the presence or absence of such interferences. Brands and lots of SPE devices should be tested to ensure that contamination does not preclude analyte identification and quantitation.

5. Health and Safety

- **5.1** The toxicity or carcinogenicity of each reagent and standard used in this method is not fully established; however, each chemical compound should be treated as a potential health hazard. From this viewpoint, exposure to these chemicals must be reduced to the lowest possible level by whatever means available. A reference file of material safety data sheets is available to all personnel involved in the chemical analysis. Additional references to laboratory safety are available in the Chemical Hygiene Plan.
- **5.2** All personnel handling environmental samples known to contain or to have been in contact with municipal waste must follow safety practices for handling known disease causative agents.
- **5.3** PFOA has been described as "likely to be carcinogenic to humans." Pure standard materials and stock standard solutions of these method analytes should be handled with suitable protection to skin and eyes, and care should be taken not to breathe the vapors or ingest the materials.

6. Sample Collection, Preservation, Shipping and Handling

6.1 Sample Collection

- **6.1.1** Samples must be collected in three (3) 250-mL high density polyethylene (HDPE) container with an unlined plastic screw cap.
- 6.1.2 The sample handler must wash their hands before sampling and wear nitrile gloves while filling and sealing the sample bottles. PFAS contamination during sampling can occur from a number of common sources, such as food packaging

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and certain foods and beverages. Proper hand washing and wearing nitrile gloves will aid in minimizing this type of accidental contamination of the samples.

- **6.1.3** Open the tap and allow the system to flush until the water temperature has stabilized (approximately 3 to 5 min). Collect samples from the flowing system.
- **6.1.4** Fill sample bottles, taking care not to flush out the sample preservation reagent. Samples do not need to be collected headspace free.
- **6.1.5** After collecting the sample, cap the bottle and agitate by hand until preservative is dissolved. Keep the sample sealed from time of collection until extraction.
- **6.1.6** Field Reagent Blank (FRB)
 - 6.1.6.1 A FRB must be handled along with each sample set. The sample set is composed of samples collected from the same sample site and at the same time. At the laboratory, fill the field blank sample bottle with reagent water and preservatives, seal, and ship to the sampling site along with the sample bottles. For each FRB shipped, an empty sample bottle (no preservatives) must also be shipped. At the sampling site, the sampler must open the shipped FRB and pour the preserved reagent water into the empty shipped sample bottle, seal and label this bottle as the FRB. The FRB is shipped back to the laboratory along with the samples and analyzed to ensure that PFASs were not introduced into the sample during sample collection/handling.
 - **6.1.6.2** The same batch of preservative must be used for the FRBs as for the field samples.
 - **6.1.6.3** The reagent water used for the FRBs must be initially analyzed for method analytes as a MB and must meet the MB criteria in Section 9.2.1 prior to use. This requirement will ensure samples are not being discarded due to contaminated reagent water rather than contamination during sampling.

6.2 Sample Preservation

6.2.1 The preservation reagent, listed in the table below, is added to each sample bottle as a solid prior to shipment to the field (or prior to sample collection).

Table 2

Compound	Amount	Purpose
Trizma	5.0 g/l	Buffering reagent and removes free chlorine

6.3 Sample Shipping

6.3.1 Samples must be chilled during shipment and must not exceed 10 °C during the first 48 hours after collection. Sample temperature must be confirmed to be at or below 10 °C when the samples are received at the laboratory. Samples stored in the lab must be held at or below 6 °C until extraction, but should not be frozen.

NOTE: Samples that are significantly above 10° C, at the time of collection, may need to be iced or refrigerated for a period of time, in order to chill them prior to shipping. This will allow them to be shipped with sufficient ice to meet the above requirements.

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6.4 Sample Handling

6.4.1 Holding Times

6.4.1.1 Water samples should be extracted as soon as possible but must be extracted within 14 days. Extracts must be stored at room temperature and analyzed within 28 days after extraction.

7. Equipment and Supplies

- **7.1** SAMPLE CONTAINERS 250-mL high density polyethylene (HDPE) bottles fitted with unlined screw caps. Sample bottles must be discarded after use.
- **7.2** POLYPROPYLENE BOTTLES 4-mL narrow-mouth polypropylene bottles.
- **7.3** CENTRIFUGE TUBES 15-mL conical polypropylene tubes with polypropylene screw caps for storing standard solutions and for collection of the extracts.
- **7.4** AUTOSAMPLER VIALS Polypropylene 0.7-mL autosampler vials with polypropylene caps.
 - **7.4.1** NOTE: Polypropylene vials and caps are necessary to prevent contamination of the sample from PTFE coated septa. However, polypropylene caps do not reseal, so evaporation occurs after injection. Thus, multiple injections from the same vial are not possible.
- **7.5** POLYPROPYLENE GRADUATED CYLINDERS Suggested sizes include 25, 50, 100 and 1000-mL cylinders.
- **7.6** MICRO SYRINGES Suggested sizes include 5, 10, 25, 50, 100, 250, 500 and 1000-μL syringes.
- **7.7** PLASTIC PIPETS Polypropylene or polyethylene disposable pipets.
- 7.8 ANALYTICAL BALANCE Capable of weighing to the nearest 0.0001 g.
- 7.9 SOLID PHASE EXTRACTION (SPE) APPARATUS FOR USING CARTRIDGES
 - **7.9.1** SPE CARTRIDGES 0.5 g, 6-mL SPE cartridges containing styrenedivinylbenzene (SDVB) sorbent phase.
 - 7.9.2 VACUUM EXTRACTION MANIFOLD A manual vacuum manifold with large volume sampler for cartridge extractions, or an automatic/robotic sample preparation system designed for use with SPE cartridges, may be used if all QC requirements discussed in Section 9 are met. Extraction and/or elution steps may not be changed or omitted to accommodate the use of an automated system. Care must be taken with automated SPE systems to ensure the PTFE commonly used in these systems does not contribute to unacceptable analyte concentrations in the MB (Sect. 9.2.1).
 - **7.9.3** SAMPLE DELIVERY SYSTEM Use of a polypropylene transfer tube system, which transfers the sample directly from the sample container to the SPE cartridge, is recommended, but not mandatory. Standard extraction manifolds come equipped with PTFE transfer tube systems. These can be replaced with 1/8" O.D. x 1/16" I.D. polypropylene or polyethylene tubing cut to an appropriate length to ensure no sample contamination from the sample transfer lines. Other types of non-PTFE tubing may be used provided it meets the MB (Sect. 9.2.1)

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and LCS (Sect. 9.3) QC requirements. The PTFE transfer tubes may be used, but an MB must be run on each PFTE transfer tube and the QC requirements in Section 13.2.2 must be met. In the case of automated SPE, the removal of PTFE lines may not be feasible; therefore, MBs will need to be rotated among the ports and must meet the QC requirements of Sections 13.2.2 and 9.2.1.

- **7.10** EXTRACT CONCENTRATION SYSTEM Extracts are concentrated by evaporation with nitrogen using a water bath set no higher than 65 °C.
- **7.11** LABORATORY OR ASPIRATOR VACUUM SYSTEM Sufficient capacity to maintain a vacuum of approximately 10 to 15 inches of mercury for extraction cartridges.
- 7.12 LIQUID CHROMATOGRAPHY (LC)/TANDEM MASS SPECTROMETER (MS/MS) WITH DATA SYSTEM
 - 7.12.1 LC SYSTEM Instrument capable of reproducibly injecting up to 10-µL aliquots, and performing binary linear gradients at a constant flow rate near the flow rate used for development of this method (0.3 mL/min). The LC must be capable of pumping the water/methanol mobile phase without the use of a degasser which pulls vacuum on the mobile phase bottle (other types of degassers are acceptable). Degassers which pull vacuum on the mobile phase bottle will volatilize the ammonium acetate mobile phase causing the analyte peaks to shift to earlier retention times over the course of the analysis batch. The usage of a column heater is optional.

NOTE: During the course of method development, it was discovered that while idle for more than one day, PFASs built up in the PTFE solvent transfer lines. To prevent long delays in purging high levels of PFASs from the LC solvent lines, they were replaced with PEEK tubing and the PTFE solvent frits were replaced with stainless steel frits. It is not possible to remove all PFAS background contamination, but these measures help to minimize their background levels.

- 7.12.2 LC/TANDEM MASS SPECTROMETER The LC/MS/MS must be capable of negative ion electrospray ionization (ESI) near the suggested LC flow rate of 0.3 mL/min. The system must be capable of performing MS/MS to produce unique product ions for the method analytes within specified retention time segments. A minimum of 10 scans across the chromatographic peak is required to ensure adequate precision.
- 7.12.3 DATA SYSTEM An interfaced data system is required to acquire, store, reduce, and output mass spectral data. The computer software should have the capability of processing stored LC/MS/MS data by recognizing an LC peak within any given retention time window. The software must allow integration of the ion abundance of any specific ion within specified time or scan number limits. The software must be able to calculate relative response factors, construct linear regressions or quadratic calibration curves, and calculate analyte concentrations.
- **7.12.4** ANALYTICAL COLUMN An LC C_{18} column (2.1 x 150 mm) packed with 5 μ m d_p C_{18} solid phase particles was used. Any column that provides adequate resolution, peak shape, capacity, accuracy, and precision (Sect. 9) may be used.

8. Reagents and Standards

8.1 GASES, REAGENTS, AND SOLVENTS – Reagent grade or better chemicals should be used.

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8.1.1 REAGENT WATER – Purified water which does not contain any measurable quantities of any method analytes or interfering compounds greater than 1/3 the RL for each method analyte of interest. Prior to daily use, at least 3 L of reagent water should be flushed from the purification system to rinse out any build-up of analytes in the system's tubing.

- **8.1.2** METHANOL (CH₃OH, CAS#: 67-56-1) High purity, demonstrated to be free of analytes and interferences.
- **8.1.3** AMMONIUM ACETATE ($NH_4C_2H_3O_2$, CAS#: 631-61-8) High purity, demonstrated to be free of analytes and interferences.
- **8.1.4** 2 mM AMMONIUM ACETATE/REAGENT WATER To prepare 1 L, add .154 g ammonium acetate to 1 L of reagent water. This solution is prone to volatility losses and should be replaced at least every 48 hours.
- **8.1.5** TRIZMA PRESET CRYSTALS, pH 7.0 Reagent grade. A premixed blend of Tris [Tris(hydroxymethyl)aminomethane] and Tris HCL [Tris(hydroxymethyl)aminomethane hydrochloride]. Alternatively, a mix of the two components with a weight ratio of 15.5/1 Tris HCL/Tris may be used. These blends are targeted to produce a pH near 7.0 at 25 °C in reagent water. Trizma functions as a buffer, and removes free chlorine in chlorinated finished waters (Sect. 6.2.1).
- **8.1.6** NITROGEN Used for the following purposes: Nitrogen aids in aerosol generation of the ESI liquid spray and is used as collision gas in some MS/MS instruments. The nitrogen used should meet or exceed instrument manufacturer's specifications. In addition, Nitrogen is used to concentrate sample extracts (Ultra High Purity or equivalent).
- **8.1.7** ARGON Used as collision gas in MS/MS instruments. Argon should meet or exceed instrument manufacturer's specifications. Nitrogen gas may be used as the collision gas provided sufficient sensitivity (product ion formation) is achieved.
- **8.2** STANDARD SOLUTIONS When a compound purity is assayed to be 96% or greater, the weight can be used without correction to calculate the concentration of the stock standard. PFAS analyte, IS and SUR standards commercially purchased in glass ampoules are acceptable; however, all subsequent transfers or dilutions performed by the analyst must be prepared and stored in polypropylene containers. Standards for sample fortification generally should be prepared in the smallest volume that can be accurately measured to minimize the addition of excess organic solvent to aqueous samples.

NOTE: Stock standards (Sect. 8.2.1, 8.2.3 and 8.2.5) are stored at ≤4 °C. Primary dilution standards (Sect. 8.2.2 and 8.2.4) are stored at room temperature to prevent adsorption of the method analytes onto the container surfaces that may occur when refrigerated. Storing the standards at room temperature will also minimize daily imprecision due to the potential of inadequate room temperature stabilization.

8.2.1 IS STOCK STANDARD SOLUTIONS - IS stock standard solutions are stable for at least 6 months when stored at 4 °C. The stock solution is purchased at a concentration range of 1-4 ng/µl.

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8.2.2 INTERNAL STANDARD PRIMARY DILUTION (IS PDS) STANDARD (0.5-2 ng/μL) – Prepare the IS PDS at a concentration of 0.5-2 ng/μL. The IS PDS is prepared in 96:4% (vol/vol) methanol:water. The IS PDS is stable for at least two months when stored in polypropylene centrifuge tubes at room temperature.

Table 3

Internal Standard	Conc. of IS Stock (ng/uL)	Vol. of IS Stock (mL)	Final Vol. of IS PDS (mL)	Final Conc. of IS PDS (ng/µL)
¹³ C-PFOA	1	1.0	2.0	0.5
¹³ C-PFOS	3	1.0	2.0	1.5
d ₃ -NMeFOSAA	4	1.0	2.0	2.0

- **8.2.3** SUR STOCK STANDARD SOLUTIONS SUR stock standard solutions are stable for at least 6 months when stored at 4 °C.
- **8.2.4** SURROGATE PRIMARY DILUTION STANDARD (SUR PDS) (0.5-2 ng/μL) Prepare the SUR PDS at a concentration of 0.5-2 ng/μL. The SUR PDS is prepared in 96:4% (vol/vol) methanol:water. This solution is used to fortify all QC and Field Samples. The PDS is stable for one year when stored in polypropylene centrifuge tubes at room temperature.

Table 4

Surrogate	Conc. of SUR Stock (ng/µL)	Vol. of SUR Stock (mL)	Final Vol. of SUR PDS (,L)	Final Conc. of SUR PDS (ng/µL)
¹³ C-PFHxA	1.0	1.0	2.0	0.5
¹³ C-PFDA	1.0	1.0	2.0	0.5
d ₅ -NEtFOSAA	4.0	1.0	2.0	2.0
Tetrafluoro-2- heptafluoropropoxy-13C3- propanoic acid1	50	1.0	2.0	0.5

¹ EPA 537.1 Surrogate only

8.2.5 ANALYTE STOCK STANDARD SOLUTION – Analyte stock standards are stable for at least 6 months when stored at -15 °C. When using these stock standards to prepare a PDS, care must be taken to ensure that these standards are at room temperature and adequately vortexed.

Table 5

Analyte Stock Solvent	Concentration (ug/mL)
100% methanol	1.0
	100% methanol 100% methanol 100% methanol 100% methanol 100% methanol 100% methanol 100% methanol 100% methanol 100% methanol

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Table 5 (cont.)

Analyte	Analyte Stock Solvent	Concentration (ug/mL)
PFHxS	100% methanol	1.0
PFOS	100% methanol	1.0
NEtFOSAA	100% methanol	1.0
NMeFOSAA	100% methanol	1.0
HFPO-DA	100% methanol	50.0
11-chloroeicosafluoro-3-	100% methanol	50.0
oxaundecane-1-sulfonic acid		
9-chlorohexadecafluoro-3-oxanone-	100% methanol	50.0
1-sulfonic acid		
4,8-dioxa-3H-perfluorononanoic	100% methanol	50.0
acid		

8.2.6 LOW, MEDIUM AND HIGH LEVEL LCS – The LCS's will be prepared at the following concentrations and rotated per batch; 2 ng/L, 40 ng/L, 500 ng/l. The analyte PDS contains all the method analytes of interest at various concentrations in methanol containing 4% water. The analyte PDS has been shown to be stable for 6 months when stored at room temperature.

8.2.7 CALIBRATION STANDARDS (CAL) -

Current Concentrations (ng/mL): 0.5, 1.0, 5.0, 10.0, 50.0, 125 and 150 (optional)

Prepare the CAL standards over the concentration range of interest from dilutions of the analyte PDS in methanol containing 4% reagent water. The IS and SUR are added to the CAL standards at a constant concentration (10-40 ng/L). The lowest concentration CAL standard must be at or below the RL (2 ng/L), which may depend on system sensitivity. The CAL standards may also be used as CCVs (Sect. 9.9). The CAL standards are stable for at least two weeks when stored at room temperature. Longer storage times are acceptable provided appropriate QC measures are documented demonstrating the CAL standard stability.

9. Quality Control

The laboratory must maintain records to document the quality of data that is generated. Ongoing data quality checks are compared with established performance criteria to determine if the results of analyses meet the performance characteristics of the method.

9.1 REPORTING LIMIT (RL) CONFIRMATION

9.1.1 Fortify, extract, and analyze seven replicate LCSs at 2 ng/l. These LCSs must contain all method preservatives described in Section 6.2.1. Calculate the mean measured concentration (Mean) and standard deviation for these replicates. Determine the Half Range for the prediction interval of results (HR_{PIR}) using the equation below

 $HR_{PIR} = 3.963s$

Where:

s =the standard deviation

3.963 = a constant value for seven replicates.

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9.1.2 Confirm that the upper and lower limits for the Prediction Interval of Result ($PIR = Mean \pm HR_{PIR}$) meet the upper and lower recovery limits as shown below

The Upper PIR Limit must be ≤150% recovery.

<u>Mean + HR</u> $_{PIR}$ x 100% ≤ 150% Fortified Concentration

The Lower PIR Limit must be ≥ 50% recovery.

 $\underline{Mean - HR_{PIR}}$ x 100% ≥ 50% Fortified Concentration

9.1.3 The RL is validated if both the Upper and Lower PIR Limits meet the criteria described above. If these criteria are not met, the RL has been set too low and must be determined again at a higher concentration.

9.2 Blank(s)

- 9.2.1 METHOD BLANK (MB) - A Method Blank (MB) is required with each extraction batch to confirm that potential background contaminants are not interfering with the identification or quantitation of method analytes. If more than 20 Field Samples are included in a batch, analyze an MB for every 20 samples. If the MB produces a peak within the retention time window of any analyte that would prevent the determination of that analyte, determine the source of contamination and eliminate the interference before processing samples. Background contamination must be reduced to an acceptable level before proceeding. Background from method analytes or other contaminants that interfere with the measurement of method analytes must be below 1/3 of the RL. Blank contamination is estimated by extrapolation, if the concentration is below the lowest CAL standard. This extrapolation procedure is not allowed for sample results as it may not meet data quality objectives. If the method analytes are detected in the MB at concentrations equal to or greater than this level, then all data for the problem analyte(s) must be considered invalid for all samples in the extraction batch. Because background contamination is a significant problem for several method analytes, it is highly recommended that the analyst maintain a historical record of MB data.
- 9.2.2 FIELD REAGENT BLANK (FRB) The purpose of the FRB is to ensure that PFASs measured in the Field Samples were not inadvertently introduced into the sample during sample collection/handling. Analysis of the FRB is required only if a Field Sample contains a method analyte or analytes at or above the RL. The FRB is processed, extracted and analyzed in exactly the same manner as a Field Sample. If the method analyte(s) found in the Field Sample is present in the FRB at a concentration greater than 1/3 the RL, then all samples collected with that FRB are invalid and must be recollected and reanalyzed.

