NEW YORK STATE BROWNFIELDS CLEANUP PROGRAM BCP ID No. C203039

REMEDIAL ACTION WORK PLAN

FORMER DICO G AUTO & TRUCK REPAIR Block 4545, Lots 1001 & 1002 3001 - 3035 White Plains Road Bronx, NY

DECEMBER 2008



Program Volunteer:

Bedford Park Associates, LLC Adee & Lester, L.P. 3035 White Plains Retail, LLC 15 Verbena Avenue Suite #100 Floral Park, NY 11001-2711



EBC Project No: ARK0602





FORMER DICO G TRUCK AND AUTO REPAIR BRONX, NEW YORK

Remedial Action Work Plan

NYSDEC BCP NUMBER: C203039

Prepared For:

Bedford Park Associates, LLC Adee & Lester, L.P. 3035 White Plains Retail, LLC 930 Broadway Woodmere, NY 11598

DECEMBER 2008

CERTIFICATIONS

I, <u>Ariel Czemerinski</u>, am currently a registered professional engineer licensed by the State of New York. I have primary direct responsibility for implementation of the remedial program for the Former Dico G Truck and Auto Repair Site (NYSDEC BCA Index No. W2-1108-07-07 Site No. C203039.

I certify that the Site description presented in this RAWP is identical to the Site descriptions presented in the Brownfield Cleanup Agreement for the Former Dico G Site and related amendments.

I certify that this plan includes proposed use restrictions, Institutional Controls, Engineering Controls, and plans for all operation and maintenance requirements applicable to the Site and provision for development of an Environmental Easement to be created and recorded pursuant ECL 71-3605 [if Track 1 is not achieved]. This RAWP requires that all affected local governments, as defined in ECL 71-3603, will be notified that such Easement has been recorded. This RAWP requires that a Site Management Plan must be submitted by the Applicant for the continual and proper operation, maintenance, and monitoring of all Engineering Controls employed at the Site, including the proper maintenance of all remaining monitoring wells, for approval by the Department [if Track 1 is not achieved].

I certify that this RAWP has a plan for transport and disposal of all soil, fill, fluids and other material removed from the property under this Plan, and that all transport and disposal will be performed in accordance with all local, State and Federal laws and requirements. All exported material will be taken to facilities licensed to accept this material in full compliance with all Federal, State and local laws.

I certify that this RAWP has a plan for import of all soils and other material from off-Site and that all activities of this type will be in accordance with all local. State and Federal laws and requirements. I certify that that this RAWP has a plan for nuisance control during the remediation and all invasive development work, including a dust, odor and vector suppression plan and that such plan is sufficient to control dust, odors and vectors and will prevent nuisances from occurring.

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. persual Flore Section 210.45 of the Penal Law.

076508	12/22/08
NYS Professional Engineer #	Date



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.

TABLE OF CONTENTS

EXE	CUTI	VE SUN	IMARY	1
1.0	INT	RODU	CTION	6
	1.1		OCATION AND DESCRIPTION	
	1.2		EMPLATED REDEVELOPMENT PLAN	
	1.3	DESCI	RIPTION OF SURROUNDING PROPERTY	7
2.0	DES	SCRIPT	TON OF REMEDIAL INVESTIGATION FINDINGS	9
2.0	2.1		ARY OF REMEDIAL INVESTIGATIONS PERFORMED.	
	2.1	2.1.1	Borings	
		2.1.2	Monitoring Wells	
		2.1.3	Samples Collected	
			2.1.3.1 Soil Samples	
			2.1.3.2 Groundwater Samples	
			2.1.3.3 Soil Gas Samples	
		2.1.4	Chemical Analytical Work Performed	
		2.1.5	Geophysical Work and Test Pits	
		2.1.6	Documentation	
	2.2		FICANT THREAT	
	2.3		HSTORY	
		2.3.1	Past Uses and Ownership	
		2.3.2	Phase I and Phase II Reports	
		2.3.2	Sanborn Maps	
	2.4	GEOL	OGICAL CONDITIONS	
	2.5	CONT	AMINATION CONDITIONS	
		2.5.1	Conceptual Model of Site Contamination	
		2.5.2	Description of Areas of Concern	
		2.5.3	Identification of Standards, Criteria and Guidance	
		2.5.4	Soil/Fill Contamination	
			2.5.4.1 Summary of Soil/Fill Contamination	24
			2.5.4.2 Comparison of Soil/Fill to SCGs	
		2.5.5	Liquid Phase Hydrocarbons	
		2.5.6	On-Site and Off-Site Groundwater Contamination	
			2.5.6.1 Summary of Groundwater Contamination	
			2.5.6.2 Comparison of Groundwater with SCGs	
		2.5.7	On-Site and Off-Site Soil Vapor Contamination	
			2.5.7.1 Summary of Soil Vapor Contamination	
	2.6	ENVIF	RONMENTAL AND PUBLIC HEALTH ASSESSMENTS	
		2.6.1	Qualitative Human Health Exposure Assessment	
		2.6.2	Fish & Wildlife Remedial Impact Analysis	
	2.7	PREVI	IOUS INTERIM REMEDIAL MEASURES	

TABLE OF CONTENTS Continued

	2.8	REME	DIAL ACTION OBJECTIVES	
		2.8.1	Groundwater	
		2.8.2	Soil	
3.0	DES	SCRIPT	ION OF REMEDIAL ACTION PLAN	
	3.1	EVAL	UATION OF REMEDIAL ALTERNATIVES	
	3.2	STANI	DARDS, CRITERIA AND GUIDANCE (SCG)	
	3.3		CTION OF THE PREFERRED REMEDY	
		3.3.1	Zoning	
		3.3.2	Applicable Community Master Plans Or Land Use Plans	
		3.3.3	Surrounding Property Uses	
		3.3.4	Citizen Participation	
		3.3.5	Environmental Justice Concerns	
		3.3.6	Land use designations	
		3.3.7	Population growth patterns	
		3.3.8	Accessibility to existing infrastructure	
		3.3.9	Proximity to cultural resources	
		3.3.10	Proximity to natural resources	
		3.3.11	Off-Site groundwater impacts	
		3.3.12	Proximity to floodplains	
		3.3.13	Geography and geology of the Site	
		3.3.14	Current Institutional Controls	
	3.4	SUMM	IARY OF SELECTED REMEDIAL ACTIONS	
4.0	RE	MEDIAI	L ACTION PROGRAM	
	4.1	GOVE	RNING DOCUMENTS	
		4.1.1	Health and Safety Plan (HASP)	
		4.1.2	Quality Assurance Project Plan (QAPP)	
		4.1.3	Construction Quality Assurance Plan (CQAP)	
		4.1.4	Soil/Materials Management Plan (SoMP)	
		4.1.5	Storm-Water Pollution Prevention Plan (SWPPP)	
		4.1.6	Community Air Monitoring Plan (CAMP)	
		4.1.7	Contractors Site Operations Plan (SOP)	
		4.1.8	Community Participation Plan (CPP)	
	4.2	GENE	RAL REMEDIAL ACTION INFORMATION	
		4.2.1	Project Organization	
		4.2.2	Remedial Engineer	
		4.2.3	Remedial Action Schedule	
		4.2.4	Work Hours	
		4.2.5	Site Security	
		4.2.6	Traffic Control	

TABLE OF CONTENTS Continued

		4.2.7	Contingency Plan	46
		4.2.8	Worker Training and Monitoring	46
		4.2.9	Agency Approvals	
		4.2.10	NYSDEC BCP Signage	
		4.2.11	Pre-Construction Meeting with NYSDEC	48
		4.2.12	Emergency Contact Information	
		4.2.13	Remedial Action Costs	
	4.3	SITE PI	REPARATION	48
		4.3.1	Mobilization	48
		4.3.2	Erosion and Sedimentation Controls	48
		4.3.3	Stabilized Construction Entrance(s)	49
		4.3.4	Utility Marker and Easements Layout	49
		4.3.5	Sheeting and Shoring	49
		4.3.6	Equipment and Material Staging	50
		4.3.7	Decontamination Area	50
		4.3.8	Site Fencing	50
		4.3.9	Demobilization	50
	4.4	REPOR	TING	50
		4.4.1	Daily Reports	50
		4.4.2	Monthly Reports	51
		4.4.3	Other Reporting	
		4.4.4	Complaint Management Plan	
		4.4.5	Deviations from the Remedial Action Work Plan	52
5.0	BEI	MEDIAI	ACTION: MATERIAL REMOVAL FROM SITE	53
5.0			EANUP OBJECTIVES	
			AL PERFORMANCE EVALUATION (END-POINT SAMPLING)	
	5.21	5.2.1	End-Point Sampling Frequency	
		5.2.2	Methodology	
		5.2.2	Reporting of Results	
		5.2.4	QA/QC	
		5.2.5	DUSR	
		5.2.6	Reporting of End-Point Data in FER	
	5.3		ATED MATERIAL REMOVAL QUANTITIES	
	5.4		IATERIALS MANAGEMENT PLAN	
	0.1	5.4.1	Soil Screening Methods	
		5.4.2	Soil Stockpile Methods	
		5.4.3	Materials Excavation and Load Out	
		5.4.4	Materials Transport Off-Site	
		5.4.5	Materials Disposal Off-Site	
		5.4.6	Materials Reuse On-Site	
		5.4.7	Fluids Management.	

TABLE OF CONTENTS Continued

		5.4.8	Demarcation	
		5.4.9	Backfill from Off-Site Sources	
		5.4.10	Stormwater Pollution Prevention	
		5.4.11	Contingency Plan	
		5.4.12	Community Air Monitoring Plan	
		5.4.13	Odor, Dust and Nuisance Control Plan	
			5.4.13.1 Odor Control Plan	56
			5.4.13.2 Dust Control Plan	56
			5.4.13.3 Nuisance Control Plan	56
6.0	REN		ACTION: LIQUID PHASE HYDROCARBON RECOVERY	
	6.1		LEANUP OBJECTIVES	
	6.2	LPH RE	EMEDIAL PEFFORMANCE EVALUATION	54
		6.2.1	Performance Monitoring Sampling Frequency	58
		6.2.2	Methodology	
		6.2.3	Reporting of Results	
	6.3	LPH RH	ECOVERY PLAN	
7.0	REN	IEDIAL	ACTION: CHEMICAL OXIDATION TREATMENT	60
	7.1		NDWATER CLEANUP OBJECTIVES	
	7.2		DIAL PERFORMANCE EVALUATION (POST TREATMENT	
		SAMPL		
		7.2.1	Performance Monitoring Sampling Frequency	. 60
		7.2.2	Methodology	
		7.2.3	Reporting of Results	
		7.2.4	QA/QC	
		7.2.5	DUSR	
		7.2.6	Reporting of Performance Data in FER	
	7.3		CAL OXIDANT TREATMENT PLAN	
	1.5	CHEIM	CAL OAIDANT TREATMENTTEAN	07
8.0	RES	IDUAL	CONTAMINATION TO REMAIN ON-SITE	68
9.0	ENC	GINEER	ING CONTROLS: TREATMENT SYSTEMS	69
	9.1	ENGIN	EERING CONTROL SYSTEMS: LPH RECOVERY	69
	9.2	ENGIN	EERING CONTROL SYSTEMS: CHEMICAL OXIDATION	69
	9.3		EERING CONTROL SYSTEMS: SUB-SLAB DEPRESSURIZATION	
			M (SSDS)	
	9.4		RIA FOR COMPLETION OF REMEDIATION/TERMINATION OF	
			DIAL SYSTEMS	
		9.4.1	LPH Recovery Program	
		9.4.2	Chemical Oxidant Treatment Program	
		9.4.3	Sub-slab Depressurization System	
	10.0		UTIONAL CONTROLS	
	10.0	1110111		15

TABLE OF CONTENTS Continued

12.0	SCHEDULE	82
11.0	11.1 CERTIFICATIONS	
11.0	FINAL ENGINEERING REPORT	78
	10.2 SITE MANAGEMENT PLAN	
	10.1 ENVIRONMENTAL EASEMENT	. 73

LIST OF TABLES

Table 1A-D	RI Summary of Soil Results
Table 2A-D	RI Summary of Groundwater Results
Table 3	RI Summary of Soil Gas Results
Table 4	Parameters Detected Above Track 1 Soil Cleanup Objectives
Table 5	Parameters Above Ambient Water Quality Standards
Table 6	Permits
Table 7	Emergency Contact Numbers

LIST OF FIGURES

Figure 1	Site Location Map
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Figure 2	Surrounding Property Map
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- Figure 3 Soil Boring Locations and New Building Layout
- Figure 4 Monitoring Well Locations and New Building Layout
- Figure 5 Soil Gas Sampling Locations and New Building Layout
- Figure 6 Geologic Cross-section
- Figure 7 Groundwater Elevation Map 12/5/07
- Figure 8 Parameters Above Track 1 Objectives
- Figure 9 Exceedances in Groundwater Standards
- Figure 10 Soil Gas Concentrations
- Figure 11 Injection and Monitoring Well Locations
- Figure 12 Sub-Slab Depressurization System Layout
- Figure 13 Sub-Slab Depressurization System Detail

APPENDICES

- Appendix A Metes and Bounds Description of Property
- Appendix B Sanborn Maps
- Appendix C Health & Safety Plan
- Appendix D Resumes
- Appendix E Community Air Monitoring Plan
- Appendix F Citizen Participation Plan
- Appendix G BCP Signage Specifications
- Appendix H Estimated Remedial Costs

LIST OF ACRONYMS

Acronym	Definition	
AMC	AMC Engineering	
AWQS	Ambient Water Quality Standards	
BCA	Brownfield Cleanup Agreement	
BCP	Brownfield Cleanup Program	
BTEX	Benzene, Toluene, Ethylbenzene and Xylene	
CQMP	Construction Quality Management Plan	
DUSR	Data Usability Statement Report	
EBC	Environmental Business Consultants	
FER	Final Engineering Report	
HDPE	High Density Polyethylene	
IRM	Interim Remedial Measure	
LPH	Liquid Phase Hydrocarbons	
NYC	New York City	
NYCDEP	New York City Department of Environmental Protection	
NYSDEC	New York State Department of Environmental Conservation	
NYSDOH	New York State Department of Health	
PS	Public School	
PVC	Polyvinyl Chloride	
RAO	Remedial Action Objectives	
RAWP	Remedial Action Work Plan	
RI	Remedial Investigation	
RSCOs	Recommended Site Cleanup Objectives	
SCG	Standards, Criteria, and Guidelines	
SMMP	Soil/Materials Management Plan	
SSDS	Sub-slab Depressurization System	
SWPPP	Stormwater Pollution Prevention Plan	
SVOCs	Semi-Volatile Organic Compounds	
USEPA	United States Environmental Protection Agency	
UST	Underground Storage Tank	
VEFR	Vacuum Enhanced Fluid Recovery	
VOCs	Volatile Organic Compounds	

EXECUTIVE SUMMARY

Site Description/Physical Setting/Site History

This Remedial Action Work Plan was prepared on behalf of Bedford Park Associates, LLC, Adee & Lester, LP and 3035 White Plains Retail, LLC (the Volunteer) of Woodmere, NY, for a commercial property located at 3035 White Plains Road, Bronx, New York (Figure 1). The site known as the Former Dico G Truck and Auto Repair was formally accepted into the New York State Department of Environmental Conservation (NYSDEC) Brownfields Cleanup Program (BCP) through a Brownfield Cleanup Agreement (BCA) executed on July 30, 2007 (NYSDEC BCP Number: C203039). The applicant was accepted into this program as a volunteer.

The subject property address is 3035 White Plains Road. It is located on the west side of White Plains Road between Adee Avenue and Burke Avenue in the Bronx, New York. The site is designated as Block 4545, Lots 1001 and 1002 (formerly lot 14) by the New York City Department of Assessment.

The subject property consists of a 16,880 ft² parcel, which was improved with a single-story 1,653 ft² masonry building with 3 service bays. The building was constructed in 1960 as a service station and is currently used as an auto repair shop. The property is surrounded by a 6-foot high chain link fence which also bisects the site just north of the service station building. The surrounding area is characterized by commercial businesses (mostly retail) along White Plains Road. Residential areas are located behind (east-west) this commercial corridor. An elevated section of the Metro-North Railway passes in front of the property, directly over White Plains Road.

According to the Phase I Environmental Site Assessment performed at the site (EBC 2/07), the property has been in continual service as a gasoline service station and / or auto repair shop since the building was constructed in 1960.

The site has an open spill file No. 99-00851 related to soil contamination discovered during the removal of twelve 550 gallon USTs in 1999. No documentation regarding endpoint sampling, impacts to groundwater or other media was available. On December 29, 2006, gasoline

contamination was encountered by a geotechnical drilling company advancing soil borings on the property to determine the foundation requirements of a potential new building for the site. Based on these observations, a preliminary investigation was performed (EBC 2/16/07) in which significant levels of volatile organic compounds (VOC) in soil and/or groundwater were identified at several locations on the property. These areas were associated with the location of known and suspected UST or dispenser areas.

Summary of the Remedial Investigation

A Remedial Investigation Work Plan (RIWP) was prepared for this site (EBC 9/07) and approved for implementation by the NYSDEC on October 1, 2007, following a 30-day public review period from August 28, 2007 to September 28, 2007

The goals of the Remedial Investigation were to define the nature and extent of contamination in soil, groundwater and any other impacted media; to identify the source(s) of the contamination; to assess the impact of the contamination on public health and/or the environment; and to provide information to support the development of a Remedial Work Plan to address the contamination.

Activities completed under the RI:

- Sampling to confirm the absence of non-petroleum contaminants such as pesticides, PCBs and metals in soil and groundwater including the analysis of 27 soil and 5 groundwater samples
- Soil sampling and analysis for petroleum compounds in 27 soil samples from eighteen soil boring locations;
- The installation of 12 groundwater monitoring wells
- The collection and analysis of 12 groundwater samples for petroleum compounds;
- The collection of analysis of soil gas samples for VOCs from 12 soil gas sampling locations.

The field work portion of the RI was conducted by EBC from October 2nd to November 2nd 2007, in accordance with the protocols and methods as established in the approved Remedial Investigation Work Plan (EBC 9/07) and Stipulation Letter (EBC 9/27/07).

The results of sampling performed during the RI, identified residual VOCs in overburden soil at two locations which correspond to the two former dispenser islands near the east side of the former gas station property. VOC concentrations in groundwater and/or free phase gasoline were found in close proximity to the former dispensers, identifying both as source areas of gasoline contamination. The greater VOC concentrations reported in both soil and groundwater in the vicinity of the north dispenser; identify it as the more significant of the two. The release scenario in both cases includes a slow release at a dispenser fitting which saturates the surrounding overburden soil to the bedrock surface approximately 2-3 feet below grade. Free-phase gasoline would then migrate along the bedrock surface following joints and cracks in the bedrock until it encounters groundwater at a depth of approximately 15 feet below the surface. Upon contacting the groundwater, a dissolved VOC plume is generated which then migrates from the south dispenser area to the south and east, and from the north dispenser area to the north and east. The direction of groundwater flow is influenced by the potentiometric surface and the orientation of joints and fractures in the bedrock.

Qualitative Human Health Exposure Assessment

The qualitative exposure assessment identified potential completed routes of exposure to construction workers and remediation workers through inhalation, ingestion and dermal contact during excavation activities. The Health and Safety Plan prepared for the site identifies such exposures and provides instructions for on-site workers to minimize potential exposure. Occupants or retail workers in the proposed on-site apartment building/commercial space may be exposed to VOCs through the vapor intrusion pathway if VOCs in groundwater are not remediated, or if preventive measures such as vapor barriers or sub-slab ventilation are not employed. However, there is evidence that some of the VOCs detected in soil gas at the site are not related to on-site contamination. Following the remediation of VOCs in groundwater at the site, an area wide soil gas study may be appropriate to establish VOC background levels in the vicinity of the site.

The exposure assessment also identified potential exposure to commercial workers and residents in adjacent structures, through migrating vapors off-gassing from impacted groundwater. This condition is expected to improve significantly in response to the removal of source areas and the remediation of groundwater within the boundaries of the site.

Summary of the Remedy

The RAWP proposed for the site consists of the removal of liquid phase hydrocarbons (LPH) and continuation of chemical oxidant injections initiated under the IRM, to further reduce VOC concentrations in groundwater at the site. The IRM also consisted of the excavation and proper off-site disposal of all overburden soils on site, as well as a significant portion of the bedrock to facilitate site redevelopment. The RAWP will be performed in accordance with the methods and specifications as described under the NYSDEC Draft DER-10, Technical Guidance for Site Investigation and Remediation (December, 2002). The overall remedial goal is to meet Track 1 Cleanup Objectives and achieve unrestricted use of the property.

The proposed RAWP includes the following elements:

- 1. The removal of LPH from on-site monitoring wells using vacuum enhanced fluid recovery and hand-bailing;
- The injection of a chemical oxidant solution to remediate the contaminated groundwater beneath the site. Chemical oxidants will be injected throughout the site through pvc injection points previously installed into the bedrock under the IRM program as well as possible additional injection points as needed.
- 3. The BCP site will be covered by a building which includes an unoccupied area (subgrade parking garage) and an occupied area (at grade retail). The occupied area has been constructed with a vapor barrier and sub-slab depressurization system (SSDS) beneath the slab. The unoccupied garage area will be ventilated with a mechanical system to meet the requirements of the NYC Building Code. Activation of the SSDS will be initiated prior to building occupation.;

- 4. 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.
- 5. Remedial activities will be performed at the Site in accordance with this NYSDECapproved RAWP, Health and Safety Plan and Community Air Monitoring Plan.
- 6. If Track 1 is not achieved by the remedy, the recording of an Environmental Easement including institutional controls to prevent future exposure to any remaining residual contamination: and
- 7. Publication of a Site Management Plan for long term management of residual contamination as required by the Environmental Easement.

REMEDIAL ACTION WORK PLAN

1.0 INTRODUCTION

Bedford Park Associates, LLC, Adee & Lester, LP and 3035 White Plains Retail, LLC of Woodmere, NY entered into a Brownfield Cleanup Agreement (BCA) with the New York State Department of Environmental Conservation (NYSDEC) in July, 2007, to investigate and remediate a 0.39-acre property located at 3035 White Plains Road in the Bronx, Bronx County New York. Bedford Park Associates, LLC, Adee & Lester, LP and 3035 White Plains Retail, LLC is a Volunteer in the Brownfield Cleanup Program. A combination residential and commercial use is proposed for the property. When completed, the Site will contain a multi-use building with first floor retail / parking space and residential apartments on subsequent floors. Refer to the Brownfield Cleanup Program (BCP) application for additional details.

This Remedial Action Work Plan (RAWP) summarizes the nature and extent of contamination as determined from data gathered during the Remedial Investigation (RI), performed between October 2 and November 2, 2007. It provides an evaluation of a Track 1 cleanup and other applicable Remedial Action alternatives, their associated costs, and the recommended and preferred remedy. The remedy described in this document is consistent with the procedures defined in 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 does not pose 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 the Bronx, New York City, New York and is identified as Block 4545 and Lots 1001 and 1002 (formerly Lot 14) on the Bronx Borough Tax Map. A United States Geological Survey (USGS) topographical quadrangle map (Figure 1) shows the Site location. The Site is situated on an approximately 0.39-acre area bounded by Lester Street to the north, Adee Avenue to the south, White Plains Road to the east, and residential homes 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 0.39-acre property is fully described in Appendix A – Metes and Bounds.

1.2 CONTEMPLATED REDEVELOPMENT PLAN

The Remedial Action to be performed under the RAWP is intended to make the Site 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 site is to be redeveloped through the new construction of a 74-unit multifamily building with approximately 11,000 square feet of ground floor commercial space. The building will include a basement level and first floor parking garage which will extend through much of the southern half of the property. The parking garage will encompass the areas formerly occupied by the UST, dispenser and service station building. The basement area, which will also include utility, meter and equipment rooms, will be excavated into the shallow bedrock surface to a final depth of 10 feet below grade.

The remainder of the site which be used for first floor commercial space, will have a slab on grade construction which will require excavation for support column footings and approximately the top 1 foot of overburden soil to accommodate the slab.

1.3 DESCRIPTION OF SURROUNDING PROPERTY

The surrounding land use (Figure 2) includes a commercial property to the north, single unit residential homes to the west, commercial retail stores to the east, and a large multi-building residential housing project to the south. The surrounding area is characterized by commercial businesses (mostly retail) along White Plains Road. Residential areas are located behind (east-west) this commercial corridor. An elevated section of the Metro-North Railway passes in front of the property, directly over White Plains Road.

The property is zoned residential R6 with a commercial a C2 overlay and a G2 (gas station) occupancy code. R6 districts are generally for medium density housing, usually between three and five stories. C2 districts are intended to serve both the immediate area around the property and a wider area within the neighborhood. Commercial uses within the classification are limited to the first one or two floors of the building. C2districts are mapped as an overlay to the residential district. A commercial overlay is a small section of a residential district, usually the first and second floors of buildings fronting major avenues, which is zoned for retail and service stores.

The proposed project is compatible with the surrounding land use, and will be in compliance with the current zoning.

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 dated September, 2007 and a Stipulation Letter (EBC) dated September 27, 2007. The investigation was conducted between October 2 and November 2, 2007. The RI was submitted to NYSDEC on October 3, 2008.

2.1 SUMMARY OF REMEDIAL INVESTIGATIONS PERFORMED

2.1.1 Borings

Eighteen soil borings were advanced to evaluate the extent and degree of impact in the identified and suspect source areas and to obtain general soil quality information across the site. At each soil boring location, soil samples were collected continuously in 4-foot intervals using a Geoprobe[™] (model 54DT) sampling system. The Geoprobe[™] uses a direct push hydraulic percussion system to drive and retrieve core samplers.

Soil samples were retrieved using a 2-inch diameter, 4-foot long macro-core sampler with disposable acetate liners. At each soil boring location, sampling was conducted to the bedrock surface. The depth to bedrock at the site varied, with the deepest (approximately 12 feet below grade) encountered in the southern portion of the property and the shallowest (3-4 feet below grade) encountered in the northern portion of the property.

Each soil sample recovered from the soil borings was characterized by an experienced geologist and field screened for the presence of VOCs using a photo-ionization detector (PID). One composite sample was retained from each 4-foot interval, from each of the 18 soil boring locations (total of 27 soil samples). Retained soil samples were submitted for laboratory analysis of VOCs by EPA Method 8260, SVOCs by EPA Method 8270, Target Analyte List (TAL) metals + hexavalent chromium, and Pesticides/PCBs by Method 8081/8082.

2.1.2 Monitoring Wells

In accordance with the RI Work Plan, a total of 12 groundwater monitoring wells (MW1-MW12) were installed from 10/23/07 to 10/29/07 to establish general groundwater quality at the site,

define the extent of VOCs in groundwater and to determine the magnitude and direction of a potential contaminant plume migrating from the site. To achieve this, monitoring wells were located to provide coverage of both the interior area of the site and along the site boundary to assess off-site contamination and plume migration. The monitoring wells were installed through overburden and bedrock materials to an overall depth of approximately 25 feet below the surface, (approximately 10 feet below the water table) using a rotary drill rig equipped with an air hammer.

The monitoring wells were constructed of 2-inch diameter PVC casing and five to ten feet of 0.010 inch slotted PVC well screen. A No.00 morie filter sand was placed in the borehole to within 2 feet above the top of the screen. A 1-foot hydrated bentonite seal was then placed on top of the filter sand and the remainder of the borehole was backfilled to grade. Following installation, each of the wells was surveyed to determine relative casing elevation to the nearest 0.01 ft and horizontal position to the nearest 0.1 ft.

Prior to sampling, a synoptic round of depth-to-groundwater (DTW) measurements was obtained from the wells on 11/2/07 to determine the water table elevation and to calculate the volume of standing water in the well. Approximately 9.5 inches of weathered gasoline was present in well MW8 on this date. The gasoline was removed by hand bailing which was repeated on a weekly basis through 1/10/08 when the wells were lost due to excavation activity. Removed gasoline was stored on-site in a 55 gallon drum. Following the initial removal, only minor amounts (approximately 1/8 inch) of free phase gasoline were reported in MW8.

In an attempt to delineate the free-phase gasoline found in MW8, four additional monitoring wells (MW13-MW16) were installed around MW8 on 11/9/07. These wells were also checked on a weekly basis through 1/10/08 with no free phase gasoline reported during this period.

2.1.3 Samples Collected

2.1.3.1 Soil Samples

A total of 27 soil samples were collected from the 18 soil borings performed at the site. Collected soil samples were as follows:

- Soil boring SB-1 was performed to a depth of 12 feet below grade resulting in the following soil samples: SB1 (0-4ft), SB1 (4-8ft) and SB1 (8-12feet).
- Soil boring SB-2 was performed to a depth of 8 feet below grade resulting in soil samples SB2 (0-4ft), SB2 (4-8ft).
- Soil borings SB-4 and SB-5 were performed to a total depth of 10 feet below grade, resulting in soil samples SB4 (0-4ft), SB5 (0-4ft), SB4 (4-8ft), SB5 (4-8ft), SB4 (8-10ft) and SB5 (8-10ft).
- Soil borings SB3, SB7, SB11 and SB13 were all performed to a final depth of 4 feet below grade, resulting in soil samples SB2 (0-4ft), SB7 (0-4ft), SB11 (0-4ft), and SB13 (0-4ft).
- Soil borings, SB6, SB8, SB9, SB10 and SB12 were all performed to a final depth of 2 feet below grade, resulting in soil samples SB6 (0-2ft), SB8 (0-2ft), SB9 (0-2ft), SB10 (0-2ft) and SB12 (0-2ft).

2.1.3.2 Groundwater Samples

Groundwater samples were obtained from wells MW1 through MW7 and MW9 through MW12 on 11/2/07 and from MW13-MW16 on 12/7/07. Samples were not collected from MW8 due to the presence of free phase gasoline in the well. Prior to sampling one to three volumes of standing water was purged from each well using a submersible pump at a flow rate of approximately 200 ml/minute to minimize the suspension of particulates in the well.

Upon completion of purging, a groundwater sample was obtained using a disposable, dedicated polyethylene bailer and string. Samples were collected in pre-cleaned laboratory supplied glassware, stored in a cooler with ice and submitted to Chemtech Laboratories, Inc. (Chemtech) of Mountainside, NJ, a New York State ELAP certified environmental laboratory (ELAP Certification No. 11376).

Groundwater samples collected from 15 of the 16 wells (all except MW8) were analyzed for VOCs by EPA method 8260. Samples from 11 of the wells (MW1-12, except MW8) were also analyzed for SVOCs by EPA method 8270. Groundwater samples from 5 of the wells (MW1, MW5, MW6, MW10, MW12) were analyzed for target analyte list metals (total/dissolved), hexavalent chromium, and pesticides/PCBs by Method 8081/8082.

2.1.3.3 Soil Gas Samples

To assess the presence of VOCs in soil gas beneath the site, soil vapor samples were collected from 12 vapor implants (SG1-SG12) located throughout the site. Soil vapor samples were collected in accordance with the Final Guidance for Evaluating Soil Vapor Intrusion in the State of New York (NYSDOH 10/06). The vapor implants were installed at the site on 10/2/07 by LVS under the supervision of an EBC environmental geologist. Soil gas samples were collected 10/5/07.

2.1.4 Chemical Analytical Work Performed

Each soil and groundwater sample was placed in pre-cleaned laboratory supplied glassware, and placed in a cooler packed with ice for transport to the laboratory. Sample analysis was provided by Chemtech Laboratories, Inc. of Mountainside, NJ, a New York State ELAP certified environmental laboratory. Soil samples were analyzed for volatile organic compounds (VOCs) by EPA Method 8260, semi-volatile organic compounds (SVOCs) by EPA Method 8270, Target Analyte List (TAL) metals, and pesticides/PCBs by Method 8081/8082. Groundwater samples were analyzed for one or more of the following depending on location: VOCs by EPA Method 8260, SVOCs by EPA Method 8270, TAL metals, and pesticides/PCBs by Method 8081/8082. Ten soil gas samples were collected for analysis for VOCs by EPA method TO-15 from the twelve soil vapor sampling points.

2.1.5 Geophysical Work and Test Pits

A geophysical survey was not conducted for the site because redevelopment plans called for the completion excavation of the site to bedrock.

In addition to the soil boring, monitoring well and soil gas sampling program, 14 test pits were performed under the IRM to verify the depth to the bedrock surface and to collect waste characterization samples as necessary to obtain final approval at the identified disposal facility for the transport of the overburden soils.

2.1.6 Documentation

Maps showing the locations of the soil borings, monitoring wells and soil gas sample collection points are provided in Figures 3 through Figure 5. The results of soil, groundwater and soil gas samples collected during the RI are summarized in Tables 1 through 3. Below is a summary of RI findings.

The results of sampling performed during the RI, identified residual VOCs in overburden soil at two locations which correspond to the two former dispenser islands near the east side of the former gas station property. VOC concentrations in groundwater and/or free phase gasoline were found in close proximity to the former dispensers, identifying both as source areas of gasoline contamination. The greater VOC concentrations reported in both soil and groundwater in the vicinity of the north dispenser; identify it as the more significant of the two source areas. The release scenario in both cases includes a slow release at a dispenser fitting which saturates the surrounding overburden soil to the bedrock surface approximately 2-3 feet below grade. Free-phase gasoline would then migrate along the bedrock surface following joints and cracks in the bedrock until it encounters groundwater at a depth of approximately 15 feet below the surface. Upon contacting the groundwater, a dissolved VOC plume is generated which then migrates from the south dispenser area to the south and east, and from the north dispenser area to the north and east. The direction of groundwater flow is influenced by the potentiometric surface and the orientation of joints and fractures in the bedrock.

During implementation of the IRM, all overburden soil was removed to the bedrock surface. In addition, a large area of bedrock was excavated to a depth of approximately 14 feet for construction of a basement level parking garage within the new building. This effectively removed the source of gasoline VOCs in soil and the historic fill which contained several SVOC compounds and metals above the Track 1 cleanup criteria. A small accumulation (<0.15 ft) of liquid phase hydrocarbons (LPH), in the form of weathered gasoline, was reported in one of nine post excavation IRM monitoring wells (IRM-W7) installed during the chemical oxidant treatment program performed under the IRM. Removal of this LPH and further treatment of groundwater is warranted, to reduce VOC concentrations in on-site groundwater and to limit off-site migration of a VOC plume.

Although elevated VOC concentrations were detected in soil-gas samples collected during the RI, there did not appear to be any correlation to identified source areas. In addition, the distribution of gasoline related VOCs, and the site-wide detections of chlorinated compounds, which were not associated with the site, provides evidence that some of the VOCs detected in soil gas were not related to on-site contamination.

2.2 SIGNIFICANT THREAT

The NYSDEC and NYSDOH have determined that this Site does not pose a significant threat to human health and the environment. Notice of that determination was provided for public review in the form of a fact sheet.

2.3 SITE HISTORY

2.3.1 Past Uses and Ownership

Previous owners and operators of the property at 3035 White Plains Road are shown below. A deed chain title search was performed from 1957 to the present, showing that the Tremarco Corporation owned the property from 1957 to 1973 when Gulf Oil Company became successor in title, as the result of a merger with Tremarco. Gulf transferred the title to 3035 White Plains Realty Corp in 1984. The title was then transferred from 3035 White Plains Realty Corp to G.S Dixon Realty Corp. in 2006, as a zero consideration transaction.

A one-story building was constructed on the property in 1960. The building was used as a service/gasoline retail station from 1960 to approximately 1999, and then as an automotive repair shop and storage yard from 1999 to the present. Based on a business directory search of the address, the earliest business directory listing for the property was in 1961, for "Safeway Service Station" and "Salzano Service Station". The Sanborn map from 1976 identifies the property as Afilling station. The applicant has no past or present affiliation with any of the entities listed below.

Dates	Name	Comments	Contact Info
prior to 3/29/57	Harry Jacobs	Owner from at least 1957	
3/29/57 to	Tremarco	Owner from 3/29/57 until merger with Gulf	
8/73	Corporation	Oil Corp	
8/73 to 8/11/84	Gulf Oil Corp.	Acquired through merger with Tremarco Corp.	
8/11/84 to 5/18/06	3035 White Plains Realty Corp	Purchase from Gulf Oil Corp.	3035 White Plains Road Bronx
5/18/06 to present	Corp.	Transfer of title as a zero consideration transaction and to wind up corporate affairs of grantor.	3035 White Plains Road Bronx

Previous Operators

Date of Listing	Name	Address
2005	Dico G Associates, Inc.	3035 White Plains Road, Bronx
2000	Dico G Associates, Inc.	3035 White Plains Road, Bronx
1993	Dico G Associates, Inc.	3035 White Plains Road, Bronx
1983	Pudix Service Center	3035 White Plains Road, Bronx
1976	L & A Gulf Service Station	3035 White Plains Road, Bronx
1971	G & A Service Station	3035 White Plains Road, Bronx
1965	Safeway Service Station Salzano Service Station	3035 White Plains Road, Bronx
1961	Safeway Service Station Salzano Service Station	3035 White Plains Road, Bronx

2.3.2 Phase I and Phase II Reports

Summary of Phase I Report

A Phase I Environmental Site Assessment (ESA), in accordance with ASTM E 1527, was completed by Environmental Business Consultants (EBC) and documented in a report dated February, 2007. The Phase I ESA revealed that the property was historically used as an automotive service station from at least 1960 to 1999. Since 1999 the site has been used mainly as a truck and automotive repair shop and scrap yard. The records search identified two NYSDEC petroleum spill files, one of which remains open. The site inspection identified numerous environmental concerns including the improper storage of fuel oil, waste oil and automotive fluids. The Phase I revealed the following recognized environmental conditions:

- The site has an open spill file No. 99-00851 related to soil contamination discovered during the removal of twelve 550 gallon USTs in 1999. No documentation regarding endpoint sampling, impacts to groundwater or other media was available.
- The improper storage of hazardous and non-hazardous materials including gasoline, fuel oil, automotive fluids and solvents.
- The outdoor storage of derelict vehicles, auto parts, scrap metals and trash.
- The presence of a surface drain with obvious staining around the structure.
- The historic use of the property as a gas station from 1960 to 1999, and as an automotive repair facility from 1960 to the present.

The Phase I concluded that the site has been impacted by petroleum products associated with underground leaking storage tanks, and that the potential exists for impacts to other areas of the site from the former dispenser system and associated piping, from the improper storage and use of petroleum products, solvents and automotive chemicals, and from the outdoor storage of derelict vehicles, auto parts and scrap metals.

The shallow groundwater and bedrock surface conditions at the site, combined with the documented historic use of the property, increases the potential liability for off-site impact to businesses and residences through the vapor intrusion pathway.

Summary of Preliminary Sampling

On December 29, 2006, gasoline contamination was encountered by a geotechnical drilling company advancing soil borings on the property to determine the foundation requirements of a potential new building for the site. On January 3, 2007, EBC visited the site and directed the geotechnical company to collect new samples from the area in which the contamination was discovered. This area corresponded to the general location of a former dispenser island, according to the property owner. Based on discussions with the property owner, two more borings were installed at locations which corresponded roughly to the location of a second dispenser island and the former UST area. Due to difficulties in accessing these areas from derelict vehicles stored on the property, optimal locations could not be achieved. Strong gasoline odors were noted from the samples collected from the borings near both of the former dispenser islands.

The geotechnical contractor was not equipped to collect groundwater samples, therefore, EBC returned to the site on January 10, 2007 to obtain a groundwater sample near the south property line, in an area where the contractor had previously encountered groundwater. The groundwater sample was collected from a depth of approximately 9 feet using a track-mounted probing machine.

Elevated VOCs were reported in the samples collected from the approximate location of the two former dispenser islands. Total VOCs in these areas exceeded 200,000 ug/kg. VOCs, indicative of gasoline contamination, were reported in all 3 borings. Elevated SVOCs also were reported in all 3 borings.

Fourteen VOC compounds associated with gasoline were found in exceedance of water quality standards. Total VOCs in the sample exceeded 27,000 ug/l. One SVOC parameter, naphthalene at a concentration of 820 ug/l, was also detected in exceedance of its water quality standard (10 ug/L).

Based on the results of soil and groundwater samples collected and the historic use of the site, the preliminary investigation concluded that the site had been impacted by its use as a service station and repair shop over the past 45 years. The report noted that the borings installed were located based on general guidance from the property owner and that they were unlikely to represent worst case conditions. Although the boring near the former UST area had no VOC exceedances, it was not optimally located within the assumed UST location because derelict vehicles were blocking access. Contamination was previously discovered in this area during removal of the USTs and a spill was reported to the DEC (No. 99-00851). There is no documentation that endpoint samples were collected from the excavation and no investigation performed to determine the extent of affected media; accordingly the preliminary report concluded that it is highly likely that significant contamination remains in this area of the property.

Groundwater from a single boring location was found to contain gasoline-related VOCs at levels significantly above water quality standards. As the boring was located close to the south property line, the report concluded that it was highly likely that contaminated groundwater was migrating off of the property. The report noted that the sample was not believed to be hydraulically downgradient of the impacted soil areas, and, therefore, VOC concentrations may be considerably higher in other areas of the site or at off-site locations.

The report noted that other areas of the property may be affected with VOCs, SVOCs and metals due to materials stored at the site and recommended that a comprehensive investigation be performed encompassing all potentially affected media (soil, soil gas, groundwater). The report noted that because shallow soil and groundwater were affected, remedial action, and / or mitigation and control measures may be needed to prevent vapor intrusion, if the property is developed as intended.

2.3.2 Sanborn Maps

All Sanborn Maps available for this Site were reviewed prior to preparation of the RAWP. Sanborn fire insurance maps for the subject property and surrounding area were reviewed for the years 1887, 1908, 1918, 1935, 1950, 1976, 1978, 1981, 1983, 1986, 1989, 1991, 1992, 1993, 1995 and 1996. The review is summarized below. Copies of Sanborn maps are included as Appendix B.

Subject Property Historical Usage

Date	Description
1887	The lot has different dimensions then it does at present due since it predates the widening and straightening of White Plains road. A dwelling is shown on the eastern half of the lot where White Plains Road is today.
1908	The lot is shown in its present dimensions. White Plans Road has been widened and now covers the eastern half of the previous lot. The lot is vacant. Lester Street is shown as a paper road at the north end of the lot. Olinville Avenue is shown as a paper road separating the subject lot from residential properties to the east.
1918	Elliot Ave is shown as a narrower paper road in place of Olinville Avenue.
1935	3 small automobile garages "A" are shown along the east side of Elliot Avenue.
1950	The garage structures are no longer shown.
1976	A building of the present size and dimensions is shown as "filling station"
1978	Unchanged
1979	Unchanged
1981	Unchanged
1983	Unchanged
1986	Unchanged
1989	Unchanged
1991	Unchanged
1992	Unchanged
1993	Unchanged
1995	Unchanged

Information contained in the Sanborn maps indicate that the subject property has been used as a service station since at least 1961.

2.4 GEOLOGICAL CONDITIONS

The bedrock below the site, known as the Manhattan Schist, is overlain by deposits of poorly permeable glacial till. This glacial till consists primarily of sandy silt with weathered bedrock fragments. Based upon observations made in the basement excavation which extended 8-10 feet into the bedrock, fractures and joints in the bedrock generally strike north-south and dip to the

northeast at an angle of 12-18 degrees. However, joints and cleavage plains were also observed which dipped to the south, particularly in the south eastern area of the site.

Soils at the site are classified as Urban Land (Ug), as defined by the United States Department of Agriculture. Urban Land is described as areas where at least 85 percent of the land surface is covered with asphalt, concrete, or other impervious building material. These areas are mostly parking lots, shopping centers, industrial parks, or institutional sites. Most areas are nearly level to gently sloping and range in size from three acres to several hundred acres.

The soil borings performed at the site describe the subsurface material as silty sand and clayey silt with rock fragments and micaceous soil composed almost entirely of severely weathered bedrock. The depth to competent bedrock, as determined by refusal during drilling, ranged from 2-3 feet below surface in the north and eastern part of the site and 10-12 feet in the southern portion of the site.

Ground water at the site exists at approximately 12-15 feet below land surface placing the water table within the bedrock at most of the locations. A geologic section is shown in Figure 6. A groundwater flow map is shown in Figure 7.

As shown in the figure, groundwater flow is generally from the central portion of the site (vicinity of the former station building) in a radial pattern to the north, south and east.

The flow patterns and direction may be influenced locally by leaking drainage structures and the orientation of joints and fractures in the bedrock.

2.5 CONTAMINATION CONDITIONS

2.5.1 Conceptual Model of Site Contamination

Although the date(s) and circumstances surrounding the release of gasoline at the site are not known, it can be assumed that it occurred sometime prior to the removal of the tanks and dispensers in 1999. Since the spill numbed assigned to the site was related to excavation of the

tank area, it is assumed that at lease some release of gasoline occurred in this area. Gasoline released from the tanks would be expected to contaminate soil within the tank bed, which was likely excavated into the bedrock surface to a depth of 8 feet. Based on the results of the RI, affected soil was removed at the time of the tank removal. The tank area itself does not appear to be a significant source of the gasoline contamination at the site.

There is evidence of a release at both the north and south dispensers as well. It is anticipated that a spill at these locations would migrate along the contours of the shallow bedrock surface (approximately 2-3 ft below grade) degree entering fractures in the bedrock until it encounters groundwater at a depth of approximately 15 feet below the water table. The release appears to have been much more significant at the north dispenser where VOC concentrations in soil and groundwater were much greater and where free phase gasoline is still present. The volume of free phase gasoline may have been insufficient to reach the water table near the south dispenser and groundwater impacts in this area may be the result of transport water migrating through affected overburden soil

Upon contacting the groundwater, dissolved VOC components would form a plume which would migrate in the direction of groundwater flow. In the vicinity of the south dispenser the flow would be generally to the south and east. In the vicinity of the north dispenser flow would generally be to the north and west. Volatile organic compounds (VOCs) would be expected to off-gas to some degree from affected groundwater where it would migrate toward low pressure areas such as utility conduits or basements. Volatilization would be limited by the occurrence of groundwater only within bedrock fractures.

2.5.2 Description of Areas of Concern

The primary areas of concern are the two former dispenser islands located on the southern half of the property along White Plains Road. Based on the degree of soil and groundwater contamination, the former north dispenser island has been identified as a primary source area with the former south dispenser island contributing to a lesser extent. Overburden soil consisted primarily of historic/urban fill material with slightly elevated levels of metals, SVOCs and pesticides. It must be noted that soil and bedrock excavation performed by the Volunteer under an approved IRM Work Plan was successful in removing all petroleum contaminated soil, and in meeting the unrestricted soil cleanup objectives, as established in Draft 6NYCRR 375-6. There are no known source areas (USTs, contaminated soil, etc.) remaining on the site, however, small accumulations of free-phase gasoline have been reported in one of the on-site monitoring wells (IRM-W7) following implementation of the IRM and a small amount of free-phase gasoline remained in one on-site well (MW8) prior to implementation of the IRM.

Contaminated media documented at the site includes soil, groundwater and soil gas which was found to be contaminated with VOCs during the RI.

