77 WEST POST ROAD WHITE PLAINS, NEW YORK

Remedial Action Work Plan

NYSDEC BCP Number: C360129

Prepared for:

Post Maple 77, LLC 2309 Frederick Douglass Boulevard New York, New York 10027-3612

Prepared by:

Remedial Engineering, P.C. 209 Shafter Street Islandia, New York 11749

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LIST OF ACRONYMS

Acronym	Definition	
µg/kg	Micrograms per Kilogram	
µg/L	Micrograms per Liter	
mg/kg	Milligrams per Kilogram	
4,4'-DDE	4,4'-Dichlorodiphenyldichloroethylene	
4,4'-DDD	4,4-Dichlorodiphenyldichloroethane	
4,4'-DDT	4,4-Dichlorodiphenyltrichloroethane	
AOCs	Areas of Concern	
ARARs	Applicable or Relevant and Appropriate Requirements	
ASP	Analytical Services Protocol	
AST	Aboveground Storage Tank	
AWQSGVs	Ambient Water Quality Standards and Guidance Values	
BCA	Brownfield Cleanup Agreement	
ВСР	Brownfield Cleanup Program	
BEEI	Bureau of Environmental Exposure Investigation	
BOA	Brownfield Opportunity Areas	
CAMP	Community Air Monitoring Plan	
C/D	Construction and Demolition	
СЕН	Center for Environmental Health	
CFR	Code of Federal Regulations	
Cis-1,2-DCE	Cis-1,2-dichloroethene	
COC	Certificate of Completion	
CP-51	Commissioner Policy-51	
СРР	Citizen Participation Plan	
CQAP	Construction Quality Assurance Plan	
CVOCs	Chlorinated Volatile Organic Compounds	
су	Cubic Yards	
DER-10	NYSDEC DER-10 Technical Guidance for Site Investigation and Remediation	
DMM	Division of Materials Management	
EC	Engineering Control	
ECL	Environmental Conservation Law	
EDD	Electronic Data Deliverable	
EFR	Enhanced Fluid Recovery	

Acronym	Definition
ELAP	Environmental Laboratory Approval Program
ESA	Environmental Site Assessment
FER	Final Engineering Report
FSRIWP	Focused Supplemental Remedial Investigation Work Plan
Ft	Feet/Foot
Ft amsl	Feet Above Mean Sea Level
Ft bls	Feet Below Land Surface
HASP	Health and Safety Plan
HAZWOPER	Hazardous Waste Operations and Emergency Response
HRC	Hydrogen Releasing Compound
HWR	Hazardous Waste Remediation
HVAC	Heating, Ventilation, and Air Conditioning
IC	Institutional Control
ISCO	In Situ Chemical Oxidation
LOIWP	Limited Offsite Investigation Work Plan
MW	Monitoring Well
NYCRR	New York Codes, Rules, and Regulations
NYSDEC	New York State Department of Environmental Conservation
NYSDOH	New York State Department of Health
NYSDOT	New York State Department of Transportation
ORC	Oxygen Release Compound
OSHA	Occupational Safety and Health Administration
OWS	Oil Water Separator
PCBs	Polychlorinated Biphenyls
PCE	Tetrachloroethene (Perchloroethene)
PEJA	Potential Environmental Justice Area
PDF	Portable Document Format
PGW	Protection of Groundwater
PID	Photo Ionization Detector
PPE	Personal Protective Equipment
PVC	Polyvinyl Chloride
QAPP	Quality Assurance Project Plan
QA/QC	Quality Assurance/Quality Control
RAOs	Remedial Action Objectives

Acronym	Definition
RAWP	Remedial Action Work Plan
REC	Recognized Environmental Condition
RI	Remedial Investigation
RIWP	Remedial Investigation Work Plan
RR	Restricted Residential
SCG	Standards, Criteria, and Guidance
SCOs	Soil Cleanup Objectives
SEQRA	State Environmental Quality Review Act
SMP	Site Management Plan
SoMP	Soil Management Plan
SOP	Site Operations Plan
SSDS	Sub-Slab Depressurization System
SSO	Site Safety Officer
STARS	Spills Technology and Remediation Series
SVOCs	Semivolatile Organic Compounds
SWPPP	Stormwater Pollution Prevention Plan
TAGM	Technical and Administrative Memorandum
TAL	Target Analyte List
TBC	To Be Considered
TCE	Trichloroethene
TCL	Target Compound List
TOGS	Technical and Operational Guidance Series
Trans-1,2-DCE	Trans-1,2-dichloroethene
USEPA	United States Environmental Protection Agency
USGS	United States Geological Survey
UST	Underground Storage Tank
UU	Unrestricted Use
VC	Vinyl Chloride
VOCs	Volatile Organic Compounds

CERTIFICATIONS

I, Charles J. McGuckin, certify that I am currently a NYS registered professional engineer and that this Remedial Action Work Plan was prepared in accordance with all applicable statutes and regulations and in substantial conformance with the DER Technical Guidance for Site Investigation and Remediation (DER-10).

I certify that all information and statements in this certification are true. I understand that a false statement made herein is punishable as Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law.

069509

NYS Professional Engineer #

2/27/17

Date



It is a violation of Article 145 of New York State Education Law for any person to alter this document in any way without the express written verification of adoption by any New York State licensed engineer in accordance with Section 7209(2), Article 145, New York State Education Law.

EXECUTIVE SUMMARY

Site Description/Physical Setting/Site History

Post Maple 77, LLC entered into a Brownfield Cleanup Agreement (BCA) with the New York State Department of Environmental Conservation (NYSDEC) in April 2013, to investigate and remediate a group of parcels totaling 3.69 acres located at 77 West Post Road in the City of White Plains, Westchester County, New York (Site). The Site, as defined herein, relates to those parcels that are enrolled in the Brownfield Cleanup Program (BCP), not the overall project redevelopment Site. Post Maple 77, LLC is a Volunteer in the BCP. Commercial and restricted residential use is proposed for the property. When completed, the Site will contain mixed use development including residences (i.e., apartments), subgrade parking, with commercial and retail space.

This Remedial Action Work Plan (RAWP) summarizes the nature and extent of contamination as determined from data gathered during the Remedial Investigation (RI), which was completed in April 2014, with supplemental RI activities completed in January and August 2015. It provides an evaluation of a Track 1 cleanup and a Track 4 Restricted Residential Remedial Action alternative, their associated costs, and the recommended and preferred remedy.

The Site is located in the County of Westchester, White Plains, New York and is identified as ten individual tax lots (Parcels A through D and F through K) on the White Plains Tax Map. A United States Geological Survey (USGS) topographical quadrangle map of White Plains, New York (Figure 1) shows the Site location. The majority of the 3.69-acre Site (except parcel K) is situated on the block bounded by West Post Road and mixed-use street level retail stores with residences above to the north, Maple Avenue and residential properties to the south, commercial-use properties and South Lexington Avenue to the east, and Rathbun Avenue and commercial-use properties to the west (see Figure 2).

Historic Site operations predominantly involved automobile sales and repair, which persisted for approximately 50 years. Each of the individual Parcels were either directly utilized for automobile sales, storage and/ or repair, or are located adjacent to Parcels that were. Additional historic Site operations included former use as a gasoline service station and a dry cleaner.

Significant Threat

The RI for this Site did not identify fish and wildlife resources. The NYSDEC and NYSDOH have determined that this Site poses a significant threat to human health and the environment based on their review of the RI Report.

Summary of the Remedial Investigation

Soil

As part of the Phase II Environmental Site Assessment (ESA) performed by Woodard & Curran, 23 soil borings were installed and 25 soil samples were collected for analysis of select VOCs, SVOCs, metals and PCBs, and pesticides. As part of the RI performed by Roux Associates, 73 soil borings were installed along with the collection and analysis of 101 discrete soil samples from 70 locations for analysis of select volatile organic compounds (VOCs), semivolatile organic compounds (SVOCs), metals, polychlorinated biphenyls (PCBs), and pesticides. Furthermore, a sample was collected from the bottom of one drywell (DW-1/4-6) and from a catch basin (CB-2) located in the middle of Parcel G.

A total of 11 compounds (10 VOCs [1,2,4-trimethylbenzene; 1,3,5-trimethylbenzene; benzene; ethylbenzene; n-butylbenzene; n-propylbenzene; toluene; xylenes; tetrachloroethene; and cis-1,2-dichloroethene] and one SVOC [naphthalene]; hereafter named "Compounds of Concern") were detected in both soil and groundwater samples at concentrations above the Protection of Groundwater Soil Cleanup Objectives (PGW SCOs) and the Ambient Water Quality Standards and Guidance Values (AWQSGVs). These compounds were detected at 15 locations (GP-1A, GP-8, GP-9, SB-4, SB-8, SB-10, RB-1, RB-2, RB-7, RB-10, RB-11, RB-47, RB-48, RW-1, and RW-4) at six Parcels (A, B, C, D, F, and I).

SVOC exceedances of the Unrestricted Use Soil Cleanup Objectives (UU SCOs) and Restricted Residential (RR) Use SCOs consisted of benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, chrysene, dibenz(a,h)anthracene, indeno(1,2,3-cd)pyrene, and naphthalene. Metal exceedances of the UU and RR Use SCOs consisted of arsenic, barium, beryllium, chromium, copper, lead, mercury, nickel, silver, and zinc. Most of these SVOCs and metals are typically found in historic fill, and there were no discernible distribution patterns that would be indicative of a past release. Furthermore, groundwater

exceedances were limited to primarily naphthalene in Parcels A, C, and D, and iron, manganese, and sodium, which are naturally-occurring metals in shallow groundwater that are not believed to be associated with an on-Site source of contamination.

Groundwater

Woodard & Curran installed three permanent groundwater monitoring wells (MW-1 through MW-3); and collected 12 groundwater grab samples for a total of 15 groundwater samples analyzed during their investigation in 2007. These samples were analyzed for select VOCs, SVOCs, and metals. As part of the RI, 25 new monitoring wells (24 water table monitoring wells and one deep monitoring well) were installed along with the collection and analysis of 33 discrete groundwater samples (25 from newly installed monitoring wells, two from pre-existing monitoring wells and six groundwater grab samples from two groundwater profile borings).

Eighteen VOCs, including petroleum related hydrocarbons and chlorinated VOCs were detected at concentrations above the AWQSGVs at 15 on-Site monitoring wells. Exceedances occurred at Parcels A, C, D, F, G, I, and J. Nine of the 18 VOCs were also detected in one or more off-Site upgradient monitoring wells. The remaining VOCs are either petroleum related hydrocarbons or are natural decay products of tetrachloroethene (PCE): cis-1,2-dichloroethen (cis-1,2-DCE), trans-1,2-dichloroethene (trans-1,2-DCE), and VC, of which cis-1,2-DCE and VC were also detected in off-Site upgradient monitoring well RW-21.

Naphthalene was detected above its AWQSGV in monitoring wells RW-1, RW-3, RW-4, and MW-3 in Parcels A, C, and D. Pentachlorophenol was detected above its AWQSGV in monitoring well RW-12 in Parcel H.

Iron, manganese, antimony, and sodium were detected in several monitoring wells at concentrations above the AWQSGVs. These metals are naturally-occurring in shallow groundwater and are not believed to be associated with an on-Site source of contamination.

Soil Vapor

Multiple VOCs were detected in samples collected from two off-Site temporary soil vapor points (SV-1 and SV-2) installed in the sidewalk along Maple Avenue, including some petroleum

related compounds (2-hexanone, ethanol, hexane, benzene, toluene, xylenes, heptane, and cyclohexane). However, the seven compounds included in the October 2006 NYSDOH Final Guidance for Evaluating Soil Vapor Intrusion in the State of New York (trichloroethene; carbon tetrachloride; VC; 1,1-dichloroethene; cis-1,2-DCE; PCE; and 1,1,1-trichloroethane) were not detected in either of the soil vapor samples analyzed.

Qualitative Human Health Exposure Assessment

Soil Exposure

Soil samples collected during the Phase II ESA and RI indicated the presence of VOCs, SVOCs, and metals at concentrations above the NYSDEC Subpart 375-6 UU, PGW, and RR Use SCOs, and a limited number of samples that exhibited concentrations of total PCBs and pesticides above the NYSDEC Subpart 375-6 UU SCOs. An individual could be exposed to these contaminants through direct contact with Site soil during ground intrusive work at the Site. Direct contact without the use of proper personal protective equipment (PPE) and personal hygiene measures could lead to dermal contact and incidental ingestion of these compounds. Since the Site will be fully fenced during construction activities, and access is controlled, potential contact with Site soil is restricted to remedial and construction contract workers at the Site performing ground intrusive activities in addition to trespassers and passersby. The general public will not be exposed to direct contact with Site soil. PPE will be required during any intrusive Site work. A community air monitoring program (CAMP) will be implemented during intrusive activities to minimize the potential for off-Site exposures from soil/dust leaving the Site.

The contemplated redevelopment plan consists of excavation for the construction of a multilevel, mixed-use development including a multi-level parking structure, retail space, medical office space and 12 residential apartments along Maple Ave. Some soil impacted above RR Use SCOs may remain in-place. However, the Site will be completely capped by the proposed complex. Therefore, the potential for exposure (on and off-Site) by direct contact with contaminated soil will be minimized for both the public and any future construction workers performing ground intrusive activities at the Site.

Groundwater Exposure

Groundwater is not used for drinking or other potable purposes (the area is connected to the public water supply), and there is no direct contact with or ingestion of groundwater by the general public (on or off-Site). Furthermore, no public water supply wells are located in the area surrounding the Site. The proposed on-Site buildings will be serviced by the public water supply.

Individuals who perform intrusive work (i.e., utility construction and/or repair), perform groundwater sampling or remedial activities may come into contact with contaminated groundwater. Proper PPE and personal hygiene measures will be required to prevent dermal contact and the potential for incidental ingestion of these compounds. Based on this, the potential for public exposure by direct contact with contaminated groundwater will be reduced or eliminated.

The potential for off-Site migration of contamination is expected to be mitigated by addressing nearby, upgradient soil and groundwater impacts as proposed in the preferred remedy.

Soil Vapor Exposure

Individuals who perform groundwater or soil vapor sampling, remedial construction or redevelopment construction activities may come into contact with contaminated soil vapor. Potential worker exposure to contaminated soil vapor during these activities will be mitigated through the implementation of the Site-Specific Health and Safety Plan, required PPE, and required worker training. Potential environmental exposures will be mitigated by engineering controls implemented during remedial construction (i.e., vapor/odor control). The potential for soil vapor intrusion would be mitigated by the utilization of a pressure slab with water proofing/vapor barrier for development areas with subgrade parking/loading dock structures, vapor barrier for slab on grade construction, and operation of typical building heating, ventilation, and air conditioning systems. A sub-slab depressurization system (SSDS) will be installed in any future buildings constructed on-Site, if deemed necessary. The potential for off-Site migration of contamination is expected to be mitigated by addressing nearby, upgradient soil and groundwater impacts as proposed in the preferred remedy.

Summary of the Remedy

The elements of the Track 4 Restricted Residential Use remedy are:

- 1. Excavation of soil/fill with concentrations of Compounds of Concern (1,2,4-trimethylbenzene; 1,3,5-trimethylbenzene; benzene; ethylbenzene; n-butylbenzene; n-propylbenzene; toluene; xylenes; PCE; cis-1,2-DCE, and naphthalene) exceeding the PGW SCOs, as defined by 6 NYCRR Part 375-6.8.
- 2. Construction and maintenance of a Site Cover System consisting of building slabs with a vapor barrier, concrete walkways, asphalt pavement and limited landscaped areas (with two feet of soil meeting the lower of the PGW or RR Use SCOs) to prevent human exposure to residual contaminated soil/fill remaining under the Site.
- 3. Recording of an Environmental Easement, including Institutional Controls, to prevent future exposure to any residual contamination remaining at the Site.
- 4. Treat groundwater and residual impacts to saturated soils via *in situ* injections of PersulfOx® and ORC-A®.
- 5. Publication of an SMP for long term management of residual contamination as required by the Environmental Easement, including plans for: (1) Institutional and Engineering Controls (IC/EC), (2) monitoring, (3) operation and maintenance and (4) reporting;
- 6. Screening for indications of contamination (by visual means, odor, and monitoring with PID) of all excavated soil during any intrusive Site work;
- 7. Collection and analysis of end-point samples to evaluate the performance of the remedy with respect to attainment of Track 4 SCOs;
- 8. The potential for vapor intrusion for any buildings on-Site will be evaluated. If vapor mitigation is necessary, a sub-slab depressurization system (SSDS) may be required as an EC for portions of development that will have a slab and sufficient clearance above the water table;
- 9. Appropriate off-Site disposal of all material removed from the Site in accordance with all Federal, State and local rules and regulations for handling, transport, and disposal;
- 10. Clean fill meeting the requirements of 6 NYCRR Part 375-6.7(d) will be brought in to replace the excavated soil and establish the designed grades at the Site. Import of materials to be used for backfill and cover in compliance with: (1) chemical limits and other specifications included in Table 14, (2) all Federal, State and local rules and regulations for handling and transport of material;
- 11. Removal of all UST's that are encountered during soil/fill removal actions. Registration of tanks (if encountered) and reporting of any petroleum spills associated with UST's and appropriate closure of these petroleum spills under the Brownfield Cleanup Program; and

12. All responsibilities associated with the Remedial Action, including permitting requirements and pretreatment requirements, will be addressed in accordance with all applicable Federal, State and local rules and regulations.

1.0 INTRODUCTION

Post Maple 77, LLC entered into a Brownfield Cleanup Agreement (BCA) with the New York State Department of Environmental Conservation (NYSDEC) in April 2013, to investigate and remediate a group of parcels totaling 3.69 acres located at 77 West Post Road in the City of White Plains, Westchester County, New York (Site). The Site, as defined herein, refers to the parcels that are enrolled in the Brownfield Cleanup Program (BCP), not the overall project redevelopment Site. Post Maple 77, LLC is a Volunteer in the BCP. Commercial and restricted residential use is proposed for the property. When completed, the Site will contain mixed use development including residences (i.e., apartments), subgrade parking, with commercial and retail space.

This Remedial Action Work Plan (RAWP) summarizes the nature and extent of contamination as determined from data gathered during the Remedial Investigation (RI), which was completed in April 2014, with supplemental RI activities completed in January and August 2015. It provides an evaluation of a Track 1 cleanup and a Track 4 Restricted Residential Remedial Action alternative, their associated costs, and the recommended and preferred remedy. The remedy described in this document is consistent with the procedures defined in NYSDEC DER-10 Technical Guidance for Site Investigation and Remediation – May 2010 (DER-10) and complies with all applicable standards, criteria and guidance. The remedy described in this document also complies with all applicable Federal, State and local laws, regulations and requirements. The NYSDEC and New York State Department of Health (NYSDOH) have determined that this Site poses a significant threat to human health and the environment. The RI for this Site did not identify fish and wildlife resources.

A formal Remedial Design document will not be prepared.

1.1 Site Location and Description

The Site is located in the County of Westchester, White Plains, New York and is identified as ten individual tax lots (Parcels A through D and F through K) on the White Plains Tax Map:

Parcel Designation	Parcel Tax Identification	Parcel Acreage
А	130.34-6-1	0.21

Parcel Designation	Parcel Tax Identification	Parcel Acreage
В	130.34-6-6	0.09
С	130.34-6-4	0.06
D	130.34-6-3	0.09
F	130.34-5-2	0.38
G	130.34-5-3	0.88
Н	130.34-5-4	0.91
Ι	130.34-5-5	0.28
J	130.34-5-6	0.32
K	130.27-8-3	0.47

A United States Geological Survey (USGS) topographical quadrangle map of White Plains, New York (Figure 1) shows the Site location. The majority of the 3.69-acre Site (except parcel K) is situated on the block bounded by West Post Road and mixed-use street level retail stores with residences above to the north, Maple Avenue and residential properties to the south, commercial-use properties and South Lexington Avenue to the east, and Rathbun Avenue and commercial-use properties to the west (see Figure 2). A boundary map is attached to the BCA as required by Environmental Conservation Law (ECL) Title 14 Section 27-1419. The 3.69-acre Site is fully described in Appendix A – Tax Map.

1.2 Contemplated Redevelopment Plan

The Remedial Action to be performed under the RAWP is intended to make the Site is protective of human health and the environment consistent with the contemplated end use. The proposed redevelopment plan and end use is described here to provide the basis for this assessment. However, the Remedial Action contemplated under this RAWP may be implemented independent of the proposed redevelopment plan.

The contemplated redevelopment plan consists of excavation for the construction of a multilevel, mixed-use development including a multi-level parking structure, retail space, medical office space and 12 residential apartments along Maple Ave. The redevelopment area will be contiguous spanning the block from West Post Road to Maple Ave and from Rathbun Ave to the east including the northern portion of Parcel J. This total development area is 4.22 acres and includes Brady Place and seven other parcels within the block that were excluded from the BCP.

Once excavation activities commence, appropriate measures will be taken to appropriately characterize and manage contaminated soil that may be encountered in areas of the Site development area where no environmental data has been collected. This includes Brady Place and the seven other parcels within the block that were excluded from the BCP.

The redevelopment plan is shown on Plate 1. Parcel K will be converted into a parking lot with a cover constructed of asphalt or two foot of clean soil/stone aggregate.

1.3 Description of Surrounding Property

The Site is located in a mixed commercial and residential use area of White Plains. All but one of the Parcels (Parcel B) is located in Business District Zone B-3. Parcel B is located in Business District B-2. The B-3 District is a general retail district containing a wide variety of retail, office and service business uses as well as multi-family dwellings. The majority of uses in the District are of a service character.

A mixed-use area is located north of the parcels (except Parcel K) across West Post Road with street level retail stores/restaurants and residences located above. The Calvary Baptist Church is also located north of the Site on Post Road. A residential use area is located south of the development Parcels across Maple Avenue, primarily consisting of multi-family dwellings. Commercial use areas extend to the east and west of the development Parcels. Multi-family residences are located northwest of Parcel K and commercial-use properties extend to the south, east and west of Parcel K including a used car lot located adjacent to the northeast of the Parcel.

2.0 DESCRIPTION OF REMEDIAL INVESTIGATION FINDINGS

The Site was investigated in accordance with the scope of work presented in the NYSDECapproved Remedial Investigation (RI) Work Plan (RIWP) dated October 9, 2013, the Focused Supplemental Remedial Investigation Work Plan (FSRIWP) dated July 22, 2014, and the Limited Off-Site Investigation Work Plan (LOIWP) dated May 21, 2015. The findings were presented in the Remedial Investigation Report dated June 9, 2016.

2.1 Summary of Remedial Investigations Performed

In 2007, Woodard & Curran conducted a Site-wide Phase II Environmental Site Assessment (ESA). Investigation activities proposed by Roux Associates in the RIWP were completed in April of 2014. Field activities proposed by Roux Associates in the FSRIWP and the LOIWP were completed in January and August 2015, respectively.

The findings of the Phase II ESA are presented in Sections 2.5.4 and 2.5.5. The findings of the RI are presented in Sections 2.5.4 through 2.5.6.

2.2 Significant Threat

The NYSDEC and NYSDOH have determined that this Site poses a significant threat to human health and the environment.

2.3 Site History

2.3.1 Past Uses and Ownership

Historic Site operations predominantly involved automobile sales and repair, which persisted for approximately 50 years. Each of the individual Parcels were either directly utilized for automobile sales, storage and/ or repair, or are located adjacent to Parcels that were. Additional historic Site operations included former use as a gasoline service station and a dry cleaner. Known historic Site use is provided for each Parcel below:

• <u>99-103 W. Post Road (Parcel A)</u>

Parcel A is 0.21 acres in area and is currently vacant without improvements. According to available historical sources, the Parcel was initially developed with residential buildings as early as 1905 and developed for commercial purposes from the 1930s onward. Historical use of environmental concern includes former use as a gas station including four underground storage tanks (USTs) for an unknown amount of time.

• <u>5 Rathbun Avenue (Parcel B)</u>

Parcel B is 0.09 acres in area and is currently vacant without improvements. According to available historical sources, the Parcel was initially developed with residential buildings as early as 1905. Additional historical use information specific to this Parcel is limited; however, the immediately surrounding properties have been utilized for automobile repairs and sales for at least 30 years.

• <u>3 Brady Place (Parcel C)</u>

Parcel C is 0.06 acres in area and is currently vacant without improvements. According to available historical sources, structures have periodically appeared on this parcel since 1905. A building utilized by an electrical contractor was demolished in the late 1980s. Additional historical use information specific to this Parcel is limited; however, the surrounding area has been utilized for automobile repairs and sales for at least 30 years.

• <u>95 West Post Road (Parcel D)</u>

Parcel D is 0.09 acres in area and is currently vacant. The Parcel is improved by one abandoned building previously utilized as an automobile sales office; an associated parking area is located south of the building. According to available historical sources, the Parcel was initially developed with residential buildings as early as 1905 and developed for commercial purposes from the 1930s onward. The current on-Site structure was reportedly constructed in 1935. Historical use information specific to this Parcel is limited; however, the Parcel was occupied by a dry cleaner in the 1970s and possibly as early as the 1940s.

• <u>79-83 West Post Road (Parcel F)</u>

Parcel F is 0.38 acres in area and is currently vacant. The Parcel is improved by an asphalt paved parking lot; no other improvements exist. According to available historical sources, the Parcel was initially developed with residential buildings as early as 1905 and developed for commercial purposes from the 1930s onward. Limited historical information is available for the Parcel specifically; however, the immediately adjacent properties to both the east and west have been utilized as automobile repair/service facilities for as many as 50 years.

• <u>77 West Post Road (Parcel G</u>)

Parcel G is 0.88 acres in area, is currently vacant and is improved by two abandoned single story buildings (one with a basement) formerly utilized for automobile repairs and sales from the 1970s through 2008. Available documentation indicates that the Parcel was utilized for mixed commercial and residential uses up to the 1970s.

• <u>55 West Post Road (Parcel H)</u>

Parcel H is 0.91 acres in area and is currently vacant. The Parcel is improved by one single-story building with a basement that was formerly utilized for automobile repairs and sales from the 1950s through 2008.

• <u>41-45 and 35 West Post Road (Parcels I and J)</u>

Parcel I (0.28 acres) consists of an asphalt paved parking lot that serves Parcel J (0.32 acres), which is currently vacant and improved with one 14,400 square foot, two-story abandoned building formerly used primarily for automobile repair but also as a showroom/office building. The two Parcels (I and J) were reportedly used as a parking garage from 1928 until being converted into their current configuration of an auto repair and sales facility in 1958. The Parcels were utilized for automobile repair and sales for the next 50 years until being abandoned in 2008.

• <u>190-192 South Lexington Avenue (Parcel K)</u>

Parcel K is approximately 0.47 acres in area, is currently vacant and is undeveloped. The Parcel is comprised of grass and small trees along a perimeter fence located adjacent to West Post Road and South Lexington Avenue. According to available historical sources, the Parcel was initially developed sometime between 1900 and 1930 with several residential buildings with street level retail units one of which was occupied by a dry cleaner for some time. In the 1970s the buildings were demolished and the Parcel was utilized for car storage for the dealership located across West Post Road until 2008 when the Parcel was vacated.

2.3.2 Phase I, Phase II, and Closure Reports

The following Phase I and Phase II reports were prepared for the Site:

- Woodard & Curran (January 24, 2008); Phase II Environmental Assessment Report, 35-95 West Post Road and 80 Brady Place, White Plains, New York; Prepared for Brickman Associates.
- Partner Engineering and Science, Inc. (March 29, 2010); Phase I Environmental Site Assessment Report, White Plains Portfolio, 55 and 77 West Post Road, White Plains, New York; Prepared for Nolan and Heller, LLP.
- Partner Engineering and Science, Inc. (March 29, 2010); Phase I Environmental Site Assessment Report, White Plains Portfolio, 2 West Post Road, White Plains, New York; Prepared for Nolan and Heller, LLP.
- Partner Engineering and Science, Inc. (March 30, 2010); Phase I Environmental Site Assessment Report, White Plains Portfolio, 87 and 95 West Post Road, White Plains, New York; Prepared for Nolan and Heller, LLP.

Three closure reports were also prepared for the Site:

- Jade Environmental Inc. (December 31, 2010); Facility Closure and Site Remediation Report, Former White Plains Mazda, 35 West Post Road, White Plains New York; prepared for BRK Acquisition Holdings, LLC.
- DRE Environmental, Inc. (March 2012); Tank Removal & Closure Report; 55 West Post Road, White Plains, New York.

• DRE Environmental, Inc. (March 2012); Tank Removal & Closure Report; 55 West Post Road, White Plains, New York.

Results of the above Environmental Reports are discussed in the following subsections.

2.3.2.1 Woodard & Curran Phase II ESA

The purpose of the Phase II ESA was to evaluate Recognized Environmental Conditions (RECs) identified during a 2007 Phase I ESA. Woodard & Curran's 2007 Phase I ESA identified several REC's including several former USTs, potential fill material, and in-ground hydraulic lifts. Results of the Woodard & Curran Phase II are discussed in Sections 2.5.4 and 2.5.5.

2.3.2.2 Phase I ESA – 55 and 77 West Post Road (Parcels H and G)

Partner Engineering and Science, Inc. (Partner) prepared a Phase I ESA in March of 2010 for 55 and 77 West Post Road which includes Parcels G (77 West Post Road) and H (55 West Post Road). Partner's Phase I identified the following RECs:

- Historical records indicated the Site had been utilized for auto sales and repair purposes since the 1970s including the use of above and below ground storage tanks, hydraulic lift systems, and an oil/water separator. Additionally, the Phase I ESA references the soil and groundwater samples collected during the Phase II ESA and notes that contaminants associated with auto repair has been found in groundwater above applicable standards.
- Two spill numbers are associated with the Site (both listed as active in the Phase I ESA, have subsequently been closed), details as follows:
 - Spill number 0901783 was generated following the removal of a 1,000-gallon fuel oil UST in 2009 in which soil contamination was observed (spill number 0901783 was closed on April 17, 2012).
 - Spill number 0901804 was generated following the removal of an unregistered UST which was found and removed in 2009. An unreported amount of diesel fuel was reported as spilled associated with this UST removal (spill number 0901804 was closed on March 31, 2011).

Partner noted that limited information regarding the above spill numbers and UST removals was available to them during the preparation of the Phase I; however, DRE Environmental, Inc. prepared a Tank Removal and Closure report in 2012 which provides details of the UST removals noted above and is summarized in Section 2.3.2.6 below.

• Partner noted that since one unregistered UST was discovered in Parcel H it is possible that additional orphaned USTs are present at the Parcel. With respect to Parcel G, Partner was informed that a fuel oil UST was removed from the parcel in 1983; however,

Partner references the Phase II ESA which notes there are two USTs located at this Parcel and highlights the discrepancy as a REC.

- An oil water separator (OWS) located at Parcel G was identified as a REC by Partner.
- An unknown steel plate located in the rear parking area of Parcel G was also identified as a REC by Partner.

Additionally, Partner noted a number of environmental concerns including:

- Several canisters of hazardous materials and gases along with drums of recovered (purged) water and stockpiled soils located at the rear of Parcel H. Note the location of the hazardous material was not provided in the Phase I ESA, nor could their location be ascertained from reviewing photographs included in the Phase I ESA.
- Staining observed in the basement of Parcel H, which Partner attributed to a *de minimis* issue.
- Ten hydraulic lifts located at Parcel H. Because these are not in-ground hydraulic lifts they were not identified as RECs.

2.3.2.3 Phase I ESA – 2 West Post Road (Parcel K)

Partner prepared a Phase I ESA in March of 2010 for 2 West Post Road (AKA 190-192 South

Lexington Avenue) (Parcel K). Partner's 2010 Phase I identified the following RECs:

- A former dry cleaner was identified through historical sources as having occupied the Site in 1976.
- Slightly elevated levels of various contaminants in soil and groundwater above applicable regulatory limits were identified at the Site during the Phase II ESA.

Additionally, Partner identified the following environmental concerns:

• Seven former structures used for residential and commercial purposes were formerly located at the Site until the 1970s. Some of these buildings were reportedly heated with fuel oil; however, tank removal records were not provided for review leaving the possibility of orphaned USTs.

2.3.2.4 Phase I ESA – 87 and 95 West Post Road (Parcels A, B, C, D, and F)

Partner prepared a Phase I ESA in March of 2010 for 87 and 95 West Post Road which includes Parcels A (99-103 West Post Road), B (5 Rathbun Avenue), C (3 Brady Place), D (95 West Post Road) and F (79-83 West Post Road). The following RECs were identified:

- Historical use includes a gas station (Parcel A), a dry cleaner (Parcel D) and auto repair (Parcel D).
- Partner reviewed the Phase II ESA and cited elevated levels of contaminants above applicable regulatory limits in both the soil and groundwater as a REC. Additionally, Partner cited open Spill Number 0709611 (opened as a result of the findings of the Woodard & Curran Phase II) which remains open.

2.3.2.5 Facility Closure and Site Remediation Report – 35 West Post Road (Parcel J)

Jade Environmental Inc. (Jade) performed facility closure and remediation activities at the Parcel J in 2010. The scope of work included completing a geophysical survey to look for orphaned USTs, clean and dispose of two USTs and three aboveground storage tanks (ASTs), removing 11 in-ground hydraulic lifts and cleaning and removing a floor drain and an OWS. Note that two in-ground hydraulic lifts were reportedly removed in 2005 (for a total of 13 in-ground hydraulic lifts). Results of the facility closure and assessment activities are as follows:

Geophysical Survey

A Phase I ESA conducted by Middleton Environmental, Inc. at the Parcel previously indicated that buried gasoline tanks may be present under the sidewalks north and south of the property or beneath the shoulder of Maple Avenue. The geophysical survey did not locate the suspected orphaned gasoline tanks. The survey did locate a previously known 1,000-gallon waste oil UST in the parking lot and one 1,000-gallon fuel oil UST beneath the showroom.

UST Removal

Both the waste oil and fuel oil USTs were unearthed, cut open, cleaned, removed and disposed off-Site. Both USTs were found to contain 18-24 inches of an oil and water mixture. Upon removal, holes were observed in the bottoms of both USTs. Impacted soil, based on visual, olfactory and photo-ionization detector (PID) readings were discovered in the fuel oil UST excavation. Impacted soil was not observed in the waste oil UST excavation.

Four end point composite samples were collected from the sidewalls of the waste oil UST excavation along with a groundwater sample as groundwater had accumulated in the bottom of the excavation. Additionally, two monitoring wells were installed and sampled north and south of the UST, and an existing well located on the north end of the parking lot was also sampled.

The report notes that no volatile organic compounds (VOCs) or semivolatile organic compounds (SVOCs) typical of heavy oil were identified in any of the soil samples collected and that no VOCs were detected in the groundwater samples collected from the three wells. Jade therefore concludes that there is no evidence of petroleum impacts in the waste oil UST excavation. Note that summary tables were not provided in the report and the groundwater sample collected from within the excavation is not discussed.

Due to the petroleum impacts observed in the soil in the fuel oil UST excavation Spill Number 10-07371 was generated (closed on September 6, 2012). Approximately 250 tons of impacted soil from the UST excavation was removed and transported off-Site for disposal. Post remedial sampling consisted of five sidewall composite samples and a groundwater sample of the water that had accumulated in the bottom of the excavation. Analytical results indicated that VOCs typical of fuel oil were not detected in soil above regulatory limits. Exceedances of VOCs and SVOCs in groundwater were detected; however, it was Jade's opinion that the exceedances are within an order of magnitude of the regulatory limits and will likely degrade over time.

Hydraulic Lift Removal

Each of the existing eleven in-ground hydraulic lifts was removed by Jade. Additionally, the soil in the locations of two former lifts were excavated to close Spill Number 05-08992 which was generated in 2005 when the two hydraulic lifts were removed from the property.

The report notes that during removal of the lifts it was evident that several if not all the lifts had leaked to some extent. Specifically, a thin layer of free phase hydraulic fluid was observed floating on the groundwater in lift excavations HL-1 and HL-9. Sheens were observed elsewhere.

Soil that appeared saturated with hydraulic fluid was excavated and removed. To remove free phase hydraulic fluid from the groundwater, an eight-hour enhanced fluid recovery (EFR) event was conducted. The EFR event was conducted at each of the 13 excavations; however, excavations HL-1, HL-2, HL-9, HL-10 and HL-13 required repeated events to capture the free phase hydraulic fluid. Post remedial sampling consisted of one composite soil sample from each excavation. Following sampling, each excavation was backfilled. Monitoring wells were

installed at excavations HL-1, HL-2, HL-9, HL-10 and HL-13 to allow for future monitoring at these locations.

Analytical results from the post remediation samples indicated that polychlorinated biphenyls (PCBs) were not detected, trace levels of SVOCs were detected in HL-7 and no petroleum related VOCs were detected. Chlorinated VOCs (CVOCs) were detected in end point samples collected at HL-2, HL-4 and HL-9. Of these detections, only the sample collected at location HL-9 contained cis-1,2-dicloroethene at concentrations above regulatory limits. Analytical results from the groundwater samples collected from the five interior wells indicated exceedances of regulatory limits at location HL-9 for various chlorinated VOCs including tetrachloroethene (PCE), trichloroethene (TCE), cis-1,2-dichloroethene (cis-1,2-DCE), and vinyl chloride (VC). The report notes that a Phase I ESA previously conducted at the parcel documented the use of PCE at the parcel.

Based on the analytical results, the area around HL-9 was excavated. The dimensions of the excavation were approximately 20-feet by 20-feet centered on HL-9 and extended to approximately three feet into the saturated zone. A floor drain sump (possibly an OWS) was discovered and removed during the excavation. In total 108 tons of soil was removed. Additionally, an EFR event was conducted on the accumulated groundwater in the excavation. In total 1,180-gallons of contaminated groundwater was removed from the excavation.

Following the second excavation, four post remediation end point soil samples were collected. Laboratory analytical results revealed no exceedances of CVOCs in the samples analyzed.

The groundwater in the excavation was treated with a hydrogen releasing compound (HRC) to address CVOC concerns in groundwater. Two weeks following the treatment, analytical results indicated exceedances of PCE, TCE, and cis-1,2-DCE. Samples were also collected six weeks following the treatment; PCE, TCE and cis-1,2-DCE were still present at concentrations above regulatory limits; however, trending downward. Based on this downward trend the excavation was again treated with HRC and then backfilled. The last sampling event occurred six months following the initial treatment; analytical results indicated that PCE was the only CVOC detected above regulatory limits. Based on these results Jade concluded that further mitigation was not

necessary. Spill Numbers 05-08992 and 10-07370 were closed on October 5th and October 6th of 2011 respectively.

2.3.2.6 Tank Removal and Closure Report – 55 West Post Road (Parcel H)

In February of 2012, DRE Environmental, Inc. (DRE) removed three adjoining waste oil USTs (550-gallon, 1,000-gallon and a 4,000-gallon) from Parcel H. During removal, impacted soils were observed (based on olfactory and visual observations) and removed. Spill numbers 09-01783 and 09-01804 were generated subsequent to the discovery of impacted soils. In total 150 tons of petroleum impacted soil was removed from the excavation. Post remedial samples consisted of one composite soil sample for the four sidewalls and one bottom sample from each UST. Analytical results indicated that no VOCs or SVOCs were detected above regulatory limits. Spill numbers 09-01783 and 09-01783 and 09-01783 and 09-01804 were closed on April 7, 2012 and March 31, 2011 respectively.

2.3.2.7 Tank Removal and Closure Report – 77 West Post Road (Parcel G)

In February of 2012 DRE removed a 500-gallon fuel oil UST from Parcel G. During removal of the UST petroleum impacted soils (based on visual and olfactory observations) were observed and spill number 11-12748 was generated. Approximately 210 tons of petroleum impacted soil was removed from the excavation. Post remedial soil samples included a total of 11 samples from the sidewalls and bottom of the excavation due to its size. DRE notes that analytical results found no petroleum related compounds above regulatory standards and therefore requested closure of spill number 11-12748. The spill number was closed on September 25, 2013.

2.4 Geological Conditions

A review of the USGS 7.5-minute series topographic quadrangle map (White Plains, New York) indicated that the maximum elevation of nine of the parcels (excluding Parcel K) is approximately 242 feet above mean sea level (ft amsl) in the western portion (Parcels A and B) of the Site (Figure 1). The topography of the Site slopes to the northeast until it reaches a low of approximately 214 ft amsl in the northeastern portion of Parcel I. This represents a change in elevation of approximately 28 feet across the Site. This change in elevation is reflected by a moderate to steep slope in Parcel C through a series of retaining walls, with milder slopes in each of the remaining development parcels. The elevation on the north side of the development parcels

(along West Post Road) is generally higher than in the south side of the Site (i.e., slopes to the south). The elevation of Parcel K is approximately 205 ft amsl and the grade is relatively flat.

Based on water-level data collected during the RI (and previous environmental investigations completed by others), the water table at the Site ranges from approximately 3 feet below land surface (ft bls) to approximately 11 ft bls. Groundwater flow direction is in a northeasterly direction. A groundwater flow map is provided as Figure 3. Generalized geologic cross-sections are provided as Figures 4 and 5.

According to "A Guide to the Geology of Westchester County, New York" by Thomas McGuire (1997), the area of Westchester County containing the Site is in the Manhattan Prong region of the Hudson Highlands physiographic province. The higher ground in Westchester is composed of the Fordham Gneiss and the Manhattan Schist, both highly resistant to erosion. Inwood Marble underlies many of the valleys, including the Bronx River located approximately three-quarters of a mile to the west of the Site. Most of the rocks in the area of the Site have been dated to be of late Precambrian and early Paleozoic ages.

Based on data collected during the RI, historic fill is present beneath the Site at varying thicknesses at depths to 8 ft bls. Parcels F, G and H consist primarily of fine to coarse sands with varying amounts of gravel from about 5 to 20 ft bls interbedded with a lens of silt approximately 2 to 10 ft in thickness. Parcels A through D, I and J consist primarily of fine to medium sands with varying amounts of silt, coarse sand and gravel from about 5 to 30 ft bls interbedded with small lenses of silt about 1 to 3 ft in thickness. Generalized geologic cross-sections are provided as Figures 4 and 5.

2.5 Contamination Conditions

2.5.1 Conceptual Model of Site Contamination

Historical information and previous investigations indicate that historical Site use included the following: automotive service station (Parcel A); auto sales/service (Parcels C, G, H, and J); drycleaner and auto sales/service (Parcel D); dry cleaner (Parcel K). Environmental investigations (Phase II ESA, closure reports, and RI) suggest that historical Site use has impacted the subsurface either through inadvertent releases to the subsurface (i.e., spills or

overfills), leaking underground storage tanks or faulty equipment (i.e., hydraulic lifts). This has the potential to result in localized soil hot-spots at various areas across the Site. Groundwater at the Site is impacted with petroleum related VOCs and CVOCs; however, the former Sunoco station immediately adjacent to Parcel A represents a potential upgradient source.

The Site is currently vacant/used as a parking lot. As such there is a minimal potential for additional releases.

2.5.2 Description of Areas of Concern

Areas of concern (AOCs) are categorized by Site media based on the findings of previous investigations (Phase II ESA, closure reports, and RI), which are detailed in Sections 2.5.4 through 2.5.6. AOCs were determined by comparing parameters in soil to Protection of Groundwater Soil Cleanup Objectives (PGW SCOs) and Restricted Residential Use (RR Use) SCOs, and parameters in groundwater to Ambient Water Quality Standards and Guidance Values A total of 11 compounds (10 VOCs [1,2,4-trimethylbenzene; 1,3,5-(AWQSGVs). trimethylbenzene; benzene; ethylbenzene; n-butylbenzene; n-propylbenzene; toluene; xylenes; PCE; and cis-1,2-DCE] and one SVOC [naphthalene]; hereafter named "Compounds of Concern") were detected in both soil and groundwater samples at concentrations above the PGW SCOs and the AWQSGVs. The proposed remedy is to remove the aforementioned impacted soils and treat residual dissolved contamination via injections of chemical oxidants, which will also address groundwater contaminants. Most of the SVOCs and metals in exceedance of RR Use SCOs are typically found in historic fill or naturally occurring, and there were no discernible distribution patterns that would be indicative of a past release. It is therefore sufficient to address SVOC and metals exceedances via capping (i.e., soil cover, asphalt, concrete, building slab, etc.) to prevent future contact with receptors.

2.5.2.1 Soil

For the purposes of determining if the PGW SCOs are an appropriate standard for soil, exceedances of the AWQSGVs were compared to exceedances of the PGW SCOs on a parcel by parcel basis. The Compounds of Concern were detected in both soil and groundwater samples at concentrations above the PGW SCOs and the AWQSGVs respectively. These compounds were detected at 15 locations (GP-1A, GP-8, GP-9, SB-4, SB-8, SB-10, RB-1, RB-2, RB-7, RB-10,

RB-11, RB-47, RB-48, RW-1, and RW-4) at six Parcels (A, B, C, D, F, and I). However, on-Site migration of VOCs from an automotive service station with a documented history of releases located upgradient of Parcel A is a likely past source of the groundwater impacts observed in Parcel A. Further, the soil samples collected from within Parcel A that exhibited exceedances were mostly collected within the smear-zone. Deeper soil samples do not exhibit exceedances. Contamination at the other parcels could be the result of past operations on or adjacent to the parcels related to automobile repairs/services (Parcels B, C, F, and I) and a former dry cleaner (Parcel D).

Acetone, a common laboratory artifact, was detected at multiple locations at concentrations below the RR Use SCO. Acetone was detected at concentrations above the PGW SCO at multiple locations but was not detected in groundwater samples at concentrations above its AWQSGV; as such, it is not considered a constituent of concern and is not discussed further.

SVOC exceedances of the Unrestricted Use Soil Cleanup Objectives (UU SCOs) and RR Use SCOs consisted of benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, chrysene, dibenz(a,h)anthracene, indeno(1,2,3-cd)pyrene, and naphthalene. Metal exceedances of the UU and RR Use SCOs consisted of arsenic, barium, beryllium, chromium, copper, lead, mercury, nickel, silver, and zinc. Most of these SVOCs and metals are typically found in historic fill, and there were no discernible distribution patterns that would be indicative of a past release. Furthermore, groundwater exceedances were limited to primarily naphthalene in Parcels A, C, and D, and iron, manganese, and sodium, which are naturally-occurring metals in shallow groundwater that are not believed to be associated with an on-Site source of contamination.

2.5.2.2 Groundwater

Eighteen VOCs, including petroleum related hydrocarbons and CVOCs were detected at concentrations above the AWQSGVs at 15 on-Site monitoring wells. Exceedances occurred at Parcels A, C, D, F, G, I, and J. Nine of the 18 VOCs were also detected in one or more off-Site upgradient monitoring wells. The remaining VOCs are either petroleum related hydrocarbons or are natural decay products of PCE (cis-1,2-DCE, trans-1,2-dichloroethene

[trans-1,2-DCE], and VC), of which cis-1,2-DCE and VC were also detected in off-Site upgradient monitoring well RW-21.

Naphthalene was detected above its AWQSGV in monitoring wells RW-1, RW-3, RW-4, and MW-3 in Parcels A, C, and D. Pentachlorophenol was detected above its AWQSGV in monitoring well RW-12 in Parcel H.

Iron, manganese, antimony, and sodium were detected in several monitoring wells at concentrations above the AWQSGVs. These metals are naturally-occurring in shallow groundwater and are not believed to be associated with an on-Site source of contamination; as such they are not discussed further.

2.5.3 Identification of Standards, Criteria and Guidance

Standards, Criteria and Guidance (SCGs) are promulgated requirements ("standards" and "criteria") and non-promulgated guidance ("guidance") that govern activities that may affect the environment and are used by the NYSDEC at various stages in the investigation and remediation of a site. SCGs incorporate both the concept of "applicable or relevant and appropriate requirements" (ARARs) and the "to be considered" (TBCs) category of non-enforceable criteria or guidance, consistent with United States Environmental Protection Agency (USEPA) remediation programs. The following table provides a list of SCGs potentially applicable to the Site. Key SCGs are discussed in greater detail below.

Citation	Title	Regulatory Agency
General		
6 NYCRR Part 375	Environmental Remediation Programs	NYSDEC
29 CFR 1910.120	Hazardous Waste Operations and Emergency Response	US Department of Labor, OSHA
29 CFR 1926	Safety and Health Regulations for Construction	US Department of Labor, OSHA
TAGM HWR-4031	Fugitive Dust Suppression and Particulate Monitoring Program at Inactive Hazardous Waste Sites	NYSDEC
No Cite	Analytical Services Protocol	NYSDEC
DER-10	Technical Guidance for Site Investigation and Remediation	NYSDEC

Citation	Title	Regulatory Agency
Soil		
6 NYCRR Part 375	Environmental Remediation Programs	NYSDEC
CP-51	Soil Cleanup Guidance	NYSDEC
STARS #1	Petroleum-Contaminated Soil Guidance Policy	NYSDEC
Groundwater		
6 NYCRR Part 700-705	Surface Water and Ground Water Classification Standards	NYSDEC
TOGS 1.1.1	Ambient Water Quality Standards and Guidance Values (AWQSGVs)	NYSDEC
40 CFR Part 144	Underground Injection Control Program	USEPA
Air		
Air Guide No. 1	Guidelines for the control of toxic ambient air contaminants	NYSDEC
No Cite	Final - Guidance for Evaluating Soil Vapor Intrusion in the State of New York	NYSDOH
Solid Waste		
6 NYCRR 360	Solid Waste Management Facilities	NYSDEC
6 NYCRR 364	Waste Transporters	NYSDEC
Site Management		
No Cite	Groundwater Monitoring Well Decommissioning Procedures	NYSDEC
6 NYCRR Part 750	State Pollutant Discharge Elimination System (SPDES) Permits	NYSDEC

Legend:

SCG:	Standards, Criteria and Guidelines
NYCRR:	New York Code of Rules and Regulations
NYSDEC:	New York State Department of Environmental Conservation
NYSDOH:	New York State Department of Health
OSHA:	Occupational Safety and Health Administration
TOGS:	Technical Operational Guidance Series
TAGM HWR:	Technical and Administrative Guidance Memorandum - Hazardous Waste Remediation
STARS	Spills Technology and Remediation Series
USEPA	United States Environmental Protection Agency

SCGs for Soil

SCGs for soil at BCP Sites are the numerical SCOs presented in Part 375. The SCOs are categorized into unrestricted use criteria and restricted use (residential, restricted-residential, commercial, or industrial) criteria, as well as criteria for PGW and ecological resources (which can also be satisfied by application of the unrestricted use criteria). The applicability of each

category of SCOs is determined based upon the current and reasonably anticipated future use of the Site, as well as cleanup tracks being evaluated.

The unrestricted criteria are applicable to the evaluation of a Track 1 cleanup per the requirements of the BCP Guide (March 2005). The restricted residential criteria would be appropriate for the Site based upon current and proposed land use and zoning.

As discussed in Section 2.5.2.1, SCGs for soil are separated into PGW SCOs for the Compounds of Concern and RR Use SCOs for the other parameters.

SCOs for the Protection of Ecological Resources were considered, but were determined not to be applicable based on Site-specific conditions. In accordance with the Part 375-6 Regulations, Protection of Ecological Resources SCOs do not and/or will not apply to sites or portions of sites where the condition of the land (e.g., paved, covered by impervious surfaces, buildings and other structures) precludes the existence of an ecological resource that constitutes an important component of the environment. The entire Site has been and will be paved or covered by buildings as part of the proposed future development; therefore, use of SCOs for Protection of Ecological Resources is not applicable.

SCGs for Groundwater

Although the groundwater beneath the Site is not used as a drinking water source, based upon the evaluation of the current soil and groundwater data discussed in the RI, the following SCGs for the groundwater will be considered:

- New York State Groundwater Quality Standards 6 NYCRR Part 703; and
- NYSDEC AWQSGVs TOGS 1.1.1.

SCG for Soil Vapor

The Final "Guidance for Evaluating Soil Vapor Intrusion in the State of New York," issued by the NYSDOH in October 2006, presents the guidelines that were used to evaluate potential soil vapor intrusion issues for the Site.
2.5.4 Soil/Fill Contamination

The following subsections summarize the soil quality based on laboratory analytical data that were generated during the Phase II ESA and the RI. As part of the Phase II ESA, 23 soil borings were installed and 25 soil samples were collected for analysis of select VOCs, SVOCs, metals and PCBs, and pesticides. As part of the RI, 73 soil borings were installed along with the collection and analysis of 101 discrete soil samples from 70 locations for analysis of select VOCs, SVOCs, metals, PCBs, and pesticides. Furthermore, a sample was collected from the bottom of one drywell (DW-1/4-6) and from a catch basin (CB-2) located in the middle of Parcel G.

Soil analytical results compared to the NYSDEC Part 375 UU, PGW, and RR Use SCOs for the other Part 375 parameters are presented in Tables 1 through 5. Exceedances of the UU SCOs are shown on Plate 2. Exceedances of the PGW SCOs for VOCs and RR Use SCOs for the other Part 375 parameters are shown on Plate 3. A discussion of the results is presented in the following subsections.

2.5.4.1 Volatile Organic Compounds

VOC exceedances of the UU, PGW, and RR Use SCOs were detected in seven Phase II ESA samples as summarized below:

- <u>1,2,4-trimethylbenzene</u>: Concentrations ranged from non-detect to 305,000 micrograms per kilogram (μg/kg) in GP-8(8-10). Exceedances of UU and PGW SCOs were detected in six samples: GP-1A(2-3), GP-8(8-10), GP-9(2-4), SB-4(10-14), SB-8(12-14), and SB-10(9-11). Exceedances of RR Use SCO were detected in three samples: GP-8(8-10), GP-9(2-4), and SB-8(12-14). Concentrations exceeding SCOs ranged from 4,240 μg/kg in SB-10(9-11) to 305,000 μg/kg in GP-8(8-10).
- <u>1,3,5-trimethylbenzene</u>: Concentrations ranged from non-detect to 84,000 μg/kg in GP-8(8-10). Exceedances of both UU and PGW SCOs were detected in five samples: GP-1A(2-3), GP-8(8-10), GP-9(2-4), SB-4(10-14), and SB-8(12-14). Exceedances of RR Use SCO were detected in two samples: GP-8(8-10) and GP-9(2-4). Concentrations exceeding SCOs ranged from 12,800 μg/kg in GP-1A(2-3) to 84,000 μg/kg in GP-8(8-10).
- <u>Acetone</u>: Concentrations ranged from non-detect to $116 \mu g/kg$ in SB-7(12-16). Exceedance of both UU and PGW SCOs was detected in SB-7(12-16) only.
- <u>Benzene</u>: Concentrations ranged from non-detect to $143 \mu g/kg$ in SB-10(9-11). Exceedance of both UU and PGW SCOs was detected in SB-10(9-11) only.

- <u>Ethylbenzene</u>: Concentrations ranged from non-detect to 131,000 μg/kg in GP-8(8-10). Exceedances of both UU and PGW SCOs were detected in five samples: GP-8(8-10), GP-9(2-4), SB-4(10-14), SB-8(12-14), and SB-10(9-11). Exceedances of RR Use SCO were detected in two samples: GP-8(8-10) and GP-9(2-4). Concentrations exceeding SCOs ranged from 2,230 μg/kg in SB-10(9-11) to 131,000 μg/kg in GP-8(8-10).
- <u>n-Butylbenzene</u>: Concentrations ranged from non-detect to 22,400 µg/kg in GP-8(8-10). Exceedance of both UU and PGW SCOs was detected in GP-8(8-10) only.
- <u>n-Propylbenzene</u>: Concentrations ranged from non-detect to 60,000 µg/kg in GP-8(8-10). Exceedances of both UU and PGW SCOs were detected in five samples: GP-1A(2-3), GP-8(8-10), GP-9(2-4), SB-4(10-14), and SB-8(12-14). Concentrations exceeding SCOs ranged from 4,400 µg/kg in GP-1A(2-3) to 60,000 µg/kg in GP-8(8-10).
- <u>Xylenes (total</u>): Concentrations ranged from non-detect to 368,100 μg/kg in GP-8(8-10). Exceedances of both UU and PGW SCOs were detected in six samples: GP-1A(2-3), GP-8(8-10), GP-9(2-4), SB-4(10-14), SB-8(12-14), and SB-10(9-11). Exceedances of RR Use SCO were detected in two samples: GP-8(8-10) and GP-9(2-4). Concentrations exceeding SCOs ranged from 2,697 μg/kg in SB-10(9-11) to 368,100 μg/kg in GP-8(8-10).

VOC exceedances of the UU, PGW, and RR Use SCOs were detected in 28 RI samples as summarized below:

- <u>Acetone</u>: Concentrations ranged from non-detect to $100 \mu g/kg$ in RB-16(6-8). Exceedances of both UU and PGW SCOs were detected in 13 samples: RB-4(7-9), RB-10(10-12), RB-14(11-12), RB-16(6-8), RB-17(6-8), RB-20(5-6.5), RB-28(7-8), RB-30(5-7), RB-31(5-7), RB-40(3-5), RB-42(5-7), RW-7(10-12), and RW-14(3-5). Concentrations exceeding SCOs ranged from 52 $\mu g/kg$ in RB-20(5-6.5) to 100 $\mu g/kg$ in RB-16(6-8). Note acetone is a common laboratory artifact.
- <u>Benzene</u>: Concentrations ranged from non-detect to 3,400 µg/kg (estimated) in RB-11(2-4). Exceedances of both UU and PGW SCOs were detected in four samples: RB-10(1-3), RB-11(2-4), RB-11(5-7), and RB-47(4-6). Concentrations exceeding SCOs ranged from 79 µg/kg (estimated) in RB-10(1-3) to 3,400 µg/kg (estimated) in RB-11(2-4).
- <u>Cis-1,2-DCE</u>: Concentrations ranged from non-detect to 1,200 µg/kg in RB-48(6-8). Exceedance of both UU and PGW SCOs was detected in RB-48(6-8) only.
- <u>Ethylbenzene</u>: Concentrations ranged from non-detect to 140,000 μg/kg in RB-48(4-6). Exceedances of both UU and PGW SCOs were detected in 11 samples: RB-1(10-12), RB-2(10-12), RB-7(15-17), RB-10(1-3), RB-11(2-4), RB-11(5-7), RB-47(4-6), RB-48(4-6), RB-48(6-8), RW-1(13-15), and RW-4(1-3). Exceedances of RR Use SCO were detected in two samples: RB-11(2-4) and RB-48(4-6). Concentrations exceeding SCOs ranged from 1,400 μg/kg in RB-2(10-12) to 140,000 μg/kg in RB-48(4-6).

- <u>PCE</u>: Concentrations ranged from non-detect to 2,200 µg/kg in RB-48(6-8). Exceedance of both UU and PGW SCOs was detected in RB-48(6-8) only.
- <u>Toluene</u>: Concentrations ranged from non-detect to 37,000 μg/kg in RB-11(2-4). Exceedances of both UU and PGW SCOs were detected in four samples: RB-11(2-4), RB-11(5-7), RB-47(4-6), and RB-48(4-6). Concentrations exceeding SCOs ranged from 780 μg/kg in RB-11(5-7) to 37,000 μg/kg in RB-11(2-4).
- <u>Xylenes (total</u>): Concentrations ranged from non-detect to 430,000 μg/kg in RB-11(2-4). Exceedances of the UU SCO were detected in 15 samples: RB-1(10-12), RB-2(10-12), RB-7(13-15), RB-7(15-17), RB-9(13-15), RB-10(1-3), RB-11(2-4), RB-11(5-7), RB-47(4-6), RB-48(4-6), RB-48(6-8), RW-1(13-15), RW-4(1-3), RW-4(7-9), and RW-9(4-6). Exceedances of the PGW SCOs were detected in 10 samples: RB-1(10-12), RB-2(10-12), RB-7(15-17), RB-10(1-3), RB-11(2-4), RB-11(5-7), RB-47(4-6), RB-48(4-6), RB-48(6-8), and RW-1(13-15). Exceedances of RR Use SCO were detected in two samples: RB-11(2-4) and RB-48(4-6). Concentrations exceeding SCOs ranged from 300 μg/kg (estimated) in RW-4(1-3) to 430,000 μg/kg in RB-11(2-4).

2.5.4.2 Semivolatile Organic Compounds

SVOC exceedances of the UU and RR Use SCOs were detected in one Phase II ESA sample, GP-1B(4-6), as summarized below:

- <u>Benzo(a)pyrene</u>: Concentrations ranged from non-detect to 1.34 mg/kg and exceeded both UU and RR Use SCOs.
- <u>Benzo(b)fluoranthene</u>: Concentrations ranged from non-detect to 1.36 mg/kg and exceeded both UU and RR Use SCOs.
- <u>Benzo(k)fluoranthene</u>: Concentrations ranged from non-detect to 1.01 mg/kg and exceeded the UU SCO only.
- <u>Chrysene</u>: Concentrations ranged from non-detect to 1.47 mg/kg and exceeded the UU SCO only.
- <u>Dibenz(a,h)anthracene</u>: Concentrations ranged from non-detect to 1.43 mg/kg and exceeded both UU and RR Use SCOs.

SVOC exceedances of the UU and RR Use SCOs were detected in 14 RI samples as summarized below:

<u>Benzo(a)anthracene</u>: Concentrations ranged from non-detect to 8,900 µg/kg in RB-28(7-8). Exceedances of both UU and RR Use SCOs were detected in 11 samples: CB-2, DW-1(4-6), RB-14(11-12), RB-19(5-7), RB-22(4-6), RB-28(5-7), RB-28(7-8), RB-34(4-6), RW-8(5-7), RW-12(5-7), and RW-12(7-8). Concentrations exceeding SCOs ranged from 1,200 µg/kg in RB-14(11-12) and RW-8(5-7) to 8,900 µg/kg in RB-28(7-8).

- <u>Benzo(a)pyrene</u>: Concentrations ranged from non-detect to 7,000 µg/kg in RB-28(7-8). Exceedances of both UU and RR Use SCOs were detected in 10 samples: CB-2, DW-1(4-6), RB-14(11-12), RB-19(5-7), RB-22(4-6), RB-28(5-7), RB-28(7-8), RB-34(4-6), RW-12(5-7), and RW-12(7-8). Concentrations exceeding SCOs ranged from 1,300 µg/kg in RB-14(11-12) to 7,000 µg/kg in RB-28(7-8).
- <u>Benzo(b)fluoranthene</u>: Concentrations ranged from non-detect to 8,800 μg/kg in RB-28(7-8). Exceedances of both UU and RR Use SCOs were detected in 11 samples: CB-2, DW-1(4-6), RB-14(11-12), RB-19(5-7), RB-22(4-6), RB-28(5-7), RB-28(7-8), RB-34(4-6), RW-8(5-7), RW-12(5-7), and RW-12(7-8). Concentrations exceeding SCOs ranged from 1,100 μg/kg in RW-8(5-7) to 8,800 μg/kg in RB-28(7-8).
- <u>Benzo(k)fluoranthene</u>: Concentrations ranged from non-detect to 3,700 μg/kg in RB-28(5-7). Exceedances of the UU SCO were detected in six samples: DW-1(4-6), RB-19(5-7), RB-22(4-6), RB-28(5-7), RB-28(7-8), and RW-12(5-7). There were no exceedances of the RR Use SCO. Concentrations exceeding the UU SCO ranged from 1,000 μg/kg in RB-19(5-7) to 3,700 μg/kg in RB-28(5-7).
- <u>Chrysene</u>: Concentrations ranged from non-detect to 7,600 μ g/kg in RW-12(5-7). Exceedances of the UU SCO were detected in 11 samples: CB-2, DW-1(4-6), RB-14(11-12), RB-19(5-7), RB-22(4-6), RB-28(5-7), RB-28(7-8), RB-34(4-6), RW-8(5-7), RW-12(5-7), and RW-12(7-8). Exceedances of the RR Use SCO were detected in four samples: RB-22(4-6), RB-28(5-7), RB-28(7-8), and RW-12(7-8). Concentrations exceeding SCOs ranged from 1,100 μ g/kg in RB-14(11-12) and RW-8(5-7) to 7,600 μ g/kg in RW-12(5-7).
- <u>Dibenzo(a,h)anthracene</u>: Concentrations ranged from non-detect to 2,000 µg/kg in RB-28(5-7). Exceedances of both UU and RR Use SCOs were detected in five samples: DW-1(4-6), RB-22(4-6), RB-28(5-7), RB-28(7-8), and RW-12(5-7). Concentrations exceeding SCOs ranged from 410 µg/kg in DW-1(4-6) to 2,000 µg/kg in RB-28(5-7).
- <u>Indeno(1,2,3-cd)pyrene</u>: Concentrations ranged from non-detect to 4,600 μg/kg in RW-12(5-7). Exceedances of both UU and RR Use SCOs were detected in 13 samples: CB-2, DW-1(4-6), RB-9(11-13), RB-14(11-12), RB-19(5-7), RB-22(4-6), RB-28(5-7), RB-28(7-8), RB-30(5-7), RB-34(4-6), RW-8(5-7), RW-12(5-7), and RW-12(7-8). Concentrations exceeding SCOs ranged from 570 μg/kg (estimated) in RB-9(11-13) to 4,600 μg/kg in RW-12(5-7).
- <u>Naphthalene</u>: Concentrations ranged from non-detect to 26,000 µg/kg in RB-11(2-4). Exceedance of the UU SCO was detected in RB-11(2-4) only. There were no exceedances of the RR Use SCO.

2.5.4.3 Metals

Metals exceedances of the UU and RR Use SCOs were detected in 17 Phase II ESA samples as summarized below:

- <u>Arsenic</u>: Concentrations ranged from non-detect to 21.90 milligrams per kilogram (mg/kg) in SB-3(3-4). Exceedance of both UU and RR Use SCOs was detected in SB-3(3-4) only.
- <u>Barium</u>: Concentrations ranged from 47.8 mg/kg to 483.0 mg/kg in GP-10(2-4). Exceedance of both UU and RR Use SCOs was detected in GP-10(2-4) only.
- <u>Chromium</u>: Concentrations ranged from 10.5 mg/kg to 32.1 mg/kg in GP-1B(4-6). Exceedances of the UU SCO were detected in two samples: GP-1B(4-6) and GP-12(6-8). There were no exceedances of the RR Use SCO. Concentrations exceeding the UU SCO ranged from 30.9 mg/kg in GP-12(6-8) to 32.1 mg/kg in GP-1B(4-6).
- <u>Copper</u>: Concentrations ranged from 10.6 mg/kg to 415.0 mg/kg in GP-1B(4-6). Exceedances of the UU SCO were detected in three samples: GP-1B(4-6), GP-10(2-4), and SB-3(3-4). Exceedance of the RR Use SCO was detected in GP-1B(4-6). Concentrations exceeding SCOs ranged from 102.0 mg/kg in SB-3(3-4) to 415.0 mg/kg in GP-1B(4-6).
- <u>Lead</u>: Concentrations ranged from non-detect to 1,730.0 mg/kg in GP-10(2-4). Exceedances of the UU SCO were detected in 12 samples: GP-1A(2-3), GP-1B(4-6), GP-3(4-5.5), GP-4(3.5-5.5), GP-5(6-8), GP-6(6-8), GP-7(2-4), GP-9(2-4), GP-10(2-4), GP-11(4-6), GP-12(6-8), and SB-3(3-4). Exceedance of the RR Use SCO was detected in GP-10(2-4). Concentrations exceeding SCOs ranged from 73.4 mg/kg in GP-12(6-8) to 1730.0 mg/kg in GP-10(2-4).
- <u>Mercury</u>: Concentrations ranged from non-detect to 70.8 mg/kg in GP-9(2-4). Exceedances were detected in six samples: GP-4(3.5-5.5), GP-5(6-8), GP-7(2-4), GP-9(2-4), and SB-3(3-4). Exceedance of the RR Use SCO was detected in GP-9(2-4). Concentrations exceeding SCOs ranged from 0.227 mg/kg in GP-5(6-8) to 70.8 mg/kg in GP-9(2-4).
- <u>Silver</u>: Concentrations ranged from non-detect to 425.0 mg/kg in GP-3(4-5.5). Exceedances of the UU SCO were detected in 17 samples: GP-1A(2-3), GP-1B(4-6), GP-2(4-6), GP-3(4-5.5), GP-4(3.5-5.5), GP-5(6-8), GP-6(6-8), GP-7(2-4), GP-8(8-10), GP-9(2-4), GP-10(2-4), GP-11(4-6), GP-12(6-8), SB-2A(4-6), SB-2B(8-10), SB-3(3-4), and SB-4(10-14). Exceedances of the RR Use SCO were detected in seven samples: GP-1B(4-6), GP-2(4-6), GP-3(4-5.5), GP-4(3.5-5.5), GP-4(3.5-5.5), GP-6(6-8), GP-7(2-4), and GP-10(2-4). Concentrations exceeding SCOs ranged from 2.15 mg/kg in SB-2B(8-10) to 425.0 mg/kg in GP-3(4-5.5).
- <u>Zinc</u>: Concentrations ranged from 22.2 mg/kg to 584.0 mg/kg in SB-3(3-4). Exceedances of the UU SCO were detected in eight samples: GP-1A(2-3), GP-1B(4-6), GP-2(4-6), GP-4(3.5-5.5), GP-9(2-4), GP-10(2-4), GP-11(4-6), and SB-3(3-4). There were no exceedances of the RR Use SCO. Concentrations exceeding the UU SCO ranged from 114.0 mg/kg in GP-9(2-4) to 584.0 mg/kg in SB-3(3-4).

Metals exceedances of the UU and RR Use SCOs were detected in 54 RI samples as summarized below:

- <u>Arsenic</u>: Concentrations ranged from 2 mg/kg to 18 mg/kg in RB-28(5-7). Exceedances of the UU SCO were detected in six samples: RB-21(4-6), RB-28(5-7), RB-37(1-3), RB-39(1-3), RW-12(5-7), and RW-12(7-8). Exceedance of the RR Use SCO was detected in RB-28(5-7). Concentrations exceeding SCOs ranged from 14 mg/kg in RB-39(1-3) and RW-12(5-7) to 18 mg/kg in RB-28(5-7).
- <u>Barium</u>: Concentrations ranged from 32 mg/kg to 490 mg/kg in RB-26(5-7). Exceedances of the UU SCO were detected in three samples: RB-26(5-7), RB-39(1-3), and RW-10(6-8). Exceedance of the RR Use SCO was detected in RB-26(5-7). Concentrations exceeding SCOs ranged from 370 mg/kg in RB-39(1-3) to 490 mg/kg in RB-26(5-7).
- <u>Beryllium</u>: Concentrations ranged from 0.09 mg/kg (estimated) to 8 mg/kg in RB-10(18-19) and exceeded the UU SCO only.
- <u>Chromium</u>: Concentrations ranged from 10 mg/kg to 53 mg/kg in RB-11(15-16). Exceedances of the UU SCO were detected in 12 samples: RB-1(10-12), RB-2(10-12), RB-2(19-20), RB-3(18-20), RB-4(7-9), RB-10(10-12), RB-11(15-16), RB-25(6-7.5), RW-1(8-10), RW-1(13-15), RW-4(13-14), and RW-19(5.5-7.5). There were no exceedances of the RR Use SCO. Concentrations exceeding the UU SCO ranged from 32 mg/kg in RW-19(5.5-7.5) to 53 mg/kg in RB-11(15-16).
- <u>Copper</u>: Concentrations ranged from 1.9 mg/kg to 97 mg/kg in RB-39(1-3). Exceedances of the UU SCO were detected in seven samples: CB-2, RB-1(10-12), RB-2(19-20), RB-28(5-7), RB-39(1-3), RW-11(4-6), and RW-12(5-7). There were no exceedances of the RR Use SCO. Concentrations exceeding the UU SCO ranged from 51 mg/kg in CB-2 to 97 mg/kg in RB-39(1-3).
- <u>Lead</u>: Concentrations ranged from 1.7 mg/kg (estimated) to 1,100 mg/kg in RW-10(6-8). Exceedances of the UU SCO were detected in 35 samples. Exceedances of the RR Use SCO were detected in three samples: DW-1(4-6), RW-10(6-8), and RW-11(4-6). Concentrations exceeding SCOs ranged from 67 mg/kg in RB-17(6-8) to 1,100 mg/kg in RW-10(6-8).
- <u>Mercury</u>: Concentrations ranged from 0.03 mg/kg (estimated) to 2.9 mg/kg in RB-22(4-6). Exceedances of the UU SCO were detected in 20 samples. Exceedances of the RR Use SCO were detected in two samples: RB-22(4-6) and RB-33(4-6). Concentrations exceeding SCOs ranged from 0.19 mg/kg in RB-17(6-8) and RB-36(2-4) to 2.9 mg/kg in RB-22(4-6).
- <u>Nickel</u>: Concentrations ranged from 5.3 mg/kg to 52 mg/kg in RB-11(15-16). Exceedances of the UU SCO were detected in five samples: RB-10(10-12), RB-10(18-19), RB-11(15-16), RW-12(5-7), and RW-19(5.5-7.5). There were no exceedances of the RR Use SCO. Concentrations exceeding the UU SCO ranged from 31 mg/kg in RW-12(5-7) to 52 mg/kg in RB-11(15-16).

• <u>Zinc</u>: Concentrations ranged from 15 mg/kg to 640 mg/kg in RW-11(4-6). Exceedances of the UU SCO were detected in 34 samples. There were no exceedances of the RR Use SCO. Concentrations exceeding SCOs ranged from 110 mg/kg in RB-6(9-11), RB-39(1-3), and RW-16(3-5) to 640 mg/kg in RW-11(4-6).

2.5.4.4 Polychlorinated Biphenyls

Total PCBs were detected in GP-10(2-4) of the Phase II ESA samples at a concentration less than the UU and RR Use SCOs. Total PCBs exceeding the UU SCO but less than the RR Use SCO was detected in RB-28(5-7) of the RI samples at 146.5 μ g/kg (estimated).

2.5.4.5 Pesticides

Two pesticides (4,4'-DDE and 4,4'-DDT) were detected in GP-10(2-4) of the Phase II ESA samples at 18.3 μ g/kg and 21.5 μ g/kg, respectively, which exceeded the UU SCOs but were less than the RR Use SCOs. The following five RI samples exhibited one or more pesticide concentrations in exceedance of the UU SCOs but less than the RR Use SCOs. CB-2 exhibited 4,4'-DDT at 54.7 μ g/kg. DW-1(4-6) exhibited 4,4'-DDD at 6.46 μ g/kg. RB-28(5-7) exhibited 4,4'-DDD, 4,4'-DDE, 4,4'-DDT, and dieldrin at 134 μ g/kg, 437 μ g/kg, 1,060 μ g/kg, and 41.8 μ g/kg (estimated), respectively. RB-28(7-8) exhibited 4,4'-DDT at 300 μ g/kg.

2.5.5 On-Site and Off-Site Groundwater Contamination

Woodard & Curran installed three permanent groundwater monitoring wells (MW-1 through MW-3); and collected 12 groundwater grab samples for a total of 15 groundwater samples analyzed during their investigation in 2007. These samples were analyzed for select VOCs, SVOCs, and metals. As part of the RI, 25 new monitoring wells (24 water table monitoring wells and one deep monitoring well) were installed along with the collection and analysis of 33 discrete groundwater samples (25 from newly installed monitoring wells, two from pre-existing monitoring wells and six groundwater grab samples from two groundwater profile borings). A summary of the results compared to the NYSDEC AWQSGVs are presented in Tables 6 through 10. Phase II ESA groundwater sample analytical exceedances are shown on Plate 4. Exceedances of the AWQSGVs from the RI data are shown on Plate 5. A discussion of the results is presented below.

2.5.5.1 Volatile Organic Compounds

VOC exceedances of applicable AWQSGVs were detected in 11 Phase II ESA samples as summarized below:

- <u>1,2,4-trimethylbenzene</u>: Concentrations ranged from non-detect to 1,460 micrograms per liter (μg/L) in GP-9W, and exceeded its AWQSGV of 5 μg/L in five samples: GP-1W, GP-9W, SB-7W, SB-8W, and MW-3.
- <u>1,3,5-trimethylbenzene</u>: Concentrations ranged from non-detect to 546 μ g/L in GP-9W, and exceeded its AWQSGV of 5 μ g/L in five samples: GP-1W, GP-9W, SB-7W, SB-8W, and MW-3.
- <u>4-isopropyltoluene</u>: Concentrations ranged from non-detect to 101 μ g/L in GP-9W, and exceeded its AWQSGV of 5 μ g/L in three samples: GP-9W, SB-8W and MW-3.
- <u>Benzene</u>: Concentrations ranged from non-detect to 446 µg/L in SB-7W, and exceeded its AWQSGV of 1 µg/L in five samples: GP-4W, GP-9W, SB-7W, SB-8W and SB-9W.
- <u>Cis-1,2-DCE</u>: Concentrations ranged from non-detect to 222 µg/L in SB-9W, and exceeded its AWQSGV of 5 µg/L in four samples: GP-4W, GP-12W, SB-5W and SB-9W.
- <u>Ethylbenzene</u>: Concentrations ranged from non-detect to 1,020 µg/L in GP-9W, and exceeded its AWQSGV of 5 µg/L in four samples: GP-9W, SB-7W, SB-8W, and MW-3.
- <u>Isopropylbenzene</u>: Concentrations ranged from non-detect to $102 \mu g/L$ in GP-9W, and exceeded its AWQSGV of $5 \mu g/L$ in two samples: GP-9W and GP-7W.
- <u>Methyl tert-butyl ether (MTBE</u>): Concentrations ranged from non-detect to 1,120 µg/L in SB-7W, and exceeded its AWQSGV of 10 µg/L in three samples: GP-12W, SB-5W and SB-7W.
- <u>Naphthalene</u>: Concentrations ranged from non-detect to $532 \mu g/L$ in GP-9W, and exceeded its AWQSGV of $10 \mu g/L$ in two samples: GP-9W and SB-7W.
- <u>n-butylbenzene</u>: Concentrations ranged from non-detect to $80.5 \,\mu$ g/L in GP-9W. Only GP-9W exceeded the AWQSGV of $5 \,\mu$ g/L.
- <u>Sec-butylbenzene</u>: Concentrations ranged from non-detect to $53.0 \,\mu g/L$ in GP-9W. Only GP-9W exceeded the AWQSGV of $5 \,\mu g/L$.
- <u>n-propylbenzene</u>: Concentrations ranged from non-detect to $231 \mu g/L$ in GP-9W, and exceeded its AWQSGV of $5 \mu g/L$ in three samples: GP-4W, GP-9W and SB-7W.
- <u>Toluene</u>: Concentrations ranged from non-detect to $114 \mu g/L$ in GP-9W, and exceeded its AWQSGV of $5 \mu g/L$ in two samples: GP-9W and SB-7W.

- <u>VC</u>: Concentrations ranged from non-detect to $21.9 \,\mu$ g/L in GP-4W, and exceeded its AWQSGV of $2 \,\mu$ g/L in two samples: GP-4W and SB-5W.
- <u>Xylenes (total</u>): Concentrations ranged from non-detect to 2,680 μ g/L in GP-9W, and exceeded its AWQSGV of 5 μ g/L in two samples: GP-9W and SB-7W.

VOC exceedances of applicable AWQSGVs were detected in 21 RI samples as summarized below:

- <u>Benzene</u>: Concentrations ranged from non-detect to 530 μg/L in RW-23, and exceeded its AWQSGV of 1 μg/L in 10 samples: RB-50(20), RW-1, RW-3, RW-4, RW-5D, RW-11, RW-21, RW-22, RW-23, and SB-4/MW-3.
- <u>Cis-1,2-DCE</u>: Concentrations ranged from non-detect to 220 μg/L in RW-5D, and exceeded its AWQSGV of 5 μg/L in 12 samples: RB-50(10), RB-50(2), RB-51(20), RW-3, RW-5D, RW-9, RW-10, RW-11, RW-16, RW-17, RW-21, and SB-1/MW-1.
- <u>Ethylbenzene</u>: Concentrations ranged from non-detect to 1,100 μg/L in RW-23, and exceeded its AWQSGV of 5 μg/L in eight samples: RW-1, RW-3, RW-4, RW-9, RW-21, RW-22, RW-23, and SB-4/MW-3.
- <u>Isopropylbenzene</u>: Concentrations ranged from non-detect to 95 μg/L in RW-3, and exceeded its AWQSGV of 5 μg/L in seven samples: RW-1, RW-3, RW-4, RW-9, RW-22, RW-23, and SB-4/MW-3.
- <u>MTBE</u>: Concentrations ranged from non-detect to 120 µg/L in RW-11, and exceeded its AWQSGV of 10 µg/L in six samples: RW-5D, RW-8, RW-9, RW-11, RW-22, and RW-23.
- <u>PCE</u>: Concentrations ranged from non-detect to 3,300 μg/L in RB-50(30), and exceeded its AWQSGV of 5 μg/L in 13 samples: RB-50(10), RB-50(20), RB-50(30), RB-51(10), RB-51(20), RB-51(30), RW-3, RW-5D, RW-9, RW-10, RW-16, RW-17, and RW-21.
- <u>Toluene</u>: Concentrations ranged from non-detect to 110 μg/L in RW-23, and exceeded its AWQSGV of 5 μg/L in seven samples: RB-50(10), RB-50(20), RB-50(30), RW-1, RW-3, RW-22, and RW-23.
- <u>Trans-1,2-DCE</u>: Concentrations ranged from non-detect to $18 \mu g/L$ (estimated) in RW-17, and exceeded its AWQSGV of $5 \mu g/L$ in RW-17 only.
- <u>TCE</u>: Concentrations ranged from non-detect to 420 μg/L in RB-50(30), and exceeded its AWQSGV of 5 μg/L in 12 samples: RB-50(10), RB-50(20), RB-50(30), RB-51(10), RB-51(20), RB-51(30), RW-5D, RW-9, RW-10, RW-16, RW-17, and RW-21.
- <u>VC</u>: Concentrations ranged from non-detect to 49 μg/L in RW-17, and exceeded its AWQSGV of 2 μg/L in seven samples: RB-50(10), RW-3, RW-5D, RW-8, RW-9, RW-11, and RW-17.

• Xylenes (total): Concentrations ranged from non-detect to 2,800 µg/L in RW-23, and exceeded its AWQSGV of 5 µg/L in nine samples: RB-50(10), RB-50(20), RW-1, RW-3, RW-4, RW-21, RW-22, RW-23, and SB-4/MW-3.

2.5.5.2 Semivolatile Organic Compounds

SVOC exceedances of applicable AWQSGVs were detected in three Phase II ESA samples as summarized below:

- 2-methylnaphthalene: Concentrations ranged from non-detect to 79.9 µg/L in GP-9W, and exceeded its AWQSGV of 50 µg/L in GP-9W only.
- Naphthalene: Concentrations ranged from non-detect to $237 \,\mu g/L$ in GP-9W, and exceeded its AWQSGV of 10 µg/L in GP-9W, SB-8W and MW-3.

SVOC exceedances of applicable AWQSGVs were detected in five RI samples as summarized

below:

- Naphthalene: Concentrations ranged from non-detect to 180 µg/L in SB-4/MW-3, and exceeded its AWQSGV of 10 µg/L in four samples: RW-1, RW-3, RW-4, and SB-4/MW-3.
- Pentachlorophenol: Concentrations ranged from non-detect to 2 µg/L in RW-12, and exceeded its AWQSGVs of 1 µg/L in RW-12 only.

2.5.5.3 Metals

Metals exceedances of applicable AWQSGVs were detected in all Phase II ESA groundwater samples as summarized below. Please note samples with GP- and SB- prefixes were collected from temporary monitoring wells, whereas those with MW- prefixes were from permanent monitoring wells that are more representative of the Site's groundwater conditions.

- Antimony: Concentrations ranged from non-detect to $125 \,\mu$ g/L in GP-6W, and exceeded • its AWQSGV of 3 µg/L in three samples: GP-2W, GP-6W and MW-1.
- Arsenic: Concentrations ranged from non-detect to 231 µg/L in GP-6W, and exceeded its AWQSGV of 25 µg/L in two samples: GP-6W and GP-9W.
- Barium: Concentrations ranged from $140 \,\mu g/L$ to $6,070 \,\mu g/L$ in GP-6W, and exceeded its AWQSGV of 1,000 µg/L in two samples: GP-6W and GP-9W.
- Beryllium: Concentrations ranged from non-detect to 18.8 µg/L in GP-6W, and exceeded its AWQSGV of 3 µg/L in two samples: GP-6W and GP-9W.
- Cadmium: Concentrations ranged from non-detect to 27.5 µg/L in GP-6W, and exceeded its AWQSGV of 5 µg/L in GP-6W only.

- <u>Chromium</u>: Concentrations ranged from non-detect to $1,640 \mu g/L$ in GP-6W, and exceeded its AWQSGV of $50 \mu g/L$ in three samples: GP-6W, GP-9W, and GP-12W.
- <u>Copper</u>: Concentrations ranged from non-detect to 1,520 µg/L in GP-6W, and exceeded its AWQSGV of 200 µg/L in two samples: GP-6W and GP-9W.
- Iron: Concentrations ranged from 27.3 μg/L to 2,160,000 μg/L in GP-6W, and exceeded its AWQSGV of 300 μg/L in 10 samples: GP-1W, GP-2W, GP-4W, GP-6W, GP-9W, GP-12W, SB-5W, MW-1, MW-2 and MW-3.
- <u>Iron and Manganese Combined</u>: Concentrations ranged from 460 μg/L to 2,175,800 μg/L in GP-6W, and exceeded its AWQSGV of 500 μg/L in all samples except SB-11W.
- <u>Lead</u>: Concentrations ranged from non-detect to 5,750 µg/L in GP-6W, and exceeded its AWQSGV of 25 µg/L in four samples: GP-4W, GP-6W, GP-9W, and GP-12W.
- <u>Magnesium</u>: Concentrations ranged from $9,120 \ \mu g/L$ to $384,000 \ \mu g/L$ in GP-6W, and exceeded its AWQSGV of 7 $\mu g/L$ in every sample analyzed.
- <u>Manganese</u>: Concentrations ranged from $383 \mu g/L$ to $15,000 \mu g/L$ in GP-6W, and exceeded its AWQSGV of $300 \mu g/L$ in every sample analyzed.
- <u>Mercury</u>: Concentrations ranged from non-detect to $6.4 \mu g/L$ in GP-6W, and exceeded its AWGSGV of $0.7 \mu g/L$ in GP-6W only.
- <u>Nickel</u>: Concentrations ranged from non-detect to 942 μ g/L in GP-6W, and exceeded its AWQSGV of 100 μ g/L in two samples: GP-6W and GP-9W.
- <u>Sodium</u>: Concentrations ranged from $27,700 \,\mu$ g/L to $831,000 \,\mu$ g/L in MW-3, and exceeded its AWQSGV of $20,000 \,\mu$ g/L in every sample analyzed.
- <u>Thallium</u>: Concentrations ranged from non-detect to $112 \mu g/L$ in GP-6W, and exceeded its AWQSGV of $1 \mu g/L$ in four samples: GP-6W, SB-5W, SB-9W and MW-3.
- <u>Zinc</u>: Concentrations ranged from non-detect to $5,080 \ \mu g/L$ in GP-6W, and exceeded its AWQSGV of $2,000 \ \mu g/L$ in GP-6W only.

Metals exceedances of applicable AWQSGVs were detected in all RI groundwater samples as summarized below:

- <u>Antimony</u>: Concentrations ranged from non-detect to $5.03 \,\mu$ g/L (estimated) in RW-5, and exceeded its AWQSGV of $3 \,\mu$ g/L in RW-5 only.
- <u>Iron</u>: Concentrations ranged from non-detect to $35,500 \,\mu$ g/L in SB-4/MW-3, and exceeded its AWQSGV of $300 \,\mu$ g/L in 17 samples.

- <u>Manganese</u>: Concentrations ranged from $164 \mu g/L$ in RW-13 to $6,538 \mu g/L$ in SB-4/MW-3, and exceeded its AWQSGV of $300 \mu g/L$ in 21 samples.
- <u>Sodium</u>: Concentrations ranged from $11,300 \,\mu g/L$ to $583,000 \,\mu g/L$ in RW-3, and exceeded its AWQSGV of 20,000 $\mu g/L$ in 24 samples.

2.5.5.4 Polychlorinated Biphenyls

PCBs were non-detect in all RI groundwater samples.

2.5.5.5 Pesticides

Pesticides were non-detect in all RI groundwater samples.

2.5.6 On-Site and Off-Site Soil Vapor Contamination

Soil vapor samples were not collected from on-Site locations during the RI.

Off-Site soil vapor data from two off-Site temporary soil vapor points (SV-1 and SV-2) installed in the sidewalk along Maple Avenue as part of the LOIWP are summarized in Table 11. Multiple VOCs were detected in the samples including some petroleum related compounds (2hexanone, ethanol, hexane, benzene, toluene, xylenes, heptane, and cyclohexane). Regulatory guidance on soil vapor and indoor air quality is presented in Matrix 1 and Matrix 2 from the NYSDOH Center for Environmental Health (CEH) Bureau of Environmental Exposure Investigation (BEEI) Final Guidance for Evaluating Soil Vapor Intrusion in the State of New York, October 2006. Matrix 1 addresses TCE, carbon tetrachloride, and VC, and Matrix 2 addresses 1,1-dichloroethene; cis-1,2-DCE; PCE; and 1,1,1-trichloroethane. The matrices establish the conditions that require a response (i.e., monitoring, mitigation, or source identification) based on an evaluation of indoor air concentrations and sub-slab vapor concentrations. None of the seven compounds included in the NYSDOH Guidance were detected in either of the soil vapor samples analyzed.

2.6 Environmental and Public Health Assessments

2.6.1 Qualitative Human Health Exposure Assessment

As described in Appendix 3B of DER-10, "The overall purpose of the Qualitative Human Health Exposure Assessment (or the exposure assessment) is to evaluate and document how people might be exposed to site related contaminants, and to identify and characterize the potentially exposed population(s) now and under the reasonably anticipated future use of the site." The following section details the Qualitative Human Health Exposure Assessment based on data collected during the Phase II ESA and RI.

2.6.1.1 Soil Exposure

Soil samples collected during the Phase II ESA and RI indicated the presence of VOCs, SVOCs, and metals at concentrations above the NYSDEC Subpart 375-6 UU, PGW, and RR Use SCOs, and a limited number of samples that exhibited concentrations of total PCBs and pesticides above the NYSDEC Subpart 375-6 UU SCOs. An individual could be exposed to these contaminants through direct contact with Site soil during ground intrusive work at the Site. Direct contact without the use of proper personal protective equipment (PPE) and personal hygiene measures could lead to dermal contact and incidental ingestion of these compounds. Since the Site will be fully fenced during construction activities, and access is controlled, potential contact with Site soil is restricted to remedial and construction contract workers at the Site performing ground intrusive activities in addition to trespassers and passersby. The general public will not be exposed to direct contact with Site soil. PPE will be required during any intrusive Site work. A community air monitoring program (CAMP) will be implemented during intrusive activities to minimize the potential for off-Site exposures from soil/dust leaving the Site.

The contemplated redevelopment plan consists of excavation for the construction of a multilevel, mixed-use development including a multi-level parking structure, retail space, medical office space and 12 residential apartments along Maple Ave. Some soil impacted above RR Use SCOs may remain in-place. However, the Site will be completely capped by the proposed complex. Therefore, the potential for exposure (on and off-Site) by direct contact with contaminated soil will be minimized for both the public and any future construction workers performing ground intrusive activities at the Site.

2.6.1.2 Groundwater Exposure

Groundwater is not used for drinking or other potable purposes (the area is connected to the public water supply), and there is no direct contact with or ingestion of groundwater by the general public (on or off-Site). Furthermore, no public water supply wells are located in the area surrounding the Site. The proposed onsite buildings will be serviced by the public water supply.

Individuals who perform intrusive work (i.e., utility construction and/or repair), perform groundwater sampling or remedial activities may come into contact with contaminated groundwater. Proper PPE and personal hygiene measures will be required to prevent dermal contact and the potential for incidental ingestion of these compounds. Based on this, the potential for public exposure by direct contact with contaminated groundwater will be reduced or eliminated.

The potential for off-Site migration of contamination is expected to be mitigated by addressing nearby, upgradient soil and groundwater impacts as proposed in the preferred remedy.

2.6.1.3 Soil Vapor Exposure

Individuals who perform groundwater or soil vapor sampling, remedial construction or redevelopment construction activities may come into contact with contaminated soil vapor. Potential worker exposure to contaminated soil vapor during these activities will be mitigated through the implementation of the Site-Specific HASP, required PPE, and required worker training. Potential environmental exposures will be mitigated by engineering controls implemented during remedial construction (i.e., vapor/odor control). The potential for soil vapor intrusion would be mitigated by the utilization of a pressure slab with water proofing/vapor barrier for development areas with subgrade parking/loading dock structures, vapor barrier for slab on grade construction, and operation of typical building HVAC systems. The potential for off-Site migration of contamination is expected to be mitigated by addressing nearby, upgradient soil and groundwater impacts as proposed in the preferred remedy.

2.6.2 Fish and Wildlife Remedial Impact Analysis

A fish and wildlife impact analysis was not applicable.

2.7 Interim Remedial Action

No interim remedial actions have been performed at the Site.

2.8 Remedial Action Objectives

Based on the results of the Remedial Investigation, the following Remedial Action Objectives (RAOs) have been identified for this Site.

2.8.1 Groundwater

RAOs for Public Health Protection

- Prevent ingestion of groundwater containing contaminant levels exceeding drinking water standards.
- Prevent contact with, or inhalation of, volatiles emanating from contaminated groundwater.

RAOs for Environmental Protection

- Restore groundwater aquifer, to the extent practicable, to pre-disposal/pre-release conditions.
- Remove the source of groundwater contamination.

2.8.2 Soil

RAOs for Public Health Protection

- Prevent ingestion/direct contact with contaminated soil.
- Prevent inhalation of, or exposure to, contaminants volatilizing from contaminated soil.

RAOs for Environmental Protection

• Prevent migration of contaminants that would result in groundwater contamination.

2.8.3 Soil Vapor

• Mitigate impacts to public health resulting from existing, or the potential for, soil vapor intrusion into buildings at the Site.

3.0 DESCRIPTION OF REMEDIAL ACTION PLAN

This section of the RAWP was prepared in accordance with Subpart 375 - 3.8(f), Subpart 375 - 1.8(f), and Section 4.3 of DER-10. As required, a minimum of two remedial alternatives (one being an unrestricted use scenario) are evaluated, as follows:

- One alternative (Remedial Alternative 1) that will achieve unrestricted use relative to on-Site soil (Track 1) without the use of Institutional Controls (ICs) or Engineering Controls (ECs); and
- One alternative (Remedial Alternative 2) assuming a restricted use (restricted residential) cleanup scenario for on-Site areas coupled with the use of ICs and ECs (Track 4).

The following is a detailed description of the alternatives analysis and remedy selection process to address impacted media at the Site.

Remedial Alternative 1: Track 1 Unrestricted Use Cleanup (Plate 6):

- Excavation and off-Site disposal of approximately 49,826 cubic yards (cy) of soil (i.e., all soil exceeding UU SCOs) over the entire Site. The estimated excavation volume is based on adding two feet to the lowest depth of known exceedance within each Parcel (actual volume is subject to change based on field conditions and results of end point sampling). The remedial excavation depths range from approximately 0 to 21 ft bls, depending on the Parcel.
- Collection of excavation sidewall and bottom endpoint samples at a frequency consistent with that presented in DER-10 to document that the SCOs were met.
- Backfill and compaction of off-Site soil meeting UU SCOs.
- *In situ* chemical oxidation (ISCO) injection for treatment of VOCs in groundwater as necessary pending results of excavation to remove potential residual on-Site sources. Two types of oxidants: PersulfOx® and Oxygen Release Compound Advanced (ORC Advanced® or ORC-A®) as manufactured by Regenesis, will be applied to effectively treat petroleum hydrocarbons (PersulfOX® and ORC-A®) and CVOCs (PersulfOX®).

Remedial Alternative 2: Track 4 Restricted Residential Cleanup (Plate 7):

• Excavation and off-Site disposal of approximately 3,391 cy of soil containing Compounds of Concern exceeding the PGW SCOs and detected in groundwater above the AWQSGVs. The Compounds of Concern are: 1,2,4-trimethylbenzene; 1,3,5-trimethylbenzene; benzene; ethylbenzene; n-butylbenzene; n-propylbenzene; toluene; xylenes; PCE; cis-1,2-DCE, and naphthalene. The estimated excavation volume is based on adding two feet to the lowest depth of known exceedance within each AOC (actual volume is subject to change based on field conditions and results of end point sampling).

The remedial excavation depths range from approximately 2 to 17.5 ft bls, depending on the AOC. Some soil contamination will remain on-Site above the RR Use SCOs.

- Collection of excavation sidewall and bottom endpoint samples at a frequency consistent with that presented in DER-10 to document that the SCOs were met. If residual impacts are not detected (based on visual means, odor, or monitoring with PID) when the excavation reaches the water table, a bottom end point sample will be collected. Otherwise, the excavation will continue to a maximum of two feet into the water table and a bottom end point sample will be collected. In consultation with the NYSDEC, residual impacts detected at elevated concentrations in end point samples below the water table may be addressed by ISCO injections.
- Backfill and compaction of off-Site soil meeting the lower of PGW or RR Use SCOs.
- A Site Cover System comprised of asphalt covered parking areas, concrete covered sidewalks/walkways, concrete building slab and limited landscaped areas (which will include a minimum of two feet of cover over existing Site soil). A physical demarcation layer, consisting of the underside of concrete sidewalks/walkways, the underside of asphalt pavement, or orange snow fencing material, filter fabric or equivalent material in landscaped areas will be used to provide a visual reference above residual contamination.
- Groundwater treatment consisting of ISCO injections of PersulfOx® and ORC-A® in areas where total dissolved VOCs were detected at concentrations greater than $200 \mu g/L$.

3.1 Evaluation of Remedial Alternatives

The goal of the remedy selection process under the BCP is to select a remedy that is protective of human health and the environment taking into consideration the current, intended, and reasonably anticipated future use of the property. Each remedial alternative is evaluated based on the factors listed below:

- Protection of human health and the environment;
- Compliance with standards, criteria, and guidelines (SCGs);
- Short-term effectiveness and impacts;
- Long-term effectiveness and permanence;
- Reduction of toxicity, mobility, or volume of contaminated material;
- Implementability;
- Cost effectiveness;

- Community Acceptance; and
- Land use.

3.1.1 Overall Protection of Human Health and the Environment

This criterion is an evaluation of the ability of each alternative or the remedy to protect public health and the environment.

Remedial Alternative 1 will be protective of human health and the environment by removing soil at the Site that exceeds the UU SCOs and backfilling those areas with material meeting the UU SCOs, thus eliminating the potential for human and environmental exposure to contaminated soil/fill once construction is complete, and eliminating the risk of contamination leaching from the soil/fill into groundwater. Though there is minimal potential for contact with contaminated groundwater as it is not used for potable purposes, the proposed groundwater remedy for Remedial Alternative 1, using *in situ* injections following excavation, will treat on-Site groundwater and mitigate off-Site migration of impacted groundwater and protect human health and the environment, to the extent practicable. Potential soil vapors and off-Site vapor migration would be addressed by removal of all impacted soil and treatment of impacted groundwater, while the potential for soil vapor intrusion would be mitigated by the utilization of a pressure slab with water proofing/vapor barrier for development areas with subgrade parking/loading dock structures, vapor barrier for slab on grade construction, and operation of typical building heating, ventilation, and air conditioning (HVAC) systems.

Remedial Alternative 2 will achieve compliance with the Track 4 SCOs by removing on-Site soils above the PGW SCOs for the Compounds of Concern, and capping on-Site soils above RR Use SCOs for the other parameters, resulting in no exposed impacted soil will be present after remedial construction. There will be a Site Cover System for the entire Site that includes building slabs, concrete walkways, asphalt pavement and limited landscaped areas (with two feet of soil meeting the lower of the PGW or RR Use SCOs) to prevent exposure to remaining contaminated media. The potential for soil vapor intrusion would be mitigated by the utilization of a pressure slab with water proofing/vapor barrier for development areas with subgrade parking/loading dock structures, vapor barrier for slab on grade construction, and operation of typical building HVAC systems. A physical demarcation layer, consisting of the underside of

the pressure slab, the underside of concrete sidewalks/walkways, the underside of asphalt pavement, or orange snow fencing material, filter fabric or equivalent material in landscaped areas will be used to provide a visual reference above residual contamination. The need for vapor mitigation will be evaluated during redevelopment and addressed in the Site Management Plan (SMP). If vapor mitigation is necessary, a sub-slab depressurization system (SSDS) may be required as an EC for portions of development that will have a slab above the water table. Implementing ICs including a SMP and Environmental Easement will ensure that the Site Cover System and ECs remain intact and protective and that use of groundwater is restricted. Excavating soil above the PGW SCOs for the Compounds of Concern and dewatering completed during the excavation will minimize leaching of contamination into groundwater.

The proposed groundwater remedy for **Remedial Alternative 2**, using *in situ* injections, will treat on-Site groundwater and mitigate off-Site migration of impacted groundwater and protect human health and the environment, to the extent practicable, considering the logistical challenges presented by most of the Site being redeveloped and covered by an active mixed use building.