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9.3 Laboratory Control Sample (LCS)

An LCS is required with each extraction batch. The fortified concentration of the LCS must be rotated between low, medium, and high concentrations from batch to batch.

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- 9.3.2 The low concentration LCS must be as near as practical to, but no more than two times, the RL. Similarly, the high concentration LCS should be near the high end of the calibration range established during the initial calibration (Sect. 10.6).
- 9.3.3 Results of the low-level LCS analyses must be 50-150% of the true value. Results of the medium and high-level LCS analyses must be 70-130% of the true value. If the LCS results do not meet these criteria for method analytes, then all data for the problem analyte(s) must be considered invalid for all samples in the extraction batch.
- 9.3.4 It is the responsibility of the extraction chemist to view the previous extraction batch to determine the next spiking concentration. (Low → Medium → High)

9.4 Internal Standards (IS)

The analyst must monitor the peak areas of the IS(s) in all injections during each analysis day. The IS responses (peak areas) in any chromatographic run must be within 70-140% of the response in the most recent CCV and must not deviate by more than 50% from the average area measured during initial analyte calibration. If the IS areas in a chromatographic run do not meet these criteria, inject a second aliquot of that extract aliquoted into a new capped autosampler vial. Random evaporation losses have been observed with the polypropylene caps causing high IS(s) areas.

- 9.4.1 If the reinjected aliquot produces an acceptable IS response, report results for that aliquot.
- If the reinjected extract fails again, the analyst should check the calibration by reanalyzing the most recently acceptable CAL standard. If the CAL standard fails the criteria of Section 9.9, recalibration is in order per Section 10.6. If the CAL standard is acceptable, extraction of the sample may need to be repeated provided the sample is still within the holding time. Otherwise, report results obtained from the reinjected extract, but annotate as suspect. Alternatively, collect a new sample and re-analyze.

9.5 Surrogate Recovery

The SUR standard is fortified into all samples, CCVs, MBs, LCSs, MSs, MSDs, FD, and FRB prior to extraction. It is also added to the CAL standards. The SUR is a means of assessing method performance from extraction to final chromatographic measurement. Calculate the recovery (%R) for the SUR using the following equation

$$%R = (A / B) x 100$$

Where:

A = calculated SUR concentration for the QC or Field Sample

B = fortified concentration of the SUR.

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9.5.1.1 SUR recovery must be in the range of 70-130%. When SUR recovery from a sample, blank, or CCV is less than 70% or greater than 130%, check 1) calculations to locate possible errors, 2) standard solutions for degradation, 3) contamination, and 4) instrument performance. Correct the problem and reanalyze the extract.

- **9.5.1.2** If the extract reanalysis meets the SUR recovery criterion, report only data for the reanalyzed extract.
- 9.5.1.3 If the extract reanalysis fails the 70-130% recovery criterion, the analyst should check the calibration by injecting the last CAL standard that passed. If the CAL standard fails the criteria of Section 10.7, recalibration is in order per Section 10.6. If the CAL standard is acceptable, extraction of the sample should be repeated provided the sample is still within the holding time. If the re-extracted sample also fails the recovery criterion, report all data for that sample as suspect/SUR recovery to inform the data user that the results are suspect due to SUR recovery. Alternatively, collect a new sample and re-analyze.

9.6 Matrix Spike (MS)

- 9.6.1 Analysis of an MS is required in each extraction batch and is used to determine that the sample matrix does not adversely affect method accuracy. Assessment of method precision is accomplished by analysis of a Field Duplicate (FD) (Sect. 9.7); however, infrequent occurrence of method analytes would hinder this assessment. If the occurrence of method analytes in the samples is infrequent, or if historical trends are unavailable, a second MS, or MSD, must be prepared, extracted, and analyzed from a duplicate of the Field Sample. Extraction batches that contain MSDs will not require the extraction of a field sample duplicate. If a variety of different sample matrices are analyzed regularly, for example, groundwater and surface water sources, method performance should be established for each. Over time, MS data should be documented by the laboratory for all routine sample sources.
- 9.6.2 Within each extraction batch, a minimum of one Field Sample is fortified as an MS for every 20 Field Samples analyzed. The MS is prepared by spiking a sample with an appropriate amount of the Analyte Stock Standard (Sect. 8.2.5). Use historical data and rotate through the low, mid and high concentrations when selecting a fortifying concentration. Calculate the percent recovery (%R) for each analyte using the equation

$$%R = (A - B) \times 100$$

Where:

A = measured concentration in the fortified sample

B = measured concentration in the unfortified sample

C = fortification concentration.

9.6.3 Analyte recoveries may exhibit matrix bias. For samples fortified at or above their native concentration, recoveries should range between 70-130%, except for low-level fortification near or at the RL (within a factor of 2-times the RL concentration) where 50-150% recoveries are acceptable. If the accuracy of any analyte falls outside the designated range, and the laboratory performance for

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that analyte is shown to be in control in the CCVs, the recovery is judged to be matrix biased. The result for that analyte in the unfortified sample is labeled suspect/matrix to inform the data user that the results are suspect due to matrix effects.

9.7 Laboratory Duplicate

- **9.7.1** FIELD DUPLICATE OR LABORATORY FORTIFIED SAMPLE MATRIX DUPLICATE (FD or MSD) Within each extraction batch (not to exceed 20 Field Samples), a minimum of one FD or MSD must be analyzed. Duplicates check the precision associated with sample collection, preservation, storage, and laboratory procedures. If method analytes are not routinely observed in Field Samples, an MSD should be analyzed rather than an FD.
- **9.7.2** Calculate the relative percent difference (*RPD*) for duplicate measurements (*FD1* and *FD2*) using the equation

RPD =
$$\frac{|FD1 - FD2|}{(FD1 + FD2)/2}$$
 x 100

- 9.7.3 RPDs for FDs should be ≤30%. Greater variability may be observed when FDs have analyte concentrations that are within a factor of 2 of the RL. At these concentrations, FDs should have RPDs that are ≤50%. If the RPD of any analyte falls outside the designated range, and the laboratory performance for that analyte is shown to be in control in the CCV, the recovery is judged to be matrix biased. The result for that analyte in the unfortified sample is labeled suspect/matrix to inform the data user that the results are suspect due to matrix effects.
- **9.7.4** If an MSD is analyzed instead of a FD, calculate the relative percent difference (RPD) for duplicate MSs (MS and MSD) using the equation

$$RPD = \frac{|MS - MSD|}{(MS + MSD)/2} \times 100$$

9.7.5 RPDs for duplicate MSs should be ≤30% for samples fortified at or above their native concentration. Greater variability may be observed when MSs are fortified at analyte concentrations that are within a factor of 2 of the RL. MSs fortified at these concentrations should have RPDs that are ≤50% for samples fortified at or above their native concentration. If the RPD of any analyte falls outside the designated range, and the laboratory performance for that analyte is shown to be in control in the CCV, the recovery is judged to be matrix biased. The result for that analyte in the unfortified sample is labeled suspect/matrix to inform the data user that the results are suspect due to matrix effects.

9.8 Initial Calibration Verification (ICV)

9.8.1 As part of the IDC (Sect. 13.2), each time a new Analyte Stock Standard solution (Sect. 8.2.5) is used, and at least quarterly, analyze a QCS sample from a source different from the source of the CAL standards. If a second vendor is not available, then a different lot of the standard should be used. The QCS should be prepared and analyzed just like a CCV. Acceptance criteria for the QCS are identical to the CCVs; the calculated amount for each analyte must be ± 30% of the expected value. If measured analyte concentrations are not of acceptable

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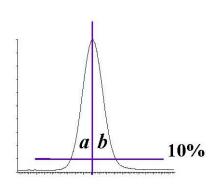
accuracy, check the entire analytical procedure to locate and correct the problem.

9.9 Continuing Calibration Verification (CCV)

9.9.1 CCV Standards are analyzed at the beginning of each analysis batch, after every 10 Field Samples, and at the end of the analysis batch. See Section 10.7 for concentration requirements and acceptance criteria.

9.10 Method-specific Quality Control Samples

9.10.1 PEAK ASYMMETRY FACTOR — A peak asymmetry factor must be calculated using the equation below during the IDL and every time a calibration curve is generated. The peak asymmetry factor for the first two eluting peaks in a midlevel CAL standard (if only two analytes are being analyzed, both must be evaluated) must fall in the range of 0.8 to 1.5. Modifying the standard or extract composition to more aqueous content to prevent poor shape is not permitted. See guidance in Section 10.6.4.1 if the calculated peak asymmetry factors do not meet the criteria.



 $A_s = b/a$

Where:

 A_s = peak asymmetry factor

b = width of the back half of the peak measured (at 10% peak height) from the trailing edge of the peak to a line dropped perpendicularly from the peak apex

a = the width of the front half of the peak measured (at 10% peak height) from the leading edge of the peak to a line dropped perpendicularly from the apex.

9.11 Method Sequence

ICV

CCV-LOW

MB

LCS

LCSD

MS

Duplicate or MSD

Field Samples (1-10)

CCV-MID

Field Samples (11-20)

CCV-HIGH

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10. Procedure

10.1 Equipment Set-up

- 10.1.1 This procedure may be performed manually or in an automated mode using a robotic or automatic sample preparation device. If an automated system is used to prepare samples, follow the manufacturer's operating instructions, but all extraction and elution steps must be the same as in the manual procedure. Extraction and/or elution steps may not be changed or omitted to accommodate the use of an automated system. If an automated system is used, the MBs should be rotated among the ports to ensure that all the valves and tubing meet the MB requirements (Sect. 9.2).
- **10.1.2** Some of the PFASs adsorb to surfaces, including polypropylene. Therefore, the aqueous sample bottles must be rinsed with the elution solvent (Sect 10.3.4) whether extractions are performed manually or by automation. The bottle rinse is passed through the cartridge to elute the method analytes and is then collected (Sect. 10.3.4).
- **10.1.3 NOTE:** The SPE cartridges and sample bottles described in this section are designed as single use items and should be discarded after use. They may not be refurbished for reuse in subsequent analyses.

10.2 Sample Preparation

10.2.1 Samples are preserved, collected and stored as presented in Section 6. All Field and QC Samples, including the MB, LCS and FRB, must contain the dechlorinating agent listed in Section 6.2.1. Determine sample volume. An indirect measurement may be done in one of two ways: by marking the level of the sample on the bottle or by weighing the sample and bottle to the nearest 10 g. After extraction, proceed to Section 10.5 for final volume determination. Some of the PFASs adsorb to surfaces, thus the sample volume may NOT be transferred to a graduated cylinder for volume measurement. The MB, LCS and FRB may be prepared by measuring 250 mL of reagent water with a polypropylene graduated cylinder or filling a 250-mL sample bottle to near the top.

The entire sample that is received must be sent through the SPE cartridge. In addition, the bottle must be solvent rinsed and this rinse must be sent through the SPE cartridge as well. The method blank (MB) and laboratory control sample (LCS) must be extracted in exactly the same manner (i.e., must include the bottle solvent rinse). It should be noted that a water rinse alone is not sufficient. This does not apply to samples with high concentrations of PFAS that are prepared using serial dilution and not SPE.

- 10.2.2 Add 20 μ L of the SUR PDS (Sect. 8.2.4) to each sample, cap and invert to mix for a final concentration of 10 ng/L for 13 C-PFHxA and 13 C-PFDA and 40 ng/L for d_5 -NEtFOSAA.
- **10.2.3** In addition to the SUR(s) and dechlorination agent, if the sample is an LCS, MS, or MSD, add the necessary amount of analyte PDS (Sect. 8.2.5). Cap and invert each sample to mix.

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10.3 Cartridge SPE Procedure

10.3.1 CARTRIDGE CLEAN-UP AND CONDITIONING – DO NOT allow cartridge packing material to go dry during any of the conditioning steps. Rinse each cartridge with 15 mL of methanol. Next, rinse each cartridge with 18 mL of reagent water, without allowing the water to drop below the top edge of the packing. If the cartridge goes dry during the conditioning phase, the conditioning must be started over. Add 4-5 mL of reagent water to each cartridge, attach the sample transfer tubes (Sect. 7.2.3), turn on the vacuum, and begin adding sample to the cartridge.

- **10.3.2** SAMPLE EXTRACTON Adjust the vacuum so that the approximate flow rate is 10-15 mL/min. Do not allow the cartridge to go dry before all the sample has passed through.
- 10.3.3 SAMPLE BOTTLE AND CARTRIDGE RINSE After the entire sample has passed through the cartridge, rinse the sample bottles with two 7.5-mL aliquots of reagent water and draw each aliquot through the sample transfer tubes and the cartridges. Draw air or nitrogen through the cartridge for 5 min at high vacuum (10-15 in. Hg).

NOTE: If empty plastic reservoirs are used in place of the sample transfer tubes to pass the samples through the cartridges, these reservoirs must be treated like the transfer tubes. After the entire sample has passed through the cartridge, the reservoirs must be rinsed to waste with reagent water.

10.3.4 SAMPLE BOTTLE AND CARTRIDGE ELUTION – Turn off and release the vacuum. Lift the extraction manifold top and insert a rack with collection tubes into the extraction tank to collect the extracts as they are eluted from the cartridges. Rinse the sample bottles with 4 mL of methanol and elute the analytes from the cartridges by pulling the 4 mL of methanol through the sample transfer tubes and the cartridges. Use a low vacuum such that the solvent exits the cartridge in a dropwise fashion. Repeat sample bottle rinse and cartridge elution with a second 4-mL aliquot of methanol.

NOTE: If empty plastic reservoirs are used in place of the sample transfer tubes to pass the samples through the cartridges, these reservoirs must be treated like the transfer tubes. After the reservoirs have been rinsed in Section 10.3.3, the elution solvent used to rinse the sample bottles must be swirled down the sides of the reservoirs while eluting the cartridge to ensure that any method analytes on the surface of the reservoirs are transferred to the extract.

10.4 Extract Concentration

10.4.1 Concentrate the extract to dryness under a gentle stream of nitrogen in a heated water bath (60-65 °C) to remove all the water/methanol mix. Add the appropriate amount of 96:4% (vol/vol) methanol:water solution and the IS PDS (Sect. 8.2.2) to the collection vial to bring the volume to 1 mL and vortex. Transfer a small aliquot with a plastic pipet (Sect. 7.6) to a polypropylene autosampler vial.

NOTE: It is recommend that the entire 1-mL aliquot not be transferred to the autosampler vial because the polypropylene autosampler caps do not reseal after injection. Therefore, do not store the extracts in the autosampler vials as evaporation losses can occur occasionally in these

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autosampler vials. Extracts can be stored in 15-mL centrifuge tubes (Sect. 7.3).

10.5 Sample Volume Determination

- 10.5.1 If the level of the sample was marked on the sample bottle, use a graduated cylinder to measure the volume of water required to fill the original sample bottle to the mark made prior to extraction. Determine to the nearest 10 mL. If using weight to determine volume, weigh the empty bottle to the nearest 10 g and determine the sample weight by subtraction of the empty bottle weight from the original sample weight (Sect. 10.2.1). Assume a sample density of 1.0 g/mL. In either case, the sample volume will be used in the final calculations of the analyte concentration (Sect. 11.2).
- **10.6 Initial Calibration** Demonstration and documentation of acceptable initial calibration is required before any samples are analyzed. After the initial calibration is successful, a CCV is required at the beginning and end of each period in which analyses are performed, and after every tenth Field Sample.

10.6.1 ESI-MS/MS TUNE

- **10.6.1.1** Calibrate the mass scale of the MS with the calibration compounds and procedures prescribed by the manufacturer.
- 10.6.1.2 Optimize the [M-H]- for each method analyte by infusing approximately 0.5-1.0 μg/mL of each analyte (prepared in the initial mobile phase conditions) directly into the MS at the chosen LC mobile phase flow rate (approximately 0.3 mL/min). This tune can be done on a mix of the method analytes. The MS parameters (voltages, temperatures, gas flows, etc.) are varied until optimal analyte responses are determined. The method analytes may have different optima requiring some compromise between the optima.
- 10.6.1.3 Optimize the product ion for each analyte by infusing approximately 0.5-1.0 μg/mL of each analyte (prepared in the initial mobile phase conditions) directly into the MS at the chosen LC mobile phase flow rate (approximately 0.4 mL/min). This tune can be done on a mix of the method analytes. The MS/MS parameters (collision gas pressure, collision energy, etc.) are varied until optimal analyte responses are determined. Typically, the carboxylic acids have very similar MS/MS conditions and the sulfonic acids have similar MS/MS conditions.
- **10.6.2** Establish LC operating parameters that optimize resolution and peak shape. Modifying the standard or extract composition to more aqueous content to prevent poor shape is not permitted.

Cautions: LC system components, as well as the mobile phase constituents, contain many of the method analytes in this method. Thus, these PFASs will build up on the head of the LC column during mobile phase equilibration. To minimize the background PFAS peaks and to keep background levels constant, the time the LC column sits at initial conditions must be kept constant and as short as possible (while ensuring reproducible retention times). In addition, prior to daily use, flush the column with 100% methanol for at least 20 min before initiating a sequence. It may be necessary on some systems to flush other LC components such as wash

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syringes, sample needles or any other system components before daily use.

Mobile phase modifiers other than 20 mM ammonium acetate may be used at the discretion of the analyst, provided that the retention time stability criteria in Sect. 10.9.2 can be met over a period of two weeks. During method development, retention times shifted to shorter and shorter times as days progressed when mobile phases with less than 20 mM ammonium acetate were used.