2.5.3 Identification of Standards, Criteria and Guidance

Applicable SCG's for Remedial Actions include the following:

- 29 CFR Part 1910.120 Hazardous Waste Operations and Emergency Response
- 40 CFR Part 144 Underground Injection Control Program
- 10 NYCRR Part 67 Lead
- 12 NYCRR Part 56 Industrial Code Rule 56 (Asbestos)
- 6 NYCRR Part 175 Special Licenses and Permits--Definitions and Uniform Procedures
- 6 NYCRR Part 371 Identification and Listing of Hazardous Wastes (November 1998)
- 6 NYCRR Part 372 Hazardous Waste Manifest System and Related Standards for Generators, Transporters and Facilities (November 1998)
- 6 NYCRR Subpart 373-4 Facility Standards for the Collection of Household Hazardous Waste and Hazardous Waste from Conditionally Exempt Small Quantity Generators (November 1998)
- 6 NYCRR Subpart 374-1 Standards for the Management of Specific Hazardous Wastes and Specific Types of Hazardous Waste Management Facilities (November 1998)
- 6 NYCRR Subpart 374-3 Standards for Universal Waste (November 1998)
- 6 NYCRR Part 375 Inactive Hazardous Waste Disposal Sites (as amended January 1998)
- 6 NYCRR Part 376 Land Disposal Restrictions

- 6 NYCRR Part 608 Use and Protection of Waters
- 6 NYCRR Parts 700-706 Water Quality Standards (June 1998)
- 6 NYCRR Part 750 through 758 Implementation of NPDES Program in NYS ("SPDES Regulations")
- Technical Guidance for Screening Contaminated Sediments (January 1999)
- TAGM 4013 Emergency Hazardous Waste Drum Removal/ Surficial Cleanup Procedures (March 1996)
- TAGM 4046 Determination of Soil Cleanup Objectives and Cleanup Levels (January 1994)
- TAGM 4059 Making Changes To Selected Remedies (May 1998)
- STARS #1 Petroleum-Contaminated Soil Guidance Policy
- TAGM 3028 "Contained In" Criteria for Environmental Media: Soil Action Levels (August 1997)
- Citizen Participation in New York's Hazardous Waste Site Remediation Program: A Guidebook (June 1998)
- TOGS 1.1.1 Ambient Water Quality Standards & Guidance Values and Groundwater Effluent Limitations
- TOGS 2.1.2 Underground Injection/Recirculation (UIR) at Groundwater Remediation Sites
- Air Guide 1 Guidelines for the Control of Toxic Ambient Air Contaminants
- OSWER Directive 9200.4-17 Use of Monitored Natural Attenuation at Superfund, RCRA Corrective Action, and Underground Storage Tank Sites (November 1997)

2.5.4 Soil/Fill Contamination

A total of 27 soil samples from 18 soil borings (SB1-SB18) were collected during the RI to evaluate the extent and degree of impact in the identified and suspect source areas and to obtain general soil quality information in overburden soils at the site.

The soil boring program identified three adjacent locations with gasoline contamination in overburden soil. All three locations correlated to the former dispenser pads near the eastern edge of the property. The depth to bedrock in this area was 2 to 4 feet below surface. Gasoline

contamination was highest near the north dispenser pad. No gasoline contamination was reported in samples collected from borings within, and adjacent to, the former UST area.

Overburden soils were comprised of urban fill which contained elevated levels of metals, SVOCs and/or pesticides.

2.5.4.1 Summary of Soil/Fill Data

Soil sample results from the RI are summarized in Table 1A-D. Further information on soil sample collection, handling and analysis can be found in the RI Report (EBC 9/08).

2.5.4.2 Comparison of Soil/Fill with SCGs

Table 4 shows exceedances from Track 1 Unrestricted SCOs for all overburden soil at the Site. Figure 8 is a spider map that shows the location and summarizes exceedances from Track 1 Unrestricted SCOs for all overburden soil.

2.5.5 Liquid Phase Hydrocarbons

LPH was initially reported in MW8 during the Remedial Investigation with approximately 9.5 inches of weathered gasoline was present in well MW8 on 11/2/07. The gasoline was removed by hand bailing which was repeated on a weekly basis through 1/10/08 when the wells were lost due to excavation activity. Removed gasoline was stored on-site in a 55 gallon drum. Following the initial removal, only minor amounts (approximately 1/8 inch) of free phase gasoline was reported in MW8. In an attempt to delineate the free-phase gasoline found in MW8, four additional monitoring wells (MW13-MW16) were installed around MW8 on 11/9/07. These wells were also checked on a weekly basis through 1/10/08 with no free phase gasoline reported.

LPH was also discovered following the completion of IRM excavation activity, in well IRM-W7 which was installed with eight other wells to monitor the chemical oxidant treatment program. On 10/3/08, 0.15 feet of LPH was measured in well IRM-W7. LPH removal was initiated in IRM-W7 on 12/16/08 using vacuum enhanced fluid recovery (VEFR). Four additional monitoring wells (IRM-W10 through IRM-WM13) were installed on 12/20, 12/21 and 12/23/08

in an effort to delineate the LPH. The wells were checked following installation and no LPH was reported.

2.5.6 On-Site and Off-Site Groundwater Contamination

Groundwater impacts are limited to dissolved VOC components associated with gasoline. Impacted groundwater was primarily encountered in the vicinity of and downgradient of the two former dispenser locations. In the case of the south dispenser location, impacted groundwater continued to migrate from this general area to the south property line. Total VOC concentrations in the vicinity of the former dispenser were reported as 6,616 ug/L (MW3). Total VOC concentrations at the south property line ranged from 1,886 to 4,661 ug/L (MW2, MW1 respectively). Based on the southerly groundwater flow direction in this area of the site, it is probable that a VOC plume of this magnitude is migrating south along the southern property line.

Groundwater in the vicinity of the former north dispenser pad has a greater degree of impact with concentrations as high as 13,722 ug/L in well MW15 and free-phase gasoline at well MW8, northwest of the former dispenser. High VOC concentrations were also present in MW5 along the east property line. Impacted groundwater from this general area is expected to be migrating northeast in response to the potentiometric surface, however, the actual direction of plume migration will likely be influenced by the orientation of fractures within the bedrock. However, the VOC concentration in groundwater from well MW5 (12,045 ug/L), indicates that a VOC plume of this magnitude is migrating off-site along the central portion of the east property line.

2.5.6.1 Summary of Groundwater Data

The results of groundwater samples collected during the RI are summarized in Table 2A-D. Further information on groundwater sample collection, handling and analysis can be found in the RI Report (EBC 9/08).

2.5.6.2 Comparison of Groundwater with SCGs

A table that indicates exceedances from GA groundwater standards in monitor wells prior to the remedy is shown in Table 5. A spider map that indicates the location(s) of and summarizes

exceedances from GA groundwater standards prior to the remedy is shown in Figure 9.

2.5.7 On-Site and Off-Site Soil Vapor Contamination

Total VOC concentrations detected in soil-gas samples collected during the RI were highest (>2,000 ug/m3) in SG10, SG12 and SG4 respectively. Soil gas concentrations at the remainder of the locations were fairly consistent at less than 1,000 ug/m3. The highest total VOC concentration which was reported at location SG10 was largely made up of methylene chloride and other non-petroleum VOCs. When looking at gasoline related compounds, the highest concentrations were limited to SG4 and SG12, with concentrations at SG12 significantly higher. Although SG4 is located near the identified secondary source area (south dispenser pad), SG12 is located in the far northwest corner the furthest away from the affected area at the site. The distribution of gasoline related VOCs, and the site-wide detections of chlorinated compounds, which were not detected in any of the on-site soil or groundwater samples indicates that at least some of the VOCs detected were not related to on-site contamination.

2.5.7.1 Summary of Soil Vapor Data

A table of soil vapor data collected prior to the remedy is shown in Table 3. A spider map that indicates the location(s) of and summarizes soil vapor data prior to the remedy is shown in Figure 10. Further information on soil gas sample collection, handling and analysis can be found in the RI Report (EBC 9/08).

2.6 ENVIRONMENTAL AND PUBLIC HEALTH ASSESSMENTS

2.6.1 Qualitative Human Health Exposure Assessment

The objective of the qualitative exposure assessment under the BCP is to identify potential receptors to the contaminants of concern (COC) that are present at, or migrating from, the site. The identification of exposure pathways describes the route that the COC takes to travel from the source to the receptor. An identified pathway indicates that the potential for exposure exists; it does not imply that exposures actually occur. An exposure pathway has five elements; a contaminant source, release and transport mechanisms, point of exposure, route of exposure and a receptor population.

The potential exposure pathways identified below, represent both current and future exposure scenarios.

Contaminant Source

The source of the VOCs detected in soil and groundwater at the site are generally related to the historic use of the property as a gasoline service station and automobile/truck repair shop. Two source areas have been identified which are related to releases at the former two dispenser islands. Based on the degree of soil and groundwater contamination, the former north dispenser island has been identified as a primary source area with the former south dispenser island contributing to a lesser extent. These two locations serve as the identified source areas for the purpose of evaluating on and off-site exposure.

It must be noted that soil and bedrock excavation performed by the Volunteer under an approved IRM Work Plan was successful in removing all petroleum contaminated soil, and in meeting the unrestricted soil cleanup objectives, as established in Draft 6NYCRR 375-6. LPH remains in one of the monitoring wells, however.

Contaminant Release and Transport Mechanism

Since an IRM was successfully completed which removed all overburden soil from the site to the bedrock surface, impacted soil is no longer contributing contaminant mass to groundwater or transferring VOCs to the vapor phase through volatilization.

However, VOCs present in on-site groundwater may volatilize to air resulting in elevated VOC concentrations in soil gas both on-site and off-site. In addition, impacted groundwater is currently migrating off-site which could result in VOC volatilization closer to potential off-site receptors.

An IRM was implemented to reduce dissolved VOCs in groundwater through chemical oxidant treatment. This program will continue under this Remedial Work Plan to achieve significant reductions in dissolved VOCs on-site eliminate future off-site migration.

Point of Exposure, Route of Exposure and Potentially Exposed Populations

Potential On-Site Exposures: Remediation workers and construction workers engaged in the

excavation of impacted and non-impacted soil at the site may be exposed to VOCs through several routes. Workers excavating impacted soil may be exposed to VOCs through inhalation, ingestion and dermal contact. Workers excavating non-impacted soil may be exposed to VOCs in soil gas through inhalation. A site specific Health and Safety Plan has been developed to identify and minimize the potential hazards to on-site workers.

Under a future scenario, commercial workers and residents within the proposed building may be exposed to vapor intrusion if remediation of the groundwater is not completed, or if preventive measures are not incorporated into the new building design. This potential route of exposure will be reduced as VOC concentrations in groundwater decrease in response to the chemical oxidant injection program.

<u>Potential Off-Site Exposures:</u> The entire area is serviced by the New York City Water System which distributes water from the Croton Reservoir system. Since there are no public or private potable supply wells in the area, exposure from contact with tap water is not a concern. Off-site exposure is therefore limited to vapor intrusion from VOCs off-gassing from impacted groundwater leaving the site. The potentially exposed population would include residents in adjacent buildings and commercial workers in retail businesses.

Off-site exposure from VOCs in groundwater to indoor air assumes that VOCs present in groundwater at the site are migrating off-site with minimal attenuation, transferring to the vapor phase and entering commercial or residential buildings through pores and cracks in the foundation to the breathing zoning. Utility workers excavating conduits and service lines beneath the sidewalk and streets could also be potentially exposed to vapor migrating along the backfill trenches associated with the installation of these lines. This potential route of exposure will be reduced as VOC concentrations in groundwater decrease in response to the chemical oxidant injection program.

2.6.2 Fish & Wildlife Remedial Impact Analysis

Potential Off-Site Environmental Impacts: Since VOCs in shallow groundwater may be leaving the site in both a southerly and easterly direction, the groundwater to surface water discharge pathway was evaluated. Based on topographic maps of the area, there are no surface water bodies within 1 mile downgradient of the site. The nearest body of water downgradient of the site is Eastchester Bay which is approximately 12,500 feet to the east. The nearest body of water is the Bronx River, which is located approximately 1,575 feet west (upgradient) of the site. There are no expected impacts to surface water environments since there are no surface water bodies within 1 mile downgradient of the site.

2.7 PREVIOUS INTERIM REMEDIAL MEASURES

The IRM approved and implemented for the site included the removal and proper disposal of all overburden soil to the bedrock surface followed by injections of a chemical oxidant solution at specified locations throughout the site as needed to remediate groundwater. The excavation of overburden soil began on December 6, 2007 and was largely completed by April 8, 2008. Oxidant injections were performed on two occasions July 20, 2008 and on September 14, 2008. Although significant improvements have been achieved in groundwater quality in response to the oxidant treatment, further treatment is warranted. Additional information regarding the IRM can be found in the Final Engineering Report (12/08)

The IRM consisted of the following remedial elements:

- Chemical Inventory and Hydraulic Lift Removal. Prior to the demolition of the building, an interior inspection was performed to determine the status of chemical inventory and hydraulic lifting equipment. Following the inspection the hydraulic system reservoir tank was emptied and the system dismantled and removed from the site. Petroleum products, and automotive chemicals were removed from the site by American Environmental Assessment, inc., a licensed Hazardous Waste contractor, and properly disposed of (or recycled) as non-hazardous or hazardous materials;
- 2. Investigation and removal of drainage structures, surface drains and related piping;
- Excavation of all overburden soil to the bedrock surface to the property line. All excavated soil was transported and disposed of in accordance with all local, State and Federal laws and requirements. All exported material will be taken to facilities licensed to accept this material in full compliance with all Federal, State and local laws;

- 4. Screening for indications of contamination (by visual means, odor, and monitoring with PID) of all excavated soil during intrusive Site work;
- 5. The removal of subsurface piping related to the underground storage tank system;
- 6. 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;
- Importation of materials to be used for backfill in compliance in compliance with a) Part 375.6 Soil Cleanup Objectives for Unrestricted use and b) all federal, state ad local rules and regulations for handling and transport of materials;
- 8. The injection of a chemical oxidant solution to remediate the contaminated groundwater beneath the site. Chemical oxidants were injected throughout the site via pvc injection points installed into the bedrock. Two oxidant injections have been performed to date.

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 ground water aquifer, to the extent practicable, to pre-disposal/pre-release conditions.
- Prevent the discharge of contaminants to surface water.
- Remove the source of ground or surface water 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 or surface water contamination.
- Prevent impacts to biota due to ingestion/direct contact with contaminated soil that would cause toxicity or bioaccumulation through the terrestrial food chain.

3.0 DESCRIPTION OF REMEDIAL ACTION PLAN

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. The remedy selection process begins by establishing remedial action objectives (RAOs) for media in which chemical constituents were found in exceedance of NYSDEC standards, criteria and guidance values (SCGs). A remedy is then developed based on the following nine criteria:

- 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.

3.2 STANDARDS, CRITERIA AND GUIDANCE (SCG)

A criterion for remedy selection is evaluation for conformance with SCGs that are applicable, relevant and appropriate. Principal SCGs that are applicable, relevant and appropriate for evaluating the alternatives for remediation of this BCP site include the following:

- 6 NYCRR Part 375-6 Soil Cleanup Objectives
- New York State Groundwater Quality Standards 6 NYCRR Part 703;
- NYSDEC Ambient Water Quality Standards and Guidance Values TOGS 1.1.1;
- NYSDEC Draft DER-10 Technical Guidance for Site Investigation and Remediation -December 2002 (or later version if available);
- NYSDEC Draft Brownfield Cleanup Program Guide May 2004;

- New York State Department of Health (NYSDOH) Generic Community Air Monitoring Plan
- NYS Waste Transporter Permits 6 NYCRR Part 364;
- NYS Solid Waste Management Requirements 6 NYCRR Part 360 and Part 364.

Additional regulations and guidance are applicable, relevant, and appropriate to the remedial alternatives and will be complied in connection with implementation of the remedial program; however, the list above is intended to represent the principal SCGs which should be considered in evaluating the remedial alternatives for the BCP site.

Conformance with the appropriate standards for remediation of contaminated soil is an important criterion in evaluating the remedial alternatives for the BCP site. Presently, in New York State 6 NYCRR Part 375 establishes the primary SCGs associated with remediation of contaminated soil at sites which are in the BCP. If proposing remediation pursuant to a Track other than Track 1 (Unrestricted Use), 6 NYCRR Part 375 requires evaluation of at least one remedial alternative pursuant to Track I (Unrestricted Use) and one other alternative developed by the applicant for the proposed use of the BCP site. The remedial alternatives presented in Section 3.3 of this work plan have been prepared in conformance with this requirement.

3.3 SELECTION OF THE PREFERRED REMEDY

The remedy recommended for the site consists of the removal and proper disposal of all overburden soil to the bedrock surface followed by removal of residual LPH through vacuum enhanced fluid recovery (VEFR) and injections of a chemical oxidant solution at specified locations throughout the site as may be needed to remediate groundwater. Chemical oxidant injection is intended to reduce the VOCs in high concentration areas, and thereby accelerate the restoration of impacted on and off-site groundwater through natural attenuation processes. Soil excavation to the bedrock surface and two rounds of chemical oxidant injections were previously completed under the IRM.

Overall Protection Of Public Health And The Environment

The recommended remedial action achieves protection of the public health and the environment by remediating the high concentration of VOCs in soil and groundwater which will eliminate or significantly reduce the potential for vapor intrusion in the new building and prevent the continued off-site migration of impacted groundwater. The remedy will meet all of the RAOs established for soil and groundwater at the site.

Compliance with Standards, Criteria and Guidance

The recommended remedial action meets the objectives of the RAOs by removing the potential for human and environmental exposures to chemical constituents above SCGs in soil and groundwater. The proposed IRM will effectively remove the source areas and all overburden soils resulting in compliance with SCGs for soils. Removal of the source area and the chemical oxidation treatment program will result in significant improvement of groundwater quality with respect to SCGs.

Long-term Effectiveness and Permanence

The remedy provides long term effectiveness and permanence by removing effected media from the site (soil) and by removing contaminant mass from the groundwater through the oxidant treatment program. Following the chemical oxidation treatment, monitoring of groundwater will continue to verify the improvement in groundwater quality.

Reduction of Toxicity, Mobility and Volume

The recommended action will reduce the toxicity, mobility and volume of the chemical constituents by removing the source area of contamination and effectively treating the high concentration areas of VOCs in groundwater.

Short-term Effectiveness

Potential short-term adverse impacts include exposure to VOCs and oxidants to remediation workers during the removal of affected soils and the injection of chemical oxidants. A health and safety plan has been prepared (Appendix C) to protect on-site remediation workers from exposure during remedy implementation.

Implementability

The selected remedy is based on simple, commonly-used techniques and processes. No issues related to the design, availability or implementation of the selected remedy is anticipated.

Cost

The selected remedy is a cost-effective approach to meet the RAOs of the site and is expected to complete the remedial process for this site. The estimated cost of the proposed remedial action is \$ 475,810.

Community Acceptance

Public participation plays a large role in the BCP process. A fact sheet has been prepared and sent out to all interested parties as identified in the site contact list. This document will be placed in a local repository (NYSDEC Region 2 office and the Allerton Branch of the NYC Public Library,) and made available for public review and comment for a period of 45 days. Since the IRM Fact sheet and previous notices did not encounter community opposition, issues with respect to community acceptance are not anticipated.

Land Use

The proposed IRM will not prevent or otherwise interfere with the intended and planned future use of the site.

3.3.1 Zoning

The proposed remedy will comply with current zoning.

3.3.2 Applicable Comprehensive Community Master Plans Or Land Use Plans

The proposed remedy will comply with applicable land use plans.

3.3.3 Surrounding Property Uses

The proposed remedy will not interfere with surrounding property uses and considers the short term affects to neighboring residences.

3.3.4 Citizen Participation

The proposed remedy will be placed in the document repository and a fact sheet notification will be sent to all parties identified on the site contact list.

3.3.5 Environmental Justice Concerns

No Environmental Justice concerns have been identified for the proposed remedy.

3.3.6 Land use designations

The proposed remedy will have is consistent with land-use designations.

3.3.7 Population growth patterns

The proposed remedy will not negatively affect on population growth patters.

3.3.8 Accessibility to existing infrastructure

The project site is accessible to existing infrastructure and the proposed remedy will not alter accessibility to existing infrastructure.

3.3.9 Proximity to cultural resources

The proposed remedy will not negatively impact cultural resources

3.3.10 Proximity to natural resources

The proposed remedy will improve the local environment and will not negatively impact affect natural resources.

3.3.11 Off-Site groundwater impacts

The proposed IRM will improve off-site groundwater impacts by removing the source of groundwater contamination and by preventing impacted groundwater from leaving the site. The proposed IRM will not affect natural resources other than to improve the quality of groundwater on a local basis.

3.3.12 Proximity to floodplains

The site is not within a floodplain.

3.3.13 Geography and Geology of the Site

The proposed IRM considers the geology and geography of the site.

3.3.14 Current Institutional Controls

There are no institutional controls presently in place ant the site.

3.4 SUMMARY OF SELECTED REMEDIAL ACTIONS

The remedy recommended for the site consists of the removal and proper disposal of all overburden soil to the bedrock surface followed by the removal of LPH from on-site monitoring wells and injections of a chemical oxidant solution at specified locations throughout the site as may be needed to remediate groundwater. The remedy selected for the site includes the following remedial elements.

- Chemical Inventory and Hydraulic Lift Removal. Prior to the demolition of the building, an interior inspection will be performed to determine the status of chemical inventory and hydraulic lifting equipment. If present, the hydraulic system reservoir tank will be emptied and the system will be dismantled and removed from the site. Petroleum products, and automotive chemicals, if present, will be removed from the site by a licensed Hazardous Waste Transport contractor and properly disposed of (or recycled) as non-hazardous or hazardous materials;
- 2. Investigation and removal of drainage structures, surface drains and related piping;
- 3. Excavation of all overburden soil to the bedrock surface to the property line. All excavated soil will be transported and disposed of in accordance with all local, State and Federal laws and requirements. All exported material will be taken to facilities licensed to accept this material in full compliance with all Federal, State and local laws;
- 4. Screening for indications of contamination (by visual means, odor, and monitoring with PID) of all excavated soil during any intrusive Site work;
- 5. The removal of subsurface piping related to the underground storage tank system;
- 6. 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;
- Collection and analysis of end-point samples to evaluate the performance of the remedy with respect to attainment of Track 1 SCOs;

- Importation of materials to be used for backfill in compliance a) Part 375.6 Soil Cleanup Objectives for Unrestricted use and b) all federal, state ad local rules and regulations for handling and transport of materials;
- 9. The removal of LPH from monitoring wells using VEFR.
- 10. The injection of a chemical oxidant solution to remediate the contaminated groundwater beneath the site. Chemical oxidants will be injected throughout the site through pvc injection points installed into the bedrock;
- 11. All responsibilities associated with the remedy, including permitting requirements and pretreatment requirements, will be addressed in accordance with all applicable Federal, State and local rules and regulations.
- 12. Remedial activities will be performed at the Site in accordance with this NYSDECapproved RAWP, the IRM WP, Health and Safety Plan and Community Air Monitoring Plan.
- 13. If Track 1 is not achieved by the remedy, the recording of an Environmental Easement including institutional controls to prevent future exposure to any remaining residual contamination: and
- 14. Publication of a Site Management Plan for long term management of residual contamination as required by the Environmental Easement.

Items 1-8 were previously completed under an IRM. Items 9 and 10 were initiated under the IRM but have not been completed. Remedial activities previously completed under the IRM were performed in accordance with the NYSDEC-approved IRM Work Plan, Health and Safety Plan and Community Air Monitoring Plan. The continuation of remedial activities will be performed at the Site in accordance with this NYSDEC-approved Remedial Work Plan. All deviations from the RAWP will be promptly reported to NYSDEC for approval and fully explained in the FER.

4.0 **REMEDIAL ACTION PROGRAM**

The objective of this section of the Remedial Action Work Plan, is to present a scope of work which will be approved by NYSDEC and when completely implemented will ready the BCP site for development under the Contemplated Use, which is unrestricted use, consistent with the requirements of the Brownfield Cleanup Program.

4.1 GOVERNING DOCUMENTS

Governing documents and procedures included in the Remedial Action Work Plan include a Site-specific Health and Safety Plan (HASP), a Community Air Monitoring Plan (CAMP), a Citizen Participation Plan, a Soil Management Plan (SoMP) analytical quality assurance/quality control (QA/QC), fluid management procedures, a Storm Water Pollution Prevention Plan SWPPP, and contractors' site operations and quality control procedures. Highlights of these documents and procedures are provided in the following sections.

4.1.1 Health & Safety Plan (HASP)

The Health and Safety Plan (HASP) takes into account the specific hazards inherent to the site and presents the minimum requirements which are to be met by the remediation contractor, EBC and its subcontractors, and other on-site personnel in order to avoid and, if necessary, protect against health and/or safety hazards. A HASP has been prepared for the remedial activity at the site and is provided in Appendix C.

Contractors and subcontractors will have the option of adopting this HASP or developing their own site-specific document. If a contractor or subcontractor chooses to prepare their own HASP, the Project Remedial Engineer will ensure that it meets the minimum requirements as detailed in the site HASP prepared by EBC and must be submitted to and approved by the NYSDEC.

Activities performed under the HASP will comply with applicable parts of OSHA Regulations, primarily 29 CFR Parts 1910 and 1926. Modifications to the HASP may be made with the approval of the Project Remedial Engineer (RE), Site Safety Manager (SSM) and/or Project Manager (PM).

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 Health and Safety Plan and for the appropriate performance of work according to that plan and applicable laws.

The Health and Safety Plan (HASP) and requirements defined in this Remedial Action Work Plan pertain to all remedial and invasive work performed at the Site until the issuance of a Certificate of Completion.

The Site Safety Manager will be Mr. Kevin Brussee. A resume for Mr. Brussee is provided in Appendix D. Confined space entry will comply with all OSHA requirements to address the potential risk posed by combustible and toxic gasses.

4.1.2 Quality Assurance Project Plan (QAPP)

The fundamental QA objective with respect to accuracy, precision, and sensitivity of analysis for laboratory analytical data is to achieve the QC acceptance of the analytical protocol. The accuracy, precision and completeness requirements will be addressed by the laboratory for all data generated.

Collected samples will be appropriately packaged, placed in coolers and shipped via overnight courier or delivered directly to the analytical laboratory by field personnel. Samples will be containerized in appropriate laboratory provided glassware and shipped in plastic coolers. Samples will be preserved through the use of ice or a cold-pak(s) to maintain a temperature of 4° C.

Dedicated disposable sampling materials will be used for both soil and groundwater samples, eliminating the need to prepare field equipment (rinsate) blanks. However, if non-disposable

equipment is used, (stainless steel scoop, etc.) field rinsate blanks will be prepared at the rate of 1 for every eight samples collected.

Decontamination of non-dedicated sampling equipment will consist of the following:

- Gently tap or scrape to remove adhered soil
- Rinse with tap water
- Wash with alconox® detergent solution and scrub
- Rinse with tap water
- Rinse with distilled or deionized water

Prepare field blanks by pouring distilled or deionized water over decontaminated equipment and collecting the water in laboratory provided containers. Trip blanks will accompany samples each time they are transported to the laboratory. Matrix spike and matrix spike duplicates (MS/MSD) will be collected at the rate of one per 20 samples submitted to the laboratory. Laboratory reports will be upgradeable to ASP category B deliverables for use in the preparation of a data usability report (DUSR).

4.1.3 Construction Quality Assurance Plan (CQAP)

All construction work related to the remedy (i.e. soil excavation) was previously completed under an IRM. Monitoring during soil excavation was performed to protect the health of site workers and the surrounding community. A Health and Safety Plan (HASP) and Community Air Monitoring Plan (CAMP) were previously approved for this project. These plans specify the monitoring procedures, action levels, and contingency measures that are required to protect public health. Generally, air monitoring during excavation consisted of real-time measurement of volatile emissions and dust levels.

All intrusive and soil disturbance activities were monitored by an EBC representative who recorded observations in the site field book and kept a photographic log of the daily activities. The installation of chemical oxidant injection wells and oxidant injections was performed under the supervision of EBC personnel under the direction of the Remediation Engineer. LPH

recovery through VEFR events and additional oxidant injections will be performed by a qualified environmental professional under the same level of oversight. EBC's field representative will provide daily updates to the Project Manager and Remediation Engineer who will both make periodic visits to the site as needed to assure construction quality.

4.1.4 Soil/Materials Management Plan (SoMP)

A soil materials management plan was previously approved under the IRM for excavation, handling, storage, transport and disposal of all soils/materials that were disturbed at the Site. The SoMP includes all of the controls that were to be applied to these efforts to assure effective, nuisance-free performance in compliance with all applicable Federal, State and local laws and regulations. The SoMP developed previously developed and implemented for this site is presented in section 5.4 of this RAWP.

4.1.5 Storm-Water Pollution Prevention Plan (SWPPP)

The erosion and sediment controls were performed in conformance with requirements presented in the New York State Guidelines for Urban Erosion and Sediment Control.

Typical measures that were utilized at various stages of the project to limit the potential for erosion and migration of soil included the use of temporary stabilized construction entrances/exits and dust control measures.

4.1.6 Community Air Monitoring Plan (CAMP)

The Community Air Monitoring Plan (CAMP) provides measures for protection for on-site workers and the downwind community (i.e., off-site receptors including residences, businesses, and on-site workers not directly involved in the remedial work) from potential airborne contaminant releases resulting from remedial activities.

The action levels specified require increased monitoring, corrective actions to abate emissions, and/or work shutdown. Additionally, the CAMP helps to confirm that the remedial work did not spread contamination off-site through the air.

The primary concerns for this site are vapors, nuisance odors and dust particulates. A CAMP was previously approved for implementation of the IRM and is provided in Appendix E.

4.1.7 Contractors Site Operations Plan (SOP)

The Remediation 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 Remediation 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.

4.1.8 Community Participation Plan (CPP)

A certification of mailing will be sent by the Volunteer to the NYSDEC project manager following the distribution of all Fact Sheets and notices that includes: (1) certification that the Fact Sheets were mailed, (2) the date they were mailed; (3) a copy of the Fact Sheet, (4) a list of recipients (contact list); and (5) a statement that the repository was inspected on (specific date) and that it contained all of applicable project documents.

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 Community Participation Plan for this project is attached in Appendix F.

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

New York Public Library Allerton Branch

2740 Barnes Avenue Bronx, NY 10467 (718) 881-4240

Hours:

Mon. 10 am to 6 pm Tues. 12 pm to 7 pm Weds. 10 am to 6 pm Fri. 1 pm to 6 pm Sat. 10 am to 6 pm

NYSDEC Region 2 Office

47-40 21st Street Long Island City, NY 11101 Call in advance – (718)482-4909 Hours: Mon. to Fri. 9 a.m. to 4 p.m

4.2 GENERAL REMEDIAL ACTION INFORMATION

4.2.1 Project Organization

The Project Manager for the Remedial Activity will be Mr. Kevin Brussee. Overall responsibility for the BCP project will be Mr. Charles B. Sosik, P.G., P.HG. The Remedial Engineer for the site is Mr. Ariel Czemerinski, P.E. The Owner's representative in charge of the redevelopment project is Mr. Daniel Moritz. The Construction Manager for site preparation and the redevelopment project is Mr. Richard Powers. The owner's representative for budgeting, scheduling and work quality for the redevelopment project is Mr. Robert Scarpa, Jr, RA. Resumes of key personnel involved in the Remedial Action are included in Appendix C.

4.2.2 Remedial Engineer

The Remedial Engineer for this project will be Mr. Ariel Czemerinski, P.E... 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 [Former Dico G Auto and Truck Repair Site (NYSDEC BCA Index No. W2-1108-07-07 Site No. C203039). The Remedial Engineer will certify in the Final Engineering Report that the remedial activities were observed by qualified environmental professionals under his supervision

and that the remediation requirements set forth in the Remedial Action Work Plan 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 Remedial Action Work Plan and will certify compliance in the Final Remediation Report. The Remedial Engineer will provide the certifications listed in Section 10.1 in the Final Engineering Report.

4.2.3 Remedial Action Schedule

The estimated duration of the remedial activity is eight to sixteen weeks. The remedial action includes the continuation of LPH recover and injection of chemical oxidants into the groundwater. Site restoration and the installation of sub-slab depressurization systems will be performed as per the redevelopment plans for the site.

4.2.4 Work Hours

The hours for operation of remedial construction will conform to the New York City Department of Buildings construction code requirements or according to specific variances issued by that agency. DEC will be notified by the Applicant of any variances issued by the Department of Buildings. NYSDEC reserves the right to deny alternate remedial construction hours.

4.2.5 Site Security

The site is currently surrounded by a chain link fences to restrict access by the public. This fence will be properly secured at the end of the day.

4.2.6 Traffic Control

All traffic enters and leaves the Site via the existing gate on White Plains Road. The Volunteer's construction management personnel will direct the arrival or departure of construction vehicles, and provide flag services as needed to maintain safe travel exiting and entering the site from White Plains Road. Site personnel will be required to park on Site or in legal all-day on-street parking spaces, along White Plains Road. Traffic related to on-going remedial activity will be minimal consisting of one to two small vehicles on a weekly or bi-weekly basis.

4.2.7 Contingency Plan

A contingency plan was developed for the IRM to account for the discovery of buried structures or contaminant sources during excavation. Since all excavation work was previously completed under the IRM no new contingency plan will be developed for the remainder of the remedial work which consists of the continuation of the oxidant injection program.

4.2.8 Worker Training and Monitoring

All on-site personnel engaged in remedial or sampling activities must receive adequate sitespecific training in the form of an on-site Health and Safety briefing prior to participating in field work with emphasis on the following:

- Protection of the adjacent community from hazardous vapors and / or dust which may be released during intrusive activities.
- Identification of chemicals known or suspected to be present on-site and the health effects and hazards of those substances.
- The need for vigilance in personnel protection, and the importance of attention to proper use, fit and care of personnel protective equipment.
- Decontamination procedures.
- Site control including work zones, access and security.
- Hazards and protection against heat or cold.
- The proper observance of daily health and safety practices, such as entry and exit of work zones and site. Proper hygiene during lunch, break, etc.

• Emergency procedures to be followed in case of fire, explosion and sudden release of hazardous gases.

4.2.9 Agency Approvals

The Applicant has addressed all SEQRA requirements for this Site. All permits or government approvals required for remedial construction have been, 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 as determined by New York City Department of Planning. 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 6. 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 Remediation 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 NYSDEC BCP Signage

A project sign was erected at the main entrance to the Site prior to the start of IRM activities. The sign indicates that the project is being performed under the New York State Brownfield Cleanup Program. The sign meets the detailed specifications provided by the NYSDEC Project Manager as shown in Appendix G.

4.2.11 Pre-Construction Meeting with NYSDEC

A pre-construction meeting with the Project Manager, Remedial Engineer, Construction Manager, Owner's Representative and the NYSDEC took place on November 26, 2007 prior to the start of major construction activities.

4.2.12 Emergency Contact Information

An emergency contact sheet with names and phone numbers is included in Table 7. That document will define the specific project contacts for use by NYSDEC and NYSDOH in the case of a day or night emergency.

4.2.13 Remedial Action Costs

The total estimated cost of the Remedial Action is \$ 475,810. An itemized and detailed summary of estimated costs for all remedial activity is attached as Appendix H. This will be revised based on actual costs and submitted as an Appendix to the Final Remediation Report.

4.3 SITE PREPARATION

The majority of site preparation work was performed under the IRM. Minimal site preparation will be required under the continuation of remedial activity as detailed under this RAWP.

4.3.1 Mobilization

Mobilization will consist of transporting the vacuum tanker truck to the site during VEFR events and of the delivery of chemical oxidants to the site. The vaccuum truck will be transported to the site on the day of the VEFR event and will leave the site the same day. Mixing and pumping equipment for the chemical oxidant treatment, will be mobilized on the day of oxidant injection and removed from the site at the end of the day.

4.3.2 Erosion and Sedimentation Controls

This section does not apply to actions taken under this RAWP since all overburden soil was removed from the site during the IRM. In addition, the new building's foundation was recently completed and there are no areas of exposed soil or sediment remaining on the property.

4.3.3 Stabilized Construction Entrance(s)

This section does not apply to actions taken under this RAWP since all overburden soil was previously removed under the IRM. In addition, the new building's foundation was recently completed and there are no areas of exposed soil or sediment remaining on the property.

4.3.4 Utility Marker and Easements Layout

The Applicant 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 Applicant and its contractors are solely responsible for safe execution of all invasive and other work performed under this RAWP. The Applicant 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 Remedial Action Work Plan is posed by utilities or easements on the Site.

4.3.5 Sheeting and Shoring

Appropriate management of structural stability of on-Site or off-Site structures during on-Site activities including excavation is the sole responsibility of the Applicant and its contractors. The Applicant and its contractors are solely responsible for safe execution of all invasive and other work performed under this Plan. The Applicant 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 Applicant 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.

4.3.6 Equipment and Material Staging

Mixing and pumping equipment will be mobilized on the day of oxidant injection and removed from the site at the end of the day. Oxidant materials may be delivered to the site prior to the day of injections. These materials will be stored on a single pallet along the east side of the construction trailer and covered with a well-secured tarp.

4.3.7 Decontamination Area

A decontamination area will not be required for remedial activities under this RAWP.

4.3.8 Site Fencing

The site is currently surrounded by a chain link fences to restrict access by the public. This fence will be properly secured at the end of the day and supplemented, as needed, by installing orange safety fencing around open excavations to ensure on-site worker safety.

4.3.9 Demobilization

Demobilization will consist of the restoration of material staging areas and the disposal of materials and/or general refuse in accordance with acceptable rules and regulations.

4.4 REPORTING

All daily and monthly Reports will be included in the Final Engineering Report.

4.4.1 Daily Reports

Daily reports will be submitted to NYSDEC and NYSDOH Project Managers by the end of each day in which remedial activity takes place. Daily reports will include:

- An update of progress made during the reporting day;
- Quantities of fluids recovered during VEFR events;
- Quantities of oxidant material applied at specific injection locations of the Site;
- A summary of any and all complaints with relevant details (names, phone numbers);
- A summary of CAMP finding, including excursions;
- 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. These reports will include a summary of air sampling results, odor and dust problems and corrective actions, and all complaints received from the public.

4.4.2 Monthly Reports

Monthly reports will be submitted to NYSDEC and NYSDOH Project Managers within one week 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 submitted to NYSDEC on CD or other acceptable electronic media and will be sent to NYSDEC's Project Manager (2 copies) and to NYSDOH's Project Manager (1 copy). CD's will have a label and a general file inventory structure that

separates photos into directories and sub-directories according to logical Remedial Action components. A photo log keyed to photo file ID numbers will be prepared to provide explanation for all representative photos. For larger and longer projects, photos should be submitted on a monthly basis or another agreed upon time interval. 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

Complaints from the public regarding nuisance or other Site conditions including noise, odor, truck traffic etc., will be recorded in the Site field book and reported to the NYSDEC in the daily status report.

4.4.5 Deviations from the Remedial Action Work Plan

Minor deviations from the RAWP will be identified in the daily update report and will be noted in the Final Engineering Report. When deviations are reported a brief discussion will be provided which will state the following:

- Reasons for deviating from the approved RAWP;
- Effect of the deviations on overall remedy.

Major changes to the scope of work must be discussed with the NYSDEC and the NYSDOH prior to implementation. If the changes are considered to be significant enough, an addendum to the RAWP Work Plan will be prepared and submitted to NYSDEC / NYSDOH for review.

5.0 REMEDIAL ACTION: MATERIAL REMOVAL FROM SITE

5.1 SOIL CLEANUP OBJECTIVES

The Soil Cleanup Objectives for this Site are listed in Table 1. Soil and materials management on-Site and off-Site has been conducted under an IRM in accordance with the Soil Management Plan as described below.

Table 4 summarizes 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 Figure 8.

5.2 REMEDIAL PERFORMANCE EVALUATION (POST EXCAVATION END-POINT SAMPLING)

Since the excavation was extended to and beyond the bedrock surface, and all overburden soil was removed under the IRM, it was not necessary to collect endpoint samples.

5.2.1 End-Point Sampling Frequency

Does not apply to this RAWP.

5.2.2 Methodology

Does not apply to this RAWP.

5.2.3 Reporting of Results

Does not apply to this RAWP.

5.2.4 QA/QC

Does not apply to this RAWP.

5.2.5 DUSR

Does not apply to this RAWP.

5.2.6 Reporting of End-Point Data in FER

Does not apply to this RAWP.

5.3 ESTIMATED MATERIAL REMOVAL QUANTITIES

All overburden soil was removed from the Site under the approved IRM. No additional soil removal will be performed under this RAWP.

The estimated quantity of overburden soil removed from the Site under the IRM is 3,808 cubic yards (5,712 tons). The estimated quantity of virgin mined stone material imported into the Site for backfill and underlayment is 868 cubic yards (1,302 tons). None of the excavated overburden soils will be reused on Site.

5.4 SOIL/MATERIALS MANAGEMENT PLAN

Does not apply to this RAWP.

5.4.1 Soil Screening Methods

Does not apply to this RAWP.

5.4.2 Stockpile Methods

Does not apply to this RAWP.

5.4.3 Materials Excavation and Load Out

Does not apply to this RAWP.

5.4.4 Materials Transport Off-Site

Does not apply to this RAWP.

5.4.5 Materials Disposal Off-Site

Does not apply to this RAWP.

5.4.6 Materials Reuse On-Site

Does not apply to this RAWP.

5.4.7 Fluids Management

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. Liquids discharged into the New York City sewer system will be addressed through approval by NYCDEP.

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

A demarcation barrier was not required for this site, since all overburden soil was removed to the bedrock surface. In addition, the analysis of bedrock chip samples indicated that all parameters were within Track 1 unrestricted SCOs, with the exception of nickel, chromium and zinc which are components of the bedrock minerology.

5.4.9 Backfill from Off-Site Sources

Does not apply to this RAWP. Under the IRM approximately 868 cubic yards (1,302 tons) of virgin mined stone material was brough onto the Site for backfill and underlayment. No additional backfill will be brought to the site under this RAWP.

5.4.10 Stormwater Pollution Prevention

Does not apply to this RAWP.

5.4.11 Contingency Plan

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 Community Air Monitoring Plan (CAMP) provides measures for protection for on-site workers and the downwind community (i.e., off-site receptors including residences, businesses, and on-site workers not directly involved in the remedial work) from potential airborne contaminant releases resulting from remedial activities at construction sites.

The action levels specified herein require increased monitoring, corrective actions to abate emissions, and/or work shutdown. Additionally, the CAMP helps to confirm that the remedial work did not spread contamination off-site through the air. The primary concerns for this site are odors associated with groundwater purging and sampling.

Exceedances observed in the CAMP will be reported to NYSDEC and NYSDOH Project Managers and included in the Daily Report. The complete CAMP developed for this site is included in Appendix E or this Work Plan.

5.4.13 Odor, Dust and Nuisance Control Plan

The Final Engineering Report 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 [and on-Site, if there are residents or tenants on the property]. 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 Applicant's Remediation Engineer, who is responsible for certifying the Final Engineering Report. All necessary means will be employed to prevent onand off-Site nuisances.

5.4.13.2 Dust Control Plan

Does not apply to this RAWP.

5.4.13.3 Nuisance Control Plan

A plan has been developed and utilized by the contractor for all remedial work and conforms, to NYCDEP noise control standards.

6.0 REMEDIAL ACTION: LIQUID PHASE HYDROCARBON RECOVERY (LPH)

6.1 LPH RECOVERY OBJECTIVES

LPH recovery objectives are to permanently remove LPH from on-site monitoring wells. Currently LPH is limited to a single well, IRM-W7 (Figure 11). Accumulations in this well have ranged from 0.0 to 0.15 ft of LPH.

6.2 LPH REMEDIAL PERFORMANCE EVALUATION

LPH recovery will be accomplished through VEFR events on a monthly basis, as needed, until LPH is no longer present in any of the on-site monitoring wells. VEFR performance will be evaluated by gauging of LPH delineation wells for LPH with an electronic interface tape.

6.2.1 Performance Monitoring Sampling Frequency

Depth to groundwater (DTW) and depth to LPH (DTP) readings will be taken on a weekly basis for the first three months and then on a monthly basis using an electronic interface probe.

6.2.2 Methodology

DTW/DTP readings will be taken from five LPH delineation wells, IRM-W7 and IRM-W10 through IRM-W13 (see Figure 11) using an electronic interface probe. Readings will be obtained from LPH-free wells first (as determined from previous gauging events) and LPH-containing wells last (as determined from previous gauging events) to avoid cross-contamination. The probe is lowered into the well until a product tone is indicated. The tape is then read against the north side of the casing as indicated by a V-notch or mark in the top of the well casing. The DTP measurement is then recorded in a log book to the nearest 0.01 foot. The probe is then lowered further until the water tone is indicated. The DTW reading is then made in the same way as that for the DTP reading. The interface probe is then decontaminated between locations according to the following procedure:

• Alconox detergent rinse

- Tap water rinse
- Distilled water rinse.

6.2.3 Reporting of Results

The results of monthly monitoring well gauging will be summarized in quarterly and annual reports in accordance with the reporting schedule detailed in the SMP.

6.3 LPH RECOVERY PLAN

LPH removal will continue on a monthly basis, as necessary, using vacuum enhanced fluid recovery (VEFR) events. VEFR events will be performed on a monthly basis on all monitoring wells which contain 0.5 inches (.04 foot) or more of LPH. Each event will last from 4 to 6 hour and will be performed using a vacuum tanker truck equipped with a 1 inch diameter pvc "stinger" downpipe. The downpipe will be connected to the 2 inch well casing using a 2 inch by 1 inch "fernco" reducer. The stinger will initially be set no more than 2 feet below the water table. If fluid recovery ceases altogether, the downpipe will be re-set deeper in the well, as needed, to continue recovery.

Depth to water (DTW) and depth to product (DTP) readings will be recorded in a log book both before and after the VEFR event.

VEFR events will continue as needed to remove any remaining LPH. Hand bailing may be used to supplement VEFR recovery between recovery events. The decision to perform VEFR events will be based on monitoring results and will be made in concurrence with the NYSDEC Project Manager.

7.0 REMEDIAL ACTION: CHEMICAL OXIDATION TREATMENT

7.1 GROUNDWATER CLEANUP OBJECTIVES

The groundwater Cleanup Objectives (groundwater standards) for this Site are listed in Table 2. The remediation of groundwater through a chemical oxidant injection program was initiated under an IRM. This effort will be continued under this RAWP as described below.

Table 5 summarizes all groundwater samples that exceed the groundwater standards proposed for this Remedial Action. A spider map that shows all groundwater samples that exceed the groundwater standards proposed for this Remedial Action is shown in Figure 9.

7.2 CHEMICAL OXIDANT TREATMENT REMEDIAL PERFORMANCE EVALUATION (POST TREATMENT SAMPLING)

Groundwater samples will be collected from nine monitoring well (IRM-W1 through W9) locations (Figure 11) within and downgradient of the treatment zone on a quarterly basis. Changes in the sampling frequency or number and location of wells included in the program will only be made in consultation with, or at the direction of, the NYSDEC. The SMP will be modified to reflect changes in sampling plans approved by NYSDEC.

