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August 03, 2016

Mr. Wayne Mizerak
New York State Department of Environmental Conservation
Division of Environmental Remediation
625 Broadway
Albany, NY 12233-1011

RE: Consolidated Edison Company of New York, Inc.
Saw Mill River Station, Con Edison Yonkers Service Center
Site Management Plan
VCA No. D2-0003-02-08; Site No: V00573

Dear Mr. Mizerak:

The enclosed Site Management Plan was prepared under Con Edison's Voluntary Cleanup Agreement #D2-0003-02-08 for the Saw Mill River Station, Con Edison Yonkers Service Center. This version of the report includes the revisions made to address your comments.

An electronic file was also provided to Mr. Anthony Perretta of NYSDOH. Please feel free to contact me at 718-204-4288 or via email at rienzor@coned.com should you have any questions or if you need any assistance during your review of this submittal.

Sincerely,

Richard Rienzo
Project Manager
EH&S, Remediation
Consolidated Edison Company of NY, Inc.

Attachments: Site Management Plan

cc: Mary Ellen Conlin, EHS Remediation Director
Kenneth Kaiser, EHS Remediation Department Manager
Anthony Perretta, NYSDOH
Correspondence File

SAW MILL RIVER STATION
CON EDISON YONKERS SERVICE CENTER
Westchester County, Yonkers, New York
SITE MANAGEMENT PLAN
(NYSDEC PERMIT/SITE NO: V00573)

CONSOLIDATED EDISON CO. OF NEW YORK, INC.
31-01 20th Avenue
Long Island City, NY 11105

Prepared by:

PARSONS
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AUGUST 2016

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

LIST OF APPENDICES

SITE MANAGEMENT PLAN

1.0 INTRODUCTION AND DESCRIPTION OF REMEDIAL PROGRAM

1.1 INTRODUCTION

This document is required as an element of the New York State (NYS) Voluntary Cleanup Program (VCP) administered by the New York State Department of Environmental Conservation (NYSDEC). The Saw Mill River Station Site located in Yonkers, New York (Site) was investigated in accordance with Voluntary Cleanup Agreement (VCA) # D2-0003-02-08 Site # V00573, which was executed on August 25, 2002.

1.1.1 General

Consolidated Edison Company of New York, Inc. (Con Edison) entered into a VCA with the NYSDEC that included an approximately 17-acre property located in Yonkers, Westchester County, New York (**Figure 1**). This VCA required the Remedial Party, Con Edison, to investigate and manage subsurface media at the Site which was contaminated as a result of prior Con Edison or predecessor company operations. A figure showing the Site location and boundaries of this approximately 17-acre Site is provided in **Figure 2**. The boundaries of the Site are more fully described in the metes and bounds site description that is included in the Deed Restriction. The Deed Restriction for the Site is appended to the final SMP as Appendix A, and the metes and bounds description is appended as Appendix B. The SMP and deed restriction apply only to the property identified as Block 2410 / Lot 72.

Completion of the Site Characterization investigation described in the final *Site Characterization Report* prepared by Parsons Corporation (“Parsons”; February 2012) identified analytes in soil and groundwater that exceeded the NYSDEC 6 NYCRR Part

375 unrestricted use soil cleanup objectives (SCO) or the Class GA Groundwater Quality Standards, respectively. Following the review of the Site Characterization results, the NYSDEC approved the Final Site Characterization Report that recommended that no further investigations or remedial measures were required to address MGP impacts. The report also recommends that a Deed Restriction that limits the use of the site as industrial and restricts groundwater use be placed on the Site. This Site Management Plan (SMP) was prepared to manage subsurface media at the Site until the Deed Restriction is extinguished in accordance with ECL Article 71, Title 36. All reports associated with the Site can be viewed by contacting the NYSDEC or its successor agency managing environmental issues in New York State.

This SMP was prepared by Parsons on behalf of Con Edison, and was prepared in accordance with the requirements in NYSDEC's *DER-10 Technical Guidance for Site Investigation and Remediation* (DER-10) dated May 3, 2010, and in accordance with the guidelines provided by NYSDEC. This SMP addresses the means for implementing the Institutional Controls (ICs) that are required by the Deed Restriction for the Site.

1.1.2 Purpose

The Site contains concentrations of contaminants above their unrestricted use standards that are not related to its former use as a MGP site. NYSDEC concurred that no remedial measures were required for the Site; as such, the observed contaminants in soil and groundwater that were above their respective standards identified during the Site Characterization were left in place. ICs are incorporated into this SMP to control exposure to subsurface media during the use of the Site to ensure protection of public health and the environment. A Deed Restriction recorded with the Westchester County Clerk requires compliance with this SMP and all ICs placed on the site. To maintain compliance with the Deed Restriction, the ICs place restrictions on Site use, including restricting land use to industrial and prohibiting use of groundwater at the Site; and mandate reporting measures for all ICs. This SMP specifies the methods necessary ensure compliance with all ICs required by the Deed Restriction for subsurface materials at the Site. This SMP has been approved by the NYSDEC, and compliance with this SMP is

required by the Grantor of the Deed Restriction and the Grantor's successors and assigns. This SMP may only be revised with the approval of the NYSDEC.

This SMP provides a detailed description of all procedures required to manage subsurface media identified at the Site, including: (1) implementation and management of all ICs, and (2) performance of periodic inspections, certification of results, and submittal of Periodic Review Reports to the NYSDEC. There are no engineering controls (EC) at the Site, and, therefore, discussion of ECs and Operations & Maintenance (O&M) requirements are not included in this SMP.

To address these needs, this SMP includes two plans: (1) an Institutional Control Plan for implementation and management of ICs, and (2) an Excavation Work Plan (EWP). The Institutional Control Plan is presented as Section 3 of this SMP and the EWP is included as Appendix C.

This SMP also includes a description of the Periodic Review Reports proposed for the periodic submittal of data, information, recommendations, and certifications to the NYSDEC.

It is important to note that:

- This SMP details the site-specific implementation procedures that are required by the Deed Restriction. Failure to properly implement the SMP is a violation of the Deed Restriction;
- Failure to comply with this SMP is also a violation of Environmental Conservation Law, 6NYCRR Part 375, and the VCA (D2-0003-02-08; Site No. V00573) for the Site, and thereby subjects the noncompliant parties to applicable penalties.

1.1.3 Revisions

Revisions to this SMP will be proposed in writing to the NYSDEC's project manager. In accordance with the Deed Restriction for the Site, the NYSDEC will provide a notice of any approved changes to the SMP, and append these notices to the SMP that is retained in its files.

1.2 SITE BACKGROUND

1.2.1 Site Location and Description

The Saw Mill River Station Site is located at 30 Worth Street, in the City of Yonkers, Westchester County, New York (**Figure 1**). The Site currently is part of Con Edison's Yonkers Service Center property and includes Lots 72, 115, 116, and 117, and the northeast-abutting parcel (Lot 65). The site is defined as all land occupied by former MGP operations owned by Con Edison or a Con Edison predecessor company. The current property boundaries and site features are illustrated on **Figure 2**. As described in the *Manufactured Gas Plant History Report* (GEI, 2003), the former holder station site, on property identified as Block 2410 / Lot 72, is 8.1 acres in size, and the Yonkers Service Center, including Lot 65, is approximately 9 acres in size. Currently, the site is zoned for industrial use (http://blade8.yonkersny.gov/WebParcelUpgrade/). The boundaries of the Site are more fully described in Appendix B (Metes and Bounds). This SMP and deed restriction only applies to Block 2410 / Lot 72.

The following description of the properties abutting the Site is provided in the *Manufactured Gas Plant History Report* prepared by GEI (2003). Railroad tracks are located directly west of the Site and the Saw Mill River is located west of the railroad tracks. Anvil Contracting Corporation occupies Lots 115, 116, and 117 on the southern portion of the Site. A construction trailer and construction equipment is stored on these lots. An auto salvage yard is located west and northwest of the Site. Lot 65 of the Yonkers Service Center is located north of the former holder station and contains Service Building No. 1 (two-story); Garage Building No. 3, currently used for material storage; and Office Building No. 2 (one-story). A school bus company, a motorcycle repair shop, and a machine company are located northeast of the Site. Commercial properties are located further north of the Site. Retail businesses such as a hair salon, realty office, delicatessen, dry cleaner and hardware store are located northeast and east of the Site. Automotive service businesses (vehicle repair and truck painting) are located southeast of the Site. The southern corner of the Site is bounded by a parking lot. A woodworking company, a brewery, and the Yonkers Department of Public Works facility are located southwest of the Site.

1.2.2 Site History

Historical research was previously conducted and documented in the 2003 report prepared by GEI Consultants, Inc. (GEI) titled *Manufactured Gas Plant History, Saw Mill River Station, Yonkers, New York*. Based on the information contained within this Report, Block 72 was acquired in two parcels in 1915 by the Westchester Lighting Company from the New York State Realty and Terminal Company and J. Livingston Hanna. Lot 115 was acquired by Westchester Lighting Company in 1938 from Siman and Rosie Fetzko. Lots 116 and 117 were acquired from Theodozy and Catherine Perick in 1938.

The Site historically has been used as a gas holder station, a Con Edison Service Center, a store, and a construction equipment storage yard. The Site was used concurrently as a gas holder station, transformer substation, and service center yard from the 1940s to the early 1950s. Historic Site structures and features are shown on **Figure 3**.

Con Edison's predecessor, Westchester Lighting Company, constructed a three million cubic foot above-grade, four-lift, steel gas holder on the southwestern portion of the Site in 1923 - 1924. A coal-fired boiler house and exhauster/compressor house was located on the southern portion of the Site. The former holder station operated from 1924 to 1951. Con Edison provided a report titled *Final Phase I Environmental Site Assessment Report, Yonkers Service Center, 30 Worth Street, Yonkers, New York* prepared by Jacques Whitford Company, Inc. (JWC) of Portsmouth, New Hampshire (May 19, 2000) to GEI. According to this report, the holder was converted to a natural gas holder in the late 1950s. Con Edison records indicate that one of the two boilers was converted from coal to oil in 1952 and a 10,000-gallon oil aboveground storage tank (AST) was to be constructed on the area formerly storing coal adjoining the boiler house. It is unknown whether the AST was constructed on the Site. The holder and boiler house and exhauster/compressor house were removed in 1977. Two small stores were located on Lots 115 and 116, and a residential structure was located on Lot 117. The buildings located on Lots 115, 116, and 117 were demolished in the late 1940s and early 1970s.

A transformer substation (Nepperhan Substation No. 2) has been located on the eastern portion of the Site since the early 1940s. Historic plans indicate that three

additional oil-cooled transformers were located on a concrete pad on the southeastern property boundary from the early 1940s to at least the 1960s. Various types of transmission equipment (e.g. utility poles, pole-mounted transformers, cables, and pipe) have been stored throughout the Site since the 1940s.

Anecdotal information provided by a Con Edison employee indicated that waste material such as cast iron mercury switches, transformer oil containing polychlorinated biphenyls (PCBs), and gas drip water containing volatile organic compounds (VOCs) and semivolatile organic compounds (SVOCs) may have been landfilled on the southwestern portion of the Site.

1.2.3 Geologic Conditions

The following section presents a summary of the Site geologic conditions, including general Site topography and hydrogeology, and a description of the regional and Site geology as defined by observations made during subsurface investigation work conducted on the Site.

Site Topography

The results of the survey completed during the 2009 and 2011 Site Characterization activities indicate that the land surface topography slopes to the northwest from Saw Mill River Road towards Saw Mill River. The ground surface elevation ranges from approximately 115 feet above mean sea level (ft amsl) at the eastern property boundary to an elevation of approximately 104 ft amsl at the western property boundary.

Hydrogeologic Conditions

The Site is located approximately 250 ft east of the easternmost bank of the Saw Mill River. The land-surface topography, historic filling activities, and the Saw Mill River are most likely the main controlling influences on the depth of the groundwater table in the Site vicinity and groundwater flow direction across the Site. During the Site Characterization activities conducted in 2009 and 2011, the depth to groundwater at the site ranged from approximately 0.8 to 9 ft bgs, with the groundwater flow direction

predominantly to the west towards Saw Mill River. Groundwater flow direction is shown in **Figure 4**.

Regional and Site Geology

As summarized in the *Manufactured Gas Plant History Report* (GEI, 2003), the Site is located in the Manhattan Prong section of the New England Uplands physiographic region of New York. The Fordham Gneiss, a Middle Proterozoic unit that is primarily comprised of black and white banded gneiss, underlies the Site. Information on the Site subsurface conditions from investigations conducted by GEI and Parsons indicates that depth to bedrock at the Site is approximately 6 to 32.5 feet below ground surface (ft bgs), with glacial deposits and fill material generally overlying the bedrock across the Site.

Site geology as observed during completion of the 2009 and 2011 Site Characterization test pits and soil boring/monitoring well installation completed by Parsons is summarized in the test pit logs provided as Appendix D, and soil boring and monitoring well completion logs are provided as Appendix E. Two geologic cross sections, including an east-west trending cross section (A-A') and a north-south trending cross section (B-B'), are presented as **Figure 5(a)** and **Figure 5(b)**, respectively. Generally, the material observed from ground surface to approximately 5 to 7 ft bgs consists of fill (including varying amounts of silt, sand, gravel and cobbles, cement, brick, and metal fragments). The fill layer is underlain by an approximately 3- to 20-foot thick layer of fine- to coarse-grained sand with varying amounts of silt. Occasional clay lenses ranging from approximately 0.3 foot to 8 ft thick are present at varying depths as observed in the sand layer.

1.3 SUMMARY OF SITE CHARACTERIZATION FINDINGS

A Site Characterization was performed in 2009 by Parsons to characterize the nature and extent of contamination at the Site, and a Supplementary Site Characterization was completed by Parsons in 2011. The results of the Site Characterization and Supplementary Site Characterization activities (collectively referred to herein as the "Site Characterization") are described in detail in the *Site Characterization Report for the Saw*

Mill River Station Site, Site No. V00573, Yonkers, New York prepared by Parsons (February 2012) for Con Edison.

The recommendations provided by the NYSDEC following review of the Site Characterization Report specified that a Deed Restriction, which limits the future use of the property for anything other than industrial purposes and includes a groundwater use restriction, be placed on the property. Because no further groundwater monitoring is required as part of the MGP site characterization, Con Edison requested and received DEC authorization to decommission the groundwater monitoring wells installed as part of the Site Characterization.

Generally, the Site Characterization yielded the following observations and conclusions:

- Potential MGP-related impacts are not present on the Site as observed during the Site Characterization and Supplementary Site Characterization field investigations.
- Remnants of the former MGP structures and associated equipment are present on the Con Edison property.
- Non-aqueous phase liquid (NAPL) was encountered only at one location during the 2009 Site Characterization. Hydrocarbon fingerprint analysis results indicate the sample contained middle petroleum distillate, which was likely diesel fuel or No. 2 heating oil. Volatile organic compound (VOC) or semivolatile organic compound (SVOC) impacts were not observed at SB-6.
- Semivolatile organic compounds, VOCs, polychlorinated biphenyls (PCBs), and metals were encountered in Site soil at concentrations exceeding 6 NYCRR Part 375 Unrestricted Site Cleanup Objectives (USCOs) during the Site Characterization activities. Fewer SVOCs were detected above the Site Cleanup Objectives (SCOs) for industrial and commercial use. Polychlorinated biphenyls were detected below the industrial use SCOs. In addition, only arsenic and mercury were detected at concentrations above the applicable Industrial Use SCOs.

- Volatile organic compounds, SVOCs, and metals were detected in Site groundwater at concentrations exceeding the applicable NYS Class GA Groundwater Quality Standards (GWQS) and guidance values during the 2009 and 2011 field investigations. These groundwater contaminants, however, are determined not to be related to MGP activities. Cyanide was detected above the applicable Class GA GWQS at one well (MW-3) during the 2009 Site Characterization; cyanide did not exceed the applicable standard in any other well sampled during either the 2009 or 2011 field investigations. Additionally, cyanide was not detected in the soil in the immediate vicinity of MW-3, and cyanide concentrations detected in Site soil sampled during the 2009 field event were below the applicable USCO. As such, exposure to cyanide at the Site is not of concern.
- Groundwater flows to the west from the direction of Pearl Street and Saw Mill River Road across the Site towards Saw Mill River.

Below is a summary of Site conditions, including soil and groundwater conditions, observed during the 2009 and 2011 Site Characterization activities.

Soil

A total of 61 soil samples and 3 duplicates were collected from the test pits, soil borings, monitoring well borings, and surface soil sample locations completed as part of the Site Characterization performed in 2009. As no visual or olfactory observations were made to indicate the necessity for collecting soil samples for analysis during the 2011 Supplementary Site Characterization investigation, only the results from the 2009 Site Characterization activities are summarized below.

Soil samples were submitted for analysis of Target Compound List (TCL) VOCs, TCL SVOCs, PCBs, Target Analyte List (TAL) metals, and cyanide. Soil analytical results are summarized in **Table 1**; sample locations are presented on **Figure 3**. A summary of VOCs, SVOCs, and PBCs exceeding the applicable SCOs in soil samples collected from the Site during the 2009 and 2011 Site Characterization activities is provided as **Figure 6**. A summary of metals detected in soil samples collected from the Site during the 2009 and 2011 Site Characterization activities is provided in **Figure 7**.

The soil sample results have been compared to the Unrestricted Soil Cleanup Objectives (USCOs) provided by NYSDEC in 6 NYCRR Part 375 (NYSDEC, 2006). However, USCOs assume there are no imposed restrictions on the use of the Site. The Site presently is used for commercial/industrial purposes, portions of the Site are paved or are occupied by buildings, and access to the vast majority of the Site is restricted by a fence surrounding the Controlled Property. Therefore, comparison of soil sample results to the USCOs is conservative. Photoionization detector (PID) readings, visual observation, and analytical results from the exterior subsurface soil investigation are summarized below.

Photoionization Detector Readings/NAPL/Hydrocarbon Fingerprinting Results

Photoionization detector readings for soil samples collected during exterior soil boring/monitoring well installations ranged from 0.0 parts per million (ppm) to 23.5 ppm above background levels. The highest PID reading of 23.5 ppm was detected in soil boring SB-6 at a depth interval of 7 to 7.5 ft bgs. The only occurrence of NAPL was in sample SB-6 (7-9') collected from a depth interval of 7 to 9 ft bgs.

A sample of soil containing NAPL from soil boring SB-6 was collected and submitted to Alpha Analytical of Mansfield, MA and coordinated by NewFields for forensic hydrocarbon fingerprint analysis. The analysis indicated that the sample contained middle petroleum distillate, likely diesel fuel or No. 2 heating oil, which is not considered to be related to MGP activity.

Volatile Organic Compounds

A total of 11 VOCs were detected at least once in the soil samples collected during Site Characterization activities. No VOCs were detected at concentrations exceeding the USCOs in the surface and subsurface soil samples. Total VOC concentrations in all soil samples ranged from non-detect to 0.318 parts per million (ppm), which was detected in the duplicate soil sample collected at TP-4B [TP-104B (8')] collected at a depth of 8 ft bgs.

Semi-Volatile Organic Compounds

A total of 24 SVOCs were detected at least once in the soil samples collected during Site Characterization activities. Eight SVOCs [benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, chrysene, dibenz(a,h)anthracene, indeno(1,2,3-cd)pyrene, and pyrene] were detected at concentrations exceeding the USCOs in nine out of 62 soil samples analyzed for SVOCs. Fewer SVOCs were detected at concentrations above the SCOs for commercial or industrial use. Semi-volatile organic compound concentrations detected in surface soil samples SS-2 and SS-6 were an order of magnitude higher than the concentrations detected at depth. Total SVOC concentrations ranged from non-detect to 624.83 ppm, which was detected at the soil sample location SS-2 (6") collected from a depth interval of 0 to 2 inches bgs. Semi-volatile organic compounds were also detected above the applicable USCO in the 6 to 18 inches bgs sample interval at location SS-2.

The vertical extent of impacts was delineated at each soil boring, monitoring well boring, test pit, and surface soil sample location including SB-13, TP-1C, TP-1D, and SS-3, with no USCOs exceeded in the deepest samples collected at these locations. The vertical extent of impacts was not delineated at two surface soil sample location (SS-2 and SS-6). The surface soil samples were collected from the soil located immediately below the asphalt cover.

Polychlorinated Biphenyls

Polychlorinated biphenyls were detected in 29 out of the 62 soil samples collected and analyzed for PCBs during the Site Characterization. Total PCBs were detected at concentrations above the applicable USCO in ten of the soil samples. However, the PCB concentrations were detected below the SCOs for industrial use. Total detected PCB concentrations ranged from 0.011 ppm, collected from a depth interval of 6 to 14 inches bgs [sample SS-4 (6-14")] to 6.2 ppm, collected from a depth interval 7 to 9 ft bgs [sample SB-6 (7-9')]. The total concentration of PCBs in samples collected from the deepest interval at all soil boring, monitoring well boring, test pit, and surface soil sample locations except at SB-7, SB-12, SS-2, and TP-1B were below the applicable USCO, indicating that the vertical extent of total PCBs were delineated at those locations.

Metals and Cyanide

Analytical results for surface and subsurface soil samples indicated the presence of nine metals exceeding the applicable USCOs. However, only arsenic and mercury concentrations were detected above the industrial use SCOs. Metals are a primary component in naturally occurring soil and are typically detected in soil used for fill in urban areas. Metals detected at levels above their respective USCOs include arsenic, barium, cadmium, copper, lead, mercury, nickel, selenium, and zinc. The distribution of metals detected in the soils did not follow a discernable pattern. Cyanide was not detected above the applicable USCO in any of the samples collected during the Site Characterization.

Site-Related Groundwater

Eight groundwater samples and one duplicate were collected during the Site Characterization performed in 2009. Four groundwater samples and one duplicate sample were collected during the 2011 Supplementary Site Characterization activities. All samples were analyzed for TCL VOCs, TCL SVOCs, PCBs, TAL Metals, and cyanide (total and available). Laboratory analytical results for constituents detected in the groundwater samples from both the 2009 and 2011 field investigations are summarized in **Table 2**. Sample locations are shown on **Figure 3**.

For evaluation purposes, analytical results are compared with Class GA groundwater quality standards (GWQS) and guidance values contained in NYSDEC Technical and Operational Guidance Series (TOGS) 1.1.1 (NYSDEC, 1998). These standards and guidance values are protective of groundwater quality assuming that groundwater is used as a source of drinking water. This assumption is not applicable to the Site because groundwater is not used as a source of drinking water. Accordingly, the use of Class GA standards and guidance values for comparison to Site groundwater is conservative. The analytical results for VOCs and SVOCs detected in groundwater samples collected during the 2009 and 2011 sampling events are presented on **Figure 8**. Metals exceedances for groundwater samples collected during the 2009 and 2011 sampling events are presented on **Figure 9**. Field measurements and observations, as well as analytical results from the groundwater investigation are summarized below.

Field Measurements

During groundwater sampling activities in December 2009 and in July 2011, each monitoring well was monitored for the presence of NAPL. No NAPL or sheen was observed in any of the wells during these events.

Volatile Organic Compounds

Nine VOCs were detected at least once in the groundwater samples collected during the 2009 and 2011 Site Characterization activities. Of the nine VOCs detected, two VOCs (benzene and tetrachloroethene) were detected at concentrations exceeding the applicable Class GA GWQS. Tetrachloroethene was detected along with cis-1,2-dichloroethene and trichloroethene, which are solvents, at OMW-3. Chlorinated VOCs, which are not commonly associated with MGP activities, were previously detected at OMW-3 at higher concentrations. Benzene was detected at MW-8 at a concentration of 6.2 µg/L and at MW-9 at an estimated concentration of 4.8 J µg/L. Ethylbenzene, m,p-xylene, o-xylene, and toluene were also detected at MW-9 at concentrations below their respective GA standards. Methyl tert-butyl ether, also not associated with MGP activity, was detected at four wells (MW-3, MW-8, MW-9, and MW-11) with a maximum concentration of 3 J µg/L at MW-8. Volatile organic compounds were not detected in seven of the Site monitoring wells (MW-2, MW-4, MW-5, MW-6, MW-7, MW-10, and MW-12).

Semivolatile Organic Compounds

One SVOC (pentachlorophenol) was detected at a concentration exceeding the Class GA GWQS in a sample collected from MW-2 during the 2009 investigation. No other SVOCs were detected in any of the monitoring wells sampled during either the 2009 or 2011 field events. Pentachlorophenol is not a MGP-related compound.

Polychlorinated Biphenyls

Polychlorinated biphenyls were not detected in any of the groundwater samples collected from Site monitoring wells during the 2009 or 2011 Site Characterization activities.

Metals and Cyanide

Analytical results indicate seven metals (arsenic, iron, lead, magnesium, manganese, sodium, and thallium) and cyanide exceeding the applicable Class GA GWQS values in groundwater samples collected during the Site Characterization monitoring rounds.

Former Gas Works Structures

The test pitting and soil boring activities conducted during the 2009 Site Characterization activities confirmed that below-grade MGP structures related to the former MGP Site operations (as described in Section 1.2.2, Site History) are present on the Site. Locations of test pits and soil borings performed for the 2009 Site Characterization are pictured on **Figure 2**, and former MGP structures identified in the *Manufactured Gas Plant History Report* (GEI, 2003) are depicted on **Figure 3**. A total of 11 test pits was completed – including five individual test pits at location TP-1 (test pits 1A through 1E), and TP-2, TP-3, TP-4, TP-4A, TP-4B, and TP-5 – to determine the presence of MGP structure remnants and/or impacted subsurface material from MGP operations or other historic site uses. A summary of below-grade structures as encountered during the test pit excavation phase of the 2009 Site Characterization activities is as follows.

- During the excavation of TP-2, the holder foundation was encountered. The foundation of the gasholder appeared to be located approximately 4.5 ft below ground surface and was generally flat. Based on the historic structures depicted in **Figure 3**, the foundation of the gasholder appeared to be approximately 160 ft in diameter. Remnants of the gas holder walls were not encountered in any of the soil borings or test pits.
- During excavation of TP-4, cast iron piping believed to be associated with former MGP operations was observed. No staining or sheen was observed in the vicinity of the piping.
- During the excavation of TP-4A and TP-4B, the drainage pit and the associated cast iron drip lines were encountered. The drip lines were located

approximately 4.5 ft bgs. The drainage pit was approximately 5 ft square, and the grates were observed in-place approximately 4 ft bgs (with a total depth of 8 ft bgs).

- During the excavation of TP-5, the concrete smoke stack foundation was encountered. The approximately 15 ft in diameter concrete foundation appeared to be located approximately 4.5 ft bgs, and was generally flat.

The test pits were excavated until the groundwater table was encountered at TP-1 (A-E), TP-2, and TP-4B. TP-3 was excavated to a depth below the water table to confirm the presence of the gasholder foundation; the foundation was not encountered at TP-3. TP-4 was excavated to a depth at which a 30-inch gas pipe was encountered and the excavation was terminated at that depth, which was above the groundwater table. TP-4A was completed to a depth where the drainage line leading to the drainage pit was encountered; TP-4A was not extended to the groundwater table. TP-5 was completed to a depth where the stack foundation was encountered, which was at a depth above the groundwater table.

Management of Excavated Materials

During the test pit excavation, the excavated soil and fill were temporarily placed on impervious plastic sheeting adjacent to the test pit. Each test pit was backfilled with the excavated material in the reverse order from which the materials were removed, except as noted below for TP-1. The location and size of TP-1 was determined based on anecdotal information provided by a Con Edison employee indicating that waste material such as cast iron mercury switches, transformer oil containing PCBs, and gas drip water containing VOCs and SVOCs may have been landfilled in the western portion of the Site; the excavation of TP-1 found no evidence of such a landfill.

Excavation at TP-1 was conducted in 6 inch increments up to a depth of 5 ft bgs. While backfilling, the lower portions of the test pits (from depth of 4 ft to 7.5 ft bgs) were backfilled in 12 inch lifts using excavated granular materials (rocks, cobbles, or gravel mixed soils). The upper portions of the test pits (up to depth of 4 ft bgs) were backfilled in 6 inch lifts using suitable excavated materials (material that does not have deleterious components, saturated/near saturated fill, or clumps of rock or soils greater than six

inches in size). Virgin New York State Department of Transportation item #4 was used as additional fill material to backfill the upper portion of the test pits, as needed. Any debris encountered at TP-1 (A-E) which was not used as backfill for the test pits was transferred into the roll-offs for off-site disposal.

1.4 SUMMARY OF REMEDIAL ACTIONS

The Site Characterization Report, which was approved by the NYSDEC on February 8, 2012, concluded that no remedial measures are required for this Site. As such, there are no remedial actions. This section of this SMP describes the Deed Restriction and associated actions that will be imposed on the Site.

Due to the presence of various contaminants not related to typical MGP impacts in soil and groundwater at the Site that are above NYSDEC Unrestricted Use criteria, development and implementation of this SMP for long-term management of impacts on the Site was recommended by the NYSDEC. Recommendations as stated in the Site Characterization Report included the following:

- Requirements for a Deed Restriction limiting the property use to industrial to restrict land use and prevent future exposure to any contamination remaining at the Site;
- A groundwater use restriction;
- Agency notification requirements;
- The development of an Excavation Work Plan (EWP);
- The completion of periodic review reports certifying that the Institutional Controls (ICs) established for the Site remain in place and any intrusive activities performed have complied with the SMP;

Additionally, because no further groundwater monitoring is necessary for Site Characterization purposes, Con Edison requested and received NYSDEC authorization to decommission the groundwater monitoring wells installed as part of the Site Characterization. Decommissioning of Site groundwater monitoring wells is complete with the exception of well MW-06, in which a product was discovered at the time of

fieldwork. This product was tentatively identified as a lubricating oil; not a typical MGP contaminant. NYSDEC spill #1213092 was opened.

1.4.1 Removal of Contaminated Materials from the Site

Although no excavations were performed at this Site, product recovery associated with the spill noted above currently is under way.

1.4.2 Site-Related Treatment Systems

As no remedial actions were warranted per the recommendations of the Site Characterization report, no long-term treatment systems were installed to address impacts identified on the Site.

1.4.3 Remaining Contamination

Based on the Site Characterization and Supplementary Site Characterization activities, there is an absence of potential MGP-related impacts at the Site. Although contaminant concentrations were detected above the NYSDEC's USCOs, since the majority of the Site is paved, no immediate potential risk to human health and environment is anticipated to exist at the Site. Maximum concentrations of SVOCs were detected in surface soil samples, which may have been intermixed with asphalt. Polychlorinated biphenyls were detected below the industrial use SCOs. Only arsenic and mercury were detected at concentrations above the industrial use SCO. Metals are commonly present in soil at industrial sites.

During the 2009 Site Characterization investigation, VOCs, SVOCs, cyanide, and metals were detected in groundwater at concentrations exceeding the Class GA GWQS and guidance values at the Site. During the 2011 Supplementary Site Characterization investigation, only metals were detected in groundwater at concentrations exceeding the applicable guidance values. However, since groundwater at the Site currently is not used as a potable water source and there are no known plans for the use of groundwater at the Site for potable or commercial/industrial purposes, groundwater does not pose an immediate potential risk to human health and the environment at the Site. In addition,

VOCs including chlorinated VOCs and MTBE, and SVOCs including pentachlorophenol are not typical MGP-related compounds. Therefore, no further investigation or remedial measures to address MGP impacts are warranted at the Saw Mill River Station Site.

Table 1 and **Figures 6** and **7** summarize the results and present the locations of all soil samples that exceeded the applicable USCOs for SVOCs, PCBs, and metals as identified during the Site Characterization investigation.

Table 2 summarizes the results for all VOCs, SVOCs, and metals detected in groundwater samples collected as part of the Site Characterization investigation. **Figure 8** shows the locations where groundwater samples exceeded the applicable NYSDEC Class GA standards for VOCs including benzene and tetrachloroethene, as well as SVOCs (i.e., pentachlorophenol), and **Figure 9** shows the locations where metals exceed the applicable NYSDEC Class GA standards in groundwater across the Site.

During the 2014 spill investigation, the field observations and chemical data indicate that impacts from NYSDEC spill 1213092 are localized to the immediate vicinity (~30 ft radius) of well MW-9, likely originating upgradient (east) of MW-9 (**Figure 10**). NAPL impacts were not detected downgradient of MW-9 or at depths greater than 5 feet bgs. Measureable NAPL was not detected in any locations other than MW-9. NAPL blebs were detected on top of the groundwater at four of the boring locations (SBSI-1; SBSI-3 through SBSI-5). No blebs were detected beyond approximately 30 feet away from MW-9.

No VOCs or SVOCs were detected in the soil at concentrations above applicable NYSDEC SCOs for unrestricted use (**Table 3**). Chemicals that were detected were not MGP-related. The VOCs detected in groundwater at MW-9 were estimated (J-flagged) and did not exceed their NYSDEC Class GA groundwater standards (**Table 4**). The VOC detections in MW-9 were lower than those recorded when MW-9 was last sampled in July 2011.

TPH concentrations were compared to screening criteria published for a middle distillate in a range of coarse sand and gravel to medium to coarse sand similar to the soils encountered at the Site (**Table 5**). The TPH concentrations measured from the Site are an order of magnitude less than the values published for NAPL mobility. Therefore,

the NAPL observed in the area of MW-9 is expected to remain in this localized area and not migrate to other areas of the Site.

Conclusions:

- The impacts of the MW-9 spill are localized and not related to Con Edison site activities.
- COC concentrations detected in soil and groundwater are below their applicable screening criteria.
- The presence of NAPL appears to be stable, localized, and not expected to migrate outside the local MW-9 area.
- The type of NAPL encountered is more similar to motor or lubricating oil than MGP-related tar.

2.0 ENGINEERING AND INSTITUTIONAL CONTROL PLAN

2.1 INTRODUCTION

2.1.1 General

Since media (i.e., soil and groundwater) containing concentrations of contaminants above unrestricted use standards exist beneath the Site, ICs and ECs are required to protect human health and the environment. This IC/EC Plan describes the procedures for the implementation and management of all IC/ECs at the site. The IC/EC Plan is one component of the SMP and is subject to revision by the NYSDEC.

2.1.2 Purpose

This plan provides:

- A description of all ICs/ECs proposed for the Site;
- A description of the key components of the IC/ECs set forth in the Deed Restriction;
- The basic implementation and intended role of each IC/EC;
- A description of the features to be evaluated during each required inspection and periodic review;
- A description of plans and procedures to be followed for implementation of IC/ECs, such as the implementation of the EWP (as provided in Appendix C) for the proper handling of subsurface materials that may be disturbed during maintenance or redevelopment work on the Site; and
- Any other provisions necessary to identify or establish methods for implementing the IC/ECs as recommended in the Site Characterization Report, and as determined by the NYSDEC.

2.2 ENGINEERING CONTROLS

2.2.1 Engineering Control Systems

2.2.1.1 Surface Cover (or Cap)

Exposure to remaining contamination at the site is mitigated by the presence of paved areas and structures placed over a significant portion of the site which act as an engineered cover. The Excavation Work Plan (EWP) provided in Appendix C outlines the procedures required to be implemented in the event the surface cover is breached, penetrated or temporarily removed, and any underlying remaining contamination is disturbed. Procedures for the inspection of the engineered cover are provided in the Site Inspection Plan included in Section 3.0 of this SMP. Any work conducted pursuant to the EWP must also be conducted in accordance with the procedures defined in a Health and Safety Plan (HASP) and associated Community Air Monitoring Plan (CAMP) prepared for the site and provided in Appendix C.

2.2.2 Criteria for Completion of Remediation/Termination of Remedial Systems

Generally, remedial processes are considered completed when monitoring indicates that the remedy has achieved the remedial action objectives identified by the decision document. The framework for determining when remedial processes are complete is provided in Section 6.4 of NYSDEC DER-10.

2.2.2.1 Cover (or Cap)

The engineered cover is a permanent control and the quality and integrity of this system will be inspected at defined, regular intervals in accordance with this SMP as required by NYSDEC.

2.3 INSTITUTIONAL CONTROLS

A series of Institutional Controls are required for the Site as per the recommendations made by the NYSDEC following review of the results of the Site Characterization to (1) limit the use and development of the Site for industrial purposes

only; and (2) restrict groundwater access, including use for drinking water, at the Site. Adherence to these ICs on the Site, or the "Controlled Property", is required by the Deed Restriction and will be implemented under this SMP. These ICs include the following requirements:

- Compliance with the Deed Restriction and this SMP by the Grantor and the Grantor's successors and assigns;
- Periodic inspections of Site environmental conditions as specified in the Deed Restriction must be performed as defined in this SMP; and
- Data and information pertinent to Site Management of the Controlled Property must be reported at the frequency and in a manner as defined in this SMP.

Institutional Controls identified in the Deed Restriction may not be discontinued without an amendment to or extinguishment of the Deed Restriction.

The Site has a series of ICs in the form of Site restrictions, including land use controls (LUCs) and groundwater use restrictions. Adherence to these ICs is required by the Deed Restriction. Site restrictions that apply to the Controlled Property are:

- The property may only be used for commercial use provided that the long-term ICs included in this SMP are employed;
- The property may not be used for a higher level of use, such as unrestricted residential use, without additional remediation and amendment of the Deed Restriction, as approved by the NYSDEC;
- All future activities on the property that will disturb subsurface material must be conducted in accordance with this SMP;
- The use of the groundwater underlying the property is prohibited without treatment rendering it safe for intended use;
- Vegetable gardens and farming on the property are prohibited; and
- The Site owner or remedial party will submit to the 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. The 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 and will be made by an expert that the NYSDEC finds acceptable.

2.3.1 Excavation Work Plan

The site is approved for industrial use. Any future intrusive work that will penetrate the surficial Site soil or asphalt will be performed in compliance with the EWP that is attached as Appendix C to this SMP. See Intrusive Activities Guidelines for an outline of when an EWP is required (**Figure 11**). Any work conducted pursuant to the EWP must also be conducted in accordance with the procedures defined in a Health and Safety Plan (HASP) and Community Air Monitoring Plan (CAMP) prepared for the Site. A sample HASP that is in current compliance with DER-10, as well as 29 CFR 1910, 29 CFR 1926, and all other applicable Federal, State and local regulations is attached as **Appendix G** to this SMP. Based on future changes to State and Federal health and safety requirements, and specific methods employed by future contractors, the HASP and CAMP will be updated and re-submitted. Any intrusive construction work will be performed in compliance with the EWP, HASP and CAMP, and will be included in the periodic inspection and certification reports submitted under the Site Management Reporting Plan (see Section 5). Intrusive activity will require notification of the party performing the annual certification so that party can perform oversight for purposes of the certification. Advance notification to the DEC is not required.

Annual inspection/certification by a Qualified Environmental Professional (QEP) shall require:

- A detailed description of the work that was performed, including the location and areal extent, intrusive elements or utilities that were installed in the

subsurface, volumes of soil to be excavated and any work that impacted the ICs as stated in the governing Deed Restriction;

- A summary of the applicable components of the EWP;
- A statement that the work was performed in compliance with the EWP and 29 CFR 1910.120;
- Identification of disposal facilities for waste streams; and
- Identification of source of any backfill along with required chemical testing results.

The Site owner and associated parties preparing the remedial documents submitted to the State, and parties performing this work, are completely responsible for the safe performance of all intrusive work, the structural integrity of excavations, proper disposal of materials from excavation de-watering activities, control of runoff from open excavations into the subsurface, and for structures that may be affected by excavations (such as building foundations and bridge footings). The Site owner will ensure that Site development activities will not interfere with, or otherwise impair or compromise, the ICs described in this SMP.

2.3.2 Soil Vapor Intrusion Evaluation

Due to chlorinated VOCs detected on-site, if future development occurs, a soil vapor intrusion evaluation will need to be completed.

2.4 INSPECTIONS AND NOTIFICATIONS

2.4.1 Inspections

A comprehensive inspection of Site-wide conditions will be conducted annually, regardless of the frequency of the submittal of the Periodic Review Report. A proposed Inspection and Reporting schedule is provided in Section 3 of this SMP. The inspections will determine and document the following:

- Compliance with requirements of this SMP and the Deed Restriction, including confirming if IC/ECs continue to be protective of human health and the environment; and
- If Site records are complete and up to date.

The reporting requirements are outlined in the Periodic Review Reporting section of this SMP (Section 5).

2.4.2 Notifications

Notifications will be submitted by the property owner to the NYSDEC as needed for the following reasons:

- Sixty-day advance notice of any proposed changes in Site use that are required under the terms of the VCA, 6NYCRR Part 375 and/or Environmental Conservation Law.

Advanced notice to the DEC is not necessary for intrusive work; however, the party performing the annual inspection/periodic certification will be notified and made aware of the intrusive work so that the party can oversee the work to ensure that it is conducted properly.

Any change in the ownership of the Site or the responsibility for implementing this SMP will include the following notifications:

- At least 60 days prior to the change, the NYSDEC will be notified in writing of the proposed change. This will include a certification that the prospective purchaser has been provided with a copy of the VCA, and all approved work plans and reports, including this SMP.
- Within 15 days after the transfer of all or part of the Site, the new owner's name, contact representative, and contact information will be confirmed in writing.

2.5 CONTINGENCY PLAN

Emergencies may include injury to personnel, fire or explosion, environmental release, or serious weather conditions.

2.5.1 Emergency Telephone Numbers

In the event of any environmentally related situation or unplanned occurrence requiring assistance the Owner of the affected portion of the Site or such Owner's representative(s) should contact the appropriate party from the contact list below. For emergencies, appropriate emergency response personnel should be contacted. Prompt contact should also be made to the Con Edison project manager. These emergency contact lists must be maintained in an easily accessible location at the Site.

Table 6: Emergency Contact Numbers

Medical, Fire, and Police:	911
One Call Center:	(800) 272-4480 (3 day notice required for utility markout)
Poison Control Center:	(800) 222-1222
Pollution Toxic Chemical Oil Spills:	(800) 424-8802
NYSDEC Spills Hotline	(800) 457-7362

Table 7: Additional Contact Numbers*

Con Edison ERT Desk	(212) 580-8383
Dig Safely New York	811

* Note: Contact numbers subject to change and should be updated as necessary

2.5.2 Map and Directions to Nearest Health Facility

Site Location: 30 Worth Street, Yonkers, NY

Nearest Hospital Name: Saint Joseph's Medical Center

Hospital Location: 127 S. Broadway, Yonkers, NY

Hospital Telephone: (914) 378-7000

Directions to the Hospital:

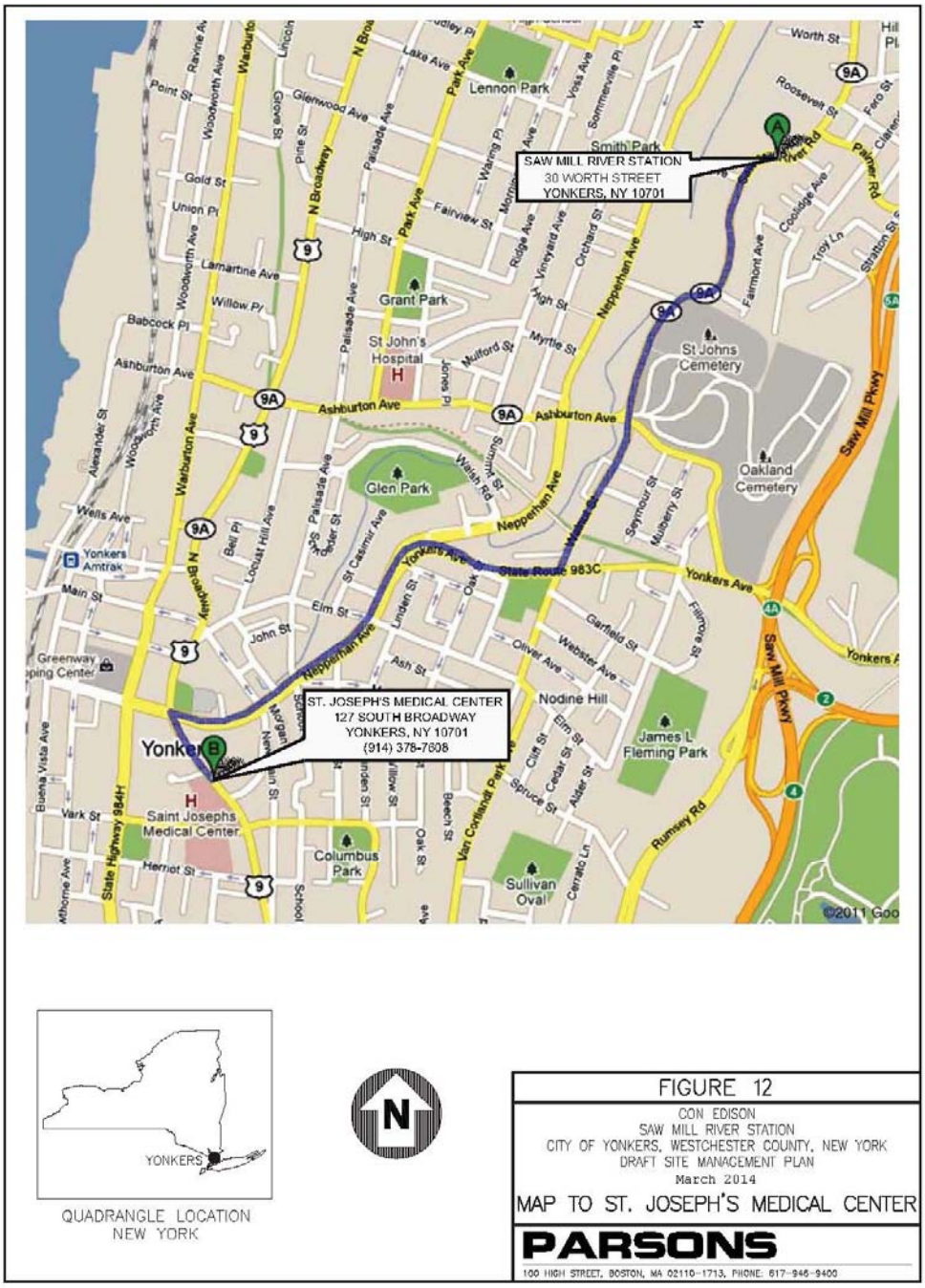
1. From 30 Worth Street (the Site), turn right (south) on SAW MILL RIVER RD/NY-9A toward LAKE AVE.
2. Continue onto WALNUT ST.
3. Turn RIGHT onto YONKERS AVE.
4. Continue onto NEPPERHAN AVE.
5. Take LEFT onto S BROADWAY/US-9/NY-9A.
6. End at 127 S Broadway Yonkers, NY 10701-4006.

Total Estimated Distance: 1.8 Miles

Total Estimated Time: 5 minutes

Figure 12

Route from the Site to St. Joseph's Medical Center



2.5.3 Response Procedures

As appropriate, the fire department and other emergency response groups, as indicated, will be notified immediately by telephone of the emergency. The Emergency Telephone Number List is found at the beginning of this Contingency Plan (**Table 6**). The List will also be posted prominently at the Site and made readily available to all personnel at all times.

The following provides a general summary of response procedures that will be implemented on the Site in the event of an incident:

- Procedures for spills: The nature of the existing conditions at the Site present very little to no danger of spills. Spill kits will be available on-Site as needed, and in the event of a spill a contractor will be dispatched to perform cleanup activities if necessary.
- Evacuation Plans: The Site Evacuation Plan as included in the HASP (**Appendix G**) will be implemented as needed.
- Amendments to the Contingency Plan will be made as required.
- Detailed response procedures are included in the HASP which is included as **Appendix G** of this SMP.

3.0 SITE INSPECTION PLAN

3.1 INTRODUCTION

The Monitoring Plan describes the measures for evaluating the performance and effectiveness of the remedy to reduce or mitigate contamination at the site, the engineered cover system, and all affected site media identified below. Monitoring of other Engineering Controls is described in Chapter 4, Operation, Monitoring and Maintenance Plan. This Monitoring Plan may only be revised with the approval of NYSDEC.

The NYSDEC has indicated that that no further monitoring of groundwater is required and has approved the decommissioning of Site monitoring wells. As such, monitoring of Site media is not required and will not be performed under this SMP. Periodic monitoring will be performed to assess the effectiveness of the IC/ECs as described in the following sections.

3.1.1 General

The Inspection Plan describes the measures for evaluating the performance and effectiveness of the IC/ECs to limit or mitigate contact with subsurface media (i.e., soil and groundwater) at the Site. The Inspection Schedule is described in 3.4 (Site-wide Inspection) of this Section. This Inspection Plan may only be revised with the approval of the NYSDEC.

3.1.2 Purpose and Schedule

N/A

3.2 COVER SYSTEM MONITORING

Monitoring of the engineered cover system will be a part of the site-wide inspections discussed below.

3.3 MEDIA MONITORING PROGRAM

N/A

3.4 SITE-WIDE INSPECTION

Site-wide inspections will be performed on a regular schedule at a minimum of once a year. An initial Site-wide inspection will be completed 15 months following approval of the Site Management Plan and then annually thereafter. During these inspections, an inspection form will be completed (**Appendix H**). The form will compile sufficient information to assess the following:

- Compliance with all ICs, including Site usage;
- An evaluation of the condition and continued effectiveness of ECs;
- General Site conditions at the time of the inspection;
- The Site management activities being conducted including, where appropriate, a health and safety inspection; and
- Confirm that Site records are up to date.

Table 8 provides an inspection and corresponding reporting schedule. Periodic reporting requirements are discussed in more detail in Section 5 of this SMP.

Table 8: Schedule of Site-wide Inspections and Periodic Reporting

Task	Reporting Frequency(1)
Site-wide Inspection	Fifteen (15) months following the approval of the Site Management Plan and annually thereafter
Periodic Inspection Report	Every year (45 days following the completion of the Site-wide Inspection)

(1) The frequency of events will be conducted as specified until otherwise approved by NYSDEC.

3.5 MONITORING QUALITY ASSURANCE/QUALITY CONTROL

N/A

3.6 MONITORING REPORTING REQUIREMENTS

Forms and any other information generated during regular monitoring events and inspections will be kept on file on-site. All forms, and other relevant reporting formats used during the monitoring/inspection events, will be (1) subject to approval by NYSDEC and (2) submitted at the time of the Periodic Review Report, as specified in the Reporting Plan of this SMP.

All monitoring results will be reported to NYSDEC on a periodic basis in the Periodic Review Report. A letter report will also be prepared [if required by NYSDEC], subsequent to each sampling event. The report (or letter) will include, at a minimum (if applicable):

- Date of event;
- Personnel conducting sampling;
- Description of the activities performed;
- Type of samples collected (e.g., sub-slab vapor, indoor air, outdoor air, etc) (if applicable);
- Copies of all field forms completed (e.g., well sampling logs, chain-of-custody documentation, etc.);
- Sampling results in comparison to appropriate standards/criteria (if applicable);
- A figure illustrating sample type and sampling locations (if applicable);
- Copies of all laboratory data sheets and the required laboratory data deliverables required for all points sampled (o be submitted electronically in the NYSDEC-identified format) (if applicable);
- Any observations, conclusions, or recommendations; and
- A determination as to whether groundwater conditions have changed since the last reporting event (if applicable).

Data will be reported in hard copy or digital format as determined by NYSDEC. A summary of the monitoring program deliverables are summarized in Table 8 above.

4.0 OPERATION AND MAINTENANCE PLAN

The Site remedy does not rely on any mechanical systems, such as sub-slab depressurization systems or air sparge/soil vapor extraction systems to protect public health and the environment. Therefore, the operation and maintenance of such components is not included in this SMP.

5.0 INSPECTIONS, REPORTING AND CERTIFICATIONS

5.1 SITE INSPECTIONS

5.1.1 Inspection Frequency

All inspections will be conducted at the frequency specified in the schedules provided in Section 3 (Inspection Plan) and as specified in Table 9 of this SMP. At a minimum, a site-wide inspection will be conducted annually to confirm that all ICs are being implemented and are protecting human health and the environment.

5.1.2 Inspection Forms, Sampling Data, and Maintenance Reports

A general site-wide inspection form (provided in Appendix H) will be completed during the annual site-wide inspection. This form is subject to NYSDEC revision.

All applicable inspection forms and other records generated for the Site during the reporting period will be provided in electronic format in the Periodic Review Report.

5.1.3 Evaluation of Records and Reporting

The results of the inspection will be evaluated as part of the IC certification to confirm that:

- Industrial Controls are in place and continue to be protective of public health and the environment;
- The recommendations including the requirement for a deed restriction limiting the property use as industrial; a groundwater use restriction; agency notification requirements; an excavation work plan; and periodic review reports as made per the results of the Site Characterization investigation are being implemented.

5.2 CERTIFICATION OF ENGINEERING AND INSTITUTIONAL CONTROLS

For each IC/EC identified for the Site, I certify that all of the following statements are true:

- The institutional control and/or engineering control employed at this Site is unchanged from the date the control was put in place, or last approved by the NYSDEC;
- Nothing has occurred that would impair the ability of the control to protect the public health and environment;
- Nothing has occurred that would constitute a violation or failure to comply with any Site management plan for this control;
- Access to the Site will continue to be provided to the NYSDEC to evaluate the remedy, including access to evaluate the continued maintenance of this control;
- If a financial assurance mechanism is required under the oversight document for the site, the mechanism remains valid and sufficient for the intended purpose under the document;
- Use of the Site is compliant with the Deed Restriction; and
- The engineering control systems are performing as designed and are effective;
- The information presented in this report is accurate and complete.
- I certify that all information and statements in this certification form are true. I understand that a false statement made herein is punishable as a Class “A” misdemeanor, pursuant to Section 210.45 of the Penal Law. I, [ConEd Name], of the Consolidated Edison Company of New York, Inc., am certifying as the Owner’s Designated Site Representative and I have been authorized and designated by all Site owners to sign this certification for the Site.

- No new information has come to my attention to indicate that the assumptions made in the Qualitative Exposure Assessment provided in the Site Characterization Report are no longer valid.

Every five years the following certification will be added:

- The assumptions made in the Qualitative Exposure Assessment remain valid.

The signed certification will be included in the Periodic Review Report described below.

5.3 PERIODIC REVIEW REPORT

A Periodic Review Report will be submitted to the Department every year, unless otherwise approved by DEC, beginning with the performance of a site-wide inspection to be conducted fifteen months after the Site Management Plan is approved by DEC. In the event that the Site is subdivided into separate parcels with different ownership, a single Periodic Review Report will be prepared that addresses the Site described in Appendix B (Metes and Bounds). The report will be prepared in accordance with NYSDEC DER-10 and submitted within 45 days of the completion of the site-wide inspection as shown in Table 8. The report will include:

- Identification, assessment and certification of all IC/ECs required by the NYSDEC recommendation for the Site;
- Results of the required annual Site inspections and severe condition inspections, if applicable;
- All applicable inspection forms and other records generated for the Site during the reporting period in electronic format;
- A site evaluation, which includes the following:
    - The compliance of the IC/ECs and Deed Restriction as recommended in the Site Characterization Report and as recommended by the NYSDEC;
    - Any new conclusions or observations regarding impacts at the Site based on inspections or data generated by the annual Site Inspections;

- Recommendations regarding any necessary changes to the IC/ECs; and
- The overall performance and effectiveness of the IC/ECs.

The Periodic Review Report will be submitted, in hard-copy format, to the NYSDEC Central Office and Regional Office in which the Site is located, and in electronic format to NYSDEC Central Office, Regional Office and the NYSDOH Bureau of Environmental Exposure Investigation.

5.4 CORRECTIVE MEASURES PLAN

If any component of the approach is found to have failed, or if the periodic certification cannot be provided due to the failure of an IC/EC, a corrective measures plan will be submitted to the NYSDEC for approval. This plan will explain the failure and provide the details and schedule for performing work necessary to correct the failure. Unless an emergency condition exists, no work will be performed pursuant to the corrective measures plan until it is approved by the NYSDEC.

REFERENCES

Con Edison, May 3, 2011. Letter to New York State Department of Environmental Conservation: Response to NYSDEC Comments on Site Characterization Report.

Con Edison, June 30, 2010. Letter to New York State Department of Environmental Conservation: Response to New York State Department of Environmental Conservation Comments on Site Characterization Report.

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New York State Department of Environmental Conservation, December 14, 2006. 6 NYCRR Part 375 Environmental Remediation Programs.

Parsons, April 2009. *Site Characterization Work Plan for the Saw Mill River Station Site,* Yonkers, New York.

LIST OF TABLES

Table 1
2009 Site Characterization Soil Analytical Summary: Detected Compounds
Draft Site Management Plan
Saw Mill River Station Site, Yonkers, NY

Consolidated Edison Saw Mill River Station Site Validated Soil Analytical Data Detected Compound Summary		Unrestricted Use	Sample ID: Lab Sample Id: Depth: Source: SDG: Matrix: Sampled:	MW- 2 (5-7') A4560-02 5-7' Chemtech A4560 SOIL 9/30/2009	MW- 2 (29-31') A4560-03 29-31' Chemtech A4560 SOIL 9/30/2009	MW- 3 (9-11') A5029-01 9-11' Chemtech A5029 SOIL 11/2/2009	MW- 3 (21-23') A5029-02 21-23' Chemtech A5029 SOIL 11/2/2009	MW- 4 (11-13') A4664-13 11-13' Chemtech A4664 SOIL 10/9/2009	MW- 4 (15-17') A4664-14 15-17' Chemtech A4664 SOIL 10/9/2009	MW- 5 (16-18') A4560-06 16-18' Chemtech A4560 SOIL 10/1/2009	MW-5 (18-20') A4560-07 18-20' Chemtech A4560 SOIL 10/1/2009
CAS NO.	COMPOUND	Objectives	UNITS:								
	VOLATILES										
67-64-1	Acetone	0.05	mg/Kg	ND	ND	ND	ND	ND	ND	ND	ND
71-43-2	Benzene	0.06	mg/Kg	ND	ND	ND	ND	ND	ND	ND	ND
106-46-7	1,4-Dichlorobenzene	1.8	mg/Kg	ND	ND	ND	ND	ND	ND	ND	ND
100-41-4	Ethyl Benzene	1	mg/Kg	ND	ND	ND	ND	ND	ND	ND	ND
98-82-8	Isopropylbenzene	NS	mg/Kg	ND	ND	ND	ND	ND	ND	ND	ND
1634-04-4	Methyl tert-butyl Ether	0.93	mg/Kg	ND	ND	ND	0.0045 J	ND	ND	ND	ND
108-87-2	Methylcyclohexane	NS	mg/Kg	ND	ND	ND	ND	ND	ND	ND	ND
75-09-2	Methylene Chloride	0.05	mg/Kg	ND	ND	ND	ND	ND	ND	ND	ND
108-88-3	Toluene	0.7	mg/Kg	ND	ND	ND	ND	ND	ND	ND	ND
136777-61-2	m/p-Xylenes	0.26	mg/Kg	ND	ND	ND	ND	ND	ND	ND	ND
1330-20-7	o-Xylene	0.26	mg/Kg	ND	ND	ND	ND	ND	ND	ND	ND
	Total VOCs	**NS**	**mg/Kg**	**ND**	**ND**	**ND**	**0.0045 J**	**ND**	**ND**	**ND**	**ND**
	SEMIVOLATILES										
98-86-2	Acetophenone	NS	mg/Kg	ND	ND	ND	ND	ND	ND	ND	ND
117-81-7	Bis(2-ethylhexyl)phthalate	NS	mg/Kg	0.76 J	0.16 J	0.24 J	ND	ND	0.14 J	0.19 J	0.076 J
85-68-7	Butylbenzylphthalate	NS	mg/Kg	ND	0.048 J	ND	ND	ND	ND	ND	ND
86-74-8	Carbazole	NS	mg/Kg	ND	ND	ND	ND	ND	ND	ND	ND
132-64-9	Dibenzofuran	NS	mg/Kg	ND	ND	ND	ND	ND	ND	ND	ND
131-11-3	Dimethylphthalate	NS	mg/Kg	ND	ND	ND	ND	ND	ND	ND	ND
108-95-2	Phenol	0.33	mg/Kg	ND	ND	ND	ND	ND	ND	ND	ND
	PAHs										
83-32-9	Acenaphthene	20	mg/Kg	ND	ND	ND	ND	ND	ND	ND	ND
208-96-8	Acenaphthylene	100	mg/Kg	ND	ND	ND	ND	ND	ND	ND	ND
120-12-7	Anthracene	100	mg/Kg	ND	ND	ND	ND	ND	ND	ND	ND
120-12-7	Benzo(a)anthracene	1	mg/Kg	0.76 J	ND	ND	ND	ND	ND	ND	ND
50-32-8	Benzo(a)pyrene	1	mg/Kg	0.79 J	ND	ND	ND	ND	ND	ND	ND
205-99-2	Benzo(b)fluoranthene	1	mg/Kg	1 J	ND	ND	ND	ND	ND	ND	ND
191-24-2	Benzo(g,h,i)perylene	100	mg/Kg	R	ND	ND	ND	ND	ND	ND	ND
207-08-9	Benzo(k)fluoranthene	0.8	mg/Kg	R	ND	ND	ND	ND	ND	ND	ND
218-01-9	Chrysene	1	mg/Kg	0.82 J	ND	ND	ND	ND	ND	ND	ND
53-70-3	Dibenz(a,h)anthracene	0.33	mg/Kg	R	ND	ND	ND	ND	ND	ND	ND
206-44-0	Fluoranthene	100	mg/Kg	1.2 J	ND	ND	ND	ND	ND	0.079 J	ND
86-73-7	Fluorene	30	mg/Kg	ND	ND	ND	ND	ND	ND	ND	ND
193-39-5	Indeno(1,2,3-cd)pyrene	0.5	mg/Kg	R	ND	ND	ND	ND	ND	ND	ND
91-57-6	2-Methylnaphthalene	NS	mg/Kg	ND	ND	ND	ND	ND	ND	ND	ND
91-20-3	Naphthalene	12	mg/Kg	ND	ND	ND	ND	ND	ND	ND	ND
85-01-8	Phenanthrene	100	mg/Kg	ND	ND	ND	ND	ND	ND	0.17 J	ND
129-00-0	Pyrene	100	mg/Kg	2.2 J	ND	ND	ND	ND	ND	0.071 J	ND
	Total PAHs	**NS**	**mg/Kg**	**6.77 J**	**ND**	**ND**	**ND**	**ND**	**ND**	**0.32 J**	**ND**
	Total SVOCs	**NS**	**mg/Kg**	**7.53 J**	**0.208 J**	**0.24 J**	**ND**	**ND**	**0.14 J**	**0.51 J**	**0.076 J**

Notes:
(1) 6NYCRR Part 375 Environmental Remediation Programs (December 14, 2006)
(2) -- indicates no cleanup objective or background level is available
(3) ND indicates compound was not detected.
(4) J indicates an estimated concentration.
(5) Shaded values exceed 6NYCRR Part 375 Unrestricted Use Soil Cleanup Objectives
(6) NA indicates compound was not analyzed

Table 1
2009 Site Characterization Soil Analytical Summary: Detected Compounds
Draft Site Management Plan
Saw Mill River Station Site, Yonkers, NY

Consolidated Edison Saw Mill River Station Site Validated Soil Analytical Data Detected Compound Summary		Unrestricted Use	Sample ID: Lab Sample Id: Depth: Source: SDG: Matrix: Sampled:	MW- 2 (5-7') A4560-02 5-7' Chemtech A4560 SOIL 9/30/2009	MW- 2 (29-31') A4560-03 29-31' Chemtech A4560 SOIL 9/30/2009	MW- 3 (9-11') A5029-01 9-11' Chemtech A5029 SOIL 11/2/2009	MW- 3 (21-23') A5029-02 21-23' Chemtech A5029 SOIL 11/2/2009	MW- 4 (11-13') A4664-13 11-13' Chemtech A4664 SOIL 10/9/2009	MW- 4 (15-17') A4664-14 15-17' Chemtech A4664 SOIL 10/9/2009	MW- 5 (16-18') A4560-06 16-18' Chemtech A4560 SOIL 10/1/2009	MW-5 (18-20') A4560-07 18-20' Chemtech A4560 SOIL 10/1/2009
CAS NO.	COMPOUND	Objectives	UNITS:								
	PCBs										
53469-21-9	Aroclor-1242		mg/Kg	ND	ND	ND	ND	ND	ND	ND	ND
12672-29-6	Aroclor-1248		mg/Kg	ND	ND	ND	ND	ND	ND	ND	ND
11096-82-5	Aroclor-1260		mg/Kg	0.063 J	ND	ND	ND	ND	ND	ND	ND
	Total PCBs	**0.1**	**mg/Kg**	**0.063 J**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**
	INORGANICS										
7429-90-5	Aluminum	NS	mg/Kg	8600	3870	11300	10400	5110	17000	2770	3170
7440-36-0	Antimony	NS	mg/Kg	ND	ND	ND	ND	ND	0.72 J	ND	ND
7440-38-2	Arsenic	13	mg/Kg	5.27	ND	ND	ND	ND	ND	0.35 J	0.59 J
7440-39-3	Barium	350	mg/Kg	113	65	126	131	47.7 J	163 J	31.2	36.6
7440-41-7	Beryllium	7.2	mg/Kg	0.31 J	0.43	0.71	0.47	0.16 J	0.62	0.12 J	0.14 J
7440-43-9	Cadmium	2.5	mg/Kg	0.83	0.28	0.92	0.8	ND	0.89	ND	0.05 J
7440-70-2	Calcium	NS	mg/Kg	32800 J	10500 J	1750	10300	2220	2800	1320 J	3120 J
7440-47-3	Chromium	NS	mg/Kg	27.4	14.8	25.7	28.5	21.5	40	9.15	9.85
7440-48-4	Cobalt	NS	mg/Kg	8.26	6.76	9.62	8.68	5.79	12.3	2.72	2.8
7440-50-8	Copper	50	mg/Kg	37.8	16.9	18.6	28.9	18.4	32.5	5.27	5.54
7439-89-6	Iron	NS	mg/Kg	16200 J	11800 J	21800	18600	8690	24800	5280 J	5480 J
7439-92-1	Lead	63	mg/Kg	121	4.55	20.1	8.39	2.44	8.23	5.09	4.21
7439-95-4	Magnesium	NS	mg/Kg	17900	7170	2650	10400	3830	9750	1840	2490
7439-96-5	Manganese	1600	mg/Kg	226	195	153	287	72.3 J	114 J	49.2	55.9
7439-97-6	Mercury	0.18	mg/Kg	0.241	ND	0.07	0.028	ND	0.012	ND	ND
7440-02-0	Nickel	30	mg/Kg	21.6	14.1	16.9	24.9	18.2	26.2	6.75	6.97
7440-09-7	Potassium	NS	mg/Kg	1280	1690	392	3180	1480 J	7930 J	761	888
7782-49-2	Selenium	3.9	mg/Kg	ND	ND	1.88	1.18	0.57 J	0.45 J	ND	ND
7440-22-4	Silver	2	mg/Kg	ND	ND	ND	ND	ND	ND	ND	ND
7440-23-5	Sodium	NS	mg/Kg	ND	ND	421	302	274	398	ND	ND
7440-28-0	Thallium	NS	mg/Kg	ND	ND	ND	0.51 J	ND	1.74 J	ND	ND
7440-62-2	Vanadium	NS	mg/Kg	33.5	19.9	39.6	31	18.2	54.3	8.25	8.5
7440-66-6	Zinc	109	mg/Kg	109	38.2	52.9	51.8	29.9 J	64.4 J	17.8	19
57-12-5	Cyanide	27	mg/Kg	ND	ND	ND	ND	ND	ND	ND	ND

Notes:
(1) 6NYCRR Part 375 Environmental Remediation Programs (December 14, 2006)
(2) -- indicates no cleanup objective or background level is available
(3) ND indicates compound was not detected.
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(5) Shaded values exceed 6NYCRR Part 375 Unrestricted Use Soil Cleanup Objectives
(6) NA indicates compound was not analyzed

Table 1
2009 Site Characterization Soil Analytical Summary: Detected Compounds
Draft Site Management Plan
Saw Mill River Station Site, Yonkers, NY