- 10.6.3 Inject a mid-level CAL standard under LC/MS conditions to obtain the retention times of each method analyte. If analyzing for PFTA, ensure that the LC conditions are adequate to prevent co-elution of PFTA and the mobile phase interferants. These interferants have the same precursor and products ions as PFTA, and under faster LC conditions may co-elute with PFTA. Divide the chromatogram into retention time windows each of which contains one or more chromatographic peaks. During MS/MS analysis, fragment a small number of selected precursor ions ([M-H]-) for the analytes in each window and choose the most abundant product ion. For maximum sensitivity, small mass windows of ±0.5 daltons around the product ion mass were used for quantitation. If sufficient sensitivity exists to meet the RL, wider mass ranges may be used to obtain more confirmation ions.
 - 10.6.3.1 As recommended by the EPA Advisory on September 2016, both linear and branched isomers should be included in the quantitation. NOTE: As the NOTE in Section 10.6.4.1 indicates, PFOS has linear and branched isomers. There have been reports that not all the products ions in the linear PFOS are produced in all the branched PFOS isomers. (This phenomenon probably exists for PFHxS and PFBS also, although it has not been studied to date.) Thus, in an attempt to reduce PFOS bias, it is required that the m/z 499 $\rightarrow m/z$ 80 transition be used as the quantitation transition. Some MS/MS instruments, such as conventional ion traps, may not be able to scan a product ion with such a wide mass difference from the precursor ion; therefore, they may not be used for this method if PFOS. PFBS. or PFHxS analysis is to be conducted. Literature reports indicate for the most abundant PFOS isomer, which is the linear isomer, that all the products ions obtained on an ion trap have less than 10% relative abundance. In addition, there is not a single ion trap MS/MS transition that encompasses the linear isomer and the majority of the branch isomers; thus, the bias would be unacceptably high.
- **10.6.4** Inject a mid-level CAL standard under optimized LC/MS/MS conditions to ensure that each method analyte is observed in its MS/MS window and that there are at least 10 scans across the peak for optimum precision.
 - 10.6.4.1 If broad, split or fronting peaks are observed for the first two eluting chromatographic peaks (if only two analytes are being analyzed, both must be evaluated), change the initial mobile phase conditions to higher aqueous content until the peak asymmetry ratio for each peak is 0.8 1.5. The peak asymmetry factor is calculated as described in Section 9.10.1 on a mid-level CAL standard. The peak asymmetry factor must meet the above criteria for the first two eluting peaks during the IDL and every time a new calibration curve is generated. Modifying the standard

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or extract composition to more aqueous content to prevent poor shape is not permitted.

NOTE: PFHxS, PFOS, NMeFOSAA, and NEtFOSAA have multiple chromatographic peaks using the LC conditions in Table 5 due to chromatographic resolution of the linear and branched isomers of these compounds. According to the EPA Advisory, September 2016, the branched isomers are identified by analyzing a qualitative/semi-qualitative mixed PFOA standard and the quantitation of PFOA is accomplished by integration the total response which includes peaks identified as linear and branched isomers. Most PFASs are produced by two different processes. One process gives rise to linear PFASs only while the other process produces both linear and branched isomers. Thus, both branched and linear PFASs can potentially be found in the environment. For the aforementioned compounds that give rise to more than one peak, all the chromatographic peaks observed in the standard must be integrated and the areas totaled. Chromatographic peaks in a sample must be integrated in the same way as the CAL standard.

- **10.6.5** Prepare a set of CAL standards as described in Section 8.2.7. The lowest concentration CAL standard must be at or below the RL (2 ng/L), which may depend on system sensitivity. It is recommended that at least four of the CAL standards are at a concentration greater than or equal to the RL.
- 10.6.6 The LC/MS/MS system is calibrated using the IS technique. Use the LC/MS/MS data system software to generate a linear regression or quadratic calibration curve for each of the analytes. This curve must always be forced through zero and may be concentration weighted, if necessary. Forcing zero allows for a better estimate of the background levels of method analytes.
 - 10.6.6.1 The isotopically labeled IS(s) in this method may undergo suppression in the ESI source if the concentration of the co-eluting unlabeled method analyte(s) is too high. The analyte concentration at which suppression may occur can vary depending on the instrument, LC conditions, ESI conditions, IS concentration, etc. To evaluate whether suppression is occurring during calibration, calculate the relative percent difference (RPD) between the high (H) and low (L) areas for each IS using the equation

RPD =
$$(H - L)$$
 x 100 $(H + L) / 2$

- **10.6.6.2** The RPD calculated above must be <20% for each IS during calibration. If the calculated RPD is >20% for any IS, the analyst must recalibrate at lower analyte concentrations until the IS RPDs are <20%.
- 10.6.7 CALIBRATION ACCEPTANCE CRITERIA When quantitated using the initial calibration curve, each calibration point, except the lowest point, for each analyte should calculate to be within 70-130% of its true value. The lowest CAL point should calculate to be within 50-150% of its true value. If these criteria cannot be met, the analyst will have difficulty meeting ongoing QC criteria. It is recommended that corrective action is taken to reanalyze the CAL standards, restrict the range of calibration, or select an alternate method of calibration (forcing the curve through zero is still required).

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10.6.7.1 CAUTION: When acquiring MS/MS data, LC operating conditions must be carefully reproduced for each analysis to provide reproducible retention times. If this is not done, the correct ions will not be monitored at the appropriate times. As a precautionary measure, the chromatographic peaks in each window must not elute too close to the edge of the segment time window.

- 10.7 CONTINUING CALIBRATION CHECK (CCV) Minimum daily calibration verification is as follows. Verify the initial calibration at the beginning and end of each group of analyses, and after every tenth sample during analyses. In this context, a "sample" is considered to be a Field Sample. MBs, CCVs, LCSs, MSs, FDs FRBs and MSDs are not counted as samples. The beginning CCV of each analysis batch must be at or below the RL in order to verify instrument sensitivity prior to any analyses. If standards have been prepared such that all low CAL points are not in the same CAL solution, it may be necessary to analyze two CAL standards to meet this requirement. Alternatively, the analyte concentrations in the analyte PDS may be customized to meet this criterion. Subsequent CCVs should alternate between a medium and high concentration CAL standard.
 - **10.7.1** Inject an aliquot of the appropriate concentration CAL standard and analyze with the same conditions used during the initial calibration.
 - 10.7.2 Determine that the absolute areas of the quantitation ions of the IS(s) are within 70-140% of the areas measured in the most recent continuing calibration check, and within 50-150% from the average areas measured during initial calibration. If any of the IS areas has changed by more than these amounts, adjustments must be made to restore system sensitivity. These adjustments may include cleaning of the MS ion source, or other maintenance as indicated in Section 10.7.4. Major instrument maintenance requires recalibration (Sect 10.6) and verification of sensitivity by analyzing a CCV at or below the RL (Sect 10.7). Control charts are useful aids in documenting system sensitivity changes.
 - 10.7.3 Calculate the concentration of each analyte and SUR in the CCV. The calculated amount for each analyte and SUR for medium and high level CCVs must be within ± 30% of the true value. The calculated amount for the lowest calibration point for each analyte must be within ± 50% and the SUR must be within ± 30% of the true value. If these conditions do not exist, then all data for the problem analyte must be considered invalid, and remedial action should be taken (Sect. 10.7.4) which may require recalibration. Any Field or QC Samples that have been analyzed since the last acceptable calibration verification should be reanalyzed after adequate calibration has been restored, with the following exception. If the CCV fails because the calculated concentration is greater than 130% (150% for the low-level CCV) for a particular method analyte, and Field Sample extracts show no detection for that method analyte, non-detects may be reported without re-analysis.
 - 10.7.4 REMEDIAL ACTION Failure to meet CCV QC performance criteria may require remedial action. Major maintenance, such as cleaning the electrospray probe, atmospheric pressure ionization source, cleaning the mass analyzer, replacing the LC column, etc., requires recalibration (Sect 10.6) and verification of sensitivity by analyzing a CCV at or below the RL (Sect 10.7).

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10.8 EXTRACT ANALYSIS

10.8.1 Establish operating conditions equivalent to those summarized in Tables 5-8 of Section 16. Instrument conditions and columns should be optimized prior to the initiation of the IDC.

- 10.8.2 Establish an appropriate retention time window for each analyte. This should be based on measurements of actual retention time variation for each method analyte in CAL standard solutions analyzed on the LC over the course of time. A value of plus or minus three times the standard deviation of the retention time obtained for each method analyte while establishing the initial calibration and completing the IDC can be used to calculate a suggested window size. However, the experience of the analyst should weigh heavily on the determination of the appropriate retention window size.
- **10.8.3** Calibrate the system by either the analysis of a calibration curve (Sect. 10.6) or by confirming the initial calibration is still valid by analyzing a CCV as described in Section 10.7. If establishing an initial calibration, complete the IDC as described in Section 13.2.
- **10.8.4** Begin analyzing Field Samples, including QC samples, at their appropriate frequency by injecting the same size aliquots, under the same conditions used to analyze the CAL standards.
- 10.8.5 At the conclusion of data acquisition, use the same software that was used in the calibration procedure to identify peaks of interest in predetermined retention time windows. Use the data system software to examine the ion abundances of the peaks in the chromatogram. Identify an analyte by comparison of its retention time with that of the corresponding method analyte peak in a reference standard.
- **10.8.6** Comparison of the MS/MS mass spectra is not particularly useful given the limited ±0.5 dalton mass range around a single product ion for each method analyte.
- 10.8.7 The analyst must not extrapolate beyond the established calibration range. If an analyte peak area exceeds the range of the initial calibration curve, the extract may be diluted with 96%:4% vol/vol) methanol:water solution and the appropriate amount of IS added to match the original concentration. Re-inject the diluted extract. Incorporate the dilution factor into the final concentration calculations. Acceptable SUR performance (Sect. 9.5.1.1) should be determined from the undiluted sample extract. The resulting data should be documented as a dilution, with an increased RL.

11. Data Evaluation, Calculations and Reporting

- **11.1** Complete chromatographic resolution is not necessary for accurate and precise measurements of analyte concentrations using MS/MS. In validating this method, concentrations were calculated by measuring the product ions listed in Table 8. Other ions may be selected at the discretion of the analyst.
- **11.2** Calculate analyte and SUR concentrations using the multipoint calibration established in Section 10.6. Do not use daily calibration verification data to quantitate analytes in samples. Adjust final analyte concentrations to reflect the actual sample volume determined in Section 10.5.

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11.3 Prior to reporting the data, the chromatogram should be reviewed for any incorrect peak identification or poor integration.

- 11.4 PFHxS, PFOS, NMeFOSAA, and NEtFOSAA have multiple chromatographic peaks using the LC conditions in Table 5 due to the linear and branch isomers of these compounds (Sect. 10.6.4.1). The areas of all the linear and branched isomer peaks observed in the CAL standards for each of these analytes must be summed and the concentrations reported as a total for each of these analytes.
- **11.5** Calculations must utilize all available digits of precision, but final reported concentrations should be rounded to an appropriate number of significant figures (one digit of uncertainty), typically two, and not more than three significant figures.

12. Contingencies for Handling Out-of-Control Data or Unacceptable Data

- 12.1 Section 9.0 outlines sample batch QC acceptance criteria. If non-compliant organic compound results are to be reported, the Organic Section Head and/or the Laboratory Director, and the Operations Manager must approve the reporting of these results. The laboratory Project Manager shall be notified, and may choose to relay the non-compliance to the client, for approval, or other corrective action, such as re-sampling and re-analysis. The analyst, Data Reviewer, or Department Supervisor performing the secondary review initiates the project narrative, and the narrative must clearly document the non-compliance and provide a reason for acceptance of these results.
- **12.2** All results for the organic compounds of interest are reportable without qualification if extraction and analytical holding times are met, preservation requirements (including cooler temperatures) are met, all QC criteria defined in the table below are met, and matrix interference is not suspected during extraction or analysis of the samples. If any of the below QC parameters are not met, all associated samples must be evaluated for reextraction and/or re-analysis.

13. Method Performance

13.1 Detection Limit Study (DL) / Limit of Detection Study (LOD) / Limit of Quantitation (LOQ)

13.1.1 The laboratory follows the procedure to determine the DL, LOD, and/or LOQ as outlined in Alpha SOP ID 1732. These studies performed by the laboratory are maintained on file for review.

13.2 Demonstration of Capability Studies

- **13.2.1** The IDC must be successfully performed prior to analyzing any Field Samples. Prior to conducting the IDC, the analyst must first generate an acceptable Initial Calibration following the procedure outlined in Section 10.6.
- **13.2.2** INITIAL DEMONSTRATION OF LOW SYSTEM BACKGROUND Any time a new lot of SPE cartridges, solvents, centrifuge tubes, disposable pipets, and autosampler vials are used, it must be demonstrated that an MB is reasonably free of contamination and that the criteria in Section 9.2.1 are met. If an automated extraction system is used, an MB should be extracted on each port to ensure that all the valves and tubing are free from potential PFAS contamination.

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13.2.3 INITIAL DEMONSTRATION OF PRECISION (IDP) — Prepare, extract, and analyze four to seven replicate LCSs fortified near the midrange of the initial calibration curve according to the procedure described in Section 10. Sample preservatives as described in Section 6.2.1 must be added to these samples. The relative standard deviation (RSD) of the results of the replicate analyses must be less than 20%.

- **13.2.4** INITIAL DEMONSTRATION OF ACCURACY (IDA) Using the same set of replicate data generated for Section 13.2.3, calculate average recovery. The average recovery of the replicate values must be within ± 30% of the true value.
- **13.2.5** INITIAL DEMONSTRATION OF PEAK ASYMMETRY FACTOR Peak asymmetry factors must be calculated using the equation in Section 9.10.1 for the first two eluting peaks (if only two analytes are being analyzed, both must be evaluated) in a mid-level CAL standard. The peak asymmetry factors must fall in the range of 0.8 to 1.5. See guidance in Section 10.6.4.1 if the calculated peak asymmetry factors do not meet the criteria.
- **13.2.6** Refer to Alpha SOP ID 1739 for further information regarding IDC/DOC Generation.
- **13.2.7** The analyst must make a continuing, annual, demonstration of the ability to generate acceptable accuracy and precision with this method.

14. Pollution Prevention and Waste Management

- **14.1** Refer to Alpha's Chemical Hygiene Plan and Hazardous Waste Management and Disposal SOP for further pollution prevention and waste management information.
- **14.2** This method utilizes SPE to extract analytes from water. It requires the use of very small volumes of organic solvent and very small quantities of pure analytes, thereby minimizing the potential hazards to both the analyst and the environment as compared to the use of large volumes of organic solvents in conventional liquid-liquid extractions.
- **14.3** The analytical procedures described in this method generate relatively small amounts of waste since only small amounts of reagents and solvents are used. However, laboratory waste management practices must be conducted consistent with all applicable rules and regulations, and that laboratories protect the air, water, and land by minimizing and controlling all releases from fume hoods and bench operations. Also, compliance is required with any sewage discharge permits and regulations, particularly the hazardous waste identification rules and land disposal restrictions.

15. Referenced Documents

- **15.1** Chemical Hygiene Plan ID 2124
- **15.2** SOP ID 1732 Detection Limit (DL), Limit of Detection (LOD) & Limit of Quantitation (LOQ) SOP
- **15.3** SOP ID 1739 Demonstration of Capability (DOC) Generation SOP
- 15.4 SOP ID 1728 Hazardous Waste Management and Disposal SOP

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16. Attachments

Table 6: LC Method Conditions

Time (min)	2 mM Ammonium Acetate (5:95 MeOH/H ₂ O)	2 mM Ammonium Acetate (100% Methanol)
Initial	100.0	0.0
1.0	100.0	0.0
2.2	85.0	15.0
11	20.0	80.0
11.4	0.0	100.0
12.4	100.0	0.0
14.0	100.0	0.0

Waters Aquity UPLC ® BEHC₁₈ 2.1 x 50 mm packed with 1.7 µm BEH C₁₈ stationary phase
Flow rate of 0.4 mL/min
2-5 µL injection

Table 7: ESI-MS Method Conditions

ESI Conditions			
Polarity	Negative ion		
Capillary needle voltage	.5 kV		
Cone Gas Flow	20 L/hr		
Nitrogen desolvation gas	1100 L/hr		
Desolvation gas temp.	500 °C		

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Table 8: Method Analyte Source, Retention Times (RTs), and IS References

Analyte	Peak #	IS# Ref
PFBS	1	2
PFHxA	3	1
HFPO-DA	5	1
PFHpA	6	1
PFHxS	7	2
ADONA	8	1
PFOA	10	1
PFNA	11	1
PFOS	12	2
PFDA	14	1
9CL-PF3ONS	15	1
NMeFOSAA	17	3
PFUnA	18	3
NEtFOSAA	20	1
PFDoA	21	1
11CL-PFOUdS	22	1
PFTrDA	23	1
PFTA	24	1
¹³ C-PFHxA	2	1
¹³ C-HFPO-DA	4	1
¹³ C-PFDA	13	1
d ₅ -NEtFOSAA	19	3
¹³ C-PFOA-IS#1	9	-
¹³ C-PFOS-IS#2	10	-
d ₃ -NMeFOSAA-IS#3	16	-

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Table 9: MS/MS Method Conditions

Segmenta	Analyte	Precursor Ion b (m/z)	Product Ion b,c (m/z)
1	PFBS	299	80
2	PFHxA	313	269
4	HFPO-DA	285	169
5	PFHpA	363	319
6	PFHxS ^e	399	80
7	ADONA	377	251
9	PFOA	413	369
10	PFNA	463	419
11	9CL-PF3ONS	531	351
13	PFOS e	499	80
15	PFDA	513	469
17	NMeFOSAA e	570	419
19	NEtFOSAA e	584	419
20	11CL-PFOUdS	631	451
21	PFUnA	563	519
22	PFDoA	613	569
23	PFTrDA	663	619
24	PFTA	713	669
2	¹³ C-PFHxA	315	270
3	¹³ C-HFPO-DA	287	169
14	¹³ C-PFDA	515	470
16	d ₅ -NEtFOSAA	589	419
8	¹³ C-PFOA	415	370
12	¹³ C-PFOS	503	80
18	d ₃ -NMeFOSAA	573	419

^a Segments are time durations in which single scan events occur; segments overlap where R.T. dictate.

^b Precursor and product ions listed in this table are nominal masses. During MS and MS/MS optimization, the analyst should determine the precursor and product ion masses to one decimal place by locating the apex of the mass spectral peak place. These precursor and product ion masses (with one decimal place) should be used in the MS/MS method for all analyses.

^c lons used for quantitation purposes.

d Argon used as collision gas at a flow rate of 0.4 mL/min

^e Analyte has multiple resolved chromatographic peaks due to linear and branched isomers. All peaks summed for quantitation purposes.

