# **Spaulding Composites Site**

ERIE COUNTY, NEW YORK

# Site Management Plan

OU1, OU2, OU3, OU4, and OU6

NYSDEC Site Number: E915050

**Prepared for:** 



Erie County Industrial Development Agency 275 Oak Street Buffalo, New York



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# SITE MANAGEMENT PLAN

# 1.0 INTRODUCTION AND DESCRIPTION OF REMEDIAL PROGRAM

#### **1.1 INTRODUCTION**

This document is required as an element of the remedial program at the Spaulding Composites Site located at 310 Wheeler Street in the City of Tonawanda, New York under the New York State (NYS) Environmental Restoration Program (ERP) administered by the New York State Department of Environmental Conservation (NYSDEC). The Site was remediated in accordance with State Assistance Contract (SAC) # C303379, Site # E915050, which was executed on June 29, 2007. In addition to the remedial work performed under the SAC, portions of the Site were identified for remedial actions under the State Superfund and State Emergency Spill Response programs. These portions of the site were remediated by NYSDEC.

#### 1.1.1 General

The City of Tonawanda, Erie County and the Erie County Industrial Development Agency (ECIDA) entered into a SAC with the NYSDEC to remediate a 46-acre property located in the City of Tonawanda, New York. The Spaulding Fibre Steering Committee (Committee) is comprised by representatives of those three groups plus the Town of Tonawanda and Empire State Development Corporation. The SAC required the Remedial Party to investigate and remediate contaminated media at Operable Units 5, 6 and 7.

Remediation of the Site, completed over several years under several funding sources (e.g., State Superfund, Environmental Restoration Program, Standby Spill Contractor), was completed in October 2010 in conformance with the Record of Decision/Statement of Basis (ROD/SOB) issued by the NYSDEC in March 2003 for the State Superfund portion of the Site (Operable Units 1 thru 4) as amended by the Explanation of Significant Difference issued by the NYSDEC in March 2009, and the Record of Decision issued by the NYSDEC in March 2009 for Operable Unit 7 of the Environmental Restoration Program portion of the Site. Operable Units 5 and 6 of the Environmental Restoration Program portion of the Site were remediated in accordance with IRM Work Plans dated May 1, 2009 and June 25, 2009, respectively. No Further Action was specified in the Records of Decisions for OU7 and OU5, therefore, for the purposes of this Site Management Plan, the "Site" is defined as OU1, OU2, OU3, OU4 and OU6

Operable Units 1 thru 4 were remediated by NYSDEC under their State Superfund and Emergency Response Programs, while OU6 was remediated under the SAC. A figure showing

the Site location is provided as Figure 1. The boundaries of the Site are shown in Figure 2. The boundaries of the Site are more fully described in the metes and bounds Site description that is part of the Environmental Easement.

After completion of the remedial work, some contamination was left in the subsurface at this Site, which is hereafter referred to as "remaining contamination." This Site Management Plan (SMP) was prepared to manage remaining contamination at the Site until the Environmental Easement 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 LiRo Engineers, Inc., on behalf of ECIDA, in accordance with the requirements in NYSDEC DER-10 Technical Guidance for Site Investigation and Remediation, dated November 2009, and the guidelines provided by NYSDEC. This SMP addresses the means for implementing the Institutional Controls (ICs) and Engineering Controls (ECs) that are required by the Environmental Easement for the Site.

#### 1.1.2 Purpose

The Site contains contamination left after completion of the remedial actions. Engineering Controls have been incorporated into the Site remedy to control exposure to remaining contamination during the use of the Site to ensure protection of public health and the environment. An Environmental Easement granted to the NYSDEC, and recorded with the Erie County Clerk, will require compliance with this SMP and all ECs and ICs placed on the Site. The ICs place restrictions on Site use, and mandate maintenance, monitoring and reporting measures for all ECs and ICs. This SMP specifies the methods necessary to ensure compliance with all ECs and ICs required by the Environmental Easement for contamination that remains at the Site. This plan has been approved by the NYSDEC, and compliance with this plan is required by the grantor of the Environmental Easement 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 remaining contamination at the Site after completion of the Remedial Action, including: (1) implementation and management of all Engineering and Institutional Controls; and (2) performance of periodic inspections, certification of results, and submittal of Periodic Review Reports.

To address these needs, this SMP includes two plans: (1) an Engineering and Institutional Control Plan for implementation and management of EC/ICs; and (2) a Monitoring Plan for implementation of Site Monitoring.

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

It is important to note that:

- This SMP details the Site-specific implementation procedures that are required by the Environmental Easement. Failure to properly implement the SMP is a violation of the Environmental Easement, which is grounds for revocation of the Certificate of Completion (COC);
- Failure to comply with this SMP is also a violation of Environmental Conservation Law, 6NYCRR Part 375 and the SAC (Index #C303379; Site #E915050) for the Site, and thereby subject to applicable penalties.

#### 1.1.3 Revisions

Revisions to this plan will be proposed in writing to the NYSDEC's project manager. In accordance with the Environmental Easement 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 Site is located in the City of Tonawanda, County of Erie, New York and is identified as Section 52.08, Block 5, Part of Lots 87 and 88 on the Erie County Tax Map. The Site is an approximately 26-acre area bounded by Dodge and Enterprise Avenues and residential property to the north, Hackett Drive and commercial properties to the south, Wheeler Street and a mix of commercial and residential properties to the east, and vacant land (OU7), Hinds Street and a mix of commercial and residential properties to the west (see Figure 1). The boundaries of the Site are more fully described in Appendix B – Metes and Bounds.

#### 1.2.2 Site History

The Spaulding Composites Site has been subdivided into seven Operable Units (OUs) as shown on Figure 2. Operable Units 1 thru 4 are associated with the State Superfund portion of the Site, and consist of multiple Solid Waste Management Units (SWMUs) and Areas of Concern (AOCs). The SWMUs and AOCs were grouped into Operable Units based upon the presence of physical waste (OU1) or contaminant type (OUs 2 and 3). Operable Unit 4 consisted of multiple contaminants, and includes the remaining SWMUs and AOCs that required remediation. An operable unit represents a portion of the Site remedy that for technical or administrative reasons can be addressed separately to eliminate or mitigate a release, threat of release or exposure pathway resulting from the Site contamination. A Solid Waste Management Unit is a Resource Conservation and Recovery Act (RCRA) term that defines a discernible unit where solid or hazardous wastes have been placed at any time, or any area where solid wastes have been routinely and systematically released. An Area of Concern is also a RCRA term, and defines an area not known to be a SWMU, where hazardous waste and/or hazardous constituents are present,

or are suspected to be present, as a result of a release from the facility. Operable Units 5 thru 7 are associated with the Environmental Restoration Program (ERP) portion of the Site. These operable units were designated to facilitate the ERP Site Investigation; Operable Units 5 and 7 were not part of Spaulding's manufacturing activities and so were relatively uncontaminated. Operable Unit 6 includes the manufacturing portion of the Site. Operable Units 1 thru 4 are located within Operable Unit 6, but are not part of the Environmental Restoration Program.

The Operable Units at the Spaulding Composites Site, with associated SWMUs and AOCs, are defined as follows:

#### **OU1: Regulated Landfill Wastes (State Superfund)**

SWMU 7	Resin Drum Landfill;
SWMU 8	Laminant Dust Landfill;

#### **OU2: PCB-Contaminated Wastes (State Superfund)**

SWMU 11	Sludge Settling Pond;
SWMU 12	Sludge Settling Pond and Former Fuel Oil Tanks;
SWMU 23	Former Tank Farm Area;
SWMU 38	Therminol Building Area;
AOC 48	Transformer Explosion Area;

#### **OU3: Petroleum Contaminated Wastes (State Superfund)**

SWMU 13	Former Grinding Oil Tank and Sludge Settling Pond;
SWMU 36	Former Tank Farm Area;

#### **OU4: Multiple Contaminant Wastes (State Superfund)**

SWMU 3	Zinc Chloride Sludge Container Storage Area;
SWMU 5	Empty Drum Storage Dock;
SWMU 14	Sludge Settling Pond;
SWMU 26	Paper Sludge Land Application Area;
SWMU 35	Lab Waste Storage Area;
AOC 45	Rail Spur;
AOC 46	Drum Storage Dock;
AOC 47	Bulk Chemical Unloading Area;

#### OU5: Wheeler Street Parking Lot (Environmental Restoration Program)

#### OU6: Main Plant Area (Environmental Restoration Program)

#### **OU7: Hinds Street Area (Environmental Restoration Program)**

These operable units are shown on Figure 2, with the individual SWMUs and AOCs shown on Figure 3.

Remedies for State Superfund Operable Units 1 thru 4 are contained in a Record of Decision issued by the NYSDEC in March 2003 and in an Explanation of Significant Difference

issued by the NYSDEC in May 2009. Remedies for OU5 and OU6 are described in the Interim Remedial Measure Work Plans and the Record of Decision issued by NYSDEC in March 2011. The remedy for ERP Operable Unit 7 is contained in a Record of Decision issued by the NYSDEC in March 2009.

#### 1.2.2.1 Operational/Disposal History

Spaulding Composites (Spaulding) began operations as a manufacturer of vulcanized fiber, an early "plastic" made by treating paper with a zinc chloride solution. The paper used to produce vulcanized fiber was also manufactured at the Site. During the late 1940s to early 1950s, the plant began production of composite laminates (Spauldite®) that were made by impregnating natural fibers with phenolic resins (and later, melamine and epoxy resins and synthetic fibers). Many of the phenolic resins used in the production of Spauldite® were manufactured on-site. In the fall of 1992 Spaulding ceased manufacturing operations at the Site and commenced decommissioning activities of the plant. Spaulding, however, maintained a limited manpower staff until January 2004 to: (1) operate an on-site water treatment system; and (2) maintain the facility (e.g., lawn mowing and security).

Contamination of Site soils and groundwater (in isolated areas) resulted from a number of sources including: (1) historical leaks and spills (at least 17 incidents were reported between 1958 and 1994); (2) on-site waste disposal in pits excavated into native soils (the State Superfund Resin Drum and Laminant Dust Landfills); (3) the use of settling ponds to remove fine-particles from facility wastewater (four settling ponds were located throughout the Site); and (4) imported fill material (e.g., foundry sand, slag) used as subbase during building construction. In addition, a number of disposal pits were located inside plant buildings; these pits were cleaned during decommissioning activities following facility closure in 1992. Fill material, which includes slag, cinders and ash, has been used throughout Operable Units 5 and 6.

#### 1.2.2.2 Remedial History

In the late 1980s, a consultant under contract with the United States Environmental Protection Agency (USEPA) conducted a RCRA Facility Assessment (RFA) at the Site. This assessment identified 36 Solid Waste Management Units (SWMUs) and several potential Areas of Concern (AOCs). Several of these SWMUs are included in the Registry of Inactive Hazardous Waste Disposal Sites in New York State (Registry). The RFA Report included a summary of the analytical data for Site surface water, soil and groundwater that were obtained by NUS Corporation in April 1987 during a Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) Site Investigation.

Spaulding completed a number of remedial activities over the years to address contamination at the Site. In the late 1970s, the four settling lagoons (formerly Site Number 915050A; Class 5) were excavated and backfilled with clean fill. The contaminated sludge and soils were reportedly disposed of at Seaway Landfill in Tonawanda, New York. These lagoons were utilized from 1930 to 1972 to collect and settle out wet grinding wastes.

In August 1985, the Zinc Chloride Sludge and Drum Landfill (Site Number 915050D; delisted) was excavated. This area was a 60 cubic yard landfill located beneath the plant floor inside the main plant building and contained zinc chloride sludge contaminated with cadmium and lead, drummed lab chemicals and resin solvent mixtures. The pit was backfilled and a new concrete floor installed over it.

That same year Spaulding removed lead contaminated zinc hydroxide sludge from the Zinc Hydroxide Sludge Storage Tank (SWMU 24). The sludge was disposed of at a permitted off-site secure landfill. The storage tank and surrounding area were decontaminated with high pressure water.

The Paper Sludge Land Application Area (SWMU 26) was a 5,000 square yard area where paper sludge was spread on the ground to dry prior to disposal. In 1987 this area was closed and the remaining paper sludge removed.

Spaulding initiated decommissioning activities at the Site in August 1992 following plant closure. The majority of these activities were completed between September 1992 and February 1993 with the remaining decommissioning activities completed by mid 1995. These activities are documented in the "Plant Decommissioning Final Report" dated August 1995.

In early 1993, Spaulding constructed an on-site water treatment system to treat PCB contaminated water from the Spauldite® basement sump, the on-site K-Line storm sewer and other waste waters generated on-site. In October 1994, that portion of the K-Line sewer impacted by PCB contamination was isolated from the remaining K-Line system. Contaminated storm water from the isolated portion of the K-Line storm sewer was pumped to the on-site water treatment system and discharged to an off-site storm sewer. Prior to discharge, however, this water was tested to confirm that it achieved applicable PCB discharge limits (65 parts per trillion) as specified in the RCRA Corrective Action Order on Consent between Spaulding and the NYSDEC. Periodic sampling and analysis of waters from the isolated portion of the K-Line sewer (treatment system influent), the water treatment system effluent and the remaining (untreated) portions of the K-Line sewer system was conducted as part of Spaulding's storm water monitoring program.

In June 1993, a portion of the on-site K-Line storm sewer was flushed and the sediments removed in accordance with a NYSDEC approved work plan. This work was completed following the detection of PCBs in the K-Line storm sewer sediments at concentrations up to 1,065 parts per million (ppm). The removed sediments were dewatered, placed in roll-offs, and sent to Chemical Waste Management in Model City, New York for disposal.

On October 21, 1994, it was discovered that an out-of-service transformer had been vandalized, resulting in a spill of PCB transformer oil. The transformer had been staged in a building pending off-site transfer for disposal. All visible fluids were immediately cleaned up by Spaulding personnel and the affected ground outside the building covered with plastic. This area was subsequently excavated, with the contaminated soils placed in roll-offs for off-site disposal. After several unsuccessful attempts to clean the concrete floor inside the building, the floor was

broken up, placed in roll-offs, and sent to Chemical Waste Management in Model City, New York for disposal.

On December 21, 1994, Spaulding successfully plugged an on-site gas well. The well was inspected by the NYSDEC on January 10, 1995 with no detectable leaks observed. The NYSDEC formally approved this project on January 19, 1995.

To evaluate the contamination at the State Superfund portion of the Spaulding Composites Site, and to evaluate remedial alternatives to address the significant threat to human health and the environment posed by the presence of hazardous waste, Spaulding completed both a Remedial Investigation/RCRA Facility Investigation (RI/RFI) and a Feasibility Study/Corrective Measures Study (FS/CMS) at the Site. This was a joint project between the State CERCLA and RCRA programs, with overall NYSDEC management, coordination and oversight provided by CERCLA staff. To satisfy both programs, Spaulding decided to conduct a single investigation of the Site. The RI/RFI was conducted in 4 phases: the first phase was conducted between April and October 1995; the second phase between July and September 1996; the third phase between October and December 1998; and the fourth phase in August 1999. Reports entitled "RCRA Facility Investigation and Remedial Investigation" dated May 24, 1999; and "Limited Groundwater Sampling Program" dated August 30, 1999 were prepared by Spaulding's consultant and described the field activities and findings of the RI/RFI in detail.

In March 2003, a Record of Decision was issued by the NYSDEC for State Superfund Operable Units 1 thru 4.

On October 15, 2003, the United States Bankruptcy court approved a recovery plan for Spaulding that in part provided for the operation of the water treatment system until January 23, 2004. On that date, in order to protect public health and the environment, the NYSDEC took over the operation and maintenance of the system. The system was operated by a NYSDEC Spill Contractor until October 11, 2004 when the K-Line sewer was plugged and abandoned in place.

In January 2004, the NYSDEC began the remediation of Operable Unit 2 by excavating PCB contaminated soils. Approximately 6,800 tons of non-hazardous soils were transported to BFI in Niagara Falls, New York for disposal, while approximately 13,500 tons of hazardous soils were transported to CWM in Model City, New York for disposal. The remediation of Operable Unit 2, except for the Spauldite Sheet Basement, was completed in February 2007 at a cost of approximately \$3,000,000.

In March 2009 a No Action Record of Decision was issued by the NYSDEC for ERP Operable Unit 7 because surface and subsurface soils met the Part 375 residential use soil cleanup objectives.

In May 2009 an Explanation of Significant Difference (ESD) was issued by the NYSDEC for State Superfund Operable Units 1, 3 and 4. This ESD modified the remedy at OU3, and incorporated the Part 375 restricted residential soil cleanup objectives to be consistent with the intended future use of the Site.

In October 2009 the NYSDEC began the remediation of Operable Units 1, 3 and 4 by excavating contaminated soils. Approximately 30,000 tons of non-hazardous soils were transported to Modern Corporation in Model City, New York for disposal, while approximately 5,300 tons of hazardous soils were transported to CWM in Model City, New York for disposal. The remediation of Operable Units 1, 3 and 4 was completed in May 2010 at a cost of approximately \$3,335,000.

In December 2009 the NYSDEC began the remediation of the Spauldite Sheet Basement (remaining portion of Operable Unit 2) by excavating PCB contaminated soils. Approximately 1,600 tons of non-hazardous soils were transported to Allied Waste Niagara Falls Landfill, LLC in Niagara Falls, New York for disposal, while approximately 440 tons of hazardous soils were transported to CWM in Model City, New York for disposal. The remediation of Operable Unit 2 was completed in March 2010 at a cost of approximately \$305,000.

Operable Units 5 and 6 were remediated under an ERP Interim Remedial Measure. The remedial activities are detailed in the *Construction Completion Report, Operable Unit 5*, LiRo Engineers, Inc., November 2010 and the *Construction Completion Report, Operable Unit 6*, LiRo Engineers, Inc., December 2010. Approximately 67,000 tons of contaminated soil were removed from the Site as part of the IRM. The IRM for OU5 and OU6 was completed in October 2010 at a cost of approximately \$2,650,000.

#### **1.2.3 Geologic Conditions**

The geology and hydrogeology of the Spaulding Composites Site have prevented the offsite migration of contaminants via shallow groundwater and have prevented the regional bedrock aquifer from becoming impacted by Site related contaminants. At the Spaulding Composites Site four distinct geologic units exist. These units, in order of increasing depth, are summarized as follows:

- Fill consisting primarily of reworked silty clay with lesser amounts of sand and gravel. Concrete rubble, crushed stone, cinders, and minor amounts of wood debris, button ash, slag, asphalt millings, foundry sand, brick and miscellaneous waste were also encountered, often mixed into the reworked silty clay. The thickness of this unit typically ranges from 1 to 10 feet within the building footprint, and from 0 to 2 feet outside the building footprint;
- A glaciolacustrine deposit consisting primarily of reddish brown silty clay with a small sand component. This unit has a very low permeability (meaning that groundwater cannot easily move through it). The thickness of this unit ranges from 36.4 to 45.8 feet;
- A dense glacial till consisting of dark reddish brown to gray, silty clay with abundant rock fragments and gravel. This unit was observed in 3 of 4 deep boreholes, and is less than 5 feet in thickness; and

• Shale bedrock of the Camillus Shale Formation. This unit was encountered at depths ranging from 38.5 to 54.9 feet.

Shallow groundwater is sporadically encountered within the fill material. This water is perched (located) on top of the glaciolacustrine deposit because of this unit's low permeability. Small quantities of perched water, however, can move into the upper silty clay unit through desiccation cracks. Soil pore water, found in very small quantities, is largely bound to the soil particles of the upper, unsaturated portion of this deposit. As a result, this water has very low mobility.

The Camillus Shale Formation is part of a regional aquifer in the Erie-Niagara basin. Groundwater from this bedrock aquifer, however, is not utilized as a source of drinking water in the Tonawanda area because of naturally occurring high mineral content and the close proximity of the Niagara River, an important source of municipal drinking water throughout the Western New York area. Groundwater flow in the upper bedrock aquifer is to the north toward the Niagara River. An overburden groundwater flow figure is shown in Figure 4.

#### **1.3 SUMMARY OF REMEDIAL INVESTIGATION FINDINGS**

Several Site Investigations have been performed to characterize the nature and extent of contamination resulting from previous activities at the Site. The results of the investigations are summarized in the following sections. The following Remedial/Site Investigation Reports have been prepared for the Site:

Plant Decommissioning Final Report, Conestoga-Rovers and Associates, 1995.

RCRA Facility Investigation and Remedial Investigation, Spaulding Composites Company, Tonawanda, New York. Conestoga-Rovers and Associates, (Revised September) 1998.

Supplemental Remedial Investigation/RCRA Facility Investigation, Spaulding Composites Company, Tonawanda, New York. Leader Environmental Inc. May 1999

Limited Groundwater Sampling Program, Leader Environmental Inc. August 30, 1999

Site Investigation Report, Spaulding Fibre Site, Tonawanda, New York, LiRo Engineers, Inc. May 2008

Supplemental Site Investigation Report, Spaulding Fibre Site, Tonawanda, New York, LiRo Engineers, Inc. January 2009

Generally, the Site Investigations have shown that historic operations, spills and disposal practices have impacted soils with volatile organic compounds, semivolatile organic compounds, metals, and PCBs in OU1, OU2, OU3, OU4, and OU6. Due to the low permeability of the soil, groundwater impacts were limited in area (Figure 4). OU7 was found to be uncontaminated and contamination at OU5 was limited to PAHs and arsenic that were attributed to the character of the fill used there.

# **1.3.1** Summary of the Remedial Investigation/RCRA Facility Investigation (RI/RFI)

The purpose of the RI/RFI was to define the nature and extent of contamination in OU1, OU2, OU3 and OU4 resulting from previous waste handling practices at the site.

The RI/RFI was conducted in four phases: the first phase was conducted between April and October 1995; the second phase between July and September 1996; the third phase between October and December 1998; and the fourth phase in August 1999. Reports entitled RCRA Facility Investigation and Remedial Investigation Report, September 1998; Supplemental Remedial Investigation/RCRA Facility Investigation, May 24, 1999; and Limited Groundwater Sampling Program, August 30, 1999 were prepared by Spaulding=s consultant and describe the field activities and findings of the RI/RFI in detail.

The RI/RFI included the following activities:

- Collection and analysis of soil samples from 83 boreholes completed throughout the site, and at specific SWMUs and AOCs to further delineate the nature and extent of contamination;
- Collection and analysis of soil/waste samples from 6 test pits completed at SWMUs 7 and 8;
- Collection and analysis of sediment samples from a drainage ditch adjacent to SWMU 7;
- Excavation of 5 test pits in the utility bedding to determine if contaminants are migrating along these utilities;
- Excavation of test pits in a Former Tank Farm area (SWMU 36) to delineate the extent of contamination;
- Conversion of 17 boreholes to monitoring wells;
- Groundwater sampling and analysis from 20 wells (17 new wells and 3 existing wells);
- A push probe soil investigation around the Therminol Building (SWMU 38) to delineate the extent of contamination; and
- Inspection of off-site storm sewers for the presence of sediments (no sediment samples were collected since little or no sediments were observed).

Based upon the RI/RFI results, in comparison to the SCGs and potential public health and environmental exposure routes, 17 SWMUs and AOCs were identified as requiring remediation. The contamination and impacted environmental media associated with these areas are summarized below. More complete information can be found in the RI/RFI Reports.

#### <u>1.3.1.1 Soil</u>

Numerous surface and subsurface soil samples were collected during the RI/RFI, and reveal that these soils were extensively contaminated with organic and inorganic compounds (Table 1). A brief summary of this contamination follows. For clarity, this discussion is presented by operable unit, and differentiates between surface and subsurface soil contamination.

Surface soils at OU1 were contaminated with toluene, phenol, cresols (2-methylphenol and 3&4-methylphenol), di-n-butylphthalate, aniline, PCBs and zinc at concentrations that exceed the SCGs (Table 1). The primary contaminants in subsurface soils at OU1 are PCBs and zinc, which were detected at concentrations up to 68.0 parts per million (ppm) and 544.0 ppm, respectively (Table 1). The quantity of contaminated soil associated with this operable unit (approximately 200 cubic yards) was small compared to the total quantity of waste material that was remediated (approximately 2,500 cubic yards).

Approximately 1,900 cubic yards of surface and subsurface soils at OU2 were extensively contaminated with PCBs, with 83% of the surface soil samples and 45% of the subsurface soil samples containing PCBs at concentrations that exceed the SCGs. Concentrations of PCBs ranged from non-detect (ND) to 144,000 ppm (Table 1). Surface soils at this operable unit were also contaminated with dichlorobenzene, toluene, ethylbenzene and zinc at concentrations that exceed the SCGs. In addition to PCBs, trichlorobenzene, phenol, cresols, din-butylphthalate and zinc were also detected in subsurface soils at concentrations that exceed the SCGs.

Surface soils at OU3 were not contaminated; however, approximately 21,000 cubic yards of subsurface soils at this operable unit were contaminated with benzene, toluene, ethanol, methanol and petroleum (Table 1). Only the concentrations of benzene and toluene exceed the SCGs. SCGs, however, are not available for ethanol, methanol and petroleum products.

Surface soils at OU4 were contaminated with phenol, cresols, di-n-butylphthalate, aniline, PCBs and zinc at concentrations that exceed the SCGs (Table 1). These contaminants were also detected in the subsurface soils of this operable unit at concentrations that exceed the SCGs (Table 1). Approximately 9,000 cubic yards of contaminated soil associated with this operable unit required remediation.

#### 1.3.1.2. Sediments

Sediment samples from the drainage ditch adjacent to the Resin Drum Landfill (SWMU 7 of OU1) revealed the presence of several site related contaminants above the SCGs (Table 1). These contaminants include phenol, cresols, di-n-butylphthalate, aniline, PCBs and zinc. Surface soil SCGs were utilized for ditch sediment as surface water in this ditch is intermittent, the ditch does not harbor an aquatic environment and any exposures would be to site workers and trespassers through direct exposures.

PCB contaminated sediments were removed from the on-site K-Line storm sewer in June 1993. Sediments were not found in the off-site storm sewer along Gibson Street so samples could not be collected for analysis.

#### 1.3.1.3 Groundwater

Twenty on-site monitoring wells were sampled on at least two occasions during the RI/RFI. Groundwater contamination was detected in only three of these wells, with the most significant contamination associated with the Rail Spur (AOC 45 of OU4), an area where bulk chemicals were historically unloaded from rail tanker cars (Table 1). Groundwater in this area wa contaminated with benzene (2.8-3.2 parts per billion (ppb)), toluene (24-32 ppb), xylenes (16-18 ppb), phenol (100,000-190,000 ppb), cresols (160,000-270,000 ppb), methanol (6,800-10,000 ppb) and unknown hydrocarbons (25,000-26,000 ppb). Contamination was not detected in two downgradient wells along Wheeler Street, indicating that contaminants from AOC 45 were not migrating off-site at this location.

Contamination of groundwater within the Resin Drum Landfill (SWMU 7 of OU1) was also documented during the RI/RFI. This groundwater was significantly contaminated with tetrachloroethane (1,000 ppb), toluene (140,000 ppb), ethylbenzene (2,500 ppb), phenol (390,000 ppb), cresols (240,000 ppb), di-n-butylphthalate (570 ppb), aniline (370,000 ppb), ethanol (200,000 ppb), methanol (550,000 ppb) and zinc (5720 ppb). Groundwater contamination, however, was not detected in six shallow overburden wells that surround the landfill, indicating that the silty clay soils at the site have prevented the migration of contaminants from the landfill.

Low concentrations (below groundwater standards) of dichloroethene were detected in two upper bedrock monitoring wells installed at the site. Trichloroethene was also detected in one of these wells at a concentration below the groundwater standard.

#### 1.3.1.4 Surface Water

Surface water at the site occurs intermittently, primarily during rain events. Surface water samples from 9 former outfalls (where surface water leaves the site) and the drainage ditch immediately adjacent to the Resin Drum Landfill (SWMU 7 of OU1) did not exceed any of the surface water SCGs. The exception to this was storm water that entered the on-site K-Line storm sewer, which was contaminated with PCBs. This water was pumped to the on-site water treatment system before discharge to the off-site storm sewer.

#### 1.3.1. 5 Waste Materials

The only waste materials encountered during the RI/RFI were the drums in the Resin Drum Landfill (SWMU 7 of OU1) and the bags of dust in the Laminant Dust Landfill (SWMU 8 of OU1). The contaminants detected at these SWMUs are summarized in Table 1, and include toluene, trichloroethene, phenols, cresols, di-n-butylphthalate, methanol, ethanol, aniline and zinc.

#### **1.3.2** Summary of the Site Investigation (SI) and Supplemental SI

The purpose of the SI and Supplemental SI was to define the nature and extent of contamination in OU6 resulting from previous waste handling practices at the site.

The SI was conducted between June 2007 and October 2007, with a Supplemental Site Investigation completed during June 2008. The field activities and findings of the investigation are described in the SI and Supplemental SI Reports.

The following general activities were conducted during the SI and Supplemental SI of OU6:

- Completion of a passive soil gas survey under the buildings of Operable Unit 6 to identify potential source areas for further investigation during the SI;
- Completion of a geophysical survey to delineate areas that might contain metal debris, drums, underground storage tanks and/or utility corridors;
- Completion of soil borings to characterize soils, determine the depth to native soils and obtain samples for chemical analysis;
- Installation of monitoring wells to enhance the existing monitoring network and to facilitate groundwater sampling for chemical analysis;
- Excavation of test pits to characterize soils, determine the depth to native soils, investigate areas identified by the geophysical survey and obtain samples for chemical analysis;
- Collection and analysis of surface and subsurface soil samples to delineate the nature and extent of contamination;
- Collection and analysis of groundwater samples to evaluate the nature and extent of groundwater contamination; and
- Completion of a Site survey showing the locations of soil borings, test pits and monitoring wells.

Generally, the SI determined that waste/source materials were present at the Site and were impacting groundwater at localized areas (Figure 4).

Below is a summary of Site conditions when the SI was performed between June 2007 and October 2007 with the Supplemental Site Investigation completed during June 2008:

#### 1.3.2.1 Soil

Surface and subsurface soil samples were collected from OU6 during the SI and Supplemental SI. Surface soil samples were collected from a depth of 0 - 2 inches to assess direct human exposure to contaminated soil and fill. Subsurface soil samples were collected from a from a depth of 0 - 21 feet at OU6 to assess the nature and extent of contamination at these operable units.

The soil results which exceeded SCGs are summarized in Table 2. Relatively widespread soils contamination was identified for metals (particularly cadmium and zinc) and for PAHs. Relatively fewer exceedances were observed for PCBs, benzene, and di-n-butylphthalate.

#### 1.3.2.2 Groundwater

Groundwater samples collected from overburden wells at Operable Unit 6 during the SI revealed that Site groundwater is locally contaminated with both organic and inorganic compounds (Table 3). The locations of these samples are shown on Figure 4. Groundwater exceedances for VOCs were documented at wells MW-16 (cis-1,2-dichloroethene, trans-1,2-dichloroethene and vinyl chloride) and MW-43 (acetone, 2-butanone and 2-hexanone), while SVOC exceedances were documented at wells OW-B2 (bis(2-ethylhexyl)phthalate) and MW-43 (formaldehyde). Groundwater exceedances for metals were documented at wells OW-B2 (antimony), OW-3 (selenium), MW-43 (antimony and lead), MW-59 (arsenic, lead and thallium) and MW-A (antimony). These exceedances are shown on Figure 4.

#### 1.3.2.3 Soil Vapor

A passive soil gas survey within the footprint of the buildings was completed as the first step of the SI to determine the presence, identity, and relative concentration of contaminants in soil and/or groundwater at the Site. Survey results were used to identify potential contaminant source areas for further investigation during the SI. During this survey, 95 passive soil gas probes were installed. This investigation identified hot spots of benzene, total BTEX (benzene, toluene, ethylbenzene and xylene), trichloroethane and tetrachloroethene. The hot spots were investigated during the SI and Supplemental SI, with the results included in the Waste/Source Areas and Soil sections above.

Soil vapor contamination identified during the SI was addressed by the IRM completed at Operable Unit 6 (described in Section 1.4); excavation activities have removed contaminated soil and fill from the Site that were the source of the soil vapor contamination.

#### **1.4 SUMMARY OF REMEDIAL ACTIONS**

OU6 was remediated in accordance with the NYSDEC-approved *Interim Remedial Measure Work Plan – OU6* dated June 2009. OU1, OU3 and OU4 were remediated in accordance with the NYSDEC Remedial Design Contract Documents dated March 2009. OU2 was remediated as described in the Record of Decision/Statement of Basis (ROD/SOB) issued by the NYSDEC in March 2003.

The remedial work completed at the Site included the following activities:

1. Excavation of buried waste to approved off-site landfills for disposal.

- 2. Excavation of contaminated soil and fill that exceeded Restricted Residential Land Use SCGs. Excavated material was transported to approved off-site landfills for disposal.
- 3. Backfilling and re-grading with materials meeting Part 375 Restricted Residential criteria, placement of topsoil and seeding of the site.<del>.</del>
- 4. Execution and recording of an Environmental Easement to restrict land use, prevent use of Site groundwater without treatment and prevent future exposure to any contamination remaining at the Site.
- 5. Development and implementation of a Site Management Plan for long term management of remaining contamination as required by the Environmental Easement, which includes plans for: (1) Institutional and Engineering Controls, (2) monitoring, (3) reporting;

#### 1.4.1 Removal of Contaminated Materials from the Site

The soil cleanup objectives (SCOs) for the primary contaminants of concern (COCs) and applicable land use for this Site are provided in Table 4.

#### <u>1.4.1.1 OU1, OU3 and OU 4</u>

In October 2009, the NYSDEC began the remediation of Operable Units 1, 3 and 4. This remediation included the excavation, transportation and off-site disposal of contaminated soil and debris that exceeded the Part 375 restricted residential soil cleanup objectives. During the remediation approximately 30,000 tons of non-hazardous soil were transported to Modern Landfill in Model City, New York for disposal, while approximately 5,300 tons of hazardous soil were transported to CWM in Model City, New York for disposal. Post excavation (confirmatory) samples were collected as excavation progressed to ensure compliance with the Part 375 Restricted Residential Land Use SCGs. The final excavation limits and the locations of all confirmatory samples were surveyed and are shown on Figure 5. Excavated areas were backfilled with clean soil and the site was restored by placing a 4-inch topsoil layer that was seeded. The State Superfund remediation of Operable Units 1, 3 and 4 was completed in May 2010.

#### 1.4.1.2 OU2

In January 2004, the NYSDEC began the remediation of Operable Unit 2 by excavating PCB contaminated soils. Approximately 6,800 tons of non-hazardous soils were transported to BFI in Niagara Falls, New York for disposal, while approximately 13,500 tons of hazardous soils were transported to CWM in Model City, New York for disposal. Post excavation (confirmatory) samples were collected as excavation progressed to ensure compliance with the TAGM 4046 Soil Cleanup Objectives as required by the March 2006 ROD (remediation was completed before

promulgation of 6 NYCRR Part 375). The final excavation limits and the locations of all confirmatory samples were surveyed and are shown on Figure 5. Excavated areas were backfilled with clean soil. The remediation of Operable Unit 2, except for the Spauldite Sheet Basement, was completed in February 2007.

In December 2009 the NYSDEC began the remediation of the Spauldite Sheet Basement (remaining portion of Operable Unit 2) by excavating PCB contaminated soils. Approximately 1,600 tons of non-hazardous soils were transported to Allied Waste Niagara Falls Landfill, LLC in Niagara Falls, New York for disposal, while approximately 440 tons of hazardous soils were transported to CWM in Model City, New York for disposal. Post excavation (confirmatory) samples were collected as excavation progressed to ensure compliance with the Part 375 Restricted Residential Land Use SCGs. The final excavation limits and the locations of all confirmatory samples were surveyed and are shown on Figure 5. Excavated areas were backfilled with clean, crushed concrete or clean soil and the site was restored by placing a 4-inch topsoil layer that was seeded. The remediation of Operable Unit 2 was completed in March 2010.

#### <u>1.4.1.3 OU6</u>

Operable Unit 6 was remediated under an ERP Interim Remedial Measure. The remedial activities are detailed in the *IRM Work Plan – OU6* dated June 23, 2009. Approximately 65,900 tons of contaminated soil were removed from OU6 as part of the IRM. Post excavation (confirmatory) samples were collected as excavation progressed to ensure compliance with the Part 375 Restricted Residential Land Use SCGs. The final excavation limits and the locations of all confirmatory samples were surveyed and are shown on Figure 5. Excavated areas were backfilled with clean, crushed concrete or clean soil and the site was restored by placing a 4-inch topsoil layer that was seeded. The IRM for OU6 was completed in October 2010.