Consolidated Edison Saw Mill River Station Site Validated Soil Analytical Data Detected Compound Summary		Unrestricted Use	Sample ID: Lab Sample Id: Depth: Source: SDG: Matrix: Sampled:	MW- 6 (5-7') A5029-03 5-7' Chemtech A5029 SOIL 11/2/2009	MW- 6 (19-21') A5029-04 19-21' Chemtech A5029 SOIL 11/2/2009	MW- 7 (7-9') A5029-05 7-9' Chemtech A5029 SOIL 11/3/2009	MW- 8 (7-9') A5029-06 7-9' Chemtech A5029 SOIL 11/3/2009	MW- 8 (11-13') A5029-07 11-13' Chemtech A5029 SOIL 11/3/2009	MW- 8 (15-17') A5029-08 15-17' Chemtech A5029 SOIL 11/3/2009	SB- 5 (5-7') A4664-08 5-7' Chemtech A4664 SOIL 10/7/2009	SB- 5 (23-25') A4664-09 23-25' Chemtech A4664 SOIL 10/7/2009	SB- 6 (7-9') A4560-08 7-9' Chemtech A4560 SOIL 10/2/2009
CAS NO.	COMPOUND	Objectives	UNITS:									
	VOLATILES											
67-64-1	Acetone	0.05	mg/Kg	ND	ND	ND	ND	ND	ND	ND	ND	ND
71-43-2	Benzene	0.06	mg/Kg	ND	ND	ND	ND	ND	ND	ND	ND	ND
106-46-7	1,4-Dichlorobenzene	1.8	mg/Kg	ND	ND	ND	ND	ND	ND	ND	ND	ND
100-41-4	Ethyl Benzene	1	mg/Kg	ND	ND	ND	ND	0.003 J	ND	ND	ND	ND
98-82-8	Isopropylbenzene	NS	mg/Kg	ND	ND	ND	ND	ND	ND	ND	ND	ND
1634-04-4	Methyl tert-butyl Ether	0.93	mg/Kg	ND	ND	ND	ND	ND	ND	ND	ND	ND
108-87-2	Methylcyclohexane	NS	mg/Kg	ND	ND	ND	ND	ND	ND	ND	ND	ND
75-09-2	Methylene Chloride	0.05	mg/Kg	ND	ND	ND	ND	ND	ND	ND	ND	ND
108-88-3	Toluene	0.7	mg/Kg	ND	ND	ND	ND	ND	ND	ND	ND	ND
136777-61-2	m/p-Xylenes	0.26	mg/Kg	ND	ND	ND	ND	ND	ND	ND	ND	ND
1330-20-7	o-Xylene	0.26	mg/Kg	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Total VOCs	**NS**	**mg/Kg**	**ND**	**ND**	**ND**	**ND**	**0.003 J**	**ND**	**ND**	**ND**	**ND**
	SEMIVOLATILES											
98-86-2	Acetophenone	NS	mg/Kg	ND	ND	ND	ND	NA	NA	ND	ND	ND
117-81-7	Bis(2-ethylhexyl)phthalate	NS	mg/Kg	0.55 J	ND	ND	ND	NA	NA	0.93 J	ND	ND
85-68-7	Butylbenzylphthalate	NS	mg/Kg	ND	ND	ND	ND	NA	NA	ND	ND	ND
86-74-8	Carbazole	NS	mg/Kg	ND	ND	ND	ND	NA	NA	ND	ND	ND
132-64-9	Dibenzofuran	NS	mg/Kg	ND	ND	ND	ND	NA	NA	ND	ND	ND
131-11-3	Dimethylphthalate	NS	mg/Kg	ND	ND	ND	ND	NA	NA	ND	ND	ND
108-95-2	Phenol	0.33	mg/Kg	ND	ND	ND	ND	NA	NA	ND	ND	ND
	PAHs											
83-32-9	Acenaphthene	20	mg/Kg	ND	ND	ND	ND	NA	NA	ND	ND	ND
208-96-8	Acenaphthylene	100	mg/Kg	ND	ND	ND	ND	NA	NA	ND	ND	ND
120-12-7	Anthracene	100	mg/Kg	ND	ND	ND	ND	NA	NA	ND	ND	ND
120-12-7	Benzo(a)anthracene	1	mg/Kg	ND	ND	ND	ND	NA	NA	ND	ND	ND
50-32-8	Benzo(a)pyrene	1	mg/Kg	ND	ND	ND	ND	NA	NA	ND	ND	ND
205-99-2	Benzo(b)fluoranthene	1	mg/Kg	ND	ND	ND	ND	NA	NA	ND	ND	ND
191-24-2	Benzo(g,h,i)perylene	100	mg/Kg	ND	ND	ND	ND	NA	NA	ND	ND	ND
207-08-9	Benzo(k)fluoranthene	0.8	mg/Kg	ND	ND	ND	ND	NA	NA	ND	ND	ND
218-01-9	Chrysene	1	mg/Kg	ND	ND	ND	ND	NA	NA	ND	ND	ND
53-70-3	Dibenz(a,h)anthracene	0.33	mg/Kg	ND	ND	ND	ND	NA	NA	ND	ND	ND
206-44-0	Fluoranthene	100	mg/Kg	ND	ND	ND	ND	NA	NA	ND	0.065 J	ND
86-73-7	Fluorene	30	mg/Kg	ND	ND	ND	ND	NA	NA	ND	ND	ND
193-39-5	Indeno(1,2,3-cd)pyrene	0.5	mg/Kg	ND	ND	ND	ND	NA	NA	ND	ND	ND
91-57-6	2-Methylnaphthalene	NS	mg/Kg	ND	ND	ND	ND	NA	NA	ND	ND	ND
91-20-3	Naphthalene	12	mg/Kg	ND	ND	ND	ND	NA	NA	ND	ND	ND
85-01-8	Phenanthrene	100	mg/Kg	ND	ND	ND	ND	NA	NA	ND	0.11 J	ND
129-00-0	Pyrene	100	mg/Kg	ND	ND	ND	ND	NA	NA	ND	0.053 J	ND
	Total PAHs	**NS**	**mg/Kg**	**ND**	**ND**	**ND**	**ND**	**NA**	**NA**	**ND**	**0.228 J**	**ND**
	Total SVOCs	**NS**	**mg/Kg**	**0.55 J**	**ND**	**ND**	**ND**	**NA**	**NA**	**0.93 J**	**0.228 J**	**ND**

Notes:
(1) 6NYCRR Part 375 Environmental Remediation Programs (December 14, 2006)
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(3) ND indicates compound was not detected.
(4) J indicates an estimated concentration.
(5) Shaded values exceed 6NYCRR Part 375 Unrestricted Use Soil Cleanup Objectives
(6) NA indicates compound was not analyzed

Table 1
2009 Site Characterization Soil Analytical Summary: Detected Compounds
Draft Site Management Plan
Saw Mill River Station Site, Yonkers, NY

Consolidated Edison Saw Mill River Station Site Validated Soil Analytical Data Detected Compound Summary		Unrestricted Use	Sample ID: Lab Sample Id: Depth: Source: SDG: Matrix: Sampled:	MW- 6 (5-7') A5029-03 5-7' Chemtech A5029 SOIL 11/2/2009	MW- 6 (19-21') A5029-04 19-21' Chemtech A5029 SOIL 11/2/2009	MW- 7 (7-9') A5029-05 7-9' Chemtech A5029 SOIL 11/3/2009	MW- 8 (7-9') A5029-06 7-9' Chemtech A5029 SOIL 11/3/2009	MW- 8 (11-13') A5029-07 11-13' Chemtech A5029 SOIL 11/3/2009	MW- 8 (15-17') A5029-08 15-17' Chemtech A5029 SOIL 11/3/2009	SB- 5 (5-7') A4664-08 5-7' Chemtech A4664 SOIL 10/7/2009	SB- 5 (23-25') A4664-09 23-25' Chemtech A4664 SOIL 10/7/2009	SB- 6 (7-9') A4560-08 7-9' Chemtech A4560 SOIL 10/2/2009
CAS NO.	COMPOUND	Objectives	UNITS:									
	PCBs											
53469-21-9	Aroclor-1242		mg/Kg	ND	ND	ND	ND	NA	NA	ND	ND	ND
12672-29-6	Aroclor-1248		mg/Kg	ND	ND	ND	ND	NA	NA	ND	ND	ND
11096-82-5	Aroclor-1260		mg/Kg	0.089 J	ND	ND	ND	NA	NA	0.031	ND	6.2
	Total PCBs	**0.1**	**mg/Kg**	**0.089 J**	**ND**	**ND**	**ND**	**NA**	**NA**	**0.031**	**ND**	**6.2**
	INORGANICS											
7429-90-5	Aluminum	NS	mg/Kg	9850	6180	8850	5670	NA	NA	9370	11200	6080
7440-36-0	Antimony	NS	mg/Kg	ND	ND	ND	ND	NA	NA	0.98 J	ND	ND
7440-38-2	Arsenic	13	mg/Kg	ND	ND	ND	ND	NA	NA	1 J	ND	24.1
7440-39-3	Barium	350	mg/Kg	70.3	85.8	87.2	52.4	NA	NA	68.6 J	154 J	80.8
7440-41-7	Beryllium	7.2	mg/Kg	0.47	0.51	0.44	0.36	NA	NA	0.62	0.27 J	0.25 J
7440-43-9	Cadmium	2.5	mg/Kg	1.28	0.51	0.57	0.61	NA	NA	0.97	0.49	0.75
7440-70-2	Calcium	NS	mg/Kg	524	177	1340	2560	NA	NA	16400	14000	15400 J
7440-47-3	Chromium	NS	mg/Kg	21	9.95	17.6	19.3	NA	NA	37.5	43.3	17.9
7440-48-4	Cobalt	NS	mg/Kg	11.2	8.72	7.38	8.06	NA	NA	10.2	8.87	4.57
7440-50-8	Copper	50	mg/Kg	23.5	20.3	31.8	35.3	NA	NA	33.4	18.5	16.3
7439-89-6	Iron	NS	mg/Kg	15600	16200	17500	12600	NA	NA	25700	20100	10200 J
7439-92-1	Lead	63	mg/Kg	742	17.1	13.1	52.5	NA	NA	34.5	4.43	287
7439-95-4	Magnesium	NS	mg/Kg	1900	3410	5480	2910	NA	NA	11600	14300	9450
7439-96-5	Manganese	1600	mg/Kg	175	321	282	121	NA	NA	281 J	298 J	124
7439-97-6	Mercury	0.18	mg/Kg	0.145	0.004 J	0.009 J	0.679	NA	NA	0.168	0.012 J	0.442
7440-02-0	Nickel	30	mg/Kg	13.8	18.5	17.3	16.3	NA	NA	20.8	25.3	10.8
7440-09-7	Potassium	NS	mg/Kg	217	4370	4370	1200	NA	NA	2340 J	6030 J	751
7782-49-2	Selenium	3.9	mg/Kg	1.37	0.89	1.37	1.47	NA	NA	0.77 J	ND	ND
7440-22-4	Silver	2	mg/Kg	ND	ND	ND	ND	NA	NA	ND	ND	ND
7440-23-5	Sodium	NS	mg/Kg	291	273	576	212	NA	NA	169	267	ND
7440-28-0	Thallium	NS	mg/Kg	ND	0.58 J	0.86 J	ND	NA	NA	ND	0.86 J	ND
7440-62-2	Vanadium	NS	mg/Kg	24.7	15.5	21.5	29.5	NA	NA	50.2	41.8	16.7
7440-66-6	Zinc	109	mg/Kg	187	16.5	75.7	79.9	NA	NA	62.6 J	55.8 J	119
57-12-5	Cyanide	27	mg/Kg	1.73	ND	ND	0.8	NA	NA	ND	ND	ND

Notes:
(1) 6NYCRR Part 375 Environmental Remediation Programs (December 14, 2006)
(2) -- indicates no cleanup objective or background level is available
(3) ND indicates compound was not detected.
(4) J indicates an estimated concentration.
(5) Shaded values exceed 6NYCRR Part 375 Unrestricted Use Soil Cleanup Objectives
(6) NA indicates compound was not analyzed

Table 1
2009 Site Characterization Soil Analytical Summary: Detected Compounds
Draft Site Management Plan
Saw Mill River Station Site, Yonkers, NY

Consolidated Edison Saw Mill River Station Site Validated Soil Analytical Data Detected Compound Summary		Unrestricted Use	Sample ID: Lab Sample Id: Depth: Source: SDG: Matrix: Sampled:	SB- 6 (29-31') A4560-09 29-31' Chemtech A4560 SOIL 10/2/2009	Dup of SB- 6 (29-31') SB-106 (29-31') A4560-12 29-31' Chemtech A4560 SOIL 10/2/2009	SB- 7 (5-7') A4664-01 5-7' Chemtech A4664 SOIL 10/5/2009	SB- 8 (11-13') A4664-02 11-13' Chemtech A4664 SOIL 10/5/2009	SB- 8 (13-15') A4664-03 13-15' Chemtech A4664 SOIL 10/6/2009	SB- 9 (11-13') A4664-04 11-13' Chemtech A4664 SOIL 10/6/2009	SB- 9 (21-23') A4664-05 21-23' Chemtech A4664 SOIL 10/6/2009	SB-11 (9-11') A4664-11 9-11' Chemtech A4664 SOIL 10/8/2009	SB-11 (17-19') A4664-12 17-19' Chemtech A4664 SOIL 10/8/2009
CAS NO.	COMPOUND	Objectives	UNITS:									
	VOLATILES											
67-64-1	Acetone	0.05	mg/Kg	ND	ND	ND	ND	ND	ND	ND	ND	ND
71-43-2	Benzene	0.06	mg/Kg	ND	ND	ND	ND	ND	ND	ND	ND	ND
106-46-7	1,4-Dichlorobenzene	1.8	mg/Kg	ND	ND	0.0027 J	ND	ND	ND	ND	ND	ND
100-41-4	Ethyl Benzene	1	mg/Kg	ND	ND	ND	ND	ND	ND	ND	ND	ND
98-82-8	Isopropylbenzene	NS	mg/Kg	ND	ND	ND	ND	ND	ND	ND	ND	ND
1634-04-4	Methyl tert-butyl Ether	0.93	mg/Kg	ND	ND	ND	ND	ND	ND	ND	ND	ND
108-87-2	Methylcyclohexane	NS	mg/Kg	ND	ND	ND	ND	ND	ND	ND	ND	ND
75-09-2	Methylene Chloride	0.05	mg/Kg	ND	ND	ND	ND	ND	ND	ND	ND	ND
108-88-3	Toluene	0.7	mg/Kg	ND	ND	ND	ND	ND	ND	ND	ND	ND
136777-61-2	m/p-Xylenes	0.26	mg/Kg	ND	ND	ND	ND	ND	ND	ND	ND	ND
1330-20-7	o-Xylene	0.26	mg/Kg	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Total VOCs	**NS**	**mg/Kg**	**ND**	**ND**	**0.0027 J**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**
	SEMIVOLATILES											
98-86-2	Acetophenone	NS	mg/Kg	ND	ND	ND	ND	ND	ND	ND	ND	ND
117-81-7	Bis(2-ethylhexyl)phthalate	NS	mg/Kg	0.069 J	0.2 J	3.8	0.66	0.36 J	ND	0.18 J	0.19 J	0.094 J
85-68-7	Butylbenzylphthalate	NS	mg/Kg	ND	ND	ND	ND	ND	ND	ND	ND	ND
86-74-8	Carbazole	NS	mg/Kg	ND	ND	ND	ND	ND	ND	ND	ND	ND
132-64-9	Dibenzofuran	NS	mg/Kg	ND	ND	ND	ND	ND	ND	ND	ND	ND
131-11-3	Dimethylphthalate	NS	mg/Kg	ND	ND	ND	ND	ND	ND	ND	ND	ND
108-95-2	Phenol	0.33	mg/Kg	ND	ND	ND	ND	ND	ND	ND	ND	ND
	PAHs											
83-32-9	Acenaphthene	20	mg/Kg	ND	ND	ND	ND	ND	ND	ND	ND	ND
208-96-8	Acenaphthylene	100	mg/Kg	ND	ND	ND	ND	ND	ND	ND	ND	ND
120-12-7	Anthracene	100	mg/Kg	ND	ND	ND	ND	ND	ND	ND	ND	ND
120-12-7	Benzo(a)anthracene	1	mg/Kg	ND	ND	0.62 J	ND	ND	ND	ND	ND	ND
50-32-8	Benzo(a)pyrene	1	mg/Kg	ND	ND	0.64 J	ND	ND	ND	ND	ND	ND
205-99-2	Benzo(b)fluoranthene	1	mg/Kg	ND	ND	0.84 J	ND	ND	ND	ND	ND	ND
191-24-2	Benzo(g,h,i)perylene	100	mg/Kg	ND	ND	0.53 J	ND	ND	ND	ND	ND	ND
207-08-9	Benzo(k)fluoranthene	0.8	mg/Kg	ND	ND	ND	ND	ND	ND	ND	ND	ND
218-01-9	Chrysene	1	mg/Kg	ND	ND	0.73 J	0.043 J	ND	ND	ND	ND	ND
53-70-3	Dibenz(a,h)anthracene	0.33	mg/Kg	ND	ND	ND	ND	ND	ND	ND	ND	ND
206-44-0	Fluoranthene	100	mg/Kg	ND	ND	1.3 J	0.075 J	ND	ND	ND	ND	ND
86-73-7	Fluorene	30	mg/Kg	ND	ND	ND	ND	ND	ND	ND	ND	ND
193-39-5	Indeno(1,2,3-cd)pyrene	0.5	mg/Kg	ND	ND	0.42 J	ND	ND	ND	ND	ND	ND
91-57-6	2-Methylnaphthalene	NS	mg/Kg	ND	ND	ND	ND	ND	ND	ND	ND	ND
91-20-3	Naphthalene	12	mg/Kg	ND	ND	ND	ND	ND	ND	ND	ND	ND
85-01-8	Phenanthrene	100	mg/Kg	ND	ND	0.62 J	0.077 J	ND	ND	ND	ND	ND
129-00-0	Pyrene	100	mg/Kg	ND	ND	1.2 J	0.053 J	ND	ND	ND	ND	ND
	Total PAHs	**NS**	**mg/Kg**	**ND**	**ND**	**6.9 J**	**0.248 J**	**ND**	**ND**	**ND**	**ND**	**ND**
	Total SVOCs	**NS**	**mg/Kg**	**0.069 J**	**0.2 J**	**10.7 J**	**0.908 J**	**0.36 J**	**ND**	**0.18 J**	**0.19 J**	**0.094 J**

Notes:
(1) 6NYCRR Part 375 Environmental Remediation Programs (December 14, 2006)
(2) -- indicates no cleanup objective or background level is available
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Table 1
2009 Site Characterization Soil Analytical Summary: Detected Compounds
Draft Site Management Plan
Saw Mill River Station Site, Yonkers, NY

Consolidated Edison Saw Mill River Station Site Validated Soil Analytical Data Detected Compound Summary		Unrestricted Use	Sample ID: Lab Sample Id: Depth: Source: SDG: Matrix: Sampled:	SB- 6 (29-31') A4560-09 29-31' Chemtech A4560 SOIL 10/2/2009	Dup of SB- 6 (29-31') SB-106 (29-31') A4560-12 29-31' Chemtech A4560 SOIL 10/2/2009	SB- 7 (5-7') A4664-01 5-7' Chemtech A4664 SOIL 10/5/2009	SB- 8 (11-13') A4664-02 11-13' Chemtech A4664 SOIL 10/5/2009	SB- 8 (13-15') A4664-03 13-15' Chemtech A4664 SOIL 10/6/2009	SB- 9 (11-13') A4664-04 11-13' Chemtech A4664 SOIL 10/6/2009	SB- 9 (21-23') A4664-05 21-23' Chemtech A4664 SOIL 10/6/2009	SB-11 (9-11') A4664-11 9-11' Chemtech A4664 SOIL 10/8/2009	SB-11 (17-19') A4664-12 17-19' Chemtech A4664 SOIL 10/8/2009
CAS NO.	COMPOUND	Objectives	UNITS:									
	PCBs											
53469-21-9	Aroclor-1242		mg/Kg	ND	ND	ND	ND	ND	ND	ND	ND	ND
12672-29-6	Aroclor-1248		mg/Kg	ND	ND	ND	ND	ND	ND	ND	ND	ND
11096-82-5	Aroclor-1260		mg/Kg	ND	ND	1.8	ND	ND	ND	ND	0.034 J	ND
	Total PCBs	**0.1**	**mg/Kg**	**ND**	**ND**	**1.8**	**ND**	**ND**	**ND**	**ND**	**0.034 J**	**ND**
	INORGANICS											
7429-90-5	Aluminum	NS	mg/Kg	2810	3620	2330	24400	17600	7850	3030	2950	8990
7440-36-0	Antimony	NS	mg/Kg	2.32 J	ND	ND	ND	0.93 J	ND	ND	ND	ND
7440-38-2	Arsenic	13	mg/Kg	0.63 J	0.3 J	ND	1.7	1.32	ND	0.28 J	2.79	ND
7440-39-3	Barium	350	mg/Kg	26.9	40.4	5.44 J	226 J	182 J	80.4 J	31.9 J	18.7 J	120 J
7440-41-7	Beryllium	7.2	mg/Kg	0.16 J	0.17 J	0.05 J	0.69	0.62	0.32 J	0.17 J	0.19 J	0.22 J
7440-43-9	Cadmium	2.5	mg/Kg	ND	0.07 J	ND	0.82	0.86	0.15 J	0.06 J	0.68	0.44
7440-70-2	Calcium	NS	mg/Kg	11300 J	10800 J	1120	1570	1500	1800	2070	42300	12300
7440-47-3	Chromium	NS	mg/Kg	10.3	15.5	3.03	44	37.2	18.4	10.9	53.7	34.2
7440-48-4	Cobalt	NS	mg/Kg	5.31	5.78	0.73 J	15	15.6	5.85	4.38	4.13	9.62
7440-50-8	Copper	50	mg/Kg	11.4	11.2	2	51.4	28.4	23.8	8.37	11.5	18.8
7439-89-6	Iron	NS	mg/Kg	7800 J	8940 J	2210	37000	35700	12600	8140	13600	16500
7439-92-1	Lead	63	mg/Kg	14.1 J	2.48 J	11.3	30.3	14.4	6.17	3.4	11.6	2.83
7439-95-4	Magnesium	NS	mg/Kg	7600	7970	369	11500	8730	3470	2690	24600	11700
7439-96-5	Manganese	1600	mg/Kg	93.5	107	16.6 J	47.8 J	53.2 J	113 J	142 J	131 J	290 J
7439-97-6	Mercury	0.18	mg/Kg	ND	ND	0.157	0.016	0.006 J	0.028	0.008 J	0.02	0.005 J
7440-02-0	Nickel	30	mg/Kg	12.1	16.6	1.31	28.5	37.7	14.4	9.47	8.32	23
7440-09-7	Potassium	NS	mg/Kg	1170	1760	113 J	12500 J	9900 J	809 J	1060 J	1000 J	4190 J
7782-49-2	Selenium	3.9	mg/Kg	ND	ND	0.34 J	ND	0.81 J	0.83 J	0.38 J	ND	0.55 J
7440-22-4	Silver	2	mg/Kg	ND	ND	ND	ND	ND	ND	ND	ND	ND
7440-23-5	Sodium	NS	mg/Kg	ND	ND	56.5 J	673	563	670	293	412	218
7440-28-0	Thallium	NS	mg/Kg	ND	0.42 J	ND	1.81 J	1.73 J	ND	ND	ND	0.64 J
7440-62-2	Vanadium	NS	mg/Kg	12.3	16.2	4.46	66.4	53.1	28.7	12	17	32.2
7440-66-6	Zinc	109	mg/Kg	20.8	24.4	25.5 J	45.6 J	44.5 J	44.4 J	24.3 J	20.1 J	46.8 J
57-12-5	Cyanide	27	mg/Kg	ND	ND	0.719	ND	ND	ND	ND	ND	ND

Notes:
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Table 1
2009 Site Characterization Soil Analytical Summary: Detected Compounds
Draft Site Management Plan
Saw Mill River Station Site, Yonkers, NY

Consolidated Edison Saw Mill River Station Site Validated Soil Analytical Data Detected Compound Summary		Unrestricted Use	Sample ID: Lab Sample Id: Depth: Source: SDG: Matrix: Sampled:	SB-12 (5-7') A4664-10 5-7' Chemtech A4664 SOIL 10/7/2009	SB-13 (5-7') A4560-04 5-7' Chemtech A4560 SOIL 10/1/2009	SB-13 (9-11') A4560-05 9-11' Chemtech A4560 SOIL 10/1/2009	SB-14 (13-15') A4664-06 13-15' Chemtech A4664 SOIL 10/6/2009	SB-14 (23-25') A4664-07 23-25' Chemtech A4664 SOIL 10/6/2009	SS- 1 (9") A4743-08 0-2 in. Chemtech A4743 SOIL 10/13/2009	SS- 1 (18") A4743-09 6-18 in. Chemtech A4743 SOIL 10/13/2009	SS- 2 (6") A4743-03 0-2 in. Chemtech A4743 SOIL 10/13/2009	SS- 2 (18") A4743-04 6-18 in. Chemtech A4743 SOIL 10/13/2009
CAS NO.	COMPOUND	Objectives	UNITS:									
	VOLATILES											
67-64-1	Acetone	0.05	mg/Kg	ND	ND	ND	ND	ND	ND	ND	ND	ND
71-43-2	Benzene	0.06	mg/Kg	ND	ND	ND	ND	ND	ND	ND	ND	ND
106-46-7	1,4-Dichlorobenzene	1.8	mg/Kg	ND	ND	ND	ND	ND	ND	ND	ND	ND
100-41-4	Ethyl Benzene	1	mg/Kg	ND	ND	ND	ND	ND	ND	ND	ND	ND
98-82-8	Isopropylbenzene	NS	mg/Kg	ND	ND	ND	ND	ND	ND	ND	ND	ND
1634-04-4	Methyl tert-butyl Ether	0.93	mg/Kg	ND	ND	ND	ND	ND	ND	ND	ND	ND
108-87-2	Methylcyclohexane	NS	mg/Kg	ND	ND	ND	ND	ND	ND	ND	ND	ND
75-09-2	Methylene Chloride	0.05	mg/Kg	ND	ND	ND	ND	ND	ND	0.0031 J	ND	0.0025 J
108-88-3	Toluene	0.7	mg/Kg	ND	ND	ND	ND	ND	ND	ND	ND	ND
136777-61-2	m/p-Xylenes	0.26	mg/Kg	ND	ND	ND	ND	ND	ND	ND	ND	ND
1330-20-7	o-Xylene	0.26	mg/Kg	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Total VOCs	**NS**	**mg/Kg**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**0.0031 J**	**ND**	**0.0025 J**
	SEMIVOLATILES											
98-86-2	Acetophenone	NS	mg/Kg	ND	ND	ND	ND	ND	ND	ND	ND	ND
117-81-7	Bis(2-ethylhexyl)phthalate	NS	mg/Kg	ND	ND	0.24 J	0.33 J	0.089 J	ND	ND	ND	ND
85-68-7	Butylbenzylphthalate	NS	mg/Kg	ND	ND	ND	ND	ND	ND	ND	ND	ND
86-74-8	Carbazole	NS	mg/Kg	ND	ND	ND	ND	ND	ND	ND	ND	ND
132-64-9	Dibenzofuran	NS	mg/Kg	ND	ND	ND	ND	ND	ND	ND	ND	ND
131-11-3	Dimethylphthalate	NS	mg/Kg	ND	ND	ND	ND	ND	ND	ND	ND	ND
108-95-2	Phenol	0.33	mg/Kg	ND	ND	ND	ND	ND	ND	ND	ND	ND
	PAHs											
83-32-9	Acenaphthene	20	mg/Kg	ND	ND	ND	ND	ND	ND	ND	0.93 J	1.5 J
208-96-8	Acenaphthylene	100	mg/Kg	ND	ND	ND	ND	ND	ND	ND	41	32
120-12-7	Anthracene	100	mg/Kg	ND	ND	ND	ND	ND	ND	ND	20	19
120-12-7	Benzo(a)anthracene	1	mg/Kg	0.42 J	1.9 J	ND	ND	ND	ND	ND	59	45
50-32-8	Benzo(a)pyrene	1	mg/Kg	0.43 J	1.3 J	ND	ND	ND	ND	ND	53	52
205-99-2	Benzo(b)fluoranthene	1	mg/Kg	0.63 J	1.1 J	ND	ND	ND	ND	ND	64	49
191-24-2	Benzo(g,h,i)perylene	100	mg/Kg	ND	ND	ND	ND	ND	ND	ND	41	32
207-08-9	Benzo(k)fluoranthene	0.8	mg/Kg	ND	ND	ND	ND	ND	ND	ND	21	17
218-01-9	Chrysene	1	mg/Kg	0.47 J	1.8 J	ND	ND	ND	ND	ND	77	48
53-70-3	Dibenz(a,h)anthracene	0.33	mg/Kg	ND	ND	ND	ND	ND	ND	ND	11	8.5
206-44-0	Fluoranthene	100	mg/Kg	0.59 J	1.5 J	ND	ND	ND	ND	ND	55	46
86-73-7	Fluorene	30	mg/Kg	ND	ND	ND	ND	ND	ND	ND	7.3 J	9.4
193-39-5	Indeno(1,2,3-cd)pyrene	0.5	mg/Kg	ND	ND	ND	ND	ND	ND	ND	41	28
91-57-6	2-Methylnaphthalene	NS	mg/Kg	ND	ND	ND	ND	ND	ND	ND	1.9 J	6 J
91-20-3	Naphthalene	12	mg/Kg	ND	ND	ND	ND	ND	ND	ND	1.7 J	4.9 J
85-01-8	Phenanthrene	100	mg/Kg	ND	ND	ND	ND	ND	ND	ND	20	36
129-00-0	Pyrene	100	mg/Kg	0.68 J	3.2 J	ND	ND	ND	ND	ND	110	88
	Total PAHs	**NS**	**mg/Kg**	**3.22 J**	**10.8 J**	**ND**	**ND**	**ND**	**ND**	**ND**	**624.83 J**	**522.3 J**
	Total SVOCs	**NS**	**mg/Kg**	**3.22 J**	**10.8 J**	**0.24 J**	**0.33 J**	**0.089 J**	**ND**	**ND**	**624.83 J**	**522.3 J**

Notes:
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CAS NO.	COMPOUND	Objectives	UNITS:									
	PCBs											
53469-21-9	Aroclor-1242		mg/Kg	ND	ND	ND	ND	ND	ND	ND	ND	ND
12672-29-6	Aroclor-1248		mg/Kg	ND	ND	ND	ND	ND	ND	ND	ND	ND
11096-82-5	Aroclor-1260		mg/Kg	0.84	0.043	ND	ND	ND	0.59 J	0.095	0.24 J	0.17 J
	Total PCBs	**0.1**	**mg/Kg**	**0.84**	**0.043**	**ND**	**ND**	**ND**	**0.59 J**	**0.095**	**0.24 J**	**0.17 J**
	INORGANICS											
7429-90-5	Aluminum	NS	mg/Kg	13800	7030	8270	18100	2170	2630	3940	1690	749
7440-36-0	Antimony	NS	mg/Kg	1.09 J	0.66 J	ND	0.81 J	0.67 J	ND	1.12 J	1 J	1.1 J
7440-38-2	Arsenic	13	mg/Kg	78.7	26.5	ND	ND	ND	2.79	8.36	8.91	5.47
7440-39-3	Barium	350	mg/Kg	146 J	80.7	95.1	178 J	8.87 J	18.1	475	22.1	7.81
7440-41-7	Beryllium	7.2	mg/Kg	0.49	0.31	0.43	0.69	0.91	0.15 J	0.37	0.29 J	0.23 J
7440-43-9	Cadmium	2.5	mg/Kg	1.29	0.98	0.24 J	1.78	1.66	0.99	0.99	0.33	0.21 J
7440-70-2	Calcium	NS	mg/Kg	30800	55800 J	1840 J	12900	443	20100	7690	13200	840
7440-47-3	Chromium	NS	mg/Kg	23	15.5	23.9	45.3	33	7.29	12.8	4.66	2.84
7440-48-4	Cobalt	NS	mg/Kg	12.8	6.68	11.1	17	11	2.39	4.16	2.6	2.79 J
7440-50-8	Copper	50	mg/Kg	42	22.1	24.3	62.9	29.6	19.3	39.2	28.7	23.4
7439-89-6	Iron	NS	mg/Kg	23700	13100 J	16100 J	34400	34100	6620	13100	8550	7460 J
7439-92-1	Lead	63	mg/Kg	113	190	8.44	10.2	20.1	58	552	73.4	199 J
7439-95-4	Magnesium	NS	mg/Kg	22200	35900	5180	15000	253	3190	1630	748	159
7439-96-5	Manganese	1600	mg/Kg	292 J	257	128	183 J	182 J	113	108	34.9	31.7 J
7439-97-6	Mercury	0.18	mg/Kg	3.2	0.561	ND	0.029	0.035	0.074	0.077	0.281	0.371
7440-02-0	Nickel	30	mg/Kg	24.7	11.5	24.7	28	28.8	5.48	10.8	8.32	6.19
7440-09-7	Potassium	NS	mg/Kg	5810 J	909	4590	10100 J	187 J	340	579	151	62.6 J
7782-49-2	Selenium	3.9	mg/Kg	ND	ND	ND	ND	0.55 J	0.71 J	0.92 J	1.68	1.62
7440-22-4	Silver	2	mg/Kg	ND	ND	ND	ND	ND	ND	ND	ND	ND
7440-23-5	Sodium	NS	mg/Kg	288	ND	ND	249	49.3 J	269	665	227	168
7440-28-0	Thallium	NS	mg/Kg	0.67 J	ND	0.62 J	1.86	ND	ND	ND	ND	ND
7440-62-2	Vanadium	NS	mg/Kg	38	20.4	29.7	69.3	76	17.4	16.9	9.74	5.04
7440-66-6	Zinc	109	mg/Kg	214 J	204	40.8	62.4 J	45.6 J	55	84.1	31.8	36 J
57-12-5	Cyanide	27	mg/Kg	ND	ND	ND	ND	ND	ND	0.743	ND	5.15

Notes:
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CAS NO.	COMPOUND	Objectives	UNITS:									
	VOLATILES											
67-64-1	Acetone	0.05	mg/Kg	ND	ND	ND	ND	ND	ND	ND	ND	ND
71-43-2	Benzene	0.06	mg/Kg	ND	ND	ND	ND	ND	ND	ND	ND	ND
106-46-7	1,4-Dichlorobenzene	1.8	mg/Kg	ND	R	ND	R	ND	ND	R	ND	ND
100-41-4	Ethyl Benzene	1	mg/Kg	ND	ND	ND	R	ND	ND	ND	ND	ND
98-82-8	Isopropylbenzene	NS	mg/Kg	ND	R	ND	R	ND	ND	ND	ND	ND
1634-04-4	Methyl tert-butyl Ether	0.93	mg/Kg	ND	ND	ND	ND	ND	ND	ND	ND	ND
108-87-2	Methylcyclohexane	NS	mg/Kg	ND	ND	ND	ND	ND	ND	ND	ND	ND
75-09-2	Methylene Chloride	0.05	mg/Kg	ND	ND	ND	ND	ND	ND	0.0029 J	ND	ND
108-88-3	Toluene	0.7	mg/Kg	ND	ND	ND	ND	ND	ND	ND	ND	ND
136777-61-2	m/p-Xylenes	0.26	mg/Kg	ND	ND	ND	R	ND	ND	ND	ND	ND
1330-20-7	o-Xylene	0.26	mg/Kg	ND	ND	ND	R	ND	ND	ND	ND	ND
	Total VOCs	**NS**	**mg/Kg**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**0.0029 J**	**ND**	**ND**
	SEMIVOLATILES											
98-86-2	Acetophenone	NS	mg/Kg	ND	ND	ND	ND	ND	ND	ND	ND	ND
117-81-7	Bis(2-ethylhexyl)phthalate	NS	mg/Kg	ND	0.28 J	ND	ND	ND	ND	ND	ND	ND
85-68-7	Butylbenzylphthalate	NS	mg/Kg	ND	ND	ND	ND	ND	ND	ND	ND	ND
86-74-8	Carbazole	NS	mg/Kg	ND	ND	ND	ND	ND	ND	ND	1.2 J	ND
132-64-9	Dibenzofuran	NS	mg/Kg	ND	ND	ND	ND	ND	ND	ND	2 J	0.43 J
131-11-3	Dimethylphthalate	NS	mg/Kg	ND	ND	ND	ND	ND	ND	ND	ND	ND
108-95-2	Phenol	0.33	mg/Kg	ND	ND	ND	ND	ND	ND	ND	ND	ND
	PAHs											
83-32-9	Acenaphthene	20	mg/Kg	1.2 J	ND	ND	ND	ND	ND	ND	3.4 J	0.79 J
208-96-8	Acenaphthylene	100	mg/Kg	28	ND	ND	ND	ND	ND	0.26 J	ND	ND
120-12-7	Anthracene	100	mg/Kg	15	0.5 J	ND	ND	ND	ND	0.2 J	10	3.4 J
120-12-7	Benzo(a)anthracene	1	mg/Kg	38	1.5 J	ND	0.22 J	ND	ND	0.37 J	18	7.7
50-32-8	Benzo(a)pyrene	1	mg/Kg	44	1.1 J	ND	0.21 J	ND	ND	0.22 J	14	5.9
205-99-2	Benzo(b)fluoranthene	1	mg/Kg	47	1.6 J	ND	0.29 J	0.22 J	ND	0.4 J	18	7.8
191-24-2	Benzo(g,h,i)perylene	100	mg/Kg	29	0.63 J	ND	ND	ND	ND	0.2 J	8.6	3.4 J
207-08-9	Benzo(k)fluoranthene	0.8	mg/Kg	13	0.72 J	ND	ND	ND	ND	ND	7.1 J	2.6 J
218-01-9	Chrysene	1	mg/Kg	40	1.7 J	ND	0.25 J	ND	ND	0.51 J	17	7.1
53-70-3	Dibenz(a,h)anthracene	0.33	mg/Kg	7.2 J	ND	ND	ND	ND	ND	ND	2.3 J	0.93 J
206-44-0	Fluoranthene	100	mg/Kg	35	3.3	ND	0.42 J	0.34 J	ND	0.49 J	40	18
86-73-7	Fluorene	30	mg/Kg	6.4 J	ND	ND	ND	ND	ND	ND	3.9 J	0.9 J
193-39-5	Indeno(1,2,3-cd)pyrene	0.5	mg/Kg	25	0.52 J	ND	ND	ND	ND	ND	8.1	3.4 J
91-57-6	2-Methylnaphthalene	NS	mg/Kg	3.6 J	ND	ND	ND	ND	ND	0.96 J	ND	ND
91-20-3	Naphthalene	12	mg/Kg	3.1 J	ND	ND	ND	ND	ND	1.2 J	ND	ND
85-01-8	Phenanthrene	100	mg/Kg	24	2 J	ND	ND	ND	ND	0.86 J	26	10
129-00-0	Pyrene	100	mg/Kg	60	2.6	ND	0.34 J	0.3 J	ND	0.75 J	33	13
	Total PAHs	**NS**	**mg/Kg**	**419.5 J**	**16.17 J**	**ND**	**1.73 J**	**0.86 J**	**ND**	**6.42 J**	**209.4 J**	**84.92 J**
	Total SVOCs	**NS**	**mg/Kg**	**419.5 J**	**16.45 J**	**ND**	**1.73 J**	**0.86 J**	**ND**	**6.42 J**	**212.6 J**	**85.35 J**

Notes:
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Table 1
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Draft Site Management Plan
Saw Mill River Station Site, Yonkers, NY

Consolidated Edison Saw Mill River Station Site Validated Soil Analytical Data Detected Compound Summary		Unrestricted Use	Sample ID: Lab Sample Id: Depth: Source: SDG: Matrix: Sampled:	Dup of SS- 2 (18") SS- 102 (18") A4743-07 6-18 in. Chemtech A4743 SOIL 10/13/2009	SS-3 (2") A4741-03 0-2 in. Chemtech A4741 SOIL 10/15/2009	SS-3 (6-18") A4741-04 6-18 in. Chemtech A4741 SOIL 10/15/2009	SS-4 (2") A4741-05 0-2 in. Chemtech A4741 SOIL 10/15/2009	SS-4 (6-14") A4741-06 6-14 in. Chemtech A4741 SOIL 10/15/2009	SS- 5 (6") A4743-01 0-2 in. Chemtech A4743 SOIL 10/13/2009	SS- 5 (18") A4743-02 6-18 in. Chemtech A4743 SOIL 10/13/2009	SS- 6 (6") A4743-10 0-2 in. Chemtech A4743 SOIL 10/13/2009	SS- 6 (18") A4743-11 6-18 in. Chemtech A4743 SOIL 10/13/2009
CAS NO.	COMPOUND	Objectives	UNITS:									
	PCBs											
53469-21-9	Aroclor-1242		mg/Kg	ND	ND	ND	ND	ND	ND	ND	ND	ND
12672-29-6	Aroclor-1248		mg/Kg	ND	ND	ND	ND	ND	ND	ND	ND	ND
11096-82-5	Aroclor-1260		mg/Kg	0.078 J	0.07	ND	0.012 J	0.011 J	0.07	ND	0.084	0.062
	Total PCBs	**0.1**	**mg/Kg**	**0.078 J**	**0.07**	**ND**	**0.012 J**	**0.011 J**	**0.07**	**ND**	**0.084**	**0.062**
	INORGANICS											
7429-90-5	Aluminum	NS	mg/Kg	910	6030	9680	3250	6040	3720	708	6890	7890
7440-36-0	Antimony	NS	mg/Kg	1.64 J	3.87	0.91 J	0.88 J	ND	4.49	1.14 J	0.75 J	0.87 J
7440-38-2	Arsenic	13	mg/Kg	6.89	346	667	1.82	1.81	278	174	6.85	2.53
7440-39-3	Barium	350	mg/Kg	11.8	145	84.7	36.7	46.2	69.2	39	56.4	68.7
7440-41-7	Beryllium	7.2	mg/Kg	0.43 J	0.6	0.43	0.16 J	0.29 J	0.7	0.25 J	0.29	0.28
7440-43-9	Cadmium	2.5	mg/Kg	0.46 J	35.5	8.25	0.39	0.52	7.62	0.58	4.69	10.1
7440-70-2	Calcium	NS	mg/Kg	889	3880	2140	6060	5190	56500	3910	15600	51200
7440-47-3	Chromium	NS	mg/Kg	2.84	32.7	33.3	13.3	15.4	27.9	3.47	20	18.3
7440-48-4	Cobalt	NS	mg/Kg	5.44 J	7.65	9.49	3.3	5.64	9.17	0.95 J	5.73	5.59
7440-50-8	Copper	50	mg/Kg	31.6	119	23.4	32.9	17.9	61.1	13.7	34.5	26.5
7439-89-6	Iron	NS	mg/Kg	16400 J	19100	17900	14700	12300	100000	31300	13500	11100
7439-92-1	Lead	63	mg/Kg	115 J	600	15.6	25.5	39.9	43.9	33.5	98.4	63.1
7439-95-4	Magnesium	NS	mg/Kg	176	1850	4150	2520	4130	22600	1040	5750	23400
7439-96-5	Manganese	1600	mg/Kg	134 J	249	185	108	160	307	21.9	209	252
7439-97-6	Mercury	0.18	mg/Kg	0.399	11.3	2.2	0.054	0.137	0.257	0.187	0.129	0.083
7440-02-0	Nickel	30	mg/Kg	9.05	20.9	17.1	10.6	11.4	22.6	1.91 J	17.8	16.7
7440-09-7	Potassium	NS	mg/Kg	67.8 J	508	1890	616	1090	485	506	736	988
7782-49-2	Selenium	3.9	mg/Kg	1.99	1.49	ND	0.45 J	0.53 J	21.3	16	0.41 J	ND
7440-22-4	Silver	2	mg/Kg	ND	1.07	ND	ND	ND	ND	ND	ND	ND
7440-23-5	Sodium	NS	mg/Kg	211	254	162	160	182	957	818	290	362
7440-28-0	Thallium	NS	mg/Kg	ND	ND	0.48 J	ND	ND	1.06 J	0.88 J	ND	ND
7440-62-2	Vanadium	NS	mg/Kg	5.39	42.5	34.1	12.3	22	19.1	8.13	24.4	26.6
7440-66-6	Zinc	109	mg/Kg	64.4 J	1010	236	43.1	66	32.6	8.08	2640	2990
57-12-5	Cyanide	27	mg/Kg	4.36	ND	ND	ND	ND	ND	ND	ND	ND

Notes:
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Consolidated Edison Saw Mill River Station Site Validated Soil Analytical Data Detected Compound Summary		Unrestricted Use	Sample ID: Lab Sample Id: Depth: Source: SDG: Matrix: Sampled:	TP-1A (3.5') A5436-06 3.5' Chemtech A5436 SOIL 12/4/2009	TP-1A (6') A5436-05 6' Chemtech A5436 SOIL 12/4/2009	TP-1B (3.5') A5436-02 3.5' Chemtech A5436 SOIL 12/1/2009	TP-1B (6.8') A5436-01 6.8' Chemtech A5436 SOIL 12/1/2009	TP-1C (4') A5436-04 4' Chemtech A5436 SOIL 12/2/2009	TP-1C (12') A5436-03 12' Chemtech A5436 SOIL 12/2/2009	TP-1D (4') A5536-02 4' Chemtech A5536 SOIL 12/8/2009	TP-1D (8.75') A5536-01 8.75' Chemtech A5536 SOIL 12/8/2009	TP-1E (5') A5536-04 5' Chemtech A5536 SOIL 12/10/2009
CAS NO.	COMPOUND	Objectives	UNITS:									
	VOLATILES											
67-64-1	Acetone	0.05	mg/Kg	ND	ND	ND	ND	ND	0.013 J	ND	ND	ND
71-43-2	Benzene	0.06	mg/Kg	ND	ND	ND	ND	ND	ND	ND	ND	ND
106-46-7	1,4-Dichlorobenzene	1.8	mg/Kg	ND	ND	ND	ND	ND	ND	ND	ND	ND
100-41-4	Ethyl Benzene	1	mg/Kg	ND	ND	ND	ND	ND	ND	ND	ND	ND
98-82-8	Isopropylbenzene	NS	mg/Kg	ND	ND	ND	ND	ND	ND	ND	ND	ND
1634-04-4	Methyl tert-butyl Ether	0.93	mg/Kg	ND	ND	ND	ND	ND	ND	ND	ND	ND
108-87-2	Methylcyclohexane	NS	mg/Kg	ND	ND	ND	ND	ND	ND	ND	ND	ND
75-09-2	Methylene Chloride	0.05	mg/Kg	ND	ND	ND	ND	ND	ND	ND	ND	ND
108-88-3	Toluene	0.7	mg/Kg	ND	ND	ND	ND	ND	ND	ND	ND	ND
136777-61-2	m/p-Xylenes	0.26	mg/Kg	ND	ND	ND	ND	ND	ND	ND	ND	ND
1330-20-7	o-Xylene	0.26	mg/Kg	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Total VOCs	**NS**	**mg/Kg**	**ND**	**ND**	**ND**	**ND**	**ND**	**0.013 J**	**ND**	**ND**	**ND**
	SEMIVOLATILES											
98-86-2	Acetophenone	NS	mg/Kg	ND	ND	ND	ND	ND	ND	ND	ND	ND
117-81-7	Bis(2-ethylhexyl)phthalate	NS	mg/Kg	ND	ND	ND	ND	ND	ND	ND	ND	ND
85-68-7	Butylbenzylphthalate	NS	mg/Kg	ND	ND	ND	ND	ND	ND	ND	ND	ND
86-74-8	Carbazole	NS	mg/Kg	ND	ND	ND	ND	ND	ND	ND	ND	ND
132-64-9	Dibenzofuran	NS	mg/Kg	ND	ND	ND	ND	ND	ND	ND	ND	ND
131-11-3	Dimethylphthalate	NS	mg/Kg	ND	ND	ND	ND	ND	ND	ND	ND	ND
108-95-2	Phenol	0.33	mg/Kg	ND	ND	ND	ND	ND	ND	ND	0.049 J	ND
	PAHs											
83-32-9	Acenaphthene	20	mg/Kg	ND	ND	ND	ND	ND	ND	ND	ND	ND
208-96-8	Acenaphthylene	100	mg/Kg	ND	ND	ND	ND	ND	ND	ND	ND	ND
120-12-7	Anthracene	100	mg/Kg	ND	ND	ND	ND	ND	ND	ND	ND	ND
120-12-7	Benzo(a)anthracene	1	mg/Kg	ND	ND	ND	ND	6.7 J	ND	2.9 J	ND	ND
50-32-8	Benzo(a)pyrene	1	mg/Kg	ND	ND	ND	ND	4.9 J	ND	2.8 J	ND	ND
205-99-2	Benzo(b)fluoranthene	1	mg/Kg	ND	ND	ND	ND	5.9 J	ND	3.2 J	0.051 J	ND
191-24-2	Benzo(g,h,i)perylene	100	mg/Kg	ND	ND	ND	ND	2.9 J	ND	ND	ND	ND
207-08-9	Benzo(k)fluoranthene	0.8	mg/Kg	ND	ND	ND	ND	2.7 J	ND	ND	ND	ND
218-01-9	Chrysene	1	mg/Kg	ND	ND	ND	ND	7.1 J	ND	3.1 J	0.046 J	ND
53-70-3	Dibenz(a,h)anthracene	0.33	mg/Kg	ND	ND	ND	ND	ND	ND	ND	ND	ND
206-44-0	Fluoranthene	100	mg/Kg	ND	ND	ND	ND	11 J	ND	4 J	0.052 J	0.38 J
86-73-7	Fluorene	30	mg/Kg	ND	ND	ND	ND	ND	ND	ND	ND	ND
193-39-5	Indeno(1,2,3-cd)pyrene	0.5	mg/Kg	ND	ND	ND	ND	2.2 J	ND	ND	ND	ND
91-57-6	2-Methylnaphthalene	NS	mg/Kg	ND	ND	ND	ND	ND	ND	ND	ND	ND
91-20-3	Naphthalene	12	mg/Kg	ND	ND	ND	ND	ND	ND	ND	0.11 J	ND
85-01-8	Phenanthrene	100	mg/Kg	ND	ND	ND	ND	4.7 J	ND	3.1 J	ND	ND
129-00-0	Pyrene	100	mg/Kg	ND	ND	ND	ND	13 J	ND	5 J	0.061 J	0.36 J
	Total PAHs	**NS**	**mg/Kg**	**ND**	**ND**	**ND**	**ND**	**61.1 J**	**ND**	**24.1 J**	**0.32 J**	**0.74 J**
	Total SVOCs	**NS**	**mg/Kg**	**ND**	**ND**	**ND**	**ND**	**61.1 J**	**ND**	**24.1 J**	**0.369 J**	**0.74 J**

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CAS NO.	COMPOUND	Objectives	UNITS:									
	PCBs											
53469-21-9	Aroclor-1242		mg/Kg	ND	ND	ND	ND	ND	ND	ND	ND	ND
12672-29-6	Aroclor-1248		mg/Kg	ND	ND	ND	ND	ND	ND	ND	ND	ND
11096-82-5	Aroclor-1260		mg/Kg	0.14	0.07	ND	0.52	0.057	ND	0.37	0.016 J	0.081 J
	Total PCBs	**0.1**	**mg/Kg**	**0.14**	**0.07**	**ND**	**0.52**	**0.057**	**ND**	**0.37**	**0.016 J**	**0.081 J**
	INORGANICS											
7429-90-5	Aluminum	NS	mg/Kg	7930	6950	7070	8750	8350	4680	10700	28100	11100
7440-36-0	Antimony	NS	mg/Kg	0.61 J	0.8 J	1.03 J	3.61	ND	ND	8.59	1.25 J	0.86 J
7440-38-2	Arsenic	13	mg/Kg	3.96	5.37	1.33	5.59	1.63	5.7	701	8.77	2.05
7440-39-3	Barium	350	mg/Kg	101	123	78.8	783	66.3	39.4	107	140	66.6
7440-41-7	Beryllium	7.2	mg/Kg	0.33	0.31	0.27 J	0.3 J	0.3	0.17 J	0.53	1.18	0.4
7440-43-9	Cadmium	2.5	mg/Kg	1.05	0.87	0.31	2.7	0.34	ND	1.26	2.64	0.63
7440-70-2	Calcium	NS	mg/Kg	13800	15400	14700	33100	13300	1340	11400	3560	6530
7440-47-3	Chromium	NS	mg/Kg	27.8	172	18	24.3	18.7	13.5	26.4	44.9	23.3
7440-48-4	Cobalt	NS	mg/Kg	7.23	6.1	5.86	9.04	6.76	5.4	7.86	15.5	8.37
7440-50-8	Copper	50	mg/Kg	41	41.5	36.4	1370	29.7	10.2	54.3	31.4	44.2
7439-89-6	Iron	NS	mg/Kg	16400	16900	13300	21200	15400	9850	22200	29900	20100
7439-92-1	Lead	63	mg/Kg	241	1170	145	2080	42.7	3.87	231	180	98.7
7439-95-4	Magnesium	NS	mg/Kg	8490	7500	5690	16800	8050	3050	8800	6640	5760
7439-96-5	Manganese	1600	mg/Kg	219	209	215	464	220	89.2	367	223	293
7439-97-6	Mercury	0.18	mg/Kg	0.08	0.308	0.669	1	0.125	0.027	0.145	0.11	0.049
7440-02-0	Nickel	30	mg/Kg	23.8	18.8	15.9	23.9	14.4	13.1	20.1	49.4	18.3
7440-09-7	Potassium	NS	mg/Kg	1510	1600	1560	1680	2020	1250	1490	1850	1970
7782-49-2	Selenium	3.9	mg/Kg	ND	ND	ND	ND	ND	0.52 J	3.32	4.65	2.07
7440-22-4	Silver	2	mg/Kg	ND	ND	ND	0.49 J	ND	ND	0.17 J	ND	ND
7440-23-5	Sodium	NS	mg/Kg	177	219	260	412	354	223	218	557	987
7440-28-0	Thallium	NS	mg/Kg	ND	ND	ND	ND	ND	ND	0.4 J	0.99 J	0.35 J
7440-62-2	Vanadium	NS	mg/Kg	29.6	31.6	34.3	42.2	31.2	17.5	32.7	58.2	35.3
7440-66-6	Zinc	109	mg/Kg	172	169	91.2	2210	151	28.2	316	586	138
57-12-5	Cyanide	27	mg/Kg	ND	ND	ND	1.35	ND	ND	ND	3.46 J	ND

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CAS NO.	COMPOUND	Objectives	UNITS:									
	VOLATILES											
67-64-1	Acetone	0.05	mg/Kg	ND	ND	ND	ND	ND	ND	ND	ND	ND
71-43-2	Benzene	0.06	mg/Kg	ND	0.0031 J	ND	ND	0.0029 J	ND	ND	ND	ND
106-46-7	1,4-Dichlorobenzene	1.8	mg/Kg	ND	R	ND	R	R	ND	ND	ND	ND
100-41-4	Ethyl Benzene	1	mg/Kg	ND	ND	ND	ND	ND	ND	ND	0.0056 J	ND
98-82-8	Isopropylbenzene	NS	mg/Kg	ND	R	ND	R	R	ND	0.0095 J	0.24 J	ND
1634-04-4	Methyl tert-butyl Ether	0.93	mg/Kg	ND	ND	ND	ND	ND	ND	ND	ND	ND
108-87-2	Methylcyclohexane	NS	mg/Kg	ND	ND	ND	ND	ND	ND	0.0034 J	0.0057 J	ND
75-09-2	Methylene Chloride	0.05	mg/Kg	ND	ND	ND	ND	ND	ND	ND	ND	ND
108-88-3	Toluene	0.7	mg/Kg	ND	ND	ND	ND	0.0056 J	ND	ND	ND	ND
136777-61-2	m/p-Xylenes	0.26	mg/Kg	ND	ND	ND	ND	ND	ND	ND	0.048 J	ND
1330-20-7	o-Xylene	0.26	mg/Kg	ND	ND	ND	ND	ND	ND	ND	0.019 J	ND
	Total VOCs	**NS**	**mg/Kg**	**ND**	**0.0031 J**	**ND**	**ND**	**0.0085 J**	**ND**	**0.0129**	**0.3183 J**	**ND**
	SEMIVOLATILES											
98-86-2	Acetophenone	NS	mg/Kg	ND	ND	ND	ND	0.057 J	ND	ND	ND	ND
117-81-7	Bis(2-ethylhexyl)phthalate	NS	mg/Kg	ND	ND	ND	ND	ND	ND	ND	ND	ND
85-68-7	Butylbenzylphthalate	NS	mg/Kg	ND	ND	ND	ND	ND	ND	ND	ND	ND
86-74-8	Carbazole	NS	mg/Kg	ND	ND	ND	ND	ND	ND	ND	ND	ND
132-64-9	Dibenzofuran	NS	mg/Kg	ND	ND	ND	ND	ND	ND	ND	ND	ND
131-11-3	Dimethylphthalate	NS	mg/Kg	ND	ND	ND	ND	ND	0.083 J	0.085 J	0.44 J	1 J
108-95-2	Phenol	0.33	mg/Kg	0.042 J	ND	ND	ND	ND	ND	ND	ND	ND
	PAHs											
83-32-9	Acenaphthene	20	mg/Kg	ND	ND	ND	ND	ND	ND	ND	ND	ND
208-96-8	Acenaphthylene	100	mg/Kg	ND	ND	ND	0.05 J	0.078 J	ND	ND	ND	ND
120-12-7	Anthracene	100	mg/Kg	ND	ND	ND	0.046 J	ND	ND	ND	ND	ND
120-12-7	Benzo(a)anthracene	1	mg/Kg	ND	ND	ND	0.089 J	0.096 J	ND	ND	ND	0.55 J
50-32-8	Benzo(a)pyrene	1	mg/Kg	ND	ND	ND	0.071 J	0.092 J	ND	ND	ND	ND
205-99-2	Benzo(b)fluoranthene	1	mg/Kg	ND	0.22 J	ND	0.096 J	0.14 J	ND	ND	ND	0.63 J
191-24-2	Benzo(g,h,i)perylene	100	mg/Kg	ND	ND	ND	0.061 J	0.12 J	ND	ND	ND	ND
207-08-9	Benzo(k)fluoranthene	0.8	mg/Kg	ND	ND	ND	ND	0.047 J	ND	ND	ND	ND
218-01-9	Chrysene	1	mg/Kg	ND	ND	ND	0.1 J	0.1 J	ND	ND	ND	0.58 J
53-70-3	Dibenz(a,h)anthracene	0.33	mg/Kg	ND	ND	ND	ND	ND	ND	ND	ND	ND
206-44-0	Fluoranthene	100	mg/Kg	ND	0.37 J	ND	0.12 J	0.097 J	ND	ND	ND	0.79 J
86-73-7	Fluorene	30	mg/Kg	ND	ND	ND	0.051 J	ND	ND	ND	ND	ND
193-39-5	Indeno(1,2,3-cd)pyrene	0.5	mg/Kg	ND	ND	ND	0.048 J	0.087 J	ND	ND	ND	ND
91-57-6	2-Methylnaphthalene	NS	mg/Kg	ND	ND	ND	0.11 J	ND	ND	0.077 J	ND	ND
91-20-3	Naphthalene	12	mg/Kg	ND	ND	ND	0.12 J	0.072 J	ND	0.31 J	ND	ND
85-01-8	Phenanthrene	100	mg/Kg	ND	0.23 J	ND	0.1 J	0.073 J	ND	ND	ND	ND
129-00-0	Pyrene	100	mg/Kg	ND	0.37 J	ND	0.17 J	0.13 J	ND	ND	ND	1.2 J
	Total PAHs	**NS**	**mg/Kg**	**ND**	**1.19 J**	**ND**	**1.232 J**	**1.132 J**	**ND**	**0.387 J**	**ND**	**3.75 J**
	Total SVOCs	**NS**	**mg/Kg**	**0.042 J**	**1.19 J**	**ND**	**1.232 J**	**1.189 J**	**0.083 J**	**0.472 J**	**0.44 J**	**4.75 J**

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(5) Shaded values exceed 6NYCRR Part 375 Unrestricted Use Soil Cleanup Objectives
(6) NA indicates compound was not analyzed

Table 1
2009 Site Characterization Soil Analytical Summary: Detected Compounds
Draft Site Management Plan
Saw Mill River Station Site, Yonkers, NY

Consolidated Edison Saw Mill River Station Site Validated Soil Analytical Data Detected Compound Summary		Unrestricted Use	Sample ID: Lab Sample Id: Depth: Source: SDG: Matrix: Sampled:	TP-1E (10.5') A5536-03 10.5' Chemtech A5536 SOIL 12/10/2009	TP-2 (6.5') A4840-01 6.5' Chemtech A4840 SOIL 10/19/2009	TP-2 (8.5') A4840-02 8.5' Chemtech A4840 SOIL 10/19/2009	TP-3 (9.5') A4840-04 9.5' Chemtech A4840 SOIL 10/20/2009	TP-3 (12') A4840-05 12' Chemtech A4840 SOIL 10/20/2009	TP-4B (4') A5072-01 4' Chemtech A5072 SOIL 11/9/2009	TP-4B (8') A5072-02 8' Chemtech A5072 SOIL 11/9/2009	Dup of TP-4B (8') TP-104B (8') A5072-05 8' Chemtech A5072 SOIL 11/9/2009	TP-4B (DP) A5072-07 Chemtech A5072 SOIL 11/9/2009
CAS NO.	COMPOUND	Objectives	UNITS:									
	PCBs											
53469-21-9	Aroclor-1242		mg/Kg	ND	0.41	ND	ND	ND	ND	ND	ND	ND
12672-29-6	Aroclor-1248		mg/Kg	ND	ND	ND	0.033 J	ND	ND	ND	ND	ND
11096-82-5	Aroclor-1260		mg/Kg	ND	ND	ND	ND	ND	ND	ND	ND	0.087 J
	Total PCBs	**0.1**	**mg/Kg**	**ND**	**0.41**	**ND**	**0.033 J**	**ND**	**ND**	**ND**	**ND**	**0.087 J**
	INORGANICS											
7429-90-5	Aluminum	NS	mg/Kg	16200	7800	8590	11700	10500	10300	9570	8810	2860
7440-36-0	Antimony	NS	mg/Kg	0.84 J	0.84 J	ND	0.51 J	0.92 J	ND	ND	ND	1.32 J
7440-38-2	Arsenic	13	mg/Kg	0.97 J	4.49	1.78	3.56	18.3	ND	2.58	2.56	43.5
7440-39-3	Barium	350	mg/Kg	116	82.8	53.9	50.5	89.5	ND	ND	ND	ND
7440-41-7	Beryllium	7.2	mg/Kg	0.59	0.41	0.38	0.46	0.39	0.34	0.39	0.36	0.18 J
7440-43-9	Cadmium	2.5	mg/Kg	0.48	2.44	0.66	0.85	1.27	0.42	0.34 J	0.39	4.47
7440-70-2	Calcium	NS	mg/Kg	1730	2300	1970	1080	1970	ND	ND	ND	124000
7440-47-3	Chromium	NS	mg/Kg	38.2	19.3	20.2	20.6	23.8	21.2	25.1	21.5	13.4
7440-48-4	Cobalt	NS	mg/Kg	15.7	8.31	7.43	8.03	6.99	13.1	8.77	8.12	2.35
7440-50-8	Copper	50	mg/Kg	16.2	31.1	20.9	24	39	31.9	21.9	18.9	44.8
7439-89-6	Iron	NS	mg/Kg	19800	16300	16000	18500	28600	13200	15100	13700	14300
7439-92-1	Lead	63	mg/Kg	9.92	405	128	81.8	501	8.33	26.1	31.6	192
7439-95-4	Magnesium	NS	mg/Kg	6670	2950	3770	2890	3610	3650	4590	4380	65400
7439-96-5	Manganese	1600	mg/Kg	238	140	307	128	140	156	175	178	166
7439-97-6	Mercury	0.18	mg/Kg	0.069	0.169	0.081	0.221	0.217	0.024	0.044	0.065	5.3
7440-02-0	Nickel	30	mg/Kg	27.3	16.3	17.4	15.1	17.5	21.9	18.6	16.5	16.9
7440-09-7	Potassium	NS	mg/Kg	2640	934	1000	696	1560	ND	ND	ND	ND
7782-49-2	Selenium	3.9	mg/Kg	1.96	ND	ND	0.44 J	1.09	ND	1.03 J	0.63 J	2.24
7440-22-4	Silver	2	mg/Kg	ND	ND	ND	ND	ND	ND	ND	ND	ND
7440-23-5	Sodium	NS	mg/Kg	579	393	351	262	317	ND	ND	ND	ND
7440-28-0	Thallium	NS	mg/Kg	0.51 J	ND	ND	0.29 J	0.56 J	ND	ND	ND	ND
7440-62-2	Vanadium	NS	mg/Kg	35.2	25.6	22.9	25.6	32.1	23.4	34.5	26.9	43
7440-66-6	Zinc	109	mg/Kg	142	439	110	73.6	128	42.6	55.4	51.7	716
57-12-5	Cyanide	27	mg/Kg	ND	6.88	0.654	ND	ND	ND	ND	ND	1.57

Notes:
(1) 6NYCRR Part 375 Environmental Remediation Programs (December 14, 2006)
(2) -- indicates no cleanup objective or background level is available
(3) ND indicates compound was not detected.
(4) J indicates an estimated concentration.
(5) Shaded values exceed 6NYCRR Part 375 Unrestricted Use Soil Cleanup Objectives
(6) NA indicates compound was not analyzed

Table 1
2009 Site Characterization Soil Analytical Summary: Detected Compounds
Draft Site Management Plan
Saw Mill River Station Site, Yonkers, NY

Consolidated Edison Saw Mill River Station Site Validated Soil Analytical Data Detected Compound Summary		Unrestricted Use	Sample ID: Lab Sample Id: Depth: Source: SDG: Matrix: Sampled:	TP-5 (2.5') A4840-06 2.5' Chemtech A4840 SOIL 10/22/2009
CAS NO.	COMPOUND	Objectives	UNITS:	
	VOLATILES			
67-64-1	Acetone	0.05	mg/Kg	ND
71-43-2	Benzene	0.06	mg/Kg	ND
106-46-7	1,4-Dichlorobenzene	1.8	mg/Kg	R
100-41-4	Ethyl Benzene	1	mg/Kg	ND
98-82-8	Isopropylbenzene	NS	mg/Kg	R
1634-04-4	Methyl tert-butyl Ether	0.93	mg/Kg	ND
108-87-2	Methylcyclohexane	NS	mg/Kg	ND
75-09-2	Methylene Chloride	0.05	mg/Kg	ND
108-88-3	Toluene	0.7	mg/Kg	ND
136777-61-2	m/p-Xylenes	0.26	mg/Kg	ND
1330-20-7	o-Xylene	0.26	mg/Kg	ND
	Total VOCs	**NS**	**mg/Kg**	**ND**
	SEMIVOLATILES			
98-86-2	Acetophenone	NS	mg/Kg	ND
117-81-7	Bis(2-ethylhexyl)phthalate	NS	mg/Kg	ND
85-68-7	Butylbenzylphthalate	NS	mg/Kg	ND
86-74-8	Carbazole	NS	mg/Kg	ND
132-64-9	Dibenzofuran	NS	mg/Kg	ND
131-11-3	Dimethylphthalate	NS	mg/Kg	ND
108-95-2	Phenol	0.33	mg/Kg	ND
	PAHs			
83-32-9	Acenaphthene	20	mg/Kg	ND
208-96-8	Acenaphthylene	100	mg/Kg	0.086 J
120-12-7	Anthracene	100	mg/Kg	0.075 J
120-12-7	Benzo(a)anthracene	1	mg/Kg	0.26 J
50-32-8	Benzo(a)pyrene	1	mg/Kg	0.25 J
205-99-2	Benzo(b)fluoranthene	1	mg/Kg	0.36 J
191-24-2	Benzo(g,h,i)perylene	100	mg/Kg	0.2 J
207-08-9	Benzo(k)fluoranthene	0.8	mg/Kg	0.13 J
218-01-9	Chrysene	1	mg/Kg	0.27 J
53-70-3	Dibenz(a,h)anthracene	0.33	mg/Kg	0.049 J
206-44-0	Fluoranthene	100	mg/Kg	0.48
86-73-7	Fluorene	30	mg/Kg	ND
193-39-5	Indeno(1,2,3-cd)pyrene	0.5	mg/Kg	0.16 J
91-57-6	2-Methylnaphthalene	NS	mg/Kg	0.044 J
91-20-3	Naphthalene	12	mg/Kg	0.086 J
85-01-8	Phenanthrene	100	mg/Kg	0.31 J
129-00-0	Pyrene	100	mg/Kg	0.51
	Total PAHs	**NS**	**mg/Kg**	**3.27 J**
	Total SVOCs	**NS**	**mg/Kg**	**3.27 J**

Notes:
(1) 6NYCRR Part 375 Environmental Remediation Programs (December 14, 2006)
(2) -- indicates no cleanup objective or background level is available
(3) ND indicates compound was not detected.
(4) J indicates an estimated concentration.
(5) Shaded values exceed 6NYCRR Part 375 Unrestricted Use Soil Cleanup Objectives
(6) NA indicates compound was not analyzed

Table 1
2009 Site Characterization Soil Analytical Summary: Detected Compounds
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Consolidated Edison Saw Mill River Station Site Validated Soil Analytical Data Detected Compound Summary		Unrestricted Use	Sample ID: Lab Sample Id: Depth: Source: SDG: Matrix: Sampled:	TP-5 (2.5') A4840-06 2.5' Chemtech A4840 SOIL 10/22/2009
CAS NO.	COMPOUND	Objectives	UNITS:	
	PCBs			
53469-21-9	Aroclor-1242		mg/Kg	ND
12672-29-6	Aroclor-1248		mg/Kg	ND
11096-82-5	Aroclor-1260		mg/Kg	ND
	Total PCBs	**0.1**	**mg/Kg**	**ND**
	INORGANICS			
7429-90-5	Aluminum	NS	mg/Kg	7570
7440-36-0	Antimony	NS	mg/Kg	0.67 J
7440-38-2	Arsenic	13	mg/Kg	24.3
7440-39-3	Barium	350	mg/Kg	91
7440-41-7	Beryllium	7.2	mg/Kg	0.44
7440-43-9	Cadmium	2.5	mg/Kg	1.33
7440-70-2	Calcium	NS	mg/Kg	13900
7440-47-3	Chromium	NS	mg/Kg	20.9
7440-48-4	Cobalt	NS	mg/Kg	6.87
7440-50-8	Copper	50	mg/Kg	54.9
7439-89-6	Iron	NS	mg/Kg	17400
7439-92-1	Lead	63	mg/Kg	188
7439-95-4	Magnesium	NS	mg/Kg	5730
7439-96-5	Manganese	1600	mg/Kg	171
7439-97-6	Mercury	0.18	mg/Kg	3.8
7440-02-0	Nickel	30	mg/Kg	15.8
7440-09-7	Potassium	NS	mg/Kg	1390
7782-49-2	Selenium	3.9	mg/Kg	0.61 J
7440-22-4	Silver	2	mg/Kg	ND
7440-23-5	Sodium	NS	mg/Kg	457
7440-28-0	Thallium	NS	mg/Kg	ND
7440-62-2	Vanadium	NS	mg/Kg	33.3
7440-66-6	Zinc	109	mg/Kg	238
57-12-5	Cyanide	27	mg/Kg	1.57