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Determination of Selected Perfluorinated Alkyl Substances by Solid Phase Extraction and Liquid Chromatography/Tandem Mass Spectrometry Isotope Dilution (LC/MS/MS)

References: EPA Method 537.1, Version 2, March 2020, EPA Document #:

EPA/600/R-20/006

Department of Defense, Quality Systems Manual for Environmental

Laboratories, Version 5.3, 2019

1. Scope and Application

Matrices: Drinking water, Non-potable Water, , Tissues, Biosolids and Soil Matrices (Drinking water is applicable for specific state regulatory requirements for this method)

Definitions: Refer to Alpha Analytical Quality Manual.

- **1.1** This is a liquid chromatography/tandem mass spectrometry (LC/MS/MS) method for the determination of selected perfluorinated alkyl substances (PFAS) in Non-Drinking Water and soil Matrices. Accuracy and precision data have been generated in reagent water, and finished ground and surface waters and soils for the compounds listed in Table 1.
- 1.2 The data report packages present the documentation of any method modification related to the samples tested. Depending upon the nature of the modification and the extent of intended use, the laboratory may be required to demonstrate that the modifications will produce equivalent results for the matrix. Approval of all method modifications is by one or more of the following laboratory personnel before performing the modification: Area Supervisor, Department Supervisor, Laboratory Director, or Quality Assurance Officer.
- 1.3 This method is restricted to use by or under the supervision of analysts experienced in the operation of the LC/MS/MS and in the interpretation of LC/MS/MS data. Each analyst must demonstrate the ability to generate acceptable results with this method by performing an initial demonstration of capability.

2. Summary of Method

- 2.1 A 250-mL water sample is fortified with extracted internal standards (EIS) and passed through a solid phase extraction (WAX) cartridge containing a mixed mode, Weak Anion Exchange, reversed phase, water-wettable polymer to extract the method analytes and isotopically-labeled compounds. The compounds are eluted from the solid phase in two fractions with methanol followed by a small amount of 2% ammonium hydroxide in methanol solution. The extract is concentrated with nitrogen in a heated water bath, and then adjusted to a 1-mL volume with 80:20% (vol/vol) methanol:water.
 - A 2-4 gram soil, solid, tissue or biosolid sample is is fortified with extracted internal standards (EIS), diluted in methanol and agitated rigorously. An aliquot of the methanol is passed across an SPE based clean-up cartridge and the eluate collected. The extract is concentrated with nitrogen in a heated water bath, and then adjusted to a 1-mL volume with 80:20% (vol/vol) methanol:water.
- 2.2 A 3 µl injection is made into an LC equipped with a C18 column that is interfaced to an MS/MS. The analytes are separated and identified by comparing the acquired mass spectra and retention times to reference spectra and retention times for calibration standards acquired under identical LC/MS/MS conditions. The concentration of each analyte is

determined by using the isotope dilution technique. Extracted Internal Standards (EIS) analytes are used to monitor the extraction efficiency of the method analytes.

2.3 Method Modifications from Reference

None.

Table 1

Parameter	Acronym	CAS		
PERFLUOROALKYL ETHER CARBOXYLIC ACIDS (PFECAs)				
Tetrafluoro-2-(heptafluoropropoxy)propanoic acid	HFPO-DA	13252-13-6		
4,8-dioxa-3H-perfluorononanoic acid	ADONA	919005-14-4		
PERFLUOROALKYLCARBOXILIC ACIDS (PFCAs)				
Perfluorobutanoic acid	PFBA	375-22-4		
Perfluoropentanoic acid	PFPeA	2706-90-3		
Perfluorohexanoic acid	PFHxA *	307-24-4		
Perfluoroheptanoic acid	PFHpA *	375-85-9		
Perfluorooctanoic acid	PFOA *	335-67-1		
Perfluorononanoic acid	PFNA *	375-95-1		
Perfluorodecanoic acid	PFDA *	335-76-2		
Perfluoroundecanoic acid	PFUnA *	2058-94-8		
Perfluorododecanoic acid	PFDoA *	307-55-1		
Perfluorotridecanoic acid	PFTrDA *	72629-94-8		
Perfluorotetradecanoic acid	PFTA *	376-06-7		
Perfluorohexadecanoic acid	PFHxDA	67905-19-5		
Perfluorooctadecanoic acid	PFODA	16517-11-6		
PERFLUOROALKYLSULFONATES (PFASs)				
Perfluorobutanesulfonic acid	PFBS *	375-73-5		
Perfluoropentanesulfonic acid	PFPeS	2706-91-4		
Perfluorohexanesulfonic acid	PFHxS *	355-46-4		
Perfluoroheptanesulfonic acid	PFHpS	375-92-8		
Perfluorooctanesulfonic acid	PFOS *	1763-23-1		
Perfluorononanesulfonic acid	PFNS	68259-12-1		
Perfluorodecanesulfonic acid	PFDS	335-77-3		
Perfluorododecanesulfonic acid	PFDoS	79780-39-5		

^{*} also reportable via the standard 537 method

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Table 1 Cont.

Parameter	Acronym	CAS		
CHLORO-PERFLUOROALKYLSULFONATE				
11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid	11CI- PF3OUdS	763051-92-9		
9-chlorohexadecafluoro-3-oxanone-1-sulfonic acid	9CI-PF3ONS	756426-58-1		
PERFLUOROOCTANESULFONAMIDES (FOSAs)				
Perfluorooctanesulfonamide	PFOSA	754-91-6		
N-methylperfluoro-1-octanesulfonamide	NMeFOSA	31506-32-8		
N-ethylperfluoro-1-octanesulfonamide	NEtFOSA	4151-50-2		
TELOMER SULFONATES				
1H,1H,2H,2H-perfluorohexane sulfonate (4:2)	4:2FTS	27619-93-8		
1H,1H,2H,2H-perfluorooctane sulfonate (6:2)	6:2FTS	27619-97-2		
1H,1H,2H,2H-perfluorodecane sulfonate (8:2)	8:2FTS	39108-34-4		
1H,1H,2H,2H-perfluorododecane sulfonate (10:2)	10:2FTS	120226-60-0		
PERFLUOROOCTANESULFONAMIDOACETIC ACIDS				
N-methyl perfluorooctanesulfonamidoacetic acid	NMeFOSAA *	2355-31-9		
N-ethyl perfluorooctanesulfonamidoacetic acid	NEtFOSAA *	2991-50-6		
NATIVE PERFLUOROOCTANESULFONAMIDOETHANOLS (FOSEs)				
2-(N-methylperfluoro-1-octanesulfonamido)-ethanol	NMeFOSE	24448-09-7		
2-(N-ethylperfluoro-1-octanesulfonamido)-ethanol	NEtFOSE	1691-99-2		

^{*} also reportable via the standard 537 method

Reporting Limits 3.

The reporting limit for PFAS's is 2 ng/L for aqueous samples (20 ng/L for HFPO-DA) and 1 ng/g (10 ng/g for HFPO-DA) for soil samples.

4. Interferences

- **4.1** PFAS standards, extracts and samples should not come in contact with any glass containers or pipettes as these analytes can potentially adsorb to glass surfaces. PFAS analyte and EIS standards commercially purchased in glass ampoules are acceptable; however, all subsequent transfers or dilutions performed by the analyst must be prepared and stored in polypropylene containers.
- **4.2** Method interferences may be caused by contaminants in solvents, reagents (including reagent water), sample bottles and caps, and other sample processing hardware that lead to discrete artifacts and/or elevated baselines in the chromatograms. The method analytes in this method can also be found in many common laboratory supplies and equipment, such as PTFE (polytetrafluoroethylene) products, LC solvent lines, methanol, aluminum foil, SPE sample transfer lines, etc. All items such as these must be routinely demonstrated to be free from interferences (less than 1/3 the RL for each method analyte) under the conditions of the analysis by analyzing laboratory reagent blanks as described in Section 9.2. Subtracting blank values from sample results is not permitted.

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4.3 Matrix interferences may be caused by contaminants that are co-extracted from the sample. The extent of matrix interferences will vary considerably from source to source, depending upon the nature of the water. Humic and/or fulvic material can be co-extracted during SPE and high levels can cause enhancement and/or suppression in the electrospray ionization source or low recoveries on the SPE sorbent. Total organic carbon (TOC) is a good indicator of humic content of the sample.

4.4 SPE cartridges can be a source of interferences. The analysis of field and laboratory reagent blanks can provide important information regarding the presence or absence of such interferences. Brands and lots of SPE devices should be tested to ensure that contamination does not preclude analyte identification and quantitation.

5. Health and Safety

- **5.1** The toxicity or carcinogenicity of each reagent and standard used in this method is not fully established; however, each chemical compound should be treated as a potential health hazard. From this viewpoint, exposure to these chemicals must be reduced to the lowest possible level by whatever means available. A reference file of material safety data sheets is available to all personnel involved in the chemical analysis. Additional references to laboratory safety are available in the Chemical Hygiene Plan.
- **5.2** All personnel handling environmental samples known to contain or to have been in contact with municipal waste must follow safety practices for handling known disease causative agents.
- **5.3** PFOA has been described as "likely to be carcinogenic to humans." Pure standard materials and stock standard solutions of these method analytes should be handled with suitable protection to skin and eyes, and care should be taken not to breathe the vapors or ingest the materials.

6. Sample Collection, Preservation, Shipping and Handling

6.1 Sample Collection for Aqueous Samples

- **6.1.1** Samples must be collected in two (2) 250-mL high density polyethylene (HDPE) container with an unlined plastic screw cap.
- **6.1.2** The sample handler must wash their hands before sampling and wear nitrile gloves while filling and sealing the sample bottles. PFAS contamination during sampling can occur from a number of common sources, such as food packaging and certain foods and beverages. Proper hand washing and wearing nitrile gloves will aid in minimizing this type of accidental contamination of the samples.
- **6.1.3** Open the tap and allow the system to flush until the water temperature has stabilized (approximately 3 to 5 min). Collect samples from the flowing system.
- **6.1.4** Fill sample bottles. Samples do not need to be collected headspace free.
- **6.1.5** After collecting the sample and cap the bottle. Keep the sample sealed from time of collection until extraction.

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6.1.6 Field Reagent Blank (FRB)

6.1.6.1 A FRB must be handled along with each sample set. The sample set is composed of samples collected from the same sample site and at the same time. At the laboratory, fill the field blank sample bottle with reagent water and preservatives, seal, and ship to the sampling site along with the sample bottles. For each FRB shipped, an empty sample bottle (no preservatives) must also be shipped. At the sampling site, the sampler must open the shipped FRB and pour the reagent water into the empty shipped sample bottle, seal and label this bottle as the FRB. The FRB is shipped back to the laboratory along with the samples and analyzed to ensure that PFAS's were not introduced into the sample during sample collection/handling.

The reagent water used for the FRBs must be initially analyzed for method analytes as a MB and must meet the MB criteria in Section 9.2.1 prior to use. This requirement will ensure samples are not being discarded due to contaminated reagent water rather than contamination during sampling.

6.2 Sample Collection for Soil and Sediment samples.

Grab samples are collected in polypropylene containers. Sample containers and contact surfaces containing PTFE shall be avoided.

6.3 Sample Preservation

Not applicable.

6.4 Sample Shipping

Samples must be chilled during shipment and must not exceed 10 °C during the first 48 hours after collection. Sample temperature must be confirmed to be at or below 10 °C when the samples are received at the laboratory. Samples stored in the lab must be held at or below 6 °C until extraction, but should not be frozen.

NOTE: Samples that are significantly above 10° C, at the time of collection, may need to be iced or refrigerated for a period of time, in order to chill them prior to shipping. This will allow them to be shipped with sufficient ice to meet the above requirements.

6.5 Sample Handling

6.5.1 Holding Times

6.5.1.1 Water samples should be extracted as soon as possible but must be extracted within 14 days. Soil samples should be extracted within 14 days. Extracts are stored at < 10 ° C and analyzed within 28 days after extraction.

7. Equipment and Supplies

- **7.1** SAMPLE CONTAINERS 250-mL high density polyethylene (HDPE) bottles fitted with unlined screw caps. Sample bottles must be discarded after use.
- **7.2** SAMPLE JARS 8 ounce wide mouth high density polyethylene (HDPE) bottles fitted with unlined screw caps. Sample bottles must be discarded after use.

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- **7.3** POLYPROPYLENE BOTTLES 4-mL narrow-mouth polypropylene bottles.
- **7.4** CENTRIFUGE TUBES 50-mL conical polypropylene tubes with polypropylene screw caps for storing standard solutions and for collection of the extracts.
- **7.5** AUTOSAMPLER VIALS Polypropylene 0.7-mL autosampler vials with polypropylene caps.
 - **7.5.1** NOTE: Polypropylene vials and caps are necessary to prevent contamination of the sample from PTFE coated septa. However, polypropylene caps do not reseal, so evaporation occurs after injection. Thus, multiple injections from the same vial are not possible.
- **7.6** POLYPROPYLENE GRADUATED CYLINDERS Suggested sizes include 25, 50, 100 and 1000-mL cylinders.
- **7.7** Auto Pipets Suggested sizes include 5, 10, 25, 50, 100, 250, 500, 1000, 5000 and 10,000-µls.
- **7.8** PLASTIC PIPETS Polypropylene or polyethylene disposable pipets.
- **7.9** ANALYTICAL BALANCE Capable of weighing to the nearest 0.0001 g.
- **7.10** ANALYTICAL BALANCE Capable of weighing to the nearest 0.1 g.
- 7.11 SOLID PHASE EXTRACTION (SPE) APPARATUS FOR USING CARTRIDGES
 - **7.11.1** SPE CARTRIDGES 0.5 g SPE cartridges containing a reverse phase copolymer characterized by a weak anion exchanger (WAX) sorbent phase.
 - 7.11.2 VACUUM EXTRACTION MANIFOLD A manual vacuum manifold with large volume sampler for cartridge extractions, or an automatic/robotic sample preparation system designed for use with SPE cartridges, may be used if all QC requirements discussed in Section 9 are met. Extraction and/or elution steps may not be changed or omitted to accommodate the use of an automated system. Care must be taken with automated SPE systems to ensure the PTFE commonly used in these systems does not contribute to unacceptable analyte concentrations in the MB (Sect. 9.2.1).
 - 7.11.3 SAMPLE DELIVERY SYSTEM Use of a polypropylene transfer tube system, which transfers the sample directly from the sample container to the SPE cartridge, is recommended, but not mandatory. Standard extraction manifolds come equipped with PTFE transfer tube systems. These can be replaced with 1/8" O.D. x 1/16" I.D. polypropylene or polyethylene tubing cut to an appropriate length to ensure no sample contamination from the sample transfer lines. Other types of non-PTFE tubing may be used provided it meets the MB (Sect. 9.2.1) and LCS (Sect. 9.3) QC requirements. The PTFE transfer tubes may be used, but an MB must be run on each PFTE transfer tube and the QC requirements in Section 13.2.2 must be met. In the case of automated SPE, the removal of PTFE lines may not be feasible; therefore, MBs will need to be rotated among the ports and must meet the QC requirements of Sections 13.2.2 and 9.2.1.
- **7.12** Extract Clean-up Cartridge 250 mg 6ml SPE Cartridge containing graphitized polymer carbon
- **7.13** EXTRACT CONCENTRATION SYSTEM Extracts are concentrated by evaporation with nitrogen using a water bath set no higher than 65 °C.

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7.14 LABORATORY OR ASPIRATOR VACUUM SYSTEM – Sufficient capacity to maintain a vacuum of approximately 10 to 15 inches of mercury for extraction cartridges.

- 7.15 LIQUID CHROMATOGRAPHY (LC)/TANDEM MASS SPECTROMETER (MS/MS) WITH DATA SYSTEM
 - 7.15.1 LC SYSTEM Instrument capable of reproducibly injecting up to 10-µL aliquots, and performing binary linear gradients at a constant flow rate near the flow rate used for development of this method (0.4 mL/min). The LC must be capable of pumping the water/methanol mobile phase without the use of a degasser which pulls vacuum on the mobile phase bottle (other types of degassers are acceptable). Degassers which pull vacuum on the mobile phase bottle will volatilize the ammonium acetate mobile phase causing the analyte peaks to shift to earlier retention times over the course of the analysis batch. The usage of a column heater is optional.
 - 7.15.2 LC/TANDEM MASS SPECTROMETER The LC/MS/MS must be capable of negative ion electrospray ionization (ESI) near the suggested LC flow rate of 0.4 mL/min. The system must be capable of performing MS/MS to produce unique product ions for the method analytes within specified retention time segments. A minimum of 10 scans across the chromatographic peak is required to ensure adequate precision.
 - 7.15.3 DATA SYSTEM An interfaced data system is required to acquire, store, reduce, and output mass spectral data. The computer software should have the capability of processing stored LC/MS/MS data by recognizing an LC peak within any given retention time window. The software must allow integration of the ion abundance of any specific ion within specified time or scan number limits. The software must be able to calculate relative response factors, construct linear regressions or quadratic calibration curves, and calculate analyte concentrations.
 - **7.15.4** ANALYTICAL COLUMN An LC BEH C_{18} column (2.1 x 50 mm) packed with 1.7 μ m d_p C_{18} solid phase particles was used. Any column that provides adequate resolution, peak shape, capacity, accuracy, and precision (Sect. 9) may be used.

8. Reagents and Standards

- **8.1** GASES, REAGENTS, AND SOLVENTS Reagent grade or better chemicals must be used.
 - **8.1.1** REAGENT WATER Purified water which does not contain any measurable quantities of any method analytes or interfering compounds greater than 1/3 the RL for each method analyte of interest. Prior to daily use, at least 3 L of reagent water should be flushed from the purification system to rinse out any build-up of analytes in the system's tubing.
 - **8.1.2** METHANOL (CH₃OH, CAS#: 67-56-1) High purity, demonstrated to be free of analytes and interferences.
 - **8.1.3** AMMONIUM ACETATE ($NH_4C_2H_3O_2$, CAS#: 631-61-8) High purity, demonstrated to be free of analytes and interferences.
 - **8.1.4** ACETIC ACID (H₃CCOOH, CAS#: 64-19-7) High purity, demonstrated to be free of analytes and interferences.

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8.1.5 1M AMMONIUM ACETATE/REAGENT WATER – High purity, demonstrated to be free of analytes and interferences.