Sample analysis will include the following parameters:

- VOCs by method 8260
- persulfate
- Ferrous Iron

7.2.1 Performance Monitoring Sampling Frequency

Groundwater samples will be collected on a quarterly basis. Subsequent post remedial sampling rounds will be performed following the achievement of remedial goals and the cessation of the chemical oxidant treatment program. Changes in the sampling frequency or number and location of wells included in the program will be only be made in consultation with, or at the direction of, NYSDEC. The SMP will be modified to reflect changes in sampling plans approved by NYSDEC.

7.2.2 Methodology

Groundwater samples will be collected using a peristaltic pump and dedicated polyethylene tubing in accordance with standard low-flow sampling methods as follows:

- Record pump make & model on sampling form.
- Wear appropriate health and safety equipment as outlined in the Health and Safety Plan
- Inspect each well for any damage or evidence of tampering and note condition in field logbook.
- Remove the well cap.
- Lay out plastic sheeting and place the monitoring, purging and sampling equipment on the sheeting.
- To avoid cross-contamination, do not let any downhole equipment touch the ground.
- Measure well headspace with a PID or FID and record the reading in the field logbook.
- A synoptic water level measurement round should be performed (in the shortest possible time) before any purging and sampling activities begin. Measure and record the depth to water using a water level meter or interface probe to the nearest 0.01 ft. Record the measurement in the field logbook. Do not measure the depth to the bottom of the well at this time (to avoid disturbing any sediment that may have accumulated). Obtain depth to bottom information from installation information in the field logbook or soil boring logs.
- Collect samples in order from wells with lowest contaminant concentration to highest concentration.
- Connect the polyethylene tubing to the peristaltic pump and lower the tubing into the well to approximately the middle of the screen. Tubing should be a minimum of 2 feet above the bottom of the well as this may cause mobilization of any sediment present in the bottom of the well.
- Start the pump at its lowest speed setting and slowly increase the speed until discharge occurs. Check water level. Adjust pump speed until there is little or no water level drawdown (less than 0.3 feet). If the minimal drawdown that can be achieved exceeds 0.3 feet but remains stable, continue purging until indicator field parameters stabilize.
- There should be at least 1 foot of water over the end of the tubing so there is no risk of entrapment of air in the sample. Pumping rates should, if needed, and reduced to the

minimum capabilities of the pump to avoid purging the well dry. However, if the recharge rate of the well is very low and the well is purged dry, then wait until the well has recharged to a sufficient level and collect the appropriate volume of sample.

During well purging, monitor indicator field parameters (turbidity,temperature, specific conductance, pH, Eh, DO) every three to five minutes (or less frequently, if appropriate). Note: during the early phase of purging emphasis should be put on minimizing and stabilizing pumping stress, and recording those adjustments. Purging is considered complete and sampling may begin when all the above indicator field parameters have stabilized. Stabilization is considered to be achieved when three consecutive readings, taken at three (3) to five (5) minute intervals, are within the following limits:

turbidity (10% for values greater than 1 NTU),DO (10%),

specific conductance (3%),

temperature (3%),

pH (± 0.1 unit),

ORP/Eh (\pm 10 millivolts).

- All measurements, except turbidity, must be obtained using a flowthrough- cell. Transparent flow-through-cells are preferred, because they allow field personnel to watch for particulate build-up within the cell. This build-up may affect indicator field parameter values measured within the cell and may also cause an underestimation of turbidity values measured after the cell. If the cell needs to be cleaned during purging operations, continue pumping and disconnect cell for cleaning, then reconnect after cleaning and continue monitoring activities.
- Water samples for laboratory analyses must be collected before water has passed through the flow-through-cell (use a by-pass assembly or disconnect cell to obtain sample). VOC samples should be collected first and directly into pre-preserved sample containers. Fill all sample containers by allowing the pump discharge to flow gently down the inside of the container with minimal turbulence.
- Use pre-preserved 40 ml glass vials and non-acidified 100 ml nalgene bottles as provided by the contract laboratory. Fill the VOA vials first, and then fill the remaining containers for persulfate and ferrous iron analysis. Fill each container with sample to just overflowing so that no air bubbles are entrapped inside. Fill all sample bottles by

allowing the pump discharge to flow gently down the inside of the bottle with minimal turbulence. Cap each bottle as it is filled.

- Label the samples, and record them on the chain of custody form. Place immediately into a cooler for shipment and maintain at 4°C.
- Remove the tubing from the well. The polyethylene tubing must either be dedicated to each well or discarded. If dedicated the tubing should be placed in a large plastic garbage bag, sealed, and labeled with the appropriate well identification number.
- Close and lock the well.
- Decontaminate pump either by changing the surgical pump tubing between wells or as follows:
 - 1. Flush the equipment/pump with potable water.
 - 2. Flush with non-phosphate detergent solution. If the solution is recycled, the solution must be changed periodically.
 - 3. Flush with potable or distilled/deionized water to remove all of the detergent solution. If the water is recycled, the water must be changed periodically.
 - 4. Flush with isopropyl alcohol (pesticide grade). If equipment blank data from the previous sampling event show that the level of contaminants is insignificant, then this step may be skipped.
 - 5. Flush with distilled/deionized water. The final water rinse must not be recycled.

Samples will be collected in pre-cleaned laboratory supplied glassware, stored in a cooler with ice and submitted to a New York State ELAP certified environmental laboratory. All purging and sampling data will be recorded on dedicated well sampling forms which will be included in the Final Engineering Report.

7.2.3 Reporting of Results

Sample analysis will be provided by a New York State ELAP certified environmental laboratory Laboratory reports will be upgradable to include ASP category B deliverables for use in the preparation of a data usability summary report (DUSR). The results of quarterly groundwater sampling will be summarized in quarterly and annual reports in accordance with the reporting schedule detailed in the SMP.

7.2.4 QA/QC

The fundamental QA objective with respect to accuracy, precision, and sensitivity of analysis for laboratory analytical data is to achieve the QC acceptance of the analytical protocol. The accuracy, precision and completeness requirements will be addressed by the laboratory for all data generated. Internal validation will be performed by the analytical laboratory on a quarterly basis. In accordance with DER-10, the final round of confirmatory (post remediation) samples will include Category B laboratory data deliverables and a Data Usability Summary Report will be prepared by a party independent from the laboratory performing the analysis.

All sampling and analysis will be performed in accordance with the requirements of this QAPP. Main components of the QAPP include:

- QA/QC Objectives for Data Measurement;
- Sampling Program:
 - Sample containers will be properly washed, decontaminated, and appropriate preservative will be added (if applicable) prior to their use by the analytical laboratory. Containers with preservative will be tagged as such.
 - Sample holding times will be in accordance with the NYSDEC ASP requirements.
 - Field QC samples (e.g., trip blanks, coded field duplicates, and matrix spike/matrix spike duplicates) will be collected as necessary.
- Sample Tracking and Custody;
- Calibration Procedures:
 - All field analytical equipment will be calibrated immediately prior to each day's use. Calibration procedures will conform to manufacturer's standard instructions.
 - The laboratory will follow all calibration procedures and schedules as specified in USEPA SW-846 and subsequent updates that apply to the instruments used for the analytical methods.
- Analytical Procedures;
- Data Reduction and Validation:

- Data validation will be performed in accordance with the USEPA validation guidelines for organic and inorganic data review. Validation will include the following:
 - Verification of 100% of all QC sample results (both qualitative and quantitative);
 - Verification of the identification of 100% of all sample results (both positive hits and non-detects);
 - Recalculation of 10% of all investigative sample results; and
 - A Data Usability Summary Report (DUSR) which will present the results of data validation, including a summary assessment of laboratory data packages, sample preservation and chain of custody procedures, and a summary assessment of precision, accuracy, representativeness, comparability, and completeness for each analytical method will be prepared for the final round of confirmatory (post-remedial) samples.
- Internal QC and Checks;
- QA Performance and System Audits;
- Preventative Maintenance Procedures and Schedules;
- Corrective Action Measures.

Collected samples will be appropriately packaged, placed in coolers and shipped via overnight courier or delivered directly to the analytical laboratory by field personnel. Samples will be containerized in appropriate laboratory provided glassware and shipped in plastic coolers. Samples will be preserved through the use of ice or "cold-paks" to maintain a temperature of 4oC.

Dedicated disposable sampling materials will be used for both soil and groundwater samples, eliminating the need to prepare field equipment (rinsate) blanks. However, if non-disposable equipment is used, (stainless steel scoop, etc.) field rinsate blanks will be prepared at the rate of 1 for every eight samples collected.

Decontamination of non-dedicated sampling equipment will consist of the following:

- 6. Flush the equipment/pump with potable water.
- 7. Flush with non-phosphate detergent solution. If the solution is recycled, the solution must be changed periodically.
- 8. Flush with potable or distilled/deionized water to remove all of the detergent solution. If the water is recycled, the water must be changed periodically.
- 9. Flush with isopropyl alcohol (pesticide grade). If equipment blank data from the previous sampling event show that the level of contaminants is insignificant, then this step may be skipped.
- 10. Flush with distilled/deionized water. The final water rinse must not be recycled.

Field blanks, if used, will be prepared by pouring distilled or deionized water over decontaminated equipment and collecting the water in laboratory provided containers. Trip blanks will accompany samples each time they are transported to the laboratory. Matrix spike and matrix spike duplicates (MS/MSD) will be collected at the rate of one per 20 samples submitted to the laboratory. Laboratory reports will be upgradeable to ASP category B deliverables for use in the preparation of a data usability report (DUSR). In accordance with DER-10, the final round of confirmatory (post remediation) samples will include Category B laboratory data deliverables and a Data Usability Summary Report will be prepared by a party independent from the laboratory performing the analysis.

7.2.5 DUSR

The Data Usability Summary Report (DUSR) provides a thorough evaluation of analytical data without third party data validation. The primary objective of a DUSR is to determine whether or not the data, as presented, meets the site/project specific criteria for data quality and data use. Final post-remedial samples collected under this RAWP will be reviewed and evaluated in accordance with the Guidance for the Development of Data Usability Summary Reports as presented in Appendix 2B of DER-10. The completed DUSR for Final post-remedial samples collected during implementation of this RAWP will be included in the Final Engineering Report.

7.2.6 Reporting of Performance Data in FER

Chemical labs used for all performance monitoring and final post-remedial sampling analysis will be NYSDOH ELAP certified. The FER will provide a tabular and map summary of all performance monitoring and post-remedial sample results and exceedances of water quality standards.

7.3 CHEMICAL OXIDANT TREATMENT PLAN

To continue reductions in the mass of dissolved BTEX and VOCs in groundwater beneath the site and prevent off-site contaminant migration, a chemical oxidant solution (sodium persulfate) will be injected into the groundwater beneath the proposed parking garage and retail space areas.

Under the IRM, fourteen oxidant injection points (Figure 11) were previously installed throughout the basement level parking garage area to target affected groundwater as defined by the results of the Remedial Investigation. The injection points were constructed of 1 inch pvc with a 5 foot 0.020 screened section installed within a 2-inch borehole cored into the bedrock five-feet below the water table. A No. 2 morie gravel pack was placed around the screen to a depth of approximately 1 foot above the screen followed by a 1 foot hydrated bentonite pellet seal. The injection wells were initially protected with a 4 inch pvc sleeve to protect the well during construction activity within the basement.

Sodium persulfate and a chelated iron activator will be delivered to the site as a dry powder and mixed with water on-site to create a 15 to 20 percent solution. The activator will be added at a ratio of 9 lbs of FeEDTA powder to each 55 lb bag of sodium persulfate. The initial injections will consist of approximately 100 gallons of solution per injection point. The need for subsequent injections and the number and location of injection points to be utilized, will be determined following the collection and analysis of performance monitoring samples.

8.0 RESIDUAL CONTAMINATION TO REMAIN ON-SITE

Since residual contaminated groundwater/soil vapor will exist beneath the Site after the remedy is complete, Engineering and Institutional Controls (ECs and ICs) may be 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 Site Management Plan (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 the following short-term (<5ys) EC systems:

- 1. Continuation of LPH recovery;
- 2. Continued chemical oxidant treatment of groundwater; and,
- 3. A sub-slab depressurization system and vapor barrier beneath the occupied areas (retail area) of the new building.

The FER will report residual contamination on the Site in tabular and map form. This will include presentation of exceedances of Track 1 objectives.

9.0 ENGINEERING CONTROLS: TREATMENT SYSTEMS

Remedial actions planned or completed for the site under the IRM and the RAWP include the excavation of all impacted and overburden soil, removal of LPH, the treatment of VOCs in groundwater through a chemical oxidant injection program and the installation of a sub-slab depressurization system and vapor barrier. Following the completion of the remedial activities, an FER and SMP will be prepared which will assess VOCs in soil gas and the need for a long term groundwater monitoring program and / or activation of vapor mitigation measures.

9.1 ENGINEERING CONTROL SYSTEMS: LPH RECOVERY

LPH removal will continue on a monthly basis, as necessary, using vacuum enhanced fluid recovery (VEFR) events. VEFR events will be performed on a monthly basis on all monitoring wells which contain 0.5 inches (0.04 feet) or more of LPH. Each event will last from 4 to 6 hour and will be performed using a vacuum tanker truck equipped with a 1 inch diameter pvc "stinger" downpipe. The downpipe will be connected to the 2 inch well casing using a 2 inch by 1 inch "fernco" reducer. The stinger will initially be set no more than 2 feet below the water table. If fluid recovery ceases altogether, the downpipe will be re-set deeper in the well, as needed, to continue recovery.

Depth to water (DTW) and depth to product (DTP) readings will be recorded in a log book both before and after the VEFR event.

VEFR events will continue as needed to remove any remaining LPH. Hand bailing may be used to supplement VEFR recovery between recovery events. The decision to perform VEFR events will be based on monitoring results and will be made in concurrence with the NYSDEC Project Manager.

9.2 ENGINEERING CONTROL SYSTEMS: CHEMICAL OXIDATION

Following excavation of soil down to the bedrock throughout the site and the excavation of bedrock to the final level in the parking garage area, a chemical oxidant injection program was

initiated under an IRM to reduce VOC concentrations in groundwater. This program will continue as needed until remedial goals have been met.

This program consists of the injection of a chemical oxidant solution in up to fourteen injection wells (see Figure 11) located within the unoccupied (garage area), as needed to address affected groundwater as identified during the Remedial Investigation. Chemical oxidant injection is intended to significantly reduce the VOCs in the high concentration areas, and thereby accelerate the improvements in groundwater quality.

The oxidant injections will consist of a solution of sodium persulfate and chelated iron activator. Both components will be delivered to the site as a dry powder and mixed then with water on-site to create a 10 to 30 percent solution. The activator will initially be added at a ratio of 9 lbs of FeEDTA powder to each 55 lb bag of sodium persulfate. The injections will consist of approximately 100 gallons of solution per injection point.

The volume of solution and the number and location of injections will be based on the results of performance sampling and modified to concentrate on remaining areas with VOC concentrations above cleanup goals. The ratio of FeEDTA to sodium persulfate will be modified in response to the results of the performance sampling. If laboratory analysis shows persulfate concentrations above 250 mg/L and Fe²⁺ concentrations below 100 mg/L, the FeEDTA will be increased to 15 pounds per 55 pounds of sodium persulfate.

Chemical oxidant treatment will continue as needed to achieve further significant reduction of VOCs in groundwater at the site. The decision to perform subsequent oxidant applications will be based on performance sampling results and will be made in concurrence with the NYSDEC project manager.

Volume and density application rates have been based on the manufacturer's recommendations and the conditions of the site. All drawings, diagrams, calculation and manufacturer's documentation for the chemical oxidation treatment program are presented in the FER.

9.3 ENGINEERING CONTROL SYSTEMS: SUB-SLAB DEPRESSURIZATION SYSTEM (SSDS)

An active SSD system will be required beneath the completed retail section of the building as a temporary preventive measure against vapor intrusion, since improvement in groundwater quality is expected to occur at the site over time. An SSD system will not be required beneath the parking garage since this area must be ventilated to remove vehicle fumes in accordance with the NYC Building Code.

An SSD system and vapor barrier were designed and incorporated into the new building plans as a preventive measure for the retail space in the new building. Design details of the SSD system beneath the 11,000 square foot commercial area on the ground floor will consist of three separate zones. Each zone will provide coverage of up to 3,666 sf of slab area. This is consistent with USEPA sub-slab depressurization design specifications which recommend a separate vent loop for every 4,000 sf of slab area.

The horizontal vent line is constructed of a continuous loop of perforated 4-inch HDPE smooth interior pipe. In each zone the horizontal pipe will extend to an adjacent utility chase-way where it will be piped individually to the roof via a 6-inch schedule 40 pvc line. Fill material around the horizontal vent piping is virgin-mined, ¹/₂ inch to ³/₄ inch gravel. Detailed specifications of the SSD system are provided in **Figures 12 and 13**.

The SSD system will be operated and tested prior to placing the new building in service. The specifications on sub-slab soil gas testing will be detailed in a Site Management Plan.

9.4 CRITERIA FOR COMPLETION OF REMEDIATION/TERMINATION OF REMEDIAL SYSTEMS

9.4.1 LPH Recovery Program

VEFR events will continue on a monthly basis, as needed, to remove any remaining LPH. Hand bailing may be used to supplement VEFR recovery between recovery events. VEFR recovery events will not be discontinued without written approval by NYSDEC and NYSDOH. A proposal to discontinue the treatment may be submitted by the property owner after residual LPH is no longer present in any of the monitoring wells. This assessment will be based on the results of gauging the monitoring wells for LPH with an electronic interface tape. LPH delineation wells will remain in place and functional until permission to discontinue their use is granted in writing by NYSDEC and NYSDOH. These sampling/monitoring activities will adhere to stipulations outlined in the Monitoring Plan section of the SMP.

9.4.2 Chemical Oxidant Treatment Program

Chemical oxidant treatment will not be discontinued without written approval by NYSDEC and NYSDOH. A proposal to discontinue the treatment may be submitted by the property owner after residual contamination concentrations in groundwater: (1) are cleaned up to levels below NYSDEC standards, or (2) have become asymptotic over an extended period of time as mandated by the NYSDEC and the NYSDOH. This assessment will be based in part on post-remediation contaminant levels in groundwater collected from monitoring wells located throughout the Site. Injection and monitoring wells will remain in place and functional until permission to discontinue their use is granted in writing by NYSDEC and NYSDOH. These sampling/monitoring activities will adhere to stipulations outlined in the Monitoring Plan section of the SMP.

9.4.3 Sub-slab Depressurization System [SSDS]

The active SSDS system is required beneath the retail area of the building, it will not be discontinued without written approval by NYSDEC and NYSDOH. A proposal to discontinue the active SSDS system may be submitted by the property owner based on confirmatory data that justifies such request. Systems will remain in place and operational until permission to discontinue use is granted in writing by NYSDEC and NYSDOH.

10.0 INSTITUTIONAL CONTROLS

Since the intent of this project is to achieve Track 1 Cleanup criteria, institutional controls are not expected to be part of the final remedy for the site.

However, if after the remedy is complete, the Site will have residual contamination remaining in place. Engineering Controls (ECs) may be 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 a Site Management Plan. These elements are described in this Section. A Site-specific Environmental Easement will be recorded with Bronx 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 Engineering and Institutional Controls (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 Site Management Plan (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 grantor's successors 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. If the Site will have residual contamination after completion of all Remedial Actions than an Environmental Easement is required. As part of this remedy, an Environmental Easement approved by NYSDEC will be filed and recorded with the Bronx County Clerk. The Environmental Easement will be submitted as part of the Final Engineering Report.

The Environmental Easement renders the Site a Controlled Property. The Environmental Easement must be recorded with the Bronx County Clerk before the Certificate of Completion can be issued by NYSDEC. A series of Institutional Controls may be required under this remedy to implement, maintain and monitor these Engineering Control systems, prevent future exposure to residual contamination by continuing LPH recovery, continuing chemical oxidant treatment of groundwater and by maintaining an SSDS and restricting groundwater use at the Site. These Institutional Controls are requirements or restrictions placed on the Site that are listed in, and required by, the Environmental Easement. Institutional Controls can, generally, be subdivided between controls that support Engineering Controls, and those that place general restrictions on Site usage or other requirements. Institutional Controls in both of these groups are closely integrated with the Site Management Plan, which provides all of the methods and procedures to be followed to comply with this remedy.

The Institutional Controls which may be needed to support Engineering Controls 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 Engineering Controls must be operated and maintained as specified in this SMP;
- A soil vapor mitigation system consisting of a sub slab depressurization system under the occupied area of the building must be inspected, certified, operated and maintained as required by the SMP;
- All Engineering Controls 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 and soil vapor probes, must be protected and replaced as necessary to ensure proper functioning in the manner specified in the SMP;

• Engineering Controls may not be discontinued without an amendment or extinguishment of the Environmental Easement.

Adherence to these Institutional Controls for the Site is mandated by the Environmental Easement and will be implemented under the Site Management Plan (discussed in the next section). The Controlled Property (Site) may also have a series of Institutional Controls in the form of Site restrictions and requirements. The Site restrictions that may apply to the Controlled Property are:

- Use of groundwater underlying the Controlled Property is prohibited without treatment rendering it safe for intended purpose;
- The Controlled Property may be used for unrestricted residential use provided that the Engineering and Institutional Controls included in this SMP are employed.
- 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 Final Engineering Report and issuance of the Certificate of Completion (COC) for the Remedial Action. The Site Management Plan 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 the NYSDEC. The property owner is responsible to ensure that all Site Management responsibilities defined in the Environmental Easement and the Site Management Plan 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, the 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 Draft DER-10 Technical Guidance for Site Investigation and Remediation, dated 12/02, 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 Site Management Plan will be based on a calendar year and will be due for submission to NYSDEC by March 1 of the year following the reporting period.

The Site Management Plan in the Final Remediation Report 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 volatile organic compound remediation areas 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 Site Management Plan (SMP). All handling of residual contaminated material will be subject to provisions contained in the SMP.

11.0 FINAL ENGINEERING REPORT

A Final Engineering Report (FER) and Certificate Of Completion (COC) 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 Final Engineering Report will include as-built drawings for all constructed elements, certifications, manifests, bills of lading as well as the complete Site Management Plan (formerly the Operation and Maintenance Plan). 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.

Where determined to be necessary by NYSDEC, a Financial Assurance Plan will be required to ensure the sufficiency of revenue to perform long-term operations, maintenance and monitoring tasks defined in the Site Management Plan and Environmental Easement. This determination will be made by NYSDEC in the context of the Final Engineering Report review.

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

The FER will include an itemized tabular description of actual costs incurred during all aspects of the Remedial Action.

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 Track 1 Unrestricted Use SCO in 6NYCRR Part 375-6. A table that shows exceedances from Track 1

Unrestricted SCOs for all soil/fill remaining at the Site after the Remedial Action and a map that shows the location and summarizes exceedances from Track 1 Unrestricted SCOs 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 Final Engineering Report 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 Certificate of Completion, 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 [name] 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, ______, 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 Former Dico G Auto and truck Repair Site (NYSDEC BCA Index No. W2-1108-07-07 Site No. C203039.

I certify that the Site description presented in this FER is identical to the Site descriptions presented in the Environmental Easement, the Site Management Plan, and the Brownfield Cleanup Agreement for the Former Dico G Auto and Truck Repair Site and related amendments.

I certify that the Remedial Action Work Plan dated [month day year] and Stipulations [if any] in a letter 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 Remedial Action Work Plan and any other relevant provisions of ECL 27-1419 have been achieved.

I certify that all use restrictions, Institutional Controls, Engineering Controls, 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 Site Management Plan has been submitted by the Applicant for the continual and proper operation, maintenance, and monitoring of all Engineering Controls 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 Remedial Action Work Plan.

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 Remedial Action Work Plan. 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.

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

The estimated duration of the Remedial Action is sixteen to twenty-four weeks. The IRM which included the excavation and disposal of overburden soils and bedrock, and the initial injection of chemical oxidants into the groundwater was previously completed at the site. Building construction at the site has progressed through the foundation work and installation of the steel superstructure. The remedial activity as described in this RAWP represents a continuation of the chemical oxidant injection program initiated under the IRM.

The schedule of tasks completed under the IRM and those yet to be completed under this RAWP are as follows:

Conduct pre-construction meeting with	Week of November 26 th , 2007
NYSDEC	
Mobilize equipment to the site and construct	Week of December 3 rd , 2007
truck pad and other designated areas	
Begin excavation of overburden soils	December 6, 2007
Complete excavation and disposal of	April 8, 2008
overburden soils	
Begin bedrock excavation for garage area and	January 15, 1008
bring in fill material for retail area and level.	
Complete bedrock excavation of garage area	April 8, 2008
and initial surface prep or retail area.	
Begin and complete installation of chemical	June 21, 22, 28 and 29, 2008
oxidant injection wells	
Perform first chemical oxidant injection	July 20, 2008
Perform 1 st round performance sampling	August 8, 2008
Install 3 additional oxidant injection wells	September 13, 2008
Perform 2 nd chemical oxidant injection	September 14, 2008
Perform 2 nd round performance sampling	October 6, 2008
Perform 3 rd chemical oxidant injection	To be determined
Perform 3 rd round performance sampling	Within 2-3 weeks following 3 rd injection
Perform 4 th chemical oxidant injection	To be determined

TABLES

TABLE 1A RI Summary of Soil Results 3035 White Plains Road, Bronx, NY Volatile Organic Compounds

COMPOUND	Track 1 Unrestricted Cleanup Objectives	SB1 (0-4FT)	SB1 (4-8FT)	SB1 (8-12FT)	SB2 (0-4FT)	SB2 (4-8FT)	SB3 (0-4FT)	SB4 (0-4FT)	SB4 (4-8FT)	SB4 (8-10FT)	SB5 (0-4FT)	SB5 (4-8FT)	SB5 (8-10FT)	SB6 (0-2FT)	SB7 (0-4FT)
Sample Results in µg/kg	ug/kg	10/2/2007	10/2/2007	10/2/2007	10/2/2007	10/2/2007	10/2/2007	10/2/2007	10/2/2007	10/2/2007	10/2/2007	10/2/2007	10/2/2007	10/2/2007	10/2/2007
1,1,1-Trichloroethane	680	2.7 U	2.3 U	2.3 U	2.4 U	2.4 U	2.3 U	2.3 U	2.4 U	2.2 U	2.3 U	2.1 U	2.3 U	2.4 U	2.3 U
1.1.2.2-Tetrachloroethane	000	2.0 U	1.7 U	1.7 U	1.8 U	1.8 U	1.7 U	1.7 U	1.8 U	1.7 U	1.7 U	1.6 U	1.7 U	1.7 U	1.7 U
1.1.2-Trichloroethane		1.9 U	1.6 U	1.6 U	1.7 U	1.7 U	1.6 U	1.6 U	1.7 U	1.6 U	1.6 U	1.5 U	1.6 U	1.7 U	1.6 U
1,1,2-Trichlorotrifluoroethane		4.3 U	3.7 U	3.7 U	3.8 U	3.7 U	3.7 U	3.7 U	3.8 U	3.5 U	3.7 U	3.4 U	3.6 U	3.7 U	3.7 U
1,1-Dichloroethane	270	1.7 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.6 U	1.4 U	1.5 U	1.4 U	1.5 U	1.5 U	1.5 U
1,1-Dichloroethene	330	3.7 U	3.2 U	3.2 U	3.3 U	3.2 U	3.2 U	3.2 U	3.3 U	3.1 U	3.2 U	2.9 U	3.1 U	3.2 U	3.2 U
1,2,4-Trichlorobenzene		4.4 U	3.8 U	3.8 U	3.9 U	3.8 U	3.8 U	3.8 U	3.9 U	3.6 U	3.8 U	3.5 U	3.7 U	3.8 U	3.8 U
1,2-Dibromo-3-Chloropropane		6.1 U	5.2 U	5.2 U	5.4 U	5.3 U	5.2 U	5.2 U	5.4 U	5.0 U	5.2 U	4.8 U	5.1 U	5.3 U	5.3 U
1,2-Dibromoethane		2.6 U	2.2 U	2.2 U	2.3 U	2.3 U	2.2 U	2.2 U	2.3 U	2.1 U	2.2 U	2.1 U	2.2 U	2.3 U	2.2 U
1,2-Dichlorobenzene	1,100	2.5 U	2.2 U	2.1 U	2.2 U	2.2 U	2.1 U	2.1 U	2.2 U	2.1 U	2.1 U	2.0 U	2.1 U	2.2 U	2.2 U
1.2-Dichloroethane	20	2.0 U	1.7 U	1.7 U	1.8 U	1.7 U	1.7 U	1.7 U	1.8 U	1.6 U	1.7 U	1.6 U	1.7 U	1.7 U	1.7 U
1,2-Dichloropropane		2.6 U	2.2 U	2.2 U	2.3 U	2.2 U	2.2 U	2.2 U	2.3 U	2.1 U	2.2 U	2.0 U	2.2 U	2.2 U	2.2 U
1,3-Dichlorobenzene	2,400	3.6 U	3.1 U	3.1 U	3.2 U	3.1 U	3.1 U	3.1 U	3.2 U	3.0 U	3.1 U	2.9 U	3.0 U	3.1 U	3.1 U
1,4-Dichlorobenzene	1,800	3.5 U	3.0 U	3.0 U	3.1 U	3.1 U	3.0 U	3.0 U	3.1 U	2.9 U	3.0 U	2.8 U	3.0 U	3.1 U	3.0 U
2-Butanone		18 U	16 U	16 U	16 U	16 U	16 U	16 U	16 U	15 U	16 U	14 U	15 U	16 U	33 J
2-Hexanone		23 U	20 U	20 U	21 U	20 U	20 U	20 U	21 U	19 U	20 U	18 U	20 U	20 U	20 U
4-Methyl-2-Pentanone		13 U	11 U	11 U	11 U	11 U	11 U	11 U	11 U	11 U	11 U	10 U	11 U	11 U	11 U
Acetone	50	22 U	19 U	19 U	19 U	19 U	140	19 U	19 U	130 J	19 U	17 U	18 U	19 U	210
Benzene	60	2.6 U	2.2 U	2.2 U	2.3 U	2.2 U	2.2 U	2.2 U	2.3 U	2.1 U	2.2 U	2.0 U	2.2 U	290	2.2 U
Bromodichloromethane		2.2 U	1.9 U	1.8 U	1.9 U	1.9 U	1.8 U	1.8 U	1.9 U	1.8 U	1.8 U	1.7 U	1.8 U	1.9 U	1.9 U
Bromoform		2.0 U	1.7 U	1.7 U	1.8 U	1.7 U	1.7 U	1.7 U	1.8 U	1.7 U	1.7 U	1.6 U	1.7 U	1.7 U	1.7 U
Bromomethane		13 U	11 U	11 U	12 U	11 U	11 U	11 U	12 U	11 U	11 U	10 U	11 U	11 U	11 U
Carbon Disulfide		2.4 U	2.0 U	2.0 U	2.1 U	2.1 U	2.0 U	2.0 U	2.1 U	2.0 U	2.0 U	1.9 U	2.0 U	2.1 U	2.1 U
Carbon Tetrachloride	760	2.9 U	2.5 U	2.4 U	2.5 U	2.5 U	2.4 U	2.4 U	2.6 U	2.4 U	2.4 U	2.3 U	2.4 U	2.5 U	2.5 U
Chlorobenzene	1,100	2.3 U	2.0 U	2.0 U	2.1 U	2.0 U	2.0 U	2.0 U	2.1 U	1.9 U	2.0 U	1.8 U	2.0 U	2.0 U	2.0 U
Chloroethane		14 U	12 U	12 U	12 U	12 U	12 U	12 U	12 U	11 U	12 U	11 U	12 U	12 U	12 U
Chloroform	370	2.3 U	1.9 U	1.9 U	2.0 U	2.0 U	1.9 U	1.9 U	2.0 U	1.9 U	1.9 U	1.8 U	1.9 U	2.0 U	1.9 U
Chloromethane		5.5 U	4.8 U	4.7 U	4.9 U	4.8 U	4.7 U	4.7 U	4.9 U	4.5 U	4.7 U	4.4 U	4.6 U	4.8 U	4.8 U
cis-1,2-Dichloroethene	250	2.1 U	1.8 U	1.8 U	1.9 U	1.8 U	1.8 U	1.8 U	1.9 U	1.7 U	1.8 U	1.7 U	1.8 U	1.8 U	1.8 U
cis-1,3-Dichloropropene		2.1 U	1.8 U	1.8 U	1.9 U	1.9 U	1.8 U	1.8 U	1.9 U	1.8 U	1.8 U	1.7 U	1.8 U	1.9 U	1.8 U
Cyclohexane		2.1 U	1.8 U	1.8 U	1.9 U	1.8 U	100	1.8 U	1.9 U	1.7 U	1.8 U	1.7 U	1.8 U	1.8 U	1.8 U
Dibromochloromethane		1.5 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.2 U	1.3 U	1.2 U	1.3 U	1.3 U	1.3 U
Dichlorodifluoromethane		5.5 U	4.8 U	4.7 U	4.9 U	4.8 U	4.7 U	4.7 U	4.9 U	4.6 U	4.7 U	4.4 U	4.7 U	4.8 U	4.8 U
Ethyl Benzene	1,000	2.3 U	2.0 U	1.9 U	2.0 U	2.0 U	70	2.0 U	2.0 U	36	2.0 U	1.8 U	1.9 U	58000 D	11 J
Isopropylbenzene		2.7 U	2.3 U	2.3 U	2.4 U	2.3 U	2.3 U	2.3 U	2.4 U	150	2.3 U	2.1 U	2.3 U	11000 JD	2.3 U
m/p-Xylenes	260	5.6 U	4.8 U	4.8 U	4.9 U	4.9 U	7900 D	4.8 U	5.0 U	4.6 U	4.8 U	4.4 U	4.7 U	480000 D	62
Methyl Acetate		5.6 U	4.8 U	4.8 U	4.9 U	4.9 U	60	4.8 U	5.0 U	4.6 U	4.8 U	4.4 U	4.7 U	4.9 U	4.8 U
Methyl tert-butyl Ether	930	2.4 U	2.0 U	2.0 U	2.1 U	2.1 U	2.0 U	2.0 U	2.1 U	2.0 U	2.0 U	1.9 U	2.0 U	2.1 U	2.1 U
Methylcyclohexane		2.7 U	2.3 U	2.3 U	2.4 U	2.4 U	100	2.3 U	2.4 U	2.2 U	2.3 U	2.1 U	2.3 U	11000 JD	2.3 U
Methylene Chloride	50	36	10 U	25 J	10 U	28 J	29	10 U	11 U	9.7 U	10 U	16 J	26 J	10 U	10 U
o-Xylene	260	2.5 U	2.1 U	2.1 U	2.2 U	2.2 U	5000 D	2.1 U	2.2 U	2.0 U	2.1 U	2.0 U	2.1 U	230000 D	24 J
Styrene		3.0 U	2.6 U	2.5 U	2.6 U	2.6 U	2.5 U	2.5 U	2.7 U	2.5 U	2.5 U	2.4 U	2.5 U	2.6 U	2.6 U
t-1,3-Dichloropropene		2.3 U	2.0 U	2.0 U	2.1 U	2.0 U	2.0 U	2.0 U	2.1 U	1.9 U	2.0 U	1.9 U	2.0 U	2.0 U	2.0 U
Tetrachloroethene	1,300	4.7 U	4.1 U	4.0 U	4.2 U	4.1 U	4.0 U	4.0 U	4.2 U	3.9 U	4.0 U	3.7 U	4.0 U	4.1 U	4.1 U
Toluene	700	2.6 U	2.3 U	2.2 U	2.3 U	2.3 U	34	2.2 U	2.3 U	2.2 U	2.2 U	2.1 U	2.2 U	75000 D	36
trans-1,2-Dichloroethene	190	4.1 U	3.6 U	3.5 U	3.6 U	3.6 U	3.5 U	3.5 U	3.7 U	3.4 U	3.5 U	3.3 U	3.5 U	3.6 U	3.6 U
Trichloroethene	470	2.0 U	1.7 U	1.7 U	1.8 U	1.7 U	1.7 U	1.7 U	1.8 U	1.6 U	1.7 U	1.6 U	1.7 U	1.7 U	1.7 U
Trichlorofluoromethane		8.1 U	6.9 U	6.9 U	7.1 U	7.0 U	6.9 U	6.9 U	7.2 U	6.6 U	6.9 U	6.4 U	6.8 U	7.0 U	7.0 U
Vinyl Chloride	20	5.3 U	4.6 U	4.5 U	4.7 U	4.6 U	4.5 U	4.5 U	4.7 U	4.4 U	4.5 U	4.2 U	4.5 U	4.6 U	4.6 U
Total Confident Conc. VOC		36	0	25	0	28	13,433	0	0	316	0	16	26	865,290	376

Qualifiers

U - The compound was not detected at the indicated concentration.

J - Data indicates the presence of a compound that meets the identification criteria. The result is less than the quantitation limit but greater than zero. The concentration given is an approximate value.

B - The analyte was found in the laboratory blank as well as the sample. This indicates possible laboratory contamination of the environmental sample.

P - For dual column analysis, the percent difference between the quantitated concentrations on the two columns is greater than 40%.

D - A sample dilution was reuired to obtain the value.

NR - Not analyzed

TABLE 1A Continued RI Summary of Soil Results 3035 White Plains Road, Bronx, NY Volatile Organic Compounds

COMPOUND	Track 1 Unrestricted Cleanup Objectives	SB8 (0-2FT)	SB9 (0-2FT)	SB10 (0-2FT)	SB11 (0-4FT)	SB12 (0-2FT)	SB13 (0-4FT)	SB14 (0-2FT)	SB15 (0-3FT)	SB16 (0-3FT)	SB17 (0-4FT)	SB17 (4-6FT)	SB18 (0-4FT)	SB18 (4-6FT)
Sample Results in µg/kg	ug/kg	10/2/2007	10/2/2007	10/2/2007	10/2/2007	10/2/2007	10/2/2007	10/2/2007	10/2/2007	10/2/2007	10/2/2007	10/2/2007	10/2/2007	10/2/2007
1.1.1-Trichloroethane	680	2.2 U	2.3 U	2.4 U	2.2 U	2.2 U	2.3 U	2.2 U	2.4 U	2.5 U	2.2 U	2.2 U	2.4 U	2.2 U
1.1.2.2-Tetrachloroethane	000	1.7 U	1.7 U	1.8 U	1.6 U	1.7 U	1.7 U	1.6 U	1.8 U	1.8 U	1.7 U	1.6 U	1.8 U	1.6 U
1.1.2-Trichloroethane		1.6 U	1.6 U	1.7 U	1.5 U	1.6 U	1.6 U	1.5 U	1.7 U	1.7 U	1.6 U	1.5 U	1.7 U	1.5 U
1,1,2-Trichlorotrifluoroethane		3.6 U	3.6 U	3.9 U	3.5 U	3.6 U	3.7 U	3.5 U	3.9 U	3.9 U	3.6 U	3.5 U	3.8 U	3.4 U
1,1-Dichloroethane	270	1.4 U	1.5 U	1.6 U	1.4 U	1.4 U	1.5 U	1.4 U	1.6 U	1.6 U	1.4 U	1.4 U	1.5 U	1.4 U
1,1-Dichloroethene	330	3.1 U	3.1 U	3.3 U	3.0 U	3.1 U	3.2 U	3.0 U	3.3 U	3.4 U	3.1 U	3.0 U	3.3 U	3.0 U
1,2,4-Trichlorobenzene		3.7 U	3.7 U	4.0 U	3.6 U	3.7 U	3.8 U	3.6 U	4.0 U	4.0 U	3.7 U	3.6 U	3.9 U	3.5 U
1,2-Dibromo-3-Chloropropane		5.1 U	5.1 U	5.5 U	4.9 U	5.1 U	5.2 U	4.9 U	5.5 U	5.5 U	5.1 U	5.0 U	5.3 U	4.9 U
1,2-Dibromoethane		2.2 U	2.2 U	2.3 U	2.1 U	2.2 U	2.2 U	2.1 U	2.3 U	2.4 U	2.2 U	2.1 U	2.3 U	2.1 U
1,2-Dichlorobenzene	1,100	2.1 U	2.1 U	2.2 U	2.0 U	2.1 U	2.1 U	2.0 U	2.2 U	2.3 U	2.1 U	2.0 U	2.2 U	2.0 U
1,2-Dichloroethane	20	1.7 U	1.7 U	1.8 U	1.6 U	1.7 U	1.7 U	1.6 U	1.8 U	1.8 U	1.7 U	1.6 U	1.7 U	1.6 U
1,2-Dichloropropane		2.1 U	2.1 U	2.3 U	2.1 U	2.1 U	2.2 U	2.1 U	2.3 U	2.3 U	2.1 U	2.1 U	2.3 U	2.0 U
1,3-Dichlorobenzene	2,400	3.0 U	3.0 U	3.2 U	2.9 U	3.0 U	3.1 U	2.9 U	3.2 U	3.3 U	3.0 U	2.9 U	3.2 U	2.9 U
1,4-Dichlorobenzene	1,800	2.9 U	2.9 U	3.2 U	2.8 U	2.9 U	3.0 U	2.8 U	3.2 U	3.2 U	2.9 U	2.9 U	3.1 U	2.8 U
2-Butanone		15 U	86 J	16 U	15 U	15 U	16 U	15 U	16 U	17 U	15 U	15 U	16 U	15 U
2-Hexanone		19 U	19 U	21 U	19 U	19 U	20 U	19 U	21 U	21 U	19 U	19 U	20 U	19 U
4-Methyl-2-Pentanone		11 U	11 U	11 U	10 U	11 U	11 U	10 U	11 U	12 U	11 U	10 U	11 U	10 U
Acetone	50	18 U	290	20 U	18 U	18 U	19 U	18 U	94 J	20 U	18 U	18 U	19 U	17 U
Benzene	60	2.1 U	2.2 U	2.3 U	2.1 U	2.1 U	2.2 U	2.1 U	2.3 U	2.3 U	2.1 U	2.1 U	2.3 U	2.1 U
Bromodichloromethane		1.8 U	1.8 U	2.0 U	1.7 U	1.8 U	1.9 U	1.7 U	1.9 U	2.0 U	1.8 U	1.8 U	1.9 U	1.7 U
Bromoform		1.7 U	1.7 U	1.8 U	1.6 U	1.7 U	1.7 U	1.6 U	1.8 U	1.8 U	1.7 U	1.6 U	1.8 U	1.6 U
Bromomethane		11 U	11 U	12 U	11 U	11 U	11 U	11 U	12 U	12 U	11 U	11 U	12 U	10 U
Carbon Disulfide		2.0 U	2.0 U	2.1 U	1.9 U	2.0 U	2.0 U	1.9 U	2.1 U	2.2 U	2.0 U	1.9 U	2.1 U	1.9 U
Carbon Tetrachloride	760	2.4 U	2.4 U	2.6 U	2.3 U	2.4 U	2.5 U	2.3 U	2.6 U	2.6 U	2.4 U	2.3 U	2.5 U	2.3 U
Chlorobenzene	1,100	1.9 U	2.0 U	2.1 U	1.9 U	1.9 U	2.0 U	1.9 U	2.1 U	2.1 U	1.9 U	1.9 U	2.1 U	1.9 U
Chloroethane		11 U	12 U	12 U	11 U	11 U	12 U	11 U	12 U	13 U	11 U	11 U	12 U	11 U
Chloroform	370	1.9 U	1.9 U	2.0 U	1.8 U	1.9 U	1.9 U	1.8 U	2.0 U	2.0 U	1.9 U	1.8 U	2.0 U	1.8 U
Chloromethane		4.6 U	4.6 U	5.0 U	4.5 U	4.6 U	4.7 U	4.5 U	5.0 U	5.0 U	4.6 U	4.5 U	4.8 U	4.4 U
cis-1,2-Dichloroethene	250	1.7 U	1.8 U	1.9 U	1.7 U	1.7 U	1.8 U	1.7 U	1.9 U	1.9 U	1.7 U	1.7 U	1.8 U	1.7 U
cis-1,3-Dichloropropene		1.8 U	1.8 U	1.9 U	1.7 U	1.8 U	1.8 U	1.7 U	1.9 U	1.9 U	1.8 U	1.7 U	1.9 U	1.7 U
Cyclohexane		1.7 U	23 J	1.9 U	1.7 U	1.7 U	1.8 U	1.7 U	1.9 U	1.9 U	1.7 U	1.7 U	1.8 U	1.7 U
Dibromochloromethane		1.2 U	1.2 U	1.3 U	1.2 U	1.2 U	1.3 U	1.2 U	1.3 U	1.4 U	1.2 U	1.2 U	1.3 U	1.2 U
Dichlorodifluoromethane		4.6 U	4.6 U	5.0 U	4.5 U	4.6 U	4.8 U	4.5 U	5.0 U	5.0 U	4.6 U	4.5 U	4.9 U	4.4 U
Ethyl Benzene	1,000	1.9 U	1300 D	2.1 U	1.8 U	1.9 U	2.0 U	1.8 U	2.1 U	2.1 U	1.9 U	1.9 U	2.0 U	1.8 U
Isopropylbenzene		2.2 U	460 JD	2.4 U	2.2 U	2.2 U	2.3 U	2.2 U	15 J	2.4 U	2.2 U	2.2 U	2.4 U	2.1 U
m/p-Xylenes	260	4.7 U	760 JD	5.0 U	4.5 U	4.7 U	4.8 U	4.5 U	16 J	5.1 U	4.7 U	4.6 U	4.9 U	4.5 U
Methyl Acetate	065	4.7 U	4.7 U	5.0 U	4.5 U	4.7 U	4.8 U	4.5 U	5.0 U	5.1 U	4.7 U	4.6 U	4.9 U	4.5 U
Methyl tert-butyl Ether	930	2.0 U	2.0 U	2.1 U	1.9 U	2.0 U	2.0 U	1.9 U	2.1 U	2.2 U	2.0 U	1.9 U	2.1 U	1.9 U
Methylcyclohexane		2.3 U	83	2.4 U	2.2 U	2.3 U	2.3 U	2.2 U	2.4 U	2.5 U	2.3 U	2.2 U	2.4 U	2.2 U
Methylene Chloride	50	9.8 U	9.8 U	11 U	23 J	17 J	10 U	9.5 U	11 U	11 U	9.8 U	9.6 U	10 U	9.4 U
o-Xylene	260	2.1 U	36	2.2 U	2.0 U	2.1 U	2.1 U	2.0 U	2.2 U	2.3 U	2.1 U	2.0 U	2.2 U	2.0 U
Styrene		2.5 U	2.5 U	2.7 U	2.4 U	2.5 U	2.6 U	2.4 U	2.7 U	2.7 U	2.5 U	2.4 U	2.6 U	2.4 U
t-1,3-Dichloropropene	1 000	2.0 U	2.0 U	2.1 U	1.9 U	2.0 U	2.0 U	1.9 U	2.1 U	2.1 U	2.0 U	1.9 U	2.1 U	1.9 U
Tetrachloroethene	1,300	3.9 U	3.9 U	4.3 U	3.8 U	3.9 U	4.1 U	3.8 U	4.2 U	4.3 U	3.9 U	3.8 U	4.1 U	3.8 U
Toluene	700	2.2 U	41	2.4 U	2.1 U	2.2 U	2.2 U	2.1 U	2.4 U	2.4 U	2.2 U	2.1 U	2.3 U	2.1 U
trans-1,2-Dichloroethene	190	3.4 U	3.4 U	3.7 U	3.3 U	3.4 U	3.6 U	3.3 U	3.7 U	3.8 U	3.4 U	3.4 U	3.6 U	3.3 U
Trichloroethene	470	1.7 U	1.7 U	1.8 U	1.6 U	1.7 U	1.7 U	1.6 U	1.8 U	1.8 U	1.7 U	1.6 U	1.7 U	1.6 U
Trichlorofluoromethane	0.7	6.7 U	6.7 U	7.3 U	6.5 U	6.7 U	6.9 U	6.5 U	7.2 U	7.3 U	6.7 U	6.6 U	7.1 U	6.4 U
Vinyl Chloride	20	4.4 U	4.4 U	4.8 U	4.3 U	4.4 U	4.6 U	4.3 U	4.8 U	4.8 U	4.4 U	4.3 U	4.7 U	4.2 U
Total Confident Conc. VOC		0	2,970	0	23	17	0	0	125	0	0	0	0	0

Qualifiers

U - The compound was not detected at the indicated concentration.