For both alternatives, during Site remediation and other construction activities, workers may be exposed to impacted soil, groundwater, and soil vapor. Potential worker exposure to contaminated media during remediation activities will be prevented or minimized through the implementation of the Site-Specific Health and Safety Plan (HASP), which includes the CAMP, and required worker training. Potential environmental exposures will be prevented or minimized by ECs implemented during remedial construction (i.e., dust suppression, odor control, and traffic control).

3.1.2 Standards, Criteria, and Guidance

The remedy must conform to officially promulgated standards and criteria that are directly applicable or that are relevant and appropriate. The selection of a remedy must also take into consideration guidance as appropriate.

Remedial Alternative 1 will achieve compliance with the Track 1 UU SCOs by removing all contaminated soils. Compliance with the SCGs for groundwater and soil vapor will be achieved through source removal.

Remedial Alternative 2 will achieve compliance with the Track 4 SCOs by removing on-Site soils above the PGW SCOs for the Compounds of Concern, and capping on-Site soils above RR Use SCOs for the other parameters, resulting in no exposed impacted soil will be present after remedial construction. There will be a Site Cover System for the entire Site that includes building slabs, concrete walkways, asphalt pavement and limited landscaped areas (with two feet of soil meeting the lower of the PGW or RR Use SCOs) to prevent exposure to remaining contaminated media. Removal of impacted soils is expected to result in significant reductions in on-Site groundwater concentrations with time, coupled with *in situ* groundwater injections to address groundwater impacts, to the extent practicable. Consequently, off-Site groundwater concentrations are expected to improve over time. The need for an SSDS to meet soil vapor SCGs will be evaluated during redevelopment and addressed in the SMP.

3.1.3 Long-Term Effectiveness and Permanence

This criterion is an evaluation of the long-term effectiveness and permanence of an alternative or remedy after implementation.

Remedial Alternative 1 removes all soil that was impacted by the historic releases. Groundwater will be treated by *in situ* injections. Sources of potential impacts to soil vapor are addressed. Therefore, incremental risk from soil, groundwater, and soil vapor will be eliminated, ECs and ICs are not necessary (except for a restriction on the use of on-Site groundwater), and the remedy will continue to meet RAOs in the future, thus providing a permanent long-term solution for the Site.

Remedial Alternative 2 removes on-Site soil that are above the PGW SCOs for the Compounds of Concern and mitigates human health and environmental exposures to soil through the Site Cover System. Groundwater impacts are addressed through *in situ* treatment, to the extent practicable, considering the logistical challenges presented by most of the Site being redeveloped and covered by an active mixed use building. ECs, including a Site Cover System (and SSDS if installed), and ICs with a SMP and Environmental Easement, will ensure long-term management and use restrictions. The SMP will ensure long-term effectiveness of all ECs and ICs by requiring periodic inspection and certification that these controls and restrictions continue to be in place and are functioning as intended.

3.1.4 Reduction in Toxicity, Mobility, or Volume of Contamination Through Treatment

This criterion is an evaluation of the ability of an alternative or remedy to reduce the toxicity, mobility, and volume of Site contamination. Preference should be given to remedies that permanently or significantly reduce the toxicity, mobility, or volume of the contamination at the Site.

- removal and/or treatment;
- containment;
- elimination of exposure; and
- treatment of source at the point of exposure.

Remedial alternatives that use treatment or removal to eliminate contaminants at a site, reduce the total mass of toxic contaminants, cause irreversible reduction in contaminants mobility, or reduce of total volume of contaminated media are preferable.

Remedial Alternative 1 permanently eliminates the toxicity, mobility, and volume of contaminants within the Site by removing all soil with concentrations that exceeded the UU SCOs. Removal of impacted soil is expected to result in significant reductions in on-Site groundwater concentrations with time. *In situ* groundwater treatment will reduce concentrations of VOCs in the groundwater on-Site and mitigate off-Site impacts to the extent practicable, beyond the Site boundary.

Remedial Alternative 2 will permanently reduce the toxicity, mobility, and volume of contaminants at the Site and will result in groundwater quality improvement with time by removing soil impacted by the Compounds of Concern above the PGW SCOs to the extent practicable. *In situ* groundwater treatment will reduce concentrations in the groundwater on-Site and mitigate off-Site impacts to the extent practicable, beyond the Site boundary, considering the logistical challenges presented by most of the Site being redeveloped and covered by an active mixed use building.

3.1.5 Short-Term Impacts and Effectiveness

This criterion is an evaluation of the potential short-term adverse environmental impacts and human exposures during the construction and/or implementation of an alternative or remedy.

Although **Remedial Alternative 1** and **Remedial Alternative 2** both require excavation of impacted materials, the length of construction for Remedial Alternative 1 would be greater than Remedial Alternative 2. Thus, Remedial Alternative 1 has higher potential exposure risks to the community and construction workers, all of which would be managed in a CAMP.

Both **Remedial Alternative 1** and **Remedial Alternative 2** would employ appropriate measures to prevent short term impacts, including a CAMP and a Soil Management Plan (SoMP), during all on-Site soil disturbance activities and would effectively prevent the release of significant contaminants into the environment. Both alternatives provide short term effectiveness in protecting the surrounding community by decreasing the risk of contact with on-Site contaminants with ECs (i.e., dust suppression and traffic control).

Potential worker exposure to soil and groundwater during remediation activities will be mitigated through the required Occupational Safety and Health Administration (OSHA) training and appropriate HASPs. Construction workers operating under appropriate management procedures and a HASP will be protected from on-Site contaminants (personal protective equipment would be worn consistent with the documented risks within the respective work zones). The groundwater treatment reagents will be temporarily stored within containers on-Site and injected into groundwater below land surface, thus minimizing the exposure to the injected reagents. It is possible that workers on the Site will be exposed to the groundwater during the implementation of the *in situ* groundwater treatment. Other potential risks include material handling, electrical shock, off-gas vapor inhalation, general trip hazards, and noise. These potential impacts are addressed in the Site-specific HASP and CAMP and the SoMP, which detail monitoring during the construction and describe ECs to be implemented as necessary (e.g., dust suppression and traffic control).

3.1.6 Implementability

This criterion is an evaluation of the technical and administrative feasibility of implementing an alternative or remedy. Both Remedial Alternatives are technically feasible and readily implementable.

The techniques, materials, and equipment to implement **Remedial Alternative 1** and **Remedial Alternative 2** are readily available and have been proven effective in remediating the contaminants associated with the Site. Standard materials, services, and well established technologies will be implemented. There are no specific difficulties associated with any of the activities proposed, which utilize standard construction methods.

3.1.7 Cost Effectiveness

This criterion is an evaluation of the overall cost effectiveness of an alternative or remedy.

Cost estimates for each alternative are shown in Tables 12 and 13.

The total cost for **Remedial Alternative 1** is estimated at approximately \$15,946,852. The total cost for **Remedial Alternative 2** is estimated at approximately \$8,594,715.

The costs associated with Remedial Alternative 1 are higher than Remedial Alternative 2 due to the additional excavation, backfill materials, and off-Site disposal that will be required to achieve Track 1 UU SCOs. Remedial Alternative 2 includes additional costs associated with maintenance of the Site Cover System, implementation of the SMP, and groundwater monitoring.

3.1.8 Community Acceptance

This criterion is evaluated after the public review of the remedy selection process as part of the final DER selection/approval of a remedy for a site.

- 1 Any public comment relative to these criteria will be considered by DER after the close of the public comment period.
- 2 Documentation of the public comments received is to be consistent with the Citizen Participation Plan (CPP) identified for a remedial program in accordance with applicable DEC policy.

A full evaluation of this criterion cannot be made until after the public comment period is complete.

3.1.9 Land Use

This criterion is an evaluation of the current, intended, and reasonably anticipated future use of the site and its surroundings, as it relates to an alternative or remedy, when unrestricted levels would not be achieved.

This evaluation has considered reasonably-anticipated future uses of the Site and takes into account:

- current use and historical and/or recent development patterns;
- applicable zoning laws and maps;
- NYS Department of State's Brownfield Opportunity Areas (BOA) pursuant to section 970-r of the general municipal law;
- applicable land use plans;
- proximity to real property currently used for residential use, and to commercial, industrial, agricultural, and/or recreational areas;
- environmental justice impacts, Federal or State land use designations;
- population growth patterns and projections;
- accessibility to existing infrastructure;
- proximity of the Site to important cultural resources and natural resources, potential vulnerability of groundwater to contamination that might emanate from the Site, proximity to flood plains, geography and geology; and
- current ICs applicable to the Site.

Remedial Alternative 1 would render the Site available for unrestricted use following remedial construction. However, the Site has been used and is planned to be used only for Restricted Residential use (and less restrictive uses defined in 6 NYCRR Part 375), and no higher use is anticipated nor likely to occur. Therefore, the additional cost for additional remediation to Unrestricted Use standards is not warranted here.

Remedial Alternative 2 is compatible with the planned future use of the new Site buildings as mixed use commercial and restricted residential.

3.2 Selection of the Preferred Remedy

The Preferred Remedy for the Site, Remedial Alternative 2, was selected for implementation since it adequately meets each of the evaluation criteria. In summary, the Preferred Remedy for the Site:

life Site.

- Is protective of public health and the environment;
- Removes soils with concentrations of Compounds of Concern (1,2,4-trimethylbenzene; 1,3,5-trimethylbenzene; benzene; ethylbenzene; n-butylbenzene; n-propylbenzene; toluene; xylenes; PCE; cis-1,2-DCE, and naphthalene) exceeding the PGW SCOs and complies with the appropriate Track 4 Restricted Residential criteria for all other constituents in soil;
- Provides long-term effectiveness and permanence through source removal, Site Cover System, *in situ* treatment of groundwater, soil vapor control measures (if necessary) and ECs and ICs;
- Reduces the toxicity, mobility, or volume of impacted material through source removal;
- Provides short-term effectiveness, including minimal impacts to workers or the surrounding neighborhood through the implementation of ECs during construction;
- Is readily implemented and allows for existing active uses to continue during implementation;
- Can be implemented at considerably lower cost than Remedial Alternative 1 for soil; and
- Is compatible with land use.

The Preferred Remedy for the Site is consistent with the approach for a Track 4 Restricted Residential use scenario described in the Part 375 Regulations.

3.2.1 Zoning

As described in the BCP application, the Post Road Corridor Redevelopment Site is entirely situated in Zone B-3 (excluding one property, 5 Rathbun Avenue that is entirely situated in business district Zone B-2), which is defined as an Intermediate Business District in the Zoning Ordinance of the City of White Plains. The B-3 district is a general retail district containing a wide variety of retail, office, and service business "uses" as well as "multi-family dwellings".

The majority of "uses" in the District are of a service character and the District is located predominantly along the major arterial commercial "streets" of the City.

3.2.2 Applicable Comprehensive Community Master Plans or Land Use Plans

The Post Road Corridor is not located within known BOA or Local Waterfront Revitalization Plans. As depicted in the Land Use Map (Figure 3 of the BCP Application), the redevelopment of the Post Road Corridor is consistent with the surrounding community redevelopment plans.

3.2.3 Surrounding Property Uses

As described in the BCP application, the general land use to the north of the Site along the south side of Post Road is mixed-use, consisting of street level stores with residential apartments above. The Calvary Baptist Church is also located north of the Site on Post Road. The general land use to the south of the Site is residential with single and two to three family multi-structural houses. To the east and west of the Site, the general land use is commercial and mixed-use properties.

3.2.4 Citizen Participation

Citizen participation will be pursued throughout the remedial process in accordance with the BCP guide and the CPP for the Site in Appendix B.

3.2.5 Environmental Justice Concerns

As described in the BCP application, the Site is located in a potential environmental justice area (PEJA) according to maps issued by NYSDEC.

3.2.6 Land Use Designations

As described in the BCP application, there are no federal or state land use designations related to the Site.

3.2.7 Population Growth Patterns

As described in the BCP application, population growth patterns and land development patterns in the area are consistent with the proposed use for the Site. Furthermore, the proposed use will support the existing local business trends and promote increased business and investment in the area.

3.2.8 Accessibility to Existing Infrastructure

As described in the BCP application, the Site's location in White Plains is accessible to existing infrastructure. The Site is within close proximity to the Bronx River Parkway and the Cross Westchester Expressway.

3.2.9 Proximity to Cultural Resources

As described in the BCP application, there are no cultural resources, including federal or state historic or heritage sites or Native American religious sites within ¹/₂ mile of the Site.

3.2.10 Proximity to Natural Resources

As described in the BCP application, there are no natural resources within ¹/₂ mile of the Site.

3.2.11 Off-Site Groundwater and Soil Vapor Impacts

Data from the off-Site Monitoring Well (RW-24) indicated no impacts to groundwater. Data from the off-Site soil vapor locations (SV-1 and SV-2) indicated no detections of the seven compounds included in the NYSDOH Guidance in either of the soil vapor samples analyzed. Data collected during the limited off-Site investigation were not sufficient to definitively conclude whether off-Site exposure is a concern. The potential for off-Site migration of contamination is expected to be mitigated by addressing nearby, upgradient soil and groundwater impacts as proposed in the preferred remedy.

3.2.12 Proximity to Floodplains

As described in the BCP application, the Site is located approximately 0.4 miles southeast of a 100 and 500-year flood zone associated with the Bronx River.

3.2.13 Geography and Geology of the Site

The surface topography in the surround area slopes toward the Site from the south, west and north. The Site itself slopes from the southwest towards the northeast. Based on the USGS 7.5-Minute topographic map (White Plains Quadrangle), the elevation of the Site ranges from approximately 245 feet (Property A) to 205 (Property K) ft amsl.

The surficial materials at the Site are mapped as Urban Land (Web Soil Survey, USDA). Based on borings completed at the Site, the surficial geology consists of historic fill material, native till and highly weathered bedrock.

The bedrock geology consists of the Manhattan Formation, consisting of schist characterized by garnet, muscovite, biotite and quartz (Geologic Map of New York, 1970). Depth to bedrock ranges across the Site from approximately 17 feet below grade to 52 feet below grade.

3.2.14 Current Institutional Controls

As described in the BCP application, there are currently no ICs on the property.

3.3 Summary of Selected Remedial Actions

The elements of the Track 4 Restricted Residential Use remedy are:

- 1. Excavation of soil/fill with concentrations of Compounds of Concern (1,2,4-trimethylbenzene; 1,3,5-trimethylbenzene; benzene; ethylbenzene; n-butylbenzene; n-propylbenzene; toluene; xylenes; PCE; cis-1,2-DCE, and naphthalene) exceeding the PGW SCOs, as defined by 6 NYCRR Part 375-6.8.
- 2. Construction and maintenance of a Site Cover System consisting of building slabs with a vapor barrier, concrete walkways, asphalt pavement and limited landscaped areas (with two feet of soil meeting the lower of the PGW or RR Use SCOs) to prevent human exposure to residual contaminated soil/fill remaining under the Site.
- 3. Recording of an Environmental Easement, including Institutional Controls, to prevent future exposure to any residual contamination remaining at the Site.
- 4. Treat groundwater and residual impacts to saturated soils via *in situ* injections of PersulfOx® and ORC-A®.
- 5. Publication of an SMP for long term management of residual contamination as required by the Environmental Easement, including plans for: (1) Institutional and Engineering Controls (IC/EC), (2) monitoring, (3) operation and maintenance and (4) reporting;
- 6. Screening for indications of contamination (by visual means, odor, and monitoring with PID) of all excavated soil during any intrusive Site work;
- 7. Collection and analysis of end-point samples to evaluate the performance of the remedy with respect to attainment of Track 4 SCOs;
- 8. The potential for vapor intrusion for any buildings on-Site will be evaluated. If vapor mitigation is necessary, a sub-slab depressurization system (SSDS) may be required as an

EC for portions of development that will have a slab and sufficient operational clearance above the water table;

- 9. Appropriate off-Site disposal of all material removed from the Site in accordance with all Federal, State and local rules and regulations for handling, transport, and disposal;
- 10. Clean fill meeting the requirements of 6 NYCRR Part 375-6.7(d) will be brought in to replace the excavated soil and establish the designed grades at the Site. Import of materials to be used for backfill and cover in compliance with: (1) chemical limits and other specifications included in Table 14, (2) all Federal, State and local rules and regulations for handling and transport of material;
- 11. Removal of all UST's that are encountered during soil/fill removal actions. Registration of tanks (if encountered) and reporting of any petroleum spills associated with UST's and appropriate closure of these petroleum spills under the Brownfield Cleanup Program; and
- 12. All responsibilities associated with the Remedial Action, including permitting requirements and pretreatment requirements, will be addressed in accordance with all applicable Federal, State and local rules and regulations.

Remedial activities will be performed at the Site in accordance with this NYSDEC-approved RAWP and the Department-issued Decision Document. All deviations from the RAWP and/or Decision Document will be promptly reported to NYSDEC for approval and fully explained in the Final Engineering Report (FER).

4.0 REMEDIAL ACTION PROGRAM

4.1 Governing Documents

4.1.1 Standards, Criteria, and Guidance

SCGs were discussed in Section 2.5.3.

4.1.2 Site Specific Health and Safety Plan (HASP)

The Site-specific HASP will be the NYSDEC-approved HASP in the RIWP. The CAMP is included in Appendix C. All remedial work performed under this plan will be in full compliance with governmental requirements, including Site and worker safety requirements mandated by Federal OSHA.

The Volunteer and associated parties preparing the remedial documents submitted to the State and those performing the construction work, are completely responsible for the preparation of an appropriate HASP and for the appropriate performance of work according to that plan and applicable laws.

The HASP and requirements defined in this RAWP pertain to all remedial and invasive work performed at the Site until the issuance of a Certificate of Completion (COC).

The Roux Associates/Remedial Engineering Site Safety Coordinator will be determined prior to implementation of the Remedial Action. A resume will be provided to NYSDEC prior to the start of remedial construction.

Confined space entry will comply with all OSHA requirements to address the potential risk posed by combustible and toxic gasses.

4.1.3 Quality Assurance Project Plan (QAPP)

The Quality Assurance Project Plan (QAPP) includes all procedures to be followed for sampling and analysis during the Remedial Action, and all requirements outlined in DER-10 Section 2.4. The QAPP will be the NYSDEC-approved QAPP in the RIWP.

4.1.4 Construction Quality Assurance Plan (CQAP)

Quality assurance/quality control procedures for all construction activities associated implementation of the remedial action construction are established in the Construction Quality Assurance Plan (CQAP), which is included in this section of the RAWP. The CQAP describes the Site-specific construction quality assurance and control measures that will be performed during remediation that will be implemented at the Site during implementation of the RAWP. The CQAP includes a program for construction observation and testing to verify performance of the remedial construction in accordance with the RAWP.

In general, the work to be addressed by this CQAP consists of the excavation and proper management/disposal of impacted soils, backfilling as necessary, and treatment of groundwater.

4.1.4.1 Organization/ Personnel

The implementation of the remedial action construction will be sequenced based on construction requirements, environmental considerations, and protection of the adjacent structure. The project team is comprised of the Owner/Volunteer (Post Maple 77, LLC), contractors, and consultants specializing in one or more critical aspects of the project. It is understood by the project team that close coordination and proper sequencing of all activities occurring on the Site will be crucial to the success of the remediation. The project team and associated responsibilities are as follows. If changes are made the project team, the CQAP will be amended.

4.1.4.2 General Contractor/ Construction Manager

Jim Tuman, Project Quality Control Officer

Post Maple 77, LLC is the General Contractor/ Construction Manager and will be responsible for the quality assurance of all of the tasks being implemented. Post Maple 77, LLC will confirm that all components of the Site activities are conducted according to the requirements of the RAWP. Post Maple 77, LLC will be responsible for verifying that the daily Site construction activities are in compliance with all of the safety requirements and regulations governing the Site activity; however, each subcontractor is responsible for the health and safety of their own personnel.

4.1.4.3 RAWP and Environmental Monitoring Compliance

Charles McGuckin, P.E. -Remedial Engineer/ Quality Assurance OfficerTBD-Quality Control Project ManagerTBD-Field Manager/ Site Safety Officer (SSO)

Roux Associates/Remedial Engineering will coordinate all Site activities being implemented to achieve the remedial objectives defined in the RAWP and will act as the SSO. Roux Associates/Remedial Engineering will provide continual review of all quality control measures implemented by the contractors to ensure compliance with the Site's remedial objectives and the Site-specific HASP. As such, Roux Associates/Remedial Engineering will provide oversight services for the duration of the remedial activities. Roux Associates/Remedial Engineering will be responsible for managing the transportation and disposal of contaminated waste and materials generated during the construction (if any), including:

- fill/soil;
- contaminated concrete, bricks or other construction debris;
- personal protective equipment and other miscellaneous debris; and
- construction wastewater.

Roux Associates/Remedial Engineering will implement the CAMP. CAMP monitoring data will be reported daily to the SSO and will be maintained on-Site. Action level exceedances will be reported to the SSO, the Post Maple 77, LLC project manager and appropriate communication and action taken. All CAMP monitoring records will be included in the overall FER that will be submitted to the NYSDEC and NYSDOH and will include all of the CAMP data collected, daily monitoring station location maps, and copies of the action limit reports (if any). If an action limit report is generated due to VOC exceedances, the NYSDEC and NYSDOH will be notified within 24 hours of the exceedance. Action limit exceedances for dust, if any, will be discussed in the daily report. A brief summary of CAMP activities, including any action limit reports generated, will be provided in the daily report.

All on-Site quality control persons identified in the CQAP will provide daily briefings and/or reports to Roux Associates/Remedial Engineering on-Site personnel, identifying the tasks completed, the remedial measures achieved, and any other issues of concern. Additionally, Mr. Charles J. McGuckin, the "Remedial Engineer", a professional engineer licensed in the State

of New York, will be responsible for certifying that the remediation construction was completed in substantial conformance with the approved RAWP and/or any NYSDEC-approved field changes.

4.1.4.4 Soil Remedial Contractor

Personnel to be Determined, Construction Quality Control

The Soil Remedial Contractor is responsible for the excavation of portions of the Site to the required depths, coordination with the General Contractor for disposal of the contaminated excavated materials, contaminated construction and demolition debris and all other contaminated wastes generated, transportation and disposal of non-contaminated construction and demolition debris (if any), and decontamination of equipment. The primary environmental obligations of the Soil Remedial Contractor include safely managing all excavated materials, preventing the contaminated Site soils from leaving the Site, and decontamination equipment, as necessary.

4.1.4.5 Groundwater Remedial Contractor

Personnel to be Determined, Construction Quality Control

The Groundwater Remedial Contractor is responsible for the implementation of the groundwater portion of the remedial action. The primary environmental obligations of the Groundwater Remedial Contractor include safely implementing the groundwater remediation in accordance with the RAWP.

4.1.4.6 Environmental Laboratory

The need for an environmental laboratory is specific to excavated soil waste characterization analysis, end-point sampling and backfill sampling. Alpha Analytical (Alpha) located in Westborough, Massachusetts will be utilized for all remediation construction-related analytical requirements. Alpha is a NYSDOH Environmental Laboratory Approval Program (ELAP) certified laboratory. All results will be reported in Electronic Data Deliverables (EDDs) prepared in accordance with NYSDEC requirements. Formal laboratory qualifications and quality assurance and quality control (QA/QC) information packages for Alpha and any other analytical laboratories proposed for the project will be submitted to the NYSDEC, if requested.

4.1.4.7 Surveying Firm

Link Land Surveyors P.C., of 21 Clark Place, Suite 1B, Mahopac, New York, a New York State-licensed surveying firm, will be contracted by Post Maple 77, LLC to provide lines, grades, boundaries, benchmarks, topographic surveys, as-built drawings, and any other survey work required for the proper execution and documentation of the work as required by the RAWP.

4.1.4.8 Waste Disposal Facilities

Waste from the Site will be transported to appropriately permitted waste disposal facilities. This CQAP will be updated with the names of the facility or facilities, as required. If any is generated, non-impacted construction debris will be transported to a registered construction and demolition disposal facility.

4.1.4.9 Waste Transporter and Disposal Facility Qualifications

As required, a qualifications package will be provided by each vendor contracted to transport waste from the Site to the designated soil disposal facilities and each designated disposal facility. The package will include the following:

- Proof of insurance and all current necessary waste transport permits for the waste type(s) being transported.
- Letters of Commitment or other appropriate documentation from all waste haulers and from all transfer, treatment, storage, and disposal facilities to be used for the project. The letters of commitment shall specifically identify the types and quantities of waste that the facility will be able to accept, the permit numbers for all facilities at which the waste will be accepted and all waste characterization requirements, if additional to waste characterization samples already collected. In the event that a facility (such as a privately owned treatment works) is prohibited from issuing a letter of commitment without a sample of the waste, a conditional type letter will be acceptable. Such a conditional letter shall specifically state what types and quantities of waste the facility will accept.
- For each waste hauler.
 - Name and federal and state identification numbers, as applicable.
 - Address.
 - Name of responsible contact for the hauler.
 - Telephone number for the contact.
 - List of types and sizes of all transport vehicles and equipment to be used.

- A description of proposed transportation route, method, and procedures for hauling waste material, including type of vehicles that will be used for each type of waste.
- Copies of any and all necessary permits and authorizations for each type of waste transported.
- For each transfer, treatment, storage and disposal facility, the Contractor will submit the following information.
 - Facility name and federal and state identification numbers.
 - Facility location.
 - Name of responsible contact for the facility.
 - Telephone number for contact.
 - Signed letter of agreement to accept waste.
 - Unit of measure utilized at facility for costing purposes.
 - Copies of all permits, licenses, letters of approval, and other authorizations to operate, held by the proposed facility as they pertain to receipt and management of waste derived from this Contract.

4.1.4.10 Construction Quality Control Testing

Implementation of quality control testing and measurement will be performed by the contractors conducting the specific Site tasks. The quality control officers, defined in Section 4.1.4, will be responsible for providing documentation of all testing and measurement results to Roux Associates/Remedial Engineering. Roux Associates/Remedial Engineering will be responsible for verifying that all quality control testing has been conducted in compliance with this RAWP and as specified herein.

Prior to initial quality control testing procedures:

- 1. Verify that the testing procedures are within the manufacturer's recommendations.
- 2. Verify that the facilities' testing equipment are available and comply with testing standards.
- 3. Check testing instrument calibrations against certified standards.
- 4. Verify the recording forms, including all the test documentation requirements have been prepared.

Qualifications of all independent environmental testing firms and laboratories will be submitted to Roux Associates and Post Maple 77, LLC for approval prior to any quality control testing and/or lab analysis as an obligation of this CQAP.

Specific task-driven testing/certification obligations as they relate to environmental aspects of the project are as follows:

- A New York State-licensed surveyor will conduct all of the necessary measurements and provide associated documentation to verify that the excavation limits are achieved.
- All excavated soil will require waste characterization analyses prior to disposal. The *in situ* characterization sampling and analysis may be conducted prior to excavation to facilitate direct-loading for waste transport and disposal, to the extent practicable. Waste characterization analysis parameters and frequency for any additional samples are determined by the waste disposal facility's acceptance requirements. As required, excavated soils will be tested in accordance with the soil disposal facility's analytical acceptance requirements that will be provided and amended to the SOP when available. Results will be provided to the disposal facility for review.
- End point samples will be collected at locations and at frequencies as discussed in Section 5.2.
- Post treatment groundwater monitoring will be performed as discussed in Section 8.1.2.
- The CAMP requires continuous real-time monitoring of VOCs and particulates during all intrusive Site activities. This monitoring equipment will be inspected periodically throughout each day to check and manually record the concentrations of VOCs and particulates and to ensure that the equipment is working properly. The equipment will be repaired, recalibrated, or replaced, as necessary. The periodic measurements will be used to identify any potential risks of off-Site migration. This monitoring data will be collected and logged for review daily by Roux Associates/Remedial Engineering and made available for regulatory agency review. Action Limit Reports will be completed to document any and all action level exceedances, as defined in the CAMP.
- The HASP requires continuous real-time monitoring of VOCs and particulates in the breathing zone of workers that will potentially be exposed to on-Site contaminants during all intrusive Site activities in order to identify and mitigate potential exposure risks to on-Site workers. This monitoring equipment will be inspected periodically throughout each day to ensure that the equipment is working properly. The equipment will be repaired, recalibrated, or replaced, as necessary.

All testing data will be managed in accordance with the above requirements and will be included in the FER to be prepared by Roux Associates/Remedial Engineering upon completion of all remedial objectives defined in the RAWP.
4.1.4.11 Project Coordination

During implementation of the remedial action construction, progress meetings/conference calls will be conducted periodically to assess the progress of the work, overall progress to date, quality control requirements, environmental and construction health and safety requirements, and future progress expectations. Those in attendance will include representatives from the Owner/Contractor, Roux Associates/Remedial Engineering and other subcontractors, as necessary. The NYSDEC and NYSDOH will attend the progress meetings at their discretion. This will provide the opportunity for all Site tasks to be integrated and discussed collectively and provide for coordination of all Site activities to maintain the overall construction schedule. Routine task meetings will also be conducted on an as-needed basis to insure proper communication between the contractors, tradesman, and supervisory personnel.

4.1.5 Soil/Materials Management Plan (SoMP)

The SoMP is included in Section 5.4 of this RAWP.

4.1.6 Storm-Water Pollution Prevention Plan (SWPPP)

The erosion and sediment controls will be in conformance with requirements presented in the New York State Guidelines for Urban Erosion and Sediment Control. The Storm-Water Pollution Prevention Plan (SWPPP) for Site redevelopment, as prepared by the Volunteer's Civil Engineer, will be followed during Site redevelopment activities.

4.1.7 Community Air Monitoring Plan (CAMP)

All invasive work will be completed in accordance with the CAMP that is included in Appendix C.

4.1.8 Contractors Site Operations Plan (SOP)

The Remedial Engineer has reviewed all plans and submittals for this remedial project (including those listed above and contractor and sub-contractor document submittals) and confirms that they are in compliance with this RAWP. The Remedial Engineer is responsible to ensure that all later document submittals for this remedial project, including contractor and sub-contractor document submittals, are in compliance with this RAWP. All remedial documents will be submitted to NYSDEC and NYSDOH in a timely manner and prior to the start of work.

4.1.9 Citizen Participation Plan

No changes will be made to approved Fact Sheets authorized for release by NYSDEC without written consent of the NYSDEC. No other information, such as brochures and flyers, will be included with the Fact Sheet mailing.

The approved Citizen Participation Plan for this project is attached in Appendix B.

Document repositories have been established at the following locations and contain all applicable

project documents:

White Plains Public Library 100 Martine Avenue White Plains, New York 10601

Library Hours of Operation:

Sunday:	1:00 PM - 5:00 PM	
Monday:	10:00 AM - 9:00 PM	
Tuesday:	10:00 AM - 9:00 PM	
Wednesday:	10:00 AM - 9:00 PM	
Thursday:	10:00 AM - 9:00 PM	
Friday:	10:00 AM - 6:00 PM	
Saturday:	10:00 AM - 5:00 PM	
Closed on City Holidays		

NYSDEC Region 3 21 South Putt Corners Road New Paltz, New York 12561

Phone: 845-256-3154

Hours: Monday through Friday: 9:00 AM – 4:00 PM

(Please call for appointment)

4.2 General Remedial Construction Information

4.2.1 Project Organization

The Soil and Groundwater Remedial Contractors have not been selected to date. Once established, a listing of key personnel involved in the Remedial Action will be provided to the NYSDEC. A copy of professional profiles for the Project Principal and Remedial Engineer for Roux Associates/Remedial Engineering and for the data validator are presented in Appendix D.

4.2.2 Remedial Engineer

The Remedial Engineer for this project will be Mr. Charles J. McGuckin. The Remedial Engineer is a registered professional engineer licensed by the State of New York. The Remedial Engineer will have primary direct responsibility for implementation of the remedial program for the 77 West Post Road Site (NYSDEC BCA Index No. C360129-03-13 Site No. C360129). The Remedial Engineer will certify in the FER that the remedial activities were observed by qualified environmental professionals under his supervision and that the remediation requirements set forth in the RAWP and any other relevant provisions of ECL 27-1419 have been achieved in full conformance with that Plan. Other Remedial Engineer certification requirements are listed later in this RAWP.

The Remedial Engineer will coordinate the work of other contractors and subcontractors involved in all aspects of remedial construction, including soil excavation, stockpiling, characterization, removal and disposal, air monitoring, emergency spill response services, import of back fill material, and management of waste transport and disposal. The Remedial Engineer will be responsible for all appropriate communication with NYSDEC and NYSDOH.

The Remedial Engineer will review all pre-remedial plans submitted by contractors for compliance with this RAWP and will certify compliance in the FER.

The Remedial Engineer will provide the certifications listed in Section 11.1 in the FER.

4.2.3 Remedial Action Construction Schedule

A schedule for the major elements of the remedial construction and the redevelopment construction are presented in Table 15.

4.2.4 Work Hours

The anticipated hours for operation of remedial construction will be between 7 A.M. and 6 P.M. from Monday to Friday, and will conform to the City of White Plains Department of Buildings construction code requirements or according to specific variances issued by that agency. NYSDEC will be notified by the Volunteer of any variances issued by the Department of Buildings. NYSDEC reserves the right to deny alternate remedial construction hours.

Post Maple 77, LLC may work longer hours and/or weekends, as permitted by the proper authorities. If work beyond these hours or on weekends is required, the proper authorities will be notified. Disturbances to the local community will be minimized to the extent practical.

4.2.5 Site Security

Security for the work, equipment, materials, supplies, facilities, personnel, and incidentals will be provided throughout the performance of the work at the Site. A perimeter chain-link fence is in place and will be maintained by the Volunteer during implementation of the remedial action and redevelopment. Additional temporary fencing and barricades will be used as needed to delineate and secure areas of ongoing remedial activities within the Site such as soil stockpiles, and health and safety exclusion zones.

All personnel and visitors will be required to sign-in upon entering the Site and sign-out upon leaving. Remedial Engineering/Roux Associates will maintain a sign in/sign out sheet for all visitors to the Site. To restrict access during remedial activities, warning signs and barrier tape will be installed at certain locations, such as open excavations.

4.2.6 Traffic Control

The Remediation Contractor/General Contractor will be responsible for providing all necessary personnel and materials (i.e., traffic lanes, safety cones) to control traffic entering and exiting the Site and for coordinating traffic control measures, as necessary. For any trucking required, the proposed truck routes for ingress and egress to the Site are shown in Figure 6.

- The inbound truck route to the Site via the Cross Westchester Expressway (I-287):
 - 1. Use the right 2 lanes to take exit 5 to merge onto NY-100 S/NY-119 E toward White Plains
 - 2. Continue onto NY-119 E
 - 3. Use the right 2 lanes to turn right onto S Lexington Avenue
 - 4. Turn right onto West New York Post Road
- The outbound truck route to I-287:
 - 1. Head northeast on West New York Post Road, which becomes East New York Post Road towards Highland Avenue

- 2. Turn left onto Dr. Martin Luther King Jr. Boulevard
- 3. Turn left onto Hamilton Avenue
- 4. Continue straight onto NY-119 W Tarrytown Road
- 5. Use the right lane to take the I-287 ramp
- 6. Keep left at the fork, follow signs to merge onto I-287

All trucks loaded with Site materials will exit the vicinity of the Site using only these approved truck routes. This is the most appropriate route and takes into account: (a) limiting transport through residential areas and past sensitive sites; (b) use of city mapped truck routes; (c) prohibiting off- Site queuing of trucks entering the facility, to the extent practicable; (d) limiting total distance to major highways; (e) promoting safety in access to highways; and (f) overall safety in transport.

4.2.7 Contingency Plan

The Contingency Plan is described in Section 5.4.11.

4.2.8 Worker Training and Monitoring

All general Site workers (as defined in OSHA 1910.120 (e)(3)(i)) that will be involved with earth disturbance activities will have received a minimum of 40 hours of initial health and safety training for hazardous waste site operations (40-Hour HAZWOPER training) and meet the medical surveillance requirements included in the HASP.

4.2.9 Agency Approvals

The Volunteer has addressed all SEQRA requirements for this Site. All permits or government approvals required for remedial construction have been, or will be, obtained prior to the start of remedial construction.

The planned end use for the Site is in conformance with the current zoning for the property of Business District B-2 and B-3. A Certificate of Completion will not be issued for the project unless conformance with zoning designation is demonstrated.

A complete list of all local, regional and national governmental permits, certificates or other approvals or authorizations required to perform the remedial and development work is attached in Table 16. This list includes a citation of the law, statute or code to be complied with, the originating agency, and a contact name and phone number in that agency. This list will be updated in the Final Engineering Report.

All planned remedial or construction work in regulated wetlands and adjacent areas will be specifically approved by the NYSDEC Division of Natural Resources to ensure that it meets the requirements for substantive compliance with those regulations prior to the start of construction. Nothing in the approved Remedial Action Work Plan or its approval by NYSDEC should be construed as an approval for this purpose.

4.2.10 Pre-Construction Meeting with NYSDEC

A project kick-off meeting will be conducted with the Volunteer, Roux Associates/Remedial Engineering and the major subcontractors prior to the commencement of any intrusive remedial activities proposed in this RAWP. The NYSDEC and NYSDOH will be notified at least seven days in advance of the proposed meeting date and will attend the pre-construction meeting at their discretion.

4.2.11 Emergency Contact Information

An emergency contact sheet with names and phone numbers is included in Table 17. That document will define the specific project contacts for use by NYSDEC and NYSDOH in the case of a day or night emergency. Since the contractors have not yet been selected, the emergency contact list will be updated prior to the start of work.

4.2.12 Remedial Action Costs

The cost estimate for Remedial Alternative 2 is provided in Table 13.

4.3 Site Preparation

4.3.1 Mobilization

The Soil and Groundwater Remedial Contractors will supply any labor and materials required for the removal and disposal of contaminated soil and treatment of groundwater. Mobilization and Site preparation activities include:

- 1. Mobilization of equipment to the work area.
- 2. Installation of temporary fencing and traffic barricades to delineate the work zone and act as a work Site security measure.
- 3. Implementation of erosion and sediment control measures in accordance with the New York Guidelines for Urban Erosion and Sediment Control.
- 4. Installation of temporary facilities.
- 5. Installation of dewatering and water treatment system or containers for storage and disposal.
- 6. Set-up of decontamination facilities.

4.3.2 Monitoring Well Decommissioning

Existing groundwater monitoring wells will either be protected during remediation and development for use in post-remedial monitoring, or will be properly decommissioned in accordance with NYSDEC policy CP-43. The only exception to this is if the full length of the well is to be excavated during remediation and development.

4.3.3 Erosion and Sedimentation Controls

Soil erosion and sediment control measures for management of storm water will be installed in accordance with the New York Guidelines for Urban Erosion and Sediment Control. Hay bales and/or silt fence will be placed by the remedial contractor at locations surrounding excavation areas, within the perimeter fencing, to control storm water runoff and surface water from entering or exiting the excavation. These control measures will be installed prior to initiating the soil excavation.

4.3.4 Stabilized Construction Entrance(s)

Approved stabilized construction entrances designed by the Volunteer's Civil Engineer and installed to facilitate Site redevelopment will continue to be used and maintained during

implementation of the remedy. Any soil spilled on the sidewalk or street immediately adjacent to the Site will be promptly removed and the street will be cleaned.

4.3.5 Utility Marker and Easements Layout

The Volunteer and its contractors are solely responsible for the identification of utilities that might be affected by work under the RAWP and implementation of all required, appropriate, or necessary health and safety measures during performance of work under this RAWP. The Volunteer and its contractors are solely responsible for safe execution of all invasive and other work performed under this RAWP. The Volunteer and its contractors must obtain any local, State or Federal permits or approvals pertinent to such work that may be required to perform work under this RAWP. Approval of this RAWP by NYSDEC does not constitute satisfaction of these requirements.

The presence of utilities and easements on the Site has been investigated by the Remedial Engineer. It has been determined that no risk or impediment to the planned work under this RAWP is posed by utilities or easements on the Site.

4.3.6 Sheeting and Shoring

Appropriate management of structural stability of on-Site or off-Site structures during on-Site activities include excavation is the sole responsibility of the Volunteer and its contractors. The Volunteer and its contractors are solely responsible for safe execution of all invasive and other work performed under this Plan. The Volunteer and its contractors must obtain any local, State or Federal permits or approvals that may be required to perform work under this Plan. Further, the Volunteer and its contractors are solely responsible for the implementation of all required, appropriate, or necessary health and safety measures during performance of work under the approved Plan.

4.3.7 Equipment and Material Staging

Equipment and materials for the remedial construction will be on-Site in a designated area.

4.3.8 Decontamination Area

Approved decontamination areas designed by the Volunteer's Civil Engineer and installed to facilitate Site redevelopment will continue to be used and maintained during implementation of the remedy. All decontamination material will be collected and properly disposed of off-Site.

4.3.9 Site Fencing

The Site is currently fully enclosed with chain-link fencing. This fencing will be maintained throughout the completion of the remedial action and redevelopment.

The fences and gates will be closed and locked when there is no activity on the Site and any breaks or gaps will be repaired immediately. Temporary fencing (e.g., cones, caution tape, etc.) will supplement the perimeter fencing to delineate and secure the area of ongoing remediation activities within the Site such as soil stockpiles, and health and safety exclusion zones.

4.3.10 Demobilization

In conjunction with the remedial activities, the Site will be prepared for the construction activities required for the redevelopment project. All temporary structures not required for the subsequent construction work will be removed. Materials used in constructing the waste staging area (e.g., plastic sheeting, hay bales) will be removed and disposed properly. Soil underlying the plastic sheeting in the waste staging area will be inspected for any visual staining or evidence of waste materials. Any impacts to the soil in this area will be removed and disposed as well. All equipment will be decontaminated prior to leaving the Site.

4.4 Reporting

All daily and monthly Reports will be included in the FER.

4.4.1 Daily Reports

Daily reports will be submitted to NYSDEC and NYSDOH Project Managers by the end of each day following the reporting period and will include:

- An update of progress made during the reporting day;
- Locations of work and quantities of material imported and exported from the Site;
- References to alpha-numeric map for Site activities;

- A summary of any and all complaints with relevant details (names, phone numbers);
- A summary of CAMP finding, including excursions; and
- An explanation of notable Site conditions.

Daily reports are not intended to be the mode of communication for notification to the NYSDEC of emergencies (accident, spill), requests for changes to the RAWP or other sensitive or time critical information. However, such conditions must also be included in the daily reports. Emergency conditions and changes to the RAWP will be addressed directly to NYSDEC Project Manager via personal communication.

Daily Reports will include a description of daily activities keyed to an alpha-numeric map for the Site that identifies work areas. These reports will include a summary of air sampling results, odor and dust problems and corrective actions, and all complaints received from the public.

A Site map that shows a predefined alpha-numeric grid for use in identifying locations described in reports submitted to NYSDEC is attached in Plate 7.

The NYSDEC assigned project number will appear on all reports.

4.4.2 Monthly Reports

Monthly reports will be submitted to NYSDEC and NYSDOH Project Managers by the 10th of the month following the end of the month of the reporting period and will include:

- Activities relative to the Site during the previous reporting period and those anticipated for the next reporting period, including a quantitative presentation of work performed (i.e., tons of material exported and imported, etc.);
- Description of approved activity modifications, including changes of work scope and/or schedule;
- Sampling results received following internal data review and validation, as applicable; and
- An update of the remedial schedule including the percentage of project completion, unresolved delays encountered or anticipated that may affect the future schedule, and efforts made to mitigate such delays.

4.4.3 Other Reporting

Photographs will be taken of all remedial activities and submitted to NYSDEC in digital (JPEG) format. Photos will illustrate all remedial program elements and will be of acceptable quality. Representative photos of the Site prior to any Remedial Actions will be provided. Representative photos will be provided of each contaminant source, source area and Site structures before, during and after remediation. Photos will be included in the daily reports as needed, and a comprehensive collection of photos will be included in the FER.

Job-site record keeping for all remedial work will be appropriately documented. These records will be maintained on-Site at all times during the project and be available for inspection by NYSDEC and NYSDOH staff.

4.4.4 Complaint Management Plan

Any complaints received from the public regarding nuisances or other Site conditions will be communicated within 24 hours to NYSDEC and NYSDOH, investigated and remedied, if required.

If an odor or dust complaint is received, the following procedure will be implemented:

- 1. Work in the affected area will be halted, and the source of odors/dust will be identified.
- 2. NYSDEC, NYSDOH, and the Volunteer will be notified of the complaint.
- 3. Nuisance odors, if any, will be abated through covering/containerizing excavated materials, backfilling open excavations in a timely manner; and/or using a foam unit or other appropriate measures.
- 4. Nuisance dust, if any, will be abated through covering/containerizing excavated materials, backfilling open excavations in a timely manner; and/or using water on excavations.
- 5. Work will resume in the affected area when the nuisance odors/dust have been abated, as determined by the Roux Associates/Remedial Engineering on-Site personnel.

4.4.5 Deviations from the Remedial Action Work Plan

Any required deviations from this RAWP will be discussed by the Volunteer's representatives with the NYSDEC. At that time, the reasons for necessary deviations from the approved RAWP will be explained and the effect of the required deviations on the overall remedy will be evaluated. If the deviation is deemed to be a significant change to the RAWP by the NYSDEC, a description and reasons for the proposed change will be emailed to the NYSDEC Project

Manager for review and written approval. All deviations from the RAWP will be fully documented in the FER.

5.0 REMEDIAL ACTION: MATERIAL REMOVAL FROM SITE

Soil containing Compounds of Concern exceeding the PGW SCOs and detected in groundwater above the AWQSGVs will be excavated and disposed off-Site. The remedial excavation depths range from approximately 2 to 17.5 ft bls, depending on the AOCs shown on Plate 7. The actual extent of excavations will depend on field observations, technical practicability based on excavation shoring limitations and the risk of undermining adjacent sidewalks and structure, and post excavation samples.

The excavation will be performed by the Soil Remedial Contractor. The excavations will be conducted in a manner that protects the integrity of the adjacent structure. Soil excavation will generally be conducted using traditional excavation equipment. If any underground utilities or other subsurface piping are encountered, the excavation will be performed by hand as required to safely expose and support the utilities.

Hydraulic control measures (i.e., excavation dewatering system) will be required to manage groundwater where excavation will be below the groundwater table. Wastewater resulting from Site dewatering will be containerized on-Site pending proper off-Site disposal or treated and discharged to the Westchester County Drainage System in accordance with the County's discharge permit requirements.

All trucks removing contaminated material from the Site will be loaded on-Site and properly decontaminated before leaving the Site.

Excavated unsaturated soil may be used as backfill provided it meets soil reuse criteria as noted in DER-10 Table 5.4 and with subsequent approval of NYSDEC. The soil must be inspected prior to reuse, and must be free from odors or staining. Excavated material to be used for backfill will be stockpiled on Site in accordance with Section 5.4. Any soils that are removed from parcels that were not previously investigated will be laboratory analyzed prior to any on-Site reuse.

Material excavated from the Site and slated for off-Site disposal will be disposed in accordance with the Soil and Materials Management Plan.

Following excavation, end-point soil samples will be collected in accordance with the remedial performance evaluation described in Section 5.2.2.

Groundwater

Dewatering will be required during some excavation activities to facilitate work below the groundwater table. Extracted groundwater will either be containerized for off-Site disposal or be treated as necessary. The groundwater will be extracted through the use of drainage sumps, perimeter well points, or other similar systems to maintain dry conditions within the excavation. Drainage sumps will be installed within the excavation, as necessary, to dewater the excavation area. The water from the drainage sumps will be pumped to either an on-Site wastewater storage tank or an on-Site treatment system. The water will be sampled to determine if treatment is required prior to discharge. If required, the treatment system may entail a settling tank, oil/water separator, bag filters, and carbon filter vessels, respectively. The Soil Remedial Contractor will identify the means and methods for dewatering and treatment, and the Remedial Engineer and NYSDEC will approve the method.

The quantity of groundwater to be extracted and treated will be determined based upon the following factors:

- Duration of excavation work below the water table;
- Depth of excavation beneath the water table; and
- Hydrogeologic factors including hydraulic permeability, hydraulic gradient, and rate of recharge into the excavation.

Extracted and treated contaminated groundwater, if any, will serve a beneficial role in reducing the toxicity, mobility, and volume of contaminated groundwater beneath the Site.

Provided below is a more detailed description of the Remedial Action, including the soil cleanup objectives, remedial performance evaluation, estimated material removal quantities, and Soil and Materials Management Plan.

5.1 Soil Cleanup Objectives

The Soil Cleanup Objectives for this Site are listed in Table 18.

Soil and materials management on-Site and off-Site will be conducted in accordance with the Soil Management Plan as described below.

Tables 1 through 5 summarize all soil samples that exceed the SCOs proposed for this Remedial Action. A spider map that shows all soil samples that exceed the SCOs proposed for this Remedial Action is shown in Plate 3.

UST closures will, at a minimum, conform to criteria defined in DER-10.

5.2 Remedial Performance Evaluation (Post Excavation End-Point Sampling)

End-point sampling and reporting will be conducted in accordance with the DER-10 and the QAPP and is discussed in the sections below.

5.2.1 End-Point Sampling Frequency

End-point samples will be collected to verify compliance with SCOs. In accordance with NYSDEC DER-10 Section 5.4, end-point excavation bottom samples will be collected at a frequency of one sample per 900 square feet of excavation bottom, and sidewall samples will be collected at a frequency of one sample per 30 linear feet of the excavation. When the excavation reaches the water table, a bottom end-point sample will be collected if residual impacts are not detected (based on visual means, odor, or monitoring with PID). Otherwise, the excavation will continue to a maximum of two feet into the water table at which time a bottom end-point (documentation) sample will be collected. The end-point samples will be analyzed for VOCs to demonstrate compliance with the PGW SCOs for the Compounds of Concern.

If the end-point bottom or sidewall soil sample results indicate that the Compounds of Concern are above the PGW SCOs, the proposed excavation boundary will be expanded laterally and vertically if the bottom is not already two feet into the water table, to the extent practicable. Additional bottom (as applicable) or sidewall soil sampling will continue until these conditions are met or to the extent feasible due to excavation shoring limitations and the risk of undermining adjacent sidewalks and structure.

5.2.2 Methodology

Each sample will be inspected for visual evidence of contamination (i.e., staining, presence of petroleum or odors) and field screened for VOCs using a PID. Soil samples to be submitted for analysis will be placed in a laboratory sample jar, and transported to the laboratory in an iced container.

5.2.3 Reporting of Results

The laboratory will report analytical results for end point samples in ASP Category B deliverable packages. An EDD in the required NYSDEC format will also be provided by the laboratory.

All end point sample data generated for the Remedial Action will be logged in a database and organized to facilitate data review and evaluation. The electronic dataset will include the data flags provided in accordance with USEPA Laboratory Data Validation Functional Guidelines for Evaluating Organic Analysis and Inorganic Analyses, as well as additional comments of the data review for ASP/CLP analyses. The data flags include such items as: 1) concentration below required detection limit, 2) estimated concentration due to poor recovery below required detection limit, 3) estimated concentration due to poor spike recovery, and 4) concentration of chemical also found in laboratory blank.

5.2.4 QA/QC

QC samples serve as checks on both the sampling and measurements systems and assist in determining the overall data quality with regard to representation, accuracy, and precision. The QAPP describes QA/QC procedures and sampling for the project.

5.2.5 Data Usability Summary Report

A Data Usability Summary Report will be prepared to evaluate the end-point samples by a party independent from the laboratory performing the analysis in accordance with Appendix 2B of DER-10.

5.2.6 Reporting of End-Point Data in FER

Chemical labs used for all end-point sample results and contingency sampling will be NYSDOH ELAP certified.

End-point sampling frequency is described in Section 5.2.1.

The FER will provide a tabular and map summary of all end-point sample results and exceedances of SCOs.

5.3 Estimated Material Removal Quantities

The estimated quantity of soil/fill to be removed from the Site is 3,391 cy. The estimated quantity of soil to be imported into the Site for backfill and cover soil is undetermined at this time. None of the soil/fill excavated as part of the Remedial Action will be reused/relocated on Site.

5.4 Soil/Materials Management Plan

The following sections provide the Soil/Materials Management Plan to be implemented during the Remedial Action.

5.4.1 Soil Screening Methods

Visual, olfactory and PID soil screening and assessment will be performed by a qualified environmental professional or experienced field geologist under the direction of the Remedial Engineer during all remedial and development excavations into known or potentially contaminated material. Soil screening will be performed regardless of when the invasive work is done and will include all excavation and invasive work performed during the remedy and during development phase, such as excavations for foundations and utility work, prior to issuance of the COC.

All primary contaminant sources (including but not limited to tanks and hotspots) identified during Site Characterization, Remedial Investigation, and Remedial Action will be surveyed by a surveyor licensed to practice in the State of New York. This information will be provided on maps in the FER.

Screening will be performed by qualified environmental professionals. Resumes will be provided for all personnel responsible for field screening (i.e., those representing the Remedial Engineer) of invasive work for unknown contaminant sources during remediation and development work.

5.4.2 Stockpile Methods

Stockpiles will be constructed in designated areas and will be kept covered at all times with appropriately anchored tarps. Saturated soils from hot spot excavations will be temporarily staged on polyethylene sheeting if not loaded out directly.

Stockpiles will be inspected daily and after every storm event. Results of inspections will be recorded in a logbook and maintained at the Site and available for inspection by NYSDEC.

Stockpiles will be kept covered at all times with appropriately anchored tarps. Stockpiles will be routinely inspected and damaged tarp covers will be promptly replaced.

Soil stockpiles will be continuously encircled with silt fences. Hay bales will be used as needed near catch basins, surface waters and other discharge points.

Water will be available on-Site at suitable supply and pressure for use in dust control.

5.4.3 Materials Excavation and Load Out

The Remedial Engineer or a qualified environmental professional under his/her supervision will oversee all invasive work and the excavation and load-out of all excavated material.

The Volunteer and its contractors are solely responsible for safe execution of all invasive and other work performed under this Plan.

The presence of utilities and easements on the Site has been investigated by the Remedial Engineer. It has been determined that no risk or impediment to the planned work under this RAWP is posed by utilities or easements on the Site.

Loaded vehicles leaving the Site will be appropriately lined, tarped, securely covered, manifested, and placarded in accordance with appropriate Federal, State, local, and New York State Department of Transportation (NYSDOT) requirements (and all other applicable transportation requirements).

Vehicles leaving the Site will not be overloaded. The Remedial Engineer's representative will make reasonable efforts to ensure that vehicles are not loaded beyond their NYSDOT weight rating and that all material is secured beneath the truck bed cover.

A truck wash will be operated on-Site, if necessary. The Remedial Engineer will be responsible for ensuring that all outbound trucks will be washed at the truck wash before leaving the Site until the remedial construction is complete.

Locations where vehicles enter or exit the Site shall be inspected daily for evidence of off-Site sediment tracking.

The Remedial Engineer will be responsible for ensuring that all egress points for truck and equipment transport from the Site will be clean of dirt and other materials derived from the Site during Site remediation and development. Cleaning of the adjacent streets will be performed as needed to maintain a clean condition with respect to Site -derived materials.

The Volunteer and associated parties preparing the remedial documents submitted to the State, and parties performing this work, are completely responsible for the safe performance of all invasive work, the structural integrity of excavations, and for structures that may be affected by excavations (such as building foundations and bridge footings).

The Remedial Engineer will ensure that Site development activities will not interfere with, or otherwise impair or compromise, remedial activities proposed in this Remedial Action Work Plan.

Each hotspot and structure to be remediated (USTs, vaults and associated piping, transformers, etc.) will be removed and end-point remedial performance sampling completed before excavations related to Site development commence proximal to the hotspot or structure.

Development-related grading cuts and fills will not be performed without NYSDEC approval and will not interfere with, or otherwise impair or compromise, the performance of remediation required by this plan.

Mechanical processing of historical fill and contaminated soil on-Site is prohibited.

All primary contaminant sources (including but not limited to tanks and hotspots) identified during Site Characterization, Remedial Investigation, and Remedial Action will be surveyed by a surveyor licensed to practice in the State of New York. The survey information will be shown on maps to be reported in the FER.

5.4.4 Materials Transport Off-Site

All transport of materials will be performed by licensed haulers in accordance with appropriate local, State, and Federal regulations, including 6 NYCRR Part 364. Haulers will be appropriately licensed and trucks properly placarded.

Truck transport routes are as described in Section 4.2.6. All trucks loaded with Site materials will exit the vicinity of the Site using only these approved truck routes.

Proposed in-bound and out-bound truck routes to the Site are shown in Figure 6. This is the most appropriate route and takes into account: (a) limiting transport through residential areas and past sensitive sites; (b) use of city mapped truck routes; (c) prohibiting off- Site queuing of trucks entering the facility; (d) limiting total distance to major highways; (e) promoting safety in access to highways; and (f) overall safety in transport.

Trucks will be prohibited from stopping and idling in the neighborhood outside the project Site.

Egress points for truck and equipment transport from the Site will be kept clean of dirt and other materials during Site remediation and development.

Queuing of trucks will be performed on-Site in order to minimize off-Site disturbance. Off-Site queuing will be prohibited.

Material transported by trucks exiting the Site will be secured with tight-fitting covers. Loosefitting canvas-type truck covers will be prohibited. If loads contain wet material capable of producing free liquid, truck liners will be used.

All trucks will be washed prior to leaving the Site. Truck wash waters will be collected and disposed of off-Site in an appropriate manner.

REMEDIAL ENGINEERING, P.C.

5.4.5 Materials Disposal Off-Site

The disposal locations will be determined prior to implementation of the Remedial Action. Disposal location established at a later date will be reported to the NYSDEC Project Manager.

The total quantity of material expected to be disposed off-Site is estimated to be 3,391 cy.

All soil/fill/solid waste excavated and removed from the Site will be treated as contaminated and regulated material and will be disposed in accordance with all local, State (including 6NYCRR Part 360) and Federal regulations. If disposal of soil/fill from this Site is proposed for unregulated disposal (i.e., clean soil removed for development purposes), a formal request with an associated plan will be made to NYSDEC's Project Manager. Unregulated off-Site management of materials from this Site is prohibited without formal NYSDEC approval.

Material that does not meet Track 1 unrestricted SCOs is prohibited from being taken to a New York State recycling facility (6NYCRR Part 360-16 Registration Facility).

As necessary, the following documentation will be obtained and reported by the Remedial Engineer for each disposal location used in this project to fully demonstrate and document that the disposal of material derived from the Site conforms with all applicable laws: (1) a letter from the Remedial Engineer or BCP Volunteer to the receiving facility describing the material to be disposed and requesting formal written acceptance of the material. This letter will state that material to be disposed is contaminated material generated at an environmental remediation Site in New York State. The letter will provide the project identity and the name and phone number of the Remedial Engineer. The letter will include as an attachment a summary of all chemical data for the material being transported (including Site Characterization data); and (2) a letter from all receiving facilities stating it is in receipt of the correspondence (above) and is approved to accept the material. These documents will be included in the FER.

Non-hazardous historic fill and contaminated soils taken off-Site will be handled, at minimum, as a Municipal Solid Waste per 6NYCRR Part 360-1.2

Historical fill and contaminated soils from the Site are prohibited from being disposed at Part 360-16 Registration Facilities (also known as Soil Recycling Facilities).

Soils that are contaminated but non-hazardous and are being removed from the Site are considered by the Division of Materials Management (DMM) in NYSDEC to be Construction and Demolition (C/D) materials with contamination not typical of virgin soils. These soils may be sent to a permitted Part 360 landfill. They may be sent to a permitted C/D processing facility without permit modifications only upon prior notification of NYSDEC Region 3 DMM. This material is prohibited from being sent or redirected to a Part 360-16 Registration Facility. In this case, as dictated by DMM, special procedures will include, at a minimum, a letter to the C/D facility that provides a detailed explanation that the material is derived from a DER remediation Site, that the soil material is contaminated and that it must not be redirected to on-Site or off-Site Soil Recycling Facilities. The letter will provide the project identity and the name and phone number of the Remedial Engineer. The letter will include as an attachment a summary of all chemical data for the material being transported.

The FER will include an accounting of the destination of all material removed from the Site during this Remedial Action, including excavated soil, contaminated soil, historic fill, solid waste, and hazardous waste, non-regulated material, and fluids. Documentation associated with disposal of all material must also include records and approvals for receipt of the material. This information will also be presented in a tabular form in the FER.

Bill of Lading system or equivalent will be used for off-Site movement of non-hazardous wastes and contaminated soils. This information will be reported in the Final Engineering Report.

Hazardous wastes derived from on-Site will be stored, transported, and disposed of in full compliance with applicable local, State, and Federal regulations.

Appropriately licensed haulers will be used for material removed from this Site and will be in full compliance with all applicable local, State and Federal regulations.

Waste characterization will be performed for off-Site disposal in a manner suitable to the receiving facility and in conformance with applicable permits. Sampling and analytical methods, sampling frequency, analytical results and QA/QC will be reported in the FER. All data available for soil/material to be disposed at a given facility must be submitted to the disposal facility with suitable explanation prior to shipment and receipt.

5.4.6 Materials Reuse On-Site

Materials that do not require removal under the proposed remedy may be reused if approved by the NYSDEC.

5.4.7 Fluids Management

Fluids management was discussed at the start of this section.

All liquids to be removed from the Site, including dewatering fluids, will be handled, transported and disposed in accordance with applicable local, State, and Federal regulations.

Dewatered fluids will not be recharged back to the land surface or subsurface of the Site. Dewatering fluids will be managed off-Site.

Discharge of water generated during remedial construction to surface waters (i.e., a local pond, stream or river) is prohibited without a SPDES permit.

5.4.8 Demarcation

After the completion of soil removal and any other invasive remedial activities and prior to backfilling, a land survey will be performed by a New York State licensed surveyor. The survey will define the top elevation of residual contaminated soils. A physical demarcation layer, consisting of orange snow fencing material or equivalent material will be placed on the surface that will not be covered by concrete, asphalt, or structures to provide a visual reference. This demarcation layer will constitute the top of the 'Residuals Management Zone', the zone that requires adherence to special conditions for disturbance of contaminated residual soils defined in the SMP. The survey will measure the grade covered by the demarcation layer before the placement of cover soils that will not be covered by concrete, asphalt, or structures; pavement

and sub-soils; structures; or other materials. This survey and the demarcation layer placed on this grade surface will constitute the physical and written record of the upper surface of the 'Residuals Management Zone' in the SMP. A map showing the survey results will be included in the FER and the SMP.

5.4.9 Backfill from Off-Site Sources

All materials proposed for import onto the Site will be approved by the Remedial Engineer and will be in compliance with provisions in this RAWP prior to receipt at the Site.

Material from industrial sites, spill sites, other environmental remediation sites or other potentially contaminated sites will not be imported to the Site.

The FER will include the following certification by the Remedial Engineer: "I certify that all import of soils from off-Site, including source evaluation, approval and sampling, has been performed in a manner that is consistent with the methodology defined in the Remedial Action Work Plan".

All imported soils will meet NYSDEC approved backfill or cover soil quality objectives for this Site. These NYSDEC approved backfill or cover soil quality objectives are the lower of the protection of groundwater or the protection of public health soil cleanup objectives for restricted residential use as set forth in Table 375-6.8(b) of 6 NYCRR Part 375 and listed in Table 14. Non-compliant soils will not be imported onto the Site without prior approval by NYSDEC. Nothing in the approved RAWP or its approval by NYSDEC should be construed as an approval for this purpose.

Soils that meet 'exempt' fill requirements under 6 NYCRR Part 360, but do not meet backfill or cover soil objectives for this Site, will not be imported onto the Site without prior approval by NYSDEC. Nothing in this RAWP should be construed as an approval for this purpose.

Solid waste will not be imported onto the Site.

In accordance with DER-10, the following material may be imported, without chemical testing, to be used as backfill beneath pavement, buildings or as part of the final Site cover, provided that it contains less than 10% by weight material which would pass through a size 80 sieve and consists of:

- gravel, rock or stone, consisting of virgin material from a NYSDEC permitted mine or quarry; or
- recycled concrete or brick from a NYSDEC registered construction and demolition debris processing facility if the material conforms to the requirements of Section 304 of the New York State Department of Transportation *Standard Specifications Construction and Materials Volume 1* (2002).

Trucks entering the Site with imported soils will be securely covered with tight fitting covers.

5.4.10 Stormwater Pollution Prevention

This section highlights key aspects that are part of the SWPPP.

Barriers and hay bale checks will be installed and inspected once a week and after every storm event. Results of inspections will be recorded in a logbook and maintained at the Site and available for inspection by NYSDEC. All necessary repairs shall be made immediately.

Accumulated sediments will be removed as required to keep the barrier and hay bale check functional.

All undercutting or erosion of the silt fence toe anchor shall be repaired immediately with appropriate backfill materials.

Manufacturer's recommendations will be followed for replacing silt fencing damaged due to weathering.

Erosion and sediment control measures identified in the RAWP shall be observed to ensure that they are operating correctly. Where discharge locations or points are accessible, they shall be inspected to ascertain whether erosion control measures are effective in preventing significant impacts to receiving waters Silt fencing or hay bales will be installed around the entire perimeter of the remedial construction area.

5.4.11 Contingency Plan

If USTs or other previously unidentified contaminant sources are found during on-Site remedial excavation or development related construction, sampling will be performed on product, sediment and surrounding soils, etc. Any USTs encountered will be properly removed and appropriate closure measures will be taken, in accordance with DER-10, Section 5.5. Chemical analytical work will be for full scan parameters (Target Analyte List [TAL] metals; Target Compound List [TCL] volatiles and semivolatiles, TCL pesticides and PCBs). These analyses will not be limited to STARS parameters where tanks are identified without prior approval by NYSDEC. Analyses will not be otherwise limited without NYSDEC approval.

Identification of unknown or unexpected contaminated media identified by screening during invasive Site work will be promptly communicated by phone to NYSDEC's Project Manager. These findings will be also included in daily and periodic electronic media reports.

5.4.12 Community Air Monitoring Plan

The CAMP is included in Appendix C.

Exceedances observed in the CAMP will be reported to NYSDEC and NYSDOH Project Managers and included in the Daily Report.

5.4.13 Odor, Dust, and Nuisance Control Plan

The FER will include the following certification by the Remedial Engineer: "I certify that all invasive work during the remediation and all invasive development work were conducted in accordance with dust and odor suppression methodology defined in the Remedial Action Work Plan."

5.4.13.1 Odor Control Plan

This odor control plan is capable of controlling emissions of nuisance odors off-Site. Specific odor control methods to be used on a routine basis will include limiting open excavation areas

and covering excavated soil. If nuisance odors are identified, work will be halted and the source of odors will be identified and corrected. Work will not resume until all nuisance odors have been abated. NYSDEC and NYSDOH will be notified of all odor events and of all other complaints about the project. Implementation of all odor controls, including the halt of work, will be the responsibility of the Volunteer's Remedial Engineer, who is responsible for certifying the FER.

All necessary means will be employed to prevent on- and off-Site nuisances. At a minimum, procedures will include: (a) limiting the area of open excavations; (b) shrouding open excavations with tarps and other covers; and (c) using foams to cover exposed odorous soils. If odors develop and cannot be otherwise controlled, additional means to eliminate odor nuisances will include: (d) direct load-out of soils to trucks for off-Site disposal; (e) use of chemical odorants in spray or misting systems; and, (f) use of staff to monitor odors in surrounding neighborhoods.

Where odor nuisances have developed during remedial work and cannot be corrected, or where the release of nuisance odors cannot otherwise be avoided due to on-Site conditions or close proximity to sensitive receptors, odor control will be achieved by sheltering excavation and handling areas under tented containment structures equipped with appropriate air venting/filtering systems.

5.4.13.2 Dust Control Plan

A dust suppression plan that addresses dust management during invasive on-Site work will include, at a minimum, the items listed below:

- Dust suppression will be achieved through the use of water to wet excavation areas and roads. Water will be available on-Site at suitable supply and pressure for use in dust control, including a water cannon truck if necessary.
- Gravel will be used on roadways to provide a clean and dust-free road surface.
- On-Site roads will be limited in total area to minimize the area required for water spraying.

5.4.13.3 Other Nuisances

A plan for rodent control will be developed and utilized by the contractor prior to and during Site clearing and Site grubbing, and during all remedial work.

A plan will be developed and utilized by the contractor for all remedial work and will conform, at a minimum, to City of White Plains noise control standards.

6.0 RESIDUAL CONTAMINATION TO REMAIN ON-SITE

Since residual contaminated soil and groundwater will exist beneath the Site after the remedy is complete, ECs and ICs are required to protect human health and the environment. These ECs and ICs are described hereafter. Long-term management of EC/ICs and of residual contamination will be executed under a Site specific SMP that will be developed and included in the FER.

ECs will be implemented to protect public health and the environment by appropriately managing residual contamination. The Controlled Property (the Site) will have two primary EC systems. These are: (1) a Site Cover System will be comprised of asphalt covered parking areas, concrete covered sidewalks/walkways, concrete building slab and limited landscaped areas (which will include a minimum of two feet of cover over existing Site soil), and (2) ISCO treatment and groundwater monitoring. The potential for vapor intrusion for any buildings on Site will be evaluated. Should it be deemed necessary, an SSDS will be installed for portions of development that will have a slab above the water table, where there is sufficient clearance above the water table.

The FER will report residual contamination on the Site in tabular and map form. This will include presentation of exceedances of Track 4 SCOs.

7.0 ENGINEERING CONTROLS: SITE COVER SYSTEM

Exposure to residual contaminated soils will be prevented by an engineered, Site Cover System that will be built on the Site. This Site Cover System will be comprised of asphalt covered parking areas, concrete covered sidewalks/walkways, concrete building slab and limited landscaped areas (which will include a minimum of two feet of cover over existing Site soil).

A Soil Management Plan will be included in the SMP and will outline the procedures to be followed in the event that the composite cover system and underlying residual contamination are disturbed after the Remedial Action is complete.

Maintenance of this Site Cover System will be described in the SMP.

8.0 ENGINEERING CONTROLS: TREATMENT SYSTEMS

8.1 In Situ Chemical Oxidation Injections

ISCO is proposed to address the Compounds of Concern in soil and groundwater at the Site. One round of ISCO is proposed for the Remedial Action; the need for additional rounds of ISCO treatment and monitoring will be evaluated and addressed in the SMP. The following sections present the injection plan.

8.1.1 Chemical Oxidant Injections

As discussed above, an *in situ* chemical oxidation injection program will be performed to address contaminated groundwater at the Site (Plate 7), targeting the Compounds of Concern that are comprised of petroleum hydrocarbons and CVOCs. As a result, PersulfOx® and ORC-A® as manufactured by Regenesis are proposed to effectively treat the two classes of compounds. Product specifications of PersulfOx® and ORC-A® are provided in Appendix E.

Treatment Area	PersulfOX (lbs)	ORC-A (lbs)
AOC 1	0	760
AOC 2	0	240
AOC 3, AOC 4	3,802	0
RW-5/5D	1,598	0
RW-10	1,102	0
RW-11	1,102	0
RW-17	5,455	0
TOTAL	13,059	1,000

Volume and density application rates for the chemical oxidant will be based on the manufacturer's recommendations, as shown in the below table.

The PersulfOx[®] and ORC-A[®] will be injected using approximately 56 temporary points spaced 10 to 15 feet apart and installed by a GeoprobeTM unit, or depending on subsurface conditions, an alternative drilling method (Plate 7). The injection points are expected to be direct push

technology injection tools with a 5-ft screen interval to direct the oxidant to the treatment zone. The treatment zone varies between 10 to 15 feet bls except in Parcel J where the proposed treatment zone is 30 feet bls.

8.1.2 Groundwater Monitoring

To assess the performance of the oxidant injections, a groundwater monitoring program will be established. This will include two components: baseline sampling and performance monitoring. Baseline sampling will be completed prior to ISCO injection implementation. Performance monitoring of water-quality indicator parameters (pH, conductivity, dissolved oxygen, oxidation-reduction potential, temperature, and turbidity) will be the primary indicator of the effects of the injection solution on the groundwater.

The proposed monitoring well network for post-remedial monitoring will be: existing monitoring wells RW-1, RW-4, RW-16, RW-17, RW-21, RW-22, RW-23, and RW-24, and newly installed monitoring wells RW-25, RW-26, RW-27, and RW-28 (Plate 7). Note performance monitoring of existing on-Site monitoring wells will only be feasible until Site development activities restrict access or destroy the wells. Please note that on-Site monitoring wells destroyed during development should be replaced in the nearest available location and post-remedial monitoring of the groundwater should continue, unless otherwise approved by the department. Details on the groundwater monitoring will be provided in the SMP.

RW-25, RW-26, RW-27, RW-28 and RW-29 will be constructed of two-inch diameter polyvinyl chloride (PVC) riser attached to 10-feet of 0.020-inch slot well screen. The screen interval for RW-25 is expected to be 10 to 20 ft bls. The screen interval for RW-26 is expected to be 8 to 18 ft bls. The screen interval for RW-27 is expected to be 3 to 13 ft bls. The screen interval for RW-28 is expected to be 2 to 12 ft bls. The screen interval for RW-29 is expected to be 20 to 30 ft bls. Final screen intervals will be adjusted as necessary per field observations. The annulus will be filled with sand to one foot above the top of screen, at a minimum, and two feet if feasible, sealed with a minimum of one foot of bentonite and then cement grouted to grade. The monitoring well will be completed at grade with a flush-mount traffic bearing road box and sealed with a locking J-plug.

Baseline Sampling

Prior to the injections, a baseline round of samples will be collected from the monitoring well network. Samples will be analyzed for TCL VOCs using USEPA SW846 Method 8260.

Performance Monitoring

Approximately four to six weeks after the oxidant injection event, performance monitoring samples will be collected from the post remedial well network. The monitoring wells will be sampled for TCL VOCs using USEPA SW846 Method 8260.

8.1.3 Data Evaluation and Reporting

After the injection and the performance monitoring have been completed, Roux Associates will evaluate the results the injection round to determine the effectiveness of the oxidant at reducing the concentrations of the Compounds of Concern in the groundwater. The evaluation and recommended course of action will be summarized in a report to NYSDEC, and as necessary, any additional rounds of injections and monitoring will be conducted as part of the SMP. All asbuilt drawings, diagrams, calculation and manufacturer documentation for treatment systems will be presented in the FER.

9.0 CRITERIA FOR COMPLETION OF REMEDIATION/ TERMINATION OF REMEDIAL SYSTEMS

9.1 Site Cover System

The Site Cover System is a permanent control and the quality and integrity of this system will be inspected at defined, regular intervals in perpetuity.

9.2 In Situ Chemical Oxidation

Groundwater samples will be collected four to six weeks following the completion of the chemical injection round. If the concentrations of the Compounds of Concern are not significantly reduced or do not suggest a downward trend, additional rounds of treatment and monitoring will be evaluated and conducted as part of the SMP. The effectiveness of the oxidant at decreasing the concentrations of the compounds of concern in the groundwater must be demonstrated before the Certificate of Completion (COC) can be issued.

9.3 Groundwater Monitoring

Groundwater monitoring activities to assess the performance of the remedy, or natural attenuation following the removal of contaminant sources, will continue, as determined by NYSDOH and NYSDEC, until residual groundwater concentrations are found to be below NYSDEC standards or have become asymptotic over an extended period. Monitoring will continue until permission to discontinue is granted in writing by NYSDEC and NYSDOH. Monitoring activities will be outlined in the Monitoring Plan of the SMP. It is anticipated that, following remediation, a minimum of eight quarterly monitoring events will be performed.

10.0 INSTITUTIONAL CONTROLS

After the remedy is complete, the Site will have residual contamination remaining in place. ECs for the residual contamination have been incorporated into the remedy to render the overall Site remedy protective of public health and the environment. Two elements have been designed to ensure continual and proper management of residual contamination in perpetuity: an Environmental Easement and an SMP.

All as-built drawings, diagrams, calculation and manufacturer documentation for treatment systems will be presented in the FER. A Site-specific Environmental Easement will be recorded with Westchester County to provide an enforceable means of ensuring the continual and proper management of residual contamination and protection of public health and the environment in perpetuity or until released in writing by NYSDEC. It requires that the grantor of the Environmental Easement and the grantor's successors and assigns adhere to all ECs/ICs placed on this Site by this NYSDEC-approved remedy. ICs provide restrictions on Site usage and mandate operation, maintenance, monitoring and reporting measures for all ECs and ICs. The SMP describes appropriate methods and procedures to ensure compliance with all ECs and ICs that are required by the Environmental Easement. Once the SMP has been approved by the NYSDEC, compliance with the SMP is required by the grantor of the Environmental Easement and assigns.

10.1 Environmental Easement

An Environmental Easement, as defined in Article 71 Title 36 of the Environmental Conservation Law, is required when residual contamination is left on-Site after the Remedial Action is complete. As part of this remedy, an Environmental Easement approved by NYSDEC will be filed and recorded with the Westchester County Office of the City Register. The Environmental Easement will be submitted as part of the FER.

The Environmental Easement renders the Site a Controlled Property. The Environmental Easement must be recorded with the Westchester County Office of the City Register before the COC can be issued by NYSDEC. A series of Institutional Controls are required under this remedy to implement, maintain and monitor these Engineering Control systems, prevent future exposure to residual contamination by controlling disturbances of the subsurface soil and

restricting the use of the Site to restricted residential (and less restrictive uses defined in 6 NYCRR Part 375) only. These ICs are requirements or restrictions placed on the Site that are listed in, and required by, the Environmental Easement. ICs can, generally, be subdivided between controls that support ECs, and those that place general restrictions on Site usage or other requirements. ICs in both of these groups are closely integrated with the SMP, which provides all of the methods and procedures to be followed to comply with this remedy.

The ICs that support ECs are:

- Compliance with the Environmental Easement by the Grantee and the Grantee's successors and adherence of all elements of the SMP is required;
- All ECs must be operated and maintained as specified in this SMP;
- A Site Cover System comprised of asphalt covered parking areas, concrete covered sidewalks/walkways, concrete building slab and limited landscaped areas (which will include a minimum of two feet of cover over existing Site soil) must be inspected, certified and maintained as required in the SMP;
- The need for soil vapor mitigation will be evaluated during redevelopment, and addressed in the SMP. If soil vapor mitigation is necessary, a soil vapor mitigation system consisting of a sub-slab depressurization system under all occupied building structures, where the is sufficient clearance above the water table, must be inspected, certified, operated, and maintained as required by the SMP.
- Injection wells and monitoring points relating to ISCO will be installed, operated, and maintained as required by the SMP.
- All ECs on the Controlled Property must be inspected and certified at a frequency and in a manner defined in the SMP;
- Groundwater, soil vapor, and other environmental or public health monitoring must be performed as defined in the SMP;
- Data and information pertinent to Site Management for the Controlled Property must be reported at the frequency and in a manner defined in the SMP;
- On-Site environmental monitoring devices, including but not limited to groundwater monitor wells, must be protected and replaced as necessary to ensure proper functioning in the manner specified in the SMP;
- ECs may not be discontinued without an amendment or extinguishment of the Environmental Easement.
Adherence to these ICs for the Site is mandated by the Environmental Easement and will be implemented under the SMP (discussed in the next section). The Controlled Property (Site) will also have a series of ICs in the form of Site restrictions and requirements. The Site restrictions that apply to the Controlled Property are:

- Vegetable gardens and farming on the Controlled Property are prohibited;
- Use of groundwater underlying the Controlled Property is prohibited without treatment rendering it safe for intended purpose;
- All future activities on the Controlled Property that will disturb residual contaminated material are prohibited unless they are conducted in accordance with the soil management provisions in the Site Management Plan;
- The Controlled Property may be used for restricted residential (and less restrictive uses defined in 6 NYCRR Part 375) use only, provided the long-term Engineering and Institutional Controls included in the SMP are employed;
- The Controlled Property may not be used for a higher level of use, such as residential or unrestricted use without an amendment or extinguishment of this Environmental Easement;
- Grantor agrees to submit to NYSDEC a written statement that certifies, under penalty of perjury, that: (1) controls employed at the Controlled Property are unchanged from the previous certification or that any changes to the controls were approved by the NYSDEC; and, (2) nothing has occurred that impairs the ability of the controls to protect public health and environment or that constitute a violation or failure to comply with the SMP. NYSDEC retains the right to access such Controlled Property at any time in order to evaluate the continued maintenance of any and all controls. This certification shall be submitted annually, or an alternate period of time that NYSDEC may allow. This annual statement must be certified by an expert that the NYSDEC finds acceptable.

10.2 Site Management Plan

Site Management is the last phase of remediation and begins with the approval of the FER and issuance of the COC for the Remedial Action. The SMP is submitted as part of the FER but will be written in a manner that allows its removal and use as a complete and independent document. Site Management continues in perpetuity or until released in writing by NYSDEC. The property owner is responsible to ensure that all Site Management responsibilities defined in the Environmental Easement and the SMP are performed.

The SMP is intended to provide a detailed description of the procedures required to manage residual contamination left in place at the Site following completion of the Remedial Action in

accordance with the BCA with the NYSDEC. This includes: (1) development, implementation, and management of all Engineering and Institutional Controls; (2) development and implementation of monitoring systems and a Monitoring Plan; (3) development of a plan to operate and maintain any treatment, collection, containment, or recovery systems (including, where appropriate, preparation of an Operation and Maintenance Manual); (4) submittal of Site Management Reports, performance of inspections and certification of results, and demonstration of proper communication of Site information to NYSDEC; and (5) defining criteria for termination of treatment system operation.

To address these needs, this SMP will include four plans: (1) an Engineering and Institutional Control Plan for implementation and management of EC/ICs; (2) a Monitoring Plan for implementation of Site Monitoring; (3) an Operation and Maintenance Plan for implementation of remedial collection, containment, treatment, and recovery systems; and (4) a Site Management Reporting Plan for submittal of data, information, recommendations, and certifications to NYSDEC. The SMP will be prepared in accordance with the requirements in NYSDEC DER-10 Technical Guidance for Site Investigation and Remediation and the guidelines provided by NYSDEC.

Site management activities, reporting, and EC/IC certification will be scheduled on a certification period basis. The certification period will be annually.

The SMP will include a monitoring plan for groundwater at the down-gradient Site perimeter to evaluate Site-wide performance of the remedy. Appropriately placed groundwater monitor wells will also be installed immediately down-gradient of all VOC remediation areas, where accessible, for the purpose of evaluation of the effectiveness of the remedy that is implemented.

No exclusions for handling of residual contaminated soils will be provided in the SMP. All handling of residual contaminated material will be subject to provisions contained in the SMP.

11.0 FINAL ENGINEERING REPORT

An FER will be submitted to NYSDEC following implementation of the Remedial Action defined in this RAWP. The FER provides the documentation that the remedial work required under this RAWP has been completed and has been performed in compliance with this plan. The FER will provide a comprehensive account of the locations and characteristics of all material removed from the Site including the surveyed map(s) of all sources. The FER will include asbuilt drawings for all constructed elements, calculation and manufacturer documentation for treatment systems, certifications, manifests, and bills of lading. All as-built drawings will be stamped and signed by a New York State Professional Engineer. The FER will provide a description of the changes in the Remedial Action from the elements provided in the RAWP and associated design documents. The FER will provide a tabular summary of all performance evaluation sampling results and all material characterization results and other sampling and chemical analysis performed as part of the Remedial Action. The FER will provide test results demonstrating that all mitigation and remedial systems are functioning properly. The FER will be prepared in conformance with DER-10.

The FER will include written and photographic documentation of all remedial work performed under this remedy.

The FER will provide a thorough summary of all residual contamination left on the Site after the remedy is complete. Residual contamination includes all contamination that exceeds the PGW SCOs for the Compounds of Concern and RR Use SCOs for the other parameters in 6NYCRR Part 375-6. A table that shows Track 4 exceedances for all soil/fill remaining at the Site after the Remedial Action and a map that shows the location and summarizes Track 4 exceedances for all soil/fill remaining at the Site after the Remedial Action will be included in the FER.

The FER will provide a thorough summary of all residual contamination that exceeds the SCOs defined for the Site in the RAWP and must provide an explanation for why the material was not removed as part of the Remedial Action. A table that shows residual contamination in excess of Site SCOs and a map that shows residual contamination in excess of Site SCOs will be included in the FER.

The FER will include an accounting of the destination of all material removed from the Site, including excavated contaminated soil, historic fill, solid waste, hazardous waste, non-regulated material, and fluids. Documentation associated with disposal of all material must also include records and approvals for receipt of the material. It will provide an accounting of the origin and chemical quality of all material imported onto the Site.

Before approval of a FER and issuance of a COC, all project reports must be submitted in digital form on electronic media (PDF).

11.1 Certifications

The following certification will appear in front of the Executive Summary of the Final Engineering Report. The certification will be signed by the Remedial Engineer Charles J. McGuckin who is a Professional Engineer registered in New York State. This certification will be appropriately signed and stamped. The certification will include the following statements:

I, Charles J. McGuckin, am currently a registered professional engineer licensed by the State of New York. I had primary direct responsibility for implementation of the remedial program for the 77 West Post Road Site (NYSDEC BCA Index No. C360129-03-13 Site No. C360129).

I certify that the Site description presented in this FER is identical to the Site descriptions presented in the Environmental Easement, the SMP, and the BCA for 77 West Post Road and related amendments.

I certify that the Remedial Action Work Plan dated [month day year] and approved by the NYSDEC were implemented and that all requirements in those documents have been substantively complied with.

I certify that the remedial activities were observed by qualified environmental professionals under my supervision and that the remediation requirements set forth in the RAWP and any other relevant provisions of ECL 27-1419 have been achieved. I certify that all use restrictions, ICs, ECs, and all operation and maintenance requirements applicable to the Site are contained in an Environmental Easement created and recorded pursuant ECL 71-3605 and that all affected local governments, as defined in ECL 71-3603, have been notified that such easement has been recorded. A SMP has been submitted by the Volunteer for the continual and proper operation, maintenance, and monitoring of all ECs employed at the Site, including the proper maintenance of all remaining monitoring wells, and that such plan has been approved by the NYSDEC.

I certify that the export of all contaminated soil, fill, water or other material from the property was performed in accordance with the Remedial Action Work Plan, and were taken to facilities licensed to accept this material in full compliance with all Federal, State and local laws.

I certify that all import of soils from off-Site, including source approval and sampling, has been performed in a manner that is consistent with the methodology defined in the RAWP.

I certify that all invasive work during the remediation and all invasive development work were conducted in accordance with dust and odor suppression methodology and soil screening methodology defined in the RAWP.

I certify that all information and statements in this certification are true. I understand that a false statement made herein is punishable as Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law.

I certify that all documents generated in support of this report have been submitted in accordance with the DER's electronic submission protocols and have been accepted by the Department.

I certify that all data generated in support of this report have been submitted in accordance with the Department's electronic data deliverable and have been accepted by the Department.

It is a violation of Article 130 of New York State Education Law for any person to alter this document in any way without the express written verification of adoption by any New York

State licensed engineer in accordance with Section 7209(2), Article 130, New York State Education Law.

12.0 SCHEDULE

Table 15 presents the Remedial Action schedule.

TABLES

- 1. Summary of Volatile Organic Compounds in Soil
- 2. Summary of Semivolatile Organic Compounds in Soil
- 3. Summary of Metals in Soil
- 4. Summary of Polychlorinated Biphenyls in Soil
- 5. Summary of Pesticides in Soil
- 6. Summary of Volatile Organic Compounds in Groundwater
- 7. Summary of Semivolatile Organic Compounds in Groundwater
- 8. Summary of Metals in Groundwater
- 9. Summary of Polychlorinated Biphenyls in Groundwater
- 10. Summary of Pesticides in Water
- 11. Summary of Volatile Organic Compounds in Offsite Soil Vapor
- 12. Summary of Costs for Remedial Alternative 1
- 13. Summary of Costs for Remedial Alternative 2
- 14. Backfill Soil Cleanup Objectives
- 15. Proposed Remedial Action Schedule
- 16. List of Required Permits
- 17. Emergency Contact List
- 18. Track 4 Soil Cleanup Objectives

	NYSDEC	NYSDEC	NYSDEC																		
	Part 375	Part 375	Part 375	Sample Designation:	GP-1A	GP-1B	GP-2	GP-3	GP-4	GP-5	GP-6	GP-7	GP-8	GP-9	GP-10	GP-11	GP-12	SB-1	SB-2A	SB-2B	SB-3
Parameter	Unrestricted	Protection of	Restricted	Sample Date:	11/1/2007	11/1/2007	11/1/2007	11/1/2007	11/1/2007	11/2/2007	11/2/2007	11/2/2007	11/5/2007	11/5/2007	11/5/2007	11/5/2007	11/5/2007	11/7/2007	11/7/2007	11/7/2007	11/7/2007
(Concentrations in $\mu g/kg$)	Use	Groundwater	Residential	Sample Depth (ft bls):	2 - 3	4 - 6	4 - 6	4 - 5.5	3.5 - 5.5	6 - 8	6 - 8	2 - 4	8 - 10	2 - 4	2 - 4	4 - 6	6 - 8	6 - 8	4 - 6	8 - 10	3 - 4
1,1,1-Trichloroethane	680	680	100000		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,1,2,2-Tetrachloroethane					NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,1,2-Trichloroethane					NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1.1-Dichloroethane	270	270	26000		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1.1-Dichloroethene	330	330	100000		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1.2.3-Trichlorobenzene					NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1.2.4-Trichlorobenzene					NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1 2 4-Trimethylbenzene	3600	3600	52000		40200	3220	ND	ND	ND	ND	ND	ND	305000	146000	ND						
1 3 5-Trimethylbenzene	8400	8400	52000		12800	220	ND	ND	ND	ND	ND	ND	84000	59/00	ND						
1.2-Dibromoethane			52000		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1.2-Dichlorobenzene	1100	1100	100000		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2-Dichloroethane	20	20	3100		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1.2 Dichloropropage	20	20	5100		INA NA	NA	NA	NA	NA	INA NA	NA	NA	NA	NA	INA NA	NA	NA	INA NA	NA	NA	INA NA
1.2 Dichlorobonzono	2400	2400	40000		INA NA	INA NA	NA	INA NA	NA	INA NA	INA NA	INA NA	INA NA	NA	INA NA	NA NA	INA NA	INA NA	INA NA	INA NA	INA NA
1,3-Dichlorohanzana	2400	2400	49000		INA NA	INA NA	NA	INA	INA NA	INA	INA	INA NA	INA	INA NA	INA	INA NA	INA	INA NA	INA	INA NA	INA
1,4-Dichiorobenzene	100	100	12000		NA	INA	NA	INA	INA NA	NA	NA	INA	NA	INA	INA NA	INA	NA	NA	NA	INA	INA
1,4-Dioxalle	100	100	100000		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Butanone (MEK)	120	120	100000		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Hexanone					NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Isopropyltoluene					7350	783	ND	ND	ND	ND	ND	ND	7890	14100	ND						
4-Methyl-2-pentanone (MIBK)					NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acetone	50	50	100000		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzene	60	60	4800		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromochloromethane					NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Bromodichloromethane					NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Bromoform					NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Bromomethane					NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Carbon disulfide					NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Carbon tetrachloride	760	760	2400		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chlorobenzene	1100	1100	100000		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chloroethane					NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chloroform	370	370	49000		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chloromethane					NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
cis-1,2-Dichloroethene	250	250	100000		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
cis-1,3-Dichloropropene					NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cyclohexane					NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibromochloromethane					NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibromochloropropane					NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dichlorodifluoromethane					NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Ethylbenzene	1000	1000	41000		ND	ND	ND	ND	ND	ND	ND	ND	131000	54400	ND						
Freon 113					NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Isopropylbenzene					2290	225	ND	ND	ND	ND	ND	ND	20400	16800	ND						
m+n-Xylene					NΔ	NΔ	NΔ	NΔ	NΔ	NΔ	NΔ	NΔ	NA	NA	NΔ						
Methyl acetate					NΔ	NA	NA	NA	NΔ	NΔ	NΔ	NΔ	NΔ	NA	NΔ	NA	NΔ	NΔ	NΔ	NA	NΔ
Methylcyclohexane					NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NΔ	NA	NA	NA	NA	NA	NA
Methylene chloride	50	50	100000		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MTRE	930	930	100000		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA NA	NA	NA	NA	NA	NA	NA
Nenthalana	930	930	100000		NA 24400	NA 052							INA 45600	1NA 47000	NA ND			NA ND			
o Vylene			100000		∠4400 N 4	932 NA							43000 NIA	4/000 NIA							
n Putulhanzana	12000	12000			INA 7760	INA 674	INA ND	INA ND	INA ND	INA	INA ND	INA ND	INA	INA 11400	INA	INA ND	INA ND	INA	INA ND	INA ND	INA
n-DutyIDenZene	12000	12000	100000		//60	6/4	ND	ND	ND	ND	ND	ND	22400	11400	ND						
n-riopyidenzene	3900	3900	100000		4400	364	ND	ND	ND	ND	ND	ND	60000	23100	ND						
sec-Butylbenzene	11000	11000	100000		3040	366	ND	ND	ND	ND	ND	ND	9120	6730	ND						
Styrene					NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Tert-butanol / butyl alcohol					ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	207	ND	ND	ND	ND	ND	ND
Tetrachloroethene	1300	1300	19000		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Toluene	700	700	100000		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

	NYSDEC	NYSDEC	NYSDEC																		
	Part 375	Part 375	Part 375	Sample Designation:	GP-1A	GP-1B	GP-2	GP-3	GP-4	GP-5	GP-6	GP-7	GP-8	GP-9	GP-10	GP-11	GP-12	SB-1	SB-2A	SB-2B	SB-3
Parameter	Unrestricted	Protection of	Restricted	Sample Date:	11/1/2007	11/1/2007	11/1/2007	11/1/2007	11/1/2007	11/2/2007	11/2/2007	11/2/2007	11/5/2007	11/5/2007	11/5/2007	11/5/2007	11/5/2007	11/7/2007	11/7/2007	11/7/2007	11/7/2007
(Concentrations in µg/kg)	Use	Groundwater	Residential	Sample Depth (ft bls):	2 - 3	4 - 6	4 - 6	4 - 5.5	3.5 - 5.5	6 - 8	6 - 8	2 - 4	8 - 10	2 - 4	2 - 4	4 - 6	6 - 8	6 - 8	4 - 6	8 - 10	3 - 4
trans-1,2-Dichloroethene	190	190	100000		NA																
trans-1,3-Dichloropropene					NA																
Trichloroethene	470	470	21000		NA																
Trichlorofluoromethane					NA																
Vinyl chloride	20	20	900		NA																
Xylenes (total)	260	1600	100000		4660	ND	368100	147000	ND												
															-						

J - Estimated value

U - Indicates that the compound was analyzed for but not detected

D - a secondary analysis after dilution due to exceedance

of the calibration range in the original sample.