Notes:
(1) 6NYCRR Part 375 Environmental Remediation Programs (December 14, 2006)
(2) -- indicates no cleanup objective or background level is available
(3) ND indicates compound was not detected.
(4) J indicates an estimated concentration.
(5) Shaded values exceed 6NYCRR Part 375 Unrestricted Use Soil Cleanup Objectives
(6) NA indicates compound was not analyzed

Table 2
2009 Site Characterization Groundwater Analytical Summary: Detected Compounds
Draft Site Management Plan
Saw Mill River Station Site, Yonkers, NY

Consolidated Edison Saw Mill River Site Validated Groundwater Analytical Data Detected Compound Summary		NYSDEC Class GA Groundwater Standards/ Guidance Values [1]	Location ID: Lab Sample ID: Source: SDG: Matrix: Sampled:	MW-2 A5435-01 Chemtech A5435 GW 12/3/2009	0MW-3 A5435-06 Chemtech A5435 GW 12/4/2009	MW-3 A5435-09 Chemtech A5435 GW 12/7/2009	Dup of MW-103 MW-103 A5435-12 Chemtech A5435 GW 12/7/2009	MW-4 A5435-04 Chemtech A5435 GW 12/4/2009	MW-5 A5435-03 Chemtech A5435 GW 12/3/2009	MW-6 A5435-02 Chemtech A5435 GW 12/3/2009	MW-7 A5435-05 Chemtech A5435 GW 12/4/2009
CAS NO.	COMPOUND		UNITS								
	VOLATILES										
71-43-2	Benzene	1	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
156-59-2	Cis-1,2-Dichloroethene	5	ug/l	ND	2.2 J	ND	ND	ND	ND	ND	ND
100-41-4	Ethylbenzene	5	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
95-47-6	o-Xylene (1,2-Dimethylbenzene	5	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
1634-04-4	Tert-Butyl Methyl Ether	10 (G)	ug/l	ND	ND	2.6 J	2.5 J	ND	ND	ND	ND
127-18-4	Tetrachloroethene	5	ug/l	ND	24	ND	ND	ND	ND	ND	ND
108-88-3	Toluene	5	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
79-01-6	Trichloroethene	5	ug/l	ND	2.1 J	ND	ND	ND	ND	ND	ND
XYLMP	m,p-Xylene	5	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
	Total VOCs	--	**ug/l**	**ND**	**28.3**	**2.6**	**2.5**	**ND**	**ND**	**ND**	**ND**
	SEMIVOLATILES										
100-52-7	Benzaldehyde	--	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
87-86-5	Pentachlorophenol	1	ug/l	8.6 J	ND	ND	ND	ND	ND	ND	ND
	PCBs										
	None Detected		ug/l								
	METALS										
7429-90-5	Aluminum	--	ug/l	2450	396	180	201	355	37.5 J	4400	1080
7440-38-2	Arsenic	25	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
7440-39-3	Barium	1000	ug/l	184	151	588	568	332	180	160	223
7440-43-9	Cadmium	5	ug/l	ND	0.97 J	ND	ND	ND	ND	ND	ND
7440-70-2	Calcium	--	ug/l	61600	82100	150000	145000	110000	120000	60100	99400
7440-47-3	Chromium, total	50	ug/l	5.86	1.85 J	ND	ND	ND	ND	6.24	ND
7440-48-4	Cobalt	--	ug/l	ND	ND	ND	ND	ND	ND	9.47 J	ND
7440-50-8	Copper	200	ug/l	16.2	7.7 J	ND	ND	ND	ND	14.7	ND
7439-89-6	Iron	300	ug/l	8510	836	11000	10500	472	1100	6370	1660
7439-92-1	Lead	25	ug/l	25.8	9.69	7.52	9.82	7.08	10.5	102	10.7
7439-95-4	Magnesium	35000 (G)	ug/l	11000	25700	31100	30000	39800	16600	15900	20800
7439-96-5	Manganese	300	ug/l	473	9640	3130	3050	1030	272	2470	935
7439-97-6	Mercury	0.7	ug/l	0.2 J	ND	ND	ND	ND	ND	0.21	ND
7440-02-0	Nickel	100	ug/l	5.11 J	72.5	ND	ND	ND	ND	14.2 J	5.32 J
7440-09-7	Potassium	--	ug/l	6420	3270	13900	13600	8390	13500	8830	8000
7440-23-5	Sodium	20000	ug/l	231000	116000	399000	389000	228000	394000	596000	1300000
7440-28-0	Thallium	0.5	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
7440-62-2	Vanadium	--	ug/l	7.76 J	ND	ND	ND	ND	ND	8.87 J	ND
7440-66-6	Zinc	2000 (G)	ug/l	56.1	18 J	13.1 J	12.3 J	9.45 J	7.65 J	107	8.04 J
	OTHER										
57-12-5	Cyanide	200	ug/l	39 J	ND	328 J	346 J	20 J	17 J	ND	11 J
57-12-5	Available Cyanide	--	ug/l	0.7 U	1.1 J	1.4 J		1.6 J	2.5	2 U	1 J

Notes:
(1) NYSDEC TOGS 1.1.1 Class GA Ambient Water Quality Standards and Guidance Values (October 1998)

	Indicates concentration exceeds standard or guidance value.
(G)	Indicates guidance value.
--	No standard or guidance value available.
ND	Indicates compound was not detected.
J	Indicates an estimated concentration.
R	Rejected during data validation process.
ug/l	Micrograms per liter

Table 2
2009 Site Characterization Groundwater Analytical Summary: Detected Compounds
Draft Site Management Plan
Saw Mill River Station Site, Yonkers, NY

Consolidated Edison Saw Mill River Site Validated Groundwater Analytical Data Detected Compound Summary		NYSDEC Class GA Groundwater Standards/ Guidance Values [1]	Location ID: Lab Sample ID: Source: SDG: Matrix: Sampled:	MW-8 A5435-07 Chemtech A5435 GW 12/4/2009	MW-9 C3158-06 Chemtech C3158 GW 7/27/2011	MW-10 C3158-02 Chemtech C3158 GW 7/27/2011	MW-11 C3158-03 Chemtech C3158 GW 7/27/2011	MW-12 C3158-04 Chemtech C3158 GW 7/27/2011	Dup of MW-12 MW-112 C3158-05 Chemtech C3158 GW 7/27/2011
CAS NO.	COMPOUND		UNITS						
	VOLATILES								
71-43-2	Benzene	1	ug/l	6.2	4.8 J	ND	ND	ND	ND
156-59-2	Cis-1,2-Dichloroethene	5	ug/l	ND	ND	ND	ND	ND	ND
100-41-4	Ethylbenzene	5	ug/l	ND	0.86 J	ND	ND	ND	ND
95-47-6	o-Xylene (1,2-Dimethylbenzene	5	ug/l	ND	1 J	ND	ND	ND	ND
1634-04-4	Tert-Butyl Methyl Ether	10 (G)	ug/l	3 J	2.2 J	ND	0.51 J	ND	ND
127-18-4	Tetrachloroethene	5	ug/l	ND	ND	ND	ND	ND	ND
108-88-3	Toluene	5	ug/l	ND	1 J	ND	ND	ND	ND
79-01-6	Trichloroethene	5	ug/l	ND	ND	ND	ND	ND	ND
XYLMP	m,p-Xylene	5	ug/l	ND	2.3 J	ND	ND	ND	ND
	Total VOCs	--	**ug/l**	**9.2**	**12.16**	**ND**	**0.51**	**ND**	**ND**
	SEMIVOLATILES								
100-52-7	Benzaldehyde	--	ug/l	ND	R	R	R	R	R
87-86-5	Pentachlorophenol	1	ug/l	ND	ND	ND	ND	ND	ND
	PCBs								
	None Detected		ug/l						
	METALS								
7429-90-5	Aluminum	--	ug/l	251	439	39.3 J	469	474	355
7440-38-2	Arsenic	25	ug/l	ND	60.6	4.26 J	ND	17	14
7440-39-3	Barium	1000	ug/l	240	313	140	239	191	195
7440-43-9	Cadmium	5	ug/l	ND	ND	ND	ND	ND	ND
7440-70-2	Calcium	--	ug/l	133000	145000	94100	97600	96800	99700
7440-47-3	Chromium, total	50	ug/l	ND	2.07 J	ND	2.73 J	1.99 J	1.82 J
7440-48-4	Cobalt	--	ug/l	ND	ND	ND	ND	ND	ND
7440-50-8	Copper	200	ug/l	ND	ND	ND	ND	ND	ND
7439-89-6	Iron	300	ug/l	5280	3110	785	933	13600	14000
7439-92-1	Lead	25	ug/l	9.54	ND	ND	4.65 J	4.2 J	4.8 J
7439-95-4	Magnesium	35000 (G)	ug/l	31200	25900	19900	18600	13100	13300
7439-96-5	Manganese	300	ug/l	705	2160	251	10100	2820	2920
7439-97-6	Mercury	0.7	ug/l	ND	ND	ND	ND	ND	ND
7440-02-0	Nickel	100	ug/l	ND	8.54 J	ND	12.7 J	4.28 J	ND
7440-09-7	Potassium	--	ug/l	15200	14900	3770	8360	13200	13600
7440-23-5	Sodium	20000	ug/l	218000	314000	309000	420000	330000	341000
7440-28-0	Thallium	0.5	ug/l	ND	ND	6.38 J	6.32 J	ND	ND
7440-62-2	Vanadium	--	ug/l	ND	ND	ND	ND	ND	ND
7440-66-6	Zinc	2000 (G)	ug/l	7.94 J	7.14 J	13.8 J	10.6 J	11.1 J	11 J
	OTHER								
57-12-5	Cyanide	200	ug/l	63 J	16	ND	9	43	39
57-12-5	Available Cyanide	--	ug/l	1.2 J	R	R	R	R	R

Notes:
(1) NYSDEC TOGS 1.1.1 Class GA Ambient Water Quality Standards and Guidance Valu
Indicates concentration exceeds standard or guidance value.
(G) Indicates guidance value.
-- No standard or guidance value available.
ND Indicates compound was not detected.
J Indicates an estimated concentration.
R Rejected during data validation process.
ug/l Micrograms per liter

Table 3
Summary of Analytical Detections for Soil Samples

Con Ed - Saw Mill River Validated Soil Analytical Data August 2014		Unrestricted Use Soil Cleanup Objectives [1]	Location ID:	HCSI-3(0.5-1)	HCSI-5(0.5-1)	SBSI-1(0.5-1.5)	SBSI-1(10-12)	SBSI-2(0.5-1.5)	SBSI-2(10-12)	SBSI-3(0.5-1.5)	Dup of SBSI-3(0.5-1.5)-20140618 SBSI-3(0.5-1.5)	SBSI-4(0.5-1.5)
			Sample ID:	HCSI-3(0.5-1)-20140625	HCSI-5(0.5-1)-20140625	SBSI-1(0.5-1.5)-20140618	SBSI-1(10-12)-20140619	SBSI-2(0.5-1.5)-20140618	SBSI-2(10-12)-20140619	SBSI-3(0.5-1.5)-20140618	SBSI-13(0.5-1.5)-20140618	SBSI-4(0.5-1.5)-20140618
			Lab Sample Id:	F3006-02	F3006-01	F2837-05	F2837-11	F2837-09	F2837-10	F2837-12	F2837-07	F2837-06
			Depth:	0.5 - 1.0	0.5 - 1.0	0.5 - 1.5	10 - 12	0.5 - 1.0	10 - 12	0.5 - 1.0	0.5 - 1.5	0.5 - 1.5
			Source:	CTECH	CTECH	CTECH	CTECH	CTECH	CTECH	CTECH	CTECH	CTECH
			SDG:	F3006	F3006	F2837	F2837	F2837	F2837	F2837	F2837	F2837
			Matrix:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
			Sampled:	6/25/2014	6/25/2014	6/18/2014	6/19/2014	6/18/2014	6/19/2014	6/18/2014	6/18/2014	6/18/2014
CAS NO.	COMPOUND		UNITS:									
	VOLATILES											
123-91-1	1,4-DIOXANE (P-DIOXANE)	100	ug/kg	R	R	R	R	R	R	R	R	R
67-64-1	ACETONE	50	ug/kg	ND	ND	**96.8**	ND	ND	ND	ND	ND	ND
98-82-8	ISOPROPYLBENZENE (CUMENE)	NS	ug/kg	R	ND	ND	ND	ND	ND	ND	ND	ND
75-09-2	METHYLENE CHLORIDE	50	ug/kg	ND	ND	1.4 J	ND	ND	ND	ND	ND	ND
	CVOCs											
79-34-5	1,1,2,2-TETRACHLOROETHANE	NS	ug/kg	R	ND	ND	ND	ND	ND	ND	ND	ND
87-61-6	1,2,3-TRICHLOROBENZENE	NS	ug/kg	R	ND	ND	ND	ND	ND	ND	ND	ND
120-82-1	1,2,4-TRICHLOROBENZENE	NS	ug/kg	R	ND	ND	ND	ND	ND	ND	ND	ND
95-50-1	1,2-DICHLOROBENZENE	1100	ug/kg	R	ND	ND	ND	ND	ND	ND	ND	ND
541-73-1	1,3-DICHLOROBENZENE	2400	ug/kg	R	ND	ND	ND	ND	ND	ND	ND	ND
106-46-7	1,4-DICHLOROBENZENE	1800	ug/kg	R	ND	ND	ND	ND	ND	ND	ND	ND
	Total VOCs		ug/kg	---	---	98.2	---	---	---	---	---	---
	SEMIVOLATILES											
51-28-5	2,4-DINITROPHENOL	NS	ug/kg	ND	ND	R	ND	R	ND	R	R	R
534-52-1	4,6-DINITRO-2-METHYLPHENOL	NS	ug/kg	ND	ND	R	ND	R	ND	R	R	R
85-68-7	BENZYL BUTYL PHTHALATE	NS	ug/kg	ND	ND	250 J	ND	R	ND	R	R	R
117-81-7	BIS(2-ETHYLHEXYL) PHTHALATE	NS	ug/kg	ND	ND	210 J	ND	R	ND	R	R	R
131-11-3	DIMETHYL PHTHALATE	NS	ug/kg	840	700 J	890	860	640 J	980	580	840	630
117-84-0	DI-N-OCTYLPHTHALATE	NS	ug/kg	ND	ND	R	ND	R	ND	R	R	R
	PAHs											
56-55-3	BENZO(A)ANTHRACENE	1000	ug/kg	ND	ND	ND	ND	ND	ND	ND	150 J	ND
50-32-8	BENZO(A)PYRENE	1000	ug/kg	ND	ND	ND	ND	ND	ND	ND	130 J	ND
205-99-2	BENZO(B)FLUORANTHENE	1000	ug/kg	ND	ND	83.8 J	ND	ND	ND	ND	200 J	ND
191-24-2	BENZO(G,H,I)PERYLENE	100000	ug/kg	ND	ND	ND	ND	ND	ND	ND	98.8 J	ND
218-01-9	CHRYSENE	1000	ug/kg	ND	ND	ND	ND	ND	ND	ND	150 J	ND
206-44-0	FLUORANTHENE	100000	ug/kg	ND	300 J	110 J	ND	ND	ND	83.7 J	350 J	80.9 J
193-39-5	INDENO(1,2,3-C,D)PYRENE	500	ug/kg	ND	ND	ND	ND	ND	ND	ND	83.7 J	ND
85-01-8	PHENANTHRENE	100000	ug/kg	ND	ND	ND	ND	ND	ND	ND	250 J	ND
129-00-0	PYRENE	100000	ug/kg	ND	300 J	110 J	ND	ND	ND	76.8 J	260 J	83.1 J
	Total PAHs		ug/kg	ND	600	304	ND	ND	ND	161	1673	164
	Total SVOCs		ug/kg	840	1300	1654	860	640	980	741	2513	794
	OTHER											
PETROLEUM HYDROCARBONS	PETROLEUM HYDROCARBONS	NS	ug/kg	13120	292863	21093		14142		131196	122719	120030

Notes:
(1) 6NYCRR Part 375 Environmental Remediation Programs (December 14, 2006)

	Indicates concentration exceed 6NYCRR Part 375 Unrestricted Use Soil Cleanup Objectives.
NS	Indicates no cleanup objective or background level is available.
ND	Indicates compound was not detected.
J	Indicates an estimated concentration.
R	Indicates data are rejected.
ug/kg	Micrograms per kilogram

Table 4

Summary of Detections for Groundwater Samples

					Dup of MW-9-20140618
Con Ed - Saw Mill River Validated Water Analytical Data August 2014		NYSDEC Class GA Groundwater Standards/Guidance Values	Location ID: Sample ID: Lab Sample Id: Source: SDG: Matrix: Sampled:	MW-9 MW-9-20140618 F2837-01 CTECH F2837 GROUNDWATER 6/18/2014	MW-9 MW-109-20140618 F2837-04 CTECH F2837 GROUNDWATER 6/18/2014
CAS NO.	COMPOUND		UNITS:		
	VOLATILES				
123-91-1	1,4-DIOXANE (P-DIOXANE)	NS	ug/l	R	R
75-15-0	CARBON DISULFIDE	NS	ug/l	ND	ND
1634-04-4	TERT-BUTYL METHYL ETHER	10	ug/l	ND	1 J
	BTEX				
100-41-4	ETHYLBENZENE	5	ug/l	0.75 J	0.73 J
XYLMP	M,P-XYLENE (SUM OF ISOMERS)	5	ug/l	0.77 J	0.77 J
95-47-6	O-XYLENE (1,2-DIMETHYLBENZENE)	5	ug/l	ND	0.33 J
	Total VOCs		ug/l	1.5	2.8
	SEMIVOLATILES				
131-11-3	DIMETHYL PHTHALATE	50 (G)	ug/l	6.7 J	5.9 J

Notes:

	Indicates concentration exceeds standard or guidance value.
(G)	Indicates guidance value.
NS	No standard or guidance value available.
ND	Indicates compound was not detected.
J	Indicates an estimated concentration.
R	Indicates data are rejected.
ug/l	Micrograms per liter

Table 5
Soil Type and NAPL Mobility Assessment

LOCATION	SAMPLE ID	USCS GROUP SYMBOL (ASTM D2487)	USCS GROUP NAME (ASTM D2487)	GRADATION ANALYSIS (ASTM D422) SIEVE SIZES (% FINER)																NAPL TYPE	TPH (mg/kg)	C^{res} (mg/kg)	Mobility Expected?
				Gravel								Sand											
				Coarse					Fine			Coarse	Medium		Fine								
				3"	2"	1.5"	1.0"	3/4"	1/2"	3/8"	#4	#10	#20	#40	#60	#100	#140	#200					
				75 mm	50	37.5	25	19	12.5	9.5	4.75	2	850µm	425	250	150	105	75					
SBSI-1	SBSI-1 (0.5-1.5)	SP	Poorly-graded sand with gravel	100	100	100	100	100	100	80.6	68.6	52.0	37.1	20.6	12.8	8.1	5.8	4.0		Lubricating Oil	21.1	3879-7742	No
SBSI-2	SBSI-2 (0.5-1.5)	SP	Poorly-graded sand with gravel	100	100	100	100	100	100	63.8	53.6	39.9	26.7	16.1	10.0	5.2	3.8	2.4		Lubricating Oil	14.1	3879-7743	No
SBSI-3	SBSI-3 (0.5-1.5)	SP	Poorly-graded sand	100	100	100	100	100	100	86.7	70.0	51.9	32.1	19.0	11.5	6.2	4.5	2.6		Lubricating Oil	131.2	3879-7744	No
SBSI-4	SBSI-4 (0.5-1.5)	SP	Poorly-graded sand with gravel	100	100	100	100	100	100	62.6	51.3	40.1	27.5	19.0	12.9	7.1	4.4	2.6		Lubricating Oil	120.0	3879-7745	No
HCSI-3	HCSI-3 (0.5-1)	SP	Poorly-graded sand	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		Lubricating Oil	13.1	3879-7746	No
HCSI-5	HCSI-5 (0.5-1)	SP	Poorly-graded sand	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		Lubricating Oil	292.9	3879-7747	No

Notes:
1) C_{res} range is from Brost (2000), Table 2, assumed middle distillate for 'coarse sand and gravel' and 'medium to coarse' sand.
2) - indicates a sieve analysis was not performed. Sieve analysis was only performed on the shallow soil samples from the four borings (SBSI-1 through SBSI-4).

Table 9
Criteria for On-Site Re-use of Excavated Material
Draft Site Management Plan
Saw Mill River Station Site, Yonkers, NY

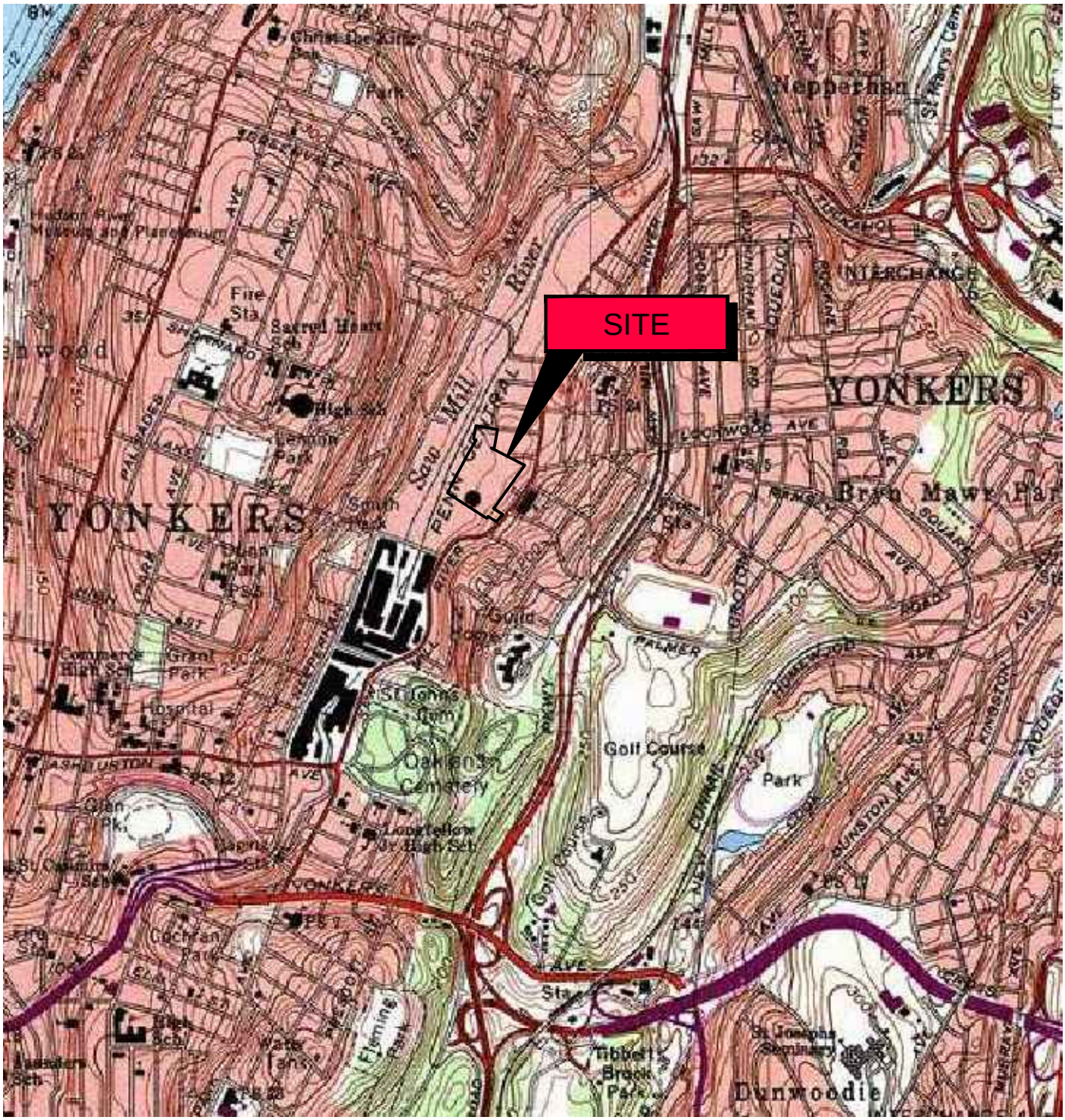
CAS No.	Compound	USCO (1)	UNITS
	VOLATILES		
67-64-1	Acetone	0.05	mg/Kg
71-43-2	Benzene	0.06	mg/Kg
106-46-7	1,4-Dichlorobenzene	1.8	mg/Kg
100-41-4	Ethyl Benzene	1	mg/Kg
98-82-8	Isopropylbenzene	NS	mg/Kg
1634-04-4	Methyl tert-butyl Ether	0.93	mg/Kg
108-87-2	Methylcyclohexane	NS	mg/Kg
75-09-2	Methylene Chloride	0.05	mg/Kg
108-88-3	Toluene	0.7	mg/Kg
136777-61-2	m/p-Xylenes	0.26	mg/Kg
1330-20-7	o-Xylene	0.26	mg/Kg
	Total VOCs	**NS**	**mg/Kg**
	SEMIVOLATILES		
98-86-2	Acetophenone	NS	mg/Kg
117-81-7	Bis(2-ethylhexyl)phthalate	NS	mg/Kg
85-68-7	Butylbenzylphthalate	NS	mg/Kg
86-74-8	Carbazole	NS	mg/Kg
132-64-9	Dibenzofuran	NS	mg/Kg
131-11-3	Dimethylphthalate	NS	mg/Kg
108-95-2	Phenol	0.33	mg/Kg
	PAHs		
83-32-9	Acenaphthene	20	mg/Kg
208-96-8	Acenaphthylene	100	mg/Kg
120-12-7	Anthracene	100	mg/Kg
120-12-7	Benzo(a)anthracene	1	mg/Kg
50-32-8	Benzo(a)pyrene	1	mg/Kg
205-99-2	Benzo(b)fluoranthene	1	mg/Kg
191-24-2	Benzo(g,h,i)perylene	100	mg/Kg
207-08-9	Benzo(k)fluoranthene	0.8	mg/Kg
218-01-9	Chrysene	1	mg/Kg
53-70-3	Dibenz(a,h)anthracene	0.33	mg/Kg
206-44-0	Fluoranthene	100	mg/Kg
86-73-7	Fluorene	30	mg/Kg
193-39-5	Indeno(1,2,3-cd)pyrene	0.5	mg/Kg
91-57-6	2-Methylnaphthalene	NS	mg/Kg
91-20-3	Naphthalene	12	mg/Kg
85-01-8	Phenanthrene	100	mg/Kg
129-00-0	Pyrene	100	mg/Kg
	Total PAHs	**NS**	**mg/Kg**
	Total SVOCs	**NS**	**mg/Kg**
	PCBs		
53469-21-9	Aroclor-1242		mg/Kg
12672-29-6	Aroclor-1248		mg/Kg
11096-82-5	Aroclor-1260		mg/Kg
	Total PCBs	**0.1**	**mg/Kg**
	INORGANICS		
7429-90-5	Aluminum	NS	mg/Kg
7440-36-0	Antimony	NS	mg/Kg
7440-38-2	Arsenic	13	mg/Kg
7440-39-3	Barium	350	mg/Kg
7440-41-7	Beryllium	7.2	mg/Kg
7440-43-9	Cadmium	2.5	mg/Kg
7440-70-2	Calcium	NS	mg/Kg
7440-47-3	Chromium	NS	mg/Kg
7440-48-4	Cobalt	NS	mg/Kg
7440-50-8	Copper	50	mg/Kg
7439-89-6	Iron	NS	mg/Kg
7439-92-1	Lead	63	mg/Kg
7439-95-4	Magnesium	NS	mg/Kg
7439-96-5	Manganese	1600	mg/Kg
7439-97-6	Mercury	0.18	mg/Kg
7440-02-0	Nickel	30	mg/Kg
7440-09-7	Potassium	NS	mg/Kg
7782-49-2	Selenium	3.9	mg/Kg
7440-22-4	Silver	2	mg/Kg
7440-23-5	Sodium	NS	mg/Kg
7440-28-0	Thallium	NS	mg/Kg
7440-62-2	Vanadium	NS	mg/Kg
7440-66-6	Zinc	109	mg/Kg
57-12-5	Cyanide	27	mg/Kg

Notes:

(1) USCOs are defined by 6NYCRR Part 375 Environmental Remediation Programs (December 14, 2006)

(2) **NS** indicates no standard or background level is available.

LIST OF FIGURES



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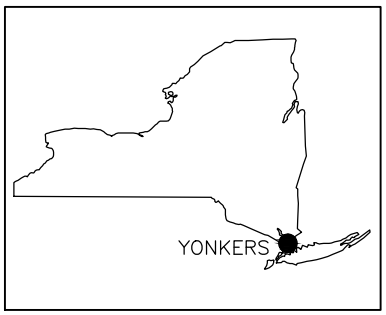

QUADRANGLE LOCATION
NEW YORK

N

FIGURE 1

CON EDISON
SAW MILL RIVER STATION
CITY OF YONKERS, WESTCHESTER COUNTY, NEW YORK
DRAFT SITE MANAGEMENT PLAN
JUNE 2012

SITE LOCATION MAP

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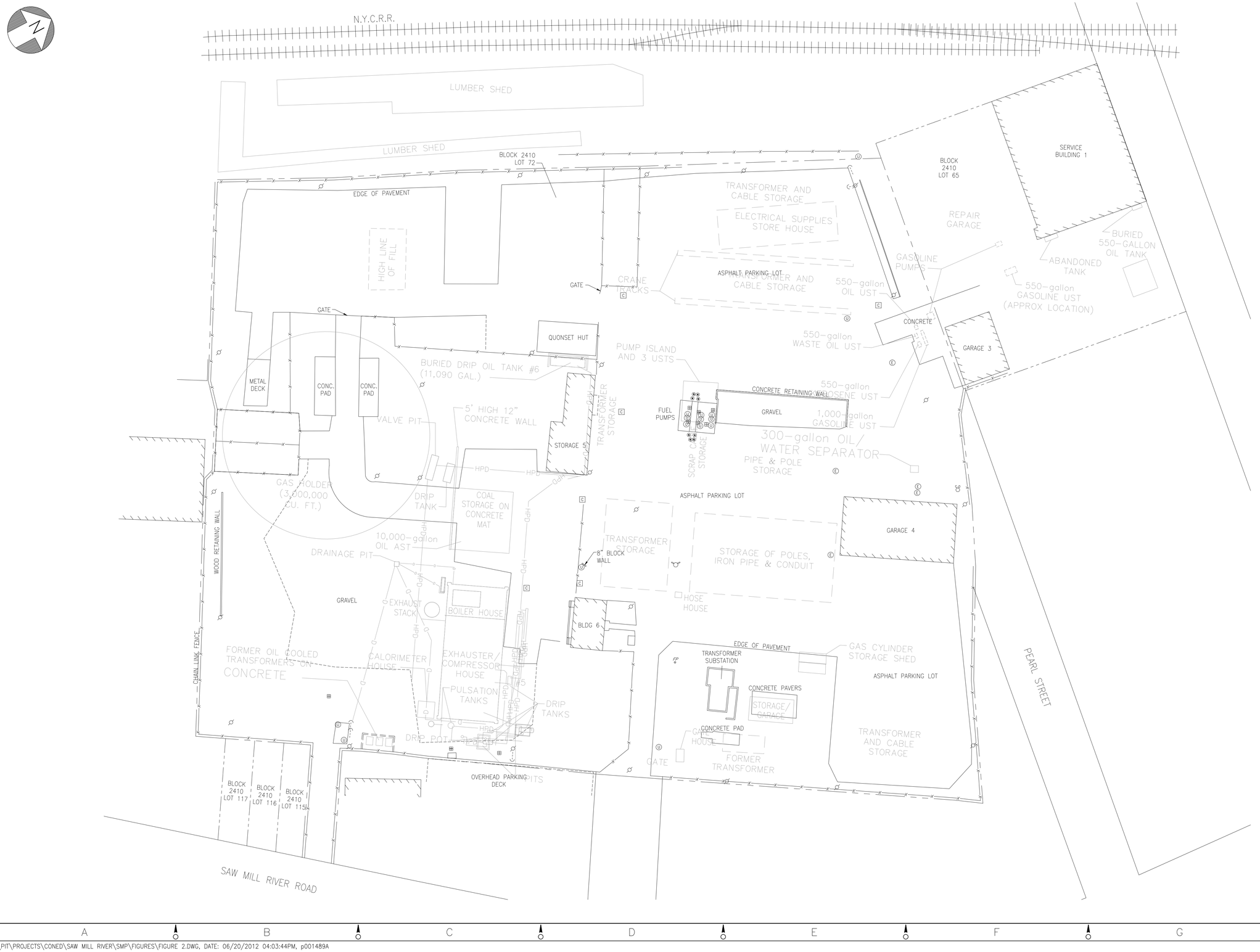

LEGEND:

- HISTORIC SITE STRUCTURES & FEATURES
- EXISTING STRUCTURE
- APPROXIMATE PROPERTY BOUNDARY
- EXISTING FENCE
- EXISTING RAILROAD TRACKS
- EXISTING PAVED AREA
- EXISTING GRAVEL AREA
- EXISTING ELECTRIC STRUCTURE
- EXISTING UNKNOWN STRUCTURE
- EXISTING DRAIN STRUCTURE
- EXISTING SANITARY SEWER STRUCTURE
- EXISTING FIRE HYDRANT
- EXISTING UTILITY POLE
- EXISTING UTILITY POLE W/GUY
- EXISTING GAS VENT
- EXISTING BOLLARD
- EXISTING FLAG POLE

NOTES:

1. BASEMAP PROVIDED BY CHAZEN ENGINEERING CO., P.C., DATED 12/15/09.
2. LOCATIONS OF ALL HISTORIC SITE STRUCTURES AND FEATURES ARE APPROXIMATE.

40 20 0 40 80

SCALE (FT.)

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COMMERCIAL TECHNOLOGY GROUP

OFFICE
100 HIGH STREET
BOSTON, MA 02110
(617) 946-9400

JOB 446113

WBS 03000

PROJECT TITLE
CON EDISON
SAW MILL RIVER STATION
CITY OF YONKERS
WESTCHESTER COUNTY, NEW YORK
DRAFT SITE MANAGEMENT PLAN
JUNE 2012

DRAWING TITLE
HISTORIC SITE STRUCTURES AND FEATURES

SCALE AS SHOWN

DRAWING NO. FIGURE 2

REV. —

FILE: P:\PIT\PROJECTS\CONED\SAW MILL RIVER\SMP\FIGURES\FIGURE 2.DWG, DATE: 06/20/2012 04:03:44PM, p001489A

LEGEND:

- MW-7 — EXISTING SITE MONITORING WELL
- TP-4 — TEST PIT
- SB-12 — SOIL BORING
- SS-1 — SURFACE SOIL SAMPLE
- APPROXIMATE LOCATION OF MW-1 AND MW-2 (HDR, 2008)
- HISTORIC SITE STRUCTURES & FEATURES
- EXISTING STRUCTURE
- APPROXIMATE PROPERTY BOUNDARY
- EXISTING FENCE
- EXISTING RAILROAD TRACKS
- EXISTING PAVED AREA
- EXISTING GRAVEL AREA
- EXISTING ELECTRIC STRUCTURE
- EXISTING UNKNOWN STRUCTURE
- EXISTING DRAIN STRUCTURE
- EXISTING SANITARY SEWER STRUCTURE
- EXISTING FIRE HYDRANT
- EXISTING UTILITY POLE
- EXISTING UTILITY POLE W/GUY
- EXISTING GAS VENT
- EXISTING BOLLARD
- EXISTING FLAG POLE

NOTES:

1. BASEMAP PROVIDED BY CHAZEN ENGINEERING CO., P.C., DATED 12/15/09.
2. HORIZONTAL DATUM IS BASED ON NEW YORK STATE PLANE NORTH AMERICAN DATUM OF 1983 (NAD83).
3. VERTICAL DATUM IS BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88).
4. LOCATIONS OF ALL HISTORIC SITE STRUCTURES AND FEATURES ARE APPROXIMATE.
5. APPROXIMATE LOCATION OF MONITORING WELLS MW-1 AND MW-2 TAKEN FROM FIGURE 5-3, SITE INVESTIGATION/REMEDIAL ALTERNATIVES REPORT BY HENNINGSON, DURHAM & RICHARDSON, DATED FEBRUARY, 2008.

40 20 0 40 80
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WESTCHESTER COUNTY, NEW YORK
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JUNE 2012

DRAWING TITLE
HISTORIC SAMPLE AND CROSS SECTION LOCATIONS

SCALE
AS SHOWN

DRAWING NO.
FIGURE 3

REV.
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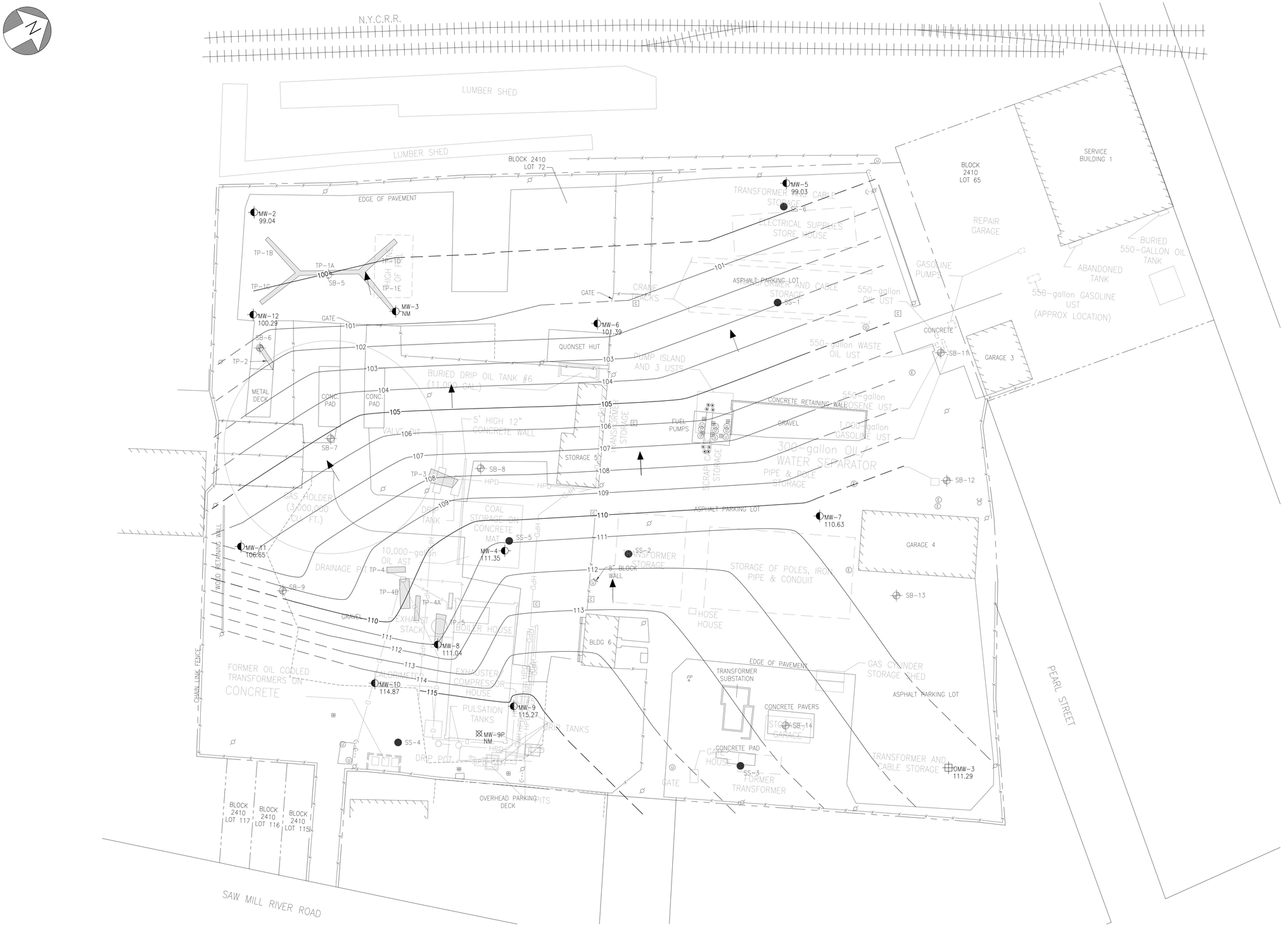
FILE: P:\PIT\PROJECTS\CONED\SAW MILL RIVER\SMP\FIGURES\FIGURE 3.DWG, DATE: 06/21/2012 03:20:25PM, p001489A



LEGEND:

MW-7 110.63	EXISTING MONITORING WELL LOCATION PROPOSED FOR ABANDONMENT (2012)
MW-9P NM	PROPOSED MONITORING WELL APPARENT GROUNDWATER ELEVATION 9/14/11
OMW-3 111.29	EXISTING MONITORING WELL
TP-4	TEST PIT
SB-12	SOIL BORING (2009)
SS-1	SURFACE SOIL SAMPLE (2009)
	HISTORIC SITE STRUCTURES & FEATURES
	EXISTING STRUCTURE
	APPROXIMATE PROPERTY BOUNDARY
	EXISTING FENCE
	EXISTING RAILROAD TRACKS
	EXISTING PAVED AREA
	EXISTING GRAVEL AREA
E	EXISTING ELECTRIC STRUCTURE
U	EXISTING UNKNOWN STRUCTURE
D	EXISTING DRAIN STRUCTURE
S	EXISTING SANITARY SEWER STRUCTURE
	EXISTING FIRE HYDRANT
	EXISTING UTILITY POLE
	EXISTING UTILITY POLE W/GUY
	EXISTING GAS VENT
	EXISTING BOLLARD
	EXISTING FLAG POLE
110	GROUNDWATER ELEVATION CONTOUR (DASHED WHERE INFERRED)
	GROUNDWATER DIRECTIONAL FLOW ARROW

NOTES:

1. BASEMAP PROVIDED BY CHAZEN ENGINEERING CO., P.C., DATED DECEMBER 15, 2009 AND UPDATED JULY 27, 2011.
2. LOCATIONS OF ALL HISTORIC SITE STRUCTURES AND FEATURES ARE APPROXIMATE.
3. GROUNDWATER ELEVATIONS ARE IN FEET ABOVE MEAN SEA LEVEL.
4. ALL GROUNDWATER LEVELS WERE RECORDED ON SEPTEMBER 14, 2011.
5. NM = NO MEASUREMENT COLLECTED AT MW-3 (WELL FILLED WITH DEBRIS/SOIL) FOR SEPTEMBER 14, 2011 GAUGING EVENT.

40 20 0 40 80

SCALE (FT.)

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WESTCHESTER COUNTY, NEW YORK
DRAFT SITE MANAGEMENT PLAN
JUNE 2012

DRAWING TITLE

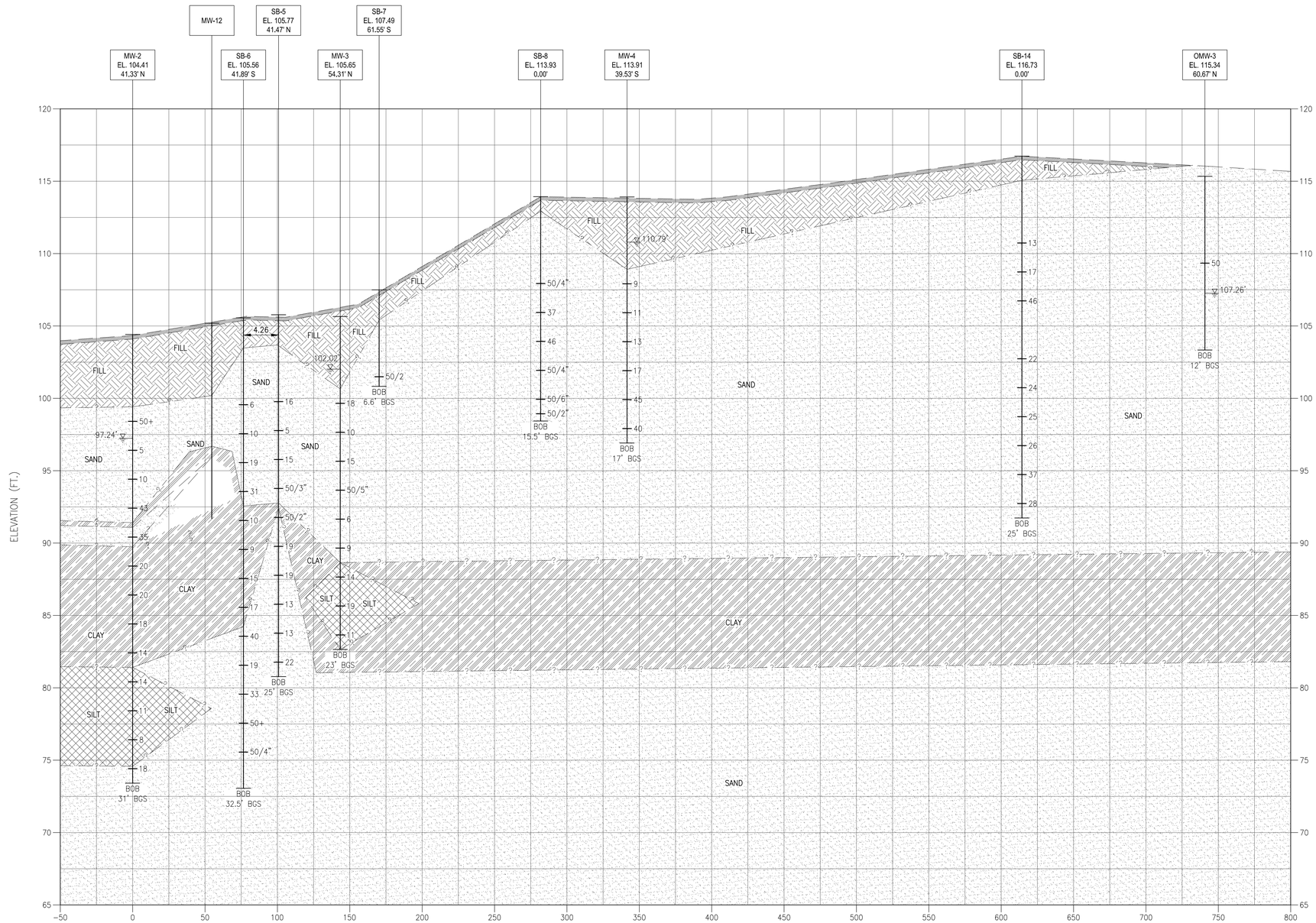
EXISTING MONITORING WELL NETWORK AND GROUNDWATER FLOW CONDITIONS SEPTEMBER 14, 2011

SCALE: AS SHOWN

DRAWING NO.: FIGURE 4

REV.: —

FILE: P:\PIT\PROJECTS\CONED\SAW MILL RIVER\SMP\FIGURES\FIGURE 10.DWG, DATE: 06/21/2012 04:03:40PM, p001489A



SECTION A–A'
SCALE: 1:40H;1:4V

LEGEND:

- MW-2 / EL. 104.41 / 41.33' N — BORING OR MONITORING WELL ID; GROUND SURFACE ELEVATION AT BORING LOCATION; APPROXIMATE OFFSET DISTANCE AND DIRECTION TO BORING
- 5 — STANDARD PENETRATION TEST (SPT) N-VALUE (ASTM D 1588)
- 97.24' — OBSERVED GROUNDWATER ELEV.
- APPROXIMATE STRATUM BREAKLINE (DASHED WHERE INFERRED)
- FILL — STRATUM DESIGNATION
- BOB 16' BGS — BOTTOM OF BOREHOLE DEPTH BELOW EXISTING GROUND SURFACE
- GROUND SURFACE
- ASPHALT
- FILL: (SAND, GRAVEL, SILT WITH COBBLES, CEMENT, BRICK AND METAL FRAGMENTS)
- SAND: (FINE TO COARSE BROWN TO GRAY SAND)
- CLAY
- SILT
- SCHIST (BEDROCK)

NOTES:

1. ALL ELEVATIONS ARE IN FEET ABOVE MEAN SEA LEVEL.
2. GROUNDWATER LEVELS WERE COLLECTED ON DECEMBER 3, 2009.

VERTICAL SCALE (FT.): 4 2 0 4 8

HORIZONTAL SCALE (FT.): 40 20 0 40 80

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WESTCHESTER COUNTY, NEW YORK
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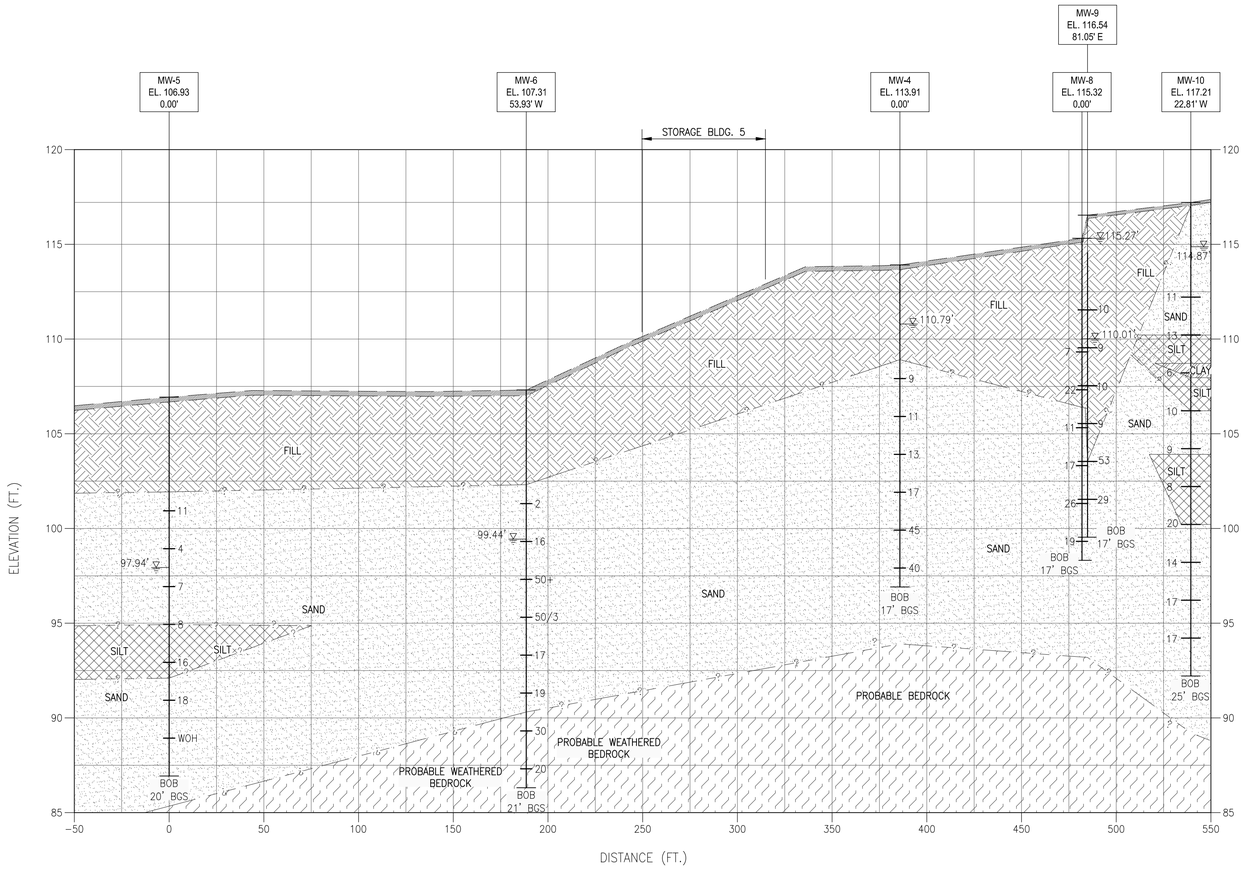
JUNE 2012

DRAWING TITLE
CROSS SECTION A–A'

SCALE: AS SHOWN

DRAWING NO. FIGURE 5a

REV. –



SECTION B–B'

SCALE: 1:40H;1:4V

3

LEGEND:

- MW-6 / EL. 107.31 / 53.93' W — BORING OR MONITORING WELL ID; GROUND SURFACE ELEVATION AT BORING LOCATION; APPROXIMATE OFFSET DISTANCE AND DIRECTION TO BORING
- 2 — STANDARD PENETRATION TEST (SPT) N-VALUE (ASTM D 1588)
- 99.44' — OBSERVED GROUNDWATER ELEV.
- APPROXIMATE STRATUM BREAKLINE (DASHED WHERE INFERRED)
- FILL — STRATUM DESIGNATION
- BOB 21' BGS — BOTTOM OF BOREHOLE DEPTH BELOW EXISTING GROUND SURFACE
- GROUND SURFACE
- ASPHALT
- FILL: (SAND, GRAVEL, SILT WITH COBBLES, CEMENT, BRICK AND METAL FRAGMENTS)
- SAND: (FINE TO COARSE BROWN TO GRAY SAND)
- CLAY
- SILT
- PROBABLE WEATHERED BEDROCK (SCHIST)

NOTES:

1. ALL ELEVATIONS ARE IN FEET ABOVE MEAN SEA LEVEL.
2. GROUNDWATER LEVELS WERE COLLECTED ON DECEMBER 3, 2009 FOR WELLS MW-4, MW-5, MW-6, AND MW-8, AND ON SEPTEMBER 14, 2011 FOR WELLS MW-9 AND MW-10.

4 2 0 4 8

VERTICAL SCALE (FT.)

40 20 0 40 80

HORIZONTAL SCALE (FT.)

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PROJECT TITLE

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WESTCHESTER COUNTY, NEW YORK
DRAFT SITE MANAGEMENT PLAN
JUNE 2012

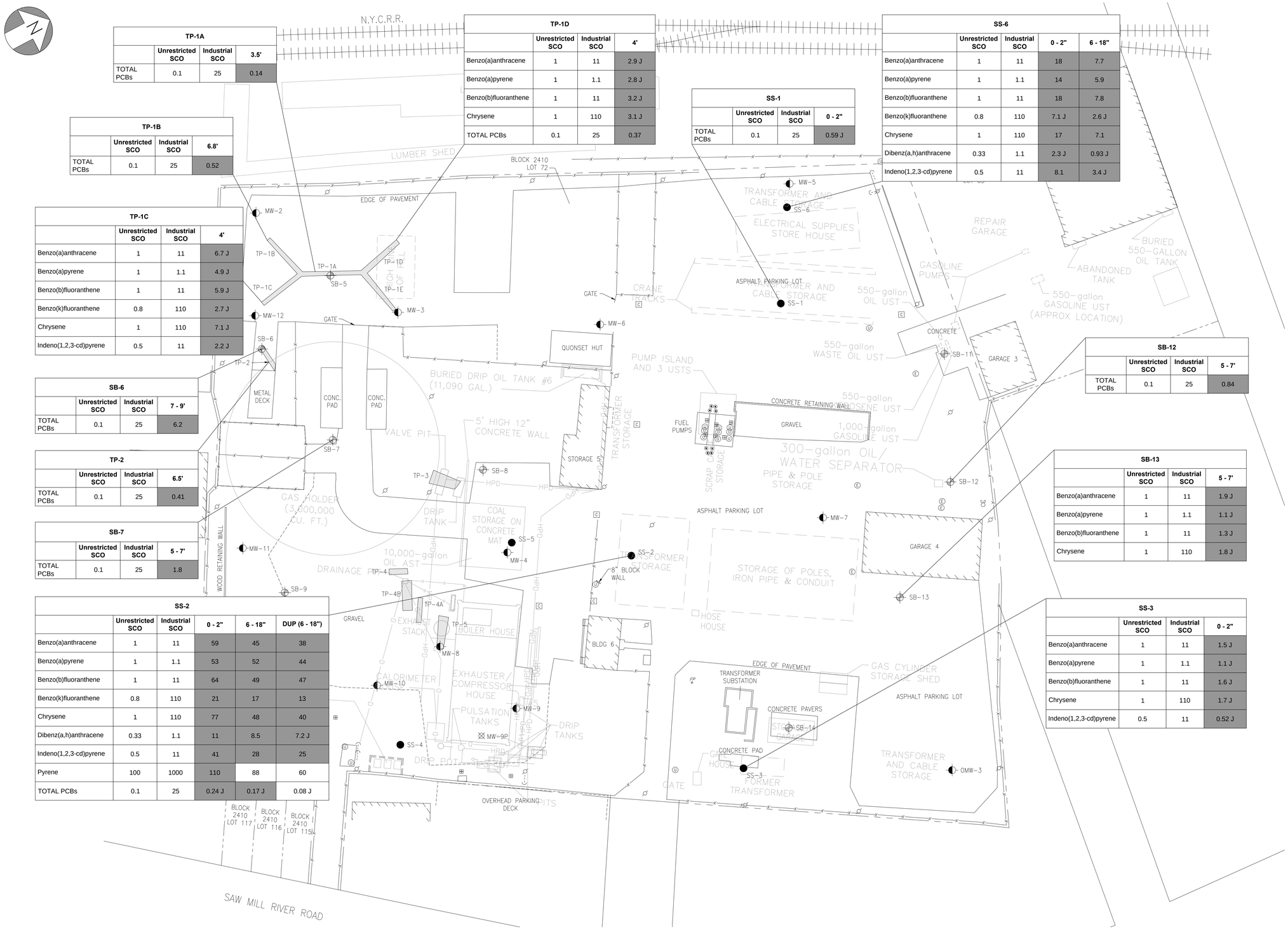
DRAWING TITLE

CROSS SECTION B–B'

SCALE: AS SHOWN

DRAWING NO. FIGURE 5b

REV. 1



TP-1A

	Unrestricted SCO	Industrial SCO	3.5'
TOTAL PCBs	0.1	25	0.14

TP-1B

	Unrestricted SCO	Industrial SCO	6.8'
TOTAL PCBs	0.1	25	0.52

TP-1C

	Unrestricted SCO	Industrial SCO	4'
Benzo(a)anthracene	1	11	6.7 J
Benzo(a)pyrene	1	1.1	4.9 J
Benzo(b)fluoranthene	1	11	5.9 J
Benzo(k)fluoranthene	0.8	110	2.7 J
Chrysene	1	110	7.1 J
Indeno(1,2,3-cd)pyrene	0.5	11	2.2 J

SB-6

	Unrestricted SCO	Industrial SCO	7 - 9'
TOTAL PCBs	0.1	25	6.2

TP-2

	Unrestricted SCO	Industrial SCO	6.5'
TOTAL PCBs	0.1	25	0.41

SB-7

	Unrestricted SCO	Industrial SCO	5 - 7'
TOTAL PCBs	0.1	25	1.8

SS-2

	Unrestricted SCO	Industrial SCO	0 - 2"	6 - 18"	DUP (6 - 18")
Benzo(a)anthracene	1	11	59	45	38
Benzo(a)pyrene	1	1.1	53	52	44
Benzo(b)fluoranthene	1	11	64	49	47
Benzo(k)fluoranthene	0.8	110	21	17	13
Chrysene	1	110	77	48	40
Dibenz(a,h)anthracene	0.33	1.1	11	8.5	7.2 J
Indeno(1,2,3-cd)pyrene	0.5	11	41	28	25
Pyrene	100	1000	110	88	60
TOTAL PCBs	0.1	25	0.24 J	0.17 J	0.08 J

TP-1D

	Unrestricted SCO	Industrial SCO	4'
Benzo(a)anthracene	1	11	2.9 J
Benzo(a)pyrene	1	1.1	2.8 J
Benzo(b)fluoranthene	1	11	3.2 J
Chrysene	1	110	3.1 J
TOTAL PCBs	0.1	25	0.37

SS-1

	Unrestricted SCO	Industrial SCO	0 - 2"
TOTAL PCBs	0.1	25	0.59 J

SS-6

	Unrestricted SCO	Industrial SCO	0 - 2"	6 - 18"
Benzo(a)anthracene	1	11	18	7.7
Benzo(a)pyrene	1	1.1	14	5.9
Benzo(b)fluoranthene	1	11	18	7.8
Benzo(k)fluoranthene	0.8	110	7.1 J	2.6 J
Chrysene	1	110	17	7.1
Dibenz(a,h)anthracene	0.33	1.1	2.3 J	0.93 J
Indeno(1,2,3-cd)pyrene	0.5	11	8.1	3.4 J

SB-12

	Unrestricted SCO	Industrial SCO	5 - 7'
TOTAL PCBs	0.1	25	0.84

SB-13

	Unrestricted SCO	Industrial SCO	5 - 7'
Benzo(a)anthracene	1	11	1.9 J
Benzo(a)pyrene	1	1.1	1.1 J
Benzo(b)fluoranthene	1	11	1.3 J
Chrysene	1	110	1.8 J

SS-3

	Unrestricted SCO	Industrial SCO	0 - 2"
Benzo(a)anthracene	1	11	1.5 J
Benzo(a)pyrene	1	1.1	1.1 J
Benzo(b)fluoranthene	1	11	1.6 J
Chrysene	1	110	1.7 J
Indeno(1,2,3-cd)pyrene	0.5	11	0.52 J

LEGEND:

- MW-7 — EXISTING SITE MONITORING WELL
- TP-4 — TEST PIT
- SB-12 — SOIL BORING
- SS-1 — SURFACE SOIL SAMPLE
- HISTORIC SITE STRUCTURES & FEATURES
- EXISTING STRUCTURE
- APPROXIMATE PROPERTY BOUNDARY
- EXISTING FENCE
- EXISTING RAILROAD TRACKS
- EXISTING PAVED AREA
- EXISTING GRAVEL AREA
- EXISTING ELECTRIC STRUCTURE
- EXISTING UNKNOWN STRUCTURE
- EXISTING DRAIN STRUCTURE
- EXISTING SANITARY SEWER STRUCTURE
- EXISTING FIRE HYDRANT
- EXISTING UTILITY POLE
- EXISTING UTILITY POLE W/GUY
- EXISTING GAS VENT
- EXISTING BOLLARD
- EXISTING FLAG POLE

NOTES:

1. BASEMAP PROVIDED BY CHAZEN ENGINEERING CO., P.C., DATED DECEMBER 15, 2009, AND UPDATED JULY 27, 2011.
2. LOCATIONS OF ALL HISTORIC SITE STRUCTURES AND FEATURES ARE APPROXIMATE.
3. ALL CONCENTRATIONS ARE IN PARTS PER MILLION (PPM).
4. SHADED VALUES EXCEED 6 NYCRR PART 375 UNRESTRICTED SOIL CLEANUP OBJECTIVES.
5. NO INDIVIDUAL VOCS WERE DETECTED ABOVE THE UNRESTRICTED SCOS.
6. ND = NOT DETECTED
7. -- = NO SCO AVAILABLE

40 20 0 40 80

SCALE (FT.)

PARSONS
COMMERCIAL TECHNOLOGY GROUP
OFFICE
100 HIGH STREET
BOSTON, MA 02110
(617) 946-9400

JOB 446113

WBS 03000

PROJECT TITLE

CON EDISON
SAW MILL RIVER STATION
CITY OF YONKERS
WESTCHESTER COUNTY, NEW YORK
DRAFT SITE MANAGEMENT PLAN
JUNE 2012

DRAWING TITLE

SUMMARY OF VOC, SVOC, AND PCB EXCEEDANCES IN SOIL

SCALE AS SHOWN

DRAWING NO. FIGURE 6

REV. 2

FILE: P:\PIT\PROJECTS\CONED\SAW MILL RIVER\SMP\FIGURES\FIGURE 4.DWG, DATE: 06/21/2012 03:23:21PM, p001489A

TP-1A		
	3.5'	6'
LEAD	241	1,170
MERCURY	0.08	0.31
ZINC	172	169

TP-1D		
	4'	8.75'
ARSENIC	701	8.77
CADMIUM	1.26	2.64
COPPER	54.3	31.4
LEAD	231	180
NICKEL	20.1	49.4
SELENIUM	3.32	4.65
ZINC	316	586

SS-6		
	0 - 2"	6 - 18"
CADMIUM	4.69	10.1
LEAD	98.4	63.1
ZINC	2,640	2,990

SS-1		
	0 - 2"	6 - 18"
BARIUM	18.1	475
LEAD	58	552

MW-2		
	5 - 7'	29 - 31'
LEAD	121	4.55
MERCURY	0.24	ND

TP-1E		
	5'	10.5'
LEAD	98.7	9.92
ZINC	138	142

TP-1B		
	3.5'	6.8'
ARSENIC	1.33	6
BARIUM	78.8	783
CADMIUM	0.31	2.7
COPPER	36.4	1,370
LEAD	145	2,080
MERCURY	0.669	1
ZINC	91.2	2,210

TP-1C		
	4'	12'
ZINC	151	28.2

SB-6			
	7 - 9'	29 - 31'	DUP (29 - 31')
ARSENIC	24.1	0.63 J	0.3 J
LEAD	287	14.1 J	2.48 J
MERCURY	0.44	ND	ND
ZINC	119	20.8	24.4

MW-6		
	5 - 7'	19 - 21'
LEAD	742	17.1
ZINC	187	16.5

TP-2		
	6.5'	8.5'
LEAD	405	128
ZINC	439	110

SB-8		
	11 - 13'	13 - 15'
COPPER	51.4	28.4
NICKEL	28.5	37.7

TP- 3		
	9.5'	12'
ARSENIC	3.56	18.3
LEAD	81.8	501
MERCURY	0.22	0.22
ZINC	73.6	128

SB-12	
	5 - 7'
ARSENIC	78.7
LEAD	113
MERCURY	3.2
ZINC	214 J

SS-5		
	0 - 2"	6 - 18"
ARSENIC	278	174
CADMIUM	7.62	0.58
COPPER	61.1	13.7
MERCURY	0.26	0.19
SELENIUM	21.3	16

SS-2			
	0 - 2"	6 - 18"	DUP (6 - 18")
LEAD	73.4	199 J	115 J
MERCURY	0.28	0.37	0.4

SB-13		
	5 - 7'	9 - 11'
LEAD	190	8.44
MERCURY	0.561	ND
ZINC	204	40.8

TP- 4	
	DRAINAGE PIT
ARSENIC	43.5
CADMIUM	4.47
LEAD	192
MERCURY	5.3
ZINC	716

MW-8	
	9'
MERCURY	0.68

TP- 5		
	2.5'	4.5'
ARSENIC	24.3	7.71
COPPER	54.9	36.7
LEAD	188	84.3
MERCURY	3.8	1.8
ZINC	238	211

SS-3		
	0 - 2"	6 - 18"
ARSENIC	346	667
CADMIUM	35.5	8.25
COPPER	119	23.4
LEAD	600	15.6
MERCURY	11.3	2.2
ZINC	1,010	236

SB-14		
	13 - 15'	23 - 25'
COPPER	62.9	29.6

N.Y.C.R.R.
LUMBER SHED
LUMBER
EDGE OF PAVEMENT
LOT 72
MW-2
TP-1B
TP-1A
TP-1C
TP-1D
TP-1E
SB-5
MW-3
MW-12
GATE
SB-6
TP-2
METAL DECK
CONC. PAD
CONC. PAD
SB-7
MW-6
QUONSET HUT
BURIED DRIP OIL TANK #6 (11,090 GAL.)
PUMP ISLAND AND 3 USTS
CONCRETE RETAINING WALL
FUEL PUMPS
GRAVEL
1,000-gallon GASOLINE UST
550-gallon KEROSENE UST
300-gallon OIL/ WATER SEPARATOR
PIPE & POLE STORAGE
SCRAP CAR STORAGE
TRANSFORMER STORAGE
STORAGE 5
SB-8
TP-3
HPD
GAS HOLDER (3,000,000 C.U. FT.)
DRIP TANK
COAL STORAGE ON CONCRETE MAT
SS-5
MW-4
MW-11
WOOD RETAINING WALL
10,000-gallon OIL AST
DRAINAGE
TP-4
SB-9
TP-4B
TP-4A
TP-5
GRAVEL
EXHAUST STACK
BOILER HOUSE
MW-8
FORMER OIL COOLED TRANSFORMERS ON CONCRETE
CHAIN LINK FENCE
MW-10
CALORIMETER HOUSE
EXHAUSTER/ COMPRESSOR HOUSE
PULSATOR
MW-9
MW-9P
SS-4
DRIP TANKS
DRIP POT
SUMP PIT
OVERHEAD PARKING DECK
BLOCK 2410 LOT 117
BLOCK 2410 LOT 116
BLOCK 2410 LOT 115
SAW MILL RIVER ROAD
ASPHALT PARKING LOT
MW-5
SS-6
TRANSFORMER AND CABLE STORAGE
ELECTRICAL SUPPLIES STORE HOUSE
REPAIR GARAGE
BLOCK 2410 LOT 65
SERVICE BUILDING 1
BURIED 550-GALLON OIL TANK
ABANDONED TANK
550-gallon GASOLINE UST (APPROX LOCATION)
GASOLINE PUMPS
CRANE TRACKS
ASPHALT PARKING LOT
SS-1
TRANSFORMER AND CABLE STORAGE
550-gallon OIL UST
550-gallon WASTE OIL UST
CONCRETE
SB-11
GARAGE 3
SB-12
ASPHALT PARKING LOT
MW-7
GARAGE 4
SS-2
TRANSFORMER STORAGE
8" BLOCK WALL
STORAGE OF POLES, IRON PIPE & CONDUIT
SB-13
BLDG 6
EDGE OF PAVEMENT
TRANSFORMER SUBSTATION
GAS CYLINDER STORAGE SHED
ASPHALT PARKING LOT
CONCRETE PAVERS
SB-14
CONCRETE PAD
SS-3
TRANSFORMER
TRANSFORMER AND CABLE STORAGE
OMW-3
GATE
PEARL STREET

LEGEND:

- MW-7 — EXISTING SITE MONITORING WELL
- TP-4 — TEST PIT
- SB-12 — SOIL BORING
- SS-1 — SURFACE SOIL SAMPLE
- HISTORIC SITE STRUCTURES & FEATURES
- EXISTING STRUCTURE
- APPROXIMATE PROPERTY BOUNDARY
- EXISTING FENCE
- EXISTING RAILROAD TRACKS
- EXISTING PAVED AREA
- EXISTING GRAVEL AREA
- EXISTING ELECTRIC STRUCTURE
- EXISTING UNKNOWN STRUCTURE
- EXISTING DRAIN STRUCTURE
- EXISTING SANITARY SEWER STRUCTURE
- EXISTING FIRE HYDRANT
- EXISTING UTILITY POLE
- EXISTING UTILITY POLE W/GUY
- EXISTING GAS VENT
- EXISTING BOLLARD
- EXISTING FLAG POLE

NOTES:

1. BASEMAP PROVIDED BY CHAZEN ENGINEERING CO., P.C., DATED 12/15/09.
2. LOCATIONS OF ALL HISTORIC SITE STRUCTURES AND FEATURES ARE APPROXIMATE.
3. ALL CONCENTRATIONS ARE IN PARTS PER MILLION (PPM).
4. SHADED VALUES EXCEED 6 NYCRR PART 375 UNRESTRICTED SOIL CLEANUP OBJECTIVES.
5. ND = NOT DETECTED

40 20 0 40 80
SCALE (FT.)