J - Data indicates the presence of a compound that meets the identification criteria. The result is less than the quantitation limit but greater than zero. The concentration given is an approximate value.

B - The analyte was found in the laboratory blank as well as the sample. This indicates possible laboratory contamination of the environmental sample.

P - For dual column analysis, the percent difference between the quantitated concentrations on the two columns is greater than 40%.

D - A sample dilution was reuired to obtain the value.

NR - Not analyzed

TABLE 1B RI Summary of Soil Results 3035 White Plains Road, Bronx, NY Semi-Volatile Organic Compounds

Objective Variation Variation <t< th=""><th></th><th></th><th></th><th></th><th></th><th></th><th>-volatile orga</th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th></t<>							-volatile orga									
L-Beginvi Product	COMPOUND	Unrestricted Cleanup	-	-		-			-		-					SB7 (0-4FT)
D2-object-Chancegroent Image: D2-object-Chance Image: D2-objec	Sample Results in µg/kg	ug/kg	10/2/2007	10/2/2007	10/2/2007	10/2/2007	10/2/2007	10/2/2007	10/2/2007	10/2/2007	10/2/2007	10/2/2007	10/2/2007	10/2/2007	10/2/2007	10/2/2007
DA-Demicationane Image	1,1-Biphenyl		73 U	62 U	310 U	64 U	63 U	60 U	310 U	64 U	87 J	62 U	57 U	300 U	960 J	65 J
Zabe Zabe Sabe Sabe <th< th=""><th>2,2-oxybis(1-Chloropropane)</th><th></th><th>71 U</th><th>60 U</th><th>300 U</th><th>62 U</th><th>61 U</th><th>59 U</th><th>300 U</th><th>63 U</th><th>58 U</th><th>60 U</th><th>56 U</th><th>290 U</th><th>600 U</th><th>61 U</th></th<>	2,2-oxybis(1-Chloropropane)		71 U	60 U	300 U	62 U	61 U	59 U	300 U	63 U	58 U	60 U	56 U	290 U	600 U	61 U
Deblockspitalishes Problem	2,4-Dinitrotoluene		65 U	55 U	270 U	57 U	56 U	54 U	280 U	57 U	53 U	55 U	51 U	270 U	550 U	56 U
Shederyningenthalen (a) (b)																54 U
Diversenting Description Ore U Part D <																63 U
b3-b0-brokenderide 15-b0 44-U 32-b0 46-U 46-U<																250 J
Shife semine Shife semine<								-					-			48 U
Astrongeny-phenylation (mod)																65 U
Achaosanine S2U 65/U 220 U 64/U 44/U 220 U 64/U 44/U 220 U 64/U 200 U 64/U 64/U 200 U 64/U 64/U <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></th><th>49 U</th></th<>											-					49 U
Achionsperiyophemyehene mon																57 U
International Protect													-			45 U
Aceneghtymen 92.000 77 U 97 U 330 U 68 U 65 U 330 U 68 U 67 U 62 U 320 U 68 U 320 U 48 U 320 U																60 U
Acengaphysine 100.00 210.1 610.1 350.0 62.0 50.0 61.0 56.0 20.0 61.0 20.0 61.0 20.0 61.0 20.0 61.0 20.0 61.0 20.0 61.0 20.0 61.0 20.0 61.0 20.0 61.0 51.0 20.0 61.0 55.0 27.0 55.0 27.0 55.0 27.0 55.0 27.0 55.0 27.0 55.0 27.0 55.0 27.0 55.0 27.0 55.0 27.0 55.0 27.0 55.0 27.0 55.0 27.0 55.0 27.0 55.0 27.0 <th></th> <th>00.000</th> <th></th> <th>65 U</th>		00.000														65 U
Acterycene 100.00 64 U 55 U 70 U		- /														
Anthracene S010 56 U 98 U 97 U 56 U 28 U 96 U 96 U 97 U 57 U 53 U 58 U 56 U 28 U 66 U 96 U 77 U																99 J 55 U
Arrane (77) (77) (280) (380) (580) (570) (550) (280) (270) (700)	•	100,000														
Benzelsehvide 900 770 3800 780 780 3800 600 740 770																400 58 U
Benergiopherse 1.000 1100 52.0 28.0 15.1 28.00 54.0 54.0 56.0 12.03 48.0 25.00 57.00 Benergiopherse 1.000 1400 41.0 20.00 16.01 39.0 180.0 38.0 180.0 38.0 180.0 38.0 180.0 38.0 180.0 38.0 180.0 38.0 180.0 38.0 180.0 38.0 180.0 38.0 180.0 38.0 180.0 48.0 190.0 48.0 190.0 48.0 190.0 48.0 49.0 49.0 49.0 50.0 62.0 77.0 38.0 18.0 77.0 38.0 18.0 77.0 38.0 18.0 77.0 38.0 19.0 48.0 77.0 38.0 19.0 48.0 77.0 38.0 19.0 58.0 68.0 58.0 68.0 58.0 68.0 38.0 18.0 77.0 59.0 58.0 68.0 38.0 68.0 58.0 68.0																78 U
Benzophymene 1.000 1100 60 U 300 U 92 J 61 U 59 U 300 U 62 U 57 U 140 J 56 U 200 U 60 U 900 Benzoph/Jperylene 100.00 700 62 U 310 U 64 U 63 U 410 U 85 U 62 U 57 U 400 U 82 U 400 U 85 U 65 U 65 U 65 U 57 U 400 U 80 U 80 U 300 U 64 U 59 U 50 U 70 U 70 U 50 U 70 U 50 U 70 U		1 000		-												
Benacy/ph/moranthene 1.000 1400 41 U 200 U 42 U 30 U 64 U 30 U <																
Isensorial/Liperviene 100,000 700 62.0 310.0 64.0 30.0 64.0 59.0 110.1 67.0 300.0 82.00 400.0 82.0 410.0 85.0 61.0 81.0 64.0 81.0 81.0 81.0 61.0 81.0																1100
Benzo/pituo-arathene 800 540 82.0 44.00 81.0 41.00 85.0 79.0 82.0 76.0 40.00 82.00 83.00		1		-			-									680
Isig2-Chiorenthoxymethane Image: Chiorenthoxymethane																340 J
bis/2-chroneethylether 91 70 U 59 U 69 U 61 U 60 U 58 U 300 U 61 U 57 U 59 U 280 U 780 U 770 U																62 U
Butylphthalate 71 U 61 U 63 U 63 U 63 U 68 U 61 U 56 U 290 U 600 U 66 Caprolactam 71 U 60 U 300 U 62 U 61 U 59 U 300 U 62 U 58 U 60 U 56 U 290 U 600 U 66 Carbazole 110 J 57 U 230 U 100 U 67 U 330 U 100 J 67 U 330 U 100 J 68 U 66 U 340 U 70 U 64 U 130 J 62 U 320 U 67 U 70 U 70 U 70 U 44 U 230 U 67 U 70 U 70 U 70 U 44 U 230 U 47 U 48 U 61 U 310 U 64 U 310 U 64 U 320 U 67 U 57 U 30 U 62 U 37 U 60 U 32 U 67 U 57 U 50 U 57 U 50 U 50 U 50 U <th></th> <th></th> <th>70 U</th> <th>59 U</th> <th>290 U</th> <th>61 U</th> <th>60 U</th> <th>58 U</th> <th>300 U</th> <th>61 U</th> <th>57 U</th> <th>59 U</th> <th>55 U</th> <th>290 U</th> <th>590 U</th> <th>60 U</th>			70 U	59 U	290 U	61 U	60 U	58 U	300 U	61 U	57 U	59 U	55 U	290 U	590 U	60 U
Caproactam 71 U 60 U 300 U 62 U 58 U 60 U 66 U 290 U 600 U 67 Carbacole 110 J 57 U 280 U 58 U 56 U 290 U 68 U 58 U 58 U 59 U 58 U 57 U 53 U 280 U 670 U 320 U 670 U 58 U 59 U 68 U 100 U 62 U 30 U 65 U 320 U 670 U 320 U 670 U 320 U 670 U 57 U 320 U 470 U 44 U 230 U 470 U 58 U 50 U 57 U 200 U 62 U 330 U 66 U 330 U 66 U 50 U 67 U 67 U 300 U 62 U 50 U 67 U 67 U 30 U 60 U 50 U	bis(2-Ethylhexyl)phthalate		84 U	72 U	360 U	74 U	73 U	70 U	360 U	75 U	71 J	72 U	67 U	350 U	720 U	73 U
Carbazole 110 J 57 U 280 U 59 U 56 U 200 U 55 U 57 U 53 U 280 U 570 U 332 Chrysene 1,000 1100 67 U 330 U 100 J 68 U 66 U 340 U 70 U 64 U 100 J 62 U 320 U 670 U 70 U 66 U 100 J 64 U 100 J 62 U 100 J 64 U 100 J	Butylbenzylphthalate		71 U	61 U	300 U	63 U	61 U	59 U	300 U	63 U	58 U	61 U	56 U	290 U	600 U	61 U
Chrysene 1,000 1100 67 U 330 U 100 J 68 U 66 U 340 U 70 U 64 U 130 J 62 U 320 U 670 U 750 U Dibenz(a,h)anthracene 330 66 J 47 U 230 U 44 U 240 U 44 U 44 U 230 U 470 U 550 U Dibenz/uran 73 U 66 U 30 U 66 U 63 U 61 U 310 U 64 U 50 U 62 U 66 U 60 U 300 U 62 U 66 U 63 U 320 U 67 U 66 U 63 U 320 U 67 U 66 U 63 U 320 U 67 U 66 U 60 U	Caprolactam		71 U	60 U	300 U	62 U	61 U	59 U	300 U	62 U	58 U	60 U	56 U	290 U	600 U	61 U
Dibenz(a,h)anthracene 330 66 J 47 U 230 U 49 U 48 U 46 U 240 U 49 U 45 U 47 U 240 U 230 U 47 U 230 U 470 U 550 Dibenz(arran 73 U 62 U 310 U 64 U 63 U 61 U 310 U 64 U 59 U 62 U 57 U 300 U 620 U 370 U 62 U 370 U 62 U 65 U 300 U 66 U 51 U 50 U 51 U </th <th>Carbazole</th> <th></th> <th>320 J</th>	Carbazole															320 J
Dibenzofuran 73 U 62 U 310 U 64 U 63 U 61 U 310 U 64 U 59 U 62 U 57 U 300 U 620 U 370 U Diethylphthalate 76 U 66 U 320 U 67 U 66 U 52 U 62 U 62 U 62 U 65 U 60 U 310 U 64 U 66 U 63 U 320 U 67 U 62 U 65 U 60 U 310 U 64 U 62 U 55 U 60 U 56 U 290 U 66 U 61 U 59 U 55 U 67 U 63 U 280 U 67 U 57 U 53 U 280 U 56 U 290 U 65 U 51 U 64 U 59 U 55 U 67 U 63 U 280 U 56 U 280 U 56 U 220 U 66 U 61 U 50 U 50 U 50 U 50 U 50 U 50 U 70 U 60 U 50 U 50 U 50 U 70 U 60 U 60 U 50 U 50 U 50 U 50 U 50 U 70 U	Chrysene		1100	67 U	330 U	100 J			340 U	70 U	64 U				670 U	750
Diethylphthalate 76 U 65 U 320 U 67 U 68 U 320 U 67 U 62 U 65 U 60 U 310 U 640 U 66 U Dimethylphthalate 71 U 60 U 300 U 62 U 61 U 59 U 300 U 62 U 55 U 57 U 53 U 280 U 59 U 310 U 63 U 64 U 62 U 320 U 66 U 63 U 59 U 310 U 63 U 64 U 62 U 320 U 66 U 75 J 63 U 59 U 310 U 63 U 61 U 59 U 30 U 60 U 61 U 59 U 30 U 60 U 61 U <t< th=""><th>Dibenz(a,h)anthracene</th><th>330</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>56 J</th></t<>	Dibenz(a,h)anthracene	330		-								-	-			56 J
Dimethylphthalate 71 U 60 U 300 U 62 U 61 U 59 U 300 U 62 U 58 U 60 U 56 U 290 U 600 U 66 Din-butylphthalate 67 U 57 U 280 U 59 U 58 U 56 U 290 U 59 U 55 U 57 U 53 U 280 U 570 U 56 Din-octyl phthalate 75 U 64 U 320 U 66 U 65 U 62 U 320 U 56 U 50 U 56 U 280 U 56 U 280 U 56 U 50 U 56 U 30 U 66 U 61 U 64 U 59 U 310 U 650 U 60 U 30 U 66 U 50 U <	Dibenzofuran															370 J
Din-butyphthalate 67 U 57 U 280 U 59 U 58 U 56 U 290 U 59 U 55 U 57 U 53 U 280 U 570 U 56 U Din-octyl phthalate 75 U 64 U 320 U 66 U 65 U 320 U 66 U 61 U 64 U 59 U 310 U 630 U 66 Fluoranthene 100,000 2500 56 U 280 U 200 J 63 J 54 U 280 U 53 U 200 J 53 U 200 J 630 U 66 66 U 61 U 64 U 53 U 200 J 63 U 50 U 70 U 630 U 630 U 66 U 75 J 63 U 59 U 300 U 66 U 66 U 75 J 63 U 59 U 300 U 66 U 66 U 75 J 63 U 59 U 300 U 66 U 66 U 75 U 60 U 50 U 50 U 60 U																65 U
Din-octy phthalate 75 U 64 U 320 U 66 U 62 U 320 U 66 U 61 U 64 U 59 U 310 U 630 U 64 U Fluoranthene 100,000 2500 56 U 280 U 200 J 63 J 54 U 280 U 53 U 200 J 52 U 270 U 550 U 1700 Fluorene 30,000 120 J 63 U 310 U 65 U 64 U 62 U 320 U 66 U 75 J 63 U 59 U 310 U 63 U 64 U 62 U 320 U 66 U 75 J 63 U 59 U 310 U 63 U 64 U 62 U 320 U 66 U 75 J 63 U 59 U 310 U 60 U 60 U 50 U 60 U																61 U
Fluoranthene 100,000 2500 56 U 280 U 200 J 63 J 54 U 280 U 53 U 200 J 52 U 270 U 550 U 1700 Fluorene 30,000 120 J 63 U 310 U 65 U 64 U 62 U 320 U 66 U 75 J 63 U 59 U 310 U 630 U 61 U Hexachlorobenzene 70 U 60 U 300 U 62 U 61 U 59 U 300 U 63 U 290 U 60 U 55 U 58 U 290 U 600 U 66 U 75 J 63 U 290 U 600 U 61 U Hexachlorobutadiene 70 U 60 U 300 U 62 U 61 U 58 U 300 U 62 U 57 U 60 U 55 U 290 U 600 U 56 U 290 U 60 U 57 U 60 U 55 U 290 U 60 U 66 U 61 U 62 U 57 U 60 U 50 U<	<i></i>															58 U
Fluorene 30,000 120 J 63 U 310 U 65 U 64 U 62 U 320 U 66 U 75 J 63 U 59 U 310 U 630 U 610 Hexachlorobenzene 70 U 60 U 300 U 62 U 61 U 59 U 300 U 62 U 57 U 63 U 59 U 200 U 60 U 61 U Hexachlorobutadiene 68 U 58 U 290 U 60 U 58 U 56 U 290 U 60 U 58 U 50 U 50 U 50 U 50 U 280 U 60 U 50 U 50 U 50 U 280 U 60 U 60 U 50 U 5																64 U
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Hexachloroputadiene 66 U 58 U 290 U 60 U 58 U 290 U 60 U 55 U 58 U 53 U 280 U 570 U 580 U Hexachlorocyclopentadiene 70 U 60 U 300 U 62 U 61 U 58 U 300 U 62 U 57 U 60 U 55 U 290 U 600 U 66 U 64 U 62 U 57 U 60 U 55 U 290 U 600 U 66 U 64 U 62 U 320 U 66 U 64 U 59 U 310 U 64 U 67 U 64 U 59 U 310 U 64 U 67 U 64 U 50 U 70 U 44 U 50 U 55 U 28 U 24 U U 44 U 46 U 100 J 44 U 47 U 24 U U 46 U 100 J 44 U 47 U 24 U U 46 U 100 J 44 U 50 J 48 U 51 U 51 U 52 U 270 U 56 U 67 U 50 U 52 U 270 U 56 U 52 U 270 U 56 U 52 U </th <th></th> <th>30,000</th> <th></th>		30,000														
Hexachlorocyclopentadiene 70 U 60 U 300 U 62 U 61 U 58 U 300 U 62 U 57 U 60 U 55 U 290 U 600 U 60 U Hexachloroethane 75 U 64 U 320 U 66 U 62 U 320 U 66 U 61 U 64 U 59 U 310 U 630 U 66 U Indenc(1,2,3-cd)pyrene 500 700 48 U 240 U 50 J 48 U 47 U 240 U 46 U 100 J 44 U 230 U 667 U 560 U 52 U 220 U 460 U 100 J 44 U 230 U 470 U 670 U 560 U 52 U 220 U 460 U 100 J 44 U 230 U 660 U 55 U 280 U 58 U 56 U																61 U 58 U
Hexachloroethane 75 U 64 U 320 U 66 U 62 U 320 U 66 U 61 U 64 U 59 U 310 U 630 U 64 U Indeno(1,2,3-cd)pyrene 500 700 48 U 240 U 50 J 48 U 47 U 240 U 49 U 46 U 100 J 44 U 230 U 470 U 670 Isophorone 66 U 56 U 280 U 57 U 55 U 280 U 58 U 57 U 56 U 58 U 57 U 56 U 58 U 57 U 56 U 280 U 56 U 52 U 270 U 56 U 280 U 57 U 56 U 280 U 56 U 52 U 57 U 56 U 58 U 57 U 56 U 58 U 57 U 56 U 58 U 57 U 58 U																60 U
Indeno(1,2,3-cd)pyrene 500 700 48 U 240 U 50 J 48 U 47 U 240 U 49 U 46 U 100 J 44 U 230 U 470 U 670 Isophorone 66 U 56 U 280 U 58 U 57 U 55 U 280 U 58 U 54 U 56 U 52 U 270 U 560 U 57 Naphtalene 12,000 75 U 64 U 320 U 66 U 65 U 140 J 320 U 66 U 70 J 64 U 59 U 310 U 5900 D 220 Nitroso-din-propylamine 96 U 82 U 400 U 85 U 83 U 80 U 410 U 56 U 57 U 390 U 810 U 810 U 810 U 82 U 76 U 390 U 810 U 82 U 76 U 390 U 62 U 810 U 82 U 76 U 390 U 62 U 62 U 810 U 810 U 810 U																64 U
Isophorone 66 U 56 U 280 U 57 U 55 U 280 U 58 U 54 U 56 U 52 U 270 U 560 U 560 U 570 U 560 U 58 U 54 U 56 U 52 U 270 U 560 U 560 U 570 U 56 U 320 U 56 U 52 U 270 U 560 U 570 U 570 U 56 U 320 U 56 U 57 U 58 U 57 U 56 U 58 U 54 U 56 U 57 U 56 U 320 U 66 U 70 J 64 U 59 U 310 U 5900 D 220 U 200 D		500														670
Naphthalene 12,000 75 U 64 U 320 U 66 U 140 J 320 U 66 U 70 J 64 U 59 U 5900 D 220 Nitrobenzene 96 U 82 U 400 U 85 U 83 U 80 U 410 U 85 U 78 U 82 U 76 U 390 U 810 U 83 N-Nitroso-di-n-propylamine 73 U 62 U 310 U 64 U 63 U 61 U 310 U 64 U 59 U 62 U 58 U 300 U 62 U 66 U 65 U 310 U 64 U 59 U 62 U 58 U 300 U 62 U 66 U 65 U 310 U 64 U 59 U 62 U 58 U 300 U 62 U <		500														57 U
Nitrobenzene 96 U 82 U 400 U 85 U 80 U 410 U 85 U 78 U 82 U 76 U 390 U 810 U 88 N-Nitroso-di-n-propylamine 73 U 62 U 310 U 64 U 63 U 61 U 310 U 64 U 59 U 62 U 58 U 300 U 620 U 62 62 U 62 U 61 U 63 U 61 U 310 U 64 U 59 U 62 U 57 U 60 U 62 U 62 U 61 U 62 U 61 U		12 000														220 J
N-Nitroso-di-n-propylamine 73 U 62 U 310 U 64 U 63 U 61 U 310 U 64 U 59 U 62 U 58 U 300 U 620 U 62 U N-Nitrosodiphenylamine 73 U 62 U 310 U 64 U 63 U 60 U 310 U 64 U 59 U 62 U 57 U 300 U 610 U 62 U		12,000														83 U
N-Nitrosodiphenylamine 73 U 62 U 310 U 64 U 63 U 60 U 310 U 64 U 59 U 62 U 57 U 300 U 610 U 66		1														63 U
																62 U
renenantorene i juuluu i juulu buul 300 UI 94 JI 60 UI 58 UI 300 UI 62 UI 95 JI 63 JI 55 UI 290 UI 690 JI 1700	Phenanthrene	100,000	1200	60 U	300 U	94 J	60 U	58 U	300 U	62 U	95 J	63 J	55 U	290 U	690 J	1700
																1400

Qualifiers

U - The compound was not detected at the indicated concentration.

J - Data indicates the presence of a compound that meets the identification criteria. The result is less than the quantitation limit but greater than zero. The concentration given is an approximate value.

B - The analyte was found in the laboratory blank as well as the sample. This indicates possible laboratory contamination of the environmental sample.

P - For dual column analysis, the percent difference between the quantitated concentrations on the two columns is greater than 40%.

D - A sample dilution was reuired to obtain the value.

NR - Not analyzed

TABLE 1B Continued RI Summaruy of Soil Results 3035 White Plains Road, Bronx, NY Semi-Volatile Organic Compounds

					Senn-voia	tile Organic C	ompounds							
COMPOUND	Track 1 Unrestricted Cleanup Objectives	SB8 (0-2FT)	SB9 (0-2FT)	SB10 (0-2FT)	SB11 (0-4FT)	SB12 (0-2FT)	SB13 (0-4FT)	SB14 (0-2FT)	SB15 (0-3FT)	SB16 (0-3FT)	SB17 (0-4FT)	SB17 (4-6FT)	SB18 (0-4FT)	SB18 (4-6FT)
Sample Results in µg/kg	ug/kg	10/2/2007	10/2/2007	10/2/2007	10/2/2007	10/2/2007	10/2/2007	10/2/2007	10/2/2007	10/2/2007	10/2/2007	10/2/2007	10/2/2007	10/2/2007
1.1-Biphenyl		58 U	60 U	64 U	58 U	59 U	60 U	58 U	250 J	63 U	58 U	59 U	61 U	57 U
2,2-oxybis(1-Chloropropane)		57 U	59 U	62 U	57 U	57 U	59 U	57 U	61 U	62 U	57 U	57 U	60 U	56 U
2,4-Dinitrotoluene		52 U	54 U	57 U	52 U	52 U	54 U	52 U	56 U	56 U	52 U	52 U	55 U	51 U
2,6-Dinitrotoluene		50 U	52 U	55 U	50 U	50 U	52 U	50 U	54 U	54 U	50 U	50 U	53 U	49 U
2-Chloronaphthalene		59 U	61 U	64 U	59 U	59 U	61 U	59 U	63 U	64 U	59 U	59 U	62 U	57 U
2-Methylnaphthalene		59 U	930	65 U	59 U	60 U	61 U	59 U	1000	64 U	59 U	59 U	62 U	58 U
2-Nitroaniline		45 U	47 U	49 U	45 U	45 U	46 U	45 U	48 U	49 U	45 U	45 U	47 U	44 U
3,3-Dichlorobenzidine		61 U	63 U	66 U	60 U	61 U	63 U	61 U	65 U	66 U	60 U	61 U	64 U	59 U
3-Nitroaniline		46 U	48 U	50 U	46 U	46 U	48 U	46 U	50 U	50 U	46 U	46 U	48 U	45 U
4-Bromophenyl-phenylether		53 U	55 U	58 U	53 U	53 U	55 U	53 U	57 U	57 U	53 U	53 U	55 U	52 U
4-Chloroaniline		42 U	44 U	46 U	42 U	43 U	44 U	42 U	45 U	46 U	42 U	42 U	44 U	41 U
4-Chlorophenyl-phenylether		56 U	58 U	61 U	56 U	56 U	58 U	56 U	60 U	61 U	56 U	56 U	59 U	55 U
4-Nitroaniline		61 U	63 U	66 U	60 U	61 U	62 U	60 U	65 U	66 U	60 U	61 U	63 U	59 U
Acenaphthene	20,000	63 U	65 U	69 U	63 U	64 U	65 U	63 U	260 J	160 J	63 U	63 U	66 U	62 U
Acenaphthylene	100,000	58 U	140 J	160 J	57 U	94 J	59 U	57 U	91 J	84 J	57 U	58 U	60 U	56 U
Acetophenone	100,000	52 U	54 U	57 U	52 U	52 U	53 U	52 U	56 U	56 U	52 U	52 U	54 U	51 U
Anthracene		54 U	130 J	240 J	75 J	120 J	55 U	53 U	550	440	53 U	54 U	56 U	52 U
Atrazine		54 U	56 U	59 U	54 U	55 U	56 U	54 U	58 U	59 U	54 U	54 U	57 U	53 U
Benzaldehyde	4 000	73 U	75 U	79 U	73 U	73 U	75 U	73 U	78 U	79 U	73 U	73 U	76 U	71 U
Benzo(a)anthracene	1,000	150 J 140 J	510 610	870 950	240 J 250 J	450	130 J 140 J	50 U	1200 1200	<u>1900</u> 1800	49 U	50 U	52 U 59 U	48 U 55 U
Benzo(a)pyrene	1,000	140 J 180 J		950 1200	250 J 340 J	500	140 J 160 J	57 U	1200	1800 2100 D	57 U	57 U		
Benzo(b)fluoranthene Benzo(g,h,i)perylene	100,000	180 J 100 J	860 460	600	340 J 170 J	660 410	160 J 98 J	39 U 59 U	360 J	640	39 U 58 U	39 U 59 U	41 U 61 U	38 U 57 U
Benzo(g,n,n)pergiene Benzo(k)fluoranthene	800	80 J	400 250 J	430	170 J 140 J	250 J	98 J 80 U	78 U	650	860	78 U	78 U	82 U	76 U
bis(2-Chloroethoxy)methane	000	58 U	60 U	430 64 U	58 U	59 U	60 U	58 U	63 U	63 U	58 U	58 U	61 U	57 U
bis(2-Chloroethyl)ether		56 U	58 U	61 U	56 U	56 U	58 U	56 U	60 U	61 U	56 U	56 U	59 U	55 U
bis(2-Ethylhexyl)phthalate		68 U	200 J	74 U	68 U	68 U	210 J	68 U	160 J	74 U	68 U	68 U	71 U	66 U
Butylbenzylphthalate		57 U	59 U	63 U	57 U	58 U	59 U	57 U	62 U	62 U	57 U	57 U	60 U	56 U
Caprolactam		57 U	59 U	62 U	57 U	57 U	59 U	57 U	61 U	62 U	57 U	57 U	60 U	56 U
Carbazole		54 U	56 U	86 J	54 U	54 U	56 U	54 U	150 J	170 J	54 U	54 U	57 U	53 U
Chrysene	1,000	150 J	570	910	290 J	490	130 J	64 U	1400	2100	63 U	64 U	67 U	62 U
Dibenz(a,h)anthracene	330	45 U	46 U	56 J	44 U	45 U	46 U	44 U	51 J	67 J	44 U	45 U	47 U	43 U
Dibenzofuran		59 U	61 U	64 U	58 U	59 U	60 U	59 U	110 J	110 J	58 U	59 U	61 U	57 U
Diethylphthalate		61 U	63 U	67 U	61 U	62 U	63 U	61 U	66 U	66 U	61 U	61 U	64 U	60 U
Dimethylphthalate		57 U	59 U	62 U	57 U	57 U	59 U	57 U	61 U	62 U	57 U	57 U	60 U	56 U
Di-n-butylphthalate		54 U	56 U	59 U	54 U	54 U	56 U	54 U	58 U	59 U	54 U	54 U	57 U	53 U
Di-n-octyl phthalate		60 U	62 U	66 U	60 U	61 U	62 U	60 U	65 U	65 U	60 U	60 U	63 U	59 U
Fluoranthene	100,000	310 J	1100	2000	720	930	190 J	53 U	2300	4000 D	53 U	53 U	55 U	51 U
Fluorene	30,000	60 U	62 U	65 U	60 U	60 U	62 U	60 U	350 J	210 J	60 U	60 U	63 U	58 U
Hexachlorobenzene		57 U	59 U	62 U	57 U	57 U	58 U	57 U	61 U	61 U	57 U	57 U	59 U	55 U
Hexachlorobutadiene		55 U	56 U	59 U	54 U	55 U	56 U	54 U	59 U	59 U	54 U	55 U	57 U	53 U
Hexachlorocyclopentadiene		57 U	59 U	62 U	56 U	57 U	58 U	56 U	61 U	61 U	56 U	57 U	59 U	55 U
Hexachloroethane	500	60 U	62 U	66 U	60 U	61 U	62 U	60 U	65 U	65 U	60 U	60 U	63 U	59 U
Indeno(1,2,3-cd)pyrene	500	85 J	470	610	160 J	380	98 J	45 U	180 J	620	45 U	45 U	47 U	44 U
Isophorone	40.000	53 U	55 U	58 U	53 U	54 U	55 U	53 U	57 U	58 U	53 U	53 U	56 U	52 U
Naphthalene	12,000	61 U 77 U	1600	66 U 84 U	60 U 77 U	61 U	62 U	60 U 77 U	320 J 83 U	66 U 84 U	60 U 77 U	61 U	63 U	59 U 75 U
Nitrobenzene N Nitroso di n propulamino		77 U 59 U	80 U 61 U	84 U 64 U	77 U 59 U	78 U 59 U	80 U 61 U	77 U 59 U	83 U 63 U	84 U 64 U	77 U 59 U	78 U 59 U	81 U 62 U	75 U 57 U
N-Nitroso-di-n-propylamine		59 U 58 U	60 U	64 U 64 U	59 U 58 U	59 U	60 U	59 U 58 U	63 U	64 U 63 U	59 U 58 U	59 U	62 U 61 U	57 U
N-Nitrosodiphenylamine Phenanthrene	100,000	58 U 150 J	420	830	450	300 J	65 J	58 U 56 U	1900	2400 D	58 U 56 U	59 U 57 U	59 U	57 U 55 U
	100,000	150 J 290 J	420 960	1600	450 600	300 J 810	65 J 200 J	56 U 63 U	1900 2600 D	2400 D 3600 D	56 U 63 U	57 U 63 U	59 U 66 U	55 U 61 U
Pyrene	100,000	290 J	900	1600	600	810	200 J	63 U	2000 D	3600 D	63 U	63 U	U 00	01 U

Qualifiers

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B - The analyte was found in the laboratory blank as well as the sample. This indicates possible laboratory contamination of the environmental sample.

P - For dual column analysis, the percent difference between the quantitated concentrations on the two columns is greater than 40%.

D - A sample dilution was reuired to obtain the value.

NR - Not analyzed

TABLE 1C RI Summary of Soil Results 3035 White Plains Road, Bronx, NY Pesticides and PCBs

COMPOUND	Track 1 Unrestricted Cleanup Objectives	SB1 (0-4FT)	SB1 (4-8FT)	SB1 (8-12FT)	SB2 (0-4FT)	SB2 (4-8FT)	SB3 (0-4FT)	SB4 (0-4FT)	SB4 (4-8FT)	SB4 (8-10FT)	SB5 (0-4FT)	SB5 (4-8FT)	SB5 (8-10FT)	SB6 (0-2FT)	SB7 (0-4FT)
Sample Results in µg/kg	ug/kg	10/2/2007	10/2/2007	10/2/2007	10/2/2007	10/2/2007	10/2/2007	10/2/2007	10/2/2007	10/2/2007	10/2/2007	10/2/2007	10/2/2007	10/2/2007	10/2/2007
4,4-DDD	3.3	0.93 U	0.79 U	0.78 U	0.82 U	0.81 U	0.78 U	0.79 U	0.82 U	0.76 U	240 D	0.74 U	0.77 U	2.6 P	11 P
4,4-DDE	3.3	2.8	0.89 U	0.88 U	0.92 U	0.90 U	0.87 U	0.89 U	0.92 U	0.85 U	2.0	0.83 U	0.86 U	0.89 U	0.90 U
4,4-DDT	3.3	3.4	0.81 U	0.80 U	2.4 P	0.83 U	0.80 U	0.81 U	0.84 U	5.1	0.81 U	0.76 U	2.4 P	0.82 U	0.82 U
Aldrin	5.0	1.6 U	1.4 U	2.6	1.4 U	1.3 U	1.4 U	1.3 U	1.3 U	1.4 U	1.4 U				
alpha-BHC	20	0.85 U	0.72 U	0.71 U	0.75 U	0.73 U	0.71 U	0.72 U	0.75 U	0.69 U	0.72 U	0.67 U	0.70 U	0.72 U	0.73 U
alpha-Chlordane	94	1.1 U	0.94 U	0.93 U	0.98 U	0.96 U	0.93 U	0.94 U	0.98 U	0.90 U	0.94 U	0.88 U	0.92 U	0.95 U	0.95 U
beta-BHC	36	1.2 U	0.99 U	0.98 U	1.0 U	1.0 U	0.97 U	0.99 U	1.0 U	0.95 U	0.98 U	0.92 U	0.96 U	0.99 U	1.0 U
delta-BHC	40	2.2 U	1.8 U	1.8 U	1.9 U	1.9 U	1.8 U	1.8 U	1.9 U	1.8 U	1.8 U	1.7 U	1.8 U	1.8 U	1.9 U
Dieldrin	5	1.1 U	0.93 U	0.92 U	0.97 U	0.95 U	0.91 U	0.93 U	0.97 U	0.89 U	0.93 U	0.87 U	0.91 U	0.93 U	0.94 U
Endosulfan I	2,400	1.2 U	0.99 U	0.98 U	1.0 U	1.0 U	0.97 U	0.99 U	1.0 U	0.95 U	0.99 U	0.93 U	0.97 U	1.0 U	1.0 U
Endosulfan II	2,400	1.3 U	1.1 U	1.1 U	1.1 U	1.1 U	1.0 U	1.1 U	1.1 U	1.0 U	1.1 U	0.99 U	1.0 U	1.1 U	1.1 U
Endosulfan Sulfate	2,400	1.4 U	1.2 U	1.2 U	1.3 U	1.2 U	1.2 U	1.2 U	1.3 U	1.2 U	1.2 U	1.1 U	1.2 U	1.2 U	1.2 U
Endrin	14	1.1 U	0.96 U	0.95 U	1.0 U	0.98 U	0.94 U	0.96 U	1.0 U	0.92 U	0.96 U	0.90 U	0.93 U	0.96 U	0.97 U
Endrin aldehyde		1.3 U	1.1 U	1.1 U	1.2 U	1.2 U	1.1 U	1.1 U	1.2 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U
Endrin ketone		1.1 U	0.93 U	0.92 U	0.96 U	0.95 U	0.91 U	0.93 U	0.96 U	0.89 U	0.93 U	0.87 U	0.90 U	0.93 U	0.94 U
gamma-BHC		2.1 J	0.81 U	0.80 U	0.84 U	0.83 U	0.80 U	0.81 U	0.84 U	0.78 U	0.81 U	0.76 U	0.79 U	0.81 U	0.82 U
gamma-Chlordane		1.2 U	0.98 U	0.97 U	1.0 U	1.0 U	0.97 U	0.99 U	1.0 U	0.94 U	0.98 U	0.92 U	0.96 U	0.99 U	1.0 U
Heptachlor	42	1.2 U	1.0 U	1.0 U	1.1 U	1.1 U	1.0 U	1.0 U	1.1 U	1.0 U	1.0 U	0.98 U	1.0 U	1.1 U	1.1 U
Heptachlor epoxide		1.4 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.1 U	1.2 U	1.1 U	1.2 U	1.2 U	1.2 U
Methoxychlor		1.1 U	0.97 U	0.96 U	1.0 U	0.99 U	0.95 U	0.97 U	1.0 U	0.93 U	0.97 U	0.91 U	0.94 U	0.97 U	0.98 U
Toxaphene		4.7 U	4.0 U	4.0 U	4.2 U	4.1 U	4.0 U	4.0 U	4.2 U	3.9 U	4.0 U	3.8 U	3.9 U	4.1 U	4.1 U
Aroclor-1016	100	3.4 U	2.9 U	2.8 U	3.0 U	2.9 U	2.8 U	2.9 U	3.0 U	2.7 U	2.9 U	2.6 U	2.8 U	2.9 U	2.9 U
Aroclor-1221	100	5.2 U	4.5 U	4.4 U	4.6 U	4.5 U	4.3 U	4.5 U	4.6 U	4.3 U	4.5 U	4.1 U	4.3 U	4.5 U	4.5 U
Aroclor-1232	100	7.8 U	6.7 U	6.6 U	6.9 U	6.7 U	6.5 U	6.7 U	6.9 U	6.4 U	6.7 U	6.1 U	6.4 U	6.7 U	6.7 U
Aroclor-1242	100	6.9 U	5.9 U	5.9 U	6.1 U	6.0 U	5.8 U	5.9 U	6.1 U	5.7 U	5.9 U	5.5 U	5.7 U	5.9 U	6.0 U
Aroclor-1248	100	3.4 U	2.9 U	2.8 U	3.0 U	2.9 U	2.8 U	2.9 U	3.0 U	2.7 U	2.9 U	2.7 U	2.8 U	2.9 U	2.9 U
Aroclor-1254	100	2.2 U	1.9 U	1.9 U	1.9 U	1.9 U	1.8 U	1.9 U	1.9 U	1.8 U	1.9 U	1.7 U	1.8 U	1.9 U	1.9 U
Aroclor-1260	100	5.6 U	4.8 U	4.7 U	4.9 U	4.8 U	4.6 U	4.8 U	4.9 U	4.5 U	4.8 U	4.4 U	4.6 U	4.8 U	4.8 U

Qualifiers

U - The compound was not detected at the indicated concentration.

J - Data indicates the presence of a compound that meets the identification criteria. The result is less than the quantitation limit but greater than zero. The concentration given is an approximate value.

B - The analyte was found in the laboratory blank as well as the sample. This indicates possible laboratory contamination of the environmental sample.

P - For dual column analysis, the percent difference between the quantitated concentrations on the two columns is greater than 40%.

D - A sample dilution was reuired to obtain the value.

NR - Not analyzed

TABLE 1C Continued RI Summary of Soil Results 3035 White Plains Road, Bronx, NY Pesticides and PCBs

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COMPOUND	Track 1 Unrestricted Cleanup Objectives	SB8 (0-2FT)	SB9 (0-2FT)	SB10 (0-2FT)	SB11 (0-4FT)	SB12 (0-2FT)	SB13 (0-4FT)	SB14 (0-2FT)	SB15 (0-3FT)	SB16 (0-3FT)	SB17 (0-4FT)	SB17 (4-6FT)	SB18 (0-4FT)	SB18 (4-6FT)
Sample Results in µg/kg	ug/kg	10/2/2007	10/2/2007	10/2/2007	10/2/2007	10/2/2007	10/2/2007	10/2/2007	10/2/2007	10/2/2007	10/2/2007	10/2/2007	10/2/2007	10/2/2007
4,4-DDD	3.3	0.75 U	5.8	0.82 U	0.75 U	15	6.0	0.68 U	0.74 U	0.74 U	0.69 U	0.68 U	0.71 U	0.67 U
4,4-DDE	3.3	0.84 U	0.87 U	0.92 U	0.84 U	0.85 U	5.0	0.94 U	1.0 U	1.0 U	0.94 U	0.94 U	0.98 U	0.92 U
4,4-DDT	3.3	0.77 U	0.80 U	0.84 U	0.77 U	1.8 J	10	1.7 U	1.9 U	1.9 U	1.7 U	1.7 U	1.8 U	1.7 U
Aldrin	5.0	1.3 U	1.4 U	1.4 U	1.3 U	1.3 U	1.4 U	0.77 U	0.83 U	0.83 U	0.77 U	0.77 U	0.80 U	0.75 U
alpha-BHC	20	0.69 U	0.71 U	0.75 U	0.68 U	0.69 U	0.71 U	1.0 U	1.1 U	1.1 U	1.0 U	0.99 U	1.0 U	0.97 U
alpha-Chlordane	94	0.90 U	0.93 U	0.98 U	0.89 U	0.91 U	0.92 U	1.3 U	1.4 U	1.4 U	1.3 U	1.3 U	1.4 U	1.3 U
beta-BHC	36	0.94 U	0.97 U	1.0 U	0.93 U	0.95 U	0.97 U	1.1 U	1.2 U	1.2 U	1.1 U	1.1 U	1.2 U	1.1 U
delta-BHC	40	1.7 U	1.8 U	1.9 U	1.7 U	1.8 U	1.8 U	0.94 U	1.0 U	1.0 U	0.94 U	0.94 U	0.98 U	0.92 U
Dieldrin	5	0.89 U	0.91 U	0.96 U	0.88 U	0.89 U	0.91 U	0.88 U	0.95 U	0.95 U	0.89 U	0.88 U	0.92 U	0.86 U
Endosulfan I	2,400	0.94 U	0.97 U	1.0 U	0.94 U	0.95 U	0.97 U	0.84 U	0.91 U	0.91 U	0.84 U	0.84 U	0.88 U	0.82 U
Endosulfan II	2,400	1.0 U	1.0 U	1.1 U	1.0 U	1.0 U	1.0 U	0.91 U	0.98 U	0.98 U	0.91 U	0.91 U	0.95 U	0.89 U
Endosulfan Sulfate	2,400	1.2 U	1.2 U	1.3 U	1.1 U	1.2 U	1.2 U	1.0 U	1.1 U	1.1 U	1.0 U	1.0 U	1.1 U	0.99 U
Endrin	14	0.91 U	0.94 U	1.0 U	0.91 U	0.92 U	0.94 U	0.75 U	31	0.81 U	0.75 U	0.75 U	0.78 U	0.73 U
Endrin aldehyde		1.1 U	1.1 U	1.2 U	1.1 U	1.1 U	1.1 U	1.2 U	1.1 U					
Endrin ketone		0.88 U	0.91 U	0.96 U	0.88 U	0.89 U	0.91 U	0.77 U	0.83 U	11	17	0.77 U	0.80 U	0.75 U
gamma-BHC		0.77 U	0.79 U	0.84 U	0.76 U	0.78 U	0.79 U	0.92 U	0.99 U	1.0 U	0.92 U	0.92 U	0.96 U	0.90 U
gamma-Chlordane		0.94 U	0.96 U	1.0 U	0.93 U	0.95 U	0.96 U	0.88 U	0.95 U	0.95 U	0.88 U	0.88 U	0.92 U	0.86 U
Heptachlor	42	1.0 U	1.0 U	1.1 U	0.99 U	1.0 U	1.0 U	1.1 U	1.2 U	1.2 U	1.1 U	1.1 U	1.1 U	1.1 U
Heptachlor epoxide		1.1 U	1.2 U	1.2 U	1.1 U	1.2 U	1.2 U	0.90 U	0.96 U	0.97 U	0.90 U	0.90 U	0.93 U	0.88 U
Methoxychlor		0.92 U	0.95 U	1.0 U	0.91 U	0.93 U	0.95 U	0.93 U	1.0 U	1.0 U	0.94 U	0.93 U	0.97 U	0.91 U
Toxaphene		3.8 U	4.0 U	4.2 U	3.8 U	3.9 U	4.0 U	3.8 U	4.1 U	4.1 U	3.8 U	3.8 U	4.0 U	3.7 U
Aroclor-1016	100	2.7 U	2.8 U	3.0 U	2.7 U	2.7 U	2.8 U	2.7 U	2.9 U	2.9 U	2.7 U	2.7 U	2.8 U	2.7 U
Aroclor-1221	100	4.2 U	4.4 U	4.6 U	4.2 U	4.3 U	4.4 U	4.2 U	4.5 U	4.6 U	4.2 U	4.2 U	4.4 U	4.1 U
Aroclor-1232	100	6.3 U	6.5 U	6.9 U	6.3 U	6.4 U	6.5 U	6.3 U	6.8 U	6.8 U	6.3 U	6.3 U	6.6 U	6.2 U
Aroclor-1242	100	5.6 U	5.8 U	6.1 U	5.6 U	5.7 U	5.8 U	5.6 U	6.0 U	6.1 U	5.6 U	5.6 U	5.8 U	5.5 U
Aroclor-1248	100	2.7 U	2.8 U	3.0 U	2.7 U	2.8 U	2.8 U	2.7 U	2.9 U	2.9 U	2.7 U	2.7 U	2.8 U	2.7 U
Aroclor-1254	100	1.8 U	1.8 U	1.9 U	1.8 U	1.8 U	1.8 U	1.8 U	1.9 U	1.9 U	1.8 U	1.8 U	1.9 U	1.7 U
Aroclor-1260	100	4.5 U	4.7 U	4.9 U	4.5 U	4.6 U	4.7 U	4.5 U	4.9 U	4.9 U	4.5 U	4.5 U	4.7 U	4.4 U

Qualifiers

U - The compound was not detected at the indicated concentration.

J - Data indicates the presence of a compound that meets the identification criteria. The result is less than the quantitation limit but greater than zero. The concentration given is an approximate value.

B - The analyte was found in the laboratory blank as well as the sample. This indicates possible laboratory contamination of the environmental sample.

P - For dual column analysis, the percent difference between the quantitated concentrations on the two columns is greater than 40%.

D - A sample dilution was reuired to obtain the value.