DUP - Duplicate sample

 $\mu g/kg$ - Micrograms per kilogram

ft bls - Feet below land surface

NYSDEC - New York State Department of Environmental Conservation

-- No NYSDEC Part 375 Standards available

Bold data indicates that parameter was detected above the NYSDEC Part 375 Unrestricted Use Standards

Shaded data indicates that parameter was detected above the NYSDEC Part 375 Protection of Groundwater Standards

Boxed data indicates that parameter was detected above the NYSDEC Part 375 Restricted Residential Standards

V - Value altered or qualifier added during data validation

R - Sample results rejected by validator

	NYSDEC	NYSDEC	NYSDEC																		
	Part 375	Part 375	Part 375	Sample Designation:	SB-4	SB-5	SB-6	SB-7	SB-8	SB-9	SB-10	SB-11	CB2	DW1	RB-1	RB-1	RB-2	RB-2	RB-3	RB-3	RB-4
Parameter	Unrestricted	Protection of	Restricted	Sample Date:	11/8/2007	11/9/2007	11/9/2007	12/5/2007	12/5/2007	12/7/2007	12/7/2007	12/7/2007	4/18/2014	4/18/2014	4/17/2014	4/17/2014	4/17/2014	4/17/2014	4/17/2014	4/17/2014	4/17/2014
(Concentrations in µg/kg)	Use	Groundwater	Residential	Sample Depth (ft bls):	10 - 14	8 - 10	17 - 19	12 - 16	12 - 14	9 - 11	9 - 11	4 - 6	-	4 - 6	10 - 12	13 - 15	10 - 12	19 - 20	10 - 12	18 - 20	7 - 9
1,1,1-Trichloroethane	680	680	100000		NA	NA	NA	NA	NA	NA	NA	NA	1.4 U	1.4 U	1200 UD	1.1 U	57 UD	62 UD	2.2 UD	1.2 U	1.1 U
1,1,2,2-Tetrachloroethane					NA	NA	NA	NA	NA	NA	NA	NA	1.4 U	1.4 U	1200 UD	1.1 U	57 UD	62 UD	2.2 UD	1.2 U	1.1 U
1,1,2-Trichloroethane					NA	NA	NA	NA	NA	NA	NA	NA	2.1 U	2.0 U	1800 UD	1.7 U	85 UD	92 UD	3.3 UD	1.7 U	1.7 U
1,1-Dichloroethane	270	270	26000		NA	NA	NA	NA	NA	NA	NA	NA	2.1 U	2.0 U	1800 UD	1.7 U	85 UD	92 UD	3.3 UD	1.7 U	1.7 U
1,1-Dichloroethene	330	330	100000		NA	NA	NA	NA	NA	NA	NA	NA	1.4 U	1.4 U	1200 UD	1.1 U	57 UD	62 UD	2.2 UD	1.2 U	1.1 U
1,2,3-Trichlorobenzene					NA	NA	NA	NA	NA	NA	NA	NA	6.9 U	6.8 U	6000 UD	5.6 U	280 UD	310 UD	11 UD	5.8 U	5.6 U
1,2,4-Trichlorobenzene					NA	NA	NA	NA	NA	NA	NA	NA	6.9 U	6.8 U	6000 UD	5.6 U	280 UD	310 UD	11 UD	5.8 U	5.6 U
1,2,4-Trimethylbenzene	3600	3600	52000		41400	ND	151	ND	147000	ND	4240	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,3,5-Trimethylbenzene	8400	8400	52000	I	13500	ND	77	ND	40800	ND	1970	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2-Dibromoethane					NA	NA	NA	NA	NA	NA	NA	NA	5.5 U	5.4 U	4800 UD	4.4 U	230 UD	250 UD	8.9 UD	4.6 U	4.5 U
1,2-Dichlorobenzene	1100	1100	100000		NA	NA	NA	NA	NA	NA	NA	NA	6.9 U	6.8 U	6000 UD	5.6 U	280 UD	310 UD		5.8 U	5.6 U
1,2-Dichloroethane	20	20	3100		NA	NA	NA	NA	NA	NA	NA	NA	1.4 U	1.4 U	1200 UD	1.1 U 2.0 U	57 UD	62 UD	2.2 UD	1.2 U	1.1 U 2.0 U
1,2-Dichloropropane					NA	NA	NA	NA	NA	NA	NA	NA	4.8 U	4.8 U	4200 UD	5.9 U	200 UD	220 UD	7.8 UD	4.1 U	5.9 U
1,3-Dichlorobenzene	2400	2400	49000		NA	NA	NA	NA	NA	NA	NA	NA	6.9 U	0.8 U	6000 UD	5.0 U 5.4 U	280 UD	310 UD		5.8 U	5.0 U
1,4-Dichiorobenzene	100	100	13000		NA NA	NA NA	NA NA	INA NA	NA	NA	INA	INA NA	0.9 U 140 U	0.8 U 140 U	120000 UD	3.0 U 110 U	280 UD	510 UD	220 UD	5.8 U	5.0 U 110 U
2 Putanona (MEK)	100	100	100000		INA NA	NA NA	NA NA	INA NA	NA NA	NA NA	INA NA	INA NA	140 U	140 U 14 U	120000 UD	1100	570 UD	6200 UD	220 UD	1200	11 11
2 Hexanone	120	120	100000		INA NA	INA NA	INA NA	INA NA	INA NA	INA NA	INA NA	INA NA	0.2 J 14 U	14 U 14 U	12000 UD	11 U	570 UD	620 UD	22 UD	12 U	11 U 11 U
4 Isopropyltoluene					NA 2400	NA	NA ND	NA ND	NA 1600	NA ND	NA 504	NA ND	I4 U NA	I4 U NA	12000 UD	NA	J/UUD NA	NA	22 UD NA	NA	NA NA
4-Isopropynolicelle 4-Methyl-2-pentanone (MIBK)					5490 NA	ND NA	ND NA	ND NA	NA	ND NA	394 NA	ND NA	14 H	14 U	12000 UD	11 II	570 UD	620 UD	22 LID	12 H	11 II
A cetone	50	50	100000		ND	ND	ND	116	ND	ND	ND	ND	30	14 U 14 U	12000 UD	11 UV	570 UD	620 UVD	22 UD 22 UVD	12 UV	55
Benzene	60	50 60	4800		ND	ND	ND	ND	ND	ND	143	ND	1411	140	12000 UD	1111	57 UD	62 UD	22 U V D	12.07	1111
Bromochloromethane					NΔ	NΔ	NΔ	NΔ	NA	NΔ	ΝΔ	NΔ	69U	68U	6000 UD	56U	280 UD	310 UD	2.2 OD	5.8 U	5.6 U
Bromodichloromethane					NΔ	NΔ	NΔ	NΔ	NA	NΔ	NΔ	NΔ	14U	14U	1200 UD	11U	57 UD	62 UD	2.2 UD	12U	11U
Bromoform					NA	NA	NA	NA	NA	NA	NA	NA	55U	54U	4800 UD	44U	230 UD	250 UD	89 UD	46U	45U
Bromomethane					NA	NA	NA	NA	NA	NA	NA	NA	2.8 U	2.7 U	2400 UD	2.2 U	110 UVD	120 UVD	4.4 UD	2.3 U	2.2 U
Carbon disulfide					NA	NA	NA	NA	NA	NA	NA	NA	14 U	14 U	12000 UD	11 U	570 UD	620 UD	22 UD	12 U	11 U
Carbon tetrachloride	760	760	2400		NA	NA	NA	NA	NA	NA	NA	NA	1.4 U	1.4 U	1200 UD	1.1 U	57 UD	62 UD	2.2 UD	1.2 U	1.1 U
Chlorobenzene	1100	1100	100000		NA	NA	NA	NA	NA	NA	NA	NA	1.4 U	1.4 U	1200 UD	1.1 U	57 UD	62 UD	2.2 UD	1.2 U	1.1 U
Chloroethane					NA	NA	NA	NA	NA	NA	NA	NA	2.8 U	2.7 U	2400 UD	2.2 U	110 UD	120 UD	4.4 UD	2.3 U	2.2 U
Chloroform	370	370	49000		NA	NA	NA	NA	NA	NA	NA	NA	2.1 U	2.0 U	1800 UD	1.7 U	85 UD	92.UD	3.3 UD	1.7 U	1.7 U
Chloromethane					NA	NA	NA	NA	NA	NA	NA	NA	6.9 U	6.8 U	6000 UD	5.6 U	280 UD	310 UVD	11 UD	5.8 U	5.6 U
cis-1.2-Dichloroethene	250	250	100000		NA	NA	NA	NA	NA	NA	NA	NA	1.4 U	1.4 U	1200 UD	1.1 U	57 UD	62 UD	2.2 UD	1.2 U	1.1 U
cis-1.3-Dichloropropene					NA	NA	NA	NA	NA	NA	NA	NA	1.4 U	1.4 U	1200 UD	1.1 U	57 UD	62 UD	2.2 UD	1.2 U	1.1 U
Cyclohexane					NA	NA	NA	NA	NA	NA	NA	NA	28 U	27 U	12000 JD	22 U	1100 UD	1200 UD	44 UD	23 U	22 U
Dibromochloromethane					NA	NA	NA	NA	NA	NA	NA	NA	1.4 U	1.4 U	1200 UD	1.1 U	57 UD	62 UD	2.2 UD	1.2 U	1.1 U
Dibromochloropropane					NA	NA	NA	NA	NA	NA	NA	NA	6.9 U	6.8 U	6000 UD	5.6 U	280 UD	310 UD	11 UD	5.8 U	5.6 U
Dichlorodifluoromethane					NA	NA	NA	NA	NA	NA	NA	NA	14 U	14 U	12000 UD	11 U	570 UD	620 UD	22 UD	12 U	11 U
Ethylbenzene	1000	1000	41000		4250	ND	ND	ND	21600	ND	2230	ND	1.4 U	1.4 U	18000 D	1.1 U	1400 D	42 JD	2.2 UD	1.2 U	1.1 U
Freon 113					NA	NA	NA	NA	NA	NA	NA	NA	28 U	27 U	24000 UD	22 U	1100 UD	1200 UD	44 UD	23 U	22 U
Isopropylbenzene					2860	ND	ND	ND	4380	ND	743	ND	1.4 U	1.4 U	3900 D	1.1 U	1300 D	41 JD	1.1 JD	1.2 U	1.1 U
m+p-Xylene					NA	NA	NA	NA	NA	NA	NA	NA	0.94 J	2.7 U	34000 D	2.2 U	2300 D	66 JD	2.5 JD	2.3 U	2.2 U
Methyl acetate					NA	NA	NA	NA	NA	NA	NA	NA	28 U	27 U	24000 UD	22 U	1100 UD	1200 UD	44 UD	23 U	22 U
Methylcyclohexane					NA	NA	NA	NA	NA	NA	NA	NA	5.5 U	5.4 U	59000 D	4.4 U	13000 D	760 D	76 D	4.6 U	4.5 U
Methylene chloride	50	50	100000		NA	NA	NA	NA	NA	NA	NA	NA	14 U	14 U	12000 UD	11 U	570 UD	620 UD	22 UD	12 U	11 U
MTBE	930	930	100000		NA	NA	NA	NA	NA	NA	NA	NA	2.8 U	2.7 U	2400 UD	2.2 U	110 UD	120 UD	4.4 UD	2.3 U	2.2 U
Napthalene			100000		6290	ND	ND	ND	15100	ND	1220	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA
o-Xylene					NA	NA	NA	NA	NA	NA	NA	NA	0.73 J	2.7 U	1800 JD	2.2 U	110 UD	120 UD	4.4 UD	2.3 U	2.2 U
n-Butylbenzene	12000	12000	100000		3590	ND	ND	ND	9510	ND	765	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA
n-Propylbenzene	3900	3900	100000		5220	ND	ND	ND	21600	ND	1310	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA
sec-Butylbenzene	11000	11000	100000		1720	ND	ND	ND	2200	ND	356	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA
Styrene					NA	NA	NA	NA	NA	NA	NA	NA	2.8 U	2.7 U	2400 UD	2.2 U	110 UD	120 UD	4.4 UD	2.3 U	2.2 U
Tert-butanol / butyl alcohol					ND	ND	ND	859	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA
Tetrachloroethene	1300	1300	19000		NA	NA	NA	NA	NA	NA	NA	NA	1.4 U	1.4 U	1200 UD	1.1 U	57 UD	62 UD	2.2 UD	1.2 U	1.1 U
Toluene	700	700	100000		ND	ND	ND	ND	ND	ND	99	ND	0.56 J	2.0 U	1800 UD	1.7 UV	85 UD	92 UVD	3.3 UD	1.7 UV	1.7 UV

	NYSDEC	NYSDEC	NYSDEC																		
	Part 375	Part 375	Part 375	Sample Designation: S	SB-4	SB-5	SB-6	SB-7	SB-8	SB-9	SB-10	SB-11	CB2	DW1	RB-1	RB-1	RB-2	RB-2	RB-3	RB-3	RB-4
Parameter	Unrestricted	Protection of	Restricted	Sample Date: 11/3	/8/2007 1	1/9/2007	11/9/2007	12/5/2007	12/5/2007	12/7/2007	12/7/2007	12/7/2007	4/18/2014	4/18/2014	4/17/2014	4/17/2014	4/17/2014	4/17/2014	4/17/2014	4/17/2014	4/17/2014
(Concentrations in µg/kg)	Use	Groundwater	Residential	Sample Depth (ft bls): 10	0 - 14	8 - 10	17 - 19	12 - 16	12 - 14	9 - 11	9 - 11	4 - 6	-	4 - 6	10 - 12	13 - 15	10 - 12	19 - 20	10 - 12	18 - 20	7 - 9
trans-1,2-Dichloroethene	190	190	100000		NA	NA	NA	NA	NA	NA	NA	NA	2.1 U	2.0 U	1800 UD	1.7 U	85 UD	92 UD	3.3 UD	1.7 U	1.7 U
trans-1,3-Dichloropropene					NA	NA	NA	NA	NA	NA	NA	NA	1.4 U	1.4 U	1200 UD	1.1 U	57 UD	62 UD	2.2 UD	1.2 U	1.1 U
Trichloroethene	470	470	21000		NA	NA	NA	NA	NA	NA	NA	NA	1.4 U	1.4 U	1200 UD	1.1 U	57 UD	62 UD	2.2 UD	1.2 U	1.1 U
Trichlorofluoromethane					NA	NA	NA	NA	NA	NA	NA	NA	6.9 U	6.8 U	6000 UD	5.6 U	280 UD	310 UD	11 UD	5.8 U	5.6 U
Vinyl chloride	20	20	900		NA	NA	NA	NA	NA	NA	NA	NA	2.8 U	2.7 U	2400 UD	2.2 U	110 UD	120 UD	4.4 UD	2.3 U	2.2 U
Xylenes (total)	260	1600	100000	6	6450	ND	ND	ND	37440	ND	2697	ND	1.67	2.7 U	35800 JD	2.2 U	2300 D	66 JD	2.5 JD	2.3 U	2.2 U

J - Estimated value

U - Indicates that the compound was analyzed for but not detected

D - a secondary analysis after dilution due to exceedance

of the calibration range in the original sample.

DUP - Duplicate sample

 $\mu g/kg$ - Micrograms per kilogram

ft bls - Feet below land surface

NYSDEC - New York State Department of Environmental Conservation

-- No NYSDEC Part 375 Standards available

Bold data indicates that parameter was detected above the NYSDEC Part 375 Unrestricted Use Standards

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V - Value altered or qualifier added during data validation

R - Sample results rejected by validator

	NYSDEC	NYSDEC	NYSDEC																		
	Part 375	Part 375	Part 375	Sample Designation:	RB-4 DUP	RB-4	RB-4	RB-5	RB-6	RB-6 DUP	RB-7	RB-7	RB-7	RB-8	RB-8 DUP	RB-9	RB-9	RB-9	RB-10	RB-10	RB-10
Parameter	Unrestricted	Protection of	Restricted	Sample Date:	4/17/2014	4/17/2014	4/17/2014	4/21/2014	4/21/2014	4/21/2014	4/7/2014	4/7/2014	4/7/2014	4/7/2014	4/7/2014	4/7/2014	4/7/2014	4/7/2014	4/8/2014	4/8/2014	4/8/2014
(Concentrations in µg/kg)	Use	Groundwater	Residential	Sample Depth (ft bls):	7 - 9	10 - 12	18 - 20	11 - 13	9 - 11	9 - 11	13 - 15	15 - 17	20 - 21	7 - 9	7 - 9	13 - 15	11 - 13	20 - 21	1 - 3	10 - 12	18 - 19
			100000													-			100 100		
1,1,1-Trichloroethane	680	680	100000		1.1 U	1.2 U	1.2 U	1.1 U	1.1 U	1.1 U	120 UD	600 UD	2.2 UD	1.2 U	1.3 U	67 UD	58 UD	1.2 U	120 UD	3.2 UD	1.2 U
1,1,2,2-Tetrachloroethane					1.1 U	1.2 U	1.2 U	1.1 U	1.1 U	1.1 U	120 UD	600 UD	2.2 UD	1.2 U	1.3 U	67 UD	58 UD	1.2 U	120 UD	3.2 UD	1.2 U
1,1,2-Trichloroethane					1.7 U	1.8 U	1.7 U	1.6 U	1.7 U	1.7 U	180 UD	900 UD	3.4 UD	1.7 U	1.9 U	100 UD	87 UD	1.8 U	180 UD	4.8 UD	1.8 U
1,1-Dichloroethane	270	270	26000		1.7 U	1.8 U	1.7 U	1.6 U	1.7 U	1.7 U	180 UD	900 UD	3.4 UD	1.7 U	1.9 U	100 UD	87 UD	1.8 U	180 UD	4.8 UD	1.8 U
1,1-Dichloroethene	330	330	100000		1.1 U	1.2 U	1.2 U	1.1 U	1.1 U	1.1 U	120 UD	600 UD	2.2 UD	1.2 U	1.3 U	67 UD	58 UD	1.2 U	120 UD	3.2 UD	1.2 U
1,2,3-Trichlorobenzene					5.6 U	5.8 U	5.8 U	5.5 U	5.7 U	5.6 U	590 UD	3000 UD	11 UD	5.8 U	6.4 U	340 UD	290 UD	5.9 U	600 UD	16 UD	6 U
1,2,4-Trichlorobenzene					5.6 U	5.8 U	5.8 U	5.5 U	5.70	5.6 U	590 UD	3000 UD	11 UD	5.8 U	6.4 U	340 UD	290 UD	5.9 U	600 UD	16 UD	6 U
1,2,4-Trimethylbenzene	3600	3600	52000		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,3,5-Trimethylbenzene	8400	8400	52000		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2-Dibromoethane					4.5 U	4.7 U	4.6 U	4.4 U	4.6 U	4.5 U	480 UD	2400 UD	8.9 UD	4.6 U	5.1 U	270 UD	230 UD	4.7 U	480 UD	13 UD	4.8 U
1,2-Dichlorobenzene	1100	1100	100000		5.6 U	5.8 U	5.8 U	5.5 U	5.70	5.6 U	590 UD	3000 UD	11 UD	5.8 U	6.4 U	12 JD	290 UD	5.9 U	600 UD	16 UD	6 U
1,2-Dichloroethane	20	20	3100		1.1 U	1.2 U	1.2 U	1.1 U	1.1 U	1.1 U	120 UD	600 UD	2.2 UD	1.2 U	1.3 U	67 UD	58 UD	1.2 U	120 UD	3.2 UD	1.2 U
1,2-Dichloropropane					3.9 U	4.1 U	4 U	3.8 U	4 U	4 U	420 UD	2100 UD	7.8 UD	4.1 U	4.5 U	240 UD	200 UD	4.2 U	420 UD	11 UD	4.2 U
1,3-Dichlorobenzene	2400	2400	49000		5.6 U	5.8 U	5.8 U	5.5 U	5.7 U	5.6 U	590 UD	3000 UD	11 UD	5.8 U	6.4 U	340 UD	290 UD	5.9 U	600 UD	16 UD	6 U
1,4-Dichlorobenzene	1800	1800	13000		5.6 U	5.8 U	5.8 U	5.5 U	5.7 U	5.6 U	590 UD	3000 UD	11 UD	5.8 U	6.4 U	340 UD	290 UD	5.9 U	600 UD	16 UD	6 U
1,4-Dioxane	100	100	13000		110 U	120 U	120 U	110 U	110 U	110 U	12000 UD	60000 UD	220 UD	120 U	130 U	6700 UD	5800 UD	120 U	12000 UD	320 UD	120 U
2-Butanone (MEK)	120	120	100000		11 U	12 U	1.4 J	11 U	11 U	11 U	1200 UD	6000 UD	22 UVD	12 U	13 U	670 UD	580 UD	12 UV	1200 UD	32 UD	12 U
2-Hexanone					11 U	12 U	12 U	11 U	11 U	11 U	1200 UD	6000 UD	22 UD	12 U	13 U	670 UD	580 UD	12 U	1200 UD	32 UD	12 U
4-Isopropyltoluene					NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Methyl-2-pentanone (MIBK)					11 U	12 U	12 U	11 U	11 U	11 U	1200 UD	6000 UD	22 UD	12 U	13 U	670 UD	580 UD	12 U	1200 UD	32 UD	12 U
Acetone	50	50	100000		34	12 UV	5.2 J	11 U	11 U	11 U	1200 UD	6000 UD	23 D	12 U	13 U	670 UD	580 UD	20	1200 UD	84 D	12 U
Benzene	60	60	4800		1.1 U	1.2 U	0.35 J	1.1 U	1.1 U	1.1 U	120 UD	600 UD	2.2 UD	1.2 U	1.3 U	67 UD	12 JD	1.2 U	79 JD	3.2 UD	1.2 U
Bromochloromethane					5.6 U	5.8 U	5.8 U	5.5 U	5.7 U	5.6 U	590 UD	3000 UD	11 UD	5.8 U	6.4 U	340 UD	290 UD	5.9 U	600 UD	16 UD	6 U
Bromodichloromethane					1.1 U	1.2 U	1.2 U	1.1 U	1.1 U	1.1 U	120 UD	600 UD	2.2 UD	1.2 U	1.3 U	67 UD	58 UD	1.2 U	120 UD	3.2 UD	1.2 U
Bromoform					4.5 U	4.7 U	4.6 U	4.4 U	4.6 U	4.5 U	480 UD	2400 UD	8.9 UD	4.6 U	5.1 U	270 UD	230 UD	4.7 U	480 UD	13 UD	4.8 U
Bromomethane					2.2 U	2.3 U	2.3 U	2.2 U	2.3 U	2.2 U	240 UD	1200 UD	4.5 UD	2.3 U	2.6 U	130 UD	120 UD	2.4 U	240 UD	6.4 UD	2.4 U
Carbon disulfide					11 U	12 U	12 U	11 U	11 U	11 U	1200 UD	6000 UD	22 UD	12 U	13 U	670 UD	580 UD	12 U	1200 UD	32 UD	12 U
Carbon tetrachloride	760	760	2400		1.1 U	1.2 U	1.2 U	1.1 U	1.1 U	1.1 U	120 UD	600 UD	2.2 UD	1.2 U	1.3 U	67 UD	58 UD	1.2 U	120 UD	3.2 UD	1.2 U
Chlorobenzene	1100	1100	100000		1.1 U	1.2 U	1.2 U	1.1 U	1.1 U	1.1 U	120 UD	600 UD	2.2 UD	1.2 U	1.3 U	67 UD	58 UD	1.2 U	120 UD	3.2 UD	1.2 U
Chloroethane					2.2 U	2.3 U	2.3 U	2.2 U	2.3 U	2.2 U	240 UD	1200 UD	4.5 UD	2.3 U	2.6 U	130 UD	120 UD	2.4 U	240 UD	6.4 UD	2.4 U
Chloroform	370	370	49000		1.7 U	1.8 U	1.7 U	1.6 U	1.7 U	1.7 U	180 UD	900 UD	3.4 UD	1.7 U	1.9 U	100 UD	87 UD	1.8 U	180 UD	4.8 UD	1.8 U
Chloromethane					5.6 U	5.8 U	5.8 U	5.5 U	5.7 U	5.6 U	590 UD	3000 UD	11 UD	5.8 U	6.4 U	340 UD	290 UD	5.9 U	600 UD	16 UD	6 U
cis-1,2-Dichloroethene	250	250	100000		1.1 U	1.2 U	1.2 U	1.1 U	1.1 U	1.1 U	120 UD	600 UD	2.2 UD	1.2 U	1.3 U	67 UD	58 UD	1.2 U	120 UD	3.2 UD	1.2 U
cis-1,3-Dichloropropene					1.1 U	1.2 U	1.2 U	1.1 U	1.1 U	1.1 U	120 UD	600 UD	2.2 UD	1.2 U	1.3 U	67 UD	58 UD	1.2 U	120 UD	3.2 UD	1.2 U
Cyclohexane					22 U	23 U	1.4 J	22 U	23 U	22 U	2400 UD	12000 UD	45 UD	23 U	26 U	1300 UD	1200 UD	24 U	3000 D	64 UD	24 U
Dibromochloromethane					1.1 U	1.2 U	1.2 U	1.1 U	1.1 U	1.1 U	120 UD	600 UD	2.2 UD	1.2 U	1.3 U	67 UD	58 UD	1.2 U	120 UD	3.2 UD	1.2 U
Dibromochloropropane					5.6 U	5.8 U	5.8 U	5.5 U	5.7 U	5.6 U	590 UD	3000 UD	11 UD	5.8 U	6.4 U	340 UD	290 UD	5.9 U	600 UD	16 UD	6 U
Dichlorodifluoromethane					11 U	12 U	12 U	11 U	11 U	11 U	1200 UD	6000 UD	22 UD	12 U	13 U	670 UD	580 UD	12 U	1200 UD	32 UD	12 U
Ethylbenzene	1000	1000	41000		1.1 U	1.2 U	1.2 U	1.1 U	1.1 U	1.1 U	400 D	2500 D	10 D	1.2 U	1.3 U	520 D	220 D	1.2 U	2200 D	97 D	1.2 U
Freon 113					22 U	23 U	23 U	22 U	23 U	22 U	2400 UD	12000 UD	45 UD	23 U	26 U	1300 UD	1200 UD	24 U	2400 UD	64 UD	24 U
Isopropylbenzene					1.1 U	1.2 U	1.2 U	1.1 U	1.1 U	1.1 U	110 JD	750 D	4.5 D	1.2 U	1.3 U	160 D	210 D	1.2 U	560 D	35 D	1.2 U
m+p-Xylene					2.2 U	2.3 U	2.3 U	2.2 U	2.3 U	2.2 U	340 D	1900 D	9.6 D	2.3 U	2.6 U	340 D	120 D	2.4 U	4600 D	190 D	2.4 U
Methyl acetate					22 U	23 U	23 U	22 U	23 U	22 U	2400 UD	12000 UD	45 UD	23 U	26 U	160 JD	1200 UD	24 U	2400 UD	64 UD	24 U
Methylcyclohexane					4.5 U	4.7 U	4.6 U	4.4 U	4.6 U	4.5 U	2900 D	16000 D	15 D	4.6 U	5.1 U	340 D	860 D	4.7 U	7700 D	150 D	4.8 U
Methylene chloride	50	50	100000		11 U	12 U	12 U	11 U	11 U	11 U	1200 UD	6000 UD	22 UD	12 U	2.7 J	670 UD	580 UD	12 U	1200 UD	32 UD	12 U
MTBE	930	930	100000		2.2 U	2.3 U	2.3 U	2.2 U	2.3 U	2.2 U	240 UD	1200 UD	4.5 UD	2.3 U	2.6 U	130 UD	120 UD	2.4 U	240 UD	6.4 UD	0.44 J
Napthalene			100000		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
o-Xylene					2.2 U	2.3 U	2.3 U	2.2 U	2.3 U	2.2 U	34 JD	220 JD	1.2 JD	2.3 U	2.6 U	570 D	29 JD	2.4 U	580 D	64 D	2.4 U
n-Butylbenzene	12000	12000	100000		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
n-Propylbenzene	3900	3900	100000		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
sec-Butylbenzene	11000	11000	100000		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Styrene					2.2 U	2.3 U	2.3 U	2.2 U	2.3 U	2.2 U	240 UD	1200 UD	4.5 UD	2.3 U	2.6 U	130 UD	120 UD	2.4 U	240 UD	6.4 UD	2.4 U
Tert-butanol / butyl alcohol					NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Tetrachloroethene	1300	1300	19000		1.1 U	1.2 U	1.2 U	1.1 U	1.1 U	1.1 U	120 UD	600 UD	2.2 UD	1.2 U	1.3 U	67 UD	58 UD	1.2 U	120 UD	3.2 UD	1.2
Toluene	700	700	100000		1.7 U	1.8 U	1.7 UV	1.6 UV	1.7 UV	1.7 UV	180 UVD	900 UVD	3.4 UVD	1.7 UV	1.9 UV	100 UD	87 UD	1.8 U	220 D	4.8 UD	1.8 U

	NYSDEC	NYSDEC	NYSDEC																		
	Part 375	Part 375	Part 375	Sample Designation:	RB-4 DUP	RB-4	RB-4	RB-5	RB-6	RB-6 DUP	RB-7	RB-7	RB-7	RB-8	RB-8 DUP	RB-9	RB-9	RB-9	RB-10	RB-10	RB-10
Parameter	Unrestricted	Protection of	Restricted	Sample Date:	4/17/2014	4/17/2014	4/17/2014	4/21/2014	4/21/2014	4/21/2014	4/7/2014	4/7/2014	4/7/2014	4/7/2014	4/7/2014	4/7/2014	4/7/2014	4/7/2014	4/8/2014	4/8/2014	4/8/2014
(Concentrations in µg/kg)	Use	Groundwater	Residential	Sample Depth (ft bls):	7 - 9	10 - 12	18 - 20	11 - 13	9 - 11	9 - 11	13 - 15	15 - 17	20 - 21	7 - 9	7 - 9	13 - 15	11 - 13	20 - 21	1 - 3	10 - 12	18 - 19
trans-1,2-Dichloroethene	190	190	100000		1.7 U	1.8 U	1.7 U	1.6 U	1.7 U	1.7 U	180 UD	900 UD	3.4 UD	1.7 U	1.9 U	100 UD	87 UD	1.8 U	180 UD	4.8 UD	1.8 U
trans-1,3-Dichloropropene					1.1 U	1.2 U	1.2 U	1.1 U	1.1 U	1.1 U	120 UD	600 UD	2.2 UD	1.2 U	1.3 U	67 UD	58 UD	1.2 U	120 UD	3.2 UD	1.2 U
Trichloroethene	470	470	21000		1.1 U	1.2 U	1.2 U	1.1 U	1.1 U	1.1 U	120 UD	600 UD	2.2 UD	1.2 U	1.3 U	22 JD	38 JD	1.2 U	38 JD	3.2 UD	1.2 U
Trichlorofluoromethane					5.6 U	5.8 U	5.8 U	5.5 U	5.7 U	5.6 U	590 UD	3000 UD	11 UD	5.8 U	6.4 U	340 UD	290 UD	5.9 U	600 UD	16 UD	6 U
Vinyl chloride	20	20	900		2.2 U	2.3 U	2.3 U	2.2 U	2.3 U	2.2 U	240 UD	1200 UD	4.5 UD	2.3 U	2.6 U	130 UD	120 UD	2.4 U	240 UD	6.4 UD	2.4 U
Xylenes (total)	260	1600	100000		2.2 U	2.3 U	2.3 U	2.2 U	2.2 U	2.3 U	374 JD	2120 JD	10.8 JD	2.3 U	2.6 U	910 D	149 JD	2.4 U	5180 D	254 D	2.4 U

J - Estimated value

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D - a secondary analysis after dilution due to exceedance

of the calibration range in the original sample.

DUP - Duplicate sample

 $\mu g/kg$ - Micrograms per kilogram

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V - Value altered or qualifier added during data validation

R - Sample results rejected by validator

	NYSDEC	NYSDEC	NYSDEC																			
	Part 375	Part 375	Part 375	Sample Designation:	RB-11	RB-11	RB-11	RB-12	RB-13	RB-14	RB-15	RB-16	RB-17	RB-18	RB-19	RB-20	RB-20	RB-21	RB-22	RB-23	RB-24	RB-24
Parameter	Unrestricted	Protection of	Restricted	Sample Date:	4/8/2014	4/8/2014	4/8/2014	4/9/2014	4/8/2014	4/8/2014	4/9/2014	4/9/2014	4/16/2014	4/16/2014	4/16/2014	4/16/2014	4/16/2014	4/16/2014	4/16/2014	4/16/2014	4/9/2014	4/9/2014
(Concentrations in $\mu g/kg$)	Use	Groundwater	Residential	Sample Depth (ft bls):	2 - 4	5 - 7	15 - 16	7 - 9	11 - 12	11 - 12	7 - 9	6 - 8	6 - 8	5 - 7	5 - 7	3 - 5	5 - 6.5	4 - 6	4 - 6	3 - 5	2 - 4	6 - 8
1,1,1-Trichloroethane	680	680	100000		5700 UD	310 UD	1.4 U	1.2 U	1.1 U	1.2 U	1.3 U	1.6 U	1.4 U	1.3 U	1.2 U	1.2 U	1.4 U	1.3 U	1.3 U	1.3 U	1.1 U	1.4 U
1.1.2.2-Tetrachloroethane					5700 UD	310 UD	1.4 U	1.2 U	1.1 U	1.2 U	1.3 U	1.6 U	1.4 U	1.3 U	1.2 U	1.2 U	1.4 U	1.3 U	1.3 U	1.3 U	1.1 U	1.4 U
1.1.2-Trichloroethane					8600 UD	460 UD	2.2 U	1.8 U	1.7 U	1.8 U	1.9 U	2.4 U	2.1 U	1.9 U	1.8 U	1.8 U	2 U	1.9 U	2 U	2 U	1.7 U	2.1 U
1.1-Dichloroethane	270	270	26000		8600 UD	460 UD	2.2 U	1.8 U	1.7 U	1.8 U	1.9 U	2.4 U	2.1 U	1.9 U	1.8 U	1.8 U	2 U	1.9 U	2 U	2 U	1.7 U	2.1 U
1.1-Dichloroethene	330	330	100000		5700 UD	310 UD	1.4 U	1.2 U	1.1 U	1.2 U	1.3 U	1.6 U	1.4 U	1.3 U	1.2 U	1.2 U	1.4 U	1.3 U	1.3 U	1.3 U	1.1 U	1.4 U
1.2.3-Trichlorobenzene					29000 UD	1500 UD	7.2 U	6.2 U	5.6 U	6.2 U	6.4 U	7.9 U	7 U	6.4 U	5.8 U	5.9 U	6.8 U	6.4 U	6.5 U	6.6 U	5.6 U	7.1 U
1.2.4-Trichlorobenzene					29000 UD	1500 UD	7.2 U	6.2 U	5.6 U	6.2 U	6.4 U	7.9 U	7 U	6.4 U	5.8 U	5.9 U	6.8 U	6.4 U	6.5 U	6.6 U	5.6 U	7.1 U
1 2 4-Trimethylbenzene	3600	3600	52000		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1 3 5-Trimethylbenzene	8400	8400	52000		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1.2-Dibromoethane		0400	52000		23000 UD	1200 UD	5811	4911	4511	4911	5211	6311	561	5111	471	4711	551	5211	5211	5211	4511	5711
1.2-Dichlorobenzene	1100	1100	100000		29000 UD	1200 UD	7.0 U	4.2U	4.50 56U	4.2U	5.2 U 64 U	0.5 U 7 9 U	5.0 C 7 U	64 U	58U	5911	68U	5.2 U 64 U	5.2 U	5.2 U 66 U	56U	71U
1.2-Dichloroethane	20	20	3100		5700 UD	310 UD	1.4 U	1211	11U	1211	131	1.5 U	1411	131	1211	1211	1411	131	131	131	11U	1411
1.2-Dichloropropage	20	20	5100		20000 LID	1100 UD	5111	1.2 U 1 3 U	3011	1.2 U 4 3 U	1.5 U	1.0 U	1.40	1.5 U	1.2 U 4 1 U	1.2 U 4 1 U	1.40	1.5 U	1.5 U 4 6 U	1.5 U 4 6 U	3011	5 11
1.3 Dichlorobanzana	2400	2400	40000		20000 UD	1500 UD	7211	4.5 U	5.7 U	4.5 U	4.5 U	7.0 U	4.90 711	4.5 U	5811	501	4.0 U	4.5 U	4.0 U	4.0 U	5.7 U	7111
1.4-Dichlorobenzene	1800	1800	13000		29000 UD	1500 UD	7.20	6.2 U	5.0 U	6.2 U	64U	7.90	70	64U	581	5911	6.8 U	64U	6.5 U	6.6 U	5.0 U	7.1 U
1.4 Diovana	100	100	13000		29000 UD	31000 UD	140 U	0.2 U 120 U	110 U	120 U	130 U	160 U	140 U	130 U	120 U	120 U	0.8 U 140 U	0.4 U 130 U	0.5 U 130 U	130 U	110 U	140 U
2 Putenona (MEK)	120	120	100000		57000 UD	2100 UD	1400	120 0	11 UV	1200	130 U 12 UV	16 UV	1400	12 U	120 0	1200	1400	12 UV	521	12 UV	11 11	1400
2-Butanone (WEK)	120	120	100000		57000 UD	3100 UD	14 U V 14 U V	12 U	11 UV	12 UV	12 11	16 U V	14 U V	13 U	12 U 12 U	12 UV	14 U V	12 U	J.J J 12 U	12 U	11 U	14 U 14 U
4 Isopropultaluana					37000 UD	5100 UD	14 U NA	12 U NA	NA	12 U NA	IS U NA	IU U NA	14 U NA	15 U NA	12 U NA	12 U NA	I4 U NA	15 U NA	IS U NA	IS U NA	NA	I4 U NA
4 Mothyl 2 pontanona (MIPK)					NA 57000 UD	100 UD	14 U	12 U	11 II	12 U	12 U	16 U			12 U				12 U			14 U
4-Methyl-2-pentalione (MIBK)			100000		57000 UD	2100 UD	14 0	521	22	52	13 0	100	14 0	150	120	12 U 8 O I	14 U 52	15 0	15 0	15 0	11 U	14 0
Acetone Bonzono	50	50	4800		37000 UD	5100 UD	1/	3.2 J 1 2 U	35 1 1 11	55 0 20 I	4Z	16U	0.58 1	9.0 J	7.3J 12U	0.0 J	54 1 4 U	40	10	4/ 12 U	110	4.0 J 1 4 II
Dromochloromothono	00	00	4600	1	20000 JID	1500 UD	7.211	1.2 U	1.1 U 5 C U	0.29 J	1.5 U	1.0 U 7 O U	0.38 J	1.5 U	1.2 U 5 9 U	1.2 U 5 0 U	1.4 U	1.3 U	1.5 U	1.5 U	1.1 U 5 6 U	1.4 U 7 1 U
Dromocilloromethane					29000 UD	210 UD	7.2 U 1 4 U	0.2 U	J.0 U	0.2 U	0.4 U	1.9 U	1411	0.4 U 1.2 U	5.8 U	5.9 U	0.8 U	0.4 U	0.3 U	0.0 U	3.0 U	7.1 U 1 4 U
Dromodicinoromethane					3700 UD	1200 LID	1.4 U	1.2 U 4 O U	1.1 U	1.2 U 4 O U	1.5 U	1.0 U	1.4 U	1.5 U	1.2 U	1.2 U	1.4 U	1.5 U	1.5 U	1.5 U	1.1 U 4 5 U	1.4 U
Bromolorm					23000 UD	1200 UD	5.8 U 2 O U	4.90	4.5 U	4.9 U	5.2 U	0.3 U 2.1 U	5.0 U	5.1 U	4.7 U	4.7 U	5.5 U	5.2 U	5.2 U	5.2 U	4.5 U	5.7U
Bromometnane					11000 UD	610 UD	2.9 U	2.5 U	2.2 U	2.5 U	2.0 U	3.1 U	2.8 U	2.0 U	2.3 U	2.4 U	2.7 U	2.6 U	2.0 U	2.0 U	2.2 U	2.8 U
Carbon disulide			2400		5700 UD	3100 UD	14 U 1 4 U	12 U	11 U	12 U	130	10 U	14 U	13 U	120	120	14 U	15 U	130	13 U	110	14 U 1 4 U
Carbon tetrachioride	/00	/60	2400		5700 UD	310 UD	1.4 U	1.2 U	1.1 U	1.2 U	1.5 U	1.0 U	1.4 U	1.5 U	1.2 U	1.2 U	1.4 U	1.5 U	1.3 U	1.5 U	1.1 U	1.4 U
Chlorodenzene	1100	1100	100000		5700 UD	510 UD	1.4 U 2.0 U	1.2 U	1.1 U	1.2 U	1.5 U	1.0 U 2.1 U	1.4 U	1.5 U	1.2 U	1.2 U	1.4 U	1.5 U	1.5 U	1.5 U	1.1 U	1.4 U
Chloroethane					11000 UD	610 UD	2.9 0	2.5 0	2.2 0	2.5 U	2.6 U	5.1 U	2.8 0	2.6 U	2.3 U	2.4 U	2.70	2.6 U	2.6 U	2.6 U	2.2 0	2.8 U
Chloroform	370	370	49000		8600 UD	460 UD	2.2 U	1.8 U	1.7 U	1.8 U	1.9 U	2.4 U	2.1 U	1.9 U	1.8 U	1.8 U	20	1.9 U	20	20	1.7 U	2.1 U
Chloromethane					29000 UD	1500 UD	7.2 U	6.2 U	5.6 U	6.2 U	6.4 U	7.9 U	70	6.4 U	5.8 U	5.9 U	6.8 U	6.4 U	6.5 U	6.6 U	5.6 U	7.1 U
cis-1,2-Dichloroethene	250	250	100000		5700 UD	310 UD	1.4 U	1.2 U	1.1 U	1.2 U	1.3 U	1.6 U	1.4 U	1.2 J	1.2 U	1.2 U	1.4 U	1.3 U	2	1.3 U	1.1 U	1.4 U
cıs-1,3-Dichloropropene					5700 UD	310 UD	1.4 U	1.2 U	1.1 U	1.2 U	1.3 U	1.6 U	1.4 U	1.3 U	1.2 U	1.2 U	1.4 U	1.3 U	1.3 U	1.3 U	1.1 U	1.4 U
Cyclohexane					80000 JD	5000 JD	29 U	25 U	22.0	25 U	26 U	310	2.0 J	26 U	23 U	24 U	270	26 U	26 U	26 U	22.0	28 U
Dibromochloromethane					5700 UD	310 UD	1.4 U	1.2 U	1.1 U	1.2 U	1.3 U	1.6 U	1.4 U	1.3 U	1.2 U	1.2 U	1.4 U	1.3 U	1.3 U	1.3 U	1.1 U	1.4 U
Dibromochloropropane					29000 UD	1500 UD	7.2 U	6.2 U	5.6 U	6.2 U	6.4 U	7.9 U	70	6.4 U	5.8 U	5.9 U	6.8 U	6.4 U	6.5 U	6.6 U	5.6 U	7.10
Dichlorodifluoromethane				r	57000 UD	3100 UD	14 U	12 U	11 U	12 U	13 U	16 U	14 U	13 U	12 U	12 U	14 U	13 U	13 U	13 U	11 U	14 U
Ethylbenzene	1000	1000	41000	l	100000 D	4700 D	0.61 J	1.2 U	1.1 U	1.2 U	1.3 U	1.6 U	1.4 U	1.3 U	1.2 U	1.2 U	1.4 U	1.3 U	1.3 U	1.3 U	1.1 U	1.4 U
Freon 113					110000 UD	6100 UD	29 U	25 U	22 U	25 U	26 U	31 U	28 U	26 U	23 U	24 U	27 U	26 U	26 U	26 U	22 U	28 U
Isopropylbenzene					19000 D	930 D	1.4 U	1.2 U	1.1 U	1.2 U	1.3 U	1.6 U	1.4 U	1.3 U	1.2 U	1.2 U	1.4 U	1.3 U	1.3 U	1.3 U	1.1 U	1.4 U
m+p-Xylene					310000 D	14000 D	1.6 J	2.5 U	2.2 U	2.5 U	2.6 U	3.1 U	2.8 U	2.6 U	2.3 U	2.4 U	2.7 U	2.6 U	2.6 U	2.6 U	2.2 U	0.54 J
Methyl acetate					110000 UD	6100 UD	29 U	25 U	22 U	25 U	26 U	31 U	28 U	26 U	23 U	24 U	27 U	26 U	26 U	26 U	22 U	28 U
Methylcyclohexane					170000 D	14000 D	5.8 U	4.9 U	4.5 U	4.9 U	5.2 U	6.3 U	5.6 U	5.1 U	4.7 U	4.7 U	5.5 U	5.2 U	5.2 U	5.2 U	4.5 U	5.7 U
Methylene chloride	50	50	100000		57000 UD	3100 UD	14 U	12 U	11 U	12 U	13 U	16 U	14 U	13 U	2.6 J	12 U	14 U	13 U	13 U	13 U	11 U	14 U
MTBE	930	930	100000		11000 UD	610 UD	0.57 J	2.5 U	2.2 U	2.5 U	2.6 U	1.0 J	0.36 J	2.6 U	2.3 U	2.4 U	2.7 U	0.57 J	2.6 U	2.6 U	2.2 U	2.8 U
Napthalene			100000		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
o-Xylene					120000 D	5000 D	0.63 J	2.5 U	2.2 U	2.5 U	2.6 U	3.1 U	2.8 U	2.6 U	2.3 U	2.4 U	2.7 U	2.6 U	2.6 U	2.6 U	2.2 U	2.8 U
n-Butylbenzene	12000	12000	100000		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
n-Propylbenzene	3900	3900	100000		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
sec-Butylbenzene	11000	11000	100000		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Styrene					11000 UD	610 UD	2.9 U	2.5 U	2.2 U	2.5 U	2.6 U	3.1 U	2.8 U	2.6 U	2.3 U	2.4 U	2.7 U	2.6 U	2.6 U	2.6 U	2.2 U	2.8 U
Tert-butanol / butyl alcohol					NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Tetrachloroethene	1300	1300	19000	_	1200 JD	310 UD	1.4 U	1.2 U	1.1 U	1.2 U	1.3 U	1.6 U	1.4 U	1.5	1.2 U	1.2 U	1.4 U	1.3 U	10	1.3 U	1.1 U	1.4 U
Toluene	700	700	100000		37000 D	780 D	2.2 UV	1.8 U	1.7 UV	1.8 UV	1.9 UV	2.4 UV	0.34 J	1.9 U	1.8 UV	1.8 U	2 U	1.9 U	2 UV	2 U	1.7 U	2.1 UV

	NYSDEC	NYSDEC	NYSDEC																			
	Part 375	Part 375	Part 375	Sample Designation:	RB-11	RB-11	RB-11	RB-12	RB-13	RB-14	RB-15	RB-16	RB-17	RB-18	RB-19	RB-20	RB-20	RB-21	RB-22	RB-23	RB-24	RB-24
Parameter	Unrestricted	Protection of	Restricted	Sample Date:	4/8/2014	4/8/2014	4/8/2014	4/9/2014	4/8/2014	4/8/2014	4/9/2014	4/9/2014	4/16/2014	4/16/2014	4/16/2014	4/16/2014	4/16/2014	4/16/2014	4/16/2014	4/16/2014	4/9/2014	4/9/2014
(Concentrations in µg/kg)	Use	Groundwater	Residential	Sample Depth (ft bls):	2 - 4	5 - 7	15 - 16	7 - 9	11 - 12	11 - 12	7 - 9	6 - 8	6 - 8	5 - 7	5 - 7	3 - 5	5 - 6.5	4 - 6	4 - 6	3 - 5	2 - 4	6 - 8
trans-1,2-Dichloroethene	190	190	100000		8600 UD	460 UD	2.2 U	1.8 U	1.7 U	1.8 U	1.9 U	2.4 U	2.1 U	1.9 U	1.8 U	1.8 U	2 U	1.9 U	2 U	2 U	1.7 U	2.1 U
trans-1,3-Dichloropropene					5700 UD	310 UD	1.4 U	1.2 U	1.1 U	1.2 U	1.3 U	1.6 U	1.4 U	1.3 U	1.2 U	1.2 U	1.4 U	1.3 U	1.3 U	1.3 U	1.1 U	1.4 U
Trichloroethene	470	470	21000		5700 UD	310 UD	1.4 U	1.2 U	1.1 U	1.2 U	1.3 U	1.6 U	1.4 U	0.61 J	1.2 U	1.2 U	1.4 U	1.3 U	3.2	1.3 U	1.1 U	1.4 U
Trichlorofluoromethane					29000 UD	1500 UD	7.2 U	6.2 U	5.6 U	6.2 U	6.4 U	7.9 U	7 U	6.4 U	5.8 U	5.9 U	6.8 U	6.4 U	6.5 U	6.6 U	5.6 U	7.1 U
Vinyl chloride	20	20	900		11000 UD	610 UD	2.9 U	2.5 U	2.2 U	2.5 U	2.6 U	3.1 U	2.8 U	2.6 U	2.3 U	2.4 U	2.7 U	2.6 U	2.6 U	2.6 U	2.2 U	2.8 U
Xylenes (total)	260	1600	100000		430000 D	19000 D	2.23 J	2.5 U	2.2 U	2.5 U	2.6 U	3.1 U	2.8 U	2.6 U	2.3 U	2.4 U	2.7 U	2.6 U	2.6 U	2.6 U	2.2 U	0.54 J

J - Estimated value

U - Indicates that the compound was analyzed for but not detected

D - a secondary analysis after dilution due to exceedance

of the calibration range in the original sample.

DUP - Duplicate sample

 $\mu g/kg$ - Micrograms per kilogram

ft bls - Feet below land surface

NYSDEC - New York State Department of Environmental Conservation

-- No NYSDEC Part 375 Standards available

Bold data indicates that parameter was detected above the NYSDEC Part 375 Unrestricted Use Standards

Shaded data indicates that parameter was detected above the NYSDEC Part 375 Protection of Groundwater Standard

Boxed data indicates that parameter was detected above the NYSDEC Part 375 Restricted Residential Standards

V - Value altered or qualifier added during data validation

R - Sample results rejected by validator

	NYSDEC	NYSDEC	NYSDEC																		
	Part 375	Part 375	Part 375	Sample Designation:	RB-25	RB-25	RB-26	RB-27	RB-28	RB-28	RB-29	RB-30	RB-31	RB-32	RB-33	RB-34	RB-35	RB-36	RB-37	RB-38	RB-39
Parameter	Unrestricted	Protection of	Restricted	Sample Date:	4/9/2014	4/9/2014	4/11/2014	4/11/2014	4/10/2014	4/10/2014	4/10/2014	4/10/2014	4/10/2014	4/10/2014	4/10/2014	4/10/2014	4/10/2014	4/14/2014	4/14/2014	4/11/2014	4/11/2014
(Concentrations in µg/kg)	Use	Groundwater	Residential	Sample Depth (ft bls):	4 - 6	6 - 7.5	5 - 7	5 - 7	5 - 7	7 - 8	5 - 7	5 - 7	5 - 7	5 - 7	4 - 6	4 - 6	3 - 5	2 - 4	1 - 3	1 - 3	1 - 3
				• •																	
1,1,1-Trichloroethane	680	680	100000		1.1 U	1.3 U	1.2 U	1.2 U	1.2 U	2.4 UD	1.1 U	1.2 U	1.1 U	1.2 U	1.3 U	1.1 U	1.1 U	1.2 U	1.1 U	1.2 U	1.1 U
1,1,2,2-Tetrachloroethane					1.1 U	1.3 U	1.2 U	1.2 U	1.2 U	2.4 UD	1.1 U	1.2 U	1.1 U	1.2 U	1.3 U	1.1 U	1.1 U	1.2 U	1.1 U	1.2 U	1.1 U
1,1,2-Trichloroethane					1.6 U	1.9 U	1.8 U	1.8 U	1.8 U	3.6 UD	1.6 U	1.8 U	1.7 U	1.8 U	2 U	1.7 U	1.6 U	1.8 U	1.6 U	1.7 U	1.7 U
1.1-Dichloroethane	270	270	26000		1.6 U	1.9 U	1.8 U	1.8 U	1.8 U	3.6 UD	1.6 U	1.8 U	1.7 U	1.8 U	2 U	1.7 U	1.6 U	1.8 U	1.6 U	1.7 U	1.7 U
1.1-Dichloroethene	330	330	100000		1.1 U	1.3 U	1.2 U	1.2 U	1.2 U	2.4 UD	1.1 U	1.2 U	1.1 U	1.2 U	1.3 U	1.1 U	1.1 U	1.2 U	1.1 U	1.2 U	1.1 U
1.2.3-Trichlorobenzene					5.4 U	6.4 U	6 U	6 U	5.9 U	12 UD	5.5 U	5.9 U	5.6 U	6.2 U	6.6 U	5.7 U	5.5 U	5.9 U	5.4 U	5.8 U	5.6 U
1.2.4-Trichlorobenzene					5.4 U	6.4 U	6 U	6 U	5.9 U	12 UD	5.5 U	5.9 U	5.6 U	6.2 U	6.6 U	5.7 U	5.5 U	5.9 U	5.4 U	5.8 U	5.6 U
1.2.4-Trimethylbenzene	3600	3600	52000		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1.3.5-Trimethylbenzene	8400	8400	52000		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1.2-Dibromoethane					4.4 U	5.1 U	4.8 U	4.8 U	4.7 U	9.5 UD	4.4 U	4.8 U	4.5 U	4.9 U	5.3 U	4.6 U	4.4 U	4.7 U	4.3 U	4.6 U	4.5 U
1.2-Dichlorobenzene	1100	1100	100000		54U	64 U	6 U	6 U	59U	12 UD	55U	59U	56U	62 U	66U	57U	55U	59U	54U	581	56U
1.2-Dichloroethane	20	20	3100		1111	131	1211	1211	1211	24 UD	11U	1211	1111	121	131	1111	11U	1211	1111	1211	1111
1.2-Dichloropropage					3811	4511	4211	4 2 U	4.1 U	83UD	3811	4211	391	4311	46U	4 11	381	4 1 U	3811	4 1 U	3911
1.3-Dichlorobenzene	2400	2400	49000		5.0 U	4.5 U	6U	6 U	5911	12 UD	551	5911	5.5 U	62 U	4.0 U	5711	551	5911	5.0 U	5811	5.9 U
1 4-Dichlorobenzene	1800	1800	13000		5.4 U	64U	6U	6U	5911	12 UD	550	5911	5.0 U	6.2 U	6.0 U	57U	550	5911	5.4 U	5811	5.0 U
1 4-Diovane	100	100	13000		110 U	130 U	120 11	120 11	120 U	240 UD	110 U	120 U	110 U	120 U	130 U	110 U	110 U	120 U	110 U	120 U	110 U
2-Butanone (MEK)	120	120	100000		11 U	13 U	12.0.0	1200	151	240 OD 24 UD	11 11	1200	11 11	12.0.0	13 U	11 11	11 11	1200	11 11	12.0.0	11 11
2-Butanone (WEK)	120	120	100000		11 U	13 U	12 U	12 U	1.5 J 12 U	24 UD	11 U	12 U	11 U	12 U 12 U	13 U	11 U	11 U	12 U	11 U	12 U 12 U	11 U
4 Isopropultoluana					NA	NA	NA	NA	NA		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4 Mathyl 2 pontanona (MIRK)						13 11	12 11	12 11	12 11	24 UD		12 11		12 11	13 11			12 11		12 11	
4-Methyl-2-pentanone (MIDK)	50		100000		201	12 U	12 U	12 0	12 0	24 OD	20	62	77	12 0	27	21	17	12.0	521	12 U	14
Ponzono	50	50	4800		3.9 J 1 1 II	1211	101	12	30 1 2 U	24 UD	1111	1211	1111	1211	1211		111	20 12 U	J.J J 1 1 II	120	14 1 1 II
Bromashlaromathana	00	00	4600		1.1 U 5 4 U	1.5 U	1.2 U	1.2 U	1.2 U 5 O U	2.4 UD	1.1 U 5 5 U	1.2 U 5 O U	1.1 U 5 6 U	1.2 U	1.5 U	1.1 U 5 7 U	1.1 U 5 5 U	1.2 U 5 O U	1.1 U 5 4 U	1.2 U 5 9 U	1.1 U 5 4 U
Dromodiahlaramathana					3.4 U	0.4 U		1211	5.9 U	12 UD	5.5 U	3.9 U	3.0 U	0.2 U	0.0 U	3.7 U	5.5 U	3.9 U	J.4 U	3.8 U	3.0 U
Bromoform					1.1 U	1.5 U 5 1 U	1.2 U	1.2 U	1.2 U 4 7 U	2.4 UD	1.1 U	1.2 U	1.1 U 4 5 U	1.2 U	1.5 U 5 2 U	1.1 U 4 4 U	1.1 U	1.2 U 4 7 U	1.1 U 4 2 U	1.2 U	1.1 U 4 5 U
Diomonothana					4.4 U	3.1 U 2 G U	4.8 U	4.8 U	4.7 U	9.3 UD	4.4 U	4.8 U	4.5 U	4.90	3.3 U	4.0 U	4.4 U	4.7 U	4.5 U	4.0 U	4.5 U
Carban disulfida					2.2 U	2.0 U	2.4 U	2.4 U	2.4 U	4.7 UD	2.2 U	2.4 U	2.2 U	2.5 U	2.0 U	2.5 U	2.2 U	2.4 U	2.1 U	2.5 U	2.2 U
Carbon disullide						130	120	120	120	24 UD	110	120	110	120	12 U		110	120		120	
Carbon tetrachioride	/60	/00	2400		1.1 U	1.5 U	1.2 U	1.2 U	1.2 U	2.4 UD	1.1 U	1.2 U	1.1 U	1.2 U	1.3 U	1.1 U	1.1 U	1.2 U	1.1 U	1.2 U	1.1 U
Chlorosethere	1100	1100	100000		1.1 U	1.5 U	1.2 U	1.2 U	1.2 U	2.4 UD	1.1 U	1.2 U	1.1 U	1.2 U	1.5 U	1.1 U	1.1 U	1.2 U	1.1 U 2.1 U	1.2 U	1.1 U
Chloroethane					2.2 0	2.0 U	2.4 U	2.4 0	2.4 U	4.7 UD	2.2 0	2.4 0	2.2 0	2.5 0	2.6 U	2.5 0	2.2 0	2.4 0	2.1 U	2.5 0	2.2 0
Chloroform	370	370	49000		1.6 U	1.9 U	1.8 U	1.8 U	1.8 U	3.6 UD	1.6 U	1.8 U	1.7 U	1.8 U	20	1.7 U	1.6 U	1.8 U	1.6 U	1.7 U	1.7 U
Chloromethane					5.4 U	6.4 U	6 U	6 U	5.9 U	12 UD	5.5 U	5.9 U	5.6 U	6.2 U	6.6 U	5.7 U	5.5 U	5.9 U	5.4 U	5.8 U	5.6 U
cis-1,2-Dichloroethene	250	250	100000		1.1 U	1.3 U	1.2 U	1.2 U	1.2 U	2.4 UD	1.1 U	1.2 U	1.1 U	1.2 U	1.3 U	1.1 U	1.1 U	1.2 U	1.1 U	1.2 U	1.1 U
cis-1,3-Dichloropropene					1.1 U	1.3 U	1.2 U	1.2 U	1.2 U	2.4 UD	1.1 U	1.2 U	1.1 U	1.2 U	1.3 U	1.1 U	1.1 U	1.2 U	1.1 U	1.2 U	1.1 U
Cyclohexane					22.0	26 U	24 U	24 U	24 U	47 UD	22 U	24 U	22 U	25 U	26 U	23 U	22 U	24 U	210	23 U	22 0
Dibromochloromethane					1.1 U	1.3 U	1.2 U	1.2 U	1.2 U	2.4 UD	1.1 U	1.2 U	1.1 U	1.2 U	1.3 U	1.1 U	1.1 U	1.2 U	1.1 U	1.2 U	1.1 U
Dibromochloropropane					5.4 U	6.4 U	6 U	6 U	5.9 U	12 UD	5.5 U	5.9 U	5.6 U	6.2 U	6.6 U	5.70	5.5 U	5.9 U	5.4 U	5.8 U	5.6 U
Dichlorodifluoromethane					11 U	13 U	12 U	12 U	12 U	24 UD	11 U	12 U	11 U	12 U	13 U	11 U	11 U	12 U	11 U	12 U	11 U
Ethylbenzene	1000	1000	41000		1.1 U	1.3 U	1.2 U	1.2 U	1.2 U	2.4 UD	1.1 U	1.2 U	1.1 U	1.2 U	1.3 U	1.1 U	1.1 U	1.2 U	1.1 U	1.2 U	1.1 U
Freon 113					22 U	26 U	24 U	24 U	24 U	47 UD	22 U	24 U	22 U	25 U	26 U	23 U	22 U	24 U	21 U	23 U	22 U
Isopropylbenzene					1.1 U	1.3 U	1.2 U	1.2 U	1.2 U	2.4 UD	1.1 U	1.2 U	1.1 U	1.2 U	1.3 U	1.1 U	1.1 U	1.2 U	1.1 U	1.2 U	1.1 U
m+p-Xylene					2.2 U	2.6 U	2.4 U	2.4 U	2.4 U	1.1 JD	2.2 U	2.4 U	2.2 U	2.5 U	2.6 U	2.3 U	2.2 U	2.4 U	2.1 U	2.3 U	2.2 U
Methyl acetate					22 U	26 U	24 U	24 U	24 U	47 UD	22 U	24 U	22 U	25 U	26 U	23 U	22 U	24 U	21 U	23 U	22 U
Methylcyclohexane					4.4 U	5.10	4.8 U	4.8 U	4.7 U	9.5 UD	4.4 U	4.8 U	4.5 U	4.9 U	5.3 U	4.6 U	4.4 U	4.7 U	4.3 U	4.6 U	4.5 U
Methylene chloride	50	50	100000		11 U	13 U	12 U	12 U	12 U	24 UD	11 U	12 U	11 U	12 U	13 U	11 U	11 U	12 U	11 U	12 U	11 U
MTBE	930	930	100000		2.2 U	2.6 U	2.4 U	2.4 U	2.4 U	4.7 UD	2.2 U	2.4 U	2.2 U	2.5 U	2.6 U	2.3 U	2.2 U	2.4 U	2.1 U	2.3 U	2.2 U
Napthalene			100000		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
o-Xylene					2.2 U	2.6 U	2.4 U	2.4 U	2.4 U	4.7 UD	2.2 U	2.4 U	2.2 U	2.5 U	2.6 U	2.3 U	2.2 U	2.4 U	2.1 U	2.3 U	2.2 U
n-Butylbenzene	12000	12000	100000		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
n-Propylbenzene	3900	3900	100000		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
sec-Butylbenzene	11000	11000	100000		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Styrene					2.2 U	2.6 U	2.4 U	2.4 U	2.4 U	4.7 UD	2.2 U	2.4 U	2.2 U	2.5 U	2.6 U	2.3 U	2.2 U	2.4 U	2.1 U	2.3 U	2.2 U
Tert-butanol / butyl alcohol					NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Tetrachloroethene	1300	1300	19000		1.1 U	0.70 J	1.2 U	1.2 U	1.5	4.3 D	1.1 U	1.2 U	1.1 U	1.2 U	1.3 U	1.1 U	1.1 U	1.2 U	1.1 U	1.2 U	1.3
Toluene	700	700	100000		1.6 UV	1.9 UV	0.39 J	1.8 U	1.8 UV	3.6 UVD	1.6 UV	1.8 UV	1.7 UV	1.8 UV	2 UV	1.7 UV	1.6 UV	1.8 U	1.6 U	0.28 J	0.45 J

	NYSDEC	NYSDEC	NYSDEC																		
	Part 375	Part 375	Part 375	Sample Designation:	RB-25	RB-25	RB-26	RB-27	RB-28	RB-28	RB-29	RB-30	RB-31	RB-32	RB-33	RB-34	RB-35	RB-36	RB-37	RB-38	RB-39
Parameter	Unrestricted	Protection of	Restricted	Sample Date:	4/9/2014	4/9/2014	4/11/2014	4/11/2014	4/10/2014	4/10/2014	4/10/2014	4/10/2014	4/10/2014	4/10/2014	4/10/2014	4/10/2014	4/10/2014	4/14/2014	4/14/2014	4/11/2014	4/11/2014
(Concentrations in µg/kg)	Use	Groundwater	Residential	Sample Depth (ft bls):	4 - 6	6 - 7.5	5 - 7	5 - 7	5 - 7	7 - 8	5 - 7	5 - 7	5 - 7	5 - 7	4 - 6	4 - 6	3 - 5	2 - 4	1 - 3	1 - 3	1 - 3
trans-1,2-Dichloroethene	190	190	100000		1.6 U	1.9 U	1.8 U	1.8 U	1.8 U	3.6 UD	1.6 U	1.8 U	1.7 U	1.8 U	2 U	1.7 U	1.6 U	1.8 U	1.6 U	1.7 U	1.7 U
trans-1,3-Dichloropropene					1.1 U	1.3 U	1.2 U	1.2 U	1.2 U	2.4 UD	1.1 U	1.2 U	1.1 U	1.2 U	1.3 U	1.1 U	1.1 U	1.2 U	1.1 U	1.2 U	1.1 U
Trichloroethene	470	470	21000		1.1 U	1.3 U	1.2 U	1.2 U	1.2 U	2.4 UD	1.1 U	1.2 U	1.1 U	1.2 U	1.3 U	1.1 U	1.1 U	1.2 U	1.1 U	1.2 U	1.1 U
Trichlorofluoromethane					5.4 U	6.4 U	6 U	6 U	5.9 U	12 UD	5.5 U	5.9 U	5.6 U	6.2 U	6.6 U	5.7 U	5.5 U	5.9 U	5.4 U	5.8 U	5.6 U
Vinyl chloride	20	20	900		2.2 U	2.6 U	2.4 U	2.4 U	2.4 U	4.7 UD	2.2 U	2.4 U	2.2 U	2.5 U	2.6 U	2.3 U	2.2 U	2.4 U	2.1 U	2.3 U	2.2 U
Xylenes (total)	260	1600	100000		2.2 U	2.6 U	2.4 U	2.4 U	2.4 U	1.1 JD	2.2 U	2.4 U	2.2 U	2.5 U	2.6 U	2.3 U	2.2 U	2.4 U	2.1 U	2.3 U	2.2 U

J - Estimated value

U - Indicates that the compound was analyzed for but not detected

D - a secondary analysis after dilution due to exceedance

of the calibration range in the original sample.

DUP - Duplicate sample

 $\mu g/kg$ - Micrograms per kilogram

ft bls - Feet below land surface

NYSDEC - New York State Department of Environmental Conservation

-- No NYSDEC Part 375 Standards available

Bold data indicates that parameter was detected above the NYSDEC Part 375 Unrestricted Use Standards

Shaded data indicates that parameter was detected above the NYSDEC Part 375 Protection of Groundwater Standard

Boxed data indicates that parameter was detected above the NYSDEC Part 375 Restricted Residential Standards

V - Value altered or qualifier added during data validation

R - Sample results rejected by validator

	NYSDEC	NYSDEC	NYSDEC																	
	Part 375	Part 375	Part 375	Sample Designation:	RB-40	RB-41	RB-42	RB-43	RB-44	RB-45	RB-46	RB-46	RB-47	RB-47 DUP	RB-47	RB-48	RB-48	RB-49	RB-50	RW-1
Parameter	Unrestricted	Protection of	Restricted	Sample Date:	4/14/2014	4/14/2014	4/14/2014	4/15/2014	4/15/2014	4/15/2014	12/29/2014	12/29/2014	12/29/2014	12/29/2014	12/29/2014	12/29/2014	12/29/2014	12/29/2014	12/30/2014	4/17/2014
(Concentrations in ug/kg)	Use	Groundwater	Residential	Sample Depth (ft bls):	3 - 5	0 - 2	5 - 7	5 - 7	5 - 7	10 - 12	6 - 8	10 - 12	4 - 6	4 - 6	8 - 10	4 - 6	6 - 8	2 - 4	4 - 6	8 - 10
1.1.1-Trichloroethane	680	680	100000		1.2 U	1.2 U	6 UD	1.2 U	1.2 U	1.2 U	1.1 U	1.2 U	310 UD	120 UD	1.1 U	3000 UD	570 UD	1.1 U	1.1 U	1.2 U
1.1.2.2-Tetrachloroethane					1.2 U	1.2 U	6 UD	1.2 U	1.2 U	1.2 U	1.1 U	1.2 U	310 UD	120 UD	1.1 U	3000 UD	570 UD	1.1 U	1.1 U	1.2 U
1.1.2-Trichloroethane					1.8 U	1.8 U	9.1 UD	1.9 U	1.9 U	1.7 U	1.6 U	1.8 U	460 UD	180 UD	1.7 U	4500 UD	860 UD	1.6 U	1.7 U	1.8 U
1 1-Dichloroethane	270	270	26000		18U	18U	91 UD	19U	19U	17U	16U	18U	460 UD	180 UD	17U	4500 UD	860 UD	16U	17U	18U
1 1-Dichloroethene	330	330	100000		1.0 U	1.0 U	6 UD	1.2 U	12U	12.U	1.0 U	1.0 U	310 UD	120 UD	11U	3000 UD	570 UD	11U	11U	1.0 U
1.2.3-Trichlorobenzene					61U	59U	30 UD	62U	62 U	5811	551	59U	1500 UD	600 UD	571	15000 UD	2900 LID	551	56U	6 U
1.2.4-Trichlorobenzene					61U	5911	30 UD	6.2 U	6.2 U	5811	551	5911	1500 UD	600 UD	5711	15000 UD	2900 UD	551	5.6 U	6 U
1.2.4-Trimethylbenzene	3600	3600	52000		NA	NA	NA	NA	NA	5.0 C	5.5 C NA	5.7 C	NA	NA	NA	NA	NA	5.5 C NA	NA	NA
1.3.5-Trimethylbenzene	8400	8400	52000		NA	NA	NA	NA	NA	NA	NA	NA	NA							
1.2 Dibromoethane	0400	0400	52000		101	17 II	24 11D	5 11	5.11	461		4711	1200 UD	480 UD	461	12000 UD	2300 LID		4511	181
1,2-Dichlorobenzene	1100	1100	100000		4.9 U 6 1 U	4.7 U 5 0 U	24 UD 30 UD	6211	6211	4.0 U 5 8 U	4.4 U 5 5 U	4.7 U 5 0 U	1200 UD	400 UD	4.00 57U	12000 UD	2300 UD	4.4 U 5 5 U	4.5 U	4.8 U
1,2-Dichloroothono	20	20	2100		1.2 U	J.9 U	30 UD	0.2 U	0.2 U	1.0 U	J.J U	1.2 U	210 UD	120 UD	J.7 U	2000 UD	2900 UD	J.J U	1.1.11	1211
1,2-Dichloropropage	20	20	5100		1.2 U	1.2 U 4 1 U		1.2 U 4 4 U	1.2 U 4 2 U	1.2 U	1.1 U 2 O U	1.2 U 4 2 U	1100 UD	120 UD 420 UD	1.1 U	10000 UD	2000 UD	1.1 U 2 O U	1.1 U	1.2 U
1,2-Dichlorohonzono	2400	2400	40000		4.5 U	4.1 U 5 O U	21 UD	4.4 U	4.3 U	4.1 U	5.90	4.2 U 5 O U	1500 UD	420 UD	4 U 5 7 U	15000 UD	2000 UD	5.90	4 U 5 6 U	4.2 U
1,5-Dichlorobenzene	2400	2400	49000		0.1 U	5.9 U	30 UD	0.2 U	0.2 U	5.8 U	5.5 U	5.9 U	1500 UD	600 UD	5.70	15000 UD	2900 UD	5.5 U	5.0 U	6 U
1,4-Dichlorobenzene	100	100	12000		0.1 U	5.9 U	50 UD	0.2 U	0.2 U	5.8 U	5.5 U	5.9 U	1300 UD	12000 UD	J./ U	13000 UD	2900 UD	5.5 U	3.0 U	120 11
1,4-Dioxane	100	100	100000		120 0	120 0		120 0	120 0	120 0	1100	120 0	31000 UD	12000 UD	100	300000 UD	57000 UD	1100	1100	120 0
2-Butanone (MEK)	120	120	100000		8.2 J	12 U	60 UD	12 U	12 UV	12 UV	11 U	12 U	3100 UD	1200 UD	10 J	30000 UD	5700 UD	11 U		12 U
2-Hexanone					12.0	12.0	60 UD	12.0	12.0	12 U		12.0	3100 UD	1200 UD		30000 UD	5700 UD			12 0
4-Isopropyltoluene					NA 10 U	NA	NA	NA 10 U	NA	NA	NA	NA	NA	NA 1200 LID	NA	NA	NA	NA	NA	NA
4-Methyl-2-pentanone (MIBK)					12 0	12.0	60 UD	12 0	12 U	12 0	11 U	12.0	3100 UD	1200 UD	11 U	30000 UD	5700 UD	11 U	11 U	12 U
Acetone	50	50	100000		61	3.9 J	84 D	4.7 J	12 U	6.4 J	II UV	12 UV	3100 UD	1200 UD	24	30000 UD	5700 UD	11 UV	11 UV	12 UV
Benzene	60	60	4800		1.2 U	1.2 U	6 UD	1.2 U	1.2 U	1.2 U	1.1 U	1.2 U	1800 JVD	410 JVD	1.1 U	3000 UD	570 UD	1.1 U	1.1 U	1.2 U
Bromochloromethane					6.1 U	5.9 U	30 UD	6.2 U	6.2 U	5.8 U	5.5 U	5.9 U	1500 UD	600 UD	5.7 U	15000 UD	2900 UD	5.5 U	5.6 U	6 U
Bromodichloromethane					1.2 U	1.2 U	6 UD	1.2 U	1.2 U	1.2 U	1.1 U	1.2 U	310 UD	120 UD	1.1 U	3000 UD	570 UD	1.1 U	1.1 U	1.2 U
Bromoform					4.9 U	4.7 U	24 UD	5 U	5 U	4.6 U	4.4 U	4.7 U	1200 UD	480 UD	4.6 U	12000 UD	2300 UD	4.4 U	4.5 U	4.8 U
Bromomethane					2.4 U	2.4 U	12 UD	2.5 U	2.5 U	2.3 U	2.2 U	2.4 U	610 UD	240 UD	2.3 U	6000 UD	1100 UD	2.2 U	2.2 U	2.4 U
Carbon disulfide					12 U	12 U	60 UD	12 U	12 U	12 U	11 U	12 U	3100 UD	1200 UD	11 U	30000 UD	5700 UD	11 U	11 U	12 U
Carbon tetrachloride	760	760	2400		1.2 U	1.2 U	6 UD	1.2 U	1.2 U	1.2 U	1.1 U	1.2 U	310 UD	120 UD	1.1 U	3000 UD	570 UD	1.1 U	1.1 U	1.2 U
Chlorobenzene	1100	1100	100000		1.2 U	1.2 U	6 UD	1.2 U	1.2 U	1.2 U	1.1 U	1.2 U	310 UD	120 UD	1.1 U	3000 UD	570 UD	1.1 U	1.1 U	1.2 U
Chloroethane					2.4 U	2.4 U	12 UD	2.5 U	2.5 U	2.3 U	2.2 U	2.4 U	610 UD	240 UD	2.3 U	6000 UD	1100 UD	2.2 U	2.2 U	2.4 U
Chloroform	370	370	49000		1.8 U	1.8 U	9.1 UD	1.9 U	1.9 U	1.7 U	1.6 U	1.8 U	460 UD	180 UD	1.7 U	4500 UD	860 UD	1.6 U	1.7 U	1.8 U
Chloromethane					6.1 U	5.9 U	30 UD	6.2 U	6.2 U	5.8 U	5.5 U	5.9 U	1500 UD	600 UD	5.7 U	15000 UD	2900 UD	5.5 U	5.6 U	6 U
cis-1,2-Dichloroethene	250	250	100000		1.2 U	1.2 U	29 D	1.2 U	1.2 U	1.2 U	1.1 U	1.2 U	310 UD	43 JD	1.1 U	3000 UD	1200 D	1.4	3	1.2 U
cis-1,3-Dichloropropene					1.2 U	1.2 U	6 UD	1.2 U	1.2 U	1.2 U	1.1 U	1.2 U	310 UD	120 UD	1.1 U	3000 UD	570 UD	1.1 U	1.1 U	1.2 U
Cyclohexane					24 U	24 U	120 UD	25 U	25 U	23 U	22 U	24 U	17000 JVD	2400 UJVD	23 U	60000 UD	11000 UD	22 U	22 U	24 U
Dibromochloromethane					1.2 U	1.2 U	6 UD	1.2 U	1.2 U	1.2 U	1.1 U	1.2 U	310 UD	120 UD	1.1 U	3000 UD	570 UD	1.1 U	1.1 U	1.2 U
Dibromochloropropane					6.1 U	5.9 U	30 UD	6.2 U	6.2 U	5.8 U	5.5 U	5.9 U	1500 UD	600 UD	5.7 U	15000 UD	2900 UD	5.5 U	5.6 U	6 U
Dichlorodifluoromethane					12 U	12 U	60 UD	12 U	12 U	12 U	11 U	12 U	3100 UD	1200 UD	11 U	30000 UD	5700 UD	11 U	11 U	12 U
Ethylbenzene	1000	1000	41000		1.2 U	1.2 U	6 UD	1.2 U	1.2 U	1.2 U	0.16 J	1.2 U	12000 JVD	3300 JVD	1.1 U	140000 D	15000 D	1.1 U	1.1 U	1.2 U
Freon 113					24 U	24 U	120 UD	25 U	25 U	23 U	22 U	24 U	RVD	2400 UD	23 U	60000 UD	11000 UD	22 U	22 U	24 U
Isopropylbenzene					1.2 U	1.2 U	6 UD	1.2 U	1.2 U	1.2 U	1.1 U	1.2 U	2100 JVD	560 JVD	1.1 U	19000 D	2000 D	1.1 U	1.1 U	1.2 U
m+p-Xylene					2.4 U	2.4 U	12 UD	2.5 U	2.5 U	2.3 U	0.49 J	0.65 J	40000 JVD	10000 JVD	2.3 U	380000 D	32000 D	2.2 U	2.2 U	2.4 U
Methyl acetate					24 U	24 U	120 UD	25 U	25 U	23 U	22 U	24 U	6100 UD	2400 UD	23 U	60000 UD	11000 UD	22 U	22 U	24 U
Methylcyclohexane					4.9 U	4.7 U	24 UD	5 U	5 U	4.6 U	16	4.7 U	26000 JVD	6600 JVD	4.6 U	95000 D	16000 D	4.4 U	4.5 U	4.8 U
Methylene chloride	50	50	100000		12 U	12 U	60 UD	12 U	12 U	12 U	11 U	12 U	3100 UD	1200 UD	11 U	30000 UD	5700 UD	11 U	11 U	12 U
MTBE	930	930	100000		2.4 U	2.4 U	12 UD	2.5 U	2.5 U	2.3 U	2.2 U	2.4 U	610 UD	240 UD	2.3 U	6000 UD	1100 UD	2.2 U	2.2 U	2.4 U
Napthalene			100000		NA	NA	NA	NA	NA	NA	NA	NA	NA							
o-Xylene					2.4 U	2.4 U	12 UD	2.5 U	2.5 U	2.3 U	2.2 U	2.4 U	15000 JVD	3600 JVD	2.3 U	52000 D	820 JD	2.2 U	2.2 U	2.4 U
n-Butylbenzene	12000	12000	100000		NA	NA	NA	NA	NA	NA	NA	NA	NA							
n-Propylbenzene	3900	3900	100000		NA	NA	NA	NA	NA	NA	NA	NA	NA							
sec-Butylbenzene	11000	11000	100000		NA	NA	NA	NA	NA	NA	NA	NA	NA							
Styrene					2.4 U	2.4 U	12 UD	2.5 U	2.5 U	2.3 U	2.2 U	2.4 U	610 UD	240 UD	2.3 U	6000 UD	1100 UD	2.2 U	2.2 U	2.4 U
Tert-butanol / butyl alcohol					NA	NA	NA	NA	NA	NA	NA	NA	NA							
Tetrachloroethene	1300	1300	19000		1.2 U	0.70 J	6.1 D	1.2 U	1.2 U	1.2 U	1.1 U	1.2 U	120 JD	35 JD	1.1 U	3000 UD	2200 D	2.6	4.4	1.2 U
Toluene	700	700	100000		1.8 U	1.8 U	9.1 UD	1.9 U	1.9 U	1.7 U	1.6 U	1.8 U	5200 JVD	1100 JVD	1.7 U	4500 D	600 JD	1.6 U	1.7 U	1.8 U

	NYSDEC	NYSDEC	NYSDEC																	
	Part 375	Part 375	Part 375	Sample Designation:	RB-40	RB-41	RB-42	RB-43	RB-44	RB-45	RB-46	RB-46	RB-47	RB-47 DUP	RB-47	RB-48	RB-48	RB-49	RB-50	RW-1
Parameter	Unrestricted	Protection of	Restricted	Sample Date: 4	4/14/2014	4/14/2014	4/14/2014	4/15/2014	4/15/2014	4/15/2014	12/29/2014	12/29/2014	12/29/2014	12/29/2014	12/29/2014	12/29/2014	12/29/2014	12/29/2014	12/30/2014	4/17/2014
(Concentrations in µg/kg)	Use	Groundwater	Residential	Sample Depth (ft bls):	3 - 5	0 - 2	5 - 7	5 - 7	5 - 7	10 - 12	6 - 8	10 - 12	4 - 6	4 - 6	8 - 10	4 - 6	6 - 8	2 - 4	4 - 6	8 - 10
trans-1,2-Dichloroethene	190	190	100000		1.8 U	1.8 U	9.1 UD	1.9 U	1.9 U	1.7 U	1.6 U	1.8 U	460 UD	180 UD	1.7 U	4500 UD	860 UD	1.6 U	1.7 U	1.8 U
trans-1,3-Dichloropropene					1.2 U	1.2 U	6 UD	1.2 U	1.2 U	1.2 U	1.1 U	1.2 U	310 UD	120 UD	1.1 U	3000 UD	570 UD	1.1 U	1.1 U	1.2 U
Trichloroethene	470	470	21000		1.2 U	1.2 U	5.1 JD	1.2 U	1.2 U	1.2 U	1.1 U	1.2 U	310 UD	120 UD	1.1 U	3000 UD	570 UD	0.54 J	0.79 J	1.2 U
Trichlorofluoromethane					6.1 U	5.9 U	30 UD	6.2 U	6.2 U	5.8 U	5.5 U	5.9 U	1500 UJVD	600 UD	5.7 U	15000 UD	2900 UD	5.5 U	5.6 U	6 U
Vinyl chloride	20	20	900		2.4 U	2.4 U	12 UD	2.5 U	2.5 U	2.3 U	2.2 U	2.4 U	610 UD	240 UD	2.3 U	6000 UD	1100 UD	2.2 U	2.2 U	2.4 U
Xylenes (total)	260	1600	100000		2.4 U	2.4 U	12 UD	2.5 U	2.5 U	2.3 U	0.49 J	0.65 J	55000 JVD	14000 JVD	2.3 U	430000 D	33000 JD	2.2 U	2.2 U	2.4 U
																	_			

J - Estimated value

U - Indicates that the compound was analyzed for but not detected

D - a secondary analysis after dilution due to exceedance

of the calibration range in the original sample.

DUP - Duplicate sample

 $\mu g/kg$ - Micrograms per kilogram

ft bls - Feet below land surface

NYSDEC - New York State Department of Environmental Conservation

-- No NYSDEC Part 375 Standards available

Bold data indicates that parameter was detected above the NYSDEC Part 375 Unrestricted Use Standards

Shaded data indicates that parameter was detected above the NYSDEC Part 375 Protection of Groundwater Standard

Boxed data indicates that parameter was detected above the NYSDEC Part 375 Restricted Residential Standards

V - Value altered or qualifier added during data validation

R - Sample results rejected by validator

	NYSDEC	NYSDEC	NYSDEC																			
	Part 375	Part 375	Part 375	Sample Designation:	RW-1	RW-2	RW-3	RW-3	RW-3	RW-4	RW-4	RW-4	RW-5	RW-6	RW-7	RW-8	RW-9	RW-9	RW-9	RW-10	RW-11	RW-11 DUP
Parameter	Unrestricted	Protection of	Restricted	Sample Date:	4/17/2014	4/7/2014	4/8/2014	4/8/2014	4/8/2014	4/8/2014	4/8/2014	4/8/2014	4/9/2014	4/9/2014	4/8/2014	4/16/2014	4/16/2014	4/16/2014	4/16/2014	4/9/2014	4/16/2014	4/16/2014
(Concentrations in µg/kg)	Use	Groundwater	Residential	Sample Depth (ft bls):	13 - 15	13 - 15	1 - 3	3 - 5	8 - 9	1 - 3	7 - 9	13 - 14	9 - 11	15 - 17	10 - 12	5 - 7	1.5 - 3	4 - 6	9 - 10	6 - 8	4 - 6	4 - 6
		10.0	100000							<	100 100						100 115					
1,1,1-Trichloroethane	680	680	100000		110 UD	1.3 U	1.2 U	58 UD	1.2 U	640 UD	130 UD	1.1 U	1.2 U	1.4 U	1.3 U	1.4 U	130 UD	260 UD	1.2 U	1.2 U	1.3 U	1.3 U
1,1,2,2-Tetrachloroethane					110 UD	1.3 U	1.2 U	58 UD	1.2 U	640 UD	130 UD	1.1 U	1.2 U	1.4 U	1.3 U	1.4 U	130 UD	260 UD	1.2 U	1.2 U	1.3 U	1.3 U
1,1,2-Trichloroethane					160 UD	1.9 U	1.7 U	86 UD	1.8 U	960 UD	190 UD	1./U	1.8 U	2.1 U	1.9 U	2.1 U	190 UD	400 UD	1.8 U	1.8 U	20	20
1,1-Dichloroethane	270	270	26000		160 UD	1.9 U	1./U	86 UD	1.8 U	960 UD	190 UD	I./U	1.8 U	2.1 U	1.9 U	2.1 U	190 UD	400 UD	1.8 U	1.8 U	20	20
1,1-Dichloroethene	330	330	100000		110 UD	1.3 U	1.2 U	200 UD	1.2 U	640 UD	130 UD	1.1 U	1.2 U	1.4 U 7.1 U	1.3 U	1.4 U 7.1 U	130 UD	260 UD	1.2 U	1.2 U	1.3 U	1.3 U
1,2,3-1 fichlorobenzene					540 UD	0.3 U	5.8 U	290 UD	0.2 U	3200 UD	640 UD	5.7U	0 U	7.1 U 7.1 U	0.4 U	7.1 U 7.1 U	630 UD	1300 UD	6.2 U		0.0 U	0.7U
1,2,4-Trimothylhangana			52000		540 UD	0.5 U NA	J.8 U NA	290 UD	0.2 U NA	5200 UD	040 UD	5.7 U NA		7.1 U NA	0.4 U NA	7.1 U NA	050 UD	1500 UD	0.2 U		0.0 U N A	0.7 U
1,2,4-Thinethylbenzene	3000 8400	3000 8400	52000		NA NA	NA NA	NA NA	NA NA	NA NA	INA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	INA NA	INA NA	NA NA	INA NA	NA NA	INA NA
1,2 Dibromoethane	8400	8400	52000		130 LID	5111	16U	230 LID	5 11	2600 UD	510 UD	16 U	181	56U	5111	56U	500 UD		5 U	181	5311	54U
1.2-Dichlorobenzene	1100	1100	100000		430 UD	63 U	4.0 U 5 8 U	200 UD	6211	2000 UD 3200 UD	640 UD	4.0 U 5 7 U	4.8 U 6 U	7.0 U	5.1 U 6 4 U	7.0 U	630 UD	1300 UD	6211	4.0 U	5.5 U 6 6 U	5.4 U 6 7 U
1.2 Dichloroethane	20	20	3100		110 UD	131	1211	290 UD	1211	5200 UD	130 UD	J.7 U 1 I U	1211	1.1 U	1311	1.1 U	130 UD	260 UD	0.2 U	1211	131	0.7 U 1 3 U
1.2-Dichloropropage	20	20	5100		380 UD	1.5 U 4 A U	1.2 U 4 1 U	200 UD	1.2 U 1 3 U	2200 UD	450 UD	1.1 U 4 U	1.2 U 4 2 U	1.4 U 4 Q U	1.5 U 4 5 U	1.4 U 1 Q II	130 UD	200 UD	1.2 U 4 3 U	1.2 U 4 2 U	1.5 U 4 6 U	1.50
1.3-Dichlorobenzene	2400	2400	49000		540 UD	4.4 U	4.1 U 5 8 U	200 UD 290 UD	4.3 U 6 2 U	3200 UD	430 UD 640 UD	40 5711	4.2 U 6 U	4.90 71U	4.5 U 64 U	4.90 71U	630 UD	1300 UD	4.5 U	4.2 U 6 U	4.0 U	4.7 U
1 4-Dichlorobenzene	1800	1800	13000		540 UD	63U	5.8 U	290 UD	6.2 U	3200 UD	640 UD	5.7 U	6 U	7.1 U 7 1 U	64U	7.1 U	630 UD	1300 UD	62U	6 U	6.0 U	67U
1 4-Dioxane	100	100	13000		11000 UD	130 U	120 U	5800 UD	120 U	64000 UD	13000 UD	110 U	120 U	140 U	130 U	140 U	13000 UD	26000 UD	120 U	120 U	130 U	130 U
2-Butanone (MEK)	120	120	100000		1100 UD	13 UV	120 C	580 UD	12 UV	6400 UD	1300 UD	11 UV	12 U	14 UV	13 UV	14 UV	1300 UD	2600 UD	120 C	12 U	13 UV	13 UV
2-Hexanone					1100 UD	13 U	12 U	580 UD	12 U	6400 UD	1300 UD	11 U	12 U	14 U	13 U	14 U	1300 UD	2600 UD	12 U	12 U	13 U	13 U
4-Isopropyltoluene					NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Methyl-2-pentanone (MIBK)					1100 UD	13 U	12 U	580 UD	12 U	6400 UD	1300 UD	11 U	12 U	14 U	13 U	14 U	1300 UD	2600 UD	12 U	12 U	13 U	13 U
Acetone	50	50	100000		1100 UVD	8.3 J	12 U	580 UD	10 J	6400 UD	1300 UD	43	12 U	15	59	46	1300 UD	2600 UD	4.9 J	12 U	44	45
Benzene	60	60	4800		110 UD	1.3 U	1.2 U	58 UD	1.2 U	640 UD	130 UD	1.1 U	1.2 U	1.4 U	2	1.4 U	130 UD	260 UD	1.2 U	1.2 U	1.3 U	1.3 U
Bromochloromethane					540 UD	6.3 U	5.8 U	290 UD	6.2 U	3200 UD	640 UD	5.7 U	6 U	7.1 U	6.4 U	7.1 U	630 UD	1300 UD	6.2 U	6 U	6.6 U	6.7 U
Bromodichloromethane					110 UD	1.3 U	1.2 U	58 UD	1.2 U	640 UD	130 UD	1.1 U	1.2 U	1.4 U	1.3 U	1.4 U	130 UD	260 UD	1.2 U	1.2 U	1.3 U	1.3 U
Bromoform					430 UD	5.1 U	4.6 U	230 UD	5 U	2600 UD	510 UD	4.6 U	4.8 U	5.6 U	5.1 U	5.6 U	500 UD	1000 UD	5 U	4.8 U	5.3 U	5.4 U
Bromomethane					220 UVD	2.5 U	2.3 U	120 UD	2.5 U	1300 UD	260 UD	2.3 U	2.4 U	2.8 U	2.6 U	2.8 U	250 UD	530 UD	2.5 U	2.4 U	2.6 U	2.7 U
Carbon disulfide					1100 UD	13 U	12 U	580 UD	12 U	6400 UD	1300 UD	11 U	12 U	14 U	13 U	14 U	1300 UD	2600 UD	12 U	12 U	13 U	13 U
Carbon tetrachloride	760	760	2400		110 UD	1.3 U	1.2 U	58 UD	1.2 U	640 UD	130 UD	1.1 U	1.2 U	1.4 U	1.3 U	1.4 U	130 UD	260 UD	1.2 U	1.2 U	1.3 U	1.3 U
Chlorobenzene	1100	1100	100000		110 UD	1.3 U	1.2 U	58 UD	1.2 U	640 UD	130 UD	1.1 U	1.2 U	1.4 U	1.3 U	1.4 U	130 UD	260 UD	1.2 U	1.2 U	1.3 U	1.3 U
Chloroethane					220 UD	2.5 U	2.3 U	120 UD	2.5 U	1300 UD	260 UD	2.3 U	2.4 U	2.8 U	2.6 U	2.8 U	250 UD	530 UD	2.5 U	2.4 U	2.6 U	2.7 U
Chloroform	370	370	49000		160 UD	1.9 U	1.7 U	86 UD	1.8 U	960 UD	190 UD	1.7 U	1.8 U	2.1 U	1.9 U	2.1 U	190 UD	400 UD	1.8 U	1.8 U	2 U	2 U
Chloromethane					540 UD	6.3 U	5.8 U	290 UD	6.2 U	3200 UD	640 UD	5.7 U	6 U	7.1 U	6.4 U	7.1 U	630 UD	1300 UD	6.2 U	6 U	6.6 U	6.7 U
cis-1,2-Dichloroethene	250	250	100000		110 UD	1.3 U	1.2 U	58 UD	1.2 U	640 UD	130 UD	1.1 U	1.2 U	1.4 U	1.3 U	0.68 J	130 UD	260 UD	1.2	1.2 U	1.3 U	1.3 U
cis-1,3-Dichloropropene					110 UD	1.3 U	1.2 U	58 UD	1.2 U	640 UD	130 UD	1.1 U	1.2 U	1.4 U	1.3 U	1.4 U	130 UD	260 UD	1.2 U	1.2 U	1.3 U	1.3 U
Cyclohexane					2200 UD	25 U	23 U	1200 UD	25 U	13000 UD	1100 JD	23 U	24 U	28 U	3.1 J	28 U	2500 UD	5300 UD	25 U	24 U	26 U	27 U
Dibromochloromethane					110 UD	1.3 U	1.2 U	58 UD	1.2 U	640 UD	130 UD	1.1 U	1.2 U	1.4 U	1.3 U	1.4 U	130 UD	260 UD	1.2 U	1.2 U	1.3 U	1.3 U
Dibromochloropropane					540 UD	6.3 U	5.8 U	290 UD	6.2 U	3200 UD	640 UD	5.7 U	6 U	7.1 U	6.4 U	7.1 U	630 UD	1300 UD	6.2 U	6 U	6.6 U	6.7 U
Dichlorodifluoromethane					1100 UD	13 U	12 U	580 UD	12 U	6400 UD	1300 UD	11 U	12 U	14 U	13 U	14 U	1300 UD	2600 UD	12 U	12 U	13 U	13 U
Ethylbenzene	1000	1000	41000		1100 D	1.3 U	1.2 U	180 D	0.55 J	2500 D	720 D	1.1 U	1.2 U	1.4 U	0.65 J	1.4 U	130 UD	780 D	1.2 U	1.2 U	1.3 U	1.3 U
Freon 113					2200 UD	25 U	23 U	1200 UD	25 U	13000 UD	2600 UD	23 U	24 U	28 U	26 U	28 U	2500 UD	5300 UD	25 U	24 U	26 U	270
Isopropylbenzene					360 D	1.3 U	1.2 U	69 D	1.2 U	5500 D	3/0 D	1.1 U	1.2 U	1.4 U	1.3 U	1.4 U	270 D	1900 D	1.2 U	1.2 U	1.3 U	1.3 U
m+p-Aylene					2700 D	2.5 U 25 U	2.3 U	130 D	2.5 U 25 U	300 JD	960 D	2.3 U	2.4 U 24 U	2.8 U	0.89 J	2.8 U	97 JD	920 D	2.5 U 25 U	2.4 U 24 U	2.6 U	2.7 U
Methyl acetate					2200 UD	23 U 5 1 U	25 U 4 6 U	1200 UD	23 U 5 U	13000 UD	2000 UD 6500 D	25 U 4 6 U	24 U 4 9 U	20 U 5 6 U	20 0	20 U 5 6 U	2300 UD	5500 UD	23 U 5 U	24 U 4 9 U	20 U 5 2 U	27 U 5 4 U
Methylene chloride	50		100000		1100 UD	271	4.0 U	580 UD	12 11	6400 UD	1300 UD	4.0 U	4.0 U 12 U	14 U	13 11	3.0 U 14 U	1300 UD	2600 UD	12 11	4.0 U 12 U	3.3 U 13 U	3.4 U 13 U
MTRE	930	930	100000		220 UD	2.7 J 2 5 U	2311	120 UD	2511	1300 UD	260 UD	2311	2411	2811	111	2811	250 UD	530 UD	0.62 1	2411	2611	2711
Nanthalana)30)50	100000		NA	2.5 U NA	2.5 U NA	NA	2.5 U NA	NA	200 OD NA	2.5 U NA	2.4 U NA	2.8 U NA	I.I J NA	2.0 U NA	250 OD NA	NA	NA	2.4 U NA	2.0 U NA	2.7 U NA
o-Xylene					290 D	2511	2311	120 UD	2511	1300 UD	260 UD	2311	2411	2811	2611	2811	250 UD	530 UD	2511	2411	2611	2711
n-Butylbenzene	12000	12000	100000		NA	2.5 C NA	2.5 U NA	NA	2.5 C NA	NA	NA	2.5 U NA	NA	2.0 U NA	2.0 U NA	2.0 U NA	NA	NA	2.5 C NA	NA	2.5 C NA	2.7 C NA
n-Propylbenzene	3900	3900	100000		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
sec-Butylbenzene	11000	11000	100000		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Styrene					220 UD	2.5 U	2.3 U	120 UD	2.5 U	1300 UD	260 UD	2.3 U	2.4 U	2.8 U	2.6 U	2.8 U	250 UD	530 UD	2.5 U	2.4 U	2.6 U	2.7 U
Tert-butanol / butvl alcohol					NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Tetrachloroethene	1300	1300	19000		110 UD	1.3 U	1.2 U	58 UD	1.2 U	640 UD	130 UD	1.1 U	1.2 U	1.4 U	1.3 U	1.4 U	130 UD	260 UD	1.2 U	1.2 U	1.3 U	1.3 U
Toluene	700	700	100000		160 UVD	1.9 UV	1.7 U	86 UVD	1.8 UV	960 UD	190 UD	1.7 UV	1.8 U	2.1 UV	1.9 UV	2.1 U	190 UVD	400 UVD	1.8 U	1.8 UV	0.28 J	0.30 J

	NYSDEC	NYSDEC	NYSDEC																			
	Part 375	Part 375	Part 375	Sample Designation:	RW-1	RW-2	RW-3	RW-3	RW-3	RW-4	RW-4	RW-4	RW-5	RW-6	RW-7	RW-8	RW-9	RW-9	RW-9	RW-10	RW-11	RW-11 DUP
Parameter	Unrestricted	Protection of	Restricted	Sample Date:	4/17/2014	4/7/2014	4/8/2014	4/8/2014	4/8/2014	4/8/2014	4/8/2014	4/8/2014	4/9/2014	4/9/2014	4/8/2014	4/16/2014	4/16/2014	4/16/2014	4/16/2014	4/9/2014	4/16/2014	4/16/2014
(Concentrations in µg/kg)	Use	Groundwater	Residential	Sample Depth (ft bls):	13 - 15	13 - 15	1 - 3	3 - 5	8 - 9	1 - 3	7 - 9	13 - 14	9 - 11	15 - 17	10 - 12	5 - 7	1.5 - 3	4 - 6	9 - 10	6 - 8	4 - 6	4 - 6
trans-1,2-Dichloroethene	190	190	100000		160 UD	1.9 U	1.7 U	86 UD	1.8 U	960 UD	190 UD	1.7 U	1.8 U	2.1 U	1.9 U	2.1 U	190 UD	400 UD	1.8 U	1.8 U	2 U	2 U
trans-1,3-Dichloropropene					110 UD	1.3 U	1.2 U	58 UD	1.2 U	640 UD	130 UD	1.1 U	1.2 U	1.4 U	1.3 U	1.4 U	130 UD	260 UD	1.2 U	1.2 U	1.3 U	1.3 U
Trichloroethene	470	470	21000		110 UD	1.3 U	1.2 U	58 UD	1.2 U	640 UD	130 UD	1.1 U	1.2 U	1.4 U	1.3 U	1.4 U	130 UD	260 UD	1.2 U	1.2 U	1.3 U	1.3 U
Trichlorofluoromethane					540 UD	6.3 U	5.8 U	290 UD	6.2 U	3200 UD	640 UD	5.7 U	6 U	7.1 U	6.4 U	7.1 U	630 UD	1300 UD	6.2 U	6 U	6.6 U	6.7 U
Vinyl chloride	20	20	900		220 UD	2.5 U	2.3 U	120 UD	2.5 U	1300 UD	260 UD	2.3 U	2.4 U	2.8 U	2.6 U	2.8 U	250 UD	530 UD	2.5 U	2.4 U	2.6 U	2.7 U
Xylenes (total)	260	1600	100000		2990 D	2.5 U	2.3 U	130 D	2.5 U	300 JD	960 D	2.3 U	2.4 U	2.8 U	0.89 J	2.8 U	97 JD	920 D	2.5 U	2.4 U	2.6 U	2.7 U

J - Estimated value

U - Indicates that the compound was analyzed for but not detected

D - a secondary analysis after dilution due to exceedance

of the calibration range in the original sample.