PARSONS
COMMERCIAL TECHNOLOGY GROUP

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BOSTON, MA 02110
(617) 946-9400

JOB 446113
WBS 03000

PROJECT TITLE
CON EDISON
SAW MILL RIVER STATION
CITY OF YONKERS
WESTCHESTER COUNTY, NEW YORK
DRAFT SITE MANAGEMENT PLAN
JUNE 2012

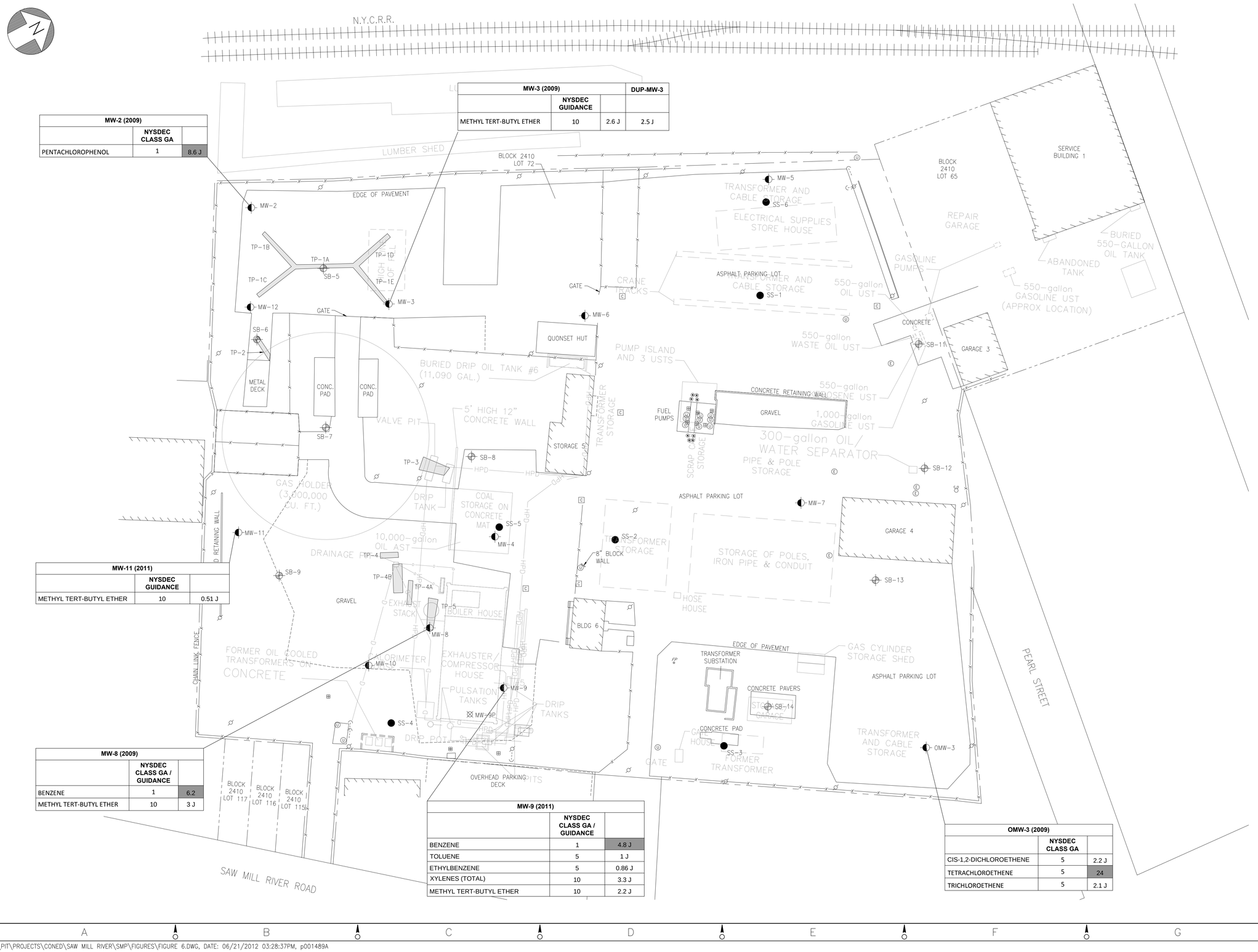
DRAWING TITLE
SUMMARY OF METAL DETECTIONS IN SOIL

SCALE AS SHOWN

DRAWING NO. FIGURE 7

REV. —

FILE: P:\PIT\PROJECTS\CONED\SAW MILL RIVER\SMP\FIGURES\FIGURE 5.DWG, DATE: 06/21/2012 03:25:16PM, p001489A



MW-2 (2009)		
	NYSDEC CLASS GA	
PENTACHLOROPHENOL	1	8.6 J

MW-3 (2009)			DUP-MW-3
	NYSDEC GUIDANCE		
METHYL TERT-BUTYL ETHER	10	2.6 J	2.5 J

MW-11 (2011)		
	NYSDEC GUIDANCE	
METHYL TERT-BUTYL ETHER	10	0.51 J

MW-8 (2009)		
	NYSDEC CLASS GA / GUIDANCE	
BENZENE	1	6.2
METHYL TERT-BUTYL ETHER	10	3 J

MW-9 (2011)		
	NYSDEC CLASS GA / GUIDANCE	
BENZENE	1	4.8 J
TOLUENE	5	1 J
ETHYLBENZENE	5	0.86 J
XYLENES (TOTAL)	10	3.3 J
METHYL TERT-BUTYL ETHER	10	2.2 J

OMW-3 (2009)		
	NYSDEC CLASS GA	
CIS-1,2-DICHLOROETHENE	5	2.2 J
TETRACHLOROETHENE	5	24
TRICHLOROETHENE	5	2.1 J

LEGEND:

- MW-7 — EXISTING SITE MONITORING WELL
- TP-4 — TEST PIT
- SB-12 — SOIL BORING
- SS-1 — SURFACE SOIL SAMPLE
- HISTORIC SITE STRUCTURES & FEATURES
- EXISTING STRUCTURE
- APPROXIMATE PROPERTY BOUNDARY
- EXISTING FENCE
- EXISTING RAILROAD TRACKS
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- EXISTING GRAVEL AREA
- EXISTING ELECTRIC STRUCTURE
- EXISTING UNKNOWN STRUCTURE
- EXISTING DRAIN STRUCTURE
- EXISTING SANITARY SEWER STRUCTURE
- EXISTING FIRE HYDRANT
- EXISTING UTILITY POLE
- EXISTING UTILITY POLE W/GUY
- EXISTING GAS VENT
- EXISTING BOLLARD
- EXISTING FLAG POLE

NOTES:

1. BASEMAP PROVIDED BY CHAZEN ENGINEERING CO., P.C., DATED DECEMBER 15, 2009, AND UPDATED JULY 27, 2011.
2. LOCATIONS OF ALL HISTORIC SITE STRUCTURES AND FEATURES ARE APPROXIMATE.
3. ALL CONCENTRATIONS ARE IN MICROGRAMS PER LITER (µg\L).
4. SHADED VALUES EXCEED NYSDEC CLASS GA GROUNDWATER STANDARDS/GUIDANCE VALUES.
5. ALL VOCS AND SVOCS THAT WERE DETECTED IN GROUNDWATER ARE INCLUDED IN THIS FIGURE.

40 20 0 40 80

SCALE (FT.)

PARSONS
COMMERCIAL TECHNOLOGY GROUP

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BOSTON, MA 02110
(617) 946-9400

JOB 446113

WBS 03000

PROJECT TITLE
CON EDISON
SAW MILL RIVER STATION
CITY OF YONKERS
WESTCHESTER COUNTY, NEW YORK
DRAFT SITE MANAGEMENT PLAN
JUNE 2012

DRAWING TITLE
SUMMARY OF VOC AND SVOC DETECTIONS IN GROUNDWATER DECEMBER 2009 AND JULY 2011

SCALE AS SHOWN

DRAWING NO. FIGURE 8

REV. 2

FILE: P:\PIT\PROJECTS\CONED\SAW MILL RIVER\SMP\FIGURES\FIGURE 6.DWG, DATE: 06/21/2012 03:28:37PM, p001489A

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BOSTON, MA 02110
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JOB 446113

WBS 03000

PROJECT TITLE
CON EDISON
SAW MILL RIVER STATION
CITY OF YONKERS
WESTCHESTER COUNTY, NEW YORK
DRAFT SITE MANAGEMENT PLAN
JUNE 2012

DRAWING TITLE
SUMMARY OF METAL EXCEEDANCES IN GROUNDWATER DECEMBER 2009 AND JULY 2011

SCALE AS SHOWN

DRAWING NO. FIGURE 9

REV. 2

FILE: P:\PIT\PROJECTS\CONED\SAW MILL RIVER\SMP\FIGURES\FIGURE 7.DWG, DATE: 06/21/2012 03:29:52PM, p001489A

N

LEGEND

- SBSI
- HAND CLEARANCE HOLES
- MONITORING WELL

SS-5
ELEV=113.88'

MW-4
TOP OF WELL: 113.91'
TOP OF PVC: 113.56'

SS-2
ELEV=113.66'

8" BLOCK
WALL

BENCHMARK
NORTH BOLT
ELEV.= 116.27

APPROXIMATE
DIRECTION OF
GROUNDWATER FLOW

TP-4

TP-4B

TP-4A

TP-5

GRAVEL

9
OUND=112.40'

HCSI-10	NAPL Observation
Sheen	None
Blebs	None

HCSI-10

HCSI-9

HCSI-9	NAPL Observation
Sheen	None
Blebs	None

MW-8
TOP OF WELL: 115.32'
TOP OF PVC: 114.79'

BLDG 6

EDGE OF PAVEMENT

TRANSFORMER
SUBSTATION

CONCRETE PAVERS

SB-14
GROUND=116.73'

CONCRETE PAD

SS-3
ELEV=117.35'

SBSI-3	NAPL on GW Surface	NAPL Obs. in Soil (Max. depth attained)
Sheen	Yes	None (3ft bgs)
Blebs	Yes	None (3ft bgs)

SBSI-3

SBSI-2

SBSI-2	NAPL on GW Surface	NAPL Obs. in Soil (Max. depth attained)
Sheen	Yes	None (15ft bgs)
Blebs	No	None (15ft bgs)

	NAPL on GW Surface	NAPL Obs. in Soil (Max. depth attained)
SBSI-4		
Sheen	Yes	None (4ft bgs)
Blebs	Yes	None (4ft bgs)
SBSI-5		
Sheen	Yes	None (3ft bgs)
Blebs	Yes	None (3ft bgs)

SBSI-5

SBSI-4

MW-9

MW-9	Dec-12	Jun-14
Thickness of Product (ft)	~1.0	0.28
Fingerprint	Lubricating oil	Similar to motor or lubricating oil
Exceedance of NYSDEC Class GA Standard?	N/A	No

SBSI-1

SBSI-1	NAPL on GW Surface	NAPL Obs. in Soil (Max. depth attained)
Sheen	Yes	None (15ft bgs)
Blebs	Yes	None (15ft bgs)

SS-4
ELEV=119.34'

HCSI-8 HCSI-7 HCSI-6 HCSI-5 HCSI-4 HCSI-3 HCSI-2 HCSI-1

OVERHEAD PARKING
DECK

HCSI-7	NAPL Observation
Sheen	Slight
Blebs	None

HCSI-5	NAPL Observation
Sheen	Slight
Blebs	None

HCSI-3	NAPL Observation
Sheen	Yes, Rainbows
Blebs	None

[redacted]

HCSI-8	NAPL Observation
Sheen	Yes
Blebs	None

HCSI-6	NAPL Observation
Sheen	None
Blebs	None

HCSI-4	NAPL Observation
Sheen	Yes, Rainbows
Blebs	None

[redacted]

50 25 0 50
Feet

Notes:

1) Soil samples were collected at locations SBSI-1(0.5-1.5), SBSI-1(10-12), SBSI-2(0.5-1.5), SBSI-2(10-12), SBSI-3(0.5-1.5), SBSI-4(0.5-1.5), HCSI-3(0.5-1), and HCSI-5(0.5-1). The samples were analyzed for VOCs, SVOCs (including PAHs). None of the detections exceeded NYSDEC SCOs for Unrestricted Use.

2) A groundwater sample was collected from MW-9. It was analyzed for VOCs and SVOCs. All of the detections were estimated and none exceeded their respective NYSDEC Class GA groundwater standard.

PARSONS
100 HIGH ST. 4TH FLOOR BOSTON, MA. 02110

Project: CON EDISON
SAW MILL RIVER STATION
YONKERS, NEW YORK

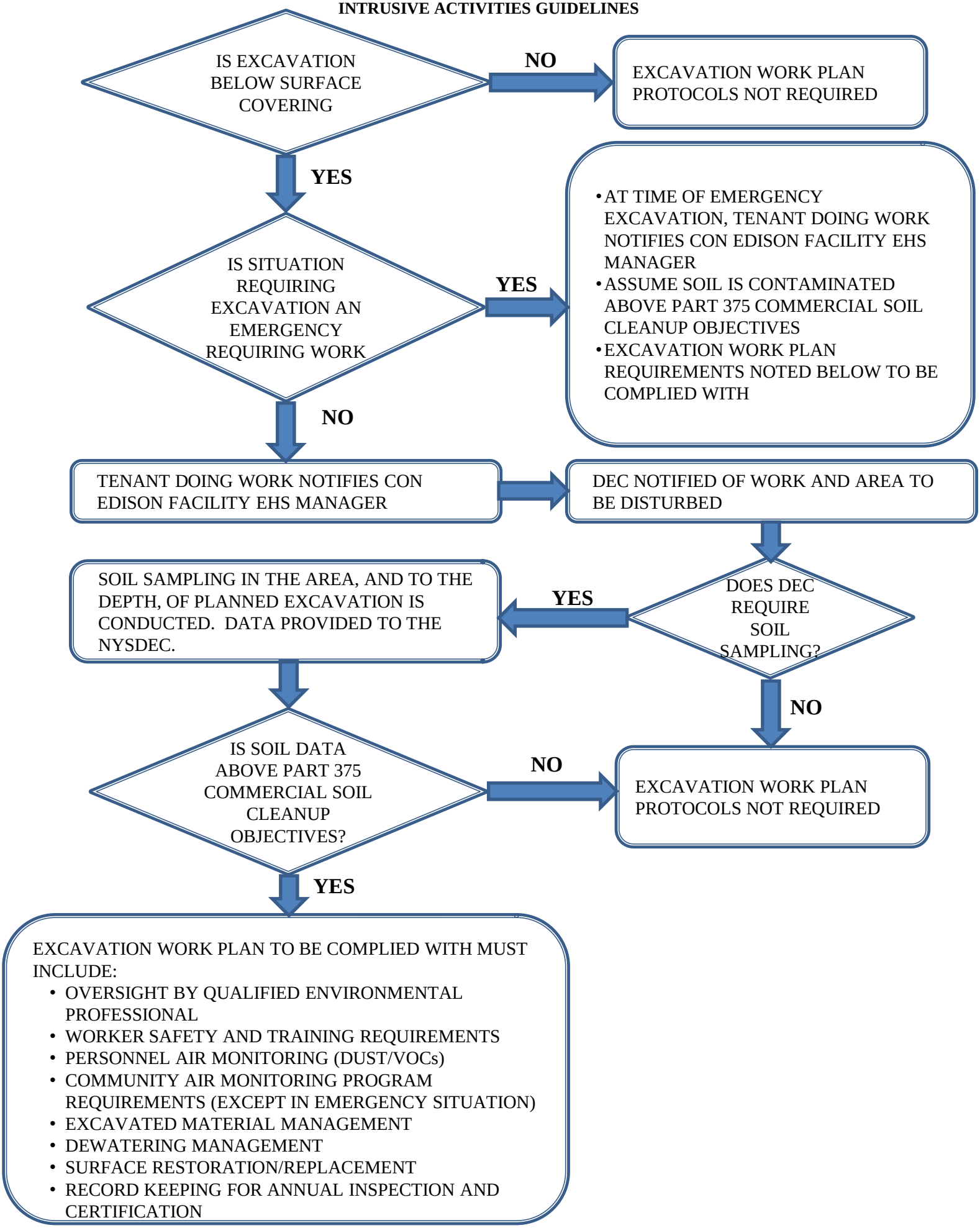
Title:

FIGURE 10
MW-9 SPILL INVESTIGATION SOIL BORING AND HAND CLEARANCE LOCATIONS

Scale: 1 " = 30 ' | Date: NOV. 2015 | Rev: 1

P:\PIT\Projects\ConEd\Saw Mill Rver\GIS\FIGURE 3_v3_113015.mxd

Figure 11
Con Edison Saw Mill River Station
Yonkers Service Center
Site Management Plan
INTRUSIVE ACTIVITIES GUIDELINES



APPENDIX A

DEED RESTRICTION

The Office of the Westchester County Clerk: This page is part of the instrument; the County Clerk will rely on the information provided on this page for purposes of indexing this instrument. To the best of submitter's knowledge, the information contained on this Recording and Endorsement Cover Page is consistent with the information contained in the attached document.

543253168DLR0021

Westchester County Recording & Endorsement Page

Submitter Information

Name:	Abstracters' Information Service (pick up by AIS)	Phone:	212 949 0100
Address 1:	1111 Marcus Avenue - Suite MZ214	Fax:	212 983 8430
Address 2:	Tel: 516-918-4600	Email:	gregoryshaw@cltic.com
City/State/Zip:	Lake Success NY 11042	Reference for Submitter:	6015069-Abstracters' Information Servic

Document Details

Control Number: **543253168** Document Type: **Declaration (DLR)**

Package ID: 20141121000860001000 Document Page Count: **7** Total Page Count: **8**

Parties

☐ Additional Parties on Continuation page

1st PARTY		2nd PARTY	
1: CONSOLIDATED EDISON CO OF NEW YORK INC	- Other	1: CONSOLIDATED EDISON CO OF NEW YORK INC	- Other
2:		2:	

Property

☐ Additional Properties on Continuation page

Street Address: 267 SAW MILL RIVER ROAD Tax Designation: 2.-2410-72

City/Town: YONKERS Village:

Cross- References

☐ Additional Cross-Refs on Continuation page

1: 2: 3: 4:

Supporting Documents

Recording Fees

Statutory Recording Fee:	$40.00
Page Fee:	$40.00
Cross-Reference Fee:	$0.00
Mortgage Affidavit Filing Fee:	$0.00
RP-5217 Filing Fee:	$0.00
TP-584 Filing Fee:	$0.00
Total Recording Fees Paid:	**$80.00**

Transfer Taxes

Consideration:	$0.00
Transfer Tax:	$0.00
Mansion Tax:	$0.00
Transfer Tax Number:	

Mortgage Taxes

Document Date:

Mortgage Amount:

Basic:	$0.00
Westchester:	$0.00
Additional:	$0.00
MTA:	$0.00
Special:	$0.00
Yonkers:	$0.00
Total Mortgage Tax:	**$0.00**

Dwelling Type: Exempt: ☐

Serial #:

RECORDED IN THE OFFICE OF THE WESTCHESTER COUNTY CLERK

Recorded: 11/21/2014 at 04:13 PM

Control Number: **543253168**

Witness my hand and official seal

Timothy C.Idoni
Westchester County Clerk

Record and Return To

☐ Pick-up at County Clerk's office

Consolidated Edison Company of New York, Inc.
4 Irving Place
Room 1850-S
New York, NY 10003
Attn: Kevin J. Klesh

DECLARATION OF COVENANTS AND RESTRICTIONS

THIS DECLARATION OF COVENANTS AND RESTRICTIONS is made this 17th day of November , 2014, by **CONSOLIDATED EDISON COMPANY OF NEW YORK, INC.** ("**Con Edison**"), a corporation organized and existing under the laws of the State of New York with an office for the transaction of business at 4 Irving Place, New York, New York 10003, and the successor by merger to the Westchester Lighting Company.

WHEREAS, the Saw Mill River Station (Site No.V-00573) is the subject of Voluntary Cleanup Agreement Index No. D2-0003-02-08 (the "**VCA**"), executed by Con Edison and the New York State Department of Environmental Conservation (the "**Department**" which has an address at 625 Broadway, Albany, New York 12233) as part of the Department's Voluntary Cleanup Program, namely that tract of real property located at 267 Saw Mill River Road in the City of Yonkers, County of Westchester, State of New York, which is part of the lands conve yed b y New York State Realty and Terminal Company to Westchester Lighting Company by deed dated June 4, 1915, and recorded in the Westchester County Clerk's Office on June 9, 1915, in Liber 2085 at Page 406, and being more particularly described in Appendix "A," attached to this Declaration of Covenants and Restrictions and made a part hereof, and hereinafter referred to as the "**Property**"; and

WHEREAS, the Department approved a remedy (the "**Remedy**") that eliminates or mitigates all significant threats to the environment presented by the contamination disposed of at the Property and such Remedy requires that the Property be subject to restrictive covenants.

NOW, THEREFORE, Con Edison, as the successor by merger to the Westchester Lighting Company and fee owner of the Property, for itself and for its successors and/or assigns, covenants that:

FIRST: The Property that is subject to this Declaration of Covenants and Restrictions is as shown on the map annexed to this Declaration of Covenants and Restrictions as Appendix "B" and made a part hereof.

SECOND: Unless prior approval by the Department or, if the Department shall no longer exist, by any New York State agency or agencies subsequently created to protect the environment of the State of New York and the health of the State's citizens, hereinafter referred to as "**the Relevant Agency**," is first obtained, where contamination remains on the Property subject to the provisions of the Site Management Plan approved by the Department for the Property (the "**SMP**"), there shall be no construction, use or occupancy of the Property that results in the disturbance or excavation of the Property which threatens the integrity of the Remedy's required engineering controls for the Property or which results in unacceptable human exposure to contaminated soils on the Property. The SMP for the Property (and all Department-approved modifications thereto) may be obtained from the New York State Department of Environmental Conservation, Division of

Environmental Remediation, Site Control Section, 625 Broadway, Albany, New York 12233.

THIRD: The owner of the Property shall not disturb, remove, or otherwise interfere with the installation, use, operation, and maintenance of the engineering controls required for the Remedy, which are described in the SMP, unless in each instance the owner of the Property first obtains a written waiver of such prohibition from the Department or Relevant Agency.

FOURTH: The owner of the Property shall prohibit the Property from ever being used for purposes other than "Industrial" use, as such term is defined in 6 NYCRR Part 375-1.8(g)(2), without the express written waiver of such prohibition by the Department or Relevant Agency.

FIFTH: The owner of the Property shall prohibit the use of the groundwater underlying the Property without necessary water quality treatment as determined by the New York State Department of Health or Westchester County Department of Health to render such groundwater safe for use as drinking water or for industrial purposes, as appropriate, and the user of such groundwater must first notify and obtain written permission to do so from the Department or Relevant Agency.

SIXTH: The owner of the Property shall provide a periodic certification, prepared and submitted by a professional engineer or environmental professional acceptable to the Department or Relevant Agency, which will certify that the institutional and engineering controls put in place for the Property are unchanged from the previous certification, comply with the SMP for the Property, and have not been impaired.

SEVENTH: The owner of the Property shall continue in full force and effect any institutional and engineering controls for the Remedy and maintain such controls, unless the owner of the Property first obtains permission to discontinue such controls from the Department or Relevant Agency, in compliance with the Department-approved SMP for the Property, which is incorporated and made enforceable hereto, subject to such modifications thereto as may be approved by the Department or Relevant Agency.

EIGHTH: This Declaration of Covenants and Restrictions is and shall be deemed a covenant that shall run with the land and shall be binding upon all future owners of the Property, and shall provide that the owner of the Property and its successors and assigns consent to enforcement by the Department or Relevant Agency of the prohibitions and restrictions that the VCA requires be recorded, and hereby covenant not to contest the authority of the Department or Relevant Agency to seek enforcement of such prohibitions and restrictions.

NINTH: Any deed of conveyance of the Property, or any portion thereof, shall recite, unless the Department or Relevant Agency has consented to the termination of such covenants and restrictions, that said conveyance is subject to this Declaration of Covenants and Restrictions.

IN WITNESS WHEREOF, the undersigned has executed this instrument on the day written below.

CONSOLIDATED EDISON COMPANY OF NEW YORK, INC.

By: _____

Title: VP and Treasurer

Date: 11/17/2014

ACKNOWLEDGEMENT

STATE OF NEW YORK)
) ss.:
COUNTY OF NEW YORK)

On the 17th day of November in the year 2014, before me, the undersigned, personally appeared Scott Sanders, personally known to me or proved to me on the basis of satisfactory evidence to be the individual whose name is subscribed to the within instrument and acknowledged to me that he/she executed the same in his/her capacity, and that by his/her signature on the instrument, the individual, or the entity upon behalf of which the individual acted executed the instrument.

_____
Notary Public

SYLVEN GLYNN
NOTARY PUBLIC, STATE OF NEW YORK
Registration No. 01GL5065881
Qualified in Kings County
Commission Expires September 16, 2018

APPENDIX B

METES AND BOUNDS

APPENDIX "A"

METES AND BOUNDS DESCRIPTION OF THE PROPERTY

All that certain parcel of land being, lying, and situate in the City of Yonkers, County of Westchester, and State of New York that consists of the entirety of those lands that were heretofore conveyed by New York State Realty and Terminal Company to Westchester Lighting Company by that certain deed dated June 4, 1915, and recorded in the Westchester County Clerk's Liber 2085 of deeds at page 406 and Lot 5 on that certain "Map of Property of Frederick C, DeAngelis...," which was filed in the Westchester County Clerk's Office on May 22, 1906, as Map No. 1621 that when taken together is bounded and described as follows:

BEGINNING at a point on the westerly line of Saw Mill River Road where it is met by the line dividing said Lot 5, on the south, from Lot 6 on said Filed Map No. 1621, on the north, which point occupies coordinate position

N 770,216.00 (y)
E 663,983.68 (x)

of the New York State Coordinate System, East Zone (NAD 83, expressed in feet);

THENCE; from said point of **BEGINNING** southerly along the westerly line of said Saw Mill River Road

S 38° 25" 41" W 25.00 feet;

to a point at the line dividing said Lot 5, now on the north, from Lot 4 on said Filed Map No. 1621, on the south;

THENCE along the last mentioned division line

N 60° 08" 19" W 109.45 feet;

to a point at the westerly line of said Lots 4 and 5 shown on Filed Map No. 1621;

THENCE southerly along the westerly line of said Lot 4 and continuing along the westerly line of Lots 3, 2 and 1 on said Filed Map No. 1621;

S 33° 00" 41" W 99.04 feet;

to a point at the line of lands formerly of Alexander Smith and Sons Carpet Company and now or formerly of 201 Saw Mill Road Development Corp. as the said line was established by the Boundary Line Agreement between Alexander Smith and Sons Carpet Company and Westchester Lighting Company dated December 27, 1923, and recorded in the Westchester County Clerk's Liber 2486 of deeds at page 260;

THENCE along the said 201 Saw Mill Road Development Corp. lands and along lands now or formerly of Corax Corporation and at all times the said agreed line

N 60° 06" 14" W 478.69 feet;

to a point at other lands formerly of New York State Realty and Terminal Company and now or formerly of Scrams Realty Corp.

THENCE northerly along the said Scrams Realty Corp. first on a non-tangent curve to the right, the center of which bears S 68° 58" 33" E, the central angle of which is 05° 44' 54", the radius of which is 2,764.71 feet for 277.37 feet, and then

N 26° 56" 40" E 345.14 feet;

to a point at the line of lands formerly of Skinner and now shown on that certain "Map of 750 Lots and Plots in the 4th Ward of the City of Yonkers...H. F. Hadden, Esq. ...," which was filed in the Westchester County Registrar's Office on July 20, 1893, as Map No. 1087;

THENCE along the southerly line of lands shown on Filed Map No. 1087

S 65° 33" 20" E 564.67 feet

to a point at the westerly line of Lot 25 on said Filed Map No. 1621;

THENCE southerly along the westerly line of said Lot 25, continuing along the westerly lines of Lots 24 through 17, inclusive, and Lot 26 on said Filed Map No. 1621, continuing further along the westerly terminus of Roosevelt Street, and continuing even further along the westerly line of Lots 27 and Lots 10 through 6, inclusive

S 33° 00" 41" W 551.27 feet,

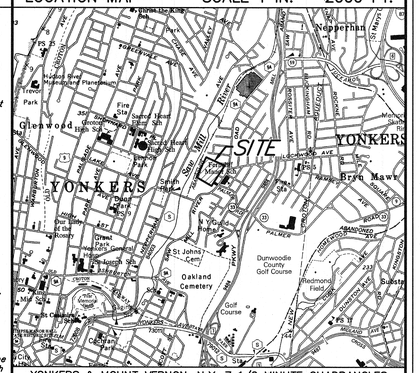
to a point at the first mentioned line dividing said Lot 6, on Filed Map No. 1621, on the north, from Lot 5 on said Filed Map No. 1621, on the south;

THENCE along the last mentioned division line

S 60° 08" 19" E 111.82 feet

to the westerly line of Saw Mill River Road and the place or point of the **BEGINNING**, containing 7.872 acres, more or less.

N.B. The meridian (North Point) area and coordinate values used in the foregoing description refer to the New York State Coordinate System, East Zone, NAD 1983, expressed in feet. The meridian is True North at 74° 30" 00" West Longitude and bears approximately 6° clockwise from the meridian in the deed recorded in Liber 2065 at page 406. The distances used in this description are Grid Distances. To obtain Ground Distances divide the Grid Distances by the Combined Scale Factor 0.99993282. This note should remain with this description in any instrument of which it may become a part.



Drawing Name: DEC22158__R01 Layout: W.O. No. 22158 Checked by GJW Spell checked by DAP Drawn by DAP Closed by DAP On 11-3-2014 FILE No. 12-161 T.M. : 2-2140-72 GEOGRAPHIC INDEX 345550, 625600

Ground Area = 7.872 Acres
Grid Area = 7.283 Acres

PROPERTY DESCRIPTION

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BEGINNING at the point on the westerly line of Saw Mill River Road where it is met by the line dividing said Lot 5, on the south, from Lot 6 on said Filed Map No. 1621, on the north, which point occupies coordinate position

N 770,216.00 (y)
E 663,983.68 (x)

of the New York State Coordinate System, East Zone (NAD 83, expressed in feet).

THENCE from the said point of beginning southerly along the westerly line of said Saw Mill River Road

S 38°25'41" W 25.00 feet,

to a point at the line dividing said Lot 5, now on the north, from Lot 4 on said Filed Map No. 1621, on the south. Thence along the last mentioned division line

N 60°08'19" W 109.45 feet,

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S 33°00'41" W 99.04 feet,

to a point at the line of lands formerly of Alexander Smith and Sons Carpet Company and now or formerly of 201 Saw Mill River Road Development Corp. as the said line was established by the Boundary Line Agreement between Alexander Smith and Sons Carpet Company and Westchester Lighting Company dated December 27, 1923, and recorded in the Westchester County Clerk's Liber 2486 of deeds at page 260. Thence along the said 201 Saw Mill River Road Development Corp. lands and along lands now or formerly of Corax Corporation and at all times along the said agreed line

N 60°06'14" W 478.69 feet

to a point at other lands formerly of New York State Realty and Terminal Company and now or formerly of Scrams Realty Corp. Thence northerly along the said Scrams Realty Corp. first on a non-tangent curve to the right, the center of which bears S68°58'33"E, the central angle of which is 05°44'54", the radius of which is 2,764.71 feet for 277.37 feet, and then

N 26°56'40" E 345.14 feet,

to a point at the line of lands formerly of Skinner and now shown on that certain "Map of 750 Lots & Plots in the 4th Ward City of Yonkers...H. F. Hadden, Esq. ...," which was filed in the Westchester County Registrar's office on July 20, 1893, as Map No. 1087. Thence along the southerly line of the lands shown on Filed Map No. 1087

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S 33°00'41" W 551.27 feet,

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S 60°08'19" E 111.82 feet

to the westerly line of Saw Mill River Road and the point or place of beginning, containing 7.872 acres, more or less.

N.B. The meridian (North Point), area and coordinate values used in the foregoing description refer to the New York State Coordinate System, East Zone, NAD 1983, expressed in feet. The meridian is True North at 74°30'00" West Longitude and bears approximately 6° clockwise from the meridian in the deed recorded in Liber 2065 at page 406. The distances used in this description are Grid Distances. To obtain Ground Distances divide the Grid Distances by the Combined Scale Factor 0.99993282. This note should remain with this description in any instrument of which it may become a part.

LOCATION MAP SCALE 1 IN. = 2000 FT.

YONKERS & MOUNT VERNON, N.Y. 7 1/2 MINUTE QUADRANGLES

SURVEY NOTES:

1. THE AREA, MERIDIAN, DISTANCES AND COORDINATE VALUES SHOWN HEREON REFER TO THE NEW YORK COORDINATE SYSTEM, EAST ZONE (NAD 83), EXPRESSED IN FEET. THE DISTANCES CONTROLLING THIS MAP ARE GRID DISTANCES. THEY HAVE BEEN SCALED BY A GRID FACTOR (SCALE FACTOR X SEA LEVEL FACTOR) OF 0.99993282. TO OBTAIN GROUND DISTANCES DIVIDE THE DISTANCES ON THIS MAP BY THE GRID FACTOR. TO OBTAIN GROUND AREA DIVIDE THE AREA ON THIS MAP BY THE SQUARE OF THE GRID FACTOR.
2. UNAUTHORIZED ALTERATION OR ADDITION TO A DOCUMENT PREPARED BY A LICENSED LAND SURVEYOR IS A VIOLATION OF SECTION 7209, SUBDIVISION 2 OF THE NEW YORK STATE EDUCATION LAW.
3. ALL BEARINGS SHOWN ARE GRID BEARINGS UNLESS OTHERWISE NOTED.
4. THIS IS A SURVEY OF LOT 5 SHOWN ON THAT CERTAIN "MAP OF PROPERTY OF FREDERICK C. DE ANGELIS ESQ. ...," WHICH WAS FILED IN THE WESTCHESTER COUNTY CLERK'S OFFICE ON MAY 22, 1906 AS MAP NO. 1621 AND THE LANDS DESCRIBED IN THE WESTCHESTER COUNTY CLERK'S LIBER 2085 CP 406 (NEW YORK STATE REALTY TERMINAL COMPANY TO WESTCHESTER LIGHTING COMPANY).

LEGEND

CMP	CORRUGATED METAL PIPE
⊕	GAS VALVE
↩	GUY
○SM	MANHOLE (SEWER)
¤	POLE
☐TB	TRAFFIC BOX
◉	WATER VALVE
▤	DROP INLET
○EP	ELECTRIC POST
⚲	HYDRANT

Ground 478.69' = GROUND DISTANCE
Grid 478.66' = GRID DISTANCE
Deed 486' = DEED DISTANCE

SUBTERRANEAN

——D——	DRAINAGE LINE (STRIPED IN FIELD)
——E——	ELECTRIC LINE (STRIPED IN FIELD)
——U——	SURFACE STRIPING PROVIDED BY CON EDISON (UNKNOWN FEATURE)

Detail A
Scale 1 in. = 10 ft.

Detail B
Scale 1 in. = 10 ft.

Detail C
Scale 1 in. = 10 ft.

PRINTED
NOV 04 2014
BADEY & WATSON
Surveying & Engineering, P.C.

SURVEYOR'S SEAL

GLENNON J. WATSON 48167

THE PROPERTY HEREON IS LOCATED ON
SHEET 22
BLOCK 2425
OF THE WESTCHESTER COUNTY BLOCK INDEX SYSTEM

STATE OF NEW YORK, DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SURVEY OF PROPERTY
PREPARED FOR
CONSOLIDATED EDISON COMPANY OF NEW YORK, INC.
SITUATE IN THE
CITY OF YONKERS
WESTCHESTER COUNTY
NEW YORK
SCALE 1 in. = 40 ft. OCTOBER 17, 2014

5 0 5 10 20 30 60
IN METERS 1: 480
40 0 20 40 80 160
IN FEET 1 inch = 40 feet

We hereby certify that the survey shown hereon was completed by us on October 17, 2014 that this map was completed on November 4, 2014 and that this survey has been prepared in accordance with the existing Code of Practice for Land Surveys adopted by The New York State Association of Professional Land Surveyors, Inc.

BADEY & WATSON
SURVEYING & ENGINEERING, P.C.
by Glennon J Watson
GLENNON J. WATSON, LS
NEW YORK STATE LICENSED LAND SURVEYOR
LICENSE No. 48167

MAPPING PLANNING DESIGN SINCE 1973
BADEY & WATSON, Surveying & Engineering, P.C.
3063 Route 9, Cold Spring, NY 10516
(845) 265-9217 (845) 265-4428 (Fax)
(877) 3.141593 Toll-Free www.BADEY-WATSON.com

FILE No. 12-161

APPENDIX C

EXCAVATION WORK PLAN

APPENDIX C – EXCAVATION WORK PLAN

C-1 SOIL SCREENING METHODS

Visual, olfactory and instrument-based soil screening will be performed by a qualified environmental professional (QEP) during all excavations into subsurface material. Soil screening will be performed regardless of where the invasive work is performed on the Site and will include all excavation and invasive work performed during development, such as excavations for foundations and utility work, after NYSDEC approval of SMP.

Soils will be segregated based on previous environmental data and screening results into material that may require off-Site disposal, material that requires testing, material that can be returned to the subsurface, and material that can be used as cover soil. If intrusive activities are proposed in the areas in which contaminated subsurface materials are anticipated, samples will be analyzed to assess where the excavated subsurface materials will be disposed.

C-2 STOCKPILE METHODS

Soil stockpiles will be maintained on tarps and/or polyethylene sheeting, and will be continuously encircled with a berm and/or silt fence. Storm water will be diverted away from soil stockpiles using hay bales or similar methods. Hay bales will be used as needed near catch basins, surface waters and other discharge points.

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

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

C-3 MATERIALS EXCAVATION AND LOAD OUT

A QEP or person under the supervision of the QEP will oversee all invasive work and the excavation and load-out of all excavated material. Intrusive work will be conducted by HAZWOPER trained personnel.

The Owner of the Property and its Contractors are solely responsible for safe execution of all intrusive and other work performed under this EWP.

The presence of subsurface utilities and easements on the Site will be investigated by the QEP. It will be determined whether a risk or impediment to the planned work under this SMP is posed by subsurface utilities or easements on the Site.

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

A truck decontamination pad will be operated on-Site. The QEP will be responsible for ensuring that all outbound trucks associated with the excavation of subsurface materials will be washed at the decontamination pad, as necessary to remove contaminated materials, before leaving the Site until the activities performed under this section are complete.

Locations where vehicles enter or exit the Site shall be inspected daily for evidence of off-Site soil tracking. Egress points for truck and equipment transport from the Site will be kept clean of dirt and other materials during all Site activities.

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

C-4 MATERIALS TRANSPORT OFF-SITE

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

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

All trucks, including contaminated truck tires and truck surfaces, will be washed, as necessary, prior to leaving the Site. Truck wash waters will be collected and disposed of off-Site in an appropriate manner.

Truck transport routes will be based on the following considerations: trucks will exit the Site and follow an approved, restricted route (i.e., using main roads exclusively, unless otherwise indicated) to the approved transfer or disposal facility as specified by the Owner and/or the Contractor, and as approved by the NYSDEC. All trucks loaded with Site materials will exit the vicinity of the Site using only these approved truck routes. The approved truck route is the most appropriate route and takes into account: (a) limiting transport through residential areas and past sensitive sites; (b) use of city mapped truck routes; (c) prohibiting off-Site queuing of trucks entering the facility; (d) limiting total distance to major highways; (e) promoting safety in access to highways; and (f) overall safety in transport; and (g) community input [(where necessary). A map of the designated truck route will be provided prior to the start of any hauling activities. This route will be determined pending approval of any intrusive work that may be performed on the Site.

Trucks will be prohibited from stopping and idling on the street outside the Site. As possible, queuing of trucks will be performed on the Site in order to minimize off-Site disturbance.

C-5 MATERIALS DISPOSAL OFF-SITE

All soil/fill/solid waste excavated and removed from the Site will be treated as regulated material and will be transported and disposed in accordance with all local, State

(including 6NYCRR Part 360) and Federal regulations. If disposal of soil/fill from the Site is proposed for unregulated off-Site disposal (i.e. clean soil removed for development purposes), a formal request with an associated plan will be made to the NYSDEC. Unregulated off-Site management of materials from this Site will not occur without formal NYSDEC approval.

Off-Site disposal locations for excavated materials will be identified in the pre-excavation notification. This will include estimated quantities and a breakdown by class of disposal facility if appropriate, i.e. hazardous waste disposal facility, solid waste landfill, petroleum treatment facility, C/D recycling facility, etc. As needed, actual disposal quantities and associated documentation will be reported to the NYSDEC in the Periodic Review Report. This documentation will include: waste profiles, test results, facility acceptance letters, manifests, bills of lading, and facility receipts.

Non-hazardous historic fill and soils removed from the Site will be handled, at minimum, as a Municipal Solid Waste per 6 NYCRR Part 360-1.2. Material that does not meet Track 1 unrestricted SCOs is prohibited from being taken to a New York State recycling facility (6 NYCRR Part 360-16 Registration Facility).

C-6 MATERIALS REUSE ON-SITE

Analytical criteria for on-site reuse of material have been approved by NYSDEC and are described below The QEP will ensure that procedures appropriate for unrestricted reuse as defined in this SMP are followed and that unacceptable material does not remain on-Site. Any excavated material may be used as backfill material on the Site within the same excavation provided the soil or fill contains no visual or olfactory evidence of contamination, and no elevated PID readings are observed, and the excavated subsurface material will be replaced in the excavation in the order that it was excavated. If any visual or olfactory impacts are observed, or if PID readings are elevated, the excavated material will be sampled for chemical analysis. Excavated subsurface material will be used as backfill anywhere on site only if the analytical results do not exceed the Industrial SCOs found in NYSDEC Environmental Programs Subpart 375. Subsurface Site material, including historic fill and impacted soil that is acceptable for re-use on-Site

will be placed in the subsurface and will not be reused within a cover soil layer, within landscaping berms, or as backfill for subsurface utility lines.

Any demolition material proposed for reuse on-Site will be sampled for asbestos and the results will be reported to the NYSDEC for acceptance. Concrete crushing or processing on-Site will not be performed without prior NYSDEC approval. Organic matter (wood, roots, stumps, etc.) or other solid waste derived from clearing and grubbing of the Site will not be reused on-Site.

Excavated material may be acceptable for use off-site if it is below the Unrestricted SCOs. If any imported fill is required, the material must meet the Industrial SCOs.

Upon completion of the work, if existing paving removed from an area of excavation is not to be replaced with paving materials, NYSDEC must be consulted regarding the final surface covering. In this case, the evaluation of final surface covering will be made based upon the use of the area and will be consistent with how the soil cover is maintained on the rest of the non-asphalted site.

C-7 FLUIDS MANAGEMENT

All liquids to be removed from the Site, including excavation dewatering and groundwater monitoring well purge and development waters, will be handled, transported and disposed in accordance with applicable local, State, and Federal regulations. Dewatering, purge and development fluids will not be recharged back to the land surface or subsurface of the Site, but will be managed off-Site.

Discharge of water generated during large-scale construction activities to surface waters (i.e. a local pond, stream or river) will be performed under a State Pollution Discharge Elimination System (SPDES) permit or transported and disposed off-Site.

C-8 BACKFILL FROM OFF-SITE SOURCES

All materials proposed for import onto the Site will be approved by the QEP and will be in compliance with provisions in this SMP, meeting Industrial SCOs, prior to receipt at the Site.

Material from industrial sites, spill sites, or other environmental remediation sites or potentially contaminated sites will not be imported to the Site. Backfill materials utilized at the Site will be obtained from a NYSDOT approved source. The following material may be imported and used as backfill without chemical testing:

- Rock or stone, consisting of virgin material from a permitted mine or quarry; or
- Granular fill material (less than 10% passing #200 sieve) that is virgin material from a NYSDOT-approved source.

Should the backfill material not meet one of the above requirements, the material will be tested via the collection of one composite sample for every 500 cubic yards for each source area and analyzed by a NYSDOH-certified Environmental Laboratory Accreditation Program (ELAP)-approved laboratory. The material will be used as backfill only if the analytical results do not exceed the Soil Cleanup Objectives found in NYSDEC Environmental Programs Subpart 375.

All imported soils will meet the backfill and cover soil quality standards established in 6 NYCRR 375-6.7(d). Based on an evaluation of the land use, protection of groundwater and protection of ecological resources criteria, the resulting soil quality standards are listed in **Table 6**. Soils that meet 'exempt' fill requirements under 6 NYCRR Part 360, but do not meet backfill or cover soil objectives for this site, will not be imported onto the Site without prior approval by NYSDEC. Solid waste will not be imported onto the Site.

Trucks entering the Site with imported soils will be securely covered with tight fitting covers. Imported soils will be stockpiled separately from excavated materials and covered to prevent dust releases.

C-9 STORMWATER POLLUTION PREVENTION

A Stormwater Pollution Prevention Plan will be developed for any future Site development activities affecting an area greater than one acre and will conform to the requirements of the NYSDEC Division of Water guidelines and NYS regulations. As part

of the Stormwater Pollution Prevention Plan, the following measures will be implemented:

- Barriers and checks will be installed and inspected once a week and after every storm event. Results of inspections will be recorded in a logbook and maintained at the Site and available for inspection by NYSDEC. All necessary repairs shall be made immediately.
- Accumulated sediments will be removed as required to keep the barrier and check functional.
- All undercutting or erosion of the silt fence toe anchor shall be repaired immediately with appropriate backfill materials.
- Manufacturer's recommendations will be followed for replacing silt fencing damaged due to weathering.
- Erosion and sediment control measures identified in the SMP shall be observed to ensure that they are operating correctly. Where discharge locations or points are accessible, they shall be inspected to ascertain whether erosion control measures are effective in preventing significant impacts to receiving waters.
- Silt fencing or hay bales will be installed around the entire perimeter of the construction area.

C-10 CONTINGENCY PLAN

If underground tanks or other previously unidentified contaminant sources are found on the Site during post-Site Characterization subsurface excavations or development-related construction, excavation activities will be suspended until sufficient equipment is mobilized to address the condition.

Sampling of any product observed will be performed, and will include sediment, surrounding soils, groundwater, etc. as necessary to determine the nature of the material and to determine the proper disposal methods for impacted media. Chemical analysis will be performed for full a full list of analytes (TAL metals; TCL volatiles and semi-

volatiles, TCL pesticides and PCBs), unless the Site history and previous sampling results provide a sufficient justification to limit the list of analytes. In this case, a reduced list of analytes will be proposed to the NYSDEC for approval prior to sampling.

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. Reportable quantities of petroleum product will also be reported to the NYSDEC spills hotline. These findings will be also included in the periodic reports prepared pursuant to Section 5 of this SMP.

Any intrusive work will be performed using Level D personal protective equipment, unless otherwise indicated.

C-11 COMMUNITY AIR MONITORING PLAN

During all intrusive work performed on the Site, except for emergency, unplanned situations, community air monitoring will be conducted in compliance with NYSDOH Generic Community Air Monitoring Plan (CAMP) requirements. Real-time air monitoring for volatile compounds and particulates will be performed as described below.

Organic Vapor Monitoring

Continuous monitoring for VOCs will be conducted using photoionization detector (PID) during all on-Site ground intrusive activities. Upwind concentrations will be measured at the start of each workday and periodically thereafter to establish background concentrations. Volatile organic compounds (VOCs) will be monitored continuously at the downwind perimeter of the work zone. Monitoring will be conducted with a PID equipped with either a 10.6 eV lamp capable of calculating 15-minute running average concentrations. An 11.7 eV lamp will be used in the areas where chlorinated solvents historically have been identified (as indicated on **Figure 2** of the SMP, i.e., in the area of monitoring well OMW-3). The following actions will be taken based on organic vapor levels measured:

- If total organic vapor levels exceed 5 ppm above background levels or concentrations during the 15-minute average at the perimeter, work

activities will be temporarily halted and monitoring continued. If levels readily decrease (per instantaneous readings) below 5 ppm above background, work activities will resume with continued monitoring.

- If total organic vapor levels at the downwind perimeter of the hot zone persist at levels in excess of 5 ppm above background but less than 25 ppm, work activities will be halted, the source of vapors identified, corrective actions taken to abate emissions, and monitoring continued. After these steps, work activities will resume provided that the total organic vapor level 200 feet downwind of the work zone or half the distance to the nearest potential receptor or residential/commercial structure, whichever is less – but in no case less than 20 feet, is below 5 ppm above background for the 15-minute average.

- If the total organic vapor level is above 25 ppm at the perimeter of the work zone, activities will be shut down.

All 15-minute readings will be recorded and available for NYSDEC and NYSDOH personnel to review. Instantaneous readings, if any, will also be recorded.

Particulate Monitoring

During on-Site ground intrusive activities performed on the Site, particulate concentrations will be monitored continuously at the downwind perimeter of the work zone with a portable real-time particulate monitor capable of measuring particulate matter less than 10 micrometers in size and capable of integrating over a period of 15 minutes (or less). The equipment will include an audible alarm to indicate any exceedance of the action level. Upwind concentrations will be measured at the start of each workday and periodically thereafter to establish background concentrations. The following actions will be taken based on particulate concentrations measured:

- If the measured downwind particulate level is 100 micrograms per cubic meter ($\mu g/m^3$) or more above background for the 15-minute period or if dust is observed leaving the work area, then dust suppression techniques will be employed. Work will continue with dust suppression provided that

the downwind particulate level does not exceed 150 μg/m^3 above background and no visible dust is migrating from the work area.

- If, after implementation of dust suppression techniques, the downwind particulate level is greater than 150 μg/m^3 above background, work will be stopped and a re-evaluation of activities initiated. Work will resume provided that dust suppression measures and other controls are successful in reducing the downwind particulate level to within 150 μg/m^3 of the background (upwind) level and in preventing visible dust migration. All readings will be recorded and be available for NYSDEC and NYSDOH personnel to review.

The HASP, which is provided in Appendix G of this SMP, includes the monitoring requirements outlined in NYSDOH's Generic CAMP. A project-specific CAMP will be developed prior to the start of Site work. Exceedances of action levels listed in the CAMP will be reported to NYSDEC and NYSDOH Project Managers.

C-12 ODOR CONTROL PLAN

If determined to be necessary, an odor control plan capable of controlling emissions of nuisance odors off-Site an on the Site will be developed. Specific odor control methods to be used on a routine basis will include foam suppressants and misting. If nuisance odors are identified at the Site boundary, or if odor complaints are received, 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 any other complaints about the project. Implementation of all odor controls, including the halt of work, is the responsibility of the Property Owner and/or the Contractor, and any measures that are implemented will be discussed in the Periodic Review Report.

All necessary means will be employed to prevent on- and off-Site nuisances. At a minimum, these measures will include: (a) limiting the area of open excavations and size of soil stockpiles; (b) shrouding open excavations with tarps and other covers; and (c) using foams to cover exposed odorous soils. nd If odors develop and cannot be otherwise

controlled, additional means to eliminate odor nuisances will include: (d) direct load-out of soils to trucks for off-Site disposal; (e) use of chemical odorants in spray or misting systems; and, (f) use of staff to monitor odors in surrounding neighborhoods.

If nuisance odors develop during intrusive work that cannot be corrected, or where the control of nuisance odors cannot otherwise be achieved due to on-Site conditions or close proximity to sensitive receptors, odor control will be achieved by sheltering the excavation and handling areas in a temporary containment structure equipped with appropriate air venting/filtering systems.

C-13 DUST CONTROL PLAN

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

- Dust suppression will be achieved through the use of a dedicated on-Site water truck for road wetting. The truck will be equipped with a water cannon capable of spraying water directly onto off-road areas including excavations and stockpiles.
- Clearing and grubbing will be performed on the Site in stages to limit the area of exposed, unvegetated soils vulnerable to dust production.
- As practicable, gravel will be used on roadways to provide a clean and dust-free road surface.
- On-Site roads will be limited in total area to minimize the area required for water truck sprinkling.

C-14 OTHER NUISANCES

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

A plan will be developed and utilized by the Contractor for all intrusive work to ensure compliance with local noise control ordinances.

APPENDIX D

TEST PIT LOGS

PARSONS
TEST PIT RECORD

PROJECT NAME:	Con Edison / Saw Mill River Station
PROJECT NUMBER:	444868-03000
WEATHER	45-55°F, Cloudy, chance of rain; Wind: SW 0-5 mph
DATE/TIME START:	4 December 2009 0745
DATE/TIME FINISH:	4 December 2009 1400
CONTRACTOR:	Environmental Closures, Inc.
INSPECTOR:	Rene Robles

TEST PIT ID: TP-1A

LOCATION:

Approximate L X W X D
= 50' X4' X 6'
Saw Mill River Station Site

DEPTH (feet bgs)	FIELD IDENTIFICATION OF MATERIAL	COMMENTS
0	0-0.5' - Asphalt	
1	0.5-1' - TRAP ROCK, brown fine to medium Sand and Silt and angular Gravel	
	1-6' - Dry, dense, brown fine to course SAND, Cobble, Broken	Headspace: 0.0 ppm
2	Asphalt, Broken Concrete, metal debris, rubber debris	
3	(Fill Material). Exposed 2 concrete slabs sloping downward to the NE one on top of the other.	
4		
5		
6	Bottom of test pit @ 6' bgs.	Groundwater encountered at 6'
7		
8		
9		
10		
11		
12		
13		
14		

Test pit was advanced utilizing a back-hoe

PARSONS
TEST PIT RECORD

PROJECT NAME:	Con Edison / Saw Mill River Station
PROJECT NUMBER:	444868-03000
WEATHER	45-55°F, Cloudy, chance of rain; Wind: SW 0-5 mph
DATE/TIME START:	4 December 2009 0745
DATE/TIME FINISH:	4 December 2009 1400
CONTRACTOR:	Environmental Closures, Inc.
INSPECTOR:	Rene Robles

TEST PIT ID: TP-1A

LOCATION:

Approximate L X W X D
= 50' X4' X 6'
Saw Mill River Station Site

PHOTOGRAPH

Excavation full length Picture taken from the south, 2 large concrete slabs sloping away the camera.

2 Large Concrete Slabs Sloping Downward, away from the camera

Excavation full length Picture taken from the north, 2 large concrete slabs sloping toward the camera.

2 Large Concrete Slabs Sloping Downward, toward the camera

PARSONS
TEST PIT RECORD

PROJECT NAME:	Con Edison / Saw Mill River Station	**TEST PIT ID:**	TP-1B
PROJECT NUMBER:	444868-03000	**LOCATION:**	
WEATHER	35-45°F, Partly cloudy; Wind: SW 5-10 mph	Approximate L X W X D	
DATE/TIME START:	1 December 2009 1050	= 38' X 3' X 6'10"	
DATE/TIME FINISH:	1 December 2009 1430	Saw Mill River Station Yard	
CONTRACTOR:	Environmental Closures, Inc.		
INSPECTOR:	Rene Robles		

DEPTH (feet bgs)	FIELD IDENTIFICATION OF MATERIAL	COMMENTS
0	0-0.5' - Asphalt	Headspace: 0.0 ppm
1	0.5-1' - TRAP ROCK, brown fine to medium Sand and Silt and angular Gravel	
	1'-6'10" - Dry, dense, brown fine to course SAND, Cobble,	
2	Broken Asphalt, Broken Concrete, metal debris, rubber debris (Fill Material).	
3		
4		
5		
6		
7	Bottom of the excavation @ 6'10" bgs	Groundwater encountered at 6'10"
8		
9		
10		
11		
12		

Test pit was advanced utilizing a back-hoe

PARSONS
TEST PIT RECORD

PROJECT NAME:	Con Edison / Saw Mill River Station
PROJECT NUMBER:	444868-03000
WEATHER	35-45°F, Partly cloudy; Wind: SW 5-10 mph
DATE/TIME START:	1 December 2009 1050
DATE/TIME FINISH:	1 December 2009 1430
CONTRACTOR:	Environmental Closures, Inc.
INSPECTOR:	Rene Robles

TEST PIT ID: TP-1B

LOCATION:

Approximate L X W X D
= 38' X 3' X 6'10"
Saw Mill River Station Yard

	PHOTOGRAPH
Excavation full length Picture taken from the south	
Excavation full length Picture taken from the north	

PARSONS
TEST PIT RECORD

PROJECT NAME:	Con Edison / Saw Mill River Station
PROJECT NUMBER:	444868-03000
WEATHER	45-55°F, Cloudy; Wind: Calm
DATE/TIME START:	2 December 2009 0900
DATE/TIME FINISH:	2 December 2009 1430
CONTRACTOR:	Environmental Closures, Inc.
INSPECTOR:	Rene Robles

TEST PIT ID: TP-1C

LOCATION:

Approximate L X W X D
= 31' X 3.5' X 12'
Saw Mill River Station Yard

DEPTH (feet bgs)	FIELD IDENTIFICATION OF MATERIAL	COMMENTS
0	0-0.5' - Asphalt	
1	0.5-1' - TRAP ROCK, brown fine to medium Sand and Slit and angular Gravel	
	1-7' - Dry, dense, brown fine to course SAND, Cobble, Broken	
2	Asphalt, Broken Concrete, metal debris, rubber debris (Fill Material).	Headspace: 0.0 ppm
3		
4		
5		
6		
7	7-11.5' Blue/gray CLAY, moist, medium dense.	Headspace: 0.0 ppm
8		
9		
10		
11	11.5-12' Brown SILTYSAND, Wet at 12' bgs, loose.	Headspace: 0.0 ppm
12	Bottom of the excavation @ 12' bgs	Groundwater encountered at 12'

Test pit was advanced utilizing a back-hoe

PARSONS
TEST PIT RECORD

PROJECT NAME:	Con Edison / Saw Mill River Station
PROJECT NUMBER:	444868-03000
WEATHER	45-55°F, Cloudy; Wind: Calm
DATE/TIME START:	2 December 2009 0900
DATE/TIME FINISH:	2 December 2009 1430
CONTRACTOR:	Environmental Closures, Inc.
INSPECTOR:	Rene Robles

TEST PIT ID: TP-1C

LOCATION:

Approximate L X W X D
= 31' X 3.5' X 12'
Saw Mill River Station Yard

PHOTOGRAPH

Excavation full length Picture taken from the south

Excavation full length Picture taken from the north

PARSONS
TEST PIT RECORD

PROJECT NAME:	Con Edison / Saw Mill River Station	**TEST PIT ID:**	TP-1D
PROJECT NUMBER:	444868-03000	**LOCATION:**	
WEATHER	27-43°F, cloudy; Wind: calm	Approximate L X W X D	
DATE/TIME START:	7 December 2009 0735	= 37.5' X 4' X 7.25'	
DATE/TIME FINISH:	7 December 2009 1430	Saw Mill River Station Yard	
CONTRACTOR:	Environmental Closures, Inc.		
INSPECTOR:	Rene Robles		

DEPTH (feet bgs)	FIELD IDENTIFICATION OF MATERIAL	COMMENTS
0	0-0.5' - Asphalt	
1	0.5-1' - TRAP ROCK, brown fine to medium Sand and Silt and angular Gravel	
	1-7.3' - Dry, dense, brown fine to course SAND, Cobble, Broken	
2	Asphalt, Broken Concrete, metal debris, rubber debris (Fill Material).	
3		
4		Headspace: 0.0 ppm
5		Water encountered at 5.5 ft bgs
6		
7	Grey CLAY, moist, dense, wet at 8.75'	
8		
9	Bottom of test pit @ 8.75' bgs	Groundwater encountered at 8.75'
10		
11		
12		

Test pit was advanced utilizing a back-hoe

PARSONS
TEST PIT RECORD

PROJECT NAME:	Con Edison / Saw Mill River Station
PROJECT NUMBER:	444868-03000
WEATHER	27-43°F, cloudy; Wind: calm
DATE/TIME START:	7 December 2009 0735
DATE/TIME FINISH:	7 December 2009 1430
CONTRACTOR:	Environmental Closures, Inc.
INSPECTOR:	Rene Robles

TEST PIT ID: TP-1D

LOCATION:

Approximate L X W X D
= 37.5' X 4' X 7.25'
Saw Mill River Station Yard

	PHOTOGRAPH
Excavation full length From the north	
Excavation full length From the South	

PARSONS
TEST PIT RECORD

PROJECT NAME:	Con Edison / Saw Mill River Station
PROJECT NUMBER:	444868-03000
WEATHER	31-43°F, Cloudy, snow sleet, freezing rain; Wind: 0-5 mph NW
DATE/TIME START:	22 April 2009 0755
DATE/TIME FINISH:	22 April 2009 1400
CONTRACTOR:	Environmental Closures, Inc.
INSPECTOR:	Rene Robles

TEST PIT ID: TP-1E

LOCATION:

Approximate L X W X D
= 37.5' X 4' X 7.25'
Saw Mill River Station Yard

DEPTH (feet bgs)	FIELD IDENTIFICATION OF MATERIAL	COMMENTS
0	0-0.5' - Asphalt	Headspace: 0.0 ppm
1	0.5-1' - TRAP ROCK, brown fine to medium Sand and Silt and angular Gravel 1-6' - Dry, dense, brown fine to course SAND, Cobble, Broken	Headspace: 0.0 ppm
2	Asphalt, Broken Concrete, metal debris, rubber debris (Fill Material). Gray CLAY at 5.5-6' bgs.	
3		
4		
5		
6	Bottom of the excavation @ 6' bgs	Groundwater encountered at 6'.
7		
8		
9		
10		
11		
12		

Test pit was advanced utilizing a back-hoe

PARSONS
TEST PIT RECORD

PROJECT NAME:	Con Edison / Saw Mill River Station
PROJECT NUMBER:	444868-03000
WEATHER	31-43°F, Cloudy, snow sleet, freezing rain; Wind: 0-5 mph NW
DATE/TIME START:	22 April 2009 0755
DATE/TIME FINISH:	22 April 2009 1400
CONTRACTOR:	Environmental Closures, Inc.
INSPECTOR:	Rene Robles

TEST PIT ID: TP-1E

LOCATION:

Approximate L X W X D
= 37.5' X 4' X 7.25'
Saw Mill River Station Yard

	PHOTOGRAPH
Excavation full length Picture taken from the north.	
Excavation full length Picture taken from the south.	

PARSONS
TEST PIT RECORD

PROJECT NAME:	Con Edison / Saw Mill River Station
PROJECT NUMBER:	444868-03000
WEATHER	Clear, 30-56°F, Wind: Calm
DATE/TIME START:	19 October 2009 0820
DATE/TIME FINISH:	19 October 2009 1400
CONTRACTOR:	Environmental Closures, Inc.
INSPECTOR:	Rene Robles

TEST PIT ID: TP-2

LOCATION:

Approximate L X W X D
= 20' X 3.5' X 8.75'
Saw Mill River Station Yard

DEPTH (feet bgs)	FIELD IDENTIFICATION OF MATERIAL	COMMENTS
0	0-3" - Asphalt 3-8" - Trap Rock	
1	8"-6.5' - Black/Dark Brown fine to medium SAND, some fine to course Gravel, little Silt, bare copper wire.	Headspace = 0.0 ppm
2	Edge of Holder foundation at 4'10"bgs	Headspace = 0.0 ppm
3		
4		Headspace = 3.9 ppm
5		
6	6.5-8.5' - Same as above, black stain with hydrocarbon like odor.	
7		
8	Bottom of excavation @ 8.5' bgs.	Groundwater encountered at 8.75'
9		
10		
11		
12		

Test pit was advanced utilizing a back-hoe

PARSONS
TEST PIT RECORD

PROJECT NAME:	Con Edison / Saw Mill River Station
PROJECT NUMBER:	444868-03000
WEATHER	Clear, 30-56°F, Wind: Calm
DATE/TIME START:	19 October 2009 0820
DATE/TIME FINISH:	19 October 2009 1400
CONTRACTOR:	Environmental Closures, Inc.
INSPECTOR:	Rene Robles

TEST PIT ID: TP-2

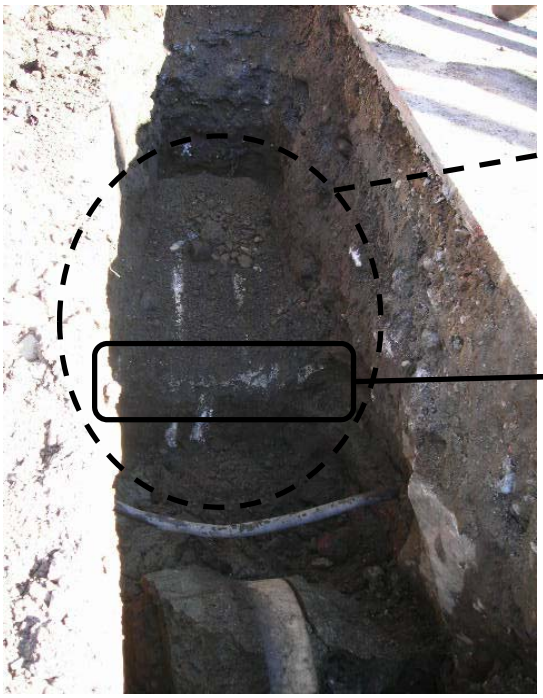
LOCATION:

Approximate L X W X D
= 20' X 3.5' X 8.75'
Saw Mill River Station Yard

PHOTOGRAPH

Excavation full length Picture taken from the south-east. Holder edge shown in the upper portion, unattached metal pipe shown in the center of picture

Excavation close-up Picture taken from the south. Holder edge shown in the upper portion, unattached metal pipe shown in the center of picture



PARSONS
TEST PIT RECORD

PROJECT NAME:	Con Edison / Saw Mill River Station
PROJECT NUMBER:	444868-03000
WEATHER	Clear, 30-56°F, Wind: Calm
DATE/TIME START:	20 October 2009 0820
DATE/TIME FINISH:	20 October 2009 1400
CONTRACTOR:	Environmental Closures, Inc.
INSPECTOR:	Rene Robles

TEST PIT ID: TP-3

LOCATION:

Approximate L X W X D
= 23' X 3.5' X 12'
Farrington St./Con Edison Yard

DEPTH (feet bgs)	FIELD IDENTIFICATION OF MATERIAL	COMMENTS
0	0-4" - Blue stone	
1	4-6' - Northern end: Brown Fine to medium SAND, some fine to course Gravel, little cobbles, moist. Southern end: Dark brown/gray fine to medium SAND, some fine to course Gravel, some cobble,	Headspace = 0.0 ppm
2	boulders broken wood.	
3		
4		
5		Groundwater encountered at 5.5'
6	6-8' - Northern end: Same as above. Southern End: Same as above, water at 5.5' bgs.	
7		
8	8-12' - gray CLAY, moist	Headspace = 0.0 ppm
9		
10	End of test pit @ 12' bgs.	
11		
12		

Test pit was advanced utilizing a back-hoe

PARSONS
TEST PIT RECORD

PROJECT NAME:	Con Edison / Saw Mill River Station
PROJECT NUMBER:	444868-03000
WEATHER	Clear, 30-56°F, Wind: Calm
DATE/TIME START:	20 October 2009 0820
DATE/TIME FINISH:	20 October 2009 1400
CONTRACTOR:	Environmental Closures, Inc.
INSPECTOR:	Rene Robles

TEST PIT ID: TP-3

LOCATION:

Approximate L X W X D
= 23' X 3.5' X 12'
Farrington St./Con Edison Yard

PHOTOGRAPH

Excavation full length Picture taken from the north-west.