#### **1.4.2 Site-Related Treatment Systems**

No long-term treatment systems were installed as part of the Site remedy.

#### 1.4.3 Remaining Contamination

#### 1.4.3.1 OU1, OU3 and OU 4

The SCGs used for cleanup objectives in OU1, OU3, and OU4 are Part 375 Restricted Residential Land Use criteria. In isolated instances, confirmation samples exceeded the Restricted Residential SCGs. These exceedances are identified in Tables 58 through 67. The confirmation results were compared to Unrestricted Use SCOs and any exceedances are also identified in Tables 58 through 67. Figures 6 through 6C show the locations where contamination remains in excess of the Unrestricted Use SCOs. Figures 7 through 7C show the locations where contamination remains in excess of the Restricted Residential Use SCGs.

#### <u>1.4.3.2 OU2</u>

The IRM of OU2 began in January 2004 and included the excavation, transportation and off-site disposal of PCB contaminated soil and debris that exceeded the TAGM 4046 soil cleanup objectives as specified in the 2003 Record of Decision. Because all other portions of the Site were remediated to Part 375 Restricted Residential criteria the confirmation results from the IRM work are compared to the Restricted Residential criteria in Tables 47 through 57. The confirmation results were compared to Unrestricted Use SCOs and any exceedances are also identified in Tables 47 through 57. Figures 6 through 6C show the locations where contamination remains in excess of the Unrestricted Use SCOs. Figures 7 through 7C show the locations where contamination remains in excess of the Restricted Residential Use SCGs.

#### <u>1.4.3.4 OU6</u>

The SCGs used for cleanup objectives in OU6 are Part 375 Restricted Residential Land Use criteria. The SCGs were achieved for nearly all IRM soil confirmation samples in OU6. In isolated instances, confirmation samples exceeded the Restricted Residential SCGs. These exceedances are identified in Tables 5 through 46. In addition, several locations (32N, 52N, 52.1F, 58.1N, 79N, 82F, and P-94) that were sampled during the SI and Supplemental SI and were not part of the IRM contained exceedances of the Restricted Residential SCGs. These locations were not included in the remedial program because the exceedances were marginal and/or the exceedances are also identified in Tables 5 through 46. Figures 6 through 6C show the locations where contamination remains in excess of the Unrestricted Use SCOs. Figures 7 through 7C show the locations where contamination remains in excess of the Restricted Residential Use SCGs.

# 2.0 ENGINEERING AND INSTITUTIONAL CONTROL PLAN

#### **2.1 INTRODUCTION**

#### 2.1.1 General

Since limited remaining contaminated soil exists beneath the Site, Engineering Controls and Institutional Controls (EC/ICs) are required to protect human health and the environment. This Engineering and Institutional Control Plan describes the procedures for the implementation and management of all EC/ICs at the Site. The EC/IC Plan is one component of the SMP and is subject to revision by NYSDEC. For the purposes of this EC/IC Plan; OU1, OU2, OU3, OU4 and OU6 are collectively referred to as OU6.

#### 2.1.2 Purpose

This plan provides:

- A description of all EC/ICs on the Site;
- The basic implementation and intended role of each EC/IC;
- A description of the key components of the ICs set forth in the Environmental Easement;
- 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 EC/ICs, such as the implementation of the Excavation Work Plan for the proper handling of remaining contamination 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 EC/ICs required by the Site remedy, as determined by the NYSDEC.

#### 2.2 ENGINEERING CONTROLS

#### 2.2.1 Engineering Control Systems

#### 2.2.1.1 Soil Cover

A site cover currently exists at OU6 and will be maintained to allow for restricted residential use of the site as a component of any site redevelopment. The future OU6 cover will consist either of the structures such as buildings, pavement, sidewalks comprising the site development or a soil cover in areas where the upper two feet of exposed surface soil exceeds the

restricted residential soil cleanup objectives (SCOs). The areas requiring cover maintenance are shown on Figure 7D. Where the OU6 soil cover is required it will be a minimum of two feet of soil, meeting SCOs for cover material as set forth in 6 NYCRR Part 375-6.7(d) for Restricted Residential use. The Excavation Work Plan that appears in Appendix A outlines the procedures required to be implemented in the event that any underlying remaining contamination is disturbed.

#### 2.3 INSTITUTIONAL CONTROLS

A series of Institutional Controls is required by the ROD to: (1) implement, maintain and monitor Engineering Control systems; (2) prevent future exposure to remaining contamination by controlling disturbances of the subsurface contamination; and, (3) limit the use and development of the Site to Restricted Residential or uses with less stringent requirements (i.e., commercial) only. Adherence to these Institutional Controls on the Site is required by the Environmental Easement and will be implemented under this Site Management Plan. These Institutional Controls are:

- Compliance with the Environmental Easement and this SMP by the Grantor and the Grantor's successors and assigns;
- All Engineering Controls must be maintained as specified in this SMP;
- All Engineering Controls on the Controlled Property must be inspected at a frequency and in a manner defined in the SMP.
- Data and information pertinent to Site Management of the Controlled Property must be reported at the frequency and in a manner defined in this SMP;

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

The Site has a series of Institutional Controls in the form of Site restrictions. Adherence to these Institutional Controls is required by the Environmental Easement. Site restrictions that apply to the Controlled Property are:

- The property may only be used for Restricted Residential or uses with less stringent requirements (i.e., commercial) use provided that the long-term Engineering and Institutional Controls included in this SMP are employed.
- The property may not be used for a higher level of use, such as residential use, without additional remediation and amendment of the Environmental Easement, as approved by the NYSDEC;
- All future activities on the property that will disturb remaining contaminated 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;
- The Site owner or remedial party will submit to NYSDEC a written statement that certifies, under penalty of perjury, that: (1) controls employed at the Controlled Property are unchanged from the previous certification or that any changes to the controls were approved by the NYSDEC; and, (2) nothing has occurred that impairs the ability of the controls to protect public health and environment or that constitute a violation or failure to comply with the SMP. NYSDEC retains the right to access such Controlled Property at any time in order to evaluate the continued maintenance of any and all controls. This certification shall be submitted annually, or an alternate period of time that NYSDEC may allow and will be made by an expert that the NYSDEC finds acceptable.

#### 2.3.1 Excavation Work Plan

The Site has been remediated for Restricted Residential use. Any future intrusive work that will penetrate the existing soil cover, or potentially encounter or disturb the remaining contamination, will be performed in compliance with the Excavation Work Plan (EWP) that is attached as Appendix A to 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 Community Air Monitoring Plan (CAMP) prepared for the Site. A sample HASP is attached as Appendix D to this SMP that is in current compliance with DER-10, and 29 CFR 1910, 29 CFR 1926, and all other applicable Federal, State and local regulations. 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 with the notification provided in Section A-1 of the EWP. 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).

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 excavation de-water, control of runoff from open excavations into remaining contamination, 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 engineering controls described in this SMP.

#### 2.4 INSPECTIONS AND NOTIFICATIONS

#### 2.4.1 Inspections

A comprehensive Site-wide inspection will be conducted annually. The inspection will determine and document the following:

- Compliance with requirements of this SMP and the Environmental Easement;
- If Site records are complete and up to date; and

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

#### 2.4.2 Notifications

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

- 60-day advance notice of any proposed changes in Site use that are required under the terms of the State Assistance Contract (SAC), 6NYCRR Part 375, and/or Environmental Conservation Law.
- 7-day advance notice of any proposed ground-intrusive activities pursuant to the Excavation Work Plan.
- Follow-up status reports on actions taken to respond to any emergency event requiring ongoing responsive action shall be submitted to the NYSDEC within 45 days and shall describe and document actions taken to restore the effectiveness of the ECs.

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 State Assistance Contract (SAC) 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 or 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 NYSDEC – Division of Environmental Remediation. These emergency contact lists must be maintained in an easily accessible location at the Site.

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

#### Table 68: Emergency Contact Numbers

#### Table 69: Other Contact Numbers

NYSDEC – Division of Environmental Remediation	(716) 851-7220
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\* Note: Contact numbers subject to change and should be updated as necessary

#### 2.5.2 Map and Directions to Nearest Health Facility

Site Location: Spaulding Composites Site 310 Wheeler Street, Tonawanda, NY

Nearest Hospital Name: Kenmore Mercy Hospital

Hospital Location: 2950 Elmwood Avenue, Buffalo, NY 14217

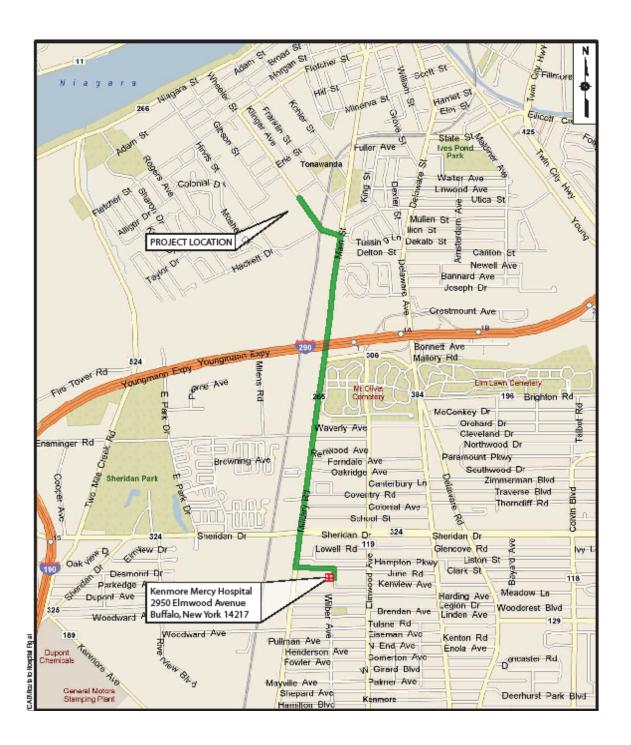
Hospital Telephone: 716-447-6100

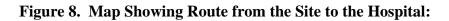
Directions to the Hospital:

- 1. Go Southeast on Wheeler Street (0.4 miles).
- 2. Turn right (South) onto SR-265 (Main St/Military Rd).
- 3. Continue to follow SR-265 (Main St/Military Rd) (1.8 miles).
- 3. Hospital is on the left immediately following Hampton Parkway.

Total Distance: 2.2 miles

Total Estimated Time: 6 minutes





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#### **2.5.3 Response Procedures**

As appropriate, the fire department and other emergency response groups will be notified immediately by telephone of the emergency. The emergency telephone number list is found at the beginning of this Contingency Plan (Table 68).

## **3.0 SITE MONITORING PLAN**

#### **3.1 INTRODUCTION**

The Site remedy does not require a Site Monitoring Plan; therefore, it is not included in this SMP.

## 4.0 OPERATION AND MAINTENANCE PLAN

#### **4.1 INTRODUCTION**

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. INSPECTIONS, REPORTING AND CERTIFICATIONS

#### **5.1 SITE INSPECTIONS**

#### **5.1.1 Inspection Frequency**

At a minimum, a Site-wide inspection will be conducted annually.

#### 5.1.2 Evaluation of Records and Reporting

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

- EC/ICs are in place, are performing properly, and remain effective;
- The Site remedy continues to be protective of public health and the environment and is performing as designed in the RAWP and FER

#### 5.2 CERTIFICATION OF ENGINEERING AND INSTITUTIONAL CONTROLS

For each engineering and institutional control identified for the Site, I certify that all of the following statements are true:

- The control employed at this Site is unchanged from the date the control was put in place, or last approved by the Department;
- 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 Department 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 environmental easement.
- 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, [name], of [business address], am certifying as [Owner or Owner's Designated Site Representative] [and I

have been authorized and designated by all Site owners to sign this certification] for the Site.

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 third year, beginning eighteen months after the Certificate of Completion is issued. 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. The report will be prepared in accordance with NYSDEC DER-10 and submitted within 45 days of the end of each certification period. Media sampling results will also be incorporated into the Periodic Review Report. The report will include:

- Identification, assessment and certification of all ECs/ICs required by the remedy 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 summary of any information generated during the reporting period with comments and conclusions;
- Results of all analyses, copies of all laboratory data sheets, and the required laboratory data deliverables for all samples collected during the reporting period will be submitted electronically in a NYSDEC-approved format;
- A Site evaluation, which includes the following:
  - The compliance of the remedy with the requirements of the Site-specific RAWP, ROD or Decision Document;
  - Any new conclusions or observations regarding Site contamination based on inspections or data generated by the Monitoring Plan for the media being monitored;
  - Recommendations regarding any necessary changes to the remedy and/or Monitoring Plan; and
  - The overall performance and effectiveness of the remedy.

The Periodic Review Report will be submitted in hard-copy and electronic formats to the NYSDEC Regional Office in which the Site is located. Reports will be sent to the following individuals:

Glenn May (hard-copy and electronic)

Division of Environmental Remediation New York State Department of Environmental Conservation 270 Michigan Avenue Buffalo, New York 14203 (716) 851-7220 gmmay@gw.dec.state.nv.us Brian Sadowski (electronic) Division of Environmental Remediation New York State Department of Environmental Conservation 270 Michigan Avenue Buffalo, New York 14203 (716) 851-7220

bpsadows@gw.dec.state.ny.us

#### **5.4 CORRECTIVE MEASURES PLAN**

If any component of the remedy is found to have failed, or if the periodic certification cannot be provided due to the failure of an institutional or engineering control, 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.

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# Table 1

# REMEDIAL INVESTIGATION CONTAMINATION SUMMARY SPAULDING COMPOSITES SITE SITE MANAGEMENT PLAN

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Media	Class	Contaminant of Concern	Concentration Range (ppm)*	Frequency of Exceeding SCGs	SCG (ppm)*
		Operable Ur	nit 1		
Waste	Volatile	Toluene	160.0 - 8,900	6/6	1.5
	Organic Compounds	Trichloroethene	ND - 5,900	1/6	0.7
	Semivolatile Organic	Phenol	38.0 - 2,000	6/6	0.03
	Compounds	Cresols **	ND - 1,200	9/12	0.1/0.9
		Di-n-butylphthalate	ND - 5,600	4/6	8.1
		Aniline	ND - 3,100	3/6	0.1
	PCBs	PCBs	ND - 0.72	0/6	10.0
	Other	Ethanol	ND - 3,100	N/A	NS
	Organic Compounds	Methanol	ND - 3,300	N/A	NS
	Metals	Zinc	ND - 617	3/6	SB (95)
Surface Soil	Volatile Organic Compounds	Toluene	ND - 44.0	1/3	1.5
		Trichloroethene	ND - 0.67	0/3	0.7
	Semivolatile Organic Compounds	Phenol	1.4 - 8.0	3/3	0.03
		Cresols **	0.31 - 8.8	6/6	0.1/0.9
		Di-n-butylphthalate	11.0 - 29.0	3/3	8.1
		Aniline	ND - 3.2	2/3	0.1
	PCBs	PCBs	0.032 - 41.0	5/6	1.0
	Other Organic	Ethanol	ND	N/A	NS
	Compounds	Methanol	ND	N/A	NS
	Metals	Zinc	262.0 - 1,160	3/3	SB (95)
Subsurface Soil	Volatile	Toluene	ND - 0.002	0/14	1.5
	Organic Compounds	Trichloroethene	ND	0/14	0.7
	Semivolatile	Phenol	ND - 0.46	2/14	0.03
	Organic Compounds	Cresols **	ND - 0.73	1/28	0.1/0.9
		Di-n-butylphthalate	ND - 0.69	0/14	8.1
		Aniline	ND	0/14	0.1
	PCBs	PCBs	ND - 68.0	4/22	10.0

# REMEDIAL INVESTIGATION CONTAMINATION SUMMARY SPAULDING COMPOSITES SITE SITE MANAGEMENT PLAN

Media	Class	Contaminant of Concern	Concentration Range (ppm)*	Frequency of Exceeding SCGs	SCG (ppm)*
		Operable Unit 1 (C	continued)		
Subsurface Soil	Other	Ethanol	ND	N/A	NS
(continued)	Organic Compounds	Methanol	ND	N/A	NS
	Metals	Zinc	49.8 - 544.0	4/14	SB (95)
Sediment	Volatile	Toluene	ND	0/3	1.5
(ditch adjacent to SWMU 7)	Organic Compounds	Trichloroethene	ND	0/3	0.7
	Semivolatile Organic	Phenol	1.6 - 5.4	3/3	0.03
	Compounds	Cresols **	0.49 - 2.4	5/6	0.1/0.9
		Di-n-butylphthalate	27.0 - 98.0	3/3	8.1
		Aniline	ND - 2.5	1/3	0.1
	PCBs	PCBs	3.5 - 11.0	3/3	1.0
	Other Organic Compounds	Ethanol	ND	N/A	NS
		Methanol	ND	N/A	NS
	Metals	Zinc	1,970 - 7,730	3/3	SB (95)
Groundwater	Volatile	Tetrachloroethane	ND - 1,000	1/17	5.0
(includes groundwater	Organic Compounds	Toluene	ND - 140,000	1/17	5.0
within landfill of SWMU 7)		Trichloroethene	ND - 1.2	0/17	5.0
,		Ethylbenzene	ND - 2,500	1/17	5.0
	Semivolatile Organic	Phenol	ND - 390,000	3/17	1.0
	Compounds	Cresols **	ND - 240,000	2/34	50.0
		Di-n-butylphthalate	ND - 570.0	1/17	50.0
		Aniline	ND - 370,000	1/17	5.0
	PCBs	PCBs	ND	0/17	0.09
	Other Organic	Ethanol	ND - 200,000	1/17	50.0
	Compounds	Methanol	ND - 550,000	N/A	NS
	Metals	Zinc	ND - 5,720	2/17	2,000

# REMEDIAL INVESTIGATION CONTAMINATION SUMMARY SPAULDING COMPOSITES SITE SITE MANAGEMENT PLAN

Media	Class	Contaminant of Concern	Concentration Range (ppm)*	Frequency of Exceeding SCGs	SCG (ppm)*				
Operable Unit 2									
Surface Soil	Volatile Organic	Ethylbenzene	ND - 72.0	1/9	5.5				
	Compounds	Toluene	ND - 110.0	1/9	1.5				
	Semivolatile Organic	Dichlorobenzene	40.6	1/5	7.9				
	Compounds	Phenol	ND - 0.25	1/5	0.03				
		Cresols **	ND - 0.25	0/10	0.1/0.9				
		Di-n-butylphthalate	ND - 3.28	0/5	8.1				
		Trichlorobenzene	ND	0/8	3.4				
	PCBs	PCBs	ND - 500.0	24/31	1.0				
	Metals	Zinc	101.0 - 758.0	5/5	SB (95)				
Subsurface Soil	Volatile	Ethylbenzene	ND	0/15	5.5				
	Organic Compounds	Toluene	ND - 0.005	0/15	1.5				
	Semivolatile Organic Compounds	Dichlorobenzene	ND - 0.48	0/7	7.9				
		Phenol	ND - 57.0	2/7	0.03				
		Cresols **	ND - 12.0	3/14	0.1/0.9				
			Di-n-butylphthalate	ND - 18.0	2/7	8.1			
		Trichlorobenzene	ND - 130.0	2/13	3.4				
	PCBs	PCBs	ND - 144,000	86/195	10.0				
	Metals	Zinc	70.6 - 345.0	5/7	SB (95)				
		Operable Un	it 3						
Surface Soil	Volatile	Benzene	ND	0/1	0.06				
	Organic Compounds	Toluene	ND	0/1	1.5				
	Other	Ethanol	ND	N/A	NS				
	Organic Compounds	Methanol	ND	N/A	NS				
		Petroleum ***	ND	N/A	NS				
Subsurface Soil	Volatile	Benzene	0.008 - 300.0	7/9	0.06				
	Organic Compounds	Toluene	ND - 56.0	2/9	1.5				

# REMEDIAL INVESTIGATION CONTAMINATION SUMMARY SPAULDING COMPOSITES SITE SITE MANAGEMENT PLAN

Media	Class	Contaminant of Concern	Concentration Range (ppm)*	Frequency of Exceeding SCGs	SCG (ppm)*						
	Operable Unit 3 (Continued)										
Subsurface Soil			ND - 83.0	N/A	NS						
(continued)	Organic Compounds	Methanol	ND - 14.0	N/A	NS						
		Petroleum ***	ND - 1,100	N/A	NS						
		Operable Un	it 4								
Surface Soil	Volatile	Benzene	ND	0/10	1.0						
	Organic Compounds	Toluene	ND - 0.023	0/10	5.0						
		Total Xylenes	ND	0/10	5.0						
	Semivolatile	Phenol	ND - 100.0	9/17	0.03						
	Organic Compounds	Cresols **	ND - 74.0	11/34	0.1/0.9						
		Di-n-butylphthalate	ND - 159.1	1/10	8.1						
		Aniline	ND - 50.0	2/10	0.1						
	PCBs	PCBs	ND - 86.3	12/20	1.0						
	Other	Ethanol	ND	N/A	NS						
	Organic Compounds	Methanol	ND	N/A	NS						
	Metals	Zinc	123.0 - 20,500	16/16	SB (95)						
Subsurface Soil	Volatile	Benzene	ND - 0.14	0/8	1.0						
5011	Organic Compounds	Toluene	ND - 0.23	0/8	5.0						
		Total Xylenes	ND - 0.06	0/8	5.0						
	Semivolatile	Phenol	ND - 95.0	4/17	0.03						
	Organic Compounds	Cresols **	ND - 54.0	5/34	0.1/0.9						
		Di-n-butylphthalate	ND - 12.0	1/8	8.1						
		Aniline	ND - 0.24	1/13	0.1						
	PCBs	PCBs	ND - 84.5	7/22	10						
	Other Organic	Ethanol	ND	N/A	NS						
	Compounds	Methanol	ND	N/A	NS						
	Metals	Zinc	63.6 - 386.0	5/15	SB (95)						

# REMEDIAL INVESTIGATION CONTAMINATION SUMMARY SPAULDING COMPOSITES SITE SITE MANAGEMENT PLAN

Media	Class	Contaminant of Concern	Concentration Range (ppm)*	Frequency of Exceeding SCGs	SCG (ppm)*					
	Operable Unit 4 (Continued)									
Groundwater	Volatile	Benzene	ND - 3.2	3/5	1.0					
(Well OW-8 at AOC 45 and	Organic Compounds	Toluene	ND - 32.0	3/5	5.0					
OW-10 near SWMU 5 and		Total Xylenes	ND - 17.9	3/5	5.0					
AOCs 46 & 47)	Semivolatile	Phenol	ND - 190,000	3/5	1.0					
	Organic Compounds	Cresols **	ND - 220,000	6/10	50					
		Di-n-butylphthalate	ND	0/5	50					
		Aniline	ND	0/5	5.0					
	PCBs	PCBs	ND	0/5	0.09					
	Other Organic	Ethanol	ND - 2,500	2/5	50					
	Compounds	Methanol	ND - 10,000	N/A	NS					
		Unknown Hydrocarbons	ND - 26,000	N/A	NS					
	Metals	Zinc	ND	0/5	2,000					
ND Compour NS No stand	nd not detected. ard.	<u>.</u>		-	<u>.</u>					

SB Site background; concentration in parentheses.

N/A Not applicable.

\* Values for groundwater are in parts per billion (ppb)

\*\* Cresols include 2-methylphenol and 3&4-methylphenol.

\*\*\* Petroleum includes unknown hydrocarbons and fuel oil.

Soil SCGs are from TAGM 4046; Groundwater SCGs are from NYSDEC Ambient Water Quality Standards.

# Table 2

# SI and Supplemental SI Soil Contamination Summary for OU6 Spaulding Composites Site Site Management Plan

OU6	Rest	ricted-Residential Su	ummary
Analyte	Maximum Concentration (mg/kg)	Number of Exceedances	Soil Cleanup Objective (mg/kg)
Arsenic	216	12	16
Barium	1770	15	400
Cadmium	229	27	4.3
Chromium	275	12	110
Copper	37200	13	270
Lead	3440	8	400
Manganese	3580	5	2000
Mercury	5.8	6	0.81
Nickel	457	2	310
Zinc	73700	25	10000
PCB	17	7	1
Benzene	26	3	4.8
benzo(a)anthracene	77	13	1
benzo(a)pyrene	66	14	1
benzo(b)fluoranthene	75	14	1
benzo(k)fluoranthene	22	5	3.9
chrysene	71	5	3.9
dibenzo(a,h)anthracene	4.8	4	0.33
fluoranthene	230	2	100
indeno(1,2,3)cd-pyrene	47	15	0.5
phenanthrene	270	2	100
pyrene	170	2	100
	CP-51 Sur	nmary	
Analyte	Maximum Concentration (mg/kg)	Number of Exceedances	Supplemental Soil Cleanup Objective (mg/kg)
di-n-butylphthalate	530	6	100

# Page 1 of 1

# Table 3.

# SI AND SUPPLEMENTAL SI GROUNDWATER CONTAMINATION SUMMARY FOR OU6 SPAULDING COMPOSITES SITE SITE MANAGEMENT PLAN

Detected Constituents	Concentration Range Detected (ppb) <sup>a</sup>	SCG <sup>b</sup> (ppb)	Frequency Exceeding SCG	
VOCs				
Acetone	ND <sup>c</sup> – 85	50	1 of 14	
2-Butanone	ND - 60	50	1 of 14	
cis-1,2-Dichloroethene	ND - 44	5	1 of 14	
trans-1,2-Dichloroethene	ND - 18	5	1 of 14	
2-Hexanone	ND - 58	50	1 of 14	
Vinyl Chloride	ND – 4.4	2	1 of 14	
SVOCs				
Bis(2-ethylhexyl)phthalate	ND – 21	5	1 of 14	
Formaldehyde	ND - 61	8	1 of 2	
Metals				
Antimony	ND – 41.5	3	3 of 14	
Arsenic	ND – 72.1	25	1 of 14	
Lead	ND - 32	25	2 of 14	
Selenium	ND - 14.5	10	1 of 14	
Thallium	ND - 4.43	0.5	1 of 14	

a - ppb: parts per billion, which is equivalent to micrograms per liter, ug/L, in water.

b - SCG: Standard Criteria or Guidance - Ambient Water Quality Standards and Guidance Values (TOGs 1.1.1), 6 NYCRR Part 703, Surface water and Groundwater Quality Standards, and Part 5 of the New York State Sanitary Code (10 NYCRR Part 5).

c - ND = contaminant analyzed but not detected.

## Table 4

## SI and Supplemental SI Soil Cleanup Objectives for OU6 Spaulding Composite Site Site Management Plan

OU6 - Part 375 - Restricted-Residential Soil Cleanup Objective Summary *					
Analyte	(mg/kg)				
Acetone	100				
Aniline	100				
Arsenic	16				
Barium	400				
Benzene	4.8				
Benzo(a)anthracene	1				
Benzo(a)pyrene	1				
Benzo(b)fluoranthene	1				
Benzo(k)fluoranthene	3.9				
2-Butanone (MEK)	100				
Cadmium	4.3				
Chromium (Hexavalent)	110				
Chrysene	3.9				
Copper	270				
Cresols (m, o, p)	100				
Dibenz(a,h)anthracene	0.33				
1,2-Dichlorobenzene	100				
1,3-Dichlorobenzene	49				
1,4-Dichlorobenzene	13				
cis-1,2-Dichloroethene	100				
trans-1,2-Dichloroethene	100				
Ethylbenzene	41				
Fluoranthene	100				
Indeno(1,2,3)cd-pyrene	0.5				
Lead	400				
Manganese	2000				
Total Mercury	0.81				
Nickel	310				
PCB	1				
Phenanthrene	100				
Phenol	100				
Pyrene	100				
Selenium	180				
Toluene	100				
Trichloroethene	21				
Tetrachloroethane	19				
Vinyl Chloride	0.9				
Xylenes (mixed)	100				
Zinc	10000				
OU-6 - CP-51 - Suppler Objective Su					
Analyte	(mg/kg)				
Bis(2-ethylhexyl)phthalate	50				
Dimethylphthalate	100				
Di-n-butylphthalate	100				

\* OU 1, 3, 4, 6, and OU 2 Basement/K-Line Sewer SCO's were NYSDEC Part 375 Restricted Residential Criteria. PCB SCO for OU2 IRM was TAGM #4046 criteria.

#### TABLE 5 SPAULDING COMPOSITES SITE AREA C, OPERABLE UNIT 6 SUMMARY OF CONFIRMATION SOIL SAMPLE RESULTS

Page 1 of 1

formula ID	NUCERCE CONTRACTOR	1	C-SS-2	C-SS-3	0.00.4	0.00.5	C DC 1	CDGA	C DC 2	0.00 (
Sample ID	NYSDEC Part 375	NYSDEC Part 375	C-SS-2 Sidewall	C-SS-3 Sidewall	C-SS-4 Sidewall	C-SS-5	C-BS-1	C-BS-2	C-BS-3	C-SS-6
Sample Location	Restricted Residential	Unrestricted	3/25/2010	3/25/2010	3/25/2010	Sidewall 3/25/2010	Bottom 3/25/2010	Bottom 3/25/2010	Bottom 3/25/2010	Sidewall 4/19/2010
Date Sampled	Guidance Value	Guidance Value	3/25/2010 Soil	3/25/2010 Soil	3/25/2010 Soil	3/25/2010 Soil	3/25/2010 Soil	3/25/2010 Soil		4/19/2010 Soil
Compound		an a /lea							Soil	
Units PAHs	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
	100	12	ND	ND	ND	ND	ND	0.51	ND	ND
Naphthalene	100 NC	12 NC	ND ND	ND ND	ND ND	ND ND	ND ND	0.51 0.64	ND ND	ND ND
2-Methylnaphthalene	100	100	ND ND	ND ND	ND ND	ND ND	ND ND		ND ND	ND ND
Acenaphthylene	100		ND	0.026 J	ND ND	ND ND	ND ND	0.087 J	ND ND	ND
Acenaphthene		20					ND ND	0.42	ND ND	
Fluorene	100	30	ND	0.024 J	ND	ND		0.26		ND
Phenanthrene	100 100	100	ND ND	0.160 J	ND	0.110 J 0.040 J	0.029 J	0.86 0.25	0.039 J	ND ND
Anthracene		100		0.049 J	ND		ND		ND	
Fluoranthene	100	100	0.028 J	0.170 J	ND ND	0.180 J	ND ND	0.24	0.042 J	0.029 J
Pyrene	100	100	ND	0.220 J		0.220 J		0.44	0.052 J	ND
Benzo (a) anthracene	1	1	0.023 J	0.100 J	ND	0.120 J	ND	0.170 J	0.027 J	0.024 J
Chrysene	3.9	1	ND	0.091 J	ND	0.100 J	ND	0.140 J	0.027 J	ND
Benzo (b) fluoranthene	1	1	ND	0.100 J	ND	0.120 J	ND	0.076 J	ND	ND
Benzo (k) fluoranthene	3.9	0.8	ND	0.030 J	ND	0.034 J	ND	0.025 J	ND	ND
Benzo (a) pyrene	1	1	ND	0.073 J	ND	0.076 J	ND	0.062 J	ND	ND
Indeno (1, 2, 3-cd) pyrene	0.5	0.5	ND	0.043 J	ND	0.047 J	ND	0.025 J	ND	ND
Dibenzo (a, h) anthracene	0.33	0.33	ND	ND	ND	ND	ND	ND	ND	ND
Benzo (g, h, i,) perylene	100	100	ND	0.056 J	ND	0.059 J	ND	0.040 J	ND	ND
METALS										
Aluminum	NC	NC	18200	12800	13300	9790	12200	8050	24900	19200
Antimony	NC	NC	0.69 B	1.1	0.52 B	0.60 B	ND	ND	0.33 B	ND
Arsenic	16	13	12.4	7.5	6.4	6.6	3.5	1.7	5.6	6.8
Barium	400	350	190	132	111	100	57	25.8	148	132
Beryllium	72	7.2	1.3	0.7	0.76	0.49	0.59	0.36	1.5	1
Cadmium	4.3	2.5	2.6	0.97	0.74	0.92	0.46	0.23 B	0.97	0.88
Calcium	NC	NC	3150	2700	2020	1570	1360	906	1940	2190
Chromium	180	30	30.4	22.2	20	17.3	17.2	9.4	27.3	26.6
Cobalt	NC	NC	14.3	8	10.1	5.4	7.5	3.9	28.4	14.6
Copper	270	50	226	114	102	84.6	11.3	4.2	24	17.5
Iron	NC	NC	36100	26300	27400	22600	25000	11900	45000	42100
Lead	400	63	55.8	94.9	51.9	99.2	11.2	6.4	15.6	16.4
Magnesium	NC	NC	5410	3660	3820	2300	3980	2160	6880	5870
Manganese	2000	1600	415	244	446	224	248	104	616	585
Mercury	0.81	0.18	0.037 B	0.29	0.030 B	0.05	0.013 B	ND	0.025 B	0.021 B
Nickel	310	30	43.8	21.6	23.3	14	15	8.9	30	26.5
Potassium	NC	NC	1890	1190	1510	655	1030	389	1780	1560
Selenium	180	3.9	3.8	3.9	3.7	3.4	4.5	1.9	4	2
Silver	180	2	0.20 B	0.45 B	0.12 B	0.25 B	ND	ND	ND	ND
Sodium	NC	NC	87.8	58.3	53.5	35.4 B	58	50.3 B	65.3	61.1
Thallum	NC	NC	2.6	1.8	2.5	1.3	1.5	0.67 B	3.6	3.5
Vanadium	NC	NC	32.2	28.6	28.4	23.7	26.4	16.9	37.6	39.7
Zinc	10000	109	1860	541	628	424	63.7	31.7	99.6	969

Notes:

1) PAHs analyzed by SW846-8270C; total metals analyzed by USEPA 6000/7000 Series Methods. 2) Shaded areas indicate result exceeds NYSDEC Part 375 Restricted

Residential Soil Guidance Values. 3) Shaded areas indicate result exceeds NYSDEC Part 375 Unrestricted Soil

Guidance Values.
4) J = detected above the MDL, but below the RL; therefore, result is an estimated concentration.

5) mg/kg = milligrams per kilogram (ppm)

6) NC = No Criteria

7) ND = Analyte included in the analysis, but not detected.

8) B = Analyte detected in associated trip blank.

\*Strikeout indicates that location was overexcavated and resampled.

## TABLE 6 SPAULDING COMPOSITES SITE AREA D, OPERABLE UNIT 6 SUMMARY OF CONFIRMATION SOIL SAMPLE RESULTS

Page 1 of 1

	7			D 66 2	D 66 2	D DC 1	D DC 2
Sample ID	NYSDEC Part 375	NYSDEC Part 375	D-SS-1	D-SS-2	D-SS-3	D-BS 1	D-BS-2
Sample Location	Restricted	Unrestricted	Sidewall	Sidewall	Sidewall	Bottom	Bottom
Date Sampled	Residential	Guidance Value	2/24/2010	2/24/2010	2/24/2010	2/24/2010	2/24/2010
Compound	Guidance Value		Soil	Soil	Soil	Soil	Soil
Units	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
PAHs							
Naphthalene	100	12	ND	ND	ND	ND	ND
2-Methylnaphthalene	NC	NC	0.030 J	ND	0.028 J	ND	ND
Acenaphthylene	100	100	0.044 J	ND	ND	ND	ND
Acenaphthene	100	20	0.077 J	ND	0.160 J	ND	0.065 J
Fluorene	100	30	0.072 J	ND	0.130 J	ND	0.063 J
Phenanthrene	100	100	1	0.030 J	1.1	ND	0.46
Anthracene	100	100	0.23	ND	0.28	ND	0.110 J
Di-n-butylphthalate	100	NC	ND	ND	ND	ND	ND
Fluoranthene	100	100	2.3	0.050 J	1.4	ND	0.5
Pyrene	100	100	1.8	0.039 J	1	ND	0.37
Benzo (a) anthracene	1	1	1	0.022 J	0.61	ND	0.200 J
Chrysene	3.9	1	1.2	ND	0.59	ND	0.200 J
Benzo (b) fluoranthene	1	1	1.4	ND	0.66	ND	0.220 J
Benzo (k) fluoranthene	3.9	0.8	0.65	ND	0.32	ND	0.100 J
Benzo (a) pyrene	1	1	1	ND	0.47	ND	0.150 J
Indeno (1, 2, 3-cd) pyrene	0.5	0.5	0.66	ND	0.27	ND	0.078 J
Dibenzo (a, h) anthracene	0.33	0.33	0.210 J	ND	0.096 J	ND	ND
Benzo (g, h, i,) perylene	100	100	0.7	ND	0.28	ND	0.083 J
METALS							
Aluminum	NC	NC	3410	15200	10600	18600	22200
Antimony	NC	NC	1.2	0.19	0.15	0.18	0.23
Arsenic	16	13	3.9	4.3	5.5	4.6	8.3
Barium	400	350	33.1	118	94.9	94.2	203
Beryllium	72	7.2	0.49	0.85	0.68	0.73	1.3
Cadmium	4.3	2.5	0.51	0.48	0.61	0.27	0.5
Calcium	NC	NC	19600	6130	29900	1460	4300
Chromium	180	30	4.3	20	15.1	22.5	30.7
Cobalt	NC	NC	1.2	22	8.9	10.8	18.6
Copper	270	50	67.2	31.4	37.2	26	38.8
Iron	NC	NC	4840	29400	27200	35400	45400
Lead	400	63	18.8	16.9	18.2	14.3	19.9
Magnesium	NC	NC	112000	6080	10900	4830	9500
Manganese	2000	1600	640	1190	521	275	867
Mercury	0.81	0.18	0.26	0.027	0.043	0.036	0.031
Nickel	310	30	4.8	23.8	18.9	20.7	41.4
Potassium	NC	NC	381	1230	1350	1180	2290
Selenium	180	3.9	0.64	1.2	0.96	2	2.4
Silver	180	2	0.065	0.086	0.065	0.078	5.6
Sodium	NC	NC	269	70.5	95.5	50.4	133
Thallum	NC	NC	2.4	7.6	2.4	1.6	5.1
Vanadium	NC	NC	5.4	26.7	23.7	31.9	41.2
Zinc	10000	109	305	166	354	89.8	377
Cyanide	27	27	3.4	0.53	0.15	0.16	0.17

Notes:

1) PAHs analyzed by SW846-8270C; total metals analyzed by USEPA

6000/7000 Series Methods.