- 8.1.6 2mM AMMONIUM ACETATE/METHANOL:WATER (5:95) To prepare, mix 2 ml of 1M AMMONIUM ACETATE,1 ml ACETIC ACID and 50 ml METHANOL into I Liter of REAGENT WATER.
- **8.1.7** Methanol/Water (80:20) To prepare a 1 Liter bottle, mix 200 ml of REAGENT WATER with 800 ml of METHANOL.
- **8.1.8** AMMONIUM HYDROXIDE (NH₃, CAS#: 1336-21-6) High purity, demonstrated to be free of analytes and interferences.
- **8.1.9** Sodium Acetate (NaOOCCH₃, CAS#: 127-09-3) High purity, demonstrated to be free of analytes and interferences.
- **8.1.10** 25 mM Sodium Acetate Buffer To prepare 250mls, dissolve .625 grams of sodium acetate into 100 mls of reagent water. Add 4 mls Acetic Acid and adjust the final volume to 250 mls with reagent water.
- **8.1.11** NITROGEN Used for the following purposes: Nitrogen aids in aerosol generation of the ESI liquid spray and is used as collision gas in some MS/MS instruments. The nitrogen used should meet or exceed instrument manufacturer's specifications. In addition, Nitrogen is used to concentrate sample extracts (Ultra High Purity or equivalent).
- **8.1.12** ARGON Used as collision gas in MS/MS instruments. Argon should meet or exceed instrument manufacturer's specifications. Nitrogen gas may be used as the collision gas provided sufficient sensitivity (product ion formation) is achieved.
- 8.2 STANDARD SOLUTIONS When a compound purity is assayed to be 96% or greater, the weight can be used without correction to calculate the concentration of the stock standard. PFAS analyte and IS standards commercially purchased in glass ampoules are acceptable; however, all subsequent transfers or dilutions performed by the analyst must be prepared and stored in polypropylene containers. Standards for sample fortification generally should be prepared in the smallest volume that can be accurately measured to minimize the addition of excess organic solvent to aqueous samples.

NOTE: Stock standards and diluted stock standards are stored at ≤4 °C.

- **8.2.1** ISOTOPE DILUTION Extracted Internal Standard (ID EIS) STOCK SOLUTIONS ID EIS stock standard solutions are stable for at least 6 months when stored at 4 °C. The stock solution is purchased at a concentration of 1000 ng/mL.
- 8.2.2 ISOTOPE DILUTION Extracted Internal Standard PRIMARY DILUTION STANDARD (ID EIS PDS) Prepare the ID EIS PDS at a concentration of 500 ng/mL. The ID PDS is prepared in 80:20% (vol/vol) methanol:water. The ID PDS is stable for 6 months when stored at ≤4 °C.

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Table 2

Isotope Labeled Standard	Conc. of EIS Stock (ng/mL)	Vol. of EIS Stock (mL)	Final Vol. of EIS PDS (mL)	Final Conc. of EIS PDS (ng/mL)
M4PFBA	1000	1.0	2.0	500
M5PFPeA	1000	1.0	2.0	500
M5PFHxA	1000	1.0	2.0	500
M4PFHpA	1000	1.0	2.0	500
M8PFOA	1000	1.0	2.0	500
M9PFNA	1000	1.0	2.0	500
M6PFDA	1000	1.0	2.0	500
M7PFUdA	1000	1.0	2.0	500
MPFDoA	1000	1.0	2.0	500
M2PFTeDA	1000	1.0	2.0	500
M2PFHxDA	50,000	.02	2.0	500
d3-N-MeFOSA	50,000	.02	2.0	500
d5-N-EtFOSA	50,000	.02	2.0	500
d7-N-MeFOSE	50,000	.02	2.0	500
d9-N-EtFOSE	50,000	.02	2.0	500
M8FOSA	1000	1.0	2.0	500
d3-N-MeFOSAA	1000	1.0	2.0	500
d5-N-EtFOSAA	1000	1.0	2.0	500
M3PFBS	929	1.0	2.0	464.5
M3PFHxS	946	1.0	2.0	473
M8PFOS	957	1.0	2.0	478.5
M2-4:2FTS	935	1.0	2.0	467.5
M2-6:2FTS	949	1.0	2.0	474.5
M2-8:2FTS	958	1.0	2.0	479
M3HFPO-DA	50,000	.4	2.0	10,000

- **8.2.3** ANALYTE STOCK STANDARD SOLUTION Analyte stock standards are stable for at least 6 months when stored at 4 °C. When using these stock standards to prepare a PDS, care must be taken to ensure that these standards are at room temperature and adequately vortexed.
- 8.2.4 Analyte Secondary Spiking Standard Prepare the spiking solution of additional add on components for project specific requirements only. ANALYTE PRIMARY SPIKING STANDARD Prepare the spiking standard at a concentration of 500 ng/mL in methanol. The spiking standard is stable for at least two months when stored in polypropylene centrifuge tubes at room temperature.

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Table 3

		Table	-	
Analyte	Conc. of	Vol. of Stock	Final Vol. of PDS	Final Conc. of PDS
	Stock (ng/mL)	(mL)	(mL)	(ng/mL)
PFBA	2000	1	4	500
PFPeA	2000	1	4	500
PFHxA	2000	1	4	500
PFHpA	2000	1	4	500
PFOA	2000	1	4	500
PFNA	2000	1	4	500
PFDA	2000	1	4	500
PFUdA	2000	1	4	500
PFDoA	2000	1	4	500
PFTrDA	2000	1	4	500
PFTeDA	2000	1	4	500
FOSA	2000	1	4	500
N-MeFOSAA	2000	1	4	500
N-EtFOSAA	2000	1	4	500
L-PFBS	1770	1	4	442.5
L-PFPeS	1880	1	4	470
L-PFHxSK	1480	1	4	370
Br-PFHxSK	344	1	4	86
L-PFHpS	1900	1	4	475
L-PFOSK	1460	1	4	365
Br-PFOSK	391	1	4	97.75
L-PFNS	1920	1	4	480
L-PFDS	1930	1	4	482.5
4:2FTS	1870	1	4	467.5
6:2FTS	1900	1	4	475
8:2FTS	1920	1	4	480

8.2.5 Analyte Secondary Spiking Standard Prepare the spiking solution of additional add on components for project specific requirements only.

Table 4

Analyte	Conc. of IS	Vol. of IS Stock	Final Vol. of IS PDS	Final Conc. of IS
_	Stock (ng/mL)	(mL)	(mL)	PDS (ng/mL)
ADONA	2000	1	4	500
PFHxDA	2000	1	4	500
PFODA	2000	1	4	500
HFPO-DA	100,000	.4	4	10,000
9CIPF3ONS	50,000	0.04	4	500
11CIPF3OUdS	50,000	0.04	4	500

8.2.6 LOW, MEDIUM AND HIGH LEVEL LCS – The LCS's will be prepared at the following concentrations and rotated per batch; 2 ng/L, 40 ng/L, 500 ng/l for drinking waters. The analyte PDS contains all the method analytes of interest at

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various concentrations in methanol. The analyte PDS has been shown to be stable for six months when stored at ≤ 4 °C.

- 8.2.7 Isotope Dilution Labeled Recovery Stock Solutions (ID REC) ID REC Stock solutions are stable for at least 6 months when stored at 4 °C. The stock solution is purchased at a concentration of 1000 ng/mL.
- 8.2.8 Isotope Dilution Labeled Recovery Primary Dilution Standard (ID REC PDS) Prepare the ID REC PDS at a concentration of 500 ng/mL. The ID REC PDS is prepared in 80:20% (vol/vol) methanol:water. The ID REC PDS is stable for at least six months when stored in polypropylene centrifuge tubes at ≤4 °C.

Table 5

Analyte	Conc. of REC Stock (ng/mL)	Vol. of REC Stock (mL)	Final Vol. of REC PDS (mL)	Final Conc. of REC PDS (ng/mL)
M2PFOA	2000	1	4	500
M2PFDA	2000	1	4	500
M3PFBA	2000	1	4	500
M4PFOS	2000	1	4	500

8.2.9 CALIBRATION STANDARDS (CAL) -

Current Concentrations (ng/mL): 0.5, 1.0, 5.0, 10.0, 50.0, 125, 150, 250, 500

Prepare the CAL standards over the concentration range of interest from dilutions of the analyte PDS in methanol containing 20% reagent water. 20 μ l of the EIS PDS and REC PDS are added to the CAL standards to give a constant concentration of 10 ng/ml. The lowest concentration CAL standard must be at or below the RL (2 ng/L), which may depend on system sensitivity. The CAL standards may also be used as CCVs (Sect. 9.8). To make calibration stock standards:

Table 6

Calibration Standard Concentration	Final Aqueous Cal STD Level Concentration	Final Soil Cal STD Level Concentration	24 compound stock added (ul)	PFHxDA Stock added (ul)	500 ng/ml PFHxDA dilution added (ul)	PFODA Stock added (ul)	500 ng/ml PFODA dilution added (ul)	ADONA, HFPO-DA, 11CI- PF3OUdS, 9CI- PF3ONS Stock added (ul)	500 ng/ml ADONA dilution added (ul)	Final Volume in MeOH/H₂O (82:20)
.5 ng/ml	2 ng/L	.25 ng/g	6.25		25		25		25	25 mls
1 ng/ml	4 ng/L	.5 ng/g	5		20		20		20	10 mls
5 ng/ml	20 ng/L	1 ng/g	25		100		100		100	10 mls
10 ng/ml	40 ng/L	5 ng/g	125	5		5		5		25 mls
50 ng/ml	200 ng/L	25 ng/g	250	10		10		10		10 mls
125 ng/ml	500 ng/L	62.5 ng/g	625	25		25		25		10 mls
150 ng/ml	600 ng/L	75 ng/g	750	30		30		30		10 mls
250 ng/ml	1000 ng/L	125 ng/g	625							5 mls
500 ng/ml	2000 ng/L	250 ng/g	1250							5 mls

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9. **Quality Control**

The laboratory must maintain records to document the quality of data that is generated. Ongoing data quality checks are compared with established performance criteria to determine if the results of analyses meet the performance characteristics of the method.

9.1 MINIMUM REPORTING LIMIT (MRL) CONFIRMATION

Fortify, extract, and analyze seven replicate LCSs at 2 ng/l. Calculate the mean measured concentration (Mean) and standard deviation for these replicates. Determine the Half Range for the prediction interval of results (HR_{PIR}) using the equation below

 $HR_{PIR} = 3.963s$

Where:

s = the standard deviation 3.963 = a constant value for seven replicates.

9.1.2 Confirm that the upper and lower limits for the Prediction Interval of Result (PIR = Mean $\pm HR_{PIR}$) meet the upper and lower recovery limits as shown below

The Upper PIR Limit must be ≤150% recovery.

Mean + HR
$$_{PIR}$$
 x 100% ≤ 150% Fortified Concentration

The Lower PIR Limit must be ≥ 50% recovery.

$$\underline{Mean - HR_{PIR}}$$
 x 100% ≥ 50%
Fortified Concentration

9.1.3 The RL is validated if both the Upper and Lower PIR Limits meet the criteria described above. If these criteria are not met, the RL has been set too low and must be determined again at a higher concentration.

9.2 Blank(s)

METHOD BLANK (MB) - A Method Blank (MB) is required with each extraction 9.2.1 batch to confirm that potential background contaminants are not interfering with the identification or quantitation of method analytes. Prep and analyze a MB for every 20 samples. If the MB produces a peak within the retention time window of any analyte that would prevent the determination of that analyte, determine the source of contamination and eliminate the interference before processing samples. Background contamination must be reduced to an acceptable level before proceeding. Background from method analytes or other contaminants that interfere with the measurement of method analytes must be below the RL. If the method analytes are detected in the MB at concentrations equal to or greater than this level, then all data for the problem analyte(s) must be considered invalid for all samples in the extraction batch. Because background contamination is a significant problem for several method analytes, it is highly recommended that the analyst maintain a historical record of MB data.

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FIELD REAGENT BLANK (FRB) - The purpose of the FRB is to ensure that 9.2.2 PFAS's measured in the Field Samples were not inadvertently introduced into the sample during sample collection/handling. Analysis of the FRB is required only if a Field Sample contains a method analyte or analytes at or above the RL. The FRB is processed, extracted and analyzed in exactly the same manner as a Field Sample.

9.3 Laboratory Control Sample (LCS) and Laboratory Control Sample **Duplicates (LCSD)**

9.3.1 An LCS is required with each extraction batch. The fortified concentration of the LCS may be rotated between low, medium, and high concentrations from batch to batch. Default limits of 50-150% of the true value may be used for analytes until sufficient replicates have been analyzed to generate proper control limits. Calculate the percent recovery (%R) for each analyte using the equation

$$%R = A \times 100$$
B

Where:

A = measured concentration in the fortified sample B =fortification concentration.

9.3.2 Where applicable, LCSD's are to be extracted and analyzed. The concentration and analyte recovery criteria for the LCSD must be the same as the batch LCS The RSD's must fall within ≤30% of the true value for medium and high level replicates, and ≤50% for low level replicates. Calculate the relative percent difference (RPD) for duplicate MSs (MS and MSD) using the equation

$$RPD = \underline{|LCS - LCSD|} \times 100$$

$$(LCS + LCSD) / 2$$

If the LCS and or LCSD results do not meet these criteria for method analytes, 9.3.3 then all data for the problem analyte(s) must be considered invalid for all samples in the extraction batch.

9.4 Labeled Recovery Standards (REC)

The analyst must monitor the peak areas of the REC(s) in all injections during each analysis day.

9.5 Extracted Internal Standards (EIS)

9.5.1 The EIS standard is fortified into all samples, CCVs, MBs, LCSs, MSs, MSDs, FD, and FRB prior to extraction. It is also added to the CAL standards. The EIS is a means of assessing method performance from extraction to final chromatographic measurement. Calculate the recovery (%R) for the EIS using the following equation:

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 $%R = (A / B) \times 100$

Where:

A = calculated EIS concentration for the QC or Field Sample

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B =fortified concentration of the EIS.

9.5.2 Default limits of 50-150% may be used for analytes until sufficient replicates have been analyzed to generate proper control limits. A low or high percent recovery for a sample, blank, or CCV does not require discarding the analytical data but it may indicate a potential problem with future analytical data. When EIS recovery from a sample, blank, or CCV are outside control limits, check 1) calculations to locate possible errors, 2) standard solutions for degradation, 3) contamination, and 4) instrument performance. For CCVs and QC elements spiked with all target analytes, if the recovery of the corresponding target analytes meet the acceptance criteria for the EIS in question, the data can be used but all potential biases in the recovery of the EIS must be documented in the sample report. If the associated target analytes do not meet the acceptance criteria, the data must be reanalyzed.

9.6 Matrix Spike (MS)

- Analysis of an MS is required in each extraction batch and is used to determine that the sample matrix does not adversely affect method accuracy. Assessment of method precision is accomplished by analysis of a Field Duplicate (FD) (Sect. 9.6): however, infrequent occurrence of method analytes would hinder this assessment. If the occurrence of method analytes in the samples is infrequent, or if historical trends are unavailable, a second MS, or MSD, must be prepared, extracted, and analyzed from a duplicate of the Field Sample. Extraction batches that contain MSDs will not require the extraction of a field sample duplicate. If a variety of different sample matrices are analyzed regularly, for example, drinking water from groundwater and surface water sources, method performance should be established for each. Over time, MS data should be documented by the laboratory for all routine sample sources.
- 9.6.2 Within each extraction batch, a minimum of one Field Sample is fortified as an MS for every 20 Field Samples analyzed. The MS is prepared by spiking a sample with an appropriate amount of the Analyte Stock Standard (Sect. 8.2.3). Use historical data and rotate through the low, mid and high concentrations when selecting a fortifying concentration. Calculate the percent recovery (%R) for each analyte using the equation

$$%R = (A - B) \times 100$$

Where:

A = measured concentration in the fortified sample

B = measured concentration in the unfortified sample

C = fortification concentration.

9.6.3 Analyte recoveries may exhibit matrix bias. For samples fortified at or above their native concentration, recoveries should range between 50-150%. If the accuracy of any analyte falls outside the designated range, and the laboratory performance for that analyte is shown to be in control in the LCS, the recovery is judged to be matrix biased. The result for that analyte in the unfortified sample is labeled suspect/matrix to inform the data user that the results are suspect due to matrix effects.

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9.7 Laboratory Duplicate

- 9.7.1 FIELD DUPLICATE OR LABORATORY FORTIFIED SAMPLE MATRIX DUPLICATE (FD or MSD) Within each extraction batch (not to exceed 20 Field Samples), a minimum of one FD or MSD must be analyzed. Duplicates check the precision associated with sample collection, preservation, storage, and laboratory procedures. If method analytes are not routinely observed in Field Samples, an MSD should be analyzed rather than an FD.
- **9.7.2** Calculate the relative percent difference (*RPD*) for duplicate measurements (*FD1* and *FD2*) using the equation

RPD =
$$\frac{|FD1 - FD2|}{(FD1 + FD2)/2}$$
 x 100

- 9.7.3 RPDs for FDs should be ≤30%. Greater variability may be observed when FDs have analyte concentrations that are within a factor of 2 of the RL. At these concentrations, FDs should have RPDs that are ≤50%. If the RPD of any analyte falls outside the designated range, and the laboratory performance for that analyte is shown to be in control in the CCV, the recovery is judged to be matrix biased. The result for that analyte in the unfortified sample is labeled suspect/matrix to inform the data user that the results are suspect due to matrix effects.
- **9.7.4** If an MSD is analyzed instead of a FD, calculate the relative percent difference (RPD) for duplicate MSs (MS and MSD) using the equation

$$RPD = \underline{|MS - MSD|} x 100$$

$$(MS + MSD) / 2$$

9.7.5 RPDs for duplicate MSs should be ≤30% for samples fortified at or above their native concentration. Greater variability may be observed when MSs are fortified at analyte concentrations that are within a factor of 2 of the RL. MSs fortified at these concentrations should have RPDs that are ≤50% for samples fortified at or above their native concentration. If the RPD of any analyte falls outside the designated range, and the laboratory performance for that analyte is shown to be in control in the LCSD where applicable, the result is judged to be matrix biased. If no LCSD is present, the associated MS and MSD are to be re-analyzed to determine if any analytical has occurred. If the resulting RPDs are still outside control limits, the result for that analyte in the unfortified sample is labeled suspect/matrix to inform the data user that the results are suspect due to matrix effects.