NR - Not analyzed

TABLE 1D RI Summary of Soil Results 3035 White Plains Road, Bronx, NY Metals

COMPOUND	Track 1 Unrestricted Cleanup Objectives	SB1 (0-4FT)	SB1 (4-8FT)	SB1 (8-12FT)	SB2 (0-4FT)	SB2 (4-8FT)	SB3 (0-4FT)	SB4 (0-4FT)	SB4 (4-8FT)	SB4 (8-10FT)	SB5 (0-4FT)	SB5 (4-8FT)	SB5 (8-10FT)	SB6 (0-2FT)	SB7 (0-4FT)
Sample Results in µg/kg	ug/kg	10/2/2007	10/2/2007	10/2/2007	10/2/2007	10/2/2007	10/2/2007	10/2/2007	10/2/2007	10/2/2007	10/2/2007	10/2/2007	10/2/2007	10/2/2007	10/2/2007
Aluminum		17100	9740	11100	13700	11100	7330	8290	10300	8250	11300	5550	5340	6880	12200
Antimony		0.301 U	0.258 U	0.255 U	0.267 U	0.258 U	0.253 U	0.258 U	0.266 U	0.247 U	0.254 U	0.236 U	0.250 U	0.256 U	0.260 U
Arsenic	13	9.850	0.423 J	3.820	2.500	1.590	1.120	2.780	1.790	0.146 U	1.870	0.139 U	0.147 U	3.130	3.770
Barium	350	235	44.7	103	121	66.7	107	109	116	59.4	120	32.8	45.4	240	307
Beryllium	7	0.806	0.346	0.501	0.683	0.376	0.410	0.340	0.376	0.555	0.363	0.196 J	0.185 J	0.339	0.477
Cadmium	2.5 c	3.100	1.140	1.550	1.470	0.968	1.520	1.510	1.520	1.650	1.060	0.392 J	0.685 J	1.890	1.990
Calcium		2630	576	5320	1400	832	2090	10200	9100	2980	1060	566	3930	4040	4540
Chromium	30 c	29.5	22.3	34.5	19.6	19.2	19.6	19.9	26.2	15.4	18.4	9.900	16.3	18.9	38.6
Cobalt		11.6	6.230	6.810	5.760	4.660	6.810	6.860	6.220	9.240	6.970	5.160	4.910	8.240	8.240
Copper	50	85.9	19.4	32.4	21.2	14.2	73.2	31.1	24.8	29.9	29.4	21.5	20.7	62.8	40.2
Iron		23900	15300	15200	14100	12900	10900	14300	16700	20100	13300	6800	8450	17200	19100
Lead	63 c	346	10.6	98.9	59.8	18.7	92.2	115	89.9	6.480	37.2	1.760	19.7	335	364
Magnesium		3580	2740	2590	2220	2140	2360	3160	3260	3280	2510	1840	2160	2410	2750
Manganese	1600 c	551	161	329	531	173	154	270	262	440	177	124	115	235	187
Mercury	0.18 c	0.393	0.017	0.056	0.078	0.030	0.081	0.106	0.099	0.006 J	0.097	0.009 J	0.018	0.180	0.156
Nickel	30	22.8	13.5	14.5	12.3	9.410	13.9	13.9	12.9	17.2	12.2	11.9	12.4	16.6	18.1
Potassium		1740	1190	1130	695	731	1390	1480	1480	2560	985	958	1170	1780	1290
Selenium	3.9c	0.347 J	0.137 U	0.135 U	0.142 U	0.137 U	0.195 J	0.136 U	0.141 U	0.131 U	0.134 U	0.125 U	0.132 U	0.136 U	0.138 U
Silver	2	0.239 J	0.137 U	0.135 U	0.142 U	0.137 U	0.134 U	0.136 U	0.141 U	0.131 U	0.134 U	0.125 U	0.132 U	0.136 U	0.138 U
Sodium		234	73.8 J	133	150	76.8	124	145	110	92.4	63.1 J	79.1	122	193	324
Thallium		1.670 U	1.430 U	1.420 U	1.490 U	1.430 U	1.400 U	1.430 U	1.480 U	1.380 U	1.410 U	1.310 U	1.390 U	1.430 U	1.450 U
Vanadium		50.2	27.3	31.2	30.4	26.9	20.5	24.5	30.2	25.0	27.7	14.2	15.5	35.0	35.5
Zinc	109 c	478	47.8	148	146	51.6	180	159	96.3	43.0	59.3	19.7	55.2	258	231
Hexavalent Chromium		0.530 U	0.455 U	0.450 U	0.472 U	0.458 U	0.446 U	0.455 U	0.469 U	0.437 U	0.454 U	0.419 U	0.442 U	0.452 U	0.459 U

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B - The analyte was found in the laboratory blank as well as the sample. This indicates possible laboratory contamination of the environmental sample.

P - For dual column analysis, the percent difference between the quantitated concentrations on the two columns is greater than 40%.

D - A sample dilution was reuired to obtain the value.

NR - Not analyzed

TABLE 1D Continued RI Summary of Soil Results 3035 White Plains Road, Bronx, NY Metals

COMPOUND	Track 1 Unrestricted Cleanup Objectives	SB8 (0-2FT)	SB9 (0-2FT)	SB10 (0-2FT)	SB11 (0-4FT)	SB12 (0-2FT)	SB13 (0-4FT)	SB14 (0-2FT)	SB15 (0-3FT)	SB16 (0-3FT)	SB17 (0-4FT)	SB17 (4-6FT)	SB18 (0-4FT)	SB18 (4-6FT)
Sample Results in µg/kg	ug/kg	10/2/2007	10/2/2007	10/2/2007	10/2/2007	10/2/2007	10/2/2007	10/2/2007	10/2/2007	10/2/2007	10/2/2007	10/2/2007	10/2/2007	10/2/2007
Aluminum		13800	12600	11100	7280	11400	9440	6660	9510	11500	6140	8800	10200	13700
Antimony		0.243 U	0.251 U	0.265 U	0.244 U	0.246 U	0.251 U	0.245 U	0.261 U	0.262 U	0.244 U	0.245 U	0.254 U	0.238 U
Arsenic	13	1.530	3.810	2.130	0.884	2.920	2.130	0.700 J	4.410	1.990	0.410 J	0.144 U	1.210	0.256 J
Barium	350	114	361	247	87.4	173	130	63.1	147	90.5	67.5	76.8	51.6	88.5
Beryllium	7	0.498	0.395	0.433	0.285	0.380	0.348	0.284	0.364	0.453	0.196 J	0.325	0.491	0.310
Cadmium	2.5 c	1.980	2.650	1.680	0.908	2.100	1.340	1.060	2.670	1.340	0.772	1.270	1.230	1.510
Calcium		3060	3830	2770	1160	2300	2750	1200	14300	979	993	7890	1210	1180
Chromium	30 c	24.2	25.0	40.8	16.1	22.0	18.6	28.2	21.5	20.3	28.0	15.9	19.9	47.2
Cobalt		18.2	14.0	9.260	6.610	12.7	7.860	11.5	9.060	7.820	5.940	8.260	9.200	10.1
Copper	50	19.0	48.3	31.5	25.1	61.5	33.9	32.2	103	21.0	26.4	23.5	27.8	39.6
Iron		21400	26100	17800	11000	20900	14100	12900	21200	15500	10200	13500	16200	17700
Lead	63 c	98.7	166	238	96.0	188	144	52.4	676	51.8	139	26.0	8.780	3.440
Magnesium		5840	5000	2850	2460	4220	2760	3600	10200	2550	2340	7810	2760	6330
Manganese	1600 c	399	317	235	229	254	194	238	256	298	171	205	207	417
Mercury	0.18 c	0.048	0.182	0.063	0.091	0.224	0.194	0.041	0.202	0.077	0.028	0.036	0.023	0.01 J
Nickel	30	25.9	19.6	18.4	13.7	18.5	14.0	25.7	20.9	13.9	12.7	12.6	19.5	23.5
Potassium		6560	7180	1070	1140	5370	1790	862	3070	1030	1110	3970	1000	3140
Selenium	3.9c	0.129 U	0.133 U	0.141 U	0.129 U	0.130 U	0.133 U	0.130 U	0.138 U	0.138 U	0.129 U	0.130 U	0.135 U	0.126 U
Silver	2	0.129 U	0.133 U	0.141 U	0.129 U	0.130 U	0.133 U	0.130 U	0.138 U	0.138 U	0.129 U	0.130 U	0.135 U	0.126 U
Sodium		328	139	240	97.7	123	113	107	181	95.6	77.2	107	80.9	59.1 J
Thallium		1.350 U	1.400 U	1.480 U	1.350 U	1.370 U	1.400 U	1.360 U	1.450 U	1.450 U	1.360 U	1.360 U	1.410 U	1.320 U
Vanadium		36.6	34.5	40.8	22.9	32.2	27.4	25.1	34.5	29.3	19.4	23.8	29.0	35.4
Zinc	109 c	83.1	313	188	124	170	132	54.1	237	77.2	38.7	67.2	51.4	54.3
Hexavalent Chromium		0.43 U	0.446 U	0.468 U	0.43 U	0.434 U	0.443 U	0.432 U	0.467 U	0.465 U	0.431 U	0.432 U	0.452 U	0.420 U

U - The compound was not detected at the indicated concentration.

J - Data indicates the presence of a compound that meets the identification criteria. The result is less than the quantitation limit but greater than zero. The concentration given is an approximate value.

B - The analyte was found in the laboratory blank as well as the sample. This indicates possible laboratory contamination of the environmental sample.

P - For dual column analysis, the percent difference between the quantitated concentrations on the two columns is greater than 40%.

D - A sample dilution was reuired to obtain the value.

NR - Not analyzed

TABLE 2A RI Summary of Groundwater Results 3035 White Plains Road, Bronx, NY Volatile Organic Compounds

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COMPOUND	NYSDEC Ambient Water Quality Standards	MW-1	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7	MW-9	MW-10	MW-11	MW-12	MW-13	MW-14	MW-15	MW-16
(μg/L)	(µg/L)	11/2/2007	11/2/2007	11/2/2007	11/2/2007	11/2/2007	11/2/2007	11/2/2007	11/2/2007	11/2/2007	11/2/2007	11/2/2007	12/7/2007	12/7/2007	12/7/2007	12/7/2007
1,1,1-Trichloroethane	1	0.17 U														
1,1,2,2-Tetrachloroethane	5	0.35 U														
1,1,2-Trichloroethane	1	0.36 U														
1,1,2-Trichlorotrifluoroethane	5	2.1 U														
1,1-Dichloroethane	4	0.28 U														
1,1-Dichloroethene	5	0.33 U														
1,2,4-Trichlorobenzene	5	5.0 U														
1,2-Dibromo-3-Chloropropane	0.4	5.0 U														
1,2-Dibromoethane		0.25 U														
1,2-Dichlorobenzene	3	0.67 U														
1,2-Dichloroethane	0.6	0.28 U														
1,2-Dichloropropane	5	0.27 U														
1,3-Dichlorobenzene	3	0.65 U														
1,4-Dichlorobenzene	3	0.79 U														
2-Butanone		1.6 U	16 J	1.6 U	1.6 U	1.6 U										
2-Hexanone		1.3 U														
4-Methyl-2-Pentanone		1.7 U														
Acetone	5	6.8 U	40	6.8 U	60	6.8 U										
Benzene	1	47	15	83	0.35 U	490 D	0.35 U	71	0.35 U	0.35 U	0.35 U	0.35 U	150	0.35 U	12	160
Bromodichloromethane	50*	0.30 U														
Bromoform	50*	0.22 U														
Bromomethane	5	1.3 U														
Carbon Disulfide		0.36 U	6.5	4.0 J	0.36 U											
Carbon Tetrachloride	5	0.34 U														
Chlorobenzene	5	0.47 U														
Chloroethane	5	1.1 U														
Chloroform	7	0.18 U														
Chloromethane	5	0.45 U														
cis-1,2-Dichloroethene	5	0.28 U														
cis-1,3-Dichloropropene	0.4	0.26 U														
Cyclohexane		42	50	57	23	110	5.0 U	58	5.0 U	5.0 U	5.0 U	5.0 U	14	5.0 U	110	5.0 U
Dibromochloromethane		0.22 U														
Dichlorodifluoromethane	5	0.70 U														
Ethyl Benzene	5	690 D	590 D	1000 D	160	1400 D	0.50 U	91	0.50 U	3.1 J	0.50 U	0.50 U	88	0.50 U	200	5.5
Isopropylbenzene	NS	86	48	92	38	63	5.0 U	70	5.0 U							
m/p-Xylenes	5	1700 D	730 D	3100 D	250	5600 D	1.1 U	350	1.1 U	17	1.1 U	1.1 U	510 D	1.1 U	8200 D	200
Methyl Acetate		5.0 U														
Methyl Cyclohexane		36	29	54	31	69	5.0 U	35	5.0 U	130	5.0 U					
Methyl tert-butyl Ether	10	120	90	430 D	22	53	4.4 J	0.23 U	9.6	78	0.23 U	0.23 U	37	0.23 U	0.23 U	6.1
Methylene Chloride	10	0.98 U														
o-Xylene	5	500 D	130	940 D	35	2200 D	0.47 U	100	0.47 U	5.7	0.47 U	0.47 U	250 D	0.47 U	3300 D	120
Styrene	5	0.45 U	0.45 U	0.45 U	0.45 U	160	0.45 U									
t-1,3-Dichloropropene	0.4	0.29 U														
Tetrachloroethene	5	0.74 U														
Toluene	5	110	24	270 D	5.4	1900 D	0.38 U	120	0.38 U	4.3 J	0.38 U	0.38 U	840 D	0.38 U	1700 D	170
trans-1,2-Dichloroethene	0.4	0.40 U														
Trichloroethene	0.4	0.59 U														
Trichlorofluoromethane	5	0.58 U														
Vinyl Chloride	NS	0.62 U														
Total Confident Conc. VOC		3331	1706	6026	564.4	12045	4.4	865	9.6	174.6	4	0	1905	0	13722	661.6
Total TICs		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Qualifiers

J - Data indicates the presence of a compound that meets the identification criteria. The result is less than the quantitation limit but greater than zero. The concentration given is an approximate value.

D - A sample dilution was reuired to obtain the value.

B - The analyte was found in the laboratory blank as well as the sample. This indicates possible laboratory contamination of the environmental sample.

P - For dual column analysis, the percent difference between the quantitated concentrations on the two columns is greater than 40%.

* - For dual column analysis, the lowest quantitated concentration is being reported due to coeluting interference.

NR - Not analyzed

U - The compound was not detected at the indicated concentration.

TABLE 2B RI Summary of Groundwater Results 3035 White Plains Road, Bronx, NY Semi-Volatile Organic Compounds

					e organic oo	•						
COMPOUND	NYSDEC Ambient Water Quality Standards	MW-1	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7	MW-9	MW-10	MW-11	MW-12
(µg/L)	(µg/L)	11/2/2007	11/2/2007	11/2/2007	11/2/2007	11/2/2007	11/2/2007	11/2/2007	11/2/2007	11/2/2007	11/3/2007	11/4/2007
1,1-Biphenyl		2.2 J	0.670 J	1.6 J	0.24 U	0.910 J	0.24 U					
2,2-oxybis(1-Chloropropane)		0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.24 U	0.25 U	0.24 U	0.25 U	0.25 U
2.4-Dinitrotoluene	5	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U
2,6-Dinitrotoluene	5	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.25 U	0.24 U	0.24 U	0.24 U	0.24 U
2-Chloronaphthalene	10	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.23 U	0.22 U	0.22 U	0.22 U	0.22 U
2-Methylnaphthalene	NS	130 D	18	110 D	0.30 U	100 D	0.30 U					
2-Nitroaniline	5	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U
3,3-Dichlorobenzidine	5	0.74 U	0.74 U	0.74 U	0.74 U	0.74 U	0.74 U	0.75 U	0.74 U	0.74 U	0.74 U	0.74 U
3-Nitroaniline	5	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.21 U	0.20 U	0.20 U	0.20 U	0.20 U
4-Bromophenyl-phenylethe	NS	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U
4-Chloroaniline	5	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U
4-Chlorophenyl-phenylether	NS	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.24 U	0.23 U	0.23 U	0.23 U	0.23 U
Acenaphthene	20	0.550 J	0.22 U	0.440 J	0.22 U	0.22 U	0.22 U	0.23 U	0.22 U	0.22 U	0.22 U	0.22 U
Acenaphthylene	20	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U
Acetophenone		0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.27 U	0.26 U	0.26 U	0.26 U	0.26 U
Anthracene	50*	0.360 J	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U
Atrazine		0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.37 U	0.36 U	0.36 U	0.36 U	0.36 U
Benzaldehyde		0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.26 U	0.25 U	0.25 U	0.25 U	0.25 U
Benzo(a)anthracene	0.002	0.400 J	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U
Benzo(a)pyrene	ND	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
Benzo(b)fluoranthene	0.002	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U
Benzo(g,h,i)perylene	NS	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U
Benzo(k)fluoranthene	0.002	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.39 U	0.38 U	0.38 U	0.38 U	0.38 U
bis(2-Chloroethoxy)methane	NS	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
bis(2-Chloroethyl)ether	1	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U
bis(2-Ethylhexyl)phthalate	5	9.1 B	2.0 JB	0.350 JB	0.400 JB	7.4 B	4.9 B	0.390 JB	0.620 JB	4.4 B	1.1 JB	2.6 B
Butylbenzylphthalate		0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	1.5 J	0.26 U	0.26 U	0.26 U	0.26 U
Caprolactam		0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.500 J	0.29 U				
Carbazole		0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U
Chrysene	0.002	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.32 U	0.31 U	0.31 U	0.31 U	0.31 U
Dibenz(a,h)anthracene	50	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.17 U	0.16 U	0.16 U	0.16 U	0.16 U
Dibenzofuran	NS	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.24 U	0.23 U	0.23 U	0.23 U	0.23 U
Diethylphthalate	50	0.19 U	0.360 J	0.550 J	0.19 U	1.3 J	0.19 U	0.20 U	0.19 U	0.250 J	0.19 U	0.19 U
Dimethylphthalate	50	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U
Di-n-butylphthalate	50	0.25 U	0.25 U	0.25 U	0.25 U	0.290 J	0.25 U	0.670 J	0.25 U	0.310 J	0.25 U	0.25 U
Di-n-octyl phthalate	50*	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U
Fluoranthene	50	0.590 J	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U
Fluorene	50	1.1 J	0.24 U	0.640 J	0.24 U	0.450 J	0.24 U	0.25 U	0.24 U	0.24 U	0.24 U	0.24 U
Hexachlorobutadiene	0.5	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U
Hexachlorocyclopentadiene	5	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Hexachloroethane	5	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.29 U	0.28 U	0.28 U	0.28 U	0.28 U
Indeno(1,2,3-cd)pyrene	0.002	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U
Isophorone	50	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U	0.45 U	0.44 U	0.44 U	0.44 U	0.44 U
Naphthalene	10	200 D	90 D	250 D	0.28 U	170 D	0.860 J	0.29 U	0.28 U	0.28 U	0.28 U	0.28 U
Nitrobenzene	0.04	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U
n-Nitrosodimethylamine		0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	0.47 U	0.46 U	0.46 U	0.46 U	0.46 U
N-Nitroso-di-n-propylamine	NS	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.28 U	0.27 U	0.27 U	0.27 U	0.27 U
N-Nitrosodiphenylamine	50	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U
Phenanthrene	50	1.5 J	0.24 U	0.440 J	0.24 U	0.730 J	0.24 U	0.25 U	0.24 U	0.500 J	0.24 U	0.24 U
Pyrene	50	0.770 J	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U

Qualifiers

U - The compound was not detected at the indicated concentration.

J - Data indicates the presence of a compound that meets the identification criteria. The result is less than the quantitation limit but greater than zero.

The concentration given is an approximate value.

D - A sample dilution was reuired to obtain the value.

B - The analyte was found in the laboratory blank as well as the sample. This indicates possible laboratory contamination of the environmental sample.

TABLE 2C

RI Summary of Groundwater Results

3035 White Plains Road, Bronx, NY

Pesticides and PCBs

COMPOUND	NYSDEC AMBIENT WATER QUALITY STANDARDS	MW-1	MW-5	MW-6	MW-10	MW-12
Pesticides and PCBs	(µg/L)	11/2/2007	11/2/2007	11/2/2007	11/2/2007	11/2/2007
4,4-DDD	0.3	0.001 U	0.001 U	0.001 U	0.001 U	0.002 U
4,4-DDE	0.2	0.001 U				
4,4-DDT	0.2	0.001 U	0.001 U	0.001 U	0.002 U	0.002 U
Aldrin	ND	0.002 U	0.002 U	0.002 U	0.003 U	0.004 U
alpha-BHC	0.01	0.001 U				
alpha-Chlordane	0.05	0.001 U	0.001 U	0.001 U	0.0022 U	0.002 U
beta-BHC	0.04	0.001 U	0.001 U	0.001 U	0.002 U	0.002 U
delta-BHC	0.04	0.0018 U	0.0018 U	0.0018 U	0.001 U	0.0035 U
Dieldrin	0.004	0.001 U	0.001 U	0.001 U	0.001 U	0.002 U
Endosulfan I	NS	0.001 U	0.001 U	0.001 U	0.001 U	0.002 U
Endosulfan II	NS	0.001 U	0.001 U	0.001 U	0.001 U	0.002 U
Endosulfan Sulfate	NS	0.001 U	0.001 U	0.001 U	0.001 U	0.002 U
Endrin	ND	0.001 U	0.001 U	0.001 U	0.001 U	0.002 U
Endrin aldehyde	5	0.001 U	0.001 U	0.001 U	0.001 U	0.002 U
Endrin ketone	5	0.001 U	0.001 U	0.001 U	0.001 U	0.002 U
gamma-BHC		0.001 U				
gamma-Chlordane	0.05	0.001 U	0.001 U	0.001 U	0.001 U	0.002 U
Heptachlor	0.04	0.001 U	0.001 U	0.001 U	0.001 U	0.003 U
Heptachlor epoxide	0.03	0.002 U	0.002 U	0.002 U	0.004 U	0.003 U
Methoxychlor	35	0.003 U	0.003 U	0.003 U	0.001 U	0.006 U
Toxaphene	0.06	0.007 U	0.007 U	0.007 U	0.009 U	0.014 U
Aroclor-1016	.09*	0.015 U	0.015 U	0.015 U	0.03 U	0.03 U
Aroclor-1221	.09*	0.014 U	0.013 U	0.013 U	0.027 U	0.027 U
Aroclor-1232	.09*	0.014 U	0.014 U	0.014 U	0.028 U	0.028 U
Aroclor-1242	.09*	0.0052 U	0.0051 U	0.0051 U	0.01 U	0.01 U
Aroclor-1248	.09*	0.0045 U	0.0044 U	0.0044 U	0.0088 U	0.0088 U
Aroclor-1254	.09*	0.0036 U	0.0035 U	0.0035 U	0.007 U	0.007 U
Aroclor-1260	.09*	0.012 U	0.012 U	0.012 U	0.024 U	0.024 U

Qualifiers

U - The compound was not detected at the indicated concentration.

J - Data indicates the presence of a compound that meets the identification criteria. The result is less than the quantitation limit but greater than zero. The concentration given is an approximate value.

B - The analyte was found in the laboratory blank as well as the sample. This indicates possible laboratory contamination of the sample.

Notes:

** - NYSDEC Ambient Water Quality Standards and Guidance Values 6/1998

ND - Non-detect

* - Guidance Value

NS - No Standard

Bold/highlighted- Indicated exceedance of the NYSDEC Groundwater Standard

TABLE 2D RI Summary of Groundwater Results 3035 White Plains Road, Bronx, NY Metals

COMPOUND	NYSDEC AMBIENT WATER QUALITY STANDARDS	MW-1 TOTAL	MW-1 DISSOLVED	MW-5 TOTAL	MW-5 DISSOLVED	MW-6 TOTAL	MW-6 DISSOLVED	MW-10 TOTAL	MW-10 DISSOLVED	MW-12 TOTAL	MW-12 DISSOLVED
Priority Pollutant Metals	(mg/L)	11/2/2007	11/2/2007	11/2/2007	11/2/2007	11/2/2007	11/2/2007	11/2/2007	11/2/2007	11/2/2007	11/2/2007
Aluminum	NS	56800	61.0	7500	170	51000	60.1	4790	98.7	21900	205
Antimony	3	8.1 U	8.1 U	8.1 U	8.1 U	8.1 U	8.1 U	8.1 U	8.1 U	8.1 U	8.1 U
Arsenic	25	2.8 U	2.8 U	2.8 U	2.8 U	2.8 U	2.8 U	2.8 U	2.8 U	2.8 U	2.8 U
Barium	100	758	135	117	54.6	581	49.6 J	62.3	18.4 J	273	41.9 J
Beryllium	3	3.8	0.91 J	1.3 J	0.93 J	2.2 J	0.86 J	1.2 J	0.93 J	1.4 J	0.87 J
Cadmium	5	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U
Calcium	NS	115000	113000	63500	64100	63700	58500	60300	62800	57800	58100
Chromium	50	110	1.1 U	17.3	1.1 U	88.6	1.1 U	11.7	1.1 U	45.1	1.3 J
Cobalt	NS	89.0	2.0 U	12.5 J	2.6 J	64.3	4.5 J	15.0	10.2 J	22.2	2.0 U
Copper	200	279	3.4 U	29.7	3.4 J	108	3.4 U	11.6	3.4 U	40.9	4.1 J
Iron	300	111000	3580	17000	2410	82500	499	9500	1840	34700	316
Lead	25	66.2	2.3 J	11.5	2.6 J	19.7	2.2 U	9.7 J	2.7 J	10.0	2.9 J
Magnesium	3500	45900	27100	19400	17700	27600	9530	19800	19200	16000	8740
Manganese	300	6210	5200	1010	980	3900	3630	1030	1030	283	118
Mercury	0.7	0.0800 U	0.0800 U	0.0800 U	0.0800 U	0.0800 U	0.0800 J	0.0800 U	0.0800 U	0.0800 U	0.0800 U
Nickel	100	169	6.2 J	31.1	7.6 J	93.6	5.6 J	24.0	17.7 J	35.5	6.0 J
Potassium	NS	45900	17100	18600	15900	38300	11900	16700	14100	25800	12200
Selenium	10	3.6 U	3.6 U	3.6 U	3.6 U	3.6 U	3.6 U	3.6 U	3.6 U	3.6 U	3.6 U
Silver	50	2.2 U	2.2 U	2.2 U	2.2 U	2.2 U	2.2 U	2.2 U	2.2 U	2.2 U	2.2 U
Sodium	2000	53800	54300	59400	61900	27600	25500	39200	39800	59900	57700
Thallium	0.5	8.1 U	8.1 U	8.1 U	8.1 U	8.1 U	8.1 U	8.1 U	8.1 U	8.1 U	8.1 U
Vanadium	NS	116	2.3 U	11.5 J	2.3 U	107	2.3 U	9.1 J	2.3 U	45.9	2.3 U
Zinc	2000	330	54.9	112	41.0	246	58.3	97.6	89.1	180	61.0
Hexavalent Chromimum	50	0.01 U		0.01 U		0.01 U		0.01 U		0.01 U	

Qualifiers

U - The compound was not detected at the indicated concentration.

J - Data indicates the presence of a compound that meets the identification criteria. The result is less than the quantitation limit but greater than zero. The concentration given is an approximate value.

B - The analyte was found in the laboratory blank as well as the sample. This indicates possible laboratory contamination of the environmental sample. Notes:

** - NYSDEC Ambient Water Quality Standards and Guidance Values 6/1998

ND - Non-detect

* - Guidance Value

NS - No Standard

Bold/highlighted- Indicated exceedance of the NYSDEC Groundwater Standard

TABLE 3 RI Summary of Soil Gas Results 3035 White Plains Road, Bronx, NY VOCs TO15

VOCs TO15														
COMPOUND	NYSDOH* 2003 Background Study	USEPA** 2002 Target Shallow	SG1	SG2	SG3	SG4	SG5	SG6	SG7	SG8	SG9	SG10	SG11	SG12
	Outdoor Air - Upper Fence	Soil Gas Conc. R=10 ⁻⁶	10/2/2007	10/2/2007	10/2/2007	10/2/2007	10/2/2007	10/2/2007	10/2/2007	10/2/2007	10/2/2007	10/2/2007	10/2/2007	10/2/2007
Sample Results in mg/m ³														
1,1,1-Trichloroethane	0.6	22000 0.42	2.39	0.48 U	2.61	1.2 U	0.24 U	3.05	0.48 U	3.05	2.83	2.39 U	3.7	3.05
1,1,2,2-Tetrachloroethane 1,1,2-Trichloroethane	0.4	1.5	1.79 U 1.2 U	1.79 U 1.2 U	1.79 U 1.2 U	4.47 U 2.94 U	0.89 U 0.6 U	1.79 U 1.2 U	1.79 U 1.2 U	1.79 U 1.2 U	1.79 U 1.2 U	8.93 U 5.98 U	1.79 U 1.2 U	1.79 U 1.2 U
1.1.2-Trichlorotrifluoroethane	2.5	300000	0.76 U	0.76 U	0.76 U	2.94 U 1.91 U	0.8 U	0.76 U	0.76 U	0.76 U	0.76 U	3.82 U	0.76 U	0.76 U
1.1-Dichloroethane	NC	5000	0.57 U	0.57 U	0.57 U	1.38 U	0.28 U	0.57 U	0.57 U	0.57 U	0.57 U	2.75 U	0.57 U	0.57 U
1,1-Dichloroethene	0.4	2000	0.48 U	0.48 U	0.48 U	1.23 U	0.25 U	0.48 U	0.48 U	0.48 U	0.48 U	2.46 U	0.48 U	0.48 U
1,2,4-Trichlorobenzene	0.4	2000	1.41 U	1.41 U	1.41 U	3.48 U	0.7 U	1.41 U	1.41 U	1.41 U	1.41 U	6.96 U	1.41 U	1.41 U
1,2,4-Trimethylbenzene	1.9	60	78.3	53.6	82.7	110	7.46	64	35.5	66.6	53	26.5	58.3	92.5
1,2-Dibromoethane	0.4	0.11	1.08 U	1.08 U	1.08 U	2.61 U	0.52 U	1.08 U	1.08 U	1.08 U	1.08 U	5.23 U	1.08 U	1.08 U
1,2-Dichlorobenzene 1,2-Dichloroethane	0.4	2000 0.94	1.02 U 0.49 U	1.02 U 0.49 U	1.02 U 0.49 U	2.53 U	0.51 U 0.24 U	1.02 U 0.49 U	1.02 U 0.49 U	1.02 U 0.49 U	1.02 U 0.49 U	5.05 U 2.43 U	1.02 U 0.49 U	1.02 U 0.49 U
1,2-Dichloroperopane	0.4	40	0.49 U	0.49 U 0.92 U	0.49 U	1.21 U 2.26 U	0.24 U 0.45 U	0.49 U	0.49 U	0.49 U 0.92 U	0.49 U	2.43 U 4.53 U	0.49 U 0.92 U	0.49 U 0.92 U
1,3,5-Trimethylbenzene	0.4	60	16.7	16.3	19.6	2.20 0	1.87	11.4	8.05	12.8	12.4	4.55 U	14.1	16.5
1.3-Butadiene	NA	0.087	0.35 U	0.35 U	0.35 U	0.88 U	0.18 U	0.35 U	0.35 U	0.35 U	0.35 U	1.77 U	0.35 U	0.35 U
1,3-Dichlorobenzene	0.4	1100	0.53 U	0.53 U	0.53 U	1.32 U	0.26 U	0.53 U	0.53 U	0.53 U	0.53 U	2.65 U	0.53 U	0.53 U
1,4-Dichlorobenzene	0.5	8000	0.84 U	0.84 U	3.37	2.04 U	245	3.61	4.81	3.61	4.33	4.09 U	2.89	8.66
1,4-Dioxane	NA	NA	0.79 U	0.79 U	0.79 U	1.94 U	0.4 U	0.79 U	0.79 U	0.79 U	0.79 U	3.96 U	0.79 U	0.79 U
2,2,4-Trimethylpentane	NA	NA	8.58	8.02	12.5	111	2.33	2.98	16.2	8.21	13.4	16.8	13.4	8.77
2-Butanone	NA	NA	26.7	14.8	31	59.8	4.42	11	13.1	23.6	34	114	29.8	27.1
2-Hexanone	NA NA	NA NA	9	0.36 U	8.34	0.9 U	2.29	3.6	0.36 U	10.5	16.4	1.8 U	8.02	0.36 U
4-Ethyltoluene 4-Methyl-2-Pentanone	NA	NA	13.9 11.6	5.69 5.4	14.7 8.34	21.6 31.1	1.47 2.21	9.62 3.76	7.46 3.11 J	11.6 18	10.2 16.2	1.47 U 38.4	10 9.82	15.1 20.1
Acetone	30	3500	138	131	232	280	19.3	74.6	158	94.3	185	779	211	113
Benzene	4.8	3.1	7.91	3.83	11.5	16.9	1.28	2.68	9.57	7.15	7.27	22.3	7.91	8.8
Benzyl Chloride	NA	0.5	0.58 U	0.58 U	0.58 U	1.44 U	0.29 U	0.58 U	0.58 U	0.58 U	0.58 U	2.88 U	0.58 U	0.58 U
Bromodichloromethane	NA	1.4	1.07 U	1.07 U	1.07 U	2.68 U	0.54 U	1.07 U	1.07 U	1.07 U	1.07 U	5.37 U	1.07 U	1.07 U
Bromoethene	NA	NA	0.44 U	0.44 U	0.44 U	1.14 U	0.23 U	0.44 U	0.44 U	0.44 U	0.44 U	2.28 U	0.44 U	0.44 U
Bromoform	NA	22	0.99 U	0.99 U	0.99 U	2.48 U	0.5 U	0.99 U	0.99 U	0.99 U	0.99 U	4.97 U	0.99 U	0.99 U
Bromomethane	0.5 NA	NA 7000	0.54 U	0.54 U	0.54 U	1.32 U	0.26 U	0.54 U	0.54 U	0.54 U	0.54 U	2.64 U	0.54 U	0.54 U
Carbon Disulfide Carbon Tetrachloride	1.2	1.6	0.3 U 0.76 U	0.3 U 0.76 U	0.3 U 0.76 U	0.75 U	0.15 U 0.38 U	2.74 0.76 U	2.74 0.76 U	0.3 U 0.76 U	6.09 0.76 U	1.49 U 3.78 U	20.8 0.76 U	0.3 U 0.76 U
Chlorobenzene	NC	600	1.2 U	1.2 U	1.2 U	3.05 U	0.6 U	1.2 U	1.2 U	1.2 U	1.2 U	6.01 U	1.2 U	1.2 U
Chloroethane	0.4	100000	0.4 U	0.4 U	0.4 U	1.01 U	0.2 U	0.4 U	0.4 U	0.4 U	0.4 U	2.02 U	0.4 U	0.4 U
Chloroform	0.5	1.1	160	0.47 U	0.47 U	1.17 U	2.24	161	0.47 U	0.47 U	0.47 U	2.34 U	0.47 U	27.8
Chloromethane	4.3	NA	0.29 U	0.29 U	0.29 U	0.74 U	1.02	0.29 U	1.39	0.29 U	0.29 U	1.47 U	0.29 U	0.29 U
cis-1,2-Dichloroethene	0.4	350	0.56 U	0.56 U	0.56 U	1.35 U	0.27 U	0.56 U	0.56 U	0.56 U	0.56 U	2.7 U	0.56 U	0.56 U
cis-1,3-Dichloropropene	0.4	NA	0.54 U	0.54 U	0.54 U	1.41 U	0.28 U	0.54 U	0.54 U	0.54 U	0.54 U	2.81 U	0.54 U	0.54 U
Cyclohexane	0.4 NA	NA NA	2.82	3.49	3.35	7.38 3.23 U	0.21 U 0.65 U	0.4 U	2.68 J	3.62	3.89 1.28 U	16.1 6.47 U	4.02	3.62
Dibromochloromethane Dichlorodifluoromethane	NA	2000	1.28 U 2.77	1.28 U 51.5	1.28 U 3.17	3.23 U 1.78 U	0.65 U 2.97	1.28 U 3.96	1.28 U 16.4	1.28 U 4.75	1.28 U 25.1	6.47 U 199	1.28 U 223	1.28 U 4.75
Dichlorotetrafluoroethane	10.0	NA	0.84 U	0.84 U	0.84 U	2.17 U	0.43 U	0.84 U	0.84 U	4.75 0.84 U	0.84 U	4.34 U	0.84 U	0.84 U
Ethyl Acetate	NA	32000	0.32 U	0.32 U	0.32 U	0.79 U	0.16 U	0.32 U	0.32 U	0.32 U	0.32 U	1.58 U	0.32 U	0.32 U
Ethyl Benzene	1.0	22	18.6	7.63	20.5	28.6	2.25	9.54	8.15	14.7	11.8	20.8	12.8	41.3
Heptane	NA	NA	28.6	16.9	29.4	58.9	3.76	8.18	11.8	26.2	21.9	46.6	21.9	48.4
Hexachloro-1,3-Butadiene	0.5	1.1	1.81 U	1.81 U	1.81 U	4.48 U	0.9 U	1.81 U	1.81 U	1.81 U	1.81 U	8.97 U	1.81 U	1.81 U
Hexane	NA	2000	12.7	9.29	19.1	23.6	2.6	17.4	20.4	12.9	16.5	57	17.2	11.8
Isopropyl Alcohol m/p-Xylene	NA 1.0	NA 70000	0.12 U 59.3	0.12 U 21	0.12 U 67.6	0.29 U 86.3	0.06 U 6.16	0.12 U 35	0.12 U 27.6	0.12 U 47	0.12 U 37.3	0.59 U 46	0.12 U 40.6	0.12 U 98.5
Methyl tert-Butyl Ether	NA	30000	0.35 U	0.35 U	7.92	0.86 U	0.10 0.17 U	72.7	3.17	47 0.35 U	6.19	40 1.73 U	13.8	0.35 U
Methylene Chloride	1.6	52	11.7	9.73	13.3	279	1.67	35.5	90.4	24.2	32.4	4718 D	26.6	19.7
o-Xylene	1.5	70000	22.2	10.6	24.6	32.1	2.6	13.2	10.9	17.5	15.6	16.5	15.4	31
Propene	NA	NA	0.34 U	0.34 U	0.34 U	0.88 U	0.17 U	0.34 U	0.34 U	0.34 U	0.34 U	1.72 U	0.34 U	0.34 U
Styrene	0.5	10000	2.55	1.87	2.89	1.87 U	1.11	1.87	0.77 U	0.77 U	2.21	9.36	0.77 U	3.06
t-1,3-Dichloropropene	NC	NA	0.45 U	0.45 U	0.45 U	1.13 U	0.23 U	0.45 U	0.45 U	0.45 U	0.45 U	2.27 U	0.45 U	0.45 U
Tetrachloroethene	0.7	8.1 NA	14.1	15.5	14.1	35.3	8.01	301	9.78	12.5	9.78	517	10	16.3
Tetrahydrofuran Toluene	0.4	4000	0.71 U 284	0.71 U 122	0.71 U 317	1.74 U 1096	0.35 U 23	0.71 U 86.1	0.71 U 137	0.71 U 259	0.71 U 180	3.53 U 477	0.71 U 189	0.71 U 2166 D
trans-1,2-Dichloroethene	NA NA	700	204 0.56 U	0.56 U	0.56 U	1.35 U	0.27 U	0.56 U	0.56 U	259 0.56 U	0.56 U	4// 2.7 U	0.56 U	0.56 U
Trichloroethene	0.4	0.22	0.75 U	0.75 U	0.75 U	1.93 U	0.39 U	18.9	0.75 U	0.75 U	0.75 U	3.86 U	0.75 U	0.75 U
Trichlorofluoromethane	5.1	7000	0.62 U	2.47	0.62 U	1.57 U	1.46	0.62 U	0.62 U	0.62 U	0.62 U	3.14 U	4.48	0.62 U
Vinyl Acetate	NA	2000	0.56 U	0.56 U	0.56 U	1.41 U	0.28 U	0.56 U	0.56 U	0.56 U	0.56 U	2.81 U	0.56 U	0.56 U
Vinyl Chloride	0.4	2.8	0.31 U	0.31 U	0.31 U	0.77 U	0.15 U	0.31 U	0.31 U	0.31 U	0.31 U	1.53 U	0.31 U	0.31 U
Total BTEX			392.01	165.06	441.2	1.259.90	35.29	146 52	193.22	345.35	251.97	582.60	265 71	2.345.60
Total Confident Conc. VOC			392.01 932.42	165.06	441.2 949.59	2,301.18	35.29 346.48	146.52 957.39	193.22 595.10	345.35 681.79	723.79	7,120.36	265.71 968.54	2,345.60 2,785.81
						-,						.,.=0.00		-,

 Qualifiers

 U - The compound was not detected at the indicated concentration.

 J - Data indicates the presence of a compound that meets the identification criteria. The result is less than the quantitation limit but greater than zero. The concentration given is an approximate value.

 B - The analyte was found in the laboratory blank as well as the sample. This indicates possible laboratory contamination of the environmental sample.