**2**) Shaded areas indicate result exceeds NYSDEC Part 375 Restricted Residential Soil Guidance Values.

3) Shaded areas indicate result exceeds NYSDEC Part 375 Unrestricted Soil Guidance Values.

**4**) J = detected above the MDL, but below the RL; therefore, result is an estimated concentration.

5) mg/kg = milligrams per kilogram (ppm)

6) NC = No Criteria

7) ND = Analyte included in the analysis, but not detected.

 $\mathbf{8}$ ) E = Analyte concentration exceeds calibration range of instrument used for analysis.

# TABLE 7 SPAULDING COMPOSITES SITE AREA E, OPERABLE UNIT 6 SUMMARY OF CONFIRMATION SOIL SAMPLE RESULTS

Page 1 of 2

Sample ID	NYSDEC Part 375		E- SS- 1	E-SS-2
Sample Location	Restricted	NYSDEC Part 375	Sidewall	Sidewall
Date Sampled	Residential	Unrestricted	2/24/2010	2/24/2010
Compound	Guidance Value	Guidance Value	Soil	Soil
Units	mg/kg	mg/kg	mg/kg	mg/kg
	mg/kg	mg/kg	mg/kg	mg/kg
PAHs	100	10	0 <b>0</b> 00 I	
Naphthalene	100	12	0.200 J	ND
2-Methylnaphthalene	NC	NC	0.27	ND
Acenaphthylene	100	100	ND	ND
Acenaphthene	100	20	0.024 J	ND
Fluorene	100	30	0.022 J	ND
Phenanthrene	100	100	0.160 J	ND
Anthracene	100	100	0.037 J	ND
Fluoranthene	100	100	0.26	ND
Pyrene	100	100	0.160 J	ND
Benzo (a) anthracene	1	1	0.092 J	ND
Chrysene	3.9	1	0.110 J	ND
Benzo (b) fluoranthene	1	1	0.120 J	ND
Benzo (k) fluoranthene	3.9	0.8	0.069 J	ND
Benzo (a) pyrene	1	1	0.087 J	ND
Indeno (1, 2, 3-cd) pyrene	0.5	0.5	0.062 J	ND
Dibenzo (a, h) anthracene	0.33	0.33	ND	ND
Benzo (g, h, i,) perylene	100	100	0.067 J	ND
METALS				
Aluminum	NC	NC	5080	21500
Antimony	NC	NC	0.39	0.19
Arsenic	16	13	3.2	5.4
Barium	400	350	66.2	166
Beryllium	72	7.2	0.34	1.7
Cadmium	4.3	2.5	3	0.47
Calcium	NC	NC	28800	1900
Chromium	180	30	11.3	29
Cobalt	NC	NC	3.6	18.3
Copper	270	50	69.9	25
Iron	NC	NC	10800	44600
Lead	400	63	21.1	12.7
Magnesium	NC	NC	5540	7760
Manganese	2000	1600	318	307
Nickel	310	30	10	36.7
Potassium	NC	NC	503	1710
Selenium	180	3.9	0.95	2.3
Silver	180	2	0.058	0.082
Sodium	NC	NC	199	92
Thallum	NC	NC	1.3	1.3
Vanadium	NC	NC	9.7	39.4
Zinc	10000	109	864	83.6
Cyanide	27	27	0.17	0.18 B

Notes:

1) PAHs analyzed by SW846-8270C; total metals analyzed by USEPA

6000/7000 Series Methods.

2) Shaded areas indicate result exceeds NYSDEC Part 375 Restricted

Residential Soil Guidance Values.

**3**) Shaded areas indicate result exceeds NYSDEC Part 375 Unrestricted Soil Guidance Values.

**4**) J = detected above the MDL, but below the RL; therefore, result is an estimated concentration.

5) mg/kg = milligrams per kilogram (ppm)

6) NC = No Criteria

7) ND = Analyte included in the analysis, but not detected.

**8**) B = Analyte detected in associated trip blank.

## TABLE 7 SPAULDING COMPOSITES SITE AREA E, OPERABLE UNIT 6 SUMMARY OF CONFIRMATION SOIL SAMPLE RESULTS

Page 2 of 2

Sample ID	NYSDEC Part 375	_	E- BS- 2	E-BS-3	E-BS-4
Sample Location	Restricted	NYSDEC Part 375	Bottom	Bottom	Bottom
Date Sampled	Residential	Unrestricted	2/24/2010	2/24/2010	3/24/2010
Compound	Guidance Value	Guidance Value	Soil	Soil	Soil
Units	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
PAHs	<u>B</u> /B				••••B' ••B
Naphthalene	100	12	ND	ND	ND
2-Methylnaphthalene	NC	NC	ND	ND	ND
Acenaphthylene	100	100	ND	ND	ND
Acenaphthylene	100	20	ND	ND	ND
Fluorene	100	30	ND	ND	ND
Phenanthrene	100	100	0.050 J	0.091 J	ND
Anthracene	100	100	ND	0.023 J	ND
Fluoranthene	100	100	0.086 J	0.025 J 0.110 J	ND
Pyrene	100	100	0.068 J	0.097 J	ND
Benzo (a) anthracene	100	100	0.046 J	0.050 J	ND
Chrysene	3.9	1	0.040 J	0.056 J	ND
Benzo (b) fluoranthene	1	1	0.057 J	0.064 J	ND
Benzo (k) fluoranthene	3.9	0.8	0.037 J ND	0.004 J 0.029 J	ND
Benzo (a) pyrene	<u> </u>	1	0.040 J	0.029 J 0.040 J	ND
Indeno (1, 2, 3-cd) pyrene	0.5	0.5	0.040 J 0.025 J	0.026 J	ND
Dibenzo (a, h) anthracene	0.33	0.33	ND	ND	ND
Benzo (g, h, i,) perylene	100	100	0.026 J	0.027 J	ND
METALS	100	100	0.020 J	0.027 3	ND
	NC	NC	16200	14200	21000 D
Aluminum	NC NC	NC NC	16200 0.39	14300 0.18	21000 B
Antimony	16	13	4.7	4.9	ND 5.2
Arsenic Barium	400	350	4.7	4.9	140
Beryllium	72	7.2	0.91	0.84	140
Cadmium	4.3	2.5	0.79	0.34	0.81
Calcium	4.3 NC	NC	63800	60100	1700 B
Chromium	180	30	22.7	21.2	27
Cobalt	NC	NC SO	11.5	12	40
Copper	270	50	34.3	33.2	26
Iron	NC	NC SO	37400	34600	40000 B
Lead	400	63	10.4	<u> </u>	40000 B
Magnesium	400 NC	NC	10.4	10	6900 B
Magnesium	2000	1600	438	538	1100
Nickel	310	30	28.3	27.1	34 B
	NC NC	NC	28.3	27.1 2250	1800B
Potassium Selenium	180	3.9	0.73	0.78	4.3
Silver	180	3.9	0.73	0.78	4.3 ND
Sodium	NC	NC 2	106	161	84 B
Thallum	NC NC	NC NC		2.2	
	NC NC	NC NC	0.34 30.4	2.2	6.5 34
Vanadium	NC 10000	NC 109	30.4 155	28.6 87.7	<u> </u>
Zinc					

Notes:

1) PAHs analyzed by SW846-8270C; total metals analyzed by USEPA

6000/7000 Series Methods.

2) Shaded areas indicate result exceeds NYSDEC Part 375 Restricted

Residential Soil Guidance Values.

**3**) Shaded areas indicate result exceeds NYSDEC Part 375 Unrestricted Soil Guidance Values.

**4**) J = detected above the MDL, but below the RL; therefore, result is an estimated concentration.

5) mg/kg = milligrams per kilogram (ppm)

**6**) NC = No Criteria

7) ND = Analyte included in the analysis, but not detected.

**8**) B = Analyte detected in associated trip blank.

# TABLE 8 SPAULDING COMPOSITES SITE AREA F, OPERABLE UNIT 6 SUMMARY OF CONFIRMATION SOIL SAMPLE RESULTS

Page 1 of 2

Sample ID	NYSDEC Part 375	_	F-BS-1	F-SS-1	F-SS-3	F-SS-5
Sample Location	Restricted	NYSDEC Part 375	Bottom	Sidewall	Sidewall	Sidewall
-	Residential	Unrestricted	3/8/2010	3/8/2010	3/8/2010	4/12/2010
Date Sampled Compound	Guidance Value	Guidance Value	Soil	Soil	5/8/2010 Soil	4/12/2010 Soil
Units	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
PAHs				ur .		
Naphthalene	100	12	ND	ND	ND	0.65
2-Methylnaphthalene	NC	NC	ND	ND	ND	0.086 J
Acenaphthylene	100	100	ND	ND	ND	ND
Acenaphthene	100	20	ND	ND	ND	ND
Fluorene	100	30	ND	ND	ND	ND
Phenanthrene	100	100	0.110 J	ND	ND	0.025 J
Anthracene	100	100	0.028 J	ND	ND	ND
Fluoranthene	100	100	0.190 J	ND	ND	0.032 J
Pyrene	100	100	0.150 J	ND	ND	ND
Benzo (a) anthracene	1	1	0.099 J	ND	ND	ND
Chrysene	3.9	1	0.095 J	ND	ND	ND
Benzo (b) fluoranthene	1	1	0.110 J	ND	ND	ND
Benzo (k) fluoranthene	3.9	0.8	0.050 J	ND	ND	ND
Benzo (a) pyrene	1	1	0.089 J	ND	ND	ND
Indeno (1, 2, 3-cd) pyrene	0.5	0.5	0.051 J	ND	ND	ND
Dibenzo (a, h) anthracene	0.33	0.33	ND	ND	ND	ND
Benzo (g, h, i,) perylene	100	100	0.054 J	ND	ND	ND
METALS						
Aluminum	NC	NC	23400	13300	24000	25000
Antimony	NC	NC	0.22	0.17	ND	ND
Arsenic	16	13	3.9	4.3	5	4.4
Barium	400	350	191	77.5	119	119
Beryllium	72	7.2	1.4	0.82	1.1	0.86
Cadmium	4.3	2.5	0.59	0.38	0.33	1.7
Calcium	NC	NC	2910	2840	2420	3000
Chromium	180	30	29.8	17.1	31.3	30.8
Cobalt	NC	NC	14.9	9.9	12.8	17.4
Copper	270	50	25.7	18.4	25.8	19.8
Iron	NC	NC	41600	23200	48200	34700
Lead	400	63	11.2	19.4	11.4	11.5
Magnesium	NC	NC	8850	3870	7330	6060
Manganese	2000	1600	754	256	266	270
Mercury	0.81	0.18	0.036 B	0.034 B	0.035 B	0.016 B
Nickel	310	30	38.8	16.3	28.7	26.3
Potassium	NC	NC	2010	1120	2120	2240
Selenium	180	3.9	2.8	2	2.6	ND
Silver	180	2	0.26 B	0.15 B	0.34 B	0.27 B
Sodium	NC	NC	101	66.5	108	86.5
Thallium	NC	NC	4.2	1.9	2.2	0.97
Vanadium	NC	NC	36.9	26.1	40.9	41.2
Zinc	10000	109	112	182	91.3	189

Notes:

1) PAHs analyzed by SW846-8270C; total metals analyzed by USEPA

6000/7000 Series Methods; mercury analyzed by SW846-7471.

2) Shaded areas indicate result exceeds NYSDEC Part 375 Restricted Residential Soil Guidance Values.

**3**) Shaded areas indicate result exceeds NYSDEC Part 375 Unrestricted Soil Guidance Values.

**4**) J = detected above the MDL, but below the RL; therefore, result is an estimated concentration.

5) mg/kg = milligrams per kilogram (ppm)

6) NC = No Criteria

7) ND = Analyte included in the analysis, but not detected.

**8**) B = Analyte detected in associated trip blank.

# TABLE 8 SPAULDING COMPOSITES SITE AREA F, OPERABLE UNIT 6 SUMMARY OF CONFIRMATION SOIL SAMPLE RESULTS

Page 2 of 2

Sample ID	NYSDEC Part 375		F-SS-6	F-SS-7
Sample Location	Restricted	NYSDEC Part 375	Sidewall	Sidewall
Date Sampled	Residential	Unrestricted	7/26/2010	8/9/2010
Compound	Guidance Value	Guidance Value	Soil	Soil
Units	mg/kg	mg/kg	mg/kg	mg/kg
PAHs	iiig/Kg	iiig/kg	mg/Kg	mg/kg
Naphthalene	100	12	ND	ND
2-Methylnaphthalene	NC	NC	ND	ND
Acenaphthylene	100	100	ND	ND ND
Acenaphthene	100	20	ND	ND
Fluorene	100	30	ND	ND
Phenanthrene	100	100	ND	0.108 J
Anthracene	100	100	ND	ND
Fluoranthene	100	100	ND	0.191
Pyrene	100	100	ND	0.191 0.154 J
Benzo (a) anthracene	100	1	ND	0.0924 J
Chrysene	3.9	1	ND	0.0956 J
Benzo (b) fluoranthene	<u> </u>	1	ND	ND
Benzo (k) fluoranthene	3.9	0.8	ND	0.0971 J
Benzo (a) pyrene	1	1	ND	0.0924 J
Indeno (1, 2, 3-cd) pyrene	0.5	0.5	ND	ND
Dibenzo (a, h) anthracene	0.33	0.33	ND	ND
Benzo (g, h, i,) perylene	100	100	ND	ND
METALS	100	100		1,12
Aluminum	NC	NC	21500	21400
Antimony	NC	NC	ND	ND
Arsenic	16	13	7.12	7.49
Barium	400	350	193	135
Beryllium	72	7.2	1.09	0.826
Cadmium	4.3	2.5	1.06	1.32
Calcium	NC	NC	3040	4480
Chromium	180	30	27.1	28.1
Cobalt	NC	NC	13	Not Analyzed
Copper	270	50	21.7	44.7
Iron	NC	NC	40200	39400
Lead	400	63	11.8	20
Magnesium	NC	NC	5410	6680
Manganese	2000	1600	1240	649
Mercury	0.81	0.18	0.0377 J	0.0588
Nickel	310	30	24.3	25.7
Potassium	NC	NC	2210	2140
Selenium	180	3.9	0.715 J	0.869 J
Silver	180	2	ND	ND
Sodium	NC	NC	147	94.9
Thallium	NC	NC	0.829 J	ND
Vanadium	NC	NC	39.4	38.5
Zinc	10000	109	78.2	230

Notes:

1) PAHs analyzed by SW846-8270C; total metals analyzed by USEPA

6000/7000 Series Methods; mercury analyzed by SW846-7471.

2) Shaded areas indicate result exceeds NYSDEC Part 375 Restricted

Residential Soil Guidance Values.

**3**) Shaded areas indicate result exceeds NYSDEC Part 375 Unrestricted Soil Guidance Values.

**4**) J = detected above the MDL, but below the RL; therefore, result is an estimated concentration.

5) mg/kg = milligrams per kilogram (ppm)

6) NC = No Criteria

7) ND = Analyte included in the analysis, but not detected.

**8**) B = Analyte detected in associated trip blank.

### TABLE 9 SPAULDING COMPOSITES SITE AREA G, OPERABLE UNIT 6 SUMMARY OF CONFIRMATION SOIL SAMPLE RESULTS Page 1 of 2

Sample ID	NYSDEC Part 375		G-BS-1	G-BS-3	G-SS-5	G-SS-6	G-SS-7	G-SS-8	G-SS-9	G-SS-10
Sample Location	Restricted	II NYSDEC Part 375 II	Bottom	Bottom	Sidewall	Sidewall	Sidewall	Sidewall	Sidewall	Sidewall
Date Sampled			3/8/2010	3/24/2010	3/24/2010	3/24/2010	3/24/2010	3/24/2010	3/24/2010	3/24/2010
Compound	Guidance Value		Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil
Units	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
METALS										
Arsenic	16	13	7	8.9	11	9.1	5.7	10	9.5	6.2
Cadium	4.3	2.5	0.94	0.71	0.77	0.89	0.69	3.2	0.65	0.93

Notes:

Total metals analyzed by USEPA 6000/7000 Series Methods.
 Shaded areas indicate result exceeds NYSDEC Part 375 Restricted

Residential Soil Guidance Values.

3) Shaded areas indicate result exceeds NYSDEC Part 375 Unrestricted Soil

Guidance Values.

4) J = detected above the MDL, but below the RL; therefore, result is an

estimated concentration.

5) mg/kg = milligrams per kilogram (ppm)

### TABLE 9 SPAULDING COMPOSITES SITE AREA G, OPERABLE UNIT 6 SUMMARY OF CONFIRMATION SOIL SAMPLE RESULTS Page 2 of 2

Sample ID	NYSDEC Part 375		G-SS-11	G-SS-12
Sample Location	Restricted	NYSDEC Part 375 Unrestricted	Sidewall	Sidewall
Date Sampled	Residential	Guidance Value	3/24/2010	3/24/2010
Compound	Guidance Value		Soil	Soil
Units	mg/kg	mg/kg	mg/kg	mg/kg
METALS				
Arsenic	16	13	7	16
Cadium	4.3	2.5	0.84	1.1

Notes:

1) Total metals analyzed by USEPA 6000/7000 Series Methods.

2) Shaded areas indicate result exceeds NYSDEC Part 375 Restricted

Residential Soil Guidance Values.

3) Shaded areas indicate result exceeds NYSDEC Part 375 Unrestricted Soil Guidance Values.

4) J = detected above the MDL, but below the RL; therefore, result is an

estimated concentration.

5) mg/kg = milligrams per kilogram (ppm)

#### TABLE 10 SPAULDING COMPOSITES SITE **AREA H, OPERABLE UNIT 6** SUMMARY OF CONFIRMATION SOIL SAMPLE RESULTS

Page 1 of 1

		Page 1 o	11			
Sample ID	NYSDEC Part	NYSDEC Part	H-SS-1	H-SS-2	H-BS-2 (H-BS-4)	H-SS-4
Sample Location	375 Restricted	375 Unrestricted	Sidewall	Sidewall	Bottom	Sidewall
Date Sampled	Residential	<b>Guidance Value</b>	3/16/2010	3/16/2010	4/13/2010	4/13/2010
Compound	Guidance Value		Soil	Soil	Soil	Soil
Units	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
PAHs						
Naphthalene	100	12	0.047 J	0.037 J	ND	ND
2-Methylnaphthalene	NC	NC	0.33	0.099 J	0.071 J	ND
Acenaphthylene	100	100	ND	ND	ND	ND
Acenaphthene	100	20	ND	0.028 J	0.069 J	ND
Fluorene	100	30	0.170 J	0.062 J	0.100 J	ND
Phenanthrene	100	100	0.48	0.150 J	0.21	ND
Anthracene	100	100	ND	0.031 J	0.054 J	ND
Di-n-butylphthalate	100	NC	0.46	0.92	ND	ND
Fluoranthene	100	100	0.160 J	0.100 J	0.069 J	ND
Pyrene	100	100	0.160 J	0.082 J	0.110 J	ND
Benzo (a) anthracene	1	1	0.086 J	0.054 J	0.051 J	ND
Chrysene	3.9	1	0.087 J	0.047 J	0.044 J	ND
Benzo (b) fluoranthene	1	1	0.090 J	0.050 J	ND	ND
Benzo (k) fluoranthene	3.9	0.8	0.041 J	ND	ND	ND
Benzo (a) pyrene	1	1	0.057 J	0.035 J	0.027 J	ND
Indeno (1, 2, 3-cd) pyrene	0.5	0.5	0.041 J	0.022 J	ND	ND
Dibenzo (a, h) anthracene	0.33	0.33	ND	ND	ND	ND
Benzo (g, h, i,) perylene	100	100	0.046 J	0.025 J	ND	ND
PCBs						
Aroclor- 1016	NC	NC	ND	ND	ND	ND
Aroclor-1221	NC	NC	ND	ND	ND	ND
Aroclor-1232	NC	NC	ND	ND	ND	ND
Aroclor-1242	NC	NC	ND	ND	ND	ND
Aroclor-1248	NC	NC	ND	ND	ND	ND
Aroclor-1254	NC	NC	0.073	ND	ND	ND
Aroclor-1260	NC	NC	ND	ND	ND	ND
Total PCBs	1	0.1	0.073	ND	ND	ND
METALS						
Aluminum	NC	NC	14600	11700	11300	15100
Antimony	NC	NC	ND	ND	0.30 B	ND
Arsenic	16	13	7.2	5.1	4.3	5
Barium	400	350	141	112	104	135
Beryllium	72	7.2	0.93	0.9	0.65	0.85
Cadmium	4.3	2.5	0.34	0.23 B	0.3	0.4
Calcium	NC	NC	58300	51600	75700	53300
Chromium	180	30	21.4	17	16.6	22.5
Cobalt	NC	NC	13.2	10	10.6	13.4
Copper	270	50	23.7	30.1	22.1	25.2
Iron	NC	NC	36800	25800	25500	34000
Lead	400	63	11	16	9.9	9.9
Magnesium	NC	NC	13200	13200	13900	14300
Manganese	2000	1600	532	428	514	561
Mercury	0.81	0.18	ND	0.010 B	0.011 B	0.014 B
Nickel	310	30	30.4	24.4	22.8	29.4
Potassium	NC	NC	2100	1750	1860	2290
Selenium	180	3.9	2.8	2.9	ND	ND
Silver	180	2	0.095 B	ND	ND	ND
Sodium	NC	NC	140	137	168	191
Thallum	NC	NC	1.7	1.3	2	2.8
Vanadium	NC	NC	27.4	23.8	22.4	28.9
Zinc	10000	109	67.5	119	62.1	56.7

Notes:

1) PAHs analyzed by SW846-8270C; total metals analyzed by USEPA 6000/7000 Series Methods.

Shaded areas indicate result exceeds NYSDEC Part 375 Restricted Residential Soil Guidance Values.
 Shaded areas indicate result exceeds NYSDEC Part 375 Unrestricted Soil Guidance Values.

4) J = detected above the MDL, but below the RL; therefore, result is an estimated concentration.

**5**) mg/kg = milligrams per kilogram (ppm)

6) NC = No Criteria

7) ND = Analyte included in the analysis, but not detected.

**8**) B = Analyte detected in associated trip blank.

9) E = Analyte concentration exceeds calibration range of instrument used for analysis.

10) P = Greater than 25% difference for detected concentrations between the two GC columns.

# TABLE 11 SPAULDING COMPOSITES SITE AREA K, OPERABLE UNIT 6 SUMMARY OF CONFIRMATION SOIL SAMPLE RESULTS

Page 1 of 1

Sample ID	NYSDEC Part 375		K-SS-1	K-SS-2	K-SS-4	K-BS-1
Sample Location	Restricted	NYSDEC Part 375 Unrestricted	Sidewall	Sidewall	Sidewall	Bottom
Date Sampled	Residential	Guidance Value	3/11/2010	3/11/2010	3/11/2010	3/11/2010
Compound	Guidance Value	Guiuance value	Soil	Soil	Soil	Soil
Units	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
PAHs						
Naphthalene	100	12	0.150 J	ND	ND	ND
2-Methylnaphthalene	NC	NC	0.200 J	0.043 J	ND	ND
Acenaphthylene	100	100	0.025 J	ND	ND	ND
Acenaphthene	100	20	0.130 J	0.130 J	ND	0.031 J
Fluorene	100	30	0.180 J	0.160 J	ND	0.034 J
Phenanthrene	100	100	1.4	1.2	0.038 J	0.28
Anthracene	100	100	0.37	0.32	ND	0.081 J
Fluoranthene	100	100	1.9	1.5	0.054 J	0.39
Pyrene	100	100	1.3	1.1	0.043 J	0.33
Benzo (a) anthracene	1	1	0.76	0.68	0.028 J	0.190 J
Chrysene	3.9	1	0.79	0.6	0.024 J	0.180 J
Benzo (b) fluoranthene	1	1	0.79	0.68	0.032 J	0.210 J
Benzo (k) fluoranthene	3.9	0.8	0.35	0.31	ND	0.090 J
Benzo (a) pyrene	1	1	0.56	0.51	ND	0.150 J
Indeno (1, 2, 3-cd) pyrene	0.5	0.5	0.28	0.26	ND	0.084 J
Dibenzo (a, h) anthracene	0.33	0.33	0.088 J	0.079 J	ND	ND
Benzo (g, h, i,) perylene	100	100	0.31	0.27	ND	0.098 J

Notes:

**1**) PAHs analyzed by SW846-8270C.

2) Shaded areas indicate result exceeds NYSDEC Part 375 Restricted Residential

Soil Guidance Values.

**3)** Shaded areas indicate result exceeds NYSDEC Part 375 Unrestricted Soil Guidance Values.

**4**) J = detected above the MDL, but below the RL; therefore, result is an estimated concentration.

**5**) mg/kg = milligrams per kilogram (ppm)

6) NC = No Criteria

7) ND = Analyte included in the analysis, but not detected.

**8**) B = Analyte detected in associated trip blank.

**9**) E = Analyte concentration exceeds calibration range of instrument used for analysis.

\*Sample location was overexcavated and resampled.

\*\*Sample location was overexcavated. No resample was collected because

overexcavation joined Area RR.

#### TABLE 12 SPAULDING COMPOSITES SITE AREA M, OPERABLE UNIT 6 SUMMARY OF CONFIRMATION SOIL SAMPLE RESULTS

Page 1 of 1

Sample ID Sample Location Bastricted Restricted R				8					
Sample Location Date SampledRestricted Residential Guidance ValueSidevall SidevallPAHs100100 <td< td=""><td>Sample ID</td><td>NYSDEC Part 375</td><td>NVEDEC D</td><td>M-SS-3</td><td>M-BS-1</td><td>M-BS-2</td><td>M-SS-5</td><td>M-SS-6</td><td>M-SS-7</td></td<>	Sample ID	NYSDEC Part 375	NVEDEC D	M-SS-3	M-BS-1	M-BS-2	M-SS-5	M-SS-6	M-SS-7
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	Sample Location		NYSDEC Part 375	Sidewall	Bottom	Bottom	Sidewall	Sidewall	Sidewall
CompoundGuidance ValueNormanSoilSoilSoilSoilSoilSoilSoilSoilSoilSoilSoilSoilSoilSoilSoilSoilSoilMarkyUnitsmg/kg <td>Date Sampled</td> <td></td> <td></td> <td>3/8/2010</td> <td>3/8/2010</td> <td>3/24/2010</td> <td>3/24/2010</td> <td>3/24/2010</td> <td>3/24/2010</td>	Date Sampled			3/8/2010	3/8/2010	3/24/2010	3/24/2010	3/24/2010	3/24/2010
PAHs         0	Compound	Guidance Value	Guidance Value	Soil	Soil	Soil	Soil	Soil	Soil
Naphthalene         100         12         ND           2-Methylnaphthalene         NC         NC         0.095 J         ND	Units	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
2-Methylaphthalene         NC         NC         0.095 J         ND	PAHs								
Acenaphthylene         100         100         0.150 J         ND         ND         ND         ND         ND         ND         ND           Acenaphthene         100         20         0.042 J         ND         NO         ND	Naphthalene	100	12	ND	ND	ND	ND	ND	ND
Accamphthene         100         20         0.042 J         ND	2-Methylnaphthalene	NC	NC	0.095 J	ND	ND	ND	ND	ND
Fluorene         100         30         0.050 J         ND         ND         ND         ND         ND         ND         ND           Phenanthrene         100         100         0.73         ND         0.110 J         0.023 J         ND         ND           Anthracene         100         100         0.200 J         ND         0.027 J         ND         ND         ND           Fluoranthene         100         100         1.6         ND         0.150 J         0.028 J         0.028 J         0.042 J           Pyrene         100         100         1.2         ND         0.170 J         ND         ND         0.050 J           Benzo (a) anthracene         1         1         0.86         ND         0.090 J         0.022 J         0.025 J         0.025 J           Benzo (b) fluoranthene         3.9         1         0.79         ND         0.081 J         ND         ND         0.032 J           Benzo (b) fluoranthene         3.9         0.8         0.4         ND         0.030 J         ND         ND         ND           Benzo (a) pyrene         1         1         0.71         ND         0.050 J         ND         ND         ND	Acenaphthylene	100	100	0.150 J	ND	ND	ND	ND	ND
Phenanthrene         100         100         0.73         ND         0.110 J         0.023 J         ND         ND           Anthracene         100         100         0.200 J         ND         0.027 J         ND         ND         ND           Fluoranthene         100         100         1.6         ND         0.150 J         0.028 J         0.028 J         0.042 J           Pyrene         100         100         1.2         ND         0.170 J         ND         ND         0.050 J           Benzo (a) anthracene         1         1         0.86         ND         0.090 J         0.022 J         0.025 J         0.032 J           Chrysene         3.9         1         0.79         ND         0.081 J         ND         0.025 J         0.028 J           Benzo (b) fluoranthene         1         1         0.98         ND         0.066 J         ND         ND         0.028 J           Benzo (a) pyrene         1         1         0.71         ND         0.030 J         ND         ND         ND           Benzo (a) pyrene         1         1         0.71         ND         0.028 J         ND         ND         ND         ND         ND	Acenaphthene	100	20	0.042 J	ND	ND	ND	ND	ND
Anthracene         100         100         0.200 J         ND         0.027 J         ND         ND         ND           Fluoranthene         100         100         1.6         ND         0.150 J         0.028 J         0.028 J         0.042 J           Pyrene         100         100         1.2         ND         0.170 J         ND         ND         0.050 J           Benzo (a) anthracene         1         1         0.86         ND         0.090 J         0.022 J         0.025 J         0.032 J           Chrysene         3.9         1         0.79         ND         0.081 J         ND         0.025 J         0.028 J           Benzo (b) fluoranthene         1         1         0.98         ND         0.066 J         ND         ND         0.032 J           Benzo (a) pyrene         1         1         0.79         ND         0.030 J         ND         ND         0.033           Benzo (a) fluoranthene         3.9         0.8         0.4         ND         0.030 J         ND         ND <td< td=""><td>Fluorene</td><td>100</td><td>30</td><td>0.050 J</td><td>ND</td><td>ND</td><td>ND</td><td>ND</td><td>ND</td></td<>	Fluorene	100	30	0.050 J	ND	ND	ND	ND	ND
Fluoranthene         100         100         1.6         ND         0.150 J         0.028 J         0.028 J         0.042 J           Pyrene         100         100         1.2         ND         0.170 J         ND         ND         0.050 J           Benzo (a) anthracene         1         1         0.86         ND         0.090 J         0.022 J         0.025 J         0.032 J           Chrysene         3.9         1         0.79         ND         0.066 J         ND         0.025 J         0.028 J           Benzo (b) fluoranthene         1         1         0.98         ND         0.066 J         ND         ND         0.03 J           Benzo (k) fluoranthene         3.9         0.8         0.4         ND         0.030 J         ND         ND         0.03 J           Benzo (a) pyrene         1         1         0.71         ND         0.050 J         ND         ND <t< td=""><td>Phenanthrene</td><td>100</td><td>100</td><td>0.73</td><td>ND</td><td>0.110 J</td><td>0.023 J</td><td>ND</td><td>ND</td></t<>	Phenanthrene	100	100	0.73	ND	0.110 J	0.023 J	ND	ND
Pyrene         100         100         1.2         ND         0.170 J         ND         ND         0.050 J           Benzo (a) anthracene         1         1         0.86         ND         0.090 J         0.022 J         0.025 J         0.032 J           Chrysene         3.9         1         0.79         ND         0.081 J         ND         0.025 J         0.028 J           Benzo (b) fluoranthene         1         1         0.98         ND         0.066 J         ND         ND         0.03 J           Benzo (k) fluoranthene         3.9         0.8         0.4         ND         0.030 J         ND         ND         ND           Benzo (a) pyrene         1         1         0.71         ND         0.050 J         ND         ND         ND           Benzo (a) pyrene         0.5         0.5         0.44         ND         0.028 J         ND	Anthracene	100	100	0.200 J	ND	0.027 J	ND	ND	ND
Benzo (a) anthracene         1         1         0.86         ND         0.090 J         0.022 J         0.025 J         0.032 J           Chrysene         3.9         1         0.79         ND         0.081 J         ND         0.025 J         0.028 J           Benzo (b) fluoranthene         1         1         0.98         ND         0.066 J         ND         ND         0.030 J           Benzo (k) fluoranthene         3.9         0.8         0.4         ND         0.030 J         ND         ND         0.03           Benzo (a) pyrene         1         1         0.71         ND         0.050 J         ND         ND         ND         ND           Indeno (1, 2, 3-cd) pyrene         0.5         0.5         0.44         ND         0.028 J         ND	Fluoranthene	100	100	1.6	ND	0.150 J	0.028 J	0.028 J	0.042 J
Chrysene         3.9         1         0.79         ND         0.081 J         ND         0.025 J         0.028 J           Benzo (b) fluoranthene         1         1         0.98         ND         0.066 J         ND         ND         0.03 J           Benzo (k) fluoranthene         3.9         0.8         0.4         ND         0.030 J         ND         ND         ND         0.03           Benzo (k) fluoranthene         3.9         0.8         0.4         ND         0.030 J         ND         ND         ND         ND           Benzo (a) pyrene         1         1         0.71         ND         0.050 J         ND         ND <t< td=""><td>Pyrene</td><td>100</td><td>100</td><td>1.2</td><td>ND</td><td>0.170 J</td><td>ND</td><td>ND</td><td>0.050 J</td></t<>	Pyrene	100	100	1.2	ND	0.170 J	ND	ND	0.050 J
Benzo (b) fluoranthene         1         1         0.98         ND         0.066 J         ND         ND         0.03           Benzo (k) fluoranthene         3.9         0.8         0.4         ND         0.030 J         ND         ND         ND         ND           Benzo (a) pyrene         1         1         0.71         ND         0.050 J         ND         ND         ND         ND           Indeno (1, 2, 3-cd) pyrene         0.5         0.5         0.44         ND         0.028 J         ND         ND         ND         ND           Dibenzo (a, h) anthracene         0.33         0.33         0.180 J         ND	Benzo (a) anthracene	1	1	0.86	ND	0.090 J	0.022 J	0.025 J	0.032 J
Benzo (k) fluoranthene         3.9         0.8         0.4         ND         0.030 J         ND         ND         ND           Benzo (a) pyrene         1         1         0.71         ND         0.050 J         ND         ND         ND         ND           Indeno (1, 2, 3-cd) pyrene         0.5         0.5         0.44         ND         0.028 J         ND         ND         ND         ND           Dibenzo (a, h) anthracene         0.33         0.33         0.180 J         ND	Chrysene	3.9	1	0.79	ND	0.081 J	ND	0.025 J	0.028 J
Benzo (a) pyrene         1         1         0.71         ND         0.050 J         ND         ND         ND           Indeno (1, 2, 3-cd) pyrene         0.5         0.5         0.44         ND         0.028 J         ND         ND         ND         ND           Dibenzo (a, h) anthracene         0.33         0.33         0.180 J         ND         N	Benzo (b) fluoranthene	1	1	0.98	ND	0.066 J	ND	ND	0.03
Indeno (1, 2, 3-cd) pyrene         0.5         0.5         0.44         ND         0.028 J         ND         ND         ND           Dibenzo (a, h) anthracene         0.33         0.33         0.180 J         ND         ND <td< td=""><td>Benzo (k) fluoranthene</td><td>3.9</td><td>0.8</td><td>0.4</td><td>ND</td><td>0.030 J</td><td>ND</td><td>ND</td><td>ND</td></td<>	Benzo (k) fluoranthene	3.9	0.8	0.4	ND	0.030 J	ND	ND	ND
Dibenzo (a, h) anthracene         0.33         0.33         0.180 J         ND	Benzo (a) pyrene	1	1	0.71	ND	0.050 J	ND	ND	ND
Benzo (g, h, i) perylene         100         100         0.51         ND         0.031 J         ND         ND         ND           METALS               Not Analyzed         Not Analyze	Indeno (1, 2, 3-cd) pyrene	0.5	0.5	0.44	ND	0.028 J	ND	ND	ND
METALS         Image: Metal state	Dibenzo (a, h) anthracene	0.33	0.33	0.180 J	ND	ND	ND	ND	ND
Arsenic         16         13         Not Analyzed         5         Not Analyzed	Benzo (g, h, i,) perylene	100	100	0.51	ND	0.031 J	ND	ND	ND
Barium         400         350         177 E         131 E         114         143         106         60.2           Cadium         4.3         2.5         1.2         0.55         1.5         0.84         0.81         0.61           Copper         270         50         69.1         28         99.6         30.5         25.1         17.5	METALS								
Cadium         4.3         2.5         1.2         0.55         1.5         0.84         0.81         0.61           Copper         270         50         69.1         28         99.6         30.5         25.1         17.5	Arsenic	16	13	Not Analyzed	5	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed
Copper         270         50         69.1         28         99.6         30.5         25.1         17.5	Barium	400	350	177 E	131 E	114	143	106	60.2
	Cadium	4.3	2.5	1.2	0.55	1.5	0.84	0.81	0.61
Lead 400 63 346 E 11.5 E 98.1 45.9 231 60.5	Copper	270	50	69.1	28	99.6	30.5	25.1	17.5
	Lead	400	63	346 E	11.5 E	98.1	45.9	231	60.5

Notes:

1) PAHs analyzed by SW846-8270C; total metals analyzed by USEPA

6000/7000 Series Methods.