DUP - Duplicate sample

 $\mu g/kg$ - Micrograms per kilogram

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V - Value altered or qualifier added during data validation

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	NYSDEC	NYSDEC	NYSDEC												
	Part 375	Part 375	Part 375	Sample Designation:	RW-12	RW-12	RW-13	RW-14	RW-15	RW-15 DUP	RW-16	RW-17	RW-17	RW-18	RW-19
Parameter	Unrestricted	Protection of	Restricted	Sample Date:	4/10/2014	4/10/2014	4/10/2014	4/14/2014	4/11/2014	4/11/2014	4/14/2014	4/11/2014	4/11/2014	4/15/2014	4/15/2014
(Concentrations in µg/kg)	Use	Groundwater	Residential	Sample Depth (ft bls):	5 - 7	7 - 8	5 - 7	3 - 5	1 - 3	1 - 3	3 - 5	0 - 2	2 - 4	5 - 6	5.5 - 7.5
1,1,1-Trichloroethane	680	680	100000		1.1 U	1.3 U	1.1 U	1.1 U	1.1 U	1.1 U	1.2 U	1.2 U	1.2 U	1.2 U	1.1 U
1,1,2,2-Tetrachloroethane					1.1 U	1.3 U	1.1 U	1.1 U	1.1 U	1.1 U	1.2 U	1.2 U	1.2 U	1.2 U	1.1 U
1,1,2-Trichloroethane					1.7 U	2 U	1.7 U	1.7 U	1.7 U	1.7 U	1.8 U	1.7 U	1.8 U	1.8 U	1.7 U
1,1-Dichloroethane	270	270	26000		1.7 U	2 U	1.7 U	1.7 U	1.7 U	1.7 U	1.8 U	1.7 U	1.8 U	1.8 U	1.7 U
1,1-Dichloroethene	330	330	100000		1.1 U	1.3 U	1.1 U	1.1 U	1.1 U	1.1 U	1.2 U	1.2 U	1.2 U	1.2 U	1.1 U
1,2,3-Trichlorobenzene					5.6 U	6.6 U	5.6 U	5.6 U	5.7 U	5.7 U	6 U	5.8 U	6 U	6.2 U	5.7 U
1,2,4-Trichlorobenzene					5.6 U	6.6 U	5.6 U	5.6 U	5.7 U	5.7 U	6 U	5.8 U	6 U	6.2 U	5.7 U
1,2,4-Trimethylbenzene	3600	3600	52000		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,3,5-Trimethylbenzene	8400	8400	52000		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1.2-Dibromoethane					4.5 U	5.3 U	4.5 U	4.5 U	4.6 U	4.6 U	4.8 U	4.6 U	4.8 U	4.9 U	4.6 U
1.2-Dichlorobenzene	1100	1100	100000		5.6 U	6.6 U	5.6 U	5.6 U	5.7 U	5.7 U	6 U	5.8 U	6 U	6.2 U	5.7 U
1.2-Dichloroethane	20	20	3100		1.1 U	1.3 U	1.1 U	1.1 U	1.1 U	1.1 U	1.2 U	1.2 U	1.2 U	1.2 U	1.1 U
1.2-Dichloropropane					4 U	4.6 U	3.9 U	3.9 U	4 U	4 U	4.2 U	4 U	4.2 U	4.3 U	4 U
1.3-Dichlorobenzene	2400	2400	49000		5.6 U	6.6 U	5.6 U	5.6 U	5.7 U	5.7 U	6 U	5.8 U	6 U	6.2 U	5.7 U
1.4-Dichlorobenzene	1800	1800	13000		5.6 U	6.6 U	5.6 U	5.6 U	5.7 U	5.7 U	6 U	5.8 U	6 U	6.2 U	5.7 U
1 4-Dioxane	100	100	13000		110 U	130 U	110 U	110 U	110 U	110 U	120 U	120 U	120 U	120 U	110 U
2-Butanone (MEK)	120	120	100000		11 U	13 U	11 U	891	11 U	11 U	12 U	12.11	12 U	12 UV	11 UV
2-Hexanone					11 U	13 U	11 U	11 U	11 U	11 U	12 U	12 U	12 U	12.U	11 U
4-Isopropyltoluene					NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Methyl-2-pentanone (MIBK)					11 11	13 U	11 U	11 U	11 U	11 II	12 U	12 11	12 11	12 11	11 II
A cetone	50	50	100000		501	22	11 U	68	11 U	11 U	21	12 U	12 U	23	621
Benzene	60	50 60	4800		11U	1311	110	11U	111	110	121	12 U	1211	1211	11U
Bromochloromethane					5.6 U	66U	561	56U	5711	57U	6 U	5.8 U	611	62 U	57U
Bromodichloromethane					11U	131	1111	1111	1111	111	1211	1211	1211	1211	11U
Bromoform					45U	5311	451	4511	46U	46U	481	46U	4811	4911	46U
Bromomethane					22U	2611	2211	2211	2311	231	4.0 U 2 4 U	231	4.0 U 2 4 U	2511	2311
Carbon disulfide					2.2 U 11 U	2.0 U	2.2 U 11 U	2.2 U 11 U	2.5 U	2.5 U	12 11	12 U	12 U	12 U	2.5 U 11 U
Carbon tetrachloride	760	760	2400		111	131	110	110	110	111	120	120	120	120	111
Chlorobenzene	1100	1100	100000		1.1 U 1 1 U	131	1.1 U	1.1 U 1 1 U	1.1 U	1.1 U	1.2 U	1.2 U	1.2 U	1.2 U	1.1 U 1 1 U
Chloroethane		1100	100000		2211	261	2211	2211	2311	2311	2411	231	2411	2511	2311
Chloroform	270	270	40000		1711	2.0 0	171	1711	171	2.5 U	1911	2.5 U	1911	1911	1711
Chloromothana	370	570	49000		1.7 U 5 G U	20	1.7 U 5 C U	1.7 U 5 6 U	1.7 U 5 7 U	1.7 U 5 7 U	1.0 U	1.7 U 5 9 U	1.8 U	1.8 U	1.7 U 5 7 U
cilloroniethane	250	250	100000		J.0 U	0.0 U	J.0 U	5.0 U	J.7 U	J.7 U	1211	J.8 U	111	0.2 U	J./ U 1 1 U
cis-1,2-Dichloropropaga	230	250	100000		1.1 U	1.5 U	1.1 U	1.1 U	1.1 U	1.1 U 1.1 U	1.2 U	1.2 U	1.1 J 1.2 U	1.2 U	1.1 U 1.1 U
Cuelebayana					22 11	1.5 U 26 U	22 11	1.1 U 22 U	1.1 U 22 U	1.1 U 22 U	1.2 U 24 U	1.2 U 22 U	1.2 U 24 U	1.2 U 25 U	22 11
Dibromochloromothono					22 U 1 1 U	200	22 U	22 U 1 1 U	23 U	23 U	24 U 1 2 U	23 U	24 U 1 2 U	23 U	25 U 1 1 U
Dibromochloronronana					1.1 U 5 6 U	1.5 U	1.1 U 5 6 U	1.1 U 5 6 U	1.1 U 5 7 U	1.1 U 5 7 U	1.2 U 6 U	1.2 U 5 9 U	1.2 U	1.2 U	1.1 U 5 7 U
Dioblorodifluoromethane					J.0 U 11 U	0.0 U 12 U	5.0 U	J.0 U 11 U	J.7 U	J.7 U	12 11	J.8 U	12 11	0.2 U	J.7 U 11 U
Ethylhonzono	1000	1000	41000		110	12 U	110	110	110	110	120	12 U	12 U	12 U	110
Europ 112	1000	1000	41000		22 11	1.5 U 26 U	1.1 U 22 U	22 11	22 11	1.1 U 22 U	1.2 U 24 U	1.2 U	1.2 U 24 U	1.2 U 25 U	22 11
Fieldi 115					22 U 1 1 U	20 U	22 U	22 U 1 1 U	25 U	25 U	24 U 1 2 U	25 U 1 2 U	24 U 1 2 U	23 U	25 U 1 1 U
m n Xylono					1.1 U	1.5 U	1.1 U	1.1 U	1.1 U	1.1 U 2.2 U	1.2 U	1.2 U 2.2 U	1.2 U 2 4 U	1.2 U 2 5 U	1.1 U 2.2 U
Mathyl agetata					2.2 U	2.0 U 26 U	2.2 U	2.2 U	2.5 U	2.5 U	2.4 U 24 U	2.5 U	2.4 U 24 U	2.5 U	2.5 U 22 U
Methyl acetate					22 U 4 5 U	20 U 5 2 U	22 U 45 U	22 U 4 5 U	25 U 4 6 U	25 U 4 6 U	24 U 4 8 U	25 U 4 6 U	24 U 4 9 U	23 U 4 O U	25 U 4 6 U
Methylene chloride			100000		4.5 0	J.J U	4.5 U	4.5 U	4.0 U	4.0 U	4.0 U	4.0 U	4.8 U	4.9 U	4.0 0
	50	50	100000			15 U 2 6 U	221		2211	2211	120	120	12 U 2 4 U	120	2211
MIBE	930	930	100000		2.2 U	2.0 U	2.2 U	2.2 U	2.3 U	2.5 U	2.4 U	2.3 U	2.4 U	2.5 U	2.3 U
Napthalene			100000												
o-Aylelle	12000				2.2 U	2.0 U	2.2 U	2.2 U	2.3 U	2.3 U	2.4 U	2.3 U	∠.4 U	2.3 U	2.3 U
n-Butylbenzene	12000	12000	100000		INA NA	INA NA	INA NA	INA NA	INA NA	INA NA	INA NA	INA NA	INA NA	INA NA	NA NA
n-Propyibenzene	3900	3900	100000		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
sec-Butylbenzene	11000	11000	100000		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Styrene					2.2 U	2.6 U	2.2 U	2.2 U	2.3 U	2.3 U	2.4 U	2.3 U	2.4 U	2.5 U	2.3 U
Tert-butanol / butyl alcohol					NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Tetrachloroethene	1300	1300	19000		1.7	0.70 J	1.1 U	1.1 U	1.1 U	1.1 U	1.5	4.1	9.7	1.2 U	1.1 U
Toluene	700	700	100000		1.7 UV	2 UV	1.7 UV	1.7 U	1.7 UV	0.40 J	1.8 U	1.7 U	1.8 U	1.8 U	1.7 U

19 014	RW-20 4/15/2014
7.5	10 - 12
U U	1.3 U 1.3 U
U U	1.9 U 1.9 U
U	1.3 U
U	6.3 U 6.3 U
1	NA NA
U	5.1 U
U U	6.3 U 1.3 U
J I I	4.4 U 6 3 U
U	6.3 U
U IV	130 U 13 UV
U	13 U
U	13 U
J U	21 1.3 U
U	6.3 U
U	5.1 U
U U	2.5 U 13 U
U	1.3 U
U U	1.3 U 2.5 U
U	1.9 U 6 3 U
U	1.3 U
U U	1.3 U 25 U
U	1.3 U 6 3 U
U	13 U
U U	1.3 U 25 U
U U	1.3 U 2 5 U
U	25 U
U U	5.1 U 13 U
U	2.5 U NA
U	2.5 U
1	NA NA
A U	NA 2.5 U
λ 1	NA
U	1.5 U 1.9 U

	NYSDEC	NYSDEC	NYSDEC													
	Part 375	Part 375	Part 375	Sample Designation:	RW-12	RW-12	RW-13	RW-14	RW-15	RW-15 DUP	RW-16	RW-17	RW-17	RW-18	RW-19	RW-20
Parameter	Unrestricted	Protection of	Restricted	Sample Date:	4/10/2014	4/10/2014	4/10/2014	4/14/2014	4/11/2014	4/11/2014	4/14/2014	4/11/2014	4/11/2014	4/15/2014	4/15/2014	4/15/2014
(Concentrations in µg/kg)	Use	Groundwater	Residential	Sample Depth (ft bls):	5 - 7	7 - 8	5 - 7	3 - 5	1 - 3	1 - 3	3 - 5	0 - 2	2 - 4	5 - 6	5.5 - 7.5	10 - 12
trans-1,2-Dichloroethene	190	190	100000		1.7 U	2 U	1.7 U	1.7 U	1.7 U	1.7 U	1.8 U	1.7 U	1.8 U	1.8 U	1.7 U	1.9 U
trans-1,3-Dichloropropene					1.1 U	1.3 U	1.1 U	1.1 U	1.1 U	1.1 U	1.2 U	1.2 U	1.2 U	1.2 U	1.1 U	1.3 U
Trichloroethene	470	470	21000		1.1 U	1.3 U	1.1 U	1.1 U	1.1 U	1.1 U	1.2 U	1.2 U	1.2	1.2 U	1.1 U	1.3 U
Trichlorofluoromethane					5.6 U	6.6 U	5.6 U	5.6 U	5.7 U	5.7 U	6 U	5.8 U	6 U	6.2 U	5.7 U	6.3 U
Vinyl chloride	20	20	900		2.2 U	2.6 U	2.2 U	2.2 U	2.3 U	2.3 U	2.4 U	2.3 U	2.4 U	2.5 U	2.3 U	2.5 U
Xylenes (total)	260	1600	100000		2.2 U	2.6 U	2.2 U	2.2 U	2.3 U	2.3 U	2.4 U	2.3 U	2.4 U	2.5 U	2.3 U	2.5 U

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of the calibration range in the original sample.

DUP - Duplicate sample

 $\mu g/kg$ - Micrograms per kilogram

ft bls - Feet below land surface

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Boxed data indicates that parameter was detected above the NYSDEC Part 375 Restricted Residential Standards

V - Value altered or qualifier added during data validation

R - Sample results rejected by validator

	NYSDEC	NYSDEC	NYSDEC															
	Part 375	Part 375	Part 375	Sample Designation:	GP-1A	GP-1B	GP-2	GP-3	GP-4	GP-5	GP-6	GP-7	GP-8	GP-9	GP-10	GP-11	GP-12	SB-1
Parameter	Unrestricted	Protection of	Restricted	Sample Date:	11/1/2007	11/1/2007	11/1/2007	11/1/2007	11/1/2007	11/2/2007	11/2/2007	11/2/2007	11/5/2007	11/5/2007	11/5/2007	11/5/2007	11/5/2007	11/7/2007
(Concentrations in µg/kg)	Use	Groundwater	Residential	Sample Depth (ft bls):	2 - 3	4 - 6	4 - 6	4 - 5.5	3.5 - 5.5	6 - 8	6 - 8	2 - 4	8 - 10	2 - 4	2 - 4	4 - 6	6 - 8	6 - 8
1,1'-Biphenyl					NA													
1,2,4,5-Tetrachlorobenzene					NA													
1-Methylnaphthalene					2950	ND	6710	1220	ND	ND	ND	ND						
2,2'-oxybis (1-chloropropane)					NA													
2,3,4,6-Tetrachlorophenol					NA													
2,4,5-Trichlorophenol					NA													
2,4,6-Trichlorophenol					NA													
2,4-Dichlorophenol					NA													
2,4-Dimethylphenol					NA													
2,4-Dinitrophenol					NA													
2,4-Dinitrotoluene					NA													
2,6-Dinitrotoluene					NA													
2-Chloronaphthalene					NA													
2-Chlorophenol					NA													
2-Methylnaphthalene					7880	563	ND	ND	ND	ND	ND	ND	12800	2940	ND	ND	ND	ND
2-Methylphenol	330	330	100000		NA													
2-Nitroaniline					NA													
2-Nitrophenol					NA													
3&4-Methylphenol	330	330	100000		NA													
3,3'-Dichlorobenzidine					NA													
3-Nitroaniline					NA													
4,6-Dinitro-2-methylphenol					NA													
4-Bromophenyl phenyl ether					NA													
4-Chloro-3-methylphenol					NA													
4-Chloroaniline					NA													
4-Chlorophenyl phenyl ether					NA													
4-Nitroaniline					NA													
4-Nitrophenol					NA													
Acenaphthene	20000	98000	100000		NA													
Acenaphthylene	100000	107000	100000		NA													
Acetophenone					NA													
Anthracene	100000	1000000	100000		ND	220	ND											
Atrazine					NA													
Benzaldehyde					NA													
Benzo[a]anthracene	1000	1000	1000		ND	434	ND											
Benzo[a]pyrene	1000	22000	1000		ND	1340	ND	366	ND									
Benzo[b]fluoranthene	1000	1700	1000		ND	1360	ND	439	ND	313	ND							
Benzo[g,h,i]perylene	100000	1000000	100000		ND	878	ND											
Benzo[k]fluoranthene	800	1700	3900		ND	1010	ND	395	ND									
Bis(2-chloroethoxy)methane					NA													
Bis(2-chloroethyl) ether					NA													
Bis(2-ethylhexyl) phthalate					NA													
Butylbenzyl phthalate					NA													
Caprolactam					NA													
Carbazole					NA													

	NYSDEC	NYSDEC	NYSDEC															
	Part 375	Part 375	Part 375	Sample Designation:	GP-1A	GP-1B	GP-2	GP-3	GP-4	GP-5	GP-6	GP-7	GP-8	GP-9	GP-10	GP-11	GP-12	SB-1
Parameter	Unrestricted	Protection of	Restricted	Sample Date:	11/1/2007	11/1/2007	11/1/2007	11/1/2007	11/1/2007	11/2/2007	11/2/2007	11/2/2007	11/5/2007	11/5/2007	11/5/2007	11/5/2007	11/5/2007	11/7/2007
(Concentrations in µg/kg)	Use	Groundwater	Residential	Sample Depth (ft bls):	2 - 3	4 - 6	4 - 6	4 - 5.5	3.5 - 5.5	6 - 8	6 - 8	2 - 4	8 - 10	2 - 4	2 - 4	4 - 6	6 - 8	6 - 8
Charanna	1000	1000	2000		ND	1470	ND	402	ND									
Diharan (a hlanthranna	220	1000	3900			14/0		ND			ND	ND	ND		ND	ND	425 ND	ND
Dibenzo[a,n]anthracene	330	100000	330		ND	1430		ND										
Dibenzofuran	7000	210000	59000		NA													
Diethyl phthalate					NA													
Dimethyl phthalate					NA													
Di-n-butyl phthalate					NA													
Di-n-octyl phthalate					NA													
Fluoranthene	100000	1000000	100000		ND	1660	ND	953	ND									
Fluorene	30000	386000	100000		NA													
Hexachlorobenzene	330	3200	1200		NA													
Hexachlorobutadiene					NA													
Hexachlorocyclopentadiene					NA													
Hexachloroethane					NA													
Indeno[1,2,3-cd]pyrene	500	8200	500		ND	196	ND											
Isophorone					NA													
Naphthalene	12000	12000	100000		5970	ND	9820	6390	ND	ND	ND	ND						
Nitrobenzene					NA													
n-Nitrosodi-n-propylamine					NA													
n-Nitrosodiphenylamine					NA													
Pentachlorophenol	800	800	6700		NA													
Phenanthrene	100000	1000000	100000		ND	858	ND											
Phenol	330	330	100000		NA													
Pyrene	100000	1000000	100000		ND	1810	ND	1010	899	ND								

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of the calibration range in the original sample.

DUP - Duplicate sample

 $\mu g/kg$ - Micrograms per kilogram

ft bls - Feet below land surface

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V - Value altered or qualifier added during data validation

UJ - Analyte was not detected. The associated reported quantitation limit is an estimate

R - Sample results rejected by validator

	NYSDEC	NYSDEC	NYSDEC															
	Part 375	Part 375	Part 375	Sample Designation:	SB-2A	SB-2B	SB-3	SB-4	SB-5	SB-6	SB-7	SB-8	SB-9	SB-10	SB-11	CB2	DW1	RB-1
Parameter	Unrestricted	Protection of	Restricted	Sample Date:	11/7/2007	11/7/2007	11/7/2007	11/8/2007	11/9/2007	11/9/2007	12/5/2007	12/5/2007	12/7/2007	12/7/2007	12/7/2007	4/18/2014	4/18/2014	4/17/2014
(Concentrations in µg/kg)	Use	Groundwater	Residential	Sample Depth (ft bls):	4 - 6	8 - 10	3 - 4	10 - 14	8 - 10	17 - 19	12 - 16	12 - 14	9 - 11	9 - 11	4 - 6	-	4 - 6	10 - 12
1,1'-Biphenyl					NA	1000 U	510 U	450 U										
1,2,4,5-Tetrachlorobenzene					NA	450 U	220 U	200 U										
1-Methylnaphthalene					ND	2000	ND	ND	ND	NA	NA	NA						
2,2'-oxybis (1-chloropropane)					NA	540 U	270 U	240 U										
2,3,4,6-Tetrachlorophenol					NA	450 U	220 U	200 U										
2,4,5-Trichlorophenol					NA	450 U	220 U	200 U										
2,4,6-Trichlorophenol					NA	270 U	140 U	120 U										
2,4-Dichlorophenol					NA	410 U	200 U	180 U										
2,4-Dimethylphenol					NA	450 U	220 U	200 U										
2,4-Dinitrophenol					NA	2200 U	1100 U	940 U										
2,4-Dinitrotoluene					NA	450 U	220 U	200 U										
2,6-Dinitrotoluene					NA	450 U	220 U	200 U										
2-Chloronaphthalene					NA	450 U	220 U	200 U										
2-Chlorophenol					NA	450 U	220 U	200 U										
2-Methylnaphthalene					ND	ND	ND	1100	ND	ND	ND	3860	ND	375	ND	200 J	270 U	980
2-Methylphenol	330	330	100000		NA	450 U	220 U	200 U										
2-Nitroaniline					NA	450 U	220 U	200 U										
2-Nitrophenol					NA	980 U	490 U	420 U										
3&4-Methylphenol	330	330	100000		NA	650 U	320 U	280 U										
3,3'-Dichlorobenzidine					NA	450 U	220 U	200 U										
3-Nitroaniline					NA	450 U	220 U	200 U										
4,6-Dinitro-2-methylphenol					NA	1200 U	580 U	510 U										
4-Bromophenyl phenyl ether					NA	450 U	220 U	200 U										
4-Chloro-3-methylphenol					NA	450 U	220 U	200 U										
4-Chloroaniline					NA	450 U	220 U	200 U										
4-Chlorophenyl phenyl ether					NA	450 U	220 U	200 U										
4-Nitroaniline					NA	450 U	220 U	200 U										
4-Nitrophenol					NA	640 U	320 U	270 U										
Acenaphthene	20000	98000	100000		NA	320 J	480	160 U										
Acenaphthylene	100000	107000	100000		NA	360 U	320	160 U										
Acetophenone					NA	450 U	220 U	200 U										
Anthracene	100000	1000000	100000		ND	720	1500	120 U										
Atrazine					NA	360 U	180 U	160 U										
Benzaldehyde					NA	600 U	300 U	260 U										
Benzo[a]anthracene	1000	1000	1000		ND	1800	3200	120 U										
Benzo[a]pyrene	1000	22000	1000		ND	1600	2800	160 U										
Benzo[b]fluoranthene	1000	1700	1000		ND	2100	3700	120 U										
Benzo[g,h,i]perylene	100000	1000000	100000		ND	1000	1600	160 U										
Benzo[k]fluoranthene	800	1700	3900		ND	770	1300	120 U										
Bis(2-chloroethoxy)methane					NA	490 U	240 U	210 U										
Bis(2-chloroethyl) ether					NA	410 U	200 U	180 U										
Bis(2-ethylhexyl) phthalate					NA	1200	220 U	200 U										
Butylbenzyl phthalate					NA	710	220 U	200 U										
Caprolactam					NA	450 U	220 U	200 U										
Carbazole					NA	390 J	480	200 U										

	NYSDEC	NYSDEC	NYSDEC															
	Part 375	Part 375	Part 375	Sample Designation:	SB-2A	SB-2B	SB-3	SB-4	SB-5	SB-6	SB-7	SB-8	SB-9	SB-10	SB-11	CB2	DW1	RB-1
Parameter	Unrestricted	Protection of	Restricted	Sample Date:	11/7/2007	11/7/2007	11/7/2007	11/8/2007	11/9/2007	11/9/2007	12/5/2007	12/5/2007	12/7/2007	12/7/2007	12/7/2007	4/18/2014	4/18/2014	4/17/2014
(Concentrations in µg/kg)	Use	Groundwater	Residential	Sample Depth (ft bls):	4 - 6	8 - 10	3 - 4	10 - 14	8 - 10	17 - 19	12 - 16	12 - 14	9 - 11	9 - 11	4 - 6	-	4 - 6	10 - 12
Chrussen	1000	1000	2000		ND	2000	2200	120 11										
Dihangala hlanthraaana	220	1000	3900		ND		ND	ND	ND	ND		ND		ND	ND	2000 220 I	3200	120 U
Dibenzo[a,n]antiliacene	330	100000	550		ND		230 J	410] 120 U									
Dibenzofuran	/000	210000	59000		NA	220 J	220	200 U										
Diethyl phthalate					NA	450 U	220 U	200 U										
Dimethyl phthalate					NA	450 U	220 U	200 U										
Di-n-butyl phthalate					NA	230 J	220 U	200 U										
Di-n-octyl phthalate					NA	450 U	220 U	200 U										
Fluoranthene	100000	1000000	100000		ND	4000	6400	120 U										
Fluorene	30000	386000	100000		NA	310 J	620	200 U										
Hexachlorobenzene	330	3200	1200		NA	270 U	140 U	120 U										
Hexachlorobutadiene					NA	450 U	220 U	200 U										
Hexachlorocyclopentadiene					NA	1300 U	640 U	560 U										
Hexachloroethane					NA	360 U	180 U	160 U										
Indeno[1,2,3-cd]pyrene	500	8200	500		ND	1100	1900	160 U										
Isophorone					NA	410 U	200 U	180 U										
Naphthalene	12000	12000	100000		ND	ND	ND	1100	ND	ND	ND	2920	ND	317	ND	180 J	220 U	2100
Nitrobenzene					NA	410 U	200 U	180 U										
n-Nitrosodi-n-propylamine					NA	450 U	220 U	200 U										
n-Nitrosodiphenylamine					NA	360 U	180 U	160 U										
Pentachlorophenol	800	800	6700		NA	360 U	180 U	160 U										
Phenanthrene	100000	1000000	100000		ND	2900	4800	120 U										
Phenol	330	330	100000		NA	450 U	220 U	200 U										
Pyrene	100000	1000000	100000		ND	3300	4900	120 U										

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UJ - Analyte was not detected. The associated reported quantitation limit is an estimate

R - Sample results rejected by validator

	NYSDEC	NYSDEC	NYSDEC															
	Part 375	Part 375	Part 375	Sample Designation:	RB-1	RB-2	RB-2	RB-3	RB-3	RB-4	RB-4 DUP	RB-4	RB-4	RB-5	RB-6	RB-6 DUP	RB-7	RB-7
Parameter	Unrestricted	Protection of	Restricted	Sample Date:	4/17/2014	4/17/2014	4/17/2014	4/17/2014	4/17/2014	4/17/2014	4/17/2014	4/17/2014	4/17/2014	4/21/2014	4/21/2014	4/21/2014	4/7/2014	4/7/2014
(Concentrations in µg/kg)	Use	Groundwater	Residential	Sample Depth (ft bls):	13 - 15	10 - 12	19 - 20	10 - 12	18 - 20	7 - 9	7 - 9	10 - 12	18 - 20	11 - 13	9 - 11	9 - 11	13 - 15	15 - 17
1,1'-Biphenyl					410 U	430 U	460 U	420 U	440 U	420 U	420 U	430 U	440 U	410 U	420 U	400 U	440 U	440 U
1,2,4,5-Tetrachlorobenzene					180 U	190 U	200 U	180 U	190 U	180 U	180 U	190 U	190 U	180 U	180 U	180 U	190 U	200 U
1-Methylnaphthalene					NA	NA	NA											
2,2'-oxybis (1-chloropropane)					220 U	220 U	240 U	220 U	230 U	220 U	220 U	230 U	230 U	210 U	220 U	210 U	230 U	230 U
2,3,4,6-Tetrachlorophenol					180 U	190 U	200 U	180 U	190 U	180 U	180 U	190 U	190 U	180 U	180 U	180 U	190 U	200 U
2,4,5-Trichlorophenol					180 U	190 U	200 U	180 U	190 U	180 U	180 U	190 U	190 U	180 U	180 U	180 U	190 U	200 U
2,4,6-Trichlorophenol					110 U	110 U	120 U	110 U	120 U	110 U	100 U	120 U	120 U					
2,4-Dichlorophenol					160 U	170 U	180 U	160 U	170 U	160 U	160 U	170 U	170 U	160 U	170 U	160 U	170 U	180 U
2,4-Dimethylphenol					180 U	190 U	200 U	180 U	190 U	180 U	180 U	190 U	190 U	180 U	180 U	180 U	190 U	200 U
2,4-Dinitrophenol					870 U	900 U	970 U	880 U	920 U	880 U	880 U	RV	920 U	860 U	890 U	850 U	930 U	940 U
2,4-Dinitrotoluene					180 U	190 U	200 U	180 U	190 U	180 U	180 U	190 U	190 U	180 U	180 U	180 U	190 U	200 U
2,6-Dinitrotoluene					180 U	190 U	200 U	180 U	190 U	180 U	180 U	190 U	190 U	180 U	180 U	180 U	190 U	200 U
2-Chloronaphthalene					180 U	190 U	200 U	180 U	190 U	180 U	180 U	190 U	190 U	180 U	180 U	180 U	190 U	200 U
2-Chlorophenol					180 U	190 U	200 U	180 U	190 U	180 U	180 U	190 U	190 U	180 U	180 U	180 U	190 U	200 U
2-Methylnaphthalene					220 U	1100	71 J	220 U	230 U	220 U	220 U	230 U	230 U	210 U	220 U	210 U	230 U	340
2-Methylphenol	330	330	100000		180 U	190 U	200 U	180 U	190 U	180 U	180 U	190 U	190 U	180 U	180 U	180 U	190 U	200 U
2-Nitroaniline					180 U	190 U	200 U	180 U	190 U	180 U	180 U	190 U	190 U	180 U	180 U	180 U	190 U	200 U
2-Nitrophenol					390 U	400 U	440 U	400 U	410 U	400 U	400 U	410 U	410 U	390 U	400 U	380 U	420 U	420 U
3&4-Methylphenol	330	330	100000		260 U	270 U	290 U	260 U	280 U	260 U	260 U	270 U	280 U	260 U	260 U	250 U	280 U	280 U
3,3'-Dichlorobenzidine					180 U	190 U	200 U	180 U	190 U	180 U	180 U	190 U	190 U	180 U	180 U	180 U	190 U	200 U
3-Nitroaniline					180 U	190 U	200 U	180 U	190 U	180 U	180 U	190 U	190 U	180 U	180 U	180 U	190 U	200 U
4,6-Dinitro-2-methylphenol					470 U	490 U	520 U	480 U	500 U	480 U	480 U	490 U	500 U	460 U	480 U	460 U	500 U	510 U
4-Bromophenyl phenyl ether					180 U	190 U	200 U	180 U	190 U	180 U	180 U	190 U	190 U	180 U	180 U	180 U	190 U	200 U
4-Chloro-3-methylphenol					180 U	190 U	200 U	180 U	190 U	180 U	180 U	190 U	190 U	180 U	180 U	180 U	190 U	200 U
4-Chloroaniline					180 U	190 U	200 U	180 U	190 U	180 U	180 U	190 U	190 U	180 U	180 U	180 U	190 U	200 U
4-Chlorophenyl phenyl ether					180 U	190 U	200 U	180 U	190 U	180 U	180 U	190 U	190 U	180 U	180 U	180 U	190 U	200 U
4-Nitroaniline					180 U	190 U	200 U	180 U	190 U	180 U	180 U	190 U	190 U	180 U	180 U	180 U	190 U	200 U
4-Nitrophenol					250 U	260 U	280 U	260 U	270 U	260 U	260 U	260 U	270 U	250 U	260 U	250 U	270 U	270 U
Acenaphthene	20000	98000	100000		140 U	150 U	160 U	150 U	140 U	150 U	140 U	150 U	160 U					
Acenaphthylene	100000	107000	100000		140 U	150 U	160 U	150 U	140 U	150 U	140 U	150 U	160 U					
Acetophenone					180 U	190 U	200 U	180 U	190 U	180 U	180 U	190 U	190 U	180 U	180 U	180 U	190 U	200 U
Anthracene	100000	1000000	100000		110 U	110 U	120 U	110 U	120 U	110 U	100 U	120 U	120 U					
Atrazine					140 U	150 U	160 U	150 U	140 U	150 U	140 U	150 U	160 U					
Benzaldehyde					240 U	250 U	260 U	240 U	250 U	240 U	240 U	250 U	250 U	240 U	240 U	230 U	260 U	260 U
Benzo[a]anthracene	1000	1000	1000		110 U	110 U	120 U	110 U	120 U	110 U	50 J	120 U	120 U					
Benzo[a]pyrene	1000	22000	1000		140 U	150 U	160 U	150 U	140 U	150 U	48 J	150 U	160 U					
Benzo[b]fluoranthene	1000	1700	1000		110 U	110 U	120 U	110 U	120 U	110 U	57 J	120 U	120 U					
Benzo[g,h,i]perylene	100000	1000000	100000		140 U	150 U	160 U	150 U	140 U	150 U	43 J	150 U	160 U					
Benzo[k]fluoranthene	800	1700	3900		110 U	110 U	120 U	110 U	120 U	110 U	45 J	120 U	120 U					
Bis(2-chloroethoxy)methane					200 U	200 U	220 U	200 U	210 U	200 U	200 U	200 U	210 U	190 U	200 U	190 U	210 U	210 U
Bis(2-chloroethyl) ether					160 U	170 U	180 U	160 U	170 U	160 U	160 U	170 U	170 U	160 U	170 U	160 U	170 U	180 U
Bis(2-ethylhexyl) phthalate					180 U	190 U	200 U	180 U	190 U	180 U	180 U	190 U	190 U	180 U	180 U	56 J	190 U	200 U
Butylbenzyl phthalate					180 U	190 U	200 U	180 U	190 U	180 U	180 U	190 U	190 U	180 U	180 U	180 U	190 U	200 U
Caprolactam					180 U	190 U	200 U	180 U	190 U	180 U	180 U	190 U	190 U	180 U	180 U	180 U	190 U	200 U
Carbazole					180 U	190 U	200 U	180 U	190 U	180 U	180 U	190 U	190 U	180 U	180 U	180 U	190 U	200 U

	NYSDEC	NYSDEC	NYSDEC															
	Part 375	Part 375	Part 375	Sample Designation:	RB-1	RB-2	RB-2	RB-3	RB-3	RB-4	RB-4 DUP	RB-4	RB-4	RB-5	RB-6	RB-6 DUP	RB-7	RB-7
Parameter	Unrestricted	Protection of	Restricted	Sample Date: 4	4/17/2014	4/17/2014	4/17/2014	4/17/2014	4/17/2014	4/17/2014	4/17/2014	4/17/2014	4/17/2014	4/21/2014	4/21/2014	4/21/2014	4/7/2014	4/7/2014
(Concentrations in µg/kg)	Use	Groundwater	Residential	Sample Depth (ft bls):	13 - 15	10 - 12	19 - 20	10 - 12	18 - 20	7 - 9	7 - 9	10 - 12	18 - 20	11 - 13	9 - 11	9 - 11	13 - 15	15 - 17
Chrysene	1000	1000	3900		110 U	110 U	120 U	110 U	120 U	110 U	58 J	120 U	120 U					
Dibenzo[a,h]anthracene	330	1000000	330		110 U	110 U	120 U	110 U	120 U	110 U	100 U	120 U	120 U					
Dibenzofuran	7000	210000	59000		180 U	190 U	200 U	180 U	190 U	180 U	180 U	190 U	190 U	180 U	180 U	180 U	190 U	200 U
Diethyl phthalate					180 U	190 U	200 U	180 U	190 U	180 U	180 U	190 U	190 U	180 U	180 U	180 U	190 U	200 U
Dimethyl phthalate					180 U	190 U	200 U	180 U	190 U	180 U	180 U	190 U	190 U	180 U	180 U	180 U	190 U	200 U
Di-n-butyl phthalate					180 U	190 U	200 U	180 U	190 U	180 U	180 U	190 U	190 U	180 U	180 U	180 U	190 U	200 U
Di-n-octyl phthalate					180 U	190 U	200 U	180 U	190 U	180 U	180 U	190 U	190 U	180 U	180 U	180 U	190 U	200 U
Fluoranthene	100000	1000000	100000		110 U	110 U	120 U	110 U	120 U	110 U	42 J	130	120 U	120 U				
Fluorene	30000	386000	100000		180 U	190 U	200 U	180 U	190 U	180 U	180 U	190 U	190 U	180 U	180 U	180 U	190 U	200 U
Hexachlorobenzene	330	3200	1200		110 U	110 U	120 U	110 U	120 U	110 U	100 U	120 U	120 U					
Hexachlorobutadiene					180 U	190 U	200 U	180 U	190 U	180 U	180 U	190 U	190 U	180 U	180 U	180 U	190 U	200 U
Hexachlorocyclopentadiene					520 U	540 U	580 U	530 U	550 U	530 U	530 U	540 U	550 U	510 U	530 U	510 U	560 U	560 U
Hexachloroethane					140 U	150 U	160 U	150 U	140 U	150 U	140 U	150 U	160 U					
Indeno[1,2,3-cd]pyrene	500	8200	500		140 U	150 U	160 U	150 U	140 U	150 U	43 J	150 U	160 U					
Isophorone					160 U	170 U	180 U	160 U	170 U	160 U	160 U	170 U	170 U	160 U	170 U	160 U	170 U	180 U
Naphthalene	12000	12000	100000		180 U	610	96 J	180 U	190 U	180 U	180 U	190 U	190 U	180 U	180 U	180 U	190 U	220
Nitrobenzene					160 U	170 U	180 U	160 U	170 U	160 U	160 U	170 U	170 U	160 U	170 U	160 U	170 U	180 U
n-Nitrosodi-n-propylamine					180 U	190 U	200 U	180 U	190 U	180 U	180 U	190 U	190 U	180 U	180 U	180 U	190 U	200 U
n-Nitrosodiphenylamine					140 U	150 U	160 U	150 U	140 U	150 U	140 U	150 U	160 U					
Pentachlorophenol	800	800	6700		140 U	150 U	160 U	150 U	140 U	150 U	140 U	150 U	160 U					
Phenanthrene	100000	1000000	100000		110 U	110 U	120 U	110 U	120 U	110 U	66 J	120 U	120 U					
Phenol	330	330	100000		180 U	190 U	200 U	180 U	190 U	180 U	180 U	190 U	190 U	180 U	180 U	180 U	190 U	200 U
Pyrene	100000	1000000	100000		110 U	110 U	120 U	110 U	120 U	110 U	36 J	100	120 U	120 U				

J - Estimated value

U - Indicates that the compound was analyzed for but not detected

D - a secondary analysis after dilution due to exceedance

of the calibration range in the original sample.

DUP - Duplicate sample

 $\mu g/kg$ - Micrograms per kilogram

ft bls - Feet below land surface

NYSDEC - New York State Department of Environmental Conservation

-- No NYSDEC Part 375 Standards available

Bold data indicates that parameter was detected above the NYSDEC Part 375 Unrestricted Use Standards

Shaded data indicates that parameter was detected above the NYSDEC Part 375 Protection of Groundwater Standards

Boxed data indicates that parameter was detected above the NYSDEC Part 375 Restricted Use Standards

V - Value altered or qualifier added during data validation

UJ - Analyte was not detected. The associated reported quantitation limit is an estimate

R - Sample results rejected by validator

	NYSDEC	NYSDEC	NYSDEC																
	Part 375	Part 375	Part 375	Sample Designation: RB-7	RB-8	RB-8 DUP	RB-9	RB-9	RB-9	RB-10	RB-10	RB-10	RB-11	RB-11	RB-11	RB-12	RB-13	RB-14	RB-15
Parameter	Unrestricted	Protection of	Restricted	Sample Designation: 1(2) / Sample Date: 4/7/2014	4/7/2014	4/7/2014	4/7/2014	4/7/2014	4/7/2014	4/8/2014	4/8/2014	4/8/2014	4/8/2014	4/8/2014	4/8/2014	4/9/2014	4/8/2014	4/8/2014	4/9/2014
(Concentrations in ug/kg)	Use	Groundwater	Residential	Sample Depth (ft bls): 20 - 21	7 - 9	7 - 9	13 - 15	11 - 13	20 - 21	1 - 3	10 - 12	18 - 19	2 - 4	5 - 7	15 - 16	7 - 9	11 - 12	11 - 12	7 - 9
(
1,1'-Biphenyl				420 U	440 U	480 U	2500 UD	1700 UD	450 U	120 J	480 U	450 U	1200 JD	180 J	540 U	460 U	1700 UD	460 U	490 U
1,2,4,5-Tetrachlorobenzene				180 U	190 U	210 U	1100 UD	760 UD	200 U	200 U	210 U	200 U	940 UD	200 U	240 U	200 U	740 UD	200 U	210 U
1-Methylnaphthalene				NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,2'-oxybis (1-chloropropane)				220 U	230 U	250 U	1300 UD	910 UD	240 U	240 U	250 U	240 U	1100 UD	240 U	290 U	240 U	890 UD	240 U	260 U
2,3,4,6-Tetrachlorophenol				180 U	190 U	210 U	1100 UD	760 UD	200 U	200 U	210 U	200 U	940 UD	200 U	240 U	200 U	740 UD	200 U	210 U
2,4,5-Trichlorophenol				180 U	190 U	210 U	1100 UD	760 UD	200 U	200 U	210 U	200 U	940 UD	200 U	240 U	200 U	740 UD	200 U	210 U
2,4,6-Trichlorophenol				110 U	110 U	130 U	670 UD	450 UD	120 U	120 U	130 U	120 U	570 UD	120 U	140 U	120 U	440 UD	120 U	130 U
2,4-Dichlorophenol				170 U	170 U	190 U	1000 UD	680 UD	180 U	180 U	190 U	180 U	850 UD	180 U	220 U	180 U	670 UD	180 U	190 U
2,4-Dimethylphenol				180 U	190 U	210 U	1100 UD	760 UD	200 U	200 U	210 U	200 U	940 UD	200 U	240 U	200 U	740 UD	200 U	210 U
2,4-Dinitrophenol				890 U	920 U	1000 U	5300 UD	3600 UD	940 U	950 U	1000 U	950 U	4500 UD	970 U	1100 U	970 U	3600 UD	980 U	1000 U
2,4-Dinitrotoluene				180 U	190 U	210 U	1100 UD	760 UD	200 U	200 U	210 U	200 U	940 UD	200 U	240 U	200 U	740 UD	200 U	210 U
2,6-Dinitrotoluene				180 U	190 U	210 U	1100 UD	760 UD	200 U	200 U	210 U	200 U	940 UD	200 U	240 U	200 U	740 UD	200 U	210 U
2-Chloronaphthalene				180 U	190 U	210 U	1100 UD	760 UD	200 U	200 U	210 U	200 U	940 UD	200 U	240 U	200 U	740 UD	200 U	210 U
2-Chlorophenol				180 U	190 U	210 U	1100 UD	760 UD	200 U	200 U	210 U	200 U	940 UD	200 U	240 U	200 U	740 UD	200 U	210 U
2-Methylnaphthalene				220 U	230 U	250 U	450 JD	910 UD	240 U	5400	88 J	240 U	29000 D	4200	290 U	240 U	890 UD	240 U	260 U
2-Methylphenol	330	330	100000	180 U	190 U	210 U	1100 UD	760 UD	200 U	200 U	210 U	200 U	940 UD	200 U	240 U	200 U	740 UD	200 U	210 U
2-Nitroaniline				180 U	190 U	210 U	1100 UD	760 UD	200 U	200 U	210 U	200 U	940 UD	200 U	240 U	200 U	740 UD	200 U	210 U
2-Nitrophenol				400 U	410 U	450 U	2400 UD	1600 UD	420 U	430 U	460 U	430 U	2000 UD	430 U	520 U	440 U	1600 UD	440 U	460 U
3&4-Methylphenol	330	330	100000	270 U	280 U	300 U	1600 UD	1100 UD	280 U	280 U	300 U	290 U	1400 UD	290 U	340 U	290 U	1100 UD	290 U	310 U
3,3'-Dichlorobenzidine				180 U	190 U	210 U	1100 UD	760 UD	200 U	200 U	210 U	200 U	940 UD	200 U	240 U	200 U	740 UD	200 U	210 U
3-Nitroaniline				180 U	190 U	210 U	1100 UD	760 UD	200 U	200 U	210 U	200 U	940 UD	200 U	240 U	200 U	740 UD	200 U	210 U
4,6-Dinitro-2-methylphenol				480 U	500 U	550 U	2900 UD	2000 UD	510 U	510 U	550 U	520 U	2400 UD	520 U	620 U	520 U	1900 UD	530 U	560 U
4-Bromophenyl phenyl ether				180 U	190 U	210 U	1100 UD	760 UD	200 U	200 U	210 U	200 U	940 UD	200 U	240 U	200 U	740 UD	200 U	210 U
4-Chloro-3-methylphenol				180 U	190 U	210 U	1100 UD	760 UD	200 U	200 U	210 U	200 U	940 UD	200 U	240 U	200 U	740 UD	200 U	210 U
4-Chloroaniline				180 U	190 U	210 U	1100 UD	760 UD	200 U	200 U	210 U	200 U	940 UD	200 U	240 U	200 U	740 UD	200 U	210 U
4-Chlorophenyl phenyl ether				180 U	190 U	210 U	1100 UD	760 UD	200 U	200 U	210 U	200 U	940 UD	200 U	240 U	200 U	740 UD	200 U	210 U
4-Nitroaniline				180 U	190 U	210 U	1100 UD	760 UD	200 U	200 U	210 U	200 U	940 UD	200 U	240 U	200 U	740 UD	200 U	210 U
4-Nitrophenol				260 U	270 U	290 U	1600 UD	1100 UD	280 U	280 U	300 U	280 U	1300 UD	280 U	340 U	280 U	1000 UD	280 U	300 U
Acenaphthene	20000	98000	100000	150 U	150 U	170 U	890 UD	160 JD	160 U	160 U	170 U	160 U	760 UD	160 U	190 U	160 U	590 UD	120 J	170 U
Acenaphthylene	100000	107000	100000	150 U	150 U	170 U	890 UD	610 UD	160 U	160 U	170 U	160 U	760 UD	160 U	190 U	160 U	590 UD	150 J	81 J
Acetophenone				180 U	190 U	210 U	1100 UD	760 UD	200 U	200 U	210 U	200 U	940 UD	200 U	240 U	200 U	740 UD	200 U	210 U
Anthracene	100000	1000000	100000	110 U	110 U	130 U	670 UD	390 JD	120 U	120 U	130 U	40 J	570 UD	36 J	140 U	120 U	130 JD	360	110 J
Atrazine				150 U	150 U	170 U	890 UD	610 UD	160 U	160 U	170 U	160 U	760 UD	160 U	190 U	160 U	590 UD	160 U	170 U
Benzaldehyde				240 U	250 U	280 U	1500 UD	1000 UD	260 U	260 U	280 U	260 U	1200 UD	260 U	320 U	270 U	980 UD	270 U	280 U
Benzo[a]anthracene	1000	1000	1000	110 U	110 U	130 U	230 JD	900 D	120 U	120 U	130 U	72 J	570 UD	120 U	140 U	120 U	360 JD	1200	320
Benzo[a]pyrene	1000	22000	1000	150 U	150 U	170 U	890 UD	800 D	160 U	160 U	170 U	61 J	760 UD	160 U	190 U	160 U	370 JD	1300	350
Benzo[b]fluoranthene	1000	17/00	1000	110 U	110 U	130 U	670 UD	940 D	120 U	120 U	130 U	65 J	570 UD	120 U	140 U	120 U	460 D	1400	360
Benzo[g,h,1]perylene	100000	1000000	100000	150 U	150 U	170 U	890 UD	610 UD	160 U	160 U	170 U	160 U	760 UD	160 U	190 U	160 U	230 JD	700	200
Benzo[k]fluoranthene	800	1700	3900	110 U	110 U	130 U	670 UD	410 JD	120 U	120 U	130 U	39 J	570 UD	120 U	140 U	120 U	440 UD	540	180
Bis(2-chloroethoxy)methane				200 U	210 U	230 U	1200 UD	820 UD	210 U	210 U	230 U	210 U	1000 UD	220 U	260 U	220 U	800 UD	220 U	230 U
Bis(2-chloroethyl) ether				170 U	170 U	190 U	1000 UD	680 UD	180 U	180 U	190 U	180 U	850 UD	180 U	220 U	180 U	670 UD	180 U	190 U
Bis(2-ethylhexyl) phthalate				180 U	190 U	210 U	1500 D	800 D	200 U	200 U	210 UV	200 U V	940 UD	200 U	240 UV	200 U	740 UD	200 U V	210 U
ButyIbenzyI phthalate				180 U	190 U	210 U	1200 D	330 JD	200 U	200 U	210 U	200 U	940 UD	200 U	240 U	200 U	740 UD	200 U	210 U
Caprolactam				180 U	190 U	210 U	1100 UD	/60 UD	200 U	200 U	210 U	200 U	940 UD	200 U	240 U	200 U	740 UD	200 U	210 U
Carbazole				180 U	190 U	210 U	1100 UD	760 UD	200 U	200 U	210 U	200 U	940 UD	200 U	240 U	200 U	740 UD	82 J	210 U

	NYSDEC	NYSDEC	NYSDEC																	
	Part 375	Part 375	Part 375	Sample Designation:	RB-7	RB-8	RB-8 DUP	RB-9	RB-9	RB-9	RB-10	RB-10	RB-10	RB-11	RB-11	RB-11	RB-12	RB-13	RB-14	RB-15
Parameter	Unrestricted	Protection of	Restricted	Sample Date:	4/7/2014	4/7/2014	4/7/2014	4/7/2014	4/7/2014	4/7/2014	4/8/2014	4/8/2014	4/8/2014	4/8/2014	4/8/2014	4/8/2014	4/9/2014	4/8/2014	4/8/2014	4/9/2014
(Concentrations in µg/kg)	Use	Groundwater	Residential	Sample Depth (ft bls):	20 - 21	7 - 9	7 - 9	13 - 15	11 - 13	20 - 21	1 - 3	10 - 12	18 - 19	2 - 4	5 - 7	15 - 16	7 - 9	11 - 12	11 - 12	7 - 9
																				_
Chrysene	1000	1000	3900		110 U	110 U	130 U	670 UD	760 D	120 U	120 U	130 U	65 J	570 UD	120 U	140 U	120 U	350 JD	1100	300
Dibenzo[a,h]anthracene	330	1000000	330		110 U	110 U	130 U	670 UD	450 UD	120 U	120 U	130 U	120 U	570 UD	120 U	140 U	120 U	440 UD	160	52 J
Dibenzofuran	7000	210000	59000		180 U	190 U	210 U	1100 UD	760 UD	200 U	200 U	210 U	200 U	940 UD	200 U	240 U	200 U	740 UD	200 U	210 U
Diethyl phthalate					180 U	190 U	210 U	1100 UD	760 UD	200 U	200 U	210 U	200 U	940 UD	200 U	240 U	200 U	740 UD	200 U	210 U
Dimethyl phthalate					180 U	190 U	210 U	1100 UD	760 UD	200 U	200 U	210 U	200 U	940 UD	200 U	240 U	200 U	740 UD	200 U	210 U
Di-n-butyl phthalate					180 U	190 U	210 U	1100 UD	1800 D	200 U	200 U	210 U	200 U	940 UD	200 U	240 U	200 U	740 UD	200 U	210 U
Di-n-octyl phthalate					180 U	190 U	210 U	1100 UD	760 UD	200 U	200 U	210 U	200 U	940 UD	200 U	240 U	200 U	740 UD	200 U	210 U
Fluoranthene	100000	1000000	100000		110 U	110 U	130 U	400 JD	1900 D	120 U	120 U	130 U	150	570 UD	66 J	140 U	120 U	550 D	2300	590
Fluorene	30000	386000	100000		180 U	190 U	210 U	1100 UD	760 UD	200 U	200 U	210 U	200 U	940 UD	97 J	240 U	200 U	740 UD	90 J	210 U
Hexachlorobenzene	330	3200	1200		110 U	110 U	130 U	670 UD	450 UD	120 U	120 U	130 U	120 U	570 UD	120 U	140 U	120 U	440 UD	120 U	130 U
Hexachlorobutadiene					180 U	190 U	210 U	1100 UD	760 UD	200 U	200 U	210 U	200 U	940 UD	200 U	240 U	200 U	740 UD	200 U	210 U
Hexachlorocyclopentadiene					530 U	550 U	600 U	3200 UD	2200 UD	560 U	570 U	600 U	570 U	2700 UD	580 U	690 U	580 U	2100 UD	580 U	610 U
Hexachloroethane					150 U	150 U	170 U	890 UD	610 UD	160 U	160 U	170 U	160 U	760 UD	160 U	190 U	160 U	590 UD	160 U	170 U
Indeno[1,2,3-cd]pyrene	500	8200	500		150 U	150 U	170 U	890 UD	570 JD	160 U	160 U	170 U	160 U	760 UD	160 U	190 U	160 U	190 JD	600	170
Isophorone					170 U	170 U	190 U	1000 UD	680 UD	180 U	180 U	190 U	180 U	850 UD	180 U	220 U	180 U	670 UD	180 U	190 U
Naphthalene	12000	12000	100000		180 U	190 U	210 U	1100 UD	760 UD	200 U	5000	210 U	200 U	26000 D	4100	240 U	200 U	740 UD	200 U	210 U
Nitrobenzene					170 U	170 U	190 U	1000 UD	680 UD	180 U	180 U	190 U	180 U	850 UD	180 U	220 U	180 U	670 UD	180 U	190 U
n-Nitrosodi-n-propylamine					180 U	190 U	210 U	1100 UD	760 UD	200 U	200 U	210 U	200 U	940 UD	200 U	240 U	200 U	740 UD	200 U	210 U
n-Nitrosodiphenylamine					150 U	150 U	170 U	890 UD	610 UD	160 U	160 U	170 U	160 U	760 UD	160 U	190 U	160 U	590 UD	160 U	170 U
Pentachlorophenol	800	800	6700		150 U	150 U	170 U	890 UD	610 UD	160 U	160 U	170 U	160 U	760 UD	160 U	190 U	160 U	590 UD	160 U	170 U
Phenanthrene	100000	1000000	100000		110 U	110 U	130 U	290 JD	1200 D	120 U	120 U	130 U	120	970 D	230	140 U	120 U	330 JD	1100	280
Phenol	330	330	100000		180 U	190 U	210 U	1100 UD	760 UD	200 U	200 U	210 U	200 U	940 UD	200 U	240 U	200 U	740 UD	200 U	210 U
Pyrene	100000	1000000	100000		110 U	110 U	130 U	420 JD	1400 D	120 U	120 U	130 U	120	570 UD	72 J	140 U	120 U	550 D	2300	630

J - Estimated value

U - Indicates that the compound was analyzed for but not detected

D - a secondary analysis after dilution due to exceedance

of the calibration range in the original sample.

DUP - Duplicate sample

 $\mu g/kg$ - Micrograms per kilogram

ft bls - Feet below land surface

NYSDEC - New York State Department of Environmental Conservation

-- No NYSDEC Part 375 Standards available

Bold data indicates that parameter was detected above the NYSDEC Part 375 Unrestricted Use Standards

Shaded data indicates that parameter was detected above the NYSDEC Part 375 Protection of Groundwater Standards

Boxed data indicates that parameter was detected above the NYSDEC Part 375 Restricted Use Standards

V - Value altered or qualifier added during data validation

UJ - Analyte was not detected. The associated reported quantitation limit is an estimate

R - Sample results rejected by validator

	NYSDEC	NYSDEC	NYSDEC																
	Part 375	Part 375	Part 375	Sample Designation:	RB-16	RB-17	RB-18	RB-19	RB-20	RB-20	RB-21	RB-22	RB-23	RB-24	RB-24	RB-25	RB-25	RB-26	RB-27
Parameter	Unrestricted	Protection of	Restricted	Sample Date:	4/9/2014	4/16/2014	4/16/2014	4/16/2014	4/16/2014	4/16/2014	4/16/2014	4/16/2014	4/16/2014	4/9/2014	4/9/2014	4/9/2014	4/9/2014	4/11/2014	4/11/2014
(Concentrations in μ g/kg)	Use	Groundwater	Residential	Sample Depth (ft bls):	6 - 8	6 - 8	5 - 7	5 - 7	3 - 5	5 - 6.5	4 - 6	4 - 6	3 - 5	2 - 4	6 - 8	4 - 6	6 - 7.5	5 - 7	5 - 7
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1,1'-Biphenyl					590 U	530 U	470 U	4300 UD	430 U	510 U	470 U	490 U	490 U	420 U	540 U	810 UD	470 U	890 UD	890 UD
1,2,4,5-Tetrachlorobenzene					260 U	230 U	210 U	1900 UD	190 U	220 U	200 U	210 U	220 U	180 U	230 U	350 UD	210 U	390 UD	390 UD
1-Methylnaphthalene					NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,2'-oxybis (1-chloropropane)					310 U	280 U	250 U	2300 UD	230 U	270 U	250 U	260 U	260 U	220 U	280 U	420 UD	250 U	470 UD	470 UD
2,3,4,6-Tetrachlorophenol					260 U	230 U	210 U	1900 UD	190 U	220 U	200 U	210 U	220 U	180 U	230 U	350 UD	210 U	390 UD	390 UD
2,4,5-Trichlorophenol					260 U	230 U	210 U	1900 UD	190 U	220 U	200 U	210 U	220 U	180 U	230 U	350 UD	210 U	390 UD	390 UD
2,4,6-Trichlorophenol					160 U	140 U	120 U	1100 UD	110 U	130 U	120 U	130 U	130 U	110 U	140 U	210 UD	120 U	230 UD	230 UD
2,4-Dichlorophenol					230 U	210 U	180 U	1700 UD	170 U	200 U	180 U	190 U	190 U	160 U	210 U	320 UD	190 U	350 UD	350 UD
2,4-Dimethylphenol					260 U	230 U	210 U	1900 UD	190 U	220 U	200 U	210 U	220 U	180 U	230 U	350 UD	210 U	390 UD	390 UD
2,4-Dinitrophenol					1200 U	1100 U	990 U	9100 UD	910 U	1100 U	990 U	RV	1000 U	880 U	1100 U	1700 UD	1000 U	1900 UD	1900 UD
2,4-Dinitrotoluene					260 U	230 U	210 U	1900 UD	190 U	220 U	200 U	210 U	220 U	180 U	230 U	350 UD	210 U	390 UD	390 UD
2,6-Dinitrotoluene					260 U	230 U	210 U	1900 UD	190 U	220 U	200 U	210 U	220 U	180 U	230 U	350 UD	210 U	390 UD	390 UD
2-Chloronaphthalene					260 U	230 U	210 U	1900 UD	190 U	220 U	200 U	210 U	220 U	180 U	230 U	350 UD	210 U	390 UD	390 UD
2-Chlorophenol					260 U	230 U	210 U	1900 UD	190 U	220 U	200 U	210 U	220 U	180 U	230 U	350 UD	210 U	390 UD	390 UD
2-Methylnaphthalene					310 U	280 U	250 U	2300 UD	230 U	270 U	250 U	260 U	260 U	220 U	280 U	420 UD	250 U	470 UD	470 UD
2-Methylphenol	330	330	100000		260 U	230 U	210 U	1900 UD	190 U	220 U	200 U	210 U	220 U	180 U	230 U	350 UD	210 U	390 UD	390 UD
2-Nitroaniline					260 U	230 U	210 U	1900 UD	190 U	220 U	200 U	210 U	220 U	180 U	230 U	350 UD	210 U	390 UD	390 UD
2-Nitrophenol					560 U	500 U	440 U	4100 UD	410 U	480 U	440 U	460 U	470 U	400 U	510 U	760 UD	450 U	840 UD	840 UD
3&4-Methylphenol	330	330	100000		380 U	330 U	300 U	2700 UD	270 U	320 U	300 U	310 U	310 U	260 U	340 U	510 UD	300 U	560 UD	560 UD
3,3'-Dichlorobenzidine					260 U	230 U	210 U	1900 UD	190 U	220 U	200 U	210 U	220 U	180 U	230 U	350 UD	210 U	390 UD	390 UD
3-Nitroaniline					260 U	230 U	210 U	1900 UD	190 U	220 U	200 U	210 U	220 U	180 U	230 U	350 UD	210 U	390 UD	390 UD
4,6-Dinitro-2-methylphenol					680 U	600 U	540 U	4900 UD	500 U	580 U	540 U	RV	560 U	480 U	610 U	920 UD	540 U	1000 UD	1000 UD
4-Bromophenyl phenyl ether					260 U	230 U	210 U	1900 UD	190 U	220 U	200 U	210 U	220 U	180 U	230 U	350 UD	210 U	390 UD	390 UD
4-Chloro-3-methylphenol					260 U	230 U	210 U	1900 UD	190 U	220 U	200 U	210 U	220 U	180 U	230 U	350 UD	210 U	390 UD	390 UD
4-Chloroaniline					260 U	230 U	210 U	1900 UD	190 U	220 U	200 U	210 U	220 U	180 U	230 U	350 UD	210 U	390 UD	390 UD
4-Chlorophenyl phenyl ether					260 U	230 U	210 U	1900 UD	190 U	220 U	200 U	210 U	220 U	180 U	230 U	350 UD	210 U	390 UD	390 UD
4-Nitroaniline					260 U	230 U	210 U	1900 UD	190 U	220 U	200 U	210 U	220 U	180 U	230 U	350 UD	210 U	390 UD	390 UD
4-Nitrophenol					360 U	320 U	290 U	2700 UD	270 U	310 U	290 U	300 U	300 U	260 U	330 U	490 UD	290 U	550 UD	540 UD
Acenaphthene	20000	98000	100000		210 U	180 U	160 U	640 JD	150 U	180 U	160 U	81 J	170 U	150 U	190 U	280 UD	170 U	310 UD	310 UD
Acenaphthylene	100000	107000	100000		210 U	180 U	160 U	1500 UD	150 U	180 U	160 U	400 JV	170 U	150 U	190 U	280 UD	170 U	310 UD	310 UD
Acetophenone					260 U	230 U	210 U	1900 UD	190 U	220 U	200 U	210 U	220 U	180 U	230 U	350 UD	210 U	390 UD	390 UD
Anthracene	100000	1000000	100000		160 U	140 U	76 J	2100 D	110 U	130 U	120 U	880 JV	130 U	110 U	140 U	210 UD	120 U	230 UD	230 UD
Atrazine					210 U	180 U	160 U	1500 UD	150 U	180 U	160 U	170 U	170 U	150 U	190 U	280 UD	170 U	310 UD	310 UD
Benzaldehyde					340 U	300 U	270 U	2500 UD	250 U	300 U	270 U	280 U	280 U	240 U	310 U	470 UD	270 U	520 UD	510 UD
Benzo[a]anthracene	1000	1000	1000		160 U	68 J	120	2600 D	39 J	130 U	150	6200 JV	130 U	110 U	140 U	210 UD	120 U	230 UD	230 UD
Benzo[a]pyrene	1000	22000	1000		210 U	93 J	110 J	2200 D	50 J	180 U	140 J	6700 JV	170 U	150 U	190 U	280 UD	170 U	310 UD	310 UD
Benzo[b]fluoranthene	1000	1700	1000		160 U	120 J	140	2700 D	45 J	130 U	180	8400 JV	130 U	110 U	140 U	210 UD	120 U	230 UD	230 UD
Benzo[g,h,i]perylene	100000	1000000	100000		210 U	86 J	72 J	1200 JD	150 U	180 U	100 J	4000 JV	170 U	150 U	190 U	280 UD	170 U	310 UD	310 UD
Benzo[k]fluoranthene	800	1700	3900		160 U	140 U	45 J	1000 JD	110 U	130 U	67 J	2400	130 U	110 U	140 U	210 UD	120 U	230 UD	230 UD
Bis(2-chloroethoxy)methane					280 U	250 U	220 U	2000 UD	200 U	240 U	220 U	230 U	230 U	200 U	250 U	380 UD	220 U	420 UD	420 UD
Bis(2-chloroethyl) ether					230 U	210 U	180 U	1700 UD	170 U	200 U	180 U	190 U	190 U	160 U	210 U	320 UD	190 U	350 UD	350 UD
Bis(2-ethylhexyl) phthalate					260 U	230 U	210 U	1900 UD	190 U	220 U	200 U	210 U	220 U	180 U	230 U	350 UD	210 U	390 UD	390 UD
Butylbenzyl phthalate					260 U	230 U	210 U	1900 UD	190 U	220 U	200 U	210 U	220 U	180 U	230 U	350 UD	210 U	390 UD	390 UD
Caprolactam					260 U	230 U	210 U	1900 UD	190 U	220 U	200 U	210 U	220 U	180 U	230 U	350 UD	210 U	390 UD	390 UD
Carbazole					260 U	230 U	210 U	1900 UD	190 U	220 U	200 U	450	220 U	180 U	230 U	350 UD	210 U	390 UD	390 UD

	NYSDEC	NYSDEC	NYSDEC															
	Part 375	Part 375	Part 375	Sample Designation: RB-16	RB-17	RB-18	RB-19	RB-20	RB-20	RB-21	RB-22	RB-23	RB-24	RB-24	RB-25	RB-25	RB-26	RB-27
Parameter	Unrestricted	Protection of	Restricted	Sample Date: 4/9/2014	4/16/2014	4/16/2014	4/16/2014	4/16/2014	4/16/2014	4/16/2014	4/16/2014	4/16/2014	4/9/2014	4/9/2014	4/9/2014	4/9/2014	4/11/2014	4/11/2014
(Concentrations in µg/kg)	Use	Groundwater	Residential	Sample Depth (ft bls): 6 - 8	6 - 8	5 - 7	5 - 7	3 - 5	5 - 6.5	4 - 6	4 - 6	3 - 5	2 - 4	6 - 8	4 - 6	6 - 7.5	5 - 7	5 - 7
								1										
Chrysene	1000	1000	3900	160 U	80 J	130	2500 D	37 J	130 U	160	6300 JV	130 U	110 U	140 U	210 UD	120 U	230 UD	230 UD
Dibenzo[a,h]anthracene	330	1000000	330	160 U	140 U	120 U	1100 UD	110 U	130 U	120 U	870 JV	130 U	110 U	140 U	210 UD	120 U	230 UD	230 UD
Dibenzofuran	7000	210000	59000	260 U	230 U	210 U	1900 UD	190 U	220 U	200 U	84 J	220 U	180 U	230 U	350 UD	210 U	390 UD	390 UD
Diethyl phthalate				260 U	230 U	210 U	1900 UD	190 U	220 U	200 U	210 U	220 U	180 U	230 U	350 UD	210 U	390 UD	390 UD
Dimethyl phthalate				260 U	230 U	210 U	1900 UD	190 U	220 U	200 U	210 U	220 U	180 U	230 U	350 UD	210 U	390 UD	390 UD
Di-n-butyl phthalate				260 U	230 U	210 U	1900 UD	190 U	220 U	200 U	210 U	220 U	180 U	230 U	350 UD	210 U	390 UD	390 UD
Di-n-octyl phthalate				260 U	230 U	210 U	1900 UD	190 U	220 U	200 U	210 U	220 U	180 U	230 U	350 UD	210 U	390 UD	390 UD
Fluoranthene	100000	1000000	100000	160 U	91 J	290	6100 D	57 J	130 U	330	14000 D	130 U	110 U	140 U	210 UD	120 U	230 UD	230 UD
Fluorene	30000	386000	100000	260 U	230 U	210 U	1100 JD	190 U	220 U	200 U	120 J	220 U	180 U	230 U	350 UD	210 U	390 UD	390 UD
Hexachlorobenzene	330	3200	1200	160 U	140 U	120 U	1100 UD	110 U	130 U	120 U	130 U	130 U	110 U	140 U	210 UD	120 U	230 UD	230 UD
Hexachlorobutadiene				260 U	230 U	210 U	1900 UD	190 U	220 U	200 U	210 U	220 U	180 U	230 U	350 UD	210 U	390 UD	390 UD
Hexachlorocyclopentadiene				750 U	660 U	590 U	5400 UD	550 U	640 U	590 U	RV	620 U	520 U	670 U	1000 UD	600 U	1100 UD	1100 UD
Hexachloroethane				210 U	180 U	160 U	1500 UD	150 U	180 U	160 U	170 U	170 U	150 U	190 U	280 UD	170 U	310 UD	310 UD
Indeno[1,2,3-cd]pyrene	500	8200	500	210 U	87 J	79 J	1400 JD	150 U	180 U	100 J	4500 JV	170 U	150 U	190 U	280 UD	170 U	310 UD	310 UD
Isophorone				230 U	210 U	180 U	1700 UD	170 U	200 U	180 U	190 U	190 U	160 U	210 U	320 UD	190 U	350 UD	350 UD
Naphthalene	12000	12000	100000	260 U	230 U	210 U	1900 UD	190 U	220 U	200 U	160 J	220 U	180 U	230 U	350 UD	210 U	390 UD	390 UD
Nitrobenzene				230 U	210 U	180 U	1700 UD	170 U	200 U	180 U	190 U	190 U	160 U	210 U	320 UD	190 U	350 UD	350 UD
n-Nitrosodi-n-propylamine				260 U	230 U	210 U	1900 UD	190 U	220 U	200 U	210 U	220 U	180 U	230 U	350 UD	210 U	390 UD	390 UD
n-Nitrosodiphenylamine				210 U	180 U	160 U	1500 UD	150 U	180 U	160 U	170 U	170 U	150 U	190 U	280 UD	170 U	310 UD	310 UD
Pentachlorophenol	800	800	6700	210 U	180 U	160 U	1500 UD	150 U	180 U	160 U	170 U	170 U	150 U	190 U	280 UD	170 U	310 UD	310 UD
Phenanthrene	100000	1000000	100000	160 U	140 U	220	5600 D	110 U	130 U	120	3000 JV	130 U	110 U	140 U	210 UD	120 U	230 UD	230 UD
Phenol	330	330	100000	260 U	230 U	210 U	1900 UD	190 U	220 U	200 U	210 U	220 U	180 U	230 U	350 UD	210 U	390 UD	390 UD
Pyrene	100000	1000000	100000	160 U	85 J	240	4900 D	56 J	130 U	280	13000 D	130 U	110 U	140 U	210 UD	120 U	230 UD	230 UD

J - Estimated value

U - Indicates that the compound was analyzed for but not detected

D - a secondary analysis after dilution due to exceedance

of the calibration range in the original sample.

DUP - Duplicate sample

 $\mu g/kg$ - Micrograms per kilogram

ft bls - Feet below land surface

NYSDEC - New York State Department of Environmental Conservation

-- No NYSDEC Part 375 Standards available

Bold data indicates that parameter was detected above the NYSDEC Part 375 Unrestricted Use Standards

Shaded data indicates that parameter was detected above the NYSDEC Part 375 Protection of Groundwater Standards

Boxed data indicates that parameter was detected above the NYSDEC Part 375 Restricted Use Standards

V - Value altered or qualifier added during data validation

UJ - Analyte was not detected. The associated reported quantitation limit is an estimate

R - Sample results rejected by validator

	NYSDEC	NYSDEC	NYSDEC														
	Part 375	Part 375	Part 375	Sample Designation: RB-28	RB-28	RB-29	RB-30	RB-31	RB-32	RB-33	RB-34	RB-35	RB-36	RB-37	RB-38	RB-39	RB-40
Parameter	Unrestricted	Protection of	Restricted	Sample Date: 4/10/20	4 4/10/2014	4/10/2014	4/10/2014	4/10/2014	4/10/2014	4/10/2014	4/10/2014	4/10/2014	4/14/2014	4/14/2014	4/11/2014	4/11/2014	4/14/2014
(Concentrations in µg/kg)	Use	Groundwater	Residential	Sample Depth (ft bls): 5 - 7	7 - 8	5 - 7	5 - 7	5 - 7	5 - 7	4 - 6	4 - 6	3 - 5	2 - 4	1 - 3	1 - 3	1 - 3	3 - 5
1,1'-Biphenyl				2200 U	D 2200 UE	410 U	880 UD	420 U	460 U	980 UD	420 U	410 U	450 U	400 U	430 U	420 U	460 U
1,2,4,5-Tetrachlorobenzene				950 UI) 190 U	180 U	380 UD	180 U	200 U	430 UD	190 U	180 U	200 U	170 U	190 U	180 U	200 U
1-Methylnaphthalene				NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,2'-oxybis (1-chloropropane)				1100 U	D 1200 UE	220 U	460 UD	220 U	240 U	520 UD	220 U	220 U	240 U	210 U	230 U	220 U	240 U
2,3,4,6-Tetrachlorophenol				950 U	D RV	RV	380 UD	180 U	200 U	430 UD	190 U	180 U	200 U	170 U	190 U	180 U	200 U
2,4,5-Trichlorophenol				950 U	D RVD	RV	380 UD	180 U	200 U	430 UD	190 U	180 U	200 U	170 U	190 U	180 U	200 U
2,4,6-Trichlorophenol				570 U	D RVD	RV	230 UD	110 U	120 U	260 UD	110 U	110 U	120 U	100 U	110 U	110 U	120 U
2,4-Dichlorophenol				860 UI	D RVD	RV	350 UD	160 U	180 U	390 UD	170 U	160 U	180 U	160 U	170 U	160 U	180 U
2,4-Dimethylphenol				950 UI	D RVD	RV	380 UD	180 U	200 U	430 UD	190 U	180 U	200 U	170 U	190 U	180 U	200 U
2,4-Dinitrophenol				4600 U	D RVD	RV	1800 UD	880 U	980 U	2100 UD	890 U	870 U	940 U	840 U	910 U	880 U	960 U
2,4-Dinitrotoluene				950 UI	980 UD	180 U	380 UD	180 U	200 U	430 UD	190 U	180 U	200 U	170 U	190 U	180 U	200 U
2,6-Dinitrotoluene				950 UI	D 190 U	180 U	380 UD	180 U	200 U	430 UD	190 U	180 U	200 U	170 U	190 U	180 U	200 U
2-Chloronaphthalene				950 UI	980 UD	180 U	380 UD	180 U	200 U	430 UD	190 U	180 U	200 U	170 U	190 U	180 U	200 U
2-Chlorophenol				950 UI	D RV	RV	380 UD	180 U	200 U	430 UD	190 U	180 U	200 U	170 U	190 U	180 U	200 U
2-Methylnaphthalene				770 JI	1600 D	220 U	460 UD	220 U	66 J	520 UD	220 U	220 U	240 U	210 U	230 U	220 U	240 U
2-Methylphenol	330	330	100000	950 UI	D RV	RV	380 UD	180 U	200 U	430 UD	190 U	180 U	200 U	170 U	190 U	180 U	200 U
2-Nitroaniline				950 UI	980 UD	180 U	380 UD	180 U	200 U	430 UD	190 U	180 U	200 U	170 U	190 U	180 U	200 U
2-Nitrophenol				2000 U	D RV	RV	830 UD	400 U	440 U	930 UD	400 U	390 U	420 U	380 U	410 U	400 U	430 U
3&4-Methylphenol	330	330	100000	1400 U	D RVD	RV	560 UD	260 U	290 U	620 UD	270 U	260 U	280 U	250 U	270 U	260 U	290 U
3,3'-Dichlorobenzidine				950 UI	980 UD	180 U	380 UD	180 U	200 U	430 UD	190 U	180 U	200 U	170 U	190 U	180 U	200 U
3-Nitroaniline				950 UI	D 190 U	180 U	380 UD	180 U	200 U	430 UD	190 U	180 U	200 U	170 U	190 U	180 U	200 U
4,6-Dinitro-2-methylphenol				2500 U	D 510 U	460 U	1000 UD	480 U	530 U	1100 UD	480 U	470 U	510 U	450 U	490 U	480 U	520 U
4-Bromophenyl phenyl ether				950 UI	D 980 UD	180 U	380 UD	180 U	200 U	430 UD	190 U	180 U	200 U	170 U	190 U	180 U	200 U
4-Chloro-3-methylphenol				950 UI	D 190 U	180 U	380 UD	180 U	200 U	430 UD	190 U	180 U	200 U	170 U	190 U	180 U	200 U
4-Chloroaniline				950 U	> 980 UD	180 U	380 UD	180 U	200 U	430 UD	190 U	180 U	200 U	170 U	190 U	180 U	200 U
4-Chlorophenyl phenyl ether				950 U	> 980 UD	180 U	380 UD	180 U	200 U	430 UD	190 U	180 U	200 U	170 U	190 U	180 U	200 U
4-Nitroaniline				950 U	> 980 UD	180 U	380 UD	180 U	200 U	430 UD	190 U	180 U	200 U	170 U	190 U	180 U	200 U
4-Nitrophenol				1300 U	D RV	RV	540 UD	260 U	280 U	600 UD	260 U	250 U	270 U	240 U	270 U	260 U	280 U
Acenaphthene	20000	98000	100000	1700 I	2000	140 U	310 UD	150 U	160 U	340 UD	95 J	39 J	160 U	140 U	150 U	150 U	160 U
Acenaphthylene	100000	107000	100000	380 JI	210 JD	140 U	130 JD	150 U	160 U	340 UD	570	50 J	160	140 U	150 U	100 J	160 U
Acetophenone				950 U	> 980 UD	180 U	380 UD	180 U	200 U	430 UD	190 U	180 U	200 U	170 U	190 U	180 U	200 U
Anthracene	100000	1000000	100000	4500 1	6500 D	110 U	380 D	110 U	120 U	260 D	850	100 J	100 J	100 U	110 U	140	120 U
Atrazine				760 U) 780 UD	140 U	310 UD	150 U	160 U	340 UD	150 U	140 U	160 U	140 U	150 U	150 U	160 U
Benzaldehyde				1200 U	D = 260 U	240 U	510 UD	240 U	270 U	570 UD	240 U	240 U	260 U	230 U	250 U	240 U	260 U
Benzo[a]anthracene	1000	1000	1000	7400 1	8900 D	93 J	920 D	110 U	91 J	690 D	1600	240	430	100 U	110 U	290	120 U
Benzo[a]pyrene	1000	22000	1000	6400 1	7000 D	77 J	890 D	150 U	91 J	590 D	1600	250	520	140 U	150 U	300	160 U
Benzo[b]fluoranthene	1000	1700	1000	72001	8800 D	150	1000 D	46 J	120	690 D	1800	350	510	100 U	110 U	380	120 U
Benzo[g,h,1]perylene	100000	100000	100000	36001	3300 D	55 J	590 D	38 J	74 J	340 D	950	200	420	140 U	150 U	290	160 U
Benzo[k]fluoranthene	800	1700	3900	3/001	3100 D	40 J	480 D	110 U	50 J	310 D	720	140	460	100 U	110 U	150	120 U
Bis(2-chloroethoxy)methane				1000 U	D 1000 UL	190 U	420 UD	200 U	220 U	470 UD	200 U	200 U	210 U	190 U	200 U	200 U	220 U
Bis(2-chloroethyl) ether				860 U	> 880 UD	160 U	350 UD	160 U	180 U	390 UD	1/0 U	160 U	180 U	160 U	1/0 U	160 U	180 U
Bis(2-ethylnexyl) phthalate				33000	J 4200 D	62 J	380 UD	180 U	200 U	430 UD	190 U	180 U	200 U	170 U	190 U	180 U	200 U
Butylbenzyl phthalate				63000	J 6100 D	180 U	380 UD	180 U	54 J	430 UD	190 U	180 U	200 U	170 U	190 U	180 U	200 U
Caprolactam				950 U	> 980 UD	180 U	580 UD	180 U	200 U	430 UD	190 U	180 U	200 U	170 U	190 U	180 U	200 U
Carbazole				1600 1	1800	180 U	380 UD	180 U	200 U	430 UD	81 J	43 J	200 U	1/0 U	190 U	20 J	200 U

	NYSDEC	NYSDEC	NYSDEC															
	Part 375	Part 375	Part 375	Sample Designation:	RB-28	RB-28	RB-29	RB-30	RB-31	RB-32	RB-33	RB-34	RB-35	RB-36	RB-37	RB-38	RB-39	RB-40
Parameter	Unrestricted	Protection of	Restricted	Sample Date:	4/10/2014	4/10/2014	4/10/2014	4/10/2014	4/10/2014	4/10/2014	4/10/2014	4/10/2014	4/10/2014	4/14/2014	4/14/2014	4/11/2014	4/11/2014	4/14/2014
(Concentrations in µg/kg)	Use	Groundwater	Residential	Sample Depth (ft bls):	5 - 7	7 - 8	5 - 7	5 - 7	5 - 7	5 - 7	4 - 6	4 - 6	3 - 5	2 - 4	1 - 3	1 - 3	1 - 3	3 - 5
	1000	1000	2000			44.0.0	0 0 T		40 T	110 -		4=00	200		10 T	110 11	220	100 11
Chrysene	1000	1000	3900		7400 D	4100	93 J	970 D	40 J	110 J	660 D	1700	300	540	49 J	110 U	320	120 U
Dibenzo[a,h]anthracene	330	1000000	330		2000 D	660	110 U	140 JD	110 U	120 U	94 JD	230	50 J	180	100 U	110 U	60 J	120 U
Dibenzofuran	7000	210000	59000		1400 D	2300 D	180 U	380 UD	180 U	200 U	430 UD	110 J	180 U	200 U	170 U	190 U	180 U	200 U
Diethyl phthalate					950 UD	980 UD	180 U	380 UD	180 U	200 U	430 UD	190 U	180 U	200 U	170 U	190 U	180 U	200 U
Dimethyl phthalate					950 UD	980 UD	180 U	380 UD	180 U	200 U	430 UD	190 U	180 U	200 U	170 U	190 U	180 U	200 U
Di-n-butyl phthalate					1400 D	980 UD	180 U	380 UD	180 U	200 U	430 UD	190 U	180 U	200 U	170 U	190 U	180 U	200 U
Di-n-octyl phthalate					950 UD	190 U	180 U	380 UD	180 U	200 U	430 UD	190 U	180 U	200 U	170 U	190 U	180 U	200 U
Fluoranthene	100000	1000000	100000		15000 D	21000 D	240	2200 D	62 J	180	1400 D	3500	600	820	100 U	110 U	620	120 U
Fluorene	30000	386000	100000		1600 D	1700	180 U	380 UD	180 U	200 U	430 UD	320	180 U	200 U	170 U	190 U	180 U	200 U
Hexachlorobenzene	330	3200	1200		570 UD	120 U	110 U	230 UD	110 U	120 U	260 UD	110 U	110 U	120 U	100 U	110 U	110 U	120 U
Hexachlorobutadiene					950 UD	980 UD	180 U	380 UD	180 U	200 U	430 UD	190 U	180 U	200 U	170 U	190 U	180 U	200 U
Hexachlorocyclopentadiene					2700 UD	2800 UD	510 U	1100 UD	530 U	580 U	1200 UD	530 U	520 U	560 U	500 U	540 U	520 U	570 U
Hexachloroethane					760 UD	780 UD	140 U	310 UD	150 U	160 U	340 UD	150 U	140 U	160 U	140 U	150 U	150 U	160 U
Indeno[1,2,3-cd]pyrene	500	8200	500		3700 D	2700	49 J	640 D	150 U	75 J	370 D	1100	210	450	140 U	150 U	260	160 U
Isophorone					860 UD	180 U	160 U	350 UD	160 U	180 U	390 UD	170 U	160 U	180 U	160 U	170 U	160 U	180 U
Naphthalene	12000	12000	100000		1400 D	2600	180 U	380 UD	180 U	200 U	430 UD	100 J	180 U	200 U	170 U	190 U	180 U	200 U
Nitrobenzene					860 UD	880 UD	160 U	350 UD	160 U	180 U	390 UD	170 U	160 U	180 U	160 U	170 U	160 U	180 U
n-Nitrosodi-n-propylamine					950 UD	980 UD	180 U	380 UD	180 U	200 U	430 UD	190 U	180 U	200 U	170 U	190 U	180 U	200 U
n-Nitrosodiphenylamine					760 UD	780 UD	140 U	310 UD	150 U	160 U	340 UD	150 U	140 U	160 U	140 U	150 U	150 U	160 U
Pentachlorophenol	800	800	6700		760 UD	RVD	RV	310 UD	150 U	160 U	340 UD	150 U	140 U	160 U	140 U	150 U	150 U	160 U
Phenanthrene	100000	1000000	100000		14000 D	20000 D	140	1100 D	39 J	110 J	830 D	2400	340	280	41 J	110 U	400	120 U
Phenol	330	330	100000		950 UD	RV	RV	380 UD	180 U	200 U	430 UD	190 U	180 U	200 U	170 U	190 U	180 U	200 U
Pyrene	100000	1000000	100000		13000 D	17000 D	170	1700 D	59 J	170	1000 D	3000	490	690	100 U	110 U	520	120 U

J - Estimated value

U - Indicates that the compound was analyzed for but not detected

D - a secondary analysis after dilution due to exceedance

of the calibration range in the original sample.

DUP - Duplicate sample

 $\mu g/kg$ - Micrograms per kilogram

ft bls - Feet below land surface

NYSDEC - New York State Department of Environmental Conservation

-- No NYSDEC Part 375 Standards available

Bold data indicates that parameter was detected above the NYSDEC Part 375 Unrestricted Use Standards

Shaded data indicates that parameter was detected above the NYSDEC Part 375 Protection of Groundwater Standards

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V - Value altered or qualifier added during data validation

UJ - Analyte was not detected. The associated reported quantitation limit is an estimate

R - Sample results rejected by validator
	NYSDEC	NYSDEC	NYSDEC																
	Part 375	Part 375	Part 375	Sample Designation:	RB-41	RB-42	RB-43	RB-44	RB-45	RW-1	RW-1	RW-2	RW-3	RW-3	RW-3	RW-4	RW-4	RW-4	RW-5
Parameter	Unrestricted	Protection of	Restricted	Sample Date: 4	/14/2014	4/14/2014	4/15/2014	4/15/2014	4/15/2014	4/17/2014	4/17/2014	4/7/2014	4/8/2014	4/8/2014	4/8/2014	4/8/2014	4/8/2014	4/8/2014	4/9/2014
(Concentrations in μ g/kg)	Use	Groundwater	Residential	Sample Depth (ft bls):	0 - 2	5 - 7	5 - 7	5 - 7	10 - 12	8 - 10	13 - 15	13 - 15	1 - 3	3 - 5	8 - 9	1 - 3	7 - 9	13 - 14	9 - 11
1,1'-Biphenyl					440 U	440 U	470 U	470 U	420 U	460 U	410 U	470 U	440 U	440 U	470 U	4800 UD	480 U	430 U	450 U
1,2,4,5-Tetrachlorobenzene					190 U	200 U	210 U	210 U	180 U	200 U	180 U	210 U	190 U	190 U	200 U	2100 UD	210 U	190 U	200 U
1-Methylnaphthalene					NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,2'-oxybis (1-chloropropane)					230 U	230 U	250 U	250 U	220 U	240 U	210 U	250 U	230 U	230 U	250 U	2500 UD	250 U	220 U	240 U
2,3,4,6-Tetrachlorophenol					190 U	200 U	210 U	210 U	180 U	200 U	180 U	210 U	190 U	190 U	200 U	2100 UD	210 U	190 U	200 U
2,4,5-Trichlorophenol					190 U	200 U	210 U	210 U	180 U	200 U	180 U	210 U	190 U	190 U	200 U	2100 UD	210 U	190 U	200 U
2,4,6-Trichlorophenol					110 U	120 U	120 U	120 U	110 U	120 U	110 U	120 U	110 U	110 U	120 U	1300 UD	130 U	110 U	120 U
2,4-Dichlorophenol					170 U	180 U	190 U	180 U	160 U	180 U	160 U	190 U	170 U	170 U	180 U	1900 UD	190 U	170 U	180 U
2,4-Dimethylphenol					190 U	200 U	210 U	210 U	180 U	200 U	180 U	210 U	190 U	190 U	200 U	2100 UD	210 U	190 U	200 U
2,4-Dinitrophenol					920 U	940 U	990 U	990 U	880 U	960 U	850 U	1000 U	920 U	920 U	RV	10000 UD	1000 U	900 U	960 U
2,4-Dinitrotoluene					190 U	200 U	210 U	210 U	180 U	200 U	180 U	210 U	190 U	190 U	200 U	2100 UD	210 U	190 U	200 U
2,6-Dinitrotoluene					190 U	200 U	210 U	210 U	180 U	200 U	180 U	210 U	190 U	190 U	200 U	2100 UD	210 U	190 U	200 U
2-Chloronaphthalene					190 U	200 U	210 U	210 U	180 U	200 U	180 U	210 U	190 U	190 U	200 U	2100 UD	210 U	190 U	200 U
2-Chlorophenol					190 U	200 U	210 U	210 U	180 U	200 U	180 U	210 U	190 U	190 U	200 U	2100 UD	210 U	190 U	200 U
2-Methylnaphthalene					230 U	230 U	250 U	250 U	220 U	240 U	380	250 U	230 U	68 J	250 U	5900 D	320	220 U	240 U
2-Methylphenol	330	330	100000		190 U	200 U	210 U	210 U	180 U	200 U	180 U	210 U	190 U	190 U	200 U	2100 UD	210 U	190 U	200 U
2-Nitroaniline					190 U	200 U	210 U	210 U	180 U	200 U	180 U	210 U	190 U	190 U	200 U	2100 UD	210 U	190 U	200 U
2-Nitrophenol					410 U	420 U	450 U	440 U	390 U	430 U	380 U	450 U	410 U	410 U	440 U	4500 UD	460 U	410 U	430 U
3&4-Methylphenol	330	330	100000		280 U	280 U	300 U	300 U	260 U	290 U	260 U	300 U	280 U	280 U	300 U	3000 UD	300 U	270 U	290 U
3,3'-Dichlorobenzidine					190 U	200 U	210 U	210 U	180 U	200 U	180 U	210 U	190 U	190 U	200 U	2100 UD	210 U	190 U	200 U
3-Nitroaniline					190 U	200 U	210 U	210 U	180 U	200 U	180 U	210 U	190 U	190 U	200 U	2100 UD	210 U	190 U	200 U
4,6-Dinitro-2-methylphenol					500 U	510 U	540 U	540 U	470 U	520 U	460 U	540 U	500 U	500 U	530 U	5500 UD	550 U	490 U	520 U
4-Bromophenyl phenyl ether					190 U	200 U	210 U	210 U	180 U	200 U	180 U	210 U	190 U	190 U	200 U	2100 UD	210 U	190 U	200 U
4-Chloro-3-methylphenol					190 U	200 U	210 U	210 U	180 U	200 U	180 U	210 U	190 U	190 U	200 U	2100 UD	210 U	190 U	200 U
4-Chloroaniline					190 U	200 U	210 U	210 U	180 U	200 U	180 U	210 U	190 U	190 U	200 U	2100 UD	210 U	190 U	200 U
4-Chlorophenyl phenyl ether					190 U	200 U	210 U	210 U	180 U	200 U	180 U	210 U	190 U	190 U	200 U	2100 UD	210 U	190 U	200 U
4-Nitroaniline					190 U	200 U	210 U	210 U	180 U	200 U	180 U	210 U	190 U	190 U	200 U	2100 UD	210 U	190 U	200 U
4-Nitrophenol					270 U	270 U	290 U	290 U	260 U	280 U	250 U	290 U	270 U	270 U	290 U	2900 UD	300 U	260 U	280 U
Acenaphthene	20000	98000	100000		110 J	160 U	160 U	160 U	150 U	160 U	140 U	170 U	150 U	150 U	160 U	1700 UD	170 U	150 U	160 U
Acenaphthylene	100000	107000	100000		150 U	160 U	160 U	160 U	150 U	160 U	140 U	170 U	150 U	150 U	160 U	1700 UD	170 U	150 U	160 U
Acetophenone					190 U	200 U	210 U	210 U	180 U	200 U	180 U	210 U	190 U	190 U	200 U	2100 UD	210 U	190 U	200 U
Anthracene	100000	1000000	100000		280	120 U	120 U	120 U	110 U	120 U	110 U	120 U	110 U	110 U	120 U	1300 UD	130 U	110 U	120 U
Atrazine					150 U	160 U	160 U	160 U	150 U	160 U	140 U	170 U	150 U	150 U	160 U	1700 UD	170 U	150 U	160 U
Benzaldehyde					250 U	260 U	270 U	270 U	240 U	260 U	240 U	270 U	250 U	250 U	270 U	2800 UD	280 U	250 U	260 U
Benzo[a]anthracene	1000	1000	1000		560	120 U	120 U	120 U	110 U	120 U	110 U	120 U	110 U	110 U	120 U	1300 UD	130 U	110 U	120 U
Benzo[a]pyrene	1000	22000	1000		440	160 U	160 U	160 U	150 U	160 U	140 U	170 U	150 U	150 U	160 U	1700 UD	170 U	150 U	160 U
Benzo[b]fluoranthene	1000	1700	1000		430	44 J	120 U	120 U	110 U	120 U	110 U	120 U	110 U	110 U	120 U	1300 UD	130 U	110 U	120 U
Benzo[g,h,i]perylene	100000	1000000	100000		270	160 U	160 U	160 U	150 U	160 U	140 U	170 U	150 U	150 U	160 U	1700 UD	170 U	150 U	160 U
Benzo[k]fluoranthene	800	1700	3900		340	120 U	120 U	120 U	110 U	120 U	110 U	120 U	110 U	110 U	120 U	1300 UD	130 U	110 U	120 U
Bis(2-chloroethoxy)methane					210 U	210 U	220 U	220 U	200 U	220 U	190 U	220 U	210 U	210 U	220 U	2300 UD	230 U	200 U	220 U
Bis(2-chloroethyl) ether					170 U	180 U	190 U	180 U	160 U	180 U	160 U	190 U	170 U	170 U	180 U	1900 UD	190 U	170 U	180 U
Bis(2-ethylhexyl) phthalate					190 U	200 U	210 U	210 U	180 U	200 U	180 U	210 U	190 UV	190 U	200 U	2100 UD	210 UV	190 UV	200 U
Butylbenzyl phthalate					190 U	200 U	210 U	210 U	180 U	200 U	180 U	210 U	190 U	190 U	200 U	2100 UD	210 U	190 U	200 U
Caprolactam					190 U	200 U	210 U	210 U	180 U	200 U	180 U	210 U	190 U	190 U	200 U	2100 UD	210 U	190 U	200 U
Carbazole					120 J	200 U	210 U	210 U	180 U	200 U	180 U	210 U	190 U	190 U	200 U	2100 UD	210 U	190 U	200 U

	NYSDEC	NYSDEC	NYSDEC																
	Part 375	Part 375	Part 375	Sample Designation:	RB-41	RB-42	RB-43	RB-44	RB-45	RW-1	RW-1	RW-2	RW-3	RW-3	RW-3	RW-4	RW-4	RW-4	RW-5
Parameter	Unrestricted	Protection of	Restricted	Sample Date:	4/14/2014	4/14/2014	4/15/2014	4/15/2014	4/15/2014	4/17/2014	4/17/2014	4/7/2014	4/8/2014	4/8/2014	4/8/2014	4/8/2014	4/8/2014	4/8/2014	4/9/2014
(Concentrations in µg/kg)	Use	Groundwater	Residential	Sample Depth (ft bls):	0 - 2	5 - 7	5 - 7	5 - 7	10 - 12	8 - 10	13 - 15	13 - 15	1 - 3	3 - 5	8 - 9	1 - 3	7 - 9	13 - 14	9 - 11
Chrysene	1000	1000	3900		540	46 J	120 U	120 U	110 U	120 U	110 U	120 U	110 U	110 U	120 U	1300 UD	130 U	110 U	120 U
Dibenzo[a,h]anthracene	330	1000000	330		88 J	120 U	120 U	120 U	110 U	120 U	110 U	120 U	110 U	110 U	120 U	1300 UD	130 U	110 U	120 U
Dibenzofuran	7000	210000	59000		77 J	200 U	210 U	210 U	180 U	200 U	180 U	210 U	190 U	190 U	200 U	2100 UD	210 U	190 U	200 U
Diethyl phthalate					190 U	200 U	210 U	210 U	180 U	200 U	180 U	210 U	190 U	190 U	200 U	2100 UD	210 U	190 U	200 U
Dimethyl phthalate					190 U	200 U	210 U	210 U	180 U	200 U	180 U	210 U	190 U	190 U	200 U	2100 UD	210 U	190 U	200 U
Di-n-butyl phthalate					190 U	200 U	210 U	210 U	180 U	200 U	180 U	210 U	190 U	190 U	200 U	2100 UD	210 U	190 U	200 U
Di-n-octyl phthalate					190 U	200 U	210 U	210 U	180 U	200 U	180 U	210 U	190 U	190 U	200 U	2100 UD	210 U	190 U	200 U
Fluoranthene	100000	1000000	100000		1200	80 J	120 U	120 U	110 U	120 U	110 U	120 U	110 U	110 U	120 U	1300 UD	130 U	110 U	120 U
Fluorene	30000	386000	100000		100 J	200 U	210 U	210 U	180 U	200 U	180 U	210 U	190 U	190 U	200 U	2100 UD	210 U	190 U	200 U
Hexachlorobenzene	330	3200	1200		110 U	120 U	120 U	120 U	110 U	120 U	110 U	120 U	110 U	110 U	120 U	1300 UD	130 U	110 U	120 U
Hexachlorobutadiene					190 U	200 U	210 U	210 U	180 U	200 U	180 U	210 U	190 U	190 U	200 U	2100 UD	210 U	190 U	200 U
Hexachlorocyclopentadiene					550 U	560 U	590 U	590 U	520 U	570 U	510 U	600 U	550 U	550 U	590 U	6000 UD	610 U	540 U	570 U
Hexachloroethane					150 U	160 U	160 U	160 U	150 U	160 U	140 U	170 U	150 U	150 U	160 U	1700 UD	170 U	150 U	160 U
Indeno[1,2,3-cd]pyrene	500	8200	500		300	160 U	160 U	160 U	150 U	160 U	140 U	170 U	150 U	150 U	160 U	1700 UD	170 U	150 U	160 U
Isophorone					170 U	180 U	190 U	180 U	160 U	180 U	160 U	190 U	170 U	170 U	180 U	1900 UD	190 U	170 U	180 U
Naphthalene	12000	12000	100000		74 J	200 U	210 U	210 U	180 U	200 U	340	210 U	190 U	190 U	200 U	2600 D	300	190 U	200 U
Nitrobenzene					170 U	180 U	190 U	180 U	160 U	180 U	160 U	190 U	170 U	170 U	180 U	1900 UD	190 U	170 U	180 U
n-Nitrosodi-n-propylamine					190 U	200 U	210 U	210 U	180 U	200 U	180 U	210 U	190 U	190 U	200 U	2100 UD	210 U	190 U	200 U
n-Nitrosodiphenylamine					150 U	160 U	160 U	160 U	150 U	160 U	140 U	170 U	150 U	150 U	160 U	1700 UD	170 U	150 U	160 U
Pentachlorophenol	800	800	6700		150 U	160 U	160 U	160 U	150 U	160 U	140 U	170 U	150 U	150 U	160 U	1700 UD	170 U	150 U	160 U
Phenanthrene	100000	1000000	100000		1300	82 J	120 U	120 U	110 U	120 U	110 U	120 U	110 U	110 U	120 U	1300 UD	130 U	110 U	120 U
Phenol	330	330	100000		190 U	200 U	210 U	210 U	180 U	200 U	180 U	210 U	190 U	190 U	200 U	2100 UD	210 U	190 U	200 U
Pyrene	100000	1000000	100000		1000	66 J	120 U	120 U	110 U	120 U	110 U	120 U	110 U	110 U	120 U	1300 UD	130 U	110 U	120 U

J - Estimated value

U - Indicates that the compound was analyzed for but not detected

D - a secondary analysis after dilution due to exceedance

of the calibration range in the original sample.