 NA - No value available

 NR - Not analyzed

TABLE 4 3035 White Plains Road, Bronx, NY Parameters Detected Above Track 1 Soil Cleanup Objectives

COMPOUND	Track 1 Unrestricted Cleanup Objectives	Range in Exceedances	SB1 (0-4FT)	SB1 (8-12FT)	SB2 (0-4FT)	SB3 (0-4FT)	SB4 (0-4FT)	SB4 (4-8FT)	SB4 (8-10FT)	SB5 (0-4FT)	SB6 (0-2FT)	SB7 (0-4FT)
Sample Results in µg/kg	ug/kg											
Acetone	50	94-290				140			130 J			210
Benzene	60	290									290	
m/p-Xylenes	260	7,60-480,000				7900 D					480000 D	
Methylcyclohexane		11,000									11000 JD	
o-Xylene	260	5,000-230,000				5000 D					230000 D	
Toluene	700	75,000						1			75000 D	
Benzo(a)anthracene	1,000	1100-1,900	1100									
Benzo(a)pyrene	1,000	1100-1,800	1100									
Benzo(b)fluoranthene	1,000	1,100-1,400	1400									1100
Benzo(k)fluoranthene	800	1,200-2,200										
Chrysene	1,000	620-1,100	1100									
Indeno(1,2,3-cd)pyrene	500	620-700	700									
Naphthalene	12,000	59,000									59000 D	
4,4-DDD	3.3	5.8-240								240 D		11 P
4,4-DDE	3.3	5.0										
4,4-DDT	3.3	5.1-10							5.1			
Endrin	14	31										
Sample Results in mg/kg	mg/kg											
Cadmium	2.5 c	2.67-3.10	3.1									
Chromium	30 c	34.5-47.2		34.5								38.6
Copper	50	62.8-103	85.9			73.2					62.8	
Lead	63 c	92.2-676	346	98.9		92.2	115	89.9			335	364
Mercury	0.18 c	0.182-0.393	0.393									
Zinc	109 c	124-478	478	148	146	180	159				258	231

COMPOUND	Track 1 Unrestricted Cleanup Objectives	Range in Exceedances	SB8 (0-2FT)	SB9 (0-2FT)	SB10 (0-2FT)	SB11 (0-4FT)	SB12 (0-2FT)	SB13 (0-4FT)	SB15 (0-3FT)	SB16 (0-3FT)	SB17 (0-4FT)	SB18 (4-6FT)
Sample Results in µg/kg	ug/kg											
Acetone	50	94-290		290					94 J			
Benzene	60	290										
m/p-Xylenes	260	7,60-480,000		760 JD								
Methylcyclohexane		11,000										
o-Xylene	260	5,000-230,000										
Toluene	700	75,000										
Benzo(a)anthracene	1,000	1100-1,900							1200	1900		
Benzo(a)pyrene	1,000	1100-1,800							1200	1800		
Benzo(b)fluoranthene	1,000	1,100-1,400			1200				2200	2100 D		
Benzo(k)fluoranthene	800	1,200-2,200								860		
Chrysene	1,000	620-1,100							1400	2100		
Indeno(1,2,3-cd)pyrene	500	620-700								620		
Naphthalene	12,000	59,000										
4,4-DDD	3.3	5.8-240		5.8			15	6.0				
4,4-DDE	3.3	5.0						5.0				
4,4-DDT	3.3	5.1-10						10				
Endrin	14	31							31			
Sample Results in mg/kg	mg/kg											
Cadmium	2.5 c	2.67-3.10							2.670			
Chromium	30 c	34.5-47.2			40.8							47.2
Copper	50	62.8-103					61.5		103			
Lead	63 c	92.2-676	98.7	166	238			144	676		139	
Mercury	0.18 c	0.182-0.393		0.182			0.224	0.194	0.202			
Zinc	109 c	124-478		313	188	124	170	132	237			

TABLE 5 3035 White Plains Road, Bronx, NY Parameters Detected Above Ambient Water Quality Standards

COMPOUND	NYSDEC Ambient Water Quality Standards	Range in Exceedance	MW-1	MW-2	MW-3	MW-5	MW-6	MW-7	MW-10	MW-12	MW-13	MW-15	MW-16
Sample Results in (µg/L)	(µg/L)												
Acetone	5	40-60						40	60				
Benzene	1	12-490	47	15	83	490 D		71			150	12	160
Ethyl Benzene	5	5.5-1,400	690 D	590 D	1000 D	1400 D		91			88	200	5.5
m/p-Xylenes	5	17-8,200	1700 D	730 D	3100 D	5600 D		350	17		510 D	8200 D	200
Methyl tert-butyl Ether	10	37-430	120	90	430 D	53			78		37		
o-Xylene	5	5.7-3,300	500 D	130	940 D	2200 D		100	5.7		250 D	3300 D	120
Styrene	5	160				160							
Toluene	5	24-1,900	110	24	270 D	1900 D		120			840 D	1700 D	170
Benzo(a)anthracene	0.002	0.4	0.400 J										
bis(2-Ethylhexyl)phthalate	5	7.4-9.1	9.1 B				7.4 B						
Naphthalene	10	90-250	200 D	90 D	250 D		170 D						
Sample Results in (mg/L)	(mg/L)												
Barium	100	135	135										
Iron	300	316-3,580	3580			2410	499		1840	316			
Magnesium	3500	8,740-27,100	27100			17700	9530		19200	8740			
Manganese	300	980-5,200	5200			980	3630		1030				
Sodium	2000	25,500-61,900	54300			61900	25500		39800	57700			

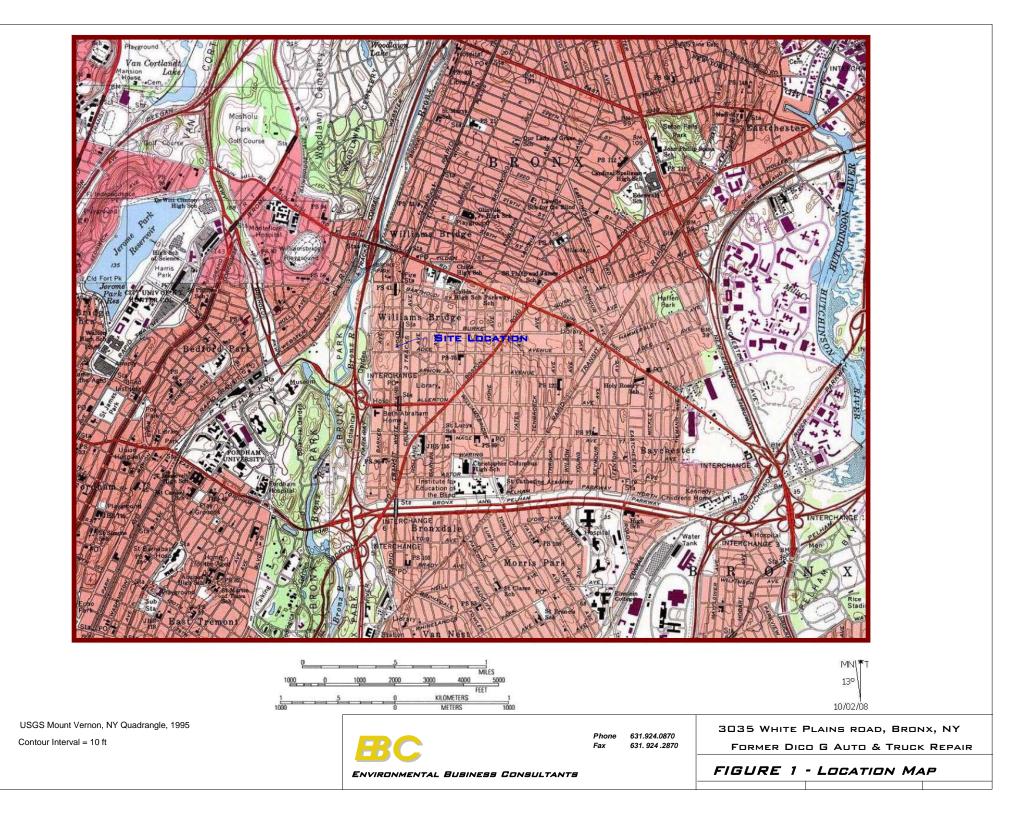
TABLE 6Project Permit ListingTo Be Updated as Project Progresses

Permit	Permit Number	Originating Agency	Pursuant to	Issued	Expires	Contact Phone
Demo (Off Site Fill)	201136519-01-DM	NYC Dept of Buildings	Title 27 / Subchapter 19 [1905.0] Article 6 1039	10/17/2007	5/10/2008	
Demo (Construction Equip Fence)	201136519-01-EQ-FN	NYC Dept of Buildings	Title 27 / Subchapter 19 [1905.0] Article 6 1039	10/17/2007	12/31/2007	
New Building (On-Site Fill)	201130560-01-NB	NYC Dept of Buildings	Title 27 / Subchapter 1 §[C26-109.1] 27-147	11/16/2007	12/21/2007	
New Building (Construction Equip Fence)	201130560-01-EQ-FN	NYC Dept of Buildings	Title 27 / Subchapter 1 §[C26-110.1] 27-156	11/16/2007	12/31/2007	
Hydrant	483096	NYC Fire Dept	Title 27, Subchapter 19	11/5/2007	1/31/2008	
Hydrant	483097	NYC Fire Dept	Title 27, Subchapter 19	11/5/2007	1/31/2008	
Hydrant	483093	NYC Fire Dept	Title 27, Subchapter 19	11/5/2007	1/31/2008	
Hydrant	483094	NYC Fire Dept	Title 27, Subchapter 19	11/5/2007	1/31/2008	
Sewer Discharge	C-4335	NYCDEP		3/12/2008	3/12/2009	

Table 7 Emergency Contact List

General Emergencies	911
NYC Police	911
NYC Fire Department	911
Beth Abraham Hospital	(718) 519-0152
NYSDEC Spills Hotline	1-800-457-7362
NYSDEC Project Manager	(718) 482-4909
NYC Department of Health	(212) 676-2400
National Response Center	1-800-424-8802
Poison Control	1-800-222-1222
EBC Project Manager	1-631-504-6000
EBC BCP Program Manager	1-631-504-6000
EBC Site Safety Officer	1-631-504-6000
Construction Manager	1-516-250-5343

FIGURES





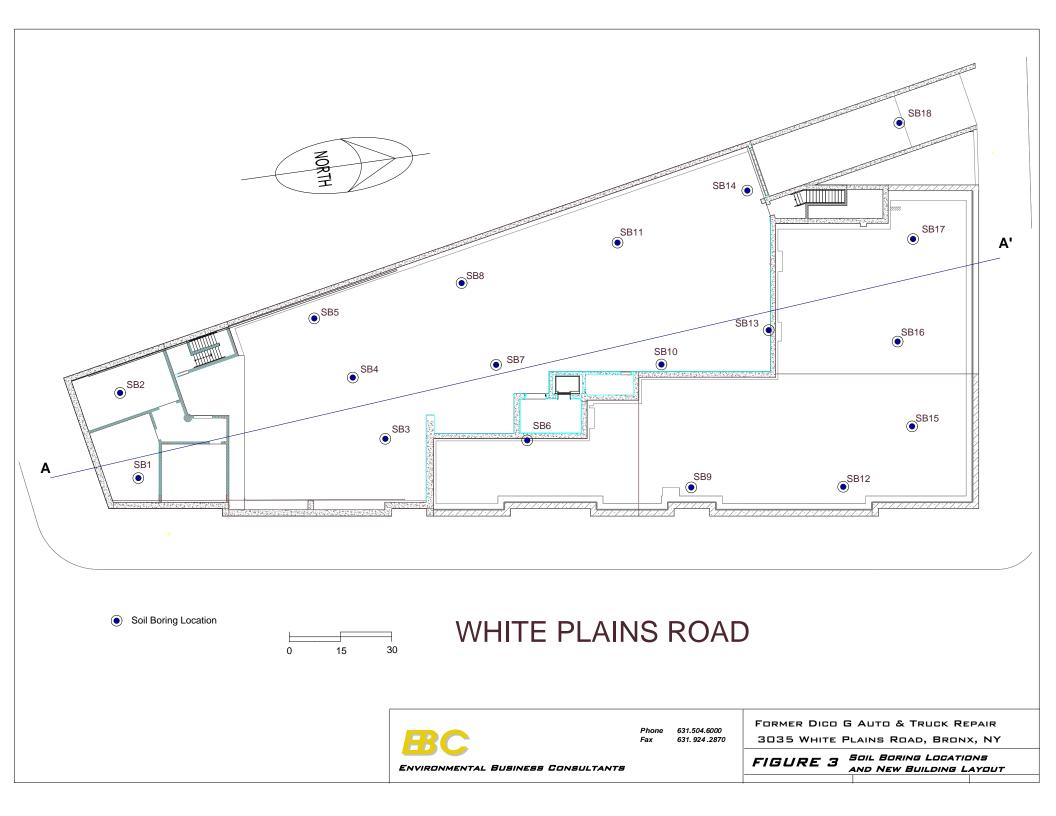


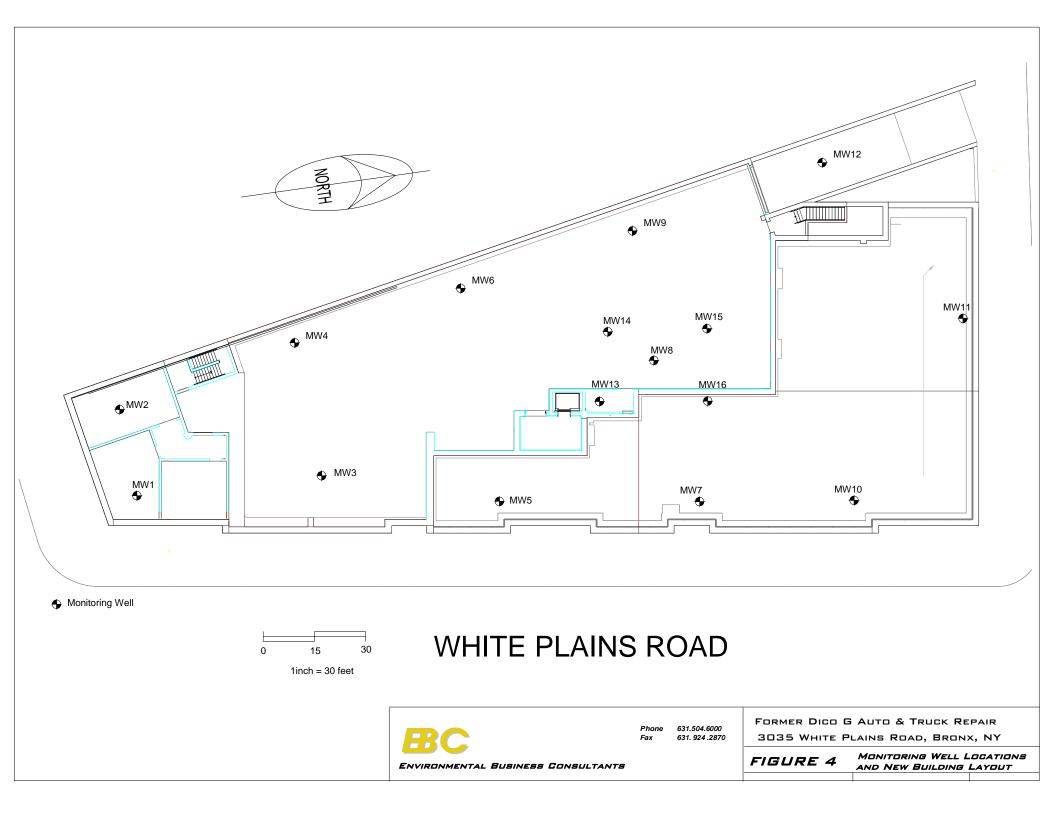
1808 Middle Country Road Ridge, NY 11961

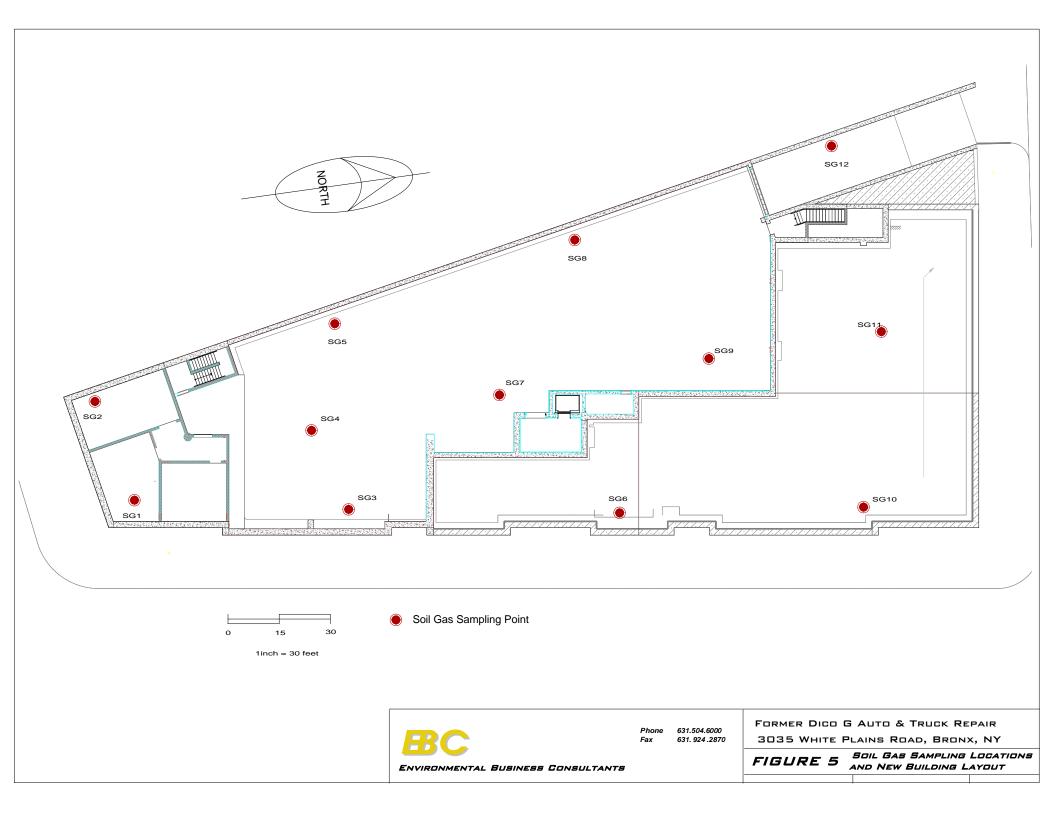
SURROUNDING PROPERTY MAP FORMER DICO-G AUTO & TRUCK REPAIR 3035 WHITE PLAINS ROAD, BRONX, NY

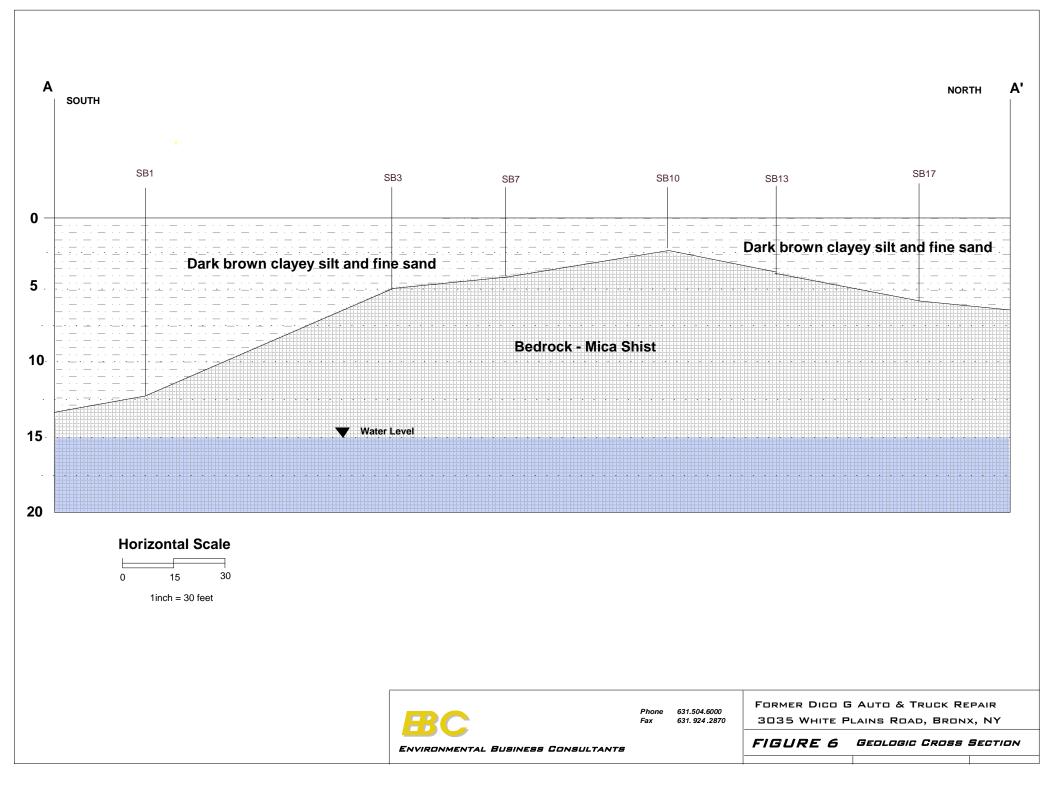
Phone Fax 631.504.6000 631. 924 .2870

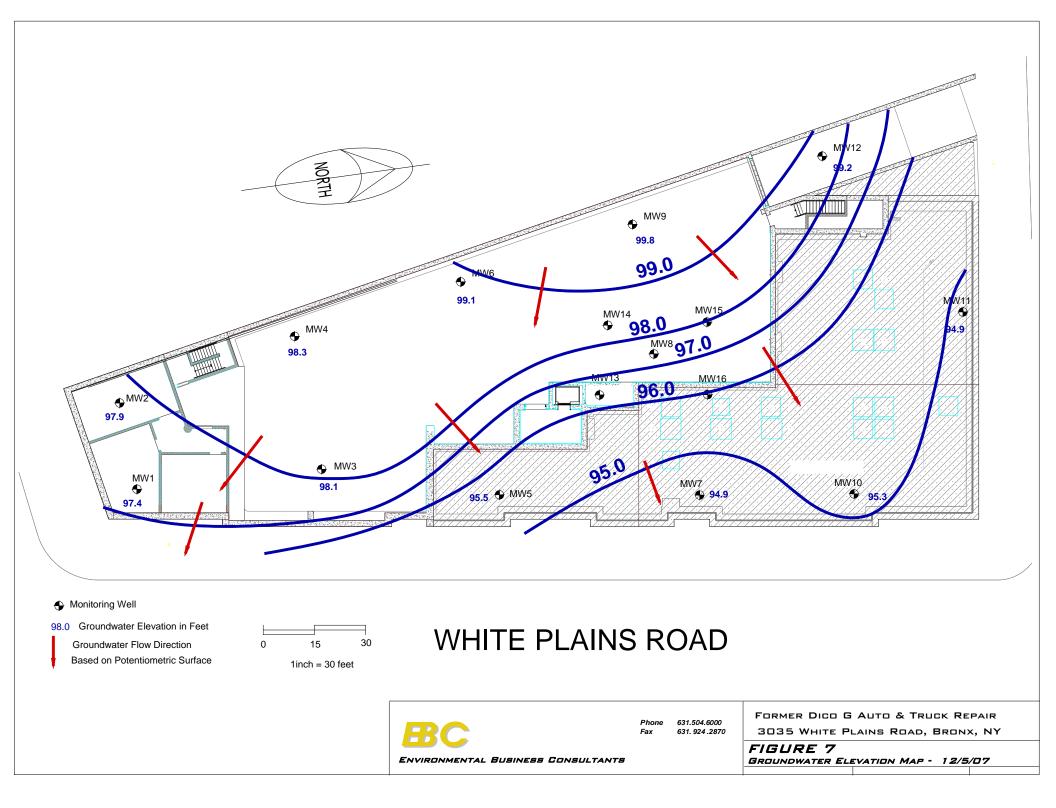
FIGURE 2

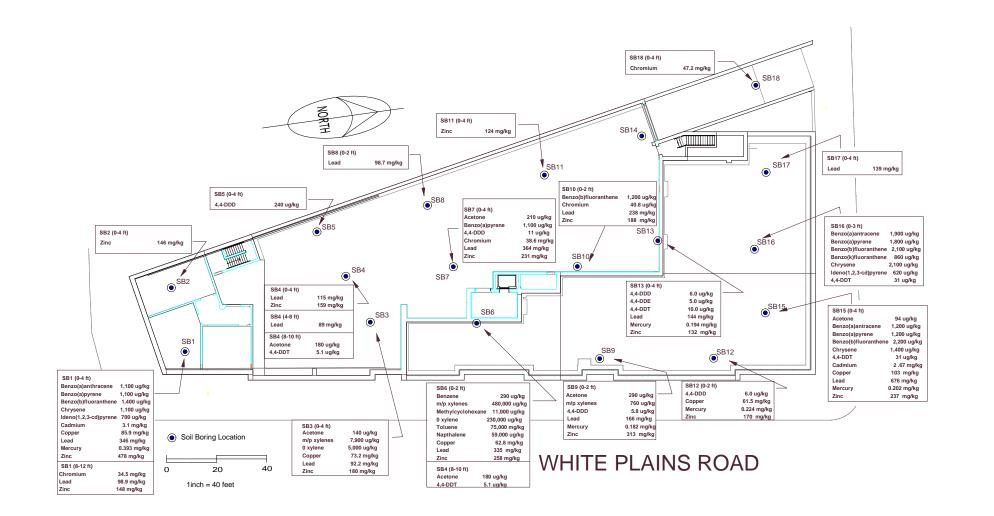




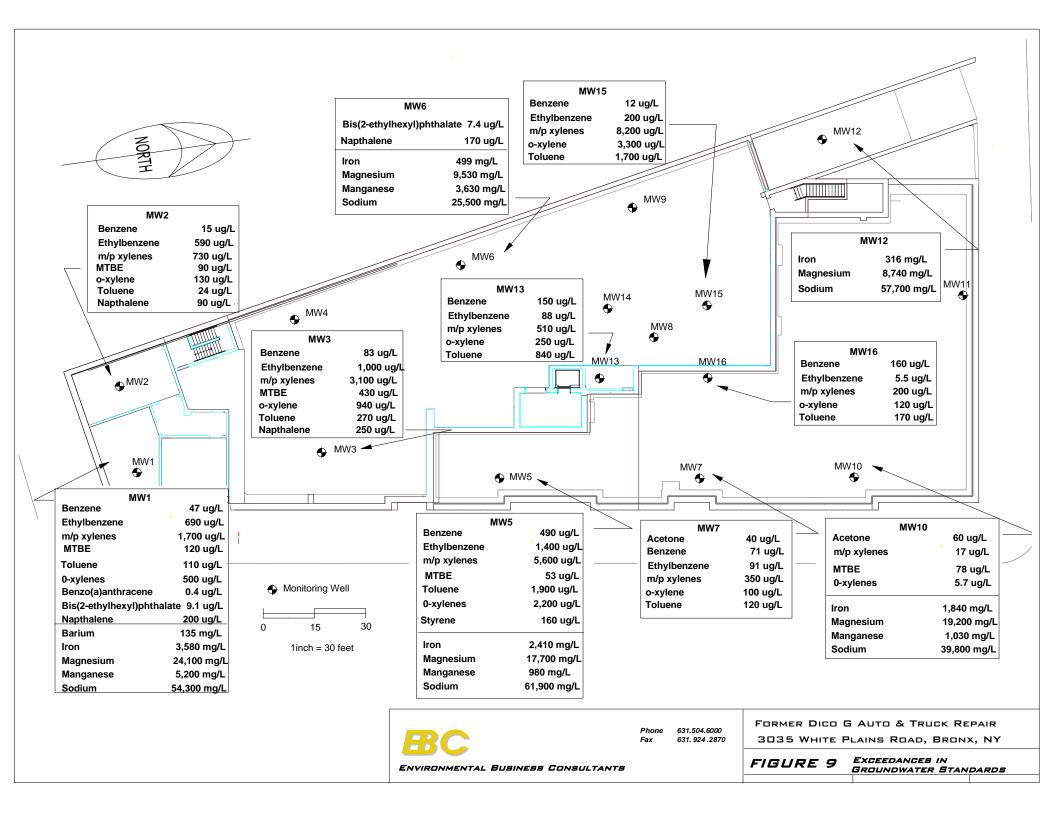


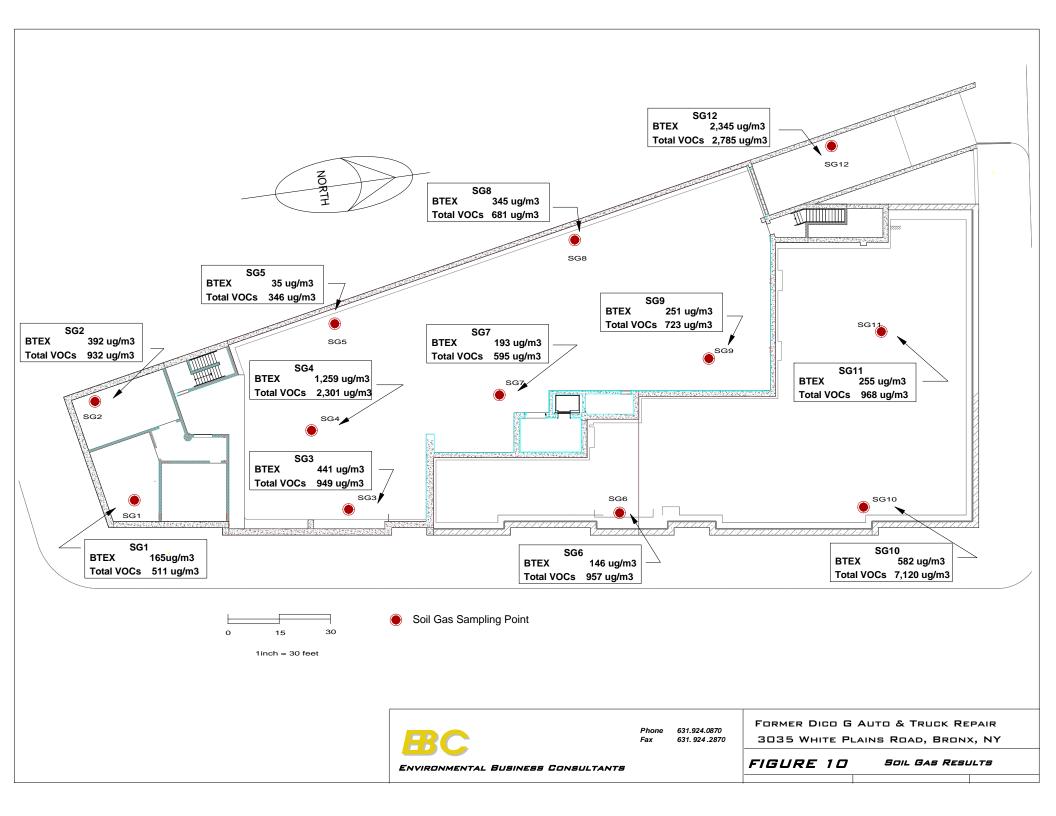


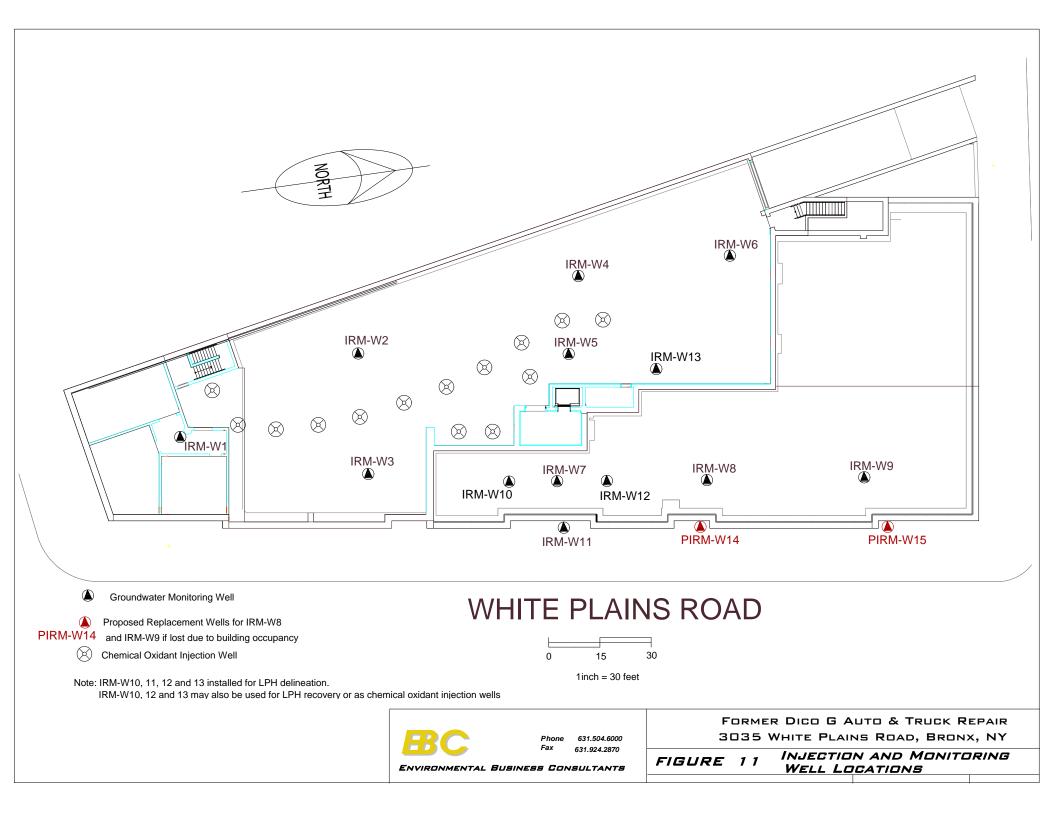


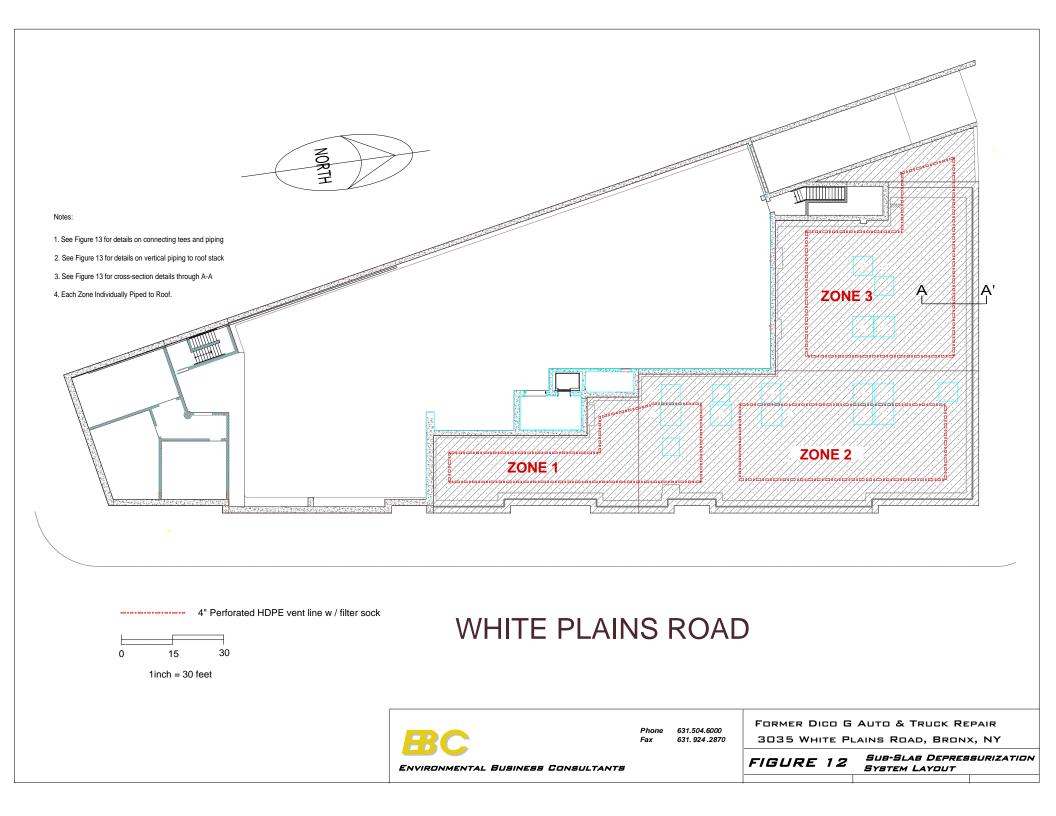


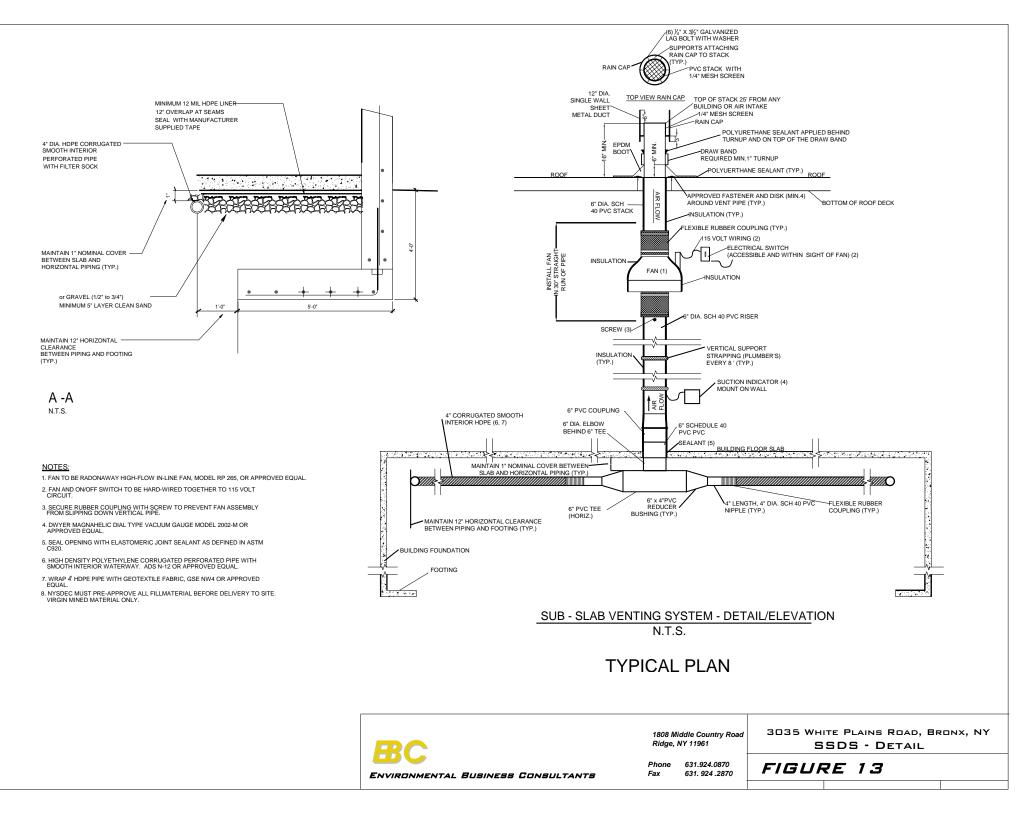












<u>APPENDIX - A</u> Metes and Bounds Description of Property

METES AND BOUNDS DESCRIPTION OF PROPERTY

ALL THAT CERTAIN PLAT OR PARCEL OF LAND, SITUATE LYING AND BEING IN THE BOROUGH AND COUNTY OF BRONX, CITY AND STATE OF NEW YORK AND BEING BOUNDED AND DESCRIBED AS FOLLOWS:

BEGINNING AT THE CORNER FORMED BY THE INTERSECTION OF THE WESTERLY SIDE OF WHITE PLAINS ROAD AND THE SOUTHERLY SIDE OF LESTER STREET (FORMERLY WILSON PLACE);

THENCE SOUTHERLY ALONG THE WESTERLY Slope OF WHITE PLAINS ROAD TWO HUNDRED AND SIXTY-FOUR AND NINETY-NINE ONE-HUNDREDTHS FEET TO THE NORTHERLY SIDE OF ADEE AVENUE;

THENCE WESTERLY ALONG THE NORTHERLY SIDE OF ADEE AVENUE TO A POINT WHERE SAID NORTHERLY SIDE OF ADEE AVENUE IS INTERSECTED BY THE EASTERLY LINE OF ELLIOTT AVENUE AS SAID ELIOTT AVENUE IS LAID DOWN UPON A MAP OF PROPERTY BELONGING TO THE ESTATES OF PETER LORILLARD KNOWN AS MAP NUMBER 448, FILED APRIL 20, 1871;

THENCE NORTHWESTERLY ALONG SAID EASTERLY LINE OF ELLIOTT AVENUE ABOUT TWO HUNDRED AND EIGHTY FEET TO THE POINT OF INTERSECTION OF SAID EASTERLY UNE OF ELLIOTT AVENUE WITH THE SOUTHERLY LINE OF LESTER STREET;

THENCE EASTERLY ALONG THE SAID SOUTHERLY SIDE OF LESTER STREET ONE HUNDRED AND THIRTY-ONE AND FORTY-SIX ONE-HUNDREDTHS FEET, MORE OR LESS, TO THE WESTERLY SIDE OF WHITE PLAINS ROAD TO THE POINT OR PLACE OF BEGINNING.

EXCEPTINGTHERE FROM SO MUCH THEREOF AS HAS BEEN TAKEN BY THE CITY OF NEW YORK FOR THE WIDENING OF ADEE AVENUE AT A POINT WHERE IT INTERSECTS THE WESTERLY SIDE OF WHITE PLAINS ROAD.

<u>APPENDIX – B</u> Sanborn Fire Insurance Maps



"Linking Technology with Tradition"®

Sanborn® Map Report

Ship To:	Charles Sos	sik	Order Date:	: 12/29/2	2006 Completion Date:	1/2/2007
	Env. Busine	ess Consultants	Inquiry #:	182609	0.3S	
	25 Central	Avenue	P.O. #:	NA		
	Hauppauge	, NY 11788	Site Name:	3035 W	/hite Plains Road	
			Add	ress:	3035 White Plains Road	
Custome	r Project:	ARK0602	City	/State:	Bronx, NY 10467	
9013314M	IL	631-234-4280	Cros	ss Stree	ets:	

Based on client-supplied information, fire insurance maps for the following years were identified

1897 - 1 Map	1983 - 1 Map
1908 - 1 Map	1986 - 1 Map
1918 - 1 Map	1989 - 1 Map
1935 - 1 Map	1991 - 1 Map
1950 - 1 Map	1992 - 1 Map
1976 - 1 Map	1993 - 1 Map
1978 - 1 Map	1995 - 1 Map
1981 - 1 Map	1996 - 1 Map

Limited Permission to Photocopy

Total Maps: 16

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Organization of Electronic Sanborn Image File

- Sanborn Map Report, listing years of coverage
- User's Guide
- Oldest Sanborn Map Image
- Most recent Sanborn Map Image

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- 1. Open file on screen.
- 2. Identify TP (Target Property) on the most recent map.
- Find TP on older printed images. 3.
- Using Acrobat® Reader®, zoom to 250% in order to view more 4 clearly. (200-250% is the approximate equivalent scale of hardcopy Sanborn Maps.)
 - A. On the menu bar, click "View" and then "Zoom to..."
 - B. Or, use the magnifying tool and drag a box around the TP

Printing a Sanborn Map From the Electonic File

- EDR recommends printing images at 300 dpi (300 dpi prints faster than 600 dpi)
- To print only the TP area, cut and paste from Acrobat to your word processor application.

Acrobat Versions 6 and 7

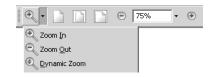
- 1. Go to the menu bar
- 2. Click the "Select Tool"
- 3. Draw a box around the area selected
- 4. "Right click" on your mouse
- 5. Select "Copy Image to Clipboard"
- 6. Go to Word Processor such as Microsoft Word, paste and print.

Acrobat Version 5

- 1. Go to the menu bar
- 2. Click the "Graphics Select Tool"
- 3. Draw a box around the area selected
- 4. Go to "Menu"
- 5. Highlight "Edit"
- 6. Highlight "Copy"
- 7. Go to Word Processor such as Microsoft Word, paste and print.

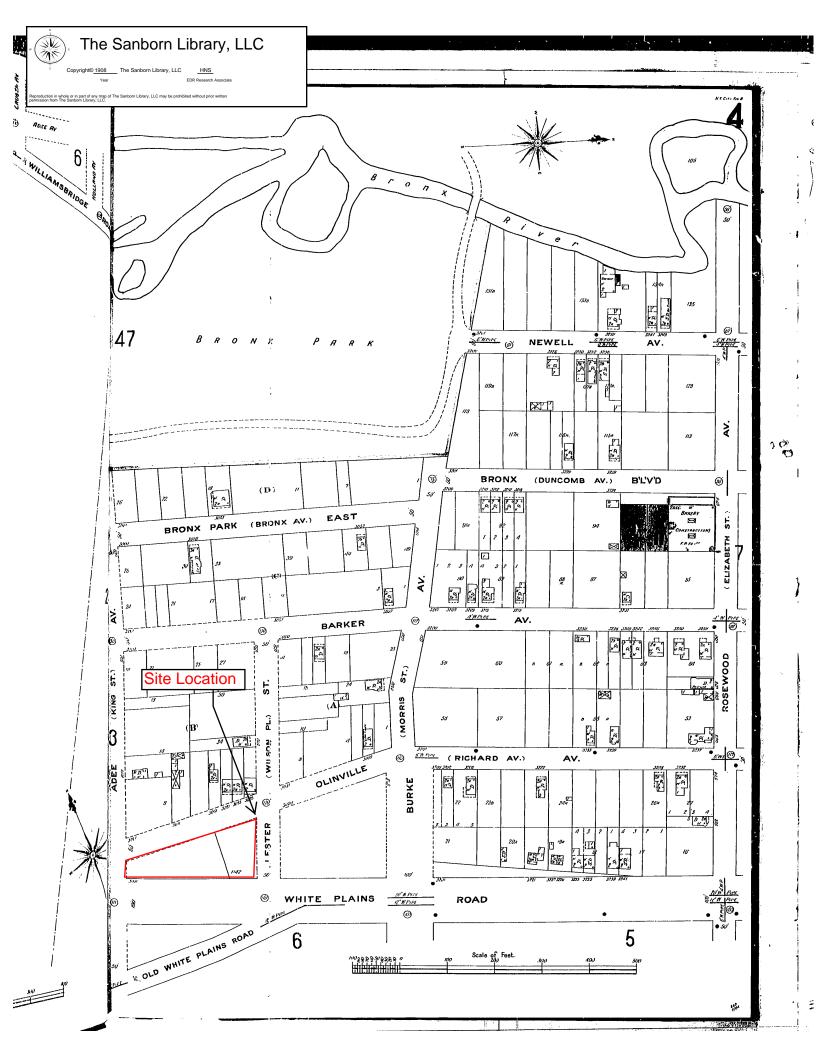
Important Information about Email Delivery of Electronic Sanborn Map Images

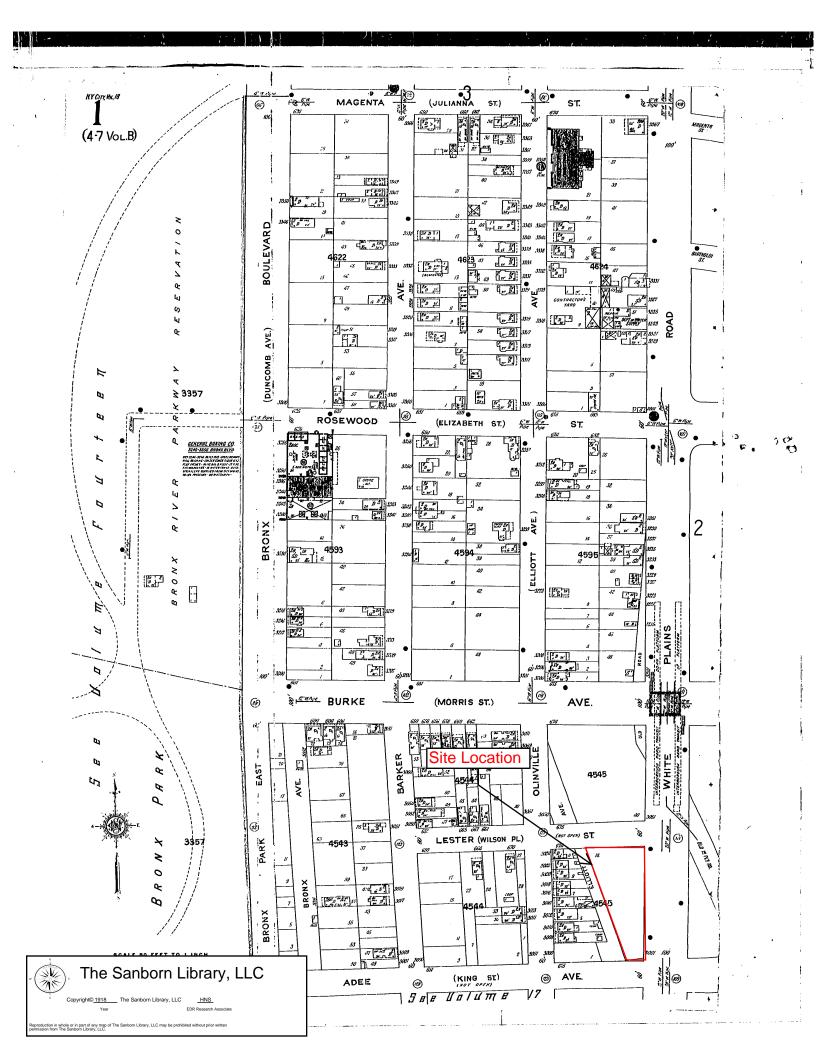
- Images are grouped intro one file, up to 2MB.
- In cases where in excess of 6-7 map years are available, the file size typically exceeds 2MB. In these cases,
- you will receive multiple files, labeled as "1 of 3", "2 of 3", etc. including all available map years. Due to file size limitations, certain ISPs, including AOL, may occasionally delay or decline to deliver files. Please contact your ISP to identify their specific file size limitations.