Excavation full length Picture taken from the south-east. native soil at the north end of the excavation

Native Soil
(away from proposed center of Holder)

Excavation close-up Picture taken from the north-west. wood debris at the south in the bottom of the excavation

Wood Debris (as deep as 12'bgs)
(Toward proposed center of Holder)

PARSONS
TEST PIT RECORD

PROJECT NAME:	Con Edison / Saw Mill River Station
PROJECT NUMBER:	444868-03000
WEATHER	Clear, 30-56°F, Wind: Calm
DATE/TIME START:	21 October 2009 0750
DATE/TIME FINISH:	21 October 2009 1400
CONTRACTOR:	Environmental Closures, Inc.
INSPECTOR:	Rene Robles

TEST PIT ID: TP-4

LOCATION:

Approximate L X W X D
= 15' X 4' X 4'
Saw Mill River Station Yard

DEPTH (feet bgs)	FIELD IDENTIFICATION OF MATERIAL	COMMENTS
0	0-1' - Brown fine to course SAND, some fine to course Gravel, little Silt, dry, dense.	Headspace = 0.0 ppm
1	1-2' - Light brown fine to medium SAND, some medium to course Gravel, little Silt, broken concrete, broken brick, wood, dry, dense.	
2	2-3.5' - Dark brown fine SAND, some Silt, moist dense.	Headspace = 0.0 ppm
3	3.5-4' - Tan/light gray fine SAND, some Silt, moist, dense	Headspace = 0.0 ppm
4	Bottom of excavation @ 4' bgs.	No Groundwater encountered
5		
6		
7		
8		
9		
10		
11		
12		

Test pit was advanced utilizing a back-hoe

PARSONS
TEST PIT RECORD

PROJECT NAME:	Con Edison / Saw Mill River Station
PROJECT NUMBER:	444868-03000
WEATHER	Clear, 30-56°F, Wind: Calm
DATE/TIME START:	21 October 2009 0750
DATE/TIME FINISH:	21 October 2009 1400
CONTRACTOR:	Environmental Closures, Inc.
INSPECTOR:	Rene Robles

TEST PIT ID: TP-4

LOCATION:

Approximate L X W X D
= 15' X 4' X 4'
Saw Mill River Station Yard

PHOTOGRAPH

Excavation full length Picture taken from the west Pipe in the middle of the picture shows 1" metal pipe

Excavation full length Picture taken from the east

Large metal in the middle bottom of the excavation

PARSONS
TEST PIT RECORD

PROJECT NAME:	Con Edison / Saw Mill River Station
PROJECT NUMBER:	444868-03000
WEATHER	Clear, 30-56°F, Wind: Calm
DATE/TIME START:	23 October 2009 0750
DATE/TIME FINISH:	23 October 2009 1400
CONTRACTOR:	Environmental Closures, Inc.
INSPECTOR:	Rene Robles

TEST PIT ID: TP-4A

LOCATION:

Approximate L X W X D
= 20' X 3' X 7'
Saw Mill River Station Yard

DEPTH (feet bgs)	FIELD IDENTIFICATION OF MATERIAL	COMMENTS
0	0-0.5' Trap rock.	
1	0.5'-3.5' Light brown-grey fine to course SAND, some fine to course angular Gravel, broken brick, fire brick, concrete, metal broken, wire, dry, dense.	Headspace = 0.0 ppm
2		
3	3.5'-7' Grey SANDYCLAY, moist, dense.	Headspace = 0.0 ppm
4		
5		
6		
7	End of test pit @ 7' bgs.	No Groundwater encountered
8		
9		
10		
11		
12		

Test pit advanced utilizing hand tools and vactron.

PARSONS
TEST PIT RECORD

PROJECT NAME:	Con Edison / Saw Mill River Station
PROJECT NUMBER:	444868-03000
WEATHER	Clear, 30-56°F, Wind: Calm
DATE/TIME START:	23 October 2009 0750
DATE/TIME FINISH:	23 October 2009 1400
CONTRACTOR:	Environmental Closures, Inc.
INSPECTOR:	Rene Robles

TEST PIT ID: TP-4A

LOCATION:

Approximate L X W X D
= 20' X 3' X 7'
Saw Mill River Station Yard

	PHOTOGRAPH
No Picture Taken	

PARSONS
TEST PIT RECORD

PROJECT NAME:	Con Edison / Saw Mill River Station
PROJECT NUMBER:	444868-03000
WEATHER	Clear, 30-56°F, Wind: Calm
DATE/TIME START:	9 November 2009 0750
DATE/TIME FINISH:	9 November 2009 1400
CONTRACTOR:	Environmental Closures, Inc.
INSPECTOR:	Rene Robles

TEST PIT ID: TP-4B

LOCATION:

Approximate L X W X D
= 25.5' X 8' X 8'
Saw Mill River Station Yard

DEPTH (feet bgs)	FIELD IDENTIFICATION OF MATERIAL	COMMENTS
0	0-0.5' - Trap rock.	
1	0.5-3.5' - Light brown-grey fine to course SAND, some fine to course angular Gravel, broken brick, fire brick, concrete, metal broken, wire, dry, dense.	
2		
3	3.5-7' - Gray SANDYCLAY, moist, dense. 8" Clay pipe running east-west 4'bgs enters the Drainage Pit from the east.	Headspace = 0.7 ppm
4	The Drainage Pit is estimated to be 5' square and the top of the Drainage Pit is 4'bgs. Water seeping into the test pit from	
5	the Drainage Pit. The Drainage Pit has a flat bottom at 8'bgs.	
6		
7		Headspace = 3.7 ppm
8	End of test pit @ 8' bgs.	Groundwater encountered at 8'
9		
10		
11		
12		

Test pit advanced utilizing hand tools and vactron.

Edge of concrete holder foundation encountered at 4 ft bgs

PARSONS
TEST PIT RECORD

PROJECT NAME:	Con Edison / Saw Mill River Station
PROJECT NUMBER:	444868-03000
WEATHER	Clear, 30-56°F, Wind: Calm
DATE/TIME START:	9 November 2009 0750
DATE/TIME FINISH:	9 November 2009 1400
CONTRACTOR:	Environmental Closures, Inc.
INSPECTOR:	Rene Robles

TEST PIT ID: TP-4B

LOCATION:

Approximate L X W X D
= 25.5' X 8' X 8'
Saw Mill River Station Yard

PHOTOGRAPH

Excavation Full length Drainage Pit shown in the bottom of the second picture

Drainage Pit interior

Drainage line from the east

Excavation close-up of excavation outside the Drainage Pit to the south.

South side exterior of Drainage Pit

PARSONS
TEST PIT RECORD

PROJECT NAME:	Con Edison / Saw Mill River Station	**TEST PIT ID:**	TP-5
PROJECT NUMBER:	444868-03000	**LOCATION:**	
WEATHER	Clear, 30-56°F, Wind: Calm	Approximate L X W X D	
DATE/TIME START:	22 October 2009 0800	= 28' X 4' X 4.5'	
DATE/TIME FINISH:	22 October 2009 1400	Saw Mill River Station Yard	
CONTRACTOR:	Environmental Closures, Inc.		
INSPECTOR:	Rene Robles		

DEPTH (feet bgs)	FIELD IDENTIFICATION OF MATERIAL	COMMENTS
0	0-4" - Trap rock	
	4"-4.5' - Dark brown fine to course SAND, fine to course angular	
1	Gravel, trace Silt, broken brick, fire brick, metal angle	Headspace = 0.0 ppm
	brackets, wire, broken metal pipe, broken concrete, large	
2	valve assembly, possible large pump unit.	
3		Headspace = 0.0 ppm
4		
5	End of test pit @ 4.5' bgs.	Groundwater not encountered
6		
7		
8		
9		
10		
11		
12		

Test pit was advanced utilizing back-hoe

PARSONS
TEST PIT RECORD

PROJECT NAME:	Con Edison / Saw Mill River Station
PROJECT NUMBER:	444868-03000
WEATHER	Clear, 30-56°F, Wind: Calm
DATE/TIME START:	22 October 2009 0800
DATE/TIME FINISH:	22 October 2009 1400
CONTRACTOR:	Environmental Closures, Inc.
INSPECTOR:	Rene Robles

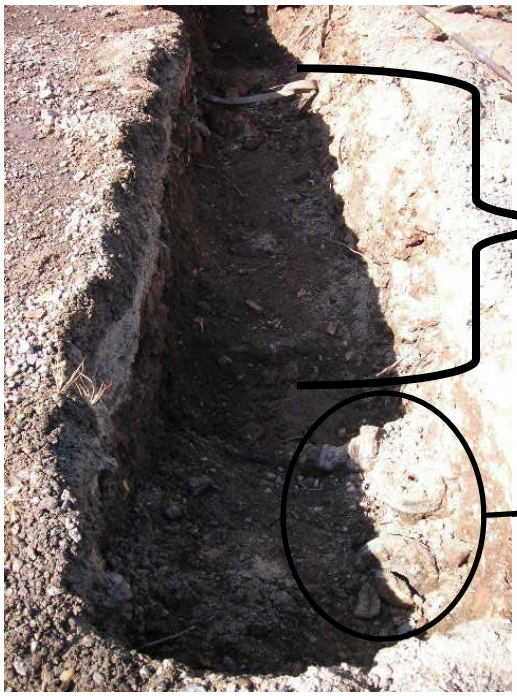
TEST PIT ID: TP-5

LOCATION:

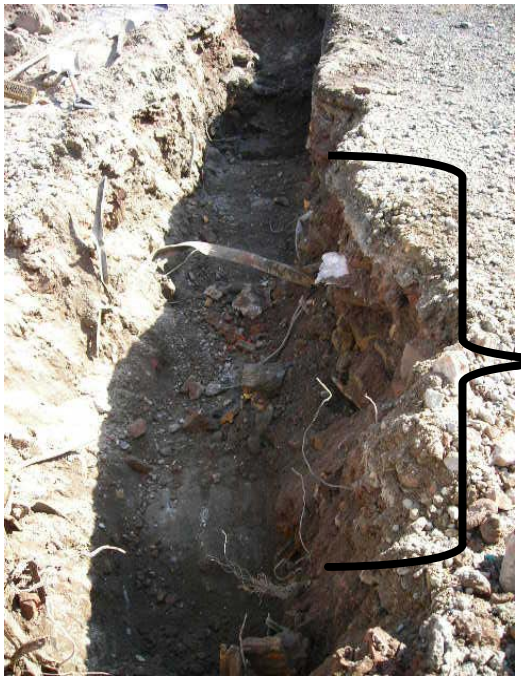
Approximate L X W X D
= 28' X 4' X 4.5'
Saw Mill River Station Yard

PHOTOGRAPH

Excavation full length Picture taken from the east. Large valve assembly shown in the bottom of the picture Smoke stack foundation at the middle of the picture.



Excavation full length Picture taken from the west, Smokestack foundation at the middle of the picture.



APPENDIX E

MONITORING WELL BORING AND CONSTRUCTION LOGS

PARSONS
DRILLING RECORD

Sheet 1 of 1

BORING NO. SB-5

Contractor: ADT
Driller: Bernie Cruz/German Torres
Inspector: S.Davis
Rig Type: DK 527 Track Rig

PROJECT NAME: Con Ed / Saw Mill River Station
PROJECT NUMBER: 444868-03000

Location Description: Saw Mill River Station Site

GROUNDWATER OBSERVATIONS				
Water Level	11'			
Date	7 Oct 09			
Time	0835			
Meas. From	GS			

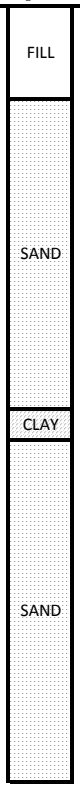
Weather: Rain 60's
Date/Time Start: 7 October 2009 0800
Date/Time Finish: 7 October 2009 1100

Location Plan

See Site Plan

Sample Depth	Sample I.D.	SPT	% Rec.	PID (ppm)	FIELD IDENTIFICATION OF MATERIAL
0		HC			0-6" - Asphalt
				0.0	6-18" - Moist, black, fmc SAND, little cmf Gravel, trace Silt (SM)
					18-25" - Boulder
					25-60" - Moist, tan, fm SAND, little Silt (SM)
5		8-8	25	8.8	Moist, medium dense, brown fmc SAND, little Silt (SM)
		8-9			
7		2-2	4	0.3	Moist, loose, brown, fmc SAND, little Silt (SM)
		3-2			
9		8-7	67	0.5	0-10" - Moist, medium dense, brown fmc SAND, little Silt (SM)
		8-10			10-16" - Moist, medium dense, gray, fmc SAND, trace Silt (SW)
11		9-50/3"	12	0.7	Wet, very dense, gray, fmc SAND, trace Silt, trace f Gravel (SW)
13		17-50/2"	25	0.5	0-4" - Wet, very stiff, gray, CLAY and f SAND (CL)
					4-8" - Wet, very dense, gray, f SAND, trace silt (SP)
15		9-9	67	0.9	Wet, medium dense, gray, fmc SAND, trace Silt (SW)
		10-8			
17		10-11	83	0.6	Wet, medium dense, gray, fmc SAND, trace Silt (SW)
		8-7			
19		6-6	75	0.5	Wet, medium dense, gray, fmc SAND, trace Silt (SW)
		7-7			
21		6-5	100	0.7	Wet, medium dense, gray, fmc SAND, trace Silt (SW)
		8-7			
23		9-10	67	0.6	Wet, medium dense, gray, fmc SAND, trace Silt (SW)
		12-10			
25					**Bottom of Boring @ 25'**
27					
29					
31					
33					
35					
37					

SCHEMATIC (drawing not to scale)



COMMENTS

SAMPLING METHOD
HC = HAND CLEARED
SS = SPLIT SPOON

COMMENTS:
Boring was hand cleared to 5' bgs; sampling with 2" split spoon
Bottom of Boring @ 25'

PARSONS
DRILLING RECORD

Sheet 1 of 1

BORING NO. SB-6

Contractor: ADT
Driller: Bernie Cruz/German Torres
Inspector: René Robles
Rig Type: DK 527 Track Rig

PROJECT NAME: Con Ed / Saw Mill River Station
PROJECT NUMBER: 444868-03000

Location Description: Saw Mill River Station Site

GROUNDWATER OBSERVATIONS				
Water Level	11'			
Date	2 Oct 09			
Time	1040			
Meas. From	GS			

Weather: Partly cloudy, 46-63°F, Wind: Calm

Date/Time Start: 2 October 2009 1025

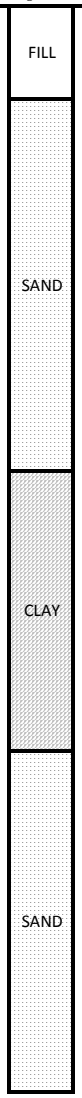
Date/Time Finish: 2 October 2009 1330

Location Plan

See Site Plan

Sample Depth	Sample I.D.	SPT	% Rec.	PID (ppm)	FIELD IDENTIFICATION OF MATERIAL
0		HC			0-6" - Asphalt
				0.0	6-18" - Moist, black, fmc SAND, little cmf Gravel, trace Silt (SM)
					18-25" - Boulder
					25-60" - Moist, tan, fm SAND, little silt (SM)
5		4-3	4	0	Dry, loose, dark brown, fm SAND, little f Gravel, trace Silt (SP)
		3-1			
7		4-5	42	23.5	0-6" - Wet, loose, dark gray/brown fm SAND, some Silt, some f Gravel (SM)
		5-4			black stain with hydrocarbon like odors, trace globules
					6-10" - Wet, loose, gray, mc SAND, little f Gravel, trace Silt (SP)
					hydrocarbon like odor
9		10-10	83	1.3	0-12" - Wet, medium dense, dark brown f SAND, some Silt (SM)
		9-8			12-20" - Wet, medium dense, gray mc SAND, some f Gravel, slight sheen (SP)
11		14-15	58	0.2	Wet, dense, gray, mc SAND, some f Gravel, slight sheen (SP)
		16-11			
13		9-5	58	1.5	Wet, stiff, tan/brown to gray CLAY. Black stain in first inch with hydrocarbon
		5-8			like odor (CL)
15		4-5	42	0.2	Moist, stiff, gray, CLAY slight sheen (CL)
		4-5			
17		6-7	50	0.3	Moist, stiff, gray, CLAY (CL)
		8-9			
19		8-10	58	0.4	Moist, stiff, gray, CLAY (CL)
		7-12			
21		11-27	25	0.3	0-4" - Moist, hard, gray, CLAY (CL)
		13-9			4-6" - Moist, dense, black/dark gray fm SAND. Slight hydrocarbon like odor (SP)
23		10-10	33	0.3	Wet, medium dense, gray, fm SAND (SP)
		9-12			
25		12-16	83	0.4	Wet, dense, gray, fm SAND (SP)
		17-21			
27		17-29	58	0.4	Wet, very dense, gray, fm SAND (SP)
		30-29			
29		44-50/4"	75	0.8	Wet, very dense, gray, fm SAND (SP)
31					
					Auger Refusal @ 32.5'
33					
34					

SCHEMATIC (drawing not to scale)



COMMENTS

SAMPLING METHOD
HC = HAND CLEARED
SS = SPLIT SPOON

COMMENTS:
Boring was hand cleared to 5' bgs; sampling with 2" split spoon; Auger refusal at 32.5' bgs.
Bottom of Boring @ 32.5'

PARSONS
DRILLING RECORD

Sheet 1 of 1

BORING NO. SB-7

Contractor: ADT
Driller: Bernie Cruz/German Torres
Inspector: S.Davis
Rig Type: DK 527 Track Rig

PROJECT NAME: Con Ed / Saw Mill River Station
PROJECT NUMBER: 444868-03000

Location Description: Saw Mill River Station Site

GROUNDWATER OBSERVATIONS

Water Level	Not Observed			
Date				
Time				
Meas. From				

Weather: Clear 50's

Date/Time Start: 5 October 2009 0800

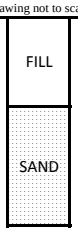
Date/Time Finish: 5 October 2009 1000

Location Plan

See Site Plan

Sample Depth	Sample I.D.	SPT	% Rec.	PID (ppm)	FIELD IDENTIFICATION OF MATERIAL
0		HC			0-6" - Asphalt
				0.0	6-18" - Moist, black, fmc SAND, little fc Gravel, little Silt, little cobbles (SM)
					18-25" - Boulder
					25-60" - Moist, tan, fm SAND, little Silt (SM)
5		3-3	8	1.2	5'-6'8" - Moist, very dense, dark brown, fmc SAND, trace Silt, trace to little f Gravel (SW-SM)
		50/2"			
7					**Refusal @ 6'8" bgs**
9					
11					
13					
15					
17					
19					
21					
23					
25					
27					
29					
31					
33					
35					
37					

SCHEMATIC (drawing not to scale)



COMMENTS

SAMPLING METHOD
HC = HAND CLEARED
SS = SPLIT SPOON

COMMENTS:
Boring was hand cleared to 5' bgs; sampling with 2" split spoon
Refusal @ 6'8" bgs

PARSONS
DRILLING RECORD

Sheet 1 of 1

BORING NO. SB-8

Contractor: ADT
Driller: Bernie Cruz/German Torres
Inspector: S.Davis
Rig Type: DK 527 Track Rig

PROJECT NAME: Con Ed / Saw Mill River Station
PROJECT NUMBER: 444868-03000

Location Description: Saw Mill River Station Site

GROUNDWATER OBSERVATIONS				
Water Level	13'			
Date	5 Oct 09			
Time	1130			
Meas. From	GS			

Weather: Clear 50's
Date/Time Start: 5 October 2009 1005
Date/Time Finish: 5 October 2009 1100

Location Plan

See Site Plan

Sample Depth	Sample I.D.	SPT	% Rec.	PID (ppm)	FIELD IDENTIFICATION OF MATERIAL	SCHEMATIC (drawing not to scale)	COMMENTS
0		HC			0-5" - Asphalt and stone subbase	FILL	
				0.0	5-12" - Moist, black, fmc SAND, little Silt, trace Clay, little debris (cinders/brick) (SM)		
					12-60" - Moist, Orange-Brown, f SAND, some Silt, trace fc Gravel, trace-little Cobbles (SM)		
5		50/4"	17	0.2	Moist, very dense, tan, fm SAND, little Clay (SC)	SAND	
7		27-18	33	0.2	Moist, dense, tan, fm SAND, little Clay (SC)		
		19-22					
9		11-16	67	0.5	0-2" - Moist, dense, tan, fm SAND, little Clay (SC)		
		30-40			2-16" Moist, dense, gray/white/black (speckled), fmc SAND, trace Silt (decomp schist)		
11		50/4"	17	2.2	Moist, very dense, gray/white/black (speckled), fmc SAND, trace Silt (decomp schist)		
13		50/6"	25	1.2	Wet, very dense, gray/white/black (speckled), fmc SAND, trace Silt (decomp schist)		
15		50/2"	0	NA	No recovery		
					Refusal @ 15'6"		
17							
19							
21							
23							
25							
27							
29							
31							
33							
35							
37							

SAMPLING METHOD
HC = HAND CLEARED
SS = SPLIT SPOON

COMMENTS:
Boring was hand cleared to 5' bgs; sampling with 2" split spoon
Refusal @ 15'6" bgs

PARSONS
DRILLING RECORD

Sheet 1 of 1

BORING NO. SB-9

Contractor:	ADT
Driller:	Bernie Cruz/German Torres
Inspector:	S.Davis
Rig Type:	DK 527 Track Rig
PROJECT NAME:	Con Ed / Saw Mill River Station
PROJECT NUMBER:	444868-03000
Location Description:	Saw Mill River Station Site

GROUNDWATER OBSERVATIONS

Water Level	7 '			
Date	6 Oct 09			
Time	0810			
Meas. From	GS			

Weather: Clear 50's

Date/Time Start: 6 October 2009 0800

Date/Time Finish: 6 October 2009 1130

Location Plan

See Site Plan

Sample Depth	Sample I.D.	SPT	% Rec.	PID (ppm)	FIELD IDENTIFICATION OF MATERIAL	SCHEMATIC (drawing not to scale)	COMMENTS
0		HC			0-60" - Dry-moist, brown, fmc SAND, some Silt,		
				0.0	some debris (concrete)	FILL	
5		3-3	67	0.5	Moist-wet, loose, gray, fm SAND, little Clay, trace Silt (SC)		
		4-3					
7		9-8	67	0.6	Wet, medium dense, gray, fm SAND, little Clay, trace Silt (SC)		
		9-10					
9		8-8	100	0.8	Wet, medium dense, gray, fm SAND, little Clay, trace Silt (SC)		
		11-9					
11		13-12	25	0.4	Wet, medium dense, gray, fm SAND, little Clay, trace Silt (SC)		
		15-17					
13		6-17	100	0.7	0-22" - Wet, dense, gray, fm SAND, little Clay, trace Silt (SC)	SAND	
		23-30			22-24" - Wet, dense, tan/brown, fmc SAND, trace Silt (SW)		
15		6-6	75	0.7	0-10" - Wet, medium dense , tan/brown, fmc SAND, trace Silt (SW)		
		6-5			10-18" - Wet, medium dense, reddish brown, f SAND, trace Silt (SP)		
17		13-17	75	0.3	Wet, dense, reddish brown, mc SAND, trace Silt, trace f Gravel (SP)		
		16-19					
19		14-18	50	0.3	Wet, dense, reddish brown, mc SAND, trace Silt, trace f Gravel (SP)		
		22-31					
21		35-50/4"	100	0.3	Wet, very dense, reddish brown, mc SAND, trace Silt, trace f Gravel (SP)		
23					**Refusal @ 22'**		
25							
27							
29							
31							
33							
35							
37							

SAMPLING METHOD
HC = HAND CLEARED
SS = SPLIT SPOON

COMMENTS:
Boring was hand cleared to 5' bgs; sampling with 2" split spoon
Refusal @ 22' bgs

PARSONS
DRILLING RECORD

Sheet 1 of 1

BORING NO. SB-11

Contractor: ADT
Driller: Bernie Cruz/German Torres
Inspector: S.Davis
Rig Type: DK 527 Track Rig

PROJECT NAME: Con Ed / Saw Mill River Station
PROJECT NUMBER: 444868-03000

Location Description: Saw Mill River Station Site

GROUNDWATER OBSERVATIONS				
Water Level	7 '			
Date	8 Oct 09			
Time	0845			
Meas. From	GS			

Weather: Clear 50's
Date/Time Start: 8 October 2009 0800
Date/Time Finish: 8 October 2009 1000

Location Plan

See Site Plan

Sample Depth	Sample I.D.	SPT	% Rec.	PID (ppm)	FIELD IDENTIFICATION OF MATERIAL	SCHEMATIC (drawing not to scale)	COMMENTS
0		HC			0-12" - Reinforced concrete	FILL	
				0.0	12-60" - Moist, gray/brown, fm SAND, little Silt (SM)		
5		7-7	8	1.8	Moist, medium dense, gray, fmc SAND, little Silt, clay (SM/SC)		
		8-9					
7		10-10	17	5.1	Wet, medium dense, gray, fc GRAVEL, little fmc Sand (GP)		
		11-10					
9		8-8	25	9.1	Wet, medium dense, dark gray, fmc SAND, some Silt (SM)	SAND	
		8-12					
11		5-8	67	3.1	Wet, medium dense, gray, fm SAND, trace Silt (SP)		
		8-9					
13		12-10	50	3.1	Wet, medium dense, gray, fm SAND, little Silt (SM)		
		9-10					
15		4-4	50	4.3	Wet, medium dense, brown/gray, fm SAND, little Silt (SM)		
		12-15					
17		32-50/1"	100	3.1	Wet, very dense, brown/gray, fm SAND, little Silt (SM)		
					Refusal @ 18' bgs		
19							
21							
23							
25							
27							
29							
31							
33							
35							
37							

SAMPLING METHOD
HC = HAND CLEARED
SS = SPLIT SPOON

COMMENTS:
Boring was hand cleared to 5' bgs; sampling with 2" split spoon
Refusal @ 18' bgs

PARSONS
DRILLING RECORD

Sheet 1 of 1

BORING NO. SB-12

Contractor: ADT
Driller: Bernie Cruz/German Torres
Inspector: S.Davis
Rig Type: DK 527 Track Rig

PROJECT NAME: Con Ed / Saw Mill River Station
PROJECT NUMBER: 444868-03000

Location Description: Saw Mill River Station Site

GROUNDWATER OBSERVATIONS				
Water Level	Not Observed			
Date				
Time				
Meas. From				

Weather: Rain 60's

Date/Time Start: 7 October 2009 1215

Date/Time Finish: 7 October 2009 1400

Location Plan

See Site Plan

Sample Depth	Sample I.D.	SPT	% Rec.	PID (ppm)	FIELD IDENTIFICATION OF MATERIAL	SCHEMATIC (drawing not to scale)	COMMENTS
0		HC			0-3" - Asphalt	FILL	
				0.0	3-8" - Moist, tan, fmc SAND, trace Silt, trace f Gravel, trace debris		
					8-60" - Moist, dark Brown, fmc SAND, trace f Gravel, trace debris (metal)		
					Boulders at 18" and 42"		
5		5-7	25	4.0	Moist, very dense, gray, fmc SAND, little Silt, trace debris (brick) (SM)		
		19-50/0"					
7					Augered to 8'		
					Refusal @ 8' bgs		
9							
11							
13							
15							
17							
19							
21							
23							
25							
27							
29							
31							
33							
35							
37							

SAMPLING METHOD
HC = HAND CLEARED
SS = SPLIT SPOON

COMMENTS:
Boring was hand cleared to 5' bgs; sampling with 2" split spoon
Refusal @ 8' bgs

PARSONS
DRILLING RECORD

Sheet 1 of 1

BORING NO. SB-13

Contractor: ADT
Driller: Bernie Cruz/German Torres
Inspector: René Robles
Rig Type: DK 527 Track Rig

PROJECT NAME: Con Ed / Saw Mill River Station
PROJECT NUMBER: 444868-03000

Location Description: Saw Mill River Station Site

GROUNDWATER OBSERVATIONS				
Water Level	~9'			
Date	1 Oct 09			
Time	0950			
Meas. From	GS			

Weather: Partly cloudy, 49-63°F, Wind; Calm

Date/Time Start: 1 October 2009 0940

Date/Time Finish: 1 October 2009 1019

Location Plan

See Site Plan

Sample Depth	Sample I.D.	SPT	% Rec.	PID (ppm)	FIELD IDENTIFICATION OF MATERIAL	SCHEMATIC (drawing not to scale)	COMMENTS
0		HC			0-3" - Asphalt		
				0.0	3-8" - Moist, tan, fmc SAND, trace Silt, trace f Gravel, trace debris		
					8-60" - Moist, dark brown, fmc SAND, trace f Gravel, trace debris (metal)	FILL	
					Boulders at 18" and 42"		
5		10-12	92	0.0	0-12" - Dry, medium dense, dark brown/black, fmc SAND, some f Gravel (SW)		
		8-8			12-22" - Dry, medium dense, tan, f SAND, some Silt, little Clay (SM)		
7		6-6	4	0.0	Dry (wet at tip), medium dense, tan, f SAND, some Silt, little Clay (SM)	SAND	
		8-13					
9		7-9	25	0.0	0-5" - Wet, very dense, tan/brown fm SAND, some Silt (SM)		
		50/3"			5-6" - Weathered rock (Probable Schist)		
11					**Split Spoon and Auger Refusal @ 10.5' bgs**		
13							
15							
17							
19							
21							
23							
25							
27							
29							
31							
33							
35							
37							

SAMPLING METHOD
HC = HAND CLEARED
SS = SPLIT SPOON

COMMENTS:
Boring was hand cleared to 5' bgs; sampling with 2" split spoon
Split Spoon and Auger Refusal @ 10.5' bgs

PARSONS
DRILLING RECORD

Sheet 1 of 1

BORING NO. SB-14

Contractor:	ADT
Driller:	Bernie Cruz/German Torres
Inspector:	S.Davis
Rig Type:	DK 527 Track Rig
PROJECT NAME:	Con Ed / Saw Mill River Station
PROJECT NUMBER:	444868-03000
Location Description:	Saw Mill River Station Site

GROUNDWATER OBSERVATIONS

Water Level	7 '			
Date	6 Oct 09			
Time	1305			
Meas. From	GS			

Weather: Clear 50's

Date/Time Start: 6 October 2009 1300

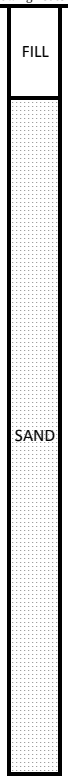
Date/Time Finish: 6 October 2009 1425

Location Plan

See Site Plan

Sample Depth	Sample I.D.	SPT	% Rec.	PID (ppm)	FIELD IDENTIFICATION OF MATERIAL
0		HC			0-1" - Concrete paving block
				0.0	1-20" - Slag/crushed asphalt
					20-60" - Moist, brown, fm SAND, some silt (SM)
5		5-5	21	2.1	Moist-wet, medium dense, tan, fm SAND, some Silt (SM)
		8-11			
7		9-8	58	1.3	0-10" - Wet, medium dense, tan, SILT, little f Sand (ML)
		9-9			10-14" - Wet, medium dense, tan, fm SAND, little Silt (SM)
9		17-19	75	1.4	0-12" - Wet, dense, tan, fm SAND, little Silt (SM)
		27-50/4"			12-18" - Wet, dense, tan, fm SAND, little Silt, trace f Gravel (SM)
11					
13		8-11	25	2.6	Wet, medium dense, tan, fm SAND, little Silt, trace f Gravel (SM)
		11-12			
15		9-12	50	2.1	Wet, medium dense, tan, fm SAND, little Silt, trace f Gravel (SM)
		12-10			
17		11-11	25	0.5	Wet, medium dense, tan, fm SAND, little Silt, trace f Gravel (SM)
		14-17			
19		8-12	75	0.9	Wet, medium dense, tan, fm SAND, little Silt, trace f Gravel (SM)
		14-15			
21		15-16	83	1.3	Wet, dense, tan, fm SAND, little Silt, trace f Gravel (SM)
		21-30			
23		12-14	75	1.3	Wet, medium dense, tan, fm SAND, little Silt, trace f Gravel (SM)
		14-15			
25					**Bottom of Boring @ 25' bgs**
27					
29					
31					
33					
35					
37					

SCHEMATIC (drawing not to scale)



COMMENTS

SAMPLING METHOD
HC = HAND CLEARED
SS = SPLIT SPOON

COMMENTS:
Boring was hand cleared to 5' bgs; sampling with 2" split spoon
Due to rig and elevation had to skip 11-13' sample
Refusal @ 25' bgs.

PARSONS
DRILLING RECORD

Sheet 1 of 1

BORING NO. MW-2

Contractor: ADT
Driller: Bernie Cruz/German Torres
Inspector: René Robles
Rig Type: DK 527 Track Rig

PROJECT NAME: Con Ed / Saw Mill River Station
PROJECT NUMBER: 444868-03000

Location Description: Saw Mill River Station Site

GROUNDWATER OBSERVATIONS				
Water Level	7.5'	7.22'		
Date	9 Sep 09	5 Oct 09		
Time	0947	955		
Meas. From	GS	TOC		

Weather: Cloudy, 45-55°F, 5-15 mph winds (NE)

Date/Time Start: 30 September 2009 0917

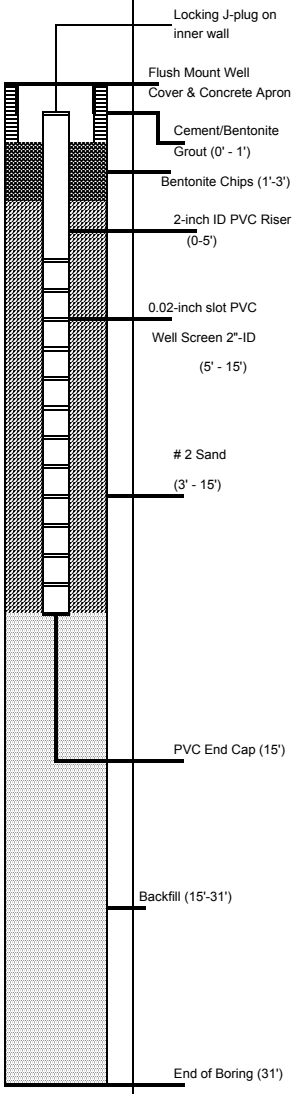
Date/Time Finish: 30 September 2009 1305

Location Plan

See Site Plan

Sample Depth	Sample I.D.	SPT	% Rec.	PID (ppm)	FIELD IDENTIFICATION OF MATERIAL
+3					
+2					
+1					
0		HC			0-6" - Asphalt
				0.0	6-8" - Dry, tan to light brown, fm SAND, some fmc angular Gravel (SP) (FILL).
					8"-5' - Dry, brown, fmc SAND, cobbles, broken asphalt, concrete, brick, metal (SW) (FILL).
5		18-27	58	1.2	Moist, very dense, brown fm SAND, some fmc Gravel, trace Silt (SP).
		28-34			
7		2-2	58	1.4	0-4" - Wet, loose, brown, fm SAND, little Silt. Wet at 7.5' bgs. (SM)
		3-5			4-12" - Moist, medium stiff, dark gray CLAY, little organic material. (CL-OH)
					12-14" - Wet, loose, gray, fm SAND, little Silt.(SM)
9		3-6	33	1.0	Wet, loose, gray, fm SAND, little Silt.(SM)
		4-6			
11		5-19	42	1.3	Wet, dense, gray fm SAND, little Silt.(SM)
		24-29			
13		20-25	83	1.5	0-4" - Moist, hard, gray CLAY, (CL).
		10-9			4-18" - Wet, dense, gray, fmc SAND, some mc Gravel, little Silt (SM).
					18-20" - Moist, hard, gray CLAY, little f Sand.(CL)
15		8-9	0	-	No Recovery.
		11-14			
17		12-10	25	1.2	0-4" - Wet, medium dense, tan/gray fm SAND, some Silt, little mc Gravel. (SM)
		10-14			4-6" - Moist, very stiff, gray CLAY. (CL)
19		9-9	25	0.9	Moist, very stiff, gray/tan CLAY. (CL)
		9-10			
21		7-7	21	2.0	Moist, stiff, gray/tan CLAY. (CL)
		7-8			
23		9-8	42	2.3	Moist, medium dense, gray SILT. (ML)
		6-10			
25		4-5	50	2.5	Moist, medium dense, gray SILT. (ML)
		6-5			
27		6-4	25	1.9	Moist, loose, gray SILT. (ML)
		4-6			
29		8-8	58	1.8	Moist, medium dense, gray SILT. (ML)
		10-12			10-14" - Medium dense, red/brown f SAND, some gray m Sand, trace c Gravel. (SW)
31					**Bottom of Boring @ 31'**
33					
35					
37					

SCHEMATIC (drawing not to scale)



COMMENTS

SAMPLING METHOD
HC = HAND CLEARED
SS = SPLIT SPOON

COMMENTS:
Boring was hand cleared to 5' bgs; sampling with 2" split spoon
Bottom of Boring @ 31'

PARSONS
DRILLING RECORD

Sheet 1 of 1

BORING NO. MW-3

Contractor: ADT
Driller: Tony Palomaque
Inspector: Mike Wilkinson
Rig Type: Mobile B-61

PROJECT NAME: Con Ed / Saw Mill River Station
PROJECT NUMBER: 444868-03000

Location Description: Saw Mill River Station Site

GROUNDWATER OBSERVATIONS				
Water Level	11'	7.44'		
Date	2 Nov 09	5 Nov 09		
Time	0820	915		
Meas. From	GS	TOC		

Weather: Cloudy, 45-55°F, 5-15 mph winds (NE)

Date/Time Start: 2 November 2009 0800

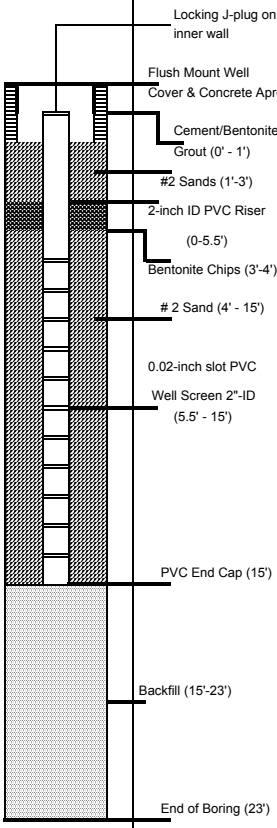
Date/Time Finish: 2 November 2009 1000

Location Plan

See Site Plan

Sample Depth	Sample I.D.	SPT	% Rec.	PID (ppm)	FIELD IDENTIFICATION OF MATERIAL
+3					
+2					
+1					
0		HC			0-6" - Asphalt
				0.0	6-8" - Dry, tan to light brown, fm SAND, some fc angular Gravel (SP) (FILL).
					8"-5' - Dry, brown, fmc SAND, cobbles, broken asphalt, concrete, brick, metal (SW) (FILL).
5		10-11	25	0.0	Moist, medium dense, brown to dark gray, f SAND, little Silt, trace f rounded Gravel (SM).
		7-5			
7		4-5	0	0.0	No Recovery.
		5-5			
9		3-4	79	0.0	0-5" - Moist, medium dense, light brown, f SAND, little silt (SM).
		11-17			5-15" - Moist, stiff, light brown to light gray SILT, some clay (ML).
					15-19" - Moist to wet, medium dense, light gray, f SAND, trace silt (SP).
11		15-50/5"	25	0.0	Wet, very dense, gray, f SAND, little silt, trace fc rounded gravel (SM).
13		4-3	38	0.0	0-5" - Moist, medium stiff, dark gray SILT, some clay (ML).
		3-4			5-9" - Wet, loose, gray, f SAND, trace silt, trace f gravel (SP).
15		4-4	25	0.1	Wet, loose, gray, fm SAND, little silt (SM).
		5-4			
17		4-7	46	0.0	Wet, stiff, brown SILT, little clay, trace f sand (ML).
		7-7			
19		4-13	54	0.1	0-2" - Wet, very stiff, gray SILT and CLAY (ML-CL).
		6-10			2-13" - Wet, very stiff, gray SILT, trace clay (ML).
21		6-6	58	0.1	Wet, stiff, gray SILT, little clay (ML).
		5-2			
23					**Bottom of Boring @ 23'**
25					
27					
29					
31					
33					
35					
37					

SCHEMATIC (drawing not to scale)



COMMENTS:
Boring was hand cleared to 5' bgs; sampling with 2" split spoon
Bottom of Boring @ 23'

SAMPLING METHOD
HC = HAND CLEARED
SS = SPLIT SPOON

PARSONS
DRILLING RECORD

Sheet 1 of 1

BORING NO. MW-4

Contractor: ADT
Driller: Bernie Cruz/German Torres
Inspector: René Robles
Rig Type: DK 527 Track Rig

PROJECT NAME: Con Ed / Saw Mill River Station
PROJECT NUMBER: 444868-03000

Location Description: Saw Mill River Station Site

Location Plan

See Site Plan

Weather: Partly Cloudy, 45-59°F, 5-15 mph winds (W)

Date/Time Start: 9 October 2009 0830

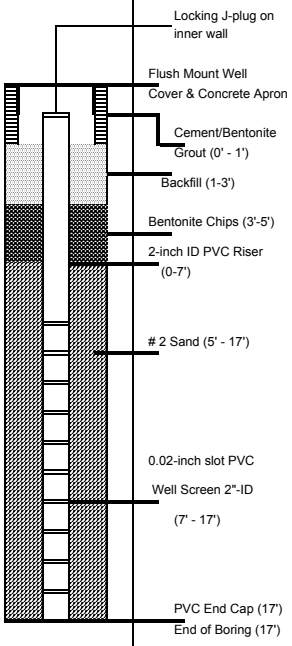
Date/Time Finish: 9 October 2009 1000

GROUNDWATER OBSERVATIONS

Water	~9'	7.44'		
Date	9 Oct 09	5 Nov 09		
Time	0900	915		
Meas. From	GS	TOC		

Sample Depth	Sample I.D.	SPT	% Rec.	PID (ppm)	FIELD IDENTIFICATION OF MATERIAL
+3					
+2					
+1					
0		HC			0-6" - Asphalt
1				0.0	6"-8" - Dry, tan to light brown, fm SAND, some fc angular gravel (SP) (FILL).
2					8"-5' - Dry, brown, fmc SAND, cobbles, broken asphalt, concrete, brick, metal (SW) (FILL).
3					
4					
5		4-4	25	2.1	Dry, loose, tan to light gray, f SAND, some Silt. (SM)
		5-4			
7		4-4	33	2.0	Dry, medium dense, tan to light gray, f SAND, some Silt. (SM)
		7-6			
9		7-7	50	1.4	Dry, medium dense, tan to light gray, f SAND, some Silt. (SM)
		6-5			
11		9-9	83	15.8	Wet, medium dense, brown, fm SAND. (SP)
		8-10			
13		18-21	58	1.9	Wet, dense, tan/brown f SAND, some f angular Gravel. (SP)
		24-31			
15		14-21	58	2.4	Wet, dense, tan/brown f SAND, some f angular Gravel. (SP)
		19-24			
17					**End of Boring @ 17'**
19					
21					
23					
25					
27					
29					
31					
33					
35					
37					

SCHEMATIC (drawing not to scale)



COMMENTS

COMMENTS:
Boring was hand cleared to 5' bgs; sampling with 2" split spoon
Bottom of Boring @ 17'

SAMPLING METHOD
HC = HAND CLEARED
SS = SPLIT SPOON

PARSONS
DRILLING RECORD

Sheet 1 of 1

BORING NO. MW-5

Contractor: ADT
Driller: Bernie Cruz/German Torres
Inspector: René Robles
Rig Type: DK 527 Track Rig

PROJECT NAME: Con Ed / Saw Mill River Station
PROJECT NUMBER: 444868-03000

Location Description: Saw Mill River Station Site

GROUNDWATER OBSERVATIONS				
Water Level	7.5'	7.22'		
Date	30 Sep 09	5 Oct 09		
Time	0947	955		
Meas. From	GS	TOC		

Weather: Cloudy, 45-55°F, 5-15 mph winds (NE)

Date/Time Start: 1 October 2009 1200

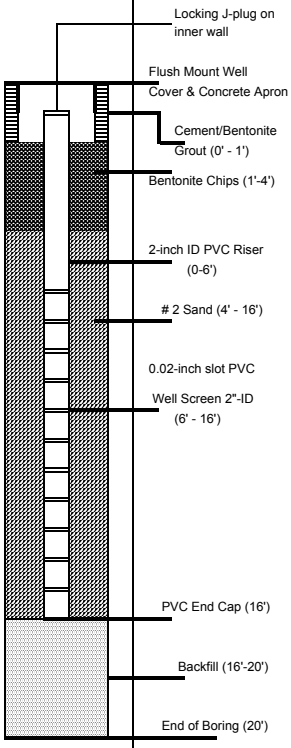
Date/Time Finish: 1 October 2009 1400

Location Plan

See Site Plan

Sample Depth	Sample I.D.	SPT	% Rec.	PID (ppm)	FIELD IDENTIFICATION OF MATERIAL
+3					
+2					
+1					
0		HC			0-6" - Asphalt
1				0.0	6-8" - Dry, tan to light brown, fm SAND, some fc angular Gravel (SP) (FILL).
2					8"-5' - Dry, brown, fmc SAND, cobbles, broken asphalt, concrete, brick, metal (SW) (FILL).
3					
4					
5		5-6	21	0.0	Dry, medium dense, tan, fm SAND, trace Silt.(SP)
		5-7			
8		2-2	8	0.0	Dry, very loose, tan/brown fm SAND, little fm Gravel, trace Silt. (SP)
		2-3			
10		3-3	58	1.9	0-6" - Wet, loose, tan/brown, fm SAND, little fm Gravel, trace Silt. (SP)
		4-3			6-14" - Moist, medium stiff, green-gray CLAY, trace organic material (OL/OH).
12		4-4	25	1.8	Moist, loose, gray SILT and SAND, trace organic material (OL/OH).
		4-4			
14		9-8	50	2.1	0-10" - Moist, medium dense, gray SILT and SAND, trace organic material (OL/OH).
		8-10			10-12" - Wet, medium dense, gray, fm SAND. (SP)
16		9-9	83	2.3	0-18" - Wet, medium dense, gray, fm SAND. (SP)
		9-2			18-20" - Wet, medium dense, tan/brown f SAND, little Silt. (SM)
18		WH-WH	58	1.8	Wet, very loose, gray, fm SAND. (SP)
		WH-WH			
20					**Bottom of Boring @ 20'**

SCHEMATIC (drawing not to scale)



COMMENTS

SAMPLING METHOD
HC = HAND CLEARED
SS = SPLIT SPOON

COMMENTS:
Boring was hand cleared to 5' bgs; sampling with 2" split spoon
Bottom of Boring @ 20'

PARSONS
DRILLING RECORD

Sheet 1 of 1

BORING NO. MW-6

Contractor: ADT
Driller: Tony Palomaque
Inspector: Mike Wilkinson
Rig Type: Mobile B-61

PROJECT NAME: Con Ed / Saw Mill River Station
PROJECT NUMBER: 444868-03000

Location Description: Saw Mill River Station Site

GROUNDWATER OBSERVATIONS				
Water Level	11'	7.44'		
Date	2 Nov 09	5 Nov 09		
Time	0820	915		
Meas. From	GS	TOC		

Weather: Cloudy, 45-55°F, 5-15 mph winds (NE)

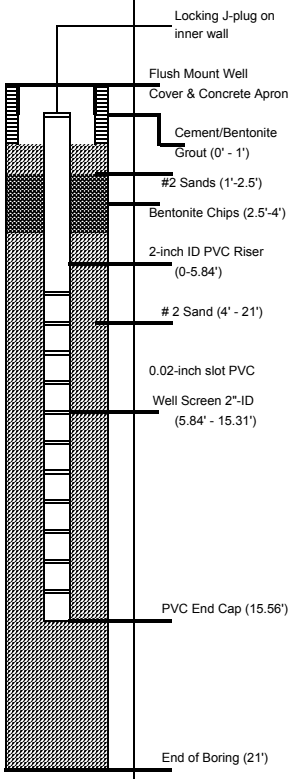
Date/Time Start: 2 November 2009 1040

Date/Time Finish: 2 November 2009 1300

Location Plan

See Site Plan

Sample Depth	Sample I.D.	SPT	% Rec.	PID (ppm)	FIELD IDENTIFICATION OF MATERIAL	SCHEMATIC (drawing not to scale)	COMMENTS
+3							
+2							
+1							
0		HC			0-6" - Asphalt		
1				0.0	6-8" - Dry, tan to light brown, fm SAND, some fc angular Gravel (SP) (FILL).		
2					8"-5' - Dry, brown, fmc SAND, cobbles, broken asphalt, concrete, brick, metal (SW) (FILL).		
3							
4							
5		1-1	50	0.1	Wet, very loose, golden brown, f SAND, little Silt, trace fc rounded Gravel (SM).		
		1-1					
7		4-7	54	0.0	0-2" - Wet, medium dense, golden brown, f SAND, trace Silt (SP).		
		9-9			2-13" - Wet, medium dense, brown, f SAND, little silt (SM).		
9		9-11	29	0.0	0-3" - Wet, very dense, brown, f SAND, little silt (SM).		
		50/3"			3-7": Wet, very dense, golden brown, fm SAND, trace silt, coal fragment (SP).		
11		17-50/3"	8	0.3	Wet, very dense, gray, f SAND, little Silt, little fc subangular Gravel (SM). Rock in tip of		
					split-spoon.		
13		7-8		0.0	Wet, medium dense, golden brown, fm SAND, some fc rounded Gravel, trace silt (SP).		
		9-8					
15		9-9		0.0	Wet, medium dense, brown, fm SAND, some fc rounded Gravel, trace silt (SP).		
		10-8			Weathered SCHIST (probable) at bottom of split-spoon.		
17		11-13	42	0.0	Weathered SCHIST (probable).		
		17-16					
19		9-10	42	0.1	Weathered SCHIST (probable).		
		10-14					
21					**End of Boring @ 21'**		
23							
25							
27							
29							
31							
33							
35							
37							



SAMPLING METHOD
HC = HAND CLEARED
SS = SPLIT SPOON

COMMENTS:
Boring was hand cleared to 5' bgs; sampling with 2" split spoon
Bottom of Boring @ 21'

PARSONS
DRILLING RECORD

Sheet 1 of 1

BORING NO. MW-7

Contractor: ADT
Driller: Tony Palomaque
Inspector: Mike Wilkinson
Rig Type: Mobile B-61

PROJECT NAME: Con Ed / Saw Mill River Station
PROJECT NUMBER: 444868-03000

Location Description: Saw Mill River Station Site

GROUNDWATER OBSERVATIONS				
Water Level	11'	7.44'		
Date	2 Nov 09	5 Nov 09		
Time	0820	915		
Meas. From	GS	TOC		

Weather: Partly Cloudy, 45-59°F, 5-15 mph winds (W)

Date/Time Start: 3 November 2009 0730

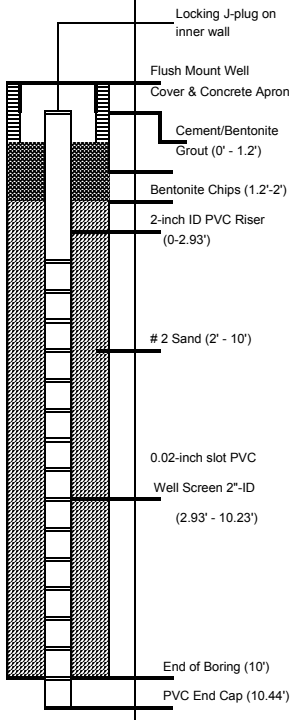
Date/Time Finish: 3 November 2009 0930

Location Plan

See Site Plan

Sample Depth	Sample I.D.	SPT	% Rec.	PID (ppm)	FIELD IDENTIFICATION OF MATERIAL
+3					
+2					
+1					
0		HC			0-6" - Asphalt
0.5				0.0	6-8" - Dry, tan to light brown, fm SAND, some fc angular Gravel (SP) (FILL).
1					8"-5' - Dry, brown, fmc SAND, cobbles, broken asphalt, concrete, brick, metal (SW) (FILL).
2					
3					
4					
5		2-1	4	0.0	Wet, very loose, golden brown, f SAND, trace Silt, micaceous (SP).
		1-WH			
6					
7		17-12	58	0.0	Wet, medium dense, brown, f SAND, trace Silt, micaceous (SP). Weathered schist in tip
		11-9			of split-spoon.
8					
9		50/3"	4	0.0	Weathered SCHIST (probable).
10					
					End of Boring @10'

SCHEMATIC (drawing not to scale)



COMMENTS

SAMPLING METHOD
HC = HAND CLEARED
SS = SPLIT SPOON

COMMENTS:
Boring was hand cleared to 5' bgs; sampling with 2" split spoon
Bottom of Boring @ 10'

PARSONS
DRILLING RECORD

Sheet 1 of 1

BORING NO. MW-8

Contractor: ADT
Driller: Tony Palomaque
Inspector: Mike Wilkinson
Rig Type: Mobile B-61

PROJECT NAME: Con Ed / Saw Mill River Station
PROJECT NUMBER: 444868-03000

Location Description: Saw Mill River Station Site

GROUNDWATER OBSERVATIONS				
Water Level	11'	7.44'		
Date	2 Nov 09	5 Nov 09		
Time	0820	915		
Meas. From	GS	TOC		

Weather: Partly Cloudy, 45-59°F, 5-15 mph winds (W)

Date/Time Start: 3 November 2009 0945

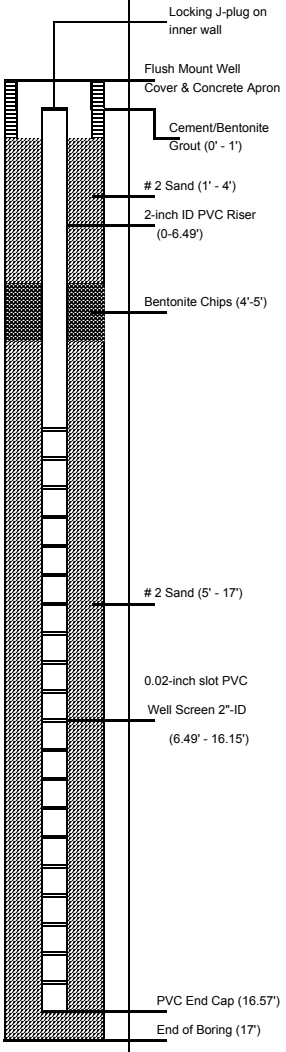
Date/Time Finish: 3 November 2009 1200

Location Plan

See Site Plan

Sample Depth	Sample I.D.	SPT	% Rec.	PID (ppm)	FIELD IDENTIFICATION OF MATERIAL
+3					
+2					
+1					
0		HC			0-6" - Asphalt
1				0.0	6-8" - Dry, medium dense, tan to light brown, fm SAND, some fc angular gravel (SP) (FILL).
					8"-5' - Dry, dense, brown, fmc SAND, cobbles, broken asphalt, concrete, brick, metal (SW) (FILL).
2					
3					
4					
5		8-5	0	-	No recovery. Rock in tip of split-spoon.
6		2-3			
7		11-14	38	0.0	Moist to wet, medium dense, dark gray, f SAND, little Silt, trace f angular Gravel, metal
					fragment (SM) (FILL).
8		8-12			
9		3-3	8	0.0	Wet, medium dense, dark gray, f SAND, trace Silt (SP). Rock in tip of split-spoon.
10		8-19			
11		8-6	13	0.2	Wet, medium dense, dark gray, f SAND, trace Silt, trace f Gravel (SP). Hydrocarbon-like
					stain, hydrocarbon-like odor.
12		11-14			
13		8-12	17	0.0	Wet, medium dense, gray, f SAND, trace f Gravel, trace Silt (SP).
14		14-16			
15		9-8	17	0.0	Wet, medium dense, gray, f SAND, trace f Gravel, trace Silt (SP).
16		11-13			
17					**End of Boring @ 17'**

SCHEMATIC (drawing not to scale)



COMMENTS

SAMPLING METHOD
HC = HAND CLEARED
SS = SPLIT SPOON

COMMENTS:
Boring was hand cleared to 5' bgs; sampling with 2" split spoon
Bottom of Boring @ 17'

PARSONS
DRILLING RECORD

Sheet 1 of 1

BORING NO. MW-9

Contractor: ADT
Driller: Shaun Miller
Inspector: René Robles
Rig Type: CME-85

PROJECT NAME: Con Ed / Saw Mill River Station
PROJECT NUMBER: 446113.01000

Location Description: Saw Mill River Station Site

GROUNDWATER OBSERVATIONS				
Water Level	3'	2.11'		
Date	6/28/11	7/5/11		
Time	0910	1020		
Meas. From	GS	TOC		

Weather: Clear, 64-81°F, 0-15 mph winds (NW)

Date/Time Start: July 1, 2011 1145

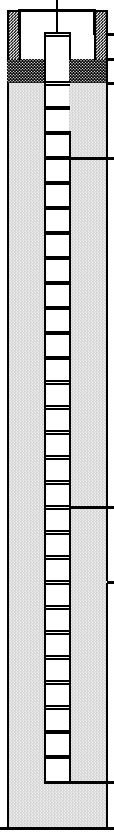
Date/Time Finish: July 1, 2011 1220

Location Plan

See Site Plan

Sample Depth	Sample I.D.	SPT	% Rec.	PID (ppm)	FIELD IDENTIFICATION OF MATERIAL
+3					
+2					
+1					
0		HC			0-2': Dry, brown, cmf SAND, little Silt, little cf Gravel, trace Cobbles,
1					broken Asphalt (FILL).
2					
					2'-6': Moist, dark brown, mf SAND, some Silt (FILL).
3					
4					
5		3	33	104.0	(5-7') Wet, loose, dark brown, cmf SAND, little Silt, little cm Gravel, Wood Debris,
		1			organic like odor from wood (FILL).
6		9			
		14			
7		6	58	8.7	(7-9') Saturated, very loose, dark brown, cmf SAND, some cmf Gravel, little Silt (FILL)
		5			
8		4			
		4			
9		11	17	8.3	(9-11') Saturated, loose, dark brown, cmf SAND, some mf Gravel, little Silt,
		6			Brick fragments (FILL).
10		4			
		1			
11		9	13	123.0	(11-13') Wet wood debris with organic like odor (FILL).
		5			Wet, red/brown silty SAND on auger flights.
12		4			
		9			
13		11	29	7.3	(13-15') Saturated, dense, brown, cmf SAND, some mf Gravel, little Silt. (SW-SM)
		19			Wet, dense, red/brown Silty SAND on auger flights.
14		34			
		15			
15		14	25	5.6	(15-17') Same as above.
		11			
16		18			
		14			
17					**End of Boring @ 17' bgs**

SCHEMATIC (drawing not to scale)



COMMENTS

SAMPLING METHOD
HC = HAND CLEARED
SS = SPLIT SPOON
BGS = BELOW GROUND SURFACE

COMMENTS:
Boring location was hand cleared to 2' bgs and Air knifed to 6' bgs; sampling was performed with 24" long, 2" OD split spoon
End of Boring @ 17' bgs.

PARSONS
DRILLING RECORD

Sheet 1 of 2

Contractor: ADT
Driller: Shaun Miller
Inspector: René Robles
Rig Type: CME-85

BORING NO. MW-10
Location Description: Saw Mill River Station Site

PROJECT NAME: Con Ed / Saw Mill River Station
PROJECT NUMBER: 446113.01000

GROUNDWATER OBSERVATIONS				
Water Level	3'	2.11'		
Date	6/28/11	7/5/11		
Time	0910	1020		
Meas. From	GS	TOC		

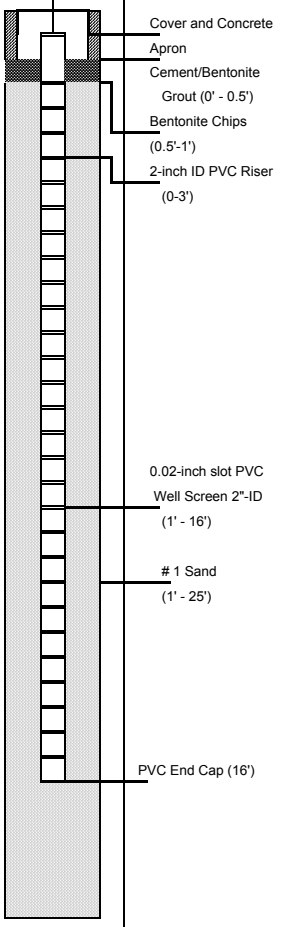
Weather: Clear, 64-81°F, 0-15 mph winds (NW)
Date/Time Start: June 30, 2011 0920
Date/Time Finish: June 30, 2011 1100

Location Plan

See Site Plan

Sample Depth	Sample I.D.	SPT	% Rec.	PID (ppm)	FIELD IDENTIFICATION OF MATERIAL
+3					
+2					
+1					
0		HC			0-2.5': Dry, tan/brown, cm SAND, little Silt, little cf Gravel. (SP-SM)
1					
2					
					2.5'-6': Wet, tan/dark brown, mf SAND, trace Silt, trace mf Gravel. (SP-SM)
3					Water at 3' bgs.
4					
5		4	38	0.0	Moist, dense, dark brown, cmf SAND, some Silt, little f Gravel. (SW-SM)
		5			
6		6			
		7			
7		9	92	0.6	0-18": Moist, dark brownSANDY SILT. (ML)
		7			18"-22": Moist, soft, dark brown CLAY. (CL)
8		6			
		5			
9		3	63	0.8	0-3": Same as above (18"-22" interval).
		2			3"-15" Moist, soft, grey SILT, trace Sand. (ML)
10		4			
		5			
11		5	67	1.0	0-6": Wet, loose, dark brown, SILTY SAND. (SM)
		5			6"-16": Wet, medium dense, dark grey, cm SAND, some f Gravel, trace Silt. (SP-SM)
12		5			
		5			
13		1	29	1.1	0-4": Same as above (6"-16" interval)
		4			4"-7": Wet, loose, grey SILT, trace f Sand. (ML)
14		5			
		7			
15		1	17	1.4	Same as above (4"-7" interval), saturated.
		3			
16		5			
		5			
17		4	38	0.8	Wet, loose, grey/brown SANDY SILT. (ML)
		9			
18		11			
		11			
19					

SCHEMATIC (drawing not to scale)



COMMENTS

SAMPLING METHOD
HC = HAND CLEARED
SS = SPLIT SPOON
BGS = BELOW GROUND SURFACE

COMMENTS:
Boring location was hand cleared to 2' bgs and Air knifed to 6' bgs; sampling was performed with 24" long, 2" OD split spoon.
End of Boring @ 25' bgs.

Contractor: ADT
Driller: Shaun Miller
Inspector: René Robles
Rig Type: CME-85

PARSONS
DRILLING RECORD

PROJECT NAME: Con Ed / Saw Mill River Station
PROJECT NUMBER: 446113.01000

BORING NO. MW-10
Location Description: Saw Mill River Station Site

GROUNDWATER OBSERVATIONS				
Water Level	3'	2.11'		
Date	6/28/11	7/5/11		
Time	0910	1020		
Meas. From	GS	TOC		

Weather: Clear, 64-81°F, 0-15 mph winds (NW)
Date/Time Start: June 30, 2011 0920
Date/Time Finish: June 30, 2011 1100

Location Plan
See Site Plan

Sample Depth	Sample I.D.	SPT	% Rec.	PID (ppm)	FIELD IDENTIFICATION OF MATERIAL	SCHEMATIC (drawing not to scale)	COMMENTS
19		2	63	1.2	0-7": Same as above (17'-19' interval)		
		5			7"-15": Moist, medium dense, orange f SAND, some Clay. (SW-SC)		
20		9					
		9					
21		6	100	0.8	Same as above (7"-15" interval), trace Gravel		
		8					
22		9					
		10					
23		7	46	1.1	Same as above (21'-23' interval)		
		10					
24		15					
		21					End of Boring (25')
25					**End of Boring @ 25'**		

SAMPLING METHOD
HC = HAND CLEARED
SS = SPLIT SPOON
BGS = BELOW GROUND SURFACE

COMMENTS:
Boring location was hand cleared to 2' bgs and Air knifed to 6' bgs; sampling was performed with 24" long, 2" OD split spoon.
End of Boring @ 25' bgs.

PARSONS
DRILLING RECORD

Sheet 1 of 1

Contractor: ADT
Driller: Shaun Miller
Inspector: René Robles
Rig Type: CME-85

PROJECT NAME: Con Ed / Saw Mill River Station
PROJECT NUMBER: 446113.01000

BORING NO. MW-11
Location Description: Saw Mill River Station Site

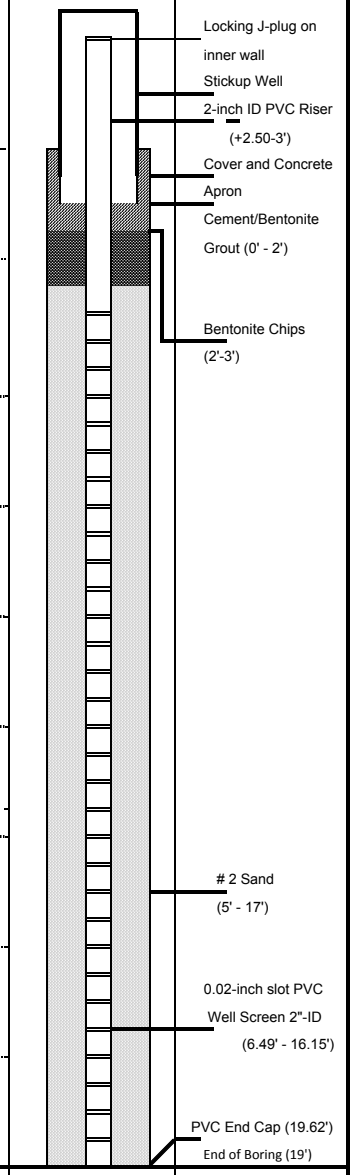
GROUNDWATER OBSERVATIONS				
Water Level	9'	8.04'		
Date	6/29/11	6/30/11		
Time	0845	1350		
Meas. From	GS	TOC		

Weather: Partly Cloudy, 70-84°F, 0-10 mph winds (NW)
Date/Time Start: June 29, 2011 0830
Date/Time Finish: June 29, 2011 0920

Location Plan
See Site Plan

Sample Depth	Sample I.D.	SPT	% Rec.	PID (ppm)	FIELD IDENTIFICATION OF MATERIAL
+3					
+2					
+1					
0		HC			0-2': Dry, brown, cmf SAND, little Silt, little cf Gravel, trace Cobbles,
1					broken Asphalt (FILL).
2					
					2'-6': Moist, dark brown, mf SAND, some Silt. (SP-SM)
3					
4					
5		3	42	1.1	Dry, loose, dark brown, mf SAND, some Silt, trace mf Gravel. (SP-SM)
		1			
6		1			
		8			
7		16	58	0.5	0-11": Same as above (5'-7' interval), wet.
		10			11"-14": Moist, medium dense, red-brown, mf SAND, some Silt. (SP-SM)
8		8			
		7			
9		9	29	0.6	Same as above (11"-14" interval).
		6			
10		7			
		8			
11		8	54	0.4	Wet, loose, tan/light brown, cmf SAND, some Silt, little mf Gravel. (SW-SM)
		6			
12		9			
		10			
13		WH	38	0.6	Saturated, loose, tan/light brown, cmf SAND, little Silt. (SW-SM)
		2			
14		5			
		6			
15		6	0	N/A	No Recovery.
		11			
16		17			
		19			
17		15	0	N/A	No Recovery.
		12			
18		8			
		10			
19					**End of Boring @ 19'**

SCHEMATIC (drawing not to scale)



SAMPLING METHOD
HC = HAND CLEARED
WHO=WEIGHT OF HAMMER
BGS = BELOW GROUND SURFACE

COMMENTS:
Boring location was hand cleared to 2' bgs and Air knifed to 6' bgs; sampling was performed with 24" long, 2" OD split spoon.
End of Boring @ 19' bgs.