DUP - Duplicate sample

 $\mu g/kg$ - Micrograms per kilogram

ft bls - Feet below land surface

NYSDEC - New York State Department of Environmental Conservation

-- No NYSDEC Part 375 Standards available

Bold data indicates that parameter was detected above the NYSDEC Part 375 Unrestricted Use Standards

Shaded data indicates that parameter was detected above the NYSDEC Part 375 Protection of Groundwater Standards

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Para 75 Para 75 <t< th=""><th></th><th>NYSDEC</th><th>NYSDEC</th><th>NYSDEC</th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th></t<>		NYSDEC	NYSDEC	NYSDEC															
Demander Demander ber Augebbe definition Augebbe definition <th></th> <th>Part 375</th> <th>Part 375</th> <th>Part 375</th> <th>Sample Designation:</th> <th>RW-6</th> <th>RW-7</th> <th>RW-8</th> <th>RW-9</th> <th>RW-9</th> <th>RW-9</th> <th>RW-10</th> <th>RW-11</th> <th>RW-11 DUP</th> <th>RW-12</th> <th>RW-12</th> <th>RW-13</th> <th>RW-14</th> <th>RW-15</th>		Part 375	Part 375	Part 375	Sample Designation:	RW-6	RW-7	RW-8	RW-9	RW-9	RW-9	RW-10	RW-11	RW-11 DUP	RW-12	RW-12	RW-13	RW-14	RW-15
	Parameter	Unrestricted	Protection of	Restricted	Sample Date:	4/9/2014	4/8/2014	4/16/2014	4/16/2014	4/16/2014	4/16/2014	4/9/2014	4/16/2014	4/16/2014	4/10/2014	4/10/2014	4/10/2014	4/14/2014	4/11/2014
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	(Concentrations in µg/kg)	Use	Groundwater	Residential	Sample Depth (ft bls):	15 - 17	10 - 12	5 - 7	1.5 - 3	4 - 6	9 - 10	6 - 8	4 - 6	4 - 6	5 - 7	7 - 8	5 - 7	3 - 5	1 - 3
1.1.3. Hereinschweisten - - - - - - - - - 2010 201																			
1.3.4.5.7 cm/methodsexrere - - - - N	1,1'-Biphenyl					530 U	960 UD	1000 UD	470 U	480 U	460 U	890 UD	480 U	500 U	4300 UD	990 UD	830 UD	410 U	860 UD
i Aldersynphillero NA N	1,2,4,5-Tetrachlorobenzene					230 U	420 UD	460 UD	200 U	210 U	200 U	390 UD	210 U	220 U	1900 UD	440 UD	360 UD	180 U	380 UD
22 0.	1-Methylnaphthalene					NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2.4.4.7 inclusionsphered - - - 200 49010 40010 201	2,2'-oxybis (1-chloropropane)					280 U	510 UD	550 UD	240 U	250 U	240 U	470 UD	260 U	260 U	2200 UD	520 UD	440 UD	220 U	450 UD
2.4.5-1 1.201 2010 40010 2010 2010 2010 1.010 2010 1.010 2010 1.010 2010 1.010 1.010 2010 1.0100 1.010	2,3,4,6-Tetrachlorophenol					230 U	420 UD	460 UD	200 U	210 U	200 U	390 UD	210 U	220 U	1900 UD	440 UD	360 UD	180 U	380 UD
2.4.6-Tickhoophand - - - - - - - 1010 280 D 2100 1200 1200 280 D 1800 1000 2000 2000 3000 2000 3000 2000 3000 2000 3000 2000 3000 2000 3000 2000 3000 2000 3000 2000 3000 2000 3000 2000 3000 2000 3000 2000 3000 2000 3000 2000 3000 2000 3000 2000 3000 2000 4000 3000 2000 3000 2000 4000 3000 3000 2000 4000 3000 3000 2000 4000 3000 3000 2000 4000 3000	2,4,5-Trichlorophenol					230 U	420 UD	460 UD	200 U	210 U	200 U	390 UD	210 U	220 U	1900 UD	440 UD	360 UD	180 U	380 UD
2.4 Disktopkend 210 C 3010 9010	2,4,6-Trichlorophenol					140 U	250 UD	270 UD	120 U	120 U	120 U	230 UD	130 U	130 U	1100 UD	260 UD	220 UD	110 U	230 UD
2.4-Discleptend </td <td>2,4-Dichlorophenol</td> <td></td> <td></td> <td></td> <td></td> <td>210 U</td> <td>380 UD</td> <td>410 UD</td> <td>180 U</td> <td>190 U</td> <td>180 U</td> <td>350 UD</td> <td>190 U</td> <td>200 U</td> <td>1700 UD</td> <td>390 UD</td> <td>330 UD</td> <td>160 U</td> <td>340 UD</td>	2,4-Dichlorophenol					210 U	380 UD	410 UD	180 U	190 U	180 U	350 UD	190 U	200 U	1700 UD	390 UD	330 UD	160 U	340 UD
2.4 Driningland 230 U 200 U	2,4-Dimethylphenol					230 U	420 UD	460 UD	200 U	210 U	200 U	390 UD	210 U	220 U	1900 UD	440 UD	360 UD	180 U	380 UD
2.4-Dimicrobines 2304 20 U 40 U 300 U 20 U 200 U 300 U 3	2,4-Dinitrophenol					1100 U	2000 UD	2200 UD	980 U	1000 U	980 U	1900 UD	1000 U	1100 U	9000 UD	2100 UD	1800 UD	860 U	1800 UD
2.4-Dimonolance 2301 42010 40010 2001 39010 2101 2010 49010 40100 38010 18010 48010 2-Chlorosphend 2301 42010 7010 30010 2010 2010 2010 2010 2010 42010 40010 2010 2010 2010 2010 2010 42010 40010 2010 2010 2010 2010 40	2,4-Dinitrotoluene					230 U	420 UD	460 UD	200 U	210 U	200 U	390 UD	210 U	220 U	1900 UD	440 UD	360 UD	180 U	380 UD
2.Choronghandane 230 U 420 U 420 U 400 U 200 U 201 U 201 U 201 U 201 U 201 U 400 U 300 U 200 U 400 U 300 U 200 U 400 U 300 U 400 U 300 U 400 U 300 U <	2,6-Dinitrotoluene					230 U	420 UD	460 UD	200 U	210 U	200 U	390 UD	210 U	220 U	1900 UD	440 UD	360 UD	180 U	380 UD
2-Chaophanchance 2210 2010 40010 30010 40101 30010 40101 30010	2-Chloronaphthalene					230 U	420 UD	460 UD	200 U	210 U	200 U	390 UD	210 U	220 U	1900 UD	440 UD	360 UD	180 U	380 UD
2-Metrylphenol 2800 500 500 2001 4010 2000 4000 2000 40000 2000 40000 2000 40000 2000 40000 2000 40000 2000 40000	2-Chlorophenol					230 U	420 UD	460 UD	200 U	210 U	200 U	390 UD	210 U	220 U	1900 UD	440 UD	360 UD	180 U	380 UD
2.Ade(s)plenol 330 100000 2000 42000 40000 2000 30000 2010 2010 90000 40000 80000 30000 30000 30000 30000 30000 30000 30000 30000 30000 30000 30000 30000 30000 30000 30000 30000 30000 30000 2000 40000 4000 3000 2000 4000 4000 3000 2000 4000 3000 2000 4000 3000 2000 4000 3000 3000 2000 4000 3000 3000 2000 4000 3000 3000 2000 4000 3000 2000 4000 3000 2000 2000 9000 4000 3000 3000 4000 3000 4000 3000 2000 4000 3000 3000 2000 2000 <td< td=""><td>2-Methylnaphthalene</td><td></td><td></td><td></td><td></td><td>280 U</td><td>510 UD</td><td>150 JD</td><td>2800</td><td>360</td><td>240 U</td><td>470 UD</td><td>260 U</td><td>260 U</td><td>1200 JD</td><td>180 JD</td><td>440 UD</td><td>220 U</td><td>450 UD</td></td<>	2-Methylnaphthalene					280 U	510 UD	150 JD	2800	360	240 U	470 UD	260 U	260 U	1200 JD	180 JD	440 UD	220 U	450 UD
2-Nicospine	2-Methylphenol	330	330	100000		230 U	420 UD	460 UD	200 U	210 U	200 U	390 UD	210 U	220 U	1900 UD	440 UD	360 UD	180 U	380 UD
2-Nicophend 5000 980 UD	2-Nitroaniline					230 U	420 UD	460 UD	200 U	210 U	200 U	390 UD	210 U	220 U	1900 UD	440 UD	360 UD	180 U	380 UD
3&4-Maphenol 330 100000 330 u 010 U 640 U 200 U 300 U 200 U 300 U 200 U	2-Nitrophenol					500 U	910 UD	980 UD	440 U	450 U	440 U	840 UD	460 U	480 U	4000 UD	940 UD	790 UD	390 U	810 UD
3.3-Dichombenzidine 23.0 400 UD 400 UD 200 U 200 U 390 UD 210 U 200 U 900 UD 440 UD 300 UD 800 UD 4.6 Dimitro-2-methylphenol 230 U 420 UD 400 UD 500 U 500 U 500 U 500 U 400 UD 400 UD 900 UD UD 400 UD	3&4-Methylphenol	330	330	100000		330 U	610 UD	660 UD	290 U	300 U	290 U	560 UD	310 U	320 U	2700 UD	630 UD	520 UD	260 U	540 UD
3.Niconalinie 23.0 40.000 50.00 390.00 390.00 20.0 40.000 40.000 300.00 800.00 4.Bronnophenyl phenyl eher 230.0 420.00 400.00 100.00 500.00 300.00 100.00 400.00 400.00 300.00 400.00 400.00 300.00 400.00 400.00 300.00 400.00 400.00 300.00 400.00 400.00 300.00 400.00 300.00 400.00 300.00 400.00 400.00 300.00 400.00 300.00 400.00 300.00 400.00 300.00 400.00 300.00 400.00 300.00 400.00 300.00 400.00 300.00 400.00 300.00 400.00 300.00 400.00 300.00 400.00 300.00 400.00 300.00 400.00 300.00 400.00 300.00 400.00 300.00 400.00 300.00 400.00 300.00 400.00 400.00 300.00 400.00 400.00 400.00 400.00 400.00 400.00 400.00 <	3,3'-Dichlorobenzidine					230 U	420 UD	460 UD	200 U	210 U	200 U	390 UD	210 U	220 U	1900 UD	440 UD	360 UD	180 U	380 UD
4.6-Dianto-2-methylptenol 620 100 UD 100 UD 120 UD 50 UD 50 UD 50 UD 500 U 400 UD 100 UD 500 UD 400 UD 600 UD <td>3-Nitroaniline</td> <td></td> <td></td> <td></td> <td></td> <td>230 U</td> <td>420 UD</td> <td>460 UD</td> <td>200 U</td> <td>210 U</td> <td>200 U</td> <td>390 UD</td> <td>210 U</td> <td>220 U</td> <td>1900 UD</td> <td>440 UD</td> <td>360 UD</td> <td>180 U</td> <td>380 UD</td>	3-Nitroaniline					230 U	420 UD	460 UD	200 U	210 U	200 U	390 UD	210 U	220 U	1900 UD	440 UD	360 UD	180 U	380 UD
4-Bromopheny pheny theny 230 U 420 UD 460 UD 200 U 390 UD 210 U 220 U 900 UD 440 UD 360 UD 380 UD 4-Chloro3-methylphenol 230 U 420 UD 460 UD 200 U 200 U 390 UD 210 U 220 U 1900 UD 440 UD 360 UD 380 UD 4-Chloroaninto 230 U 420 UD 460 UD 200 U 200 U 390 UD 210 U 220 U 1900 UD 440 UD 360 UD 180 U 380 UD 4-Nitroaninto 230 U 460 UD 200 U 210 U 230 U 300 UD 310 UD 100 UD 440 UD 300 UD 300 UD 400 UD 300 UD 400 U	4,6-Dinitro-2-methylphenol					600 U	1100 UD	1200 UD	530 U	540 U	530 U	1000 UD	550 U	580 U	4900 UD	1100 UD	950 UD	470 U	980 UD
4-Chlorob-3-methylphenol 230 U 420 U 460 UD 200 U 210 U 200 U 390 UD 210 U 220 U 1900 UD 440 UD 360 UD 180 U 380 UD 4-Chlorophenyl phenyl ether 230 U 420 U 460 UD 200 U 210 U 200 U 390 UD 210 U 220 U 1900 UD 440 UD 360 UD 180 U 380 UD 4-Nitrophenol 230 U 420 UD 460 UD 200 U 200 U 390 UD 210 U 220 U 190 UD 440 UD 360 UD 380 UD 4-Nitrophenol 300 U 300 UD 300 UD 100 UD 100 U 100 U 430 UD 360 UD 380 UD Accenaphihylene 100000 100000 100000 100000 10000 300 UD 360 UD 170 U 160 U 100 U 100 U 230 UD 360 UD	4-Bromophenyl phenyl ether					230 U	420 UD	460 UD	200 U	210 U	200 U	390 UD	210 U	220 U	1900 UD	440 UD	360 UD	180 U	380 UD
4-Chloroantline 230 U 420 UD 460 UD 200 U 200 U 390 UD 210 U 220 U 1900 UD 440 UD 300 UD 380 UD 4-Chlorophenyl phenyl ether 230 U 420 UD 460 UD 200 U 210 U 390 UD 210 U 220 U 1900 UD 440 UD 360 UD 180 U 380 UD 4-Nitroantline 230 U 420 UD 640 UD 200 U 290 U 280 U 500 UD 310 UD 240 UD 500 UD 310 UD 240 UD 300 UD 400 UD 300 UD 400 UD 500 UD 410 UD 300 UD 400 UD 300	4-Chloro-3-methylphenol					230 U	420 UD	460 UD	200 U	210 U	200 U	390 UD	210 U	220 U	1900 UD	440 UD	360 UD	180 U	380 UD
4-Chlorophenyl etheryl ethery 230 U 420 UD 460 UD 200 U 210 U 200 U 400 U 300 UD Accaphenone 230 U 400 U 360 UD 460 U 200 U 200 U 300 UD 400 U 360 UD 360 UD Actaphenone 230 U 400 U 360 UD 400 U 300 UD 360 UD 300 UD 360 UD </td <td>4-Chloroaniline</td> <td></td> <td></td> <td></td> <td></td> <td>230 U</td> <td>420 UD</td> <td>460 UD</td> <td>200 U</td> <td>210 U</td> <td>200 U</td> <td>390 UD</td> <td>210 U</td> <td>220 U</td> <td>1900 UD</td> <td>440 UD</td> <td>360 UD</td> <td>180 U</td> <td>380 UD</td>	4-Chloroaniline					230 U	420 UD	460 UD	200 U	210 U	200 U	390 UD	210 U	220 U	1900 UD	440 UD	360 UD	180 U	380 UD
4-Nitroaniline 230 U 420 UD 460 UD 200 U 210 U 220 U 900 UD 440 UD 360 UD 360 UD 400 UD 360 UD 400 UD 360 UD 400 UD 300 UD 300 UD 300 UD 300 UD 400 UD 300 UD 300 UD 300 UD 300 UD 400 UD 300 UD 300 UD 300 UD 400 UD 400 UD 300 UD 400 UD 300 UD 400 UD 400 UD 400 UD 300 UD 400 UD 300 UD 400 UD 400 UD 300 UD 400 UD 300 UD 400 UD 300 UD 400 UD 300 UD 400 UD 400 UD 400 UD 300 UD 400 UD 400 UD 300 UD 400 UD <td< td=""><td>4-Chlorophenyl phenyl ether</td><td></td><td></td><td></td><td></td><td>230 U</td><td>420 UD</td><td>460 UD</td><td>200 U</td><td>210 U</td><td>200 U</td><td>390 UD</td><td>210 U</td><td>220 U</td><td>1900 UD</td><td>440 UD</td><td>360 UD</td><td>180 U</td><td>380 UD</td></td<>	4-Chlorophenyl phenyl ether					230 U	420 UD	460 UD	200 U	210 U	200 U	390 UD	210 U	220 U	1900 UD	440 UD	360 UD	180 U	380 UD
4-Nitrophenol320U590 UD640 UD290 U290 U280 U550 UD300 U310 U2600 UD610 UD510 UD250 UD330 UDAcenaphthylene1000098000100000100000190 U220 U310 UD160 U170 U160 U310 UD170 U180 U450 JD100 JD100 UD300 UDAcenaphtylene230 U420 UD460 UD200 U210 U200 U210 U210 U450 JD100 JD690 UD480 UD380 UDAntrazice100 UD140 U240 UD800 U120 U120 U130 UD130 U150 UD150 UD50 UD380 UDAtrazice100 UD140 U50 UD600 UD270 U280 U150 UD580 UD480 UD240 U380 UDBenzolajantracene100010001000100 U770 U770 D160 U170 U160 U270 U280 U280 U280 U290 UD180 U880 UD180 U830 UDBenzolajhyrene100010001000100010001000100 U370 D160 U170 U160 U270 U280 U180 U180 U380 UD180 U380 UD <td>4-Nitroaniline</td> <td></td> <td></td> <td></td> <td></td> <td>230 U</td> <td>420 UD</td> <td>460 UD</td> <td>200 U</td> <td>210 U</td> <td>200 U</td> <td>390 UD</td> <td>210 U</td> <td>220 U</td> <td>1900 UD</td> <td>440 UD</td> <td>360 UD</td> <td>180 U</td> <td>380 UD</td>	4-Nitroaniline					230 U	420 UD	460 UD	200 U	210 U	200 U	390 UD	210 U	220 U	1900 UD	440 UD	360 UD	180 U	380 UD
Accanaphthene 20000 98000 100000 190 U 340 UD 310 JD 160 U 170 U 180 U 2300 D 360 D 290 UD 140 U 300 UD Accanaphthylene 100000 100000 100000 100000 100000 210 U 230 UD 180 U 360 UD 180 U 360 UD 360 UD 360 UD 360 UD Accaphthylene 230 U 460 UD 360 UD 160 U 160 U 160 U 310 UD 170 U 180 U 280 UD 460 UD 360 UD Anthracene 100000 1000000 100000 100000 10000 360 UD 360 UD 270 U 280 U 270 U 280 U 280 UD 280 UD <td>4-Nitrophenol</td> <td></td> <td></td> <td></td> <td></td> <td>320 U</td> <td>590 UD</td> <td>640 UD</td> <td>290 U</td> <td>290 U</td> <td>280 U</td> <td>550 UD</td> <td>300 U</td> <td>310 U</td> <td>2600 UD</td> <td>610 UD</td> <td>510 UD</td> <td>250 U</td> <td>530 UD</td>	4-Nitrophenol					320 U	590 UD	640 UD	290 U	290 U	280 U	550 UD	300 U	310 U	2600 UD	610 UD	510 UD	250 U	530 UD
Accamp I00000 I07000 I00000 I0000 I00000 I0000 I0000 I0000	Acenaphthene	20000	98000	100000		190 U	340 UD	310 JD	160 U	170 U	160 U	310 UD	170 U	180 U	2300 D	360 D	290 UD	140 U	300 UD
Accord hereine230 U420 UD460 UD200 U210 U200 U390 UD210 U220 U1900 UD440 UD360 UD180 U380 UDAntracene100000100000100000140 U240 UD800 D120 U120 U120 U89 ID130 U130 U600 D1000 D69 JD110 U230 UDAtrazine190 U340 UD600 UD270 U280 U220 UD280 U280 U	Acenaphthylene	100000	107000	100000		190 U	220 JD	360 UD	160 U	170 U	160 U	310 UD	170 U	180 U	450 JD	100 JD	290 UD	140 U	300 UD
Anthracene100000100000010000001000000100000010000010000010000069 JD110 U230 UDAtrazine190 U340 UD360 UD160 U170 U160 U310 UD170 U180 U1500 UD350 UD290 UD240 UD300 UDBenzaldehyde310 U560 UD270 U280 U270 U220 UD520 UD280 U250 UD580 UD480 UD240 U200 UDBenzaldehyde310 UD560 UD120 U570 U280 U250 UD580 UD480 UD240 U200 UDBenzalghyrene10001000100010001000190 U720 U970 D160 U170 U160 U250 D180 U410 D760 D180 UD89 JD300 UDBenzalgh,ijperylene1000100000100000100000100000100000180 U380 D570 D160 U53 J160 U280 U240 UD280 U230 UDBenzalgh,ijperylene1000100000100000100000100000100000100000100000160 U380 D570 D160 U53 J160 U280 U240 UD280 U230 UDBenzalgh,ijperylene1000100000100000100000100000100000100000160 UD380 UD380 UD380 UD380 UD380 UD	Acetophenone					230 U	420 UD	460 UD	200 U	210 U	200 U	390 UD	210 U	220 U	1900 UD	440 UD	360 UD	180 U	380 UD
Atrazine190 U 340 UD 360 UD 160 U 170 U 160 U 170 U 180 U 1500 UD 350 UD 290 UD 140 U 300 UDBenzaldehyde 310 U 560 UD 600 UD 270 U 280 U 270 U 520 UD 280 U 290 UD 580 UD 480 UD 240 U 500 UDBenzalqanthracene100010001000100010001000100010001000 720 D 970 D 160 U 54 U 270 U 250 U 880 U 480 UD	Anthracene	100000	1000000	100000		140 U	240 JD	800 D	120 U	120 U	120 U	89 JD	130 U	130 U	6000 D	1000 D	69 JD	110 U	230 UD
Benzaldehyde 310 U 560 UD 600 UD 270 U 280 UD 280 UD 280 UD 580 UD 480 UD 240 U 500 UD Benza[a]anthracene 1000 1000 1000 1000 1000 140 U 670 D 1200 D 120 U 54 J 120 U 250 D 180 140 7600 D 1600 D 180 JD 75 J 230 UD Benza[a]pyrene 1000 22000 1000 1000 1000 1000 140 U 860 D 1100 D 120 U 67 J 120 U 350 D 260 180 1500 D 180 JD 53 J 00 UD 350 UD 480 D 100 D 97 JD 160 U 35 J 160 U 350 J 140 J 96 J 410 D 97 D 100 D 100 U 30 UD 480 D 100 U 350 UD 160 U 120 U 120 U 120 U 120 JD 84 J 70 J 300 D 70 D 100 D 100 JD 100 JD 100 JD 100 D 100 D 100 D 100 D 100 JD 100 D 100 JD	Atrazine					190 U	340 UD	360 UD	160 U	170 U	160 U	310 UD	170 U	180 U	1500 UD	350 UD	290 UD	140 U	300 UD
Benzo[a]anthracene 1000 1000 1000 1000 140 U 670 D 120 U 54 J 120 U 250 D 180 140 7600 D 160 U 180 JD 75 J 230 UD Benzo[a]pyrene 1000 22000 1000 1000 190 U 72 D 970 D 160 U 170 U 270 JD 200 150 J 6900 D 150 D 180 JD 89 J 300 UD Benzo[b]fluoranthene 1000 1700 10000 100000 100000 100000 100000 100000 190 U 380 D 570 D 160 U 53 J 160 U 280 JD 140 J 96 J 4100 D 970 D 160 JD 59 J 300 UD Benzo[k]fluoranthene 800 1700 3900 140 U 320 D 480 D 120 U 63 J 120 U 120 JD 84 J 70 J 300 D 740 D 86 JD 93 J 230 UD Bis(2-chlorethxy)methane 250 U 460 UD 200 U 230 U 230 U 230 UD 160 U 300 UD 160 U	Benzaldehyde					310 U	560 UD	600 UD	270 U	280 U	270 U	520 UD	280 U	290 U	2500 UD	580 UD	480 UD	240 U	500 UD
Benzo[a]pyrene 1000 22000 1000 190 U 720 D 970 D 160 U 170 U 160 U 270 JD 200 150 J 6900 D 150 D 180 JD 89 J 300 UD Benzo[b]fluoranthene 1000 1700 1000 100000 1000000 1000000 1000000 1000000 1000000 190 U 380 D 570 D 160 U 53 J 160 U 280 JD 140 J 96 J 4100 D 970 D 160 JD 59 J 300 UD Benzo[k]fluoranthene 800 1700 3900 140 U 320 D 480 D 120 U 63 J 120 U 120 JD 84 J 70 J 3300 D 740 D 86 JD 93 J 230 UD Bis(2-chloroethoxy)methane 250 U 460 UD 490 UD 220 U 230 U 230 U 240 U 2000 UD 470 UD 390 UD 160 U 340 UD Bis(2-chloroethyl) ether 230 U 420 UD 180 U 350 UD 190 U 200 U 300 UD 300 UD <t< td=""><td>Benzo[a]anthracene</td><td>1000</td><td>1000</td><td>1000</td><td></td><td>140 U</td><td>670 D</td><td>1200 D</td><td>120 U</td><td>54 J</td><td>120 U</td><td>250 D</td><td>180</td><td>140</td><td>7600 D</td><td>1600 D</td><td>180 JD</td><td>75 J</td><td>230 UD</td></t<>	Benzo[a]anthracene	1000	1000	1000		140 U	670 D	1200 D	120 U	54 J	120 U	250 D	180	140	7600 D	1600 D	180 JD	75 J	230 UD
Benzoly 1000 1700 1000 1000 140 U 860 D 1100 D 120 U 67 J 120 U 350 D 260 180 8000 D 1900 D 210 JD 65 J 230 UD Benzoly,hiperylene 100000 1000000 1000000 1000000 1000000 100000 100000 100000 100000 59 J 300 UD 410 UD 320 D 480 D 120 U 63 J 120 U 230 U 240 UD 200 UD 470 UD 390 UD 390 UD 410 UD 410 UD 180 U 190 UD 210 U 230 U 420 UD 200 U 400 UD 190 UD 200 U 390 UD 390 UD 300 UD 410 UD 410 UD 180 U 190 UD 210 U 200 U 200 U 200 U 200 U 100 U 300 UD 300 UD <td< td=""><td>Benzo[a]pyrene</td><td>1000</td><td>22000</td><td>1000</td><td></td><td>190 U</td><td>720 D</td><td>970 D</td><td>160 U</td><td>170 U</td><td>160 U</td><td>270 JD</td><td>200</td><td>150 J</td><td>6900 D</td><td>1500 D</td><td>180 JD</td><td>89 J</td><td>300 UD</td></td<>	Benzo[a]pyrene	1000	22000	1000		190 U	720 D	970 D	160 U	170 U	160 U	270 JD	200	150 J	6900 D	1500 D	180 JD	89 J	300 UD
Benzolg,h,ilperylene 100000 1000000 100000 100000 100000 100000 100000 100000 100000 100000 100000 100000 300 UD 410 UD 300 UD 480 U 120 U 63 J 120 U 120 U 220 U 230 U 230 UD 410 UD 300 UD <t< td=""><td>Benzo[b]fluoranthene</td><td>1000</td><td>1700</td><td>1000</td><td></td><td>140 U</td><td>860 D</td><td>1100 D</td><td>120 U</td><td>67 J</td><td>120 U</td><td>350 D</td><td>260</td><td>180</td><td>8000 D</td><td>1900 D</td><td>210 JD</td><td>65 J</td><td>230 UD</td></t<>	Benzo[b]fluoranthene	1000	1700	1000		140 U	860 D	1100 D	120 U	67 J	120 U	350 D	260	180	8000 D	1900 D	210 JD	65 J	230 UD
Benzo[k]fluoranthene80017003900140 U $320 D$ $480 D$ $120 U$ $63 J$ $120 U$ $120 JD$ $84 J$ $70 J$ $3300 D$ $740 D$ $86 JD$ $93 J$ $230 UD$ Bis(2-chloroethoxy)methane $250 U$ $460 UD$ $490 UD$ $220 U$ $230 U$ $220 U$ $230 U$ $240 U$ $2000 UD$ $470 UD$ $390 UD$ $190 U$ $410 UD$ Bis(2-chloroethy) ether $210 U$ $380 UD$ $410 UD$ $180 U$ $190 U$ $180 U$ $390 UD$ $200 U$ $1700 UD$ $390 UD$ $330 UD$ $160 U$ $340 UD$ Bis(2-chloroethy) ether $230 UV$ $420 UD$ $460 UD$ $200 U$ $210 U$ $200 U$ $210 U$ $200 U$ $390 UD$ $320 D$ $360 UD$ $180 U$ $380 UD$ Bis(2-chlylexyl) phthalate $230 UV$ $420 UD$ $460 UD$ $200 U$ $210 U$ $200 U$ $210 U$ $220 U$ $5000 D$ $3200 D$ $360 UD$ $180 U$ $380 UD$ Butylbenzyl phthalate $230 U$ $420 UD$ $460 UD$ $200 U$ $210 U$ $200 U$ $210 U$ $220 U$ $8600 D$ $3700 D$ $360 UD$ $180 U$ $380 UD$ Caprolactam $230 U$ $420 UD$ $460 UD$ $200 U$ $210 U$ $200 U$ $210 U$ $220 U$ $1900 UD$ $440 UD$ $360 UD$ $180 U$ $380 UD$ Carbazo	Benzo[g,h,i]perylene	100000	1000000	100000		190 U	380 D	570 D	160 U	53 J	160 U	280 JD	140 J	96 J	4100 D	970 D	160 JD	59 J	300 UD
Bis(2-chloroethoxy)methane 250 U 460 UD 490 UD 220 U 230 U 230 U 240 U 2000 UD 470 UD 390 UD 190 U 410 UD Bis(2-chloroethyl) ether 210 U 380 UD 410 UD 180 U 190 U 200 U 1700 UD 390 UD 330 UD 160 U 340 UD Bis(2-ethylhexyl) pthalate 230 U 420 UD 460 UD 200 U 210 U 390 UD 210 U 3200 D 360 UD 180 U 380 UD Bis(2-ethylhexyl) pthalate 230 U 420 UD 460 UD 200 U 210 U 200 U 210 U 220 U 5000 D 3200 D 360 UD 180 U 380 UD Butylbenzyl pthalate 230 U 420 UD 460 UD 200 U 210 U 200 U 210 U 220 U 8600 D 3700 D 360 UD 180 U 380 UD Caprolactam 230 U 420 UD 210 U 200 U	Benzo[k]fluoranthene	800	1700	3900		140 U	320 D	480 D	120 U	63 J	120 U	120 JD	84 J	70 J	3300 D	740 D	86 JD	93 J	230 UD
Bis(2-chloroethyl) ether 210 U 380 UD 410 UD 180 U 190 U 190 U 200 U 1700 UD 390 UD 330 UD 160 U 340 UD Bis(2-ethylhexyl) phthalate 230 UV 420 UD 460 UD 200 U 210 U 200 U 390 UD 3200 D 360 UD 180 U 380 UD Butylbenzyl phthalate 230 U 420 UD 460 UD 200 U 210 U 220 U 5000 D 3200 D 360 UD 180 U 380 UD Butylbenzyl phthalate 230 U 420 UD 460 UD 200 U 210 U 220 U 8600 D 3700 D 360 UD 180 U 380 UD Caprolactam 230 U 420 UD 460 UD 200 U 210 U 200 U 210 U 220 U 1900 UD 440 UD 360 UD 180 U 380 UD Caprolactam 230 U 420 UD 210 U 200 U 390 UD 210 U 220 U 190	Bis(2-chloroethoxy)methane					250 U	460 UD	490 UD	220 U	230 U	220 U	420 UD	230 U	240 U	2000 UD	470 UD	390 UD	190 U	410 UD
Bis(2-ethylhexyl) phthalate 230 UV 420 UD 460 UD 200 U 210 U 200 U 200 U 360 UD 180 U 380 UD Butylbenzyl phthalate 230 U 420 UD 460 UD 200 U 210 U 200 U 390 UD 210 U 220 U 5000 D 3200 D 360 UD 180 U 380 UD Butylbenzyl phthalate 230 U 420 UD 460 UD 200 U 210 U 200 U 390 UD 210 U 220 U 8600 D 3700 D 360 UD 180 U 380 UD Caprolactam 230 U 420 UD 460 UD 200 U 210 U 200 U 210 U 220 U 1900 UD 440 UD 360 UD 180 U 380 UD Carbazole 230 U 420 UD 210 U 200 U 390 UD 210 U 220 U 1900 UD 440 UD 360 UD 180 U 380 UD Carbazole 230 U 420 UD 210 U 200 U 390 UD 210 U	Bis(2-chloroethyl) ether					210 U	380 UD	410 UD	180 U	190 U	180 U	350 UD	190 U	200 U	1700 UD	390 UD	330 UD	160 U	340 UD
Butylbenzyl phthalate 230 U 420 UD 460 UD 200 U 210 U 200 U 210 U 200 U <td>Bis(2-ethylhexyl) phthalate</td> <td></td> <td></td> <td></td> <td></td> <td>230 UV</td> <td>420 UD</td> <td>460 UD</td> <td>200 U</td> <td>210 U</td> <td>200 U</td> <td>390 UD</td> <td>210 U</td> <td>220 U</td> <td>5000 D</td> <td>3200 D</td> <td>360 UD</td> <td>180 U</td> <td>380 UD</td>	Bis(2-ethylhexyl) phthalate					230 UV	420 UD	460 UD	200 U	210 U	200 U	390 UD	210 U	220 U	5000 D	3200 D	360 UD	180 U	380 UD
Caprolactam 230 U 420 UD 460 UD 200 U 210 U 200 U 210 U 200 U 210 U 200 U 210 U 200 U 200 U 200 U 200 U 210 U 200 U 200 U 200 U 200 U 210 U 200 U <	Butylbenzyl phthalate					230 U	420 UD	460 UD	200 U	210 U	200 U	390 UD	210 U	220 U	8600 D	3700 D	360 UD	180 U	380 UD
Carbazole 230 U 420 UD 210 JD 200 U 210 U 200 U 390 UD 210 U 220 U 1700 JD 290 JD 360 UD 180 U 380 UD	Caprolactam					230 U	420 UD	460 UD	200 U	210 U	200 U	390 UD	210 U	220 U	1900 UD	440 UD	360 UD	180 U	380 UD
	Carbazole					230 U	420 UD	210 JD	200 U	210 U	200 U	390 UD	210 U	220 U	1700 JD	290 JD	360 UD	180 U	380 UD

	NYSDEC	NYSDEC	NYSDEC															
	Part 375	Part 375	Part 375	Sample Designation:	RW-6	RW-7	RW-8	RW-9	RW-9	RW-9	RW-10	RW-11	RW-11 DUP	RW-12	RW-12	RW-13	RW-14	RW-15
Parameter	Unrestricted	Protection of	Restricted	Sample Date:	4/9/2014	4/8/2014	4/16/2014	4/16/2014	4/16/2014	4/16/2014	4/9/2014	4/16/2014	4/16/2014	4/10/2014	4/10/2014	4/10/2014	4/14/2014	4/11/2014
(Concentrations in µg/kg)	Use	Groundwater	Residential	Sample Depth (ft bls):	15 - 17	10 - 12	5 - 7	1.5 - 3	4 - 6	9 - 10	6 - 8	4 - 6	4 - 6	5 - 7	7 - 8	5 - 7	3 - 5	1 - 3
																_		
Chrysene	1000	1000	3900		140 U	700 D	1100 D	120 U	66 J	120 U	280 D	190	150	7600 D	1600 D	190 JD	96 J	98 JD
Dibenzo[a,h]anthracene	330	1000000	330		140 U	250 UD	120 JD	120 U	57 J	120 U	230 UD	130 U	130 U	1100 D	240 JD	220 UD	110 U	230 UD
Dibenzofuran	7000	210000	59000		230 U	420 UD	220 JD	200 U	210 U	200 U	390 UD	210 U	220 U	1700 JD	270 JD	360 UD	180 U	380 UD
Diethyl phthalate					230 U	420 UD	460 UD	200 U	210 U	200 U	390 UD	210 U	220 U	1900 UD	440 UD	360 UD	180 U	380 UD
Dimethyl phthalate					230 U	420 UD	460 UD	200 U	210 U	200 U	390 UD	210 U	220 U	1900 UD	440 UD	360 UD	180 U	380 UD
Di-n-butyl phthalate					230 U	420 UD	460 UD	200 U	210 U	200 U	390 UD	210 U	220 U	1900 UD	260 JD	170 JD	180 U	380 UD
Di-n-octyl phthalate					230 U	420 UD	460 UD	200 U	210 U	200 U	390 UD	210 U	220 U	1900 UD	440 UD	360 UD	180 U	380 UD
Fluoranthene	100000	1000000	100000		140 U	1600 D	2700 D	120 U	50 J	120 U	550 D	260	240	17000 D	3500 D	390 D	110	96 JD
Fluorene	30000	386000	100000		230 U	420 UD	460 D	200 U	210 U	200 U	390 UD	210 U	220 U	2300 D	320 JD	360 UD	180 U	380 UD
Hexachlorobenzene	330	3200	1200		140 U	250 UD	270 UD	120 U	120 U	120 U	230 UD	130 U	130 U	1100 UD	260 UD	220 UD	110 U	230 UD
Hexachlorobutadiene					230 U	420 UD	460 UD	200 U	210 U	200 U	390 UD	210 U	220 U	1900 UD	440 UD	360 UD	180 U	380 UD
Hexachlorocyclopentadiene					670 U	1200 UD	1300 UD	590 U	600 U	580 U	1100 UD	610 U	630 U	5400 UD	1200 UD	1000 UD	520 U	1100 UD
Hexachloroethane					190 U	340 UD	360 UD	160 U	170 U	160 U	310 UD	170 U	180 U	1500 UD	350 UD	290 UD	140 U	300 UD
Indeno[1,2,3-cd]pyrene	500	8200	500		190 U	340 D	620 D	160 U	59 J	160 U	220 JD	140 J	100 J	4600 D	1000 D	140 JD	57 J	300 UD
Isophorone					210 U	380 UD	410 UD	180 U	190 U	180 U	350 UD	190 U	200 U	1700 UD	390 UD	330 UD	160 U	340 UD
Naphthalene	12000	12000	100000		230 U	420 UD	150 JD	840	180 J	200 U	390 UD	210 U	220 U	2600 D	440 D	360 UD	180 U	380 UD
Nitrobenzene					210 U	380 UD	410 UD	180 U	190 U	180 U	350 UD	190 U	200 U	1700 UD	390 UD	330 UD	160 U	340 UD
n-Nitrosodi-n-propylamine					230 U	420 UD	460 UD	200 U	210 U	200 U	390 UD	210 U	220 U	1900 UD	440 UD	360 UD	180 U	380 UD
n-Nitrosodiphenylamine					190 U	340 UD	360 UD	160 U	170 U	160 U	310 UD	170 U	180 U	1500 UD	350 UD	290 UD	140 U	300 UD
Pentachlorophenol	800	800	6700		190 U	340 UD	360 UD	160 U	170 U	160 U	310 UD	170 U	180 U	1500 UD	350 UD	290 UD	140 U	300 UD
Phenanthrene	100000	1000000	100000		140 U	810 D	2400 D	44 J	120 U	120 U	350 D	100 J	110 J	17000 D	2900 D	260 D	53 J	230 UD
Phenol	330	330	100000		230 U	420 UD	460 UD	200 U	210 U	200 U	390 UD	210 U	220 U	1900 UD	440 UD	360 UD	180 U	380 UD
Pyrene	100000	1000000	100000		140 U	1300 D	2300 D	41 J	46 J	120 U	460 D	240	200	14000 D	2900 D	320 D	110	91 JD

J - Estimated value

U - Indicates that the compound was analyzed for but not detected

D - a secondary analysis after dilution due to exceedance

of the calibration range in the original sample.

DUP - Duplicate sample

 $\mu g/kg$ - Micrograms per kilogram

ft bls - Feet below land surface

NYSDEC - New York State Department of Environmental Conservation

-- No NYSDEC Part 375 Standards available

Bold data indicates that parameter was detected above the NYSDEC Part 375 Unrestricted Use Standards

Shaded data indicates that parameter was detected above the NYSDEC Part 375 Protection of Groundwater Standards

Boxed data indicates that parameter was detected above the NYSDEC Part 375 Restricted Use Standards

V - Value altered or qualifier added during data validation

UJ - Analyte was not detected. The associated reported quantitation limit is an estimate

R - Sample results rejected by validator

	NYSDEC	NYSDEC	NYSDEC								
	Part 375	Part 375	Part 375	Sample Designation:	RW-15 DUP	RW-16	RW-17	RW-17	RW-18	RW-19	RW-20
Parameter	Unrestricted	Protection of	Restricted	Sample Date:	4/11/2014	4/14/2014	4/11/2014	4/11/2014	4/15/2014	4/15/2014	4/15/2014
(Concentrations in µg/kg)	Use	Groundwater	Residential	Sample Depth (ft bls):	1 - 3	3 - 5	0 - 2	2 - 4	5 - 6	5.5 - 7.5	10 - 12
1,1'-Biphenyl					860 UD	450 U	430 U	4500 UD	470 U	430 U	470 U
1,2,4,5-Tetrachlorobenzene					380 UD	200 U	190 U	2000 UD	200 U	190 U	200 U
1-Methylnaphthalene					NA						
2,2'-oxybis (1-chloropropane)					450 UD	240 U	220 U	2400 UD	240 U	220 U	250 U
2,3,4,6-Tetrachlorophenol					380 UD	200 U	190 U	2000 UD	200 U	190 U	200 U
2,4,5-Trichlorophenol					380 UD	200 U	190 U	2000 UD	200 U	190 U	200 U
2,4,6-Trichlorophenol					220 UD	120 U	110 U	1200 UD	120 U	110 U	120 U
2,4-Dichlorophenol					340 UD	180 U	170 U	1800 UD	180 U	170 U	180 U
2,4-Dimethylphenol					380 UD	200 U	190 U	2000 UD	200 U	190 U	200 U
2,4-Dinitrophenol					1800 UD	960 U	900 U	9500 UD	980 U	900 U	990 U
2,4-Dinitrotoluene					380 UD	200 U	190 U	2000 UD	200 U	190 U	200 U
2,6-Dinitrotoluene					380 UD	200 U	190 U	2000 UD	200 U	190 U	200 U
2-Chloronaphthalene					380 UD	200 U	190 U	2000 UD	200 U	190 U	200 U
2-Chlorophenol					380 UD	200 U	190 U	2000 UD	200 U	190 U	200 U
2-Methylnaphthalene					450 UD	240 U	220 U	2400 UD	240 U	220 U	250 U
2-Methylphenol	330	330	100000		380 UD	200 U	190 U	2000 UD	200 U	190 U	200 U
2-Nitroaniline					380 UD	200 U	190 U	2000 UD	200 U	190 U	200 U
2-Nitrophenol					810 UD	430 U	400 U	4300 UD	440 U	400 U	440 U
3&4-Methylphenol	330	330	100000		540 UD	290 U	270 U	2900 UD	290 U	270 U	300 U
3,3'-Dichlorobenzidine					380 UD	200 U	190 U	2000 UD	200 U	190 U	200 U
3-Nitroaniline					380 UD	200 U	190 U	2000 UD	200 U	190 U	200 U
4,6-Dinitro-2-methylphenol					980 UD	520 U	490 U	5200 UD	530 U	490 U	530 U
4-Bromophenyl phenyl ether					380 UD	200 U	190 U	2000 UD	200 U	190 U	200 U
4-Chloro-3-methylphenol					380 UD	200 U	190 U	2000 UD	200 U	190 U	200 U
4-Chloroaniline					380 UD	200 U	190 U	2000 UD	200 U	190 U	200 U
4-Chlorophenyl phenyl ether					380 UD	200 U	190 U	2000 UD	200 U	190 U	200 U
4-Nitroaniline					380 UD	200 U	190 U	2000 UD	200 U	190 U	200 U
4-Nitrophenol					520 UD	280 U	260 U	2800 UD	290 U	260 U	290 U
Acenaphthene	20000	98000	100000		300 UD	160 U	150 U	1600 UD	160 U	150 U	160 U
Acenaphthylene	100000	107000	100000		300 UD	160 U	77 J	1600 UD	160 U	150 U	160 U
Acetophenone					380 UD	200 U	190 U	2000 UD	200 U	190 U	200 U
Anthracene	100000	1000000	100000		220 UD	120	66 J	1200 UD	120 U	110 U	120 U
Atrazine					300 UD	160 U	150 U	1600 UD	160 U	150 U	160 U
Benzaldehyde					500 UD	260 U	170 J	2600 UD	270 U	250 U	270 U
Benzo[a]anthracene	1000	1000	1000		220 UD	440	240	1200 UD	120 U	110 U	120 U
Benzo[a]pyrene	1000	22000	1000		300 UD	420	220	1600 UD	160 U	150 U	160 U
Benzo[b]fluoranthene	1000	1700	1000		88 JD	500	340	1200 UD	120 U	110 U	120 U
Benzo[g,h,i]perylene	100000	1000000	100000		300 UD	260	190	1600 UD	160 U	150 U	160 U
Benzo[k]fluoranthene	800	1700	3900		220 UD	250	140	1200 UD	120 U	110 U	120 U
Bis(2-chloroethoxy)methane					400 UD	220 U	200 U	2100 UD	220 U	200 U	220 U
Bis(2-chloroethyl) ether					340 UD	180 U	170 U	1800 UD	180 U	170 U	180 U
Bis(2-ethylhexyl) phthalate					380 UD	200 U	190 U	2000 UD	200 U	190 U	200 U
Butylbenzyl phthalate					380 UD	200 U	190 U	2000 UD	200 U	190 U	200 U
Caprolactam					380 UD	200 U	190 U	2000 UD	200 U	190 U	200 U
Carbazole					380 UD	97 J	53 J	2000 UD	200 U	190 U	200 U

	NYSDEC	NYSDEC	NYSDEC								
	Part 375	Part 375	Part 375	Sample Designation:	RW-15 DUP	RW-16	RW-17	RW-17	RW-18	RW-19	RW-20
Parameter	Unrestricted	Protection of	Restricted	Sample Date:	4/11/2014	4/14/2014	4/11/2014	4/11/2014	4/15/2014	4/15/2014	4/15/2014
(Concentrations in µg/kg)	Use	Groundwater	Residential	Sample Depth (ft bls):	1 - 3	3 - 5	0 - 2	2 - 4	5 - 6	5.5 - 7.5	10 - 12
Chrysene	1000	1000	3900		220 UD	490	270	1200 UD	120 U	110 U	120 U
Dibenzo[a,h]anthracene	330	1000000	330		220 UD	110 J	51 J	1200 UD	120 U	110 U	120 U
Dibenzofuran	7000	210000	59000		380 UD	200 U	190 U	2000 UD	200 U	190 U	200 U
Diethyl phthalate					380 UD	200 U	190 U	2000 UD	200 U	190 U	200 U
Dimethyl phthalate					380 UD	200 U	190 U	2000 UD	200 U	190 U	200 U
Di-n-butyl phthalate					380 UD	200 U	190 U	2000 UD	200 U	190 U	200 U
Di-n-octyl phthalate					380 UD	200 U	190 U	2000 UD	200 U	190 U	200 U
Fluoranthene	100000	1000000	100000		86 JD	890	440	1200 UD	120 U	110 U	120 U
Fluorene	30000	386000	100000		380 UD	200 U	190 U	2000 UD	200 U	190 U	200 U
Hexachlorobenzene	330	3200	1200		220 UD	120 U	110 U	1200 UD	120 U	110 U	120 U
Hexachlorobutadiene					380 UD	200 U	190 U	2000 UD	200 U	190 U	200 U
Hexachlorocyclopentadiene					1100 UD	570 U	540 U	5700 UD	590 U	540 U	590 U
Hexachloroethane					300 UD	160 U	150 U	1600 UD	160 U	150 U	160 U
Indeno[1,2,3-cd]pyrene	500	8200	500		300 UD	290	220	1600 UD	160 U	150 U	160 U
Isophorone					340 UD	180 U	170 U	1800 UD	180 U	170 U	180 U
Naphthalene	12000	12000	100000		380 UD	200 U	190 U	2000 UD	200 U	190 U	200 U
Nitrobenzene					340 UD	180 U	170 U	1800 UD	180 U	170 U	180 U
n-Nitrosodi-n-propylamine					380 UD	200 U	190 U	2000 UD	200 U	190 U	200 U
n-Nitrosodiphenylamine					300 UD	160 U	150 U	1600 UD	160 U	150 U	160 U
Pentachlorophenol	800	800	6700		300 UD	160 U	150 U	1600 UD	160 U	150 U	160 U
Phenanthrene	100000	1000000	100000		220 UD	610	180	1200 UD	120 U	110 U	120 U
Phenol	330	330	100000		380 UD	200 U	190 U	2000 UD	200 U	190 U	200 U
Pyrene	100000	1000000	100000		82 JD	690	370	1200 UD	120 U	110 U	120 U

J - Estimated value

U - Indicates that the compound was analyzed for but not detected

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of the calibration range in the original sample.

DUP - Duplicate sample

 $\mu g/kg$ - Micrograms per kilogram

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	NYSDEC	NYSDEC	NYSDEC																	
	Part 375	Part 375	Part 375	Sample Designation:	GP-1A	GP-1B	GP-2	GP-3	GP-4	GP-5	GP-6	GP-7	GP-8	GP-9	GP-10	GP-11	GP-12	SB-1	SB-2A	SB-2B
Parameter	Unrestricted	Protection of	Restricted	Sample Date:	11/1/2007	11/1/2007	11/7/2007	11/1/2007	11/1/2007	11/2/2007	11/2/2007	11/2/2007	11/5/2007	11/5/2007	11/5/2007	11/5/2007	11/5/2007	11/7/2007	11/7/2007	11/7/2007
(Concentrations in mg/kg)	Use	Groundwater	Residential	Sample Depth (ft bls):	2 - 3	4 - 6	4 - 6	4 - 5.5	3.5 - 5.5	6 - 8	6 - 8	2 - 4	8 - 10	2 - 4	2 - 4	4 - 6	6 - 8	6 - 8	4 - 6	8 - 10
Aluminum					10,600	9,920	12,700	11,700	9,980	12,500	11,900	11,600	12,800	8,450	6,630	14,800	12,700	7,070	11,300	12,000
Antimony					NA															
Arsenic	13	16	16		4.20	10.70	3.76	6.47	5.83	4.35	4.77	4.04	ND	3.89	5.63	ND	ND	3.20	5.58	5.06
Barium	350	820	400		105.0	293.0	96.0	79.7	130.0	92.3	84.8	102.0	162.0	102.0	483.0	296.0	161.0	47.8	80.8	83.2
Beryllium	7.2	47	72		ND	1.56	ND													
Cadmium	2.5	7.5	4.3		ND	1.020	ND	1.54	0.694	ND	ND	1.4	ND							
Calcium					4,820	11,200	3,200	8,200	9,930	2,300	3,530	13,200	1,810	4,010	30,700	7,120	3,450	2,250	2,600	2,730
Chromium	30		180		19.5	32.1	25.2	21.7	19.2	20.2	17.0	14.9	23.0	14.9	16.0	28.7	30.9	16.3	24.0	24.9
Cobalt					6.08	10.10	7.45	6.59	6.88	7.03	7.93	5.24	11.60	5.35	5.60	12.90	12.50	5.22	9.55	8.52
Copper	50	1720	270		24.2	415.0	24.5	17.4	38.4	24.9	33.1	13.8	12.4	31.3	123.0	29.6	30.1	11.8	24.5	23.6
Iron					17,300	54,200	18,800	26,000	18,300	18,500	19,000	14,800	22,400	14,600	12,800	27,100	25,200	14,500	19,100	21,400
Lead	63	450	400		220.0	233.0	46.0	82.1	210.0	109.0	114.0	134.0	8.6	182.0	1730.0	230.0	73.4	6.01	12.60	19.60
Magnesium					5,420	6,400	4,910	4,160	5,150	4,750	4,460	3,850	5,150	4,100	4,050	6,590	6,810	3,070	4,960	4,960
Manganese	1600	2000	2000		253	340	204	260	315	250	242	161	143	257	241	304	171	172	333	648
Mercury	0.18	0.73	0.81		0.0419	0.178	0.0885	0.178	0.300	0.227	0.600	0.350	ND	70.800	0.118	0.133	0.0308	ND	ND	ND
Nickel	30	130	310		13.9	20.7	16.2	12.4	13.2	13.9	12.5	10.2	24.7	10.4	18.4	25.1	27.5	10.8	10.0	15.9
Potassium					2,100	3,270	1,010	1,610	1,450	1,920	2,190	929	8,020	1,550	1,550	5,740	5,810	1,290	2,330	2,340
Selenium	3.9	4	180		ND	1.87	ND	ND	ND	ND	1.65	ND	3.21	ND	ND	2.61	2.53	ND	2.08	ND
Silver	2	8.3	180		160.0	287.0	348.0	425.0	305.0	172.0	270.0	250.0	114.0	95.8	352.0	136.0	91.8	ND	3.15	2.15
Sodium					ND	3.22	ND	ND	ND	ND	411	226	248							
Thallium					NA															
Vanadium					28.6	33.5	33.4	36.0	29.8	34.0	34.4	23.7	40.5	25.4	25.5	47.7	43.7	24.4	34.4	37.1
Zinc	109	2480	10000		143.0	478.0	220.0	76.3	185.0	103.0	72.0	92.7	52.4	114.0	503.0	214.0	89.5	29.6	52.4	47.3

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of the calibration range in the original sample.

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	NYSDEC	NYSDEC	NYSDEC																	
	Part 375	Part 375	Part 375	Sample Designation:	SB-3	SB-4	SB-5	SB-6	SB-7	SB-8	SB-9	SB-10	SB-11	CB2	DW1	RB-1	RB-1	RB-2	RB-2	RB-3
Parameter	Unrestricted	Protection of	Restricted	Sample Date:	11/7/2007	11/6/2007	11/9/2007	11/9/2007	12/5/2007	12/5/2007	12/7/2007	12/7/2007	12/7/2007	4/18/2014	4/18/2014	4/17/2014	4/17/2014	4/17/2014	4/17/2014	4/17/2014
(Concentrations in mg/kg)	Use	Groundwater	Residential	Sample Depth (ft bls):	3 - 4	10 - 14	8 - 10	17 - 19	12 - 16	12 - 14	9 - 11	9 - 11	4 - 6	-	4 - 6	10 - 12	13 - 15	10 - 12	19 - 20	10 - 12
Aluminum					14,200	12,100	9,830	6,100	5,310	6,860	13,200	7,420	9,650	7600	8700	23000	18000	17000	25000	6400
Antimony				_	NA	5.4 U	5.1 U	4.5 U	4.4 U	4.4 U	4.6 U	4.2 U								
Arsenic	13	16	16		21.90	2.75	3.65	2.84	ND	ND	ND	1.58	ND	6.1	5.2	4	2.1	3.4	5.7	2.3
Barium	350	820	400	_	175.0	113.0	70.8	50.5	60.4	61.2	154.0	65.4	124.0	67	150	260	160	150	340	62
Beryllium	7.2	47	72		0.870	ND	0.19 J	0.36 J	0.62	0.54	0.30 J	4.8	0.14 J							
Cadmium	2.5	7.5	4.3		1.13	ND	ND	ND	ND	ND	0.551	ND	ND	1.1 U	0.80 J	0.89 U	0.87 U	0.87 U	0.93 U	0.84 U
Calcium					9,350	2,830	5,630	17,600	28,600	4,360	1,960	10,100	4,120	23000	16000	1800	3800	1600	1800	2400
Chromium	30		180		23.6	23.5	20.4	14.5	15.2	16.2	26.0	18.4	10.5	14	16	44	29	36	48	16
Cobalt					11.50	9.42	6.87	4.09	5.02	5.90	21.90	7.24	9.16	6.5	5.2	14	14	9.6	17	5.1
Copper	50	1720	270		102.0	26.9	23.4	21.3	10.6	19.1	27.2	20.2	18.9	51	48	66	1.9	36	52	14
Iron					45,300	20,700	17,600	14,200	13,000	18,000	25,600	16,200	18,000	16000	14000	36000	28000	30000	52000	12000
Lead	63	450	400		347.00	4.02	51.70	2.73	ND	8.49	25.00	32.40	27.10	55	470	9.7	6.6	11	21	2.5 J
Magnesium					4,390	4,200	5,410	9,860	9,520	5,090	6,050	6,280	3,540	8000	3000	7700	6100	7800	7700	3400
Manganese	1600	2000	2000		702	250	247	242	159	313	1,370	1,050	563	220	140	380	450	330	980	140
Mercury	0.18	0.73	0.81		0.314	ND	0.165	ND	ND	ND	ND	0.038	0.065	0.05 J	0.28	0.09 U	0.08 U	0.07 U	0.08 U	0.08 U
Nickel	30	130	310		23.5	19.0	12.9	9.73	14.0	11.8	22.3	9.73	10.3	12	13	21	24	16	28	10
Potassium					2,160	5,510	1,780	1,990	2,370	2,120	5,180	1,800	2,030	1300	1200	14000	11000	9600	16000	2400
Selenium	3.9	4	180		3.26	ND	2.2 U	2.0 U	0.69 J	1.7 U	0.33 J	1.9 U	1.7 U							
Silver	2	8.3	180		2.52	4.05	1.59	ND	ND	ND	ND	ND	ND	1.1 U	1.0 U	0.89 U	0.87 U	0.87 U	0.93 U	0.84 U
Sodium					324	183	132	213	198	215	358	150	96.1	220	180 J	350	940	380	170 J	520
Thallium					NA	2.2 U	2.0 U	1.8 U	1.7 U	1.7 U	1.9 U	1.7 U								
Vanadium					50.7	34.4	28.8	19.5	22.0	19.3	40.5	26.1	29.5	43	24	62	42	54	66	18
Zinc	109	2480	10000		584.0	47.9	54.3	26.9	22.2	30.8	64.8	43.5	29.7	130	340	82	76	75	130	25

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	Part 375	Part 375	Part 375	Sample Designation:	RB-3	RB-4	RB-4 DUP	RB-4	RB-4	RB-5	RB-6	RB-6 DUP	RB-7	RB-7	RB-7	RB-8	RB-8 DUP	RB-9	RB-9	RB-9
Parameter	Unrestricted	Protection of	Restricted	Sample Date:	4/17/2014	4/17/2014	4/17/2014	4/17/2014	4/17/2014	4/21/2014	4/21/2014	4/21/2014	4/7/2014	4/7/2014	4/7/2014	4/7/2014	4/7/2014	4/7/2014	4/7/2014	4/7/2014
(Concentrations in mg/kg)	Use	Groundwater	Residential	Sample Depth (ft bls):	18 - 20	7 - 9	7 - 9	10 - 12	18 - 20	11 - 13	9 - 11	9 - 11	13 - 15	15 - 17	20 - 21	7 - 9	7 - 9	11 - 13	13 - 15	20 - 21
Aluminum					20000	22000	21000	15000	12000	5400	15000	15000	7200	8200	6400	14000	14000	11000	0000	12000
Antimony					20000 4.6 U	4 2 U	21000 4 4 U	13000	12000	12U	13000 4 2 U	441	7200 4.4 U	4811	4 2 U	14000 4 5 U	4011	4 5 U	5211	13000 4.4 U
Arconio					4.00	4.3 0	4.4 0	4.40	4.40	4.30	4.5 U	4.4 U 5.6 IV	4.40	4.00	4.50	4.50	4.90	4.50	J.2 U 8 2	4.40
Alsellic	15	10	10		5.4 100	4	5.1	2.9	2.7	5.2	5.2 J V	J.0 J V	2.0	5.0	2.1 50	5.1 96	2.4	4.4	0.2	2.7
	330	820	400		190	170	160	200	150	33	110	0.42 I	Jð 0 10 T	38 0 10 T	39 0.16 I	00 0 22 I	83 0.25 I	190	89 0 24 I	120
Beryllium	1.2	47	12		0.92	0.57	0.59	0.49	0.44	0.09 J	0.47	0.43 J	0.18 J	0.19 J	0.10 J	0.33 J	0.35 J	0.31 J	0.24 J	0.44 U
Cadmium	2.5	7.5	4.3		0.92 0	0.870	0.88 U	0.89 U	0.88 U	0.85 U	0.86 U	0.88 0	0.89 0	0.95 0	0.870	0.9 U	0.98 U	0.57J	1	0.89 0
Calcium					3900	1200	1300	1600	3100	48000	2300 JV	3500	24000	9600	32000	1800	1600	36000	23000	6400
Chromium	30		180		36	33	32	29	24	12	24	23	12	15	13	21	22	20	18	27
Cobalt					14	13	14	11	9.8	4.3	8.8	9.3	5.6	6.2	5.4	8.8	9.4	8.2	8.4	9.2
Copper	50	1720	270		8.1	20	20	30	22	12	41 JV	53	15	16	19	19	20	45	35	26
Iron					34000	33000	34000	25000	22000	10000	24000	22000	14000	16000	13000	20000	21000	21000	25000	22000
Lead	63	450	400		11	7.6	8	6.1	4.9	1.8 J	260 JV	58 JV	3.6 J	7.9	3.2 J	3.8 J	4.4 J	120	79	5.4
Magnesium					6900	6500	6100	5500	5100	6100	4900	5600	12000	6500	12000	4800	5200	9200	4900	9300
Manganese	1600	2000	2000		250	450	410	200	370	140	320	320	250	210	260	580	430	220	250	260
Mercury	0.18	0.73	0.81		0.08 U	0.09 U	0.08 U	0.09 U	0.09 U	0.08 U	0.07 U	0.08 U	0.1 U	0.09 U	0.09 U	0.09 U	0.09 U	0.24	0.18	0.09 U
Nickel	30	130	310		26	25	26	22	18	8.3	15	16	11	12	11	16	17	16	18	20
Potassium					13000	9000	9800	8700	7300	2000	5400	4800	2000	2200	2000	3800	4100	3800	2200	6700
Selenium	3.9	4	180		0.48 J	0.44 J	1.8 U	0.64 J	0.30 J	1.7 U	1.7 UV	1.8 U	1.8 U	1.9 U	1.7 U	1.8 U	2 U	0.46 J	0.50 J	1.8 U
Silver	2	8.3	180		0.92 U	0.87 U	0.88 U	0.89 U	0.88 U	0.85 U	0.86 U	0.88 U	0.89 U	0.95 U	0.87 U	0.9 U	0.98 U	0.9 U	1 U	0.89 U
Sodium					140 J	120 J	120 J	560	490	220	130 J	120 J	210	210	180	340	230	200	270	320
Thallium					1.8 U	1.7 U	1.8 U	1.8 U	1.8 U	1.7 U	1.7 UJV	1.8 U	1.8 U	1.9 U	1.7 U	1.8 U	2 U	1.8 U	2.1 U	1.8 U
Vanadium					45	48	49	40	32	18	35	33	16	19	16	30	31	30	32	42
Zinc	109	2480	10000		90	72	76	63	57	21	110	100	32	34	26	45	44	180	370	49

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	Part 375	Part 375	Part 375	Sample Designation:	RB-10	RB-10	RB-10	RB-11	RB-11	RB-11	RB-12	RB-13	RB-14	RB-15	RB-16	RB-17	RB-18	RB-19	RB-20	RB-20	RB-21
Parameter	Unrestricted	Protection of	Restricted	Sample Date:	4/8/2014	4/8/2014	4/8/2014	4/8/2014	4/8/2014	4/8/2014	4/9/2014	4/8/2014	4/8/2014	4/9/2014	4/9/2014	4/16/2014	4/16/2014	4/16/2014	4/16/2014	4/16/2014	4/16/2014
(Concentrations in mg/kg)	Use	Groundwater	Residential	Sample Depth (ft bls):	1 - 3	10 - 12	18 - 19	2 - 4	5 - 7	15 - 16	7 - 9	11 - 12	11 - 12	7 - 9	6 - 8	6 - 8	5 - 7	5 - 7	3 - 5	5 - 6.5	4 - 6
Aluminum					15000	21000	27000	18000	13000	29000	13000	7900	12000	11000	12000	13000	5000	9200	8800	11000	11000
Antimony					4.5 U	5 U	4.6 U	4.4 U	4.6 U	5.5 U	4.8 U	4.2 U	4.8 U	4.9 U	6 U	0.93 J	4.8 U	0.79 J	4.6 U	5.4 U	0.94 J
Arsenic	13	16	16		8.7	9.3	5.8	6.5	6	11	6.8	5.6	8	7.1	12	6.1	3.1	5.1	6	6.1	16
Barium	350	820	400		84	200	82	130	88	240	53	130	120	110	95	100	46	70	69	76	100
Beryllium	7.2	47	72		0.51	0.30 J	8	0.49	0.31 J	0.81	0.31 J	0.17 J	0.25 J	0.30 J	0.43 J	0.44 J	0.13 J	0.26 J	0.28 J	0.34 J	0.42 J
Cadmium	2.5	7.5	4.3		0.9 U	1 U	0.93 U	0.89 U	0.92 U	1.1 U	0.95 U	0.08 J	0.21 J	0.17 J	1.2 U	1.1 U	0.96 U	0.88 U	0.93 U	1.1 U	0.31 J
Calcium					4200	1300	6000	1800	2900	2900	930	16000	2300	11000	3500	2000	11000	8800	12000	16000	3000
Chromium	30		180		24	38	27	25	23	53	20	18	24	20	22	20	11	22	17	18	19
Cobalt					7.6	19	21	10	8.4	28	8.6	5.5	7.6	7	7.7	7.1	4	6.6	6.4	6.1	5.9
Copper	50	1720	270		15	9.1	28	25	17	8.4	18	28	29	42	20	23	15	26	32	18	29
Iron					24000	35000	25000	21000	19000	44000	19000	13000	17000	17000	19000	17000	8800	16000	14000	16000	15000
Lead	63	450	400		7.6	2.3 J	6.2	9.2	6.3	11	5.9	110	160	79	56	67	17	28	68	34	140
Magnesium					5200	7600	39000	5700	5200	12000	4600	6300	3900	4400	3600	3600	4100	5700	3800	4600	3700
Manganese	1600	2000	2000		170	160	850	160	200	220	340	170	160	220	280	170	99	220	330	170	160
Mercury	0.18	0.73	0.81		0.09 U	0.09 U	0.1 U	0.09 U	0.09 U	0.1 U	0.1 U	0.18	0.33	0.1	0.23	0.19	0.09 U	0.1	0.06 J	0.12	0.27
Nickel	30	130	310		15	32	36	18	15	52	14	12	15	13	14	12	9.3	18	14	12	13
Potassium					2900	14000	5200	3500	3600	18000	1800	1800	2000	1600	740	1200	1300	2400	1600	1400	1700
Selenium	3.9	4	180		1.8 U	2 U	1.9 U	1.8 U	1.8 U	2.2 U	1.9 U	1.7 U	0.40 J	0.37 J	2.7	2.2 U	1.9 U	1.8 U	1.8 U	2.2 U	0.70 J
Silver	2	8.3	180		0.9 U	0.40 J	0.93 U	0.89 U	0.92 U	0.42 J	0.95 U	0.85 U	0.96 U	0.98 U	1.2 U	1.1 U	0.96 U	0.88 U	0.93 U	1.1 U	0.26 J
Sodium					180	190 J	120 J	1900	920	560	120 J	140 J	91 J	220	460	160 J	150 J	140 J	160 J	190 J	330
Thallium					1.8 U	2 U	1.9 U	1.8 U	1.8 U	2.2 U	1.9 U	1.7 U	1.9 U	2 U	2.4 U	2.2 U	1.9 U	1.8 U	1.8 U	2.2 U	2 U
Vanadium					42	59	27	37	33	73	30	23	30	28	31	28	15	25	24	27	29
Zinc	109	2480	10000		42	88	130	52	43	160	33	120	210	160	120	77	41	52	120	61	340

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	Part 375	Part 375	Part 375	Sample Designation:	RB-22	RB-23	RB-24	RB-24	RB-25	RB-25	RB-26	RB-27	RB-28	RB-28	RB-29	RB-30	RB-31	RB-32	RB-33	RB-34	RB-35
Parameter	Unrestricted	Protection of	Restricted	Sample Date:	4/16/2014	4/16/2014	4/9/2014	4/9/2014	4/9/2014	4/9/2014	4/11/2014	4/11/2014	4/10/2014	4/10/2014	4/10/2014	4/10/2014	4/10/2014	4/10/2014	4/10/2014	4/10/2014	4/10/2014
(Concentrations in mg/kg)	Use	Groundwater	Residential	Sample Depth (ft bls):	4 - 6	3 - 5	2 - 4	6 - 8	4 - 6	6 - 7.5	5 - 7	5 - 7	5 - 7	7 - 8	5 - 7	5 - 7	5 - 7	5 - 7	4 - 6	4 - 6	3 - 5
Aluminum					14000	11000	12000	16000	15000	19000	13000	11000	7600	6500	7900	9100	10000	11000	10000	8000	7600
Antimony					0.81 J	1.3 J	4.4 U	5.4 U	4.2 U	4.9 U	4.6 U	4.5 U	4.5 U	4.6 U	4.3 U	4.6 U	4.4 U	4.6 U	5.2 U	4.3 U	4.2 U
Arsenic	13	16	16		7.1	7.8	6.2	8.8	8.4	11	12	8.7	18	8	7.3	8.4	8	10	12	10	8
Barium	350	820	400		120	140	77	120	93	140	490	96	94	74	53	120	94	140	110	56	93
Beryllium	7.2	47	72		0.56	0.43 J	0.28 J	0.47 J	0.34 J	0.45 J	0.34 J	0.25 J	0.09 J	0.14 J	0.23 J	0.26 J	0.19 J	0.34 J	0.32 J	0.16 J	0.18 J
Cadmium	2.5	7.5	4.3		0.11 J	1.4	0.88 U	1.1 U	0.84 U	0.98 U	0.31 J	0.9 U	0.9 U	0.93 U	0.86 U	0.11 J	0.88 U	0.17 J	1 U	0.86 U	0.84 U
Calcium					5300	2500	2300	9600	1100	1800	23000	12000	56000	55000	49000	6900	1800	5500	9500	5900	5700
Chromium	30		180		21	19	21	25	30	46	21	19	19	11	11	16	26	24	18	16	15
Cobalt					8.4	6.5	7	9.6	9.2	12	5.9	6.6	5.3	3.5	3	6.1	6.6	7.6	6.6	6.9	6.3
Copper	50	1720	270		42	25	17	19	25	28	35	36	78	17	12	30	21	32	29	31	18
Iron					18000	16000	18000	21000	22000	27000	16000	17000	23000	11000	8400	16000	18000	19000	21000	18000	15000
Lead	63	450	400		130	280	18	100	5.3	44	320	160	160	36	70	170	33	130	130	61	61
Magnesium					4200	3400	4300	5100	6000	7100	6400	6900	6600	12000	3200	3500	4000	4500	3800	3300	4000
Manganese	1600	2000	2000	_	190	170	340	430	220	350	200	350	240	150	180	250	250	330	370	290	180
Mercury	0.18	0.73	0.81		2.9	0.48	0.08 U	0.1	0.08 U	0.03 J	0.23	0.29 JV	0.13	0.2	0.08 U	0.1	0.03 J	0.22	1.4	0.2	0.2
Nickel	30	130	310		14	12	13	16	18	22	12	14	30	11	7.4	13	14	17	12	11	12
Potassium					1500	1200	2200	3000	2800	3200	1600	2300	1600	1700	810	1300	2900	2200	1300	1100	2000
Selenium	3.9	4	180		2 U	0.30 J	1.8 U	2.2 U	1.7 U	2 U	1.8 U	1.8 U	1.8 U	1.8 U	1.7 U	1.8 U	1.8 U	1.9 U	2.1 U	1.7 U	1.7 U
Silver	2	8.3	180		0.22 J	1 U	0.88 U	1.1 U	0.84 U	0.98 U	0.91 U	0.9 U	0.9 U	0.93 U	0.86 U	0.93 U	0.88 U	0.93 U	1 U	0.86 U	0.84 U
Sodium					290	170 J	340	310	720	820	230	180	340	260	260	160 J	160 J	200	310	120 J	550
Thallium					2 U	2 U	1.8 U	2.2 U	1.7 U	2 U	1.8 U	1.8 U	1.8 U	1.8 U	1.7 U	1.8 U	1.8 U	1.9 U	2.1 U	1.7 U	1.7 U
Vanadium					30	25	29	36	41	55	29	34	97	28	14	23	31	31	26	29	24
Zinc	109	2480	10000		240	510	44	61	42	65	400	70	220	280	64	140	54	180	120	66	62

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	NYSDEC	NYSDEC	NYSDEC																		
	Part 375	Part 375	Part 375	Sample Designation:	RB-36	RB-37	RB-38	RB-39	RB-40	RB-41	RB-42	RB-43	RB-44	RB-45	RW-1	RW-1	RW-2	RW-3	RW-3	RW-3	RW-4
Parameter	Unrestricted	Protection of	Restricted	Sample Date:	4/14/2014	4/14/2014	4/11/2014	4/11/2014	4/14/2014	4/14/2014	4/14/2014	4/15/2014	4/15/2014	4/15/2014	4/17/2014	4/17/2014	4/7/2014	4/8/2014	4/8/2014	4/8/2014	4/8/2014
(Concentrations in mg/kg)	Use	Groundwater	Residential	Sample Depth (ft bls):	2 - 4	1 - 3	1 - 3	1 - 3	3 - 5	0 - 2	5 - 7	5 - 7	5 - 7	10 - 12	8 - 10	13 - 15	13 - 15	1 - 3	3 - 5	8 - 9	1 - 3
Aluminum					16000	12000	17000	12000	8500	12000	4500	15000	12000	3600	24000	16000	13000	11000	12000	11000	12000
Antimony					4.5 U	4.2 U	4.5 U	1.1 J	4.7 U	4.4 U	4.6 U	4.8 U	4.8 U	0.82 J	4.6 U	4.2 U	5 U	4.4 U	4.4 U	4.8 U	4.9 U
Arsenic	13	16	16		9.3	16	9.6	14	10	8.6	7	5.3	4.4	2.5	2	3.5	2	6	5.7	5.2	8
Barium	350	820	400		95	190	100	370	59	110	110	120	97	34	76	170	78	82	110	32	130
Beryllium	7.2	47	72		0.55	0.22 J	0.64	0.42 J	0.24 J	0.28 J	0.17 J	0.63	0.29 J	0.09 J	0.26 J	0.38 J	0.34 J	0.30 J	0.29 J	0.43 J	0.28 J
Cadmium	2.5	7.5	4.3		0.89 U	0.83 U	0.9 U	0.88 U	0.94 U	0.89 U	0.07 J	0.96 U	0.96 U	0.88 U	0.92 U	0.84 U	1 U	0.89 U	0.87 U	0.96 U	0.19 J
Calcium					3200	5500	3300	11000	2200	4900	27000	2900	2200	4700	4500	2000	5300	2000	1900	4400	23000
Chromium	30		180		23	26	25	24	20	30	17	26	22	10	33	35	24	21	19	21 JV	19
Cobalt					11	10	10	9.4	7	9.7	2.6	10	8.4	3.4	7	11	9.2	8.8	8.3	6.1	8.4
Copper	50	1720	270		45	28	24	97	12	28	9	24	10	11	13	22	18	16	17	21	42
Iron					20000	30000	22000	34000	22000	20000	10000	22000	19000	9200	17000	26000	21000	19000	18000	18000	18000
Lead	63	450	400		120	68 JV	5	130	4.6 J	43	12	13	7.9	1.7 J	7.1	5.9	4.5 J	4.4	3.9 J	2.0 J	150
Magnesium					4400	5000	6100	5100	3900	6400	3600	7200	3800	3700	39000	6900	5400	4800	4600	11000	6200
Manganese	1600	2000	2000		540	170	420	440	140	240	100	320	220	110	300	160	250	230	160	100 JV	190
Mercury	0.18	0.73	0.81		0.19	0.05 J	0.08 U	0.2	0.08 U	0.03 J	0.08 U	0.09 U	0.09 U	0.08 U	0.08 U	0.07 U	0.1 U	0.09 U	0.1 U	0.08 U	0.31
Nickel	30	130	310		16	19	21	18	11	18	5.3	19	15	7	14	24	18	15	17	11	13
Potassium					1200	7800	3200	4400	1900	4100	1700	4500	3700	1200	3600	9200	4100	3800	4000	770 JV	2700
Selenium	3.9	4	180		1.8 U	0.32 J	1.8 U	1.8 U	1.9 U	1.8 U	1.8 U	1.9 U	1.9 U	1.8 U	1.8 U	1.7 U	0.30 J	1.8 U	1.7 U	1.9 U	0.50 J
Silver	2	8.3	180		0.89 U	0.83 U	0.9 U	0.88 U	0.94 U	0.89 U	0.92 U	0.96 U	0.96 U	0.88 U	0.92 U	0.84 U	1 U	0.89 U	0.87 U	0.96 U	0.98 U
Sodium					320	190	230	350	240	140 J	250	150 J	82 J	95 J	120 J	310	210	230	430	2100 JV	680
Thallium					1.8 U	1.7 U	1.8 U	1.8 U	1.9 U	1.8 U	1.8 U	1.9 U	1.9 U	1.8 U	1.8 U	1.7 U	2 U	1.8 U	1.7 U	1.9 U	2 U
Vanadium					32	37	35	30	25	37	16	36	32	13	38	39	31	30	29	24	33
Zinc	109	2480	10000		100	53	51	110	33	120	51	54	49	15	41	60	46	45	42	34 JV	140

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	NYSDEC	NYSDEC	NYSDEC																	
	Part 375	Part 375	Part 375	Sample Designation:	RW-4	RW-4	RW-5	RW-6	RW-7	RW-8	RW-9	RW-9	RW-9	RW-10	RW-11	RW-11 DUP	RW-12	RW-12	RW-13	RW-14
Parameter	Unrestricted	Protection of	Restricted	Sample Date:	4/8/2014	4/8/2014	4/9/2014	4/9/2014	4/8/2014	4/16/2014	4/16/2014	4/16/2014	4/16/2014	4/9/2014	4/16/2014	4/16/2014	4/10/2014	4/10/2014	4/10/2014	4/14/2014
(Concentrations in mg/kg)	Use	Groundwater	Residential	Sample Depth (ft bls):	7 - 9	13 - 14	9 - 11	15 - 17	10 - 12	5 - 7	1.5 - 3	4 - 6	9 - 10	6 - 8	4 - 6	4 - 6	5 - 7	7 - 8	5 - 7	3 - 5
Aluminum					8300	20000	11000	7000	10000	14000	14000	16000	12000	9900	10000	10000	6500	6500	6200	7200
Antimony					4.8 U	4.4 U	4.5 U	5.5 U	4.9 U	1.0 J	5 U	5 U	4.8 U	3.0 J	6.9	2.5 J	4.4 U	5.1 U	4.2 U	4.4 U
Arsenic	13	16	16		5	7.1	7.9	6.5	7	7.1	5.1	5.3	5.6	9.6	9.4	8.1	16	14	8	6.9
Barium	350	820	400		75	180	52	56	92	130	84	85	98	400	290	310	83	62	97	90
Beryllium	7.2	47	72		0.17 J	0.40 J	0.44 J	0.16 J	0.30 J	0.42 J	0.64	0.63	0.27 J	0.42 J	0.41 J	0.41 J	0.44 U	0.13 J	0.20 J	0.16 J
Cadmium	2.5	7.5	4.3		0.97 U	0.88 U	0.91 U	1.1 U	0.98 U	0.87 J	0.99 U	1 U	0.97 U	0.41 J	0.92 J	0.73 J	0.09 J	1 U	0.09 J	0.88 U
Calcium					28000	1900	1400	46000	14000	8900	1900	2700	2200	12000	3700	4800	45000	39000	12000	13000
Chromium	30		180		18	40	18	15	20	24	18	22	24	16	27	25	16	16	12	14
Cobalt					7.2	12	8.2	5.7	7.5	7.8	7	7.3	9.9	6.6	7.6	7.3	6	5.1	4.8	6.2
Copper	50	1720	270		17	32	14	14	28	37	15	17	20	35	91	62	58	46	27	21
Iron					15000	28000	16000	15000	15000	19000	17000	18000	21000	14000	19000	17000	22000	20000	13000	14000
Lead	63	450	400		4.2 J	4.3 J	7.5	3.5 J	200	170	60	46	3.4 J	1100	490	530	140	120	85	40
Magnesium					6200	9100	3000	5900	4700	4800	3900	4500	6200	4700	3600	3800	11000	3200	5600	7100
Manganese	1600	2000	2000		990	240	280	150	190	210	190	180	250	290	200	190	230	200	190	200
Mercury	0.18	0.73	0.81		0.1 U	0.09 U	0.1 U	0.1 U	0.06 J	0.54	0.13	0.03 J	0.1 U	0.18	0.37	0.5	0.11	0.09 U	0.05 J	0.08 U
Nickel	30	130	310		14	23	11	11	14	15	14	14	20	13	21	16	31	21	11	10
Potassium					3600	13000	680	2600	1400	2200	1200	1500	4700	1500	1600	1700	1300	940	1600	2600
Selenium	3.9	4	180		1.9 U	1.8 U	1.8 U	2.2 U	2 U	2.1 U	2 U	2 U	1.9 U	1.9 U	0.43 J	0.30 J	1.8 U	2 U	1.7 U	1.8 U
Silver	2	8.3	180		0.97 U	0.26 J	0.91 U	1.1 U	0.98 U	1.1 U	0.99 U	1 U	0.97 U	0.93 U	0.28 J	1 U	0.88 U	1 U	0.85 U	0.88 U
Sodium					180 J	270	320	220	120 J	340	94 J	120 J	440	980	370	180 J	280	390	200	250
Thallium					1.9 U	1.8 U	1.8 U	2.2 U	2 U	2.1 U	2 U	2 U	1.9 U	1.9 U	2.1 U	2 U	1.8 U	2 U	1.7 U	1.8 U
Vanadium					24	60	27	19	28	32	26	31	33	26	29	30	81	55	20	24
Zinc	109	2480	10000		33	73	39	30	68	470	86	75	50	300	640	430	150	130	120	42

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of the calibration range in the original sample.

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	NYSDEC	NYSDEC	NYSDEC									
	Part 375	Part 375	Part 375	Sample Designation:	RW-15	RW-15 DUP	RW-16	RW-17	RW-17	RW-18	RW-19	RW-20
Parameter	Unrestricted	Protection of	Restricted	Sample Date:	4/11/2014	4/11/2014	4/14/2014	4/11/2014	4/11/2014	4/15/2014	4/15/2014	4/15/2014
(Concentrations in mg/kg)	Use	Groundwater	Residential	Sample Depth (ft bls):	1 - 3	1 - 3	3 - 5	0 - 2	2 - 4	5 - 6	5.5 - 7.5	10 - 12
Aluminum					15000	15000	13000	11000	10000	13000	16000	6800
Antimony					4 4 U	4 4 U	111	45U	4511	181	111	4811
Arsenic	13	16	16		86	85	99	92	98	8	4.8	33
Barium	350	820	400		120	120	120	100	81	100	150	82
Bervllium	7.2	47	72		0.46	0.41 J	0.34 J	0.36 J	0.30 J	0.28 J	0.29 J	0.15 J
Cadmium	2.5	7.5	4.3		0.88 U	0.88 U	0.9 U	0.9 U	0.15 J	0.94 U	0.9 U	0.96 U
Calcium					2600 JV	2900	9100	31000	38000	2600	1200	1800
Chromium	30		180		23	23	23	17	21	25	32	12
Cobalt					10	10	7.9	6.2	7.3	7.1	15	6.2
Copper	50	1720	270		42 JV	29	30	22	32	30	5.1	13
Iron					22000	22000	21000	19000	22000	29000	27000	13000
Lead	63	450	400		74 JV	75	100	40	68	240	12	11
Magnesium					4300	4500	5600	5800	5900	5000	5200	3400
Manganese	1600	2000	2000		270	280	250	260	270	280	470	92
Mercury	0.18	0.73	0.81		0.1	0.07 J	0.02 J	0.07 J	0.06 J	0.02 J	0.09 U	0.1
Nickel	30	130	310		18	18	15	13	15	13	33	9.7
Potassium					5300	5800	2700	2200	2600	3600	8600	2300
Selenium	3.9	4	180		1.8 U	1.9 U	1.8 U	1.9 U				
Silver	2	8.3	180		0.88 U	0.88 U	0.9 U	0.9 U	0.9 U	0.94 U	0.9 U	0.96 U
Sodium					170 J	170 J	200	340	290	120 J	110 J	74 J
Thallium					1.8 U	1.9 U	1.8 U	1.9 U				
Vanadium					34	35	32	25	28	35	43	19
Zinc	109	2480	10000		80 JV	86	110	100	180	140	81	67

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	NYSDEC	NYSDEC	NYSDEC							
	Part 375	Part 375	Part 375	Sample Designation:	GP-1A	GP-1B	GP-2	GP-3	GP-4	GP-5
Parameter	Unrestricted	Protection of	Restricted	Sample Date:	11/1/2007	11/1/2007	11/1/2007	11/1/2007	11/1/2007	11/2/2007
(Concentrations in µg/kg)	Use	Groundwater	Residential	Sample Depth (ft bls):	2 - 3	4 - 6	4 - 6	4 - 5.5	3.5 - 5.5	6 - 8
Aroclor-1016					NA	NA	NA	NA	NA	NA
Aroclor-1221					NA	NA	NA	NA	NA	NA
Aroclor-1232					NA	NA	NA	NA	NA	NA
Aroclor-1242					NA	NA	NA	NA	NA	NA
Aroclor-1248					NA	NA	NA	NA	NA	NA
Aroclor-1254					NA	NA	NA	NA	NA	NA
Aroclor-1260					NA	NA	NA	NA	NA	NA
Aroclor-1262					NA	NA	NA	NA	NA	NA
Aroclor-1268					NA	NA	NA	NA	NA	NA
PCBS, TOTAL	100	3200	1000		ND	ND	ND	ND	ND	ND

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P - The RPD between the results for the two columns exceeds the method-specified criteria

	NYSDEC	NYSDEC	NYSDEC							
	Part 375	Part 375	Part 375	Sample Designation:	GP-6	GP-7	GP-8	GP-9	GP-10	GP-11
Parameter	Unrestricted	Protection of	Restricted	Sample Date:	11/2/2007	11/2/2007	11/5/2007	11/5/2007	11/5/2007	11/5/2007
(Concentrations in µg/kg)	Use	Groundwater	Residential	Sample Depth (ft bls):	6 - 8	2 - 4	8 - 10	2 - 4	2 - 4	4 - 6
Aroclor-1016					NA	NA	NA	NA	NA	NA
Aroclor-1221					NA	NA	NA	NA	NA	NA
Aroclor-1232					NA	NA	NA	NA	NA	NA
Aroclor-1242					NA	NA	NA	NA	NA	NA
Aroclor-1248					NA	NA	NA	NA	NA	NA
Aroclor-1254					NA	NA	NA	NA	NA	NA
Aroclor-1260					NA	NA	NA	NA	NA	NA
Aroclor-1262					NA	NA	NA	NA	NA	NA
Aroclor-1268					NA	NA	NA	NA	NA	NA
PCBS, TOTAL	100	3200	1000		ND	ND	ND	ND	61.9	ND

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	NYSDEC	NYSDEC	NYSDEC							
	Part 375	Part 375	Part 375	Sample Designation:	GP-12	SB-1	SB-2A	SB-2B	SB-3	SB-4
Parameter	Unrestricted	Protection of	Restricted	Sample Date:	11/5/2007	11/7/2007	11/7/2007	11/7/2007	11/7/2007	11/8/2007
(Concentrations in µg/kg)	Use	Groundwater	Residential	Sample Depth (ft bls):	6 - 8	6 - 8	4 - 6	8 - 10	3 - 4	10 - 14
Aroclor-1016					NA	NA	NA	NA	NA	NA
Aroclor-1221					NA	NA	NA	NA	NA	NA
Aroclor-1232					NA	NA	NA	NA	NA	NA
Aroclor-1242					NA	NA	NA	NA	NA	NA
Aroclor-1248					NA	NA	NA	NA	NA	NA
Aroclor-1254					NA	NA	NA	NA	NA	NA
Aroclor-1260					NA	NA	NA	NA	NA	NA
Aroclor-1262					NA	NA	NA	NA	NA	NA
Aroclor-1268					NA	NA	NA	NA	NA	NA
PCBS, TOTAL	100	3200	1000		ND	ND	ND	ND	ND	ND
Aroclor-1262 Aroclor-1268 PCBS, TOTAL	 100	3200	1000		NA NA ND	NA NA ND	NA NA ND	NA NA ND	NA NA ND	NA NA ND

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	Part 375	Part 375	Part 375	Sample Designation:	SB-5	SB-6	SB-7	SB-8	SB-9	SB-10
Parameter	Unrestricted	Protection of	Restricted	Sample Date:	11/9/2007	11/9/2007	12/5/2007	12/5/2007	12/7/2007	12/7/2007
(Concentrations in µg/kg)	Use	Groundwater	Residential	Sample Depth (ft bls):	8 - 10	17 - 19	12 - 16	12 - 14	9 - 11	9 - 11
Aroclor-1016					NA	NA	NA	NA	NA	NA
Aroclor-1221					NA	NA	NA	NA	NA	NA
Aroclor-1232					NA	NA	NA	NA	NA	NA
Aroclor-1242					NA	NA	NA	NA	NA	NA
Aroclor-1248					NA	NA	NA	NA	NA	NA
Aroclor-1254					NA	NA	NA	NA	NA	NA
Aroclor-1260					NA	NA	NA	NA	NA	NA
Aroclor-1262					NA	NA	NA	NA	NA	NA
Aroclor-1268					NA	NA	NA	NA	NA	NA
PCBS, TOTAL	100	3200	1000		ND	ND	ND	ND	ND	ND

J - Estimated value

U - Indicates that the compound was analyzed for but not detected

D - a secondary analysis after dilution due to exceedance

of the calibration range in the original sample.

DUP - Duplicate sample

µg/kg - Micrograms per kilogram

ft bls - Feet below land surface

NYSDEC - New York State Department of Environmental Conservation

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P - The RPD between the results for the two columns exceeds the method-specified criteria

	NYSDEC	NYSDEC	NYSDEC							
	Part 375	Part 375	Part 375	Sample Designation:	SB-11	CB2	DW1	RB-4	RB-4 DUP	RB-4
Parameter	Unrestricted	Protection of	Restricted	Sample Date:	12/7/2007	4/18/2014	4/18/2014	4/17/2014	4/17/2014	4/17/2014
(Concentrations in µg/kg)	Use	Groundwater	Residential	Sample Depth (ft bls):	4 - 6	-	4 - 6	7 - 9	7 - 9	10 - 12
Aroclor-1016					NA	44.1 U	43.2 U	36.6 U	35.2 U	38.2 U
Aroclor-1221					NA	44.1 U	43.2 U	36.6 U	35.2 U	38.2 U
Aroclor-1232					NA	44.1 U	43.2 U	36.6 U	35.2 U	38.2 U
Aroclor-1242					NA	44.1 U	43.2 U	36.6 U	35.2 U	38.2 U
Aroclor-1248					NA	44.1 U	43.2 U	36.6 U	35.2 U	38.2 U
Aroclor-1254					NA	44.1 U	43.2 U	36.6 U	35.2 U	38.2 U
Aroclor-1260					NA	21.3 J	57.6	36.6 U	35.2 U	38.2 U
Aroclor-1262					NA	44.1 U	43.2 U	36.6 U	35.2 U	38.2 U
Aroclor-1268					NA	44.1 U	27.6 J	36.6 U	35.2 U	38.2 U
PCBS, TOTAL	100	3200	1000		ND	21.3 J	85.2 J	36.6 U	35.2 U	38.2 U

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P - The RPD between the results for the two columns exceeds the method-specified criteria

	NYSDEC	NYSDEC	NYSDEC							
	Part 375	Part 375	Part 375	Sample Designation:	RB-4	RB-6	RB-6 DUP	RB-7	RB-7	RB-7
Parameter	Unrestricted	Protection of	Restricted	Sample Date:	4/17/2014	4/21/2014	4/21/2014	4/7/2014	4/7/2014	4/7/2014
(Concentrations in µg/kg)	Use	Groundwater	Residential	Sample Depth (ft bls):	18 - 20	11 - 13	11 - 13	13 - 15	15 - 17	20 - 21
Aroclor-1016					36.9 U	35.2 U	36.0 U	37.8 U	37.9 U	36.2 U
Aroclor-1221					36.9 U	35.2 U	36.0 U	37.8 U	37.9 U	36.2 U
Aroclor-1232					36.9 U	35.2 U	36.0 U	37.8 U	37.9 U	36.2 U
Aroclor-1242					36.9 U	35.2 U	36.0 U	37.8 U	37.9 U	36.2 U
Aroclor-1248					36.9 U	35.2 U	36.0 U	37.8 U	37.9 U	36.2 U
Aroclor-1254					36.9 U	35.2 U	36.0 U	37.8 U	37.9 U	36.2 U
Aroclor-1260					36.9 U	35.2 U	36.0 U	37.8 U	37.9 U	36.2 U
Aroclor-1262					36.9 U	35.2 U	36.0 U	37.8 U	37.9 U	36.2 U
Aroclor-1268					36.9 U	35.2 U	36.0 U	37.8 U	37.9 U	36.2 U
PCBS, TOTAL	100	3200	1000		36.9 U	35.2 U	36.0 U	37.8 U	37.9 U	36.2 U

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P - The RPD between the results for the two columns exceeds the method-specified criteria

NYSDEC	NYSDEC	NYSDEC							
Part 375	Part 375	Part 375	Sample Designation:	RB-17	RB-24	RB-24	RB-28	RB-28	RB-33
Unrestricted	Protection of	Restricted	Sample Date:	4/16/2014	4/9/2014	4/9/2014	4/10/2014	4/10/2014	4/10/2014
Use	Groundwater	Residential	Sample Depth (ft bls):	6 - 8	2 - 4	6 - 8	5 - 7	7 - 8	4 - 6
				44.5 U	36.3 U	47.4 U	38.1 U	37.0 U	42.1 U
				44.5 U	36.3 U	47.4 U	38.1 U	37.0 U	42.1 U
				44.5 U	36.3 U	47.4 U	38.1 U	37.0 U	42.1 U
				44.5 U	36.3 U	47.4 U	38.1 U	37.0 U	42.1 U
				44.5 U	36.3 U	47.4 U	38.1 U	37.0 U	42.1 U
				44.5 U	36.3 U	47.4 U	125	38.3 P	42.1 U
				44.5 U	36.3 U	47.4 U	21.5 J	37.0 U	28.8 J
				44.5 U	36.3 U	47.4 U	38.1 U	37.0 U	42.1 U
				44.5 U	36.3 U	47.4 U	38.1 U	37.0 U	42.1 U
100	3200	1000		44.5 U	36.3 U	47.4 U	146.5 J	38.3 P	28.8 J
	NYSDEC Part 375 Unrestricted Use 100	NYSDEC NYSDEC Part 375 Part 375 Unrestricted Protection of Groundwater	NYSDECNYSDECNYSDECPart 375Part 375Part 375UnrestrictedProtection of GroundwaterRestricted Residential	NYSDECNYSDECNYSDECPart 375Part 375Part 375Sample Designation:UnrestrictedProtection of GroundwaterRestrictedSample Date:UseGroundwaterResidentialSample Depth (ft bls):<	NYSDEC NYSDEC NYSDEC NYSDEC Part 375 Part 375 Part 375 Sample Designation: RB-17 Unrestricted Protection of Restricted Sample Date: 4/16/2014 Use Groundwater Residential Sample Depth (ft bls): 6 - 8 44.5 U 44	NYSDEC NYSDEC NYSDEC NYSDEC Part 375 Part 375 Part 375 Sample Designation: RB-17 RB-24 Unrestricted Protection of Restricted Sample Date: 4/16/2014 4/9/2014 Use Groundwater Residential Sample Depth (ft bls): 6 - 8 2 - 4 44.5 U 36.3 U 44.5 U 36.3 U </td <td>NYSDEC NYSDEC NYSDEC NYSDEC Sample Designation: RB-17 RB-24 RB-24 Unrestricted Protection of Restricted Sample Date: 4/16/2014 4/9/2014 4/9/2014 Use Groundwater Residential Sample Depth (ft bls): 6 - 8 2 - 4 6 - 8 44.5 U 36.3 U 47.4 U 44.5 U 36.3 U 47.4 U</td> <td>NYSDEC NYSDEC NYSDEC NYSDEC Part 375 Part 36.311 Part 36.311 Part 36.311 Part 36.311 Part 36.311 Part 36.311 Part 36.311</td> <td>NYSDEC NYSDEC NYSDEC Part 375 Part 36.3 U 47.4 U 38.1 U 37.0 U 44.5 U 36.3 U 47.4 U</td>	NYSDEC NYSDEC NYSDEC NYSDEC Sample Designation: RB-17 RB-24 RB-24 Unrestricted Protection of Restricted Sample Date: 4/16/2014 4/9/2014 4/9/2014 Use Groundwater Residential Sample Depth (ft bls): 6 - 8 2 - 4 6 - 8 44.5 U 36.3 U 47.4 U 44.5 U 36.3 U 47.4 U	NYSDEC NYSDEC NYSDEC NYSDEC Part 375 Part 36.311 Part 36.311 Part 36.311 Part 36.311 Part 36.311 Part 36.311 Part 36.311	NYSDEC NYSDEC NYSDEC Part 375 Part 36.3 U 47.4 U 38.1 U 37.0 U 44.5 U 36.3 U 47.4 U

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P - The RPD between the results for the two columns exceeds the method-specified criteria

	NYSDEC	NYSDEC	NYSDEC								
	Part 375	Part 375	Part 375	Sample Designation:	RB-40	RB-45	RW-2	RW-3	RW-3	RW-3	RW-4
Parameter	Unrestricted	Protection of	Restricted	Sample Date:	4/14/2014	4/15/2014	4/7/2014	4/8/2014	4/8/2014	4/8/2014	4/8/2014
(Concentrations in µg/kg)	Use	Groundwater	Residential	Sample Depth (ft bls):	3 - 5	10 - 12	13 - 15	1 - 3	3 - 5	8 - 9	1 - 3
Aroclor-1016					38.6 U	37.8 U	41.8 U	37.5 U	36.3 U	40.5 U	42.2 U
Aroclor-1221					38.6 U	37.8 U	41.8 U	37.5 U	36.3 U	40.5 U	42.2 U
Aroclor-1232					38.6 U	37.8 U	41.8 U	37.5 U	36.3 U	40.5 U	42.2 U
Aroclor-1242					38.6 U	37.8 U	41.8 U	37.5 U	36.3 U	40.5 U	42.2 U
Aroclor-1248					38.6 U	37.8 U	41.8 U	37.5 U	36.3 U	40.5 U	42.2 U
Aroclor-1254					38.6 U	37.8 U	41.8 U	37.5 U	36.3 U	40.5 U	42.2 U
Aroclor-1260					38.6 U	37.8 U	41.8 U	37.5 U	36.3 U	40.5 U	42.2 U
Aroclor-1262					38.6 U	37.8 U	41.8 U	37.5 U	36.3 U	40.5 U	42.2 U
Aroclor-1268					38.6 U	37.8 U	41.8 U	37.5 U	36.3 U	40.5 U	42.2 U
PCBS, TOTAL	100	3200	1000		38.6 U	37.8 U	41.8 U	37.5 U	36.3 U	40.5 U	42.2 U

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	NYSDEC	NYSDEC	NYSDEC							
	Part 375	Part 375	Part 375	Sample Designation:	RW-4	RW-4	RW-6	RW-9	RW-9	RW-9
Parameter	Unrestricted	Protection of	Restricted	Sample Date:	4/8/2014	4/8/2014	4/9/2014	4/16/2014	4/16/2014	4/16/2014
(Concentrations in µg/kg)	Use	Groundwater	Residential	Sample Depth (ft bls):	7 - 9	13 - 14	15 - 17	1.5 - 3	4 - 6	9 - 10
Aroclor-1016					41.8 U	35.9 U	46.1 U	40.4 U	42.5 U	39.7 U
Aroclor-1221					41.8 U	35.9 U	46.1 U	40.4 U	42.5 U	39.7 U
Aroclor-1232					41.8 U	35.9 U	46.1 U	40.4 U	42.5 U	39.7 U
Aroclor-1242					41.8 U	35.9 U	46.1 U	40.4 U	42.5 U	39.7 U
Aroclor-1248					41.8 U	35.9 U	46.1 U	40.4 U	42.5 U	39.7 U
Aroclor-1254					41.8 U	35.9 U	46.1 U	40.4 U	42.5 U	39.7 U
Aroclor-1260					41.8 U	35.9 U	46.1 U	40.4 U	42.5 U	39.7 U
Aroclor-1262					41.8 U	35.9 U	46.1 U	40.4 U	42.5 U	39.7 U
Aroclor-1268					41.8 U	35.9 U	46.1 U	40.4 U	42.5 U	39.7 U
PCBS, TOTAL	100	3200	1000		41.8 U	35.9 U	46.1 U	40.4 U	42.5 U	39.7 U

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	NYSDEC	NYSDEC	NYSDEC							
	Part 375	Part 375	Part 375	Sample Designation:	RW-14	RW-15	RW-15 DUP	RW-17	RW-17	RW-19
Parameter	Unrestricted	Protection of	Restricted	Sample Date:	4/14/2014	4/11/2014	4/11/2014	4/11/2014	4/11/2014	4/15/2014
(Concentrations in µg/kg)	Use	Groundwater	Residential	Sample Depth (ft bls):	3 - 5	1 - 3	1 - 3	0 - 2	2 - 4	5.5 - 7.5
Aroclor-1016					36.6 U	36.7 U	36.5 U	37.7 U	38.1 U	36.4 U
Aroclor-1221					36.6 U	36.7 U	36.5 U	37.7 U	38.1 U	36.4 U
Aroclor-1232					36.6 U	36.7 U	36.5 U	37.7 U	38.1 U	36.4 U
Aroclor-1242					36.6 U	36.7 U	36.5 U	37.7 U	38.1 U	36.4 U
Aroclor-1248					36.6 U	36.7 U	36.5 U	37.7 U	38.1 U	36.4 U
Aroclor-1254					36.6 U	36.7 U	36.5 U	37.7 U	38.1 U	36.4 U
Aroclor-1260					36.6 U	36.7 U	36.5 U	37.7 U	38.1 U	36.4 U
Aroclor-1262					36.6 U	36.7 U	36.5 U	37.7 U	38.1 U	36.4 U
Aroclor-1268					36.6 U	36.7 U	36.5 U	37.7 U	38.1 U	36.4 U
PCBS, TOTAL	100	3200	1000		36.6 U	36.7 U	36.5 U	37.7 U	38.1 U	36.4 U

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	NYSDEC	NYSDEC	NYSDEC							
	Part 375	Part 375	Part 375	Sample Designation:	GP-1A	GP-1B	GP-2	GP-3	GP-4	GP-5
Parameter	Unrestricted	Protection of	Restricted	Sample Date:	11/1/2007	11/1/2007	11/1/2007	11/1/2007	11/1/2007	11/2/2007
(Concentrations in µg/kg)	Use	Groundwater	Residential	Sample Depth (ft bls):	2 - 3	4 - 6	4 - 6	4 - 5.5	3.5 - 5.5	6 - 8
4,4'-DDD	3.3	14000	13000		NA	NA	NA	NA	NA	NA
4,4'-DDE	3.3	17000	8900		ND	ND	ND	ND	ND	ND
4,4'-DDT	3.3	136000	7900		ND	ND	ND	ND	ND	ND
Aldrin	5	190	97		NA	NA	NA	NA	NA	NA
alpha-BHC	20	20	480		NA	NA	NA	NA	NA	NA
alpha-Chlordane	94	2900	4200		NA	NA	NA	NA	NA	NA
beta-BHC	36	90	360		NA	NA	NA	NA	NA	NA
Chlordane					NA	NA	NA	NA	NA	NA
delta-BHC	40	250	100000		NA	NA	NA	NA	NA	NA
Dieldrin	5	100	200		NA	NA	NA	NA	NA	NA
Endosulfan I	2400	102000	24000		NA	NA	NA	NA	NA	NA
Endosulfan II	2400	102000	24000		NA	NA	NA	NA	NA	NA
Endosulfan sulfate	2400	1000000	24000		NA	NA	NA	NA	NA	NA
Endrin ketone					NA	NA	NA	NA	NA	NA
Endrin	14	60	11000		NA	NA	NA	NA	NA	NA
gamma-BHC (Lindane)	100	100	1300		NA	NA	NA	NA	NA	NA
gamma-Chlordane					NA	NA	NA	NA	NA	NA
Heptachlor epoxide					NA	NA	NA	NA	NA	NA
Heptachlor	42	380	2100		NA	NA	NA	NA	NA	NA
Methoxychlor					NA	NA	NA	NA	NA	NA
Toxaphene					NA	NA	NA	NA	NA	NA

J - Estimated value

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NA - Not available

	NYSDEC	NYSDEC	NYSDEC							
	Part 375	Part 375	Part 375	Sample Designation:	GP-6	GP-7	GP-8	GP-9	GP-10	GP-11
Parameter	Unrestricted	Protection of	Restricted	Sample Date:	11/2/2007	11/2/2007	11/5/2007	11/5/2007	11/5/2007	11/5/2007
(Concentrations in µg/kg)	Use	Groundwater	Residential	Sample Depth (ft bls):	6 - 8	2 - 4	8 - 10	2 - 4	2 - 4	4 - 6
4,4'-DDD	3.3	14000	13000		NA	NA	NA	NA	NA	NA
4,4'-DDE	3.3	17000	8900		ND	ND	ND	ND	18.3	ND
4,4'-DDT	3.3	136000	7900		ND	ND	ND	ND	21.5	ND
Aldrin	5	190	97		NA	NA	NA	NA	NA	NA
alpha-BHC	20	20	480		NA	NA	NA	NA	NA	NA
alpha-Chlordane	94	2900	4200		NA	NA	NA	NA	NA	NA
beta-BHC	36	90	360		NA	NA	NA	NA	NA	NA
Chlordane					NA	NA	NA	NA	NA	NA
delta-BHC	40	250	100000		NA	NA	NA	NA	NA	NA
Dieldrin	5	100	200		NA	NA	NA	NA	NA	NA
Endosulfan I	2400	102000	24000		NA	NA	NA	NA	NA	NA
Endosulfan II	2400	102000	24000		NA	NA	NA	NA	NA	NA
Endosulfan sulfate	2400	1000000	24000		NA	NA	NA	NA	NA	NA
Endrin ketone					NA	NA	NA	NA	NA	NA
Endrin	14	60	11000		NA	NA	NA	NA	NA	NA
gamma-BHC (Lindane)	100	100	1300		NA	NA	NA	NA	NA	NA
gamma-Chlordane					NA	NA	NA	NA	NA	NA
Heptachlor epoxide					NA	NA	NA	NA	NA	NA
Heptachlor	42	380	2100		NA	NA	NA	NA	NA	NA
Methoxychlor					NA	NA	NA	NA	NA	NA
Toxaphene					NA	NA	NA	NA	NA	NA

J - Estimated value

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NA - Not available

	NYSDEC	NYSDEC	NYSDEC							
	Part 375	Part 375	Part 375	Sample Designation:	GP-12	SB-1	SB-2A	SB-2B	SB-3	SB-4
Parameter	Unrestricted	Protection of	Restricted	Sample Date:	11/5/2007	11/7/2007	11/7/2007	11/7/2007	11/7/2007	11/8/2007
(Concentrations in µg/kg)	Use	Groundwater	Residential	Sample Depth (ft bls):	6 - 8	6 - 8	4 - 6	8 - 10	3 - 4	10 - 14
4,4'-DDD	3.3	14000	13000		NA	NA	NA	NA	NA	NA
4,4'-DDE	3.3	17000	8900		ND	ND	ND	ND	ND	ND
4,4'-DDT	3.3	136000	7900		ND	ND	ND	ND	ND	ND
Aldrin	5	190	97		NA	NA	NA	NA	NA	NA
alpha-BHC	20	20	480		NA	NA	NA	NA	NA	NA
alpha-Chlordane	94	2900	4200		NA	NA	NA	NA	NA	NA
beta-BHC	36	90	360		NA	NA	NA	NA	NA	NA
Chlordane					NA	NA	NA	NA	NA	NA
delta-BHC	40	250	100000		NA	NA	NA	NA	NA	NA
Dieldrin	5	100	200		NA	NA	NA	NA	NA	NA
Endosulfan I	2400	102000	24000		NA	NA	NA	NA	NA	NA
Endosulfan II	2400	102000	24000		NA	NA	NA	NA	NA	NA
Endosulfan sulfate	2400	1000000	24000		NA	NA	NA	NA	NA	NA
Endrin ketone					NA	NA	NA	NA	NA	NA
Endrin	14	60	11000		NA	NA	NA	NA	NA	NA
gamma-BHC (Lindane)	100	100	1300		NA	NA	NA	NA	NA	NA
gamma-Chlordane					NA	NA	NA	NA	NA	NA
Heptachlor epoxide					NA	NA	NA	NA	NA	NA
Heptachlor	42	380	2100		NA	NA	NA	NA	NA	NA
Methoxychlor					NA	NA	NA	NA	NA	NA
Toxaphene					NA	NA	NA	NA	NA	NA

J - Estimated value

U - Indicates that the compound was analyzed for but not detected

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NA - Not available

	NYSDEC	NYSDEC	NYSDEC							
	Part 375	Part 375	Part 375	Sample Designation:	SB-5	SB-6	SB-7	SB-8	SB-9	SB-10
Parameter	Unrestricted	Protection of	Restricted	Sample Date:	11/9/2007	11/9/2007	12/5/2007	12/5/2007	12/7/2007	12/7/2007
(Concentrations in µg/kg)	Use	Groundwater	Residential	Sample Depth (ft bls):	8 - 10	17 - 19	12 - 16	12 - 14	9 - 11	9 - 11
4,4'-DDD	3.3	14000	13000		NA	NA	NA	NA	NA	NA
4,4'-DDE	3.3	17000	8900		ND	ND	ND	ND	ND	ND
4,4'-DDT	3.3	136000	7900		ND	ND	ND	ND	ND	ND
Aldrin	5	190	97		NA	NA	NA	NA	NA	NA
alpha-BHC	20	20	480		NA	NA	NA	NA	NA	NA
alpha-Chlordane	94	2900	4200		NA	NA	NA	NA	NA	NA
beta-BHC	36	90	360		NA	NA	NA	NA	NA	NA
Chlordane					NA	NA	NA	NA	NA	NA
delta-BHC	40	250	100000		NA	NA	NA	NA	NA	NA
Dieldrin	5	100	200		NA	NA	NA	NA	NA	NA
Endosulfan I	2400	102000	24000		NA	NA	NA	NA	NA	NA
Endosulfan II	2400	102000	24000		NA	NA	NA	NA	NA	NA
Endosulfan sulfate	2400	1000000	24000		NA	NA	NA	NA	NA	NA
Endrin ketone					NA	NA	NA	NA	NA	NA
Endrin	14	60	11000		NA	NA	NA	NA	NA	NA
gamma-BHC (Lindane)	100	100	1300		NA	NA	NA	NA	NA	NA
gamma-Chlordane					NA	NA	NA	NA	NA	NA
Heptachlor epoxide					NA	NA	NA	NA	NA	NA
Heptachlor	42	380	2100		NA	NA	NA	NA	NA	NA
Methoxychlor					NA	NA	NA	NA	NA	NA
Toxaphene					NA	NA	NA	NA	NA	NA

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of the calibration range in the original sample.