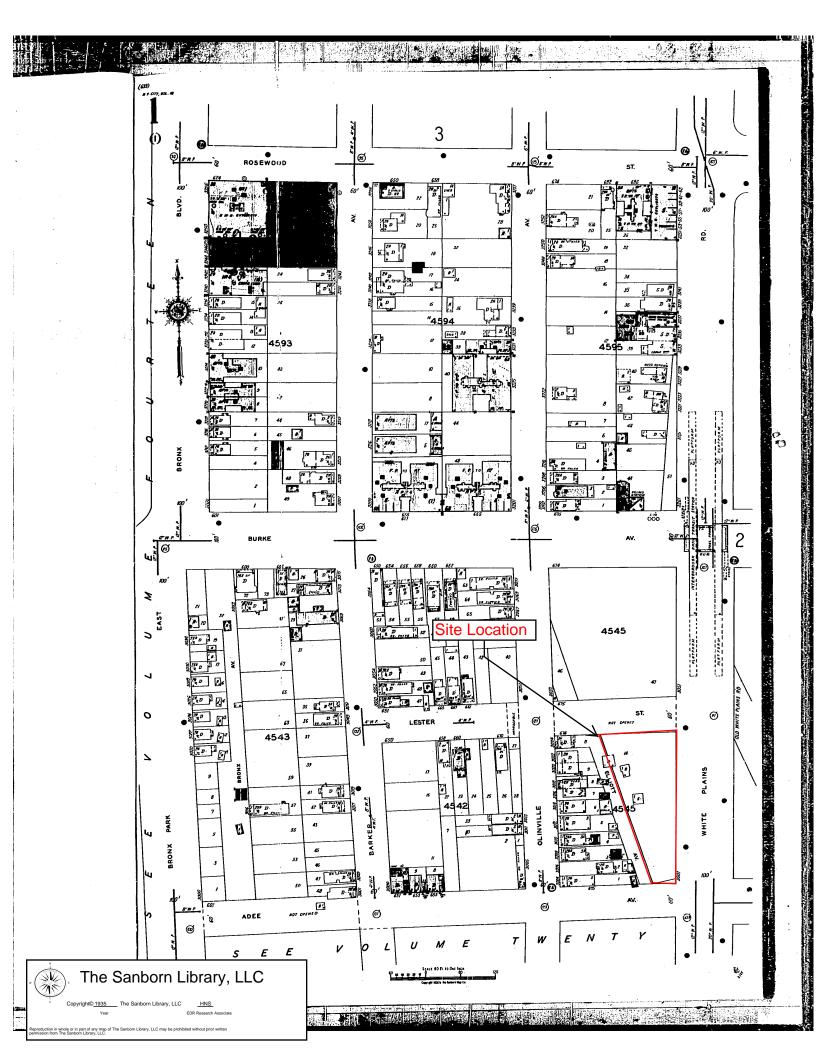


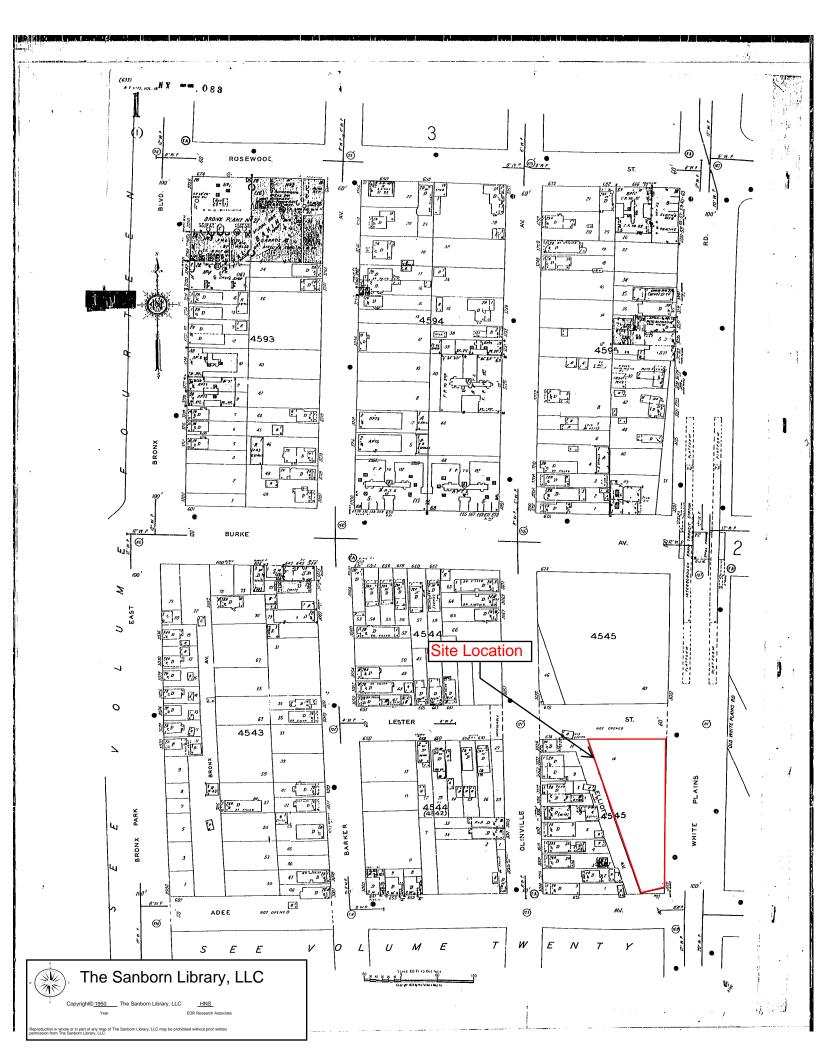




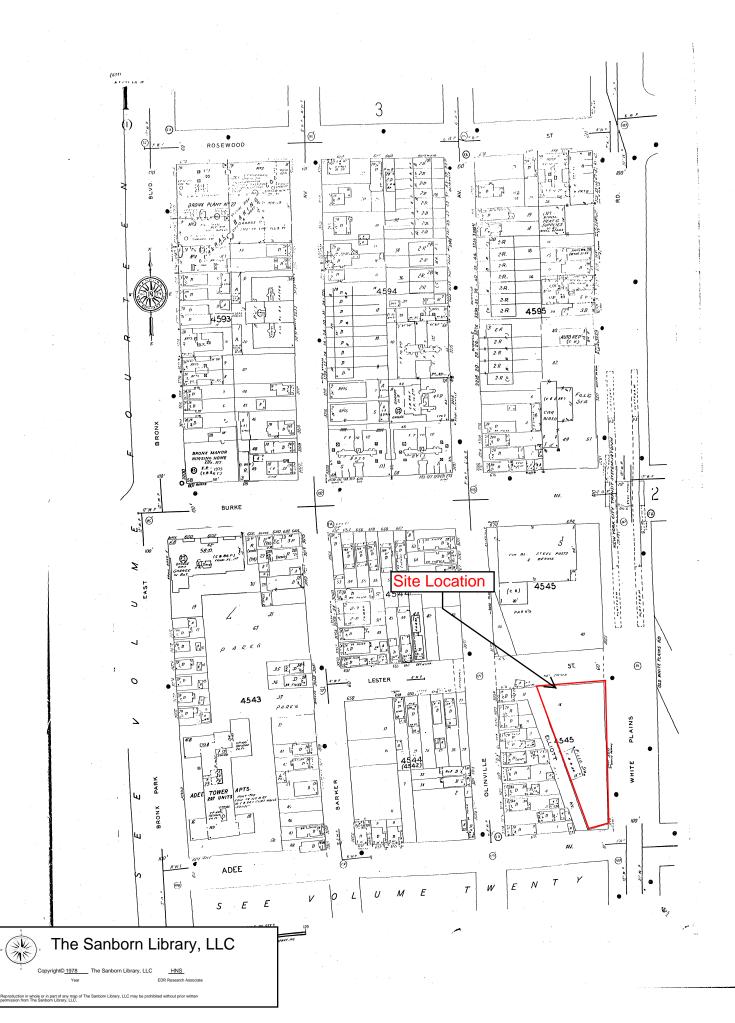


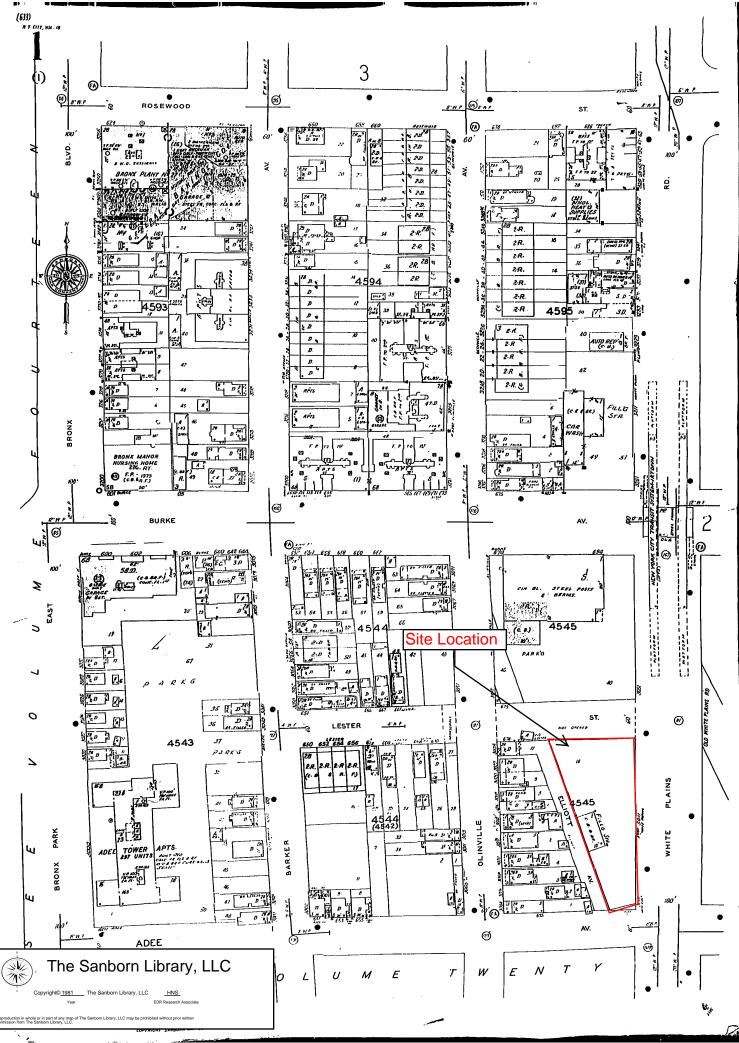


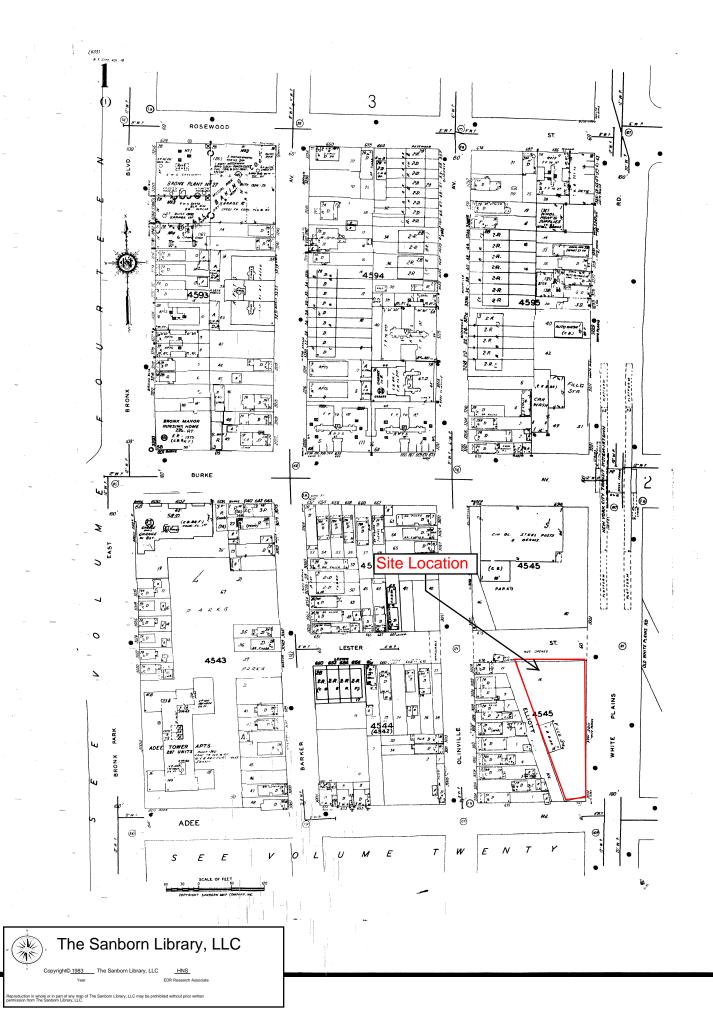


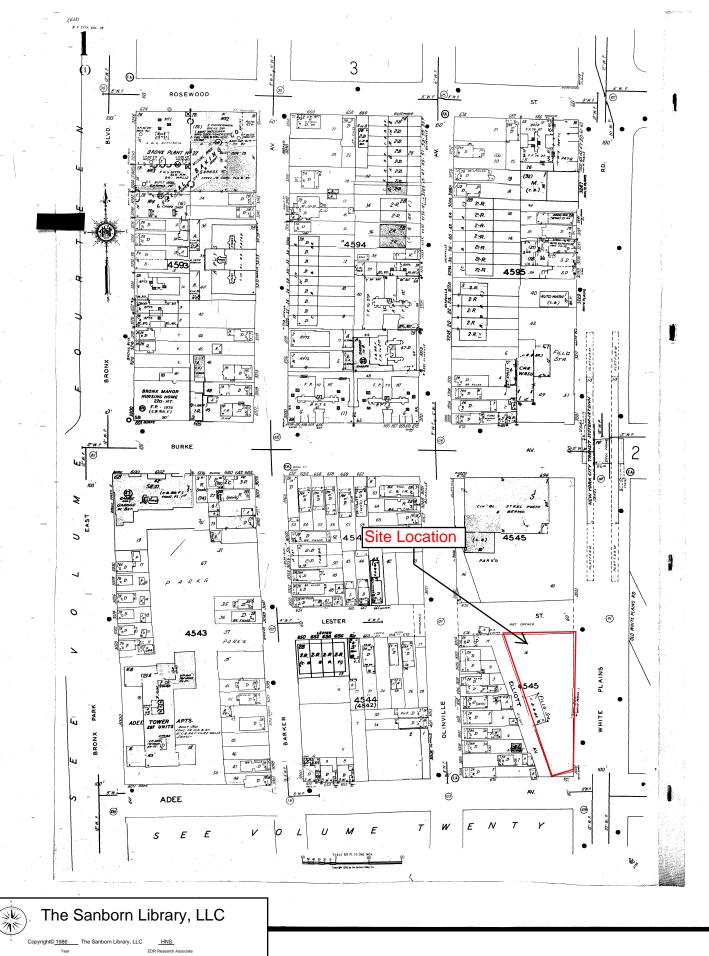




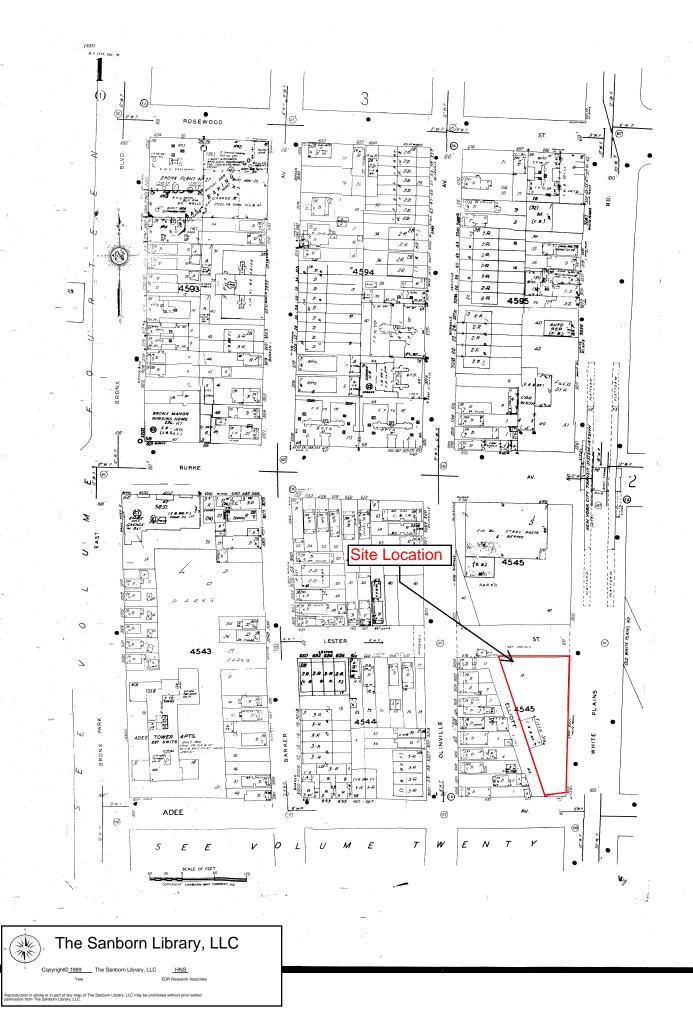


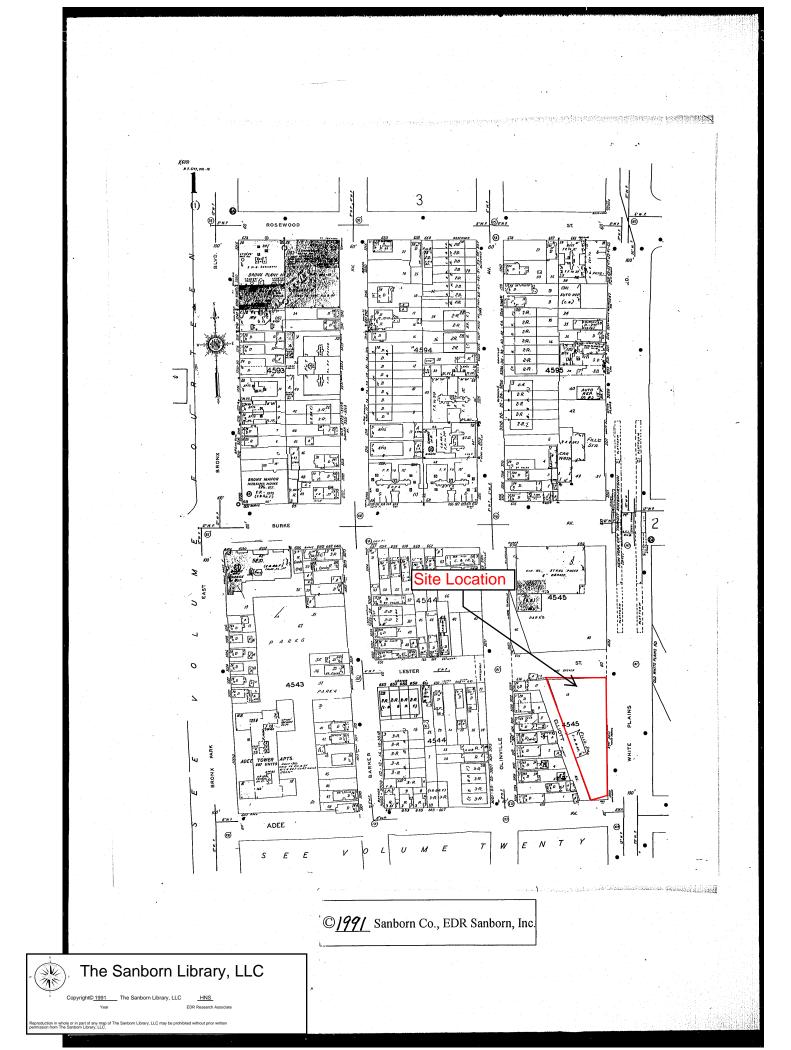


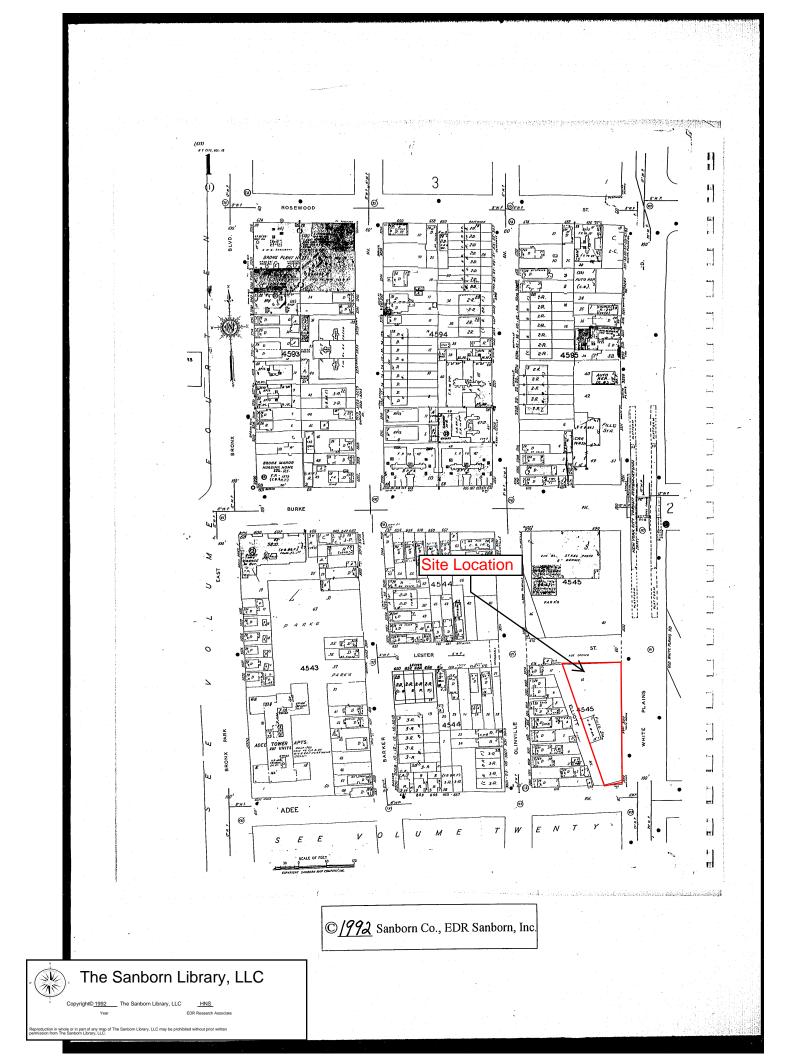


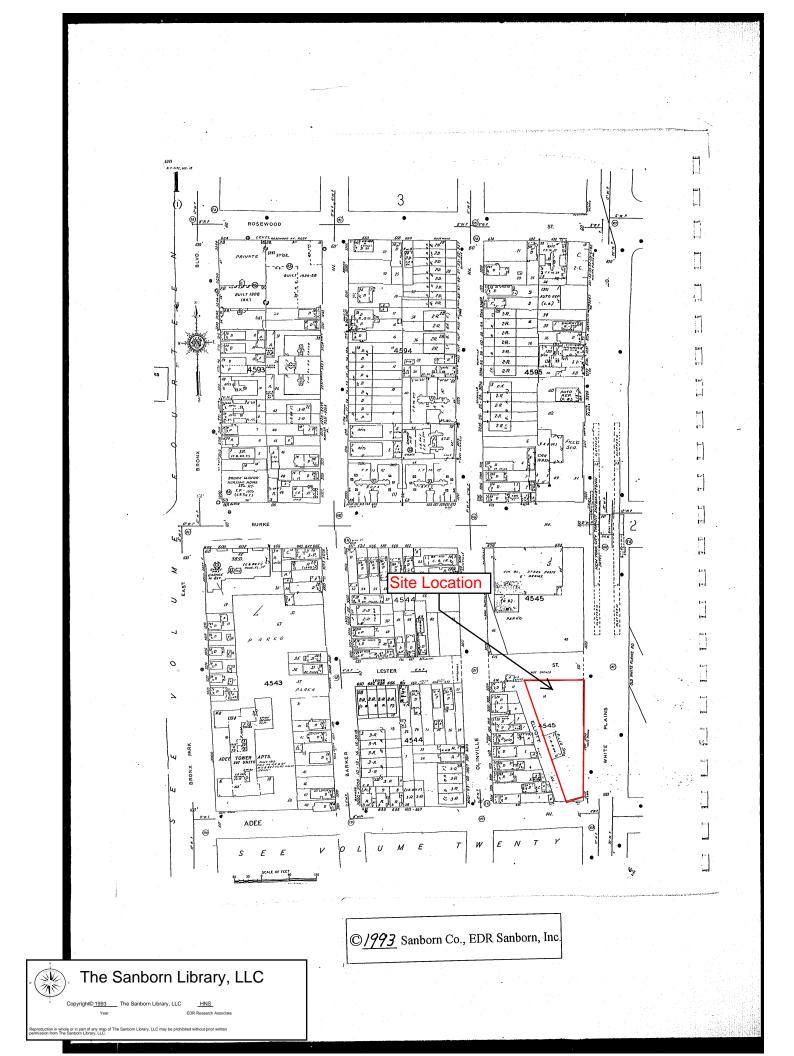


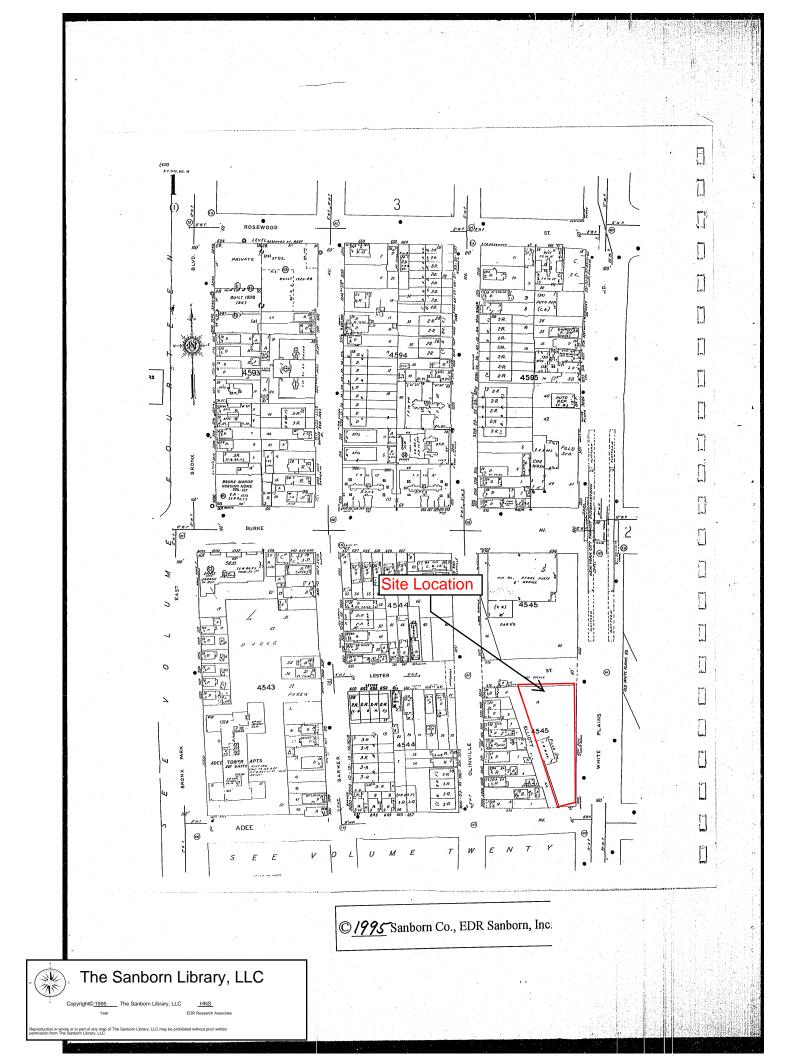
Reproduction in whole or in part of any map of The Sanborn Library, LLC may be prohibited without prior emission from The Sanborn Library, LLC.

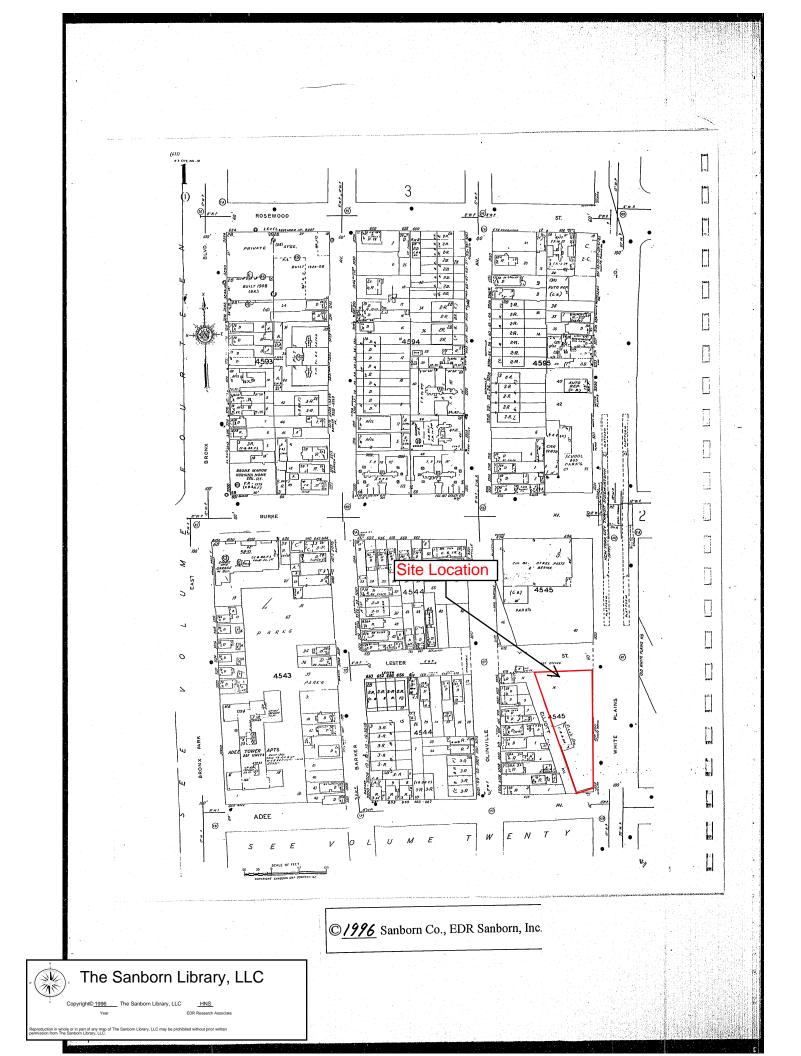












<u>APPENDIX - C</u> Health and Safety Plan

(under separate cover)



Charles B. Sosik, PG, PHG, Principal

Professional Experience 20 years	Professional Certification Professional Geologist, NH
Education MS, Hydrogeology, Adelphi University, NY BS, Geology, Northern Arizona University, AZ	 Professional Hydrogeologist, WA Licensed Site Professional (LSP), MA (in progress) OSHA 40-hr HAZMAT OSHA 8-hr. Supervisor
 Areas of Expertise Brownfields Hazardous Waste Site Investigations Pre-purchase Site Evaluations and Support Regulatory Negotiations Strategic Planning Real Estate Transactions NYC "E" Designations 	 Professional Affiliation / Committees NYS Council of Professional Geologists (NYSCPG) Association of Groundwater Scientists & Engineers (AGSE) NYS RBCA Advisory Committee Massachusetts LSP Association New Hampshire Association of Professional Geologists Interstate Technology Regulatory Council/MTBE Team Environmental Business Association, Brownfields Task Force Part 375 Working Group

PROFILE

Mr. Sosik has 20 years of experience in contaminant release management. He specializes in advising clients on managing environmental compliance with federal, state, and municipal agencies and has successfully directed numerous investigation and remediation projects involving petroleum, pesticides, chlorinated solvents, heavy metals and radiologically activated media. His work included extensive three-dimensional investigations on MTBE, which have been used effectively to help shape public policy. He also has experience in applying models to groundwater related problems and has completed several large-scale projects to determine fate and transport of contaminants, establish spill scenarios, and closure criteria. His experience and expertise in the area of contaminant hydrogeology has resulted in requests from environmental attorneys, property owners and New York State to serve as an expert witness and technical advisor on a variety of legal disputes.

Recently Mr. Sosik has been engaged in providing environmental consulting to developers responding to the extensive re-zoning of former industrial and commercial properties, which is currently taking place throughout New York City. These services include everything from pre-purchase evaluations and contract negotiations to gaining acceptance in and moving projects through the NYS Brownfields Program. Mr. Sosik has taken a pro-active role in the continued development of the NYS Brownfields Program and related policy, by attending numerous working seminars, active participation in work groups and task forces and by providing commentary to draft versions of new guidance documents. Throughout his professional career, Mr. Sosik has remained committed to developing innovative cost- efficient solutions to environmental issues, specifically tailored to the needs of his clients.

SELECTED PROJECTS

Scavenger Waste Treatment Facility (SWTF), Suffolk County, NY

Water Treatment Plant EIS - Focused EIS - In response to requests from the Suffolk County Council on Environmental Quality and the Brookhaven Conservation Advisory Council, Mr. Sosik prepared a focused EIS to evaluate the potential impacts to an important surface water resource from the proposed facility including cumulative and synergistic effects with established contaminant plumes in the area.

Advanced Residential Communities, Rockville Centre, NY

Brownfield Project – As the senior project manager on this large scale, high profile redevelopment project, Mr. Sosik was asked to develop a plan to accelerate the regulatory process in the face of general community opposition. Through numerous discussions with the BCP management team, He was able to condense the schedule and review period, through the submission of supporting documents (Investigation Report, Remedial Work Plan) with the BCP application package. Community opposition, which focused on the environmental condition of the site as a means to block the project, was used to advantage in expediting approval of the aggressive interim remedial

plan. This will allow the developer to begin remedial work approximately 5 months ahead of schedule.

Former Temco Uniform site, West Haverstraw, NY

Brownfield Project – Mr. Sosik took over management of this project from another consultant following transition of this VCP site to the BCP. Mr. Sosik used the opportunity to renegotiate and revise the scope of work to allow a more cost effective and focused investigation plan without re-writing or resubmitting the RIWP. During the NYSDEC's review of the transition package, he met with and coordinated changes with the NYSDEC Project Manager to gain approval. The result saved the client a significant amount of money, but perhaps more importantly in this case, did so without loss of time.

Grovick Properties, Jackson Heights, NY

Brownfield Project – This Brownfield property is somewhat unique in that it had been investigated and partially remediated by the NYSDEC through the petroleum spill fund. The client was interested in purchasing the property and redeveloping it as office and retail space.

ENVIRONMENTAL BUSINESSS CONSULTANTS

Charles B. Sosik, PG, PHG, Principal

Mr. Sosik reviewed the NYSDEC investigation and developed a supplemental plan to meet the requirements of an RI under the BCP program. By performing this limited amount of field work "up-front" he was able to complete an RI Report and Remedial Plan and submit both with the BCP application package. The NYSDEC and NYSDOH approved the RI Report and the Remedial Plan with minor changes. This cut 120 days from the review process and allowed the client to arrange financing and move his project forward knowing what the clean-up costs would be at the outset.

Metro Management, Bronx, NY

Brownfield Project – The site of a former gas station, the developer had planned to construct a 12-story affordable housing apartment complex with first floor retail space. Since the site was located in an Environmental zone, potential tax credits of 22% for site development, remediation and tangible property could be realized under the BCP. In a pre-application meeting with the NYSDEC, Mr. Sosik realized that the department did not believe the site was eligible for the BCP, since it had been previously investigated and closed under the spills program.

Mr. Sosik assisted the developer in securing financing, and due to the demands of an aggressive construction schedule developed an Interim Remedial Measure (IRM), based on chemical oxidation treatment. Working closely with the clients environmental counsel, Mr. Sosik was able to get the IRM approved without a public comment period. Implementation of the IRM is currently underway.

Brandt Airflex, NY

Technical Consulting Services - Mr. Sosik provided senior level technical advice and strategic planning in developing an off-site RI/FS for the site, in negotiating a tax reduction for the property due to the environmental condition and in preparing a cost to cure estimate for settlement between business partners. After achieving a favorable tax consideration and settlement agreement for his client

Allied Aviation Services, Dallas, Fort Worth, Airport, Dallas, TX

Jet Fuel Investigation - Mr. Sosik developed and managed an investigative plan to quickly identify the extent and source of jet fuel which was discharging from the Airport's storm drain system to a creek a mile away. Through the use of a refined conceptual model, accelerated investigative techniques and a flexible work plan, he was able to identify the source of the fuel and the migration route within a single week. He then identified remedial options and successfully negotiated a risk based plan with the Texas regulatory agency that had issued a notice of enforcement action against the facility.

KeySpan – Former LILCO Facilities, Various NY Locations

Pesticide Impact Evaluation - Developed, negotiated and implemented a site screening procedure to evaluate impact to public health and the environment as the result of past herbicide use at 211 utility sites. Using an unsaturated zone leaching model (PRZM) on a small subset of the sites, he was able to establish mass loading schedules for the remaining sites. This was combined with public well data in a GIS environment to perform queries with respect to mass loading, time transport and proximity to vunerable public supply wells. Using this approach Mr. Sosik was able to show that there were no

concerns for future impact. This effort satisfied the public health and resource concerns of the state environmental agency and county health department in a reasonable amount of time and at a fraction of the cost of a full scale investigation.

Former Computer Circuits (Superfund) Site, Hauppauge, NY

CERCLA RI/FS - As Senior Project Manager for the site, he played a major role in regaining control of the investigation activites for the PRP. This action prevented the USEPA from initiating an extensive investigation at the site using a RAC II contractor allowing the client to perform a more efficient investigation. He was involved in all negotiations with EPA and was the project lead in developing a revised site characterization plan (work plan, field sampling plan, quality assurance plan, etc.). By carefully managing all phases of the investigation and continued interaction with each of the three regulatory agencies involved, Mr. Sosik was able to keep the project focused and incrementally reinforce the clients position. The estimated cost of the revised investigation is expected to save the client 1.5 to 2 million dollars.

Sun Oil, Seaford, NY

Remediation Consuliting Services & Project Management - Under an atmosphere of regulatory distrust, political pressure and mounting public hostility toward the client, Mr. Sosik conducted an off-site 3-D investigation to define the extent of contamination and the potential impact on public health. By designing and implementing an aggressive source area remediation program and personal interaction with the public and regulatory agencies, he was able to successfully negotiate a limited off-site remediation favorable to the client. Source area remediation was completed within 6 months and the project successfully closed without damage to the client's public image or working relationship with the regulatory agencies.

Con Edison, Various Locations, NY

Hydrogeologic Consulting Services - Under a general consulting contract, Mr. Sosik conducted detailed subsurface hydrogeologic investigations at five locations to assist in the development of groundwater contingency planning. He also developed and implemented work plans to investigate and remediate existing petroleum, cable fluid, and PCB releases at many of the generating facilities and substations. An important aspect of his role was in assisting the client in strategic planning and negotiations with the regulatory agency.

Keyspan - Tuthill Substation, Aqueboque, NY

Accelerated Site Characterization - Using accelerated site characterization techniques, Mr. Sosik presented the project as a case study in establishing the transport of an herbacide and its metobolites aplied at utility sites in the 1980's The results were then used to establish a screening method for evaluating 211 similar sites controlled by the client in a reasonable and eficient manner.

NYSDEC Spill, East Moriches, NY

Spill Release Analysis - With recognized expertise in the area of gasoline plume development on Long Island, Mr. Sosik was asked by the State to establish the release date (and principal responsible party) of an extensive petroleum spill, which impacted a residential

ENVIRONMENTAL BUSINESSS CONSULTANTS

Charles B. Sosik, PG, PHG, Principal

neighborhood. He used multiple lines of evidence, and a new EPA model (HSSM), which he has helped to refine, to reconstruct the release scenario and spill date, in support of the State Attorney General's cost recovery effort from the PRP.

Minmilt Realty, Farmingdale, NY

Fate & Transport Modeling - He completed an RI/FS at this location for a PCE plume that had been in transit for over 30 years. Mr. Sosik applied a conservative model to evaluate time/concentration impacts under a variety of transport scenarios to a municipal wellfield located 13,000 feet away. Through the use of the model and careful interpretation of an extensive data set compiled from several sources, Mr. Sosik was able to propose a plan which was both acceptable to the regulator and favorable to the client.

Sebonack Golf Course Project, Town of Southampton, NY

IPM Pesticide Study - Provided professional hydrogeologic services in support of the EIS prepared for the development of the site. The proposed development included an 18-hole golf course, clubhouse, dormitory facility, cottages, associated structures, and a 6,000 square foot research station for Southampton College. Mr. Sosik performed an extensive evaluation (using a pesticide-leaching model) on the effects of pesticide and nitrogen loading to groundwater as part of the projects commitment to an Integrated Pest Management (IPM) approach.

NYSDEC, Spills Division, Regions 1 - 4

Petroleum Spills Investigation & Remediation - As a prime contractor/consultant for the NYSDEC in Regions 1-4, Mr. Sosik has managed the investigation and remediation of numerous petroleum spills throughout the State. Many of these projects required the development of innovative investigation and remediation techniques to achieve project goals. He was also involved in many pilot projects and research studies to evaluate innovative investigation techniques such as accelerated site characterization, and alternative approaches to remediation such as monitored natural attenuation and risk based corrective action.

Sun Oil, E. Meadow, NY

Exposure Assessment - Performed to seek closure of the spill file, despite the presence of contaminants above standards, Mr. Sosik determined after the extended assessment that the level of remaining contamination would not pose a future threat to human health or the environment. He used multiple lines of evidence, and a fate and transport model to show that degradation processes would achieve standards within a reasonable time.

Sand & Gravel Mine, NY

Property Development - As part of the development of a sand and gravel mine, Mr. Sosik provided environmental consulting services to assist in obtaining a mining permit, which would result in the construction of a 150-acre lake. Specifically, Mr. Sosik investigated if the proposed lake would reduce groundwater quantity to domestic and public well fields, and/or accelerate the migration of potential surface contaminants to the lower part of the aquifer. After assuming the lead role in negotiations with the regulatory agency, Mr. Sosik was able to obtain a permit for the client by adequately addressing water quality and quantity issues, and by preparing a monitoring plan and spill response plan, acceptable to all parties.

NYSDEC, Mamaroneck, NY

Site Characterization / Source Identification - In a complex hydrogeologic setting consisting of contaminant transport through fractured metomorphic bedrock and variable overburden materials, Mr. Sosik was able to develop and implement a sub-surface investigation to differentiate and separate the impact associated with each of two sources. The results of this investigation were successful in encouraging the spiller to accept responsibility for the release.

Riverhead Municipal Water District, NY

Site Characterization / Remedial Planning - Using accelerated characterization techniques, he implemented a 3-D site investigation to identify two service stations 4,000 ft. away as the source of contamination impacting a municipal wellfield. In accordance with the strict time table imposed by the need to return the wellfield to production by early spring, he designed and implemented a multi-point (9 RW, 6 IW) recovery and injection well system using a 3-d numerical flow model, and completed the project on time. Using a contaminant transport model, Mr. Sosik developed clean-up goals which were achieved in 9 months of operation, well below the projected 3 to 5 year project duration.

Montauk Fire Department, NY

Site Assessment - Mr. Sosik performed a limited investigation and used a 2-D flow model to demonstrate that the property could not have been the source of contamination which had impacted an adjacent wellfield as per the results of a previous investigation. This small focused effort successfully reversed a \$500,000, and rising, claim against the department by the water district and the NYSDEC.

PREVIOUS EXPERIENCE

P.W. Grosser Consulting, Bohemia, NY Senior Project Manager, 1999-2006 Environmental Assessment & Remediation, Patchogue, NY Senior Project Manager, 1994-1999 Miller Environmental Group, Calverton, NY Project Manager, 1989-1994 DuPont Biosystems, Aston, PA Hydrogeologist, 1988-1989



Charles B. Sosik, PG, PHG, Principal

EXPERT WITNESS TESTIMONY AND DEPOSITIONS

Fact Witness -Testimony on relative age of petroleum spill based on nature and extent of residual and dissolved components at the Delta Service Station in Uniondale, NY Fall/1999

Expert Witness / Expert Report for defendant in cost recovery case by NYS Attorney General regarding a Class II Inactive Hazardous Waste (State Superfund) project by the NYSDEC (October 2004 – present, Report: March 2005, Deposition: April 2005)

Expert Witness / Fact Witness for plaintiff seeking compensation for partial expenses incurred during the investigation and remediation of a USEPA CERCLA site due to the release and migration of contaminants from an "upgradient" industrial property. (Deposition May 2005).

Expert Witness / Fact Witness for NYS Attorney General with respect to cost recovery for a NYSDEC petroleum spill site in Holtzville, NY (Deposition April 2005).

Expert Witness – Statement of opinion and expert testimony at trial for plaintiff seeking damages from a major oil corporation for contamination under a prior leasing agreement in Rego Park, NY. Case decided in favor of plaintiff. Trial date July/2007

Expert Report - for Attorney General on modeling performed to determine the spill release scenario at a NYSDEC petroleum spill site in East Moriches, NY. June/2000

Expert Witness / Fact Witness for defendant with respect to cost recovery and third party responsibility for a NYSDEC petroleum spill site. (Expert Statement of Fact – October 2005).

Expert Witness for plaintiff seeking damages related to a petroleum spill from the previous owner/operator of a gas station in College Point, NY. Currently under investigation and data collection.

Expert Witness for plaintiff (water supply purveyor) seeking damages from major oil companies and manufacturer of MTBE at various locations in Suffolk County, NY. Expert reports July 2007, August 2007 and October 2007, trial date September 2008.

Expert Witness - Deposition for NYS Attorney General regarding NYSDEC cost recovery for a petroleum spill site at Sag Harbor, NY. August/2002

Expert Witness - for NYS Attorney General regarding NYSDEC cost recovery for a petroleum spill site at Riverhead, NY. Currently underway.

MODELING EXPERIENCE (PARTIAL LISTING)

PROJECT	MODEL	APPLICATION
Riverhead Water District, Riverhead, NY	MODFLOW, MODPATH	Remediation system design to intercept MTBE plume and prevent continued impact to municipal well field.
NYSDEC - Region 1, Holbrook, NY	MODFLOW, MODPATH	Simulate transport of MTBE plume to predict future impact.
NYSDEC - Region 1, East Moriches, NY	HSSM	Evaluate release scenario and start date of petroleum spill in support of cost recovery by NYS AG office.
AMOCO, Deer Park, NY	HSSM	Estimate release amount, start date and spill scenario to evaluate the potential for mass unaccounted for
Keyspan Energy, Nassau/Suffolk Counties Substations	PRZM	Estimate mass load of simazine used at 211 electric substations and screen sites according to potential for human health and ecological impacts.
Saboneck Golf Club, Southampton NY	PRZM	Estimate mass load of proposed pesticides on new golf course to evaluate acceptability under an IPM program.
Suffolk County Department of Public Works (SCDPW) Scavenger Waste Treatment Plant, Yaphank, NY	DYNFLOW, DYNTRAC	Evaluate time-transport and nitrogen impact on local river system.
SCDPW SUNY Waste Water Treatment Plant, Stony Brook, NY	DYNFLOW, DYNTRAC	Determine outfall location and time-transport of nitrogen from proposed upgrades to an existing wastewater treatment plant
Water Authority of Great Neck North Great Neck, NY	MODFLOW, MODPATH, MT3D	Review of modeling study performed by EPA to evaluate potential future impact to Well field from PCE plume. Identified serious flaws in model construction and implementation, which invalidated conclusions

PUBLICATIONS

Smart Pump & Treat Strategy for MTBE Impacting a Public Water Supply (14th Annual Conference on Contaminated Soils Proceedings, 1998) Transport & Transformation of BTEX & MTBE in a Sand Aquifer (Groundwater Monitoring & Remediation 05/1998) Characteristics of Gasoline Releases in the Water Table Aquifer of Long Island (Petroleum Hydrocarbons Conference Proceedings, 1999) Field Applications of the Hydrocarbon Spill Screening Model (HSSM) (USEPA Interactive Modeling Web Course www.epa.gov/athens/software/training/webcourse Authored module on model application and applied use of calculators, 02/2000) Comparative Evaluation of MTBE Sites on Long Island, US EPA Workshop on MTBE Bioremediation (Cincinnati, 02/2000) Comparison of Four MTBE Plumes in the Upper Glacial Aquifer of Long Island (American Geophysical Union, San Francisco, 12/1996) Analysis and Simulation of the Gasoline Spill at East Patchogue, New York (American Geophysical Union, San Francisco, 12/1998)



Kevin R. Brussee, Project Manager

Professional Experience EBC: January 2008 Prior: 5 years

Education

MS, Environmental Studies, University of Massachusetts, Lowell BS, Environmental Science, Plattsburgh State University, NY

Areas of Expertise

• Site Investigations

- Gasoline/Fuel Oil Tank Removals
- NYC "E" Designations

Professional Certification

• NYSDEC Spill Closure

• OSHA 40-hr HAZMAT

PROFILE

Mr. Brussee has 5 years experience as an environmental consultant/contractor and has worked on and managed a wide range of environmental projects. Mr. Brussee has conducted Phase I, II and III Environmental Site Assessments for commercial, industrial, and residential properties in New York, Maryland and Delaware.

Mr. Brussee's field experience includes tank removal and installations, spill management and closure, soil and groundwater sampling, and both the oversight and operation of soil boring and well installation equipment. In addition, Mr. Brussee has performed project research, data reduction and evaluation, and has prepared reports for both regulatory and client use.

PREVIOUS EXPERIENCE

Eastern Environmental Solutions, Inc., Manorville, NY

Project Manager, 2006-2008

EA Engineering, Science & Technology Hydrogeologist, 2005-2006

P.W. Grosser Consulting, Bohemia, NY

Field Hydrogeologist, 2002-2003

PUBLICATIONS

Chemical Stress Induced by Copper, Examination of a Biofilm System; (Water Science Technology, 2006; 54(9): 191-199.)

ARIEL CZEMERINSKI, P.E. P.O. Box 43 Albertson, NY 11507-0043 mobile (516) 987-1662 fax (516) 706-3214 Email: ariel@amc-engineering.com

SUMMARY:

New York State Professional Engineer. Results-oriented Chemical and Environmental Engineer, with 15 years of experience in the chemical and environmental areas. Areas of expertise include process control and automation, process optimization, productivity improvement, quality systems, environmental compliance, process and plant safety, and management of a production facility. A team player with excellent technical problem solving ability and strong communications skills. Registered PE in NY, IN, IL, and MI.

PROFESSIONAL EXPERIENCE:

1997-present AMC Engineering, PLLC. Roslyn Heights, NY (Organized in 2000). <u>Principal</u>. Clients range from small car wash and Laundromat operators to multimillion-dollar chemical process companies.