2) Shaded areas indicate result exceeds NYSDEC Part 375 Restricted

Residential Soil Guidance Values.

3) Shaded areas indicate result exceeds NYSDEC Part 375 Unrestricted

Soil Guidance Values.

4) J = detected above the MDL, but below the RL; therefore, result is an

estimated concentration.

**5**) mg/kg = milligrams per kilogram (ppm)

6) NC = No Criteria

7) ND = Analyte included in the analysis, but not detected.

 $\mathbf{8}$ ) E = Analyte concentration exceeds calibration range of instrument used

for analysis.

# TABLE 13 SPAULDING COMPOSITES SITE AREA N, OPERABLE UNIT 6 SUMMARY OF CONFIRMATION SOIL SAMPLE RESULTS

Page 1 of 1

Sample ID	NYSDEC Part 375	NVCDEC Dent 275	N-BS-1	N-SS-1	N-SS-2	N-SS-3	N-SS-4	
Sample Location	Restricted Residential Cuidance Value	NYSDEC Part 375 Unrestricted Guidance Value		Bottom	Sidewall	Sidewall	Sidewall	Sidewall
Date Sampled			3/8/2010	3/8/2010	3/8/2010	3/16/2010	3/16/2010	
Compound	Guidance Value		Soil	Soil	Soil	Soil	Soil	
Units	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	
METALS								
Barium	400	350	398	247	116	56	120	
Copper	270	50	60.1	120	57.6	68	91	

Notes:

1) Total metals analyzed by USEPA 6000/7000 Series Methods.

2) Shaded areas indicate result exceeds NYSDEC Part 375 Restricted Residential

Soil Guidance Values.

3) Shaded areas indicate result exceeds NYSDEC Part 375 Unrestricted Soil

Guidance Values.

4) J = detected above the MDL, but below the RL; therefore, result is an estimated

concentration.

**5**) mg/kg = milligrams per kilogram (ppm)

## TABLE 14 SPAULDING COMPOSITES SITE AREA AA, OPERABLE UNIT 6 SUMMARY OF CONFIRMATION SOIL SAMPLE RESULTS Page 1 of 1

Sample ID	NYSDEC Part 375	NYSDEC Part 375	AA-S-1	AA-S-2	AA-S-3	AA-B-1
Sample Location	Restricted	Unrestricted	Sidewall	Sidewall	Sidewall	Bottom
Date Sampled	Residential	Guidance Value	3/11/2010	3/11/2010	3/11/2010	3/11/2010
Compound	Guidance Value	Guidance Value	Soil	Soil	Soil	Soil
Units	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
PAHs						
Naphthalene	100	12	ND	0.170 J	0.22	ND
2-Methylnaphthalene	NC	NC	ND	0.31	0.76	ND
Acenaphthylene	100	100	ND	0.031 J	ND	ND
Acenaphthene	100	20	ND	0.058 J	0.170 J	ND
Fluorene	100	30	ND	0.065 J	0.200 J	ND
Phenanthrene	100	100	0.140 J	0.62	1.1	0.074 J
Anthracene	100	100	0.040 J	0.130 J	0.26	ND
Fluoranthene	100	100	0.3	0.98	1.4	0.099 J
Pyrene	100	100	0.25	0.57	1.3	0.077 J
Benzo (a) anthracene	1	1	0.170 J	0.35	0.67	0.044 J
Chrysene	3.9	1	0.160 J	0.44	0.71	0.042 J
Benzo (b) fluoranthene	1	1	0.190 J	0.42	0.78	0.048 J
Benzo (k) fluoranthene	3.9	0.8	0.100 J	0.46	0.38	0.027 J
Benzo (a) pyrene	1	1	0.150 J	0.45	0.64	0.038 J
Indeno (1, 2, 3-cd) pyrene	0.5	0.5	0.096 J	0.26	0.38	0.022 J
Dibenzo (a, h) anthracene	0.33	0.33	ND	0.150 J	0.120 J	ND
Benzo (g, h, i,) perylene	100	100	0.120 J	0.28	0.43	0.024 J
METALS						
Arsenic	16	13	8.8 B	12 B	3.5 B	5.0 B
Copper	270	50	42	95	26	28
Mercury	0.81	0.18	0.043 J	0.19	0.12	ND

Notes:

**1**) PAHs analyzed by SW846-8270C; total metals analyzed by USEPA 6000/7000 Series Methods.

2) Shaded areas indicate result exceeds NYSDEC Part 375 Restricted Residential

Soil Guidance Values.

**3**) Shaded areas indicate result exceeds NYSDEC Part 375 Unrestricted Soil Guidance Values.

**4**) J = detected above the MDL, but below the RL; therefore, result is an estimated concentration.

5) mg/kg = milligrams per kilogram (ppm)

6) NC = No Criteria

7) ND = Analyte included in the analysis, but not detected.

**8**) B = Analyte detected in associated trip blank.

# TABLE 15 SPAULDING COMPOSITES SITE AREA AB, OPERABLE UNIT 6 SUMMARY OF CONFIRMATION SOIL SAMPLE RESULTS

Page 1 of 1

Sample ID	NYSDEC Part 375		AB-B-1	AB-S1	AB-SS-3
Sample Location	Restricted	NYSDEC Part 375	Bottom	Sidewall	Sidewall
Date Sampled	Residential	Unrestricted	3/11/2010	3/12/2010	4/8/2010
Compound	Guidance Value	Guidance Value	Soil	Soil	Soil
Units	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
PAHs					
Naphthalene	100	12	ND	0.036 J	ND
2-Methylnaphthalene	NC	NC	ND	0.030 J	ND
Acenaphthylene	100	100	ND	ND	ND
Acenaphthene	100	20	ND	0.077 J	ND
Fluorene	100	30	ND	0.076 J	ND
Phenanthrene	100	100	0.038 J	0.61	ND
Anthracene	100	100	ND	0.150 J	ND
Fluoranthene	100	100	0.047 J	0.8	0.045 J
Pyrene	100	100	0.087 J	0.65	0.053 J
Benzo (a) anthracene	1	1	0.034 J	0.35	0.040 J
Chrysene	3.9	1	0.041 J	0.28	0.036 J
Benzo (b) fluoranthene	1	1	0.034 J	0.56	0.033 J
Benzo (k) fluoranthene	3.9	0.8	ND	0.22	ND
Benzo (a) pyrene	1	1	0.025 J	0.38	0.022 J
Indeno (1, 2, 3-cd) pyrene	0.5	0.5	ND	0.23	ND
Dibenzo (a, h) anthracene	0.33	0.33	ND	0.085 J	ND
Benzo (g, h, i,) perylene	100	100	0.028 J	0.23	ND
METALS					
Aluminum	NC	NC	11300	17500	16100
Antimony	NC	NC	1.7	0.93	ND
Arsenic	16	13	6	9.9	5.3
Barium	400	350	68.7	204	155
Beryllium	72	7.2	0.61	1.4	0.98
Cadmium	4.3	2.5	0.27	1.3	0.6
Calcium	NC	NC	7820	45600	38600
Chromium	180	30	14.5	30.8	23.1
Cobalt	NC	NC	8.9	10.7	12.2
Copper	270	50	18.2	86.7	24.6
Iron	NC	NC	25200	34400	37600
Lead	400	63	24.8	136	12
Magnesium	NC	NC	5430	10000	15200
Manganese	0	1600	228	542	473
Mercury	0.81	0.18	0.012 B	0.28	ND
Nickel	310	30	16.4	28.1	29.1
Potassium	NC	NC	968	2030	2390
Selenium	180	3.9	1.9	1.6	1.1
Silver	180	2	0.16 B	0.28 B	0.14 B
Sodium	NC	NC	100	2170	130
Thallium	NC	NC	1.4	2.4	1.4
Vanadium	NC	NC	28.8	29.8	28.3
Zinc	10000	109	6630	590	649

Notes:

1) SVOCs analyzed by SW846-8270C; total metals analyzed by USEPA

6000/7000 Series Methods; mercury analyzed by SW846-7471.

2) Shaded areas indicate result exceeds NYSDEC Part 375 Restricted Residential

Soil Guidance Values.

**3**) Shaded areas indicate result exceeds NYSDEC Part 375 Unrestricted Soil Guidance Values.

**4**) J = detected above the MDL, but below the RL; therefore, result is an estimated concentration.

5) mg/kg = milligrams per kilogram (ppm)

**6**) NC = No Criteria

7) ND = Analyte included in the analysis, but not detected

**8**) B = Analyte detected in associated trip blank

9) E = Analyte concentration exceeds calibration range of instrument used for

analysis.

## TABLE 16 SPAULDING COMPOSITES SITE AREA AC, OPERABLE UNIT 6 SUMMARY OF CONFIRMATION SOIL SAMPLE RESULTS Page 1 of 2

Sample ID	NYSDEC Part 375	DEC Part 375	AC-SS-1	AC-BS-2	AC-BS-5	AC-BS-11	AC-BS-14	AC-BS-15	AC-BS-16	AC-BS-19
Sample Location	Restricted Residential Guidance Value	Sidewall	Bottom	Bottom	Bottom	Bottom	Bottom	Bottom	Bottom	
Date Sampled		4/14/2010	4/14/2010	6/9/2010	6/9/2010	6/24/2010	6/24/2010	6/24/2010	6/24/2010	
Compound			Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil
Units	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
METALS										
Cadmium	4.3	2.5	2	2.2	2.19	2.82	1.69	3.2	1.51	2.54
Zinc	10000	109	6200	1100	3790	5190	2290	3190	1890	2340

Notes:

1) Total metals analyzed by USEPA 6000/7000 Series Methods.

2) Shaded areas indicate result exceeds NYSDEC Part 375 Restricted

Residential Soil Guidance Values.

3) Shaded areas indicate result exceeds NYSDEC Part 375 Unrestricted Soil

Guidance Values.

4) mg/kg = milligrams per kilogram (ppm)

## TABLE 16 SPAULDING COMPOSITES SITE AREA AC, OPERABLE UNIT 6 SUMMARY OF CONFIRMATION SOIL SAMPLE RESULTS Page 2 of 2

Sample ID	NYSDEC Part 375		AC-BS-21	AC-BS-22
Sample Location	Restricted	NYSDEC Part 375 Unrestricted	Bottom	Bottom
Date Sampled	Residential	Guidance Value	7/15/2010	7/15/2010
Compound	Guidance Value		Soil	Soil
Units	mg/kg	mg/kg	mg/kg	mg/kg
METALS				
Cadmium	4.3	2.5	2.61	2.94
Zinc	10000	109	1990	5290

Notes:

1) Total metals analyzed by USEPA 6000/7000 Series Methods.

2) Shaded areas indicate result exceeds NYSDEC Part 375 Restricted

Residential Soil Guidance Values.

3) Shaded areas indicate result exceeds NYSDEC Part 375 Unrestricted Soil

Guidance Values.

4) mg/kg = milligrams per kilogram (ppm)

## TABLE 17 SPAULDING COMPOSITES SITE AREA AD, OPERABLE UNIT 6 SUMMARY OF CONFIRMATION SOIL SAMPLE RESULTS Page 1 of 1

#### Sample ID AD-BS-1 AD-BS-2 AD-SS-1 NYSDEC Part 375 NYSDEC Part 375 Sample Location Sidewall Bottom Bottom Restricted Unrestricted **Residential Guidance Date Sampled** 5/5/2010 5/5/2010 5/5/2010 **Guidance Value** Value Compound Soil Soil Soil Units mg/kg mg/kg mg/kg mg/kg mg/kg METALS Zinc 10000 109 1550 7340 53.2

Notes:

1) Total metals analyzed by USEPA 6000/7000 Series Methods.

2) Shaded areas indicate result exceeds NYSDEC Part 375 Restricted Residential Soil Guidance Values.

**3**) Shaded areas indicate result exceeds NYSDEC Part 375 Unrestricted Soil Guidance Values.

4) mg/kg = milligrams per kilogram (ppm)

\*Sample location was overexcavated until it met excavation Area AC.

# TABLE 18 SPAULDING COMPOSITES SITE AREA AE, OPERABLE UNIT 6 SUMMARY OF CONFIRMATION SOIL SAMPLE RESULTS

#### Page 1 of 1

Sample ID	NYSDEC Part 375	NUCLEC D 4 255	AE-SS-1	AE-SS-2	AE-BS-13	AE-BS-14
Sample Location	Restricted	NYSDEC Part 375 Unrestricted	Sidewall	Sidewall	Bottom	Bottom
Date Sampled	Residential	Guidance Value	3/15/2010	3/16/2010	5/5/2010	5/5/2010
Compound	Guidance Value	Guidance value	Soil	Soil	Soil	Soil
Units	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
METALS						
Cadmium	4.3	2.5	0.4	0.39	2.36	2.72
Lead	400	63	13.7	15.2	17.3	21.1
Zinc	10000	109	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed
PCBs						
Aroclor- 1016	NC	NC	ND	ND	Not Analyzed	Not Analyzed
Aroclor-1221	NC	NC	ND	ND	Not Analyzed	Not Analyzed
Aroclor-1232	NC	NC	ND	ND	Not Analyzed	Not Analyzed
Aroclor-1242	NC	NC	ND	ND	Not Analyzed	Not Analyzed
Aroclor-1248	NC	NC	ND	ND	Not Analyzed	Not Analyzed
Aroclor-1254	NC	NC	ND	ND	Not Analyzed	Not Analyzed
Aroclor-1260	NC	NC	ND	ND	Not Analyzed	Not Analyzed

#### Notes:

1) Total metals analyzed by USEPA 6000/7000 Series Methods; PCBs analyzed by SW846-8082.

2) Shaded areas indicate result exceeds NYSDEC Part 375 Restricted

Residential Soil Guidance Values.

 Shaded areas indicate result exceeds NYSDEC Part 375 Unrestricted Soil Guidance Values.

5) mg/kg = milligrams per kilogram (ppm)

6) NC = No Criteria

7) ND = Analyte included in the analysis, but not detected.

## TABLE 19 SPAULDING COMPOSITES SITE AREA AF, OPERABLE UNIT 6 SUMMARY OF CONFIRMATION SOIL SAMPLE RESULTS Page 1 of 1

Sample ID	NYSDEC Part 375		AF-BS-2	AF-BS-3	AF-BS-6	AF-SS-9	AF-BS-11	AF-BS-12	AF-BS-14	AF-BS-15
Sample Location	Restricted	NYSDEC Part 375	Bottom	Bottom	Bottom	Sidewall	Bottom	Bottom	Bottom	Bottom
Date Sampled	Residential	Unrestricted Guidance Value	3/15/2010	3/29/2010	3/29/2010	4/19/2010	4/19/2010	4/19/2010	5/5/2010	5/5/2010
Compound	Guidance Value		Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil
Units	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
METALS										
Cadmium	4.3	2.5	0.54	3.48	1.05	1.3	0.39	4.3	Not Analyzed	Not Analyzed
Zinc	10000	109	1580	Not Analyzed	Not Analyzed	3760	61.5	2180	1300	3340

Notes:

Total metals analyzed by USEPA 6000/7000 Series Methods.
 Shaded areas indicate result exceeds NYSDEC Part 375 Restricted

Residential Soil Guidance Values.

3) Shaded areas indicate result exceeds NYSDEC Part 375 Unrestricted Soil Guidance Values.

4) mg/kg = milligrams per kilogram (ppm)

\*Sample location was overexcavated and resampled.

\*\*Sample location was overexcavated until Area AF joined Area AE;

therefore, there was no resample.

## TABLE 20 SPAULDING COMPOSITES SITE AREA AG, OPERABLE UNIT 6 SUMMARY OF CONFIRMATION SOIL SAMPLE RESULTS Page 1 of 2

Sample ID	NYSDEC Part 375		AG-SS-1	AG-SS-2	AG-BS-1	AG-BS-2	AG-SS-4a	AG-SS-6	AG-SS-9
Sample Location	Restricted	NYSDEC Part 375 Unrestricted	Sidewall	Sidewall	Bottom	Bottom	Sidewall	Sidewall	Sidewall
Date Sampled	Residential	Guidance Value	3/12/2010	3/12/2010	3/12/2010	3/12/2010	3/25/2010	3/25/2010	3/25/2010
Compound	Guidance Value		Soil						
Units	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
METALS									
Zinc	10000	109	71	150	930	1200	9700	3200	8100

Notes:

1) Total metals analyzed by USEPA 6000/7000 Series Methods.

2) Shaded areas indicate result exceeds NYSDEC Part 375 Restricted Residential

Soil Guidance Values.

3) Shaded areas indicate result exceeds NYSDEC Part 375 Unrestricted Soil

Guidance Values.

4) mg/kg = milligrams per kilogram (ppm)

## TABLE 20 SPAULDING COMPOSITES SITE AREA AG, OPERABLE UNIT 6 SUMMARY OF CONFIRMATION SOIL SAMPLE RESULTS Page 2 of 2

Sample ID	NYSDEC Part 375		AG-SS-10	AG-SS-11
Sample Location	Restricted	NYSDEC Part 375 Unrestricted	Sidewall	Sidewall
Date Sampled	Residential	Guidance Value	4/12/2010	4/12/2010
Compound	Guidance Value		Soil	Soil
Units	mg/kg	mg/kg	mg/kg	mg/kg
METALS				
Zinc	10000	109	400	6800

Notes:

1) Total metals analyzed by USEPA 6000/7000 Series Methods.

2) Shaded areas indicate result exceeds NYSDEC Part 375 Restricted Residential

Soil Guidance Values.

3) Shaded areas indicate result exceeds NYSDEC Part 375 Unrestricted Soil

Guidance Values.

**4**) mg/kg = milligrams per kilogram (ppm)

### TABLE 21 SPAULDING COMPOSITES SITE AREA AH, OPERABLE UNIT 6 SUMMARY OF CONFIRMATION SOIL SAMPLE RESULTS Page 1 of 2

Sample ID	NYSDEC Part 375		AH-S1	AH-S2	AH-S3	AH-B2	AH-BS-4	AH-BS-5	AH-BS-8	AH-BS-14	AH-BS-16
Sample Location	Restricted	NYSDEC Part 375 Unrestricted	Sidewall	Sidewall	Sidewall	Bottom	Bottom	Bottom	Bottom	Bottom	Bottom
Date Sampled	Residential	Guidance Value	3/12/2010	3/12/2010	3/12/2010	3/12/2010	3/25/2010	3/25/2010	3/25/2010	4/12/2010	4/29/2010
Compound	Guidance Value	Guidance Value	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil
Units	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
PAHs											
Di-n-butylphthalate	100	NC	0.092 J	ND	ND	ND	Not Analyzed	Not Analyzed	Not Analyzed	ND	Not Analyzed
METALS											
Arsenic	16	13	6	2.6	6.9	5.5	Not Analyzed	Not Analyzed	Not Analyzed	4.2	1.55
Copper	270	50	45	16	83	21	Not Analyzed	Not Analyzed	Not Analyzed	20	Not Analyzed
Manganese	2000	1600	590	380	590	1100	Not Analyzed	Not Analyzed	Not Analyzed	720	Not Analyzed
Zinc	10000	109	600	70	5200	1200	6700	5400	77	2100	7730

Notes:

1) PAHs analyzed by SW846-8270C; total metals analyzed by USEPA 6000/7000 Series Methods.

2) Shaded areas indicate result exceeds NYSDEC Part 375 Restricted

Residential Soil Guidance Values.

3) Shaded areas indicate result exceeds NYSDEC Part 375 Unrestricted

Soil Guidance Values.

**4**) J = detected above the MDL, but below the RL; therefore, result is an estimated concentration.

5) mg/kg = milligrams per kilogram (ppm)

**6**) ND = Analyte included in the analysis, but not detected.

### TABLE 21 SPAULDING COMPOSITES SITE AREA AH, OPERABLE UNIT 6 SUMMARY OF CONFIRMATION SOIL SAMPLE RESULTS Page 2 of 2

Sample ID	NYSDEC Part 375		AH-BS-18	AH-BS-19	AH-BS-21	AH-BS-22	AH-BS-23
Sample Location	Restricted	NYSDEC Part 375 Unrestricted	Bottom	Bottom	Bottom	Bottom	Bottom
Date Sampled	Residential	Guidance Value	4/29/2010	4/29/2010	5/5/2010	5/5/2010	5/5/2010
Compound	Guidance Value		Soil	Soil	Soil	Soil	Soil
Units	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
PAHs							
Di-n-butylphthalate	100	NC	Not Analyzed	Not Analyzed	ND	ND	ND
METALS							
Arsenic	16	13	3.2	3.14	3.95	3.35	2.18
Copper	270	50	Not Analyzed	Not Analyzed	19.1	20.7	19
Manganese	2000	1600	Not Analyzed	Not Analyzed	213	450	361
Zinc	10000	109	4310	6920	6340	66.2	6850

Notes:

**1**) PAHs analyzed by SW846-8270C; total metals analyzed by USEPA 6000/7000 Series Methods.

2) Shaded areas indicate result exceeds NYSDEC Part 375 Restricted

Residential Soil Guidance Values.

**3**) Shaded areas indicate result exceeds NYSDEC Part 375 Unrestricted Soil Guidance Values.

**4**) J = detected above the MDL, but below the RL; therefore, result is an estimated concentration.

**5**) mg/kg = milligrams per kilogram (ppm)

6) ND = Analyte included in the analysis, but not detected.

## TABLE 22 SPAULDING COMPOSITES SITE AREA AI, OPERABLE UNIT 6 SUMMARY OF CONFIRMATION SOIL SAMPLE RESULTS Page 1 of 1

Sample ID	NYSDEC Part 375		AI-BS-1	AI-BS-2	AI-SS-2	AI-SS-4	AI-SS-5
Sample Location	Restricted	NYSDEC Part 375 Unrestricted	Bottom	Bottom	Sidewall	Sidewall	Sidewall
Date Sampled	Residential	Guidance Value	2/24/2010	2/24/2010	2/24/2010	2/24/2010	3/24/2010
Compound	Guidance Value		Soil	Soil	Soil	Soil	Soil
Units	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
METALS							
Arsenic	16	13	5.4	4.6	3.6	11.3	5.6
Copper	270	50	7.2	8.1	21.5	67.8	17.4
Lead	400	63	14.2	11.9	9.8	39.2	16.7
Mercury	0.81	0.18	0.032 B	0.021 B	ND	0.04 B	0.038 B
Zinc	10000	109	1180	1560	78.2	789	1940

Notes:

1) Total metals analyzed by USEPA 6000/7000 Series Methods; mercury

analyzed by SW846-7471.

2) Shaded areas indicate result exceeds NYSDEC Part 375 Restricted

Residential Soil Guidance Values.

3) Shaded areas indicate result exceeds NYSDEC Part 375 Unrestricted Soil

Guidance Values.

**4**) mg/kg = milligrams per kilogram (ppm)

**5**) B = Analyte detected in associated trip blank.

### TABLE 23 SPAULDING COMPOSITES SITE AREA AJ-a, OPERABLE UNIT 6 SUMMARY OF CONFIRMATION SOIL SAMPLE RESULTS Page 1 of 2

Sample ID	NYSDEC Part 375		AJ-a-BS-1	AJ-a-BS-4	AJ-a - SS-2	AJ-a-BS-6	AJ-a-BS-7	AJ-a-BS-12	AJ-a-BS-13
Sample Location	Restricted	NYSDEC Part 375 Unrestricted	Bottom	Bottom	Sidewall	Bottom	Bottom	Bottom	Bottom
Date Sampled	Residential	Guidance Value	5/7/2010	7/9/2010	7/19/2010	7/26/2010	7/26/2010	7/27/2010	7/27/2010
Compound	Guidance Value		Soil	Soil	Soil	Soil	Soil	Soil	Soil
Units	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
METALS									
Cadmium	4.3	2.5	0.933	1.84	3.35	1.58	0.828	0.694	0.686
Copper	270	50	27.6	101	14	69.8	56.5	38.2	30.1
Zinc	10000	109	962	4030	8680	4680	1260	109	83.1

Notes:

1) Total metals analyzed by USEPA 6000/7000 Series Methods.

2) Shaded areas indicate result exceeds NYSDEC Part 375 Restricted Residential

Soil Guidance Values.

3) Shaded areas indicate result exceeds NYSDEC Part 375 Unrestricted Soil

Guidance Values.

4) mg/kg = milligrams per kilogram (ppm)

### TABLE 23 SPAULDING COMPOSITES SITE AREA AJ-a, OPERABLE UNIT 6 SUMMARY OF CONFIRMATION SOIL SAMPLE RESULTS Page 2 of 2

Sample ID	NYSDEC Part 375		AJ-a-BS-14	AJ-a-BS-15	AJ-a-BS-16	AJ-a-BS-18	AJ-a-BS-19
Sample Location	Restricted	NYSDEC Part 375 Unrestricted	Bottom	Bottom	Bottom	Bottom	Bottom
Date Sampled	Residential	Guidance Value	7/27/2010	7/27/2010	8/3/2010	8/10/2010	8/10/2010
Compound	Guidance Value		Soil	Soil	Soil	Soil	Soil
Units	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
METALS							
Cadmium	4.3	2.5	0.948	0.789	3.47	0.873	1.18
Copper	270	50	31.2	6.99	21.4	25.2	69.2
Zinc	10000	109	95.1	45.5	5630	449	4850

Notes:

 Total metals analyzed by USEPA 6000/7000 Series Methods.
 Shaded areas indicate result exceeds NYSDEC Part 375 Restricted Residential Soil Guidance Values.

3) Shaded areas indicate result exceeds NYSDEC Part 375 Unrestricted Soil

Guidance Values.

4) mg/kg = milligrams per kilogram (ppm)

# TABLE 24 SPAULDING COMPOSITES SITE AREA AJ-b, OPERABLE UNIT 6 SUMMARY OF CONFIRMATION SOIL SAMPLE RESULTS

Page 1 of 2

Sample ID	NYSDEC Part 375		AJ-b-BS-2	AJ-b-BS-4	AJ-b-BS-6	AJ-b-BS-7	AJ-b-BS-8	AJ-b - SS-1	AJ-b - SS-4
Sample Location	Restricted	NYSDEC Part 375 Unrestricted	Bottom	Bottom	Bottom	Bottom	Bottom	Sidewall	Sidewall
Date Sampled	Residential	Guidance Value	5/7/2010	5/7/2010	5/7/2010	5/7/2010	5/27/2010	6/8/2010	7/9/2010
Compound	Guidance Value		Soil	Soil	Soil	Soil	Soil	Soil	Soil
Units	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
METALS									
Cadmium	4.3	2.5	1.68	4.18	3.7	1.38	0.531	2.68	3.12
Zinc	10000	109	4760	3100	5490	1430	118	3620	8370

Notes:

1) Total metals analyzed by USEPA 6000/7000 Series Methods.

2) Shaded areas indicate result exceeds NYSDEC Part 375 Restricted

Residential Soil Guidance Values.

**3**) Shaded areas indicate result exceeds NYSDEC Part 375 Unrestricted Soil Guidance Values.

**4**) J = detected above the MDL, but below the RL; therefore, result is an estimated concentration.

**5**) mg/kg = milligrams per kilogram (ppm)

# TABLE 24 SPAULDING COMPOSITES SITE AREA AJ-b, OPERABLE UNIT 6 SUMMARY OF CONFIRMATION SOIL SAMPLE RESULTS

# Page 2 of 2

Sample ID	NYSDEC Part 375		AJ-b-BS-14	AJ-b-BS-16	
Sample Location	Restricted	NYSDEC Part 375 Unrestricted	Bottom	Bottom	
Date Sampled	Residential	Guidance Value	7/9/2010	8/4/2010	
Compound	Guidance Value		Soil	Soil	
Units	mg/kg	mg/kg	mg/kg	mg/kg	
METALS					
Cadmium	4.3	2.5	4.11	0.389 J	
Zinc	10000	109	4810	183	

Notes:

1) Total metals analyzed by USEPA 6000/7000 Series Methods.

2) Shaded areas indicate result exceeds NYSDEC Part 375 Restricted

Residential Soil Guidance Values.

**3**) Shaded areas indicate result exceeds NYSDEC Part 375 Unrestricted Soil Guidance Values.

**4**) J = detected above the MDL, but below the RL; therefore, result is an estimated concentration.

**5**) mg/kg = milligrams per kilogram (ppm)

Page 1 of 1

Sample ID Sample Location	NYSDEC Part 375 Restricted	NYSDEC Part 375	AK-a-BS-1 Bottom	AK-a-SS-1 Sidewall	AK-a-BS-3 Bottom	AK-a-SS-2 Sidewall
Date Sampled	Residential	Unrestricted	5/20/2010	6/3/2010	6/23/2010	7/15/2010
Compound	Guidance Value	Guidance Value	Soil	Soil	Soil	Soil
Units	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
PAHs			6 8		6 8	
Naphthalene	100	12	ND	ND	ND	ND
2-Methylnaphthalene	NC	NC	ND	ND	ND	ND
Acenaphthylene	100	100	ND	ND	ND	ND
Acenaphthene	100	20	ND	ND	ND	ND
Fluorene	100	30	ND	ND	ND	ND
Phenanthrene	100	100	ND	ND	ND	ND
Anthracene	100	100	ND	ND	ND	ND
Fluoranthene	100	100	0.159 J	ND	ND	ND
Pyrene	100	100	0.103 J	ND	ND	ND
Benzo (a) anthracene	1	1	ND	ND	ND	ND
Chrysene	3.9	1	ND	ND	ND	ND
Benzo (b) fluoranthene	1	1	ND	ND	ND	ND
Benzo (k) fluoranthene	3.9	0.8	ND	ND	ND	ND
Benzo (a) pyrene	1	1	ND	ND	ND	ND
Indeno (1,2,3-cd) pyrene	0.5	0.5	ND	ND	ND	ND
Dibenzo (a,h) anthracene	0.33	0.33	ND	ND	ND	ND
Benzo (g,h,i) perylene	100	100	ND	ND	ND	ND
METALS						
Manganese	2000	1600	479	577	486	500

Notes:

1) PAHs analyzed by SW846-8270C; total metals analyzed by USEPA 6000/7000 Series Methods.

**2**) Shaded areas indicate result exceeds NYSDEC Part 375 Restricted Residential Soil Guidance Values.

**3**) Shaded areas indicate result exceeds NYSDEC Part 375 Unrestricted Soil Guidance Values.

**4**) J = detected above the MDL, but below the RL; therefore, result is an estimated concentration.

**5**) mg/kg = milligrams per kilogram (ppm)

**6**) NC = No Criteria

7) ND = Analyte included in the analysis, but not detected.

# TABLE 26SPAULDING COMPOSITES SITEAREA AK-b, OPERABLE UNIT 6SUMMARY OF CONFIRMATION SOIL SAMPLE RESULTSPage 1 of 2

Sample ID	NYSDEC Part 375		AK-b - SS-2	AK-b - BS-2	AK-b - BS-3	AK-b - BS-4	AK-b - BS-5	AK-b - BS-6	
Sample Location	Restricted	NVSDFC Part 375	Sidewall	Bottom	Bottom	Bottom	Bottom	Bottom	
Date Sampled	Residential	Residential	Residential Guidance Value	5/27/2010	6/3/2010	6/23/2010	7/29/2010	7/29/2010	7/29/2010
Compound	Guidance Value	Guidance value	Soil	Soil	Soil	Soil	Soil	Soil	
Units	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	
METALS									
Cadmium	4.3	2.5	0.7	1.09	1.29	1.53	1.91	0.752	
Chromium	180	30	31.7	28.7	26.5	22.2	23.7	26.9	
Copper	270	50	22	30.6	23.9	22.3	45.7	28.2	
Zinc	10000	109	2040	115	87.6	472	4050	245	

Notes:

1) Total metals analyzed by USEPA 6000/7000 Series Methods.

2) Shaded areas indicate result exceeds NYSDEC Part 375 Restricted Residential

Soil Guidance Values.

 Shaded areas indicate result exceeds NYSDEC Part 375 Unrestricted Soil Guidance Values.

4) J = detected above the MDL, but below the RL; therefore, result is an

estimated concentration.

5) mg/kg = milligrams per kilogram (ppm)

\*Sample location was overexcavated and resampled.

\*Sample location was overexcavated until Area AK-b joined Area AI; therefore,

there was no resample.

# TABLE 26SPAULDING COMPOSITES SITEAREA AK-b, OPERABLE UNIT 6SUMMARY OF CONFIRMATION SOIL SAMPLE RESULTSPage 2 of 2

Sample ID	NYSDEC Part 375		AK-b - BS-9	AK-b - BS-10	AK-b - BS-12	AK-b - BS-13	AK-b - BS-14		
Sample Location	Restricted	NYSDEC Part 375	Bottom	Bottom	Bottom	Bottom	Bottom		
Date Sampled	Residential	Unrestricted Guidance Value			ial Guidance Value	7/20/2010 7/20/2010	8/9/2010	8/17/2010	8/17/2010
Compound	Guidance Value		Soil	Soil	Soil	Soil	Soil		
Units	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg		
METALS									
Cadmium	4.3	2.5	1.68	0.964	0.251	0.442 J	0.828		
Chromium	180	30	21.9	29.3	24.8	24.8	24.4		
Copper	270	50	34.5	26.2	22.2	24.2	24		
Zinc	10000	109	4650	1420	65.6	73	300		

Notes:

1) Total metals analyzed by USEPA 6000/7000 Series Methods.

2) Shaded areas indicate result exceeds NYSDEC Part 375 Restricted Residential Soil Guidance Values.

 Shaded areas indicate result exceeds NYSDEC Part 375 Unrestricted Soil Guidance Values.

4) J = detected above the MDL, but below the RL; therefore, result is an

estimated concentration.

5) mg/kg = milligrams per kilogram (ppm)

\*Sample location was overexcavated and resampled.

\*Sample location was overexcavated until Area AK-b joined Area AI; therefore,

there was no resample.

#### TABLE 27 SPAULDING COMPOSITES SITE AREA AK-c, OPERABLE UNIT 6 SUMMARY OF CONFIRMATION SOIL SAMPLE RESULTS Page 1 of 1

Sample ID	NYSDEC Part 375	NYSDEC Part 375 Unrestricted Guidance Value	AK-c - BS-2	AK-c - BS-3	AK-c - SS-3	AK-c - SS-4
Sample Location	Restricted		Bottom	Bottom	Sidewall	Sidewall
Date Sampled	Residential		5/27/2010	6/3/2010	6/23/2010	6/23/2010
Compound	Guidance Value		Soil	Soil	Soil	Soil
Units	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
METALS						
Cadmium	4.3	2.5	1.57	2.35	3.23	1.5
Chromium	180	30	38.2	28.9	26.5	26.2
Copper	270	50	23.7	35.5	17.5	20.5
Zinc	10000	109	1580	2070	9830	2830

Notes:

 Total metals analyzed by USEPA 6000/7000 Series Methods.
 Shaded areas indicate result exceeds NYSDEC Part 375 Restricted Residential Soil Guidance Values.