PARSONS
DRILLING RECORD

Sheet 1 of 1

Contractor: ADT
Driller: Shaun Miller
Inspector: René Robles
Rig Type: CME-85

BORING NO. MW-12
Location Description: Saw Mill River Station Site

PROJECT NAME: Con Ed / Saw Mill River Station
PROJECT NUMBER: 446113.01000

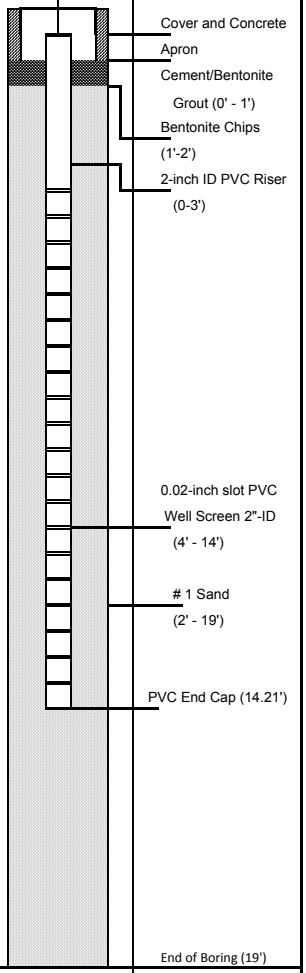
GROUNDWATER OBSERVATIONS				
Water Level	9'	5.31'		
Date	6/29/11	40725		
Time	1340	855		
Meas. From	GS	TOC		

Weather: Partly Cloudy, 70-84°F, 0-10 mph winds (NW)
Date/Time Start: June 29, 2011 1330
Date/Time Finish: June 29, 2011 1420

Location Plan
See Site Plan

Sample Depth	Sample I.D.	SPT	% Rec.	PID (ppm)	FIELD IDENTIFICATION OF MATERIAL
+3					
+2					
+1					
0		HC			0-4": Asphalt.
1					4"-6": Dry, tan cm SAND, trace Silt (FILL).
					6"-5': Dry, tan COBBLES, Broken concrete ceramic plates, broken asphalt, metal
2					metal debris, some cmfSand, trace Silt (FILL).
3					
4					
5		12	38	0.0	Moist, dense, dark brown, cmf SAND, some Silt, little f Gravel. (SW-SM)
		30			
6		15			
		12			
7		4	92	0.6	0-18": Moist, dark brown f SANDY SILT. (ML)
		3			18"-22": Moist, soft, dark brown CLAY. (CL)
8		2			
		2			
9		2	63	0.8	0-3": Same as above (18"-22" interval).
		2			3"-15" Moist, loose, grey SILT, trace Sand.
10		2			
		4			
11		2	67	1.0	0-6": Wet, loose, dark brown SILTY SAND. (SM)
		5			6"-16": Wet, medium dense, dark grey, cm SAND, some f Gravel, trace Silt. (SP-SM)
12		11			
		13			
13		5	29	1.1	0-4": Same as above (6"-16" interval)
		8			4"-7": Wet, loose, grey SILT, trace f Sand. (ML)
14		5			
		4			
15		10	17	1.4	Same as above (4"-7" interval), saturated.
		6			
16		4			
		5			
17		3	38	0.8	Wet, loose, grey/brown SANDY SILT. (ML)
		5			
18		5			
		7			
19					**End of Boring @ 19'**

SCHEMATIC (drawing not to scale)



COMMENTS:
Boring was hand cleared to 2' bgs and Air knifed to 6' bgs; sampling with 2" split spoon
Bottom of Boring @ 19'

SAMPLING METHOD
HC = HAND CLEARED
SS = SPLIT SPOON

Soil Boring Log

CLIENT:	Con Edison	**INSPECTOR:**	Zohar Lavy	**BORING/WELL NO.**	**SBSI-1**
PROJECT NAME:	Saw Mill Station - Spill Investigation	**DRILLER:**	Chris Miglioni	**LOCATION DESCRIPTION**	
PROJECT LOCATION:	Yonkers, NY	**WEATHER:**	P. Cloudy, lt rain, high-70s, Wind: light, north	Approximately 20 feet east of well MW-9	
PROJECT NUMBER:	448929-01000	**CONTRACTOR:**	Aquifer Drilling and Testing, Inc.		
GROUNDWATER OBSERVATIONS		**RIG TYPE:**	Vactron and Geoprobe	**LOCATION PLAN**	
		DATE/TIME START:	6/18/2014 0845-1030 hand clearance		
WATER LEVEL:	~1.5 feet bgs	**DATE/TIME FINISH:**	6/19/2014 1000-1030 geoprobe		
DATE:	6/18/14	**WEIGHT OF HAMMER:**	NA		
TIME:	0845-1030	**DROP OF HAMMER:**	NA		
MEAS. FROM:	Grade	**TYPE OF HAMMER:**	NA		

SAMPLE DEPTH	SAMPLE I.D.	ADV/ REC.	PID (ppm)	FIELD IDENTIFICATION OF MATERIAL	STRATA	COMMENTS
0	SBSI-1(0.5-1.5')	Vactron	0.0	0-0.5' Dry, brown, fine to medium SAND and medium to coarse sub-angular GRAVEL	FILL (SW)	Sample time: 0915. NAPL sheen and blebs observed on the water surface.
1						
2				0.5-5' Moist, fine to medium SAND and medium to coarse sub-angular GRAVEL, some Brick, little Cobble		
3						
4						
5		60/48	0.0	0-24" Moist, dark grey, fine SAND, little Silt, little fine to medium sub-angular Gravel, trace Mica, trace Brick		
6						
7				24-32" Moist, orange, fine SAND and SILT	SW-SM	
8				32-48" Wet, dark brown, fine to medium SAND, trace sub-angular Gravel, trace Silt		
9						
10	SBSI-1 (10'-12')	60/60	0.0	0-56" Wet, brown/orange, fine to medium SAND, some fine to coarse sub-angular to sub-round Gravel, trace Silt		Sample time: 1015
11						
12						
13						
14				56"- 60" Moist, orange, fine sand and silt.		
15	**End of Boring at 15 ft bgs**					

Notes:
1) Boring advanced via hand clearing/Vactron methods from ground surface to a depth of 5' below ground surface (bgs).
2) Soil samples were field screened with a Photo Ionization Detector (PID) meter.
3) Both soil samples submitted for laboratory chemical analysis.
4) Soil cuttings were containerized. The boring was grouted to the surface and the ground surface was restored, as appropriate.

Sample Types	Consistency vs. Blowcount / Foot				
S -- Split Spoon	Granular (Sand & Gravel)		Fine Grained (Silt & Clay)		and - 35 -50%
U -- Undisturbed Tube	V. Loose: 0-4	Dense: 30-50	V. Soft: <2	Stiff: 8-15	some - 20-35%
C -- Rock Core	Loose: 4-10	V. Dense: >50	Soft: 2-4	V. Stiff: 15-30	little - 10-20%
A -- Auger Cuttings	M. Dense: 10-30		M. Stiff: 4-8	Hard: > 30	trace - <10%
					moisture, density, color, gradation

Soil Boring Log

CLIENT:	Con Edison	**INSPECTOR:**	Zohar Lavy	**BORING/WELL NO.**	**SBSI-2**
PROJECT NAME:	Saw Mill Station - Spill Investigation	**DRILLER:**	Chris Miglioni	**LOCATION DESCRIPTION**	
PROJECT LOCATION:	Yonkers, NY	**WEATHER:**	P. Cloudy, lt rain, high-70s, Wind: light, north	Approximately 20 feet north of well MW-9	
PROJECT NUMBER:	448929-01000	**CONTRACTOR:**	Aquifer Drilling and Testing, Inc.		
GROUNDWATER OBSERVATIONS		**RIG TYPE:**	Vactron and Geoprobe	**LOCATION PLAN**	
		DATE/TIME START:	6/18/2014 1325-1400 hand clearance		
WATER LEVEL:	~1.5 feet bgs	**DATE/TIME FINISH:**	6/19/2014 0845-0930 geoprobe		
DATE:	6/18/14	**WEIGHT OF HAMMER:**	NA		
TIME:	1325-1400	**DROP OF HAMMER:**	NA		
MEAS. FROM:	Grade	**TYPE OF HAMMER:**	NA		

SAMPLE DEPTH	SAMPLE I.D.	ADV/ REC.	PID (ppm)	FIELD IDENTIFICATION OF MATERIAL	STRATA	COMMENTS
0	SBSI-2(0.5-1.5')	Vactron	0.0	0'-0.5' Dry, brown, fine to medium SAND and medium to coarse sub-angular to angular GRAVEL 0.5'-1.5' Moist, brown, fine to medium SAND, some medium to coarse sub-angular to angular GRAVEL, trace Brick	FILL (SW)	Sample time: 1345 Air knife through the 1.5 to 5 ft bgs interval due to high water table. Slight sheen on top of water.
1						
2						
3						
4						
5		60/60	0.0	0-30" Moist, dark grey SILT, some fine Sand, trace fine sub-round Gravel	SM	
6						
7				30-50" Moist, dark grey SILT, some fine Sand, some micaceous bedrock Boulder		
8						
9				50-60" Moist, orange, fine SAND, some Silt, little sub-angular to sub-round fine to medium Gravel	SW-SM	
10	SBSI-2 (10'-12')	60/60	0.0	0-15" Moist, orange, fine SAND, some Silt, little sub-angular to sub-round fine to medium Gravel		Sample time: 0925
11				15-48" Moist, pink/red SILT, some fine Sand, little very stiff Clay, little Mica		
12				48-54" Wet, brown, medium SAND		
13				54-60" Moist, pink/red SILT, some fine Sand, little very stiff Clay, little Mica		
14						
15	**End of Boring at 15 ft bgs**					

Notes:
1) Boring advanced via hand clearing/Vactron methods from ground surface to a depth of 5' below ground surface (bgs).
2) Soil samples were field screened with a Photo Ionization Detector (PID) meter.
3) Both soil samples submitted for laboratory chemical analysis.
4) Soil cuttings were containerized. The boring was grouted to the surface and the ground surface was restored, as appropriate.

Sample Types	Consistency vs. Blowcount / Foot				
S -- Split Spoon	Granular (Sand & Gravel)		Fine Grained (Silt & Clay)		and - 35 -50%
U -- Undisturbed Tube	V. Loose: 0-4	Dense: 30-50	V. Soft: <2	Stiff: 8-15	some - 20-35%
C -- Rock Core	Loose: 4-10	V. Dense: >50	Soft: 2-4	V. Stiff: 15-30	little - 10-20%
A -- Auger Cuttings	M. Dense: 10-30		M. Stiff: 4-8	Hard: > 30	trace - <10%
					moisture, density, color, gradation

APPENDIX F

HISTORIC SITE SOIL AND GROUNDWATER ANALYTICAL DATA SUMMARY

FINAL

SITE INVESTIGATION/
REMEDIAL ALTERNATIVES REPORT
310 SAW MILL RIVER ROAD
YONKERS, NEW YORK

NYSDEC Site #B00179-3

February 2008

Prepared for:
Yonkers Parking Authority
8 Buena Vista Avenue
Yonkers, New York 10701

Prepared by:
Henningson, Durham & Richardson
Architecture and Engineering, P.C.
711 Westchester Avenue
White Plains, New York 10604

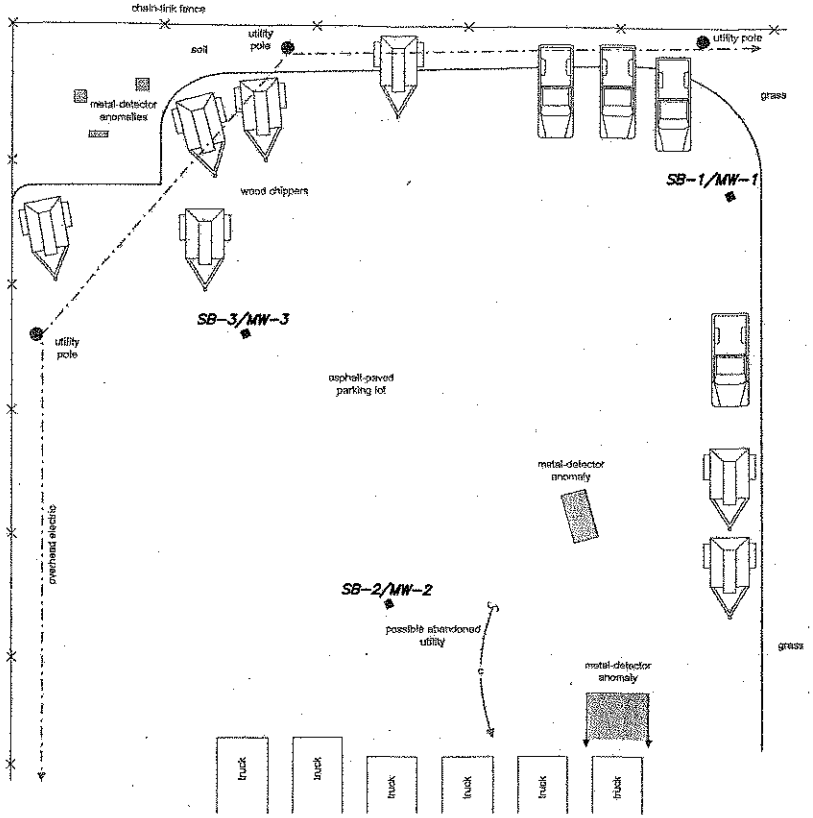
Table 3-5
Summary of Off-Site Soil Borings

Boring Number	Depth (feet)	Soil Description	PID Reading	Comment/ Soil Recovery
SB-1/ MW-1	0 - 2	Asphalt, gravel	0	
	2 - 4	Dark brown well graded sandy soil	0	
	4 - 6	Sandy light brown soil to dark brown sandy soil	0	Soil sample & duplicate soil sample
	6 - 8	No recovery	n/a	Groundwater at approximately 6.5 ft
SB-2/ MW-2	0 - 2	Asphalt, gravel	0	
	2 - 4	Gravel to dark brown well graded sandy soil	0	
	4 - 6	Medium brown sandy soil, moist	0	Soil sample
	6 - 8	Dark brown fine sandy soil, saturated	0	Extra soil sample per NYSDEC. GW at approx 6.5 ft
	8 - 10	Medium brown sandy soil to grey-brown silty clay, saturated	0	
	10 - 12	Brown backfill	0	
	12 - 14	Very minimal recovery	0	
SB-3/ MW-3	0 - 2	Asphalt, gravel with some dark brown soil	0	
	2 - 4	Gravel to dark brown well graded sandy soil	0	
	4 - 6	Dark brown sandy soil with unconsolidated conglomerate material	0	Soil sample with MS and MSD
	6 - 8	Fine-grained dark brown soil, saturated	0	Spoon part empty. GW at approx 6.5ft
	8 - 10	Dark brown sandy soil to light grey clay to orange-brown clay	0	

Notes:
MS: Matrix Spike
MSD: Matrix Spike Duplicate
MW: Groundwater Monitoring Well
SB: Soil Boring (Subsurface) -Soil Sample

NOTES:

1. BASE MAP PROVIDED BY NAEVA GEOPHYSICS INC., (50 N. HARRISON AVENUE, CONGERS, NY) ENTITLED "SUBSURFACE FEATURES DETECTED DURING A GEOPHYSICAL INVESTIGATION OF A PORTION OF A CONED FACILITY PARKING LOT, 30 WORTH STREET YONKERS, NEW YORK" AND DATED FEBRUARY 15, 2005.



0 20 40

SCALE IN FEET

Con Ed property

F-3

HDR
Hemmington, Durham and Richardson Architecture & Engineering, P.C.
711 Westchester Avenue
White Plains, NY 10604

No.	Description	Date	Drawn	Checked	Approved	Proj. Mgr.
A	DRAFT SI/RAR	10/05	NI	NC		JM

Project Manager: J. MARIANI
Architect
Civil
Electrical
Mechanical
Structural
Drawn By: N. INGRASSIA

YONKERS PARKING AUTHORITY
DRAFT SITE INVESTIGATION/
REMEDIAL ALTERNATIVES REPORT

FINAL OFF-SITE SAMPLING LOCATIONS

Date	Project No.	Figure No.	Sheet
10/12/05	11786	3-2	A

Scale: AS SHOWN

Table 5-7
Summary of Off-Site Subsurface Soil Sample Results: RCRA Metals, TCLP Metals, PCBs and SVOCs above the NYSDEC TAGM #4046 RSCO and/or STARS Memo #1

Analyte	Subsurface Soil Sample(s) above NYSDEC TAGM #4046 RSCO / STARS Memo #1	Highest Result (and Location)	NYSDEC TAGM #4046 RSCO / STARS Memo #1 (1)(2)
RCRA Metals			
Arsenic	SB-2 and SB-3	198 ppm (SB-2)	7.5 ppm
Cadmium	SB-1, SB-2 and SB-3	4.3 ppm (SB-2)	1 ppm
Chromium	SB-1, SB-2 and SB-3	28.3 ppm (SB-2)	10 ppm
Lead	SB-2	865 ppm (SB-2)	500 ppm
Selenium	SB-3	2.21 ppm (SB-3)	2 ppm
Mercury	SB-1, SB-2 and SB-3	1.6 ppm (SB-2)	0.1 ppm
TCLP Metals			
Arsenic	SB-2 and SB-3	1,340 ppb (SB-2)	5 ppb
Barium	SB-1, SB-2 and SB-3	1,650 ppb (SB-1)	100 ppb
Lead	SB-2 and SB-3	1,960 ppb (SB-2)	5 ppb
Mercury	SB-1, SB-2 and SB-3	1.1 ppb (SB-1)	0.2 ppb
PCBs			
Aroclor-1248	SB-1	33,000 ppb (SB-1)	10 ppb
Aroclor-1260	SB-1 and SB-3	330 ppb (SB-1)	10 ppb
SVOCs			
Benzo(a)anthracene	SB-1 and SB-3	940 ppb (SB-3)	224 ppb
Benzo(a)pyrene	SB-1, SB-2 and SB-3	780 ppb (SB-3)	61 ppb
Benzo(b)fluoranthene	SB-3	1,200 ppb (SB-3)	1,100 ppb
Chrysene	SB-1 and SB-3	1,100 ppb (SB-3)	400 ppb

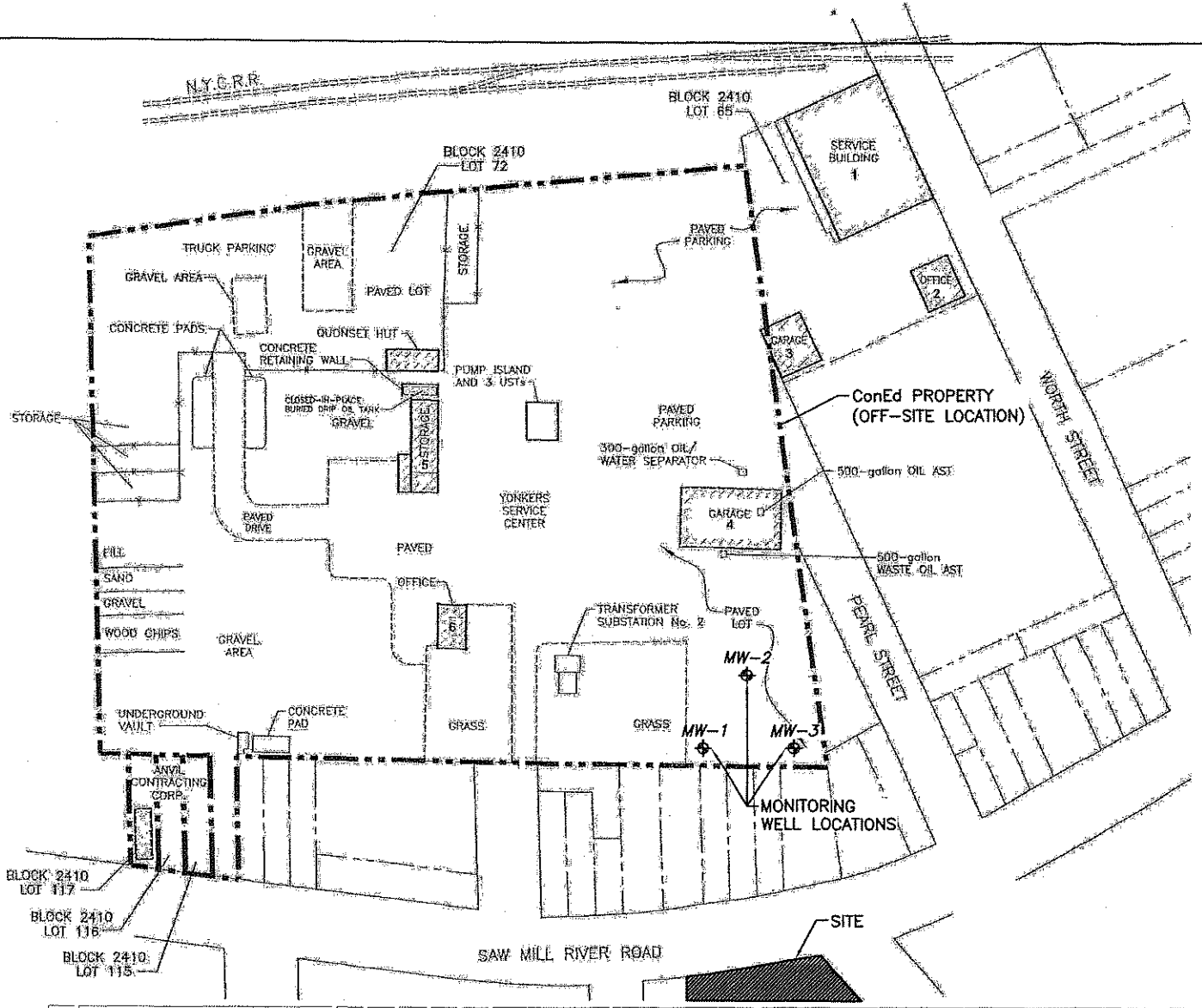
Notes:
(1) RSCO from NYSDEC's TAGM HWR-94-4046, revised January 24, 1994.
(2) TCLP Metal thresholds as presented in NYSDEC's STARS Memo #1, revised January 1992.
ppb: parts per billion
ppm: parts per million
SB: Soil Boring (Subsurface) - Soil Sample

Table 5-8
Off-Site Subsurface Soil Sampling Results
Above NYSDEC TAGM #4046 RSCOs or NYSDEC STARS #1

Sample ID		NYSDEC TAGM #4046 RSCO	SB-1 (4-6')	SB-1 (4-6') DL	SB-1 DUP (4-6')	SB-1 DUP (4-6') DL	SB-2 (4-6')	SB-2 (6-8')	SB-3 (4-6')
Lab Sample Number			T1856-01	T1856-01DL	T1856-02	T1856-02DL	T1856-03	T1856-04	T1856-05
Sampling Date			03/09/05	03/09/05	03/09/05	03/09/05	03/10/05	03/10/05	03/10/05
Matrix			SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
Parameter									
Metals (ppm)	Arsenic	7.5	6.82 JN		7.43 JN		**198 JN**	**83.7 JN**	**140 JN**
	Cadmium	1	**1.15 N**		**1.19 N**		**4.3 N**	**1.78 N**	**2.58 N**
	Chromium	10	**19.8 N**		**18.3 N**		**28.3 N**	**21.5 N**	**20 N**
	Lead	500	33.3 JN		32.8 JN		**865 JN**	244 JN	217 JN
	Selenium	2	1.01 UJN		0.83 UJN		1.65 UN	1.41 UN	**2.21 N**
	Mercury	0.1	**0.161 JN**		**0.124 JN**		**1.6 JND**	**0.979 JND**	**0.76 JND**
PCBs (ppm)	Aroclor-1248	10	**21000 E**	**33000 JDP**	**16000 E**	**27000 JDP**	4.4 U	4.4 U	4.0 U
	Aroclor-1260	10	3.3 U	330 UD	3.3 U	**330 UD**	3.5 U	3.5 U	**240**
SVOCs (ppb)	Benzo(a)anthracene	224	**320 J**		190 J		140 J	12 U	**940 J**
	Benzo(a)pyrene	61	**300 J**		**180 J**		**140 J**	14 U	**780 J**
	Benzo(b)fluoranthene	1100	450 J		200 J		42 U	42 U	**1200 J**
	Chrysene	400	**570 J**		250 J		180 J	25 U	**1100 J**
Sample ID		NYSDEC STARS #1	SB-1 (4-6')	SB-1 (4-6') DL	SB-1 DUP (4-6')	SB-1 DUP (4-6') DL	SB-2 (4-6')	SB-2 (6-8')	SB-3 (4-6')
Lab Sample Number			T1856-01	T1856-01DL	T1856-02	T1856-02DL	T1856-03	T1856-04	T1856-05
Sampling Date			03/09/05	03/09/05	03/09/05	03/09/05	03/10/05	03/10/05	03/10/05
Matrix			SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
Parameter									
TCLP Metals (ppb)	Arsenic	5	48.4 U		48.4 U		**1340**	**481**	**206**
	Barium	100	**1650 J**		**1410 J**		**1430 J**	**1170 J**	**1340 J**
	Lead	5	130 U		112 U		**1960 J**	**374 J**	**439 J**
	Mercury	0.2	**1.1 J**		**0.85 J**		0.825 U	**0.825 J**	**0.9 J**

Data Qualifiers & Notes

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 - Dilution performed due to analyte's concentration exceeded the calibrated range of the instrument for specific analysis
E - Exceeds calibration
N - The analysis indicates the presence of an analyte that has been "tentatively identified"
UJ - The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit appropriate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte
JN - The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration.
DL - Dilution performed due to analyte's concentration exceeded the calibrated range of the instrument for specific analysis
RE - Specific reanalysis for surrogate recovery and internal standard confirmation
SB - Soil boring
DUP - Duplicate sample
Bold - Exceedence of NYSDEC TAGM #4046 RSCO for non-TCLP related analysis. Exceedance of NYSDEC STARS #1 for TCLP analysis.



F-6

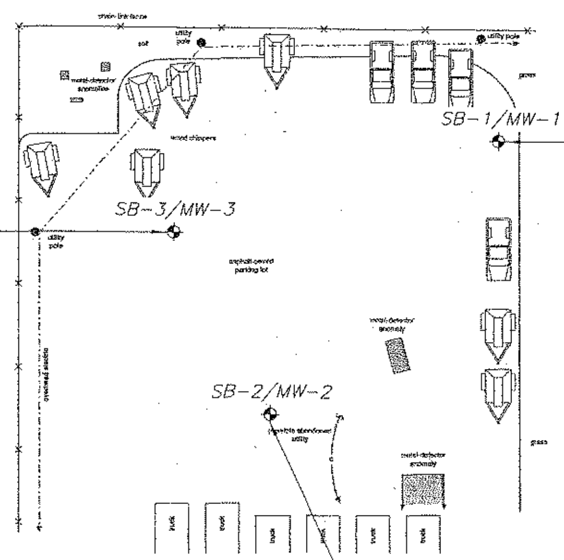
A	DRAFT SI/RAR	10/05	NI	NC		JM

Project Manager: J. MARIANI
Drawn By: N. INGRASSIA

YONKERS PARKING AUTHORITY
DRAFT SITE INVESTIGATION/
REMEDIAL ALTERNATIVES REPORT

OFF-SITE PROPERTY LOCATION

Date	Project No.	Figure No.	Sheet
10/12/05	11786	5-3	A
Scale: AS SHOWN			



SB-3 (4'-6')	
Metals	CONC. (PPM)
Arsenic (7.5)	140 JN
Cadmium (1)	2.58 N
Chromium (10)	20 N
Selenium (2)	2.21 N
Mercury (0.1)	0.76 JND
TCLP Metals	CONC. (PPB)
Arsenic (5)	206
Barium (100)	1,340 J
Lead (5)	439 J
Mercury (0.2)	0.9 J
PCBs	CONC. (PPM)
Aroclor-1250 (10)	240
SVOCs	CONC. (PPB)
Benzo(a)anthracene (224)	940 J
Benzo(a)pyrene (61)	780 J
Benzo(b)fluoranthene (1,100)	1,200 J
Chrysene (400)	1,100 J

MW-3	
Metals	CONC. (PPM)
Arsenic (25)	55.9
Chromium (50)	77
Lead (25)	123 J
VOCs	CONC. (PPB)
cis-1,2-Dichloroethene (5)	5.3
Tetrachloroethene (5)	130 J
Trichloroethene (5)	7.1

SB-2 (4'-6')	
Metals	CONC. (PPM)
Arsenic (7.5)	198 JN
Cadmium (1)	4.3 N
Chromium (10)	28.3 N
Lead (500)	865 JN
Mercury (0.1)	1.6 JND
TCLP Metals	CONC. (PPB)
Arsenic (5)	1,340
Barium (100)	1,430 J
Lead (5)	1,960 J
SVOCs	CONC. (PPB)
Benzo(a)pyrene (61)	140 J

SB-2 (6'-8')	
Metals	CONC. (PPM)
Arsenic (7.5)	83.7 JN
Cadmium (1)	1.78 N
Chromium (10)	21.5 N
Mercury (0.1)	0.979 JND
TCLP Metals	CONC. (PPB)
Arsenic (5)	481
Barium (100)	1,170 J
Lead (5)	374 J
Mercury (0.2)	0.825 J

MW-2	
Metals	CONC. (PPM)
Arsenic (25)	98.7
Cadmium (5)	6.06
Chromium (50)	115
Lead (25)	206 J
Selenium (10)	10.5
Mercury (0.7)	1.58 J
PCBs	CONC. (PPM)
Aroclor-1016 (0.09)	1.2
Aroclor Total (0.09)	1.2
VOCs	CONC. (PPB)
Tetrachloroethene (5)	16 J

MW-2 DUP	
Metals	CONC. (PPM)
Arsenic (25)	114
Cadmium (5)	7.94
Chromium (50)	135
Lead (25)	253 J
Mercury (0.7)	1.85 J
PCBs	CONC. (PPM)
Aroclor-1016 (0.09)	1 JP
Aroclor Total (0.09)	1 JP
VOCs	CONC. (PPB)
Tetrachloroethene (5)	15 J

MW-1	
Metals	CONC. (PPM)
Lead (25)	58.1 J
PCBs	CONC. (PPM)
Aroclor-1016 (0.09)	11 EP
Aroclor Total (0.09)	11 EP
VOCs	CONC. (PPB)
Tetrachloroethylene (5)	93 J

MW-1 DL	
PCBs	CONC. (PPM)
Aroclor-1016 (0.09)	21 D
Aroclor Total (0.09)	21 D

SB-1 (4'-6')	
Metals	CONC. (PPM)
Cadmium (1)	1.15 N
Chromium (10)	19.8 N
Mercury (0.1)	0.161 JN
TCLP Metals	CONC. (PPB)
Barium (100)	1,850 J
Mercury (0.2)	1.7 J
PCBs	CONC. (PPM)
Aroclor 1248 (10)	21,000 E
SVOCs	CONC. (PPB)
Benzo(a)anthracene (224)	320 J
Benzo(a)pyrene (61)	300 J
Chrysene (400)	570 J

SB-1 (4'-6') DL	
PCBs	CONC. (PPM)
Aroclor 1248 (10)	33,000 JDP

SB-1 DUP (4'-6')	
Metals	CONC. (PPM)
Cadmium (1)	1.19 N
Chromium (10)	18.3 N
Mercury (0.1)	0.124 JN
PCBs	CONC. (PPB)
Aroclor 1248 (10)	16,000 E
SVOCs	CONC. (PPB)
Benzo(a)pyrene (61)	180 J
TCLP Metals	CONC. (PPB)
Barium (100)	1,410 J
Mercury (0.2)	0.85 J

SB-1 DUP (4'-6') DL	
PCBs	CONC. (PPM)
Aroclor 1248 (10)	27,000 JDP
Aroclor 1250 (10)	330 UD

NOTES:

1. ANALYTICAL RESULTS ON THIS FIGURE ARE THOSE OBTAINED DURING THE MARCH 2005 OFF-SITE SAMPLING ACTIVITIES AND ARE IN EXCEEDANCE OF EITHER THE (1) NYSDEC TAGM #4046 RSCOS (FOR NON-TCLP ANALYSES FOR SOIL SAMPLES); (2) NYSDEC STARS MEMO #1 (FOR TCLP ANALYSES FOR SOIL SAMPLES); OR (3) NYSDEC PART 703 STANDARDS AND/OR NYSDEC TOGS 1.1.1 GUIDANCE VALUES (FOR GROUNDWATER SAMPLES).
2. ANALYTICAL RESULTS EITHER (1) BELOW THE NYSDEC TAGM #4046 RSCOS, NYSDEC STARS MEMO #1 OR NYSDEC STANDARDS/GUIDELINES OR (2) QUALIFIED WITH ONE OF THE FOLLOWING QUALIFIERS ARE NOT SHOWN ON THIS FIGURE:
   - "U" MEANING THAT THE ANALYTE WAS NOT DETECTED AT THE INDICATED CONCENTRATION
   - "B" MEANING THAT THE ANALYTE WAS FOUND IN THE LABORATORY BLANK AS WELL AS THE SAMPLE.
3. VALUES PROVIDED IN PARENTHESIS AFTER THE ANALYTE IS EITHER THE (1) NYSDEC TAGM #4046 RSCOS (FOR NON-TCLP ANALYSES FOR SOIL SAMPLES); (2) NYSDEC STARS MEMO #1 (FOR TCLP ANALYSES FOR SOIL SAMPLES); OR (3) THE NYSDEC STANDARD. VALUES PROVIDED IN PARENTHESIS AND IN ITALICS AFTER THE ANALYTE IS THE NYSDEC GUIDELINE.

J: DATA INDICATES THE PRESENCE OF A COMPOUND THAT MEETS THE IDENTIFICATION CRITERIA. THE CONCENTRATION GIVEN IS AN APPROXIMATE VALUE.

D: DILUTION PERFORMED DUE TO ANALYTE'S CONCENTRATION EXCEEDED THE CALIBRATED RANGE OF THE INSTRUMENT FOR SPECIFIC ANALYSIS.

E: EXCEEDS CALIBRATION

N: THE ANALYSIS INDICATES THE PRESENCE OF AN ANALYTE THAT HAS BEEN "TENTATIVELY IDENTIFIED"

VOC: VOLATILE ORGANIC COMPOUND
SVOC: SEMIVOLATILE ORGANIC COMPOUND
PCB: POLYCHLORINATED BIPHENYL
TCLP: TOXICITY CHARACTERISTIC LEACHATE PROCEDURE
SB: SOIL BORING
MW: GROUNDWATER MONITORING WELL
PPM: PARTS PER MILLION
PPB: PARTS PER BILLION
BOLD: EXCEEDANCE OF EITHER EITHER THE (1) NYSDEC TAGM #4046 RSCOS (FOR NON-TCLP ANALYSES FOR SOIL SAMPLES); (2) NYSDEC STARS MEMO #1 (FOR TCLP ANALYSES FOR SOIL SAMPLES); OR (3) NYSDEC PART 703 STANDARDS

ITALICS: EXCEEDANCE OF NYSDEC GUIDELINE

0 30 60
SCALE IN FEET

HDR

A | DRAFT SI/RAR | 10/05 | NI | NC | JM

J. MARIANI
N. INGRASSIA

YONKERS PARKING AUTHORITY
DRAFT SITE INVESTIGATION/
REMEDIAL ALTERNATIVES REPORT

OFF-SITE SAMPLING ANALYTICAL RESULTS

10/12/05 | 11786 | 5-5 | A
AS SHOWN

Table 5-9
Summary of Off-Site Groundwater Sample Results: RCRA Metals, PCBs and VOCs above the NYSDEC Standards/Guidelines

Analyte	Groundwater Sample(s) above NYSDEC Standards/Guidelines	Highest Result (and Location)	NYSDEC Standards/Guidelines (1)
RCRA Metals			
Arsenic	MW-2 and MW-3	114 ppm (MW-2)	25 ppm
Cadmium	MW-2	7.94 ppm (MW-2)	5 ppm
Chromium	MW-2 and MW-3	135 ppm (MW-2)	50 ppm
Lead	MW-1, MW-2 and MW-3	253 ppm (MW-2)	25 ppm
Selenium	MW-2	10.5 ppm (MW-2)	10 ppm
Mercury	MW-2	1.85 ppm (MW-2)	0.7 ppm
PCBs			
Aroclor-1016	MW-1 and MW-2	21 ppm (MW-1)	0.09 * ppm
Total Aroclor	MW-1 and MW-2	21 ppm (MW-1)	0.09 * ppm
VOCs			
cis-1,2-Dichloroethene	MW-3	5.3 ppb (MW-3)	5 ppb
Tetrachloroethene	MW-1, MW-2 and MW-3	130 ppb (MW-3)	5 ppb
Trichloroethene	MW-3	7.1 ppb (MW-3)	5 ppb

Notes:
(1) Based on Title 6 of the New York Code of Rules and Regulations, Part 703, Surface and Groundwater Quality Standards for class GA waters (fresh groundwater with a best end usage as drinking water).
* Applies to the sum of the substance
MW: Monitoring Well
ppb: parts per billion
ppm: parts per million

Table 5-10
Off-Site Groundwater Sampling Results
Above NYSDEC Standards/Guidelines

Sample ID		NYSDEC Part 703 Standard or NYSDEC TOGS 1.1.1 Guidelines			MW-1		MW-1DL		MW-2		MW-2DUP		MW-3	
Lab Sample Number					T1884-01		T1884-01DL		T1884-04		T1884-05		T1884-06	
Sampling Date					03/11/05		03/11/05		03/11/05		03/11/05		03/11/05	
Matrix					WATER		WATER		WATER		WATER		WATER	
Parameter		Standard	or	Guideline										
Metals (ppm)	Arsenic	25			8.39	J			**98.7**		**114**		55.9	
	Cadmium	5			2.02	J			**6.06**		7.94		3.1	J
	Chromium	50			36.4				**115**		**135**		77	
	Lead	25			**58.1**	**J**			**206**	**J**	**253**	**J**	**123**	**J**
	Selenium	10			6.36	J			**10.5**		6.62	J	5.24	U
	Mercury	0.7			0.29	J			**1.58**	**J**	**1.85**	**J**	0.35	J
PCBs (ppm)	Aroclor-1016	0.09 *			**11**	**EP**	**21**	**D**	**1.2**		**1**	**JP**	0.13	U
	Aroclor-Total	0.09			**11**	**EP**	**21**	**D**	**1.2**		**1**	**JP**	0.522	U
VOCs (ppb)	cis-1,2-Dichloroethene	5			0.77	U			0.77	U	0.77	U	**5.3**	
	Tetrachloroethene	5			**93**	**J**			**16**	**J**	**15**	**J**	**130**	**J**
	Trichloroethene	5			0.67	U			0.67	U	0.67	U	**7.1**	

Data Qualifiers & Notes

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.

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

D - Dilution performed due to analyte's concentration exceeded the calibrated range of the instrument for specific analysis

E - Exceeds calibration

UJ - The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit appropriate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte

JN - The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration.

DL - Dilution performed due to analyte's concentration exceeded the calibrated range of the instrument for specific analysis

MW - Groundwater Monitoring Well

DUP - Duplicate sample

Bold - Exceedence of NYSDEC Part 703 Standard

Italicize - Exceedence of NYSDEC TOGS 1.1.1 Guideline

(1) - 2,4-Dichlorophenol, Pentachlorophenol and Phenol added together should not exceed the Part 703 Standard of 1.0 ug/L

(2) - Applies to the sum of cis- and trans-1,3-Dichloropropene

* - Applies to the sum of the substance

Specific reanalysis was not conducted for this analysis

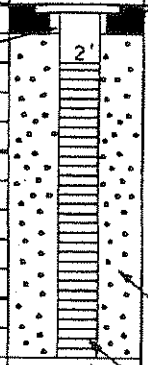
JOB LOCATION: CON EDISON 310 SAW MILL RIVER ROAD	Aquifer Drilling & Testing, Inc. **SUBSURFACE EXPLORATION**	SHEET 1 OF 1 LOCATION: YONKERS, NY HOLE NO.: B-1 LINE & STA: N: E: OFFSET:
CONTRACT:	FOR: HDR	
DEPTH: FT: CASING OUT DATE: DEPTH: FT: ALL CASING OUT DATE:	DATE START: 3/9/05 DATE FINISH: 3/9/05	GROUND ELEVATION: GROUND WATER ELEVATION: DATE:
CASING OD: 4" SAMPLER OD: 2" DIAMOND BIT SIZE: DRILLING METHOD: MUD ROTARY	WEIGHT OF HAMMER: 300 - 140 LBS INSIDE LENGTH OF SAMPLER: 24" IN DRILL RIG: MOBILE DK-527 TRACK	HAMMER FALL CASING: 24" SAMPLER: 30"

	CASING BLOWS PER FOOT	SAMPLE NUMBER	SAMPLE DEPTHS ELV./ FEET	SAMPLE RECOVERY	BLOWS PER 6" ON SAMPLER 0-6	6-12	12-18	18-24	WELL INFO	PROFILE CHANGE DEPTH	FIELD IDENTIFICATION OF SOIL AND ROCK
0									BENTONITE	0	
							MANHOLE		2'		
5		S1	5 - 7		5	16	21	20			BROWN SILTY SAND
		S2	7 - 8' 3"		22	31	50/3"				BROWN GRAVELLY FINE SAND
10									#1 SAND		END OF BORING 8' 3"
									12'		GW @ 7' BGS
15									.01 SLOT SCREEN		
20											
25											
30											
35											
40											

SOIL ENGINEER:	DRILLER: B. CRUZ
DRILLING INSPECTOR:	HELPER: K. ELTAHAN

JOB LOCATION: CON EDISON 310 SAW MILL RIVER ROAD	Aquifer Drilling & Testing, Inc. **SUBSURFACE EXPLORATION**	SHEET 1 OF 1 LOCATION: YONKERS, NY HOLE NO.: B-2 LINE & STA: N: E: OFFSET:
CONTRACT:	FOR: HDR	
DEPTH: FT: CASING OUT DATE: DEPTH: FT: ALL CASING OUT DATE:	DATE START: 3/10/05 DATE FINISH: 3/10/05	GROUND ELEVATION: GROUND WATER ELEVATION: DATE:
CASING OD: 4" SAMPLER OD: 2" DIAMOND BIT SIZE: DRILLING METHOD: MUD ROTARY	WEIGHT OF HAMMER: 300 - 140 LBS INSIDE LENGTH OF SAMPLER: 24" IN DRILL RIG: MOBILE DK-527 TRACK	HAMMER FALL CASING: 24" SAMPLER: 30"

	CASING BLOWS PER FOOT	SAMPLE NUMBER	SAMPLE DEPTHS ELV./ FEET	SAMPLE RECOVERY	BLOWS PER 6" ON SAMPLER 0-6	6-12	12-18	18-24	DENSITY OR CONSIST MOISTURE	PROFILE CHANGE DEPTH	FIELD IDENTIFICATION OF SOIL AND ROCK
0										0	BENTONITE
											MANHOLE
5		S1	5 - 7		12	18	22	27			BROWN SILTY SAND
		S2	7 - 7' 9"		43	50/3"					BROWN GRAVELLY FINE SAND
10		S3	9' - 9' 3"		50/3"					#1 SAND	END OF BORING 9' 3"
15											
20											
25											
30											
35											
40											



SOIL ENGINEER:	DRILLER: B. CRUZ
DRILLING INSPECTOR:	HELPER: K. ELTAHAN

JOB LOCATION:
CON EDISON
310 SAW MILL
RIVER ROAD

Aquifer Drilling & Testing, Inc.

SUBSURFACE EXPLORATION

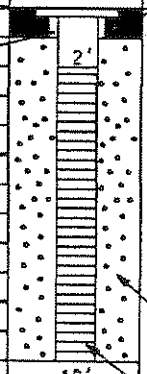
SHEET 1 OF 1
LOCATION: YONKERS, NY
HOLE NO.: B-3
LINE & STA: N:
E:
OFFSET:

CONTRACT:
FOR: HDR

DEPTH: FT: CASING OUT DATE:
DEPTH: FT: ALL CASING OUT DATE:
DATE START: 3/10/05
DATE FINISH: 3/10/05
GROUND ELEVATION:
GROUND WATER ELEVATION:
DATE:

CASING OD: 4"
SAMPLER OD: 2"
DIAMOND BIT SIZE:
DRILLING METHOD: MUD ROTARY
WEIGHT OF HAMMER: 300 - 140 LBS
INSIDE LENGTH OF SAMPLER: 24" IN
DRILL RIG: MOBILE DK-527 TRACK
HAMMER FALL
CASING: 24" SAMPLER: 30"

	CASING BLOWS PER FOOT	SAMPLE NUMBER	SAMPLE DEPTHS ELV./ FEET	SAMPLE RECOVERY	BLOWS PER 6" ON SAMPLER 0-6	6-12	12-18	18-24	DENSITY OR CONSIST MOISTURE	PROFILE CHANGE DEPTH	FIELD IDENTIFICATION OF SOIL AND ROCK
0											BENTONITE
										0	
											MANHOLE
5		S1	5 - 7		11	31	40	41			BROWN SILTY SAND
		S2	7 - 7' 8"		36	50/2"					BROWN GRAVELLY FINE SAND
10											END OF BORING 7' 8"
15											
20											
25											
30											
35											
40											



SOIL ENGINEER:
DRILLING INSPECTOR:
DRILLER: B. CRUZ
HELPER: K. ELTAHAN

APPENDIX G

HEALTH AND SAFETY PLAN AND COMMUNITY AIR MONITORING PLAN

HEALTH AND SAFETY PLAN (HASP) TEMPLATE FOR THE SITE MANAGEMENT PLAN (SMP) AT THE SAW MILL RIVER STATION

Prepared For:

TBD
(Insert Office Name)
(Insert Street Address)
(Insert City, State and Zip Code)

Project Name:

(Enter Here)

Prepared By:

(Insert Subcontractor Name)
(Insert Street Address)
(Insert City, State, and Zip Code)
Author: (Insert Name and Title)

REVIEWED AND APPROVED BY:

Project Manager: _____ _____
Date

Table of Contents

Table of Contents (continued)

List of Figures

List of Tables

List of Exhibits

List of Attachments

1. INTRODUCTION

This Health and Safety Plan (HASP) template has been prepared for any post-remedial action work at the Saw Mill River Station (the Site) discussed in the Site Management Plan (SMP). This plan is a template to be used to prepare a site-specific HASP by any future party performing work at the Site. This template provides guidance for potential hazards that may be encountered during field activities that may be required to complete any post-remedial activities. The primary post-remedial field activities may include, but are not limited to, the following:

- Future intrusive construction work.

During intrusive work and other field activities, field staff may be exposed to hazards associated with chemicals of concern on and off the Site. As a result, field personnel may be required to have specialized training (i.e. as per 29 CFR 1910.120) or wear personal protective equipment (PPE) suitable for the level of contaminates present. Air monitoring may be required to evaluate contamination levels, ambient air conditions, and to determine if additional PPE is necessary.

Field staff may also be exposed to other hazards that are encountered during field activities including slips, trips, falls, automobiles, traffic, heavy equipment, drill rigs, and winches. Depending upon the time of season, field staff may be exposed to biological hazards, for example insect bites, stings, ticks, and snakes. Meteorological hazards such as lightning, wind, rain, and ultraviolet radiation may also be present.

This HASP template outlines safety and health requirements and guidelines for project work. When implemented, these requirements will help protect site personnel, visitors, the public and environment from exposure to potential safety and health hazards.

This HASP must be updated as conditions change or situations change, usually by addenda to the plan. All field personnel must understand and implement the HASP and any addenda. Review of the HASP should be documented by having field personnel sign an acknowledgement form stating that they understand the plan and its requirements.

2. STATEMENT OF SAFETY AND HEALTH POLICY

This Section will be updated with a statement of safety and health policy by the party performing the work prior to commencement of any intrusive field activities at the Site.

3. SCOPE OF WORK EVALUATION

This HASP Template accompanies the Site Management Plan (SMP) for the entire Site which has been fully remediated in accordance with the Remedial Action Work Plans (RAWP). All

aspects of future Site redevelopment of the Site will be managed by the SMP. This template should be updated by the party completing the work to cover all tasks and activities completed under the SMP.

This potential scope of work described in the SMP includes but is not limited to intrusive activities that may result in encountering residual contaminated soils as part of future redevelopment and general Site inspections.

4. SITE BACKGROUND

The Saw Mill River Station Site is located at 30 Worth Street, on the west of Saw Mill River Road, in the City of Yonkers, Westchester County, New York (Figure 1). The Site currently is part of Con Edison's Yonkers Service Center property and includes Lots 72, 115, 116, and 117, and the northeast-abutting parcel (Lot 65). The site is defined as all land occupied by former MGP operations and formerly (or currently) owned by Con Edison or a Con Edison predecessor company. The current property boundaries and site features are illustrated on Figure 2. As described in the Manufactured Gas Plant History Report (GEI, 2003), the former holder station site, on property identified as Block 2410 / Lot 72, is 8.1 acres in size, and the Yonkers Service Center, including Lot 65, is approximately 9 acres in size. Currently, the site is zoned for industrial use (http://blade8.yonkersny.gov/WebParcelUpgrade/). The boundaries of the Site are more fully described in Appendix B (Metes and Bounds). This SMP and deed restriction only apply to the property identified as Block 2410 / Lot 72.

The following description of the properties abutting the Site is provided in the Manufactured Gas Plant History Report prepared by GEI (2003). Railroad tracks are located directly west of the Site and the Saw Mill River is located west of the railroad tracks. Anvil Contracting Corporation occupies Lots 115, 116, and 117 on the southern portion of the Site. A construction trailer and construction equipment is stored on these lots. An auto salvage yard is located west and northwest of the Site. Lot 65 of the Yonkers Service Center is located north of the former holder station and contains Service Building No. 1 (two-story); Garage Building No. 3, currently used for material storage; and Office Building No. 2 (one-story). A school bus company, a motorcycle repair shop, and a machine company are located northeast of the Site. Commercial properties are located further north of the Site. Retail businesses such as a hair salon, realty office, delicatessen, dry cleaner and hardware store are located northeast and east of the Site. Automotive service businesses (vehicle repair and truck painting) are located southeast of the Site. The southern corner of the Site is bounded by a parking lot. A woodworking company, a brewery, and the Yonkers Department of Public Works facility are located southwest of the Site.

5. SITE HISTORY

Historical research was previously conducted and documented in the 2003 report prepared by GEI Consultants, Inc. (GEI) titled Manufactured Gas Plant History, Saw Mill River Station, Yonkers, New York. Based on the information contained within this Report, Block 72 was acquired in two parcels in 1915 by the Westchester Lighting Company from the New York State Realty and Terminal Company and J. Livingston Hanna. Lot 115 was acquired by Westchester Lighting Company in 1938 from Siman and Rosie Fetzko. Lots 116 and 117 were acquired from Theodozy and Catherine Perick in 1938.

The Site historically has been used as a gas holder station, a Con Edison Service Center, a store, and a construction equipment storage yard. The Site was used concurrently as a gas holder station, transformer substation, and service center yard from the 1940s to the early 1950s. Historic Site structures and features are shown on Figure 3.

Con Edison's predecessor, Westchester Lighting Company, constructed a three million cubic foot above-grade, four-lift, steel gas holder on the southwestern portion of the Site in 1923 - 1924. A coal-fired boiler house and exhauster/compressor house was located on the southern portion of the Site. The former holder station operated from 1924 to 1951. Con Edison provided a report titled Final Phase I Environmental Site Assessment Report, Yonkers Service Center, 30 Worth Street, Yonkers, New York prepared by Jacques Whitford Company, Inc. (JWC) of Portsmouth, New Hampshire (May 19, 2000) to GEI. According to this report, the holder was converted to a natural gas holder in the late 1950s. Con Edison records indicate that one of the two boilers was converted from coal to oil in 1952 and a 10,000-gallon oil aboveground storage tank (AST) was to be constructed on the area formerly storing coal adjoining the boiler house. It is unknown whether the AST was constructed on the Site. The holder and boiler house and exhauster/compressor house were removed in 1977. Two small stores were located on Lots 115 and 116, and a residential structure was located on Lot 117. The buildings located on Lots 115, 116, and 117 were demolished in the late 1940s and early 1970s.

A transformer substation (Nepperhan Substation No. 2) has been located on the eastern portion of the Site since the early 1940s. Historic plans indicate that three additional oil-cooled transformers were located on a concrete pad on the southeastern property boundary from the early 1940s to at least the 1960s. Various types of transmission equipment (e.g. utility poles, pole-mounted transformers, cables, and pipe) have been stored throughout the Site since the 1940s.

Anecdotal information provided by a Con Edison employee indicated that waste material such as cast iron mercury switches, transformer oil containing polychlorinated biphenyls (PCBs), and gas drip water containing volatile organic compounds (VOCs) and semivolatile organic compounds (SVOCs) may have been landfilled on the southwestern portion of the Site.

6. RESPONSIBILITY/IDENTIFICATION OF KEY LINE PERSONNEL

This section will be updated by the party performing the work prior to the commencement of such work.

Contractor:	TBD	
Address:	TBD	
Telephone:	TBD	Email: TBD
Company Executive responsible for project: TBD		Contact No. TBD
Manager/Superintendent: TBD		Contact No. TBD
Safety Representative/Manager: TBD		Contact No. TBD
Key Foreperson or forepersons: TBD		Contact No. TBD
Client Project Management POC: Mr. Rich Rienzo		Contact No. (718) 204-4288

These personnel have the authority and responsibility for implementing the provisions of this program for:

Project Site Location	On-site Contact No. TBD
Saw Mill River Station Yonkers, New York	

All managers and supervisors are responsible for implementing and maintaining the site-specific HASP in their work areas and for answering worker questions about the HASP. A copy of this HASP must be available for review.

7. IDENTIFICATION OF COMPETENT/QUALIFIED PERSONS

The party performing the work and/or their subcontractors must identify OSHA-regulated and certified competent persons for work or tasks requiring that level of supervision. The field personnel listed below will be assigned to the project and have the designated certifications.

This section will be updated by the party performing the work prior to the commencement of work at the Site.

Name	Job Title	40-hr HAZWOPER	8-hr HAZWOPER Supervisor	8-hr HAZWOPER refresher expires	Other training (i.e. excavation, confined space)
TBD	Field Supervisor	-	-	-	

Prior to the commencement of any field activities, a competent person will be identified as the Field Supervisor and the person's certifications will be added to the HASP. The supervisor of the competent person must certify in writing the specific competencies of the named competent person.

8. HAZARD/RISK/EXPOSURE ASSESSMENT

A site-specific risk analysis must be conducted before commencing any investigation and remediation efforts at the Site. An example of a site-specific risk review checklist is included as Exhibit 8.1, which must be modified by the Project Manager of the party performing work at the Site. This checklist documents existing exposures that may impact the work, surrounding facilities, equipment, workers, or the public at large. The analysis includes locating, documenting, and/or photographing items such as:

- Overhead and underground power lines
- Sewer and water utilities
- Underground fuel oil pipelines
- Existing building interferences
- Traffic
- Security
- Fences
- Water hazards
- Existing geographical and environmental conditions
- Investigation Derived Waste (IDW) Disposal

Upon completion of the site-specific risk analysis, personnel must identify and control all work-related hazards and propose controls and mitigation strategies for high-risk activities.

Pre-field work safety activities include a detailed analysis of the scope of work and safety specifications. An example of elements that could be included in a pre-field work safety meeting is presented in Exhibit 8.2.

Exhibit 8.1 Site-Specific Risk Review Checklist

Date:_____ Project or Location:_____

Risk/Hazard	Detail	Present
Employee Exposure	Hazardous chemicals	_____
	Lead	_____
	Asbestos	_____
	UXO	_____
	PCB	_____
	Airborne contaminants (dust, mists, fumes)	_____
	Other (specify)	_____
	_____	
Hazardous Waste	Handling, removal or storage of hazardous is required	_____
	_____	
Crane Work	Mobile cranes	_____
	Tandem lifts	_____
	Bridge cranes	_____
	Derricks	_____
	_____	
Powered Industrial Trucks	Forklift training is required	_____
Aerial Lifts	Hydraulic booms	_____
	Scissor lifts	_____
	Mobile scaffolding	_____
	_____	
Drilling		
Sediment Sampling	Vibracore	_____
	Grab Sampling	_____
Electrical	Staging area	_____

Risk/Hazard	Detail	Present
Marine or Over Water Work	Work on or over water is required	_____
	Underwater (diving) work is required	_____
	_____	
Personal Protective Equipment	Work activities or work site requires hearing protection	_____
	Work activities or location requires using respirators	_____
	Work activities or location requires special protective clothing	_____
	_____	
Public Exposure	Work activities or location requires special precautions to protect the public	
	_____	_____
Permits	required	_____
	Hot permit	_____
Other Exposures	Other exposure or high-risk activities (list)	
	_____	
	_____	_____
	_____	
	_____	
	_____	
	_____	

Notes: _____

_____

Reviewed by: _____ Title: _____ Date: _____

Exhibit 8.2 Pre-Field Work Safety Meeting

Date:		Project/Location:	
Subcontractor Representative:		Project Manager (Party performing Work):	
Phone:		Phone:	
Subcontractor Safety Rep:		Safety Manager (Party performing Work):	
Phone:		Phone:	

The following items were identified and reviewed.

Health & Safety		**Medical**	
Site-Specific Safety Plans/Model Program		Substance Abuse Screening	
Competent/Qualified Person Documentation		Emergency Procedures	
Safety Audits/Inspections		Site Security	
Subcontractor Responsibilities		Smoking Policy	
Site Orientation Requirements		Medical Services Requirements	
Pre-mobilization Safety Meeting/Date		Treatment Locations/Addresses/Phone List	
Crane Inspection Certification		Other	
Personal Protective Equipment (PPE)			
Environmental Hazards			
Other			

Additional Notes/Comments:

9. CONTROL MEASURES/ACTIVITY HAZARD ANALYSIS

9.1 CONTROL MEASURES

Site hazards and hazards resulting from investigation and remediation activities are controlled using one or more of the control measures listed below. The order of precedence is as follows:

9.1.1 Engineer/Design to Eliminate or Minimize Hazards

A major component of the design or planning phase is to select appropriate safety features to eliminate a hazard and render it fail-safe or provide redundancy using backup components.

Exclusion Zone

The exclusion zone will be established at the site for each intrusive activity. The zone will be defined by the excavation boundaries. In the field, the zone will be defined by temporary posts/stanchions and caution tape, extending from 10 feet up to the swing radius of the operating equipment in each direction around the intrusive activity. Unprotected onlookers should be located 50 feet upwind of drilling or environmental sampling activities. In the event that action levels are exceeded in the breathing zone, then all personnel in the exclusion zone must stop work, evacuate, evaluate the situation. If the actions levels continue to exceed recommended limits then upgrade the level of personal protective equipment on properly trained and certified crew members to continue work.

Decontamination Zone

A decontamination zone will be established between the exclusion zone and the support zone. This zone will also be delineated utilizing stanchions and caution tape, and will be up to 10 feet wide. Personnel decontamination must take place prior to leaving the decontamination area and prior to entering any personnel hygiene facilities, or before eating, drinking, or smoking. Any decontamination water will be contained for appropriate disposal. Soiled PPE will be removed and placed in drums.

Support Zone

A support zone will be established where break areas, operational direction and support facilities (to include supplies, equipment storage and maintenance areas) will be located. No equipment or personnel will be permitted to enter the support zone from the exclusion zone without passing through the personnel or equipment decontamination zone.

9.1.2 Guard the Hazard

Hazards that cannot be eliminated by design must be reduced to an acceptable risk level by safety guards or isolation devices that render them inactive.

9.1.3 Provide Warnings

Hazards that cannot be totally eliminated by design or guarding are controlled through using a warning or alarm device.

Exposure/Air Monitoring Program

An environmental and personal monitoring program will be developed based on site-specific information for any future intrusive activity. This plan discusses general information on wind direction monitoring, volatile organic compound (VOC) monitoring, and dust monitoring.

Wind Direction Monitoring

A wind direction indicator (such as survey flagging tied to a stake, or a flag on a boat/barge) will be erected at every active work site. This will enable the Site Safety Officer (SSO) and on-site personnel to determine upwind locations necessary for proper health and safety procedure implementation, (work areas relative to the excavation) and, if necessary, evacuation procedures.

Volatile Organics Monitoring

Field work at sites with VOC contamination shall use photoionization detector (PID) (OVM-580B/580S or equivalent) equipped with a 10.6e V lamp or other monitoring instrument deemed appropriate by the Project Safety Manager (PSM) to monitor VOC concentrations in the working area. Readings detected by the PID or other instrument will be used to determine the appropriate levels of protection. Action levels for some VOCs and particulates that have been previously encountered at the Site are presented in Table 9.1.1.

Dust Monitoring

If site activities generate sustained (15 minutes), visible dust due to wind erosion of soils, a personal DataRAM meter will be obtained to monitor worker breathing zones for total dust levels. Readings will consider upwind background dust levels, as well as diesel particulate emissions from heavy equipment before upgrades to higher levels of PPE are initiated as shown in Table 9.1.2.

Community Air Monitoring Plan

Community air monitoring will be conducted in compliance with the NYSDOH's Generic Community Air Monitoring Plan (CAMP). Real-time air monitoring for volatile compounds and particulates at the perimeter of the hot zone will be performed as described below.

VOC Monitoring

Periodic monitoring for VOCs will be conducted during non-intrusive activities such as the collection of soil samples. Periodic monitoring may include obtaining measurements upon

arrival at a location, when overturning soil, and upon leaving the location. In some instances, depending on the proximity of exposed individuals, continuous monitoring may be conducted during these activities.

Continuous monitoring for VOCs will be conducted during all ground intrusive activities (i.e., hand clearing, soil boring and monitoring well installation). Upwind concentrations will be measured at the start of each workday and periodically thereafter to establish background concentrations. VOCs will be monitored continuously at the downwind perimeter of the hot zone. Monitoring will be conducted in accordance with Table 9.1.1.

All 15-minute readings will be recorded and available for NYSDEC and NYSDOH personnel to review. Instantaneous readings, if any, will also be recorded.

Particulate Monitoring

Particulate concentrations will be monitored continuously at the downwind perimeter of the hot zone with a portable real-time particulate monitor capable of measuring particulate matter less than 10 micrometers in size and capable of integrating over a period of 15 minutes (or less). The equipment will include an audible alarm to indicate exceedence of the action level. Upwind concentrations will be measured at the start of each workday and periodically thereafter in accordance with Table 9.1.1.

All readings will be recorded and be available for NYSDEC and NYSDOH personnel to review.

Calibrations

Field instruments will be calibrated immediately prior to each day's use. The calibration procedures will conform to manufacturer's standard instructions. This calibration will ensure that the equipment is functioning within the allowable tolerances established by the manufacturer. Records of all instrument calibration and instrument manuals will be maintained on-site. Calibrations protocol for a PID is described in more detail below.

PID

- The photoionization detector (PID) will be an OVM-580B/580S (or equivalent), equipped with a 10.6 eV lamp. The MiniRae is capable of ionizing and detecting compounds with an ionization potential of less than 10.6 eV. This accounts for up to 73% of the volatile organic compounds on the Target Compound List.
- Calibration must be performed at the beginning of each day of use with a standard calibration gas having an approximate concentration of 100 parts per million (ppm) of isobutylene. If the unit experiences abnormal perturbation or erratic readings, additional calibration will be required.

- All calibration data must be recorded in the field log book.
- A battery check must be completed at the beginning and end of each working day.

9.1.4 Provide Special Procedures or Training

When design, guarding, or warnings cannot eliminate hazards, the party performing the work and their subcontractors must develop procedures, training, and audits to ensure safe completion of work. Training cannot be a substitute for hazard elimination when life-threatening hazards are present.

Decontamination Procedure

Level D or Modified Level D protection will be worn for initial entry on-site and initially for all activities. If air concentrations exceed action levels, workers will employ engineering controls first before upgrading the level of protection. Personal decontamination may be necessary for activities involving the use of Modified Level D, Level C, or Level B PPE. Table 9.1.2 includes the proper decontamination procedures that must be implemented if chemical contamination present and PPE protection greater than level D is used. The Project Safety Manager will determine the proper procedures for decontamination based on the work activities and amount of contamination.

Temporary wash facilities will be provided in the decontamination zone for personnel hand/face washing. This may be substituted with disposable wet towels based on the weather conditions. Waste water will be transferred to 55-gallon drums and will be labeled as IDW. Solid waste generated from the decontamination activities will also be placed in 55-gallon drums and labeled as IDW.

Soil / Water / Waste Management

Procedures will be implemented regarding the management of soil, water, and waste to minimize the likelihood of unacceptable release of hazardous constituents. These procedures include:

- Roll-off container(s) for soil will be located within a staging area located on the west side of the property; the staging area will be fenced w/ temporary 6-ft fence.
- All investigation derived waste (IDW) (PPE, decontamination waste, excess drill cuttings) will be placed in 55-gallon drums. The drums will be labeled as IDW from the corresponding activity or source area. The drums will be placed on wooden pallets in a plastic-lined containment area pending characterization and proper disposal either at a municipal solid waste landfill or hazardous waste disposal facility (if materials meet disposal facility and regulatory requirements).

- Under no circumstances is waste to leave the Site prior to characterization and subsequent disposal of waste coordinated by the party performing the work or their subcontractor.

Provide Personal Protective Equipment

To protect workers from injury, the last method in the order of precedence is the use of personal protective equipment, such as hard hats, gloves, eye protection, and other protective equipment with the understanding that bulky, cumbersome, and heavy personal protective equipment is often discarded or not used, rendering this method ineffective without proper controls. If emergency eyewash stations are required, then they must be kept accessible at all times and be maintained to prevent from freezing. In the event that personal protective equipment is ripped or torn, work shall stop immediately and PPE shall be removed and replaced as soon as possible.

PPE Selection

The selection and use of PPE at individual sites will be initially Level D unless specified by the Project Safety Manager. The unknown nature of hazardous waste site work and the possibility of changing conditions during the work may require changes in the personal protective equipment. When changes in personal protective equipment become necessary, these changes shall be made in accordance with the action levels and criteria set forth in this plan. As a rule, levels of PPE will need to be reassessed if any of the following occur:

- Appearance of previously unidentified or anticipated chemical conditions or task hazards (this may require a HASP Addendum for the responsible party's review and acceptance prior to proceeding).
- Ambient weather conditions change which impact the use of assigned PPE.
- A new task is introduced or a previously assigned and evaluated task is expanded in scope.

If work tasks are added to the Scope of Work (SOW) after approval of this HASP, the Project Safety Manager shall identify and assess the task hazards, complete and sign an AHA form and designate the level and type of PPE to be used during conduct of the task. The new AHA, along with any other additions, changes or modifications to the approved HASP shall be approved by the PSM and/or the Project Manager. Subsequently, these modifications, resulting in a HASP Addendum, shall be reviewed and accepted by the responsible party's representative prior to proceeding.

Initially at portions of the east side of the site, where NAPL may be encountered based on Site Investigation data, work will start in Modified Level D. In the remaining areas of the site, PPE

level will be upgraded to Modified Level D, if NAPL is encountered. This includes tyvek coveralls, in addition to safety glasses with permanent side shields, steel toe boots, hearing protection (e.g. when working within 15 feet of vacuum excavation equipment, excavator, drill rig, sawing, or jack hammering), metatarsal foot protectors (when sawing, jack hammering, or pressure washing), long pants or jeans, traffic safety vests (when working on streets, sidewalks, parking lots, or driveways), disposable boot covers (when in contact with disturbed soil), short or long sleeve shirts, nitrile outer and PVC inner gloves (required during all sampling activities), and hard hat (cannot be blue or white). Required equipment for Levels B, C, and D are detailed in Table 9.1.2, Description of Personal Protective Equipment and Levels of Protection.

The organic vapor monitor and multi-gas meter will be the primary instruments for determining contaminant concentrations that may trigger a change in respiratory protection during intrusive and sampling activities. Other instruments such as Draeger tubes, miniRAMs and/or other particulate air monitors may also trigger changes in PPE. Action levels for changes in personal protection equipment are shown in Table 9.1.1.

OSHA Requirements for Personal Protective Equipment:

All personal protective equipment must meet the following OSHA standards:

Type of Protection	Regulation	Source
Eye and Face	29 CFR 1910.133 29 CFR 1926.102	ANSI Z87.1-1968
Respiratory	29 CFR 1910.134 29 CFR 1926.103	ANSI Z88.1-1980
Head	29 CFR 1910.135 29 CFR 1926.100	ANSI Z89.1-1969
Foot	29 CFR 1910.136 29 CFR 1926.96	ANSI Z41.1-1967

ANSI = American National Standards Institute

Both the respirator and cartridges specified for use in Level C protection must be fit-tested prior to use in accordance with OSHA regulations (29 CFR 1910.1025; 29 CFR 1910.134). In addition, if Level C protection is required, a cartridge change-out schedule must be developed. HEPA filters will be the only cartridges used. Medical qualification, training and fit-testing must be received on an annual basis. If a respirator is worn more than 30 days per year, participation in a Medical Surveillance Program is required.

9.2 ACTIVITY HAZARD ANALYSIS

The party performing the work and their subcontractors are required to conduct an activity hazards analysis (AHA) for all aspects of the work. The activity hazards analyses consist of the following three steps:

- Identify the task and break it down into steps.
- Identify the hazards associated with each step.
- Identify the specific hazard control measure used for each step in accordance with the order-of-precedence method of control.

The Project Managers may use the following list as a guide in determining the investigation and remediation activity hazards analyses for various high-hazard operations and critical tasks.

- **Pre-mobilization Inspection**. Conduct an initial site inspection for pre-job planning. The inspection should cover potential exposures such as the location of electrical lines, underground utilities (See Attachment A for Con Edison's requirements, when applicable), nearby structures, traffic conditions, site security needs, public exposures general liability, and other potential exposures.
- **Traffic Controls.** Control measures include warning signs, flagmen, traffic stoppage and control, and unloading procedures. Internal traffic control plans should include ways to restrict the number of vehicles on site, the flow of vehicles accessing the site and driving through the site, haul roads, speed controls, subcontractor employee parking areas, merging of site traffic with local vehicle traffic, pedestrian controls in traffic zones, access by emergency and rescue vehicles and operator controls.
- **Vehicle Operation.** Although driving a vehicle may be second nature to many individuals, there are many hazards and controls that need to be identified. Fatigue and distractions are two hazards that many individuals do not think about on a regular basis. Operating off-road vehicles such as an All-Terrain Vehicle (ATV) also require training.
- **Field Activities.** Many different types of activities occur in the field from excavations, soil sampling, liner installation and monitoring. A variety of hazards could be incurred with each activity such as biological, slip/trips/falls and lacerations. An activity hazard analysis is required for each different field activity to identify the hazards and controls.

- **Field Visit.** When a field visit occurs, it may be before any field activities are taking place. However, there may still be hazards present such as walking or driving in fields with uneven terrain, poisonous vegetation, etc. Although personal protective equipment such as a hard hat and safety glasses may not be needed, sturdy work boots, long pants, long sleeve shirts and sunscreen may be necessary.
- **Mobilization/Demobilization.** Conduct an initial site inspection for pre-job planning. The inspection should cover potential exposures such as the location of electrical lines, underground utilities, nearby structures, traffic conditions, site security needs, public exposures general liability, and other potential exposures.
- **Heavy equipment controls**. Evaluate the use of heavy equipment in operations such as site clearing, grading, drilling and excavation or lifting. Controls should include equipment alarms, use of qualified operators, pre-use inspections, and any specific OSHA regulatory requirements.
- **Personal protective equipment (PPE**). Consider operations where PPE is required and the type of PPE required (e.g., eye, head, foot, respiratory, hearing and hand protection, and types of special protective clothing – Tyvek and Nomex coveralls).
- **Portable hand and power tools**. Evaluate the tools to be used and the ways that workers are protected from the hazards associated with the use of tools. Consider tool maintenance requirements; electrical requirements; the use of ground fault circuit interrupters, grounding, extension cords, and tool inspection procedures; and employee training and PPE requirements.
- **On-site traffic**. Internal traffic control plans should include ways to restrict the number of vehicles on site, the flow of vehicles through the site, haul roads, speed controls, subcontractor employee parking areas, merging of site traffic with local vehicle traffic, pedestrian controls in traffic zones, access by emergency and rescue vehicles and operator controls.
- **Employee training**. Always review the safety training needs of employees. Training should include initial site safety orientations. Some operations (e.g., HAZWOPER activities, excavation, blasting, scaffold erection, tunneling, confined space, and operating heavy equipment and working in highly hazardous plant process operations) may require special training that must be checked and evaluated.