DUP - Duplicate sample

 $\mu g/kg$ - Micrograms per kilogram

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NA - Not available

	NYSDEC	NYSDEC	NYSDEC							
	Part 375	Part 375	Part 375	Sample Designation:	SB-11	CB2	DW1	RB-4	RB-4 DUP	RB-4
Parameter	Unrestricted	Protection of	Restricted	Sample Date:	12/7/2007	4/18/2014	4/18/2014	4/17/2014	4/17/2014	4/17/2014
(Concentrations in µg/kg)	Use	Groundwater	Residential	Sample Depth (ft bls):	4 - 6	-	4 - 6	7 - 9	7 - 9	10 - 12
4,4'-DDD	3.3	14000	13000		NA	10.7 UD	6.46	1.73 U	1.67 U	1.86 U
4,4'-DDE	3.3	17000	8900		ND	10.7 UD	2.13 U	1.73 U	1.67 U	1.86 U
4,4'-DDT	3.3	136000	7900		ND	54.7 D	4.00 U	3.24 U	3.14 U	3.49 U
Aldrin	5	190	97		NA	10.7 UD	2.13 U	1.73 U	1.67 U	1.86 U
alpha-BHC	20	20	480		NA	4.45 UD	0.889 U	0.720 U	0.697 U	0.775 U
alpha-Chlordane	94	2900	4200		NA	13.3 UD	2.67 U	2.16 U	2.09 U	2.32 U
beta-BHC	36	90	360		NA	10.7 UD	2.13 U	1.73 U	1.67 U	1.86 U
Chlordane					NA	86.8 UD	17.3 U	14.0 U	13.6 U	15.1 U
delta-BHC	40	250	100000		NA	10.7 UD	2.13 U	1.73 U	1.67 U	1.86 U
Dieldrin	5	100	200		NA	6.67 UD	1.33 U	1.08 U	1.05 U	1.16 U
Endosulfan I	2400	102000	24000		NA	10.7 UD	2.13 U	1.73 U	1.67 U	1.86 U
Endosulfan II	2400	102000	24000		NA	10.7 UD	2.13 U	1.73 U	1.67 U	1.86 U
Endosulfan sulfate	2400	1000000	24000		NA	4.45 UD	0.889 U	0.720 U	0.697 U	0.775 U
Endrin ketone					NA	10.7 UD	2.13 U	1.73 U	1.67 U	1.86 U
Endrin	14	60	11000		NA	4.45 UD	0.889 U	0.720 U	0.697 U	0.775 U
gamma-BHC (Lindane)	100	100	1300		NA	4.45 UD	0.889 U	0.720 U	0.697 U	0.775 U
gamma-Chlordane					NA	13.3 UD	2.67 U	2.16 U	2.09 U	2.32 U
Heptachlor epoxide					NA	20.0 UD	4.00 U	3.24 U	3.14 U	3.49 U
Heptachlor	42	380	2100		NA	5.34 UD	1.07 U	0.864 U	0.837 U	0.930 U
Methoxychlor					NA	20.0 UD	4.00 U	3.24 U	3.14 U	3.49 U
Toxaphene					NA	200 UD	40.0 U	32.4 U	31.4 U	34.9 U

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	NYSDEC	NYSDEC	NYSDEC							
	Part 375	Part 375	Part 375	Sample Designation:	RB-4	RB-6	RB-6 DUP	RB-7	RB-7	RB-7
Parameter	Unrestricted	Protection of	Restricted	Sample Date:	4/17/2014	4/21/2014	4/21/2014	4/7/2014	4/7/2014	4/7/2014
(Concentrations in µg/kg)	Use	Groundwater	Residential	Sample Depth (ft bls):	18 - 20	11 - 13	11 - 13	13 - 15	15 - 17	20 - 21
4,4'-DDD	3.3	14000	13000		1.74 U	1.77 U	1.72 U	1.86 U	1.84 U	1.77 U
4,4'-DDE	3.3	17000	8900		1.74 U	1.77 U	1.72 U	1.86 U	1.84 U	1.77 U
4,4'-DDT	3.3	136000	7900		3.27 U	3.33 U	3.22 U	3.49 U	3.44 U	3.31 U
Aldrin	5	190	97		1.74 U	1.77 U	1.72 U	1.86 U	1.84 U	1.77 U
alpha-BHC	20	20	480		0.727 U	0.739 U	0.716 U	0.775 U	0.766 U	0.736 U
alpha-Chlordane	94	2900	4200		2.18 U	2.22 U	2.15 U	2.32 U	2.30 U	2.21 U
beta-BHC	36	90	360		1.74 U	1.77 U	1.72 U	1.86 U	1.84 U	1.77 U
Chlordane					14.2 U	14.4 U	14.0 U	15.1 U	14.9 U	14.4 U
delta-BHC	40	250	100000		1.74 U	1.77 U	1.72 U	1.86 U	1.84 U	1.77 U
Dieldrin	5	100	200		1.09 U	1.11 U	1.07 U	1.16 U	1.15 U	1.10 U
Endosulfan I	2400	102000	24000		1.74 U	1.77 U	1.72 U	1.86 U	1.84 U	1.77 U
Endosulfan II	2400	102000	24000		1.74 U	1.77 U	1.72 U	1.86 U	1.84 U	1.77 U
Endosulfan sulfate	2400	1000000	24000		0.727 U	0.739 U	0.716 U	0.775 U	0.766 U	0.736 U
Endrin ketone					1.74 U	1.77 U	1.72 U	1.86 U	1.84 U	1.77 U
Endrin	14	60	11000		0.727 U	0.739 U	0.716 U	0.775 U	0.766 U	0.736 U
gamma-BHC (Lindane)	100	100	1300		0.727 U	0.739 U	0.716 U	0.775 U	0.766 U	0.736 U
gamma-Chlordane					2.18 U	2.22 U	2.15 U	2.32 U	2.30 U	2.21 U
Heptachlor epoxide					3.27 U	3.33 U	3.22 U	3.49 U	3.44 U	3.31 U
Heptachlor	42	380	2100		0.872 U	0.887 U	0.859 U	0.930 U	0.919 U	1.27
Methoxychlor					3.27 U	3.33 U	3.22 U	3.49 U	3.44 U	3.31 U
Toxaphene					32.7 U	33.3 U	32.2 U	34.9 U	34.4 U	33.1 U

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	NYSDEC	NYSDEC	NYSDEC							
	Part 375	Part 375	Part 375	Sample Designation:	RB-17	RB-24	RB-24	RB-28	RB-28	RB-33
Parameter	Unrestricted	Protection of	Restricted	Sample Date:	4/16/2014	4/9/2014	4/9/2014	4/10/2014	4/10/2014	4/10/2014
(Concentrations in µg/kg)	Use	Groundwater	Residential	Sample Depth (ft bls):	6 - 8	2 - 4	6 - 8	5 - 7	7 - 8	4 - 6
4,4'-DDD	3.3	14000	13000		2.12 U	1.70 U	2.18 U	134	18.0 UD	2.02 U
4,4'-DDE	3.3	17000	8900		2.12 U	0.955 J	2.18 U	437 D	51.9 D	2.02 U
4,4'-DDT	3.3	136000	7900		3.97 U	1.55 J	4.08 U	1060 D	121 D	3.79 U
Aldrin	5	190	97		2.12 U	1.70 U	2.18 U	1.85 U	18.0 UD	2.02 U
alpha-BHC	20	20	480		0.883 U	0.708 U	0.907 U	0.772 U	7.51 UD	0.843 U
alpha-Chlordane	94	2900	4200		2.65 U	2.12 U	2.72 U	50.4	22.5 UD	2.53 U
beta-BHC	36	90	360		2.12 U	1.70 U	2.18 U	1.85 U	18.0 UD	2.02 U
Chlordane					17.2 U	13.8 U	17.7 U	15.1 U	146 UD	16.4 U
delta-BHC	40	250	100000		2.12 U	1.70 U	2.18 U	1.85 U	18.0 UD	2.02 U
Dieldrin	5	100	200		1.32 U	1.06 U	1.36 U	41.8 JV	11.3 UD	1.26 U
Endosulfan I	2400	102000	24000		2.12 U	1.70 U	2.18 U	1.85 U	18.0 UD	2.02 U
Endosulfan II	2400	102000	24000		2.12 U	1.70 U	2.18 U	1.85 U	18.0 UD	2.02 U
Endosulfan sulfate	2400	1000000	24000		0.883 U	0.708 U	0.907 U	0.772 U	7.51 UD	0.843 U
Endrin ketone					2.12 U	1.70 U	2.18 U	1.85 U	18.0 UD	2.02 U
Endrin	14	60	11000		0.883 U	0.708 U	0.907 U	0.772 U	7.51 UD	0.843 U
gamma-BHC (Lindane)	100	100	1300		0.883 U	0.708 U	0.907 U	0.772 U	7.51 UD	0.843 U
gamma-Chlordane					2.65 U	2.12 U	2.72 U	45.3	22.5 UD	2.53 U
Heptachlor epoxide					3.97 U	3.18 U	4.08 U	5.21 JV	33.8 UD	3.79 U
Heptachlor	42	380	2100		1.06 U	0.849 U	1.09 U	7.74	9.02 UD	1.01 U
Methoxychlor					3.97 U	3.18 U	4.08 U	3.48 U	33.8 UD	3.79 U
Toxaphene					39.7 U	31.8 U	40.8 U	34.8 U	338 UD	37.9 U

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	NYSDEC	NYSDEC	NYSDEC								
	Part 375	Part 375	Part 375	Sample Designation:	RB-40	RB-45	RW-2	RW-3	RW-3	RW-3	RW-4
Parameter	Unrestricted	Protection of	Restricted	Sample Date:	4/14/2014	4/15/2014	4/7/2014	4/8/2014	4/8/2014	4/8/2014	4/8/2014
(Concentrations in µg/kg)	Use	Groundwater	Residential	Sample Depth (ft bls):	3 - 5	10 - 12	13 - 15	1 - 3	3 - 5	8 - 9	1 - 3
4,4'-DDD	3.3	14000	13000		1.87 U	1.74 U	1.97 U	1.82 U	1.76 U	1.95 U	40.2 UD
4,4'-DDE	3.3	17000	8900		1.87 U	1.74 U	1.97 U	1.82 U	1.76 U	1.95 U	40.2 UD
4,4'-DDT	3.3	136000	7900		3.50 U	3.27 U	3.70 U	3.42 U	3.30 U	3.65 U	300 D
Aldrin	5	190	97		1.87 U	1.74 U	1.97 U	1.82 U	1.76 U	1.95 U	40.2 UD
alpha-BHC	20	20	480		0.778 U	0.726 U	0.822 U	0.760 U	0.733 U	0.812 U	16.7 UD
alpha-Chlordane	94	2900	4200		2.33 U	2.18 U	2.47 U	2.28 U	2.20 U	2.44 U	50.2 UD
beta-BHC	36	90	360		1.87 U	1.74 U	1.97 U	1.82 U	1.76 U	1.95 U	40.2 UD
Chlordane					15.2 U	14.2 U	16.0 U	14.8 U	14.3 U	15.8 U	326 UD
delta-BHC	40	250	100000		1.87 U	1.74 U	1.97 U	1.82 U	1.76 U	1.95 U	40.2 UD
Dieldrin	5	100	200		1.17 U	1.09 U	1.23 U	1.14 U	1.10 U	1.22 U	25.1 UD
Endosulfan I	2400	102000	24000		1.87 U	1.74 U	1.97 U	1.82 U	1.76 U	1.95 U	40.2 UD
Endosulfan II	2400	102000	24000		1.87 U	1.74 U	1.97 U	1.82 U	1.76 U	1.95 U	40.2 UD
Endosulfan sulfate	2400	1000000	24000		0.778 U	0.726 U	0.822 U	0.760 U	0.733 U	0.812 U	16.7 UD
Endrin ketone					1.87 U	1.74 U	1.97 U	1.82 U	1.76 U	1.95 U	40.2 UD
Endrin	14	60	11000		0.778 U	0.726 U	0.822 U	0.760 U	0.733 U	0.812 U	16.7 UD
gamma-BHC (Lindane)	100	100	1300		0.778 U	0.726 U	0.822 U	0.760 U	0.733 U	0.812 U	16.7 UD
gamma-Chlordane					2.33 U	2.18 U	2.47 U	2.28 U	2.20 U	2.44 U	50.2 UD
Heptachlor epoxide					3.50 U	3.27 U	3.70 U	3.42 U	3.30 U	3.65 U	75.3 UD
Heptachlor	42	380	2100		0.933 U	0.872 U	0.987 U	0.912 U	0.880 U	0.974 U	20.1 UD
Methoxychlor					3.50 U	3.27 U	3.70 U	3.42 U	3.30 U	3.65 U	75.3 UD
Toxaphene					35.0 U	32.7 U	37.0 U	34.2 U	33.0 U	36.5 U	753 UD

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	NYSDEC	NYSDEC	NYSDEC							
	Part 375	Part 375	Part 375	Sample Designation:	RW-4	RW-4	RW-6	RW-9	RW-9	RW-9
Parameter	Unrestricted	Protection of	Restricted	Sample Date:	4/8/2014	4/8/2014	4/9/2014	4/16/2014	4/16/2014	4/16/2014
(Concentrations in µg/kg)	Use	Groundwater	Residential	Sample Depth (ft bls):	7 - 9	13 - 14	15 - 17	1.5 - 3	4 - 6	9 - 10
4,4'-DDD	3.3	14000	13000		1.95 U	1.73 U	2.24 U	19.7 UD	20.7 UD	1.91 U
4,4'-DDE	3.3	17000	8900		1.95 U	1.73 U	2.24 U	19.7 UD	20.7 UD	1.91 U
4,4'-DDT	3.3	136000	7900		3.66 U	3.24 U	4.19 U	36.9 UD	38.8 UD	3.58 U
Aldrin	5	190	97		1.95 U	1.73 U	2.24 U	19.7 UD	20.7 UD	1.91 U
alpha-BHC	20	20	480		0.812 U	0.720 U	0.932 U	8.20 UD	8.63 UD	0.796 U
alpha-Chlordane	94	2900	4200		2.44 U	2.16 U	2.80 U	24.6 UD	25.9 UD	2.39 U
beta-BHC	36	90	360		1.95 U	1.73 U	2.24 U	19.7 UD	20.7 UD	1.91 U
Chlordane					15.8 U	14.0 U	18.2 U	160 UD	168 UD	15.5 U
delta-BHC	40	250	100000		1.95 U	1.73 U	2.24 U	19.7 UD	20.7 UD	1.91 U
Dieldrin	5	100	200		1.22 U	1.08 U	1.40 U	12.3 UD	12.9 UD	1.19 U
Endosulfan I	2400	102000	24000		1.95 U	1.73 U	2.24 U	19.7 UD	20.7 UD	1.91 U
Endosulfan II	2400	102000	24000		1.95 U	1.73 U	2.24 U	19.7 UD	20.7 UD	1.91 U
Endosulfan sulfate	2400	1000000	24000		0.812 U	0.720 U	0.932 U	8.20 UD	8.63 UD	0.796 U
Endrin ketone					1.95 U	1.73 U	2.24 U	19.7 UD	20.7 UD	1.91 U
Endrin	14	60	11000		0.812 U	0.720 U	0.932 U	8.20 UD	8.63 UD	0.796 U
gamma-BHC (Lindane)	100	100	1300		0.812 U	0.720 U	0.932 U	8.20 UD	8.63 UD	0.796 U
gamma-Chlordane					2.44 U	2.16 U	2.80 U	24.6 UD	25.9 UD	2.39 U
Heptachlor epoxide					3.66 U	3.24 U	4.19 U	36.9 UD	38.8 UD	3.58 U
Heptachlor	42	380	2100		0.975 U	0.864 U	1.12 U	9.84 UD	10.4 UD	0.956 U
Methoxychlor					3.66 U	3.24 U	4.19 U	36.9 UD	38.8 UD	3.58 U
Toxaphene					36.6 U	32.4 U	41.9 U	369 UD	388 UD	35.8 U

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	NYSDEC	NYSDEC	NYSDEC							
	Part 375	Part 375	Part 375	Sample Designation:	RW-14	RW-15	RW-15 DUP	RW-17	RW-17	RW-19
Parameter	Unrestricted	Protection of	Restricted	Sample Date:	4/14/2014	4/11/2014	4/11/2014	4/11/2014	4/11/2014	4/15/2014
(Concentrations in µg/kg)	Use	Groundwater	Residential	Sample Depth (ft bls):	3 - 5	1 - 3	1 - 3	0 - 2	2 - 4	5.5 - 7.5
4,4'-DDD	3.3	14000	13000		1.71 U	1.80 U	1.77 U	1.77 U	1.88 U	1.76 U
4,4'-DDE	3.3	17000	8900		1.71 U	1.80 U	1.77 U	1.77 U	1.88 U	1.76 U
4,4'-DDT	3.3	136000	7900		3.21 U	3.38 U	3.33 U	3.32 U	3.53 U	3.30 U
Aldrin	5	190	97		1.71 U	1.80 U	1.77 U	1.77 U	1.88 U	1.76 U
alpha-BHC	20	20	480		0.714 U	0.752 U	0.739 U	0.737 U	0.785 U	0.733 U
alpha-Chlordane	94	2900	4200		2.14 U	2.26 U	2.22 U	2.21 U	2.35 U	2.20 U
beta-BHC	36	90	360		1.71 U	1.80 U	1.77 U	1.77 U	1.88 U	1.76 U
Chlordane					13.9 U	14.7 U	14.4 U	14.4 U	15.3 U	14.3 U
delta-BHC	40	250	100000		1.71 U	1.80 U	1.77 U	1.77 U	1.88 U	1.76 U
Dieldrin	5	100	200		1.07 U	1.13 U	1.11 U	1.11 U	1.18 U	1.10 U
Endosulfan I	2400	102000	24000		1.71 U	1.80 U	1.77 U	1.77 U	1.88 U	1.76 U
Endosulfan II	2400	102000	24000		1.71 U	1.80 U	1.77 U	1.77 U	1.88 U	1.76 U
Endosulfan sulfate	2400	1000000	24000		0.714 U	0.752 U	0.739 U	0.737 U	0.785 U	0.733 U
Endrin ketone					1.71 U	1.80 U	1.77 U	1.77 U	1.88 U	1.76 U
Endrin	14	60	11000		0.714 U	0.752 U	0.739 U	0.737 U	0.785 U	0.733 U
gamma-BHC (Lindane)	100	100	1300		0.714 U	0.752 U	0.739 U	0.737 U	0.785 U	0.733 U
gamma-Chlordane					2.14 U	2.26 U	2.22 U	2.21 U	2.35 U	2.20 U
Heptachlor epoxide					3.21 U	3.38 U	3.33 U	3.32 U	3.53 U	3.30 U
Heptachlor	42	380	2100		0.857 U	0.903 U	0.887 U	0.885 U	0.942 U	0.880 U
Methoxychlor					3.21 U	3.38 U	3.33 U	3.32 U	3.53 U	3.30 U
Toxaphene					32.1 U	33.8 U	33.3 U	33.2 U	35.3 U	33.0 U

J - Estimated value

U - Indicates that the compound was analyzed for but not detected

D - a secondary analysis after dilution due to exceedance

of the calibration range in the original sample.

DUP - Duplicate sample

 $\mu g/kg$ - Micrograms per kilogram

ft bls - Feet below land surface

NYSDEC - New York State Department of Environmental Conservation

-- No NYSDEC Part 375 Standards available

Bold data indicates that parameter was detected above the NYSDEC Part 375 Unrestricted Use Standards

Shaded data indicates that parameter was detected above the NYSDEC Part 375 Protection of Groundwater Standards

Boxed data indicates that parameter was detected above the NYSDEC Part 375 Restricted Use Standards

NA - Not available

	NYSDEC	Sample Designation:	GP-1W	GP-2W	GP-4W	GP-6W	GP-9W	GP-12W	SB-5W	SB-7W
Parameter	AWQSGVs	Sample Date:	11/5/2007	11/5/2007	11/5/2007	11/5/2007	11/14/2007	11/14/2007	11/14/2007	12/11/2007
(Concentrations in μ g/L)	$(\mu g/L)$	Sample Depth (ft bls):								
		• • • · · · · · ·								
1,1,1-Trichloroethane	5		NA	NA	NA	NA	NA	NA	NA	NA
1,1,2,2-Tetrachloroethane	5		NA	NA	NA	NA	NA	NA	NA	NA
1,1,2-Trichloroethane	1		NA	NA	NA	NA	NA	NA	NA	NA
1,1-Dichloroethane	5		NA	NA	NA	NA	NA	NA	NA	NA
1,1-Dichloroethene	5		NA	NA	NA	NA	NA	NA	NA	NA
1,2,3-Trichlorobenzene	5		NA	NA	NA	NA	NA	NA	NA	NA
1,2,4-Trichlorobenzene	5		NA	NA	NA	NA	NA	NA	NA	NA
1,2,4-Trimethylbenzene	5		35.9	ND	ND	ND	1,460	ND	ND	5.4
1,2-Dibromoethane			NA	NA	NA	NA	NA	NA	NA	NA
1,2-Dichlorobenzene	3		NA	NA	NA	NA	NA	NA	NA	NA
1,2-Dichloroethane	0.6		NA	NA	NA	NA	NA	NA	NA	NA
1,2-Dichloropropane	1		NA	NA	NA	NA	NA	NA	NA	NA
1,3-Dichlorobenzene	3		NA	NA	NA	NA	NA	NA	NA	NA
1,3,5- Trimethylbenzene	5		6.7	ND	ND	ND	546.0	ND	ND	21.3
1,4-Dichlorobenzene	3		NA	NA	NA	NA	NA	NA	NA	NA
1,4-Dioxane			NA	NA	NA	NA	NA	NA	NA	NA
2-Butanone (MEK)	50		NA	NA	NA	NA	NA	NA	NA	NA
2-Hexanone	50		NA	NA	NA	NA	NA	NA	NA	NA
4-Isopropyltoluene	5		ND	ND	ND	ND	101.0	ND	ND	2.4
4-Methyl-2-pentanone (MIBK)			NA	NA	NA	NA	NA	NA	NA	NA
Acetone	50		ND	ND	ND	14.7	NA	ND	11.0	ND
Benzene	1		ND	ND	4.5	ND	128.0	ND	ND	445.0
Bromochloromethane	5		NA	NA	NA	NA	NA	NA	NA	NA
Bromodichloromethane	50		NA	NA	NA	NA	NA	NA	NA	NA
Bromoform	50		NA	NA	NA	NA	NA	NA	NA	NA
Bromomethane	5		NA	NA	NA	NA	NA	NA	NA	NA
Carbon disulfide	60		NA	NA	NA	NA	NA	NA	NA	NA
Carbon tetrachloride	5		NA	NA	NA	NA	NA	NA	NA	NA
Chlorobenzene	5		NA	NA	NA	NA	NA	NA	NA	NA
Chloroethane	5		NA	NA	NA	NA	NA	NA	NA	NA
Chloroform	7		ND	ND	ND	ND	ND	ND	ND	ND
Chloromethane			NA	NA	NA	NA	NA	NA	NA	NA
cis-1,2-Dichloroethene	5		ND	ND	22.4	ND	ND	11.3	15.8	ND
cis-1,3-Dichloropropene	5		NA	NA	NA	NA	NA	NA	NA	NA
Cyclohexane			NA	NA	NA	NA	NA	NA	NA	NA
Di-Isopropyl ether			ND	ND	2.5	ND	ND	ND	ND	3.0
Dibromochloromethane	50		NA	NA	NA	NA	NA	NA	NA	NA
Dibromochloropropane			NA	NA	NA	NA	NA	NA	NA	NA
Dichlorodifluoromethane	5		NA	NA	NA	NA	NA	NA	NA	NA

Table 6. Summary of Volatile Organic Compounds in Groundwater, Post Corridor - White Plains, New York

	NYSDEC	Sample Designation:	GP-1W	GP-2W	GP-4W	GP-6W	GP-9W	GP-12W	SB-5W	SB-7W
Parameter	AWQSGVs	Sample Date:	11/5/2007	11/5/2007	11/5/2007	11/5/2007	11/14/2007	11/14/2007	11/14/2007	12/11/2007
(Concentrations in $\mu g/L$)	(µg/L)	Sample Depth (ft bls):								
Ethylbenzene	5		1.0	ND	ND	ND	1,020.0	ND	ND	47.9
Freon 113			NA	NA	NA	NA	NA	NA	NA	NA
Isopropylbenzene	5		3.3	ND	ND	ND	102.0	ND	ND	11.3
m+p-Xylene	5		NA	NA	NA	NA	NA	NA	NA	NA
Methyl acetate			NA	NA	NA	NA	NA	NA	NA	NA
Methylcyclohexane			NA	NA	NA	NA	NA	NA	NA	NA
Methylene chloride	5		NA	NA	NA	NA	NA	NA	NA	NA
MTBE	10		ND	ND	ND	5.0	ND	22.8	11.5	1,120.0
Napthalene	10		5.8	ND	ND	ND	522.0	ND	ND	34.9
n-Butylbenzene	5		ND	ND	ND	ND	80.5	ND	ND	ND
sec-Butylbenzene	5		ND	ND	ND	ND	53.0	ND	ND	2.0
n-Propylbenzene	5		4.2	ND	129.0	ND	231.0	ND	ND	5.9
o-Xylene	5		NA	NA	NA	NA	NA	NA	NA	NA
Styrene	5		NA	NA	NA	NA	NA	NA	NA	NA
Tert-amyl methyl ether			ND	ND	2.6	ND	ND	ND	ND	ND
Tert-butanol / butyl alcohol			ND	ND	2.10	ND	ND	ND	ND	22.2
Tetrachloroethene	5		ND	ND	ND	ND	ND	ND	ND	ND
Toluene	5		ND	ND	ND	ND	114.0	ND	ND	24.6
trans-1,2-Dichloroethene	5		ND	ND	1.1	ND	ND	ND	ND	ND
trans-1,3-Dichloropropene			NA	NA	NA	NA	NA	NA	NA	NA
Trichloroethene	5		ND	ND	ND	ND	ND	ND	ND	ND
Trichlorofluoromethane	5		NA	NA	NA	NA	NA	NA	NA	NA
Vinyl chloride	2		ND	ND	21.9	ND	ND	ND	2.5	ND
Xylenes (total)	5		8.6	ND	ND	ND	2,500.0	ND	ND	99.9

Table 6. Summary of Volatile Organic Compounds in Groundwater, Post Corridor - White Plains, New York

NYSDEC - New York State Department of Environmental Conservation

AWQSGVs - Ambient Water-Quality Standards and Guidance Values

 $\mu g/L$ -Micrograms per liter

J - Estimated Value

U - Compound was analyzed for but not detected

D - Secondary analysis after dilution due to exceedance

DUP - Duplicate

- - No NYSDEC AWQSGV available

Bold data indicates that parameter was detected above the NYSDEC AWQSGVs

V - Value altered or qualifier added during data validation

R - Sample results rejected by validator

UJ - Analyte was not detected. The associated reported quantitation limit is an estimate

NJ - Detection is tentative in identification and estimated in value
	NYSDEC	Sample Designation:	SB-8W	SB-9W	SB-10W	SB-11W	MW-1	MW-2	MW-3	RW-23-DUP
Parameter	AWQSGVs	Sample Date:	12/11/2007	12/11/2007	12/11/2007	12/11/2007	11/19/2007	11/19/2007	11/20/2007	1/15/2015
(Concentrations in $\mu g/L$)	$(\mu g/L)$	Sample Depth (ft bls):								
		• • • · · · · · ·								
1,1,1-Trichloroethane	5		NA	62 UD						
1,1,2,2-Tetrachloroethane	5		NA	12 UD						
1,1,2-Trichloroethane	1		NA	38 UD						
1,1-Dichloroethane	5		NA	62 UD						
1,1-Dichloroethene	5		NA	12 UD						
1,2,3-Trichlorobenzene	5		NA	62 UD						
1,2,4-Trichlorobenzene	5		NA	62 UD						
1,2,4-Trimethylbenzene	5		60.7	ND	1.2	ND	ND	ND	877.0	NA
1,2-Dibromoethane			NA	50 UD						
1,2-Dichlorobenzene	3		NA	62 UD						
1,2-Dichloroethane	0.6		NA	12 UD						
1,2-Dichloropropane	1		NA	25 UD						
1,3-Dichlorobenzene	3		NA	62 UD						
1,3,5- Trimethylbenzene	5		333.0	ND	ND	ND	ND	ND	265.0	NA
1,4-Dichlorobenzene	3		NA	62 UD						
1,4-Dioxane			NA	6200 UD						
2-Butanone (MEK)	50		NA	120 UD						
2-Hexanone	50		NA	120 UD						
4-Isopropyltoluene	5		6.6	ND	ND	ND	ND	ND	63.2	NA
4-Methyl-2-pentanone (MIBK)			NA	120 UD						
Acetone	50		ND	120 UD						
Benzene	1		20.6	1.4	ND	ND	ND	ND	ND	520 D
Bromochloromethane	5		NA	62 UD						
Bromodichloromethane	50		NA	12 UD						
Bromoform	50		NA	50 UD						
Bromomethane	5		NA	62 UD						
Carbon disulfide	60		NA	120 UD						
Carbon tetrachloride	5		NA	12 UD						
Chlorobenzene	5		NA	62 UD						
Chloroethane	5		NA	62 UD						
Chloroform	7		ND	ND	ND	ND	2.4	2.4	ND	62 UD
Chloromethane			NA	62 UD						
cis-1,2-Dichloroethene	5		ND	222.0	ND	1.4	4.5	NA	ND	62 UD
cis-1,3-Dichloropropene	5		NA	12 UD						
Cyclohexane			NA	300 D						
Di-Isopropyl ether			ND	NA						
Dibromochloromethane	50		NA	12 UD						
Dibromochloropropane			NA	62 UD						
Dichlorodifluoromethane	5		NA	120 UD						

Table 6. Summary of Volatile Organic Compounds in Groundwater, Post Corridor - White Plains, New York

ROUX ASSOCIATES, INC.

	NYSDEC	Sample Designation:	SB-8W	SB-9W	SB-10W	SB-11W	MW-1	MW-2	MW-3	RW-23-DUP
Parameter	AWQSGVs	Sample Date:	12/11/2007	12/11/2007	12/11/2007	12/11/2007	11/19/2007	11/19/2007	11/20/2007	1/15/2015
(Concentrations in µg/L)	$(\mu g/L)$	Sample Depth (ft bls):								
Ethylbenzene	5		340	ND	1.8	ND	ND	ND	706.0	1100 D
Freon 113			NA	62 UD						
Isopropylbenzene	5		48.8	ND	ND	ND	ND	ND	81.6	81 D
m+p-Xylene	5		NA	2700 D						
Methyl acetate			NA	50 UD						
Methylcyclohexane			NA	280 D						
Methylene chloride	5		NA	62 UD						
MTBE	10		52.5	116.0	29.1	ND	ND	ND	45.0	40 JD
Napthalene	10		147.0	ND	ND	ND	ND	ND	315.0	NA
n-Butylbenzene	5		ND	NA						
sec-Butylbenzene	5		17.6	ND	ND	ND	ND	ND	ND	NA
n-Propylbenzene	5		170.0	ND	ND	ND	ND	ND	72.8	NA
o-Xylene	5		NA	310 D						
Styrene	5		NA	62 UD						
Tert-amyl methyl ether			ND	NA						
Tert-butanol / butyl alcohol			ND	25.0	ND	NA	50.4	ND	451.0	NA
Tetrachloroethene	5		ND	2.1	ND	4.9	ND	ND	NA	12 UD
Toluene	5		4.5	ND	ND	ND	ND	ND	ND	110 D
trans-1,2-Dichloroethene	5		ND	1.0	ND	ND	ND	ND	ND	62 UD
trans-1,3-Dichloropropene			NA	12 UD						
Trichloroethene	5		ND	6.1	ND	1.1	ND	ND	ND	12 UD
Trichlorofluoromethane	5		NA	62 UD						
Vinyl chloride	2		ND	15.2	ND	ND	2.4	ND	ND	25 UD
Xylenes (total)	5		749.0	ND	2.3	ND	ND	ND	1,091.0	3000 D

NYSDEC - New York State Department of Environmental Conservation

AWQSGVs - Ambient Water-Quality Standards and Guidance Values

 $\mu g/L$ -Micrograms per liter

J - Estimated Value

U - Compound was analyzed for but not detected

D - Secondary analysis after dilution due to exceedance

DUP - Duplicate

- - No NYSDEC AWQSGV available

Bold data indicates that parameter was detected above the NYSDEC AWQSGVs $% \left(\mathcal{A}_{\mathrm{N}}^{\mathrm{A}}\right) =\left(\mathcal{A}_{\mathrm{N}}^{\mathrm{A}}\right) \left(\mathcal{A}_{\mathrm{N}}^{\mathrm{A}}\right)$

V - Value altered or qualifier added during data validation

R - Sample results rejected by validator

UJ - Analyte was not detected. The associated reported quantitation limit is an estimate

	NYSDEC	Sample Designation:	RB-50	RB-50	RB-50	RB-51	RB-51	RB-51 DUP	RB-51	RW-1
Parameter	AWQSGVs	Sample Date:	12/30/2014	12/30/2014	12/30/2014	12/30/2014	12/30/2014	12/30/2014	12/30/2014	5/15/2014
(Concentrations in $\mu g/L$)	$(\mu g/L)$	Sample Depth (ft bls):	10	20	30	10	20	20	30	
1,1,1-Trichloroethane	5		25 UD	25 UD	62 UD	2.5 U	2.5 U	2.5 U	2.5 U	12 UD
1,1,2,2-Tetrachloroethane	5		5 UD	5 UD	12 UD	0.5 U	0.5 U	0.5 U	0.5 U	2.5 UD
1,1,2-Trichloroethane	1		15 UD	15 UD	38 UD	1.5 U	1.5 U	1.5 U	1.5 U	7.5 UD
1,1-Dichloroethane	5		25 UD	25 UD	62 UD	2.5 U	2.5 U	2.5 U	2.5 U	12 UD
1,1-Dichloroethene	5		5 UD	5 UD	12 UD	0.5 U	0.5 U	0.5 U	0.5 U	2.5 UD
1,2,3-Trichlorobenzene	5		25 UD	25 UD	62 UD	2.5 U	2.5 U	2.5 U	2.5 U	12 UD
1,2,4-Trichlorobenzene	5		25 UD	25 UD	62 UD	2.5 U	2.5 U	2.5 U	2.5 U	12 UD
1,2,4-Trimethylbenzene	5		NA	NA						
1,2-Dibromoethane			20 UD	20 UD	50 UD	2 U	2 U	2 U	2 U	10 UD
1,2-Dichlorobenzene	3		25 UD	25 UD	62 UD	2.5 U	2.5 U	2.5 U	2.5 U	12 UD
1,2-Dichloroethane	0.6		5 UD	5 UD	12 UD	0.5 U	0.5 U	0.5 U	0.5 U	2.5 UD
1,2-Dichloropropane	1		10 UD	10 UD	25 UD	1 U	1 U	1 U	1 U	5.0 UD
1,3-Dichlorobenzene	3		25 UD	25 UD	62 UD	2.5 U	2.5 U	2.5 U	2.5 U	12 UD
1,3,5- Trimethylbenzene	5		NA	NA						
1,4-Dichlorobenzene	3		25 UD	25 UD	62 UD	2.5 U	2.5 U	2.5 U	2.5 U	12 UD
1,4-Dioxane			2500 UD	2500 UD	6200 UD	250 U	250 U	250 U	250 U	1200 UD
2-Butanone (MEK)	50		50 UD	50 UD	120 UD	5 U	4.4 J	3.5 J	5 U	25 UD
2-Hexanone	50		50 UD	50 UD	120 UD	5 U	5 U	5 U	5 U	25 UD
4-Isopropyltoluene	5		NA	NA						
4-Methyl-2-pentanone (MIBK)			50 UD	50 UD	120 UD	5 U	5 U	5 U	5 U	25 UD
Acetone	50		50 UVD	50 UD	120 UD	5 UV	23 JV	14 JV	5 UV	25 UD
Benzene	1		5 UD	2.4 JD	12 UD	0.25 J	0.32 J	0.26 J	0.5 U	1.8 JD
Bromochloromethane	5		25 UD	25 UD	62 UD	2.5 U	2.5 U	2.5 U	2.5 U	12 UD
Bromodichloromethane	50		5 UD	5 UD	12 UD	0.5 U	0.5 U	0.5 U	0.5 U	2.5 UD
Bromoform	50		20 UD	20 UD	50 UD	2 U	2 U	2 U	2 U	10 UD
Bromomethane	5		25 UD	25 UD	62 UD	2.5 U	2.5 U	2.5 U	2.5 U	12 UD
Carbon disulfide	60		50 UD	50 UD	120 UD	5 U	5 U	5 U	5 U	25 UD
Carbon tetrachloride	5		5 UD	5 UD	12 UD	0.5 U	0.5 U	0.5 U	0.5 U	2.5 UD
Chlorobenzene	5		25 UD	25 UD	62 UD	2.5 U	2.5 U	2.5 U	2.5 U	12 UD
Chloroethane	5		25 UD	25 UD	62 UD	2.5 U	2.5 U	2.5 U	2.5 U	12 UD
Chloroform	7		25 UD	25 UD	62 UD	2.5 U	2.5 U	2.5 U	2.5 U	12 UD
Chloromethane			25 UD	25 UD	62 UD	2.5 U	2.5 U	2.5 U	2.5 U	12 UD
cis-1,2-Dichloroethene	5		69 D	12 JD	62 UD	4.1	9.9	13	1.1 J	12 UD
cis-1,3-Dichloropropene	5		5 UD	5 UD	12 UD	0.5 U	0.5 U	0.5 U	0.5 U	2.5 UD
Cyclohexane			100 UD	100 UD	250 UD	1.1 J	0.36 J	0.55 J	10 U	210 D
Di-Isopropyl ether			NA	NA						
Dibromochloromethane	50		5 UD	5 UD	12 UD	0.5 U	0.5 U	0.5 U	0.5 U	2.5 UD
Dibromochloropropane			25 UD	25 UD	62 UD	2.5 U	2.5 U	2.5 U	2.5 U	12 UD
Dichlorodifluoromethane	5		50 UD	50 UD	120 UD	5 U	5 U	5 U	5 U	25 UD

Table 6. Summary of Volatile Organic Compounds in Groundwater, Post Corridor - White Plains, New York

	NYSDEC	Sample Designation:	RB-50	RB-50	RB-50	RB-51	RB-51	RB-51 DUP	RB-51	RW-1
Parameter	AWQSGVs	Sample Date:	12/30/2014	12/30/2014	12/30/2014	12/30/2014	12/30/2014	12/30/2014	12/30/2014	5/15/2014
(Concentrations in $\mu g/L$)	(µg/L)	Sample Depth (ft bls):	10	20	30	10	20	20	30	
Ethylbenzene	5		25 UD	25 UD	62 UD	2.5 U	2.5 U	2.5 U	2.5 U	570 D
Freon 113			25 UD	25 UD	62 UD	2.5 U	2.5 U	2.5 U	2.5 U	12 UD
Isopropylbenzene	5		25 UD	25 UD	62 UD	2.5 U	2.5 U	2.5 U	2.5 U	49 D
m+p-Xylene	5		13 JD	16 JD	62 UD	0.9 J	1.3 J	1.1 J	2.5 U	760 D
Methyl acetate			20 UD	20 UD	50 UD	2 U	2 U	2 U	2 U	10 UD
Methylcyclohexane			100 UD	100 UD	250 UD	4.9 JV	1.2 J	1.5 J	1.7 J	200 D
Methylene chloride	5		25 UD	25 UD	62 UD	2.5 U	2.5 U	2.5 U	2.5 U	12 UD
MTBE	10		25 UD	25 UD	62 UD	2.5 U	2.5 U	2.5 U	2.5 U	12 UD
Napthalene	10		NA	NA						
n-Butylbenzene	5		NA	NA						
sec-Butylbenzene	5		NA	NA						
n-Propylbenzene	5		NA	NA						
o-Xylene	5		25 UD	25 UD	62 UD	2.5 U	2.5 U	2.5 U	2.5 U	54 D
Styrene	5		25 UD	25 UD	62 UD	2.5 U	2.5 U	2.5 U	2.5 U	12 UD
Tert-amyl methyl ether			NA	NA						
Tert-butanol / butyl alcohol			NA	NA						
Tetrachloroethene	5		1200 D	1700 D	3300 D	59 JV	21	29	19	2.5 UD
Toluene	5		19 JD	28 D	23 JD	1.3 J	1 J	0.8 J	2.5 U	19 D
trans-1,2-Dichloroethene	5		25 UD	25 UD	62 UD	2.5 U	2.5 U	2.5 U	2.5 U	12 UD
trans-1,3-Dichloropropene			5 UD	5 UD	12 UD	0.5 U	0.5 U	0.5 U	0.5 U	2.5 UD
Trichloroethene	5		110 D	320 D	420 D	25	11	15	10	2.5 UD
Trichlorofluoromethane	5		25 UD	25 UD	62 UD	2.5 U	2.5 U	2.5 U	2.5 U	12 UD
Vinyl chloride	2		4.2 JD	10 UD	25 UD	0.42 J	0.73 J	1 U	1 U	5.0 UD
Xylenes (total)	5		13 JD	16 JD	62 UD	0.9 J	1.3 J	1.1 J	2.5 U	810 D

Table 6. Summary of Volatile Organic Compounds in Groundwater, Post Corridor - White Plains, New York

NYSDEC - New York State Department of Environmental Conservation

AWQSGVs - Ambient Water-Quality Standards and Guidance Values

- $\mu g/L$ -Micrograms per liter
- J Estimated Value
- U Compound was analyzed for but not detected

D - Secondary analysis after dilution due to exceedance

- DUP Duplicate
- - No NYSDEC AWQSGV available

Bold data indicates that parameter was detected above the NYSDEC AWQSGVs

V - Value altered or qualifier added during data validation

R - Sample results rejected by validator

UJ - Analyte was not detected. The associated reported quantitation limit is an estimate

	NYSDEC	Sample Designation:	RW-2	RW-2 DUP	RW-3	RW-4	RW-5	RW-5 DUP	RW-5D	RW-6
Parameter	AWQSGVs	Sample Date:	5/15/2014	5/15/2014	5/16/2014	5/15/2014	5/14/2014	5/14/2014	5/16/2014	5/14/2014
(Concentrations in $\mu g/L$)	$(\mu g/L)$	Sample Depth (ft bls):								
		• • • · · · · · · · · · · · · · · · · ·								
1,1,1-Trichloroethane	5		2.5 U	2.5 U	12 UD	12 UD	2.5 U	2.5 U	6.2 UD	2.5 U
1,1,2,2-Tetrachloroethane	5		0.50 U	0.50 U	2.5 UD	2.5 UD	0.50 U	0.50 U	1.2 UD	0.50 U
1,1,2-Trichloroethane	1		1.5 U	1.5 U	7.5 UD	7.5 UD	1.5 U	1.5 U	3.8 UD	1.5 U
1,1-Dichloroethane	5		2.5 U	2.5 U	12 UD	12 UD	2.5 U	2.5 U	6.2 UD	2.5 U
1,1-Dichloroethene	5		0.50 U	0.50 U	2.5 UD	2.5 UD	0.50 U	0.50 U	0.51 JD	0.50 U
1,2,3-Trichlorobenzene	5		2.5 U	2.5 U	12 UD	12 UD	2.5 U	2.5 U	6.2 UD	2.5 U
1,2,4-Trichlorobenzene	5		2.5 U	2.5 U	12 UD	12 UD	2.5 U	2.5 U	6.2 UD	2.5 U
1,2,4-Trimethylbenzene	5		NA							
1,2-Dibromoethane			2.0 U	2.0 U	10 UD	10 UD	2.0 U	2.0 U	5.0 UD	2.0 U
1,2-Dichlorobenzene	3		2.5 U	2.5 U	12 UD	12 UD	2.5 U	2.5 U	6.2 UD	2.5 U
1,2-Dichloroethane	0.6		0.50 U	0.50 U	2.5 UD	2.5 UD	0.50 U	0.50 U	1.2 UD	0.50 U
1,2-Dichloropropane	1		1.0 U	1.0 U	5.0 UD	5.0 UD	1.0 U	1.0 U	2.5 UD	1.0 U
1,3-Dichlorobenzene	3		2.5 U	2.5 U	12 UD	12 UD	2.5 U	2.5 U	6.2 UD	2.5 U
1,3,5- Trimethylbenzene	5		NA							
1,4-Dichlorobenzene	3		2.5 U	2.5 U	12 UD	12 UD	2.5 U	2.5 U	6.2 UD	2.5 U
1,4-Dioxane			250 U	250 U	1200 UD	1200 UD	250 U	250 U	620 UD	250 U
2-Butanone (MEK)	50		5.0 U	5.0 U	25 UD	25 UD	5.0 U	5.0 U	3.1 JD	5.0 U
2-Hexanone	50		5.0 U	5.0 U	25 UD	25 UD	5.0 U	5.0 U	12 UD	5.0 U
4-Isopropyltoluene	5		NA							
4-Methyl-2-pentanone (MIBK)			5.0 U	5.0 U	25 UD	25 UD	5.0 U	5.0 U	12 UD	5.0 U
Acetone	50		5.0 U	2.9 J	25 UD	25 UD	5.0 U	1.6 J	12 D	1.7 J
Benzene	1		0.36 J	0.30 J	22 D	12 D	0.50 U	0.50 U	1.4 D	0.19 J
Bromochloromethane	5		2.5 U	2.5 U	12 UD	12 UD	2.5 U	2.5 U	6.2 UD	2.5 U
Bromodichloromethane	50		0.50 U	0.50 U	2.5 UD	2.5 UD	0.50 U	0.50 U	1.2 UD	0.50 U
Bromoform	50		2.0 U	2.0 U	10 UD	10 UD	2.0 U	2.0 U	5.0 UD	2.0 U
Bromomethane	5		2.5 U	2.5 U	12 UD	12 UD	2.5 U	2.5 U	6.2 UD	2.5 U
Carbon disulfide	60		5.0 U	5.0 U	25 UD	25 UD	5.0 U	5.0 U	12 UD	5.0 U
Carbon tetrachloride	5		0.50 U	0.50 U	2.5 UD	2.5 UD	0.50 U	0.50 U	1.2 UD	0.50 U
Chlorobenzene	5		2.5 U	2.5 U	12 UD	12 UD	2.5 U	2.5 U	6.2 UD	2.5 U
Chloroethane	5		2.5 U	2.5 U	12 UD	12 UD	2.5 U	2.5 U	6.2 UD	2.5 U
Chloroform	7		2.5 U	2.5 U	12 UD	12 UD	2.5 U	2.5 U	5.5 JD	2.5 U
Chloromethane			2.5 U	2.5 U	12 UD	12 UD	2.5 U	2.5 U	6.2 UD	2.5 U
cis-1,2-Dichloroethene	5		2.5 U	2.5 U	8.6 JD	12 UD	2.5 U	2.5 U	220 D	2.5 U
cis-1,3-Dichloropropene	5		0.50 U	0.50 U	2.5 UD	2.5 UD	0.50 U	0.50 U	1.2 UD	0.50 U
Cyclohexane			10 U	10 U	180 D	220 D	10 U	10 U	2.0 JD	10 U
Di-Isopropyl ether			NA							
Dibromochloromethane	50		0.50 U	0.50 U	2.5 UD	2.5 UD	0.50 U	0.50 U	1.2 UD	0.50 U
Dibromochloropropane			2.5 U	2.5 U	12 UD	12 UD	2.5 U	2.5 U	6.2 UD	2.5 U
Dichlorodifluoromethane	5		5.0 U	5.0 U	25 UD	25 UD	5.0 U	5.0 U	12 UD	5.0 U

Table 6. Summary of Volatile Organic Compounds in Groundwater, Post Corridor - White Plains, New York

ROUX ASSOCIATES, INC.

	NYSDEC	Sample Designation:	RW-2	RW-2 DUP	RW-3	RW-4	RW-5	RW-5 DUP	RW-5D	RW-6
Parameter	AWQSGVs	Sample Date:	5/15/2014	5/15/2014	5/16/2014	5/15/2014	5/14/2014	5/14/2014	5/16/2014	5/14/2014
(Concentrations in µg/L)	(µg/L)	Sample Depth (ft bls):								
Ethylbenzene	5		2511	0721	950 D	200 D	2511	2511	6 2 UD	2511
Euryidenzene Freon 113	5		2.50	0.72 J 2 5 U	12 UD	12 UD	2.5 U	2.5 U	6.2 UD	2.5 U
Isopropulbonzono			2.50	2.5 U	12 UD	12 UD	2.5 U	2.5 U	0.2 UD	2.5 U
	5		2.5 U	2.5 U	93 D 020 D	00 D 160 D	2.5 U	2.5 U	0.2 UD	2.5 U
m+p-Aylene	3		2.5 U	2.5 U	920 D	100 D	2.5 U	2.5 U	6.2 UD	2.5 U
Methyl acetate			2.0 U	2.0 U	10 UD	10 UD	2.0 U	2.0 U	5.0 UD	2.0 U
Methylcyclohexane			10 U	10 U	150 D	210 D	10 U	10 U	25 UD	10 U
Methylene chloride	5		2.5 U	2.5 U	12 UD	12 UD	2.5 U	2.5 U	6.2 UD	2.5 U
MTBE	10		6.7	7.6	12 UD	12 UD	2.5 U	2.5 U	24 D	2.5 U
Napthalene	10		NA	NA	NA	NA	NA	NA	NA	NA
n-Butylbenzene	5		NA	NA	NA	NA	NA	NA	NA	NA
sec-Butylbenzene	5		NA	NA	NA	NA	NA	NA	NA	NA
n-Propylbenzene	5		NA	NA	NA	NA	NA	NA	NA	NA
o-Xylene	5		2.5 U	2.5 U	140 D	5.6 JD	2.5 U	2.5 U	6.2 UD	2.5 U
Styrene	5		2.5 U	2.5 U	12 UD	12 UD	2.5 U	2.5 U	6.2 UD	2.5 U
Tert-amyl methyl ether			NA	NA	NA	NA	NA	NA	NA	NA
Tert-butanol / butyl alcohol			NA	NA	NA	NA	NA	NA	NA	NA
Tetrachloroethene	5		0.50 U	0.50 U	6.6 D	2.5 UD	0.38 J	0.38 J	52 D	0.50 U
Toluene	5		2.5 U	2.5 U	41 D	12 UD	2.5 U	2.5 U	6.2 UD	2.5 U
trans-1.2-Dichloroethene	5		2.5 U	2.5 U	12 UD	12 UD	2.5 U	2.5 U	6.2 UD	2.5 U
trans-1 3-Dichloropropene			0.50 U	0.50 U	25 UD	25 UD	0.50 U	0.50 U	1 2 UD	0.50 U
Trichloroethene	5		0.50 U	0.50 U	41D	2.5 UD	0.50 U	0.50 U	42 D	0.50 U
Trichlorofluoromethane	5		2511	2511	12 UD	12 UD	2511	2511	62 UD	2511
Vinyl ablorida	5		2.5 U	2.5 U	56D	12 UD	2.5 U	2.5 U	0.2 UD	2.5 U
v myr chloride Vylanas (tatal)	ے ج		1.0 0	1.0 0	5.0 D 1100 D	3.0 UD	1.00	1.00	2.4 JD	1.00
Ayrenes (total)	3		2.3 U	2.3 U	1100 D	1/0 JD	2.3 U	2.3 U	0.2 UD	2.3 U

NYSDEC - New York State Department of Environmental Conservation

AWQSGVs - Ambient Water-Quality Standards and Guidance Values

 $\mu g/L$ -Micrograms per liter

J - Estimated Value

U - Compound was analyzed for but not detected

D - Secondary analysis after dilution due to exceedance

DUP - Duplicate

- - No NYSDEC AWQSGV available

Bold data indicates that parameter was detected above the NYSDEC AWQSGVs

V - Value altered or qualifier added during data validation

R - Sample results rejected by validator

UJ - Analyte was not detected. The associated reported quantitation limit is an estimate

	NYSDEC	Sample Designation:	RW-7	RW-8	RW-9	RW-10	RW-11	RW-12	RW-13	RW-14	RW-15
Parameter	AWQSGVs	Sample Date:	5/16/2014	5/16/2014	5/16/2014	5/16/2014	5/16/2014	5/16/2014	5/16/2014	5/16/2014	5/16/2014
(Concentrations in $\mu g/L$)	$(\mu g/L)$	Sample Depth (ft bls):									
1,1,1-Trichloroethane	5		2.5 U	2.5 U	2.5 U	6.2 UD	2.5 U				
1,1,2,2-Tetrachloroethane	5		0.50 U	0.50 U	0.50 U	1.2 UD	0.50 U				
1,1,2-Trichloroethane	1		1.5 U	1.5 U	1.5 U	3.8 UD	1.5 U				
1,1-Dichloroethane	5		2.5 U	2.5 U	2.5 U	6.2 UD	2.5 U				
1,1-Dichloroethene	5		0.50 U	0.50 U	0.50 U	1.2 UD	0.50 U				
1,2,3-Trichlorobenzene	5		2.5 U	2.5 U	2.5 U	6.2 UD	2.5 U				
1,2,4-Trichlorobenzene	5		2.5 U	2.5 U	2.5 U	6.2 UD	2.5 U				
1,2,4-Trimethylbenzene	5		NA								
1,2-Dibromoethane			2.0 U	2.0 U	2.0 U	5.0 UD	2.0 U				
1,2-Dichlorobenzene	3		2.5 U	2.5 U	2.5 U	6.2 UD	2.5 U				
1,2-Dichloroethane	0.6		0.50 U	0.50 U	0.50 U	1.2 UD	0.53	0.50 U	0.50 U	0.50 U	0.50 U
1,2-Dichloropropane	1		1.0 U	1.0 U	1.0 U	2.5 UD	1.0 U				
1,3-Dichlorobenzene	3		2.5 U	2.5 U	2.5 U	6.2 UD	2.5 U				
1,3,5- Trimethylbenzene	5		NA								
1,4-Dichlorobenzene	3		2.5 U	2.5 U	2.5 U	6.2 UD	2.5 U				
1,4-Dioxane			250 U	250 U	250 U	620 UD	250 U				
2-Butanone (MEK)	50		5.0 U	5.0 U	5.0 U	12 UD	5.0 U				
2-Hexanone	50		5.0 U	5.0 U	5.0 U	12 UD	5.0 U				
4-Isopropyltoluene	5		NA								
4-Methyl-2-pentanone (MIBK)			5.0 U	5.0 U	5.0 U	12 UD	5.0 U				
Acetone	50		3.0 J	1.9 J	2.5 J	3.4 JD	5.0 U	11	5.0 U	2.6 J	1.5 J
Benzene	1		0.36 J	0.75	0.49 J	0.40 JD	3.4	0.50 U	0.50 U	0.50 U	0.50 U
Bromochloromethane	5		2.5 U	2.5 U	2.5 U	6.2 UD	2.5 U				
Bromodichloromethane	50		0.50 U	0.50 U	0.50 U	1.2 UD	0.50 U				
Bromoform	50		2.0 U	2.0 U	2.0 U	5.0 UD	2.0 U				
Bromomethane	5		2.5 U	2.5 U	2.5 U	6.2 UD	2.5 U				
Carbon disulfide	60		5.0 U	5.0 U	5.0 U	12 UD	5.0 U				
Carbon tetrachloride	5		0.50 U	0.50 U	0.50 U	1.2 UD	0.50 U				
Chlorobenzene	5		2.5 U	2.5 U	0.81 J	6.2 UD	2.5 U				
Chloroethane	5		2.5 U	2.5 U	2.5 U	6.2 UD	2.5 U				
Chloroform	7		2.5 U	2.5 U	2.5 U	6.2 UD	2.5 U				
Chloromethane			2.5 U	2.5 U	2.5 U	6.2 UD	2.5 U				
cis-1,2-Dichloroethene	5		2.5 U	4	63	180 D	36	2.5 U	2.5 U	2.5 U	2.5 U
cis-1,3-Dichloropropene	5		0.50 U	0.50 U	0.50 U	1.2 UD	0.50 U				
Cyclohexane			1.2 J	1.4 J	3.8 J	25 UD	19	10 U	10 U	10 U	10 U
Di-Isopropyl ether			NA								
Dibromochloromethane	50		0.50 U	0.50 U	0.50 U	1.2 UD	0.50 U				
Dibromochloropropane			2.5 U	2.5 U	2.5 U	6.2 UD	2.5 U				
Dichlorodifluoromethane	5		5.0 U	5.0 U	5.0 U	12 UD	5.0 U				

Table 6. Summary of Volatile Organic Compounds in Groundwater, Post Corridor - White Plains, New York

ROUX ASSOCIATES, INC.

	NYSDEC	Sample Designation:	RW-7	RW-8	RW-9	RW-10	RW-11	RW-12	RW-13	RW-14	RW-15
Parameter	AWQSGVs	Sample Date:	5/16/2014	5/16/2014	5/16/2014	5/16/2014	5/16/2014	5/16/2014	5/16/2014	5/16/2014	5/16/2014
(Concentrations in µg/L)	(µg/L)	Sample Depth (ft bls):									
Ethylbanzana	5		2511	2511	56	6 2 UD	2511	2511	2511	2511	2511
EuryDenzene Freon 113	5		2.5 U	2.5 U	2.5 U	6.2 UD	2.5 U				
Isopropylbenzene	5		2.5 U	2.5 U	6.5	6.2 UD	2.5 U				
m+p-Xylene	5		2.5 U	2.5 U	2.9	6.2 UD	2.5 U				
Methyl acetate			2.0 U	2.0 U	2.0 U	5.0 UD	2.0 U				
Methylcyclohexane			1.4 J	3.7 J	6.0 J	25 UD	7.5 J	10 U	10 U	10 U	10 U
Methylene chloride	5		2.5 U	2.5 U	2.5 U	6.2 UD	2.5 U				
MTBE	10		0.72 J	50	14	10 D	120	2.5 U	2.5 U	2.5 U	2.5 U
Napthalene	10		NA								
n-Butylbenzene	5		NA								
sec-Butylbenzene	5		NA								
n-Propylbenzene	5		NA								
o-Xylene	5		2.5 U	2.5 U	2.5 U	6.2 UD	2.5 U				
Styrene	5		2.5 U	2.5 U	2.5 U	6.2 UD	2.5 U				
Tert-amyl methyl ether			NA								
Tert-butanol / butyl alcohol			NA								
Tetrachloroethene	5		0.50 U	0.50 U	9.8	120 D	0.50 U				
Toluene	5		2.5 U	2.5 U	2.5 U	6.2 UD	2.5 U				
trans-1,2-Dichloroethene	5		2.5 U	2.5 U	2.5 U	6.2 UD	2.5 U				
trans-1,3-Dichloropropene			0.50 U	0.50 U	0.50 U	1.2 UD	0.50 U				
Trichloroethene	5		0.50 U	0.50 U	7.2	54 D	0.50 U				
Trichlorofluoromethane	5		2.5 U	2.5 U	2.5 U	6.2 UD	2.5 U				
Vinyl chloride	2		1.0 U	5.7	2.5	0.96 JD	21	1.0 U	1.0 U	1.0 U	1.0 U
Xylenes (total)	5		2.5 U	2.5 U	2.9	6.2 UD	2.5 U				

Table 6.	Summary of	of Volatile	Organic (Compounds in	Groundwater,	Post Corridor	- White Plains,	New York
			- 0		,		,	

NYSDEC - New York State Department of Environmental Conservation

AWQSGVs - Ambient Water-Quality Standards and Guidance Values

 $\mu g/L$ -Micrograms per liter

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U - Compound was analyzed for but not detected

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Bold data indicates that parameter was detected above the NYSDEC AWQSGVs

V - Value altered or qualifier added during data validation

R - Sample results rejected by validator

UJ - Analyte was not detected. The associated reported quantitation limit is an estimate

	NYSDEC	Sample Designation:	RW-16	RW-17	RW-18	RW-19	RW-20	RW-21	RW-22	RW-23	RW-24
Parameter	AWQSGVs	Sample Date:	5/16/2014	5/16/2014	5/16/2014	5/15/2014	5/15/2014	1/15/2015	1/15/2015	1/15/2015	8/14/2015
(Concentrations in $\mu g/L$)	$(\mu g/L)$	Sample Depth (ft bls):									
1,1,1-Trichloroethane	5		2.5 U	62 UD	2.5 U	2.5 U	2.5 U	12 UD	6.2 UD	50 UD	2.5 U
1,1,2,2-Tetrachloroethane	5		0.50 U	12 UD	0.50 U	0.50 U	0.50 U	2.5 UD	1.2 UD	10 UD	0.50 U
1,1,2-Trichloroethane	1		1.5 U	38 UD	1.5 U	1.5 U	1.5 U	7.5 UD	3.8 UD	30 UD	1.5 U
1,1-Dichloroethane	5		2.5 U	62 UD	2.5 U	2.5 U	2.5 U	12 UD	6.2 UD	50 UD	2.5 U
1,1-Dichloroethene	5		0.50 U	12 UD	0.50 U	0.50 U	0.50 U	2.5 UD	1.2 UD	10 UD	0.50 U
1,2,3-Trichlorobenzene	5		2.5 U	62 UD	2.5 U	2.5 U	2.5 U	12 UD	6.2 UD	50 UD	2.5 U
1,2,4-Trichlorobenzene	5		2.5 U	62 UD	2.5 U	2.5 U	2.5 U	12 UD	6.2 UD	50 UD	2.5 U
1,2,4-Trimethylbenzene	5		NA								
1,2-Dibromoethane			2.0 U	50 UD	2.0 U	2.0 U	2.0 U	10 UD	5.0 UD	40 UD	2.0 U
1,2-Dichlorobenzene	3		2.5 U	62 UD	2.5 U	2.5 U	2.5 U	12 UD	6.2 UD	50 UD	2.5 U
1,2-Dichloroethane	0.6		0.50 U	12 UD	0.50 U	0.50 U	0.50 U	2.5 UD	1.2 UD	10 UD	0.50 U
1,2-Dichloropropane	1		1.0 U	25 UD	1.0 U	1.0 U	1.0 U	5.0 UD	2.5 UD	20 UD	1.0 U
1,3-Dichlorobenzene	3		2.5 U	62 UD	2.5 U	2.5 U	2.5 U	12 UD	6.2 UD	50 UD	2.5 U
1,3,5- Trimethylbenzene	5		NA								
1,4-Dichlorobenzene	3		2.5 U	62 UD	2.5 U	2.5 U	2.5 U	12 UD	6.2 UD	50 UD	2.5 U
1,4-Dioxane			250 U	6200 UD	250 U	250 U	250 U	1200 UD	620 UD	5000 UD	250 U
2-Butanone (MEK)	50		5.0 U	120 UD	2.6 J	5.0 U	5.0 U	25 UD	12 UD	100 UD	5.0 U
2-Hexanone	50		5.0 U	120 UD	5.0 U	5.0 U	5.0 U	25 UD	12 UD	100 UD	5.0 U
4-Isopropyltoluene	5		NA								
4-Methyl-2-pentanone (MIBK)			5.0 U	120 UD	5.0 U	5.0 U	5.0 U	25 UD	12 UD	100 UD	5.0 U
Acetone	50		1.8 J	120 UD	24	3.3 J	2.0 J	25 UD	17 D	100 UD	5.0 U
Benzene	1		0.50 U	12 UD	0.21 J	0.50 U	0.50 U	2.0 JD	96 D	530 D	0.50 U
Bromochloromethane	5		2.5 U	62 UD	2.5 U	2.5 U	2.5 U	12 UD	6.2 UD	50 UD	2.5 U
Bromodichloromethane	50		0.50 U	12 UD	0.50 U	0.50 U	0.50 U	2.5 UD	1.2 UD	10 UD	0.50 U
Bromoform	50		2.0 U	50 UD	2.0 U	2.0 U	2.0 U	10 UD	5.0 UD	40 UD	2.0 U
Bromomethane	5		2.5 U	62 UD	2.5 U	2.5 U	2.5 U	12 UD	6.2 UD	50 UD	2.5 U
Carbon disulfide	60		5.0 U	120 UD	5.0 U	5.0 U	5.0 U	25 UD	12 UD	100 UD	5.0 U
Carbon tetrachloride	5		0.50 U	12 UD	0.50 U	0.50 U	0.50 U	2.5 UD	1.2 UD	10 UD	0.50 U
Chlorobenzene	5		2.5 U	62 UD	2.5 U	2.5 U	2.5 U	12 UD	6.2 UD	50 UD	2.5 U
Chloroethane	5		2.5 U	62 UD	2.5 U	2.5 U	2.5 U	12 UD	6.2 UD	50 UD	2.5 U
Chloroform	7		2.5 U	62 UD	2.5 U	2.5 U	2.5 U	12 UD	6.2 UD	50 UD	2.5 U
Chloromethane			2.5 U	62 UD	2.5 U	2.5 U	2.5 U	12 UD	6.2 UD	50 UD	2.5 U
cis-1,2-Dichloroethene	5		17	340 D	2.5 U	2.5 U	2.6	19 D	6.2 UD	50 UD	2.5 U
cis-1,3-Dichloropropene	5		0.50 U	12 UD	0.50 U	0.50 U	0.50 U	2.5 UD	1.2 UD	10 UD	0.50 U
Cyclohexane			10 U	250 UD	10 U	10 U	10 U	4.6 JD	130 D	300 D	10 U
Di-Isopropyl ether			NA								
Dibromochloromethane	50		0.50 U	12 UD	0.50 U	0.50 U	0.50 U	2.5 UD	1.2 UD	10 UD	0.50 U
Dibromochloropropane			2.5 U	62 UD	2.5 U	2.5 U	2.5 U	12 UD	6.2 UD	50 UD	2.5 U
Dichlorodifluoromethane	5		5.0 U	120 UD	5.0 U	5.0 U	5.0 U	25 UD	12 UD	100 UD	5.0 U

Table 6. Summary of Volatile Organic Compounds in Groundwater, Post Corridor - White Plains, New York

ROUX ASSOCIATES, INC.

	NYSDEC	Sample Designation:	RW-16	RW-17	RW-18	RW-19	RW-20	RW-21	RW-22	RW-23	RW-24
Parameter	AWQSGVs	Sample Date:	5/16/2014	5/16/2014	5/16/2014	5/15/2014	5/15/2014	1/15/2015	1/15/2015	1/15/2015	8/14/2015
(Concentrations in µg/L)	$(\mu g/L)$	Sample Depth (ft bls):									
Ethylbenzene	5		2.5 U	62 UD	2.5 U	2.5 U	2.5 U	10 JD	35 D	1100 D	2.5 U
Freon 113			2.5 U	62 UD	2.5 U	2.5 U	2.5 U	12 UD	6.2 UD	50 UD	2.5 U
Isopropylbenzene	5		2.5 U	62 UD	2.5 U	2.5 U	2.5 U	12 UD	6.3 D	80 D	2.5 U
m+p-Xylene	5		2.5 U	62 UD	2.5 U	2.5 U	2.5 U	32 D	170 D	2500 D	2.5 U
Methyl acetate			2.0 U	50 UD	2.0 U	2.0 U	2.0 U	10 UD	5.0 UD	40 UD	2.0 U
Methylcyclohexane			10 U	250 UD	10 U	10 U	10 U	5.1 JD	73 D	280 D	10 U
Methylene chloride	5		2.5 U	62 UD	2.5 U	2.5 U	2.5 U	12 UD	6.2 UD	50 UD	2.5 U
MTBE	10		2.5 U	62 UD	2.5 U	1.3 J	4.4	12 UD	29 D	44 JD	2.5 U
Napthalene	10		NA								
n-Butylbenzene	5		NA								
sec-Butylbenzene	5		NA								
n-Propylbenzene	5		NA								
o-Xylene	5		2.5 U	62 UD	2.5 U	2.5 U	2.5 U	12 UD	22 D	300 D	2.5 U
Styrene	5		2.5 U	62 UD	2.5 U	2.5 U	2.5 U	12 UD	6.2 UD	50 UD	2.5 U
Tert-amyl methyl ether			NA								
Tert-butanol / butyl alcohol			NA								
Tetrachloroethene	5		16	2600 D	0.36 J	0.50 U	0.50 U	460 D	1.2 UD	10 UD	0.50 U
Toluene	5		2.5 U	62 UD	2.5 U	2.5 U	2.5 U	12 UD	6.4 D	110 D	2.5 U
trans-1,2-Dichloroethene	5		2.5 U	18 JD	2.5 U	2.5 U	2.5 U	12 UD	6.2 UD	50 UD	2.5 U
trans-1,3-Dichloropropene			0.50 U	12 UD	0.50 U	0.50 U	0.50 U	2.5 UD	1.2 UD	10 UD	0.50 U
Trichloroethene	5		5.1	220 D	0.50 U	0.50 U	0.17 J	13 D	1.2 UD	10 UD	0.50 U
Trichlorofluoromethane	5		2.5 U	62 UD	2.5 U	2.5 U	2.5 U	12 UD	6.2 UD	50 UD	2.5 U
Vinyl chloride	2		1.0 U	49 D	1.0 U	1.0 U	1.0 U	5.0 UD	2.5 UD	20 UD	1.0 U
Xylenes (total)	5		2.5 U	62 UD	2.5 U	2.5 U	2.5 U	32 D	190 D	2800 D	2.5 U

Table 6.	Summary of	Volatile Organic	Compounds in	Groundwater.	Post Corridor -	White Plains.	New York

NYSDEC - New York State Department of Environmental Conservation

AWQSGVs - Ambient Water-Quality Standards and Guidance Values

 $\mu g/L$ -Micrograms per liter

J - Estimated Value

U - Compound was analyzed for but not detected

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DUP - Duplicate

- - No NYSDEC AWQSGV available

Bold data indicates that parameter was detected above the NYSDEC AWQSGVs

V - Value altered or qualifier added during data validation

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UJ - Analyte was not detected. The associated reported quantitation limit is an estimate

	NYSDEC	Sample Designation: SB-1/MW-1 S	SB-2/MW-2	SB-4/MW-3
Parameter	AWOSGVs	Sample Date: 4/22/2016	5/16/2014	5/15/2014
(Concentrations in $\mu g/L$)	(ug/L)	Sample Depth (ft bls):		
((1.8)			
1,1,1-Trichloroethane	5	2.5 U	2.5 U	12 UD
1,1,2,2-Tetrachloroethane	5	0.50 U	0.50 U	2.5 UD
1,1,2-Trichloroethane	1	1.5 U	1.5 U	7.5 UD
1,1-Dichloroethane	5	2.5 U	2.5 U	12 UD
1,1-Dichloroethene	5	0.50 U	0.50 U	2.5 UD
1,2,3-Trichlorobenzene	5	2.5 U	2.5 U	12 UD
1,2,4-Trichlorobenzene	5	2.5 U	2.5 U	12 UD
1,2,4-Trimethylbenzene	5	NA	NA	NA
1,2-Dibromoethane		2.0 U	2.0 U	10 UD
1,2-Dichlorobenzene	3	2.5 U	2.5 U	12 UD
1,2-Dichloroethane	0.6	0.21 J	0.50 U	2.5 UD
1,2-Dichloropropane	1	1.0 U	1.0 U	5.0 UD
1,3-Dichlorobenzene	3	2.5 U	2.5 U	12 UD
1,3,5- Trimethylbenzene	5	NA	NA	NA
1,4-Dichlorobenzene	3	2.5 U	2.5 U	12 UD
1,4-Dioxane		250 U	250 U	1200 UD
2-Butanone (MEK)	50	5.0 U	5.0 U	25 UD
2-Hexanone	50	5.0 U	5.0 U	25 UD
4-Isopropyltoluene	5	NA	NA	NA
4-Methyl-2-pentanone (MIBK)		5.0 U	5.0 U	25 UD
Acetone	50	5.0 U	2.5 J	5.6 JD
Benzene	1	0.50 U	0.50 U	2.8 D
Bromochloromethane	5	2.5 U	2.5 U	12 UD
Bromodichloromethane	50	0.50 U	0.50 U	2.5 UD
Bromoform	50	2.0 U	2.0 U	10 UD
Bromomethane	5	2.5 U	2.5 U	12 UD
Carbon disulfide	60	5.0 U	5.0 U	25 UD
Carbon tetrachloride	5	0.50 U	0.50 U	2.5 UD
Chlorobenzene	5	2.5 U	2.5 U	12 UD
Chloroethane	5	2.5 U	2.5 U	12 UD
Chloroform	7	2.5 U	2.5 U	12 UD
Chloromethane		2.5 U	2.5 U	12 UD
cis-1,2-Dichloroethene	5	7.6	2.5 U	12 UD
cis-1,3-Dichloropropene	5	0.50 U	0.50 U	2.5 UD
Cyclohexane		NA	10 U	240 D
Di-Isopropyl ether		NA	NA	NA
Dibromochloromethane	50	0.50 U	0.50 U	2.5 UD
Dibromochloropropane		2.5 U	2.5 U	12 UD
Dichlorodifluoromethane	5	5.0 U	5.0 U	25 UD

ROUX ASSOCIATES, INC.

	NYSDEC	Sample Designation: SB-1/MW-1 SB-2/MW-	2 SB-4/MW-3
Parameter	AWQSGVs	Sample Date: 4/22/2016 5/16/2014	5/15/2014
(Concentrations in $\mu g/L$)	(µg/L)	Sample Depth (ft bls):	
Ethylbenzene	5	2.5 U 2.5 U	540 D
Freon 113		NA 2.5 U	12 UD
Isopropylbenzene	5	2.5 U 2.5 U	76 D
m+p-Xylene	5	2.5 U 2.5 U	800 D
Methyl acetate		NA 2.0 U	10 UD
Methylcyclohexane		NA 10 U	220 D
Methylene chloride	5	2.5 U 2.5 U	12 UD
MTBE	10	2.5 U 2.5 U	12 UD
Napthalene	10	NA NA	NA
n-Butylbenzene	5	NA NA	NA
sec-Butylbenzene	5	NA NA	NA
n-Propylbenzene	5	NA NA	NA
o-Xylene	5	2.5 U 2.5 U	19 D
Styrene	5	2.5 U 2.5 U	12 UD
Tert-amyl methyl ether		NA NA	NA
Tert-butanol / butyl alcohol		NA NA	NA
Tetrachloroethene	5	0.50 U 0.50 U	2.5 UD
Toluene	5	2.5 U 2.5 U	4.7 JD
trans-1,2-Dichloroethene	5	2.5 U 2.5 U	12 UD
trans-1,3-Dichloropropene		0.50 U 0.50 U	2.5 UD
Trichloroethene	5	0.50 U 0.50 U	2.5 UD
Trichlorofluoromethane	5	2.5 U 2.5 U	12 UD
Vinyl chloride	2	1.0 U 1.0 U	5.0 UD
Xylenes (total)	5	2.5 U 2.5 U	820 D

NYSDEC - New York State Department of Environmental Conservation

AWQSGVs - Ambient Water-Quality Standards and Guidance Values

- $\mu g/L$ -Micrograms per liter
- J Estimated Value
- U Compound was analyzed for but not detected

D - Secondary analysis after dilution due to exceedance

- DUP Duplicate
- - No NYSDEC AWQSGV available

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V - Value altered or qualifier added during data validation

R - Sample results rejected by validator

UJ - Analyte was not detected. The associated reported quantitation limit is an estimate

Table 7. Summar	v of Semivolatile	Organic Compo	ounds in Grou	ndwater. Post (Corridor - White I	Plains, New York
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	NYSDEC	Sample Designation:	GP-1W	GP-2W	GP-4W	GP-6W	GP-9W	GP-12W	SB-5W	SB-7W
Parameter	AWQSGVs	Sample Date:	11/5/2007	11/5/2007	11/5/2007	11/5/2007	11/14/2007	11/14/2007	11/14/2007	12/11/2007
(Concentrations in µg/L)	(µg/L)									
I,I'-Biphenyl			NA	NA	NA	NA	NA	NA	NA	NA
1-Methylnaphthalene			ND	ND	ND	ND	36.2	ND	ND	ND
1,2,4,5-Tetrachlorobenzene			NA	NA	NA	NA	NA	NA	NA	NA
2,2'-oxybis (1-chloropropane)	5		NA	NA	NA	NA	NA	NA	NA	NA
2,3,4,6-Tetrachlorophenol			NA	NA	NA	NA	NA	NA	NA	NA
2,4,5-Trichlorophenol			NA	NA	NA	NA	NA	NA	NA	NA
2,4,6-Trichlorophenol			NA	NA	NA	NA	NA	NA	NA	NA
2,4-Dichlorophenol	5		NA	NA	NA	NA	NA	NA	NA	NA
2,4-Dimethylphenol	50		NA	NA	NA	NA	NA	NA	NA	NA
2,4-Dinitrophenol	10		NA	NA	NA	NA	NA	NA	NA	NA
2,4-Dinitrotoluene	5		NA	NA	NA	NA	NA	NA	NA	NA
2,6-Dinitrotoluene	5		NA	NA	NA	NA	NA	NA	NA	NA
2-Chloronaphthalene	10		NA	NA	NA	NA	NA	NA	NA	NA
2-Chlorophenol			NA	NA	NA	NA	NA	NA	NA	NA
2-Methylnaphthalene			ND	ND	ND	ND	79.9	ND	ND	ND
2-Nitroaniline	5		NA	NA	NA	NA	NA	NA	NA	NA
2-Nitrophenol			NA	NA	NA	NA	NA	NA	NA	NA
3&4-Methylphenol			NA	NA	NA	NA	NA	NA	NA	NA
3,3'-Dichlorobenzidine	5		NA	NA	NA	NA	NA	NA	NA	NA
3-Nitroaniline	5		NA	NA	NA	NA	NA	NA	NA	NA
4.6-Dinitro-2-methylphenol			NA	NA	NA	NA	NA	NA	NA	NA
4-Bromophenyl phenyl ether			NA	NA	NA	NA	NA	NA	NA	NA
4-Chloro-3-methylphenol			NA	NA	NA	NA	NA	NA	NA	NA
4-Chloroaniline	5		NA	NA	NA	NA	NA	NA	NA	NA
4-Chlorophenyl phenyl ether			NA	NA	NA	NA	NA	NA	NA	NA
4-Nitroaniline	5		NA	NA	NA	NA	NA	NA	NA	NA
4-Nitrophenol			NΔ	NΔ	NΔ	NΔ	NΔ	NΔ	NΔ	NΔ
Acenanhthene	20		NΔ	NΔ	NΔ	NΔ	NΔ	NΔ	NΔ	NΔ
A cenaphthylene	20		NA	NA	NA NA	NA	NA	NA	NA	NA
Acotophonono	20		IN/A NA	INA NA	NA NA	NA NA	NA NA	INA NA	IN/A NA	IN/A NA
Actiophenone			IN/A NIA	INA NA	INA NA	INA NA		INA NA	INA NA	INA NA
A trazina	50		INA	INA	INA	INA	INA	INA	INA	INA
Atrazine			NA	NA	NA	NA	NA	NA	NA	NA

	NYSDEC	Sample Designation:	GP-1W	GP-2W	GP-4W	GP-6W	GP-9W	GP-12W	SB-5W	SB-7W
Parameter	AWQSGVs	Sample Date:	11/5/2007	11/5/2007	11/5/2007	11/5/2007	11/14/2007	11/14/2007	11/14/2007	12/11/2007
(Concentrations in $\mu g/L$)	(µg/L)									
Benzaldehvde			NΔ	NΔ	NA	NΑ	NΔ	NΔ	NΔ	NΔ
Benzolalanthracene	0.002		NΔ	NΔ	NΔ	NΔ	NA	NΔ	NA	NΔ
Benzo[a]pyrepe	0.002		NA	NA	NA	NA	NA	NA	NA	NA
Bonzo[b]fluorenthono	0 002		NA	NA	NA	NA	NA	NA	NA	NA
Bonzo[g h i]porvlopo	0.002		NA	NA	NA	NA	NA	NA	NA	NA
Benzo[k]fluoranthene			NA NA	NA	NA	NA	NA	NA	NA	NA
Delizo[K]Huoranuiene Dig(2 chloroothowy)mothono	0.002		INA NA	INA NA	INA NA	INA NA	INA NA	INA	INA NA	INA
Bis(2 chloroothyl) other	5		INA NA	NA	INA NA	INA NA	INA	INA NA	INA	INA
Dis(2-chioroeunyi) ether			NA NA	NA	NA	NA	NA	NA	NA	NA
Bis(2-ethylnexyl) phinalate	5		NA	NA	NA	NA	NA	NA	NA	NA
Butylbenzyl phthalate	50		NA	NA	NA	NA	NA	NA	NA	NA
Caprolactam			NA	NA	NA	NA	NA	NA	NA	NA
Carbazole			NA	NA	NA	NA	NA	NA	NA	NA
Chrysene	0.002		NA	NA	NA	NA	NA	NA	NA	NA
Dibenzo[a,h]anthracene			NA	NA	NA	NA	NA	NA	NA	NA
Dibenzofuran			NA	NA	NA	NA	NA	NA	NA	NA
Diethyl phthalate	50		NA	NA	NA	NA	NA	NA	NA	NA
Dimethyl phthalate	50		NA	NA	NA	NA	NA	NA	NA	NA
Di-n-butyl phthalate	50		NA	NA	NA	NA	NA	NA	NA	NA
Di-n-octyl phthalate			NA	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	50		NA	NA	NA	NA	NA	NA	NA	NA
Fluorene	50		NA	NA	NA	NA	NA	NA	NA	NA
Hexachlorobenzene	0.04		NA	NA	NA	NA	NA	NA	NA	NA
Hexachlorobutadiene	0.5		NA	NA	NA	NA	NA	NA	NA	NA
Hexachlorocyclopentadiene	5		NA	NA	NA	NA	NA	NA	NA	NA
Hexachloroethane	5		NA	NA	NA	NA	NA	NA	NA	NA
Indeno[1.2.3-cd]pyrene	0.002		NA	NA	NA	NA	NA	NA	NA	NA
Isophorone	50		NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	10		ND	ND	ND	ND	237.0	ND	ND	ND

n-Nitrosodi-n-propylamine

n-Nitrosodiphenylamine

Pentachlorophenol

0.4

--

50

1

Nitrobenzene

NA

	NYSDEC	Sample Designation:	GP-1W	GP-2W	GP-4W	GP-6W	GP-9W	GP-12W	SB-5W	SB-7W
Parameter A	WQSGVs	Sample Date:	11/5/2007	11/5/2007	11/5/2007	11/5/2007	11/14/2007	11/14/2007	11/14/2007	12/11/2007
(Concentrations in µg/L)	(µg/L)									
Phenanthrene	50		NA	NA	NA	NA	NA	NA	NA	NA
Phenol	1		NA	NA	NA	NA	NA	NA	NA	NA
Pyrene	50		NA	NA	NA	NA	NA	NA	NA	NA

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 μ g/L -Micrograms per liter

J - Estimated Value

U - Compound was analyzed for but not detected

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- - No NYSDEC AWQSGV available

Table 7. Summary of Semivolatile Organic Compounds in Groundwater, Post Corridor - White Plains, New York

	NYSDEC	Sample Designation:	SB-8W	SB-9W	SB-10W	SB-11W	MW-1	MW-2	MW-3
Parameter	AWQSGVs	Sample Date:	12/11/2007	12/11/2007	12/11/2007	12/11/2007	11/19/2007	11/19/2007	11/20/2007
(Concentrations in $\mu g/L$)	(µg/L)								
1,1'-Biphenyl			NA						
1-Methylnaphthalene			26.6	ND	ND	ND	ND	ND	15.3
1,2,4,5-Tetrachlorobenzene			NA						
2,2'-oxybis (1-chloropropane)	5		NA						
2,3,4,6-Tetrachlorophenol			NA						
2,4,5-Trichlorophenol			NA						
2,4,6-Trichlorophenol			NA						
2,4-Dichlorophenol	5		NA						
2,4-Dimethylphenol	50		NA						
2,4-Dinitrophenol	10		NA						
2,4-Dinitrotoluene	5		NA						
2,6-Dinitrotoluene	5		NA						
2-Chloronaphthalene	10		NA						
2-Chlorophenol			NA						
2-Methylnaphthalene			25.3	ND	ND	ND	ND	ND	28.5
2-Nitroaniline	5		NA						
2-Nitrophenol			NA						
3&4-Methylphenol			NA						
3,3'-Dichlorobenzidine	5		NA						
3-Nitroaniline	5		NA						
4,6-Dinitro-2-methylphenol			NA						
4-Bromophenyl phenyl ether			NA						
4-Chloro-3-methylphenol			NA						
4-Chloroaniline	5		NA						
4-Chlorophenyl phenyl ether			NA						
4-Nitroaniline	5		NA						
4-Nitrophenol			NA						
Acenaphthene	20		NA						
Acenaphthylene	20		NA						
Acetophenone			NA						
Anthracene	50		NA						
Atrazine			NA						

	NYSDEC	Sample Designation:	SB-8W	SB-9W	SB-10W	SB-11W	MW-1	MW-2	MW-3
Parameter	AWQSGVs	Sample Date:	12/11/2007	12/11/2007	12/11/2007	12/11/2007	11/19/2007	11/19/2007	11/20/2007
(Concentrations in µg/L)	(µg/L)								
Benzaldehyde			NA						
Benzo[a]anthracene	0.002		NA						
Benzo[a]pyrene	0		NA						
Benzo[b]fluoranthene	0.002		NA						
Benzo[g,h,i]perylene			NA						
Benzo[k]fluoranthene	0.002		NA						
Bis(2-chloroethoxy)methane	5		NA						
Bis(2-chloroethyl) ether			NA						
Bis(2-ethylhexyl) phthalate	5		NA						
Butylbenzyl phthalate	50		NA						
Caprolactam			NA						
Carbazole			NA						
Chrysene	0.002		NA						
Dibenzo[a,h]anthracene			NA						
Dibenzofuran			NA						
Diethyl phthalate	50		NA						
Dimethyl phthalate	50		NA						
Di-n-butyl phthalate	50		NA						
Di-n-octyl phthalate			NA						
Fluoranthene	50		NA						
Fluorene	50		NA						
Hexachlorobenzene	0.04		NA						
Hexachlorobutadiene	0.5		NA						
Hexachlorocyclopentadiene	5		NA						
Hexachloroethane	5		NA						
Indeno[1,2,3-cd]pyrene	0.002		NA						
Isophorone	50		NA						
Naphthalene	10		44.4	ND	ND	ND	ND	ND	10.3
Nitrobenzene	0.4		NA						
n-Nitrosodi-n-propylamine			NA						
n-Nitrosodiphenylamine	50		NA						
Pentachlorophenol	1		NA						

	NYSDEC	Sample Designation:	SB-8W	SB-9W	SB-10W	SB-11W	MW-1	MW-2	MW-3
Parameter	AWQSGVs	Sample Date:	12/11/2007	12/11/2007	12/11/2007	12/11/2007	11/19/2007	11/19/2007	11/20/2007
(Concentrations in $\mu g/L$)	(µg/L)								
Phenanthrene	50		NA						
Phenol	1		NA						
Pyrene	50		NA						

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Table 7. Summar	v of Semivolatile	Organic Compo	ounds in Grou	ndwater. Post (Corridor - White I	Plains, New York
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-	NYSDEC	Sample Designation:	RW-1	RW-2	RW-2 DUP	RW-3	RW-4	RW-5	RW-5 DUP	RW-5D
Parameter	AWQSGVs	Sample Date:	5/15/2014	5/15/2014	5/15/2014	5/16/2014	5/15/2014	5/14/2014	5/14/2014	5/16/2014
(Concentrations in µg/L)	(µg/L)	_								
1,1'-Biphenyl			2.0 U	2.0 U	2.0 U	1.0 J	2.0 U	2.0 U	2.0 U	2.0 U
1-Methylnaphthalene			NA							
1,2,4,5-Tetrachlorobenzene			10 U							
2,2'-oxybis (1-chloropropane)	5		2.0 U							
2,3,4,6-Tetrachlorophenol			5.0 U							
2,4,5-Trichlorophenol			5.0 U							
2,4,6-Trichlorophenol			5.0 U							
2,4-Dichlorophenol	5		5.0 U							
2,4-Dimethylphenol	50		5.0 U							
2,4-Dinitrophenol	10		20 U							
2,4-Dinitrotoluene	5		5.0 U							
2,6-Dinitrotoluene	5		5.0 U							
2-Chloronaphthalene	10		1.0 UD	0.20 U	0.20 U	2.0 UD	2.0 UD	0.20 U	0.20 U	0.20 U
2-Chlorophenol			2.0 U							
2-Methylnaphthalene			18 D	0.20 U	0.20 U	53 D	46 D	0.20 U	0.20 U	0.20 U
2-Nitroaniline	5		5.0 U							
2-Nitrophenol			10 U							
3&4-Methylphenol			5.0 U							
3,3'-Dichlorobenzidine	5		5.0 U							
3-Nitroaniline	5		5.0 U							
4,6-Dinitro-2-methylphenol			10 U							
4-Bromophenyl phenyl ether			2.0 U							
4-Chloro-3-methylphenol			2.0 U							
4-Chloroaniline	5		5.0 U							
4-Chlorophenyl phenyl ether			2.0 U							
4-Nitroaniline	5		5.0 U							
4-Nitrophenol			10 U							
Acenaphthene	20		1.0 UD	0.20 U	0.20 U	2.0 UD	2.0 UD	0.20 U	0.20 U	0.20 U
Acenaphthylene	20		1.0 UD	0.20 U	0.20 U	2.0 UD	2.0 UD	0.20 U	0.20 U	0.20 U
Acetophenone			5.0 U							
Anthracene	50		1.0 UD	0.20 U	0.20 U	2.0 UD	2.0 UD	0.20 U	0.20 U	0.20 U
Atrazine			10 U							

Table 7. Summary of Semivolatile Organic Compounds in	n Groundwater, Post Corridor - White Plains, New York
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	NYSDEC	Sample Designation:	RW-1	RW-2	RW-2 DUP	RW-3	RW-4	RW-5	RW-5 DUP	RW-5D
Parameter	AWQSGVs	Sample Date:	5/15/2014	5/15/2014	5/15/2014	5/16/2014	5/15/2014	5/14/2014	5/14/2014	5/16/2014
(Concentrations in µg/L)	(µg/L)									
Benzaldehyde			5.0 U							
Benzo[a]anthracene	0.002		1.0 UD	0.20 U	0.20 U	2.0 UD	2.0 UD	0.20 U	0.20 U	0.20 U
Benzo[a]pyrene	0		1.0 UD	0.20 U	0.20 U	2.0 UD	2.0 UD	0.20 U	0.20 U	0.20 U
Benzo[b]fluoranthene	0.002		1.0 UD	0.20 U	0.20 U	2.0 UD	2.0 UD	0.20 U	0.20 U	0.20 U
Benzo[g,h,i]perylene			1.0 UD	0.20 U	0.20 U	2.0 UD	2.0 UD	0.20 U	0.20 U	0.20 U
Benzo[k]fluoranthene	0.002		1.0 UD	0.20 U	0.20 U	2.0 UD	2.0 UD	0.20 U	0.20 U	0.20 U
Bis(2-chloroethoxy)methane	5		5.0 U							
Bis(2-chloroethyl) ether			2.0 U							
Bis(2-ethylhexyl) phthalate	5		3.0 U	3.0 U	3.0 U	1.8 J	3.0 U	3.0 U	3.0 U	3.0 U
Butylbenzyl phthalate	50		5.0 U							
Caprolactam			10 U							
Carbazole			2.0 U							
Chrysene	0.002		1.0 UD	0.20 U	0.20 U	2.0 UD	2.0 UD	0.20 U	0.20 U	0.20 U
Dibenzo[a,h]anthracene			1.0 UD	0.20 U	0.20 U	2.0 UD	2.0 UD	0.20 U	0.20 U	0.20 U
Dibenzofuran			2.0 U							
Diethyl phthalate	50		5.0 U							
Dimethyl phthalate	50		5.0 U							
Di-n-butyl phthalate	50		5.0 U							
Di-n-octyl phthalate			5.0 U							
Fluoranthene	50		1.0 UD	0.20 U	0.20 U	2.0 UD	2.0 UD	0.20 U	0.20 U	0.20 U
Fluorene	50		1.0 UD	0.20 U	0.20 U	2.0 UD	2.0 UD	0.20 U	0.20 U	0.20 U
Hexachlorobenzene	0.04		4.0 UD	0.80 U	0.80 U	8.0 UD	8.0 UD	0.80 U	0.80 U	0.80 U
Hexachlorobutadiene	0.5		2.5 UD	0.50 U	0.50 U	5.0 UD	5.0 UD	0.50 U	0.50 U	0.50 U
Hexachlorocyclopentadiene	5		20 U							
Hexachloroethane	5		4.0 UD	0.80 U	0.80 U	8.0 UD	8.0 UD	0.80 U	0.80 U	0.80 U
Indeno[1,2,3-cd]pyrene	0.002		1.0 UD	0.20 U	0.20 U	2.0 UD	2.0 UD	0.20 U	0.20 U	0.20 U
Isophorone	50		5.0 U							
Naphthalene	10		51 D	0.07 J	0.11 J	130 D	86 D	0.20 U	0.20 U	0.08 J
Nitrobenzene	0.4		2.0 U							
n-Nitrosodi-n-propylamine			5.0 U							
n-Nitrosodiphenylamine	50		2.0 U							
Pentachlorophenol	1		4.0 UD	0.80 U	0.80 U	8.0 UD	8.0 UD	0.80 U	0.80 U	0.80 U

Sample Designation:	RW-1	RW-2	RW-2 DUP	RW-3	RW-4	RW-5	RW-5 DUP	RW-5D
Sample Date:	5/15/2014	5/15/2014	5/15/2014	5/16/2014	5/15/2014	5/14/2014	5/14/2014	5/16/2014
	1.0 UD	0.20 U	0.20 U	2.0 UD	2.0 UD	0.20 U	0.20 U	0.20 U
	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
	1.0 UD	0.20 U	0.20 U	2.0 UD	2.0 UD	0.20 U	0.20 U	0.20 U
	Sample Designation: Sample Date:	Sample Designation: RW-1 Sample Date: 5/15/2014 1.0 UD 5.0 U 1.0 UD 1.0 UD	Sample Designation: RW-1 RW-2 Sample Date: 5/15/2014 5/15/2014 1.0 UD 0.20 U 5.0 U 5.0 U 1.0 UD 0.20 U	Sample Designation: RW-1 RW-2 RW-2 DUP Sample Date: 5/15/2014 5/15/2014 5/15/2014 1.0 UD 0.20 U 0.20 U 5.0 U 5.0 U 5.0 U 1.0 UD 0.20 U 0.20 U	Sample Designation: RW-1 RW-2 RW-2 DUP RW-3 Sample Date: 5/15/2014 5/15/2014 5/15/2014 5/16/2014 1.0 UD 0.20 U 0.20 U 2.0 UD 5.0 U 5.0 U 5.0 U 5.0 U 1.0 UD 0.20 U 0.20 U 2.0 UD 5.0 U 5.0 U 5.0 U 2.0 UD	Sample Designation: RW-1 RW-2 RW-2 DUP RW-3 RW-4 Sample Date: 5/15/2014 5/15/2014 5/15/2014 5/16/2014 5/15/2014 1.0 UD 0.20 U 0.20 U 2.0 UD 2.0 UD 5.0 U 5.0 U 5.0 U 5.0 U 5.0 U 1.0 UD 0.20 U 0.20 U 2.0 UD 2.0 UD	Sample Designation: RW-1 RW-2 RW-2 DUP RW-3 RW-4 RW-5 Sample Date: 5/15/2014 5/15/2014 5/15/2014 5/15/2014 5/15/2014 5/15/2014 5/15/2014 5/14/2014 1.0 UD 0.20 U 0.20 U 2.0 UD 2.0 UD 0.20 U 5.0 U	Sample Designation: RW-1 RW-2 RW-2 RW-2 RW-3 RW-3 RW-4 RW-5 RW-5 DUP Sample Date: 5/15/2014 5/15/2014 5/15/2014 5/16/2014 5/15/2014 5/14/2014 5/14/2014 5/14/2014 1.0 UD 0.20 U 0.20 U 2.0 UD 2.0 UD 0.20 U 0.20 U 5.0 U

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 μ g/L -Micrograms per liter

J - Estimated Value

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DUP - Duplicate

- - No NYSDEC AWQSGV available

Table 7. Summar	v of Semivolatile	Organic Compo	ounds in Grou	ndwater. Post (Corridor - White I	Plains, New York
ruore /. Summu	, or benn toname	organic comp	Junus In Olou	ind matery r obt		i i u i i u i u i u i u i u i u i u i u

	NYSDEC	Sample Designation:	RW-6	RW-7	RW-8	RW-9	RW-10	RW-11	RW-12	RW-13
Parameter	AWQSGVs	Sample Date:	5/14/2014	5/16/2014	5/16/2014	5/16/2014	5/16/2014	5/16/2014	5/16/2014	5/16/2014
(Concentrations in µg/L)	(µg/L)									
1,1'-Biphenyl			2.0 U							
1-Methylnaphthalene			NA							
1,2,4,5-Tetrachlorobenzene			10 U							
2,2'-oxybis (1-chloropropane)	5		2.0 U							
2,3,4,6-Tetrachlorophenol			5.0 U							
2,4,5-Trichlorophenol			5.0 U							
2,4,6-Trichlorophenol			5.0 U							
2,4-Dichlorophenol	5		5.0 U							
2,4-Dimethylphenol	50		5.0 U							
2,4-Dinitrophenol	10		20 U							
2,4-Dinitrotoluene	5		5.0 U							
2,6-Dinitrotoluene	5		5.0 U							
2-Chloronaphthalene	10		0.20 U							
2-Chlorophenol			2.0 U							
2-Methylnaphthalene			0.20 U	0.20 U	0.20 U	0.07 J	0.20 U	0.20 U	0.19 J	0.20 U
2-Nitroaniline	5		5.0 U							
2-Nitrophenol			10 U							
3&4-Methylphenol			5.0 U	2.8 J						
3,3'-Dichlorobenzidine	5		5.0 U							
3-Nitroaniline	5		5.0 U							
4,6-Dinitro-2-methylphenol			10 U							
4-Bromophenyl phenyl ether			2.0 U							
4-Chloro-3-methylphenol			2.0 U							
4-Chloroaniline	5		5.0 U							
4-Chlorophenyl phenyl ether			2.0 U							
4-Nitroaniline	5		5.0 U							
4-Nitrophenol			10 U							
Acenaphthene	20		0.20 U	0.36	0.20 U					
Acenaphthylene	20		0.20 U							
Acetophenone			5.0 U							
Anthracene	50		0.20 U	0.20 U	0.20 U	0.20 U	0.17 J	0.20 U	1.4	0.20 U
Atrazine			10 U							