3) Shaded areas indicate result exceeds NYSDEC Part 375 Unrestricted Soil

Guidance Values.

4) mg/kg = milligrams per kilogram (ppm)

# TABLE 28 SPAULDING COMPOSITES SITE AREA AL, OPERABLE UNIT 6 SUMMARY OF CONFIRMATION SOIL SAMPLE RESULTS

Page 1 of 1

Sample ID	NYSDEC Part 375		AL-BS-1	AL-BS-2	AL-SS-1	West of Boiler house	West of AL-SS-2	West of AL-SS-3
Sample Location	Restricted	NYSDEC Part 375	Bottom	Bottom	Sidewall	Sidewall	Sidewall	Sidewall
Date Sampled	Residential	Unrestricted Guidance Value	5/7/2010	5/7/2010	6/8/2010	6/23/2010	8/3/2010	8/3/2010
Compound	Guidance Value	Guiuance value	Soil	Soil	Soil	Soil	Soil	Soil
Units	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
PAHs								
Naphthalene	100	12	ND	ND	ND	ND	ND	ND
2-Methylnaphthalene	NC	NC	ND	ND	ND	ND	ND	ND
Acenaphthylene	100	100	ND	ND	ND	ND	ND	ND
Acenaphthene	100	20	ND	ND	ND	ND	ND	ND
Fluorene	100	30	ND	ND	ND	ND	ND	ND
Phenanthrene	100	100	ND	ND	ND	ND	ND	ND
Anthracene	100	100	ND	ND	ND	ND	ND	ND
Di-n-butyl phthalate	100	NC	ND	ND	ND	ND	Not Analyzed	Not Analyzed
Fluoranthene	100	100	ND	ND	ND	0.0376	ND	ND
Pyrene	100	100	ND	ND	ND	ND	ND	ND
Benzo (a) anthracene	1	1	ND	ND	ND	ND	ND	ND
Chrysene	3.9	1	ND	ND	ND	ND	ND	ND
Benzo (b) fluoranthene	1	1	ND	ND	ND	ND	ND	ND
Benzo (k) fluoranthene	3.9	0.8	ND	ND	ND	ND	ND	ND
Benzo (a) pyrene	1	1	ND	ND	ND	ND	ND	ND
Indeno (1,2,3-cd) pyrene	0.5	0.5	ND	ND	ND	ND	ND	ND
Dibenzo (a,h) anthracene	0.33	0.33	ND	ND	ND	ND	ND	ND
Benzo (g,h,i) perylene	100	100	ND	ND	ND	ND	ND	ND
PCBs								
Aroclor- 1016	NC	NC	ND	ND	ND	ND	ND	ND
Aroclor-1221	NC	NC	ND	ND	ND	ND	ND	ND
Aroclor-1232	NC	NC	ND	ND	ND	ND	ND	ND
Aroclor-1242	NC	NC	ND	ND	ND	ND	ND	ND
Aroclor-1248	NC	NC	ND	ND	ND	ND	ND	0.0561
Aroclor-1254	NC	NC	ND	ND	ND	ND	ND	ND
Aroclor-1260	NC	NC	ND	ND	ND	ND	ND	ND
Aroclor-1262	NC	NC	ND	ND	ND	ND	ND	ND
Aroclor-1268	NC	NC	ND	ND	ND	ND	ND	ND
Total PCBs	1	0.1	ND	ND	ND	ND	ND	0.0561
METALS								
Cadmium	4.3	2.5	1.58	1.31	0.68	1.02	0.938	0.675
Chromium	180	30	28	26.6	19.4	17.8	32.3	24.1
Zinc	10000	109	1010	83.7	55.1	727	80.6	63.3

Notes:

1) PAHs analyzed by SW846-8270C; metals analyzed by USEPA 6000/7000

Series Methods; PCBs analyzed by SW846-8082.

2) Shaded areas indicate result exceeds NYSDEC Part 375 Restricted Residential

Soil Guidance Values.

 Shaded areas indicate result exceeds NYSDEC Part 375 Unrestricted Soil Guidance Values.

**4)** J = detected above the MDL, but below the RL; therefore, result is an estimated

concentration.

**5**) mg/kg = milligrams per kilogram (ppm)

6) NC = No Criteria

7) ND = Analyte included in the analysis, but not detected.

# TABLE 29 SPAULDING COMPOSITES SITE SPAULDITE TUBE, OPERABLE UNIT 6 SUMMARY OF CONFIRMATION SOIL SAMPLE RESULTS

#### Page 1 of 1

Sample ID	NYSDEC Part 375		Spauldite BS-1	Spauldite BS-2	Spauldite SS-1	Spauldite SS-4	Spauldite SS-5	Spauldite SS-6
Sample Location	Restricted	NYSDEC Part 375 Unrestricted	Bottom	Bottom	Sidewall	Sidewall	Sidewall	Sidewall
Date Sampled	Residential	Guidance Value	6/30/2010	6/30/2010	7/13/2010	8/3/2010	8/10/2010	8/10/2010
Compound	Guidance Value	Guidance Value	Soil	Soil	Soil	Soil	Soil	Soil
Units	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
PAHs								
Naphthalene	100	12	ND	ND	ND	ND	0.158	ND
2-Methylnaphthalene	NC	NC	ND	ND	ND	ND	ND	ND
Acenaphthylene	100	100	ND	ND	ND	ND	ND	ND
Acenaphthene	100	20	ND	ND	ND	ND	0.296	0.238
Fluorene	100	30	ND	ND	ND	ND	0.505	0.253
Phenanthrene	100	100	ND	ND	ND	ND	3.34	1.28
Anthracene	100	100	ND	ND	ND	ND	0.799	0.454
Fluoranthene	100	100	ND	ND	ND	ND	4.24	1.35
Pyrene	100	100	ND	ND	ND	ND	2.75	0.914
Benzo (a) anthracene	1	1	ND	ND	ND	ND	1.37	0.592
Chrysene	3.9	1	ND	ND	ND	ND	1.37	0.518
Benzo (b) fluoranthene	1	1	ND	ND	ND	ND	1.11	0.353
Benzo (k) fluoranthene	3.9	0.8	ND	ND	ND	ND	0.992	0.464
Benzo (a) pyrene	1	1	ND	ND	ND	ND	1.09	0.468
Indeno (1, 2, 3-cd) pyrene	0.5	0.5	ND	ND	ND	ND	0.59	0.21
Dibenzo (a, h) anthracene	0.33	0.33	ND	ND	ND	ND	0.157	ND
Benzo (g, h, i,) perylene	100	100	ND	ND	ND	ND	0.461	0.158 J
METALS								
Copper	270	50	14.3	23	7.76	34.8	56.3	56.8

Notes:

1) PAHs analyzed by SW846-8270C; total metals analyzed by USEPA

6000/7000 Series Methods.

**2)** Shaded areas indicate result exceeds NYSDEC Part 375 Restricted Residential Soil Guidance Values.

3) Shaded areas indicate result exceeds NYSDEC Part 375 Unrestricted Soil

Guidance Values.

4) J = detected above the MDL, but below the RL; therefore, result is an

**5**) mg/kg = milligrams per kilogram (ppm)

6) ND = Analyte included in the analysis, but not detected.

7) NC = No Criteria

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Comula ID	NEGDEC D 4 255	-	DACC 1		DADC 2
Sample ID	NYSDEC Part 375	NYSDEC Part 375	BA SS-1	BA BS-1	BA BS-2
Sample Location	Restricted	Unrestricted	Sidewall	Bottom	Bottom
Date Sampled	Residential	Guidance Value	6/8/2010	6/17/2010	6/17/2010
Compound	Guidance Value		Soil	Soil	Soil
Units PAHs	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
	100				110
Naphthalene	100	12	ND	ND	ND
2-Methylnaphthalene	NC	NC	ND	ND	ND
Acenaphthylene	100	100	ND	ND	ND
Acenaphthene	100	20	ND	ND	ND
Fluorene	100	30	ND	ND	ND
Phenanthrene	100	100	ND	ND	ND
Anthracene	100	100	ND	ND	ND
Fluoranthene	100	100	ND	ND	ND
Pyrene	100	100	ND	ND	ND
Benzo (a) anthracene	1	1	ND	ND	ND
Chrysene	3.9	1	ND	ND	ND
Benzo (b) fluoranthene	1	1	ND	ND	ND
Benzo (k) fluoranthene	3.9	0.8	ND	ND	ND
Benzo (a) pyrene	1	1	ND	ND	ND
Indeno (1,2,3-cd) pyrene	0.5	0.5	ND	ND	ND
Dibenzo (a,h) anthracene	0.33	0.33	ND	ND	ND
Benzo (g,h,i) perylene	100	100	ND	ND	ND
PCBs					
Aroclor- 1016	NC	NC	ND	ND	ND
Aroclor-1221	NC	NC	ND	ND	ND
Aroclor-1232	NC	NC	ND	ND	ND
Aroclor-1242	NC	NC	ND	ND	ND
Aroclor-1248	NC	NC	ND	ND	ND
Aroclor-1254	NC	NC	ND	ND	ND
Aroclor-1260	NC	NC	ND	ND	ND
Aroclor-1262	NC	NC	ND	ND	ND
Aroclor-1268	NC	NC	ND	ND	ND
METALS					
Aluminum	NC	NC	20900	Not Analyzed	Not Analyzed
Antimony	NC	NC	2.09 J	Not Analyzed	Not Analyzed
Arsenic	16	13	7.04	2.47	4.42
Barium	400	350	302	Not Analyzed	Not Analyzed
Beryllium	72	7.2	1.02	Not Analyzed	Not Analyzed
Cadmium	4.3	2.5	2.52	0.575 J	1.12
Calcium	NC	NC	2910	Not Analyzed	Not Analyzed
Chromium	180	30	17.2	Not Analyzed	Not Analyzed
Cobalt	NC	NC	5.88	Not Analyzed	Not Analyzed
Copper	270	50	113	Not Analyzed	Not Analyzed
Iron	NC	NC	92100	Not Analyzed	Not Analyzed
Lead	400	63	12.8	Not Analyzed	Not Analyzed
Magnesium	NC	NC	710	Not Analyzed	Not Analyzed
Manganese	2000	1600	104	Not Analyzed	Not Analyzed
Mercury	0.81	0.18	0.0158 J	Not Analyzed	Not Analyzed
Nickel	310	30	10	Not Analyzed	Not Analyzed
Potassium	NC	NC	909	Not Analyzed	Not Analyzed
Selenium	180	3.9	3.57	Not Analyzed	Not Analyzed
Silver	180	2	ND	Not Analyzed	Not Analyzed
Sodium	NC	NC	344	Not Analyzed	Not Analyzed
Thallium	NC	NC	ND	Not Analyzed	Not Analyzed
Vanadium	NC	NC	27.9	Not Analyzed	Not Analyzed
Zinc	10000	109	207	Not Analyzed	Not Analyzed
	10000	109	207	THOU AMALYZED	not Analyzed

Notes:

1) PAHs analyzed by SW846-8270C; total metals analyzed by USEPA 6000/7000

Series Methods; PCBs analyzed by SW846-8082.

2) Shaded areas indicate result exceeds NYSDEC Part 375 Restricted Residential Soil Guidance Values.

3) Shaded areas indicate result exceeds NYSDEC Part 375 Unrestricted Soil

Guidance Values.4) J = detected above the MDL, but below the RL; therefore, result is an

estimated concentration.

5) mg/kg = milligrams per kilogram (ppm)

6) ND = Analyte included in the analysis, but not detected.

7) NC = No Criteria

## TABLE 31 SPAULDING COMPOSITES SITE AREA BB, OPERABLE UNIT 6 SUMMARY OF CONFIRMATION SOIL SAMPLE RESULTS Page 1 of 1

Sample ID	NYSDEC Part 375		BB-BS-1	BB-BS-2	BB-SS-1
Sample Location	Restricted	NYSDEC Part 375 Unrestricted	Bottom	Bottom	Sidewall
Date Sampled	Residential	Guidance Value	4/20/2010	4/20/2010	4/20/2010
Compound	Guidance Value	Guidance value	Soil	Soil	Soil
Units	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
PAHs					
Naphthalene	100	12	ND	ND	ND
Acenaphthylene	100	100	ND	ND	ND
Acenaphthene	100	20	ND	ND	ND
Fluorene	100	30	ND	ND	0.023 J
Phenanthrene	100	100	ND	ND	0.190 J
Anthracene	100	100	ND	ND	0.059 J
Di-n-butylphthalate	NC	NC	ND	1.1	4.5 E
Fluoranthene	100	100	ND	ND	0.23
Pyrene	100	100	ND	ND	0.170 J
Benzo (a) anthracene	1	1	ND	ND	0.130 J
Chrysene	3.9	1	ND	ND	0.091 J
Benzo (b) fluoranthene	1	1	ND	ND	0.082 J
Benzo (k) fluoranthene	3.9	0.8	ND	ND	0.041 J
Benzo (a) pyrene	1	1	ND	ND	0.066 J
Indeno (1,2,3-cd) pyrene	0.5	0.5	ND	ND	0.036 J
Dibenzo (a,h) anthracene	0.33	0.33	ND	ND	ND
Benzo (g,h,i) perylene	100	100	ND	ND	0.045 J

Notes:

1) PAHs analyzed by SW846-8270C.

2) Shaded areas indicate result exceeds NYSDEC Part 375 Restricted

Residential Soil Guidance Values.

3) Shaded areas indicate result exceeds NYSDEC Part 375 Unrestricted Soil

Guidance Values.

4) J = detected above the MDL, but below the RL; therefore, result is an

estimated concentration.

**5**) mg/kg = milligrams per kilogram (ppm)

7) ND = Analyte included in the analysis, but not detected.

**9**) E = Analyte concentration exceeds calibration range of instrument used for analysis.

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Sample ID	NYSDEC Part 375		BC-a-BS-1	BC-a-BS-2	BC-a-BS-3
Sample Location	Restricted	NYSDEC Part 375 Unrestricted	Bottom	Bottom	Bottom
Date Sampled	Residential	Guidance Value	4/8/2010	4/15/2010	4/29/2010
Compound	Guidance Value		Soil	Soil	Soil
Units	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
VOCs					
Benzene	4.8	0.06	ND	ND	0.0058 J
METALS					
Arsenic	16	13	4.5	6.8	5.18

Notes:

**1**) VOCs analyzed by SW846-8240; total metals analyzed by USEPA 6000/7000 Series Methods.

2) Shaded areas indicate result exceeds NYSDEC Part 375 Restricted Residential

Soil Guidance Values.

3) Shaded areas indicate result exceeds NYSDEC Part 375 Unrestricted Soil

Guidance Values.

**4**) J = detected above the MDL, but below the RL; therefore, result is an estimated concentration.

**5**) mg/kg = milligrams per kilogram (ppm)

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Sample ID	NYSDEC Part 375	NYSDEC Part 375 Unrestricted Guidance Value	BC-b-BS-1	BC-b-BS-2	BC-b-SS-1	BC-b-SS-2
Sample Location	Restricted		Bottom	Bottom	Sidewall	Sidewall
Date Sampled	Residential		4/8/2010	4/8/2010	4/8/2010	4/8/2010
Compound	Guidance Value		Soil	Soil	Soil	Soil
Units	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
VOCs						
Benzene	4.8	0.06	0.0012 J	0.0023 J	ND	0.0011 J
METALS						
Arsenic	16	13	4	7.1	2.8	4.70

Notes:

1) VOCs analyzed by SW846-8240; total metals analyzed by USEPA 6000/7000 Series Methods.

**2)** Shaded areas indicate result exceeds NYSDEC Part 375 Restricted Residential Soil Guidance Values.

**3**) Shaded areas indicate result exceeds NYSDEC Part 375 Unrestricted Soil Guidance Values.

**4**) J = detected above the MDL, but below the RL; therefore, result is an estimated concentration.

**5**) mg/kg = milligrams per kilogram (ppm)

### TABLE 34 SPAULDING COMPOSITES SITE AREA BC-c, OPERABLE UNIT 6 SUMMARY OF CONFIRMATION SOIL SAMPLE RESULTS Page 1 of 1

Sample ID	NYSDEC Part 375		BC-C-BS-3	BC-C-BS-4
Sample Location	Restricted	NYSDEC Part 375 Unrestricted	Bottom	Bottom
Date Sampled	Residential	Guidance Value	4/28/2010	4/28/2010
Compound	Guidance Value		Soil	Soil
Units	mg/kg	mg/kg	mg/kg	mg/kg
VOCs				
Benzene	4.8	0.06	ND	ND
METALS				
Arsenic	16	13	2.98	4.36

Notes:

1) VOCs analyzed by SW846-8240; total metals analyzed by USEPA

6000/7000 Series Methods.

2) Shaded areas indicate result exceeds NYSDEC Part 375 Restricted

Residential Soil Guidance Values.

**3**) Shaded areas indicate result exceeds NYSDEC Part 375 Unrestricted Soil Guidance Values.

**4**) mg/kg = milligrams per kilogram (ppm)

5) ND = Analyte included in the analysis, but not detected.

#### Page 1 of 1

Sample ID	NYSDEC Part 375		BD-BS-1	BD-SS-2	BD-BS-3
Sample Location	Restricted	NYSDEC Part 375 Unrestricted	Bottom	Sidewall	Bottom
Date Sampled	Residential	Guidance Value	4/20/2010	5/10/2010	5/10/2010
Compound	Guidance Value	Outdance Value	Soil	Soil	Soil
Units	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
PAHs					
Naphthalene	100	12	ND	ND	ND
2-Methylnaphthalene	NC	NC	ND	ND	ND
Acenaphthylene	100	100	ND	ND	ND
Acenaphthene	100	20	ND	ND	ND
Fluorene	100	30	ND	ND	ND
Phenanthrene	100	100	ND	ND	ND
Anthracene	100	100	ND	ND	ND
Fluoranthene	100	100	ND	ND	ND
Pyrene	100	100	ND	ND	ND
Benzo (a) anthracene	1	1	ND	ND	ND
Chrysene	3.9	1	ND	ND	ND
Benzo (b) fluoranthene	1	1	ND	ND	ND
Benzo (k) fluoranthene	3.9	0.8	ND	ND	ND
Benzo (a) pyrene	1	1	ND	ND	ND
Indeno (1,2,3-cd) pyrene	0.5	0.5	ND	ND	ND
Dibenzo (a,h) anthracene	0.33	0.33	ND	ND	ND
Benzo (g,h,i) pylene	100	100	ND	ND	ND

Notes:

**1**) PAHs analyzed by SW846-8270C.

**2**) Shaded areas indicate result exceeds NYSDEC Part 375 Restricted Residential Soil Guidance Values.

3) Shaded areas indicate result exceeds NYSDEC Part 375 Unrestricted Soil

#### Guidance Values.

**4**) J = detected above the MDL, but below the RL; therefore, result is an estimated

concentration.

**5**) mg/kg = milligrams per kilogram (ppm)

6) NC = No Criteria

7) ND = Analyte included in the analysis, but not detected.

8) E = Analyte concentration exceeds calibration range of instrument used for

analysis.

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Sample ID	NYSDEC Part 375		BE - BS-1	BE - BS-2	BE - SS-1
Sample Location	Restricted	II NYSDEC Part 375 II	Bottom	Bottom	Sidewall
Date Sampled	Residential	Guidance Value	4/14/2010	4/14/2010	4/14/2010
Compound	Guidance Value		Soil	Soil	Soil
Units	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
METALS					
Cadmium	4.3	2.5	0.014	0.54	1.1
Lead	400	63	0.54	7.9	9.6
Zinc	10000	109	140	140	390

Notes:

1) Total metals analyzed by USEPA 6000/7000 Series Methods.

2) Shaded areas indicate result exceeds NYSDEC Part 375 Restricted Residential

Soil Guidance Values.

3) Shaded areas indicate result exceeds NYSDEC Part 375 Unrestricted Soil

Guidance Values.

4) mg/kg = milligrams per kilogram (ppm)

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Sample ID	NYSDEC Part 375		BF-1E	BF-2E	BF-3E	BF-4E	BF-5E	BFW-1			
Sample Location	Restricted	NYSDEC Part 375 Unrestricted	Bottom	Bottom	Bottom	Bottom	Bottom	Sidewall			
Date Sampled	Residential				Guidance Value	9/10/2009	9/10/2009	9/10/2009	9/10/2009	9/10/2009	9/21/2009
Compound	Guidance Value	uidance Value	Soil	Soil	Soil	Soil	Soil	Soil			
Units	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg			
METALS											
Barium	400	350	133	134	147	112	87.8	157			
Chromium, hexavalent	180	30	ND	ND	ND	ND	ND	ND			
Chromium, total	180	30	20.4	18.9	27.8	26.6	12.2	24.9			

Notes:

1) Total metals analyzed by USEPA 6000/7000 Series Methods.

2) Shaded areas indicate result exceeds NYSDEC Part 375 Restricted Residential

Soil Guidance Values.

**3**) Shaded areas indicate result exceeds NYSDEC Part 375 Unrestricted Soil Guidance Values.

**4**) mg/kg = milligrams per kilogram (ppm)

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Sample ID	NYSDEC Part 375		BFW-2	BFW-3	BFW-4	BFW-5	BFW-6	BFW-7
Sample Location	Restricted NYSDEC Part 37	NYSDEC Part 375 Unrestricted	Sidewall	Sidewall	Sidewall	Sidewall	Sidewall	Sidewall
Date Sampled	Residential	Guidance Value	9/21/2009	9/21/2009	9/21/2009	9/21/2009	9/21/2009	9/21/2009
Compound	Guidance Value	Value	Soil	Soil	Soil	Soil	Soil	Soil
Units	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
METALS								
Barium	400	350	117	145	122	62.7	85.6	74.9
Chromium, hexavalent	180	30	ND	ND	ND	ND	ND	ND
Chromium, total	180	30	18.9	25.6	22.1	13.8	17.5	13.2

Notes:

1) Total metals analyzed by USEPA 6000/7000 Series Methods.

2) Shaded areas indicate result exceeds NYSDEC Part 375 Restricted Residential

Soil Guidance Values.

**3**) Shaded areas indicate result exceeds NYSDEC Part 375 Unrestricted Soil Guidance Values.

**4**) mg/kg = milligrams per kilogram (ppm)

#### TABLE 38 SPAULDING COMPOSITES SITE AREA BH, OPERABLE UNIT 6 SUMMARY OF CONFIRMATION SOIL SAMPLE RESULTS Page 1 of 1

Sample ID	NYSDEC Part 375		BH-SS-1	BH-BS-1	BH-BS-2	BH-SS-3
Sample Location	Restricted	NYSDEC Part 375	Sidewall	Bottom	Bottom	Sidewall
Date Sampled	Residential	Unrestricted	3/26/2010	3/26/2010	3/26/2010	4/19/2010
Compound	Guidance Value	Guidance Value	Soil	Soil	Soil	Soil
Units	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
PAHs	88		8	88	88	88
Acenaphthene	100	20	ND	ND	ND	ND
Anthracene	100	100	ND	ND	ND	ND
Benzo (a) anthracene	1	1	ND	0.113	0.0975	0.027 J
Benzo (a) pyrene	1	1	ND	0.09	ND	ND
Benzo (b) fluoranthene	1	1	ND	0.09	ND	ND
Benzo (g,h,i) pylene	100	100	ND	ND	ND	ND
Benzo (k) fluoranthene	3.9	0.8	ND	ND	ND	ND
Chrysene	3.9	1	ND	0.105	0.0941	ND
Dibenzo (a,h) anthracene	0.33	0.33	ND	ND	ND	ND
Fluoranthene	100	100	ND	0.28	0.254	0.042 J
Fluorene	100	30	ND	ND	ND	ND
Indeno (1,2,3-cd) pyrene	0.5	0.5	ND	ND	ND	ND
Naphthalene	100	12	ND	ND	ND	ND
Phenanthrene	100	100	ND	0.253	0.249	0.033 J
Pyrene	100	100	ND	0.185	0.176	ND
METALS						
Aluminum	NC	NC	25000	33300	29100	19100
Antimony	NC	NC	ND	ND	ND	ND
Arsenic	16	13	3.74	4.43	5.09	5.2
Barium	400	350	132	177	177	146
Beryllium	72	7.2	0.92	1.46	1.23	1.1
Cadmium	4.3	2.5	0.501	0.682	0.719	0.42
Calcium	NC	NC	7820	2870	20100	3210
Cobalt	NC	NC	11.7	22	14.6	14.2
Chromium	180	30	30	39.5	36.5	26.8
Copper	270	50	21.3	29.5	30.4	24
Iron	NC	NC	28700	37500	36700	43100
Lead	400	63	13.6	17.7	19.4	10.5
Magnesium	NC	NC	11500	11400	14100	8720
Manganese	2000	1600	388	508	715	480
Mercury	0.81	0.18	0.0228	0.12	0.0241	0.026
Nickel	310	<u>30</u>	26.2	34.9	33.8	34
Potassium	NC	NC	4870	6610	6700	1930
Sodium	NC 180	NC 2.0	163	179 ND	212	120
Selenium	180	3.9	ND	ND	ND	ND
Silver	180 NG	2	ND	0.299	0.375	ND
Thallium	NC	NC	0.909	0.963	1.2	2.9
Vanadium	NC 10000	NC 100	44.8	57.6	54.8	32.8
Zinc	10000	109	85.7	327	127	67.1

Notes:

1) PAHs analyzed by SW846-8270C; total metals analyzed by USEPA

6000/7000 Series Methods.

2) Shaded areas indicate result exceeds NYSDEC Part 375 Restricted

Residential Soil Guidance Values.

 Shaded areas indicate result exceeds NYSDEC Part 375 Unrestricted Soil Guidance Values.

**4**) J = detected above the MDL, but below the RL; therefore, result is an estimated concentration.

5) mg/kg = milligrams per kilogram (ppm)

6) NC = No Criteria

7) ND = Analyte included in the analysis, but not detected.

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Sample ID	NYSDEC Part 375 Restricted NYSDEC Part 375		BI - BS-1	BI - BS-2	BI - SS-1	BI - SS-3	
Sample Location	Restricted Residential Guidance Value	Residential Unrestricted 4/14/2010	NYSDEC Part 375	Bottom	Bottom	Sidewall	Sidewall
Date Sampled			4/14/2010	4/19/2010	5/27/2010		
Compound			Soil	Soil	Soil	Soil	
Units	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	
METALS							
Cadmium	4.3	2.5	0.76	0.36	0.41	2.58	
Lead	400	63	12.5	11.1	11.6	99.6	
Zinc	10000	109	2570	114	134	6710	

Notes:

1) Total metals analyzed by USEPA 6000/7000 Series Methods.

2) Shaded areas indicate result exceeds NYSDEC Part 375 Restricted Residential Soil Guidance Values.

3) Shaded areas indicate result exceeds NYSDEC Part 375 Unrestricted Soil Guidance Values.

4) mg/kg = milligrams per kilogram (ppm)

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Sample ID	NYSDEC Part 375	NYSDEC Part 375	BK-BS-1	BK-BS-2	BK-SS-1
Sample Location	Restricted	Unrestricted	Bottom	Bottom	Sidewall
Date Sampled	Residential	Guidance Value	4/14/2010	4/14/2010	4/14/2010
Compound	Guidance Value	Guidance value	Soil	Soil	Soil
Units	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
PAHs					
Naphthalene	100	12	ND	ND	ND
2-Methylnaphthalene	NC	NC	ND	ND	ND
Acenaphthylene	100	100	ND	ND	ND
Acenaphthene	100	20	0.028 J	ND	ND
Fluorene	100	30	0.031 J	ND	ND
Phenanthrene	100	100	0.26	0.025 J	0.16 J
Anthracene	100	100	0.069 J	ND	ND
Di-n-butylphthalate	100	NC	0.28	ND	ND
Fluoranthene	100	100	0.29	ND	ND
Pyrene	100	100	0.3	ND	ND
Benzo (a) anthracene	1	1	0.17 J	ND	ND
Chrysene	3.9	1	0.13 J	ND	ND
Benzo (b) fluoranthene	1	1	0.13 J	ND	ND
Benzo (k) fluoranthene	3.9	0.8	0.059 J	ND	ND
Benzo (a) pyrene	1	1	0.095 J	ND	ND
Indeno (1,2,3-cd) pyrene	0.5	0.5	0.049 J	ND	ND
Dibenzo (a,h) anthracene	0.33	0.33	ND	ND	ND
Benzo (g,h,i) perylene	100	100	0.062 J	ND	ND
PCBs	100	100	010021	1.12	1.12
Aroclor- 1016	NC	NC	ND	ND	ND
Aroclor-1221	NC	NC	ND	ND	ND
Aroclor-1232	NC	NC	ND	ND	ND
Aroclor-1242	NC	NC	ND	ND	ND
Aroclor-1248	NC	NC	ND	ND	ND
Aroclor-1254	NC	NC	0.11	ND	ND
Aroclor-1260	NC	NC	ND	ND	ND
Total PCBs	1	0.1	0.11	0	0
METALS	1	0.1	0.11	0	0
Aluminum	NC	NC	15900	8490	18200
Antimony	NC	NC	0.27 B	0.25 B	ND
Arsenic	16	13	5.1	3.2	6.2
Barium	400	350	91.5	68.7	368
Beryllium	72	7.2	0.9	0.5	1.1
Cadmium	4.3	2.5	1	0.53	1.1
Calcium	NC	NC 2.5	49500	62600	4570
Chromium	180	30	21.6	12.3	22.1
Cobalt	NC	NC S0	11.4	7.2	10.7
Copper	270	50	27.5	15.9	27.9
Iron	NC 270	NC S0	35000	22400	35500
Lead	400	63	12.2	7.8	20.9
Magnesium	400 NC	NC NC	112.2	13600	5460
Magnesium Manganese	2000	1600	486	562	190
Manganese	0.81	0.18	0.018 B	0.019 B	0.029 B
Nickel	310	30	26.7	15.8	27.1
		30 NC			
Potassium	NC 180		2710	1530	1720
Silver	180	3.9	1.7	1.1 B	3.4
Silver	180	2 NG	0.15 B	ND	0.15 B
Sodium	NC	NC	155	144	105
Thallium	NC	NC	2.3	2.3	1.3
Vanadium	NC	NC	29.5	18.3	31.6
Zinc	10000	109	117	51.4	670

Notes:

1) PAHs analyzed by SW846-8270; total metals analyzed by USEPA 6000/7000 Series Methods; PCBs analyzed by SW846-8082.

2) Shaded areas indicate result exceeds NYSDEC Part 375 Restricted Residential Soil Guidance Values.

3) Shaded areas indicate result exceeds NYSDEC Part 375 Unrestricted Soil Guidance Values.

4) mg/kg = milligrams per kilogram (ppm)

6) NC = No Criteria

7) ND = Analyte included in the analysis, but not detected.

 $\mathbf{8}$ ) J = detected above the MDL, but below the RL; therefore, result is an estimated concentration.

9) B = Analyte detected in associated trip blank.

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			Page 1 of 2				
Sample ID	NYSDEC Part 375	NYSDEC Part 375	K LINE-SS-1	K LINESS-2	K LINESS-3	K LINESS-4	K LINESS-6
Sample Location	Restricted	Unrestricted	Sidewall	Sidewall	Sidewall	Sidewall	Sidewall
Date Sampled	Residential	Guidance Value	5/12/2010	5/12/2010	5/12/2010	5/12/2010	5/13/2010
Compound	Guidance Value	Guidance value	Soil	Soil	Soil	Soil	Soil
Units	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
PAHS							
Naphthalene	100	12	0.166 J	0.14 J	ND	ND	ND
2-Methylnaphthalene	NC	NC	ND	ND	ND	ND	ND
Acenaphthylene	100	100	ND	ND	ND	ND	ND
Acenaphthene	100	20	ND	ND	ND	ND	ND
Fluorene	100	30	ND	ND	ND	ND	ND
Hexachlorobenzene	1.2	0.33	ND	ND	ND	ND	ND
Phenanthrene	100	100	0.0724 J	ND	ND	ND	ND
Anthracene	100	100	ND	ND	ND	ND	ND
Fluoranthene	100	100	0.115 J	ND	ND	ND	ND
Pyrene	100	100	0.0917 J	ND	ND	ND	ND
Benzo (a) anthracene	1	1	0.0703 J	ND	ND	ND	ND
Chrysene	3.9	1	0.0657 J	ND	ND	ND	ND
Benzo (b) fluoranthene	1	1	ND	ND	ND	ND	ND
Benzo (k) fluoranthene	3.9	0.8	0.0552 J	ND	ND	ND	ND
Benzo (a) pyrene	1	1	0.0521 J	ND	ND	ND	ND
Indeno (1,2,3-cd) pyrene	0.5	0.5	ND	ND	ND	ND	ND
Dibenzo (a,h) anthracene	0.33	0.33	ND	ND	ND	ND	ND
Dibenzofuran	59	7	ND	ND	ND	ND	ND
Benzo (g,h,i) pylene	100	100	ND	ND	ND	ND	ND
Pentachlorophenol	6.7	0.8	ND	ND	ND	ND	ND
Phenol	100	0.33	ND	ND	ND	ND	ND
PCBs							
Aroclor- 1016	NC	NC	ND	ND	ND	ND	ND
Aroclor-1221	NC	NC	ND	ND	ND	ND	ND
Aroclor-1232	NC	NC	ND	ND	ND	ND	ND
Aroclor-1242	NC	NC	ND	ND	ND	ND	ND
Aroclor-1248	NC	NC	ND	ND	ND	ND	ND
Aroclor-1254	NC	NC	ND	ND	ND	ND	ND
Aroclor-1260	NC	NC	ND	ND	ND	ND	ND
Aroclor-1262	NC	NC	ND	ND	ND	ND	ND
Aroclor-1268	NC	NC	ND	ND	ND	ND	ND
METALS				0	1	0	
Aluminum	NC	NC	4230	20100	15200	11500	13300
Antimony	NC	NC	1.33 J	ND	ND	ND	ND
Arsenic	16	13	14.7	1.98	3.48	4.12	2.08
Barium	400	350	261	136	134	106	112
Beryllium	72	7.2	0.896	1.13	0.953	0.695	0.732
Cadmium	4.3	2.5	2.14	1.04	0.97	0.782	1.12
Calcium	NC	NC	23200	5810	5130	52400	60800
Chromium	180	<u>30</u>	7.17	27.5	21.6	16.9	19
Cobalt	NC	NC 50	3.33	12.2	10	8.54	9.82
Copper	270	50 NG	81.2	23.1	34.2	20.5	34.2
Iron	NC	NC	60500	38300	33000	21000	23900
Lead	400	63 NG	10.7	8.55	10.7	7.71	17
Magnesium	NC 2000	NC 1600	4170	13300	7100	16400	15600
Manganese	2000	1600	224	548	226	406	582
Mercury	0.81	0.18	0.0508	0.0228 J	0.0431	0.0171 J	0.0233 J
Nickel	310 NC	30 NC	5.1	29	21	18.6	20.8
Potassium	NC 180	NC 2.0	878	2480	1810 1.21 J	2350	2190
Selenium	180	3.9	4.52	1.39 J	1.21 J	0.993 J	0.935 J
Silver	180	2	ND 125	ND	ND	ND 165	ND 125
Sodium	NC	NC	135	121 ND	82.2	165	135
Thallium	NC	NC NC	ND 18.8	ND 21.6	ND 25.0	ND 20.0	ND 27.1
Vanadium	NC 10000	NC 100	18.8	31.6	25.9	20.9	27.1
Zinc	10000	109	80.1	64.8	141	52.8	553

Notes: 1) PAHs analyzed by SW846-8270; total metals analyzed by USEPA

6000/7000 Series Methods; PCBs analyzed by SW846-8082.
2) Shaded areas indicate result exceeds NYSDEC Part 375 Restricted

Residential Soil Guidance Values.

3) Shaded areas indicate result exceeds NYSDEC Part 375 Unrestricted Soil Guidance Values. 4) J = detected above the MDL, but below the RL; therefore, result is an

estimated concentration. 5) mg/kg = milligrams per kilogram (ppm)

6) NC = No Criteria

7) ND = Analyte included in the analysis, but not detected.