9.8 Initial Calibration Verification (ICV)

9.8.1 As part of the IDC (Sect. 13.2), and after each ICAL, analyze a QCS sample from a source different from the source of the CAL standards. If a second vendor is not available, then a different lot of the standard should be used. The QCS should be prepared and analyzed just like a CCV. Acceptance criteria for the QCS are identical to the CCVs; the calculated amount for each analyte must be ± 30% of the expected value. If measured analyte concentrations are not of acceptable accuracy, check the entire analytical procedure to locate and correct the problem.

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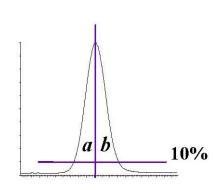
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9.9 Continuing Calibration Verification (CCV)

9.9.1 CCV Standards are analyzed at the beginning of each analysis batch, after every 10 Field Samples, and at the end of the analysis batch. See Section 10.7 for concentration requirements and acceptance criteria.

9.10 Method-specific Quality Control Samples

9.10.1 PEAK ASYMMETRY FACTOR – A peak asymmetry factor must be calculated using the equation below during the IDL and every time a calibration curve is generated. The peak asymmetry factor for the first two eluting peaks in a midlevel CAL standard (if only two analytes are being analyzed, both must be evaluated) must fall in the range of 0.8 to 1.5. Modifying the standard or extract composition to more aqueous content to prevent poor shape is not permitted. See guidance in Section 10.6.4.1 if the calculated peak asymmetry factors do not meet the criteria.



 $A_s = b/a$

Where:

 A_s = peak asymmetry factor

- b = width of the back half of the peak measured (at 10% peak height) from the trailing edge of the peak to a line dropped perpendicularly from the peak apex
- a = the width of the front half of the peak measured (at 10% peak height) from the leading edge of the peak to a line dropped perpendicularly from the apex.

9.11 Method Sequence

- CCV-LOW
- MB
- LCS
- LCSD
- MS
- Duplicate or MSD
- Field Samples (1-10)
- CCV-MID
- Field Samples (11-20)
- CCV-LOW

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10. Procedure

10.1 Equipment Set-up

10.1.1 This procedure may be performed manually or in an automated mode using a robotic or automatic sample preparation device. If an automated system is used to prepare samples, follow the manufacturer's operating instructions, but all extraction and elution steps must be the same as in the manual procedure. Extraction and/or elution steps may not be changed or omitted to accommodate the use of an automated system. If an automated system is used, the MBs should be rotated among the ports to ensure that all the valves and tubing meet the MB requirements (Sect. 9.2).

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- **10.1.2** Some of the PFAS's adsorb to surfaces, including polypropylene. Therefore, the aqueous sample bottles must be rinsed with the elution solvent (Sect 10.3.4) whether extractions are performed manually or by automation. The bottle rinse is passed through the cartridge to elute the method analytes and is then collected (Sect. 10.3.4).
- 10.1.3 NOTE: The SPE cartridges and sample bottles described in this section are designed as single use items and should be discarded after use. They may not be refurbished for reuse in subsequent analyses.

10.2 Sample Preparation and Extraction of Aqueous Samples

10.2.1 Samples are preserved, collected and stored as presented in Section 6.

The entire sample that is received must be sent through the SPE cartridge. In addition, the bottle must be solvent rinsed and this rinse must be sent through the SPE cartridge as well. The method blank (MB) and laboratory control sample (LCS) must be extracted in exactly the same manner (i.e., must include the bottle solvent rinse). It should be noted that a water rinse alone is not sufficient. This does not apply to samples with high concentrations of PFAS that are prepared using serial dilution and not SPE.

- 10.2.2 Determine sample volume. Weigh all samples to the nearest 1g. If visible sediment is present, centrifuge and decant into a new 250mL HDPE bottle and record the weight of the new container.
 - NOTE: Some of the PFAS's adsorb to surfaces, thus the sample volume may **NOT** be transferred to a graduated cylinder for volume measurement.
- 10.2.3 The MB, LCS and FRB may be prepared by measuring 250 mL of reagent water with a polypropylene graduated cylinder or filling a 250-mL sample bottle to near the top.
- 10.2.4 Adjust the QC and sample pH to 3 by adding acetic acid in water dropwise
- 10.2.5 Add 20 µL of the EIS PDS (Sect. 8.2.2) to each sample and QC, cap and invert to mix.
- 10.2.6 If the sample is an LCS, LCSD, MS, or MSD, add the necessary amount of analyte PDS (Sect. 8.2.3). Cap and invert each sample to mix.

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10.3 Cartridge SPE Procedure

- 10.3.1 CARTRIDGE CLEAN-UP AND CONDITIONING DO NOT allow cartridge packing material to go dry during any of the conditioning steps. Rinse each cartridge with 3 X 5 mL of 2% ammonium hydroxide in methanol, followed by 5mls of methanol. Next, rinse each cartridge with 5 mls of the 25 mM acetate buffer, followed by 15 mL of reagent water, without allowing the water to drop below the top edge of the packing. If the cartridge goes dry during the conditioning phase, the conditioning must be started over. Add 4-5 mL of reagent water to each cartridge, attach the sample transfer tubes (Sect. 7.9.3), turn on the vacuum, and begin adding sample to the cartridge.
- **10.3.2** SAMPLE EXTRACTON Adjust the vacuum so that the approximate flow rate is approximately 4 mL/min. Do not allow the cartridge to go dry before all the sample has passed through.
- 10.3.3 SAMPLE BOTTLE AND CARTRIDGE RINSE After the entire sample has passed through the cartridge, rinse the sample bottles with 4 ml reagent water followed by 4 ml 25 mM acetate buffer at pH 4 and draw the aliquot through the sample transfer tubes and the cartridges. Draw air or nitrogen through the cartridge for 5-10 min at high vacuum (10-15 in. Hg). NOTE: If empty plastic reservoirs are used in place of the sample transfer tubes to pass the samples through the cartridges, these reservoirs must be treated like the transfer tubes. After the entire sample has passed through the cartridge, the reservoirs must be rinsed to waste with reagent water.
- 10.3.4 SAMPLE BOTTLE AND CARTRIDGE ELUTION, Fraction 1 Turn off and release the vacuum. Lift the extraction manifold top and insert a rack with collection tubes into the extraction tank to collect the extracts as they are eluted from the cartridges. Rinse the sample bottles with 12 mls of methanol and draw the aliquot through the sample transfer tubes and cartridges. Use a low vacuum such that the solvent exits the cartridge in a dropwise fashion.

SAMPLE BOTTLE AND CARTRIDGE ELUTION, Fraction 2 In a separate collection vial, rinse the sample bottles with 12 mL of 2% ammonium hydroxide in methanol and elute the analytes from the cartridges by pulling the 4 mL of methanol through the sample transfer tubes and the cartridges. Use a low vacuum such that the solvent exits the cartridge in a dropwise fashion.

NOTE: If empty plastic reservoirs are used in place of the sample transfer tubes to pass the samples through the cartridges, these reservoirs must be treated like the transfer tubes. After the reservoirs have been rinsed in Section 10.3.3, the elution solvent used to rinse the sample bottles must be swirled down the sides of the reservoirs while eluting the cartridge to ensure that any method analytes on the surface of the reservoirs are transferred to the extract.

CLEAN-UP CARTRIDGE ELUTION, Elute the clean-up cartridge with 8 additional mls of methanol and draw the aliquot through the cartridge. Use a low vacuum such that the solvent exits the cartridge in a dropwise fashion.

10.3.5 Fractions 1 and 2 are to be combined during the concentration stage (section 10.6).

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10.4 Sample Prep and Extraction Protocol for Soils, Solids and Sediments.

10.4.1 Homogenize and weigh 4 grams of sample (measured to the nearest hundredth of a gram) into a 50 ml polypropylene centrifuge tube. For laboratory control blanks and spikes, 4 grams of clean sand is used.

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- 10.4.2 Add 40 µL of the EIS PDS (Sect. 8.2.2) to each sample and QC.
- 10.4.3 If the sample is an LCS, LCSD, MS, or MSD, add the necessary amount of analyte PDS (Sect. 8.2.3). Cap and invert each sample to mix.
- 10.4.4 To all samples, add 10 mls of methanol, cap, vortex for 25 seconds at 2500 RPM.
- 10.4.5 Following mixing, sonicate each sample for 30 minutes and let samples sit overnight (at least 2 hours is required for RUSH samples).
- **10.4.6** Centrifuge each sample at 3500RPM for 10 minutes.
- **10.4.7** Remove 5ml of supernatant, and reserve for clean-up.

10.5 Sample Prep and Extraction Protocol for Tissues, Oils and Biosolids.

- 10.5.1 Homogenize and weigh 2-8 grams of sample (measured to the nearest hundredth of a gram) into a 50 ml polypropylene centrifuge tube. For laboratory control blanks and spikes, 4 grams of clean sand is used.
- 10.5.2 Add 40 µL of the EIS PDS (Sect. 8.2.2) to each sample and QC.
- 10.5.3 If the sample is an LCS, LCSD, MS, or MSD, add the necessary amount of analyte PDS (Sect. 8.2.3). Cap and invert each sample to mix.
- **10.5.4** Add 100 ul of Ammonium Hydroxide.
- 10.5.5 To all samples, add 10 mls of methanol, cap, vortex for 25-30 seconds at 2500
- 10.5.6 Following mixing, sonicate each sample for 30 minutes and let samples sit for 2 hours.
- **10.5.7** Centrifuge each sample at 3500RPM for 10 minutes.
- **10.5.8** Remove 5 mls of the supernatant, and reserve for clean-up.

10.6 Extract Clean-up: Soils, Solids and Aqueous Matrices

- 10.6.1 CARTRIDGE CLEAN-UP AND CONDITIONING -. Rinse each cartridge with 15 mL of methanol and discard. If the cartridge goes dry during the conditioning phase, the conditioning must be started over. Attach the sample transfer tubes (Sect. 7.9.3), turn on the vacuum, and begin adding sample to the cartridge. For Soils extracts, transfer 5 mls of the MeOH eluate to the cartridge. Samples should be allowed to pass through the cartridge by gravity feed at a dropwise rate to ensure adequate contact time with the cartridge sorbent. Vacuum is only to applied if the flow of solvent through the cartridge stops.
- 10.6.2 Adjust the vacuum so that the approximate flow rate is 1-2 mL/min. Do not allow the cartridge to go dry before all the sample has passed through.
- 10.6.3 SAMPLE BOTTLE AND CARTRIDGE RINSE After the entire sample has passed through the cartridge, rinse the sample collection vial with two 4-mL aliquots of methanol and draw each aliquot through the cartridges. Draw air or nitrogen through the cartridge for 5 min at high vacuum (10-15 in. Hg).

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> 10.6.4 If extracts are not to be immediately evaporated, cover collection tubes and store at ambient temperature till concentration.

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10.7 Extract Clean-up: Tissues, Oils and Biosolids

- 10.7.1 CARTRIDGE CLEAN-UP AND CONDITIONING -. Stack a 500 mg WAX cartridge onto a 250 mg GCB cartridge. Rinse each cartridge set with 10 mL of 2% NH₄OH and discard. Immediately rinse each cartridge stack with 15 mls MeOH and discard, If the cartridge goes dry during the conditioning phase, the conditioning must be started over. Attach the sample transfer tubes (Sect. 7.9.3), turn on the vacuum.
- 10.7.2 Adjust the vacuum so that the approximate flow rate is 1-2 mL/min. Do not allow the cartridge to go dry before all the sample has passed through.
- 10.7.3 SAMPLE elution AND CARTRIDGE RINSE Load 5 mls of the MeOH sample extract to the cartridge. After the entire sample has passed through the cartridge, rinse the cartridges with 5-mLs of methanol and draw through the cartridges. Immediately add and elute 2 5ml aliquots of 2% NH₄OH to the cartridges, collecting the eluate with the MeOH eluate.

If extracts are not to be immediately evaporated, cover collection tubes and store at ambient temperature till concentration.

10.8 Extract Concentration

10.8.1 Concentrate the extract to dryness under a gentle stream of nitrogen in a heated water bath (60-65 °C) to remove all the water/methanol mix. Add the appropriate amount of 80:20% (vol/vol) methanol:water solution and 20 µl of the ID REC PDS (Sect. 8.2.7) to the collection vial to bring the volume to 1 mL and vortex. Transfer two aliquots with a plastic pipet (Sect. 7.6) into 2 polypropylene autosampler vials.

NOTE: It is recommended that the entire 1-mL aliquot not be transferred to the autosampler vial because the polypropylene autosampler caps do not reseal after injection. Therefore, do not store the extracts in the autosampler vials as evaporation losses can occur occasionally in these autosampler vials. Extracts can be split between 2 X 700 µl vials (Sect. 7.4).

10.9 Sample Volume Determination

- 10.9.1 If the level of the sample was marked on the sample bottle, use a graduated cylinder to measure the volume of water required to fill the original sample bottle to the mark made prior to extraction. Determine to the nearest 10 mL.
- 10.9.2 If using weight to determine volume, weigh the empty bottle to the nearest 10 g and determine the sample weight by subtraction of the empty bottle weight from the original sample weight (Sect. 10.2.2). Assume a sample density of 1.0 g/mL. In either case, the sample volume will be used in the final calculations of the analyte concentration (Sect. 11.2).
- 10.10 Initial Calibration Demonstration and documentation of acceptable initial calibration is required before any samples are analyzed. After the initial calibration is successful, a CCV is required at the beginning and end of each period in which analyses are performed, and after every tenth Field Sample.

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10.10.1 ESI-MS/MS TUNE

- **10.10.1.1** Calibrate the mass scale of the MS with the calibration compounds and procedures prescribed by the manufacturer.
- 10.10.1.2 Optimize the [M-H]- for each method analyte by infusing approximately 0.5-1.0 μg/mL of each analyte (prepared in the initial mobile phase conditions) directly into the MS at the chosen LC mobile phase flow rate (approximately 0.4 mL/min). This tune can be done on a mix of the method analytes. The MS parameters (voltages, temperatures, gas flows, etc.) are varied until optimal analyte responses are determined. The method analytes may have different optima requiring some compromise between the optima.
- 10.10.1.3 Optimize the product ion for each analyte by infusing approximately 0.5-1.0 μg/mL of each analyte (prepared in the initial mobile phase conditions) directly into the MS at the chosen LC mobile phase flow rate (approximately 0.4 mL/min). This tune can be done on a mix of the method analytes. The MS/MS parameters (collision gas pressure, collision energy, etc.) are varied until optimal analyte responses are determined. Typically, the carboxylic acids have very similar MS/MS conditions and the sulfonic acids have similar MS/MS conditions.
- **10.10.2** Establish LC operating parameters that optimize resolution and peak shape. Modifying the standard or extract composition to more aqueous content to prevent poor shape is not permitted.

Cautions: LC system components, as well as the mobile phase constituents, contain many of the method analytes in this method. Thus, these PFAS's will build up on the head of the LC column during mobile phase equilibration. To minimize the background PFAS peaks and to keep background levels constant, the time the LC column sits at initial conditions must be kept constant and as short as possible (while ensuring reproducible retention times). In addition, prior to daily use, flush the column with 100% methanol for at least 20 min before initiating a sequence. It may be necessary on some systems to flush other LC components such as wash syringes, sample needles or any other system components before daily use.

- 10.10.3 Inject a mid-level CAL standard under LC/MS conditions to obtain the retention times of each method analyte. If analyzing for PFTA, ensure that the LC conditions are adequate to prevent co-elution of PFTA and the mobile phase interferants. These interferants have the same precursor and products ions as PFTA, and under faster LC conditions may co-elute with PFTA. Divide the chromatogram into retention time windows each of which contains one or more chromatographic peaks. During MS/MS analysis, fragment a small number of selected precursor ions ([M-H]-) for the analytes in each window and choose the most abundant product ion. For maximum sensitivity, small mass windows of ±0.5 daltons around the product ion mass were used for quantitation.
- **10.10.4** Inject a mid-level CAL standard under optimized LC/MS/MS conditions to ensure that each method analyte is observed in its MS/MS window and that there are at least 10 scans across the peak for optimum precision.
 - **10.10.4.1** If broad, split or fronting peaks are observed for the first two eluting chromatographic peaks (if only two analytes are being analyzed, both must be evaluated), change the initial mobile phase conditions to higher

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> aqueous content until the peak asymmetry ratio for each peak is 0.8 -1.5. The peak asymmetry factor is calculated as described in Section 9.9.1 on a mid-level CAL standard. The peak asymmetry factor must meet the above criteria for the first two eluting peaks during the IDL and every time a new calibration curve is generated. Modifying the standard or extract composition to more aqueous content to prevent poor shape is not permitted.

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NOTE: PFHxS, PFOS, NMeFOSAA, and NEtFOSAA have multiple chromatographic peaks using the LC conditions in Table 5 due to chromatographic resolution of the linear and branched isomers of these compounds. Most PFAS's are produced by two different processes. One process gives rise to linear PFAS's only while the other process produces both linear and branched isomers. Thus, both branched and linear PFAS's can potentially be found in the environment. For the aforementioned compounds that give rise to more than one peak, all the chromatographic peaks observed in the standard must be integrated and the areas totaled. Chromatographic peaks in a sample must be integrated in the same way as the CAL standard.

- 10.10.5 Prepare a set of CAL standards as described in Section 8.2.5. The lowest concentration CAL standard must be at or below the RL (2 ng/L), which may depend on system sensitivity.
- 10.10.6 The LC/MS/MS system is calibrated using the isotope dilution technique. Target analytes are quantitated against their isotopically labeled analog (Extracted Internal Standard) where commercially available. If a labeled analog is not commercially available, the extracted internal standard with the closest retention time and /or closest chemical similarity is to be used. Use the LC/MS/MS data system software to generate a linear regression or quadratic calibration curve for each of the analytes. This curve must always be forced through zero and may be concentration weighted, if necessary. Forcing zero allows for a better estimate of the background levels of method analytes. A minimum of 5 levels are required for a linear calibration model and a minimum of 6 levels are required for a quadratic calibration model.
- 10.10.7 CALIBRATION ACCEPTANCE CRITERIA A linear fit is acceptable if the coefficient of determination (r²) is greater than 0.99. When quantitated using the initial calibration curve, each calibration point, except the lowest point, for each analyte must calculate to be within 70-130% of its true value. The lowest CAL point must calculate to be within 50-150% of its true value. If these criteria cannot be met, the analyst will have difficulty meeting ongoing QC criteria. It is recommended that corrective action is taken to reanalyze the CAL standards, restrict the range of calibration, or select an alternate method of calibration (forcing the curve through zero is still required).
 - 10.10.7.1 CAUTION: When acquiring MS/MS data, LC operating conditions must be carefully reproduced for each analysis to provide reproducible retention times. If this is not done, the correct ions will not be monitored at the appropriate times. As a precautionary measure, the chromatographic peaks in each window must not elute too close to the edge of the segment time window.