Exhibit 9.1 is a sample activity hazards analysis form. Exhibit 9.2 shows a training record to be completed and kept on file for each activity hazards analysis.

Example AHAs can be found in Attachment B. The intent of an AHA is to identify the steps, hazards, and control measures involved with performing a specific task. The attached AHAs are not inclusive of all activities performed at the site, and may not include all of the steps, hazards or control measures required to safely complete a task. Any individual given a work assignment shall review the corresponding AHA prior to commencing work activities to determine whether the AHA needs to be modified for site specific conditions, or if an additional AHA should be developed.

Table 9.1.1
Regulatory Levels for Common Air Contaminants

Contaminant	OSHA PEL **	Monitoring Instrument	Action Level	Action Taken *(Refer to MSDSs for required actions and develop SOPs for required actions)*
Carbon Monoxide	50 ppm	4-gas meter, CO meter	> 50 ppm	Refer to MSDS for required actions and develop SOPs for required actions Refer to MSDS for required actions and develop SOPs for required actions
Combustible Gas	10%	4-gas meter, LEL meter	> 10%	Refer to MSDS for required actions and develop SOPs for required actions
Dust #	5 mg/m3	DataRAM	< 1 mg/m3	None.
			1 - 5 mg/m3	Implement engineering controls to suppress or control dust.
			> 5 mg/m3	Continue dust suppression and stop work activities
Oxygen	20.9%	4-gas meter, O2 meter	< 19.5%	Refer to MSDS for required actions and develop SOPs for required actions
			19.5 - 23.5%	Normal
			> 23.5%	Refer to MSDS for required actions and develop SOPs for required actions
VOCs #	n/a	Photoionization Detector	< 1 ppm	None
			1 - 5 ppm	Implement engineering controls to suppress vapor levels. Monitor for specific contaminants
			6 - 10 ppm	Take 3 consecutive readings. If confirmed, wear half or full face piece respirator. Implement engineering controls to suppress vapor levels.
			11 - 50 ppm	Take 3 consecutive readings. If confirmed, wear full face piece respirator. Continue engineering controls to suppress mercury levels.
			> 50 ppm	Stop work activities. Take 3 consecutive readings to confirm. If trained and fit tested, don supplied air respirator.

Note: All readings that will be used to determine the appropriateness of an upgrade in PPE shall be taken in the worker's breathing zone. PID readings shall be sustained readings of 15 minutes or more. Multi-gas meter readings shall be 30 second sampling periods with the meter held in the worker's breathing zone.

Readings will be taken at the beginning of the day, changes in work activities and during all sampling activities.

**The OSHA PEL levels are current as of December 2008. OSHA constantly reviews and updates these levels. The party performing the work shall review 29 CFR 1910.1000 Table Z-1 and update the levels, as necessary, prior to performing work.

The action levels and the actions taken for VOCs and for dust provided in this table are based on NYSDOH Generic Community Air Monitoring Plan (CAMP) (December 2002). The party performing the work shall review NYSDEC DER-10 to verify whether updates have been made to the Generic CAMP. For employee safety, OSHA regulation 1910 should be consulted.

Table 9.1.2
Description of Personal Protective Equipment and Levels of Protection

LEVEL D

Level D protection will be worn for initial entry on-site and for all activities unless otherwise noted by the PSM. Level D protection will consist of:

- Standard work clothes
- Steel-toe safety boots
- Safety glasses (goggles must be worn when splash hazard is present)
- Hearing protection (when working within 25 feet of vacuum excavation equipment, excavators, drill rigs, sawing, or jack hammering)
- Metatarsal foot protectors (when sawing, jack hammering, or pressure washing)
- Traffic safety vests (when working on streets, sidewalks, parking lots, and driveways)
- Nitrile outer gloves and latex or nitrile inner gloves (sampling operations)
- Hard hat (must be worn during all site activities and cannot be blue or white)
- Disposable boot covers will be worn when in contact with disturbed soils

MODIFIED LEVEL D

Modified Level D protection, unless otherwise specified by the PSM, will consist of Level D equipment and the following additional equipment:

- Nitrile outer gloves and latex or nitrile inner
- Tyvek coveralls if particulate hazards only are present, poly-coated Tyvek coveralls if liquid hazards are present

LEVEL C

Requirements for Level C protection is described in OSHA regulation 29 CFR 1910.134. Generally, Level C protection, unless otherwise specified by the SSO, will consist of Level D equipment and the following additional equipment:

- Full-face air-purifying respirator
- Combination HEPA filter (P100)/organic vapor cartridges
- Tyvek coveralls if particulate hazards only are present, poly-coated Tyvek coveralls if liquid hazards are present
- PVC or nitrile inner and nitrile outer gloves

LEVEL B

Requirements for Level B protection is described in OSHA regulation 29 CFR 1910.134. If the concentration of volatile organics or cyanide equals or exceeds the specified action levels, all field personnel associated with the project will immediately retreat to a location up-wind of the source of contamination. At this point the SSO must consult with the responsible party to discuss appropriate actions.

Exhibit 9.1 Activity Hazards Analysis Form

Page____ of _____

Project Name & Number:	**AHA No.**	**Date:**	**New:**
Location:	**Contractor:**		**Revised:**
Required Personal Protective Equipment		**Analysis by:**	**Date:**
	Superintendent/Competent Person	**Reviewed by:**	**Date:**
Work Operation:		**Approved by:**	**Date:**

Work Activity	Potential Hazards	Preventive or Corrective Measures	Inspection Requirements

Training Requirements:

All assigned employees are required to familiarize themselves with the contents of this AHA before starting a work activity and review it with their Supervisor during their Daily Safety Huddle.

Exhibit 9.2 Activity Hazards Analysis Training Record

JOB NUMBER_____

AHA NUMBER_____

JOB LOCATION_____

DATE:_____

NAME OF TRAINER:_____

SUBJECTS COVERED:_____

_____

_____

_____

TRAINING AIDS USED:_____

_____

_____

ATTENDEES (PLEASE SIGN NAME LEGIBLY):

_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
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_____	_____
_____	_____
_____	_____
_____	_____

(Use additional sheets if necessary)

10. PERIODIC SAFETY INSPECTIONS/AUDITS

The PSM will implement an audit and inspection program. The Project Manager, PSM, or their designee, will conduct monthly safety inspections.

The site inspection is a protocol designed to identify and correct unsafe acts and conditions, as well as recognize safe work practices and accomplishments in the party performing the work or their subcontractors' scope of work. The Project Manager or PSM should develop standard safety checklists appropriate to the work being performed. Exhibit 10.1 is an example of a simple checklist to evaluate a project's status, and should be modified to address potential unsafe acts and conditions specific to work activities occurring at the Site.

Inspections involve a daily or weekly site walk of a project site that focuses on safety. The Project Manager or Field Team Leader (FTL) responsible for the work conducts inspections, accompanied by the PSM as necessary. Daily site walks do not have to be documented, but once a week the Project Manager, or designee, prepares an inspection report using Exhibit 10.1 and forwards it to the PSM for maintaining in the project file. Items found to be out of compliance must be assigned to the responsible party for corrective action and the corrective action tracked to completion.

Exhibit 10.1 Site Safety and Health Inspection Checklist

Project: _____ Date: _____

Name: _____ Time: _____

Any items that have been found deficient must be corrected before work or use.

This checklist includes, but is not limited to, the following:

	Yes	No
Safe Access and Workspace		
Are safe access and adequate space for movement available for:		
Emergencies		
Work area		
Walkways and passageways		
Are ladders, stairways, and elevators properly located and functioning?		
Is protection provided for floor and roof openings?		
Is overhead protection provided for all areas of exposure?		
Is lighting adequate?		
Planning Work for Safety		
Are employees provided with all required protective equipment?		
Have other contractors and trades been coordinated with to prevent congestion and avoid hazards?		
Is all temporary flooring, safety nets, and scaffolding provided where required?		
Utilities and Services Identification		
High voltage lines		
Have all been identified by signs?		
Have high voltage lines been moved or de-energized, or barriers erected to prevent employee contact?		
Sanitary Facilities		
Drinking water		
Are toilet facilities adequate?		

Work Procedures – Materials Handling			
Is material handling space adequate?			
Is material handling equipment adequate and proper?			
Is material handling equipment in good condition?			
Marine Safety			
Slip, trip, fall hazards	Muscle strain from improper lifting		
Heat or cold stress	Pinch points		
Insect bites	Inhaling, touching, ingesting contaminants		
Waves, surges, currents	Drowning		
Noise exposure			
Other (e.g., tunnels, excavations, shafts)			

11. COMPLIANCE REQUIREMENTS POLICY

The party performing the work and their subcontractors must enforce all applicable requirements of OSHA 1910 and 1926, where applicable. Exhibit 11.1 represents OSHA and owners' corporate regulations and requirements applicable to the project. Based on the most recent risk assessments, Project Manager and PSM update the listed topics periodically. Training and other requirements are updated in this HASP as required by changes to Exhibit 11.1.

The party performing the work at the Site in the future and their subcontractors are individually responsible for training their respective employees and for complying with all project requirements.

Exhibit 11.1 Competent Person and Activity Hazards Analysis Requirements

Safety and Health Requirement	OSHA Regulation	Competent Qualified Person-Supv	Training Required	Written Plan and AHA Required
General Safety & Health	1926.20	Yes	Yes	Yes
Safety Training	1926.21	Yes	Yes	Yes
First Aid and Medical	1926.23, 50	Yes	Yes	Yes
Emergency Employee Action Plans	1926.35	Recommended	Yes	Yes
Hazard Communication	1926.59	Yes	Yes	Yes
Hazardous Waste Operations and Emergency Response	1910.120; 1926.65	Yes Supv – 8 hr	Yes	Yes
Waste Disposal	1926.252	Yes	Yes	Yes
Excavations	1926.650-652	Yes	Yes	Yes

12. WRITTEN PROGRESSIVE DISCIPLINARY PROGRAM

Items found to be out of compliance must be assigned to the responsible party for corrective action and the corrective action tracked to completion. The project has a formal notice of subcontractor violation of safety and health regulations program to ensure that violations are issued in an immediately dangerous to life and health (IDLH) situation or when the subcontractor repeatedly fails to comply with safety and health requirements. Any noncompliance items must be advised to the responsible party using a Notice of Violation, included as Exhibit 12.1. The notice (Exhibit 12.1) documents poor performance and requires a response from subcontractor senior management. The notice contains five distinct levels of discipline, from submission of a recovery plan to contract termination.

Exhibit 12.1 Notice of Violation of Safety and Health Regulations

Date: _____

Contractor Name: _____

Address: _____

_____

_____

Attention: _____

This letter officially notifies you that you have been found to be in violation of the following Safety Regulations:

_____

on (date) _____, by _____.

Confined Space Entry	__	Lockout/Tagout	__	Hot Work	__	Personal Protective Equipment	__
Knowledge of the environment	__	Awareness of warning alarms	__	Evacuation routes	__	Back-up Alarms	__
Assembly locations	__	Fall Protection	__	Scaffolding	__	Environmental/Hazardous Material Storage	__
Safe Work Practices	__	Security Practices	__				

Other: _____

_____

_____

This/These violations occurred at the following locations: _____

_____

at the following times _____ and dates _____

The name of the employees was/were _____

under the supervision of _____.

13 HAZARD CORRECTION POLICY

Potential hazards that may be encountered during intrusive activities at the Site are listed below, but the list is not all-inclusive. Examples of generic AHAs for various work activities that need to be modified for site-specific work activities are found in Attachment B.

13.1 CHEMICAL HAZARDS

Health hazards and the exposure limits associated with potential chemicals of concern are presented in Table 13.1. These hazards can be encountered during subsurface and intrusive investigation in and around the Site. Both real time breathing zone air-monitoring and CAMP monitoring, using a photoionization detector, a multi-gas meter, and a dust monitor should be performed by the responsible field investigator. The real time data will be recorded in the field book by the field investigator/SSO, following each observation, during intrusive activities and sampling activities. CAMP monitoring data will be downloaded daily and kept as an electronic file.

13.2 PHYSICAL HAZARDS

Physical hazards that may be encountered include but are not limited to heat stress, cold-related illness, ultra-violet radiation, working on or adjacent to a waterway, and noise hazards.

Heat Stress:

Heat stress is one of the most common (and potentially serious) illnesses that affect field personnel. When site personnel are engaged in operations involving hot environments, a number of physiological responses can occur which may seriously affect the health and safety of the workers. Heat stress can result in health effects ranging from transient heat fatigue to serious illness or death. Heat stress can be eliminated or controlled through the use of a comprehensive heat stress prevention and monitoring program.

Training shall be provided to all employees to recognize heat illness hazards before starting to work outdoors. Any employee experiencing or witnessing signs and/or symptoms of a heat related illness shall report the findings to their supervisor immediately. Supervisors shall understand the procedures to follow when an employee exhibits symptoms consistent with heat illness, including emergency response.

Definitions

Acclimatization - a temporary adaption of the body to work in the heat that occurs gradually when a person is exposed to it. Acclimatization peaks in most people within 4-14 days of regular work for at least 2 hours per day in the heat.

Environmental Risk Factors - working conditions that create the possibility that heat illness could occur, including air temperature, relative humidity, radiant heat from the sun and other sources, conductive heat sources such as the ground, air movement, workload severity and duration, protective clothing and personal protective equipment worn by employees.

Heat Illness - a serious medical condition resulting from the body's inability to cope with a particular heat load, and includes heat cramps, heat exhaustion, heat syncope and heat stroke.

Heat Wave - a sudden and temporary rise of temperature above the seasonal average for a particular region, which lasts for a prolonged period of time. A heat wave can greatly increase the risk of heat related illnesses.

Personal Risk Factors - an individual's age, degree of acclimatization, health, water consumption, alcohol consumption, caffeine consumption, and use of prescription medications that affect the body's water retention or other physiological responses to heat.

Preventive Recovery Period - a period of time to recover from the heat in order to prevent heat illness.

Shade - blockage of direct sunlight. Canopies, umbrellas and other temporary structures or devices may be used to provide shade. One indicator that blockage is sufficient is when objects do not cast a shadow in the area of blocked sunlight. Shade is not adequate when heat in the area of shade defeats the purpose of shade, which is to allow the body to cool. For example, a car sitting in the sun does not provide acceptable shade to a person inside it, unless the car is running with air conditioning.

Signs and Symptoms of Heat Illnesses

Heat Rash – or prickly heat, occurs in hot and humid environments where sweat is not removed from the skin. Usually disappears when worker returns to cool environment.

Heat Cramps – muscle contractions from the loss of fluids /electrolytes due to sweating. Occurs when workers perform hard physical labor in a hot environment. Most common in the arms and legs. Cramping can occur after work has stopped.

Heat Exhaustion – inadequate blood circulation from stress due to constant heat. The whole body, especially the circulatory system, is extremely stressed. Possible symptoms include: pale, flushed face and neck; clammy skin; heavy sweating; fatigue; shortness of breath; headache; dizziness or fainting; nausea and vomiting; and rapid heartbeat and breathing.

Heat Stroke – body's failure to regulate its' temperature. The most serious stage of heat illness. Symptoms include: dizziness and confusion, red, hot, dry skin; nausea and vomiting; very little sweating; rapid pulse; high body temperature, 105° F or higher; convulsions, and fainting.

Heat Illness Prevention

Prevention of heat related illness in extreme temperature project personnel shall consider implement a Physiological monitoring program, include monitoring with a WBGT and implementing work rest regiments. The field team shall be encouraged to drink plenty of liquids to replenish electrolytes. The field team shall also, construct a shaded rest area for workers to take breaks.

Prevention of heat related illness may call for establishing work teams to rotate to minimize heat related illnesses.

Heat Illness Treatment

Heat Cramps - take water every 15 to 20 minutes. Drinking an electrolyte replacement (like Gatorade) may help.

Heat exhaustion - Get medical help. Don't leave the person alone. While waiting, remove worker to cool place to rest; remove as much clothing as possible; give water and electrolytes; and don't allow person to get chilled.

Heat Stroke – Call 911 immediately. While awaiting medical help, get victim into cool area, fan vigorously, apply cool water to clothing or skin, and apply ice packs under arms and to the groin area.

Heat Waves

Heat illness prevention during heat waves means taking extra measures.

More vigilance - supervisors/employees watch others very closely and provide more frequent feedback during work activities. Site workers shall avoid working alone and utilize the "Buddy System", watch each other and closely monitor/report an employees' condition. Personnel shall be accounted for their whereabouts throughout the work shift and at the end of the day.

More water - employees should drink small quantities of water more frequently before, during and after work. There should be extra supplies of water for replenishment, encourage employees to consult with their doctor on salt/mineral replacement.

More cooling - use other cooling measures in addition to shade, spraying body with water/wiping with wet towels and taking additional/longer breaks in the shade.

Change schedule - work activities may be started earlier on later in the evening, split-up work shifts and avoid working during the hotter parts of the day. Work shifts can be cut short or stop work.

Change meals - encourage employees to eat smaller/or more frequent meals (less body heat during digestion than with big meals), choose foods with higher water content (for example, fruits, vegetables and salads).

Acclimatization warning - personnel should allow the body time to adjust to sudden, abnormally high temperatures or other extreme conditions. Even employees previously fully acclimatized are at risk for heat illness.

Environmental and Physiological Factors

- Average ambient air temperature 96ºF (75-116ºF)
- Average humidity 29% (12% - 55%)
- Average wind speed 7 mph
- Average core body temperature 104ºF (98 -108ºF)

Provision of Water

Sufficient amounts of cool water shall be available and replenished at all times w/at least one quart per employee per hour for the entire shift.

Easy access to clean and cool water shall be available to encourage frequent drinking.

Access to Shade

A Preventative Recovery Period (PRP) is necessary if an employee is suffering from heat illness or believes that a rest break is needed to recover from the heat.

Access to shade shall be permitted at all times. Employees shall have access to an area with shade that is either open to the air or provided with ventilation or cooling for a period of no less than 5 minutes.

Measurement

Portable heat stress meters or monitors are used to measure heat conditions. These instruments can calculate both the indoor and outdoor WBGT Index according to established ACGIH Threshold Limit Value equations. With this information and information on the type of work being performed, heat stress meters can determine how long a person can safely work or remain in a particular hot environment.

Cold-Related Illness:

Cold-related illness, like heat stress, is very common and can seriously affect field personnel if the appropriate controls are not established. Exposure to low temperatures presents a risk to employee safety and health, in the form of hypothermia and frostbite. Both can be controlled or eliminated by implementing employee training, periodic physiological screening, establishment of administrative controls, selecting proper work clothing, and wind-chill monitoring which all contribute to the prevention of hypothermia and frostbite. All field personnel will be provided with adequate cold weather gear, including insulated coveralls, gloves or mittens, and cold weather boots. Warming facilities or equipment will be provided (e.g., heated car) and utilized by field personnel as needed. Personnel working on Eastchester Creek will wear a USCG-approved survival suit when the sum of the air temperature and water temperature is less than 90 degrees Fahrenheit (°F). If extremely cold or severe weather conditions are forecast, work activities should be postponed.

Electrocution:

All drilling and excavation equipment will be kept a safe distance from live sources of electricity. Drill rods and other metal objects will not be raised above the height of the rig. The length of drill rods will be less than the distance to the nearest live electrical source so if

the drill string is dropped it cannot fall across electrified equipment. All subsurface and overhead electrical sources and lines will be identified before digging, drilling, or sampling activities commence. Where possible and/or practical, electric lines and sources will be deactivated or insulated before digging, drilling, or sampling activities are commenced.

Ultraviolet Radiation:

The sun emits ultraviolet radiation (UV) as heat and light. The skin's natural defense mechanisms attempt to reject the UV by distributing melanin pigmentation where needed. However, overexposure to direct sunlight can cause inflammation or blistering of the skin (sunburn). The use of sunscreen, long sleeve shirts, and wide brim hats can help prevent sunburn. Chronic exposure to UV radiation is known to cause skin cancer. In case of sunburn, do not apply burn ointment, cold cream, or butter to relieve pain. Use a dry dressing and get medical attention for severe, extensive sunburns.

Noise:

Operating heavy equipment can be a potential noise source. Hearing protection will be worn by personnel operating heavy equipment, or other personnel in close proximity (e.g. 25 feet) to the equipment. If the noise level exceeds 85 decibels over an 8-hour time weighted average, then exposed personnel must be enrolled in a Hearing Conservation Program..

13.3 BIOLOGICAL HAZARDS

Biological hazards can result from encounters with mammals, insects, snakes, spiders, ticks, plants, parasites, and pathogens. Mammals can bite or scratch when cornered or surprised. The bite or scratch can result in local infection or infection with systemic pathogens or parasites. Insect and spider bites can result in severe allergic reactions in sensitive individuals. Exposure to poison ivy, poison oak or poison sumac results in skin rash. Ticks carry a number of serious diseases. Dead animals, organic wastes, and contaminated soil and water can harbor parasites and pathogens. Most of the field activities will occur in a densely populated area; however, the possibility of encountering biological hazards still exists.

Poison Ivy:

Some of the most common and severe allergic reactions are a result from contact with poison ivy, poison oak, and poison sumac. Contact with the poisonous sap of these plants produces a severe rash characterized by redness, blisters, swelling, and intense burning and itching. The victim also may develop a high fever and may be very ill. Ordinarily, the rash begins within a few hours after exposure, but it may be delayed for 24 to 48 hours.

Ticks:

Ticks may be common during the spring and summer. Two types of ticks may be encountered: the dog tick and the deer tick. The dog tick is the larger, more common tick. After biting, the dog tick will remain attached to the victim until engorged with blood. Dog ticks may transmit rocky mountain spotted fever and other diseases. The deer tick is much smaller, ranging from poppy seed to grape seed size, and does not remain attached to the skin for very long after biting. Deer ticks can transmit Lyme disease, which can have serious, long-term health effects if left untreated. Lyme disease is characterized by a bulls-eye type rash; light in the center with an outer red area. Flu-like symptoms may also occur. These signs may occur at different times and the rash may not appear. If you discover any bites on the skin, wash the affected area and seek medical attention if a rash or flu-like symptoms appear.

Bees, Wasps, Hornets, and Other Insects:

Symptoms of an insect bite are normally a sharp, immediate pain in the body part bitten. Poisonous insects and insect-like creatures that may be encountered at the Site include the following:

- Bees (honeybees, bumble bees, wasps, and hornets);
- Caterpillars; and
- Beetles/Bugs

Spiders:

The two poisonous spiders that may be encountered at the Site are the Brown Recluse and the Black Widow. The Brown Recluse is up to one inch long with a violin or “fiddle” shaped mark on the top of the head. The Black Widow is a smaller, bulbous black spider with a red hourglass-shaped mark on the underside.

Reactions to a Brown Recluse spider bite include mild to severe pain within two to eight hours and a star shaped area around the bite within three to four days. Significant tissue death and loss accompanies a Brown Recluse spider bite. Reactions to a Black Widow spider include intense pain at the site of the bite after approximately 15 to 60 minutes, followed by profuse sweating, rigid abdominal muscles, muscle spasms, breathing difficulty, slurred speech, poor coordination, dilated pupils, and generalized swelling of face and extremities.

Persons that have been bitten by a Brown Recluse or Black Widow spider should be immediately transported to a hospital. The spider should be collected (if possible) for confirmation of the species.

13.4 ENVIRONMENTAL HAZARDS

Slip, Trip, and Fall Hazards:

The site may contain slip, trip, and fall hazards for site workers, such as:

- Holes, pits, tree roots, or ditches.
- Slippery surfaces.
- Steep grades.
- Uneven grades.
- Sharp objects, such as nails, metal shards, and broken glass.

Severe Weather Hazards:

During the course of field operations, severe weather may be encountered, including thunderstorms, lightning, rainstorms, and other unsafe weather conditions (i.e., high winds and tornadoes). Criteria indicating that severe weather conditions may exist include:

- High winds (greater than 40 miles per hour – depending on the tree cover and other site specific conditions);
- Tornado watch or warning in place for the area including the site;
- Visible lightning;
- Extreme temperatures (e.g., greater than 100 degrees F); or
- Heavy rainfall that makes footing treacherous and visibility difficult.

If severe weather is approaching, the PSM and FTL will determine if weather conditions justify a stoppage of work activities. The PSM and FTL will also determine if weather conditions allow for restart of work activities following the severe weather. In general, work will not commence for 20 minutes after any lightning. Monitor weather radio and if possible monitor weather radar via internet.

13.5 FIRE HAZARDS

Although fires and explosions may arise spontaneously, they are more commonly the result of carelessness during the conduct of site activities, such as moving drums, mixing/bulking of site chemicals and during refueling of heavy or hand held equipment. Some potential causes of explosions and fires include:

- Mixing of incompatible chemicals, which cause reactions that spontaneously ignite due to the production of both flammable vapors and heat;

- Ignition of explosive or flammable chemical gases or vapors by external ignition sources;
- Ignition of materials due to oxygen enrichment;
- Agitation of shock or friction-sensitive compounds;
- Sudden release of materials under pressure.

13.6 SITE CHARACTERIZATION ACTIVITY HAZARD ANALYSIS

The party performing the work and their subcontractors are required to conduct an activity hazards analysis (AHAs) for all aspects of the work. These AHAs will be reviewed daily. The activity hazards analyses consist of the following three steps:

- Identify the task and break it down into steps.
- Identify the hazards associated with each step.
- Identify the specific hazard control measure used for each step in accordance with the order-of-precedence method of control.

The Project Managers may use the following list as a guide in determining the investigation and remediation activity hazards analyses for various high-hazard operations and critical tasks.

- General Oversight
- **Activities – Field.** Many different types of activities occur in the field from excavations, groundwater sampling, soil sampling, liner installation, well installation and monitoring, and pump tests. A variety of hazards could be incurred with each activity such as biological, slip/trips/falls and lacerations. An activity hazard analysis is required for each different field activity to identify the hazards and controls.
- **Site Visit or Site Walk.** When a field visit occurs, it may be before any field activities are taking place. However, there may still be hazards present such as walking or driving in fields with uneven terrain, poisonous vegetation, etc. Although personal protective equipment such as a hard hat and safety glasses may not be needed, sturdy work boots, long pants, long sleeve shirts and sunscreen may be necessary.
- **Operation- Motor Vehicle.** Although driving a vehicle may be second nature to many individuals, there are many hazards and controls that need to be identified. Fatigue and distractions are two hazards that many individuals do not think about

on a regular basis. Operating off-road vehicles such as an All-Terrain Vehicle (ATV) also require training.

- **Operation- Heavy Equipment or Machinery and Drill rigs.** Evaluate the use of heavy equipment in operations such as site clearing, grading, drilling and excavation or lifting. Controls should include equipment alarms, use of qualified operators, pre-use inspections, and any specific OSHA regulatory requirements.
- Fueling- Motor Vehicle
- Fueling- Heavy Equipment and Machinery
- Sampling- Soil
- Decontamination- Area Set-up
- Decontamination- Large Equipment
- **Decontamination- Personnel.** Following sample processing activities, personnel will decontaminate in the designated site decontamination area.
- **Decontamination- Portable Tools.** Equipment used to collect samples and to monitor personnel exposures shall be cleaned to remove any signs of the investigated material. Sample collection equipment may be sprayed with water to remove such material. Air monitoring or other sensitive equipment may be wiped with a damp disposable wipe.

TABLE 13.1
RELEVANT PROPERTIES OF VOLATILES AND SEMIVOLATILES KNOWN OR SUSPECTED AT THE SAW MILL RIVER STATION

Compound (Synonym)	OSHA PEL[1] (ppm)	IDLH (ppm)	LEL (%)	Odor Threshold[2] (ppm)	Odor Character	Vapor Pressure (mm Hg)	Physical State	Detectable w/ 10.6 eV lamp PID (I.P. eV)
Benzene	1 5 [STEL]	500 [Ca]	1.2	119	Aromatic, sweet	75	Flammable Liquid	Yes (9.24)
o-,m-, p- Xylenes	100 150 [STEL]	900	0.9	20	Aromatic	7,9,9	Flammable Liquid vapor	Yes (8.4-8.6)
Toluene	200 300 [CEIL]	500	1.1	37	Sweet, pungent Benzene-like	20	Flammable Liquid vapor	Yes (8.82)
Ethyl Benzene	100 125 [TLV-STEL]	800	0.8	0.6	Oily Solvent	10	Flammable Liquid	Yes (8.76)
Hydrogen Sulfide	10	100	4.0	0.8	Rotten Egg	17.6	Flammable Gas	No[3]
Naphthalene	10 15 [TLV-STEL]	250	0.9	0.64	Mothballs/ Tar/ Creosote	0.08	Combustible Solid	Yes (8.12)

(1) 29 CFR 1910, June 30, 1993 (8-hour Time weighted average unless otherwise specified.). These values may be modified by OSHA. The values should be checked and updated, as necessary, prior to commencing work activities.

(2) ACGIH 1989 Highest reported value of acceptable odor threshold range. These values may be modified by ACGIH. The values should be checked and updated, as necessary, prior to commencing work activities.

(3) For hydrogen sulfide detection, a gas meter with hydrogen sulfide detection capability could be used.

[IDLH] Immediately dangerous to life or health.

[CA] Suspect carcinogen - Minimize all possible exposures.

[STEL] 15 minute Short Term Exposure Limit

[SKIN] Designates that skin is an important possible route of exposure.

[CEIL] Ceiling Limit - not to de exceeded at any time during a work day.

[TLV] Threshold Limit Value.

14. TRAINING AND INSTRUCTION POLICY

All workers, including managers and supervisors, shall have training and instruction on general and job-specific safety and health practices. Training and instruction shall be provided as follows:

- When this HASP is updated for a specific activity;
- To all new workers;
- To all workers given new job assignments for which training has not previously provided;
- Whenever new substances, processes, procedures or equipment are introduced to the workplace and represent a new hazard;
- Whenever the employer is made aware of a new or previously unrecognized hazard;
- To supervisors to familiarize them with the safety and health hazards to which workers under their immediate direction and control may be exposed; and,
- To all workers with respect to hazards specific to each employee's job assignment.

Workplace safety and health practices for all locations include, but are not limited to, the following:

- Explanation of this site-specific HASP, emergency action plan and fire prevention plan, and measures for reporting any unsafe conditions, work practices, injuries and when additional instruction is needed.
- Use of appropriate clothing, including gloves, footwear, and personal protective equipment.
- Information about chemical hazards to which employees could be exposed and other hazard communication program information.
- Availability of toilet, hand-washing, and drinking water facilities.
- Provisions for medical services and first aid including emergency procedures.

In addition, specific instructions to all workers will be provided regarding hazards unique to their job assignment, to the extent that such information was not already covered in other training.

15. PROJECT SITE EMPLOYEES ORIENTATION PROGRAM SUBJECTS

The PSM helps to develop the orientation and meets with new workers to review site procedures and requirements. Topics covered in the HASP overview include:

- Names of personnel responsible for site safety and health
- Reporting emergencies, incidents and unsafe conditions
- Emergency/evacuation plans
- Safety, health and other hazards at the site
- Review of relevant activities on site and related Activity Hazard Analyses (AHAs)
- Proper use of personal protective equipment
- Work practices by which a worker can minimize risk from hazards
- Safe use of engineering controls and equipment on site
- Acute effects of compounds at the site
- Decontamination procedures

16. EMPLOYEE COMMUNICATION SYSTEM AND POLICY

An open, two-way communication between management and staff on health and safety issues is essential to an injury-free, productive workplace. The following system of communication is designed to facilitate a continuous flow of safety and health information between management and staff in a form that is readily understandable and consists of one or more of the following checked items:

- New worker orientation including a discussion of safety and health policies and procedures.
- Review of site-specific HASP prepared by future party performing work at the Site.
- Workplace safety and health training programs.
- Regular weekly and daily safety meetings.
- Effective communication of safety and health concerns between workers and supervisors, including translation where appropriate.
- Posted or distributed safety information.
- A system for workers to anonymously inform management about workplace hazards.
- A labor/management safety and health committee that meets regularly, prepares written records of the safety and health committees meetings, reviews results of the periodic scheduled inspections, reviews investigations of accidents and exposures and makes suggestions to management for the prevention of future incidents, reviews investigations

of alleged hazardous conditions, and submits recommendations to assist in the evaluation of employee safety suggestion.

17. RECORDKEEPING POLICY

Following steps must be taken to document implementation of the site-specific HASP:

- Records of hazard assessment inspections, including the persons conducting the inspection, the unsafe conditions and work practices that have been identified and the action taken to correct the identified unsafe conditions and work practices, are recorded on a hazard assessment and correction form.
- Documentation of safety and health training for each worker, including the worker's name or other identifier, training dates, types of training, and training providers are recorded on a worker training and instruction form.
- Other records are retained as required by contract specifications or by local, state or federal (OSHA regulations). Where regulations do not specify the length of records retention, a period of three years after project completion will be used.

18. INCIDENT/NEAR-MISS INCIDENT INVESTIGATIONS POLICY

All incidents and significant near-miss incidents are investigated by an individual or team with training in accident investigation and root cause analysis. The party performing the work and their subcontractors must investigate incidents involving their employees or activities and maintain an investigation report.

Procedures for investigating workplace incidents and near-miss incidents include:

- Responding to the incident scene as soon as possible;
- Reporting incidents and near-miss incidents immediately to the appropriate point-of-contact
- Interviewing injured workers and witnesses;
- Examining the workplace for factors associated with the incident/near-miss incident;
- Determining the cause of the incident/near-miss incident;
- Taking corrective action to prevent the incident/near-miss incident from reoccurring;
- Recording the findings and corrective actions taken; and
- Post-accident substance abuse testing.

19. EMERGENCY ACTION PLAN

The purpose of the Emergency Action Plan is to ensure that immediate mitigative and corrective emergency response actions are in place to minimize the consequences of an emergency, protect worker and public health and safety, provide security, and ensure the continuance of such actions until the emergency is terminated. Development and implementation of an Emergency Action Plan is required for prompt, efficient, and effective response to emergencies in accordance with applicable local, staff, and federal regulations.

The Project Manager will ensure that a comprehensive Emergency Action Plan has been established prior to any work involving any radiological or chemical hazard. The Emergency Action Plan is needed to train personnel on the required actions during an emergency situation to preserve the health and safety of the public and workers.

An Emergency Action Plan shall be developed and implemented in accordance with the applicable standards or requirements and specific site conditions. The basic elements of the Plan are as follows:

- Identification of hazards and threats, hazard mitigation, development and preparation of emergency plans and procedures, and identification of personnel and resources needed for effective response.
- Acquisition and maintenance of resources, training, drills, and exercises.
- Application of resources to mitigate consequences to workers, the public, the environment, and national security, as well as the initiation of recovery from an emergency.
- Actions taken following termination of the emergency to return to normal operations.
- Assessments and documentation to ensure that stated emergency capabilities are sufficient to implement emergency plans.

20. SITE SPECIFIC MEDICAL EMERGENCY PLAN

Following medical requirements have been established and implemented for the project:

20.1 NON-EMERGENCY MEDICAL SERVICES

The following medical facilities are suggested based on their proximity to the Site to treat work-related injuries and illnesses that are NOT life threatening. It is recommended to contact the clinics to ensure that the hours of operations meet the potential needs of Site workers. If work hours are outside the hours of operation of these clinics, then additional clinics that have better hours must be identified.

- St John's Riverside Hospital, 2 Park Ave, Yonkers, NY 10703, Phone (914) 964-4444; or
- St Joseph's Medical Center, 127 S Broadway, Yonkers, NY 10701, Phone (914) 378-7000;

Note: Transportation to a medical facility for non-emergencies must be done by at least two (2) individuals (i.e. driver and observer).

Figure 20.1
St John's Riverside Hospital
2 Park Ave, Yonkers, NY 10703
(914) 964-4444

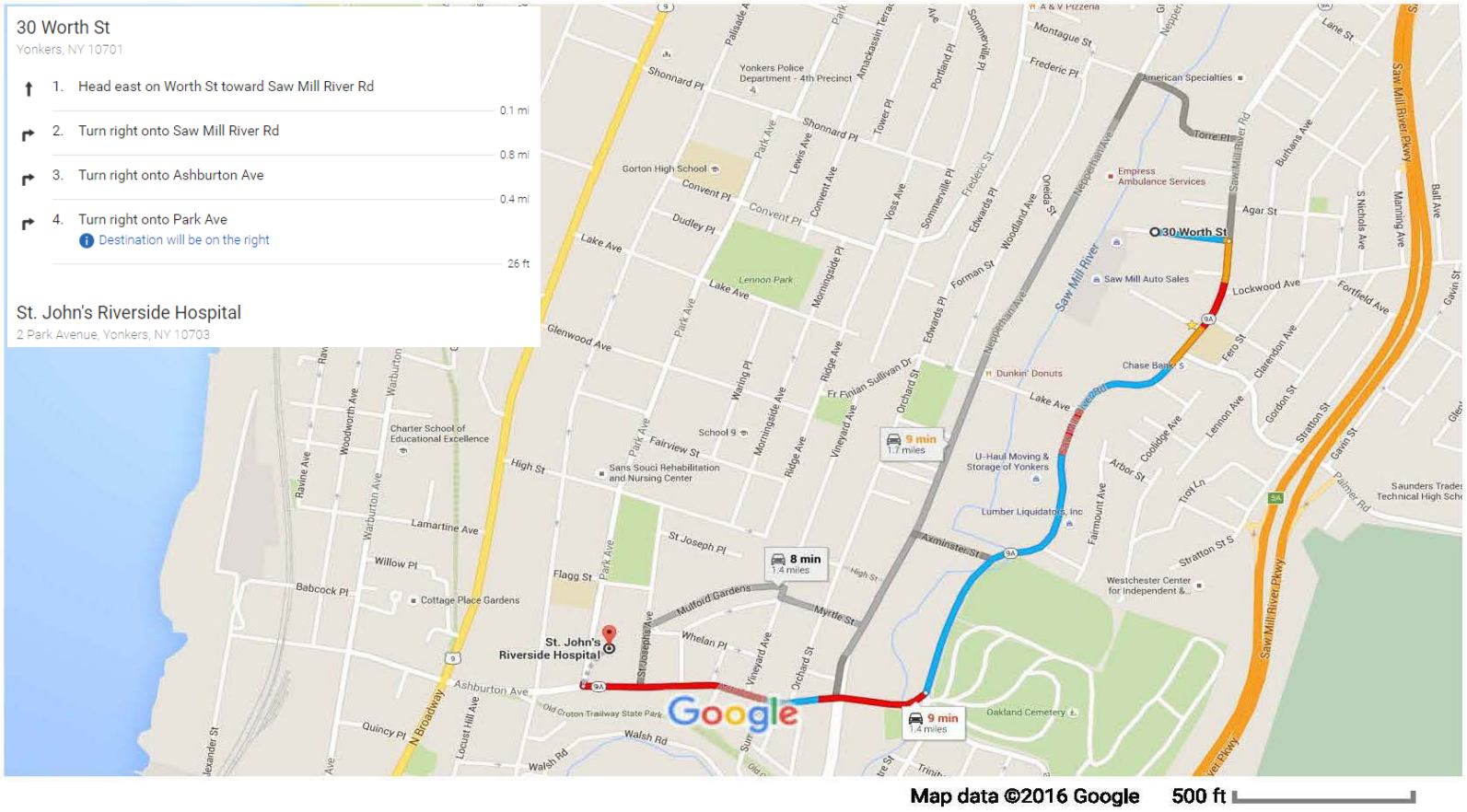
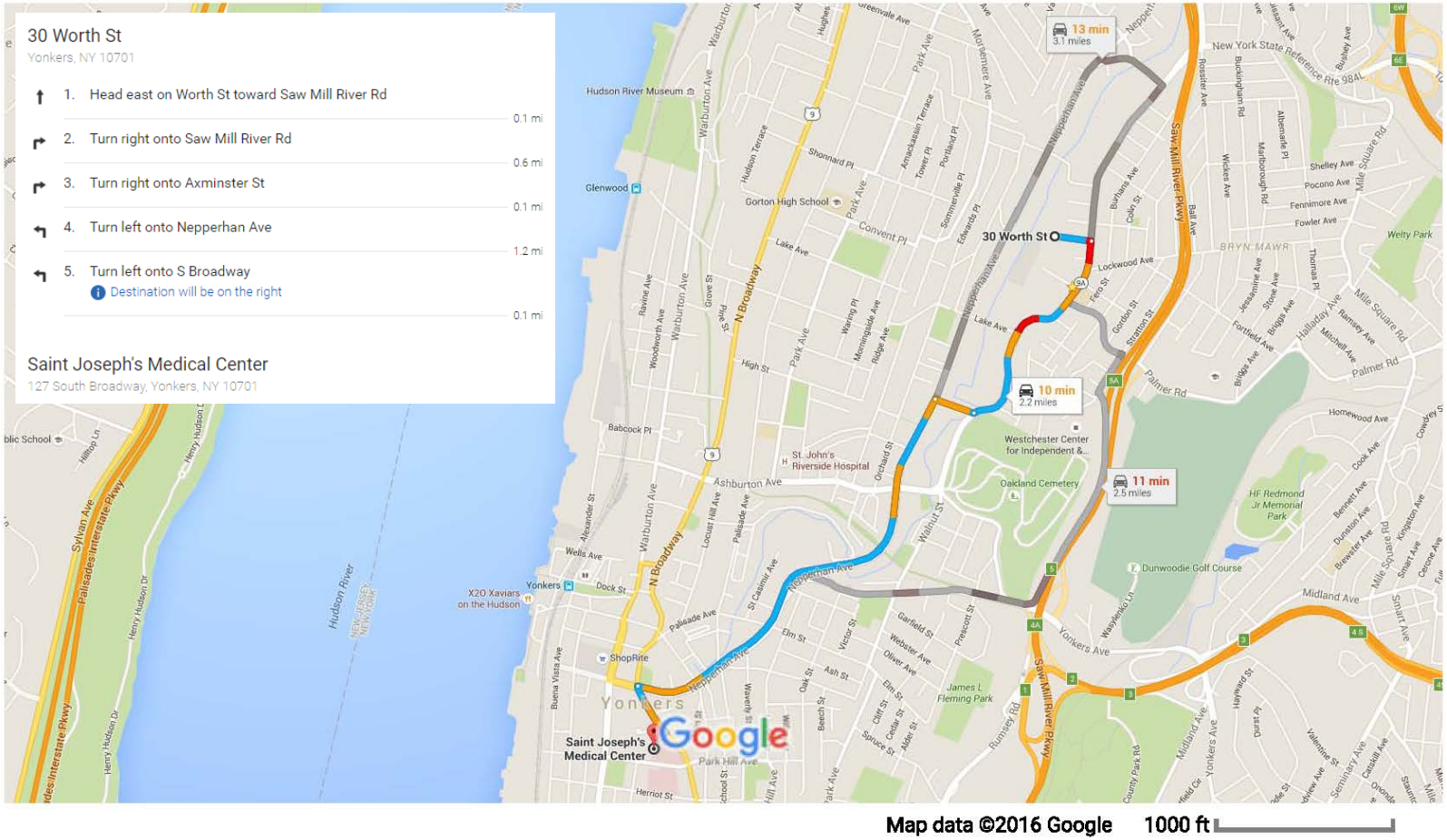


Figure 20.2
St Joseph's Medical Center
127 S Broadway, Yonkers, NY 10701
Phone (914) 378-7000

Google Maps

30 Worth St, Yonkers, NY 10701 to Saint Joseph's Medical Center

Drive 2.2 miles, 10 min



20.2 Emergency Medical Response

The project shall display posters/signs with emergency telephone numbers and locations of facilities in visible locations and at selected phone locations throughout the project area (including subcontractor facilities).

Emergency Contacts	**Phone Number**
Ambulance	**911**
Fire Department	**911**
State Police (NYS)	**911**
Mr. Rich Rienzo (Con Edison) – *or the responsible party's representative*	(718) 204-4288 – office
	(917) 658-6822 – mobile
Mr. Lawrence J. Bruno (Con Edison EH&S) *– or the responsible party's representative*	(718) 267-3866 – office
	(973) 615-8265 – pager
Dig Safely New York	811
Pollution Toxic Chemical Oil Spills	(800) 424-8802
Sound Shore Medical Center (Emergency)	(914) 964-4444
Poison Control Center	(800) 222-1222

21. HAZARD COMMUNICATION PROGRAM

The purpose of a Hazard Communication Program is to ensure that the hazards of all chemicals produced or imported are evaluated, and that information concerning their hazards is transmitted to employers and employees. This transmittal of information is to be accomplished by means of comprehensive hazard communication programs, which are to include container labeling and other forms of warning, material safety data sheets and employee training. This section will provide the Program outline, a list of the hazardous chemicals to be used and a description of where Material Safety Data Sheets (MSDSs) will be located. The written Program in compliance with 29 CFR 1910.1200, as well as the MSDSs, are found in Attachment C.

Attachment A
Con Edison Requirements (If Appropriate)

Attachment B
Example Activity Hazard Analysis

Activity/Work Task: ACTIVITIES RELATED TO SITE VISITS AND SITE WALKS	Overall Risk Assessment Code (RAC) (Use highest code)	L
Project Location: Saw Mill River Station, Yonkers, NY		
Project Number: 446113		
Date Prepared: 04 March 2014		
Prepared by (Name/Title): Todd Belanger		
Reviewed by (Name/Title): Beth Badik		
Notes: (Field Notes, Review Comments, etc.) Hard hat, steel-toe boots, safety glasses, gloves, and high visibility vest. Ear plugs/muffs, if necessary.		

Risk Assessment Code (RAC) Matrix

Severity	Probability				
	Frequent	Likely	Occasional	Seldom	Unlikely
Catastrophic	E	E	H	H	M
Critical	E	H	H	M	L
Marginal	H	M	M	L	L
Negligible	M	L	L	L	L

Step 1: Review each **"Hazard"** with identified safety **"Controls"** and determine RAC (See above)

"Probability" is the likelihood to cause an incident, near miss, or accident and identified as: Frequent, Likely, Occasional, Seldom or Unlikely.

"Severity" is the outcome/degree if an incident, near miss, or accident did occur and identified as: Catastrophic, Critical, Marginal, or Negligible

Step 2: Identify the RAC (Probability/Severity) as E, H, M, or L for each "Hazard" on AHA. Annotate the overall highest RAC at the top of AHA.

RAC Chart

E = Extremely High Risk
H = High Risk
M = Moderate Risk

Work Activities	Potential Hazards	Hazard Control Measures	RAC
Site visit/walk	Slips, Trips, Falls	▪ Workers will be aware of potentially slippery surfaces and tripping hazards. ▪ Work slowly during transit. Jumping, running, and horseplay are prohibited. ▪ Workers will keep all areas clean and free of debris to deter any unnecessary trips and falls. ▪ Clean up all spills immediately. ▪ Personnel will notify the SSHO of any unsafe conditions	L
	Rain	▪ Have proper PPE and clothing (i.e. rain gear, footwear, etc) available. Be aware of slip hazards, puddles, etc.	L
	Sunshine (UV radiation)	▪ Have sunscreen available for ultraviolet protection. Have water for dehydration.	L
	Lightning	▪ Do not begin or continue work until lightning subsides for 20 minutes.	L

Work Activities	Potential Hazards	Hazard Control Measures	RAC
	High winds, dust storm	▪ Wear goggles if dust/debris is visible.	L
	Cold and Heat Stress	▪ Visitors will dress accordingly to prevent injuries from extreme heat, or cold. ▪ SSHO will monitor for cold/heat stress symptoms.	L
	Biological Hazards (ticks, bees, mosquitoes, snakes, etc.)	▪ Personnel will be aware of potential exposure to biological hazards. ▪ Wear appropriate clothing (hat, long-sleeve shirt, long pants, gloves, boots etc.) and insect repellant.	L
	Site Hazards Material Exposure	▪ Training and safety awareness of potential exposure to contaminates at the site. ▪ Training of all personnel decontamination procedures (if appropriate to visit). ▪ Appropriate PPE will be worn dependent on site conditions and actions levels. (if appropriate to visit) ▪ Must sign off on health and safety plan. ▪ Visitor will be escorted around site by a 40 hour trained individual unless cleared with the SSHO.	L

Equipment to be Used	Training Requirements/Competent or Qualified Personnel name(s)	Inspection Requirements
1. Appropriate PPE for selection operation, at minimum – a. Long Sleeve Shirt b. Long Legged Pants c. Sturdy Work Boots d. Rain gear, when required e. Safety glasses (use goggles when dusty) f. High visibility vest (when working near vehicles) g. Other PPE as required (hard hat, hearing protection)	Qualified Personnel None required. Training 1) Visitors report to the SSHO who will give a short health and safety orientation and require sign off on the health and safety plan. The SSHO determines if the visitor can access the site based on verification of 40 training or if the visitor(s) will need to be escorted by a 40-hour trained individual onsite. 2) OSHA HAZWOPER and medical monitoring. 3) Additional training (such as first aid/CPR, bloodborne pathogens, etc.) as applicable.	None required.

Training Acknowledgement:

Printed Name	Signature	Date

Activity/Work Task: OPERATION OF MOTOR VEHICLES	Overall Risk Assessment Code (RAC) (Use highest code) **L**
Project Location: Saw Mill River Station, Yonkers, NY	
Project Number: 446113	
Date Prepared: 04 March 2014	
Prepared by (Name/Title): Todd Belanger	
Reviewed by (Name/Title): Beth Badik	
Notes: (Field Notes, Review Comments, etc.) Steel-toe boots, safety glasses (tinted as necessary), and high visibility vest. Ear plugs/muffs, if necessary.	

Risk Assessment Code (RAC) Matrix

Severity	Probability				
	Frequent	Likely	Occasional	Seldom	Unlikely
Catastrophic	E	E	H	H	M
Critical	E	H	H	M	L
Marginal	H	M	M	L	L
Negligible	M	L	L	L	L

Step 1: Review each **"Hazard"** with identified safety **"Controls"** and determine RAC (See above)

"Probability" is the likelihood to cause an incident, near miss, or accident and identified as: Frequent, Likely, Occasional, Seldom or Unlikely.

"Severity" is the outcome/degree if an incident, near miss, or accident did occur and identified as: Catastrophic, Critical, Marginal, or Negligible

Step 2: Identify the RAC (Probability/Severity) as E, H, M, or L for each "Hazard" on AHA. Annotate the overall highest RAC at the top of AHA.

RAC Chart

E = Extremely High Risk
H = High Risk
M = Moderate Risk

Work Activities	Potential Hazards	Hazard Control Measures	RAC
Driving to and from the job site	Vehicle Accident	▪ All employees shall complete the ParsonsU safety module on Defensive Driving. ▪ Plan your travel route and check maps for directions or discuss with colleagues. ▪ Inspect vehicle before driving and check for proper equipment/supplies. ▪ Clean windows and mirrors as needed throughout the trip. ▪ Have sun glasses available to reduce sun glare and wear as needed. ▪ Follow vehicle maintenance schedule to reduce possibilities of breakdown while driving.	L
	Distraction while driving	▪ Stop driving a vehicle, regardless of the speed (i.e. even 5 mph) or location (i.e. private road), when the potential of being distracted by conversation exists. ▪ Drivers are prohibited from using communication devices (e.g., cell phones) while operating any motor vehicle.	L

Work Activities	Potential Hazards	Hazard Control Measures	RAC
	Fatigue/Falling asleep	▪ Get adequate rest prior to driving. ▪ Pull over and rest if experiencing drowsiness ▪ Change seat position, stretch, open the window, adjust radio if experiencing drowsiness.	L
	Weather /Road conditions	▪ Check road and weather conditions prior to driving. ▪ Be prepared to adjust driving if conditions change. ▪ Travel in daylight hours if possible. ▪ Give yourself plenty of time to allow for slow-downs due to construction, accidents, or other unforeseen circumstances. ▪ Use lights at night and lights/wipers during inclement weather.	L
	Theft/Crime of parked vehicle	▪ Lock the vehicle when leaving the area ▪ Use ant-theft deterrents (e.g., the club, visible alarm indicators, etc.) ▪ Park in well lit areas. ▪ Hide valuables	L

Equipment to be Used	Training Requirements/Competent or Qualified Personnel name(s)	Inspection Requirements
1. Appropriate PPE for selection operation, at minimum – a. Long sleeve shirt b. Long pants c. Steel-toe boots d. Tinted safety glasses (if needed for glare) e. High visibility vest 2. Designated Site vehicles will be equipped with the minimum - a. Map and Directions to site medical facility b. Project Emergency Contact Telephone Listing c. Serviceable First Aid Kit d. Serviceable 2A:10BC rated or larger fire extinguisher 3. Other vehicles designated as personnel conveyance will be equipped with – a. Map and Directions to site medical facility b. Project Emergency Contact Telephone Listing 4. Forms of Communications a. Project or personal Cellular Phone	Qualified Personnel 1. First Aid/CPR – SSHO and one other individual. 2. Any person operating a motor vehicle shall possess, at all times while operating such vehicle, a license/permit valid for the equipment being operated Training 1. Site-specific WP, SOP and AHA 2. Driver's license. All vehicles must have the required State vehicle registration and/or inspection documentation.	1. Initial (Site Selection) – Before initial use, vehicles not otherwise inspected by State or local authorities, shall be inspected by a qualified mechanic and found in safe operating condition and in compliance with all required published vehicle safety standards. Prior to each use, but not more often than daily, motor vehicles shall be checked by the operator to assure that the following parts, equipment, and accessories are in safe operating condition and free of apparent damage that could cause failure while in use: • Service brakes, including trailer brake connections; • Parking system (hand brake); • Emergency stopping system (brakes); • Tires; • Horns; • Steering mechanism; • Coupling devices (if applicable); • Seat/shoulder belts; • Operating controls • Safety devices • Accessories including lights, reflectors, windshield wipers, and defrosters where such equipment is necessary If during inspection or during use, equipment fails to function properly, equipment is to be turned in for repair/replacement. 2. Daily – Vehicles shall be inspected daily by operator (see above). Housekeeping of assembly and work areas for debris and hazards. SSHO will perform audits and spot checks to verify compliance. SSHO will update site's MSDS files on all items, supplies and material brought onto site. 3. Weekly – First Aid/CPR kit(s) and fire extinguisher(s) 4. Final (Site Departure) – Inspection of the entire area to ensure the site is left in the same or better than when we arrived.

Training Acknowledgement:

Printed Name	Signature	Date

Vehicle Inspection, ON-SITE

This form must be filled out for any motor vehicle.

DRIVERS NAME	LICENSE NUMBER
COMPANY	
TYPE OF VEHICLE	VEHICLE NUMBER
INSPECTION DATE/TIME	INSPECTOR

PART INSPECTED	SAT	UNSAT	COMMENT
HORN			
STEERING SYSTEM			
WIPERS			
COUPLING DEVICE (IF APPLICABLE)			
MIRRORS			
FIRE EXTINGUISHERS (10 ABC, 2 EACH)			
FUILDS (OIL, WIPER, COOLANT)			
REFLECTORS			
EMERGENCY FLASHERS			
LIGHTS			
ELECTRIC WIRING			
FUEL SYSTEM			
EXHAUST SYSTEM			
BRAKE SYSTEM			
SUSPENSION			
CARGO SPACE/ CARGO RESTRAINS			
TIRES, WHEELS, RIMS			
TAILGATE			
SEAT / SHOULDER BELTS			

INSPECTION RESULTS (INSPECTOR INITIALS)

ACCEPTED:

REJECTED:

REMARKS

INSPECTORS SIGNATURE/DATE			

Activity/Work Task: ACTIVITY INVOLVING USE OF HEAVY OR MOTORIZED EQUIPMENT	Overall Risk Assessment Code (RAC) (Use highest code)	L
Project Location: Saw Mill River Station, Yonkers, NY		
Project Number: 446113		
Date Prepared: 04 March 2014		
Prepared by (Name/Title): Todd Belanger		
Reviewed by (Name/Title): Beth Badik		
Notes: (Field Notes, Review Comments, etc.) Hard hat, steel-toe boots, safety glasses, gloves, high visibility apparel. Ear plugs/muffs, if necessary.		

Risk Assessment Code (RAC) Matrix

Severity	Probability				
	Frequent	Likely	Occasional	Seldom	Unlikely
Catastrophic	E	E	H	H	M
Critical	E	H	H	M	L
Marginal	H	M	M	L	L
Negligible	M	L	L	L	L

Step 1: Review each **"Hazard"** with identified safety **"Controls"** and determine RAC (See above)

"Probability" is the likelihood to cause an incident, near miss, or accident and identified as: Frequent, Likely, Occasional, Seldom or Unlikely.

"Severity" is the outcome/degree if an incident, near miss, or accident did occur and identified as: Catastrophic, Critical, Marginal, or Negligible

Step 2: Identify the RAC (Probability/Severity) as E, H, M, or L for each "Hazard" on AHA. Annotate the overall highest RAC at the top of AHA.

RAC Chart

- **E = Extremely High Risk**
- **H = High Risk**
- **M = Moderate Risk**

Work Activities	Potential Hazards:	Hazard Control Measures:	RAC
Transport to, from, and around the site	Operation of Motor Vehicle	Drivers will have a valid driver's license (CDL as necessary) and will wear a seat belt at all times. Drivers are prohibited from using any communication devices (e.g., cell phones) while operating any motor vehicles. Personnel will practice defensive driving techniques. Personnel will be aware of road conditions, obstacles, and hazards. Obey Base speed limit.	L
	Struck by passing vehicle	Lights or reflectors shall be used on signs for night work. Traffic Control Plans will be implemented as necessary. Barriers, warning signs, designated walkways, or other safeguards will be provided where pedestrians are exposed to the risk of collision. High visibility apparel should be worn when working near roadways. Use ground guides for the backing of all vehicles.	L
	Struck by loose equipment	All equipment and tools will be properly secured during transport. All vehicles and equipment will comply with DOT and OSHA requirements.	L
	Tip Over	Never move the equipment with the bucket upright. Set hydraulic leveling jacks before use (as applicable). Ensure the work area foundation is as stable as possible.	L
	Backing	Use a ground guide along with a functioning back-up alarm (that is audible above the site noise) during equipment backing.	L

Work Activities	Potential Hazards:	Hazard Control Measures:	RAC
Heavy or Motorized Equipment Operation	Equipment Maintenance	The equipment must be maintained in a proper functioning condition. All motors must be shut off and electrical, mechanical, and hydraulic components locked out of service when making repairs. Safety shutoff system must be tested daily and not disabled. Bleed off pressure on hydraulic lines before undoing fittings. Do not leave tools or parts loose on the equipment after maintenance has been performed.	L
	Fire Hazards	All motors must be shut off during refueling. Smoking near the drilling rig is not permitted. A charged fire extinguisher must be maintained on the drilling rig and associated motorized equipment, and must have a tag documenting inspections. Fuel containers will not be stored within 10' of the drilling rig motor. Fuel will be stored in UL approved safety containers with contents clearly labeled.	L
	Operation of Motor Vehicle	Drivers will have a valid driver's license and will wear a seat belt at all times. Drivers are prohibited from using any communication devices (e.g., cell phones) while operating any motor vehicles. Personnel will be aware of road conditions and hazards. Personnel will practice defensive driving techniques. Operators of heavy equipment will be trained in the operation of such, and will provide documentation to the SSHO prior to operation.	L
	Tip Over	Never move the equipment with the bucket upright. Set hydraulic leveling jacks before use (as applicable). Ensure the work area foundation is as stable as possible. Blades and buckets must be lowered to the ground and parking brakes set before shutting off a heavy equipment or vehicle. Load composition, stability, stacking, unstacking, and transport will be conducted in accordance with the site-specific SOP. If a load is in a raised position, an operator will attend to the controls. The maximum rated load for a lift vehicle will not be exceeded.	L
	Struck By	Operation of heavy equipment in accordance with the SSHP. Be alert when working around heavy equipment. No part of any load will pass above a worker. Loads that might tip or fall must be secured. Loads will be transported as low to the ground as feasible. Workers must stay out of the swing radius of backhoes and excavation equipment. Traffic Control Plans will be implemented as necessary. Barriers, warning signs, designated walkways, or other safeguards will be provided where pedestrians are exposed to the risk of collision. High visibility apparel will be worn when working near roadways or heavy equipment. No heavy equipment will be operated without a ground guide. Obtain the attention of the operator before moving into the area of the equipment.	L
Heavy or Motorized Equipment Operation (Cont.)	Vehicle and heavy equipment traffic in work area	Operation of heavy equipment in accordance with the SSHP. Be alert when working around heavy equipment. Ground guide for the backing of all vehicles. No heavy equipment will be operated without a ground guide. Barriers, warning signs, designated walkways, or other safeguards will be provided as necessary according to the traffic control plans. All workers will follow the traffic control plans and review it daily in the tailgate meeting. Obtain the attention of the operator before moving into the area of the equipment. Implement traffic control plan. High visibility apparel will be worn when working near roadways or heavy equipment.	L
	Electrocution	Inspect for buried and overhead utilities near the work area. A clearance permit shall be obtained from Base personnel and a geophysical subcontractor prior to initiating intrusive operations.	L
	Noise	Hearing protection will be worn in hazardous noise areas.	L

Equipment to be Used	Training Requirements/Competent or Qualified Personnel name(s)	Inspection Requirements
1. Hand and Power Tools 2. Appropriate PPE for selection operation, at minimum – a. Hard hat b. Long sleeve shit c. Long pants d. Steel-toe boots e. Safety glasses f. Gloves g. High visibility vest h. Ear plugs/muffs, if necessary 3. Heavy Equipment, as needed or specified by WP or SSHP 4. Designated Site vehicles will be equipped with the minimum - a. Map and Directions to site medical facility b. Project Emergency Contact Telephone Listing c. Serviceable First Aid Kit d. Serviceable 2A:10BC or greater extinguisher 5. Other vehicles designated as personnel conveyance will be equipped with – a. Map and Directions to site medical facility b. Project Emergency Contact Telephone Listing 6. Forms of Communications a. Project or personal Cellular Phone	Qualified Personnel 1. First Aid/CPR – SSHO and one other individual. 2. All personnel operating any mechanized equipment will provide proof of competency (documentation of training or experience) to the SSHO prior to operating the equipment. Training 1. Site-specific WP, SOP and AHA 2. OSHA 40 hour and applicable 8 hour 3. Equipment operation 4. Heat/Cold Stress 5. Biological hazards 6. Flora/Fauna endangered/threatened 7. Daily safety and operational briefing 8. Site visitor training 9 30-hr OSHA construction Outreach training (SSHO)	1. Initial (Site Selection) – General inspection of assembly area. Before any machinery or mechanized equipment is placed in use it shall be inspected and tested in accordance with the manufacturer's recommendations and shall be certified in writing by a competent person/mechanic to meet the manufacturer's recommendations Equipment will be inspected daily by operator prior to use in accordance with the manufacturer's instructions. If during inspection or during use, equipment fails to function properly, equipment is to be turned in for repair/replacement. 2. Daily- Housekeeping of assembly and work areas for debris and hazards. SSHO will perform audits and spot checks to verify compliance. SSHO will update site's MSDS files on all items, supplies and material brought onto site. Prior to each use, but not more often than daily, heavy equipment shall be checked by the operator to assure that the equipment is in safe operating condition and free of apparent damage that could cause failure while in use. Periodic communication checks between Field Office or SSHO and Field Crews, as deemed necessary, to ensure crew's status and relay emergency information. Field Office and SSHO will maintain a telephonic roster of all site personnel's cellular phone numbers to ensure a form of communication. In the event that a field crew fails to make a communications check, they will cease operations and relocate to re-establish communications link with the Field Office or SSHO. Competent Person will inspect the excavation daily to ensure engineering controls are adequate and working. 3. Weekly – First Aid/CPR kit(s) and fire extinguisher(s), 4. Final (Site Departure) – Inspection of the entire area to ensure the site is left in the same or better than when we arrived.

Training Acknowledgement:

Printed Name	Signature	Date

Activity/Work Task: FUELING MOTOR VEHICLES	Overall Risk Assessment Code (RAC) (Use highest code)	L
Project Location: Saw Mill River Station, Yonkers, NY		
Project Number: 446113		
Date Prepared: 04 March 2014		
Prepared by (Name/Title): Todd Belanger		
Reviewed by (Name/Title): Beth Badik		
Notes: (Field Notes, Review Comments, etc.) Hard hat, steel-toe boots, safety glasses, high visibility vest, and gloves (as needed). Ear plugs/muffs, if necessary.		

Risk Assessment Code (RAC) Matrix

Severity	Probability				
	Frequent	Likely	Occasional	Seldom	Unlikely
Catastrophic	E	E	H	H	M
Critical	E	H	H	M	L
Marginal	H	M	M	L	L
Negligible	M	L	L	L	L

Step 1: Review each **"Hazard"** with identified safety **"Controls"** and determine RAC (See above)

"Probability" is the likelihood to cause an incident, near miss, or accident and identified as: Frequent, Likely, Occasional, Seldom or Unlikely.

"Severity" is the outcome/degree if an incident, near miss, or accident did occur and identified as: Catastrophic, Critical, Marginal, or Negligible

Step 2: Identify the RAC (Probability/Severity) as E, H, M, or L for each "Hazard" on AHA. Annotate the overall highest RAC at the top of AHA.

RAC Chart

E = Extremely High Risk
H = High Risk
M = Moderate Risk

Work Activities	Potential Hazards	Hazard Control Measures	RAC
Fueling the vehicle	Overflow/Spills of fuel on to pavement.	▪ Ensure that fuel pumps have a UL listed automatic closing valve. ▪ Use approved safety containers. ▪ Workers will be aware capacity of fuel tank/container. ▪ Do not "squeeze in" extra gasoline to fill up tank. ▪ Inform gas station attendant of fuel spill.	L
	Explosion	▪ Ensure that all fuel is in approved safety containers. ▪ No smoking or open flame within 50 feet of fueling area. ▪ Equipment/Motors that use flammable fuel shall be shut down during fueling, servicing, or maintenance. ▪ Turn cell phones off during fueling of vehicle.	L
	Spill on clothing	▪ Workers should be aware of capacity of fuel tank. ▪ Wear gloves while fueling. ▪ Change clothing if saturated with fuel.	L

Equipment to be Used	Training Requirements/Competent or Qualified Personnel name(s)	Inspection Requirements
1. OSHA Approved Fuel Cans; Approved Fire Extinguishers; Bonding Strap; Funnels; Drip Pans, and Absorbent Material 2. Hand Tools 3. Designated Site vehicles will be equipped with the minimum - a. Map and Directions to site medical facility b. Project Emergency Contact Telephone Listing c. Serviceable First Aid Kit d. Serviceable 2A:10BC fire extinguisher or greater shall be present in vehicles. Fueling station location shall have 40-BC extinguisher available 4. Other vehicles designated as personnel conveyance will be equipped with – a. Map and Directions to site medical facility b. Project Emergency Contact Telephone Listing 5. Forms of Communications a. Project supplied or personal Cellular Phone	<u>Qualified Personnel</u> 1. First Aid/CPR – SSHO and one other individual. 2. All personnel operating any mechanized equipment will provide proof of competency (documentation of training or experience) to the SSHO prior to operating the equipment. <u>Training</u> 1. Site-specific WP, SOP and AHA 2. OSHA 40 hour and applicable 8 hour 3. Equipment operation 4. Heat/Cold Stress 5. Biological hazards 6. Flora/Fauna endangered/threatened 7. Daily safety and operational briefing 8. Site visitor training 9. All personnel engaged in the operation of heavy equipment and machinery will have knowledge and experience in working with and operating the equipment they must show proof of competency.	<u>1. Initial (Site Selection)</u> – General inspection of assembly area. Vehicles will be inspected daily by operator prior to use. If during inspection or during use, equipment fails to function properly, equipment is to be turned in for repair/replacement. <u>2. Daily</u>- Housekeeping of assembly and work areas for debris and hazards. SSHO will perform audits and spot checks to verify compliance. SSHO will update site's MSDS files on all items, supplies and material brought onto site. Periodic communication checks between Field Office or SSHO and Field Crews, as deemed necessary, to ensure crew's status and relay emergency information. Field Office and SSHO will maintain a telephonic roster of all site personnel's cellular phone numbers to ensure a form of communication. In the event that a field crew fails to make a communications check, they will cease operations or relocate to re-establish communications link with the Field Office or SSHO. <u>3. Weekly</u> – First Aid/CPR kit(s) and fire extinguisher(s). <u>4. Final (Site Departure)</u> – Inspection of the entire area to ensure the site is left in the same or better than when we arrived.