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		Page 2 01 2	KIDE CC-	KINE CO.	KINE CO.
Sample ID	NYSDEC Part 375	NYSDEC Part 375	K LINESS-7	K LINESS-8	K LINESS-9
Sample Location	Restricted	Unrestricted	Sidewall	Sidewall	Sidewall
Date Sampled	Residential Guidance Value	Guidance Value	5/13/2010	5/13/2010	6/9/2010
Compound			Soil	Soil	Soil
Units PAHs	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
	100	12	ND	ND	ND
Naphthalene	100	12	ND	ND	ND
2-Methylnaphthalene	NC	NC	ND	ND	ND
Acenaphthylene	100	100	ND	ND	ND
Acenaphthene	100	20	ND	ND	0.0831 J
Fluorene	100	30	ND	ND	0.0898 J
Hexachlorobenzene	1.2	0.33	ND	ND	ND
Phenanthrene	100	100	ND	ND	0.873
Anthracene	100	100	ND	ND	0.302
Fluoranthene	100	100	ND	ND	1.12
Pyrene	100	100	ND	ND	0.84
Benzo (a) anthracene	1	1	ND	ND	0.412
Chrysene	3.9	1	ND	ND	0.42
Benzo (b) fluoranthene	1	1	ND	ND	0.284
Benzo (k) fluoranthene	3.9	0.8	ND	ND	0.328
Benzo (a) pyrene	1	1	ND	ND	0.332
Indeno (1,2,3-cd) pyrene	0.5	0.5	ND	ND	0.172 J
Dibenzo (a,h) anthracene	0.33	0.33	ND	ND	0.0463 J
Dibenzofuran	59	7	ND	ND	ND
Benzo (g,h,i) pylene	100	100	ND	ND	0.164 J
Pentachlorophenol	6.7	0.8	ND	ND	ND
Phenol	100	0.33	ND	ND	ND
PCBs					
Aroclor- 1016	NC	NC	ND	ND	ND
Aroclor-1221	NC	NC	ND	ND	ND
Aroclor-1232	NC	NC	ND	ND	ND
Aroclor-1242	NC	NC	ND	ND	ND
Aroclor-1248	NC	NC	ND	ND	ND
Aroclor-1254	NC	NC	ND	ND	ND
Aroclor-1260	NC	NC	ND	ND	ND
Aroclor-1262	NC	NC	ND	ND	ND
Aroclor-1268	NC	NC	ND	ND	ND
METALS					
Aluminum	NC	NC	19100	20900	4460
Antimony	NC	NC	0.667 J	ND	ND
Arsenic	16	13	2.65	3.07	1.34 J
Barium	400	350	146	141	20.6
Beryllium	72	7.2	1.04	1.07	0.347 J
Cadmium	4.3	2.5	1.08	1.28	0.459 J
Calcium	NC	NC	15500	4640	85500
Chromium	180	30	25.4	26.1	7.7
Cobalt	NC	NC	12.8	14.4	2.75
Copper	270	50	22.8	21.7	11.6
Iron	NC	NC	27100	28800	11700
Lead	400	63	9.02	17.5	6.71
Magnesium	NC	NC	12500	6980	41400
Manganese	2000	1600	481	541	304
Mercury	0.81	0.18	0.0216 J	0.0488	0.0119 J
Nickel	310	30	30	24.2	6.07
Potassium	NC	NC	2510	2330	1080
Selenium	180	3.9	1.28 J	1.63 J	0.313 J
Silver	180	2	ND	ND	ND
Sodium	NC	NC	116	95.3	177
Thallium	NC	NC	ND	ND	ND
Vanadium	NC	NC	34	38.4	12.3
	II INC.	INC	54	50.4	14.3

Notes:

1) PAHs analyzed by SW846-8270; total metals analyzed by USEPA

6000/7000 Series Methods; PCBs analyzed by SW846-8082.
2) Shaded areas indicate result exceeds NYSDEC Part 375 Restricted

Residential Soil Guidance Values.

3) Shaded areas indicate result exceeds NYSDEC Part 375 Unrestricted Soil

Guidance Values. 4) J = detected above the MDL, but below the RL; therefore, result is an

estimated concentration.

5) mg/kg = milligrams per kilogram (ppm)

6) NC = No Criteria

7) ND = Analyte included in the analysis, but not detected.

#### TABLE 42 SPAULDING COMPOSITES SITE AREA - DITCH A, OPERABLE UNIT 6 SUMMARY OF CONFIRMATION SOIL SAMPLE RESULTS Page 1 of 3

Sample ID	NYSDEC Part 375		Ditch-A-SS-1	Ditch-A-SS-2	Ditch-A-BS-1
Sample Location	Restricted	NYSDEC Part 375	Sidewall	Sidewall	Bottom
Date Sampled	Residential	Unrestricted	5/5/2010	5/5/2010	5/5/2010
Compound	Guidance Value	Guidance Value	Soil	Soil	Soil
Units	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
PAHs	mg/ng	mg/ng	mg/ng	mg/mg	mg/mg
Naphthalene	100	12	Not Analyzed	Not Analyzed	Not Analyzed
2-Methylnaphthalene	NC	NC	Not Analyzed	Not Analyzed	Not Analyzed
Acenaphthylene	100	100	Not Analyzed	Not Analyzed	Not Analyzed
Acenaphthene	100	20	Not Analyzed	Not Analyzed	Not Analyzed
Fluorene	100	30	Not Analyzed	Not Analyzed	Not Analyzed
Phenanthrene	100	100	Not Analyzed	Not Analyzed	Not Analyzed
Anthracene	100	100	Not Analyzed	Not Analyzed	Not Analyzed
Di-n-butylphthalate	100	NC	19.3 D	0.0312 J	0.926
Fluoranthene	100	100	Not Analyzed	Not Analyzed	Not Analyzed
Pyrene	100	100	Not Analyzed	Not Analyzed	Not Analyzed
Benzo (a) anthracene	1	1	Not Analyzed	Not Analyzed	Not Analyzed
Chrysene	3.9	1	Not Analyzed	Not Analyzed	Not Analyzed
Benzo (b) fluoranthene	1	1	Not Analyzed	Not Analyzed	Not Analyzed
Benzo (k) fluoranthene	3.9	0.8	Not Analyzed	Not Analyzed	Not Analyzed
Benzo (a) pyrene	1	1	Not Analyzed	Not Analyzed	Not Analyzed
Indeno (1, 2, 3-cd) pyrene	0.5	0.5	Not Analyzed	Not Analyzed	Not Analyzed
Dibenzo (a, h) anthracene	0.33	0.33	Not Analyzed	Not Analyzed	Not Analyzed
Benzo (g, h, i,) perylene	100	100	Not Analyzed	Not Analyzed	Not Analyzed
METALS					
Aluminum	NC	NC	Not Analyzed	Not Analyzed	Not Analyzed
Antimony	NC	NC	Not Analyzed	Not Analyzed	Not Analyzed
Arsenic	16	13	Not Analyzed	Not Analyzed	Not Analyzed
Barium	400	350	Not Analyzed	Not Analyzed	Not Analyzed
Beryllium	72	7.2	Not Analyzed	Not Analyzed	Not Analyzed
Cadmium	4.3	2.5	Not Analyzed	Not Analyzed	Not Analyzed
Calcium	NC	NC	Not Analyzed	Not Analyzed	Not Analyzed
Chromium	180	30	Not Analyzed	Not Analyzed	Not Analyzed
Cobalt	NC	NC	Not Analyzed	Not Analyzed	Not Analyzed
Copper	270	50	Not Analyzed	Not Analyzed	Not Analyzed
Iron	NC	NC	Not Analyzed	Not Analyzed	Not Analyzed
Lead	400	63	Not Analyzed	Not Analyzed	Not Analyzed
Magnesium	NC 2000	NC 1600	Not Analyzed	Not Analyzed	Not Analyzed
Manganese	0.81	1600 0.18	Not Analyzed	Not Analyzed	Not Analyzed
Mercury Nickel	310	30	Not Analyzed Not Analyzed	Not Analyzed Not Analyzed	Not Analyzed Not Analyzed
Potassium	NC	NC	Not Analyzed	Not Analyzed	Not Analyzed
Selenium	180	3.9	Not Analyzed	Not Analyzed	Not Analyzed
Silver	180	2	Not Analyzed	Not Analyzed	Not Analyzed
Sodium	NC	NC	Not Analyzed	Not Analyzed	Not Analyzed
Thallum	NC	NC	Not Analyzed	Not Analyzed	Not Analyzed
Vanadium	NC	NC	Not Analyzed	Not Analyzed	Not Analyzed
Zinc	10000	109	Not Analyzed	Not Analyzed	Not Analyzed
Cyanide	27	27	Not Analyzed	Not Analyzed	Not Analyzed
PCBs					
Aroclor-1016	NC	NC	ND	ND	ND
Aroclor-1221	NC	NC	ND	ND	ND
Aroclor-1232	NC	NC	ND	ND	ND
Aroclor-1242	NC	NC	ND	ND	ND
Aroclor-1248	NC	NC	0.164	0.0204 J	0.0468
Aroclor-1254	NC	NC	ND	ND	0.0702
Aroclor-1260	NC	NC	ND	ND	ND
Aroclor-1262	NC	NC	ND	ND	ND
Aroclor-1268	NC	NC	ND	ND	ND
Total PCBs	1	0.1	0.164	0.0204	0.117

Notes: 1) PAHs analyzed by SW846-8270C; total metals analyzed by USEPA

6000/7000 Series Methods; PCBs analyzed by SW846-8082. 2) Shaded areas indicate result exceeds NYSDEC Part 375 Restricted Residential

Soil Guidance Values.
 Soil Soil Guidance Values.
 Shaded areas indicate result exceeds NYSDEC Part 375 Unrestricted Soil Guidance Values.
 Soil Soil Guidance Values.
 Soil Soil Content of the MDL, but below the RL; therefore, result is an an an analysis of the MDL.

4) J = detected above the MDL, but below the RL; therefore, resestimated concentration.
5) mg/kg = milligrams per kilogram (ppm)
6) NC = No Criteria
7) ND = Analyte included in the analysis, but not detected.
8) B = Analyte detected in associated trip blank.
9) D = Reported value is from a dilution of the original sample.
\*Sample location was overexcavated and resampled.

#### TABLE 42 SPAULDING COMPOSITES SITE AREA - DITCH A, OPERABLE UNIT 6 SUMMARY OF CONFIRMATION SOIL SAMPLE RESULTS Page 2 of 3

Sample ID	NYSDEC Part 375		Ditch-A-BS-2	Ditch-A-BS 3	Ditch-A-BS 4
Sample Location	Restricted	NYSDEC Part 375	Bottom	Bottom	Bottom
Date Sampled	Residential	Unrestricted Guidance Value	5/5/2010	5/27/2010	5/27/2010
Compound	Guidance Value	Guiuance value	Soil	Soil	Soil
Units	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
PAHs					
Naphthalene	100	12	Not Analyzed	ND	ND
2-Methylnaphthalene	NC	NC	Not Analyzed	ND	ND
Acenaphthylene	100	100	Not Analyzed	ND	ND
Acenaphthene	100	20	Not Analyzed	ND	ND
Fluorene	100	30	Not Analyzed	ND	ND
Phenanthrene	100	100	Not Analyzed	ND	ND
Anthracene	100	100	Not Analyzed	ND	ND
Di-n-butylphthalate	100	NC	2.68	ND	1.75
Fluoranthene	100	100	Not Analyzed	ND	ND
Pyrene	100	100	Not Analyzed	ND	ND
Benzo (a) anthracene	1	1	Not Analyzed	ND	ND
Chrysene	3.9	1	Not Analyzed	ND	ND
Benzo (b) fluoranthene	1	1	Not Analyzed	ND	ND
Benzo (k) fluoranthene	3.9	0.8	Not Analyzed	ND	ND
Benzo (a) pyrene	1	1	Not Analyzed	ND	ND
Indeno (1, 2, 3-cd) pyrene	0.5	0.5	Not Analyzed	ND	ND
Dibenzo (a, h) anthracene	0.33	0.33	Not Analyzed	ND	ND
Benzo (g, h, i,) perylene	100	100	Not Analyzed	ND	ND
METALS					
Aluminum	NC	NC	Not Analyzed	7690	13600
Antimony	NC	NC	Not Analyzed	ND	ND
Arsenic	16	13	Not Analyzed	1.71	1.77
Barium	400	350	Not Analyzed	68.6	96.3
Beryllium	72	7.2	Not Analyzed	0.411 J	0.705
Cadmium	4.3	2.5	Not Analyzed	0.396 J	0.411 J
Calcium	NC	NC	Not Analyzed	56700	31400
Chromium	180	30	Not Analyzed	11.5	20.1
Cobalt	NC	NC	Not Analyzed	7.16	7.48
Copper	270	50	Not Analyzed	16.4	16.9
Iron	NC	NC	Not Analyzed	13400 B	20100 B
Lead	400	63	Not Analyzed	13.2	8.37
Magnesium	NC	NC	Not Analyzed	16900	17900
Manganese	2000	1600	Not Analyzed	433	248
Mercury	0.81	0.18	Not Analyzed	0.0055 J	0.0137 J
Nickel	310	30	Not Analyzed	14.1	19.8
Potassium	NC 180	NC 2.0	Not Analyzed	1340 0.226 J	1920 0.487 I
Selenium Silver	180 180	3.9	Not Analyzed Not Analyzed	0.336 J ND	0.487 J ND
Silver	NC 180	NC 2	Not Analyzed	147	188
Thallum	NC	NC	Not Analyzed Not Analyzed	ND	188 ND
Vanadium	NC	NC	Not Analyzed	16	24.3
Zinc	10000	109	Not Analyzed	67.5	24.5 78
Cyanide	27	27	Not Analyzed	ND	ND
PCBs	21	2,	1.00111111111200	110	1,0
Aroclor-1016	NC	NC	ND	ND	ND
Aroclor-1221	NC	NC	ND	ND	ND
Aroclor-1232	NC	NC	ND	ND	ND
Aroclor-1242	NC	NC	ND	ND	ND
Aroclor-1248	NC	NC	0.402	ND	ND
Aroclor-1254	NC	NC	0.44	ND	ND
Aroclor-1260	NC	NC	ND	ND	ND
Aroclor-1262	NC	NC	ND	ND	ND
Aroclor-1268	NC	NC	ND	ND	ND
Total PCBs	1	0.1	0.842	ND	ND

Notes: 1) PAHs analyzed by SW846-8270C; total metals analyzed by USEPA

6000/7000 Series Methods; PCBs analyzed by SW846-8082. 2) Shaded areas indicate result exceeds NYSDEC Part 375 Restricted Residential Soil Guidance Values.
 Soil Soil Guidance Values.
 Shaded areas indicate result exceeds NYSDEC Part 375 Unrestricted Soil Guidance Values.
 Soil Soil Guidance Values.
 Soil Soil Content of the MDL, but below the RL; therefore, result is an an an analysis of the MDL.

4) J = detected above the MDL, but below the RL; therefore, resestimated concentration.
5) mg/kg = milligrams per kilogram (ppm)
6) NC = No Criteria
7) ND = Analyte included in the analysis, but not detected.
8) B = Analyte detected in associated trip blank.
9) D = Reported value is from a dilution of the original sample.
\*Sample location was overexcavated and resampled.

#### TABLE 42 SPAULDING COMPOSITES SITE AREA - DITCH A, OPERABLE UNIT 6 SUMMARY OF CONFIRMATION SOIL SAMPLE RESULTS Page 3 of 3

Sample ID	NYSDEC Part 375		Ditch-A-SS-1A	Ditch-A-SS-2A	Ditch-A-BS-1A	Ditch-A-BS-2A
Sample Location	Restricted	NYSDEC Part 375	Sidewall	Sidewall	Bottom	Bottom
Date Sampled	Residential	Unrestricted	5/28/2010	5/28/2010	5/28/2010	5/28/2010
Compound	Guidance Value	Guidance Value	Soil	Soil	Soil	Soil
Units	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
PAHs						
Naphthalene	100	12	ND	ND	ND	ND
2-Methylnaphthalene	NC	NC	ND	ND	ND	ND
Acenaphthylene	100	100	ND	ND	ND	ND
Acenaphthene	100	20	ND	ND	ND	ND
Fluorene	100	30	ND	ND	ND	ND
Phenanthrene	100	100	ND	ND	ND	ND
Anthracene	100	100	ND	ND	ND	ND
Di-n-butylphthalate	100	NC	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed
Fluoranthene	100	100	ND	ND	ND	0.0889 J
Pyrene	100	100	ND	ND	ND	ND
Benzo (a) anthracene	1	1	ND	ND	ND	ND
Chrysene	3.9	1	ND	ND	ND	ND
Benzo (b) fluoranthene	1	1	ND	ND	ND	ND
Benzo (k) fluoranthene	3.9	0.8	ND	ND	ND	ND
Benzo (a) pyrene	1	1	ND	ND	ND	ND
Indeno (1, 2, 3-cd) pyrene	0.5	0.5	ND	ND	ND	ND
Dibenzo (a, h) anthracene	0.33	0.33	ND	ND	ND	ND
Benzo (g, h, i,) perylene	100	100	ND	ND	ND	ND
METALS	NG	NG	16100	10200	10,000	7100
Aluminum	NC	NC	16100	19300	12600	7180
Antimony	NC	NC	ND	ND	ND	ND
Arsenic	16 400	13	4.02	4.05	1.87	1.47 J
Barium Beryllium	400	350 7.2	120	132 0.947	111 0.649	46.7 0.351 J
Cadmium	4.3	2.5	0.954	0.732	0.649	0.351 J 0.488 J
Calcium	4.5 NC	NC	2410	2420	71000	57200
Chromium	180	30	2410	2420	17.6	10.8
Cobalt	NC	NC	13.5	8.72	7.33	5.23
Copper	270	50	20.4	19.8	18.9	14.3
Iron	NC	NC	22500 B	23100 B	17700 B	12600 B
Lead	400	63	13.5	9.22	9.05	7.58
Magnesium	NC	NC	4780	5780	19100	16700
Manganese	2000	1600	509	307	417	479
Mercury	0.81	0.18	0.0206 J	0.0249 J	0.0118 J	0.0068 J
Nickel	310	30	22.3	27	17	11
Potassium	NC	NC	2240	2410	2280	1360
Selenium	180	3.9	0.947 J	0.951 J	0.606 J	0.456 J
Silver	180	2	ND	ND	ND	ND
Sodium	NC	NC	75.2	110	143	132
Thallum	NC	NC	ND	ND	ND	ND
Vanadium	NC	NC	29.5	31.9	24.8	16.9
Zinc	10000	109	1100	62.5	65	80.2
Cyanide	27	27	ND	ND	ND	ND
PCBs	NC	NC	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed
Aroclor-1016	NC	NC		-		Not Analyzed
Aroclor-1221 Aroclor-1232	NC	NC	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed
Aroclor-1232 Aroclor-1242	NC	NC	Not Analyzed Not Analyzed	Not Analyzed Not Analyzed	Not Analyzed Not Analyzed	Not Analyzed Not Analyzed
Aroclor-1242 Aroclor-1248	NC	NC	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed
Aroclor-1248 Aroclor-1254	NC	NC	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed
Aroclor-1260	NC	NC	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed
Aroclor-1260	NC	NC	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed
Aroclor-1268	NC	NC	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed

Notes: 1) PAHs analyzed by SW846-8270C; total metals analyzed by USEPA

OPATIS analyzed by SW846-8082.
 Shaded areas indicate result exceeds NYSDEC Part 375 Restricted Residential Soil Guidance Values.
 Shaded areas indicate result exceeds NYSDEC Part 375 Unrestricted Soil

Guidance Values. 4) J = detected above the MDL, but below the RL; therefore, result is an

4) J = detected above the MDL, but below the RL; therefore, res estimated concentration.
5) mg/kg = milligrams per kilogram (ppm)
6) NC = No Criteria
7) ND = Analyte included in the analysis, but not detected.
8) B = Analyte detected in associated trip blank.
9) D = Reported value is from a dilution of the original sample.
\*Sample location was overexcavated and resampled.

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Sample ID	NYSDEC Part 375		Ditch-B-BS 1	Ditch-B-BS 2
Sample Location	Restricted	NYSDEC Part 375 Unrestricted	Bottom	Bottom
Date Sampled	Residential	Guidance Value	4/27/2010	4/27/2010
Compound	Guidance Value		Soil	Soil
Units	mg/kg mg/kg		mg/kg	mg/kg
PAHs				
Di-n-butylphthalate	100	NC	0.136	2.38
PCBs				
Aroclor-1016	NC	NC	ND	ND
Aroclor-1221	NC	NC	ND	ND
Aroclor-1232	NC	NC	ND	ND
Aroclor-1242	NC	NC	ND	ND
Aroclor-1248	NC	NC	0.0462	0.103
Aroclor-1254	NC	NC	ND	ND
Aroclor-1260	NC	NC	ND	ND
Aroclor-1262	NC	NC	ND	ND
Aroclor-1268	NC	NC	ND	ND
Total PCBs	1	0.1	0.0462	0.103
METALS				
Arsenic	16	13	11	9.01
Cadium	4.3	2.5	1.97	2.44

Notes:

1) PAHs analyzed by SW846-8270C; PCBs analyzed by SW846-8082.

2) Shaded areas indicate result exceeds NYSDEC Part 375 Restricted Residential

Soil Guidance Values.

3) Shaded areas indicate result exceeds NYSDEC Part 375 Unrestricted Soil

Guidance Values.

**4**) mg/kg = milligrams per kilogram (ppm)

**5**) NC = No Criteria

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Sample ID	NYSDEC Part 375		WA-4-RR-BS-1	WA-4-RR-BS-2	WA-4-RR-BS-3	RR-BS-6
Sample Location	Restricted	NYSDEC Part 375	Bottom	Bottom	Bottom	Bottom
Date Sampled	Residential	Unrestricted	6/11/2010	6/11/2010	6/11/2010	6/22/2010
Compound	Guidance Value	Guidance Value	Soil	Soil	Soil	Soil
Units	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
PAHs				8 8	88	88
Naphthalene	100	12	ND	ND	ND	ND
2-Methylnaphthalene	NC	NC	ND	ND	ND	ND
Acenaphthylene	100	100	ND	ND	ND	ND
Acenaphthene	100	20	ND	ND	ND	ND
Fluorene	100	30	ND	ND	ND	ND
Phenanthrene	100	100	0.21	ND	ND	ND
Anthracene	100	100	ND	ND	ND	ND
Fluoranthene	100	100	0.377	ND	0.166 J	ND
Pyrene	100	100	0.346	ND	0.169 J	ND
Benzo (a) anthracene	1	1	0.205	ND	0.113 J	ND
Chrysene	3.9	1	0.29	ND	0.151 J	ND
Benzo (b) fluoranthene	1	1	0.223	ND	0.122 J	ND
Benzo (k) fluoranthene	3.9	0.8	0.269	ND	0.167 J	ND
Benzo (a) pyrene	1	1	0.244	ND	0.121 J	ND
Indeno (1,2,3-cd) pyrene	0.5	0.5	0.123 J	ND	ND	ND
Dibenzo (a,h) anthracene	0.33	0.33	ND	ND	ND	ND
Benzo (g,h,i) perylene	100	100	0.13 J	ND	ND	ND
METALS						
Aluminum	NC	NC	4950	6670	5670	12200
Antimony	NC	NC	ND	0.718 J	0.93 J	ND
Arsenic	16	13	14.5	8.75	9.24	9.83
Barium	400	350	57.1	107	64.6	76.7
Beryllium	72	7.2	0.663	0.715	0.761	1.34
Cadmium	4.3	2.5	0.914	0.755	0.917	0.706
Calcium	NC	NC	6420	7500	9360	72300
Chromium	180	30	10.8	9.54	9.87	12.1
Cobalt	NC	NC	4.96	7.65	4.6	8.61
Copper	270	50	30.3	29.7	31.2	17.4
Iron	NC	NC	18000	19800	24900	17500
Lead	400	63	57.5	26.9	25.2	7.36
Magnesium	NC	NC	2600	2690	2470	14200
Manganese	2000	1600	182	1120	297	529
Mercury	0.81	0.18	0.134	0.0572	0.122	0.0086 J
Nickel	310	30 NG	12	14.9	11.9	19.4
Potassium	NC	NC	786	1090	751	1640
Selenium	180	3.9	1.21 J	1.34 J	1.32 J	1.54 J
Silver	180	2	ND 105	ND 102	ND 120	ND 172
Sodium	NC	NC	105	182 ND	120	172 ND
Thallium	NC	NC	ND	ND 12.0	ND 12	ND
Vanadium	NC	NC	14	13.9	12	16.1
Zinc	10000	109	156	126	206	94.3

Notes:

1) PAHs analyzed by SW846-8270C; total metals analyzed by USEPA

6000/7000 Series Methods; PCBs analyzed by SW846-8082.

2) Shaded areas indicate result exceeds NYSDEC Part 375 Restricted

Residential Soil Guidance Values.

**3**) Shaded areas indicate result exceeds NYSDEC Part 375 Unrestricted Soil Guidance Values.

**4**) J = detected above the MDL, but below the RL; therefore, result is an estimated concentration.

**5**) mg/kg = milligrams per kilogram (ppm)

6) ND = Analyte included in the analysis, but not detected.

7) NC = No Criteria

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Sample ID	NYSDEC Part 375		RR-BS-7	RR-BS-8	RR-BS-9	RR-I
Sample Location	Restricted	NYSDEC Part 375 Unrestricted	Bottom	Bottom	Bottom	Bottom
Date Sampled	Residential	Guidance Value	6/22/2010	6/22/2010	6/22/2010	6/23/2010
Compound	Guidance Value	Guiuance value	Soil	Soil	Soil	Soil
Units	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
PAHs						
Naphthalene	100	12	ND	ND	ND	ND
2-Methylnaphthalene	NC	NC	ND	ND	ND	ND
Acenaphthylene	100	100	ND	ND	ND	ND
Acenaphthene	100	20	ND	ND	ND	ND
Fluorene	100	30	ND	ND	ND	ND
Phenanthrene	100	100	ND	ND	0.159	ND
Anthracene	100	100	ND	ND	ND	ND
Fluoranthene	100	100	ND	ND	0.212	ND
Pyrene	100	100	ND	ND	0.152 J	ND
Benzo (a) anthracene	1	1	ND	ND	0.0867 J	ND
Chrysene	3.9	1	ND	ND	0.0898 J	ND
Benzo (b) fluoranthene	1	1	ND	ND	ND	ND
Benzo (k) fluoranthene	3.9	0.8	ND	ND	ND	ND
Benzo (a) pyrene	1	1	ND	ND	ND	ND
Indeno (1,2,3-cd) pyrene	0.5	0.5	ND	ND	ND	ND
Dibenzo (a,h) anthracene	0.33	0.33	ND	ND	ND	ND
Benzo (g,h,i) perylene	100	100	ND	ND	ND	ND
METALS						
Aluminum	NC	NC	26000	16900	15400	Not Analyzed
Antimony	NC	NC	ND	ND	BRL	Not Analyzed
Arsenic	16	13	2.82	4.24	4.5	Not Analyzed
Barium	400	350	135	117	135	Not Analyzed
Beryllium	72	7.2	1.71	1.01	0.898	Not Analyzed
Cadmium	4.3	2.5	1.04	0.826	0.855	Not Analyzed
Calcium	NC	NC	3250	5060	3370	Not Analyzed
Chromium	180	30	32.7	24.4	22.2	Not Analyzed
Cobalt	NC	NC	21.4	10.7	9.44	Not Analyzed
Copper	270	50	24.7	22.5	20.6	Not Analyzed
Iron	NC	NC	46100	24800	21500	Not Analyzed
Lead	400	63	13.7	14.8	9.93	Not Analyzed
Magnesium	NC	NC	9650	9940	4930	Not Analyzed
Manganese	2000	1600	204	256	256	451
Mercury	0.81	0.18	0.0203 J	0.0149 J	0.0193 J	Not Analyzed
Nickel	310	30	31	24.8	23.1	Not Analyzed
Potassium	NC	NC	3380	2580	2140	Not Analyzed
Selenium	180	3.9	1.31 J	1.07 J	0.702 J	Not Analyzed
Silver	180	2	ND	ND	ND	Not Analyzed
Sodium	NC	NC	149	114	107	Not Analyzed
Thallium	NC	NC	ND	ND	ND	Not Analyzed
Vanadium	NC	NC	40.4	29.5	27.7	Not Analyzed
Zinc	10000	109	100	86.6	225	Not Analyzed

Notes:

1) PAHs analyzed by SW846-8270C; total metals analyzed by USEPA

6000/7000 Series Methods; PCBs analyzed by SW846-8082.

2) Shaded areas indicate result exceeds NYSDEC Part 375 Restricted

Residential Soil Guidance Values.

**3**) Shaded areas indicate result exceeds NYSDEC Part 375 Unrestricted Soil Guidance Values.

**4**) J = detected above the MDL, but below the RL; therefore, result is an estimated concentration.

5) mg/kg = milligrams per kilogram (ppm)

6) ND = Analyte included in the analysis, but not detected.

7) NC = No Criteria

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Sample ID	NYSDEC Part 375		S-10	RR-BS-13	RR-BS-19	RR-BS-22
Sample Location	Restricted	NYSDEC Part 375	Bottom	Bottom	Bottom	Bottom
Date Sampled	Residential	Unrestricted	6/25/2010	6/25/2010	6/28/2010	7/13/2010
Compound	Guidance Value	Guidance Value	Soil	Soil	Soil	Soil
Units	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
PAHs						
Naphthalene	100	12	Not Analyzed	ND	ND	ND
2-Methylnaphthalene	NC	NC	Not Analyzed	ND	0.0897 J	ND
Acenaphthylene	100	100	Not Analyzed	ND	ND	ND
Acenaphthene	100	20	Not Analyzed	ND	ND	ND
Fluorene	100	30	Not Analyzed	ND	ND	ND
Phenanthrene	100	100	Not Analyzed	0.265	0.103	ND
Anthracene	100	100	Not Analyzed	ND	ND	ND
Fluoranthene	100	100	Not Analyzed	0.295	0.174	ND
Pyrene	100	100	Not Analyzed	0.213	0.133	ND
Benzo (a) anthracene	1	1	Not Analyzed	0.136 J	0.0888 J	ND
Chrysene	3.9	1	Not Analyzed	0.138 J	0.101	ND
Benzo (b) fluoranthene	1	1	Not Analyzed	ND	0.0706 J	ND
Benzo (k) fluoranthene	3.9	0.8	Not Analyzed	0.124 J	0.0936 J	ND
Benzo (a) pyrene	1	1	Not Analyzed	0.0967 J	0.0916 J	ND
Indeno (1,2,3-cd) pyrene	0.5	0.5	Not Analyzed	ND	0.0477 J	ND
Dibenzo (a,h) anthracene	0.33	0.33	Not Analyzed	ND	ND	ND
Benzo (g,h,i) perylene	100	100	Not Analyzed	ND	0.0487 J	ND
METALS						
Aluminum	NC	NC	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed
Antimony	NC	NC	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed
Arsenic	16	13	1.9	7.02	7.21	7.28
Barium	400	350	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed
Beryllium	72	7.2	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed
Cadmium	4.3	2.5	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed
Calcium	NC	NC	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed
Chromium	180	30	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed
Cobalt	NC	NC	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed
Copper	270	50	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed
Iron	NC	NC	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed
Lead	400	63	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed
Magnesium	NC	NC	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed
Manganese	2000	1600	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed
Mercury	0.81	0.18	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed
Nickel	310	30	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed
Potassium	NC	NC	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed
Selenium	180	3.9	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed
Silver	180	2	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed
Sodium	NC	NC	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed
Thallium	NC	NC	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed
Vanadium	NC	NC	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed
Zinc	10000	109	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed

Notes:

1) PAHs analyzed by SW846-8270C; total metals analyzed by USEPA

6000/7000 Series Methods; PCBs analyzed by SW846-8082.

2) Shaded areas indicate result exceeds NYSDEC Part 375 Restricted

Residential Soil Guidance Values.

3) Shaded areas indicate result exceeds NYSDEC Part 375 Unrestricted Soil Guidance Values.

4) J = detected above the MDL, but below the RL; therefore, result is an estimated concentration.

5) mg/kg = milligrams per kilogram (ppm)

6) ND = Analyte included in the analysis, but not detected.

7) NC = No Criteria

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Sample ID	NYSDEC Part 375		RR-BS-24	RR-BS-25	RR-BS-26	RR-SS-01
Sample Location	Restricted	NYSDEC Part 375	Bottom	Bottom	Bottom	Sidewall
Date Sampled	Residential	Unrestricted	7/15/2010	7/20/2010	7/20/2010	8/4/2010
Compound	Guidance Value	Guidance Value	Soil	Soil	Soil	Soil
Units	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
PAHs						
Naphthalene	100	12	ND	ND	ND	ND
2-Methylnaphthalene	NC	NC	ND	0.11 J	ND	ND
Acenaphthylene	100	100	ND	ND	ND	0.112 J
Acenaphthene	100	20	ND	ND	ND	ND
Fluorene	100	30	ND	ND	0.17 J	ND
Phenanthrene	100	100	ND	ND	ND	0.141 J
Anthracene	100	100	ND	ND	ND	ND
Fluoranthene	100	100	ND	ND	ND	0.357
Pyrene	100	100	ND	ND	ND	0.42
Benzo (a) anthracene	1	1	ND	ND	ND	0.303
Chrysene	3.9	1	ND	ND	ND	0.349
Benzo (b) fluoranthene	1	1	ND	ND	ND	0.494
Benzo (k) fluoranthene	3.9	0.8	ND	ND	ND	0.57
Benzo (a) pyrene	1	1	ND	ND	ND	0.415
Indeno (1,2,3-cd) pyrene	0.5	0.5	ND	ND	ND	0.215
Dibenzo (a,h) anthracene	0.33	0.33	ND	ND	ND	ND
Benzo (g,h,i) perylene	100	100	ND	ND	ND	0.201
METALS						
Aluminum	NC	NC	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed
Antimony	NC	NC	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed
Arsenic	16	13	6.19	1.75	3.35	10.5
Barium	400	350	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed
Beryllium	72	7.2	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed
Cadmium	4.3	2.5	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed
Calcium	NC	NC	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed
Chromium	180	30	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed
Cobalt	NC	NC	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed
Copper	270	50	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed
Iron	NC	NC	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed
Lead	400	63	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed
Magnesium	NC	NC	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed
Manganese	2000	1600	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed
Mercury	0.81	0.18	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed
Nickel	310	30	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed
Potassium	NC	NC	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed
Selenium	180	3.9	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed
Silver	180	2	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed
Sodium	NC	NC	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed
Thallium	NC	NC	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed
Vanadium	NC	NC	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed
Zinc	10000	109	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed

Notes:

1) PAHs analyzed by SW846-8270C; total metals analyzed by USEPA

6000/7000 Series Methods; PCBs analyzed by SW846-8082.

2) Shaded areas indicate result exceeds NYSDEC Part 375 Restricted

Residential Soil Guidance Values.

3) Shaded areas indicate result exceeds NYSDEC Part 375 Unrestricted Soil Guidance Values.

4) J = detected above the MDL, but below the RL; therefore, result is an estimated concentration.

5) mg/kg = milligrams per kilogram (ppm)

6) ND = Analyte included in the analysis, but not detected.

7) NC = No Criteria

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Sample ID	NYSDEC Part 375	NYSDEC Part 375	RR-SS-03
Sample Location	Restricted	NYSDEC Part 375 Unrestricted	Sidewall
Date Sampled	Residential	Guidance Value	8/11/2010
Compound	Guidance Value	Guidance value	Soil
Units	mg/kg	mg/kg	mg/kg
PAHs			
Naphthalene	100	12	ND
2-Methylnaphthalene	NC	NC	ND
Acenaphthylene	100	100	ND
Acenaphthene	100	20	ND
Fluorene	100	30	ND
Phenanthrene	100	100	ND
Anthracene	100	100	ND
Fluoranthene	100	100	ND
Pyrene	100	100	ND
Benzo (a) anthracene	1	1	ND
Chrysene	3.9	1	ND
Benzo (b) fluoranthene	1	1	ND
Benzo (k) fluoranthene	3.9	0.8	ND
Benzo (a) pyrene	1	1	ND
Indeno (1,2,3-cd) pyrene	0.5	0.5	ND
Dibenzo (a,h) anthracene	0.33	0.33	ND
Benzo (g,h,i) perylene	100	100	ND
METALS			
Aluminum	NC	NC	Not Analyzed
Antimony	NC	NC	Not Analyzed
Arsenic	16	13	7.44
Barium	400	350	Not Analyzed
Beryllium	72	7.2	Not Analyzed
Cadmium	4.3	2.5	Not Analyzed
Calcium	NC	NC	Not Analyzed
Chromium	180	30	Not Analyzed
Cobalt	NC	NC	Not Analyzed
Copper	270	50	Not Analyzed
Iron	NC	NC	Not Analyzed
Lead	400	63	Not Analyzed
Magnesium	NC	NC	Not Analyzed
Manganese	2000	1600	Not Analyzed
Mercury	0.81	0.18	Not Analyzed
Nickel	310	30	Not Analyzed
Potassium	NC	NC	Not Analyzed
Selenium	180	3.9	Not Analyzed
Silver	180	2	Not Analyzed
Sodium	NC	NC	Not Analyzed
Thallium	NC	NC	Not Analyzed
Vanadium	NC	NC	Not Analyzed
Zinc	10000	109	Not Analyzed

Notes:

1) PAHs analyzed by SW846-8270C; total metals analyzed by USEPA

6000/7000 Series Methods; PCBs analyzed by SW846-8082.