Table 7. Summary of Semivolatile Organic Compounds in Groundwater, Post Corridor - White Plains, New York	Table 7. Summary of Semivolatile Organic Compounds in Group	indwater, Post Corridor - White Plains, New York
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	NYSDEC	Sample Designation:	RW-6	RW-7	RW-8	RW-9	RW-10	RW-11	RW-12	RW-13
Parameter	AWQSGVs	Sample Date:	5/14/2014	5/16/2014	5/16/2014	5/16/2014	5/16/2014	5/16/2014	5/16/2014	5/16/2014
(Concentrations in μ g/L)	(µg/L)									
Benzaldehyde			5.0 U							
Benzo[a]anthracene	0.002		0.20 U							
Benzo[a]pyrene	0		0.20 U							
Benzo[b]fluoranthene	0.002		0.20 U							
Benzo[g,h,i]perylene			0.20 U							
Benzo[k]fluoranthene	0.002		0.20 U							
Bis(2-chloroethoxy)methane	5		5.0 U							
Bis(2-chloroethyl) ether			2.0 U							
Bis(2-ethylhexyl) phthalate	5		3.0 U	1.3 J	3.0 U	3.0 U				
Butylbenzyl phthalate	50		5.0 U							
Caprolactam			10 U							
Carbazole			2.0 U							
Chrysene	0.002		0.20 U							
Dibenzo[a,h]anthracene			0.20 U							
Dibenzofuran			2.0 U							
Diethyl phthalate	50		5.0 U							
Dimethyl phthalate	50		5.0 U							
Di-n-butyl phthalate	50		5.0 U							
Di-n-octyl phthalate			5.0 U							
Fluoranthene	50		0.20 U	0.12 J	0.20 U					
Fluorene	50		0.20 U	0.16 J	0.20 U					
Hexachlorobenzene	0.04		0.80 U							
Hexachlorobutadiene	0.5		0.50 U							
Hexachlorocyclopentadiene	5		20 U							
Hexachloroethane	5		0.80 U							
Indeno[1,2,3-cd]pyrene	0.002		0.20 U							
Isophorone	50		5.0 U							
Naphthalene	10		0.20 U	0.08 J	0.24	0.61	0.20 U	0.20 U	0.88	0.07 J
Nitrobenzene	0.4		2.0 U							
n-Nitrosodi-n-propylamine			5.0 U							
n-Nitrosodiphenylamine	50		2.0 U							
Pentachlorophenol	1		0.80 U	2	0.80 U					

	NYSDEC	Sample Designation:	RW-6	RW-7	RW-8	RW-9	RW-10	RW-11	RW-12	RW-13
Parameter	AWQSGVs	Sample Date:	5/14/2014	5/16/2014	5/16/2014	5/16/2014	5/16/2014	5/16/2014	5/16/2014	5/16/2014
(Concentrations in µg/L)	(µg/L)									
Phenanthrene	50		0.20 U	0.08 J	0.20 U					
Phenol	1		5.0 U							
Pyrene	50		0.20 U	0.11 J	0.20 U					

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 μ g/L -Micrograms per liter

J - Estimated Value

U - Compound was analyzed for but not detected

DUP - Duplicate

- - No NYSDEC AWQSGV available

Table 7. Summar	v of Semivolatile	Organic Compo	ounds in Grou	ndwater. Post (Corridor - White I	Plains, New York
ruore /. Summu	, or benn toname	organic comp	Junus In Olou	ind matery r obt		i i u i i u i u i u i u i u i u i u i u

-	NYSDEC	Sample Designation:	RW-14	RW-15	RW-16	RW-17	RW-18	RW-19	RW-20	SB-1/MW-1
Parameter	AWQSGVs	Sample Date:	5/16/2014	5/16/2014	5/16/2014	5/16/2014	5/16/2014	5/15/2014	5/15/2014	4/22/2016
(Concentrations in µg/L)	(µg/L)									
1,1'-Biphenyl			2.0 U	40 U						
1-Methylnaphthalene			NA							
1,2,4,5-Tetrachlorobenzene			10 U	9.9 U						
2,2'-oxybis (1-chloropropane)	5		2.0 U							
2,3,4,6-Tetrachlorophenol			5.0 U	NA						
2,4,5-Trichlorophenol			5.0 U	100 U						
2,4,6-Trichlorophenol			5.0 U	4.9 U						
2,4-Dichlorophenol	5		5.0 U	100 U						
2,4-Dimethylphenol	50		5.0 U	100 U						
2,4-Dinitrophenol	10		20 U	400 U						
2,4-Dinitrotoluene	5		5.0 U	100 U						
2,6-Dinitrotoluene	5		5.0 U	4.9 U						
2-Chloronaphthalene	10		0.20 U							
2-Chlorophenol			2.0 U							
2-Methylnaphthalene			0.20 U							
2-Nitroaniline	5		5.0 U	4.9 U						
2-Nitrophenol			10 U	9.9 U						
3&4-Methylphenol			5.0 U	4.9 U						
3,3'-Dichlorobenzidine	5		5.0 U	100 U						
3-Nitroaniline	5		5.0 U	4.9 U						
4,6-Dinitro-2-methylphenol			10 U	200 U						
4-Bromophenyl phenyl ether			2.0 U	40 U						
4-Chloro-3-methylphenol			2.0 U							
4-Chloroaniline	5		5.0 U	4.9 U						
4-Chlorophenyl phenyl ether			2.0 U							
4-Nitroaniline	5		5.0 U	100 U						
4-Nitrophenol			10 U	9.9 U						
Acenaphthene	20		0.20 U	0.20 U	0.20 U	0.20 U	0.22	0.20 U	0.20 U	0.20 U
Acenaphthylene	20		0.20 U							
Acetophenone			5.0 U	4.9 U						
Anthracene	50		0.20 U	0.20 U	0.09 J	0.10 J	0.08 J	0.20 U	0.20 U	0.20 U
Atrazine			10 U	NA						

Table 7. Summar	v of Semivolatile	Organic Compou	inds in Groundwa	ter. Post Corridor	White Plains, New York
ruoro /. Dummu	, or benn toraule	organic compou	mas m orouna m		

	NYSDEC	Sample Designation:	RW-14	RW-15	RW-16	RW-17	RW-18	RW-19	RW-20	SB-1/MW-1
Parameter	AWQSGVs	Sample Date:	5/16/2014	5/16/2014	5/16/2014	5/16/2014	5/16/2014	5/15/2014	5/15/2014	4/22/2016
(Concentrations in µg/L)	(µg/L)									
Benzaldehyde			5.0 U	NA						
Benzo[a]anthracene	0.002		0.20 U							
Benzo[a]pyrene	0		0.20 U							
Benzo[b]fluoranthene	0.002		0.20 U							
Benzo[g,h,i]perylene			0.20 U							
Benzo[k]fluoranthene	0.002		0.20 U							
Bis(2-chloroethoxy)methane	5		5.0 U	4.9 U						
Bis(2-chloroethyl) ether			2.0 U							
Bis(2-ethylhexyl) phthalate	5		3.0 U	1.0 J	3.0 U	3.0 U				
Butylbenzyl phthalate	50		5.0 U	4.9 U						
Caprolactam			10 U	NA						
Carbazole			2.0 U	40 U						
Chrysene	0.002		0.20 U							
Dibenzo[a,h]anthracene			0.20 U							
Dibenzofuran			2.0 U							
Diethyl phthalate	50		5.0 U	4.9 U						
Dimethyl phthalate	50		5.0 U	4.9 U						
Di-n-butyl phthalate	50		5.0 U	4.9 U						
Di-n-octyl phthalate			5.0 U	4.9 U						
Fluoranthene	50		0.20 U	0.20 U	0.20 U	0.20 U	0.10 J	0.20 U	0.20 U	0.20 U
Fluorene	50		0.20 U	0.20 U	0.20 U	0.20 U	0.34	0.20 U	0.20 U	0.20 U
Hexachlorobenzene	0.04		0.80 U	0.79 U						
Hexachlorobutadiene	0.5		0.50 U	0.49 U						
Hexachlorocyclopentadiene	5		20 U							
Hexachloroethane	5		0.80 U	0.79 U						
Indeno[1,2,3-cd]pyrene	0.002		0.20 U							
Isophorone	50		5.0 U	4.9 U						
Naphthalene	10		0.20 U	0.20 U	0.20 U	0.20 U	0.16 J	0.20 U	0.20 U	0.20 U
Nitrobenzene	0.4		2.0 U							
n-Nitrosodi-n-propylamine			5.0 U	4.9 U						
n-Nitrosodiphenylamine	50		2.0 U	40 U						
Pentachlorophenol	1		0.80 U	0.79 U						

	NYSDEC	Sample Designation:	RW-14	RW-15	RW-16	RW-17	RW-18	RW-19	RW-20	SB-1/MW-1
Parameter	AWQSGVs	Sample Date:	5/16/2014	5/16/2014	5/16/2014	5/16/2014	5/16/2014	5/15/2014	5/15/2014	4/22/2016
(Concentrations in µg/L)	(µg/L)									
Phenanthrene	50		0.20 U	0.20 U	0.20 U	0.20 U	0.15 J	0.20 U	0.20 U	0.20 U
Phenol	1		5.0 U	100 U						
Pyrene	50		0.20 U	0.20 U	0.20 U	0.20 U	0.09 J	0.20 U	0.20 U	0.20 U

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 μ g/L -Micrograms per liter

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U - Compound was analyzed for but not detected

DUP - Duplicate

- - No NYSDEC AWQSGV available

	NYSDEC	Sample Designation:	SB-2/MW-2	SB-4/MW-3
Parameter	AWQSGVs	Sample Date:	5/16/2014	5/15/2014
(Concentrations in $\mu g/L$)	$(\mu g/L)$	-		
· · · · · · · · · · · · · · · · · · ·				
1,1'-Biphenyl			2.0 U	2.0 U
1-Methylnaphthalene			NA	NA
1,2,4,5-Tetrachlorobenzene			10 U	10 U
2,2'-oxybis (1-chloropropane)	5		2.0 U	2.0 U
2,3,4,6-Tetrachlorophenol			5.0 U	5.0 U
2,4,5-Trichlorophenol			5.0 U	5.0 U
2,4,6-Trichlorophenol			5.0 U	5.0 U
2,4-Dichlorophenol	5		5.0 U	5.0 U
2,4-Dimethylphenol	50		5.0 U	5.0 U
2,4-Dinitrophenol	10		20 U	20 U
2,4-Dinitrotoluene	5		5.0 U	5.0 U
2,6-Dinitrotoluene	5		5.0 U	5.0 U
2-Chloronaphthalene	10		0.20 U	4.0 UD
2-Chlorophenol			2.0 U	2.0 U
2-Methylnaphthalene			0.20 U	37 D
2-Nitroaniline	5		5.0 U	5.0 U
2-Nitrophenol			10 U	10 U
3&4-Methylphenol			5.0 U	5.0 U
3,3'-Dichlorobenzidine	5		5.0 U	5.0 U
3-Nitroaniline	5		5.0 U	5.0 U
4,6-Dinitro-2-methylphenol			10 U	10 U
4-Bromophenyl phenyl ether			2.0 U	2.0 U
4-Chloro-3-methylphenol			2.0 U	2.0 U
4-Chloroaniline	5		5.0 U	5.0 U
4-Chlorophenyl phenyl ether			2.0 U	2.0 U
4-Nitroaniline	5		5.0 U	5.0 U
4-Nitrophenol			10 U	10 U
Acenaphthene	20		0.20 U	4.0 UD
Acenaphthylene	20		0.20 U	4.0 UD
Acetophenone			5.0 U	5.0 U
Anthracene	50		0.20 U	4.0 UD
Atrazine			10 U	10 U

	NYSDEC	Sample Designation:	SB-2/MW-2	SB-4/MW-3
Parameter	AWQSGVs	Sample Date:	5/16/2014	5/15/2014
(Concentrations in $\mu g/L$)	(µg/L)			
Benzaldehyde			5.0 U	5.0 U
Benzo[a]anthracene	0.002		0.20 U	4.0 UD
Benzo[a]pyrene	0		0.20 U	4.0 UD
Benzo[b]fluoranthene	0.002		0.20 U	4.0 UD
Benzo[g,h,i]perylene			0.20 U	4.0 UD
Benzo[k]fluoranthene	0.002		0.20 U	4.0 UD
Bis(2-chloroethoxy)methane	5		5.0 U	5.0 U
Bis(2-chloroethyl) ether			2.0 U	2.0 U
Bis(2-ethylhexyl) phthalate	5		3.0 U	3.0 U
Butylbenzyl phthalate	50		5.0 U	5.0 U
Caprolactam			10 U	10 U
Carbazole			2.0 U	2.0 U
Chrysene	0.002		0.20 U	4.0 UD
Dibenzo[a,h]anthracene			0.20 U	4.0 UD
Dibenzofuran			2.0 U	2.0 U
Diethyl phthalate	50		5.0 U	5.0 U
Dimethyl phthalate	50		5.0 U	5.0 U
Di-n-butyl phthalate	50		5.0 U	5.0 U
Di-n-octyl phthalate			5.0 U	5.0 U
Fluoranthene	50		0.05 J	4.0 UD
Fluorene	50		0.20 U	4.0 UD
Hexachlorobenzene	0.04		0.80 U	16 UD
Hexachlorobutadiene	0.5		0.50 U	10 UD
Hexachlorocyclopentadiene	5		20 U	20 U
Hexachloroethane	5		0.80 U	16 UD
Indeno[1,2,3-cd]pyrene	0.002		0.20 U	4.0 UD
Isophorone	50		5.0 U	5.0 U
Naphthalene	10		0.20 U	180 D
Nitrobenzene	0.4		2.0 U	2.0 U
n-Nitrosodi-n-propylamine			5.0 U	5.0 U
n-Nitrosodiphenylamine	50		2.0 U	2.0 U
Pentachlorophenol	1		0.80 U	16 UD

Parameter	NYSDEC AWOSGVs	Sample Designation: Sample Date:	SB-2/MW-2 5/16/2014	SB-4/MW-3 5/15/2014
(Concentrations in µg/L)	(µg/L)	I I I I I I I I I I		
Phenanthrene	50		0.20 U	4.0 UD
Phenol	1		5.0 U	5.0 U
Pyrene	50		0.20 U	4.0 UD

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	NYSDEC	Sample Designation:	GP-1W	GP-2W	GP-4W	GP-6W	GP-9W	GP-12W	SB-5W	SB-7W	SB-8W
Parameter	AWQSGVs	Sample Date:	11/5/2007	11/5/2007	11/5/2007	11/5/2007	11/14/2007	11/14/2007	11/14/2007	12/11/2007	12/11/2007
(Concentrations in µg/L)	(µg/L)										
Aluminum			1,950	12,200	14,600	634,000	134,000	28,100	15,900	46	54
Antimony	3		ND	52	ND	125	ND	ND	ND	ND	ND
Arsenic	25		ND	4	7	231	32	ND	ND	ND	4
Barium	1000		204	275	140	6,070	1,800	434	241	220	412
Beryllium	3		ND	ND	ND	19	4	ND	ND	ND	ND
Cadmium	5		ND	ND	ND	28	3	ND	ND	ND	ND
Calcium			145,000	204,000	14,900	623,000	226,000	241,000	212,000	198,000	220,000
Chromium	50		12	28	38	1,640	148	55	26	ND	ND
Cobalt			7	11	11	366	75	24	39	7	5
Copper	200		15	19	30	1,520	410	86	45	ND	ND
Cyanide	0.2		ND	13	ND	ND	ND	ND	14	ND	ND
Iron	300		17,500	21,500	48,600	2,160,000	163,000	42,700	26,000	41	48
Iron and Manganese Combin	0.5		19,600	23,730	40,980	2,175,800	172,100	45,200	36,180	2,770	3,950
Lead	25		20	21	137	5,750	351	120	24	ND	12
Magnesium			42,500	69,700	9,120	304,000	92,200	52,000	38,500	71,000	90,200
Manganese	300		2,050	2,230	383	15,000	9,100	2,500	9,350	2,730	3,900
Mercury	0.7		ND	ND	0	6	0	ND	ND	ND	ND
Nickel	100		7	19	22	942	141	47	51	7	7
Potassium			13,500	13,600	3,610	155,000	30,300	16,100	15,400	15,000	19,700
Selenium	10		NA	NA	NA	NA	NA	NA	NA	NA	NA
Silver	50		ND	ND	ND	ND	18	5	ND	ND	13
Sodium	20000		185,000	257,000	90,800	241,000	320,000	27,700	145,000	275,000	383,000
Thallium	0.5		ND	ND	ND	112	ND	ND	10	ND	ND
Vanadium			8	33	41	1,520	328	72	41	ND	ND
Zinc	2000		73	81	112	5,080	548	208	107	6	ND

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µg/L -Micrograms per liter

J - Estimated Value

U - Compound was analyzed for but not detected

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Bold data indicates that parameter was detected above the NYSDEC AWQSGVs

Parameter AWQSGVs (Concentrations in µg/L) Sample Date: 12/11/2007 12/11/2007 11/19/2007 11/19/2007 11/20/2007 5/15/2014 </th <th>014 V J U 8</th>	014 V J U 8
(Concentrations in μg/L) (μg/L) Aluminum 26 17 52 27,900 16,800 143 66.9 16.4 JV 10 UV	V J U 8
Aluminum 26 17 52 27,900 16,800 143 66.9 16.4 JV 10 UV	IV J U 8
Aluminum 26 17 52 27,900 16,800 143 66.9 16.4 JV 10 U	V J U 8
	: J U 18
Antimony 3 ND ND ND 5 ND ND 2.1 1.21 0.78	U 18
Arsenic 25 ND ND ND 13 7 7 0.72 0.14 J 0.5 U	18
Barium 1000 228 251 150 267 262 852 220.4 76.09 79.08	
Beryllium 3 ND ND ND ND ND 0.5 U 0.5 U 0.5 U	U
Cadmium 5 ND ND ND ND ND 0.2 U 0.2 U 0.2 U 0.2 U	U
Calcium 154,000 132,000 92,600 140,000 120,000 266,000 180000 73500 8440)0
Chromium 50 ND ND ND 48 29 ND 1 UV 1 UV 1 UV	V
Cobalt ND ND ND 17 11 ND 2.81 0.75 0.79)
Copper 200 ND ND ND 41 40 ND 1.5 UV 1.5 UV 0.88	J
Cyanide 0.2 ND ND ND ND ND ND NA NA NA	L
Iron 300 42 27 52 39,000 22,400 37,200 19700 33.8 J 1000	U
Iron and Manganese Combin 0.5 3,240 2,800 460 40,070 23,830 42,540 NA NA NA	۱.
Lead 25 ND ND ND ND ND 13 2.4 1 U 1 U	l
Magnesium 29,100 40,800 15,300 30,300 34,700 60,900 41100 21600 2160)0
Manganese 300 3,200 2,850 407 1,070 1,430 6,340 4306 226.7 216	5
Mercury 0.7 ND ND ND ND ND 0.2 U 0.2 U 0.2 U 0.2 U	U
Nickel 100 ND ND ND 37 28 NA 3.47 0.71 JV 1.28 J	JV
Potassium 10,700 11,500 6,350 21,800 15,200 12,000 7060 2990 3510	0
Selenium 10 NA NA NA NA NA 1.05 J 9.13 9.81	1
Silver 50 16 ND 12 6 ND ND 0.4 U 0.4 U	U
Sodium 20000 333,000 177,000 242,000 242,000 136,000 831,000 218000 43900 5400)0
Thallium 0.5 13 ND ND ND 9 0.5 U 0.5 U 0.5 U	U
Vanadium ND ND ND 74 44 ND 0.4 J 0.23 J 0.28	J
Zinc200010ND511759ND11.1315.9816	

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	NYSDEC	Sample Designation:	RW-3	RW-4	RW-5	RW-5 DUP	RW-5D	RW-6	RW-7	RW-8	RW-9	RW-10
Parameter	AWQSGVs	Sample Date:	5/16/2014	5/15/2014	5/14/2014	5/14/2014	5/16/2014	5/14/2014	5/16/2014	5/16/2014	5/16/2014	5/16/2014
(Concentrations in µg/L)	(µg/L)											
Aluminum			81.4	58.2	298 JV	36.8 JV	19200	254	202	10 UV	1630	11.5
Antimony	3		1.46	1 UV	5.03 JV	1 UV	0.31 J	1 UV	1 UV	0.66 J	1 UV	1 UV
Arsenic	25		0.92	0.84	0.39 J	0.27 J	1.51	1.4	3.64	1.83	0.75	0.28 J
Barium	1000		250.4	294	174.7	185.3	307.5	121.5	294.3	233.3	224.8	152.6
Beryllium	3		0.5 U	0.5 U	0.5 U	0.5 U	0.82	0.5 U				
Cadmium	5		0.2 U	0.2 U	0.07 JV	0.08 J	0.2 U	0.2 U	0.2 U	0.2 U	0.17 J	0.22
Calcium			113000	140000	74200	76000	180000	142000	166000	108000	188000	249000
Chromium	50		1 UV	1.21	1 UV	1 UV	37.81	1 UV	1	1 UV	3.19	1 UV
Cobalt			0.9	0.83	2.69	2.78	15.5	2.41	1.45	0.3	10.51	6.7
Copper	200		1.5 UV	1.5 UV	1.5 UV	1.5 UV	21.92	2.2	1.5 UV	1.5 U	4.73	1.63
Cyanide	0.2		NA									
Iron	300		820	10600	396 JV	57.9 JV	26700	1820	19700	4650	3060	48.8 J
Iron and Manganese Combin	0.5		NA									
Lead	25		0.38 J	0.58 J	0.36 J	1 U	10.19	1.61	0.61 J	0.37 J	2.53	1 U
Magnesium			16600	36800	9220 JV	9670	28600	22400	42800	36400	29700	40100
Manganese	300		3614	2816	2100 JV	2094	4172	4426	4012	1501	4724	3456
Mercury	0.7		0.2 U									
Nickel	100		2.29	1.21	1.56	1.35	27.3	1.27	1.02	0.58	7.96	5.49
Potassium			4590	7970	3670 JV	3500	20400	7500	16000	4520	6040	5220
Selenium	10		5 U	0.45 J	1.55 J	1.17 J	1.54 J	5 U	0.38 J	5 U	0.38 J	1.08 J
Silver	50		0.4 U									
Sodium	20000		583000	146000	546000	579000	527000	77100	77800	127000	358000	527000
Thallium	0.5		0.5 U	0.5 U	0.5 U	0.5 U	0.4 J	0.5 U	0.5 U	0.5 U	0.04 J	0.5 U
Vanadium			0.29 J	0.26 J	1.17 J	0.51 J	49.64	0.9 J	1.05 J	0.14 J	4.52 J	0.31 J
Zinc	2000		10 UV	10 UV	10 UV	10 UV	89.82	17.79	17.46	10 UV	12.36	10 UV

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	NYSDEC	Sample Designation:	RW-11	RW-12	RW-13	RW-14	RW-15	RW-16	RW-17	RW-18	RW-19	RW-20
Parameter	AWQSGVs	Sample Date:	5/16/2014	5/16/2014	5/16/2014	5/16/2014	5/16/2014	5/16/2014	5/16/2014	5/16/2014	5/15/2014	5/15/2014
(Concentrations in µg/L)	(µg/L)											
Aluminum			346	77.4	593	53.1	103	76.2	11.7	2580	14.9	10 UV
Antimony	3		1 UV	2.87	1 UV	0.52 J	1 UV	1 UV	1 UV	1.04	0.11 J	0.17 J
Arsenic	25		0.7	9.85	0.88	0.79	0.44 J	0.39 J	0.37 J	2.01	0.38 J	0.39 J
Barium	1000		253.7	61.35	169.5	229.8	227.2	47.15	86.34	144.3	45.48	51.65
Beryllium	3		0.5 U	0.11 J	0.5 U	0.5 U						
Cadmium	5		0.2 U	0.08 J	0.2 U	0.11 J	0.2 U	0.26	0.2 U	0.12 J	0.2 U	0.14 J
Calcium			130000	217000	94100	80200	98800	294000	142000	381000	263000	106000
Chromium	50		1.4	1.39	2.05	1 UV	1 UV	1 UV	1 UV	6.01	1 UV	1 UV
Cobalt			0.4	1.69	0.89	1.55	1.27	2.05	1.13	4.37	1.91	1.03
Copper	200		1.5 UV	15.74	2	3.81	1.5 UV	2.4	1.54	8.69	1.33	1.32
Cyanide	0.2		NA									
Iron	300		7550	236	2090	258	191	414	38 J	3020	1000 U	1740
Iron and Manganese Combin-	0.5		NA									
Lead	25		2.08	2.33	1.57	0.48 J	1.22	0.63 J	1 U	21.9	0.29 J	1 U
Magnesium			38000	13200	38000	25300	40400	23100	46800	83100	64200	22700
Manganese	300		444.7	329.4	164	1489	264.2	1731	234	2418	1369	530.2
Mercury	0.7		0.2 U	0.12 J	0.2 U							
Nickel	100		0.98	9.57	2.03	4	1.8	3.95	5.17	7.92	2.6	1.5
Potassium			6380	71500	9410	5320	10400	15200	15200	10900	5560	5620
Selenium	10		5 U	1.43 J	5 U	0.49 J	5 U	0.58 J	0.54 J	2.38 J	1.28 J	0.58 J
Silver	50		0.4 U									
Sodium	20000		131000	143000	155000	32800	32600	172000	127000	20900	11400	11300
Thallium	0.5		0.5 U	0.06 J	0.5 U	0.04 J	0.03 J	0.5 U	0.03 J	0.06 J	0.5 U	0.5 U
Vanadium			1.23 J	51.35	2.02 J	0.83 J	0.78 J	0.36 J	0.39 J	7.15	0.4 J	0.23 J
Zinc	2000		10 UV	14.83	10 UV	19.98	10 UV	41.89	10 UV	40.41	10 UV	10 UV

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	NYSDEC	Sample Designation:	SB-1/MW-1	SB-2/MW-2	SB-4/MW-3
Parameter	AWQSGVs	Sample Date:	4/22/2016	5/16/2014	5/15/2014
(Concentrations in $\mu g/L$)	(µg/L)				
Aluminum			1700	474	6.77 J
Antimony	3		0.56 J	1 UV	1 UV
Arsenic	25		0.55	1.15	3.66
Barium	1000		55.68	105	282.9
Beryllium	3		0.5 U	0.5 U	0.5 U
Cadmium	5		0.2 U	0.15 J	0.2 U
Calcium			138000	95000	217000
Chromium	50		4.39	1.47	1 UV
Cobalt			1.99	1.7	0.18 J
Copper	200		5.53	6.25	1.5 UV
Cyanide	0.2		NA	NA	NA
Iron	300		3120	1470	35500
Iron and Manganese Combin	0.5		NA	NA	NA
Lead	25		4.8	22.18	5.23
Magnesium			42700	20400	36200
Manganese	300		351.3	894.8	6538
Mercury	0.7		0.2 U	0.2 U	0.2 U
Nickel	100		7.25	3.54	0.52
Potassium			9560	892	6230
Selenium	10		5 U	2.32 J	0.31 J
Silver	50		0.4 U	0.4 U	0.4 U
Sodium	20000		89500	77000	77300
Thallium	0.5		0.5 U	0.03 J	0.5 U
Vanadium			3.78 J	2.61 J	0.93 J
Zinc	2000		23.4	30.99	10 UV

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Bold data indicates that parameter was detected above the NYSDEC AWQSGVs

	NYSDEC	Sample Designation:	RW-1	RW-2	RW-2 DUP	RW-3	RW-4	RW-5	RW-5 DUP	RW-5D
Parameter	AWQSGVs	Sample Date:	5/15/2014	5/15/2014	5/15/2014	5/16/2014	5/15/2014	5/14/2014	5/14/2014	5/16/2014
(Concentrations in µg/L)	(µg/L)									
Aroclor-1016			0.083 U							
Aroclor-1221			0.083 U							
Aroclor-1232			0.083 U							
Aroclor-1242			0.083 U							
Aroclor-1248			0.083 U							
Aroclor-1254			0.083 U							
Aroclor-1260			0.083 U							
Aroclor-1262			0.083 U							
Aroclor-1268			0.083 U							
PCBS, TOTAL			0.083 U							

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J - Estimated Value

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DUP - Duplicate

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| | NYSDEC | Sample Designation: | RW-6 | RW-7 | RW-8 | RW-9 | RW-10 | RW-11 | RW-12 | RW-13 |
|--------------------------|---------|---------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| Parameter | AWQSGVs | Sample Date: | 5/14/2014 | 5/16/2014 | 5/16/2014 | 5/16/2014 | 5/16/2014 | 5/16/2014 | 5/16/2014 | 5/16/2014 |
| (Concentrations in µg/L) | (µg/L) | | | | | | | | | |
| | | | | | | | | | | |
| Aroclor-1016 | | | 0.083 U |
| Aroclor-1221 | | | 0.083 U |
| Aroclor-1232 | | | 0.083 U |
| Aroclor-1242 | | | 0.083 U |
| Aroclor-1248 | | | 0.083 U |
| Aroclor-1254 | | | 0.083 U |
| Aroclor-1260 | | | 0.083 U |
| Aroclor-1262 | | | 0.083 U |
| Aroclor-1268 | | | 0.083 U |
| PCBS, TOTAL | | | 0.083 U |

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µg/L -Micrograms per liter

J - Estimated Value

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	NYSDEC	Sample Designation:	RW-14	RW-15	RW-16	RW-17	RW-18	RW-19	RW-20	SB-1/MW-1
Parameter	AWQSGVs	Sample Date:	5/16/2014	5/16/2014	5/16/2014	5/16/2014	5/16/2014	5/15/2014	5/15/2014	4/22/2016
(Concentrations in µg/L)	(µg/L)									
Aroclor-1016			0.083 U							
Aroclor-1221			0.083 U							
Aroclor-1232			0.083 U							
Aroclor-1242			0.083 U							
Aroclor-1248			0.083 U							
Aroclor-1254			0.083 U							
Aroclor-1260			0.083 U							
Aroclor-1262			0.083 U							
Aroclor-1268			0.083 U							
PCBS, TOTAL			0.083 U							

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J - Estimated Value

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Table 9. Summary of Polychlorinated Biphenyls in Groundwater, Post Corridor - White Plains, New York

	NYSDEC	Sample Designation:	SB-2/MW-2	SB-4/MW-3
Parameter	AWQSGVs	Sample Date:	5/16/2014	5/15/2014
(Concentrations in µg/L)	(µg/L)			
Aroclor-1016			0.083 U	0.083 U
Aroclor-1221			0.083 U	0.083 U
Aroclor-1232			0.083 U	0.083 U
Aroclor-1242			0.083 U	0.083 U
Aroclor-1248			0.083 U	0.083 U
Aroclor-1254			0.083 U	0.083 U
Aroclor-1260			0.083 U	0.083 U
Aroclor-1262			0.083 U	0.083 U
Aroclor-1268			0.083 U	0.083 U
PCBS, TOTAL			0.083 U	0.083 U

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	NYSDEC	Sample Designation: F	RW-1	RW-2	RW-2 DUP	RW-3	RW-4	RW-5	RW-5 DUP	RW-5D
Parameter	AWQSGVs	Sample Date: 5/1	15/2014	5/15/2014	5/15/2014	5/16/2014	5/15/2014	5/14/2014	5/14/2014	5/16/2014
(Concentrations in µg/L)	(µg/L)									
4,4'-DDD	0.3	0.	.040 U	0.040 U	0.040 U	0.040 U	0.040 U	0.040 U	0.040 U	0.040 U
4,4'-DDE	0.2	0.	.040 U	0.040 U	0.040 U	0.040 U	0.040 U	0.040 U	0.040 U	0.040 U
4,4'-DDT	0.2	0.	.040 U	0.040 U	0.040 U	0.040 U	0.040 U	0.040 U	0.040 U	0.040 U
Aldrin	0	0.	.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U
alpha-BHC		0.	.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U
alpha-Chlordane		0.	.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U
beta-BHC		0.	.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U
Chlordane	0.05	0.	.200 U	0.200 U	0.200 U	0.200 U	0.200 U	0.200 U	0.200 U	0.200 U
delta-BHC		0.	.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U
Dieldrin	0.004	0.	.040 U	0.040 U	0.040 U	0.040 U	0.040 U	0.040 U	0.040 U	0.040 U
Endosulfan I		0.	.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U
Endosulfan II		0.	.040 U	0.040 U	0.040 U	0.040 U	0.040 U	0.040 U	0.040 U	0.040 U
Endosulfan sulfate		0.	.040 U	0.040 U	0.040 U	0.040 U	0.040 U	0.040 U	0.040 U	0.040 U
Endrin ketone		0.	.040 U	0.040 U	0.040 U	0.040 U	0.040 U	0.040 U	0.040 U	0.040 U
Endrin	0	0.	.040 U	0.040 U	0.040 U	0.040 U	0.040 U	0.040 U	0.040 U	0.040 U
gamma-BHC (Lindane)		0.	.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U
gamma-Chlordane	0	0.	.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U
Heptachlor epoxide	0.03	0.	.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U
Heptachlor	0.04	0.	.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U
Methoxychlor	35	0.	.200 U	0.200 U	0.200 U	0.200 U	0.200 U	0.200 U	0.200 U	0.200 U
Toxaphene	0.06	0.	.200 U	0.200 U	0.200 U	0.200 U	0.200 U	0.200 U	0.200 U	0.200 U

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Bold data indicates that parameter was detected above the NYSDEC AWQSGVs

	NYSDEC	Sample Designation:	RW-6	RW-7	RW-8	RW-9	RW-10	RW-11	RW-12	RW-13
Parameter	AWQSGVs	Sample Date:	5/14/2014	5/16/2014	5/16/2014	5/16/2014	5/16/2014	5/16/2014	5/16/2014	5/16/2014
(Concentrations in µg/L)	(µg/L)									
4,4'-DDD	0.3		0.040 U	0.04 U	0.040 U					
4,4'-DDE	0.2		0.040 U	0.04 U	0.040 U					
4,4'-DDT	0.2		0.040 U	0.04 U	0.040 U					
Aldrin	0		0.020 U	0.02 U	0.020 U					
alpha-BHC			0.020 U	0.02 U	0.020 U					
alpha-Chlordane			0.020 U	0.02 U	0.020 U					
beta-BHC			0.020 U	0.02 U	0.020 U					
Chlordane	0.05		0.200 U	0.2 U	0.200 U					
delta-BHC			0.020 U	0.02 U	0.020 U					
Dieldrin	0.004		0.040 U	0.04 UV	0.040 U					
Endosulfan I			0.020 U	0.02 U	0.020 U					
Endosulfan II			0.040 U	0.04 U	0.040 U					
Endosulfan sulfate			0.040 U	0.04 U	0.040 U					
Endrin ketone			0.040 U	0.04 U	0.040 U					
Endrin	0		0.040 U	0.04 U	0.040 U					
gamma-BHC (Lindane)			0.020 U	0.02 U	0.020 U					
gamma-Chlordane	0		0.020 U	0.02 U	0.020 U					
Heptachlor epoxide	0.03		0.020 U	0.02 U	0.020 U					
Heptachlor	0.04		0.020 U	0.02 U	0.020 U					
Methoxychlor	35		0.200 U	0.2 U	0.200 U					
Toxaphene	0.06		0.200 U	0.2 U	0.200 U					

NYSDEC - New York State Department of Environmental Conservation

AWQSGVs - Ambient Water-Quality Standards and Guidance Values

 μ g/L -Micrograms per liter

J - Estimated Value

U - Compound was analyzed for but not detected

DUP - Duplicate

- - No NYSDEC AWQSGV available

Bold data indicates that parameter was detected above the NYSDEC AWQSGVs

	NYSDEC	Sample Designation:	RW-14	RW-15	RW-16	RW-17	RW-18	RW-19	RW-20	SB-1/MW-1
Parameter	AWQSGVs	Sample Date:	5/16/2014	5/16/2014	5/16/2014	5/16/2014	5/16/2014	5/15/2014	5/15/2014	4/22/2016
(Concentrations in µg/L)	(µg/L)									
4,4'-DDD	0.3		0.040 U							
4,4'-DDE	0.2		0.040 U							
4,4'-DDT	0.2		0.040 U							
Aldrin	0		0.020 U							
alpha-BHC			0.020 U							
alpha-Chlordane			0.020 U							
beta-BHC			0.020 U							
Chlordane	0.05		0.200 U							
delta-BHC			0.020 U							
Dieldrin	0.004		0.040 U							
Endosulfan I			0.020 U							
Endosulfan II			0.040 U							
Endosulfan sulfate			0.040 U							
Endrin ketone			0.040 U							
Endrin	0		0.040 U							
gamma-BHC (Lindane)			0.020 U							
gamma-Chlordane	0		0.020 U							
Heptachlor epoxide	0.03		0.020 U							
Heptachlor	0.04		0.020 U							
Methoxychlor	35		0.200 U							
Toxaphene	0.06		0.200 U							

NYSDEC - New York State Department of Environmental Conservation

AWQSGVs - Ambient Water-Quality Standards and Guidance Values

µg/L -Micrograms per liter

J - Estimated Value

U - Compound was analyzed for but not detected

DUP - Duplicate

- - No NYSDEC AWQSGV available

Bold data indicates that parameter was detected above the NYSDEC AWQSGVs

	NYSDEC	Sample Designation:	SB-2/MW-2	SB-4/MW-3
Parameter	AWQSGVs	Sample Date:	5/16/2014	5/15/2014
(Concentrations in µg/L)	(µg/L)			
4,4'-DDD	0.3		0.040 U	0.040 U
4,4'-DDE	0.2		0.040 U	0.040 U
4,4'-DDT	0.2		0.040 U	0.040 U
Aldrin	0		0.020 U	0.020 U
alpha-BHC			0.020 U	0.020 U
alpha-Chlordane			0.020 U	0.020 U
beta-BHC			0.020 U	0.020 U
Chlordane	0.05		0.200 U	0.200 U
delta-BHC			0.020 U	0.020 U
Dieldrin	0.004		0.040 U	0.040 U
Endosulfan I			0.020 U	0.020 U
Endosulfan II			0.040 U	0.040 U
Endosulfan sulfate			0.040 U	0.040 U
Endrin ketone			0.040 U	0.040 U
Endrin	0		0.040 U	0.040 U
gamma-BHC (Lindane)			0.020 U	0.020 U
gamma-Chlordane	0		0.020 U	0.020 U
Heptachlor epoxide	0.03		0.020 U	0.020 U
Heptachlor	0.04		0.020 U	0.020 U
Methoxychlor	35		0.200 U	0.200 U
Toxaphene	0.06		0.200 U	0.200 U

NYSDEC - New York State Department of Environmental Conservation

AWQSGVs - Ambient Water-Quality Standards and Guidance Values

 μ g/L -Micrograms per liter

J - Estimated Value

U - Compound was analyzed for but not detected

DUP - Duplicate

- - No NYSDEC AWQSGV available

Bold data indicates that parameter was detected above the NYSDEC AWQSGVs

	~ !! -	T /	~ **	X 7 /	0 1 5 1	011.1	637.6
	Soil V	/apor/	Soil	Vapor/	Sample Designation:	SV-1	SV-2
Analyte	Indoo	or Air	Indo	oor A1r	Sample Date:	8/5/2015	8/5/2015
(Concentrations in $\mu g/m^3$)	Mat	rix 1	Ma	trix 2	Block:		
	Monitor	Mitigate	Monitor	Mitigate	Lot:		
	50	250				11.2.15	4.00 LTD
Carbon tetrachloride	50	250				11.3 UD	4.20 UD
Trichloroethene	50	250				9.67 UD	3.58 UD
Vinyl chloride	50	250				4.60 UD	1.71 UD
I,I-Dichloroethene			100	1000		7.14 UD	2.64 UD
cıs-1,2-Dıchloroethene			100	1000		7.14 UD	2.64 UD
Tetrachloroethene			100	1000		12.2 UD	4.52 UD
1,1,1-Trichloroethane			100	1000		9.82 UD	3.64 UD
1.1.2.2-Tetrachloroethane						12.4 UD	4.58 UD
1.1.2-Trichloroethane						9.82 UD	3.64 UD
1.1-Dichloroethane						7.29 UD	2.70 UD
1 2 4-Trichlorobenzene						134 UD	4 95 UD
1.2.7-Trimethylbenzene						60 0 D	62 Q D
1,2,4- mineury idenzente 1.2-Dibromoethene						13 8 110	5 13 UD
1,2-Dichlorobanzana							
1,2-Dichloroothere							4.01 UD
1,2-Dichlorencena						1.29 UD	2.70 UD
1,2-Dicinoropropane						0.52 UD	3.08 UD
1,5,5-1 rimetnyibenzene						18.1 D	18.7 D
1,3-Butadiene						7.63 D	1.48 UD
1,3-Dichlorobenzene						10.8 UD	4.01 UD
1,4-Dichlorobenzene						10.8 UD	4.01 UD
1,4-Dioxane						6.49 UD	2.40 UD
2-Butanone (MEK)						472 D	198 D
2-Hexanone						75.0 D	42.6 D
3-Chloropropene						5.63 UD	2.09 UD
4-Ethyltoluene						12.3 D	11.2 D
4-Methyl-2-pentanone (MIBK)						18.4 UD	6.84 UD
Acetone						7170 D	2830 D
Benzene						13.4 D	17.6 D
Benzyl chloride						9.32 UD	3.45 UD
Bromodichloromethane						12.1 UD	4.47 UD
Bromoethene						7.87 UD	2.92 UD
Bromoform						18.6 UD	6.90 UD
Bromomethane						6.99 UD	2.59 UD
Carbon disulfide						16.5 D	37.1 D
Chlorobenzene						8.29 UD	3.07 UD
Chloroethane						4.75 UD	1.76 UD
Chloroform						73.7 D	7.76 D
Chloromethane						3.72 UD	1.38 UD
cis-1,3-Dichloropropene						8.17 UD	3.03 UD
Cyclohexane						6.20 UD	164 D
Dibromochloromethane						15.3 UD	5.68 UD
Dichlorodifluoromethane						8.90 UD	3.30 UD
Ethanol						211 D	93.8 D
Ethyl Acetate						16.2 UD	6.02 UD
Ethylbenzene						22.9 D	14.4 D
Freon 113						13 8 UD	5 11 UD
Freon 114						12.0 UD	4 66 UD
Hentane						200D	4.00 UD
Heyechlorobutediene						20.9 D	23.7 D
Isopatana						19.2 UD	
Isoproponal						11.3 D	5.12 UD
творгораног						∠ 3.3 D	1.94 D

Table 11. Summary of Volatile Organic Compounds in Offsite Soil Vapor, Post Corridor - White Plains, New York

Table 11. Summary of Volatile Organic Compounds in Offsite Soil Vapor, Post Corridor - White Plains, New York

	Soil Vapor/		Soil V	/apor/	Sample Designation:	SV-1	SV-2
Analyte	Indoor Air		Indo	or Air	Sample Date:	8/5/2015	8/5/2015
(Concentrations in $\mu g/m^3$)	Mati	rix 1	Mat	rix 2	Block:		
	Monitor	Mitigate	Monitor	Mitigate	Lot:		
m+p-Xylene						92.1 D	65.6 D
Methylene chloride						15.6 UD	5.80 UD
MTBE						6.49 UD	2.40 UD
n-Hexane						11.3 D	20.4 D
o-Xylene						38.8 D	44.3 D
Styrene						7.66 UD	2.84 UD
t-Butyl Alcohol						48.8 D	28.6 D
Tetrahydrofuran						13.3 UD	4.93 UD
Toluene						68.2 D	26.5 D
trans-1,2-Dichloroethene						7.14 UD	2.64 UD
trans-1,3-Dichloropropene						8.17 UD	3.03 UD
Trichlorofluoromethane						10.1 UD	3.75 UD

U - Indicates that the compound was analyzed for but not detected

D - a secondary analysis after dilution due to exceedance

of the calibration range in the original sample.

 $\mu g/m3$ - Micrograms per cubic meter

Bold data indicates that parameter was detected

Shaded data indicates that parameter was detected above levels to be monitored in accordance with the Final NYSDOH CEH BEEI Soil Vapor Intrusion Guidance of October 2006

Boxed data indicates that parameter was detected above levels to be mitigated in accordance

with the Final NYSDOH CEH BEEI Soil Vapor Intrusion Guidance of October 2006

TABLE 12. TRACK 1 UNRESTRICTED CLEANUP COST ESTIMATE POST ROAD CORRIDOR POST MAPLE 77, LLC ENVIRONMENTAL REMEDIATION COST ESTIMATE

ITEM	Description	UNIT	QUANTITY	UN	IT COST	TOTAL
	Soil Handling and Removal					
1	Demolish Existing Retaining Walls and Pavement	Lump Sum	1	\$	400,000	\$400,000
2	Excavation Shoring	Lump Sum	1	\$	900,000	\$900,000
3	Soil Excavation	CY	49,826	\$	30	\$1,494,788
4	Soil Transport & Disposal Cost assuming soil is Non Hazardous	Ton	37,370	\$	55	\$2,055,334
5	Soil Transport & Disposal Cost assuming soil is Non Hazardous Petroleum	Ton	37,370	\$	80	\$2,989,576
6	Waste Characterization Samples	Ea	100	\$	1,040	\$104,000
7	End Point Samples	Ea	256	\$	505	\$129,280
8	Procurement and Placement of Clean Backfill	CY	59,792	\$	45	\$2,690,618
	This includes pro-rata costs for Items 1 & 2 based on the percentage In-Situ Chemical Oxidation	of the redevel	opment within the	he B	CP parcels	\$10,343,290
q	Procurement of Oxidants	LS	1	\$	133.142	\$133,142
10	Injection Point Construction and Injection	Davs	65	\$	2.750	\$178,750
				Ŧ	_,	\$311.892
	Dewatering and Treatment					+,
11	Dewatering Water Container Rental and Disposal	Month	9	\$	30.000	\$270.000
12	Dewater Vac Truck (and Operator)	Month	9	\$	70.000	\$630.000
				Ŧ	,	\$900.000
	Supplemental Remediation Costs					
13	Mobilization/Demobilization	Lump Sum	1	\$	150,000	\$150,000
14	Erosion and Sediment Control	Lump Sum	1	\$	100,000	\$100,000
15	Remedial Construction Oversight	Days	190	\$	1,880	\$357,200
16	Community Air Monitoring Plan (CAMP) Equipment (during excavation and soil					
10	handling)	Month	9	\$	30,000	\$270,000
17	Vapor, Dust, and Odor Suppression	Lump Sum	1	\$	50,000	\$50,000
18	Data Usability Summary Report (DUSR) for Post Excavation Soil Samples	Lump Sum	1	\$	8,500	\$8,500
19	Monitoring Well Abandonment	Lump Sum	1	\$	20,000	\$20,000
20	Monitoring Well Installation	Ea	4	\$	4,000	\$16,000
21	Monitoring Well Sampling	Ea	2	\$	7,000	\$14,000
22	Engineering Support and Disposal Coordination	Month	9	\$	15,000	\$135,000
						\$1,120,700
	soil handling, ISCC	, dewatering	and remediatio	n co	st subtotal	\$12,675,882
			20% cos	st co	ntingency	\$2,535,176
		:	5% fees, insura	nce	and bonds	\$633,794
	BCP Record Keeping					
23	Citizen Participation: Public Meeting, Fact Sheet Distribution, CPP development	Lump Sum	1	\$	20,000	\$20,000
24	BCP Weekly and Monthly Reporting Requirements	Month	8	\$	4,000	\$32,000
25	Final Engineering Report	Lump Sum	1	\$	50.000	\$50.000
	<i>6</i>	p 5 ann	1	Ψ	2 3,000	\$102,000
		Crowd T	atal of Domast-	1 4 1	tomotive 1	\$15 046 953
		Grand I	otal of Kemedia	u Al	ternative 1	\$15,940,852

Notes

1. Soil handling and removal costs subject to change pending actual remediation costs and excavation extents.

2. Soil handling and removal assumes excavation to the limits of the AOCs on all sides and depths detailed in the RAWP.

3. An estimated 68 percent of the redevelopment will be within the BCP parcels.

4. CAMP implementation assumes one CAMP Technician and two CAMP monitoring stations operating 40 hours per week.

5. Excavation screening, end-point sampling, and disposal supervision assumes one part-time engineer/geologist onsite during excavation for field screening of excavated mate end point soil sampling and waste disposal tracking.

TABLE 13. TRACK 4 RESTRICTED RESIDENTIAL CLEANUP COST ESTIMATE POST ROAD CORRIDOR POST MAPLE 77, LLC ENVIRONMENTAL REMEDIATION COST ESTIMATE

ITEM	Description	UNIT	QUANTITY	UN	IT COST	FOTAL
	Soil Handling and Removal					
1	1 Demolish Existing Retaining Walls and Pavement	Lump Sum	1	\$	400,000	\$400,000
2	2 Excavation Shoring	Lump Sum	1	\$	600,000	\$600,000
3	3 Soil Excavation	CY	3,391	\$	30	\$101,735
4	4 Soil Transport & Disposal Cost assuming soil is Non Hazardous	Ton	2,543	\$	55	\$139,885
5	5 Soil Transport & Disposal Cost assuming soil is Non Hazardous Petroleum	Ton	2,543	\$	80	\$203,469
6	5 Waste Characterization Samples	Ea	7	\$	1,040	\$7,280
	/ End Point Samples	Ea	61	\$	505	\$30,805
8	8 Procurement and Placement of Clean Backfill	CY	5,586	\$ DCI	45	\$251,366
	Inis includes pro-rata costs for items 1 & 2 based on the percentage of In-Situ Chemical Oxidation	the redevelop	ment within the	BCF	parcels	\$1,411,228
9	9 Procurement of Oxidants	LS	1	\$	63,623	\$63,623
10) Injection Point Construction and Injection	Days	42	\$	2,750	\$173,250
	Demotive and The terms					\$236,873
11	Dewatering Water Container Pental and Disposal	Month	2	¢	20.000	\$45,000
12	Dewatering water Container Rental and Disposal	Month	2	ф Э	70,000	\$43,000
12		Monu	2	φ	70,000	\$150,000
	Sitewide Cap					,
13	3 Provision and Placement of Demarcation Layer	SY	1,352	\$	5	\$6,762
						\$6,762
	Soil Vapor Mitigation	ar.	150.000	¢	0	¢1 200 000
14	4 waterproofing Memorane This is a pro-rate cost based on the percentage of	SF the redevelor	150,000		8 Proreals	\$1,200,000
	Supplemental Remediation Costs	the redevelop	ment within the	; bCr	r parcers	\$612,020
15	5 Mobilization/Demobilization	Lump Sum	1	¢	100.000	\$100,000
16	6 Erosion and Sediment Control	Lump Sum	1	\$	100,000	\$100,000
17	7 Remedial Construction Oversight	Davs	59	\$	1.880	\$110.920
10	Community Air Monitoring Plan (CAMP) Equipment (during excavation and soil handling)	Dujo		Ψ	1,000	0110,020
10		Month	2	\$	30,000	\$45,000
19	9 Vapor, Dust, and Odor Suppression	Lump Sum	1	\$	30,000	\$30,000
20) Data Usability Summary Report (DUSR) for Post Excavation Soil Samples	Lump Sum	1	\$	5,000	\$5,000
21	Monitoring Well Abandonment	Lump Sum	1	\$	20,000	\$20,000
22	2 Monitoring Well Installation	Ea	4	\$	4,000	\$16,000
23	3 Monitoring Well Sampling Event	Ea	2	\$	7,000	\$14,000
24	t Engineering Support and Disposal Coordination	Month	2	\$	25,000	\$37,300
	soil handling ISCO	downtoring (nd romodiatio	n 006	t cubtotal	\$478,420
	son nanuning, isco,	dewatering a		n cos	tingency	\$619.062
		5	5% fees, insura	nce a	and bonds	\$154,765
	BCP Record Keeping	-				+,
25	5 Citizen Participation: Public Meeting, Fact Sheet Distribution, CPP development	Lump Sum	1	\$	20,000	\$20,000
26	5 BCP Weekly and Monthly Reporting Requirements	Month	3	\$	4,000	\$10,000
27	7 Final Engineering Report	Lump Sum	1	\$	40,000	\$40,000
28	8 Environmental Easement	Lump Sum	1	\$	35,000	\$35,000
29	9 Site Management Plan	Lump Sum	1	\$	30,000	\$30,000
30) Annual Groundwater Monitoring and Reporting	Year	1	\$	33,000	\$33,000
31	1 Annual Engineer Certification for SMP	Year	1	\$	5,000	\$5,000
32	2 Annual Brownfield Redevelopment Report	Year	1	\$	10,000	\$10,000
						\$183,000
	Total Remediation Costs of	us Engineeri	ng and Institut	iona	l Controls	\$4.052.136
			<u> </u>			. ,
	Redevelopment					
33	3 Soil Excavation In Excess of AOCs	CY	39,609	\$	15	\$594,133
34	4 Foundation Walls	Lump Sum	1	\$1	,400,000	\$1,400,000
35	5 Foundation Slab	Lump Sum	1	\$ 3	3,600,000	\$3,600,000
	This is a pro-rata cost based on the percentage of	the redevelop	ment within the	BCF	P parcels	\$3,785,482
			20% cos	t con	ntingency	\$757,096
	Total Redeve	lopment Cos	ts in Support o	of Rer	mediation	\$4,542.579
		r 200	rrett			. ,
		Crowd To	tal of Domodia	1 4 14	amativa 2	¢9 504 715

Notes

1. Soil handling and removal costs subject to change pending actual remediation costs and excavation extents.

2. Soil handling and removal assumes excavation to the limits of the AOCs on all sides and depths detailed in the RAWP.

3. An estimated 68 percent of the redevelopment will be within the BCP parcels.

4. CAMP implementation assumes one CAMP Technician and two CAMP monitoring stations operating 40 hours per week.

5. Excavation screening, end-point sampling, and disposal supervision assumes one part-time engineer/geologist onsite during excavation for field screening of excavated materials, end point soil sampling and waste disposal tracking.

Environmental Easement and Site Management Plan Costs will be highly dependent upon legal review and editing.

7. Only one year of Annual cost items are shown in the table. Annual reports will be required for multiple years.

	NYSDEC Backfill
Parameter	Soil Cleanup
	Objectives ¹
Valatila Argania Compounds (Concor	ntrations in us/leg)
1.1.1.Trichloroethane	680
1,1,1-Themoroethane	270
1,1 Dichloroethene	330
1,1-Dicinoroeutene 1,2,4 Trimethylbenzene	3600
1,2,4-Trimethylbenzene	8400
1,2, Dichlorobanzana	1100
1,2-Dichloroothana	20
1,2-Dichlorobanzana	20
1,3-Dichlorobanzana	1800
1,4-Dichiolobelizelle	1800
2 Putanona (MEK)	100
2-Butanone (MEK)	120
Denzene	50
Benzene n Dutulhenzene	00
In-BulyIDenzene Corbon totrochloride	12000
Chlenchengen e	/00
Chloroform	1100
Chlorolorm	370
cis-1,2-Dichloroethene	250
Etnylbenzene	1000
Methylene chloride	50
MIBE	930
n-Propylbenzene	3900
sec-Butylbenzene	11000
tert-Butylbenzene	5900
Tetrachloroethene	1300
Toluene	700
trans-1,2-Dichloroethene	190
Trichloroethene	47/0
Vinyl chloride	20
Xylenes (total)	1600

 Table 14. Backfill Soil Cleanup Objectives, Post Corridor - White Plains, New York

	NYSDEC Backfill
Parameter	Soil Cleanup
	Objectives ¹
Semivolatile Organic Compounds (Con	centrations in µg/kg)
2-Methylphenol	330
3&4-Methylphenol	330
Acenaphthene	98000
Acenaphthylene	100000
Anthracene	100000
Benzo[a]anthracene	1000
Benzo[a]pyrene	1000
Benzo[b]fluoranthene	1000
Benzo[g,h,i]perylene	100000
Benzo[k]fluoranthene	1700
Chrysene	1000
Dibenzo[a,h]anthracene	330
Dibenzofuran	59000
Fluoranthene	100000
Fluorene	100000
Hexachlorobenzene	1200
Indeno[1,2,3-cd]pyrene	500
Naphthalene	12000
Pentachlorophenol	800
Phenanthrene	100000
Phenol	330
Pyrene	100000
Metals (Concentrations in mg/kg)	
Arsenic	16
Barium	400
Bervllium	47
Cadmium	4.3
Chromium, Hexavalent	19
Chromium	180
Copper	270
Cvanide Total	27
Lead	400
Manganese	2000
Mercury	0.73
Nickel	130
Selenium	4
Silver	8.3
Zinc	2480

 Table 14. Backfill Soil Cleanup Objectives, Post Corridor - White Plains, New York

Parameter	NYSDEC Backfill Soil Cleanup Objectives ¹		
Pesticides (Concentrations in µg/kg)			
2,4,5-TP	3800		
4,4'-DDD	13000		
4,4'-DDE	8900		
4,4'-DDT	7900		
Aldrin	97		
alpha-BHC	20		
alpha-Chlordane	2900		
beta-BHC	90		
delta-BHC	250		
Dieldrin	100		
Endosulfan I	24000		
Endosulfan II	24000		
Endosulfan sulfate	24000		
Endrin	60		
gamma-BHC (Lindane)	100		
Heptachlor	380		
Pentachlorophenol	800		
Total Polychlorinated Biphenyls (Concentrations in µg/kg)			
Total Polychlorinated Biphenyls	1000		

Table 14. Backfill Soil Cleanup Objectives, Post Corridor - White Plains, New York

¹ Backfill soil cleanup objectives are the lower of the NYSDEC Part
 375 Protection of Groundwater or Restricted Residential Use SCOs.
 μg/kg - Micrograms per kilogram
 mg/kg - Milligrams per kilogram
 NYSDEC - New York State Department of Environmental Conservation
 SCOs - Soil Cleanup Objectives

Table 15. Proposed Remedial Action SchedulePost Corridor - White Plains, New York

Remedial Action Work Element or Deliverable	Duration (weeks)	Cumulative Duration (weeks)
NYSDEC Approval of Final RAWP (After 45 day public comment period)	0	0
Preparation of Specifications and Contracting Documents	6	6
Bid Review and Award	1-2	8
Obtain Permits	4-6	14
Redevelopment Construction/AOC Excavation	24	38
Groundwater Remedial Contractor Mobilization	1	39
ISCO Injections	4-5	44
Groundwater Remedial Contractor Demobilization	1	45
Groundwater Performance Monitoring	4-6	51
Contingency ISCO Injections	2-3	54
Preparation and Submission of Draft FER and SMP	12	66

Table 16. List of Required Permits, Post Corridor - White Plains, New York

Regulatory Agency	Permit
City of White Plains Sidewalk Opening Permit (for monitoring well installation)	
USEPA	Underground Injection Control Program Form (for groundwater injections)

Note: This list only accounts for permits required from the street level and below. Permits for aboveground portions of the building are not listed.

USEPA - United States Environmental Protection Agency

Table 17. Emergency Contact List

Title	Contact	Telephone/Cell
Post Maple 77, LLC (Owner)		
Project Manager	Scott Auster	(212) 233-0495 Extension: 217
Roux Associates		
Project Principal	Joseph Duminuco	(631) 232-2600
Principal Engineer (Remedial Engineering, P.C.)	Charles McGuckin	(631) 232-2600
Field Manager/Site Safety Officer	TBD	TBD
Corporate Health and Safety Manager	Joseph Gentile	(856) 423-8800
Office Health and Safety Manager	Joseph Gavin	(631) 232-2600

Emergency Phone Numbers

Emergency Medical Service	.911
Police: White Plains Police Department	.911
Fire: White Plains Volunteer Fire Department	.911
Hospital: White Plains Hospital	.914-681-0600
National Response Center	.800-424-8802
Poison Control Center	.800-222-1222
CHEMTREC®	.800-262-8200
Centers for Disease Control	.800-311-3435
USEPA (Region II)	.212-637-5000
NYSDEC Emergency Spill Response	.800-457-7362

	NYSDEC Part 375
Parameter	Protection of
	Groundwater ¹
Volatile Organic Compounds (Concentra	ations in µg/kg)
1,1,1-Trichloroethane	680
1,1-Dichloroethane	270
1,1-Dichloroethene	330
1,2,4-Trimethylbenzene	3600
1,3,5-Trimethylbenzene	8400
1,2-Dichlorobenzene	1100
1,2-Dichloroethane	20
1,3-Dichlorobenzene	2400
1,4-Dichlorobenzene	1800
1,4-Dioxane	100
2-Butanone (MEK)	120
Acetone	50
Benzene	60
n-Butylbenzene	12000
Carbon tetrachloride	760
Chlorobenzene	1100
Chloroform	370
cis-1,2-Dichloroethene	250
Ethylbenzene	1000
Methylene chloride	50
MTBE	930
n-Propylbenzene	3900
sec-Butylbenzene	11000
tert-Butylbenzene	5900
Tetrachloroethene	1300
Toluene	700
trans-1,2-Dichloroethene	190
Trichloroethene	470
Vinyl chloride	20
Xylenes (total)	1600

Table 18. Track 4 Soil Cleanup Objectives, Post Corridor - White Plains, New York

	NYSDEC Part 375
Parameter	Restricted
	Residential ¹
Semivolatile Organic Compounds (Conce	entrations in µg/kg)
2-Methylphenol	100000
3&4-Methylphenol	100000
Acenaphthene	100000
Acenaphthylene	100000
Anthracene	100000
Benzo[a]anthracene	1000
Benzo[a]pyrene	1000
Benzo[b]fluoranthene	1000
Benzo[g,h,i]perylene	100000
Benzo[k]fluoranthene	3900
Chrysene	3900
Dibenzo[a,h]anthracene	330
Dibenzofuran	59000
Fluoranthene	100000
Fluorene	100000
Hexachlorobenzene	1200
Indeno[1,2,3-cd]pyrene	500
Naphthalene	100000
Pentachlorophenol	6700
Phenanthrene	100000
Phenol	100000
Pyrene	100000
Motols (Concentrations in malka)	
Arsonic	16
Barium	400
Berullium	400
Cadmium	12
Chromium Heyayalent	4.5
Chromium	180
Copper	270
Cyanide Total	270
Lead	400
Manganese	2000
Mercury	0.81
Nickel	310
Selenium	180
Silver	180
Zinc	10000
	10000

Table 18. Track 4 Soil Cleanup Objectives, Post Corridor - White Plains, New York

	NYSDEC Part 375
Parameter	Restricted
	Residential ¹
Pesticides (Concentrations in µg/kg)	
2,4,5-TP	100000
4,4'-DDD	13000
4,4'-DDE	8900
4,4'-DDT	7900
Aldrin	97
alpha-BHC	480
alpha-Chlordane	4200
beta-BHC	360
delta-BHC	100000
Dieldrin	200
Endosulfan I	24000
Endosulfan II	24000
Endosulfan sulfate	24000
Endrin	11000
gamma-BHC (Lindane)	1300
Heptachlor	2100
Pentachlorophenol	6700
Total Polychlorinated Biphenyls (Concent	rations in ug/kg)
Total Polychlorinated Biphenyls	1000

Table 18. Track 4 Soil Cleanup Objectives, Post Corridor - White Plains, New York

Track 4 soil cleanup objectives are the NYSDEC Part 375
 Protection of Groundwater SCOs for VOCs and NYSDEC Part 375
 Restricted Residential Use SCOs for all other parameters.
 μg/kg - Micrograms per kilogram
 mg/kg - Milligrams per kilogram
 NYSDEC - New York State Department of Environmental Conservation
 SCOs - Soil Cleanup Objectives

FIGURES

- 1. Site Location Map
- 2. Site Layout
- 3. Groundwater Elevation and Contour Map
- 4. Generalized Southwest-Northeast Geologic Cross Section A-A'
- 5. Generalized Northwest-Southeast Geologic Cross Section B-B'
- 6. Truck Ingress and Egress Routes





LEGEND



SITE LOCATION AND TAX PARCEL (SEE TAX PARCEL REFERENCE LIST BELOW)

BCP SITE BOUNDARY

REF.	ADDRESS	TAX I.D.
Α	99-103 W. Post Rd	130.34-6-1
В	5 Rathbun Avenue	130.34-6-6
С	3 Brady Place	130.34-6-4
D	95 W. Post Rd	130.34-6-3
F	79-83 W. Post Rd	130.34-5-2
G	77 W. Post Rd	130.34-5-3
Н	55 W. Post Rd	130.34-5-4
1	41-45 W. Post Rd	130.34-5-5
J	35 W. Post Rd	130.34-5-6
K	190-192 S. Lexington Ave	130.27-8-3

SOURCE: Westchester County Geographic Information Systems Website.





	Demedial	Compiled by: G.L.	Date: 16AUG16	FIGURE
)'	Remedial	Prepared by: B.H.C.	Scale: AS SHOWN	
	REMEDIAL ENGINEERING, P.C.	Project Mgr: W.K.	Project: 2195.0001Y000	3
	ENVIRONMENTAL ENGINEERS	File: 2195.0001Y12	5.01.DWG	











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APPENDICES

- A. Metes and Bounds
- B. Citizen Participation Plan
- C. Community Air Monitoring Plan
- D. Resumes of Key Personnel
- E. ISCO Product Specifications

APPENDIX A

Metes and Bounds



Legend



Site Location and Tax Parcel (See tax parcel reference list below.)

REF.	ADDRESS	TAX I.D.
Α	99-103 W. Post Rd	130.34-6-1
B	5 Rathbun Avenue	130.34-6-6
С	3 Brady Place	130.34-6-4
D	95 W. Post Rd	130.34-6-3
E	2 Brady Place	130.34-5-1
F	79-83 W. Post Rd	130.34-5-2
G	77 W. Post Rd	130.34-5-3
Н	55 W. Post Rd	130.34-5-4
I	41-45 W. Post Rd	130.34-5-5
J	35 W. Post Rd	130.34-5-6
K	190-192 S. Lexington Ave	130.27-8-3

SOURCE: Westchester County Geographic Information Systems Website.



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APPENDIX B

Citizen Participation Plan



New York State Department of Environmental Conservation

Brownfield Cleanup Program

Citizen Participation Plan

for Post Road Corridor – White Plains Site No. C360129

77 West Post Road White Plains Westchester County, New York

August 2013

TABLE OF CONTENTS

1.0	WHAT IS NEW YORK'S BROWNFIELD CLEANUP PROGRAM?	.1
2.0	CITIZEN PARTICIPATION ACTIVITIES	.2
3.0	MAJOR ISSUES OF PUBLIC CONCERN	.7
4.0	SITE INFORMATION	.8
5.0	INVESTIGATION AND CLEANUP PROCESS	.9

APPENDICES

- A. Project Contacts and Locations of Reports and Information
- B. Site Contact List
- C. Site Location Map and Tax Map
- D. Brownfield Cleanup Program Process

Note: The information presented in this Citizen Participation Plan was current as of the date of its approval by the New York State Department of Environmental Conservation. Portions of this Citizen Participation Plan may be revised during the site's investigation and cleanup process.

Applicant:Post Maple 77, LLC ("Applicant")Site Name:Post Road Corridor – White Plains ("Site")Site Address:77 West Post Road, White Plains, New YorkSite County:Westchester CountySite Number:C360129

1.0 WHAT IS NEW YORK'S BROWNFIELD CLEANUP PROGRAM?

New York's Brownfield Cleanup Program (BCP) works with private developers to encourage the voluntary cleanup of contaminated properties known as "brownfields" so that they can be reused and developed. These uses include recreation, housing, and business.

A *brownfield* is any real property that is difficult to re-use or redevelop because of the presence or potential presence of contamination. A brownfield typically is a former industrial or commercial property where operations may have resulted in environmental contamination. A brownfield can pose environmental, legal, and financial burdens on a community. If a brownfield is not addressed, it can reduce property values in the area and affect economic development of nearby properties.

The BCP is administered by the New York State Department of Environmental Conservation (NYSDEC) which oversees Applicants that conduct brownfield site investigation and cleanup activities. An Applicant is a person who has requested to participate in the BCP and has been accepted by the NYSDEC. The BCP contains investigation and cleanup requirements, ensuring that cleanups protect public health and the environment. When the NYSDEC certifies that these requirements have been met, the property can be reused or redeveloped for the intended use.

For more information about the BCP, go online at: <u>http://www.dec.ny.gov/chemical/8450.html</u>.

2.0 CITIZEN PARTICIPATION ACTIVITIES

Why NYSDEC Involves the Public and Why It Is Important

The NYSDEC involves the public to improve the process of investigating and cleaning up contaminated sites, and to enable citizens to participate more fully in decisions that affect their health, environment, and social wellbeing. The NYSDEC provides opportunities for citizen involvement and encourages early two-way communication with citizens before decision makers form or adopt final positions.

Involving citizens affected and interested in site investigation and cleanup programs is important for many reasons. These include:

- Promoting the development of timely, effective site investigation, and cleanup programs that protect public health and the environment.
- Improving public access to, and understanding of, issues and information related to a particular site and that site's investigation and cleanup process.
- Providing citizens with early and continuing opportunities to participate in the NYSDEC's site investigation and cleanup process.
- Ensuring that the NYSDEC makes site investigation and cleanup decisions that benefit from input that reflects the interests and perspectives found within the affected community.
- Encouraging dialogue to promote the exchange of information among the affected/ interested public, State agencies, and other interested parties that strengthens trust among the parties, increases understanding of site and community issues and concerns, and improves decision making.

This Citizen Participation (CP) Plan provides information about how the NYSDEC will inform and involve the public during the investigation and cleanup of the site identified above. The public information and involvement program will be carried out with assistance, as appropriate, from the Applicant.

Project Contacts

Appendix A identifies the NYSDEC project contact(s) to whom the public should address questions or request information about the site's investigation and cleanup program. The public's suggestions about this CP Plan and the CP program for the site are always welcome. Interested people are encouraged to share their ideas and suggestions with the project contacts at any time.

Locations of Reports and Information

The locations of the reports and information related to the site's investigation and cleanup program also are identified in Appendix A. These locations provide convenient access to important project documents for public review and comment. Some documents may be placed on the NYSDEC web site. If this occurs, NYSDEC will inform the public in fact sheets distributed about the site and by other means, as appropriate.

Site Contact List

Appendix B contains the site contact list. This list has been developed to keep the community informed about, and involved in, the site's investigation and cleanup process. The site contact list will be used periodically to distribute fact sheets that provide updates about the status of the project. These will include notifications of upcoming activities at the site (such as fieldwork), as well as availability of project documents and announcements about public comment periods.

The site contact list includes, at a minimum:

- chief executive officer and planning board chairperson of each county, city, town and village in which the site is located;
- residents, owners, and occupants of the site and properties adjacent to the site;
- the public water supplier which services the area in which the site is located;
- any person who has requested to be placed on the site contact list;
- the administrator of any school or day care facility located on or near the site for purposes of posting and/or dissemination of information at the facility; and
- location(s) of reports and information.

The site contact list will be reviewed periodically and updated as appropriate. Individuals and organizations will be added to the site contact list upon request. Such requests should be submitted to the NYSDEC project contact(s) identified in Appendix A. Other additions to the site contact list may be made at the discretion of the NYSDEC project manager, in consultation with other NYSDEC staff as appropriate.
CP Activities

The table at the end of this section identifies the CP activities, at a minimum, that have been and will be conducted during the site's investigation and cleanup program. The flowchart in Appendix D shows how these CP activities integrate with the site investigation and cleanup process. The public is informed about these CP activities through fact sheets and notices distributed at significant points during the program. Elements of the investigation and cleanup process that match up with the CP activities are explained briefly in Section 5.

- Notices and Fact Sheets help the interested and affected public to understand contamination issues related to a site, and the nature and progress of efforts to investigate and clean up a site.
- **Public forums, comment periods, and contact with project managers** provide opportunities for the public to contribute information, opinions and perspectives that have potential to influence decisions about a site's investigation and cleanup.

Document repositories have been established at the following locations:

White Plains Public Library 100 Martine Avenue White Plains, New York 10601 (914) 422-1400 NYSDEC Region 3 21 South Putt Corners Road

New Paltz, New York 12561

(845) 256-3154

The public is encouraged to contact project staff at any time during the site's investigation and cleanup process with questions, comments, or requests for information.

This CP Plan may be revised due to changes in major issues of public concern identified in Section 3 or in the nature and scope of investigation and cleanup activities. Modifications may include additions to the site contact list and changes in planned citizen participation activities.

Technical Assistance Grant

The NYSDEC must determine if the site poses a significant threat to public health or the environment. This determination generally is made using information developed during the investigation of the site, as described in Section 5.

If the site is determined to be a significant threat, a qualifying community group may apply for a Technical Assistance Grant (TAG). The purpose of a TAG is to provide funds to the qualifying group to obtain independent technical assistance. This assistance helps the TAG recipient to interpret and understand existing environmental information about the nature and extent of contamination related to the site and the development/implementation of a remedy.

An eligible community group must certify that its membership represents the interests of the community affected by the site, and that its members' health, economic well-being or enjoyment of the environment may be affected by a release or threatened release of contamination at the site.

For more information about TAGs, go online at <u>http://www.dec.ny.gov/regulations/2590.html</u>.

Citizen Participation Requirements (Activities)	Timing of CP Activity(ies)						
Application Process:							
 Prepare site contact list Establish document repositories	At time of preparation of application to participate in the BCP.						
 Publish notice in Environmental Notice Bulletin (ENB) announcing receipt of application and 30-day public comment period Publish above ENB content in local newspaper Mail above ENB content to site contact list Conduct 30-day public comment period 	When NYSDEC determines that BCP application is complete. The 30-day public comment period begins on date of publication of notice in ENB. End date of public comment period is as stated in ENB notice. Therefore, ENB notice, newspaper notice, and notice to the site contact list should be provided to the public at the same time.						
After Execution of Brownfield Site Cleanup Agreement:							
Prepare Citizen Participation (CP) Plan	Before start of Remedial Investigation						

Note: The table identifying the citizen participation activities related to the site's investigation and cleanup program follows on the next page:

Citizen Participation Requirements (Activities)	Timing of CP Activity(ies)						
Before NYSDEC Approves Reme	dial Investigation (RI) Work Plan:						
 Distribute fact sheet to site contact list about proposed RI activities and announcing 30-day public comment period about draft RI Work Plan Conduct 30-day public comment period 	Before NYSDEC approves RI Work Plan. If RI Work Plan is submitted with application, public comment periods will be combined and public notice will include fact sheet. Thirty-day public comment period begins/ends as per dates identified in fact sheet.						
After Applicant Complet	es Remedial Investigation:						
• Distribute fact sheet to site contact list that describes RI results. Before NYSDEC approves RI Report.							
Before NYSDEC Approves	Remedial Work Plan (RWP):						
 Distribute fact sheet to site contact list about proposed RWP and announcing 45-day public comment period. Public meeting by NYSDEC about proposed RWP (if requested by affected community or at discretion of NYSDEC project manager). Conduct 45-day public comment period. 	Before NYSDEC approves RWP. Forty-five day public comment period begins/ends as per dates identified in fact sheet. Public meeting would be held within the 45-day public comment period.						
Before Applicant Starts Cleanup Action:							
• Distribute fact sheet to site contact list that describes upcoming cleanup action.	Before the start of cleanup action.						
After Applicant Completes Cleanup Action:							
• Distribute fact sheet to site contact list that announces that cleanup action has been completed and that summarizes the Final Engineering Report.	At the time NYSDEC approves Final Engineering Report. These two fact sheets are combined, if possible, if there is not a delay in issuing the COC.						
• Distribute fact sheet to site contact list announcing issuance of Certificate of Completion (COC).							

3.0 MAJOR ISSUES OF PUBLIC CONCERN

This section of the CP Plan identifies major issues of public concern that relate to the site. Additional major issues of public concern may be identified during the course of the site's investigation and cleanup process.

No major issues of public concern have been identified yet that relate to the Site. This Site is located within a potential environmental justice area. In addition, truck traffic coming on and off the Site as well as noise may be a concern to the community.

Furthermore, the Site will include procedures for protection of public health and safety during investigation and remediation activities. During investigation and remediation, worker and community health and safety activities will be conducted, including:

- Securing unenclosed portions of the site perimeter with an eight foot fence;
- On-site air monitoring for worker protection, if warranted;
- Perimeter air monitoring for community protection, if warranted; and
- Using odor, vapor, and dust controls such as water or foam sprays, as required during air monitoring, if needed.

Details on the Site Health and Safety Plan (HASP) and the Community Air Monitoring Plan (CAMP) will be included in the documents generated in support of the remediation.

4.0 SITE INFORMATION

Appendix C contains maps identifying the location and tax parcels comprising the Site.

Site Description

The property is located at 77 West Post Road (Site) in White Plains, Westchester County, New York, and is in a Suburban setting. The Site consists of 10 separate tax lots (identified as Parcels A through D, and F through K): 130.34-6-1, 130.34-6-6, 130.34-6-4, 130.34-6-3, 130.34-5-2, 130.34-5-3, 130.34-5-4, 130.34-5-5, 130.3-5-6, and 130.27-8-3. Parcels A through D are bordered to the north by West Post Road, to the south by Maple Avenue, to the east by Rathbun Avenue and to the west by Brady Place. Parcels F through J are bordered to the north by West Post Road, to the east by Brady Place and to the west by a Nissan Dealership. Parcel K is bordered to the north by a used car lot and residential properties, to the south by West Post Road to the east by a restaurant and to the west by South Lexington Avenue. The total area for the Site is approximately 3.7 acres. The 10 Parcels that make up the Site are a collection of commercial and residential parcels that are currently vacant.

The Site is entirely situated in Zone B-3 (excluding Parcel B which is located in Business District [B-2]) which is defined as an Intermediate Business District in the Zoning Ordinance of the City of White Plains (Adopted June 1, 1981 with Amendments through June 2007).

The B-3 District is a general retail district containing a wide variety of retail, office and service business uses as well as multi-family dwellings. The majority of uses in the District are of a service character and the District is located predominantly along the major arterial commercial streets of the City.

History of Site Use, Investigation, and Cleanup

Historical uses include automobile dealerships, automobile repair facilities, a dry cleaner, and a gas station among others. Previous investigations performed by others at the Site identified chlorinated solvents, petroleum-related volatile organic compounds, semi-volatile organic compounds and metals in the soil and groundwater.

5.0 INVESTIGATION AND CLEANUP PROCESS

Application

The Applicant has applied for and been accepted into New York's Brownfield Cleanup Program as a Volunteer. This means that the Applicant was not responsible for the disposal or discharge of the contaminants or whose ownership or operation of the Site took place after the discharge or disposal of contaminants. The Volunteer must fully characterize the nature and extent of contamination on-Site, and must conduct a "qualitative exposure assessment," a process that characterizes the actual or potential exposures of people, fish and wildlife to contaminants on the Site and to contamination that has migrated from the Site.

The Applicant in the Application proposes that the Site will be used for restricted purposes (i.e., restricted residential, commercial, etc.).

To achieve this goal, the Applicant will conduct investigation and cleanup activities at the Site with oversight provided by the NYSDEC. The Brownfield Cleanup Agreement executed by the NYSDEC and the Applicant sets forth the responsibilities of each party in conducting these activities at the Site.

Investigation

The Applicant will conduct an investigation of the Site officially called a "remedial investigation" (RI). This investigation will be performed with NYSDEC oversight. The Applicant must develop a remedial investigation work plan, which is subject to public comment.

The Site investigation has several goals:

- 1) define the nature and extent of contamination in soil, groundwater and any other parts of the environment that may be affected;
- 2) identify the source(s) of the contamination;
- 3) assess the impact of the contamination on public health and the environment; and
- 4) provide information to support the development of a proposed remedy to address the contamination or the determination that cleanup is not necessary.

When the investigation is complete, the Applicant will prepare and submit a report that summarizes the results. This report also will recommend whether cleanup action is needed to address site-related contamination. The investigation report is subject to review and approval by the NYSDEC.

The NYSDEC will use the information in the investigation report to determine if the site poses a significant threat to public health or the environment. If the site is a "significant threat," it must be cleaned up using a remedy selected by the NYSDEC from an analysis of alternatives prepared by the Applicant and approved by the NYSDEC. If the site does not pose a significant threat, the Applicant may select the remedy from the approved analysis of alternatives.

Remedy Selection

When the investigation of the site has been determined to be complete, the project likely would proceed in one of two directions:

- 1. The Applicant may recommend in its investigation report that no action is necessary at the site. In this case, the NYSDEC would make the investigation report available for public comment for 45 days. The NYSDEC then would complete its review, make any necessary revisions, and, if appropriate, approve the investigation report. The NYSDEC would then issue a "Certificate of Completion" (described below) to the Applicant.
 - or
- 2. The Applicant may recommend in its investigation report that action needs to be taken to address site contamination. After the NYSDEC approves the investigation report, the Applicant may then develop a cleanup plan, officially called a "Remedial Work Plan". The Remedial Work Plan describes the Applicant's proposed remedy for addressing contamination related to the site.

When the Applicant submits a proposed Remedial Work Plan for approval, the NYSDEC would announce the availability of the proposed plan for public review during a 45-day public comment period.

Cleanup Action

The NYSDEC will consider public comments, and revise the draft cleanup plan, if necessary, before approving the proposed remedy. The New York State Department of Health (NYSDOH)

must concur with the proposed remedy. After approval, the proposed remedy becomes the selected remedy.

The Applicant may then design and perform the cleanup action to address the Site contamination. The NYSDEC and NYSDOH oversee the activities. When the Applicant completes cleanup activities, it will prepare a final engineering report that certifies that cleanup requirements have been achieved or will be achieved within a specific time frame. The NYSDEC will review the report to be certain that the cleanup is protective of public health and the environment for the intended use of the site.

Certificate of Completion

When the NYSDEC is satisfied that cleanup requirements have been achieved or will be achieved for the Site, it will approve the final engineering report. The NYSDEC then will issue a Certificate of Completion (COC) to the Applicant. The COC states that cleanup goals have been achieved, and relieves the Applicant from future liability for site-related contamination, subject to certain conditions. The Applicant would be eligible to redevelop the site after it receives a COC.

Site Management

Site management is the last phase of the site cleanup program. This phase begins when the COC is issued. Site management may be conducted by the Applicant under NYSDEC oversight, if contamination will remain in place. Site management incorporates any institutional and engineering controls required to ensure that the remedy implemented for the site remains protective of public health and the environment. All significant activities are detailed in a Site Management Plan.

An institutional control is a non-physical restriction on use of the site, such as a deed restriction that would prevent or restrict certain uses of the property. An institutional control may be used when the cleanup action leaves some contamination that makes the site suitable for some, but not all uses.

An engineering control is a physical barrier or method to manage contamination. Examples include: caps, covers, barriers, fences, and treatment of water supplies.

Site management also may include the operation and maintenance of a component of the remedy, such as a system that is pumping and treating groundwater. Site management continues until the NYSDEC determines that it is no longer needed.

APPENDICES

- A. Project Contacts and Locations of Reports and Information
- B. Site Contact List
- C. Site Location Map and Tax Parcel Map
- D. Brownfield Cleanup Program Process

Citizen Participation Plan

APPENDIX A

Project Contacts and Locations of Reports and Information

APPENDIX A

PROJECT CONTACTS AND LOCATIONS OF REPORTS AND INFORMATION

Project Contacts

For information about the site's investigation and cleanup program, the public may contact any of the following project staff:

New York State Department of Environmental Conservation (NYSDEC):

Jamie Verrigni Project Manager NYSDEC Division of Environmental Remediation 625 Broadway, 11th Floor Albany, New York 12233 Telephone: (518) 402-9662 Michael Knipfing Citizen Participation Specialist NYSDEC Region 3 21 South Putt Corners Road New Paltz, New York 12561 Telephone: (845) 256-3154

New York State Department of Health (NYSDOH):

Nathan Walz NYSDOH Bureau of Environmental Exposure Investigation Empire State Plaza, Corning Tower Room 1787 Albany, New York 12237 Telephone: (518) 402-7880

Locations of Reports and Information:

The facilities identified below are being used to provide the public with convenient access to important project documents:

White Plains Public Library 100 Martine Avenue White Plains, New York 10601 Telephone: (914) 422-1400

Hours:	Monday, Tuesday,		
	and Wednesday:	10:00 AM —	9:00 PM
	Thursday and Friday:	10:00 AM —	6:00 PM
	Saturday:	10:00 AM —	5:00 PM
	Sunday:	1:00 PM —	5:00 PM
	Closed on City Holidays		

NYSDEC Region 3 21 South Putt Corners Road New Paltz, New York 12561

Telephone: (845) 256-3154

Hours: Monday through Friday: 9:00 AM — 4:00 PM (please call for appointment)

Citizen Participation Plan

APPENDIX B

Site Contact List

APPENDIX B

Site Name: Post Road Corridor —

Name	Title/Affiliation	Address 1	Address 2	City	State	ZIP	Site Name (County)
Thomas Roach, Mayor	City of White Plains	255 Main Street		White Plains	New York	10601	Post Road Corridor - White Plains (Westchester)
Anne Mcpherson, Clerk	City of White Plains	255 Main Street		White Plains	New York	10601	Post Road Corridor - White Plains (Westchester)
Elizabeth Cheteny	Planning Commissioner	255 Main Street		White Plains	New York	10601	Post Road Corridor - White Plains (Westchester)
Benjamin Boykin	City Council	255 Main Street		White Plains	New York	10601	Post Road Corridor - White Plains (Westchester)
John Kirkpatrick	City Council	255 Main Street		White Plains	New York	10601	Post Road Corridor - White Plains (Westchester)
Milagros Lecuona	City Council	255 Main Street		White Plains	New York	10601	Post Road Corridor - White Plains (Westchester)
John M. Martin	City Council City Council	255 Main Street		White Plains	New York	10601	Post Road Corridor - White Plains (Westchester)
Dennis Krolian		255 Main Street		White Plains	New York	10601	Post Road Corridor - White Plains (Westchester)
Beth Smayda	City Council	255 Main Street		White Plains	New York	10601	Post Road Corridor - White Plains (Westchester)
Susan Habel	Director of Urban Renewal	255 Main Street		White Plains	New York	10601	Post Road Corridor - White Plains (Westchester)
Hon. Charles Schumer	US Senate			Washington, DC		20510	Post Road Corridor - White Plains (Westchester)
Hon. Kirsten Gillibrand	US Senate			Washington, DC		20510	Post Road Corridor - White Plains (Westchester)
Nita Lowey	Representative	22 Mamaroneck Avenue	Ste # 310	White Plains	New York	10605	Post Road Corridor - White Plains (Westchester)
Suzi Oppenheimer	State Senator	222 Grace Church Street		Port Chester	New York	10573	Post Road Corridor - White Plains (Westchester)
Robert Castelli	Assemblyman	4 New King Street	No. 125	White Plains	New York	10604	Post Road Corridor - White Plains (Westchester)
Amy Paulin	Assemblyperson	700 White Plains Road	Ste # 252	White Plains	New York	10583	Post Road Corridor - White Plains (Westchester)
William Ryan	Legislator, Westchester County	800 Michaelian Office		White Plains	New York	10601	Post Road Corridor - White Plains (Westchester)
Alfreda Williams	Legislator, Westchester County	800 Michaelian Office		White Plains	New York	10601	Post Road Corridor - White Plains (Westchester)
Tina Seckerson	Clerk, County Legistature	800 Michaelian Office		White Plains	New York	10601	Post Road Corridor - White Plains (Westchester)
Robert Astorino	County Executive	800 Michaelian Office		White Plains	New York	10601	Post Road Corridor - White Plains (Westchester)
Timothy Idoni	County Clerk	110 MLK Jr. Blvd.		White Plains	New York	10601	Post Road Corridor - White Plains (Westchester)
Dr. Sherlita Amler – Commissioner	County Health Department	145 Huguenot Street		New Rochelle	New York	10801	Post Road Corridor - White Plains (Westchester)
Edward Buroughs – Commisioner	County Planning Department	148 Martine Avenue		White Plains	New York	10601	Post Road Corridor - White Plains (Westchester)
Joseph J. Nicoletti, Jr., P.E.	Commissioner, Public Works	255 Main Street		White Plains	New York	10601	Post Road Corridor - White Plains (Westchester)
NYCDEP		465 Columbus Ave.		Valhalla	New York	10595	Post Road Corridor - White Plains (Westchester)
El Clarin	City Editor	48 Broadway		Haverstraw	New York	10927	Post Road Corridor - White Plains (Westchester)
Associated Press	City Editor	148 Martine Avenue		White Plains	New York	10927	Post Road Corridor - White Plains (Westchester)
Gannett Suburban Newspapers	City Editor	1 Gannett Drive		White Plains	New York	10604	Post Road Corridor - White Plains (Westchester)
Rising Publications	City Editor	25 Warburton Avenue		Yonkers	New York	10701	Post Road Corridor - White Plains (Westchester)
Suburban Street News	City Editor	170 Hamilton Ave.	Ste # 211	White Plains	New York	10601	Post Road Corridor - White Plains (Westchester)
The Buisness Journal	City Editor	3 Gannett Drive		White Plains	New York	10601	Post Road Corridor - White Plains (Westchester)
Patent Trader-Journal News	City Editor	185 Kisco Ave.		Mount Kisco	New York	10549	Post Road Corridor - White Plains (Westchester)
Westchester County Press	City Editor	PO Box 152		White Plains	New York	10602	Post Road Corridor - White Plains (Westchester)
White Plains Report Dispatch	City Editor	1 Gannett Drive		White Plains	New York	10604	Post Road Corridor - White Plains (Westchester)
Yonkers Jewish Chronicle	City Editor	584 North Boradway		Yonkers	New York	10701	Post Road Corridor - White Plains (Westchester)
WHUD/WLNA	News Director	PO Box 310		Beacon	New York	12508	Post Road Corridor - White Plains (Westchester)
WRTN/WVOX	News Director	1 Broadcast Forum		New Rochelle	New York	10801	Post Road Corridor - White Plains (Westchester)
News 12	News Director	6 Executive Plaza		Yonkers	New York	10701	Post Road Corridor - White Plains (Westchester)
Paragon Cable	News Director	701-717 N. MacQuestein		Mount Vernon	New York	10552	Post Road Corridor - White Plains (Westchester)
WRNN-TV	News Director	800 Westchester Ave.	Ste # S-640	Rye Brook	New York	10573	Post Road Corridor - White Plains (Westchester)
Lisa Phillips	Bureau Chief, WAMC	318 Central Avenue		Albany	New York	12206	Post Road Corridor - White Plains (Westchester)

APPENDIX B

Site Name: Post Road Corridor —

Name	Title/Affiliation	Address 1	Address 2	City	State	ZIP	Site Name (County)
Hank Gross	Mid Hudson News Network	42 Marcy Lane		Middletown	New York	10941	Post Road Corridor - White Plains (Westchester)
Westmore News Inc.	City Editor	33 Broad Street		Port Chester	New York	10573	Post Road Corridor - White Plains (Westchester)
Women's E News	News Director	6 Barclay Street	5th Floor	New York	New York	10007	Post Road Corridor - White Plains (Westchester)
WFAS-AM	News Director	365 Secor Road		Hartsdale	New York	10530	Post Road Corridor - White Plains (Westchester)
White Plains Times	City Editor	31 Mamaroneck Avenue		White Plains	New York	10601	Post Road Corridor - White Plains (Westchester)
Tri-State Pennysaver	City Editor	510 Fifth Avenue		Pelham	New York	10803	Post Road Corridor - White Plains (Westchester)
Hometown Media Group	City Editor	200 William Street		Port Chester	New York	10573	Post Road Corridor - White Plains (Westchester)
NY Times	City Editor, Metro Desk	620 8 th Avenue		New York	New York	10018	Post Road Corridor - White Plains (Westchester)
Scenic Hudson		1 Civic Center Plaza		Poughkeepsie	New York	12601	Post Road Corridor - White Plains (Westchester)
Greenway Conservancy		625 Broadway	4th Floor	Albany	New York	12207	Post Road Corridor - White Plains (Westchester)
The Nature Conservancy	Eastern NY Chapter	265 Chestnut Ridge Road		Mt. Kisco	New York	10549	Post Road Corridor - White Plains (Westchester)
Westchester Environmental Coalition		PO Box 488		White Plains	New York	10602	Post Road Corridor - White Plains (Westchester)
Federated Conservationists of Westchester		78 N. Broadway		White Plains	New York	10603	Post Road Corridor - White Plains (Westchester)
Karl Coplan, Esq. – Pace/Riverkeeper		78 N. Broadway		White Plains	New York	10603	Post Road Corridor - White Plains (Westchester)
Beczak Environmental Center		21 Alexander Street		Yonkers	New York	10701	Post Road Corridor - White Plains (Westchester)
Environmental Citizens Coalition		33 Central Avenue		Albany	New York	12210	Post Road Corridor - White Plains (Westchester)
Laura Haight	NYPIRG	107 Washington Ave.		Albany	New York	12210	Post Road Corridor - White Plains (Westchester)
Westchester County EMC		414 Michaelian Office		White Plains	New York	10601	Post Road Corridor - White Plains (Westchester)
Sierra Club – Atlantic Chapter		353 Hamilton Street		Albany	New York	12210	Post Road Corridor - White Plains (Westchester)
Robert Funicello, Director of Env. Projects	Dept. of Env. Facilities	270 North Avenue		New Rochelle	New York	10801	Post Road Corridor - White Plains (Westchester)
Teresa Niss, Principal	Post Road School	175 W. Post Road		White Plains	New York	10606	Post Road Corridor - White Plains (Westchester)
Ms. Barbara A Keys	City of White Plains Youth Bureau	2 Fisher Loop		White Plains	New York	10601	Post Road Corridor - White Plains (Westchester)
Ms. Kimberly C. Cugini	City of White Plains Youth Bureau After School	175 W. Post Road		White Plains	New York	10606	Post Road Corridor - White Plains (Westchester)
Da Rocha, Lia		236 S. Lexington Ave.		White Plains	New York	10606	Post Road Corridor - White Plains (Westchester)
Mrs. Kathleen M. Whelan	Family Service of Westchester @ Bethel Center	1 Fisher Court		White Plains	New York	10601	Post Road Corridor - White Plains (Westchester)
Ms. Christina M. Anes	Family Services of Westchester	2 Fisher Court		White Plains	New York	10601	Post Road Corridor - White Plains (Westchester)
Johnson, Dina		135 S. Lexington Ave.		White Plains	New York	10601	Post Road Corridor - White Plains (Westchester)
Mrs. Pattie Dozier	Passage to Excellence Corporation	1 Fisher Court		White Plains	New York	10601	Post Road Corridor - White Plains (Westchester)
The Salvation Army		16 Sterling Avenue		White Plains	New York	10606	Post Road Corridor - White Plains (Westchester)
Gabmar Realty Corp.		149 Grand Street		White Plains	New York	10601	Post Road Corridor - White Plains (Westchester)
Gabmar Property Brokers Inc.		149 Grand Street		White Plains	New York	10601	Post Road Corridor - White Plains (Westchester)
Tax ID: 130.27-8-4	West Post Realty	130 W. Post Road		White Plains	New York	10606	Post Road Corridor - White Plains (Westchester)
Sunoco		115 W. Post Road		White Plains	New York	10606	Post Road Corridor - White Plains (Westchester)
Sunoco		107 W. Post Road		White Plains	New York	10606	Post Road Corridor - White Plains (Westchester)
Anthonys Triangle Deli		102 W. Post Road		White Plains	New York	10606	Post Road Corridor - White Plains (Westchester)
Magnota, Angelo and Jean		100 Prospect Street		White Plains	New York	10606	Post Road Corridor - White Plains (Westchester)
Pauldings Cycle Store		98 W. Post Road		White Plains	New York	10606	Post Road Corridor - White Plains (Westchester)
La Colmend II Grocery and Meat Store		94 W. Post Road		White Plains	New York	10606	Post Road Corridor - White Plains (Westchester)
Noel Laundromat		92 W. Post Road		White Plains	New York	10606	Post Road Corridor - White Plains (Westchester)
Current Occupant		80 W. Post Road		White Plains	New York	10606	Post Road Corridor - White Plains (Westchester)
City Supermarket		68 W. Post Road		White Plains	New York	10606	Post Road Corridor - White Plains (Westchester)
Aires De Colombia Resturant		64 W. Post Road		White Plains	New York	10606	Post Road Corridor - White Plains (Westchester)

APPENDIX B

Site Name: Post Road Corridor —

Name	Title/Affiliation	Address 1	Address 2	City	State	ZIP	Site Name (County)
Calvary Baptist Church		32 W. Post Road		White Plains	New York	10606	Post Road Corridor - White Plains (Westchester)
La Villa Resturant		30 W. Post Road		White Plains	New York	10606	Post Road Corridor - White Plains (Westchester)
Marys Hair Salon		28 W. Post Road		White Plains	New York	10606	Post Road Corridor - White Plains (Westchester)
West Post Realty		25 W. Post Road		White Plains	New York	10606	Post Road Corridor - White Plains (Westchester)
Veracruz Resturant		24 W. Post Road		White Plains	New York	10606	Post Road Corridor - White Plains (Westchester)
Shop Smart Foor Mart		20 W. Post Road		White Plains	New York	10606	Post Road Corridor - White Plains (Westchester)
El Miski Resturant		16 W. Post Road		White Plains	New York	10606	Post Road Corridor - White Plains (Westchester)
Raulding, George		15 Quincy Lane		White Plains	New York	10606	Post Road Corridor - White Plains (Westchester)
Trinidad, Mario & Ana		13 Rathbun		White Plains	New York	10606	Post Road Corridor - White Plains (Westchester)
Schnurmacher Center for Rehabilitation		12 Tibbits Avenue		White Plains	New York	10606	Post Road Corridor - White Plains (Westchester)
Mercado, Jose & Maria		8 Rathbun Avenue		White Plains	New York	10606	Post Road Corridor - White Plains (Westchester)
Demaria, Antonio & Malandro, Maria		7 Sybil Street		White Plains	New York	10606	Post Road Corridor - White Plains (Westchester)
Khan, Hazrat & Shah, Main Hussan		4 E. Post Road		White Plains	New York	10606	Post Road Corridor - White Plains (Westchester)
Used Car Sales		184-188 S. Lexington		White Plains	New York	10606	Post Road Corridor - White Plains (Westchester)
2 East Post Rd Associates LLC		12 East Post Road		White Plains	New York	10606	Post Road Corridor - White Plains (Westchester)
Mar Mini Market		2-4 East Post Road		White Plains	New York	10606	Post Road Corridor - White Plains (Westchester)
Current Occupant		215-221 Maple Avenue		White Plains	New York	10606	Post Road Corridor - White Plains (Westchester)
White Plains Nissan		29-35 W. Post Road		White Plains	New York	10606	Post Road Corridor - White Plains (Westchester)
Presser Stanley & ORS		PO Box 886		Hartsdale	New York	10530	Post Road Corridor - White Plains (Westchester)
80 W. Post Rd Corp.		49-70 31st Street		Long Island City	New York	11101	Post Road Corridor - White Plains (Westchester)
White Plains Public Library		100 Maritime Avenue		White Plains	New York	10601	Post Road Corridor - White Plains (Westchester)
NYSDEC Region 3		21 South Putt Corners		New Paltz	New York	12561	Post Road Corridor - White Plains (Westchester)

Citizen Participation Plan

APPENDIX C

Site Location Map and Tax Parcel Map





Legend



Site Location and Tax Parcel (See tax parcel reference list below.)

REF.	ADDRESS	TAX I.D.
Α	99-103 W. Post Rd	130.34-6-1
B	5 Rathbun Avenue	130.34-6-6
С	3 Brady Place	130.34-6-4
D	95 W. Post Rd	130.34-6-3
F	79-83 W. Post Rd	130.34-5-2
G	77 W. Post Rd	130.34-5-3
Н	55 W. Post Rd	130.34-5-4
I	41-45 W. Post Rd	130.34-5-5
J	35 W. Post Rd	130.34-5-6
K	190-192 S. Lexington Ave	130.27-8-3
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SOURCE: Westchester County Geographic Information Systems Website.