Training Acknowledgement:

Printed Name	Signature	Date

Activity/Work Task: FUELING HEAVY EQUIPMENT	Overall Risk Assessment Code (RAC) (Use highest code)					L
Project Location: Saw Mill River Station, Yonkers, NY	**Risk Assessment Code (RAC) Matrix**					
Project Number: 446113	**Severity**	**Probability**				
Date Prepared: 04 March 2014		Frequent	Likely	Occasional	Seldom	Unlikely
Prepared by (Name/Title): Todd Belanger	Catastrophic	E	E	H	H	M
	Critical	E	H	H	M	L
Reviewed by (Name/Title): Beth Badik	Marginal	H	M	M	L	L
	Negligible	M	L	L	L	L
Notes: (Field Notes, Review Comments, etc.) Hard hat, steel-toe boots, safety glasses, gloves (as needed), and high visibility vest. Ear plugs/muffs, if necessary.	Step 1: Review each **"Hazard"** with identified safety **"Controls"** and determine RAC (See above)					
	"Probability" is the likelihood to cause an incident, near miss, or accident and identified as: Frequent, Likely, Occasional, Seldom or Unlikely.	**RAC Chart**				
	"Severity" is the outcome/degree if an incident, near miss, or accident did occur and identified as: Catastrophic, Critical, Marginal, or Negligible	**E = Extremely High Risk**				
		H = High Risk				
	Step 2: Identify the RAC (Probability/Severity) as E, H, M, or L for each "Hazard" on AHA. Annotate the overall highest RAC at the top of AHA.	**M = Moderate Risk**				

Work Activities	Potential Hazards	Hazard Control Measures	RAC
Fueling the equipment	Overflow/Spills of fuel on to pavement	▪ Ensure that fuel pumps have a UL listed automatic closing valve. ▪ Workers will be aware capacity of fuel tank. ▪ Do not "squeeze in" extra fuel to fill up tank. ▪ Have berms or absorbent pads available.	L
	Explosion	▪ Ensure that all fuel is in approved safety containers. ▪ No smoking or open flame within 50 feet. ▪ Equipment/Motors that use flammable fuel shall be shut down during fueling, servicing, or maintenance. ▪ Turn cell phones off during refueling vehicle. ▪ Ensure that all heavy equipment has a fire extinguisher.	L
	Spill on clothing	▪ Workers should be aware of capacity of fuel tank. ▪ Wear gloves while fueling. ▪ Change clothing if saturated with fuel.	L

Work Activities	Potential Hazards	Hazard Control Measures	RAC
	Site Location	▪ Provide refueling driver with directions to site and accessible route to equipment/machinery. ▪ Ensure that there is road (gravel, mats) for refueling truck to drive/park on.	L
	Hazardous Site contamination	▪ Decontaminate equipment/machinery prior to refueling and remove from exclusion zone. ▪ Decontaminate refueling truck if contact with potential contaminated material. ▪ Provide training/awareness to driver, escort on site if need be.	L

Equipment to be Used	Training Requirements/Competent or Qualified Personnel name(s)	Inspection Requirements
1. OSHA Approved Fuel Cans; Approved Fire Extinguishers; Bonding Strap; Funnels; Drip Pans, and Absorbent Material 2. Hand Tools 3. Designated Site vehicles will be equipped with the minimum - a. Map and Directions to site medical facility b. Project Emergency Contact Telephone Listing c. Serviceable First Aid Kit a. Serviceable 2A 10-BC extinguisher in vehicles. 40-BC extinguisher present at refueling station 4. Other vehicles designated as personnel conveyance will be equipped with – a. Map and Directions to site medical facility b. Project Emergency Contact Telephone Listing 5. Forms of Communications a. Project supplied or personal Cellular Phone	Qualified Personnel 1. First Aid/CPR –SSHO and one other individual. 2 All personnel operating any mechanized equipment will provide proof of competency (documentation of training or experience) to the SSHO prior to operating the equipment. Training 1. Site-specific WP, SOP and AHA 2. OSHA 40 hour and applicable 8 hour 3. Medical monitoring program 4. First aid/CPR, bloodborne pathogens, respiratory protection, confined space entry, etc. as applicable 3. Equipment operation 4. Heat/Cold Stress 5. Biological hazards 6. Flora/Fauna endangered/threatened 7. Daily safety and operational briefing 8. Site visitor training	1. Initial (Site Selection) – General inspection of assembly area. Equipment will be inspected daily by operator prior to use in accordance with the manufacturer's instructions. If during inspection or during use, equipment fails to function properly, equipment is to be turned in for repair/replacement. 2. Daily- Housekeeping of assembly and work areas for debris and hazards. SSHO will perform audits and spot checks to verify compliance. SSHO will update site's MSDS files on all items, supplies and material brought onto site. Periodic communication checks between Field Office or SSHO and Field Crews, as deemed necessary, to ensure crew's status and relay emergency information. Field Office and SSHO will maintain a telephonic roster of all site personnel's cellular phone numbers to ensure a form of communication. In the event that a field crew fails to make a communications check, they will cease operations or relocate to re-establish communications link with the Field Office or SSHO. 3. Weekly – First Aid/CPR kit(s) and fire extinguisher(s) 4. Final (Site Departure) – Inspection of the entire area to ensure the site is left in the same or better than when we arrived.

Training Acknowledgement:

Printed Name	Signature	Date

Activity/Work Task: ACTIVITIES INVOLVING PERSONNEL DECONTAMINATION	Overall Risk Assessment Code (RAC) (Use highest code)	L
Project Location: Saw Mill River Station, Yonkers, NY		
Project Number: 446113		
Date Prepared: 04 March 2014		
Prepared by (Name/Title): Todd Belanger		
Reviewed by (Name/Title): Beth Badik		

Notes: (Field Notes, Review Comments, etc.)
Level D ensemble with gloves.

Decontamination procedures may vary for each work area. Personnel will follow decontamination procedures outlined in the site-specific SOP. PPE and decontamination water will be collected and disposed of according to the Saw Mill River Site Management Plan.

Risk Assessment Code (RAC) Matrix

Severity	Probability				
	Frequent	Likely	Occasional	Seldom	Unlikely
Catastrophic	E	E	H	H	M
Critical	E	H	H	M	L
Marginal	H	M	M	L	L
Negligible	M	L	L	L	L

Step 1: Review each **"Hazard"** with identified safety **"Controls"** and determine RAC (See above)

"Probability" is the likelihood to cause an incident, near miss, or accident and identified as: Frequent, Likely, Occasional, Seldom or Unlikely.

"Severity" is the outcome/degree if an incident, near miss, or accident did occur and identified as: Catastrophic, Critical, Marginal, or Negligible

Step 2: Identify the RAC (Probability/Severity) as E, H, M, or L for each "Hazard" on AHA. Annotate the overall highest RAC at the top of AHA.

RAC Chart

E = Extremely High Risk
H = High Risk
M = Moderate Risk

Work Activities	Potential Hazards:	Hazard Control Measures:	RAC
Decontaminate personnel exiting from the exclusion zone.	Site Hazardous Material Exposure	Training and safety awareness of potential exposure to contaminants at the site. Training of personal decontamination procedure. Appropriate PPE (safety glasses, gloves, and steel-toe boots).	L
	Eye injury	PPE (safety glasses, chemical goggles) will be worn as required in the HASP.	L
	Slips trip and falls	Be aware of tripping hazards. If personnel are wearing Tyvek suits, provide a chair to use while removing PPE.	L
	Heat Injuries	Implement heat stress control program.	L
Support rescue personnel (as required).	Site Hazardous Material Exposure	Training and safety awareness of potential exposure to contaminants at the site. Training of personal decontamination procedure. Appropriate PPE. Personnel will follow decontamination procedures outlined in the site-specific SOP.	L
	Bloodborne Pathogens	Personnel will be trained in risks associated with bloodborne pathogens, in accordance with the Health and Safety Plan.	L
	Heat injuries	Implement heat stress control program. Dress appropriately. Provide adequate drinking water.	L
	Slips trip and falls	Be aware of tripping hazards.	L

Equipment to be Used	Training Requirements/Competent or Qualified Personnel name(s)	Inspection Requirements
1. Decontamination Equipment – a. Decontamination solution of 5% bleach b. Scrub Brushes c. 5-gal Decontamination Buckets d. Hand Sprayers e. Detergent (Soap) f. Water 2. Designated Site vehicles will be equipped with the minimum - a. Map and Directions to site medical facility b. Project Emergency Contact Telephone Listing c. Serviceable First Aid Kit d. Serviceable 2A:10BC fire extinguisher or greater 3. Other vehicles designated as personnel conveyance will be equipped with – a. Map and Directions to site medical facility b. Project Emergency Contact Telephone Listing 4. Forms of Communications a. Project or personal Cellular Phone	Qualified Personnel 1. First Aid/CPR – SSHO and one other individual. Training 1. Site-specific WP, SOP and AHA 2. OSHA 40 hour and applicable 8 hour 3. Equipment operation 4. Heat/Cold Stress 5. Biological hazards 6. Flora/Fauna endangered/threatened 7. Daily safety and operational briefing 8. Site visitor training	1. Initial (Site Selection) – General inspection of assembly area. Equipment will be inspected daily by operator prior to use in accordance with the manufacturer's instructions. If during inspection or during use, equipment fails to function properly, equipment is to be turned in for repair/replacement. 2. Daily- Housekeeping of assembly and work areas for debris and hazards. SSHO will perform audits and spot checks to verify compliance. SSHO will update site's MSDS files on all items, supplies and material brought onto site. Periodic communication checks between Field Office or SSHO and Field Crews, as deemed necessary, to ensure crew's status and relay emergency information. Field Office and SSHO will maintain a telephonic roster of all site personnel's cellular phone numbers to ensure a form of communications. In the event that a field crew fails to make a communications check, they will cease operations and relocate to re-establish communications link with the Field Office or SSHO. 3. Weekly – First Aid/CPR kit(s) and fire extinguisher(s). 4. Final (Site Departure) – Inspection of the entire area to ensure the site is left in the same or better than when we arrived.

Training Acknowledgement:

Printed Name	Signature	Date

Activity/Work Task: LARGE EQUIPMENT DECONTAMINATION	Overall Risk Assessment Code (RAC) (Use highest code)	L
Project Location: Saw Mill River Station, Yonkers, NY		
Project Number: 446113		
Date Prepared: 04 March 2014		
Prepared by (Name/Title): Todd Belanger		
Reviewed by (Name/Title): Beth Badik		
Notes: (Field Notes, Review Comments, etc.) Hard hat, steel-toe boots, safety glasses, gloves, and high visibility vest. Ear plugs/muffs, splash goggles, hard hat, steel-toed boots, nitrile outer gloves and latex inter gloves, Tyvek coveralls or splash apron if necessary.		

Risk Assessment Code (RAC) Matrix

Severity	Probability				
	Frequent	Likely	Occasional	Seldom	Unlikely
Catastrophic	E	E	H	H	M
Critical	E	H	H	M	L
Marginal	H	M	M	L	L
Negligible	M	L	L	L	L

Step 1: Review each **"Hazard"** with identified safety **"Controls"** and determine RAC (See above)

"Probability" is the likelihood to cause an incident, near miss, or accident and identified as: Frequent, Likely, Occasional, Seldom or Unlikely.

"Severity" is the outcome/degree if an incident, near miss, or accident did occur and identified as: Catastrophic, Critical, Marginal, or Negligible

Step 2: Identify the RAC (Probability/Severity) as E, H, M, or L for each "Hazard" on AHA. Annotate the overall highest RAC at the top of AHA.

RAC Chart

E = Extremely High Risk
H = High Risk
M = Moderate Risk

Work Activities	Potential Hazards	Hazard Control Measures	RAC
Process items through decontamination in accordance with the SSHP	Site Hazardous Material Exposure	▪ Training and safety awareness of potential exposure to contaminates at the site and decontamination procedure. ▪ Appropriate PPE will be worn by decon personnel. ▪ Personnel will follow decontamination procedure	L
	Slips, Trips, Falls	▪ Workers will be aware of potentially slippery surfaces and tripping hazards. ▪ Workers will keep all areas clean and free of debris to deter any unnecessary trips and falls. ▪ Personnel will clean up all spills immediately. ▪ Personnel will notify the SSHO of any unsafe conditions.	L
	Heat and Cold Stress	▪ Implement the cold/heat stress control program. ▪ SSHO will monitor workers for Heat/Cold stress symptoms.	L
	Eye Injury	▪ PPE (safety glasses, etc.) will be worn.	L

Work Activities	Potential Hazards	Hazard Control Measures	RAC
Hot Water High Pressure Spray/Steam Clean	Hot Water Burns	▪ Prior to decontamination of large equipment, personnel will ensure that all other workers are outside of the decontamination areas. ▪ Personnel will wear appropriate PPE (e.g. gloves, tyvek, splash goggles, etc.).	L
	Injury and/or Damage to Personnel and Project Equipment	▪ Personnel will use caution in directing the spray/stream of the pressure washer. ▪ Personnel will ensure the workspace is clear of other personnel and equipment prior to operating a pressure washer. ▪ Personnel will not direct the pressure washer in the direction of any other personnel or equipment.	L
	Spill/Leak of contaminated Water	▪ Decontamination area will be designed to collect all contaminated wash/rinse water and to prevent the spread of run off. ▪ Berms and absorbent pads will be available for use in controlling spills.	L

Equipment to be Used	Training Requirements/Competent or Qualified Personnel name(s)	Inspection Requirements
1. Decontamination Equipment – a. Decontamination solution of 5% bleach b. Scrub Brushes c. 5-gal Decontamination Buckets d. Hand or high pressure sprayer(s) e. Detergent (Soap) f. Water 2. Designated Site vehicles will be equipped with the minimum - a. Map and Directions to site medical facility b. Project Emergency Contact Telephone Listing c. Serviceable First Aid Kit d. Serviceable 2A:10BC fire extinguisher 3. Other vehicles designated as personnel conveyance will be equipped with – a. Map and Directions to site medical facility b. Project Emergency Contact Telephone Listing 4. Forms of Communications a. Project supplied or personal Cellular Phone	Qualified Personnel 1. First Aid/CPR – SSHO and one other individual. 2. All personnel operating heavy equipment will provide proof of competency (documentation of training or experience) to the SSHO prior to operating the equipment. Training 1. Site-specific WP, SOP and AHA 2. OSHA 40 hour and applicable 8 hour, and medical surveillance 3. Equipment operation 4. Heat/Cold Stress 5. Biological hazards 6. Flora/Fauna endangered/threatened 7. Daily safety and operational briefing 8. Site visitor training	1. Initial (Site Selection) – General inspection of assembly area. Equipment will be inspected daily by operator prior to use in accordance with the manufacturer's instructions. If during inspection or during use, equipment fails to function properly, equipment is to be turned in for repair/replacement. 2. Daily- Housekeeping of assembly and work areas for debris and hazards. SSHO will perform audits and spot checks to verify compliance. SSHO will update site's MSDS files on all items, supplies and material brought onto site. Periodic communication checks between Field Office or SSHO and Field Crews, as deemed necessary, to ensure crew's status and relay emergency information. Field Office and SSHO will maintain a telephonic roster of all site personnel's cellular phone numbers to ensure a form of communication. In the event that a field crew fails to make a communications check, they will cease operations and relocate to re-establish communications link with the Field Office or SSHO. 3. Weekly – First Aid/CPR kit(s) and fire extinguishers 4. Final (Site Departure) – Inspection of the entire area to ensure the site is left in the same or better than when we arrived.

Training Acknowledgement:

Printed Name	Signature	Date

Activity/Work Task: PORTABLE TOOL DECONTAMINATION	Overall Risk Assessment Code (RAC) (Use highest code)	L
Project Location: Saw Mill River Station, Yonkers, NY		
Project Number: 446113		
Date Prepared: 04 March 2014		
Prepared by (Name/Title): Todd Belanger		
Reviewed by (Name/Title): Beth Badik		

Notes: (Field Notes, Review Comments, etc.) Hard hat, steel-toe boots, safety glasses, gloves, and high visibility vest. Ear plugs/muffs, splash goggles, hard hat, steel-toed boots, nitrile outer gloves and latex inter gloves, Tyvek coveralls or splash apron, if necessary.

Risk Assessment Code (RAC) Matrix

Severity	Probability				
	Frequent	Likely	Occasional	Seldom	Unlikely
Catastrophic	E	E	H	H	M
Critical	E	H	H	M	L
Marginal	H	M	M	L	L
Negligible	M	L	L	L	L

Step 1: Review each **"Hazard"** with identified safety **"Controls"** and determine RAC (See above)

"Probability" is the likelihood to cause an incident, near miss, or accident and identified as: Frequent, Likely, Occasional, Seldom or Unlikely.

"Severity" is the outcome/degree if an incident, near miss, or accident did occur and identified as: Catastrophic, Critical, Marginal, or Negligible

Step 2: Identify the RAC (Probability/Severity) as E, H, M, or L for each "Hazard" on AHA. Annotate the overall highest RAC at the top of AHA.

RAC Chart

E = Extremely High Risk
H = High Risk
M = Moderate Risk

Work Activities	Potential Hazards	Hazard Control Measures	RAC
General	Site Hazardous Material Exposure	▪ Training and safety awareness of potential exposure to contaminates at the site and decontamination procedures. ▪ Appropriate PPE will be worn (e.g., gloves, splash goggles, Tyvek, etc.). ▪ Personnel will follow decontamination procedures.	L
	Eye Injury	▪ PPE (safety glass, etc.) will be worn.	L
	Slips, Trips, Falls	▪ Workers will be aware of potentially slippery surfaces and tripping hazards. ▪ Workers will keep all areas clean and free of debris to deter any unnecessary trips and falls. ▪ Personnel will clean up all spills immediately. ▪ Personnel will notify the SSHO of any unsafe conditions.	L
Remove gross contamination with brush.	Damaging equipment or tools	▪ To clean instrumentation: follow manufacturer's instructions.	L

Work Activities	Potential Hazards	Hazard Control Measures	RAC
Place in decontamination bucket or rinse with decontamination solution	Spill/leakage	▪ Workers will have berms or spill absorbent pads nearby to prevent the spread of contaminated water. ▪ Decontamination area will be designed to minimize exposure and maintain spill containment.	L
Clean with wash solution	Chemical reaction with wash solution	▪ A fire extinguisher will be located in an accessible location on site. ▪ Review the chemicals of concern and use appropriate wash solution.	L
Rinse with water	Contamination remains	▪ Personnel will repeat proper decontamination procedure.	L
Hot Water High Pressure Spray/Steam Clean	Hot Water Burns	▪ Prior to decontamination of large equipment, personnel will ensure that all other workers are outside of the decontamination areas. ▪ Personnel will wear appropriate PPE (e.g. gloves, tyvek, splash goggles, etc.).	L
	Injury and/or Damage to Personnel and Project Equipment	▪ Personnel will use caution in directing the spray/stream of the pressure washer. ▪ Personnel will ensure the workspace is clear of other personnel and equipment prior to operating a pressure washer. ▪ Personnel will not direct the pressure washer in the direction of any other personnel or equipment.	L
	Spill/Leak of contaminated Water	▪ Decontamination area will be designed to collect all contaminated wash/rinse water and to prevent the spread of runoff. ▪ Berms and absorbent pads will be available for use in controlling spills.	L

Equipment to be Used	Training Requirements/Competent or Qualified Personnel name(s)	Inspection Requirements
1. Decontamination Equipment – a. Decontamination solution of 5% bleach b. Scrub Brushes c. 5-gal Decontamination Buckets d. Hand Sprayers e. Detergent (Soap) f. Water 2. Designated Site vehicles will be equipped with the minimum - a. Map and Directions to site medical facility b. Project Emergency Contact Telephone Listing c. Serviceable First Aid Kit d. Serviceable 2A:10BC fire extinguisher or greater extinguisher present 3. Other vehicles designated as personnel conveyance will be equipped with – a. Map and Directions to site medical facility b. Project Emergency Contact Telephone Listing 4. Forms of Communications a. Project supplied or personal Cellular Phone	Qualified Personnel 1. First Aid/CPR – SSHO and one other individual. 2. Site Manager Training 1. Site-specific WP, SOP and AHA 2. OSHA 40 hour and applicable 8 hour, and medical surveillance 3. Equipment operation 4. Heat/Cold Stress 5. Biological hazards 6. Flora/Fauna endangered/threatened 7. Daily safety and operational briefing 8. Site visitor training	1. Initial (Site Selection) – General inspection of assembly area. Equipment will be inspected daily by operator prior to use in accordance with the manufacturer's instructions. If during inspection or during use, equipment fails to function properly, equipment is to be turned in for repair/replacement. 2. Daily- Housekeeping of assembly and work areas for debris and hazards. SSHO will perform audits and spot checks to verify compliance. SSHO will update site's MSDS files on all items, supplies and material brought onto site. Periodic communication checks between Field Office or SSHO and Field Crews, as deemed necessary, to ensure crew's status and relay emergency information. Field Office and SSHO will maintain a telephonic roster of all site personnel's cellular phone numbers to ensure a form of communication. In the event that a field crew fails to make a communications check, they will cease operations and relocate to re-establish communications link with the Field Office or SSHO. 3. Weekly – First Aid/CPR kit(s) and fire extinguisher(s). 4. Final (Site Departure) – Inspection of the entire area to ensure the site is left in the same or better than when we arrived.

Training Acknowledgement:

Printed Name	Signature	Date

Activity/Work Task: SAMPLE COLLECTION	Overall Risk Assessment Code (RAC) (Use highest code)	L
Project Location: Saw Mill River Station, Yonkers, NY	**Risk Assessment Code (RAC) Matrix**	
Project Number: 446113		
Date Prepared: 04 March 2014		
Prepared by (Name/Title): Todd Belanger		
Reviewed by (Name/Title): Beth Badik		
Notes: (Field Notes, Review Comments, etc.) Nitrile gloves, safety glasses, steel toes boots, hard hat, and high visibility vest.		

Severity	**Probability**				
	Frequent	Likely	Occasional	Seldom	Unlikely
Catastrophic	E	E	H	H	M
Critical	E	H	H	M	L
Marginal	H	M	M	L	L
Negligible	M	L	L	L	L

Step 1: Review each **"Hazard"** with identified safety **"Controls"** and determine RAC (See above)

"Probability" is the likelihood to cause an incident, near miss, or accident and identified as: Frequent, Likely, Occasional, Seldom or Unlikely.

"Severity" is the outcome/degree if an incident, near miss, or accident did occur and identified as: Catastrophic, Critical, Marginal, or Negligible

Step 2: Identify the RAC (Probability/Severity) as E, H, M, or L for each "Hazard" on AHA. Annotate the overall highest RAC at the top of AHA.

RAC Chart

E = Extremely High Risk

H = High Risk

M = Moderate Risk

Work Activity	Potential Hazards	Hazard Control Measures	RAC
Sampling	Inhalation and contact with hazardous substances	• Provide field personnel with proper PPE based on the exposure hazards • Review hazardous properties of site contaminants and control measures, including PPE, prior to field operations • Position operator crosswind (i.e. perpendicular to the direction of the wind) ; stay upwind • Keep all sampling supplies and bottles upwind or crosswind • Minimize exposure to liquid IDW by containerizing and covering bailed groundwater. • Review MS	L
	Struck by/against flying particles, protruding objects, liquid splashes	• Wear safety glasses, gloves, and steel-toed safety boot at all times • Wear safety glasses and gloves when filling sample bottles and performing field test kit analyses.	L
	Back injuries; musculoskeletal disorders (MSD)	• Observe proper lifting/carrying techniques • Obey sensible lifting limits (50 lb. maximum per person for manual lifting) • Use mechanical lifting equipment (handcarts, trucks) or more than one person to move large, awkward loads	L

Work Activity	Potential Hazards	Hazard Control Measures	RAC
		• Avoid performing the same strenuous activity for extended periods.	
Sampling (Cont.)	Injuries from improper use of hand tools and equipment	• Maintain all tools in a safe, good working condition • Provide training on proper operation of tools and equipment • Keep guards in place during use • All power tools will have insulated handles, be electrically grounded, battery operated or double insulated • When using cutting tool, always cut away from body and hands • Take damaged or worn tools out of service	L
	Heat stress	• Provide fluids to prevent work dehydration • Give frequent breaks	L
	Slip, Trip, Fall, Loss of Balance	• Site safety briefing • Stay alert • Maintain firm footing • Use "buddy" system • Watch for obstacles	L
	Vehicle and heavy equipment traffic in work area	• All workers will follow the Traffic Control Plans and review it daily in tailgate meetings. • Operation of heavy equipment in accordance with the site-specific SOP. • Be alert when working around heavy equipment. • Ground guide for the backing of all vehicles. • No heavy equipment will be operated without a ground guide. • Barriers, warning signs, designated walkways, or other safeguards will be provided in accordance with the traffic control plan.. • Obtain the attention of the operator before moving into the area of the equipment. • High visibility apparel will be worn when working near roadways or heavy equipment.	L

Equipment to be Used	Training Requirements/Competent or Qualified Personnel name(s)	Inspection Requirements
1. Hand and Power Tools 2. Appropriate PPE for selection operation, at a minimum – a. Nitrile gloves b. Safety glasses c. Steel toes boots d. Hard hat e. High visibility safety vest f. Safety Glasses, when required g. Additional PPE to conduct other operations, as directed 3. Heavy Equipment, as needed or specified by WP or SSHP 4. Sampling Equipment, at a minimum a. Sampling Bowls and Spoons b. 6-mil plastic sheeting and bags c. Cleaning Solution, Water and Soap d. 5-gal Buckets e. Nitrile Gloves f. Supplied jars and shipping containers g. Miscellaneous sampling supplies 5. Designated Site vehicles will be equipped with the minimum - a. Map and Directions to site medical facility b. Project Emergency Contact Telephone Listing c. Serviceable First Aid Kit d. Serviceable 2A:10BC or greater fire extinguisher 6. Other vehicles designated as personnel conveyance will be equipped with – a. Map and Directions to site medical facility b. Project Emergency Contact 7. Forms of Communications a. Project supplied or personal Cellular Phone	<u>Qualified Personnel</u> 1. First Aid/CPR –SSHO and one other individual. 2. Site Manager 3. Drilling equipment shall be operated only by qualified (by training and experience) personnel who are authorized by their respective employer to operate subject equipment. Documentation of competency will be provided to the SSHO prior to the start of drilling operations <u>Training</u> 1. Site-specific WP, SOP and AHA 2. OSHA 40 hour and applicable 8 hour 3. Equipment operation 4. Heat/Cold Stress 5. Biological hazards 6. Flora/Fauna endangered/threatened 7. Daily safety and operational briefing 8. Site visitor training	<u>1. Initial (Site Selection)</u> – General inspection of assigned or designated area. Before any machinery or mechanized equipment is placed in use it shall be inspected and tested in accordance with the manufacturer's recommendations and shall be certified in writing by a competent person/mechanic to meet the manufacturer's recommendations. Equipment will be inspected daily by operator prior to use in accordance with the manufacturer's instructions. If during inspection or during use, equipment fails to function properly, equipment is to be turned in for repair/replacement. Prior to bringing earth drilling equipment on the job site, a survey shall be conducted to identify overhead electrical hazards and potential ground hazards, such as contact with unexploded ordnance, hazardous agents in the soil, or underground utilities. <u>2. Daily</u>- Housekeeping of assembly and work areas for debris and hazards. SSHO will perform audits and spot checks to verify compliance. Periodic communication checks between Field Office or SSHO and Field Crews, as deemed necessary, to ensure crew's status and relay emergency information. Field Office and SSHO will maintain a telephonic roster of all site personnel's cellular phone numbers to ensure a form of communication. In the event that a field crew fails to make a communications check, they will cease operations and relocate to re-establish communications link with the Field Office or SSHO. <u>3. Weekly</u> – First Aid/CPR kit(s) and fire extinguisher(s). <u>4. Final (Site Departure)</u> – Inspection of the entire area to ensure the site is left in the same or better than when we arrived.

Training Acknowledgement:

Printed Name	Signature	Date

Activity/Work Task: SAMPLE PROCESSING	Overall Risk Assessment Code (RAC) (Use highest code)					L
Project Location: Saw Mill River Station, Yonkers, NY	**Risk Assessment Code (RAC) Matrix**					
Project Number: 446113	**Severity**	**Probability**				
Date Prepared: 04 March 2014		Frequent	Likely	Occasional	Seldom	Unlikely
Prepared by (Name/Title): Todd Belanger	Catastrophic	E	E	H	H	M
	Critical	E	H	H	M	L
Reviewed by (Name/Title): Beth Badik	Marginal	H	M	M	L	L
	Negligible	M	L	L	L	L
Notes: (Field Notes, Review Comments, etc.) Hard hat, steel-toe boots, safety glasses, gloves, and high visibility vest. Ear plugs/muffs, if necessary.	Step 1: Review each **"Hazard"** with identified safety **"Controls"** and determine RAC (See above)					
	"Probability" is the likelihood to cause an incident, near miss, or accident and identified as: Frequent, Likely, Occasional, Seldom or Unlikely.	**RAC Chart**				
	"Severity" is the outcome/degree if an incident, near miss, or accident did occur and identified as: Catastrophic, Critical, Marginal, or Negligible	**E = Extremely High Risk**				
		H = High Risk				
	Step 2: Identify the RAC (Probability/Severity) as E, H, M, or L for each "Hazard" on AHA. Annotate the overall highest RAC at the top of AHA.	**M = Moderate Risk**				

Work Activities	Potential Hazards	Hazard Control Measures	RAC
Packing sample for off-site shipment to lab	Accidental breakage of glass bottles	▪ Wear cut-resistant gloves during packaging of glass bottles. ▪ Immediate clean-up of spills.	L
	Back Injury, muscle strain/stress	▪ Personnel will utilize proper lifting techniques or ask for help with moving/lifting objects.	L
	Hazardous Material Exposure	▪ Training and safety awareness of potential exposure to contaminates at the site and decontamination procedure. ▪ Appropriate PPE will be worn (e.g., safety glasses, gloves, etc.). ▪ Personnel will follow decontamination procedure. ▪ Screen for COCs with PID over samples and in workers breathing zone. ▪ Ventilate work area with fans or vents (as needed)	L

Work Activities	Potential Hazards	Hazard Control Measures	RAC
	Slips, Trips, Falls	▪ Workers will be aware of potentially slippery surfaces and tripping hazards. ▪ Workers will keep all areas clean and free of debris to deter any unnecessary trips and falls. ▪ Personnel will clean up all spills immediately. ▪ Personnel will notify the SSHO of any unsafe conditions	L
	Heat and Cold Stress	▪ The SSHO will implement the cold/heat stress control program as appropriate to conditions. ▪ SSHO will monitor workers for heat/cold stress symptoms.	L
	Eye Injury	▪ PPE (safety glasses, etc.) will be worn.	L

Equipment to be Used	Training Requirements/Competent or Qualified Personnel name(s)	Inspection Requirements
1. Appropriate PPE for selection operation, at minimum – a. Long Sleeve Shirt b. Long Legged Pants c. Sturdy Work Boots d. Gloves e. Safety Glasses, when required f. Hard Hat, when required g. High visibility safety vest, when required h. Ear plugs, when required i. Additional PPE to conduct other operations, as directed 2. Designated Site vehicles will be equipped with the minimum - a. Map and Directions to site medical facility b. Project Emergency Contact Telephone Listing c. Serviceable First Aid Kit d. Serviceable 2A:10BC or greater fire extinguisher 3. Other vehicles designated as personnel conveyance will be equipped with – a. Map and Directions to site medical facility b. Project Emergency Contact Telephone Listing 4. Forms of Communications a. Project supplied or personal cellular phone	Qualified Personnel 1. First Aid/CPR - SSHO and one other individual. Training 1. Site-specific WP, SOP and AHA 2. OSHA 40 hour and applicable 8 hour 3. Equipment operation 4. Heat/Cold Stress 5. Biological hazards 6. Flora/Fauna endangered/threatened 7. Daily safety and operational briefing 8. DOT Training for personnel handling hazardous materials 9. Only qualified personnel will be allowed to operate hand and power tools.	1. Initial (Site Selection) – General inspection of assembly area. Equipment will be inspected daily by operator prior to use in accordance with the manufacturer's instructions. If during inspection or during use, equipment fails to function properly, equipment is to be turned in for repair/replacement. 2. Daily- Housekeeping of assembly and work areas for debris and hazards. SSHO will perform audits and spot checks to verify compliance. SSHO will update site's MSDS files on all items, supplies and material brought onto site. Periodic communication checks between Field Office or SSHO and Field Crews, as deemed necessary, to ensure crew's status and relay emergency information. Field Office and SSHO will maintain a telephonic roster of all site personnel's cellular phone numbers to ensure a form of communications. In the event that a field crew fails to make a communications check, they will cease operations or relocate to re-establish communications link with the Field Office or SSHO. 3. Weekly – First Aid/CPR kit(s), fire extinguisher(s), vehicles and equipment. 4. Final (Site Departure) – Inspection of the entire area to ensure the site is left in the same or better than when we arrived.

Training Acknowledgement:

Printed Name	Signature	Date

Activity/Work Task: POWER/HAND TOOL OPERATION	Overall Risk Assessment Code (RAC) (Use highest code)	L
Project Location: Saw Mill River Station, Yonkers, NY		
Project Number: 446113		
Date Prepared: 04 March 2014		
Prepared by (Name/Title): Todd Belanger		
Reviewed by (Name/Title): Beth Badik		
Notes: (Field Notes, Review Comments, etc.) Hard hat, steel-toe boots, safety glasses, gloves, and high visibility vest. Ear plugs/muffs, if necessary.		

Risk Assessment Code (RAC) Matrix

Severity	Probability				
	Frequent	Likely	Occasional	Seldom	Unlikely
Catastrophic	E	E	H	H	M
Critical	E	H	H	M	L
Marginal	H	M	M	L	L
Negligible	M	L	L	L	L

Step 1: Review each **"Hazard"** with identified safety **"Controls"** and determine RAC (See above)

"Probability" is the likelihood to cause an incident, near miss, or accident and identified as: Frequent, Likely, Occasional, Seldom or Unlikely.

"Severity" is the outcome/degree if an incident, near miss, or accident did occur and identified as: Catastrophic, Critical, Marginal, or Negligible

Step 2: Identify the RAC (Probability/Severity) as E, H, M, or L for each "Hazard" on AHA. Annotate the overall highest RAC at the top of AHA.

RAC Chart

E = Extremely High Risk
H = High Risk
M = Moderate Risk

Work Activities	Potential Hazards	Hazard Control Measures	RAC
Using Power/Hand Tools.	Electrical Fires/Shock/Burns	▪ Use proper engineering controls when working with electricity (i.e., grounding, bonding, insulation, GFCI, guarding, etc.) ▪ Check insulation of wiring. ▪ Hand and power tools shall be used, inspected, and maintained in accordance with the manufacturer's instructions.	L
	Rain	▪ Be aware of work conditions and do not work in wet areas with live electricity	L
	Lightning	▪ Do not begin or continue work until lightning subsides for 20 minutes.	L

Work Activities	Potential Hazards	Hazard Control Measures	RAC
	Slips, Trips, Falls	▪ Workers will be aware of potentially slippery surfaces and tripping hazards. ▪ Work slowly during transit. Jumping, running, and horseplay are prohibited. ▪ Workers will keep all areas clean and free of debris to deter any unnecessary trips and falls. ▪ Clean up all spills immediately. ▪ Personnel will notify the SHSO of any unsafe conditions.	L
	Injury from Hand Tool Operation	▪ Ensure that all tools used onsite are in proper working order and are in good condition, clean, oil free, and have insulated grips. ▪ Do not leave hand tools lying around where they could become a hazard. ▪ Personnel to inform SHSO or Site Manger if tools require repair or replacement. ▪ Keep tools in non-conductive container and be aware of metal on tool belts. ▪ Take tools out of service and remove from work vicinity if they are not working correctly.	L
	Injury from Power Tool Operation	▪ All tools will be in good working order and properly grounded. ▪ No damaged equipment will be issued until repaired or replaced. ▪ When power operated tools are designed to accommodate guards, the guard must be in place on the tool. ▪ Do not overload electrical circuits and use a GFCI. ▪ Take tools out of service and remove from work vicinity if they are not working correctly. ▪ Follow operations and maintenance procedures for each piece of equipment used on site.	L

Equipment to be Used	Training Requirements/Competent or Qualified Personnel name(s)	Inspection Requirements
1. Hand and Power Tools, at a minimum a. Wrenches b. Multitool c. Screwdriver 2. Appropriate PPE for selection operation, at minimum – a. Long Sleeve Shirt b. Long Legged Pants c. Sturdy Work Boots d. Leather Gloves e. Safety Glasses, when required f. Hard Hat, when required g. High visibility safety vest, when required h. Steel-toed boots, as directed i. Additional PPE to conduct other operations, as directed 3. Designated Site vehicles will be equipped with the minimum - a. Map and Directions to site medical facility b. Project Emergency Contact Telephone Listing c. Serviceable First Aid Kit d. Serviceable 2A:10BC or larger fire extinguisher 4. Other vehicles designated as personnel conveyance will be equipped with – a. Map and Directions to site medical facility b. Project Emergency Contact Telephone Listing 5. Forms of Communications a. Project or personal cellular phone	<u>Qualified Personnel</u> 1. First Aid/CPR – SHSO and one other individual. 2. Site Manager <u>Training</u> 1. Site-specific WP, SOP and AHA 2. OSHA 40 hour and applicable 8 hour 3. Equipment operation 4. Heat/Cold Stress 5. Biological hazards 6. Flora/Fauna endangered/threatened 7. Daily safety and operational briefing 8. Site visitor training	<u>1. Initial (Site Selection)</u> – General inspection of assembly area. Equipment (tools) will be inspected daily by operator prior to use in accordance with the manufacturer's instructions. If during inspection or during use, equipment fails to function properly, equipment is to be turned in for repair/replacement. <u>2. Daily</u>- Housekeeping of assembly and work areas for debris and hazards. SHSO will perform audits and spot checks to verify compliance. SHSO will update site's MSDS files on all items, supplies and material brought onto site. Periodic communication checks between Field Office or SHSO and Field Crews, as deemed necessary, to ensure crew's status and relay emergency information. Field Office and SHSO will maintain a telephonic roster of all site personnel's cellular phone numbers to ensure a form of communication. In the event that a field crew fails to make a communications check, they will cease operations and relocate to re-establish communications link with the Field Office or SHSO. <u>3. Weekly</u> – First Aid/CPR kit(s), fire extinguisher(s), vehicles and equipment. <u>4. Final (Site Departure)</u> – Inspection of the entire area to ensure the site is left in the same or better than when we arrived.

Training Acknowledgement:

Printed Name	Signature	Date

Activity/Work Task: DRILLING, WELL INSTALLATION, WELL ABANDONMENT	Overall Risk Assessment Code (RAC) (Use highest code)	**M**
Project Location: Saw Mill River Station, Yonkers, NY	**Risk Assessment Code (RAC) Matrix**	
Project Number: 446113	**Severity** / **Probability**	
Date Prepared: 04 March 2014		
Prepared by (Name/Title): Todd Belanger		
Reviewed by (Name/Title): Beth Badik		
Notes: (Field Notes, Review Comments, etc.) Hard hat, steel-toe boots, safety glasses, gloves, and high visibility vest. Ear plugs/muffs, if necessary.		

Severity	Frequent	Likely	Occasional	Seldom	Unlikely
Catastrophic	E	E	H	H	M
Critical	E	H	H	M	L
Marginal	H	M	M	L	L
Negligible	M	L	L	L	L

Step 1: Review each **"Hazard"** with identified safety **"Controls"** and determine RAC (See above)

"Probability" is the likelihood to cause an incident, near miss, or accident and identified as: Frequent, Likely, Occasional, Seldom or Unlikely.

"Severity" is the outcome/degree if an incident, near miss, or accident did occur and identified as: Catastrophic, Critical, Marginal, or Negligible

Step 2: Identify the RAC (Probability/Severity) as E, H, M, or L for each "Hazard" on AHA. Annotate the overall highest RAC at the top of AHA.

RAC Chart

E = Extremely High Risk
H = High Risk
M = Moderate Risk

Work Activities	Potential Hazards	Hazard Control Measures	RAC
Drilling, Well Installation, and Well Abandonment	Failure of Equipment	• Proper site-specific safety training for operator and crew • Daily inspection to include: ▪ Vehicle/equipment condition ▪ Properly block and level machine ▪ Proper equipment storage ▪ Condition of all fittings, drive rods, and hydraulic lines ▪ Presence and check first aid kit and fire extinguisher	L
	Inhalation and Contact with Hazardous Substances or Vehicle Exhaust	• Provide workers proper skin, eye, and respiratory protection (as needed) based on the exposure hazards and vehicle exhaust present • Review hazardous properties of site contaminants and vehicle exhaust with workers before sampling operations begin • Orient operator cross-wind • Keep all sampling supplies and bottles upwind or cross-wind	L
	Contact with Utilities	• Use Underground Utility Avoidance procedures: ▪ Contact geophysical subcontractor to mark utilities	M

Work Activities	Potential Hazards	Hazard Control Measures	RAC
		▪ Have emergency telephone number available ▪ Mark known utilities • Maintain safe distance from overhead electrical lines (See Table below)	
	Struck by/Against Flying Particles, Protruding Objects, Liquid Splash	• Wear hard hats, safety glasses with side shields and steel-toed safety boots at all times. • Keep hands clear of rod prior to it being driven • Wear splash shields and safety goggles when cleaning, decontaminating drilling equipment	L
	High Noise Levels	• Use hearing protection when exposed to excessive noise levels (greater than 85 dBA) • The need to raise your voice at 1 foot or shout at 3 feet is a sign hear protection is required	L
	Musculoskeletal Disorders (MSD)	• Observe proper lifting techniques • Obey sensible lifting limits (50 lb. maximum per person manual lifting) • Use mechanical lifting equipment (hand carts, trucks) or more than one person to move large, awkward loads.	L
	Sharp Objects	• Use Geoprobe® tool or hook bladed utility knife to cut acetate sleeves • Maintain all tools in a safe condition • Keep guards in place during use • Always cut away from body and hands	L
	Caught In/Between Moving Parts	• Identify and understand parts of equipment which may cause crushing, pinching, rotating, or similar injuries • Assure guards are in place to protect from these parts of equipment during operation • Provide and use proper work glove when the possibility of pinching, or other injury may be caused by moving/handling large or heavy objects • Maintain all equipment in safe condition • Keep all guards in place during use • De-energize and lock-out machinery before maintenance or service • Do not wear loose clothing or jewelry	L
	Flammable, Explosive Atmospheres	• Monitor air with a PID during drilling • Turn engine off before refueling • Eliminate sources of ignition from the work area • Prohibit smoking in well drilling area • Provide a charged ABC fire extinguishers with a tag documenting inspections • Store flammable liquids in well ventilated areas • Prohibit storage of flammable liquids in plastic containers • Store combustible materials away from flammables • Separate flammables and oxidizers by 20 feet minimum	L

Work Activities	Potential Hazards	Hazard Control Measures	RAC
	Vehicle and heavy equipment traffic in work area	• All personnel will follow the traffic control plans-developed by the traffic control subcontractor. The traffic control plans will be reviewed by all workers during the site orientation training and in all morning tailgate meetings. • Barriers, warning signs, designated walkways, or other safeguards will be provided according to the traffic plans. • High visibility safety vest will be worn when working near roadways or heavy equipment. • Operation of heavy equipment in accordance with the HASP. • Be alert when working around heavy equipment. • Use ground guides for the backing of all vehicles. No heavy equipment will be operated without a ground guide. • Obtain the attention of the operator before moving into the area of the equipment.	L
	Heat Stress	• Monitor for heat stress in accordance with health and safety procedures • Provide fluids to prevent work dehydration • Give frequent breaks • Dress appropriately	L
	Slips, Trips, and Falls	• Good housekeeping	L

Minimum Clearance from Energized Overhead Electrical Line

Nominal System Voltage	Minimum Required Clearance
–Up to 50 kV	10 feet
51 - 200 kV	15 feet
201 - 350 kV	20 feet
351 - 500 kV	25 feet
501 - 650 kV	30 feet
651 - 800 kV	35 feet

Equipment to be Used	Training Requirements/Competent or Qualified Personnel name(s)	Inspection Requirements
1. Hand and Power Tools 2. Appropriate PPE for selection operation, at minimum – a. Hard hat b. Steel-toe boots c. Safety glasses d. Gloves e. High visibility safety vest f. Ear plugs/muffs, if necessary g. Additional PPE to conduct other operations, as directed 3. Heavy Equipment, as needed or specified by WP or SSHP 4. Air Monitoring Equipment (Photo Ionization Detector – PID) 5. Designated Site vehicles will be equipped with the minimum - a. Map and Directions to site medical facility b. Project Emergency Contact Telephone Listing c. Serviceable First Aid Kit d. Serviceable 2A:10BCor larger fire extinguisher 6. Other vehicles designated as personnel conveyance will be equipped with – a. Map and Directions to site medical facility b. Project Emergency Contact 7. Forms of Communications a. Project supplied or personal cellular phone	<u>Qualified Personnel</u> 1. First Aid/CPR – SSHO and one other individual. 2. Site Manager 3. Drilling equipment shall be operated only by qualified (by training and experience) personnel who are authorized by their respective employer to operate subject equipment. Proof of qualification will be provided to the SSHO prior to the start of drilling operations <u>Training</u> 1. Site-specific WP, SOP and AHA 2. OSHA 40 hour and applicable 8 hour 3. Equipment operation 4. Heat/Cold Stress 5. Biological hazards 6. Flora/Fauna endangered/threatened 7. Daily safety and operational briefing 8. Site visitor training 9. Only qualified personnel are allowed to operate hand and power tools	<u>1. Initial (Site Selection)</u> – General inspection of assigned or designated area. Prior to bringing earth drilling equipment on the job site a survey shall be conducted to identify overhead electrical hazards and potential ground hazards, such as contact with unexploded ordnance, hazardous agents in the soil, or underground utilities. Equipment will be inspected daily by operator prior to use in accordance with the manufacturer's instructions. If during inspection or during use, equipment fails to function properly, equipment is to be turned in for repair/replacement. <u>2. Daily</u>- Housekeeping of assembly and work areas for debris and hazards. SSHO will perform audits and spot checks to verify compliance. Periodic communication checks between Field Office or SSHO and Field Crews, as deemed necessary, to ensure crew's status and relay emergency information. Field Office and SSHO will maintain a telephonic roster of all site personnel's cellular phone numbers to ensure a form of communication. In the event that a field crew fails to make a communications check, they will cease operations and relocate to re-establish communications link with the Field Office or SSHO. <u>3. Weekly</u> – First Aid/CPR kit(s), fire extinguisher(s), vehicles and equipment. <u>4. Final (Site Departure)</u> – Inspection of the entire area to ensure the site is left in the same or better than when we arrived.

Training Acknowledgement:

Printed Name	Signature	Date

Activity/Work Task: DRUM MOVING / FILLING / EMPTYING	Overall Risk Assessment Code (RAC) (Use highest code)	L
Project Location: Saw Mill River Station, Yonkers, NY		
Project Number: 446113		
Date Prepared: 04 March 2014		
Prepared by (Name/Title): Todd Belanger		
Reviewed by (Name/Title): Beth Badik		
Notes: (Field Notes, Review Comments, etc.) Gloves, steel-toe boots, and high visibility vest.		

Risk Assessment Code (RAC) Matrix

Severity	Probability				
	Frequent	Likely	Occasional	Seldom	Unlikely
Catastrophic	E	E	H	H	M
Critical	E	H	H	M	L
Marginal	H	M	M	L	L
Negligible	M	L	L	L	L

Step 1: Review each **"Hazard"** with identified safety **"Controls"** and determine RAC (See above)

"Probability" is the likelihood to cause an incident, near miss, or accident and identified as: Frequent, Likely, Occasional, Seldom or Unlikely.

"Severity" is the outcome/degree if an incident, near miss, or accident did occur and identified as: Catastrophic, Critical, Marginal, or Negligible

Step 2: Identify the RAC (Probability/Severity) as E, H, M, or L for each "Hazard" on AHA. Annotate the overall highest RAC at the top of AHA.

RAC Chart

E = Extremely High Risk

H = High Risk

M = Moderate Risk

Work Activities	Potential Hazards:	Preventive or Corrective Measures:	RAC
Transfer drums to / from transport vehicle/fill drums/empty drums	Tripping hazards	Worker awareness of potential slippery surfaces and tripping hazards.	L
	Heat/cold stress injuries	Implement heat/cold stress control program.	L
	Vehicle and heavy equipment traffic in work area	Operation of heavy equipment in accordance with the SSHP. Be alert when working around heavy equipment. Ground guide for the backing of all vehicles. No heavy equipment will be operated without a ground guide. Barriers, warning signs, designated walkways, or other safeguards will be provided in accordance with the traffic control plan. All workers will follow the control plan and review it daily in tailgate meetings. High visibility safety vest will be worn when working near roadways or heavy equipment. If a forklifts is used to move drums, the folk lift cannot be loaded above its rated capacity. Under all travel conditions the forklift shall be operated at a speed that will permit it to be brought to a stop in a safe manner. On all grades the load and load engaging means shall be tilted back if applicable, and raised only as far as necessary to clear the road surface	L
	Noise	Hearing protection will be worn in hazardous noise areas.	L
	Injury from Hand Tool Operation	Personnel awareness of potential hazards from hand tool operation. SHSO will ensure that all tools used on site are in proper working order and are in good condition. Personnel to inform SHSO or project manager if tools require repair or replacement.	L

Work Activities	Potential Hazards:	Preventive or Corrective Measures:	RAC
	Back injury	Personnel will utilize proper lifting techniques, and team-lift techniques where needed. There is a 50-lb lift limit per individual. Containers exceeding this limit should be lifted by two or more individuals. Proper technique includes bending at the knees not the hip or back in order to support the weight of the load on legs.	L
	Operation of Motor Vehicle	Drivers will have a valid driver's license and will wear a seat belt at all times. Drivers are prohibited from using any communication devices (e.g., cell phones) while operating any motor vehicles. Personnel will practice defensive driving techniques. Adhere to Base speed limits.	L

Equipment to be Used	Training Requirements/Competent or Qualified Personnel name(s)	Inspection Requirements
1. Drum dolly and skid/steer loader or forklift with drum grappler. 2. Appropriate PPE for selection operation, at minimum – a. Long Sleeve Shirt b. Long Legged Pants c. Steel toed safety Work Boots d. Leather Gloves e. Safety Glasses, when required f. High visibility safety vest when required g. Additional PPE, as directed	Qualified Personnel 1. First Aid/CPR – SHSO and one other individual. 2. Site Manager 3. The forklift operator must be certified as having been trained and evaluated in accordance with 29 CFR 1910.178. 5. Only qualified personnel will be allowed to operate drum dolly and skid/steer loader or forklift with drum grappler. Training 1. Site-specific WP, SOP and AHA 2. OSHA 40 hour and applicable 8 hour 3. Equipment operation 4. Heat/Cold Stress 5. Biological hazards 6. Enrolled in a medical monitoring program 7. Current occupational physical and physician's certificate in accordance with 29 CFR 1910.120(f)	1. Initial (Site Selection) – All PPE will be inspected by workers prior to use. Before any machinery or mechanized equipment is placed in use it shall be inspected and tested in accordance with the manufacturer's recommendations and shall be certified in writing by a competent person/mechanic to meet the manufacturer's recommendations. 2. Daily – All machinery and equipment shall be inspected daily to ensure safe operating conditions. Inspections shall be performed by a competent person.

Training Acknowledgement:

Printed Name	Signature	Date

Activity/Work Task: HIGH PRESSURE WASHING	Overall Risk Assessment Code (RAC) (Use highest code)					L
Project Location: Saw Mill River Station, Yonkers, NY	**Risk Assessment Code (RAC) Matrix**					
Project Number: 446113	**Severity**	**Probability**				
Date Prepared: 04 March 2014		Frequent	Likely	Occasional	Seldom	Unlikely
Prepared by (Name/Title): Todd Belanger	Catastrophic	E	E	H	H	M
	Critical	E	H	H	M	L
Reviewed by (Name/Title): Beth Badik	Marginal	H	M	M	L	L
	Negligible	M	L	L	L	L
Notes: (Field Notes, Review Comments, etc.) Gloves, ear plugs/muffs, splash goggles, steel-toed boots, Tyvek coveralls or splash apron if necessary.	Step 1: Review each **"Hazard"** with identified safety **"Controls"** and determine RAC (See above)					
	"Probability" is the likelihood to cause an incident, near miss, or accident and identified as: Frequent, Likely, Occasional, Seldom or Unlikely.	**RAC Chart**				
	"Severity" is the outcome/degree if an incident, near miss, or accident did occur and identified as: Catastrophic, Critical, Marginal, or Negligible	**E = Extremely High Risk**				
		H = High Risk				
	Step 2: Identify the RAC (Probability/Severity) as E, H, M, or L for each "Hazard" on AHA. Annotate the overall highest RAC at the top of AHA.	**M = Moderate Risk**				

Work Activities	Potential Hazards	Hazard Control Measures	RAC
General	Site Hazardous Material Exposure	▪ Training and safety awareness of potential exposure to contaminates at the site and decontamination procedure. ▪ Appropriate PPE will be worn by decon personnel. ▪ Personnel will follow decontamination procedure	L
	Slips, Trips, Falls	▪ Workers will be aware of potentially slippery surfaces and tripping hazards. ▪ Workers will keep all areas clean and free of debris to deter any unnecessary trips and falls. ▪ Personnel will clean up all spills immediately. ▪ Personnel will notify the SHSO of any unsafe conditions.	L
	Heat and Cold Stress	▪ Implement the cold/heat stress control program. ▪ SHSO will monitor workers for Heat/Cold stress symptoms.	L
	Eye Injury	▪ PPE (safety glasses, goggles, etc.) will be worn.	L

Work Activities	Potential Hazards	Hazard Control Measures	RAC
Hot Water High Pressure Spray/Steam Clean	Hot Water Burns	▪ Prior to decontamination of large equipment, personnel will ensure that all other workers are outside of the decontamination areas. ▪ Personnel will wear appropriate PPE (e.g. gloves, tyvek, splash goggles, etc.).	L
	Injury and/or Damage to Personnel and Project Equipment	▪ Personnel will use caution in directing the spray/stream of the pressure washer. ▪ Personnel will ensure the workspace is clear of other personnel and equipment prior to operating a pressure washer. ▪ Personnel will not direct the pressure washer in the direction of any other personnel or equipment.	M
	Spill/Leak of contaminated Water	▪ Decontamination area will be designed to collect all contaminated wash/rinse water and to prevent the spread of runoff. ▪ Berms and absorbent pads will be available for use in controlling spills.	L

Equipment to be Used	Training Requirements/Competent or Qualified Personnel name(s)	Inspection Requirements
1. Power Washer 2. Hand and Power Tools 3. Appropriate PPE for selection operation, at minimum – a. Long Sleeve Shirt b. Long Legged Pants c. Sturdy Work Boots d. Leather Gloves e. Safety Glasses or goggles, f. Hard Hat, when required g. High visibility safety vest, when required h. Hearing Protection, as directed i. Steel-toes boots, if required j. Apron or tyvek as necessary k. Additional PPE to conduct other operations, as directed 5. Additional equipment to conduct other operations, that may include – a. Spill Containment System; Sumps; 6-mil plastic sheeting; scrub brushes; soap; cleaning solvent b. 55-gal poly drums for "grey water" collection 6. Designated Site vehicles will be equipped with the minimum - a. Map and Directions to site medical facility b. Project Emergency Contact Telephone Listing c. Serviceable First Aid Kit d. Serviceable 2-A:10BC or greater fire extinguisher 7. Forms of Communications a. Project or personal cellular phone	Qualified Personnel 1. First Aid/CPR – SHSO and one other individual. 2. Site Manager Training 1. Site-specific WP, SOP and AHA 2. OSHA 40 hour and applicable 8 hour 3. Equipment operation 4. Heat/Cold Stress 5. Biological hazards 6. Flora/Fauna endangered/threatened 7. Daily safety and operational briefing 8. Site visitor training	1. Initial (Site Selection) – General inspection of assembly area. Equipment will be inspected daily by operator prior to use in accordance with the manufacturer's instructions. If during inspection or during use, equipment fails to function properly, equipment is to be turned in for repair/replacement. 2. Daily- Housekeeping of assembly and work areas for debris and hazards. SHSO will perform audits and spot checks to verify compliance. SHSO will update site's MSDS files on all items, supplies and material brought onto site. Periodic communication checks between Field Office or SHSO and Field Crews, as deemed necessary, to ensure crew's status and relay emergency information. Field Office and SHSO will maintain a telephonic roster of all site personnel's cellular phone numbers to ensure a form of communication. In the event that a field crew fails to make a communications check, they will cease operations and relocate to re-establish communications link with the Field Office or SHSO. 3. Weekly – First Aid/CPR kit(s), fire extinguisher(s), vehicles and equipment. 4. Final (Site Departure) – Inspection of the entire area to ensure the site is left in the same or better than when we arrived.

Training Acknowledgement:

Printed Name	Signature	Date

Activity/Work Task: ACTIVITIES INVOLVED WITH PROJECT MOBILIZATION AND DEMOBILIZATION	Overall Risk Assessment Code (RAC) (Use highest code)	L
Project Location: Saw Mill River Station, Yonkers, NY		
Project Number: 446113		
Date Prepared: 04 March 2014		
Prepared by (Name/Title): Todd Belanger		
Reviewed by (Name/Title): Beth Badik		

Risk Assessment Code (RAC) Matrix

Severity	Probability				
	Frequent	Likely	Occasional	Seldom	Unlikely
Catastrophic	E	E	H	H	M
Critical	E	H	H	M	L
Marginal	H	M	M	L	L
Negligible	M	L	L	L	L

Notes: (Field Notes, Review Comments, etc.)
Hard hat, steel-toe boots, safety glasses, gloves, high visibility vest. Ear plugs/muffs, if necessary.

Step 1: Review each **"Hazard"** with identified safety **"Controls"** and determine RAC (See above)

"Probability" is the likelihood to cause an incident, near miss, or accident and identified as: Frequent, Likely, Occasional, Seldom or Unlikely.

"Severity" is the outcome/degree if an incident, near miss, or accident did occur and identified as: Catastrophic, Critical, Marginal, or Negligible

Step 2: Identify the RAC (Probability/Severity) as E, H, M, or L for each "Hazard" on AHA. Annotate the overall highest RAC at the top of AHA.

RAC Chart

E = Extremely High Risk
H = High Risk
M = Moderate Risk

Work Activities	Potential Hazards:	Hazard Control Measures:	RAC
Mobilization / Set up Work Area	Tripping hazards	Worker awareness of potential slippery surfaces and tripping hazards.	L
	Heat/cold stress injuries	Implement heat/cold stress control program. Dress appropriately. Provide adequate drinking water.	L
	Biological Hazard (ticks, bees, mosquitoes, spiders, etc.)	Personnel awareness of potential exposure to biological hazards. Wear appropriate clothing (hat, long-sleeve shirt, long pants, gloves, and boots) and insect repellants. Wear thick gloves when clearing plants or debris from work area.	L
	Operation of Motor Vehicle	Drivers will have a valid driver's license and will wear a seat belt at all times. Drivers are prohibited from using any communication devices (e.g., cell phones) while operating any motor vehicles. Personnel will be aware of road conditions and hazards. Personnel will practice defensive driving techniques. Adhere to speed limits.	L
	Vehicle and heavy equipment traffic in work area	Be aware of any vehicles or heavy equipment in area and be certain to wear a hard hat, safety glasses, and a high visibility safety vest when working around heavy equipment. Operation of heavy equipment in accordance with the APP. Establish arm and hand signals or radio communication with the equipment operator. Use of ground guides when vehicle(s) are not equipped with an audible warning device and/or has an obstructed view. No heavy equipment will be operated without a ground guide. Obtain the attention of the operator before moving into the area of the equipment. High visibility apparel will be worn when working near roadways or heavy equipment.	L
	Noise	Hearing protection will be worn in hazardous noise areas.	L

Work Activities	Potential Hazards:	Hazard Control Measures:	RAC
	Hand tools	All tools will be in good working order. No damaged equipment will be used until repaired or replaced. Damaged equipment must be tagged and taken out of service.	L
Demobilization / Restore site.	Tripping hazards	Worker awareness of potential slippery surfaces and tripping hazards.	L
	Heat stress injuries	Heat stress control program. Dress appropriately. Provide adequate drinking water.	L
	Biological Hazard (ticks, bees, mosquitoes, snakes, spiders, etc.)	Personnel awareness of potential exposure to biological hazards. Wear appropriate clothing (hat, long-sleeve shirt, long pants, gloves, and boots) and insect repellants. Wear thick gloves when clearing plants or debris from work area.	L
	Vehicle and heavy equipment traffic in work area	Be aware of any vehicles or heavy equipment in area and be certain to wear a hard hat, safety glasses, and a high visibility safety vest when working around heavy equipment. Operation of heavy equipment in accordance with the APP. Establish arm and hand signals or radio communication with the equipment operator. Use of ground guides when vehicle(s) are not equipped with an audible warning device and/or has an obstructed view. No heavy equipment will be operated without a ground guide. Obtain the attention of the operator before moving into the area of the equipment. High visibility safety vest will be worn when working near roadways or heavy equipment.	L
	Noise	Hearing protection will be worn in hazardous noise areas.	L
	Hand tools	All tools will be in good working order. No damaged equipment will be used until repaired or replaced. All safety guards designed on equipment will remain in place. If any safety device on equipment is missing, that piece of equipment will be placed out of service until it can be repaired or replaced	L

Equipment to be Used	Training Requirements/Competent or Qualified Personnel name(s)	Inspection Requirements
1. Hand and Power Tools 2. Appropriate PPE for selection operation, at minimum – a. Long Sleeve Shirt b. Long Legged Pants c. Sturdy Work Boots d. Leather Gloves e. Safety Glasses, when required f. Hard Hat, when required g. High visibility Safety Vest, when required h. Additional PPE to conduct other operations, as directed 3. Designated Site vehicles will be equipped with the minimum - a. Map and Directions to site medical facility b. Project Emergency Contact Telephone Listing c. Serviceable First Aid Kit d. Serviceable 2A:10BC or larger fire extinguisher 4. Other vehicles designated as personnel conveyance will be equipped with – a. Map and Directions to site medical facility b. Project Emergency Contact Telephone Listing 5. Forms of Communications a. Project supplied or personal Cellular Phone	Qualified Personnel 1. First Aid/CPR - SHSO and one other individual. 2. Site Manager 3. Certified Electrician 4. All personnel operating any mechanized equipment will provide proof of competency (documentation of training or experience) to the SHSO prior to operating the equipment. Training 1. Site-specific WP, SOP and AHA 2. OSHA 40 hour and applicable 8 hour 3. Equipment operation 4. Heat/Cold Stress 5. Biological hazards 6. Flora/Fauna endangered/threatened 7. Daily safety and operational briefing 8. Site visitor training 9. Only qualified personnel will be allowed to operate hand and power tools.	1. Initial (Site Selection) – General inspection of assembly area. Equipment will be inspected daily by operator prior to use in accordance with the manufacturer's instructions. If during inspection or during use, equipment fails to function properly, equipment is to be turned in for repair/replacement. 2. Daily- Housekeeping of assembly and work areas for debris and hazards. SHSO will perform audits and spot checks to verify compliance. SHSO will update site's MSDS files on all items, supplies and material brought onto site. Periodic communication checks between Field Office or SHSO and Field Crews, as deemed necessary, to ensure crew's status and relay emergency information. Field Office and SHSO will maintain a telephonic roster of all site personnel's cellular phone numbers to ensure a form of communication. In the event that a field crew fails to make a communications check, they will cease operations or relocate to re-establish communications link with the Field Office or SHSO. 3. Weekly – First Aid/CPR kit(s), fire extinguisher(s), vehicles and equipment. 4. Final (Site Departure) – Inspection of the entire area to ensure the site is left in the same or better than when we arrived.

Training Acknowledgement:

Printed Name	Signature	Date

Activity/Work Task: GROUNDWATER SAMPLING	Overall Risk Assessment Code (RAC) (Use highest code)	M
Project Location: Saw Mill River Station, Yonkers, NY	**Risk Assessment Code (RAC) Matrix**	
Contract Number: 446113		
Date Prepared: 04 March 2014		
Prepared by (Name/Title): Todd Belanger		
Reviewed by (Name/Title): Beth Badik		
Notes: (Field Notes, Review Comments, etc.) Nitrile gloves, safety glasses, steel toes boots, hard hat, high visibility apparel.		

Severity	**Probability**				
	Frequent	Likely	Occasional	Seldom	Unlikely
Catastrophic	E	E	H	H	M
Critical	E	H	H	M	L
Marginal	H	M	M	L	L
Negligible	M	L	L	L	L

Step 1: Review each **"Hazard"** with identified safety **"Controls"** and determine RAC (See above)

"Probability" is the likelihood to cause an incident, near miss, or accident and identified as: Frequent, Likely, Occasional, Seldom or Unlikely.

"Severity" is the outcome/degree if an incident, near miss, or accident did occur and identified as: Catastrophic, Critical, Marginal, or Negligible

Step 2: Identify the RAC (Probability/Severity) as E, H, M, or L for each "Hazard" on AHA. Annotate the overall highest RAC at the top of AHA.

RAC Chart

E = Extremely High Risk

H = High Risk

M = Moderate Risk

Work Activity	Potential Hazards	Hazard Control Measures	RAC
Sampling	Inhalation and contact with hazardous substances	• Provide field personnel with proper PPE based on the exposure hazards • Review hazardous properties of site contaminants and control measures, including PPE, prior to field operations • Orient operator cross-wind; stay upwind • Keep all sampling supplies and bottles upwind or cross-wind • Minimize exposure to liquid IDW by containerizing and covering bailed groundwater. • Review MS	L
	Struck by/against flying particles, protruding objects, liquid splashes	• Wear safety glasses, gloves, and steel-toed safety boot at all times • Wear safety glasses when cleaning or decontaminating equipment • Wear safety glasses and gloves when filling sample bottles and performing field test kit analyses.	L
	Back injuries; musculoskeletal disorders (MSD)	• Observe proper lifting/carrying techniques • Obey sensible lifting limits (50 lb. maximum per person for manual lifting) • Use mechanical lifting equipment (handcarts, trucks) or more than one person to move large, awkward loads • Avoid performing the same strenuous activity for extended periods.	M

Work Activity	Potential Hazards	Hazard Control Measures	RAC
Sampling (Cont.)	Injuries from improper use of hand tools and equipment	• Maintain all tools in a safe, good working condition • Provide training on proper operation of tools and equipment • Keep guards in place during use • All power tools will have insulated handles, be electrically grounded, or be double insulated • When using cutting tool, always cutting away from body and hands • Take damaged or worn tools out of service	**M**
	Biological Hazard (ticks, bees, mosquitoes, spiders, etc.)	Personnel awareness of potential exposure to biological hazards. Wear appropriate clothing (hat, long-sleeve shirt, long pants, gloves, and boots) and insect repellants. Wear thick gloves when clearing plants or debris from work area. Hazardous Plants -PPE for avoidance of hazardous plants (specifically Poison Ivy/Oak and Sumac) will consist of long sleeved shirts and long pants, or coveralls; safety glasses; leather gloves; and head cover such as a hard hat, baseball cap or head scarf. Daily protective controls will consist of: •Applying a protective barrier cream (such as Ivy X©) to potentially exposed skin at the beginning of each day; • Washing with poison ivy/oak oil cleanser (such as Tecnu©) (following directions on bottle) at breaks and the end of each field day, or as soon as a rash appears (do not apply to broken skin); • • Field personnel changing into clean clothing or removing coveralls and removing automotive seat covers before leaving the site each day; and Any other protective measures deemed appropriate	**M**
	Heat stress	• Provide fluids to prevent work dehydration • Give frequent breaks	**L**
	Slip, Trip, Fall, Loss of Balance	• Site safety briefing • Stay alert • Maintain firm footing • Use "buddy" system • Watch for obstacles	**L**
	Vehicle and heavy equipment traffic in work area	• All workers will follow the Traffic Control Plans and review it daily in tailgate meetings. • Operation of heavy equipment in accordance with the site-specific SOP. • Be alert when working around heavy equipment. • Ground guide for the backing of all vehicles. • No heavy equipment will be operated without a ground guide. • Barriers, warning signs, designated walkways, or other safeguards will be provided in accordance with the traffic control plan.. • Obtain the attention of the operator before moving into the area of the equipment. • High visibility apparel will be worn when working near roadways or heavy equipment.	**L**

Training Requirements:
All assigned employees are required to familiarize themselves with the contents of this AHA before starting a work activity and review it with their Supervisor during their Daily Safety Huddle.

Training Acknowledgement:

_____
_____
_____
_____

Attachment C
Written Hazard Communication Program and Material Safety Data Sheets

(Hazard Communication Program to be drafted and inserted into this plan by the party performing the work.)

APPENDIX H

SITE-WIDE INSPECTION FORM

Saw Mill River Station Site
Site-Wide Inspection Checklist

Date and Time: _____

Inspector (Qualified Environmental Professional, Professional Engineer, etc.) and Company:

_____

Weather Conditions: _____

Event Type (circle one): Scheduled (e.g., Annual) Non-Routine (After Severe Weather)

Identify Site Usage:

_____

_____

_____

Engineering Control Systems Inspection – Engineered Cover

Asphalt Inspection:

Please note any observations of breaches in the asphalt cap, which may include but are not limited to cracks, holes, indentations, vegetation growing through asphalt, etc

_____

Concrete Slab/Sidewalks Inspection:

Please note any observations of breaches in any concrete on the Site, which may include but are not limited to cracks, holes, indentations, vegetation growing through concrete etc.

_____

_____

Landscaped Areas Inspection:

Please note any observations of breaches in the soil cover, which may include but are not limited to holes and soil washout.

_____

_____

_____

1. **Any new buildings constructed on-Site?** ☐ Yes ☐ No

Describe (if yes): _____

_____

_____

2. **Is a Deed Restriction on file?** ☐ Yes ☐ No

Provide the following information for the Deed Restriction.

Book number: _____

Page number: _____ _____

Date Deed Restriction was filed in Registrar's office:

_____

11A. **Have any amendments and/or additional filings been recorded that may modify or supersede the Deed Restriction?**

If yes, explain:

_____

_____

Follow-up Corrective Action - if applicable, provide description and scheduled date of any required Corrective Action below.

_____

_____

_____

_____

_____

*For items that are checked, notify Consolidated Edison of New York, Inc. within 24 hours.

Inspector's Signature: _____ **Date:** _____

Reviewed by: _____ **Date:** _____