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10.11 CONTINUING CALIBRATION CHECK (CCV) — Minimum daily calibration verification is as follows. Verify the initial calibration at the beginning and end of each group of analyses, and after every tenth sample during analyses. In this context, a "sample" is considered to be a Field Sample. MBs, CCVs, LCSs, MSs, FDs FRBs and MSDs are not counted as samples. The beginning CCV of each analysis batch must be at or below the RL in order to verify instrument sensitivity prior to any analyses. If standards have been prepared such that all low CAL points are not in the same CAL solution, it may be necessary to analyze two CAL standards to meet this requirement. Alternatively, the analyte concentrations in the analyte PDS may be customized to meet these criteria. Subsequent CCVs should alternate between a medium and Low concentration CAL standard.

- **10.11.1** Inject an aliquot of the appropriate concentration CAL standard and analyze with the same conditions used during the initial calibration.
- 10.11.2 Calculate the concentration of each analyte and EIS in the CCV. The calculated amount for each analyte for medium level CCVs must be within ± 30% of the true value with an allowance of 10% of the reported analytes to be greater than 30%. The calculated amount for each EIS must be within ± 50% of the true value. The calculated amount for the lowest calibration point for each analyte must be within ± 50%. If these conditions do not exist, then all data for the problem analyte must be considered invalid, and remedial action should be taken (Sect. 10.7.4) which may require recalibration. Any Field or QC Samples that have been analyzed since the last acceptable calibration verification should be reanalyzed after adequate calibration has been restored, with the following exception. If the CCV fails because the calculated concentration is greater than 130% (150% for the low-level CCV) for a particular method analyte, and Field Sample extracts show no detection for that method analyte, non-detects may be reported without reanalysis.
- 10.11.3 REMEDIAL ACTION Failure to meet CCV QC performance criteria may require remedial action. Major maintenance, such as cleaning the electrospray probe, atmospheric pressure ionization source, cleaning the mass analyzer, replacing the LC column, etc., requires recalibration (Sect 10.6) and verification of sensitivity by analyzing a CCV at or below the RL (Sect 10.7).

10.12 EXTRACT ANALYSIS

- **10.12.1** Establish operating conditions equivalent to those summarized in Tables 6-8 of Section 16. Instrument conditions and columns should be optimized prior to the initiation of the IDC.
- 10.12.2 Establish an appropriate retention time window for each analyte. This should be based on measurements of actual retention time variation for each method analyte in CAL standard solutions analyzed on the LC over the course of time. A value of plus or minus three times the standard deviation of the retention time obtained for each method analyte while establishing the initial calibration and completing the IDC can be used to calculate a suggested window size. However, the experience of the analyst should weigh heavily on the determination of the appropriate retention window size.
- **10.12.3** Calibrate the system by either the analysis of a calibration curve (Sect. 10.6) or by confirming the initial calibration is still valid by analyzing a CCV as described

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in Section 10.7. If establishing an initial calibration, complete the IDC as described in Section 13.2.

- **10.12.4** Begin analyzing Field Samples, including QC samples, at their appropriate frequency by injecting the same size aliquots under the same conditions used to analyze the CAL standards.
- 10.12.5 At the conclusion of data acquisition, use the same software that was used in the calibration procedure to identify peaks of interest in predetermined retention time windows. Use the data system software to examine the ion abundances of the peaks in the chromatogram. Identify an analyte by comparison of its retention time with that of the corresponding method analyte peak in a reference standard.
- 10.12.6 The analyst must not extrapolate beyond the established calibration range. If an analyte peak area exceeds the range of the initial calibration curve, the sample should be re-extracted with a reduced sample volume in order to bring the out of range target analytes into the calibration range. If a smaller sample size would not be representative of the entire sample, the following options are recommended. Re-extract an additional aliquot of sufficient size to insure that it is representative of the entire sample. Spike it with a higher concentration of internal standard. Prior to LC/MS analysis, dilute the sample so that it has a concentration of internal standard equivalent to that present in the calibration standard. Then, analyze the diluted extract.

11. Data Evaluation, Calculations and Reporting

- **11.1** Complete chromatographic resolution is not necessary for accurate and precise measurements of analyte concentrations using MS/MS. In validating this method, concentrations were calculated by measuring the product ions listed in Table 7.
- **11.2** Calculate analyte concentrations using the multipoint calibration established in Section 10.6. Do not use daily calibration verification data to quantitate analytes in samples. Adjust final analyte concentrations to reflect the actual sample volume determined in Section 10.6 where:

 C_{ex} = (Area of target analyte * Concentration of Labeled analog) / (area of labeled analog * CF)

 $C_s = (C_{ex} / sample volume in ml) * 1000$

 C_{ex} = The concentration of the analyte in the extract

CF = calibration factor from calibration.

- **11.3** Prior to reporting the data, the chromatogram should be reviewed for any incorrect peak identification or poor integration.
- 11.4 PFHxS, PFOS, PFOA, NMeFOSAA, and NEtFOSAA have multiple chromatographic peaks using the LC conditions in Table 5 due to the linear and branch isomers of these compounds (Sect. 10.6.4.1). The areas of all the linear and branched isomer peaks observed in the CAL standards for each of these analytes must be summed and the concentrations reported as a total for each of these analytes.

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11.5 Calculations must utilize all available digits of precision, but final reported concentrations should be rounded to an appropriate number of significant figures (one digit of uncertainty), typically two, and not more than three significant figures.

12. Contingencies for Handling Out-of-Control Data or Unacceptable Data

- 12.1 Section 9.0 outlines sample batch QC acceptance criteria. If non-compliant organic compound results are to be reported, the Organic Section Head and/or the Laboratory Director, and the Operations Manager must approve the reporting of these results. The laboratory Project Manager shall be notified, and may choose to relay the non-compliance to the client, for approval, or other corrective action, such as re-sampling and re-analysis. The analyst, Data Reviewer, or Department Supervisor performing the secondary review initiates the project narrative, and the narrative must clearly document the non-compliance and provide a reason for acceptance of these results.
- **12.2** All results for the organic compounds of interest are reportable without qualification if extraction and analytical holding times are met, preservation requirements (including cooler temperatures) are met, all QC criteria are met, and matrix interference is not suspected during extraction or analysis of the samples. If any of the below QC parameters are not met, all associated samples must be evaluated for re-extraction and/or re-analysis.

13. Method Performance

13.1 Detection Limit Study (DL) / Limit of Detection Study (LOD) / Limit of Quantitation (LOQ)

13.1.1 The laboratory follows the procedure to determine the DL, LOD, and/or LOQ as outlined in Alpha SOP ID 1732. These studies performed by the laboratory are maintained on file for review.

13.2 Demonstration of Capability Studies

- **13.2.1** The IDC must be successfully performed prior to analyzing any Field Samples. Prior to conducting the IDC, the analyst must first generate an acceptable Initial Calibration following the procedure outlined in Section 10.6.
- **13.2.2** INITIAL DEMONSTRATION OF LOW SYSTEM BACKGROUND Any time a new lot of SPE cartridges, solvents, centrifuge tubes, disposable pipets, and autosampler vials are used, it must be demonstrated that an MB is reasonably free of contamination and that the criteria in Section 9.2.1 are met. If an automated extraction system is used, an MB should be extracted on each port to ensure that all the valves and tubing are free from potential PFAS contamination.
- 13.2.3 INITIAL DEMONSTRATION OF PRECISION (IDP) Prepare, extract, and analyze four to seven replicate LCSs fortified near the midrange of the initial calibration curve according to the procedure described in Section 10. Sample preservatives as described in Section 6.2.1 must be added to these samples. The relative standard deviation (RSD) of the results of the replicate analyses must be less than 20%.

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13.2.4 INITIAL DEMONSTRATION OF ACCURACY (IDA) — Using the same set of replicate data generated for Section 13.2.3, calculate average recovery. The average recovery of the replicate values must be within ± 30% of the true value.

- **13.2.5** INITIAL DEMONSTRATION OF PEAK ASYMMETRY FACTOR Peak asymmetry factors must be calculated using the equation in Section 9.10.1 for the first two eluting peaks (if only two analytes are being analyzed, both must be evaluated) in a mid-level CAL standard. The peak asymmetry factors must fall in the range of 0.8 to 1.5. See guidance in Section 10.6.4.1 if the calculated peak asymmetry factors do not meet the criteria.
- **13.2.6** Refer to Alpha SOP ID 1739 for further information regarding IDC/DOC Generation.
- **13.2.7** The analyst must make a continuing, annual, demonstration of the ability to generate acceptable accuracy and precision with this method.

14. Pollution Prevention and Waste Management

- **14.1** Refer to Alpha's Chemical Hygiene Plan and Hazardous Waste Management and Disposal SOP for further pollution prevention and waste management information.
- **14.2** This method utilizes SPE to extract analytes from water. It requires the use of very small volumes of organic solvent and very small quantities of pure analytes, thereby minimizing the potential hazards to both the analyst and the environment as compared to the use of large volumes of organic solvents in conventional liquid-liquid extractions.
- 14.3 The analytical procedures described in this method generate relatively small amounts of waste since only small amounts of reagents and solvents are used. The matrices of concern are finished drinking water or source water. However, laboratory waste management practices must be conducted consistent with all applicable rules and regulations, and that laboratories protect the air, water, and land by minimizing and controlling all releases from fume hoods and bench operations. Also, compliance is required with any sewage discharge permits and regulations, particularly the hazardous waste identification rules and land disposal restrictions.

15. Referenced Documents

Chemical Hygiene Plan - ID 2124

SOP ID 1732 Detection Limit (DL), Limit of Detection (LOD) & Limit of Quantitation (LOQ) SOP

SOP ID 1739 Demonstration of Capability (DOC) Generation SOP

SOP ID 1728 Hazardous Waste Management and Disposal SOP

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16. Attachments

Table 7: LC Method Conditions

Time (min)	2 mM Ammonium Acetate (5:95 MeOH/H₂O)	100% Methanol
Initial	100.0	0.0
1.0	100.0	0.0
2.2	85.0	15.0
11	20.0	80.0
11.4	0.0	100.0
12.4	100.0	00.0
15.5	100.0	0.0

Waters Aquity UPLC ® BEHC₁₈ 2.1 x 50 mm packed with 1.7 μm BEH C₁₈ stationary phase
Flow rate of 0.4 mL/min
3 μL injection

Table 8: ESI-MS Method Conditions

ESI Conditions			
Polarity	Negative ion		
Capillary needle voltage	.5 kV		
Cone Gas Flow	25 L/hr		
Nitrogen desolvation gas	1000 L/hr		
Desolvation gas temp.	500 °C		

Table 9: Method Analyte Source, Retention Times (RTs), and EIS References

#	Analyte	Transition	RT	IS	Туре
1	МЗРВА	216>171	2.65		REC
2	PFBA	213 > 169	2.65	2: M4PFBA	
3	M4PFBA	217 > 172	2.65	1: M3PBA	EIS
4	PFPeA	263 > 219	5.67	4: M5PFPEA	
5	M5PFPEA	268 > 223	5.66	1: M3PBA	EIS
6	PFBS	299 > 80	6.35	6: M3PFBS	
7	M3PFBS	302 > 80	6.35	29:M4PFOS	EIS
8	FtS 4:2	327 > 307	7.47	9: M2-4:2FTS	
9	M2-4:2FTS	329 > 81	7.47	29:M4PFOS	EIS
10	PFHxA	303 > 269	7.57	10: M5PFHxA	
11	M5PFHxA	318 > 273	7.57	19:M2PFOA	EIS
12	PFPeS	349 > 80	7.88	18: M3PFHxS	
13	PFHpA	363 > 319	8.80	14: M4PFHpA	
14	M4PFHpA	367 > 322	8.80	19:M2PFOA	EIS

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#	Analyte	Transition	RT	IS	Туре
15	L-PFHxS	399 > 80	8.94	18: M3PFHxS	
16	br-PFHxS	399 > 80	8.72	18: M3PFHxS	
17	PFHxS Total	399 > 80	8.94	18: M3PFHxS	
18	M3PFHxS	402 > 80	8.94	29:M4PFOS	EIS
19	MPFOA	415 > 370	9.7		REC
20	PFOA	413 > 369	9.7	23: M8PFOA	
21	br-PFOA	413 > 369	9.48	23: M8PFOA	
22	PFOA Total	413 > 369	9.7	23: M8PFOA	
23	M8PFOA	421 > 376	9.7	19: M2PFOA	EIS
24	FtS 6:2	427 > 407	9.66	25: M2-6:2FTS	
25	M2-6:2FTS	429 > 409	9.66	29:M4PFOS	EIS
26	PFHpS	449 > 80	9.78	33: M8PFOS	
27	PFNA	463 > 419	10.41	33: M8PFOS	
28	M9PFNA	472 > 427	10.41	19: M2PFOA	EIS
29	M4PFOS	501 > 80	10.45		REC
30	PFOS	499 > 80	10.45	33: M8PFOS	
31	br-PFOS	499 > 80	10.27	33: M8PFOS	
32	PFOS Total	499 > 80	10.45	33: M8PFOS	
33	M8PFOS	507 > 80	10.45	29: M4PFOS	EIS
34	FtS 8:2	527 > 507	10.99	38: M2-8:2FTS	
35	M2-8:2FTS	529 > 509	10.99	29:M4PFOS	EIS
36	M2PFDA	515 > 470	11.00		REC
37	PFDA	513 > 469	11.00	38: M6PFDA	
38	M6PFDA	519 > 474	11.00	36: M2PFDA	EIS
39	PFNS	549 > 80	11.02	33:M8PFOS	
40	NMeFOSAA	570 > 419	11.41	41: D3-NMeFOSAA	
41	d3-NMeFOSAA	573 > 419	11.41	36: M2PFDA	EIS
42	PFOSA	498 > 78	11.48	29: M8FOSA	
43	M8FOSA	506 > 78	11.48	19: M2PFOA	EIS
44	PFUnDA	563 > 519	11.51	41: M7-PFUDA	
45	M7-PFUDA	570 > 525	11.51	36: M2PFDA	EIS
46	PFDS	599 > 80	11.51	33:M8PFOS	
47	NEtFOSAA	584 > 419	11.68	48: d5-NEtFOSAA	
48	d5-NEtFOSAA	589 > 419	11.68	36: M2PFDA	EIS
49	PFDoA	613 > 569	11.96	50: MPFDOA	
50	MPFDOA	615 > 570	11.96	36: M2PFDA	EIS
51	PFTriA	663 > 619	12.34	50: MPFDOA	
52	PFTeA	713 > 669	12.6	53: M2PFTEDA	
53	M2PFTEDA	715 > 670	12.6	36: M2PFDA	EIS

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#	Analyte	Transition	RT	IS	Туре
54	M3HFPO-DA	329>285	7.97	19: M2PFOA	EIS
55	HFPO-DA	332>287	7.97	54: M3HFPO-DA	
56	ADONA	377>251	8.00	23: M8PFOA	
57	PFHxDA	813>769	13.20	59: M2PFHxDA	
58	PFODA	913>869	13.50	59: M2PFHxDA	
59	M2PFHxDA	815>770	13.20	36:M2PFDA	EIS
60	NEtFOSA	526>169	11.00	61: NMeFOSA	
61	NMeFOSA	512>169	10.50	63: d3-NMeFOSA	
62	d3-NMeFOSA	515>169	10.50	36: M2PFDA	EIS
63	d5-NEtFOSA	531>169	11.00	36: M2PFDA	EIS
64	NMeFOSE	556>122	11.25	66: d7-NMeFOSE	
65	NEtFOSE	570>136	10.75	67: d9-NEtFOSE	
66	d7-NMeFOSE	563>126	11.25	36: M2PFDA	EIS
67	d9-NEtFOSE	579>142	10.75	36: M2PFDA	EIS
68	FtS 10:2	627>607	11.50	25: M2-6:2FTS	
69	PFDoS	699>99	12.50	33: M8PFOS	
70	9CIPF3ONS	531>351	10.23	33: M8PFOS	
10	11CIPF3OUdS	631>451	11.27	33: M8PFOS	

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RESUME CHRISTINA RINK-ASHDOWN

EDUCATION

BS Biology, 2006 University of California, San Diego

PROFESSIONAL HISTORY

Laboratory Data Consultants, Inc. Inorganic Chemist 2009 to present

Enviromatrix Analytical, Inc. Metals Chemist 2007 to 2009

REPRESENTATIVE EXPERIENCE

Ms. Rink-Ashdown has over 13 years combined environmental laboratory and data validation experience. Her experience includes performance of data validation in the trace metals, radiochemistry, and wet chemistry areas for major Federal and commercial projects. Her laboratory experience includes hands-on CLP and SW-846 ICP/CVAA analysis and overall technical review of data deliverables. Specifically, Ms. Rink-Ashdown has over 6 years inorganic and radiochemistry data validation experience using USEPA (including Region III) functional guidelines and other applicable documents.

As chemist with LDC, Ms. Rink-Ashdown specializes in the data validation of trace metals, wet chemistry, methyl mercury and radiochemistry analyses using USEPA functional guidelines or equivalent protocol. She has worked under various CERCLA and EPA data validation guidelines for the various CERCLA, Navy, Army Corps, AFCEE/AFCEC and commercial projects. She is certified as a "Radiometric Data Validation Specialist" through course work and testing by the Radiochemistry Society. Ms. Rink-Ashdown has validated over 2,000 samples for various isotopes in the last two years.

Ms. Rink-Ashdown has over 2 years of environmental laboratory experience in a laboratory performing the analyses of inorganic parameters.

As lead inorganic chemist at Enviromatrix Analytical, Inc., Ms. Rink-Ashdown managed the inorganic chemistry section which performed techniques such as atomic absorption and inductively coupled argon plasma spectrometry. These analyses were performed from methods referenced in EPA CLP, SW-846, and Standard Methods documents.