2) Shaded areas indicate result exceeds NYSDEC Part 375 Restricted

Residential Soil Guidance Values.

**3**) Shaded areas indicate result exceeds NYSDEC Part 375 Unrestricted Soil Guidance Values.

**4**) J = detected above the MDL, but below the RL; therefore, result is an estimated concentration.

**5**) mg/kg = milligrams per kilogram (ppm)

6) ND = Analyte included in the analysis, but not detected.

7) NC = No Criteria

#### TABLE 45 SPAULDING COMPOSITES SITE COAL CONVEYOR, OPERABLE UNIT 6 SUMMARY OF CONFIRMATION SOIL SAMPLE RESULTS Page 1 of 1

Sample ID	NYSDEC Part 375	NUCEDECE A 255	Coal Conveyor BS-1	Coal Conveyor SS-2	Coal Conveyor SS-3	
Sample Location	Restricted	NYSDEC Part 375 Unrestricted	Bottom	Sidewall	Sidewall	
Date Sampled	Residential	Guidance Value	7/29/2010	7/29/2010	8/9/2010	
Compound	Guidance Value	Guidance value	Soil	Soil	Soil	
Units	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	
PAHs						
Naphthalene	100	12	ND	ND	ND	
2-Methylnaphthalene	NC	NC	ND	ND	ND	
Acenaphthylene	100	100	ND	ND	ND	
Acenaphthene	100	20	ND	ND	ND	
Fluorene	100	30	ND	ND	ND	
Phenanthrene	100	100	ND	ND	ND	
Anthracene	100	100	ND	ND	ND	
Fluoranthene	100	100	ND	ND	ND	
Pyrene	100	100	ND	ND	ND	
Benzo (a) anthracene	1	1	ND	ND	ND	
Chrysene	3.9	1	ND	ND	ND	
Benzo (b) fluoranthene	1	1	ND	ND	ND	
Benzo (k) fluoranthene	3.9	0.8	ND	ND	ND	
Benzo (a) pyrene	1	1	ND	ND	ND	
Indeno (1,2,3-cd) pyrene	0.5	0.5	ND	ND	ND	
Dibenzo (a,h) anthracene	0.33	0.33	ND	ND	ND	
Benzo (g,h,i) perylene	100	100	ND	ND	ND	
METALS						
Arsenic	16	13	15.2	6.41	7.83	
Cadmium	4.3	2.5	0.702	0.922	1.14	

Notes:

1) PAHs analyzed by SW846-8270C; total metals analyzed by USEPA 6000/7000 Series Methods.

3) She led areas

**2**) Shaded areas indicate result exceeds NYSDEC Part 375 Restricted Residential Soil Guidance Values.

 Shaded areas indicate result exceeds NYSDEC Part 375 Unrestricted Soil Guidance Values.

**4**) J = detected above the MDL, but below the RL; therefore, result is an estimated concentration.

**5**) mg/kg = milligrams per kilogram (ppm)

6) ND = Analyte included in the analysis, but not detected.

#### TABLE 46 SPAULDING COMPOSITES SITE SEWER PIPE AT GIBSON/DODGE, OPERABLE UNIT 6 SUMMARY OF CONFIRMATION SOIL SAMPLE RESULTS

Page 1 of 2

Sample ID	NYSDEC Part 375		SEWER PIPE-BS-1	SEWER PIPE-SS-3	SEWER PIPE-SS-4	SEWER PIPE-SS-7
Sample Location	Restricted	NYSDEC Part 375 Unrestricted	Bottom	Sidewall	Sidewall	Sidewall
Date Sampled	Residential	Guidance Value	8/17/2010	8/17/2010	8/17/2010	9/7/2010
Compound	Guidance Value	Guidance value	Soil	Soil	Soil	Soil
Units	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
VOCS				·		
Acetone	100	0.05	ND	ND	ND	Not Analyzed
Benzene	4.8	0.06	ND	ND	ND	Not Analyzed
2-Butanone (MEK)	100	0.12	ND	ND	ND	Not Analyzed
n-Butylbenzene	100	12	ND	ND	ND	Not Analyzed
sec-Butylbenzene	100	11	ND	ND	ND	Not Analyzed
tert-Butylbenzene	100	5.9	ND	ND	ND	Not Analyzed
Carbon tetrachloride	2.4	0.76	ND	ND	ND	Not Analyzed
Chlorobenzene	100	1.1	ND	ND	ND	Not Analyzed
Chloroform	49	0.37	ND	ND	ND	Not Analyzed
1,2-Dichlorobenzene	100	1.1	ND	ND	ND	Not Analyzed
1,3-Dichlorobenzene	49	2.4	ND	ND	ND	Not Analyzed
1,4-Dichlorobenzene	13	1.8	ND	ND	ND	Not Analyzed
1,2-Dichloroethane	3.1	0.02	ND	ND	ND	Not Analyzed
1,1-Dichloroethene	100	0.33	ND	ND	ND	Not Analyzed
cis-1,2-Dichloroethene	100	0.25	ND	ND	ND	Not Analyzed
trans-1,2-Dichloroethene	100	0.19	ND	ND	ND	Not Analyzed
Ethylbenzene	41	1	0.107	ND	ND	Not Analyzed
Methyl tert-butyl ether	100	0.93	ND	ND	ND	Not Analyzed
Naphthalene	100	12	ND	ND	ND	Not Analyzed
n-Propylbenzene	100	3.9	ND	ND	ND	Not Analyzed
Toluene	100	0.7	14.2 E	ND	ND	Not Analyzed
1,1,1-Trichloroethane	100	0.68	ND	ND	ND	Not Analyzed
Trichloroethene	21	0.47	ND	ND	ND	Not Analyzed
1,2,4-Trimethylbenzene	52	3.6	ND	ND	ND	Not Analyzed
1,3,5-Trimethylbenzene	52	8.4	ND	ND	ND	Not Analyzed
Vinyl chloride	0.9	0.02	ND	ND	ND	Not Analyzed
m,p-Xylene	N/A	N/A	0.491	ND	ND	Not Analyzed
o-Xylene	N/A	N/A	0.17	ND	ND	Not Analyzed
Xylene (total)	100	0.26	0.661	ND	ND	Not Analyzed

Notes:

1) VOCs analyzed by SW846-8240; PAHs analyzed by SW846-8270; total

metals analyzed by USEPA 6000/7000 Series Methods.

2) Shaded areas indicate result exceeds NYSDEC Part 375 Restricted

Residential Soil Guidance Values.

3) Shaded areas indicate result exceeds NYSDEC Part 375 Unrestricted

Soil Guidance Values.

**4**) J = detected above the MDL, but below the RL; therefore, result is an estimated concentration.

5) mg/kg = milligrams per kilogram (ppm)

6) ND = Analyte included in the analysis, but not detected.

7) NC = No Criteria

#### **TABLE 46** SPAULDING COMPOSITES SITE **SEWER PIPE AT GIBSON/DODGE, OPERABLE UNIT 6** SUMMARY OF CONFIRMATION SOIL SAMPLE RESULTS

Page 2 of 2

Sample ID	NYSDEC Part 375		SEWER PIPE-BS-1	SEWER PIPE-SS-3	SEWER PIPE-SS-4	SEWER PIPE-SS-7
Sample Location	Restricted	NYSDEC Part 375	Bottom	Sidewall	Sidewall	Sidewall
Date Sampled	Residential	Unrestricted	8/17/2010	8/17/2010	8/17/2010	9/7/2010
Compound	Guidance Value	Guidance Value	Soil	Soil	Soil	Soil
Units	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
SVOCS						
Naphthalene	100	12	ND	ND	ND	ND
Acenaphthylene	100	100	ND	ND	ND	ND
Acenaphthene	100	20	ND	ND	ND	ND
Fluorene	100	30	ND	ND	ND	ND
Hexachlorobenzene	1.2	0.33	ND	ND	ND	ND
Phenanthrene	100	100	ND	ND	ND	0.0981 J
Anthracene	100	100	ND	ND	ND	0.031 J
Fluoranthene	100	100	ND	ND	ND	0.143 J
Pyrene	100	100	ND	ND	ND	0.109 J
Benzo (a) anthracene	1	1	ND	ND	ND	0.0719 J
Chrysene	3.9	1	ND	ND	ND	0.0645 J
Benzo (b) fluoranthene	1	1	ND	ND	ND	0.0671 J
Benzo (k) fluoranthene	3.9	0.8	ND	ND	ND	0.0585 J
Benzo (a) pyrene	1	1	ND	ND	ND	0.0658 J
Indeno (1,2,3-cd) pyrene	0.5	0.5	ND	ND	ND	0.0271 J
Dibenzo (a,h) anthracene	0.33	0.33	ND	ND	ND	ND
Dibenzofuran	59	7	ND	ND	ND	ND
Benzo (g,h,i) perylene	100	100	ND	ND	ND	0.0258 J
Pentachlorophenol	6.7	0.8	ND	ND	ND	ND
Phenol	100	0.33	ND	ND	ND	ND
METALS						
Aluminum	NC	NC	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed
Antimony	NC	NC	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed
Arsenic	16	13	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed
Barium	400	350	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed
Beryllium	72	7.2	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed
Cadmium	4.3	2.5	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed
Calcium	NC	NC	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed
Chromium	180	30	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed
Cobalt	NC	NC	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed
Copper	270	50	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed
Iron	NC 400	NC	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed
Lead	400	<u>63</u>	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed
Magnesium	NC	NC	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed
Manganese	2000	1600	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed
Mercury	0.81	0.18	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed
Nickel	310	<u>30</u>	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed
Potassium	NC 100	NC	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed
Selenium	180	3.9	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed
Silver	180	2	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed
Sodium	NC	NC	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed
Thallium	NC	NC	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed
Vanadium	NC	NC	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed
Zinc	10000	109	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed

Notes:

1) VOCs analyzed by SW846-8240; PAHs analyzed by SW846-8270; total metals analyzed by USEPA 6000/7000 Series Methods.

2) Shaded areas indicate result exceeds NYSDEC Part 375 Residential Soil Guidance Values.

3) Shaded areas indicate result exceeds NYSDEC Part 375 Unrestricted Soil Guidance Values.

4) J = detected above the MDL, but below the RL; therefore, result is an estimated concentration.

5) mg/kg = milligrams per kilogram (ppm)

6) ND = Analyte included in the analysis, but not detected.

7) NC = No Criteria

# TABLE 47SPAULDING COMPOSITES SITESPAULDITE SHEET BASEMENT, OPERABLE UNIT 2SUMMARY OF CONFIRMATION SOIL SAMPLE RESULTS

Page 1 of 3

Sample ID	NYSDEC Part 375	NYSDEC Part 375	38-001A	38-002A	38-003	38-004	38-005	38-006B	38-007B	38-008B
Sample Location	Restricted	Unrestricted	Bottom	Bottom	Bottom	Bottom	Bottom	Bottom	Bottom	Bottom
Date Sampled	Residential	Guidance Value	2/24/2010	2/24/2010	2/18/2010	2/18/2010	2/18/2010	3/1/2010	3/1/2010	3/1/2010
Compound	Guidance Value	Guidance value	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil
Units	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
PCBs										
Aroclor-1242	NC	NC	ND (0.25)	ND (0.27)	ND (0.26)	ND (0.22)	ND (0.22)	ND (0.020)	ND (0.018)	ND (0.018)
Aroclor-1248	NC	NC	ND (0.25)	0.071 J	0.79	0.63	0.63	ND (0.020)	ND (0.018)	0.025
Aroclor-1254	NC	NC	ND (0.25)	ND (0.27)	ND (0.26)	ND (0.22)	ND (0.22)	ND (0.020)	ND (0.018)	ND (0.018)
Aroclor-1260	NC	NC	ND (0.25)	ND (0.27)	ND (0.26)	ND (0.22)	ND (0.22)	ND (0.020)	ND (0.018)	ND (0.018)
Total PCBs	1	0.1	ND (0.25)	0.071 J	0.79	0.63	0.63	ND (0.020)	ND (0.018)	0.025

Notes:

1) PCBs analyzed by SW846-8082.

2) Shaded areas indicate result exceeds NYSDEC Part 375

Restricted Residential Soil Guidance Values.

3) Shaded areas indicate result exceeds NYSDEC Part 375

Unrestricted Soil Guidance Values.

4) J = detected above the MDL, but below the RL; therefore,

5) mg/kg = milligrams per kilogram (ppm)

6) NC = No Criteria

# TABLE 47SPAULDING COMPOSITES SITESPAULDITE SHEET BASEMENT, OPERABLE UNIT 2SUMMARY OF CONFIRMATION SOIL SAMPLE RESULTS

Page 2 of 3

Sample ID	NYSDEC Part 375	NYSDEC Part 375	38-009	38-010	38-011B	38-012	38-013	38-014	38-015B	38-016
Sample Location	Restricted	Unrestricted	Bottom	Bottom	Bottom	Bottom	Bottom	Bottom	Bottom	Bottom
Date Sampled	Residential	Guidance Value	2/18/2010	2/18/2010	3/1/2010	2/18/2010	2/18/2010	2/18/2010	3/1/2010	2/18/2010
Compound	Guidance Value	Guidance value	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil
Units	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
PCBs										
Aroclor-1242	NC	NC	ND (0.21)	ND (0.23)	ND (0.020)	ND (0.25)	ND (0.23)	ND (0.25)	ND (0.019)	ND (0.21)
Aroclor-1248	NC	NC	0.26	0.12 J	0.010 J	0.86	0.10 J	0.17 J	0.15	0.42
Aroclor-1254	NC	NC	ND (0.21)	ND (0.23)	ND (0.020)	ND (0.25)	ND (0.23)	ND (0.25)	ND (0.019)	ND (0.21)
Aroclor-1260	NC	NC	ND (0.21)	ND (0.23)	ND (0.020)	ND (0.25)	ND (0.23)	ND (0.25)	ND (0.019)	ND (0.21)
Total PCBs	1	0.1	0.26	0.12 J	0.010 J	0.86	0.10 J	0.17 J	0.15	0.42

Notes:

1) PCBs analyzed by SW846-8082.

2) Shaded areas indicate result exceeds NYSDEC Part 375

Restricted Residential Soil Guidance Values.

3) Shaded areas indicate result exceeds NYSDEC Part 375

Unrestricted Soil Guidance Values.

4) J = detected above the MDL, but below the RL; therefore,

5) mg/kg = milligrams per kilogram (ppm)

6) NC = No Criteria

# TABLE 47SPAULDING COMPOSITES SITESPAULDITE SHEET BASEMENT, OPERABLE UNIT 2SUMMARY OF CONFIRMATION SOIL SAMPLE RESULTS

Page 3 of 3

Sample ID	NYSDEC Part 375	NYSDEC Part 375	38-017	38-018	38-019A	38-020	38-021	38-022
Sample Location	Restricted	Unrestricted	Bottom	Bottom	Bottom	Bottom	Bottom	Bottom
Date Sampled	Residential	Guidance Value	2/18/2010	2/18/2010	2/25/2010	2/18/2010	2/18/2010	2/18/2010
Compound	Guidance Value	Guiuance value	Soil	Soil	Soil	Soil	Soil	Soil
Units	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
PCBs								
Aroclor-1242	NC	NC	ND (0.28)	ND (0.21)	ND (0.24)	ND (0.21)	ND (0.25)	ND (0.26)
Aroclor-1248	NC	NC	ND (0.28)	0.20 J	ND (0.24)	0.74	0.13 J	0.55
Aroclor-1254	NC	NC	ND (0.28)	ND (0.21)	ND (0.24)	ND (0.21)	ND (0.25)	ND (0.26)
Aroclor-1260	NC	NC	ND (0.28)	ND (0.21)	ND (0.24)	ND (0.21)	ND (0.25)	ND (0.26)
Total PCBs	1	0.1	ND (0.28)	0.20 J	ND (0.24)	0.74	0.13 J	0.55

Notes:

1) PCBs analyzed by SW846-8082.

2) Shaded areas indicate result exceeds NYSDEC Part 375

Restricted Residential Soil Guidance Values.

3) Shaded areas indicate result exceeds NYSDEC Part 375

Unrestricted Soil Guidance Values.

4) J = detected above the MDL, but below the RL; therefore,

5) mg/kg = milligrams per kilogram (ppm)

6) NC = No Criteria

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Sample ID	NYSDEC Part 375	NVCDEC Dout 275	38-023	38-025	38-026	38-027	38-028	38-029
Sample Location	Restricted	NYSDEC Part 375 Unrestricted	Bottom	Sidewall	Sidewall	Sidewall	Bottom	Sidewall
Date Sampled	Residential	Guidance Value	3/4/2010	3/4/2010	3/4/2010	3/4/2010	3/4/2010	3/4/2010
Compound	Guidance Value		Soil	Soil	Soil	Soil	Soil	Soil
Units	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
PCBs								
Aroclor-1242	NC	NC	ND (0.25)	ND (0.24)	ND (0.24)	ND (0.20)	ND (0.24)	ND (0.24)
Aroclor-1248	NC	NC	ND (0.25)	ND (0.24)	ND (0.24)	0.093 J	ND (0.24)	ND (0.24)
Aroclor-1254	NC	NC	ND (0.25)	ND (0.24)	ND (0.24)	ND (0.20)	ND (0.24)	ND (0.24)
Aroclor-1260	NC	NC	ND (0.25)	ND (0.24)	ND (0.24)	ND (0.20)	ND (0.24)	ND (0.24)
Total PCBs	1	0.1	ND (0.25)	ND (0.24)	ND (0.24)	0.093 J	ND (0.24)	ND (0.24)
METALS								
Arsenic	16	13	2.8	3.1	2.6	1.1 J	3.0	3.7
Barium	400	350	117.0	83.3	87.2	48.1	87.1	91.9
Chromium	180	30	10.4	11.1	12.0	8.97	14.1	18.7

Notes:

1) PCBs analyzed by SW846-8082.

2) Shaded areas indicate result exceeds NYSDEC Part 375

Restricted Residential Soil Guidance Values.

3) Shaded areas indicate result exceeds NYSDEC Part 375

Unrestricted Soil Guidance Values.

4) J = detected above the MDL, but below the RL; therefore,

5) mg/kg = milligrams per kilogram (ppm)

6) NC = No Criteria

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Sample ID	NYSDEC Part 375	NYSDEC Part 375	38-030	38-031	38-032	38-033	38-034
Sample Location	Restricted	Unrestricted	Sidewall	Sidewall	Sidewall	Sidewell	Bottom
Date Sampled	Residential	Guidance Value	3/4/2010	3/4/2010	3/4/2010	3/4/2010	3/4/2010
Compound	Guidance Value	Guidance value	Soil	Soil	Soil	Soil	Soil
Units	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
PCBs							
Aroclor-1242	NC	NC	ND (0.24)	ND (0.25)	ND (0.27)	ND (0.21)	ND (0.25)
Aroclor-1248	NC	NC	ND (0.24)	ND (0.25)	ND (0.27)	0.19 J	1.2
Aroclor-1254	NC	NC	ND (0.24)	ND (0.25)	ND (0.27)	ND (0.21)	ND (0.25)
Aroclor-1260	NC	NC	ND (0.24)	ND (0.25)	ND (0.27)	ND (0.21)	ND (0.25)
Total PCBs	1	0.1	ND (0.24)	ND (0.25)	ND (0.27)	0.19 J	1.2
METALS							
Arsenic	16	13	3.0	3.9	4.6	2.5	3.1
Barium	400	350	91.5	105.0	163.0	97.5	87.1
Chromium	180	30	11.0	19.5	18.3	9.78	10.7

Notes:

1) PCBs analyzed by SW846-8082.

2) Shaded areas indicate result exceeds NYSDEC Part 375

Restricted Residential Soil Guidance Values. 3) Shaded areas indicate result exceeds NYSDEC Part 375 Unrestricted Soil Guidance Values.

4) J = detected above the MDL, but below the RL; therefore,

5) mg/kg = milligrams per kilogram (ppm)

6) NC = No Criteria

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Sample ID	NYSDEC Part 375	NYSDEC Part 375	LS-1	LS-2	LS-3	LS-4	LS-5	LS-6	LS-7	LS-8
Sample Location	Restricted	Unrestricted	Sidewall	Sidewall	Sidewall	Sidewall	Sidewall	Bottom	Sidewall	Bottom
Date Sampled	Residential	Guidance Value	7/22/2004	7/26/2004	7/27/2004	7/27/2004	7/27/2004	7/27/2004	7/27/2004	7/27/2004
Compound	Guidance Value	Guidance value	Soil	Soil	Soil	Soil	Soil	Soil	Fill	Soil
Units	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
PCBs										
Aroclor-1242	NC	NC								
Aroclor-1248	NC	NC							0.74	
Aroclor-1254	NC	NC							0.73	
Aroclor-1260	NC	NC								
Total PCBs	1	0.1	ND (0.059)	ND (0.06)	ND (0.059)	ND (0.059)	ND (0.059)	ND (0.059)	1.47	ND (0.059)

Notes:

1) PCBs analyzed by SW846-8082.

2) Shaded areas indicate result exceeds NYSDEC Part 375

Restricted Residential Soil Guidance Values.

3) Shaded areas indicate result exceeds NYSDEC Part 375

Unrestricted Soil Guidance Values.

4) mg/kg = milligrams per kilogram (ppm)

5) NC = No Criteria

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Sample ID	NYSDEC Part 375	NYSDEC Part 375	LS-10	LS-11	LS-12	LS-13	LS-14	LS-15	LS-16	LS-17
Sample Location	Restricted	Unrestricted	Sidewall	Bottom	Sidewall	Sidewall	Bottom	Sidewall	Sidewall	Bottom
Date Sampled	Residential	Guidance Value	7/30/2004	7/30/2004	7/30/2004	7/30/2004	7/30/2004	7/30/2004	8/5/2004	8/5/2004
Compound	Guidance Value	Guidance value	Soil							
Units	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
PCBs										
Aroclor-1242	NC	NC								
Aroclor-1248	NC	NC								
Aroclor-1254	NC	NC								
Aroclor-1260	NC	NC								
Total PCBs	1	0.1	ND (0.059)							

Notes:

1) PCBs analyzed by SW846-8082.

2) Shaded areas indicate result exceeds NYSDEC Part 375

Restricted Residential Soil Guidance Values.

3) Shaded areas indicate result exceeds NYSDEC Part 375

Unrestricted Soil Guidance Values.

4) mg/kg = milligrams per kilogram (ppm)

5) NC = No Criteria

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Sample ID	NYSDEC Part 375	NYSDEC Part 375	LS-18	LS-19	LS-20	LS-21	LS-22	LS-23	LS-24	LS-25
Sample Location	Restricted	Unrestricted	Sidewall	Sidewall	Bottom	Sidewall	Sidewall	Sidewall	Sidewall	Bottom
Date Sampled	Residential	Guidance Value	8/5/2004	8/5/2004	8/5/2004	8/5/2004	8/9/2004	8/9/2004	8/9/2004	8/9/2004
Compound	Guidance Value	Guiuance value	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil
Units	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
PCBs										
Aroclor-1242	NC	NC								
Aroclor-1248	NC	NC							1.0	
Aroclor-1254	NC	NC								
Aroclor-1260	NC	NC								
Total PCBs	1	0.1	ND (0.059)	1.0	ND (0.059)					

Notes:

1) PCBs analyzed by SW846-8082.

2) Shaded areas indicate result exceeds NYSDEC Part 375

Restricted Residential Soil Guidance Values.

3) Shaded areas indicate result exceeds NYSDEC Part 375

Unrestricted Soil Guidance Values.

4) mg/kg = milligrams per kilogram (ppm)

5) NC = No Criteria

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Sample ID	NYSDEC Part 375	NYSDEC Part 375	LS-27	LS-28	LS-29	LS-30	LS-31	LS-32	LS-34	LS-35
Sample Location	Restricted	Unrestricted	Sidewall	Sidewall	Sidewall	Sidewall	Bottom	Bottom	Sidewall	Sidewall
Date Sampled	Residential	Guidance Value	8/9/2004	8/9/2004	8/9/2004	8/9/2004	8/9/2004	8/9/2004	8/9/2004	8/9/2004
Compound	Guidance Value	Guidance value	Fill	Fill	Soil	Soil	Soil	Soil	Soil	Soil
Units	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
PCBs										
Aroclor-1242	NC	NC								
Aroclor-1248	NC	NC	5.7	1.8	0.41	0.051	3.8			0.089
Aroclor-1254	NC	NC								
Aroclor-1260	NC	NC								
Total PCBs	1	0.1	5.7	1.8	0.41	0.051	3.8	ND (0.059)	ND (0.059)	0.089

Notes:

1) PCBs analyzed by SW846-8082.

2) Shaded areas indicate result exceeds NYSDEC Part 375

Restricted Residential Soil Guidance Values.

3) Shaded areas indicate result exceeds NYSDEC Part 375

Unrestricted Soil Guidance Values.

4) mg/kg = milligrams per kilogram (ppm)

5) NC = No Criteria

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Sample ID	NYSDEC Part 375	NYSDEC Part 375	DS-2	DS-3	DS-4	DS-5	DS-6	DS-19	DS-20	DS-39
Sample Location	Restricted	Unrestricted	Sidewall	Sidewall	Bottom	Sidewall	Sidewall	Bottom	Sidewall	Bottom
Date Sampled	Residential	Guidance Value	9/1/2004	9/1/2004	9/1/2004	9/1/2004	9/1/2004	9/20/2004	9/20/2004	10/8/2004
Compound	Guidance Value	Guidance value	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil
Units	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
PCBs										
Aroclor-1242	NC	NC								
Aroclor-1248	NC	NC		0.40	1.3	0.16	0.14	0.18		11.0
Aroclor-1254	NC	NC								
Aroclor-1260	NC	NC								
Total PCBs	1	0.1	ND (0.059)	0.40	1.3	0.16	0.14	0.18	ND (0.059)	11.0

Notes:

1) PCBs analyzed by SW846-8082.

2) Shaded areas indicate result exceeds NYSDEC Part 375

Restricted Residential Soil Guidance Values.

3) Shaded areas indicate result exceeds NYSDEC Part 375

Unrestricted Soil Guidance Values.

4) mg/kg = milligrams per kilogram (ppm)

5) NC = No Criteria

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Sample ID	NYSDEC Part 375	NYSDEC Part 375	DS-7	DS-8	DS-9	DS-10	DS-11	DS-12
Sample Location	Restricted	Unrestricted	Bottom	Sidewall	Sidewall	Sidewall	Sidewall	Bottom
Date Sampled	Residential	Guidance Value	9/2/2004	9/2/2004	9/2/2004	9/2/2004	9/2/2004	9/2/2004
Compound	Guidance Value	Guiuance value	Soil	Soil	Soil	Soil	Soil	Soil
Units	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
PCBs								
Aroclor-1242	NC	NC						
Aroclor-1248	NC	NC	0.055	0.044				
Aroclor-1254	NC	NC						
Aroclor-1260	NC	NC						
Total PCBs	1	0.1	0.055	0.044	ND (0.059)	ND (0.059)	ND (0.059)	ND (0.059)

Notes:

1) PCBs analyzed by SW846-8082.

2) Shaded areas indicate result exceeds NYSDEC Part 375

Restricted Residential Soil Guidance Values.

3) Shaded areas indicate result exceeds NYSDEC Part 375

Unrestricted Soil Guidance Values.

4) mg/kg = milligrams per kilogram (ppm)

5) NC = No Criteria

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Sample ID	NYSDEC Part 375	NYSDEC Part 375	DS-13	DS-14	DS-15	DS-16	DS-63
Sample Location	Restricted	Unrestricted	Sidewall	Sidewall	Bottom	Sidewall	Sidewall
Date Sampled	Residential	Guidance Value	9/2/2004	9/2/2004	9/2/2004	9/2/2004	2/4/2005
Compound	Guidance Value	Guiuance value	Soil	Soil	Soil	Soil	Fill
Units	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
PCBs							
Aroclor-1242	NC	NC					
Aroclor-1248	NC	NC	0.11				2.5
Aroclor-1254	NC	NC					
Aroclor-1260	NC	NC					
Total PCBs	1	0.1	0.11	ND (0.059)	ND (0.059)	ND (0.059)	2.5

Notes:

1) PCBs analyzed by SW846-8082.

2) Shaded areas indicate result exceeds NYSDEC Part 375

Restricted Residential Soil Guidance Values.

3) Shaded areas indicate result exceeds NYSDEC Part 375

Unrestricted Soil Guidance Values.

4) mg/kg = milligrams per kilogram (ppm)

5) NC = No Criteria

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Sample ID	NYSDEC Part 375	NYSDEC Part 375	DS-22	DS-26	DS-28	DS-31	DS-32	DS-38	DS-40	DS-42
Sample Location	Restricted	Unrestricted	Bottom	Bottom	Sidewall	Sidewall	Sidewall	Sidewall	Bottom	Sidewall
Date Sampled	Residential	Guidance Value	9/20/2004	9/20/2004	9/20/2004	9/20/2004	9/20/2004	10/8/2004	10/8/2004	10/8/2004
Compound	Guidance Value	Guidance value	Soil	Soil	Soil	Soil	Fill	Fill	Soil	Soil
Units	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
PCBs										
Aroclor-1242	NC	NC								
Aroclor-1248	NC	NC	0.35	0.067	0.61	0.15	0.063	0.087		0.54
Aroclor-1254	NC	NC								
Aroclor-1260	NC	NC								
Total PCBs	1	0.1	0.35	0.067	0.61	0.15	0.063	0.087	ND (0.059)	0.54

Notes:

1) PCBs analyzed by SW846-8082.

2) Shaded areas indicate result exceeds NYSDEC Part 375

Restricted Residential Soil Guidance Values.

3) Shaded areas indicate result exceeds NYSDEC Part 375

Unrestricted Soil Guidance Values.

4) mg/kg = milligrams per kilogram (ppm)

5) NC = No Criteria

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Sample ID	NYSDEC Part 375	NYSDEC Part 375	DS-44	DS-45	DS-46	DS-47	DS-50	DS-51	DS-52	DS-53
Sample Location	Restricted	Unrestricted	Sidewall	Bottom	Sidewall	Sidewall	Sidewall	Bottom	Sidewall	Sidewall
Date Sampled	Residential	Guidance Value	10/8/2004	10/8/2004	10/8/2004	10/13/2004	10/20/2004	10/20/2004	10/20/2004	10/20/2004
Compound	Guidance Value	Guidance value	Soil	Soil	Soil	Fill	Soil	Soil	Soil	Soil
Units	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
PCBs										
Aroclor-1242	NC	NC								
Aroclor-1248	NC	NC				5.1				
Aroclor-1254	NC	NC								
Aroclor-1260	NC	NC								
Total PCBs	1	0.1	ND (0.059)	ND (0.059)	ND (0.059)	5.1	ND (1.0)	ND (1.0)	ND (1.1)	ND (1.1)

Notes:

1) PCBs analyzed by SW846-8082.

2) Shaded areas indicate result exceeds NYSDEC Part 375

Restricted Residential Soil Guidance Values.

3) Shaded areas indicate result exceeds NYSDEC Part 375

Unrestricted Soil Guidance Values.

4) mg/kg = milligrams per kilogram (ppm)

5) NC = No Criteria

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Sample ID	NYSDEC Part 375	NWEDEC Devel 275	DS-54	DS-55	DS-56	DS-57	DS-58	DS-59	DS-60
Sample Location	Restricted	NYSDEC Part 375 Unrestricted	Bottom	Sidewall	Bottom	Sidewall	Sidewall	Sidewall	Sidewall
Date Sampled	Residential	Guidance Value	10/20/2004	10/21/2004	10/27/2004	10/27/2004	10/27/2004	10/27/2004	2/4/2005
Compound	Guidance Value	Guiuance value	Soil	Soil	Soil	Soil	Soil	Soil	Soil
Units	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
PCBs									
Aroclor-1242	NC	NC							
Aroclor-1248	NC	NC			3.7				0.1
Aroclor-1254	NC	NC							
Aroclor-1260	NC	NC							
Total PCBs	1	0.1	ND (0.059)	ND (1.2)	3.7	ND (1.2)	ND (1.1)	ND (1.1)	0.1

Notes:

1) PCBs analyzed by SW846-8082.

2) Shaded areas indicate result exceeds NYSDEC Part 375

Restricted Residential Soil Guidance Values.

3) Shaded areas indicate result exceeds NYSDEC Part 375

Unrestricted Soil Guidance Values.

4) mg/kg = milligrams per kilogram (ppm)

5) NC = No Criteria

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Sample ID	NYSDEC Part 375	NYSDEC Part 375	BS-1	BS-2	BS-3
Sample Location	Restricted	Unrestricted	Bottom	Bottom	Bottom
Date Sampled	Residential	Guidance Value	10/26/2004	10/26/2004	10/26/2004
Compound	Guidance Value	Guidance value	Soil	Soil	Soil
Units	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
PCBs					
Aroclor-1242	NC	NC			
Aroclor-1248	NC	NC	7.6		
Aroclor-1254	NC	NC			
Aroclor-1260	NC	NC			
Total PCBs	1	0.1	7.6	ND (1.1)	ND (1.2)

Notes:

1) PCBs analyzed by SW846-8082.

2) Shaded areas indicate result exceeds NYSDEC Part 375

2) Shaded areas indicate result exceeds NYSDEC Part 375
Restricted Residential Soil Guidance Values.
3) Shaded areas indicate result exceeds NYSDEC Part 375

Unrestricted Soil Guidance Values.

4) mg/kg = milligrams per kilogram (ppm)

5) NC = No Criteria

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Sample ID	NYSDEC Part 375	NYSDEC Part 375	TS-1	TS-3	TS-5	TS-6	TS-7	TS-8	TS-10	TS-11
Sample Location	Restricted	Unrestricted	Sidewall	Sidewall	Sidewall	Bottom	Bottom	Bottom	Bottom	Sidewall
Date Sampled	Residential	Guidance Value	9/24/2004	9/24/2004	9/24/2004	10/5/2004	10/5/2004	10/5/2004	10/5/2004	10/5/2004
Compound	Guidance Value	Guidance value	Soil	Gravel	Soil	Soil	Soil	Soil	Soil	Soil
Units	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
PCBs										
Aroclor-1242	NC	NC								
Aroclor-1248	NC	NC			2.8	0.097	0.052	0.13	1.5	0.48
Aroclor-1254	NC	NC								
Aroclor-1260	NC	NC								
Total PCBs	1	0.1	ND (1.2)	ND (1.2)	2.8	0.097	0.052	0.13	1.5	0.48

Notes:

1) PCBs analyzed by SW846-8082.

2) Shaded areas indicate result exceeds NYSDEC Part 375

Restricted Residential Soil Guidance Values.

3) Shaded areas indicate result exceeds NYSDEC Part 375

Unrestricted Soil Guidance Values.

4) mg/kg = milligrams per kilogram (ppm)

5) NC = No Criteria

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Sample ID	NYSDEC Part 375	NYSDEC Part 375	TS-12	TS-13	TS-14	TS-15	TS-16	TS-17	TS-18	TS-19
Sample Location	Restricted	Unrestricted	Sidewall	Bottom	Sidewall	Sidewall	Sidewall	Sidewall	Sidewall	Sidewall
Date Sampled	Residential	Guidance Value	10/5/2004	10/12/2004	10/13/2004	10/13/2004	10/20/2004	10/20/2004	10/20/2004	10/20/2004
Compound	Guidance Value	Guiuance value	Soil	Soil	Soil	Fill	Soil	Soil	Soil	Soil
Units	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
PCBs										
Aroclor-1242	NC	NC								
Aroclor-1248	NC	NC	1.0	4.3	1.3	1.6		0.98	0.57	
Aroclor-1254	NC	NC								
Aroclor-1260	NC	NC								
Total PCBs	1	0.1	1.0	4.3	1.3	1.6	ND (1.0)	0.98	0.57	ND (1.1)

Notes:

1) PCBs analyzed by SW846-8082.