- Engineering Consulting Services.
- Environmental Compliance, Permitting. Clean Water Act, Clean Air Act. Hazardous Materials.
- Chemical Process Design and Optimization. Process scale up.
- Wastewater Treatment systems.
- Design of cleaning compounds for the Transportation industry.
- Zoning regulations. Expediting Services. NYFD, NYC Buildings, NYSDEC, Suffolk County
- Safety and environmental training.
- Quality (ISO 9000) Management Systems: System auditing and implementation.
- Expert witness and testimony.

1994-2001 Axel Plastics Research Laboratories, Woodside, NY

Plant Manager

As the Plant Manager, I was responsible for all day-to-day operations. During my tenure at Axel I have accomplished the following:

- Designed and installed a powders blending facility, including materials handling, dust collection systems, mixers, and other processing equipment.
- Process scaled by a factor of 25.
- Identified major process improvement.
- Implemented a safety program, based on OSHA standards.
- Implemented a Company-wide Quality Management system (ISO 9000).
- Successfully addressed all environmental-related issues with local authorities.
- Trained all plant personnel in the use of new equipment, software, controllers and systems, and processes.
- Wrote all operating procedures and instructions. Designed and implemented an Intranet system with all information pertaining to day-to-day operations, for Company wide use.
- Planned production for the two plants and more than 140 lines of products.
- Maintained materials inventory.
- Managed all shipping/receiving operations.
- Managed all equipment and process maintenance.

1992-1994 Millennium Chemicals (SCM, Colors & Silica), Baltimore, MD. <u>Process Engineer and Project Manager.</u>

- Process engineering, design, manufacturing and environmental control for the Silica Gel plant.
- Responsible for ISO 9000 certification. Wrote all procedures and instructions for the plant and maintenance.
- Conducted capital asset planning.
- During my stay At SCM Chemicals I introduced an SPC program. Its implementation enabled production to narrow down broad product specification and identify the variables that rendered the process out of control.
- The installation of an inline particle size analyzer helped the Company save \$750,000 in waste product per year.

1990-1992 CROMPTON (WITCO) CORPORATION, POLYMER ADDITIVES, Taft, LA. <u>Process Development Engineer.</u>

- Routine responsibilities were to develop new processes and optimize existing ones.
- Successfully designed and installed a distributed control system to remotely control an organic peroxides facility (Marshall, TX).
- Designed, erected and operated a Pilot Plant. It successfully brought to the market a pesticide, patented by Dupont and commercialized by Witco (Seenox).
- Conducted process simulation to identify process and product optimization.
- Designed process equipment (reactors, heat exchangers, pumps)

Summer 1989 CON EDISON - POWER GENERATION PLANT, Queens, NY. <u>Chemical Engineer. Summer internship.</u>

Developed a comprehensive manual of operations of a boiler control system. Trained the station chemists on the use of the Chemical Information System, on which the manual was based.

1987-1988 VINISA S.A.I.C. - PVC COMPOUNDING, Buenos Aires, Argentina. <u>Production and Project Manager.</u>

Coordinated production in VINISA's 3 compounding plants. Routine responsibilities included: Technical assistance to PVC compounders, Production organization, planning and control, production management.

EDUCATION:

1988-1990 COLUMBIA UNIVERSITY, New York, NY M.S. Chemical Engineering, Feb. 1990. Awarded Fellowship as a Teaching Assistant. Thesis: Optimal Periodic Control.

1981-1987 UNIVERSITY OF BUENOS AIRES, Buenos Aires, Argentina.

Chemical Engineer (six year program).

Graduated in top 3% of class.

Teaching Assistant of Inorganic Chemistry.

Thesis: Feasibility study for the production of pectin. Fats and Oils refinery plant. Continuing Education Courses attended: (partial list)

- Building Inspections Course
- Environmental Regulation
- Design of Chemical Reactors
- Process Hazard Analysis
- Hazardous Materials Regulations
- Forklift Safety
- CPR Training
- Supervisors Training
- OSHA regulations
- ISO 9000
- Lead auditor training
- Wastewater Treatment System

ADDITIONAL INFORMATION

Past Chairman of the New York Section, AIChE (American Institute of Chemical Engineers). Computer Literate: Process simulators, AutoCAD, Microsoft Office, Internet Excellent communications skills. Fluent in Spanish.

RESUME

EMPLOYMENT

1/99-Present	<u>ROBERT W SCARPA JR ARCHITECT</u> New York, New York	
	Principle	
	Since starting this firm I have been able to participate in a variety of projects ranging from corporate interiors, new multi-family and single family housing, renovations, additions, and new buildings. I have been the principle designer of many of these projects and have participated in them as the architect of record as well as a consultant to other design firms who did not have the expertise to complete the work. In addition I have been retained as a consultant by owners who required assistance in reviewing and supplementing the work of their design professionals who were not fully capable of developing their projects.	
	Projects have ranged in scale from \$50,000 to \$45,000,000.	
6/95-12/98	SALSANO ASSOCIATES ARCHITECTS New York, New York	
	Director of Design	
	Principal designer as well as director of professional staff in the preparation of design and construction documents and director of construction administration. Cultivated potential clients and obtained commissions for the firm. Hired staff and consultants.	
	Projects included new commercial and multi-family residential buildings, large scale corporate interiors, medical offices, showrooms, executive offices and facade renovation.	
9/92-3/95	PLATT BYARD DOVELL ARCHITECTS New York, New York	
	Project Manager	
	Senior staff position requiring management and training of junior staff, organizing project development and construction documents, coordinating multiple consultants, NYC building and zoning code analyses, as well as reporting to the firm's partners on office organization and quality control procedures.	
	Projects included core, office interiors, and showrooms for the Chanel building, 15 E. 57th Street, NYC (\$35 million), a medical laboratory/ office building (\$25 million), that was an adaptive reuse of a Tribeca perfume warehouse, several corporate interiors projects including trading rooms for a major Wall Street bank.	

ARCHITECT

Resume, Page 2

2/92-8-92	CONSULTANT IN PRIVATE PRACTICE Prepared specifications for a 26 story Manhattan residential high-rise and completed a window replacement program for The Manhattan School of Music.
5/85-2/92	<u>ULRICH FRANZEN & ASSOCIATES</u> New York, New York <u>Associate</u>
	Responsible for managing the firm's work as well as hiring, training and assigning staff. Duties included substantial client contact and construction administration. Experienced in the following: hiring and coordinating multiple consultants, acoustical design, lighting design, specification writing, and working with associated architectural and interior design firms. Directed all phases of projects from programming and schematic design through design development, construction documents, construction administration, and project close-out. Co-designer on projects with the firm's principal.
	Projects managed ranged in scale from \$1-15 million and included commercial buildings and office interiors, educational facilities including a dormitory, recital hall, music practice rooms and a library, restoration/ renovation both commercial and residential as well as single-family residential buildings including steel frame,

wood frame and NYC apartments.

PROFESSIONAL REGISTRATION

New York State New Jersey NCARB Certificate

EDUCATION

<u>Columbia University Graduate School of Architecture and Planning</u> Master of Science in Architecture, 1985

<u>New York Institute of Technology, Old Westbury, New York</u> Bachelor of Architecture, Magna Cum Laude, 1984 Gold Medal for Architectural Design Excellence

TEACHING EXPERIENCE

Adjunct Assistant Professor of Architecture New York Institute of Technology, Old Westbury, New York Second Year Studio Critic, 1988-1990

<u>Guest Critic</u> Parsons School of Design, 1998-2002 New York School of Interior Design, 1990-1997

RICHARD J. POWERS

3096 Decatur Avenue, Bronx, New York 10467 Home (718) 547-7159 Cell (516) 250-5343 email: rjp3096@yahoo.com

My career goal is to obtain a position as a Director Of Design and Construction for a mid-sized construction company in the New York City metropolitan area.

MANAGEMENT

* Construction **Operations** * Facilities *Value Engineering *Analysis

I am a professional with a proven successful track record in developing and managing operational systems, enhancing performance and quality of services rendered, and directing projects through completion, resulting in cost effective operations and profitability.

I am skilled in recognizing patterns and opportunities, identifying problems and initiating corrective action for resolution. I am systematic in defining objectives and coordinating available and potential resources. I am adept in presenting ideas and concepts to instruct, motivate, train, and empower staff and clients. I achieve results through analysis, attention to detail, follow through, and hands on participation.

B.P.S. Construction Management, The Pratt Institute 2003

EXPERIENCE

Coastal Builders Corp. / The Arker Companies., Woodmere, New York 2003 – Present

Senior Project Manager. Last two projects successfully completed: \$60 M renovation project of 816 apartments in three sites in Coney Island, N.Y. / Mixed use building, Bronx, N. Y. comprising 100 apartments and a 20,000 SF Staples store on a Brownfield site.

L & M Builders, Larchmont, New York

Senior Superintendent / Project Manager. Successfully completed the gut renovation of 216 apartments in thirteen buildings on West 148th Street in Harlem. Project entailed combining all of the buildings into a single apartment building.

1998 - 2001Kessler Assisted Living Centers, Bloomfield, New Jersey Director of Design and Construction. Oversaw the design and construction of assisted living and Alzheimer residences in New Jersey, Florida and Colorado. Oversaw the design and construction of the first LEEDS "green" assisted living facility in Chatham, New Jersey.

Wagman Construction Company, New York **Project Manager**

The National Equity Fund, New York, New York

Director of Vocational Training - Bronx Job Corps Center

Facilities Manager - Responsible for construction management supervision and capital planning for national portfolio of eight thousand apartments. Trained asset managers and general partners in capital planning, construction and maintenance procedures.

Powers Contracting, Inc., Bronx, New York <i>President</i> – Operated all phases of a general contracting and development business.	1987 – 1995
The Bodak Organization, Bronx, New York Director of Maintenance and Construction	1983 – 1986
The National Association of Home Builders, Bronx, New York	1980 – 1983

1997 - 1998

2001 - 2003

1995-1997

<u>APPENDIX - E</u> Community Air Monitoring Plan

NEW YORK STATE BROWNFIELDS CLEANUP PROGRAM BCP ID No. C203039

COMMUNITY AIR MONITORING PLAN

3035 WHITE PLAINS ROAD BRONX, NY

August 2007

COMMUNITY AIR MONITORING PLAN TABLE OF CONTENTS

1.0	INTRODUCTION1				
	1.1 Regulatory Requirements	1			
2.0	AIR MONITORING	2			
	2.1 Real-Time Monitoring	2			
	2.1.1 Work Area				
	2.1.2 Community Air Monitoring Requirements	2			
3.0	VAPOR EMISSION RESPONSE PLAN	4			
4.0	MAJOR VAPOR EMISSION RESPONSE PLAN	5			
5.0	VAPOR / ODOR SUPPRESSION TECHNIQUES	6			
6.0	DUST SUPPRESSION TECHNIQUES	7			
7.0	DATA QUALITY ASSURANCE	8			
	7.1 Calibration	8			
	7.2 Operations	8			
	7.3 Data Review	8			
8.0	RECORDS AND REPORTING	9			

LIST OF TABLES

Table 1-1	Frequency and Location of Air Monitoring	3
Table 1-2	Real-Time Air Monitoring Action Levels	.3

1.0 INTRODUCTION

The Community Air Monitoring Plan (CAMP) provides measures for protection for on-site workers and the downwind community (i.e., off-site receptors including residences, businesses, and on-site workers not directly involved in the remedial work) from potential airborne contaminant releases resulting from remedial activities at construction sites.

The action levels specified herein require increased monitoring, corrective actions to abate emissions, and/or work shutdown. Additionally, the CAMP helps to confirm that the remedial work did not spread contamination off-site through the air.

The primary concerns for this site are odors and dust particulates.

1.1 Regulatory Requirements

This CAMP was established in accordance with the following requirements:

- 29 CFR 1910.120(h): This regulation specifies that air shall be monitored to identify and quantify levels of airborne hazardous substances and health hazards, and to determine the appropriate level of protection for workers.
- New York State Department of Health's (NYSDOH) Generic Community Air Monitoring Plan: This guidance specifies that a community air-monitoring program shall be implemented to protect the surrounding community and to confirm that the work does not spread contamination off-site through the air.

New York State Department of Environmental Conservation (NYSDEC) Technical and Guidance Memorandum (TAGM) #4031 - Fugitive Dust Suppression and Particulate Monitoring Program at Inactive Hazardous Waste Sites: This guidance provides a basis for developing and implementing a fugitive dust suppression and particulate monitoring program as an element of a hazardous waste site's health and safety program



2.0 AIR MONITORING

The following sections contain information describing the types, frequency and location of real-time monitoring.

2.1 Real-Time Monitoring

This section addresses the real-time monitoring that will be conducted within the work area ,and along the site perimeter, during intrusive activities such as excavation, product recovery, manipulation of soil piles, extraction of shoring systems, etc.

2.1.1 Work Area

The following instruments will be used for work area monitoring:

- Photoionization Detector (PID)
- Dust Monitor

Table 1-1 presents a breakdown of each main activity and provides the instrumentation, frequency and location of the real-time monitoring for the site. Table 1-2 lists the Real-Time Air Monitoring Action Levels to be used in all work areas.

2.1.2 Community Air Monitoring Requirements

To establish ambient air background concentrations, air will be monitored at several locations around the site perimeter before construction activities begin. These points will be monitored periodically in series during the site work. When the excavation area is within 20 feet of potentially exposed populations or occupied structures, the perimeter monitoring points will be located to represent the nearest potentially exposed individuals.

Fugitive respirable dust will be monitored using a MiniRam Model PDM-3 aerosol monitor. Air will be monitored for VOCs with a portable Ionscience 3000 photoionization detector (PID), or equivalent. All air monitoring data is documented in a site log book by the designated site safety officer. The site safety officer or delegate must ensure that air monitoring instruments are calibrated and maintained in accordance with manufacturer's specifications. All instruments will be zeroed daily and checked for accuracy. A daily log will be kept. If additional monitoring is required, the protocols will be developed and appended to this plan

ACTIVITY	AIR MONITORING INSTRUMENT	FREQUENCY AND LOCATION	
Drilling, Probing, Excavation, and Loading Operations	PID, Dust Monitor	Every 30 minutes in Breathing Zone (BZ) during intrusive activities or if odors become apparent. Every hour at perimeter of site during intrusive or soil loading activities	
BC Environmental Business Consult		nic Road Phone 631.924.0870 NY 11961 Fax 631.924.2870	

Table 2-1Frequency and Location of Air Monitoring

AIR MONITORING INSTRUMENT	MONITORING LOCATION	ACTION LEVEL	SITE ACTION	REASON
PID	Breathing Zone	0-1 ppm, above background non- transient	None	Exposure below established exposure limits
PID	Breathing Zone	1-5 ppm, above background non- transient	Don APR	Based on potential exposure to benzene
PID	Breathing Zone	>5 ppm, above background non- transient	Don ASR or SCBA, Institute vapor/odor suppression measures, Notify HSM.	Increased exposure to site contaminants, potential for vapor release to public areas.
PID	Work Area Perimeter	< 1 ppm above background non- transient	None	Exposure below established exposure limits.
PID	Work Area Perimeter	> 1 ppm above background non- transient	Stop work and implement vapor release response plan until readings return to acceptable levels, Notify HSM.	Increased exposure to site contaminants, potential for vapor release to public areas
Mini Ram	Work Area Perimeter	< 150 µg/m ³	None	Exposure below established exposure limits.
Mini Ram	Work Area Perimeter	>150 µg/m ³	Don ASR or SCBA, Institute dust suppression measures, Notify HSM.	Increased exposure to site contaminants, potential for dust release to public areas

Table 2-2Real-Time Air Monitoring Action Levels



9 Peconic Road Ridge, NY 11961

3.0 VAPOR EMISSION RESPONSE PLAN

This section is excerpted from the NYSDOH guidance for Community Air Monitoring Plan - Ground Intrusive Activities.

If the ambient air concentration of organic vapors exceeds 5 ppm above background at the perimeter of the work area, activities will be halted and monitoring continued. If the organic vapor level decreases below 5 ppm above background, work activities can resume. If the organic vapor levels are greater than 5 ppm over background but less than 25 ppm over background at the perimeter of the work area, activities can resume provided:

• the organic vapor level 200 feet downwind of the work area or half the distance to the nearest residential or commercial structure, whichever is less, is below 5 ppm over background.

If the organic vapor level is above 25 ppm at the perimeter of the work area, activities must be shut down. When work shutdown occurs, downwind air monitoring as directed by the Health & Safety Officer will be implemented to ensure that vapor emission does not impact the nearest residential or commercial structure at levels exceeding those specified in Section 4.0.



4.0 MAJOR VAPOR EMISSION RESPONSE PLAN

If any organic levels greater than 5 ppm over background are identified 200 feet downwind from the work area or half the distance to the nearest residential or commercial property, whichever is less, all work activities must be halted.

If, following the cessation of the work activities, or as the result of an emergency, organic levels persist above 5 ppm above background 200 feet downwind or half the distance to the nearest residential or commercial property from the work area, then the air quality must be monitored within 20 feet of the perimeter of the nearest residential or commercial structure (20 Foot Zone).

If efforts to abate the emission source are unsuccessful and if organic vapor levels are approaching 5 ppm above background for more than 30 minutes in the 20 Foot Zone, then the Major Vapor Emission Response Plan shall automatically be placed into effect.

However, the Major Vapor Emission Response Plan shall be immediately placed in effect if organic vapor levels are greater than 10 ppm above background.

Upon activation, the following activities will be undertaken:

All emergency Response Contacts are listed in the Health & Safety Plan will go into effect.

The local police authorities will immediately be contacted by the Health & Safety Officer and advised of the situation.

Frequent air monitoring will be conducted at 30-minute intervals within the 20 Foot Zone. If two successive readings below action levels are measured, air monitoring may be halted or modified by the Health & Safety Officer.



5.0 VAPOR / ODOR SUPPRESSION TECHNIQUES

Vapor / odor suppression techniques must be employed when action levels warrant the use of these techniques.

The primary technique to be implemented for control of volatile organic odors from stockpiled soil loaded trucks or the open excavation will be the application of a hydro-mulch material or encapsulating foam sealant. The hydro-mulch material is a seedless version of the hydro-seed product commonly used by commercial landscaping contractors to provide stabilization and rapid grow-in of grasses or wild flowers along highways, embankments and other large areas. Hydro-mulch or the encapsulating sealant will be sprayed over open excavation areas, temporary stockpile areas, drying beds and loaded trucks, as necessary. This is a highly effective method for controlling odors, because the release of odors is sealed immediately at the source. As a final control, excavation will be limited to favorable wind and temperature conditions to minimize off-site odor migration.



6.0 DUST SUPPRESSION TECHNIQUES

Reasonable dust-suppression techniques must be employed during all work that may generate dust, such as excavation, grading, placement of clean fill, and loading of contaminated soils. The following techniques were shown to be effective for controlling the generation and migration of dust during remedial activities:

- Wetting equipment and excavation faces;
- Spraying water on buckets during excavation and dumping;
- Hauling materials in properly covered containers; and,
- Restricting vehicle speeds to 10 mph.

Using atomizing sprays will prevent overly wet conditions, conserve water, and offer an effective means of suppressing fugitive dust. It is imperative that utilizing water for suppressing dust will not create surface runoff.



7.0 DATA QUALITY ASSURANCE

7.1 Calibration

Instrument calibration shall be documented on instrument calibration and maintenance sheets or in the designated field logbook. All instruments shall be calibrated as required by the manufacturer. Calibration checks may be used during the day to confirm instrument accuracy. Duplicate readings may be taken to confirm individual instrument response.

7.2 **Operations**

All instruments shall be operated in accordance with the manufacturer's specifications. Manufacturers' literature, including an operations manual for each piece of monitoring equipment will be maintained on-site by the SSO for reference.

7.3 Data Review

The SSO will interpret all monitoring data based on Table 2-2 and his/her professional judgment. The SSO shall review the data with the PM to evaluate the potential for worker exposure, upgrades/downgrades in level of protection, comparison to direct reading instrumentation and changes in the integrated monitoring strategy.

Monitoring and sampling data, along with all sample documentation will be periodically reviewed by the PM.



8.0 **RECORDS AND REPORTING**

All air readings must be recorded on daily air monitoring log sheets and made available for review by personnel from NYSDEC and NYSDOH.



<u>APPENDIX - F</u> Citizen Participation Plan



New York State Department of Environmental Conservation

Brownfield Cleanup Program

Citizen Participation Plan for Former Dico G Auto & Truck Repair

3035 White Plains Road Bronx, New York

August 2007

Contents

<u>Sectio</u>	n Page Number
1.	What is New York's Brownfield Cleanup Program?1
2.	Citizen Participation Plan Overview1
3.	Site Information
4.	Remedial Process
5.	Citizen Participation Activities8
6.	Major Issues of Public Concern
Apper	ndix A – Site Location Map10
Apper	ndix B – Project Contacts and Document Repositories11
Apper	ndix C – Brownfield Site Contact List12
Apper	ndix D – Identification of Citizen Participation Activities13
Apper	ndix E – Brownfield Cleanup Program Process14
	* * * *

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 brownfield site's remedial process.

Applicant: Bedford Park Associates, LLC, Adee & Lester, LLP, 3035 White Plains Road Retail, LLC Site Name: Former Dico G Auto & Truck Repair Site Address: 3035 White Plains Road Site County: Bronx Site Number: C203039

1. What is New York's Brownfield Cleanup Program?

New York's Brownfield Cleanup Program (BCP) is designed to encourage the private sector to investigate, remediate (clean up) and redevelop brownfields. A brownfield is any real property where redevelopment or reuse may be complicated by the presence or potential presence of a contaminant. 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 the 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 remedial activities.¹ An Applicant is a person whose request to participate in the BCP has been accepted by NYSDEC. The BCP contains investigation and remediation (cleanup) requirements, ensuring that cleanups protect public health and the environment. When 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: www.dec.state.ny.us/website/der/bcp .

2. Citizen Participation Plan Overview

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

Appendix A contains a map identifying the location of the site.

Project Contacts

Appendix B identifies NYSDEC project contact(s) to whom the public should address questions or request information about the site's remedial program. The public's suggestions about this CP

¹ "Remedial activities", "remedial action", and "remediation" are defined as all activities or actions undertaken to eliminate, remove, treat, abate, control, manage, or monitor contaminants at or coming from a brownfield site.

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.

Document Repositories

The locations of the site's document repositories also are identified in Appendix B. The document repositories provide convenient access to important project documents for public review and comment.

Site Contact List

Appendix C contains the brownfield site contact list. This list has been developed to keep the community informed about, and involved in, the site's investigation and remediation process. The brownfield 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 remedial activities at the site (such as fieldwork), as well as availability of project documents and announcements about public comment periods.

The brownfield site contact list includes, at a minimum:

- chief executive officer and official(s) principally involved with relevant zoning and planning matters 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;
- document repositories.

Where the site or adjacent real property contains multiple dwelling units, the Applicant will work with NYSDEC to develop an alternative method for providing such notice in lieu of mailing to each individual. For example, the owner of such a property that contains multiple dwellings may be requested to prominently display fact sheets and notices required to be developed during the site's remedial process. This procedure would substitute for the mailing of such notices and fact sheets, especially at locations where renters, tenants and other residents may number in the hundreds or thousands, making the mailing of such notices impractical.

The brownfield 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 B. Other additions to the brownfield site contact list may be made on a site-specific basis at the discretion of the NYSDEC project manager, in consultation with other NYSDEC staff as appropriate.

CP Activities

Appendix D identifies the CP activities, at a minimum, that have been and will be conducted during the site's remedial program. The flowchart in Appendix E shows how these CP activities

integrate with the site remedial process. The public is informed about these CP activities through fact sheets and notices developed at significant points in the site's remedial process.

- Notices and fact sheets help the interested and affected public to understand contamination issues related to a brownfield site, and the nature and progress of efforts to investigate and remediate a brownfield 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 brownfield site's investigation and remediation.

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

This CP Plan may be revised due to changes in major issues of public concern identified in Section 6. or in the nature and scope of remedial activities. Modifications may include additions to the brownfield site contact list and changes in planned citizen participation activities.

3. Site Information

The property known as the Former Dico G Auto & Truck Repair, located at 3001- 3035 White Plains Road, Bronx, NY, was accepted into the New York State Brownfield Cleanup Program (BCP) on July 30, 2007.

Site Description

The subject property address is 3035 White Plains Road. It is located on the west side of White Plains Road between Adee Avenue and Burke Avenue in the Bronx, New York. The site is designated as Section 4545, Lot 14 by the New York City Department of Assessment.

The subject property consists of a 16,880 ft^2 parcel, which is improved with a single-story 1,653 ft^2 masonry building with 3 service bays. The building was constructed in 1960 as a service station and is currently used as an auto repair shop. The property is surrounded by a 6-foot high chain link fence which also bisects the site just north of the service station building. The surrounding area is characterized by commercial businesses (mostly retail) along White Plains Road. Residential areas are located behind (east-west) this commercial corridor. An elevated section of the Metro-North Railway passes in front of the property, directly over White plains Road.

Site History

The property has been in continual service as a gasoline service station and / or auto repair shop since the building was constructed in 1960.

The site has an open spill file No. 99-00851 related to soil contamination discovered during the removal of twelve 550 gallon USTs in 1999. On December 29, 2007, gasoline contamination was encountered by a geotechnical drilling company advancing soil borings on the property to

determine the foundation requirements of a potential new building for the site. Based on these observations, a preliminary investigation was performed in which significant levels of volatile organic compounds (VOC) in soil and /or groundwater were identified at several locations on the property. These areas were associated with the location of known and suspected UST or dispenser areas.

Environmental History

A Phase I Environmental Site Assessment (ESA), in accordance with ASTM E 1527, was completed by Environmental Business Consultants (EBC) and documented in a report dated February, 2007. The Phase I ESA revealed that the property was historically used as an automotive service station from at least 1960 to 1999. Since 1999 the site has been used mainly as a truck and automotive repair shop and scrap yard. The records search identified two NYSDEC petroleum spill files, one of which remains open. The site inspection identified numerous environmental concerns including the improper storage of fuel oil, waste oil and automotive fluids.

The Phase I revealed the following recognized environmental conditions:

- The site has an open spill file No. 99-00851 related to soil contamination discovered during the removal of twelve 550 gallon USTs in 1999. No documentation regarding endpoint sampling, impacts to groundwater or other media was available.
- The improper storage of hazardous and non-hazardous materials including gasoline, fuel oil, automotive fluids and solvents.
- The outdoor storage of derelict vehicles, auto parts, scrap metals and trash.
- The presence of a surface drain with obvious staining around the structure.
- The historic use of the property as a gas station from 1960 to 1999, and as an automotive repair facility from 1960 to the present.

The Phase I concluded that the site has been impacted by petroleum products associated with underground leaking storage tanks, and that the potential exists for impacts to other areas of the site from the former dispenser system and associated piping, from the improper storage and use of petroleum products, solvents and automotive chemicals, and from the outdoor storage of derelict vehicles, auto parts and scrap metals.

The site is listed on the PBS database under the name Otis Petroleum (PBS No. 2-601449). The database lists the subject site as a PBS facility with 10 USTs closed on September 1, 1999.

The site is also listed on the NYSPILLS database. The database indicates that there are two spills associated with the site. The first spill (No. 98-07962) was reported to the DEC on September 29, 1998 due to complaints from customers about sand in gasoline purchased from the station.

According to the file, this spill was closed on March 3, 2003, in response to an internal directive to close out spills with no recent history.

The second spill (No. 99-00851) which is related to contamination found during removal of the underground storage tanks in April 1999, was reported to the DEC on April 22, 1999. According to the DEC records, the spill was not investigated and remains open.

On December 29, 2007, gasoline contamination was encountered by a geotechnical drilling company advancing soil borings on the property to determine the foundation requirements of a potential new building for the site. On January 3, 2007, EBC visited the site and directed the geotechnical company to collect new samples from the area in which the contamination was discovered. This area corresponded to the general location of a former dispenser island, according to the property owner. Based on discussions with the property owner, two more borings were installed at locations which corresponded roughly to the location of a second dispenser island and the former UST area.

Since the geotechnical contractor was not equipped to collect groundwater samples, EBC returned to the site on January 10, 2007 to obtain a groundwater sample near the south property line, in an area where the contractor had previously encountered groundwater. The groundwater sample was collected from a depth of approximately 9 feet using a track-mounted probing machine.

Elevated volatile organic compounds (VOCs) related to gasoline, were reported in the soil samples collected from the approximate location of the two former dispenser islands. In addition VOC compounds, associated with gasoline, were found in the groundwater sample in exceedance of the water quality standards.

Based on the results of soil and groundwater samples collected and the historic use of the site, the preliminary investigation concluded that the site had been impacted by its use as a service station and repair shop over the past 45 years. The report noted that the borings installed were located based on general guidance from the property owner and that they were unlikely to represent worst case conditions.

Groundwater from a single boring location was found to contain gasoline-related VOCs at levels significantly above water quality standards. Since the boring was located close to the south property line, the report concluded that it was highly likely that contaminated groundwater was migrating off of the property. The report noted that the sample was not believed to be hydraulically downgradient of the impacted soil areas, and, therefore, VOC concentrations may be considerably higher in other areas of the site or at off-site locations.

The report noted that other areas of the property may be affected with VOCs, SVOCs and metals due to materials stored at the site and recommended that a comprehensive investigation be performed encompassing all potentially affected media (soil, soil gas, groundwater). The report noted that because shallow soil and groundwater were affected, remedial action, and / or mitigation and control measures may be needed to prevent vapor intrusion, if the property is developed as intended.

4. Remedial Process

Note: See Appendix E for a flowchart of the brownfield site remedial 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 onsite, 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 its Application proposes that the site will be used for unrestricted purposes.

To achieve this goal, the Applicant will conduct remedial activities at the site with oversight provided by NYSDEC. The Brownfield Cleanup Agreement executed by NYSDEC and the Applicant sets forth the responsibilities of each party in conducting a remedial program at the site.

Investigation

If the Applicant conducts a remedial investigation (RI) of the site, it will be performed with NYSDEC oversight. The Applicant must develop a remedial investigation workplan, which is subject to public comment as noted in Appendix D. The goals of the investigation are as follows:

1) Define the nature and extent of contamination in soil, surface water, groundwater and any other impacted media;

2) Identify the source(s) of the contamination;

3) Assess the impact of the contamination on public health and/or the environment; and

4) Provide information to support the development of a Remedial Work Plan to address the contamination, or to support a conclusion that the contamination does not need to be addressed.

The Applicant will prepare an RI Report after it completes the RI. This report will summarize the results of the RI and will include the Applicant's recommendation of whether remediation is needed to address site-related contamination. The RI Report is subject to review and approval by NYSDEC. Before the RI Report is approved, a fact sheet that describes the RI Report will be sent to the site's contact list.

NYSDEC will determine if the site poses a significant threat to public health and/or the environment. If NYSDEC determines that the site is 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 community 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 eligible site.

For more information about the TAG Program and the availability of TAGs, go online at: www.dec.state.ny.us/website/der/guidance/tag/.

Remedy Selection

After NYSDEC approves the RI Report, the Applicant will be able to develop a Remedial Work Plan if remediation is required. The Remedial Work Plan describes how the Applicant would address the contamination related to the site.

The public will have the opportunity to review and comment on the draft Remedial Work Plan. The site contact list will be sent a fact sheet that describes the draft Remedial Work Plan and announces a 45-day public comment period. NYSDEC will factor this input into its decision to approve, reject or modify the draft Remedial Work Plan.

A public meeting may be held by NYSDEC about the proposed Remedial Work Plan if requested by the affected community and if significant substantive issues are raised about the draft Remedial Work Plan. Please note that, in order to request a public meeting, the health, economic well-being or enjoyment of the environment of those requesting the public meeting must be threatened or potentially threatened by the site. In addition, the request for the public meeting should be made within the first 30 days of the 45-day public comment period for the draft Remedial Work Plan. A public meeting also may be held at the discretion of the NYSDEC project manager in consultation with other NYSDEC staff as appropriate.

Construction

Approval of the Remedial Work Plan by NYSDEC will allow the Applicant to design and construct the alternative selected to remediate the site. The site contact list will receive notification before the start of site remediation. When the Applicant completes remedial activities, it will prepare a final engineering report that certifies that remediation requirements have been achieved or will be achieved within a specific time frame. NYSDEC will review the report to be certain that the remediation is protective of public health and the environment for the intended use of the site. The site contact list will receive a fact sheet that announces the completion of remedial activities and the review of the final engineering report.

Certificate of Completion and Site Management

Once NYSDEC approves the final engineering report, it will issue the Applicant a Certificate of Completion. This Certificate states that remediation goals have been achieved, and relieves the Applicant from future remedial liability, subject to statutory conditions. The Certificate also includes a description of any institutional and engineering controls or monitoring required by the approved remedial work plan. If the Applicant uses institutional controls or engineering controls to achieve remedial objectives, the site contact list will receive a fact sheet that discusses such controls.

An institutional control is a non-physical restriction on use of the brownfield site, such as a deed restriction that would prevent or restrict certain uses of the remediated property. An institutional control may be used when the remedial 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, such as a cap or vapor barrier.

Site management will be conducted by the Applicant as required. NYSDEC will provide appropriate oversight. Site management involves the institutional and engineering controls required for the brownfield site. Examples include: operation of a water treatment plant, maintenance of a cap or cover, and monitoring of groundwater quality.

5. Citizen Participation Activities

CP activities that have already occurred and are planned during the investigation and remediation of the site under the BCP are identified in Appendix D: Identification of Citizen Participation Activities. These activities also are identified in the flowchart of the BCP process in Appendix E. NYSDEC will ensure that these CP activities are conducted, with appropriate assistance from the Applicant.

All CP activities are conducted to provide the public with significant information about site findings and planned remedial activities, and some activities announce comment periods and request public input about important draft documents such as the Remedial Work Plan.

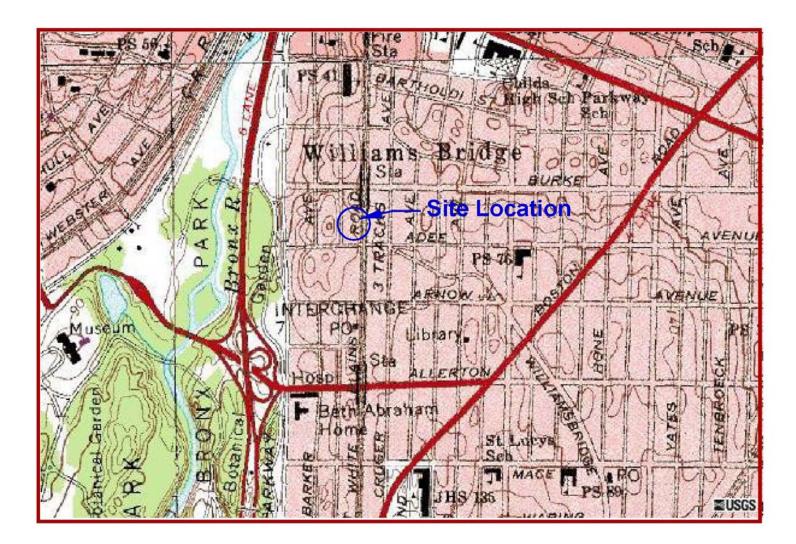
All written materials developed for the public will be reviewed and approved by NYSDEC for clarity and accuracy before they are distributed. Notices and fact sheets can be combined at the discretion, and with the approval of, NYSDEC.

6. Major Issues of Public Concern

This section of the CP Plan identifies major issues of public concern, if any, that relate to the site. Additional major issues of public concern may be identified during the site's remedial process.

Based on the presence of volatile organic compounds (from gasoline) in soil and groundwater at the site, gasoline vapors may be present in the ground above the contaminated soil and groundwater. If these vapors were to migrate off of the property, they could enter nearby basements in commercial buildings or residences.

Appendix A – Site Location Map



Appendix B – Project Contacts and Document Repositories

Project Contacts

For information about the site's remedial program, the public may contact any of the following project staff:

New York State Department of Environmental Conservation (NYSDEC):

Shaminder Singh Project Manager NYSDEC Region 2 Division of Environmental Remediation 47-40 21st Street Long Island City, NY 11101 (718) 482-4909

New York State Department of Health (NYSDOH):

Gary Litwin Project Manager NYSDOH Flanigan Square 547 River Street Troy, NY 12180-2216

Document Repositories

The document repositories identified below have been established to provide the public with convenient access to important project documents:

New York Public Library - Allerton Branch 2740 Barnes Avenue Bronx, NY10467

Phone: (718) 881-4240 Hours:

Mon	Tue	Wed	Thu	Fri	Sat	Sun
10-6	12-7	10-6	1-6	1-6	10-5	_

NYSDEC Region 2 Division of Environmental Remediation 47-40 21st Street Long Island City, NY 11101 Shaminder Singh Hours: M-F, 8am to 4:30pm (call for appointment)

Appendix C – Brownfield Site Contact List

Local Government Contacts - Chief Executive Officer and Zoning Board Chairman

<u>Bronx County</u> Chief Executive Officer (Borough President): Aldofo Carrion, Jr. Address: 851 Grand Concourse, NY 10451 Phone: (718) 590-3500

Zoning Board Chairman: Planning and zoning for the County, which is a Borough of New York City, is under the responsibility of the NYC Department of City Planning (see below).

<u>City of New York</u> Chief Executive Officer: Mayor Michael R. Bloomberg Address: City Hall, New York, NY 10007 Phone: 311 (or 212-NEW-YORK outside NYC)

NYC Department of City Planning Chairman: Amanda M. Burden Address: 22 Reade Street, New York, NY 10007-1216 Phone: (212) 720-3300 Bronx Borough Office Phone: (718) 220-8500

Local News Media

Bronx Press/Riverdale Review 6050 Riverdale Avenue Bronx, NY 10471 Phone: (718) 543-5200 Fax: (718) 543-4206

Public Water Supplier

The New York City Department of Environmental Protection Bureau of Water Supply 59-17 Junction Blvd. Flushing, NY 11373

Schools and Daycare Facilities

P.S. 41 Gun Hill Road School - K to 5 3352 Olinville Ave Bronx, New York 10467 Phone: (718) 652-3461 Principal: Erika Tobia

H.S. 425 Evander Childs High School 800 East Gun Hill Road Bronx, NY 10467 Phone: (718) 519-7700 Principal: Monica Ortiz-Urena

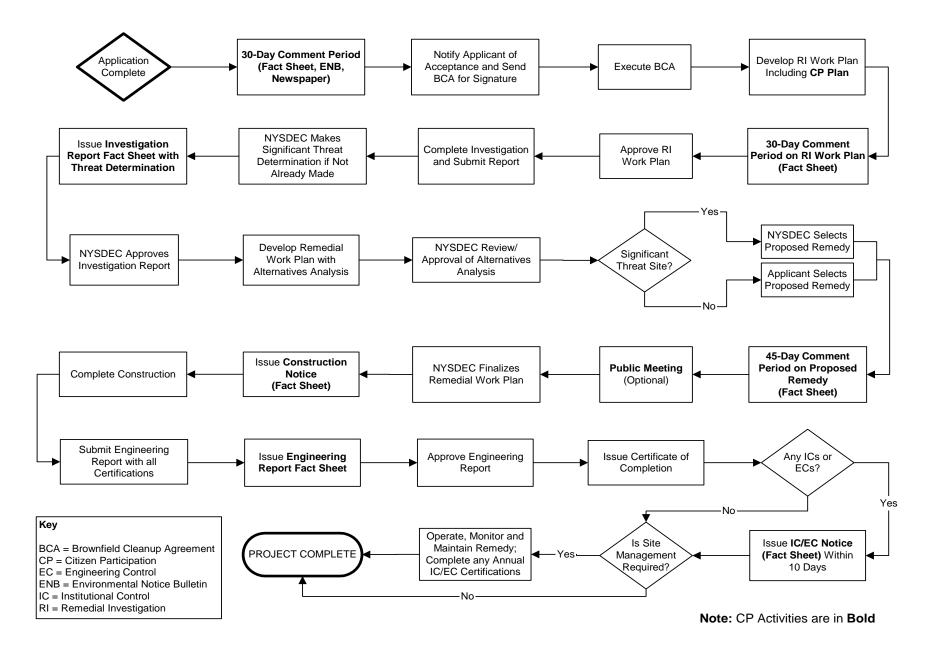
Document Repository

New York Public Library - Allerton Branch 2740 Barnes Avenue Bronx, NY10467 (718) 881-4240

Appendix D – Identification of Citizen Participation Activities

Required Citizen Participation (CP) Activities	CP Activities) Occur at this Point
Application Process:	
• Prepare brownfield site contact list (BSCL)	At time of preparation of application to participate in BCP.
 Establish document repositories Publish notice in Environmental Notice Bulletin (ENB) announcing receipt of application and 30-day comment period 	When NYSDEC determines that BCP application is complete. The 30-day comment period begins on date of publication of notice in ENB. End date of comment period is as stated in ENB notice. Therefore, ENB notice, newspaper notice and notice to the BSCL should be provided to the public at the same time.
After Execution of Brownfield Site Cleanup Agreemen	t:
• Prepare citizen participation (CP) plan	Draft CP Plan must be submitted within 20 days of entering Brownfield Site Cleanup Agreement. CP Plan must be approved by NYSDEC before distribution.
After Remedial Investigation (RI) Work Plan Received	1:
• Mail fact sheet to BSCL about proposed RI activities and announcing 30-day public comment period on draft RI Work Plan	Before NYSDEC approves RI Work Plan. If RI Work Plan is submitted with application, comment periods will be combined and public notice will include fact sheet. 30-day comment period begins/ends as per dates identified in fact sheet.
After RI Completion:	
Mail fact sheet to BSCL describing results of RI	Before NYSDEC approves RI Report.
After Remedial Work Plan (RWP) Received:	
 Mail fact sheet to BSCL about proposed RWP and announcing 45-day comment period Public meeting by NYSDEC about proposed RWP (if requested by affected community or at discretion of NYSDEC project manager in consultation with other NYSDEC staff as appropriate) 	Before NYSDEC approves RWP. 45-day comment period begins/ends as per dates identified in fact sheet. Public meeting would be held within the 45-day comment period.
After Approval of RWP:	
Mail fact sheet to BSCL summarizing upcoming remedial construction	Before the start of remedial construction.
After Remedial Action Completed:	·
• Mail fact sheet to BSCL announcing that remedial construction has been completed	At the time NYSDEC approves Final Engineering Report. These two fact sheets should be combined when possible if there is not a delay in issuance of the COC.
• Mail fact sheet to BSCL announcing issuance of Certificate of Completion (COC)	

Appendix E – Brownfield Cleanup Program Process



APPENDIX - G BCP Signage Specifications



Program Name

Site Name Site Number Name of Party Performing Remedial Activities

Governor Commissioner Municipal Executive

Transform the Past.... Build for the Future

SIGNS FOR REMEDIAL PROGRAMS

Instructions

Signs are required at sites where remedial activities are being performed under one of the following remedial programs: State Superfund, Voluntary Cleanup Program (VCP), Brownfield Cleanup Program (BCP), Environmental Restoration Program (ERP), Brownfield Opportunity Area (BOA) Program (note: activities under this program would be for investigation). The cost of the sign will be borne by the parties performing the remedial activities based on the legal document the activities are being performed under (i.e. volunteers/participants would pay 100% of the cost under the BCP; municipalities would be reimbursed for 90% of the cost under the ERP).

Sign Requirements

Size: Horizontal format - 96'' wide by 48'' high										
Construction Materials: Aluminum or wood blank sign boards with vinyl sheeting.										
Inserts:	"Site Name", "Site Number", "Name of Party Performing Remedial Activities" and "Municipal Executive". Indicate position, size and topography for specific inserts.									
Color Scheme: Copy surrounding DEC logo - "NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION" - PMS 355										
	DEC logo: PMS 301 Blue PMS 355 Green									
	Text:									
	Program (choose one): Brownfield Cleanup Program Voluntary Cleanup Program Brownfield Opportunity Areas Program Petroleum Remediation Program State Superfund Program 1996 Clean Water/Clean Air Bond Act - Environmental Rest	PMS 301 toration Program								
	Site Name, Site Number, Party Performing Remedial Activit Names of Governor, Commissioner, Municipal Executive Transform the PastBuild for the Future	ies PMS 355 PMS 301 PMS 355								
Type Specifications:	All type is Caslon 540, with the exception of the logotype. Format is: center each line of copy with small caps and initial caps.									
Production Notes:	96" wide x 48" high aluminum blanks will be covered with v achieve background color. Copy and logo will be silk scree surface.									

See attached format

<u>APPENDIX - H</u> Estimated Remedial Costs

Description	0.1		Tana Quart Unit		11	Unit Cost		Comital Coast	
Description	Category	Volume (cy)	Tons	Quant.	Unit	Unit	Cost		Capital Cost
Free Phase Product Removal	Our equisient en disus minht			10	1	^	75.00	\$	8,300.00
Extraction of free phase gasoline from the vicinity of MW8.	Supervision and oversight			10	hrs	\$	75.00	\$	750.00
	Vaccum truck			1	day	\$		\$	800.00
	Set-up			1	ls		2,500.00	\$	2,500.00
	Liquid disposal			5000	gal	\$	0.85	\$	4,250.00
Excavation and Disposal of Impacted Soil								\$	363,110.00
Includes costs associated with excavating 3,800 cubic yds of	Supervision and oversight			10	day	\$	750.00	\$▲	
pthalate impacted soil on Lots 1, 10 and 78.	Excavate	3800	5700	3800	yds	\$	20.00	\$	76,000.00
-	Backfill			266	yds	\$	20.00	\$	5,320.00
	Non- hazardous Disposal			5700	tons	\$	47.00	\$	267,900.00
	End point sample analysis								
	(SVOC)			18	ea	\$	240.00	\$	4,320.00
	End point sample analysis								
	(VOC)			18	ea	\$	115.00	¢	2,070.00
Chem-Ox Injection	(100)			10	ea	Ψ	115.00	Ψ \$	85,100.00
Includes costs associated with injecting sodium persulfate at 40	Supervision and oversight			10	day	\$	750.00	\$ ≜	7,500.00
injection points	Installation of injection			10	uay	Ψ	100.00	Ψ	7,000.00
	points			40	ea	\$	1,500.00	\$	60,000.00
	Injection			40	days			\$	8,000.00
	Sodium Perulfate			2200	lbs	\$		\$	6,600.00
	Shipping			1	ea	\$	500.00	\$	500.00
	Project Management and			1	ea	ψ	300.00	Ψ	500.00
	Coordintation			1	l.s.	\$	2,500.00	¢	2,500.00
Monitoring and Sampling	Coordination			1	1.5.	ψ	2,300.00	Ψ \$	2,300.00
Includes sampling and analysis costs on a quarterly basis for a 2	Sample Collection			8	event	\$	2,000.00	\$ ▲	
year monitoring program. Assumes sample collection from 8 well	Sample Analysis			64	samples	\$	105.00	\$	6,720.00
locations.	Data Validation			8	samples	\$	35.00	\$	280.00
	disposal of purge water			8	drums	\$	275.00	\$	2,200.00
	Project Management and			0	ulullis	Ψ	210.00	Ψ	2,200.00
	Coordintation			8	event	\$	300.00	\$	2,400.00
Total	Coordination			0	CVCIIL	Ψ	300.00	Գ \$	2,400.00 475,810.00
Total								Ψ	473,010.00