Appendix G

Key Personnel Resumes
NYSDEC BCP Site Number C241254

CHRISTOPHER CONNOLLY

PROJECT MANAGER



EDUCATION

Bachelor of Science, Music Technology and Studio Systems Design - University of Rhode Island (2008)

EXPERIENCE

IMPACT ENVIRONMENTAL-Project Manager, 2015-Present

- Conducts visual inspections and produces Phase I Environmental Site Assessments.
- Arranges, organizes, and oversees Phase II Environmental Site Assessments and Limited Subsurface Investigations.
- Arranges and oversees small, moderate and large-scale remediation projects, including communication with disposal facilities, subcontractors, Clients and regulatory agencies, as applicable.
- Produces Work Plans, Final Engineering Reports and other associated regulatory reports.
- Conducts various methods of soil and groundwater sampling, groundwater monitoring, well purging & sampling, and soil vapor sampling.

LAUREL ENVIRONMENTAL ASSOCIATES - Environmental Scientist, 2010-2015

- Conducts visual inspections of Phase I & II Environmental Site Assessments.
- Writes Transaction screen and Phase I, II, and III
 Environmental Site Assessments, Remedial Action Work Plans
 (RIWP), Environmental Assessment Statements (EAS) and
 Supplemental Studies reports, as well as New York City Office
 of Environmental Remediation Voluntary Cleanup Program
 Reports.
- Assists in Phase II site operations.
- Organizes, arranges logistics, and oversees small to large scale remediation projects, with accurate communication with disposal facility, trucking, developer and regulatory agency required. Conducts associated CAMP monitoring and writes Daily Reports.
- Conducts various methods of soil and groundwater sampling, groundwater monitoring, well purging & sampling, and soil vapor sampling.
- Experience operating and assisting with truck-mounted,track-mounted and portable Geoprobe® machines and tooling.
- Conducts ground penetrating radar, magnetic and utility surveys.
- Completed OSHA 24-Hour HAZWOPER Training program.
- Conducts Nuisance Noise and Excessive Vibration monitoring assessments.
- Project manages numerous NYC OER Voluntary Cleanup Projects, dealing with the remediation and continuing use of Brownfields sites.

KEY PROJECTS

- RCRA Closure projects, activities and reports.
- CEQR EAS Reports, OER Work Plans, OER Final Engineering Reports.
- Gasoline Station Portfolio Phase I and II ESAs

- OSHA 40-hour HAZWOPER Training
- OSHA 8-hour Refresher (2007-to-present)
- OSHA 10-hour Construction Training (2016)

DANIEL FRUHAUF

Associate Project Manager



EDUCATION

Bachelor of Arts, Ecosystems & Human Impact. SUNY at Stony Brook (2012)

EXPERIENCE

2014-Present IMPACT ENVIRONMENTAL Associate Project Manager

- Responsible for management and logistical coordination of investigative and remedial tasks, schedule and implementation quality on very large to small clean-up projects within NYC, Long Island, NY and East Chicago, Indiana
- Developed and prepared various environmental planning documents approved by regulators including, Remedial Action Work Plans, Corrective Measures Implementation Work Plan, Health and Safety Plans, Waste Characterization Work Plans, Community Air Monitoring Plans, Phase II ESA Work Plans, Underground Storage Tank Removal Work Plan, etc.
- Responsible for developing complex methods of tracking and incorporating innovative technology to measure remedial completion for adequate reporting purposes
- Assembled proposals, work orders, change orders and general contracts for multiple clients
- Performed complex Phase II Assessments and other Subsurface Investigations to detect and target specific contaminants for delineation purposes.
- Designed and constructed various remedial systems including sub-slab depressurization systems, soil vapor extraction systems.
- Conducted, presented and attended multiple regulator meetings with USEPA, NYSDEC, NYC OER.
- Provided a professional attitude of always learning, exploring new methods and teaching along the way

2013-2014 SOVEREIGN CONSULTING Inc. Environmental Scientist

- Collected field data, soil, groundwater samples from various NYSDEC regulated Spill Sites and other hazardous waste sites
- Assisted in construction and design of SVE, SSDS and product skim systems at multiple tri-state clean-up projects
- Prepared various reporting components specific to NYSDEC Quarterly Monitoring Reports, Phase I ESA, Phase II ESA and owner liability risk assessments
- Provided contractor oversight and split sampling with multiple environmental contractors on various clean-up and development projects
- Engaged in various meetings with regulators as to develop cleanup strategies for complex projects

KEY PROJECTS

- Former Du Pont East Chicago Facility RCRA CA Clean-up Project, East Chicago, IN
- Independent Metal Strapping NYSDEC/RCRA Closure, Roslyn, NY
- Multiple MTA/ LIRR Development Projects NYC, LI NY
- Saint Barnabas Hospital Development Project – Bronx NY
- Multiple NYC OER regulated Commercial Development Projects - NYC

- HAZWOPER 40hr + 8hr Refreshers
- OSHA 10hr Construction Safety
- OSHA 30hr Construction Safety
- Transportation Worker Identification Card (TWIC)
- NYC Office of Environmental Remediation (OER) Trained
- MTA/Amtrak Track Safety
- MTA/NYC Transit Track Safety
- · LIRR Safety Blue Card
- NYSDEC SWPPP Certified Inspector
- · Certified NYSDOL Asbestos Inspector

GREG MENDEZ-CHICAS

SENIOR PROJECT MANAGER



EDUCATION

Bachelor of Science, Environmental Science, SUNY at Plattsburgh (2007)

EXPERIENCE

IMPACT ENVIRONMENTAL, 2009-Present, Senior Project Manager

- Direct and supervise staff of geologists, hydrogeologists, and environmental engineers in development and implementation of environmental assessments, investigations, construction and remediation projects in commercial and industrial markets for lenders, real estate investment/development firms, construction firms and government agencies.
- · Provide regulatory and technical guidance and strategy
- Manage Phase I and Phase II assessments, State Spill
 Investigation and Remediation, County and Federal
 Underground Injection Control Programs, State & City
 Voluntary/Brownfield Cleanup Programs, State & Federal
 Superfund Sites, Brownfield Environmental Restoration
 Programs, Federal RCRA Closure, City E-Designation Projects.
- Quality control of project budgets, efficiencies, and profitability
- Maintain key relationships with existing clients, and cultivate the development of new business and growth.

APEX COMPANIES, 2007-2009, Environmental Scientist

- Prepared Phase I Environmental Assessments (ESAs) in general conformation with ASTM Practice E-1527-05 and USEPA ALL Appropriate Inquiries (AAI).
- Performed various aspects of Phase II scopes of work for commercial and industrial properties.
- Conducted microbiological sampling/investigations at a medical equipment manufacturing facility
- Preparation and implementation of sub-slab soil vapor sampling plans at former utilized gasoline and/or dry cleaning operations.

KEY PROJECTS

- LIRR/MTA East Side Access (five contracts)
- Briarcliff Manor
- Saint Barnabas Hospital Expansion

- OSHA 40-hour HAZWOPER Training
- OSHA 8-hour Refresher (2007-to-present)
- OSHA 10-hour Construction Training (2016)
- New York State Licensed Asbestos Inspector (2007-to-present)
- NYSDEC Erosion & Sediment Control Training (2016)
- Amtrak (2016) & LIRR Roadway Safety Training (2017)
- New York City Office of Environmental Remediation – Certified Brownfield Professional (Silver Certification)
- The Groundwater Pollution and Hydrology Course (38-Hour), Princeton groundwater, Inc., July 2021

KEVIN KLEAKA, P.G.

Executive Vice President/Senior Environmental Scientist



EDUCATION

State University of New York at Plattsburg,

Bachelor of Science in Environmental Science, 1995 Applied Environmental Science Program

EXPERIENCE

IMPACT ENVIRONMENTAL CLOSURES Inc., 1997-Present), Executive Vice President, Senior Environmental Scientist

- Principally responsible for managing environmental assessment, investigation, construction and remediation projects in commercial and industrial markets for lenders, real estate investment/development firms, construction firms and government agencies.
- Manage Phase I and II Environmental Site Assessments, State Spill Investigation and Remediation, County and Federal Underground Injection Control Programs, State & City Voluntary/Brownfield Cleanup Programs, State & Federal Superfund Sites, Brownfield Environmental Restoration Programs, Federal RCRA Closure, City E-Designation Projects.
- Responsible for environmental compliance of construction projects for waste management.
- Quality control of work products and deliverables.
- Supervise staff of geologists, hydrogeologists, engineers, environmental scientists, and environmental technicians to develop and implement sampling and analysis plans, quality assurance programs, remedial action plans.
- Provide expert witness testimony/fact statements and support in litigation cases involving soil, air and/or groundwater pollution.

WYETH AYERST LABORATORIES, (1995-1997), Chemist worked in chromatographic separations division performing quality assurance analysis.

 Performed laboratory procedures and analyses in accordance with USFDA analytical test methods by liquid, gas, and thin layer chromatography.

KEY PROJECTS

- East Side Access MTA LIRR
- Melody Cleaners
- · ExxonMobil Spill- Valley Stream, NY
- Spartan Petroleum
- JFK 1020. Runway 13R-31L
- Rheingold Brewery Redevelopment Project
- WTC Greenwich Street Corridor Reconstruction
- · Yankee Stadium Macomb's Park

ORGANIZATIONS

- New York City Brownfield Partnership
- New Partners for Community Revitalization
- ASTM Committee
- National Groundwater Association
- · Environmental Bankers Association
- · Vapor Intrusion Network
- Long Island Geologist Association
- Environmental Consulting Professionals
- Environmental Insurance Professionals

- Licensed Profession Geologist (NYS# 000735)
- Gold Certified Brownfield Professional 2012
- Advanced Tools for In-Situ Remediation Workshop
- ASTM Technical & Professional Training for Assessment of Vapor Intrusion into Structures of Property & New York State Department of Health, Vapor Intrusion Training
- New York Precision Equipment Global Survey Positioning Training
- MTBE & TBA Comprehensive Site Assessment and Successful Groundwater Remediation
- Environmental Data Resources, Due Diligence Workshop
- Advanced Technologies for Accelerated Natural Attenuation
- Eophysical Survey Systems, Theory and Practice of Applying Subsurface Interface Radar in Engineering and Geophysical Investigation.
- 40-Hour Occupational Safety & Health Administration

LEIF ROBERTSON

ASSOCIATE PROJECT MANAGER



EDUCATION

Bachelor of Science, Geology, SUNY at Cortland (2012)

EXPERIENCE

2017-Present IMPACT ENVIRONMENTAL Associate Project Manager

- Prepares Phase I and Phase II Environmental Site Assessments (ESAs) in general conformance with ASTM Practice.
- Prepares Field Sampling Plans for NYSDEC Spill Sites.
- Carry out environmental investigative work including soil borings, soil sampling, groundwater monitoring well installation and groundwater collection, soil vapor and sub-slab soil vapor probe installation and sample collection and subsequent data analysis and presentation to client.
- Oversees logistics of small to moderate scale remediation projects, including drafting and modeling, communication with disposal facilities, subcontractors, Clients and regulatory agencies, as applicable.
- Coordinate and oversee remediation work in compliance with site-specific approved Remedial Action Work Plans and with Local, State, and Federal Regulations.

2015-2017 VHB ENGINEERING Project Scientist

- · Gather field data on NYSDEC spill sites.
- Performed Underground Storage Tank removal oversight and soil screening.
- Document environmental field work, and assist in preparing and completing reports.
- Maintain community air monitoring programs and document job site activities related to foundation construction phase projects.
- Conduct groundwater (low-flow) sampling events and real time water parameter data logging using various equipment
- Contamination concentration, plume direction reports related to petroleum spills.
- Groundwater, soil & vapor sampling.
- Perform ASTM Phase I ESA Site Inspections and Prepare Reports.

KEY PROJECTS

- · Bill Wolf Petroleum
- Spartan Petroleum
- Atlantis Management Group
- Former DuPont Facility East Chicago

- OSHA 40-hour HAZWOPER Training
- · OSHA 8-hour Refresher
- OSHA 10-hour Construction Training
- OSHA 30-Hour Construction Training

MICHAEL BLUIGHT, P.G.

Technical Manager



EDUCATION

Masters of Science, Hydrogeology SUNY at Stony Brook (In Progress) Bachelor of Science, Geology. SUNY at Stony Brook (2000)

EXPERIENCE

2013-Present **IMPACT ENVIRONMENTAL** *Technical Manager/Quality Service Manager/Project Manager*

- Directed environmental related tasks related to the redevelopment of New York State Voluntary Cleanup Program and Inactive Hazardous Waste sites for future retail and commercial use
- Managed a portfolio of retail petroleum/automotive service station remediation projects in the metropolitan New York City and Long Island regions.
- Constructed and implemented interim and operable unit remedial measures and performed contaminant migration investigations for New York State Superfund projects.
- Devised and implemented bioremediative and in-situ chemical oxidation subsurface injection remedial work for petroleum and chlorinated solvent impacted sites.
- Provided project manager support related to technical design and construction of soil, soil vapor and groundwater remediation systems.
- Mentored and provided support for junior-level staff related to Federal, State and local environmental regulations, protocols and procedures, remediation system design and technical specifications, regulatory report writing, contaminate transport and flow modeling software, and field work protocols and procedures.
- Conducted ultiple UST removal/replacement assessments, closures and remedial actions, Phase I and Phase II environmental site assessments and investigation and soil vapor intrusion investigation projects in the metropolitan New York City and Long Island regions.

2000-2013 Experience as a Project Manager and Senior Hydrogeologist at leading metropolitan New York based environmental and engineering firms

KEY PROJECTS

- Dzus Fasteners (NYS Inactive Hazardous Waste Disposal) Site, West Islip, NY
- Melody Cleaners (NYS Voluntary Cleanup Program) Site, East Meadow, NY
- Gerdau Steel/Anaconda Copper Site, Perth Amboy, NJ
- Cerro Wire (NYS Inactive Hazardous Waste Disposal) Site, Syosset, New York
- Sid Harvey Industries (NYS Voluntary Cleanup Program) Site, Valley Stream, New York
- General Dynamics Armament and Technical Products Site, Glen Cove, New York
- Fujicolor Processing, Inc. Sites, Nationwide locations
- Fairchild Republic Aircraft Main Plant (NYS Inactive Hazardous Waste Disposal) Site,
 Farmingdale, New York
- Commercial Envelope Manufacturing (NYS Inactive Hazardous Waste Disposal) Site, Deer Park, New York

ORGANIZATIONS

- · National Ground Water Association
- Long Island Association of Professional Geologists
- New York State Council of Professional Geologists

- OSHA 40-hour HAZWOPER Training
- OSHA 10-hour Construction Safety
- CPR & First Aide Training
- Undergraduate Excellence in Teaching SUNY @ Stony Brook
- Professional Geologist NYS#000872

Email: xyuan@impactenvironmental.com Mobile: 1-412-719-2487

Xin Yuan, P.E.

Professional Licenses

Professional Engineer in Massachusetts, Pennsylvania, Indiana, New Jersey, New York and Indiana

Professional Experience

July 2015 - Present

Quality Control Manager/Professional Engineer Impact Environmental Consulting, Inc, Bohemia, NY

- Management of site investigation/remediation/brownfield redevelopment projects;
- Environmental compliance & permitting of beneficial use/waste management facilities and brownfield redevelopment projects;

September 2010 - July 2015

Environmental Analyst

Impact Environmental Consulting, Inc, Bohemia, NY

- Design and implementation of contaminated site investigation and remediation per applicable state regulations in NY/NJ/PA and NYC regulations;
- On-site management of site remediation/waste management projects;
- Environmental compliance & permitting of ongoing waste disposal/beneficial reuse projects.

Education

September 2008 - August 2010

Master of Science in Civil Engineering- University of Massachusetts, Amherst, MA

September 2004 - July 2008

Bachelors of Science in Environmental Engineering -Tsinghua University, Beijing, China

RESUME CHRISTINA RINK-ASHDOWN

EDUCATION

BS Biology, 2006 University of California, San Diego

PROFESSIONAL HISTORY

Laboratory Data Consultants, Inc. Inorganic Chemist 2009 to present

Enviromatrix Analytical, Inc. Metals Chemist 2007 to 2009

REPRESENTATIVE EXPERIENCE

Ms. Rink-Ashdown has over 13 years combined environmental laboratory and data validation experience. Her experience includes performance of data validation in the trace metals, radiochemistry, and wet chemistry areas for major Federal and commercial projects. Her laboratory experience includes hands-on CLP and SW-846 ICP/CVAA analysis and overall technical review of data deliverables. Specifically, Ms. Rink-Ashdown has over 6 years inorganic and radiochemistry data validation experience using USEPA (including Region III) functional guidelines and other applicable documents.

As chemist with LDC, Ms. Rink-Ashdown specializes in the data validation of trace metals, wet chemistry, methyl mercury and radiochemistry analyses using USEPA functional guidelines or equivalent protocol. She has worked under various CERCLA and EPA data validation guidelines for the various CERCLA, Navy, Army Corps, AFCEE/AFCEC and commercial projects. She is certified as a "Radiometric Data Validation Specialist" through course work and testing by the Radiochemistry Society. Ms. Rink-Ashdown has validated over 2,000 samples for various isotopes in the last two years.

Ms. Rink-Ashdown has over 2 years of environmental laboratory experience in a laboratory performing the analyses of inorganic parameters.

As lead inorganic chemist at Enviromatrix Analytical, Inc., Ms. Rink-Ashdown managed the inorganic chemistry section which performed techniques such as atomic absorption and inductively coupled argon plasma spectrometry. These analyses were performed from methods referenced in EPA CLP, SW-846, and Standard Methods documents.

Qualifications Summary

- Over 7 years of experience in the environmental field.
- Over 2 years of experience in Project Management.
- Strong customer service and communication skills.

HEATHER HAYDEN

Project Manager

Fields of Expertise

Manage client relationship by acting as liaison between the client and laboratory staff. Review client requests for ability of the laboratory to perform testing in accordance with requested methodologies. Monitor client projects through the laboratory to verify compliance with client requirements. Prepare client quotations.

Higher Education

M.S. – Psychology – Southern New Hampshire University, Manchester, NH (2018)

B.A. – Sociology – William Paterson University, Wayne, NJ (2014)

Employment History

12/2020- Present	Alpha Analytical – Project Manager
06/2019 - 12/2020	Alpha Analytical – Project Management Assistant
09/2014 - 06/2019	Hampton Clarke, Inc – Environmental QA/QC Reporting Supervisor and Health and Safety Officer
10/2011 - 09/2014	Prospect Park Policy Department – Police Clerk and Administrative Assistant