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Citizen Participation Plan

APPENDIX D

Brownfield Cleanup Program Process

APPENDIX D

BROWNFIELD CLEANUP PROGRAM PROCESS



APPENDIX C

Community Air Monitoring Plan

APPENDIX C

C360129 HASP, August 2016 New York State Department of Health Generic Community Air Monitoring Plan

Overview

A Community Air Monitoring Plan (CAMP) requires real-time monitoring for volatile organic compounds (VOCs) and particulates (i.e., dust) at the downwind perimeter of each designated work area when certain activities are in progress at contaminated sites. The CAMP is not intended for use in establishing action levels for worker respiratory protection. Rather, its intent is to provide a measure of protection for the downwind community (i.e., off-site receptors including residences and businesses and on-site workers not directly involved with the subject work activities) from potential airborne contaminant releases as a direct result of investigative and remedial work activities. The action levels specified herein require increased monitoring, corrective actions to abate emissions, and/or work shutdown. Additionally, the CAMP helps to confirm that work activities did not spread contamination off-site through the air.

The generic CAMP presented below will be sufficient to cover many, if not most sites. Specific requirements should be reviewed for each situation in consultation with NYSDOH to ensure proper applicability. In some cases, a separate site-specific CAMP or supplement may be required. Depending upon the nature of contamination, chemical-specific monitoring with appropriately sensitive methods may be required. Depending upon the proximity of potentially exposed individuals, more stringent monitoring or response levels than those presented below may be required. Special requirements will be necessary for work within 20 feet of potentially exposed individuals or structures and for indoor work with co-located residences or facilities. These requirements should be determined in consultation with NYSDOH.

Reliance on the CAMP should not preclude simple, common-sense measures to keep VOCs, dust, and odors at a minimum around the work areas.

Community Air Monitoring Plan

Depending upon the nature of known or potential contaminants at each site, real-time air monitoring for VOCs and/or particulate levels at the perimeter of the exclusion zone or work area will be necessary. Most sites will involve VOC and particulate monitoring; sites known to be contaminated with heavy metals alone may only require particulate monitoring. If radiological contamination is a concern, additional monitoring requirements may be necessary per consultation with appropriate DEC/NYSDOH staff.

Continuous monitoring will be required for all ground intrusive activities and during the demolition of contaminated or potentially contaminated structures. Ground intrusive activities include, but are not limited to, soil/waste excavation and handling, test pitting or trenching, and the installation of soil borings or monitoring wells.

Periodic monitoring for VOCs will be required during non-intrusive activities such as the collection of soil and sediment samples or the collection of groundwater samples from existing monitoring wells. "Periodic" monitoring during sample collection might reasonably consist of taking a reading upon arrival at a sample location, monitoring while opening a well cap or overturning soil, monitoring during well baling/purging, and taking a reading prior to leaving a sample location. In some instances, depending upon the proximity of potentially exposed individuals, continuous monitoring may be required during sampling activities. Examples of such situations include groundwater sampling at wells on the curb of a busy urban street, in the midst of a public park, or adjacent to a school or residence.

VOC Monitoring, Response Levels, and Actions

Volatile organic compounds (VOCs) must be monitored at the downwind perimeter of the immediate work area (i.e., the exclusion zone) on a continuous basis or as otherwise specified. Upwind concentrations should be measured at the start of each workday and periodically thereafter to establish background conditions, particularly if wind direction changes. The monitoring work should be performed using equipment appropriate to measure the types of contaminants known or suspected to be present. The equipment should be calibrated at least daily for the contaminant(s) of concern or for an appropriate surrogate. The equipment should be capable of calculating 15-minute running average concentrations, which will be compared to the levels specified below.

- If the ambient air concentration of total organic vapors at the downwind perimeter of the work area or exclusion zone exceeds 5 parts per million (ppm) above background for the 15-minute average, work activities must be temporarily halted and monitoring continued. If the total organic vapor level readily decreases (per instantaneous readings) below 5 ppm over background, work activities can resume with continued monitoring.
- 2. If total organic vapor levels at the downwind perimeter of the work area or exclusion zone persist at levels in excess of 5 ppm over background but less than 25 ppm, work activities must be halted, the source of vapors identified, corrective actions taken to abate emissions, and monitoring continued. After these steps, work activities can resume provided that the total organic vapor level 200 feet downwind of the exclusion zone or half the distance to the nearest potential receptor or residential/commercial structure, whichever is less but in no case less than 20 feet, is below 5 ppm over background for the 15-minute average.
- 3. If the organic vapor level is above 25 ppm at the perimeter of the work area, activities must be shutdown.
- 4. All 15-minute readings must be recorded and be available for State (DEC and NYSDOH) personnel to review. Instantaneous readings, if any, used for decision purposes should also be recorded.

Particulate Monitoring, Response Levels, and Actions

Particulate concentrations should be monitored continuously at the upwind and downwind perimeters of the exclusion zone at temporary particulate monitoring stations. The particulate monitoring should be performed using real-time monitoring equipment capable of measuring particulate matter less than 10 micrometers in size (PM-10) and capable of integrating over a period of 15 minutes (or less) for comparison to the airborne particulate action level. The equipment must be equipped with an audible alarm to indicate exceedance of the action level. In addition, fugitive dust migration should be visually assessed during all work activities.

- 1. If the downwind PM-10 particulate level is 100 micrograms per cubic meter (mcg/m³) greater than background (upwind perimeter) for the 15-minute period or if airborne dust is observed leaving the work area, then dust suppression techniques must be employed. Work may continue with dust suppression techniques provided that downwind PM-10 particulate levels do not exceed 150 mcg/m³ above the upwind level and provided that no visible dust is migrating from the work area.
- 2. If, after implementation of dust suppression techniques, downwind PM-10 particulate levels are greater than 150 mcg/m³ above the upwind level, work must be stopped and a re-evaluation of activities initiated. Work can resume provided that dust suppression measures and other controls are successful in reducing the downwind PM-10 particulate concentration to within 150 mcg/m³ of the upwind level and in preventing visible dust migration.
- 3. All readings must be recorded and be available for State (DEC and NYSDOH) and County Health personnel to review.

APPENDIX D

Resumes of Key Personnel

Joseph D. Duminuco Vice President/Principal Hydrogeologist

Specialties:

Investigation and remediation of soil, groundwater, and soil vapor at commercial and industrial sites focusing on the use of innovative solutions. Providing environmental consulting services and strategic planning to the real estate industry focused on Brownfield Redevelopment projects. Significant railroad and transit experience (over 100 sites).

Experience Summary:

Thirty years of experience: Vice President/National Client Manager, Office Manager, Principal, Senior and Project Hydrogeologist at Roux Associates; Staff Hydrogeologist at Geraghty & Miller; and Geologist at Mueser Rutledge Consulting Engineers.

Credentials:

M.S. in Geology, Wright State University, 1990 B.S. in Geology, Hofstra University, 1983

Presentations:

- Environmental Law in Real Estate Transactions Working With Technical Professionals; Hofstra University Law School, January 13, 2013
- Duminuco J., Coyle F. Property Redevelopment and Brownfield Sites. Proceedings of the 11th Annual Environmental Law Conference; ISBA Conference; 2012 May
- Duminuco J. Transactions and the Environment: Contaminated Property Issues in Real Estate and Corporate Matters; New York State Bar Association; Tarrytown, NY; 2006 June

Key Projects:

- Principal-in-Charge of a Brownfield redevelopment of a property adjacent to a dry cleaning solvent distribution facility in Brooklyn, New York. The site was previously a warehouse built on a former freight railyard that serviced the dry cleaning solvent facility. Offloading spillage on site and migration from the offsite facility resulted in significant soil, groundwater, and vapor contamination with chlorinated VOCs. The site is being developed into multifamily with first floor retail use and the remedy consisted of soil hot spot removal, a physical barrier to limit on site migration, a permeable reactive wall to eliminate off site migration, hot-spot *in situ* injections and a sub slab depressurization system.
- Principal-in-charge for a Brownfield Redevelopment project that also requires a RCRA compliant facility closure. The site is a former paint factory located in Queens, New York. Due diligence environmental investigations determined historical site operations adversely impacted the subsurface including a LNAPL plume in addition to petroleum hydrocarbon impacts to the soil and groundwater. Roux Associates has provided environmental consulting services for this project including multiple meetings and discussions with NYSDEC; preparation of: multiple IRM work plans, RCRA Sampling Plan, RIWP, HASP, CAMP, and RCRA Facility Closure Plan. Roux Associates also completed a RI at the site which characterized the nature and extent of the impacts. Preparation of a RAWP is underway and will include implementation of a HVDPE remediation system. In addition, bulkhead replacement will be a component of the remedy.
- Principal-in-charge of a Brownfield redevelopment of a former MGP site into a Big Box retail site in Brooklyn, New York. Project consisted of negotiations with NYSDEC and

Roux limited remediation to former gasholders filled with coal tar, soil hot spots with mobile coal tar and perimeter containment of coal tar. All the remaining soil at the site was impacted with MGP waste and most of the site was underlain by liquid coal tar. Roux negotiated use of institutional/engineering controls to allow significant contamination to remain in place. A sub slab depressurization system and vapor barrier was installed to address the mobile coal tar left below the retail building.

- Principal-in-Charge for a Brownfield redevelopment project at a site in White Plains, New York, which consists of 16 separate parcels spanning 4.5 acres, has a variety of former uses including automotive service/repair and multiple dry cleaners. Due diligence environmental investigations determined the site has both chlorinated and petroleum hydrocarbon impacts to the soil and groundwater. Roux Associates prepared the BCP Pre-Application Worksheets and the BCP Application which were required for entry into the BCP after which, Roux Associates prepared the CPP, RIWP, HASP, and CAMP. Implementation of the RIWP was completed and preparation of a RAWP is underway that will consist of soil hot spot removals, in situ chemical oxidation for groundwater contamination and installation of a sub slab depressurization system.
- Principal-in-Charge of a mixed-use (public school and residential) Brownfield redevelopment in lower Manhattan, New York. Project consisted of a Phase I and a Phase II ESA to satisfy NYCDEP requirements. Due to the presence of contaminated historic fill Roux performed *in situ* waste characterization to assist in the development of NYCDEP-required plans. In addition, Roux provided oversight of the waste removal, completion of waste manifests, and full-time CAMP during all soil moving activities. Roux provided support to excavation contractor when two previously unknown USTs were discovered during excavation activities.
- of a Principal-in-Charge multi-phased Brownfield investigation for the redevelopment of a former Defense Site to water front, upscale housing in Long Island, New York. This investigation included determining the nature and extent of chlorinated VOCs in soil, groundwater and vapor- phase contamination onsite and offsite. Utilized a risk assessment to argue the level of residual contamination allowed to remain onsite with an intended residential future use. Remedial alternatives were selected in accordance with future development plans and institutional/engineering controls were proposed to limit cleanup costs. Successfully argued the technical impracticability of remediation of the heavily contaminated deeper aquifer beneath the site and offsite.
- Principal-in-Charge of a retail/commercial redevelopment in the Bronx, New York. The site contained a NYCDEP E-Designation due to a previous onsite service station UST release. In addition, a previous Phase I and Phase II ESA identified a former dry cleaner with a chlorinated VOC release. Roux performed a focused Phase II ESA at the dry cleaner and determined the chlorinated solvent release was not a hazard. Roux obtained closure under the NYSDEC Spills group and the site was redeveloped with a restaurant, a pharmacy, and re-use of a former supermarket.



- Principal-in-Charge of the redevelopment and expansion of an automobile dealer/service center in New York, New York into the US Flagship dealer for a major European luxury car manufacturer. Supported client and legal team during lease negotiations. Worked closely with NYCOER to address NYCDEP "E" designation. Coordination with NYCOER to implement remedial investigation and develop a site materials management plan as part of the expansion. Also worked closely with NYSDEC to address an on-site spill as well as coordinate efforts to evaluate if a 19,000 gallon dielectric fluid release by others impacted the site.
- Principal-in-Charge for the completion of Phase I and Phase II Environmental Site Assessment activities associated with a proposed mixed use redevelopment located in Westchester, New York waterfront. Work included management of subsurface investigation activities to characterize soil conditions, and working closely with client's architects and construction contractors to integrate the proposed site remediation into the project development plan (including evaluating multiple potential disposal scenarios). Site contaminants included hydrocarbons (including free-product plume from former USTs), and historic fill constituents.
- Principal-in-Charge of an 80-acre redevelopment in Yonkers, New York. Work included Phase I and Phase II investigations, asbestos surveys and abatement support and response to a free product impact form an adjacent landowner. Coordinated with NYSDEC and responsible party to address contamination issue and not impact client's construction schedule.
- Principal-in-Charge for the redevelopment of a property in Brooklyn, New York into supportive housing. Worked closely with NYCOER to address NYCDEP "E" designation. Coordination with NYCOER to implement remedial investigation and develop RAP/CHASP as part of the NYC VCP.
- Principal-in-Charge for the redevelopment of a property in the Bronx, New York into supportive housing. Worked closely with NYCDEP to address "E" designation. Coordination with NYCDEP to implement remedial investigation and develop RAP/CHASP as part of the redevelopment. Also performed an ASTM VEC to address vapor concerns.
- Principal-in-Charge of a Brownfield redevelopment in Brooklyn, New York at a mixed use multifamily housing/ neighborhood retail complex with an onsite dry cleaner. There is soil, groundwater and vapor contamination from chlorinated VOCs from the former onsite dry cleaner as well as groundwater contamination from offsite dry cleaners. The remedy will consist of hot spot soil removal, SVE, *in situ* groundwater treatment and a negative pressure approach for vapor mitigation in the existing buildings.
- Principal-in-Charge of a Brownfield Redevelopment for a large vacant parcel (460 acres) on Long Island. The project involved an extensive investigation, UST and PCB remediation; removal and proper disposal of numerous tanks, drums, abandoned vehicles and transformers; and participation in contentious public meetings. The site was redeveloped into a golf course and a senior care facility.
- Principal-in-Charge for a property transfer support project at a heavily contaminated (chlorinated volatile organic compounds form an adjacent dry cleaner and on site MGP waste)

distribution facility in the Bronx, New York. The site was a former MGP being handled under the VCP in addition to an open petroleum spill under the regional spills group. Roux performed a Phase I for the buyer, a Phase II and remedial cost estimate for the owner and negotiated with the buyer's consultant and NYSDEC to limit the scope of the investigation and cleanup.

- Principal-in-Charge of investigation and remediation of a catastrophic heating oil release for a commercial office building in Brooklyn, New York. All work was performed under the oversight of the NYSDEC Spills Group and time was of the essence for the initial response as the heating season was fast approaching. Roux performed free product delineation and remediation and indoor air monitoring at adjacent buildings. Site closure was obtained from NYSDEC.
- Principal-in-Charge of a mixed-use (residential, retail, commercial) Brownfield redevelopment in the Bronx, New York. Project consisted of a Phase I and Phase II ESA to satisfy NYCDEP requirements. The media investigated included soil, groundwater, soil vapor, and building materials. During the Phase II ESA, Roux performed preliminary *in situ* waste characterization.
- Principal-in-Charge of an interior Brownfield Redevelopment of a PCB, metals, and hydrocarbon contaminated wire manufacturing facility in Westchester County, New York into use as a movie studio. Activities included delineation and characterization of building surfaces, design of a remediation program and interim cleanups to allow studio use as the project progressed.
- Principal-in-Charge of multiple phases of Brownfield Project for construction of a cogeneration facility in Brooklyn, New York. Project consisted of: construction oversight; environmental compliance monitoring; asbestos and lead paint abatement oversight; data evaluation and report preparation; soil, offshore sediment, and sewer effluent sampling; PCBcontaminated material remediation; preparation of a waste handling and disposal plan; and permitting.
- Principal-in-Charge of the investigation and remediation of a self-storage complex in Staten Island, New York through the NYCOER Brownfields Program. Activities include a remedial investigation, preparation of a remedial action plan and installation of a sub slab depressurization system to address chlorinated VOCs.
- Principal-in-Charge of multiple retail developments in Harlem, New York. Work included Phase I and Phase II investigations to satisfy NYCDEP and lender requirements. Lead based paint and asbestos surveys were performed as part of due diligence. Extensive asbestos issues were identified in building materials and soil backfill. Worked with asbestos contractors to determine best abatement approaches for the redevelopments.
- Principal-in-Charge of a Brownfield Redevelopment under the Voluntary Cleanup Program at a commercial property in Queens, New York, where buyer was about to terminate the deal since high concentrations of chlorinated VOCs were detected in groundwater beneath the site. Based on data evaluation convinced NYSDEC to investigate adjacent property as likely source of groundwater contamination. NYSDEC agreed that no further action was warranted by our client and deal was completed.

Joseph D. Duminuco Vice President/Principal Hydrogeologist

- Principal-in-Charge for the installation of an active sub-slab venting system at a dry cleaner in Oceanside, New York. This system was required to mitigate elevated chlorinated VOCs present in soil vapor beneath the dry cleaner and neighboring stores. This work was conducted under NYSDEC and NYSDOH oversight. Official regulatory closure of the site was achieved.
- Principal-in-Charge of a fast-paced property transfer environmental assessment at an electronics manufacturing facility contaminated with metals and solvents in Bridgeport, Connecticut. Project consisted of the development and implementation of a detailed field sampling plan within a oneweek time frame: indoor and outdoor soil sampling and monitoring well installation; groundwater and sewer effluent sampling; asbestos survey and asbestos sampling; and a tidal influence assessment. Data was evaluated and a summary report was prepared within one week and a remedial alternatives evaluation and cost estimate was prepared in less than one week.
- Principal-in-Charge of a multi-phase RI/FS at a PCB and diesel-fuel contaminated railroad yard in New York City. The Site is on the state superfund list because PCBs were detected in soil, groundwater, hydrocarbon plume, sewer water and sewer sediment. Responsibilities include: preparation of work plans; delineation of PCB hot spots with immunoassays; sewer investigation including pumpouts, monitoring, flow measurements and video surveys prior to abandonment; investigation and remediation of numerous USTs including gasoline, solvents and fuel oils; support of construction activities; report preparation; negotiations with the NYSDEC/NYSDOH; participation in public meetings; and implementation of interim remedial measures to mitigate the PCB-contaminated hydrocarbon plume; interim remedial measures to mitigate PCB, PAH and lead contaminated soil hot spots; and agency acceptance of alternate cleanup levels for site soils that resulted in savings of over \$80 million.
- Project Coordinator of multi-year environmental consulting contracts with Amtrak and New Jersey Transit. Responsibilities include contract negotiations, workload/ resource distribution, compliance with contract requirements including utilization of M/WBE contractors, client-staff liaison, adherence to budgets and schedules, and overall quality assurance.
- Principal-in-Charge of project to support the construction of a high speed rail program. Performed Phase I and II Environmental Site Assessments as part of due diligence at three major railyards. Prepared reports and presentations regarding environmental conditions to regulatory agencies and the design-build consortium. Performed pre-construction sampling and hot spot remediation programs. Also, prepared environmental contingency plans for construction contractors to follow.
- Principal-in-Charge of an investigation at a PCB and solventcontaminated transformer manufacturing/repair facility in North Carolina. Responsibilities include preparation of a work plan and oversight of the project which consists of soil borings and sampling, immunoassay testing, monitoring well installation, groundwater sampling, report preparation, and remedial alternatives evaluation.

- Principal-in-Charge of an NPL Superfund Site in Delaware. Responsibilities include: the on-going performance monitoring of a groundwater extraction system. The remedial system was installed to capture a chlorinated solvent plume emanating from a former PVC manufacturing facility. In addition, prepared and implemented an RI work plan for a USEPA-required off-site investigation of adjacent chemical manufacturing facilities and a large petroleum refinery. Also included DNAPL investigation and deep aquifer study.
- Principal-in-Charge of a NJDEP-ECRA/ISRA investigation and cleanup involving groundwater and soil contamination at a pesticide formulation and distribution facility in New Jersey. Responsibilities include: delineating the nature and extent of the off-site contaminant plume; determining groundwater flow patterns in a two-aquifer system; using a three-dimensional computer model to determine proper location for extraction and injection wells; and preparing work plans and summary reports for NJDEP-required additional delineation of the nature and extent of on-site soil contamination.
- Project Director of all UST investigative and remedial work performed at service station sites in New England for a major oil company. Responsibilities included: preparation and negotiation of work orders; coordination of monitoring and sampling; communication with client, regulator and site owner contacts; management of technical aspects of all projects; strategy evaluation with client; administration of all contracts and operation and maintenance of remediation systems to mitigate UST releases which included groundwater pump and treat, product recovery, and soil venting systems.
- Project Manager of an RI/FS at a former electronics manufacturing facility in an industrial area of Long Island. Metals and solvents (plating wastes) were detected in on-site leach pools and in soil and groundwater. Responsibilities include reviewing and revising the work plan and providing technical oversight of the project, including: Geoprobe[®] drilling; soil sampling; soil-gas surveys; leach pool sediment sampling; monitoring well installation; groundwater sampling; geophysical mapping; report preparation; and negotiations with NYSDEC. Convinced NYSDEC that groundwater remediation was inappropriate in an industrialized area. Focused remediation to a few soil hot spots only.
- Principal-in-Charge of a multi-year quarterly monitoring and reporting program at a municipal landfill complex on Long Island, New York. The complex consists of multiple landfills, leachate containment systems and leachate holding tanks. Project involves collection of water level and water-quality data from dozens of monitoring wells, sampling of leachate containment systems, coordination with contract laboratory, data validation, data evaluation and report preparation.
- Provided litigation support for an industrial property owner where a tenant's manufacturing operations had resulted in contamination of the building in addition to soil and groundwater. Without prior notification or consent from the owner, the tenant had conducted a Phase II investigation and remediation activities to address metals and VOCs. Reviewed technical reports and prepared a work plan to address areas for further investigation and perform confirmatory sampling in support of the owner of the property. Provided deposition testimony in connection with the case.

Technical Specialties:

Engineering design of soil and groundwater remediation systems. brownfields cleanup plans, stormwater studies and engineered natural treatment systems.

Experience Summary:

Twenty-eight years of experience: Principal, Senior and Project Engineer with Roux Associates; President of Remedial Engineering, P.C.; and Design Engineer at Dvirka and Bartilucci Consulting Engineers.

Credentials:

B.C.E., Civil Engineering, University of Delaware, 1987.

- M.B.A., Management, Adelphi University, 1992.
- Professional Engineer: New York, New Jersey, Pennsylvania, Rhode Island, Connecticut, Vermont, Virginia, North Carolina, Ohio, Michigan and Montana

Professional Affiliations:

National Society of Professional Engineers American Society of Civil Engineers.

WEF Hazardous Waste Committee, 1996 – 1998.

Publications:

- Assessment and Remediation of Off-Spec Asphalt Disposal Areas -Co-authored, Contaminated Soils, Volume 3, Amherst Scientist Publishers, 1998.
- Use of a Subsurface Flow Constructed Wetlands for Collection and Removal of Water Containing BTEX, Co-authored, Proceedings of the 2000 Petroleum Hydrocarbons and Organic Chemicals in Groundwater Conference, National Ground Water Association.

Key Projects:

- Principal Engineer for the preparation of an expert report for a former valve manufacturing facility in Coxsackie, New York. The report was prepared on behalf of counsel for a Contractor who performed remedial construction work for this State "Superfund" site. The actions were against the holder of the construction contract, NYSDEC, and their engineering consultant. The remedial action included building demolition, remediation of soils impacted by chlorinated VOCs, removal of DNAPL source areas, treatment of excavated soils using low temperature thermal desorption, and consolidation and capping of metals impacted soils. The expert project work involved a detailed review of the RL/FS, remedial action plans and construction progress documentation to formulate opinions as to the industry acceptable accuracy of the Contract Documents.
- Principal engineer for the preparation of the feasibility study, IRM plans, and remedial design/remedial action plans for a 40 acre former manufacturing facility in Rensselaer, New York. IRM Soil remediation included excavation of over 10,000 cubic yards of CVOC and metals source material for disposal at multiple facilities based on waste characteristics. Basement cleaning was performed in three large buildings to remove accumulated process sludges. Lagoon closure plans included sediment removal, dewatering, soil washing, and soil capping. The final remedy for the site includes a groundwater perimeter containment trench and 40 gpm treatment system for metals and VOCs and a 9-acre vegetated cap for a former landfill.
- Principal Engineer responsible for the preparation of the remediation completion report at Captain's Cove former municipal landfill State Superfund Site located in Glen Cove, New York. This work has been performed in accordance with Title 3 of the NYS Environmental Quality Bond Act under contract to the City of Glen Cove. Design elements included excavation plans, radiological waste monitoring, demo debris and waste separation and screening, dewatering water

management, waste disposal, and site restoration. Additional work included the delisting of a six acre "clean" portion of the site to allow the development of a ferry terminal and esplanade and development of alternative cleanup standards consistent with future site uses. Site remediation will accommodate site redevelopment as a commercial waterfront and operating ferry service and seaport area.

- Principal Engineer for the feasibility studies and remedial action work plans for multiple operable units of a large railyard located in Sunnyside, Queens, New York under the NYSDEC Inactive hazardous waste program. For the former engine house and maintenance area unit, pre-design studies included product plume thickness data collection and modeling, ex situ biopiles treatment, *in situ* enhanced bioremediation, and *in situ* chemical oxidation. The final design consisted of decontamination and removal of structures, excavation of hot spot soils for PCBs and lead, UST closures, a dual phase high vacuum extraction system and *in situ* bioremediation.
- Principal Engineer responsible for engineering certification of all ٠ remediation activities related to the seven-city-block Barclay's Arena and Atlantic Yards redevelopment in Brooklyn, New York. This multi-billion dollar redevelopment includes the Arena, which will be focal point of a the largest redevelopment project in Brooklyn, consisting of an urban complex of housing, commercial and retail space, as well as several acres of landscaped public open space. The existing properties being redeveloped are residential, commercial, and industrial properties, including a large railroad yard. Engineering certification included multiple RAWPs under NYSDEC Spills Program, UST removals, soil excavation, in situ groundwater treatment and remedy oversight services. The project also includes ACM abatement, building demolition, soil pre-wasteclassification, coordination (with the receiving facilities), and oversight of the removal of 1,000,000 cubic yards of soil (~550,000 yards removed to date), representing one of the largest excavation and soil removal projects performed in New York City.
- Principal Engineer for the remediation of a former Manufactured Gas Plant (MGP) facility in Brooklyn, NY, including oversight of the excavation of both the former gasholders, and adjacent contaminated hotspots requiring offsite thermal desorption of over 30,000 tons of coal tar impacted soil. Directed the Community Air Monitoring Program (CAMP) specific to the MGP impacted soil removal, as required by both New York State Department of Environmental Conservation (NYSDEC) and New York State Department of Health (NYSDOH). Remedial activity met all substantive requirements of the NYSDEC approved Remedial Action Work Plan for the Site. The remedy included design of a passive subsurface vapor monitoring/recovery system for a 500,000 sq.ft. retail structure in Brooklyn, NY. The system design integrated a perforated piping system complemented by a protective vapor barrier below the structural floor slab to monitor and mitigate volatile organic compound vapors. Multiple vapor barrier options were evaluated to determine the optimum design based on the site conditions.
- Principal Engineer for remedial action plan implementation oversight and certification for the CornellTech campus development on Roosevelt Island, New York. The first phase of the campus development includes ACM abatement and demolition of the former Goldwater Hospital, construction of four main campus buildings, new utilities, roadways and lawn/landscaped areas. Responsibilities include oversight of soil/subsurface structures excavation handling, disposal and

reuse; community air monitoring; dewatering permit compliance; and SWPPP inspections.

- Principal Engineer providing expert settlement support services to a county municipality in New York State. The case involved an EPA Order for underground storage tank (UST) compliance for over 50 county operated facilities with over 125 USTs. The project involved the field inventory of the USTs at each facility and development of both Interim and final compliance plans to comply with EPA, NYSDEC and local UST regulations. Detailed cost estimates were prepared for multiple scenarios for upgrading USTs including tightness testing, manway repairs, leak detection and overfill protection monitoring systems, UST removal and replacement, and new piping. The upgrade evaluation and negotiations included incorporation of Supplemental Environmental Project (SEPs) in accordance with EPA requirements. SEPs included centralized monitoring systems for leak detection and inventory control.
- Principal Engineer for preparation of a site management plan for redevelopment of a former watch case factory in Sag Harbor, New York. The primary engineering controls for the former factory conversion to a residential building consisted of a vapor barrier and an active subslab depressurization system (SSDS) to address chlorinated VOCs. The SSDS system was complicated due to the existing 100 year old structure. A unique raised floor approach was designed to allow for the SSDS installation. The system design, approved by NYSDEC and NYSDOH includes multiple legs, dual blowers, low vacuum alarms and monitoring points.
- Principal Engineer for the Remedial Action Work Plan (RAWP) for redevelopment of a shopping center in the Bronx, New York. The RAWP elements included soil and groundwater management plans, stormwater management, air monitoring and vapor mitigation systems. To address vapor intrusion, active subslab depressurization systems were designed for two pad buildings. One system for a new retail building construction and one retro-fit system for an existing building to be used as a restaurant. Closure reports were prepared and certified documenting all remediation work and approved by NYC Mayor's Office of Environmental Remediation (OER).
- Principal Engineer for the preparation of a preliminary remedial design for the remediation and restoration of a pond and surface water tributaries to Canaan Lake that have been impacted from leachate generated from an upgradient former municipal landfill located in Holtsville, New York. Completed a preliminary remedial design for the construction of a compost-based permeable reactive barrier for the removal and treatment of leachate prior to discharge to the surface water, followed by restoration of the surface water body and surrounding wetlands. The project included development of a long term remedial strategy to reduce rainfall infiltration into the landfill and minimize leachate generation. Current plans to reduce rainfall infiltration include the planting of 3,250 hybrid poplars, regrading and lining of drainage swales, and the resurfacing of low lying areas consistent with recreational facilities.
- Principal Engineer for final capping elements and wetlands restoration work and completion of the Final Engineering Report for an inactive hazardous waste site in Syracuse, New York. The project included onsite consolidation of lead impacted waste; 7-acre landfill cap with vegetated layer, cover soil, and geomembrane; stormwater runoff controls; reconstruction of waste water ponds; and an 8-acre wetland restoration. An O &M Plan was prepared and implemented

consisting of groundwater, surface water and landfill gas monitoring, and annual cap and wetland inspections.

- Principal Engineer for the preparation of the remedial action work plan for an 11-acre former Department of Defense owned Site that manufactured airplane parts along Hempstead Harbor in Manorhaven, New York. The project is regulated under the NYSDEC Voluntary Cleanup Program. The remedial design consisted of both soil vapor extraction/air sparging and *in situ* enhanced bioremediation systems for Site groundwater impacted by chlorinated VOCs. The final remedial design and site management plan are expected to include soil capping, vapor barriers and passive ventilation systems to be incorporated into a residential redevelopment with waterfront access.
- Project Engineer for the design and construction management of a 600 gpm groundwater extraction and treatment system to prevent offsite migration at a petroleum storage and pipeline transfer facility in Providence, Rhode Island. The treatment system was designed to remove iron, BTEX, and naphthalene from the groundwater to below surface water discharge standards for the Providence River. The system processes consisted of equalization, aeration, de-aeration, flocculation, clarification, air stripping, dual media filtration, granular activated carbon adsorption (liquid and vapor phase), and sludge thickening and dewatering. The system included an outfall diffuser designed in accordance with the CORMIX computer model.
- Senior Engineer responsible for the design, construction management, and O&M of a 60,000-gpd constructed wetlands treatment system for a former manufacturing facility in Virginia. The 16-acre treatment system was designed within an existing phragmites wetland to remove zinc and iron from landfill leachate prior to discharge to an adjacent creek. The treatment system consisted of alkalinity producing cells, oxic ponds, compost and limestone berms, anaerobic cells and aerobic cells. The design included a 400-foot reinforced earthen dike together with hydraulic control structures and piping to maintain cell water levels and flow rates. The system also includes a pump station and force main for both effluent discharge and irrigation purposes. Joint wetlands and local permit approvals were obtained for the project.
- Senior Engineer for the performance of a stormwater runoff evaluation for a manufacturing facility in Watertown, New York. Roux Associates was retained as third party to evaluate the drainage design and construction elements for an industrial landfill cap. The evaluation was performed for the facility owner in support of potential litigation arising from onsite building flooding incidents following a severe snow and rain storm event. The scope of work included an evaluation of the existing onsite storm sewer system capacity, calculation of runoff flow rates for the 300-acre contributing area, review of landfill cap surface drainage design, review of erosion control measures implemented during construction, and analysis of specific flooding incident causes. The runoff analyses were performed using the TR 55 Method for three conditions: pre-capped, capping under construction prior to establishment of vegetation, and final vegetated cap design. Recommendations were made to improve the site drainage including design of surface drainage swales, temporary berms and sediment traps during construction and modification of snow handling practices.
- Senior Engineer for the performance of a feasibility study and remedial design for the closure of a concrete oil/water separator filled with refinery sludge and demolition materials impacted with lead at a former refinery in Providence, Rhode Island. Remedial alternatives were developed and evaluated including

capping and containment using a perimeter slurry wall, sheet piling or concrete wall sealing; excavation and disposal; and *in situ* solidification. The capping and containment using a slurry wall alternative was selected for implementation of the remedial design. The design consisted of removal and replacement of existing monitoring wells, sealing of separator wall openings, a 2-acre multi-layer cap, a 1200-foot long by 30foot deep soil-bentonite slurry wall, and a perimeter drainage swale. The multi-layer cap included a 40-mil HDPE geomembrane and a geosynthetic clay liner. The slurry wall was keyed into the existing clay confining layer beneath the separator. The design incorporated disposal of an additional 10,000 cubic yards of petroleum impacted soil under the cap.

- Principal Engineer for the preparation of field implementation plans, construction monitoring, and Engineers Certification Report for a former manufactured gas Plant (MGP) site in Manhattan, New York. The site was one of the first projects completed under the NYS Brownfields Cleanup Program. The remedy included soil excavation and offsite thermal treatment, a sheet pile barrier wall, a vapor barrier and basement ventilation system. A comprehensive air monitoring program was conducted due to the concerns over coal tar residue emissions and odors on the surrounding community. The remedy was incorporated into the design and construction of the headquarters office building of an international media company.
- Principal Engineer for the management of a soil and groundwater remediation system for a nationwide overnight delivery distribution center in Brooklyn, New York as part of the NYSDEC Voluntary Cleanup Program. A risk-based remedial approach that called for the remediation of "hot spot" source area soils, and mass-reduction of VOCs was successfully utilized for the Site. As a result, the focus of remediation was on reducing the mass of VOCs in on-site groundwater to a level where natural attenuation would be effective in remediation of VOCs. To address the contamination in the source area, a soil vapor extraction (SVE) and air sparge (AS) system consisting of 8 SVE wells and 17 AS wells was designed, constructed, operated and maintained for a period of approximately 3 years. Permanent shutdown of the system was approved by the NYSDEC.
- Senior Engineer for the design and construction management of a soil remediation and stormwater management project at a 16-acre former pesticide warehouse facility in Dayton, New Jersey. The Site was redeveloped for storage and trailer parking. The project consisted of consolidation of pesticide contaminated soils; asphalt capping of the 3.5 acre contaminated soils area; stormwater collection, conveyance and detention; and site regrading. The evaluation included TR-55 runoff modeling for pre and post capping and development conditions. The storm sewer system consisted of multiple catch basins, over 2,000 linear feet of reinforced concrete pipe ranging in size from 15 to 30 inches, and a recharge basin. A Soil Erosion and Sedimentation Control Plan and a NJPDES General Permit were prepared for the project.
- Project Principal for the performance of LNAPL remediation studies at the New Jersey Transit former Lake Street Bus Garage in Newark, New Jersey. The studies involved evaluating remedial alternatives for free product recovery, performance of an LNAPL recovery pilot test and cost estimating. A RAWP and engineering design plans were prepared for both the bus garage and the adjacent park properties. The remedy included excavation of the source area, horizontal recovery wells, a vertical recovery trench, *in situ* oxidation injections and product recovery using vacuum extraction.

- Senior Engineer for the performance of a stormwater management analysis for a 28-acre industrial landfill in Virginia. The principal objective of the study was to identify engineering controls to minimize stormwater runoff to a metals contaminated sediment impoundment. The study included TR-55 runoff modeling and storage analyses for multiple detention ponds. Three engineering control alternatives were identified including landfill cap regrading, diversion using berms and swales, and diking and weir raising.
- Senior Engineer for the investigation, design, and construction management of the closure of a 2-acre fire-water supply pond and modification of the stormwater conveyance system at a former manufacturing facility in Williamsburg, Virginia. The investigation phase of the project was focused on determining the sources and loading of metals influent to the pond. Field activities included examination of the existing stormwater drainage system, subwatershed delineation, groundwater monitoring, and installation of automatic stormwater sampling devices. The final design included 400 feet of open concrete channels, 250 feet of culvert replacement, sliplining of 370 feet of 36-inch RCP culvert, reconstruction of five catch basins, placement of 10,000 cubic yards of clay fill within the pond and regrading of existing drainage ditches. Erosion control measures and slope stabilization were also included as well as the design of a special outlet structure for minimizing erosion at the outfall.
- Project Principal for the investigation and closure of five USTs at the New Jersey Transit Broad Street Station site in Summit, New Jersey. Tank sizes ranged from 20,000 to 30,000-gallon capacity. UST closure program completed in accordance with the NJDEP Technical Requirements for Site Remediation. Closure report prepared and submitted to the NJDEP and subsequent issuance of a No Further Action letter from the NJDEP.
- Project Engineer of the underground storage tank (UST) program for a major retail chain store in the New York, New Jersey and Pennsylvania region. Responsibilities included preparation of a UST management plan based on federal, state, and local regulations and costs to prioritize UST maintenance. The tank designs included plans and specifications for the removal and replacement, or upgrading, of USTs to meet regulatory requirements. The engineering design involved fuel requirements for dual heating and back-up generator usage, mechanical pumping equipment and fire wall design.
- Project Engineer for the design and construction management of a 1,000 sq.ft. hazardous and flammable materials storage facility in Syosset, New York. The facility included concrete secondary containment dikes, access ramps, sprinkler system modifications, and lighting. The separate flammable materials area included 2-hour fire rated concrete block walls and doors, ventilation equipment and a fire alarm system. Permitting services were performed for the Nassau County Department of Health, the Nassau County Fire Marshall, and the Building Department.
- Project Engineer for the design of a 2,000 sq.ft. hazardous waste storage facility in Astoria, New York. Prior to construction, demolition of an existing building was required and included removal of asbestos and lead paint. The project included driving treated timber piles and excavation and removal of contaminated soil and groundwater. The structure consisted of a steel frame with a metal standing seam roof system, decorative masonry block walls, and a roll-up door. Temporary and permanent fencing were required along with concrete sidewalk replacement.
- Senior Engineer for the decommissioning of a pharmaceutical facility covering two entire city blocks as a part of a NYSDEC

Voluntary Cleanup Agreement in Brooklyn, New York. Responsibilities include technical review of Interim Remedial Measure (IRM) work plans for lead and mercury-contaminated soil excavation and disposal, implementation of these work plans (excavation and offsite disposal), preparation of biddable plans and specifications, review of IRM Closure Reports, and obtaining closure documentation from regulators on a fast track basis to allow redevelopment for a large scale shopping complex and public schools.

- Senior Engineer providing construction management services in support of the BNYCP Cogeneration Facility construction and Brooklyn Navy Yard facility decommissioning. Work included preparation of construction management plans, supervision of soil, concrete, and sediment disposal activities, asbestos surveys, and PCB sampling and analysis work. A NYCDEP wastewater discharge permit was prepared for the million gallon per day stream condensate and wastewater backwash flow rate.
- Project Principal for performing remedial alternative cost estimating for a New Jersey Transit site in Montclair, New Jersey, which is to be redeveloped as a firehouse. A cost estimate prepared by another consultant was reviewed as part of the scope of work. The proposed remedial alternative for the site consisted of excavation and disposal of PAH-impacted fill material and capping. The alternative remedy proposed by Roux Associates was a more risk-based approach, resulting in a cost savings of approximately \$100,000 for New Jersey Transit.
- Project Engineer for the design and construction management of cap repair and drainage improvement measures for an industrial hazardous waste landfill in Tennessee. Components of the design included replacement of the primary clay cover material, temporary and permanent erosion and sedimentation control measures, and a lined drainage channel to minimize the generation of landfill leachate. The project included the performance of a focused feasibility study to characterize the flow, quality, and treatability of the leachate. A feasibility study was also performed in order to evaluate constructed wetlands remedial technology as a method of effective and economical treatment of leachate.
- Senior Engineer for the remedial design and construction management of a 7-acre off-spec asphalt waste pond at a former refinery in New England. The asphalt material exhibited a low load bearing capacity combined with a viscous, tacky surface. An *in situ* solidification mix design was developed consisting of liquification using hot water and a 2-stage lime kiln dust reagent injection and mixing step. Gravel was added to the mix when the existing subgrade material was of insufficient bearing capacity. Solidified material was tested for unconfined compressive strength, durability, and TCLP. The final cover material consisted of a 6-inch vegetated layer.
- Principal Engineer for the performance of LNAPL remediation studies for a former bus maintenance facility and a segment of a Metropolitan Subway System in Newark, New Jersey. The studies involved evaluating groundwater and soil monitoring data, performance of LNAPL recovery pilot tests, evaluation of remedial alternatives and cost estimating. Recommendations included the use of mobile high vacuum extraction methods to collect LNAPL while minimizing capital expenditures and permanent low vacuum extraction methods to minimize odors to subway cars and surrounding communities.

Litigation Support Experience

• Project Engineer for the evaluation of remedial investigations and remedial cost estimates for a 30-acre former book publishing facility in Poughkeepsie, New York. The evaluation included the review of Phase I and Phase II investigation reports, remedial investigation (RI) and feasibility study (FS) reports, and the remedial investigation work plan. The findings included the presence of chlorinated volatile organic compounds in the soil and groundwater as well as identification of underground storage tanks. Deficiencies were identified in both the RI and FS reports by comparing with the NYSDEC's required criteria and recommendations were proposed for the RI work plan to further delineate source areas. Based on the remedial investigation review, revised costing assumptions were made and remedial cost estimates were prepared totaling \$3.6 million.

• Project Engineer for the evaluation of expected remedial costs for nine hazardous waste sites, two of which are federal superfund sites. The evaluation of both single and multiple PRP sites was performed to identify costs for an insurance claim. The expected remedial costs for nine sites, which include landfills or facility surface impoundments, totaled approximately \$65 million. Remedial plans evaluated for multiple site operable units included groundwater pump and treat, alternative water supply systems, soil/sludge *in situ* solidification and treatment, and wetlands restoration. Additional work included evaluating invoices for site work previously performed and allocating expenses into their appropriate operable unit and work type, i.e., defense or indemnity.

Water Treatment Experience:

- Senior Engineer for the engineering design of a 10 gpm groundwater recovery and treatment system at a former tank farm in Rhode Island. The recovery system included a 200-foot slotted HDPE horizontal well, a 400-foot coated concrete swale and curbing, and a series of seepage collection points manifolded to a common receiving structure. The entire system was designed for passive recovery and gravity flow transmission targeting free-product seepage areas. The treatment system consisted of a collection sump retrofitted within an existing separator, a coalescing plate oil/water separator, a surge tank, a bag filter, and carbon adsorption units. The project included a permit modification for discharge to the Providence River.
- Design Engineer for the design and start-up operation of a 2 mgd packed tower aeration system for potable water in Williston Park, New York. The primary contaminants were trichloroethane and tetrachloroethene which were stripped below drinking water standards. The design process included full scale pilot testing to assure proper removal levels.
- Design Engineer for the design, construction and start-up operation of a 5 mgd industrial cooling water treatment system utilizing mechanical surface aeration. The system consisted of two lined aeration basins operating in series with floating mechanical aerators to remove volatile organic contaminants to levels suitable for recharge into the Long Island groundwater aquifer. The primary contaminants were 1,1-dichloroethene, trichloroethane, tetrachloroethene and vinyl chloride.
- Design Engineer for the design and construction of a 4 mgd granular activated carbon system for potable water in Hempstead, New York. The primary contaminants consisted of more than 8 volatile and semivolatile organic compounds. Responsibilities included site inspection for the installation of the six vessels containing 20,000 lbs of carbon in each. The system was designed for 99.9% removal efficiency with two units operating in series.

Constructed Wetlands Experience

• Senior engineer for the conceptual design of a constructed wetlands stormwater treatment system for a coal handling freight railroad facility in Norfolk, Virginia. The design consists of

treatment of contaminated stormwater runoff generated from maintenance and fuel handling areas onsite. The design treatment performance objective is the reduction of total suspended solids, oil and grease, and selected metals to levels below the SPDES permit discharge standards established for two of the site's outfalls discharging to the Elizabeth River. The 3-acre system consists of a passively operated 200,000-gpd subsurface-type constructed wetlands with a low visual impact and specialized structural design to meet the needs of a busy railyard facility. Additional design components include stormwater bypass structures, jacking beneath tracks, a grit chamber, a lift station, and outfall modifications. A joint wetlands permit will be prepared for the project.

- Senior Engineer for the feasibility study, conceptual design and construction of four constructed wetlands units and sedimentation basin for a stormwater treatment system along Cedar Swamp Creek for the City of Glen Cove, New York. The project consisted of review of stormwater studies of the 12 square mile contributing watershed, compilation of USGS water quality and flow data, evaluation of stormwater treatment methods and best management practices and optimum site selection along the creek. The constructed wetlands design included a forebay, high and low marsh cells, a micropool, and stormwater bypass structures for removal of sediment, nitrogen, phosphorus, and trace metals during first flush events. Final design for the first 1.8 acre constructed wetlands unit was completed and performance of construction management is ongoing. Design activities include structural and hydraulic design tasks with specific emphasis on storm water bypass. The design has been integrated into an into an intermodal transportation project with the addition of bicycle and walking paths. NYSDEC and Army Corps permits were obtained for the project.
- Project Engineer for the design of a 7,000 gpd subsurface flowtype constructed wetlands treatment system for a refinery site in Rhode Island. The system was designed to treat a surface-water stream impacted by petroleum hydrocarbons. The system's high aesthetic, low visual impact appeal was ideal for its golf course setting. Both phragmites SPP and Typha SPP wetland species were incorporated in the design in order to assess the biodegradation/biotransformation processes effectiveness. A growth and maturation plan and a treatment evaluation plan were developed in order to evaluate the system performance.
- Lead Engineer responsible for technical review of a design for modifications to a constructed wetlands system in Nicholas County, West Virginia. The system was designed to treat the leachate from a solid waste landfill at a maximum capacity of 30 gpm. The complete water tight treatment system consisted of a sedimentation basin, stabilization basin, a series of three wetland cells and a finishing ditch. The wetland cells consisted of a double liner system with leachate collection piping overlaid with stone fill and a matrix of plant life. The technology combines physical, geochemical and biological removal mechanisms operating simultaneously.

Permitting/Compliance Plans

• Project Engineer for the preparation of a Spill Prevention Control and Countermeasure (SPCC) Plan and a Storm Water Pollution Prevention Plan (SWPPP) for an 850-acre petroleum storage terminal in New England. The SPCC Plan involved the inventory of 50 bulk storage tanks and miscellaneous storage vessels and an assessment of barge loading areas, truck loading racks, additive loading areas, pumping stations, and a network of aboveground pipelines. The SWPPP encompassed an inventory and surveying of the existing storm sewer system, an evaluation of oil/water separator performance and identification of storm water management controls and practices.

• Project Engineer for the design of modifications to multiple discharge facilities along the Providence and Runnins Rivers in Rhode Island. Permitting activities were performed with the following agencies: Rhode Island Department of Environmental Management (RIDEM) Pollutant Discharge Elimination System (RPDES), RIDEM Division of Freshwater Wetlands, Coastal Resources Management Council (CRMC), and the Army Corps of Engineers.

Sanitary Experience

- Design Engineer for the evaluation of a municipal sanitary sewer system consisting of approximately 70 miles of piping ranging in size from 8 inch to 16 inch, in Garden City, New York. The sewer system was evaluated for existing and proposed flow capacity, surcharging, infiltration of groundwater, inflow of storm water, root encroachment, and sewer breaks. Evaluation methods consisted of hydraulic profile analysis, television inspection of piping, field inspection of manholes, and flow measurement. Sewer upgrading methods were evaluated including direct replacement, manhole restoration and pipe slip lining, and a rehabilitation program was implemented.
- Design Engineer for the City of Glen Cove's industrial wastewater pretreatment program which was established to monitor significant industrial users discharging to the city's wastewater treatment plant to minimize upsets to the biological treatment mechanisms. The program work included annual facility inspections, wastewater discharge sampling, review and evaluation of quarterly self-monitoring results, calculation of discharge penalty fees, preparation of annual monitoring reports for each facility and development of wastewater discharge permits to comply with City regulations.
- Design Engineer for a heavy metals study for the municipal sanitary sewer system in the City of Glen Cove, New York. The heavy metals study consisted of the development and performance of a city-wide sewer sampling program to identify the sources of heavy metals loadings on the wastewater treatment plant. The evaluation included industrial sources, scavengers, non-industrial sources, the plant operation itself, and review of existing heavy metal studies. Recommendations were provided for minimization of loadings and pretreatment to protect the plant operations.

Stormwater Experience

- Design Engineer for the evaluation and conceptual design of a water management plan for a 200 acre proposed office complex in Bethpage, New York. The design included inlets, piping and recharge basin sizing for peak storm water runoff flows as well as a system of architectural ponds and level control structures. For dry periods, the design included flow controls connected to an existing cooling water system to maintain pond levels and for utilization as a water supply for an irrigation sprinkler system during the growing season.
- Design Engineer for the design of a municipal storm drainage system for a 200-acre contributing area in Garden City, New York. The purpose of the drainage system was to alleviate severe flooding problems for eight homes located in a local low point of a residential neighborhood. The system included over 4,800 linear feet of reinforced concrete piping ranging in size from 12 to 60 inches. Design considerations included hydraulic gradient analysis, inlet capacity, utility crossings, minimization of removals of established trees, a county road crossing, utilization of existing structures and piping, and a headwall discharge to a recharge basin. Additional design items included

pavement restoration, service line relocations, curbs and sidewalks, and maintenance and protection of traffic.

Site Assessment Experience

- Principal Engineer for the performance of a Brownfields Demonstration Pilot Program in the Hamlet of New Cassel for the Town of North Hempstead, New York. Under an EPA grant, Roux Associates created an inventory of 50 potential commercial/industrial properties within New Cassel and evaluated these properties based on perceived contamination and potential for redevelopment/reuse. Eight sites exhibiting the greatest potential for redevelopment were selected to perform Phase I Environmental Site Assessments. Of these eight sites, four sites were selected for Brownfield Site investigations to identify the nature and extent of contamination in soil and groundwater and provide potential remedial alternatives and cleanup costs to revitalize these properties. The Brownfields Demonstration Pilot Program also included community outreach activities to promote a unified approach to the redevelopment of Brownfields in new Cassel.
- Senior Engineer for coordination and review of Phase I environmental site assessments for five large research and development complexes located throughout the eastern United States for a major chemical company. The site assessments were performed for due diligence prior to engaging in long-term property lease agreements. The site assessments evaluated chemical storage and handling areas and previous site usage.
- Senior Engineer for coordination and review of Phase I environmental site assessments for 12 properties associated with tennis centers acquisition on Long Island, New York. The properties were either active tennis center facilities or vacant parcels available for new construction. All site assessments were conducted in accordance with ASTM standards for commercial real estate transactions. Primary concerns identified were USTs, drum storage areas, and unauthorized dumping.
- Project Manager representing a group of banks investing in a 20-acre commercial property in Westchester, New York. The onsite soil was contaminated with several volatile and semivolatile organics. Performed an evaluation of the remediation plan which included onsite biological treatment of soils and aeration and oil water separation of groundwater.

Water Main Experience

- Project Engineer for the design of over 6,000 feet of ductile iron water main in sizes from 4 to 16 inches for Town of Hempstead, New York Department of Water and the Nassau County, New York Department of Public Works. The designs included wet and dry connections to existing mains, fittings, valves, copper services and fire hydrants. Restoration work included replacement of asphalt pavement, concrete sidewalk and curbs, and grass areas.
- Design Engineer for the design and construction management of over 10,000 feet of ductile iron water main in sizes from 6 to 12 inches for the Town of Wallkill, New York. The designs included booster pump station upgrades, a stream crossing, a wetlands crossing, jacking of 36-inch casing beneath a state highway, air release chambers, copper service re-connections, fire hydrants, valves and appurtenances. Restoration work included wetlands restoration, backfilling and regrading within a NYSDOT right-of-way and grass and pavement replacement.

• Design Engineer for the design and construction management of upgrades to a 3.7 mgd potable water booster pump station for the Town of Wallkill, New York. The design featured the replacement of a hydropneumatic tank and pump system with three larger capacity centrifugal pumps. The upgrades were performed while maintaining the pump station service. The pump station revisions included piping, pump pads, shut-off valves, silent check valves, pressure relief valves, gauges, ventilation equipment and a motor control center.

Feasibility Study Experience

- Senior Engineer for the performance of a feasibility study and remedial design of a free product containment and recovery system at a former refinery in New England. The areal extent of the free-product plume was approximately 10 acres with a measured thickness of up to eight feet. Pilot testing activities consisted of pump tests, baildown tests, and funnel and gate systems with and without sheeting. The selected remedial alternative consisted of re-routing and repair of active storm sewer piping, closure-in place of a former 72-inch storm drain using clay fill material to form a barrier wall, and installation of multiple recovery trenches totaling 450 linear feet. The recovery trenches were installed to a depth of 14 feet using a deep trenching machine and were completed with gravel, horizontal perforated piping, recovery wells, and monitoring wells to accommodate both passive and active product recovery pumping equipment. Product recovery enhancement pilot testing was also performed by using non-ionic surfactants, mechanical re-working of soil and vacuum extraction methods.
- Project Engineer for the performance of a feasibility study for the containment of a free-product plume beneath a refinery site in Rhode Island. The feasibility study included analysis of groundwater modeling, bench and pilot scale treatability studies, groundwater quality characterization, identification and screening of discharge alternatives, and treatment process evaluations. The work also included the evaluation of the discharge of treatment system effluent to several receptors including groundwater, wetlands, sanitary sewers, and storm sewers. Discharge requirements were evaluated for processs water, off-gas air and residual wastes. Several treatment processes were also evaluated including metals precipitation and sludge dewatering, VOC and SVOC removal, and off-gas treatment. Preferred alternatives for each process were selected for remedial design development.
- Project Engineer for the performance of a feasibility study for a hazardous waste landfill located at a Superfund site in Tennessee. The feasibility study focused on the characterization and quantification of landfill leachate consisting of chlorinated organic compounds as well as proprietary pesticide compounds. The remedial technologies which were evaluated included leachate collection alternatives, onsite treatment alternatives and offsite disposal methods. An analysis was performed for onsite treatment technologies which included constructed wetlands, biological fluidized bed reactor, and granular activated carbon adsorption. The technologies were assembled into four feasible remedial alternatives and treatability studies were recommended to confirm the suitability of selected processes.



Wai Kwan, Ph.D., P.E. Senior Engineer

Technical Specialties:

Environmental chemistry, engineered natural systems, PCBs, chlorinated solvents, design of remediation systems utilizing traditional and innovative techniques.

Experience Summary:

Over ten years of experience as a Senior and Project Engineer with Roux Associates, Inc.

Credentials:

- Ph.D., Environmental Engineering, Massachusetts Institute of Technology, 2003
- M.S., Environmental Engineering, Massachusetts Institute of Technology, 1999
- B.S., Chemistry, California Institute of Technology, 1997
- B.S., Engineering & Applied Science, California Institute of Technology, 1997

Professional Engineer – New York

Publications / Presentations / Abstracts:

- *Extricating Membership as a PRP at Hazardous Waste Disposal Sites.* Ram, N. M., Kwan, W. P., Gerbig, C. A., and Moore, C., Remediation Journal. Accepted for 2014 publication.
- Long-Term Performance of a Phytoremediation Cap. Kwan, W. P., USEPA Engineering Forum, August 2012.
- Long-Term Performance of an Integrated CTW/Phyto Cap System. Kwan, W. P., and W. Eifert, 8th International Phytotechnology Society Conference, 2011.
- Large-Scale Enhanced Reductive Dechlorination for the Remediation of Chlorinated Volatile Organic Compounds. Kwan, W. P., Senh, S., and Netuschil, G., Proceedings of The Seventh International Conference on Remediation of Chlorinated and Recalcitrant Compounds, Paper F-036, 2010.
- Predicting Oxidation Rates of Dissolved Contaminants During In Situ Remediation Using Fenton's Reaction. Kwan, W. P., and B. M. Voelker, Abstracts of Papers of the American Chemical Society, 228(352 ENVR), 2004.
- Influence of Electrostatics on the Oxidation Rates of Organic Compounds in Heterogeneous Fenton Systems. Kwan, W. P. and B. M. Voelker, Environmental Science & Technology, 38(12), 2004.
- Rates of Hydroxyl Radical Generation and Organic Compound Oxidation in Mineral-Catalyzed Fenton Like Systems. Kwan, W. P. and B. M. Voelker, Environmental Science & Technology, 37(6), 2003.
- Decomposition of Hydrogen Peroxide and Organic Compounds in the Presence of Dissolved Iron and Ferrihydrite. Kwan, W. P. and B. M. Voelker, Environmental Science & Technology, 36(7), 2002.
- Heterogeneous Fenton-Like Chain Reactions Initiated by Iron Oxides. Kwan, W. P. and B. M. Voelker, Abstracts of Papers of the American Chemical Society, 200(283 ENVR), 2000.

Professional Affiliations: American Chemical Society

Key Projects:

Engineered Natural Systems (ENS)

- Project Manager and Engineer for the design of a fullscale natural media filtration (NMF) system consisting of two stormwater storage basins (0.4 MM and 1.8 MM gallons) and four NMF cells (two 114,000-gallon aboveground cells and 0.15- and 0.25-acre in-ground cells) at a 172-acre active aluminum manufacturing facility in Lafayette, Indiana. The NMF cells treat up to 1,500 GPM of stormwater runoff and process water impacted by polychlorinated biphenyls (PCBs), dissolved and particulate aluminum, and suspended solids. Researched the fate and transport of PCBs, and assessed the treatability of PCBs in wetlands. Evaluated a compost treatability bench-scale experiment. Designed and coordinated groundwater percolation tests. Used HydroCAD to model treatment capacity for multiple storm events.
- Project Engineer for the design of a passive stormwater management system for a 3,500-acre aluminum manufacturing facility in Point Comfort, Texas. The passive stormwater management system uses sedimentation trenches and swales to manage and convey bauxite-laden runoff. Stormwater runoff is managed by a constructed treatment wetland (CTW) and is consumptively used by a phytotechnology tree plot. Completed a hydrologic analysis using USACE HEC-HMS modeling software. Prepared bid specifications and provided bid support.
- Project Manager and Senior Engineer for the design of a NMF system to reduce PCBs to non-detect levels in stormwater at an aluminum extrusion facility in Cressona, Pennsylvania. The NMF system will treat a first flush volume of 240,000 gallons containing residual PCBs. Conducted a detailed analysis of the site's constituents and runoff volumes during dry weather and wet weather to properly size the pump station and the NMF cell. A Bid Document will be prepared for the construction of the NMF system.
- Project Engineer for the design of a CTW to manage stormwater runoff generated from a scrap metal recycling facility in Sayreville, New Jersey. The CTW was designed to handle and treat runoff with elevated levels of suspended solids prior to discharge to adjacent coastal and freshwater jurisdictional wetlands.
- Evaluated the feasibility of using CTW to treat 110 GPM of groundwater containing elevated levels of cyanide at an aluminum manufacturing facility in Hannibal, Ohio. The CTW was designed to address the site's constituents and winter environment, and was modularized to facilitate the expansion and incorporation of the pilot-scale CTW into the full-scale CTW.

Soil and Groundwater Investigation and Remediation

• Senior and Project Engineer for the remediation of a former petroleum refinery terminal in Buffalo,


Wai Kwan, Ph.D., P.E. Senior Engineer

New York, under the New York State Department of Environmental Conservation (NYSDEC) Brownfield Cleanup Program. Worked closely with geotechnical consultant and reviewed conceptual and final designs for stabilization of 1,400 linear feet of river embankment using tiered slopes, rip rap, and reinforced Critiqued scanning bioengineering. electron microscopy photographs and energy dispersive x-ray spectroscopy absorption spectra that were used to identify and support the conclusion that multiple, unrelated lead species are present within one operable unit. Evaluated bench scale studies of stabilization/ solidification agents. Designed, supervised, and evaluated the performance of multiple options to treat petroleum impacted soils based on results generated from pilot scale field tests. Prepared Alternatives Analysis Report for different operable units to document analysis of engineering options and remedy recommendation. Prepared permit application, Remedial Design and Bid Document for implementation of remedy. Reviewed contractor submittals. Provided oversight and engineering support during remedy construction.

- Project Manager and Engineer for a soil vapor extraction (SVE) and air sparge (AS) system to treat groundwater contaminated with volatile organic compounds (VOCs) and chlorinated VOCs (CVOCs) at a 0.8-acre NYSDEC Voluntary Cleanup Site in Brooklyn, New York. Designed and performed two SVE/AS pilot studies. Designed the full-scale SVE/AS system. Provided oversight during installation of the full-scale SVE/AS system. Prepared the Final Engineering Report and the Site Management Plan. Managing daily operations of the SVE/AS system and groundwater gauging and sampling personnel. Responsible for communications with the NYSDEC and submitting progress reports.
- Designed and oversaw construction of full-scale in situ enhanced bioremediation treatment system for groundwater impacted with CVOCs at an 18-acre former electronics manufacturing facility in Taiwan. Evaluated the effectiveness of different substrates for *in situ* treatment from the results of two concurrent 6-month pilot studies, resulting in selection of enhanced bioremediation. The full-scale treatment system consists of over 9,000 feet of piping and 189 molasses wells. The technology injection decreased tetrachloroethene (PCE) concentrations by 99%, trichloroethene (TCE) concentrations by 98%, and total CVOC concentrations by 96%.
- Project Manager and Senior Engineer for the performance of a Corrective Measures Study (CMS) at a 30-acre land parcel undergoing RCRA Corrective Action in Williamsburg, Virginia. The site is a former fibers manufacturing facility, and a RCRA regulated landfill is located within the parcel. The CMS was

conducted to identify, evaluate, and recommend a final remedy to address zinc-impacted groundwater discharging to a tributary. Managed multi-person field crew who installed multiple monitoring wells, gauged and sampled groundwater, and conducted slug tests. Analyzed the CMS data to show more than 96 percent of the zinc loading is attributed to groundwater discharge along approximately 20 percent of the shoreline. Proposed a final remedy consisting of a 6.5-acre phytotechnology cover and 960 linear feet of compost reactive barrier, at a significantly lower cost compared to conventional treatment approaches.

- Project Manager and Senior Engineer for the performance of multiple soil, groundwater, and soil vapor investigations at a NYSDEC Voluntary Cleanup Site in Brooklyn, New York. Prepared reports, work plans and directed field staff in the collection of discrete soil, groundwater, and soil vapor samples to delineate the extent of CVOC contamination in groundwater, soil, and soil vapor. Used membrane interface probe technology as a screening tool to focus subsequent sample collection efforts and to reduce overall investigation costs.
- Field Engineer for the remediation of two 6.25-million gallon process lagoons at a former dye manufacturing facility in Rensselaer, New York. Supervised the excavation, staging, screening, and transport of riprap and soil contaminated with hazardous concentrations of arsenic. Interacted daily with the client and regulatory agency representatives during implementation of the remedial action.
- Prepared a treatability study work plan to evaluate the feasibility of using surfactant-enhanced subsurface remediation technology to enhance free-product recovery at a former petroleum refinery and distribution terminal in Greenpoint, Brooklyn, New York. The effort consisted of corresponding with surfactant vendors, performing literature review, and designing a bench scale treatability study and an implementability assessment for the purpose of enhancing recovery of residual free-product in the regional aquifer that is exhibiting decreases in recovery rates via dual-pump liquid extraction.
- Project Engineer for a multi-element remedial design of a USEPA Superfund Site in Nassau, New York. Prepared response letters, technical drawings, and 95% and 100% remedial design documents in accordance with the Record of Decision and Consent Judgment.
- Field Engineer for the remediation of a NYSDEC Brownfield Site in Staten Island, New York. Supervised the removal of soil and groundwater contaminated with hazardous levels of PCE and TCE released from a defunct dry cleaner. Evaluated the performance of molasses injections to enhance *in situ* bioremediation of impacted groundwater. Prepared the Final Engineering Report to document the remedial action.



Wai Kwan, Ph.D., P.E. Senior Engineer

- Project Manager and Engineer for a feasibility study to mitigate land subsidence at a golf course in Northport, New York. Completed a data review of existing reports from USGS and local municipality, previous soil investigation, and current stormwater drainage design. Directed a field investigation to obtain data in support of the conceptual model for land movement. Concluded that existing stormwater management measures accelerated the rate of land movement. Evaluated potential engineering remedies.
- Evaluated laboratory data packages of post-excavation • soil samples generated during the interim remediation of a former storage and loading area of a pharmaceutical company in Brooklyn, New York. Initial site investigations concluded site contamination limited to petroleum-related compounds. was Supplemental site investigations conducted a few years after the conclusion of the interim remediation showed a dissolved CVOC plume was present site-wide. Reviewed chromatograms and concluded that CVOCs were detected – but not reported since the reporting scope was limited to petroleum-related compounds - in many of the post-excavation soil samples, which would have provided earlier indications of the presence of the CVOC plume.

Litigation Support

- Senior Engineer for the analysis of expert reports and preparation of rebuttal for three superfund sites in New York and Massachusetts. The case involved assigning the percentage of PCBs released over time during the operation of the facilities at the three sites for the purpose of remedial costs allocation to various insurance carriers. Reviewed information submitted by opposing experts, conducted independent research to verify methodologies, and provided technical calculations indicating flaws in positions advocated by the opposing experts.
- Senior Engineer for the preparation of an expert report for a fuel oil release in Rochelle Park, New Jersey. The release was from a residential underground storage tank (UST). The expert report opined on the age of the release, the reliability of the estimation method used by the opposing expert, and the accuracy of the age dating of the perforations in the UST.
- Project Engineer for the preparation of an affidavit regarding a cesspool explosion on Long Island, New York. The affidavit was prepared for the defendant's counsel providing technical calculations and opining on the improbability that the defendant's use of a drain cleaner contributed to a flash fire that injured the plaintiff. Also prepared an expert rebuttal affidavit to demonstrate the fallacies in the plaintiff's expert's arguments. The judge dismissed the case after reviewing all admitted information.
- Senior Engineer for the evaluation of expected remedial costs for waste disposal sites as part of a large bankruptcy litigation. Reviewed over 70 site records to

identify potential liabilities and appropriate statute of limitations. Developed present value of remedial investigation and action costs and apportionment ranging from \$160,000 to \$1,200,000.

• Senior Engineer for the evaluation of gas chromatograms from multiple retail gasoline stations in Puerto Rico as part of a class action lawsuit. Responsibilities included reviewing for indicators of methyl tert-butyl ether (MTBE) and determining MTBE concentrations from historic laboratory data packages.

Compliance

- Project Engineer for the evaluation of air emissions data from a steel mill melt shop in Sayreville, New Jersey. Prepared annual emissions statement in accordance with permit requirements using RADIUS software and emissions factors from AP-42 and CEMS data. Evaluated and summarized trends and anomalies observed in over one year's worth of air monitoring data on particulates and metals from monitors set up in the surrounding community.
- Project Engineer for the preparation of Title V emissions statement for two major hospitals in Nassau County, New York. Responsibilities included reviewing annual fuel usage data, calculating air emissions using emissions factors from AP-42, and preparing the emissions statement.
- Project Manager for the coordination, preparation, and submission of PCB TMDL reporting requirements for multiple sites in Virginia. Responsibilities included managing subcontractors, preparing submission forms in accordance with state guidelines, and preparing the first Pollutant Minimization Plan (PMP) in the state for PCBs.



Yixian Zhang, Ph.D Senior Scientist

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Technical Specialties:

More than 10 years of experience in environmental chemistry with extensive experience in assessment and remediation of sediments contaminated with PCBs, PAHs, and petroleum hydrocarbons. Designed, implemented, and managed data collection programs including field, laboratory, and data interpretation components to study transport, fate, and effects of organic and inorganic contaminants in terrestrial and marine environments. Specialized in environmental forensic techniques including advanced chemical fingerprinting for source identification and timing of releases. Expertise in contaminant partitioning in aqueous, solid, and biota phases and implications to contaminant bioavailability. Significant experience in research and development of new analytical methods including in situ chemical sensors, field-screening techniques and fixed laboratory methods. Strong knowledge in toxicity and bioaccumulation testing of contaminated sediments and sediment quality triad assessment. Additional area of expertise includes quality assurance/quality control (QA/QC) plan development and implementation and data quality evaluation.

Experience Summary:

Senior Scientist, Roux Associates (2009 - present)

Principal Research Scientist, Battelle (2005 – 2009)

Environmental Scientist, Tetra Tech ECI (formerly Foster Wheeler Environmental Corp) (2001-2005)

Research Assistant, University of Massachusetts, Boston (1995-2001)

Environmental Scientist, Shanghai Environmental Monitoring Center (1991-1995)

Credentials:

B.S. Environmental Sciences, East China Normal University, Shanghai, China, 1991

Ph.D. Environmental Sciences (Concentration on Environmental Geochemistry), University of Massachusetts, Boston, 2003

Publications:

- Wang, X., Y. Zhang, and R. F. Chen. 2001. Distribution and Partitioning of Polycyclic Aromatic Hydrocarbons (PAHs) in Different Size Fractions in Sediments from Boston Harbor, United States. *Marine Pollution Bulletin.* 42 (11): 1139-1149.
- Chen R.F., Y. Zhang, P. Vlahos, and S. M. Rudnick. 2002. The Fluorescence of Dissolved Organic Matter in the Mid-Atlantic Bight. *Deep Sea Research*. 49 (20): 4439-4459.

Presentations:

- Zhang, Y. and Chen, R. F. Determination of PAHs and DOC in Sediment Porewater Using TR-LIF. Fifth International Conference on Remediation of Contaminated Sediments, Jacksonville, Florida. February 2009. Session E3.
- Burgess, R.M.; Zhang, Y.; McKee, M.P.; Lohmann, R.; Luey, P.J.; Friedman, C.L.; Schubauer-Berigan, J.P. and Lefkovitz, L. Evaluating PCB Bioavailability Using Passive Samplers and Mussels at a Contaminated Sediment Site. Fifth International Conference on Remediation of Contaminated Sediments, Jacksonville, Florida. February 2009. Session C4.

- Burgess, R.M.; Zhang, Y.; McKee, M. P.; Lohmann, R.; Luey, P.J.; Friedman, C.L.; Schubauer-Berigan, J.P. and Lefkovitz, L. Comparison of Passive Sampling Devices for Measuring Dissolved PCBs in the Water Column of a Marine Superfund Site. North American Society of Environmental Toxicology and Chemistry (SETAC) National meeting, Tampa Bay, Florida. November 2008. Session TP73.
- Zhang, Y.; Chen, R. F. and Wang, X. Laser-Induced Fluorescence Measurements of Natural and Anthropogenic Organic Compounds in Coastal Marine Sediments. American Geophysical Union, 2002 Ocean Sciences Meeting, Honolulu, Hawaii. February 2002. Session OS12A.
- Chen, R. F.; Gardner. G. B.; Zhang, Y. and Govignon-Berry, A. Chromophoric Dissolved Organic Matter (CDOM) in the Mississippi River Plume. American Geophysical Union, 2002 Ocean Sciences Meeting, Honolulu, Hawaii. February 2002. Session OS01.
- Emsbo-Mattingly. S.; Douglas, H.; Beliveau, A.; Wojtas, M.; Zhang, Y. and Ferro, H. The Analysis of PCBs in New Bedford Harbor Sediments: Selecting and Optimizing Immunoassay, GC/ECD, and GC/MS Methods Based on Multiple Site-Specific DQOs. The Annual International Conference on Soils, Sediments, Water, and Energy. Amherst, Massachusetts. October 2001. Environmental Forensics Session.
- Chen, R. F.; Zhang, Y.; Vlahos, P. and Rudnick, S. M. The Fluorescence of Dissolved Organic Matter in the Mid-Atlantic Bight. American Society of Limnology and Oceanography, 2001 Aquatic Science Meeting, Albuquerque, New Mexico. February 2001. Session SS06-03.
- Chen, R. F.; Gardner, G. B.; Zhang, Y.; Vlahos, P.; Wang, X. and Rudnick, S. M. Chromophoric Dissolved Organic Matter (CDOM) in Four US Estuaries. American Geophysical Union, 2000 Ocean Science Meeting, San Antonio, Texas. January 2000. Session OS21k-03.
- Chen, R. F.; Rudnick, S. M. and Zhang, Y. Chromophoric Dissolved Organic Matter in the Chesapeake Bay. American Society of Limnology and Oceanography, 1999 Aquatic Science Meeting, Santa Fe, New Mexico. February 1999. Session SS34TU1130E.
- Chen, R. F.; Gardner. G. B.; Rudnick, S. M. and Zhang, Y. High-Resolution, In Situ Optical Measurement of Dissolved Organic Components in Four US Estuaries. American Geophysical Union, 1999 Spring Meeting, Boston, Massachusetts. June 1999. Session OS22D-05.
- Chen, R. F.; Jiang, Y.; Johnson, A.; Shull, D.; Siegener, R.; Vlahos, P. and Zhang, Y. Organic Carbon Cycling in Boston Harbor. American Geophysical Union, 1998 Spring Meeting, Boston, Massachusetts. May 1998. Session OS52B-05.
- Chen, R. F.; Zhang, Y. and Rudnick, S. M. Optical Properties of Chromophoric Dissolved Organic Matter (CDOM) on the Mid-Atlantic Bight. American Geophysical Union, 1998 Ocean Science Meeting, San Diego, California. February 1998. Session OS21H-10.



Julie A. Moriarity Project Scientist

Technical Specialties:

Design, implementation and management of remedial investigations and Phase I and Phase II Environmental Site Assessments, New York State Brownfields Cleanup Program, New York City Office of Environmental Remediation Voluntary Cleanup Program. Field Management for large-scale soil excavation projects, including site assessment, remediation implementation and construction activities.

Experience Summary:

Six years' experience including Project Scientist and Staff Scientist at Roux Associates, Project Scientist at Enviroscience Consultants, Project Manager and Estimator for Water Treatment at Philip Ross Industries.

Credentials:

Binghamton University, State University of New York, Bachelor of Science, Environmental Sciences, December 2009

OSHA 40-hour HAZWOPER Training LIRR Track Safety Training AMTRAK Contractor Safety and Security Training

Key Projects

- LA Central – Project Manager for the redevelopment of a 4.1 acre site located in the Bronx. Redevelopment plans include a multi-phase, mixed-use affordable housing development offering 992 apartments. Roux Associates completed a Phase I and Remedial Investigation at the site which identified historic fill and chlorinates in groundwater. A restrictive declaration had been previously assigned to the site and the client initially opted to go through NYCOER's Voluntary Cleanup Program to address the RD, and we started that process by submitting a Phase II WP to NYCOER. However; changes were made to the New York State Brownfield Cleanup Program that made the BCP an attractive option for this site and, therefore, we have changed course and are now enrolled in the NYS BCP.
- Bernstein Real Estate: Project Manager for an E-Designation and Spills site located in Midtown Manhattan, which included the completion of Phase I and Phase II investigations and LNAPL delineation. The Site is enrolled in the NYCOER VCP and all investigation and remedial activities were completed in accordance with NYCOER and NYSDEC Spill Program guidelines.

- Project Manager for an E-Designation site located in the West Village of Manhattan, which included the completion of a Phase I and Remedial Investigation. The proposed remedy will include excavation and installation of a vapor barrier prior to the redevelopment of the Site. The Site is enrolled in the NYCOER VCP and all investigation and remedial activities were completed in accordance with NYCOER VCP guidelines.
- Project Manager for a Phase I and Phase II Environmental Site Assessment. Project included a Phase II site investigation that included sampling to delineate and identify the source of a PCE plume beneath the Site.
- Syosset Park Field Manager for supplemental soil sampling investigation at a large and complex NYS BCP Site located in Nassau County. The Site has an extensive environmental history, including former use as a wire and conduit manufacturer (former NYS Inactive Hazardous Waste Site), former landfill (currently a Federal Superfund site), and town DPW facility.
- Performed numerous Phase I Environmental Site Assessments for due diligence in connection with property transfers for the Metro New York Area. A majority of properties included commercial properties, former retail gasoline stations, and office buildings.
- Staff Scientist/Field Manager for underground storage tank (UST) discovery, inventory, and removal. Field responsibilities involved subcontractor oversight for excavation and removal of UST, tank cleaning and waste management.
- Staff Scientist responsible for implementation of CAMP and SWPPP. Intrusive activities included soil and sediment excavation and trucking. In addition to CAMP activities, assisted project manager and construction manager with contractor oversight, material review, health and safety oversight, and daily reporting.





Julie A. Moriarity Project Scientist

- Staff Scientist responsible for Phase II Site Assessment and preparation of investigation reports for soil boring installation, monitoring well installation and corresponding soil, soil vapor and groundwater sampling.
- Staff Scientist responsible for bi-annual soil vapor monitoring program for a former petroleum refinery and terminal in Brooklyn, New York. Field work included the sampling and screening of over 100 permanent soil vapor monitoring points for soil vapor intrusion monitoring.
- Field Manager for the completion of quarterly groundwater investigations for a former asphalt facility in Medford, New York.
- Experience in municipal projects which entailed major scheduling, purchasing, on-site work coordination, RFIs, change orders, knowledge of the construction process, and the equipment used in the water treatment industry. Projects include Bethpage Water District – Construction of New Pump Station; Hicksville Water District – Wellhead Treatment for VOC Removal; Roslyn Water District – VOC Treatment; Garden City Park – VOC Treatment



Yixian Zhang, Ph.D Senior Scientist

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- Zhang, Y. and Chen, R. F. Fluorescence Measurements of Coastal Marine Sediments. American Geophysical Union, 1998 Ocean Science Meeting, San Diego, California. February 1998. Session OS42N-11.
- Zhang, Y. and Chen, R. F. Chromophoric Dissolved Organic Matter (CDOM) in the Mid-Atlantic Bight Measured by Absorption and Fluorescence. American Geophysical Union, 1996 Fall Meeting, San Francisco, California. December 1996. Session OC72B-10.

Key Projects:

- Task Manager/Project Scientist, Remedial Investigation and Clean-up, New Bedford Harbor Superfund Site, MA: More than 7 years of experience with the investigation and remediation of PCB-contaminated sediments at the site: 2001-2005 at Tetra Tech and 2006 - 2009 at Battelle. Responsibilities included providing technical expertise and oversight for multidisciplinary tasks, preparing and reviewing workplans, field sampling plans (FSPs), and quality assurance project plans (QAPPs), performing data interpretation to evaluate the effectiveness of various contaminant mitigation (e.g., dredging, capping) and source control measures, and preparing technical reports on study findings. Experience highlights included developing and comparing various fieldscreening, on-site, and off-site laboratory analytical approaches for obtaining fast-turnaround and cost-effective data, leading a sediment trap study to evaluate sediment transport due to natural processes and remediation activities, performing advanced fingerprinting and other environmental forensic techniques to determining the sources of re-deposited sediments, and participating in a study design to determine facilitated migration of PCBs through groundwater pathway into the harbor due to the co-presence of chlorinated solvents in the contamination source area.
- Project/Task Manager, Evaluation of Contaminant Release from Sediments, New Bedford Harbor Superfund Site, MA: The objectives of this multi-year research project were to better understand the release of PCBs from sediments into the water column under field conditions during active remedial dredging and non-dredging periods. Responsible for providing project/task management and overall scientific oversight. Prepared the project workplan and QAPP, coordinated field investigation activities, developed new analytical methods for C18 and solid phase microextraction (SPME) techniques in the laboratory, and evaluated the use of sediment traps, passive samplers including semipermeable membrane devices (SPMDs), SPME, and polyethylene devices (PEDs), as well as biomonitoring organisms (e.g. blue mussels) to measure sediment resuspension, transport, and release of bioavailable PCBs in the water column.
- <u>Project Manager, Sediment Innovative Treatment Demonstration</u> <u>Project, Long Island Sound, NY:</u> Managed testing of treated sediments to determine the feasibility and cost-effectiveness of using treated sediment for one or more beneficial uses (e.g., soil or aggregate manufacturing process). Responsibilities included Sampling and Analysis Plan (SAP) preparation, field sampling and analytical task management, and subcontractor coordination for this multi-phase project. Prepared final reports that summarized bulk chemistry of the treated sediments to evaluate direct exposure concerns and leachability testing results to determine contaminant mobility potential.

- Project/Task Manager, Dredged Material Testing, Various Locations in New England States: Managed physical, chemical, and biological testing of dredged material from various New England locations to evaluate potential environmental impacts as a result of ocean disposal of dredged material. Responsibilities included preparing project SAPs, managing analyses of water, sediment, and biological tissue samples for pesticides, PCBs, and PAHs in the laboratory, coordinating other physical, chemical, and biological testing tasks such as grain size and TOC measurements, trace metal analysis, acute and chronic bioassay and bioaccumulation tests, performing data interpretation, and preparing reports. The testing and data interpretation followed EPA/USACE guidance "Evaluation of Dredged Material Proposed for Ocean Disposal—Testing Manual" (the "Green Book").
- Project Manager, Analytical Chemistry, Bioaccumulation, and Benthic Infauna Community Analysis Support for Naval Station Sediment Total Maximum Daily Load (TMDL) Assessment, San Diego, CA: Managed the chemical analysis of water, sediment, and biota samples, sediment bioaccumulation tests, and benthic infauna community analysis. The final report incorporated sediment chemistry and benthic infauna results to assess sediment quality using statistical tools such as cluster and ordination analysis, principal components analysis (PCA), and multiple regression analysis.
- <u>Technical Support, Ashtabula River Contaminated Sediment</u> <u>Remediation Dredging, OH:</u> Served as technical expert for the extensive monitoring effort during the pre- and post-dredging phases to measure sediment residuals and immediate and longterm impacts of contaminant removal on the ecosystem. Major author of the monitoring program design, QAPP, and data interpretation report regarding the innovative field assessment devices such as SPME, PED, and bio-monitoring techniques.
- <u>Project Manager, Analytical Method Development for Emerging</u> <u>Contaminants:</u> Managed the method development effort in the laboratory for emerging contaminants including pharmaceuticals and personal care products (PPCPs) such as prescription and nonprescription drugs, steroids, and hormones, as well as brominated flame retardants such as polybrominated diphenyl ethers (PBDEs).
- <u>Task Manager/Project Scientist</u>, <u>Navel Weapons Industrial</u> <u>Reserve Plant</u>, <u>MA</u>: An *in situ* thermal treatment system using electrical resistance heating (ERH) technology was implemented to further clean up the residual chlorinated solvents and BETX contamination in soil and groundwater of two areas at the site. Responsibilities included managing project chemistry task and preparing final report to evaluate the ERH treatment efficiency and whether natural attenuation was occurring after the treatment.
- <u>Task Manager/Project Scientist, Navy Tank Farms 1, 2, 4 and 5,</u> <u>RI:</u> Managed chemistry tasks to support on-going investigation and remediation activities including preparing project QA/QC plan, performing field screening tests (using PetroFlag) for rapid qualification of oil contamination in soil, coordinating subcontract labs, and performing data validation. The project was to further define the nature and extent of petroleum hydrocarbon contamination in the soil and groundwater, and to perform necessary clean-up for the purpose of reuse of the area as a golf course.

APPENDIX E

ISCO Product Specifications



ORC Advanced[®] Technical Description

ORC Advanced[®] is an engineered, oxygen release compound designed specifically for enhanced, *in situ* aerobic bioremediation of petroleum hydrocarbons in ground-water and saturated soils. Upon contact with groundwater, this calcium oxyhydroxide-based material becomes hydrated producing a controlled release of molecular oxygen (17% by weight) for periods of up to 12 months on a single application.

ORC Advanced decreases time to site closure and accelerates degradation rates up to 100 times faster than natural degradation rates. A single ORC Advanced application can support aerobic biodegradation for up to 12 months with minimal site disturbance, no permanent or emplaced above ground equipment, piping, tanks, power sources, etc are needed. There is no operation or maintenance required. ORC Advanced provides lower costs, greater efficiency and reliability compared to engineered mechanical systems, oxygen emitters and bubblers.



Example of ORC Advanced

ORC Advanced provides remediation practitioners with a significantly faster and highly effective means of treating petroleum contaminated sites. Petroleum hydrocarbon contamination is often associated with retail petroleum service stations resulting from leaking underground storage tanks, piping and dispensers. As a result, ORC Advanced technology and applications have been tailored around the remediation needs of the retail petroleum industry and include: tank pit excavations, amending and mixing with backfill, direct-injection, bore-hole backfill, ORC Advanced Pellets for waterless and dustless application, combined ISCO and bioremediation applications, etc.

For a list of treatable contaminants with the use of ORC Advanced, view the Range of Treatable Contaminants Guide

Chemical Composition

- Calcium hydroxide oxide
- Calcium hydroxide
- Monopotassium phosphate
- Dipotassium phosphate

Properties

- Physical state: Solid
- Form: Powder
- Odor: Odorless
- Color: White to pale yellow
- pH: 12.5 (3% suspension/water)



ORC Advanced[®] Technical Description

Storage and Handling Guidelines

Storage

Store in a cool, dry place out of direct sunlight

Store in original tightly closed container

Store in a well-ventilated place

Do not store near combustible materials

Store away from incompatible materials

Provide appropriate exhaust ventilation in places where dust is formed

HandlingMinimize dust generation and accumulationKeep away from heatRoutine housekeeping should be instituted to
ensure that dust does not accumulate on surfacesObserve good industrial hygiene practicesTake precaution to avoid mixing with combustibles
materialsAvoid contact with water and moistureAvoid contact with eyes, skin, and clothingAvoid prolonged exposureWear appropriate personal protective equipment

Applications

- Slurry mixture direct-push injection through hollow rods or direct-placement into boreholes
- In situ or ex situ slurry mixture into contaminated backfill or contaminated soils in general
- Slurry mixture injections in conjunction with chemical oxidants like RegenOx or PersulfOx
- Filter sock applications in groundwater for highly localized treatment
- Ex situ biopiles

Health and Safety

Wash thoroughly after handling. Wear protective gloves, eye protection, and face protection. Please review the <u>ORC Advanced Safety Data Sheet</u> for additional storage, usage, and handling requirements.



www.regenesis.com 1011 Calle Sombra, San Clemente CA 92673 949.366.8000

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PersulfOx[®] Technical Description

PersulfOx is an *In Situ* Chemical Oxidation (ISCO) reagent that destroys organic contaminants found in groundwater and soil through powerful, yet controlled, chemical reactions. A sodium persulfate-based technology (figure 1), PersulfOx employs a patented catalyst to enhance the oxidative destruction of both hydrocarbons and chlorinated contaminants in the subsurface.

Typically, sodium persulfate is activated with the addition of heat, chelated metals, hydrogen peroxide, or base in order to generate sulfate radicals. These activation processes are inherently complex, costly and can pose additional health and safety risks. In comparison, PersulfOx is a relatively safe and easy-to-use ISCO agent with a built-in catalyst which activates the persulfate component, generating contaminant-destroying free radicals without the need for the addition of a separate activator. The equation below shows the net complete oxidation of toluene, a constituent of gasoline, by PersulfOx:



Example of PersulfOx



1 \bigcirc + 18 Na₂S₂O₈ + 14 H₂O _____Activator or Catalyst → 7 CO₂ + 36 NaHSO₄

For a list of treatable contaminants with the use of PersulfOx, view the Range of Treatable Contaminants Guide

Chemical Composition

- Sodium Persulfate CAS #7775-27-1
- Sodium Silicate CAS #1344-09-8

Properties

- pH 7 to 11.5 at 25°C
- Appearance White, free-flowing powder, clear to cloudy when mixed with water
- Odor Not detectable
- Vapor Pressure None
- Chemical Hazard Classification Class 5.1 Oxidizer

Storage and Handling Guidelines

Storage

Store locked up

Keep away from heat

Store in a cool, dry place out of direct sunlight

Handling

Minimize dust generation and accumulation

Routine housekeeping should be instituted to ensure that dust does not accumulate on surfaces



PersulfOx[®] Technical Description

Storage (continued)
Store in original tightly closed container
Store in a well-ventilated place
Do not store near combustible materials
Store away from incompatible materials
Recommended to store at less than 40°C
Provide appropriate exhaust ventilation in places where dust is formed

Handling (continued)Avoid mixing with combustiblesAvoid contaminationKeep away from clothing and other combustible
materialsWear appropriate personal protective equipmentAvoid breathing dustAvoid contact with eyes, skin, and clothingAvoid prolonged exposureDo not taste or swallowWhen using, do not eat, drink or smokeWear appropriate personal protective equipmentAvoid prolonged exposureDo not taste or swallowObserve good industrial hygiene practices

Applications

- PersulfOx is mixed with water at a rate of 5% to 20% prior to application.
- For most applications, REGENESIS suggests a 10-15% solution. The resulting mixture has viscosity similar to water.
- Injects into formation through direct push injection points, injection wells or other injection delivery systems.

Application instructions for this product are contained here PersulfOx Application Instructions.

Health and Safety

Material is relatively safe to handle; however, avoid contact with eyes, skin and clothing. OSHA Level D personal protection equipment including: vinyl or rubber gloves, eye protection, and dust mask are recommended when handling this product. Please review the Material Safety Data Sheet for additional storage, usage, and handling requirements here: <u>PersulfOx SDS</u>.

- 1. Sample Location Map/Redevelopment Plan
- 2. Soil Sample Exceedances of Unrestricted Use Soil Cleanup Objectives
- 3. Soil Sample Exceedances of Protection of Groundwater and/or Restricted Residential Use Cleanup Soil Cleanup Objectives
- 4. Phase II ESA Groundwater Sample Analytical Exceedances
- 5. Exceedances of Ambient Water Quality Standards and Guidance Values
- 6. Remedial Alternative 1: Track 1 Unrestricted Use Cleanup
- 7. Remedial Alternative 2: Track 4 Restricted Residential Use Cleanup





LEGEND			<u>N0</u>	OTES	
	\$	SOIL BORING/MONITORING WELL, INSTALLED BY ROUX ASSOCIATES	1.	ELEVATIONS SHOWN HE PLAINS DATUM.	
	•	SOIL BORING, INSTALLED BY ROUX ASSOCIATES	2.	ELEVATIONS AT AREAS	
		GROUNDWATER PROFILE BORING, INSTALLED BY ROUX ASSOCIATES			
	۲	SOIL/GROUNDWATER PROFILE BORING, INSTALLED BY ROUX ASSOCIATES			
	\$	SOIL BORING COMPLETED AS TEMPORARY WELL, INSTALLED BY OTHERS			
	•	BORING COMPLETED AS MONITORING WELL, INSTALLED BY OTHERS			
	۲	SOIL BORING, INSTALLED BY OTHERS			
		TEMPORARY SOIL VAPOR SAMPLING POINT, INSTALLED BY ROUX ASSOCIATES			
		PARCEL BOUNDARY			
		BCP BOUNDARY			

HEREON REFER TO THE CITY OF WHITE

S OUTSIDE SHOWN EXCAVATIONS ARE NOT





SAMPLE LOCATION MAP/ REDEVELOPMENT PLAN

REMEDIAL ACTION WORK PLAN POST ROAD CORRIDOR – WHITE PLAINS 77 WEST POST ROAD, WHITE PLAINS, NY

POST MAPLE 77, LLC

[Remedial

Prepared For:

Compiled by: C.S. Date: 19AUG16 Prepared by: J.A.D. Scale: AS SHOWN REMEDIAL ENGINEERING, P.C. Project Mgr: W.K. Project: 2195.0001Y000 ENVIRONMENTAL ENGINEERS File: 2195.0001Y126.01.DWG









SOIL SAMPLE EXCEEDANCES OF UNRESTRICTED USE SOIL CLEANUP OBJECTIVES REMEDIAL ACTION WORK PLAN POST ROAD CORRIDOR – WHITE PLAINS 77 WEST POST ROAD, WHITE PLAINS, NY

Prepared For:

POST MAPLE 77, LLC

Remedial

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•	SOIL BORING/MONITORING WELL, IN
۲	SOIL BORING, INSTALLED BY ROUX
	GROUNDWATER PROFILE BORING, IN
۲	SOIL/GROUNDWATER PROFILE BORIN
+	SOIL BORING COMPLETED AS TEMPO
•	BORING COMPLETED AS MONITORING
۲	SOIL BORING INSTALLED BY OTHERS
	TEMPORARY SOIL VAPOR SAMPLING
	PARCEL BOUNDARY
	BCP BOUNDARY



SB-7W	12/11/07
Analyte	
VOCs	
1,2,4-Trimethylbenzene	5.4
1,3,5- Trimethylbenzene	21.3
Benzene	446
Ethylbenzene	47.9
Isopropylbenzene	11.3
Methyl tert-butyl ether (MTBE)	1120
Napthalene	34.9
n-Propylbenzene	6.9
Toluene	24.6
Xylenes (Total)	99.9
Metals	
Iron and Manganese Combined	2770
Magnesium	71000
Manganese	2730
Sodium	275000

GP-9W	11/14/07
Analyte	
VOCs	
1,2,4-Trimethylbenzene	1460
1,3,5- Trimethylbenzene	546
4-Isopropyltoluene	101
Benzene	128
Ethylbenzene	1020
Isopropylbenzene	102
Napthalene	532
n-Butylbenzene	80.5
sec-Butylbenzene	53
n-Propylbenzene	231
Toluene	114
Xylenes (Total)	2680
SVOCs	
2-Methylnaphthalene	79.9
Naphthalene	237
Metals	
Arsenic	32
Barium	1800
Beryllium	4.4
Chromium	148
Copper	410
Iron	163000
Iron and Manganese Combined	172100
Magnesium	92200
Manganese	9100
Sodium	328000
Nickel	141
Lead	351







	11/5/07	
	21500	
nbined	23730	
	69700	
	2230	
	257000	
	52	

ELEVATIONS SHOWN HEREON REFER TO THE CITY OF

GROUNDWATER STANDARDS

Parameter	Standards*
(Concentrations in µg/L)	(µg/L)
VOCs	
1,2,4-Trimethylbenzene	5
1,3,5- Trimethylbenzene	5
4-Isopropyltoluene	5
Benzene	1
cis-1,2-Dichloroethene	5
Ethylbenzene	5
Isopropylbenzene	5
Methyl tert-butyl ether (MTBE)	10
Napthalene	10
n-Butylbenzene	5
sec-Butylbenzene	5
n-Propylbenzene	5
Toluene	5
Trichloroethene (TCE)	5
Vinyl chloride	2
Xylenes (Total)	5
SVOCs	
Benzo[a]anthracene	0.002
Naphthalene	10
Metals	
Mercury	0.7
Arsenic	25
Barium	1000
Beryllium	3
Cadmium	5
Chromium	50
Copper	200
Iron	300
Iron and Manganese Combined	500
Magnesium	7
Manganese	300
Sodium	20000
Nickel	100
Lead	25
Antimony	3
Thallium	1
Zinc	2000

µg/L Micrograms per liter

* NYSDEC AWQSGVs NYSDEC New York State Department of Environmental Conservation AWQSGVs Ambient Water-Quality Standards and Guidance Values VOCs Volatile Organic Compounds

SVOCs Semivolatile Organic Compounds





PHASE II ESA GROUNDWATER SAMPLE ANALYTICAL EXCEEDANCES

REMEDIAL ACTION WORK PLAN POST ROAD CORRIDOR - WHITE PLAINS 77 WEST POST ROAD, WHITE PLAINS, NY

POST MAPLE 77, LLC

ROUX Environmental Consulting & Management

Prepared For:

Compiled by: R.M. Date: 08AUG16 Prepared by: B.H.C. Scale: AS SHOWN ROUX ASSOCIATES, INC. Project Mgr: W.K. Project: 2195.0001Y000 File: 2195.0001Y126.04.DWG

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REMEDIAL ENGINEERING, P.C. Project Mgr: W.K. Project: 2195.0001Y000 5 ENVIRONMENTAL ENGINEERS File: 2195.0001Y126.01.DWG





Parcel	Area (ac)	Remedial Excavation Depth (ft bls)	Remedial Excavation Volume (cu yd)
А	0.21	13	4,404
В	0.09	17.5	2,541
С	0.06	21	2,033
D	0.09	21	3,049
F	0.38	6.95	4,261
G	0.88	7.345	10,428
Н	0.91	7.055	10,358
I	0.28	5.5	2,485
J	0.32	6.67	3,443
К	0.47	9	6,824



LEGEND		<u>N(</u>	DTES
	PROPOSED LIMITS OF EXCAVATION AND BACKFILL	1.	ELEVATIONS PLAINS DAT
•	PROPOSED MONITORING WELL	2.	AOC – ARI
•	PROPOSED LOCATION OF IN SITU CHEMICAL OXIDATION INJECTION POINT AND APPROXIMATE AREA OF INFLUENCE		
•	SOIL BORING/MONITORING WELL, INSTALLED BY ROUX ASSOCIATES		
•	SOIL BORING, INSTALLED BY ROUX ASSOCIATES		
	GROUNDWATER PROFILE BORING, INSTALLED BY ROUX ASSOCIATES		
۲	SOIL/GROUNDWATER PROFILE BORING, INSTALLED BY ROUX ASSOCIATES		
	SOIL BORING COMPLETED AS TEMPORARY WELL, INSTALLED BY OTHERS		
•	BORING COMPLETED AS MONITORING WELL, INSTALLED BY OTHERS		
۲	SOIL BORING, INSTALLED BY OTHERS		
1	TEMPORARY SOIL VAPOR SAMPLING POINT, INSTALLED BY ROUX ASSOCIATES		
A	ALPHA-NUMERIC GRID		
	PARCEL BOUNDARY		
	BCP BOUNDARY		

IS SHOWN HEREON REFER TO THE CITY OF WHITE ATUM. REA OF CONCERN



REMEDIAL ALTERNATIVE 1: TRACK 1 UNRESTRICTED USE CLEANUP

REMEDIAL ACTION WORK PLAN POST ROAD CORRIDOR – WHITE PLAINS 77 WEST POST ROAD, WHITE PLAINS, NY

POST MAPLE 77, LLC

[Remedial

Prepared For:

Compiled by: C.S. Date: 19AUG16 Prepared by: J.A.D. Scale: AS SHOWN REMEDIAL ENGINEERING, P.C. Project Mgr: W.K. Project: 2195.0001Y000 6 ENVIRONMENTAL ENGINEERS File: 2195.0001Y126.01.DWG



AOC	Area (sq ft)	Development Excavation Depth (ft bls)	Additional Remedial Excavation Depth (ft bls)	Remedial Excavation Volume (cu yd)
1	2,050	7	9	683
2	666	5.5	11.5	284
3	1,713	0	10	634
4	1,742	0	5	323
5	861	5.5	6.5	207
6	900	3	2	67
7	900	7.5	5.5	183
8	904	1.5	17.5	586
9	848	2.5	13.5	424



LEGEND

		PROPOSED LIMITS OF EXCAVATION AND BACKFILL	1.	ELEVATIO PLAINS
	•	PROPOSED MONITORING WELL	2.	AOC -
	•	PROPOSED LOCATION OF IN SITU CHEMICAL OXIDATION INJECTION POINT AND APPROXIMATE AREA OF INFLUENCE		
	+	SOIL BORING/MONITORING WELL, INSTALLED BY ROUX ASSOCIATES		
	•	SOIL BORING, INSTALLED BY ROUX ASSOCIATES		
		GROUNDWATER PROFILE BORING, INSTALLED BY ROUX ASSOCIATES		
	\bigcirc	SOIL/GROUNDWATER PROFILE BORING, INSTALLED BY ROUX ASSOCIATES		
	÷	SOIL BORING COMPLETED AS TEMPORARY WELL, INSTALLED BY OTHERS		
	\$	BORING COMPLETED AS MONITORING WELL, INSTALLED BY OTHERS		
	•	SOIL BORING, INSTALLED BY OTHERS		
	1	TEMPORARY SOIL VAPOR SAMPLING POINT, INSTALLED BY ROUX ASSOCIATES		
A		ALPHA-NUMERIC GRID		
		PARCEL BOUNDARY		
		BCP BOUNDARY		

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NOTES



REMEDIAL ALTERNATIVE 2: TRACK 4 RESTRICTED RESIDENTIAL USE CLEANUP

REMEDIAL ACTION WORK PLAN POST ROAD CORRIDOR – WHITE PLAINS 77 WEST POST ROAD, WHITE PLAINS, NY

POST MAPLE 77, LLC

Compiled by: C.S. Date: 10AUG16

[Remedial REMEDIAL ENGINEERING, P.C. Project Mgr: W.K. Project: 2195.0001Y000 7

Prepared For:

Prepared by: J.A.D. Scale: AS SHOWN ENVIRONMENTAL ENGINEERS File: 2195.0001Y126.01.DWG