2) Shaded areas indicate result exceeds NYSDEC Part 375

Restricted Residential Soil Guidance Values.

3) Shaded areas indicate result exceeds NYSDEC Part 375

Unrestricted Soil Guidance Values.

4) mg/kg = milligrams per kilogram (ppm)

5) NC = No Criteria

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Sample ID	NYSDEC Part 375	NYSDEC Part 375	TS-20	TS-21	TS-22	TS-23	TS-26	TS-27	TS-29	TS-30
Sample Location	Restricted	Unrestricted	Bottom	Sidewall	Sidewall	Sidewall	Sidewall	Bottom	Sidewall	Sidewall
Date Sampled	Residential	Guidance Value	10/20/2004	10/21/2004	10/21/2004	10/21/2004	10/21/2004	10/21/2004	10/22/2004	10/22/2004
Compound	Guidance Value	Guidance value	Soil							
Units	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
PCBs										
Aroclor-1242	NC	NC								
Aroclor-1248	NC	NC	4.4	0.84						
Aroclor-1254	NC	NC								
Aroclor-1260	NC	NC								
Total PCBs	1	0.1	4.4	0.84	ND (1.2)					

Notes:

1) PCBs analyzed by SW846-8082.

2) Shaded areas indicate result exceeds NYSDEC Part 375

Restricted Residential Soil Guidance Values.

3) Shaded areas indicate result exceeds NYSDEC Part 375

Unrestricted Soil Guidance Values.

4) mg/kg = milligrams per kilogram (ppm)

5) NC = No Criteria

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Sample ID Sample Location Date Sampled Compound	NYSDEC Part 375 Restricted Residential Guidance Value	NYSDEC Part 375 Unrestricted Guidance Value	TS-31 Bottom 10/22/2004 Soil	TS-32 Bottom 10/22/2004 Soil	TS-34 Bottom 4/18/2006 Soil	TS-35 Bottom 4/18/2006 Soil	TS-36 Bottom 4/18/2006 Soil	TS-37 Sidewall 9/7/2006 Soil	TS-38 Sidewall 9/7/2006 Soil	TS-39 Sidewall 9/7/2006 Soil
Units	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
PCBs										
Aroclor-1242	NC	NC							0.18	
Aroclor-1248	NC	NC			2.0	0.47	1.5	0.15		
Aroclor-1254	NC	NC								
Aroclor-1260	NC	NC								
Total PCBs	1	0.1	ND (1.2)	ND (1.2)	2.0	0.47	1.5	0.15	0.18	ND (0.02)

Notes:

1) PCBs analyzed by SW846-8082.

2) Shaded areas indicate result exceeds NYSDEC Part 375

Restricted Residential Soil Guidance Values.

3) Shaded areas indicate result exceeds NYSDEC Part 375

Unrestricted Soil Guidance Values.

4) mg/kg = milligrams per kilogram (ppm)

5) NC = No Criteria

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Sample ID	NYSDEC Part 375	NYSDEC Part 375	48-1C	48-2C	48-3C	48-4C2	48-5C	48-6C	48-7C	48-8C
Sample Location	Restricted	Unrestricted	Bottom	Bottom	Bottom	Bottom	Bottom	Bottom	Bottom	Bottom
Date Sampled	Residential	Guidance Value	10/5/2005	10/5/2005	10/5/2005	10/12/2005	10/12/2005	10/27/2005	10/27/2005	10/27/2005
Compound	Guidance Value	Guidance value	Soil	Soil	Soil	Fill	Fill	Soil	Soil	Soil
Units	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
PCBs										
Aroclor-1242	NC	NC								
Aroclor-1248	NC	NC								
Aroclor-1254	NC	NC								
Aroclor-1260	NC	NC	0.73			0.27	0.27			
Total PCBs	1	0.1	0.73	ND (0.019)	ND (0.030)	0.27	0.27	ND (0.110)	ND (0.110)	ND (0.094)

Notes:

1) PCBs analyzed by SW846-8082.

2) Shaded areas indicate result exceeds NYSDEC Part 375

Restricted Residential Soil Guidance Values.

3) Shaded areas indicate result exceeds NYSDEC Part 375

Unrestricted Soil Guidance Values.

4) J = detected above the MDL, but below the RL; therefore,

5) mg/kg = milligrams per kilogram (ppm)

6) NC = No Criteria

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Sample ID	NYSDEC Part 375	NYSDEC Part 375	48-9C	48-10C	48-11C	48-12C	48-13C	48-14C	48-15C	48-16C
Sample Location	Restricted	Unrestricted	Bottom							
Date Sampled	Residential	Guidance Value	10/27/2005	10/27/2005	10/27/2005	10/27/2005	10/27/2005	10/27/2005	11/17/2005	11/17/2005
Compound	Guidance Value	Guiuance value	Soil							
Units	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
PCBs										
Aroclor-1242	NC	NC								
Aroclor-1248	NC	NC			0.087 J					
Aroclor-1254	NC	NC								
Aroclor-1260	NC	NC			0.32		0.94		0.32	7.3
Total PCBs	1	0.1	ND (0.097)	ND (0.100)	0.407 J	ND (0.100)	0.94	ND (0.100)	0.32	7.3

Notes:

1) PCBs analyzed by SW846-8082.

2) Shaded areas indicate result exceeds NYSDEC Part 375

Restricted Residential Soil Guidance Values.

3) Shaded areas indicate result exceeds NYSDEC Part 375

Unrestricted Soil Guidance Values.

4) J = detected above the MDL, but below the RL; therefore,

5) mg/kg = milligrams per kilogram (ppm)

6) NC = No Criteria

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Sample ID	NYSDEC Part 375	NYSDEC Part 375	48-17C	48-18C	48-23C	48-24C	48-27C	48-28C	48-29C
Sample Location	Restricted	Unrestricted	Bottom	Bottom	Bottom	Bottom	Bottom	Bottom	Bottom
Date Sampled	Residential	Guidance Value	11/17/2005	4/18/2006	4/18/2006	4/18/2006	5/24/2006	5/24/2006	5/24/2006
Compound	Guidance Value	Guidance value	Soil	Fill	Fill	Fill	Soil	Soil	Soil
Units	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
PCBs									
Aroclor-1242	NC	NC							
Aroclor-1248	NC	NC		0.78	0.093	0.075			
Aroclor-1254	NC	NC							
Aroclor-1260	NC	NC		2.1	0.21	0.14		0.017 J	0.21
Total PCBs	1	0.1	ND (0.096)	2.88	0.303	0.215	ND (0.020)	0.017 J	0.21

Notes:

1) PCBs analyzed by SW846-8082.

2) Shaded areas indicate result exceeds NYSDEC Part 375

Restricted Residential Soil Guidance Values.

3) Shaded areas indicate result exceeds NYSDEC Part 375

Unrestricted Soil Guidance Values.

4) J = detected above the MDL, but below the RL; therefore,

5) mg/kg = milligrams per kilogram (ppm)

6) NC = No Criteria

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Sample ID	NYSDEC Part 375	NEWEDEC D. 4 275	TF-1	TF-2	TF-3	TF-4	TF-5	TF-6	TF-7
Sample Location	Restricted	NYSDEC Part 375 Unrestricted	Sidewall	Bottom	Bottom	Bottom	Sidewall	Bottom	Bottom
Date Sampled	Residential	Guidance Value	11/7/2006	11/7/2006	11/7/2006	11/7/2006	11/7/2006	11/7/2006	11/7/2006
Compound	Guidance Value	Guidance value	Fill	Soil	Soil	Soil	Fill	Soil	Soil
Units	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
PCBs									
Aroclor-1242	NC	NC							
Aroclor-1248	NC	NC		0.019	0.070	0.0071 J	2.6	0.26	
Aroclor-1254	NC	NC	0.063						
Aroclor-1260	NC	NC							
Total PCBs	1	0.1	0.063	0.019	0.070	0.0071 J	2.6	0.26	ND (0.021)

Notes:

1) PCBs analyzed by SW846-8082.

2) Shaded areas indicate result exceeds NYSDEC Part 375

Restricted Residential Soil Guidance Values.

3) Shaded areas indicate result exceeds NYSDEC Part 375

Unrestricted Soil Guidance Values.

4) J = detected above the MDL, but below the RL; therefore,

5) mg/kg = milligrams per kilogram (ppm)

6) NC = No Criteria

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Sample ID	NYSDEC Part 375	NWEDEC Devet 275	TF-8	TF-9	TF-10	TF-11	TF-12	TF-13	TF-14
Sample Location	Restricted	NYSDEC Part 375 Unrestricted	Bottom	Sidewall	Bottom	Bottom	Bottom	Sidewall	Bottom
Date Sampled	Residential	Guidance Value	11/7/2006	11/7/2006	11/7/2006	11/7/2006	11/7/2006	11/7/2006	11/8/2006
Compound	Guidance Value	Guiuance value	Soil	Fill	Soil	Soil	Soil	Fill	Soil
Units	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
PCBs									
Aroclor-1242	NC	NC							
Aroclor-1248	NC	NC	0.024	1.8		0.098		0.25	
Aroclor-1254	NC	NC							
Aroclor-1260	NC	NC						0.04	
Total PCBs	1	0.1	0.024	1.8	ND (0.021)	0.098	ND (0.021)	0.29	ND (0.020)

Notes:

1) PCBs analyzed by SW846-8082.

2) Shaded areas indicate result exceeds NYSDEC Part 375

Restricted Residential Soil Guidance Values.

3) Shaded areas indicate result exceeds NYSDEC Part 375

Unrestricted Soil Guidance Values.

4) J = detected above the MDL, but below the RL; therefore,

5) mg/kg = milligrams per kilogram (ppm)

6) NC = No Criteria

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Sample ID	NYSDEC Part 375	NWEDEC Dart 275	TF-15	TF-16	TF-17	TF-18	TF-19	TF-20	TF-21
Sample Location	Restricted	NYSDEC Part 375 Unrestricted	Bottom	Bottom	Sidewall	Bottom	Bottom	Bottom	Sidewall
Date Sampled	Residential	Guidance Value	11/8/2006	11/8/2006	11/8/2006	11/8/2006	11/8/2006	11/8/2006	11/8/2006
Compound	Guidance Value	Ouluance value	Soil	Soil	Fill	Soil	Soil	Soil	Fill
Units	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
PCBs									
Aroclor-1242	NC	NC							
Aroclor-1248	NC	NC	0.015 J		3.1	0.18	0.072		0.11
Aroclor-1254	NC	NC							
Aroclor-1260	NC	NC							
Total PCBs	1	0.1	0.015 J	ND (0.019)	3.1	0.18	0.072	ND (0.020)	0.11

Notes:

1) PCBs analyzed by SW846-8082.

2) Shaded areas indicate result exceeds NYSDEC Part 375

Restricted Residential Soil Guidance Values.

3) Shaded areas indicate result exceeds NYSDEC Part 375

Unrestricted Soil Guidance Values.

4) J = detected above the MDL, but below the RL; therefore,

5) mg/kg = milligrams per kilogram (ppm)

6) NC = No Criteria

#### Page 4 of 4

Sample ID	NYSDEC Part 375	NYSDEC Part 375	TF-22	TF-23	TF-24	TF-27
Sample Location	Restricted	Unrestricted	Bottom	Bottom	Sidewall	Sidewall
Date Sampled	Residential	Guidance Value	11/8/2006	11/8/2006	11/8/2006	11/9/2006
Compound	Guidance Value		Soil	Soil	Fill	Fill
Units	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
PCBs						
Aroclor-1242	NC	NC				
Aroclor-1248	NC	NC	0.018 J		0.67	0.25
Aroclor-1254	NC	NC				
Aroclor-1260	NC	NC				
Total PCBs	1	0.1	0.018 J	ND (0.021)	0.67	0.25

Notes:

1) PCBs analyzed by SW846-8082.

2) Shaded areas indicate result exceeds NYSDEC Part 375

Restricted Residential Soil Guidance Values.

3) Shaded areas indicate result exceeds NYSDEC Part 375

Unrestricted Soil Guidance Values.

4) J = detected above the MDL, but below the RL; therefore,

5) mg/kg = milligrams per kilogram (ppm)

6) NC = No Criteria

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Sample ID	NYSDEC Part 375	NYSDEC Part 375	LS-1	LS-2	LS-3	LS-5	LS-6	LS-7	LS-8
Sample Location	Restricted	Unrestricted	Sidewall	Bottom	Bottom	Sidewall	Sidewall	Sidewall	Sidewall
Date Sampled	Residential	Guidance Value	10/26/2006	10/26/2006	10/26/2006	10/26/2006	10/26/2006	10/26/2006	11/8/2006
Compound	Guidance Value	Outuance value	Soil	Soil	Soil	Soil	Soil	Fill	Soil
Units	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
PCBs									
Aroclor-1242	NC	NC							
Aroclor-1248	NC	NC		0.18	0.016 J	0.019 J		0.73	0.017 J
Aroclor-1254	NC	NC							
Aroclor-1260	NC	NC							
Total PCBs	1	0.1	ND (0.021)	0.18	0.016 J	0.019 J	ND (0.020)	0.73	0.017 J

Notes:

1) PCBs analyzed by SW846-8082.

2) Shaded areas indicate result exceeds NYSDEC Part 375

Restricted Residential Soil Guidance Values.

3) Shaded areas indicate result exceeds NYSDEC Part 375

Unrestricted Soil Guidance Values.

4) J = detected above the MDL, but below the RL; therefore,

5) mg/kg = milligrams per kilogram (ppm)

6) NC = No Criteria

#### TABLE 58 SPAULDING COMPOSITES SITE SWMU3, OU 1/3/4 SUMMARY OF CONFIRMATION SOIL SAMPLE RESULTS Page 1 of 1

	NYSDEC Part 375	NUCLEC D 4 255	0038	004S	005SR
Date Sampled	Restricted	NYSDEC Part 375 Unrestricted	11/23/2009 14:15	11/23/2009 14:15	1/27/2010 9:05
Location	Residential		SWMU 3	SWMU 3	SWMU 3
Depth Interval(ft)	Guidance Value	Guidance Value	0-1	0-1	0-2.5
Units	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
VOCs					
1,4-Dichlorobenzene	13	1.8	ND	ND	ND
Benzene	4.8	0.06	ND	ND	ND
Ethylbenzene	41	1	ND	ND	ND
Toluene	100	0.7	ND	ND	ND
Trichloroethene	21	0.47	ND	0.0016	ND
Xylenes, total	100	0.26	ND	ND	ND
SVOCs - GC/MS (8270)					
Benzo[a]anthracene	1	1	0.14	0.37	0.71
Benzo[a]pyrene	1	1	0.11	0.26	0.64
Benzo[b]fluoranthene	1	1	0.19	0.35	0.92
Benzo[k]fluoranthene	3.9	0.8	ND	0.17	0.24
Chrysene	3.9	1	0.14	0.32	0.67
Dibenz[a,h]anthracene	0.33	0.33	ND	ND	ND
Fluoranthene	100	100	0.27	0.61	1.1
Indeno[1,2,3-cd]pyrene	0.5	0.5	0.051	0.16	0.41
Phenanthrene	100	100	0.2	0.5	0.62
Pyrene	100	100	0.22	0.52	1.1
Aniline	48	NC	ND	ND	ND
2-Methylphenol	100	NC	ND	ND	ND
Di-n-butyl phthalate	100	NC	ND	ND	ND
Phenol	100	0.33	ND	ND	ND
PCBs - EPA Method 808 (8082)					
Total Polychlorinated Biphenyls	1	0.1	ND	ND	ND
Metals - Method SW 846 Series					
Arsenic	16	13	5.2	6.7	8.4
Barium	400	350	102	160	111
Cadmium	4.3	2.5	0.792	1.26	0.626
Chromium*	180	30	21.9	21.8	7.15
Copper	270	50	25.9	110	246
Lead	400	63	35	41.1	61.3
Mercury	0.81	0.18	0.0226	0.0271	0.575
Zinc	10000	109	5170	7760	13800

1) Analytical Methods: VOCs - 8260B; SVOCs - 8270C; PCBs - 8082; total metals 6000/7000 Series Methods.

2) Shaded areas indicate result exceeds NYSDEC Part 375 Restricted Residential

3) Shaded areas indicate result exceeds NYSDEC Part 375 Unrestricted Soil

4) J = detected above the MDL, but below the RL; therefore, result is an estimated concentration.

5) mg/kg = milligrams per kilogram (ppm)

6) NC = No Criteria

7) ND = Analyte included in the analysis, but not detected.

#### TABLE 59 SPAULDING COMPOSITES SITE SWMU5, OU 1/3/4 SUMMARY OF CONFIRMATION SOIL SAMPLE RESULTS Page 1 of 4

	NYSDEC Part 375	NYSDEC Part 375	001S	002S	003S	004S	0055	006B	008B
Date Sampled	Restricted	Unrestricted	RSL0616-01	RSL0616-02	RSL0616-03	12/14/2009 09:15	RSL0616-05	RSL0616-06	12/14/2009 09:35
Location	Residential	Guidance Value	SWMU5	SWMU5	SWMU5	SWMU5	SWMU5	SWMU5	SWMU5
Depth Interval(ft)	Guidance Value	Guidance Value	02	02	02	02	02	2	2
Units	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
VOCs									
1,4-Dichlorobenzene	13	1.8	ND	ND	ND	ND	ND	ND	ND
Benzene	4.8	0.06	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	41	1	ND	ND	ND	ND	ND	ND	ND
Toluene	100	0.7	ND	ND	ND	ND	ND	0.0016	ND
Trichloroethene	21	0.47	ND	ND	ND	ND	ND	ND	ND
Xylenes, total	100	0.26	ND	ND	ND	ND	ND	ND	ND
SVOCs - GC/MS (8270)									
Benzo[a]anthracene	1	1	ND	ND	ND	0.18	ND	ND	ND
Benzo[a]pyrene	1	1	ND	ND	ND	0.15	ND	ND	ND
Benzo[b]fluoranthene	1	1	ND	ND	ND	0.20	ND	ND	ND
Benzo[k]fluoranthene	3.9	0.8	ND	ND	ND	0.34	ND	ND	ND
Chrysene	3.9	1	ND	ND	ND	0.14	ND	ND	ND
Dibenz[a,h]anthracene	0.33	0.33	ND	ND	ND	ND	ND	ND	ND
Fluoranthene	100	100	ND	ND	ND	0.29	ND	ND	ND
Indeno[1,2,3-cd]pyrene	0.5	0.5	ND	ND	ND	ND	ND	ND	ND
Phenanthrene	100	100	ND	ND	ND	0.23	ND	ND	ND
Pyrene	100	100	ND	ND	ND	0.23	ND	ND	ND
Aniline	48	NC	ND	ND	ND	ND	ND	ND	ND
2-Methylphenol	100	NC	ND	ND	ND	0.20	ND	ND	ND
Di-n-butyl phthalate	100	NC	0.17	0.16	0.15	8.4	0.15	0.18	0.14
Phenol	100	0.33	ND	ND	ND	0.85	ND	ND	ND
PCBs - EPA Method 808 (8082)									
Total Polychlorinated Biphenyls	1	0.1	ND	ND	ND	ND	ND	ND	ND
Metals - Method SW 846 Series									
Arsenic	16	13	4.8	5.1	5.3	7.4	5.2	2.9	4.9
Barium	400	350	114	169	148	140	142	126	186
Cadmium	4.3	2.5	0.616	0.417	0.357	1.31	0.319	0.219	0.231
Chromium*	180	30	20.8	29.6	25.7	19.9	27.3	25.2	27.1
Copper	270	50	19	27.9	23.9	228	25.5	16	22.8
Lead	400	63	11.7	12.1	11.3	45	18.3	9.5	11.1
Mercury	0.81	0.18	0.0288	0.0248	0.0254	0.0403	0.0232	0.0308	0.0209
Zinc	10000	109	93.4	95	78.3	504	132	74.3	72.9

1) Analytical Methods: VOCs - 8260B; SVOCs - 8270C; PCBs - 8082; total metals

6000/7000 Series Methods.

2) Shaded areas indicate result exceeds NYSDEC Part 375 Restricted Residential

3) Shaded areas indicate result exceeds NYSDEC Part 375 Unrestricted Soil

4) J = detected above the MDL, but below the RL; therefore, result is an estimated

concentration.

5) mg/kg = milligrams per kilogram (ppm)

6) NC = No Criteria

7) ND = Analyte included in the analysis, but not detected.

#### TABLE 59 SPAULDING COMPOSITES SITE SWMU5, OU 1/3/4 SUMMARY OF CONFIRMATION SOIL SAMPLE RESULTS Page 2 of 4

	NYSDEC Part 375		009B	0118	012B	013B	20B	21B
Date Sampled	Restricted	NYSDEC Part 375	12/14/2009 09:40	0	12/15/2009 12:10	0	70	12/17/2009 11:05
Location	Residential	Unrestricted	SWMU5	SWMU5	SWMU5	SWMU5	SWMU 5	SWMU 5
Depth Interval(ft)	Guidance Value	Guidance Value	2	02	2	2	2	2
Units	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
VOCs								
1,4-Dichlorobenzene	13	1.8	ND	ND	0.0047	ND	ND	ND
Benzene	4.8	0.06	ND	ND	0.031	ND	ND	ND
Ethylbenzene	41	1	ND	ND	ND	ND	ND	ND
Toluene	100	0.7	ND	0.0021	0.019	0.0026	ND	ND
Trichloroethene	21	0.47	ND	ND	ND	ND	ND	ND
Xylenes, total	100	0.26	ND	ND	0.0015	0.0014	ND	ND
SVOCs - GC/MS (8270)								
Benzo[a]anthracene	1	1	0.062	0.36	0.36	0.20	ND	0.033
Benzo[a]pyrene	1	1	0.041	0.31	0.20	ND	ND	ND
Benzo[b]fluoranthene	1	1	0.076	0.64	0.27	ND	ND	0.026
Benzo[k]fluoranthene	3.9	0.8	0.076	ND	0.16	ND	ND	0.023
Chrysene	3.9	1	0.063	0.30	0.32	ND	ND	0.035
Dibenz[a,h]anthracene	0.33	0.33	ND	ND	ND	ND	ND	ND
Fluoranthene	100	100	0.072	0.45	0.90	0.24	0.023	0.048
Indeno[1,2,3-cd]pyrene	0.5	0.5	0.024	0.23	ND	ND	ND	ND
Phenanthrene	100	100	0.021	0.29	0.52	0.18	ND	ND
Pyrene	100	100	0.053	0.46	0.71	0.18	ND	ND
Aniline	48	NC	ND	ND	44	ND	ND	ND
2-Methylphenol	100	NC	ND	0.27	0.11	ND	ND	ND
Di-n-butyl phthalate	100	NC	0.20	23	41	48	0.97	0.094
Phenol	100	0.33	ND	1.8	ND	1.3	0.23	ND
PCBs - EPA Method 808 (8082)								
Total Polychlorinated Biphenyls	1	0.1	ND	ND	ND	ND	ND	ND
Metals - Method SW 846 Series								
Arsenic	16	13	6.5	5.00	5.4	6.1	6.1	5.4
Barium	400	350	90.8	36.2	172	76.3	142	160
Cadmium	4.3	2.5	0.388	0.523	0.916	0.699	ND	0.607
Chromium*	180	30	19.6	6.57	23.3	11.5	25.8	25.8
Copper	270	50	15.4	30.4	41.3	49.4	24.8	45.2
Lead	400	63	26.7	25.3	15.6	40.2	12.3	31.4
Mercury	0.81	0.18	0.0460	0.206	0.0395	0.0817	0.0191	0.0373
Zinc	10000	109	225	195	138	254	90.2	215

1) Analytical Methods: VOCs - 8260B; SVOCs - 8270C; PCBs - 8082; total metals

6000/7000 Series Methods.

2) Shaded areas indicate result exceeds NYSDEC Part 375 Restricted Residential

3) Shaded areas indicate result exceeds NYSDEC Part 375 Unrestricted Soil

4) J = detected above the MDL, but below the RL; therefore, result is an estimated

concentration.

**5**) mg/kg = milligrams per kilogram (ppm)

6) NC = No Criteria

7) ND = Analyte included in the analysis, but not detected.

#### TABLE 59 SPAULDING COMPOSITES SITE SWMU5, OU 1/3/4 SUMMARY OF CONFIRMATION SOIL SAMPLE RESULTS Page 3 of 4

	NYSDEC Part 375	NYSDEC Part 375	22B	23B	24B	014B	015B	025B	026B
Date Sampled	Restricted		12/17/2009 11:10	12/17/2009 11:15	12/17/2009 11:20	12/16/2009 12:00	12/16/2009 12:05	11/21/2009 8:00	11/21/2009 8:05
Location	Residential	Unrestricted	SWMU 5	SWMU 5	SWMU5	SWMU5	SWMU5	SWMU 5	SWMU 5
Depth Interval(ft)	Guidance Value	Guidance Value	2	2	2	2	2	2	2
Units	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
VOCs									
1,4-Dichlorobenzene	13	1.8	ND	ND	ND	ND	ND	ND	ND
Benzene	4.8	0.06	ND	ND	ND	0.033	0.17	0.0051	0.0095
Ethylbenzene	41	1	ND	ND	ND	0.0019	ND	ND	ND
Toluene	100	0.7	ND	0.026	ND	1.1	0.0031	0.0042	ND
Trichloroethene	21	0.47	ND	ND	ND	ND	ND	ND	ND
Xylenes, total	100	0.26	ND	ND	ND	0.010	ND	ND	ND
SVOCs - GC/MS (8270)									
Benzo[a]anthracene	1	1	ND	ND	ND	ND	ND	0.63	0.05
Benzo[a]pyrene	1	1	ND	ND	ND	ND	ND	0.51	0.043
Benzo[b]fluoranthene	1	1	ND	ND	ND	ND	ND	0.87	0.058
Benzo[k]fluoranthene	3.9	0.8	ND	ND	ND	ND	ND	ND	0.025
Chrysene	3.9	1	ND	ND	ND	ND	ND	0.62	0.051
Dibenz[a,h]anthracene	0.33	0.33	ND	ND	ND	ND	ND	ND	ND
Fluoranthene	100	100	ND	ND	ND	ND	0.27	1.5	0.095
Indeno[1,2,3-cd]pyrene	0.5	0.5	ND	ND	ND	ND	ND	0.27	0.029
Phenanthrene	100	100	ND	ND	0.031	ND	0.28	1.7	0.069
Pyrene	100	100	ND	ND	ND	ND	ND	1.2	0.077
Aniline	48	NC	ND	ND	ND	ND	ND	ND	ND
2-Methylphenol	100	NC	ND	ND	ND	0.45	ND	0.18	ND
Di-n-butyl phthalate	100	NC	ND	1.8	0.092	ND	2.2	3.7	0.73
Phenol	100	0.33	ND	ND	ND	11	0.78	0.24	0.24
PCBs - EPA Method 808 (8082)									
Total Polychlorinated Biphenyls	1	0.1	ND	ND	ND	ND	ND	ND	ND
Metals - Method SW 846 Series									
Arsenic	16	13	6.4	7.2	5.7	4.3	7.9	4.7	7
Barium	400	350	60.7	152	121	188	83.5	96.7	145
Cadmium	4.3	2.5	0.071	ND	ND	ND	ND	0.488	6
Chromium*	180	30	17.4	25.4	21.7	29.5	13.2	23.8	17.7
Copper	270	50	15.8	29.6	21.2	25.8	24.9	33.2	208
Lead	400	63	33.2	15.7	10.5	9.7	23.1	31.3	32.2
Mercury	0.81	0.18	0.0463	0.0258	0.0100	ND	0.0247	0.0674	0.0763
Zinc	10000	109	102	99.3	65.2	70.2	95.2	444	729

1) Analytical Methods: VOCs - 8260B; SVOCs - 8270C; PCBs - 8082; total metals

6000/7000 Series Methods.

2) Shaded areas indicate result exceeds NYSDEC Part 375 Restricted Residential

3) Shaded areas indicate result exceeds NYSDEC Part 375 Unrestricted Soil

4) J = detected above the MDL, but below the RL; therefore, result is an estimated

concentration.

5) mg/kg = milligrams per kilogram (ppm)

6) NC = No Criteria

7) ND = Analyte included in the analysis, but not detected.

#### TABLE 59 SPAULDING COMPOSITES SITE SWMU5, OU 1/3/4 SUMMARY OF CONFIRMATION SOIL SAMPLE RESULTS Page 4 of 4

		1	1	
	NYSDEC Part 375	NYSDEC Part 375	027S	16-17-18SR
Date Sampled	Restricted	Unrestricted	11/21/2009 8:10	2/8/2010 12:00
Location	Residential	Guidance Value	SWMU 5	SWMU 5
Depth Interval(ft)	Guidance Value	Suldance Value	02	
Units	mg/kg	mg/kg	mg/kg	mg/kg
VOCs				
1,4-Dichlorobenzene	13	1.8	ND	ND
Benzene	4.8	0.06	ND	-
Ethylbenzene	41	1	ND	-
Toluene	100	0.7	ND	-
Trichloroethene	21	0.47	ND	-
Xylenes, total	100	0.26	ND	-
SVOCs - GC/MS (8270)				
Benzo[a]anthracene	1	1	0.61	ND
Benzo[a]pyrene	1	1	0.52	ND
Benzo[b]fluoranthene	1	1	0.9	ND
Benzo[k]fluoranthene	3.9	0.8	ND	ND
Chrysene	3.9	1	0.59	ND
Dibenz[a,h]anthracene	0.33	0.33	0.091	ND
Fluoranthene	100	100	1.3	ND
Indeno[1,2,3-cd]pyrene	0.5	0.5	0.32	ND
Phenanthrene	100	100	1.1	ND
Pyrene	100	100	1.1	ND
Aniline	48	NC	ND	-
2-Methylphenol	100	NC	ND	ND
Di-n-butyl phthalate	100	NC	1.8	17
Phenol	100	0.33	ND	0.81
PCBs - EPA Method 808 (8082)				
Total Polychlorinated Biphenyls	1	0.1	ND	0.392
Metals - Method SW 846 Series				
Arsenic	16	13	5.3	-
Barium	400	350	134	-
Cadmium	4.3	2.5	0.328	-
Chromium*	180	30	23.5	-
Copper	270	50	23.6	-
Lead	400	63	12.7	-
Mercury	0.81	0.18	0.0637	-
Zinc	10000	109	96.5	-

1) Analytical Methods: VOCs - 8260B; SVOCs - 8270C; PCBs - 8082; total metals

6000/7000 Series Methods.

2) Shaded areas indicate result exceeds NYSDEC Part 375 Restricted Residential

3) Shaded areas indicate result exceeds NYSDEC Part 375 Unrestricted Soil

4) J = detected above the MDL, but below the RL; therefore, result is an estimated

concentration.

5) mg/kg = milligrams per kilogram (ppm)

6) NC = No Criteria

7) ND = Analyte included in the analysis, but not detected.

#### TABLE 60 SPAULDING COMPOSITES SITE SWMU7, OU 1/3/4 SUMMARY OF CONFIRMATION SOIL SAMPLE RESULTS Page 1 of 3

			003S	002B	006S	001BR	002SR	007B	008S
Date Sampled	NYSDEC Part 375	NYSDEC Part 375	11/19/2009 12:00	3/17/10 14:00	3/17/10 14:00	3/25/10 12:00	3/25/10 13:00	3/24/10 14:15	3/24/10 14:10
Location	Restricted Residential Guidance Value	Unrestricted Guidance Value	SWMU 7	SWMU 7	SWMU 7	SWMU 7	SWMU 7	SWMU 7	SWMU 7
Depth Interval(ft)	Guidance value	Guiuance value	0-3	10	10	10	10	10'	0-2'
Units	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
VOCs									
1,4-Dichlorobenzene	13	1.8	ND	ND	ND	-	-	ND	ND
Benzene	4.8	0.06	ND	ND	ND	-	-	ND	ND
Ethylbenzene	41	1	ND	ND	ND	-	-	ND	ND
Toluene	100	0.7	ND	ND	ND	-	-	ND	ND
Trichloroethene	21	0.47	ND	ND	ND	-	-	ND	ND
Xylenes, total	100	0.26	ND	ND	ND	-	-	ND	ND
SVOCs - GC/MS (8270)									
Benzo[a]anthracene	1	1	1.1	ND	ND	-	-	ND	ND
Benzo[a]pyrene	1	1	1	ND	ND	-	-	ND	ND
Benzo[b]fluoranthene	1	1	1.3	ND	ND	-	-	ND	ND
Benzo[k]fluoranthene	3.9	0.8	0.46	ND	ND	-	-	ND	ND
Chrysene	3.9	1	1.1	ND	ND	-	-	ND	ND
Dibenz[a,h]anthracene	0.33	0.33	ND	ND	ND	-	-	ND	ND
Fluoranthene	100	100	2.2	ND	ND	-	-	ND	ND
Indeno[1,2,3-cd]pyrene	0.5	0.5	0.52	ND	ND	-	-	ND	ND
Phenanthrene	100	100	1.6	ND	ND	-	-	ND	ND
Pyrene	100	100	1.9	ND	ND	-	-	ND	ND
Aniline	48	NC	ND	-	-	-	-	-	-
2-Methylphenol	100	NC	ND	ND	ND	-	-	0.4	ND
Di-n-butyl phthalate	100	NC	2.3	ND	ND	-	-	ND	ND
Phenol	100	0.33	ND	ND	ND	-	-	4.7	ND
PCBs - EPA Method 808 (8082)									
Total Polychlorinated Biphenyls	1	0.1	ND	ND	ND	2.4	0.32	0.039	0.078
Metals - Method SW 846 Series									
Arsenic	16	13	9.7	ND	ND	-	-	ND	ND
Barium	400	350	140	85.8	118	-	-	72.2	130
Cadmium	4.3	2.5	0.912	ND	ND	-	-	ND	ND
Chromium*	180	30	20.3	12.4	18.3	-	-	9.64	17.7
Copper	270	50	185	19.1	13.2	-	-	17	16
Lead	400	63	70.8	9.12	5.13	-	-	11.4	8.39
Mercury	0.81	0.18	0.0891	ND	ND	-	-	ND	ND
Zinc	10000	109	1180	101	68.9	-	-	162	91.9

1) Analytical Methods: VOCs - 8260B; SVOCs - 8270C; PCBs - 8082; total metals

6000/7000 Series Methods.

2) Shaded areas indicate result exceeds NYSDEC Part 375 Restricted Residential

3) Shaded areas indicate result exceeds NYSDEC Part 375 Unrestricted Soil
4) J = detected above the MDL, but below the RL; therefore, result is an estimated

concentration.

5) mg/kg = milligrams per kilogram (ppm)

6) NC = No Criteria

7) ND = Analyte included in the analysis, but not detected.

#### TABLE 60 SPAULDING COMPOSITES SITE SWMU7, OU 1/3/4 SUMMARY OF CONFIRMATION SOIL SAMPLE RESULTS Page 2 of 3

			0138	0158	016B	0185	0205	021B	0228
Date Sampled	NYSDEC Part 375	NYSDEC Part 375	3/26/10 8:05	3/26/10 8:15	3/26/10 8:20	3/26/10 8:30	3/26/10 8:40	3/26/10 8:45	3/26/10 8:50
Location	Restricted Residential	Unrestricted	SWMU 7						
Depth Interval(ft)	Guidance Value	Guidance Value	2-10'	2-10'	10'	2-10'	2-10'	10'	0-2'
Units	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
VOCs						<u> </u>			
1,4-Dichlorobenzene	13	1.8	ND						
Benzene	4.8	0.06	ND						
Ethylbenzene	41	1	ND						
Toluene	100	0.7	ND	1.7	1.7	ND	ND	0.028	ND
Trichloroethene	21	0.47	ND						
Xylenes, total	100	0.26	ND						
SVOCs - GC/MS (8270)									
Benzo[a]anthracene	1	1	ND	ND	ND	ND	0.39	ND	ND
Benzo[a]pyrene	1	1	ND						
Benzo[b]fluoranthene	1	1	ND						
Benzo[k]fluoranthene	3.9	0.8	ND						
Chrysene	3.9	1	ND						
Dibenz[a,h]anthracene	0.33	0.33	< 0.38	ND	ND	ND	ND	ND	ND
Fluoranthene	100	100	ND	ND	ND	ND	0.75	ND	ND
Indeno[1,2,3-cd]pyrene	0.5	0.5	ND						
Phenanthrene	100	100	ND	ND	ND	ND	0.75	ND	ND
Pyrene	100	100	ND	ND	ND	ND	0.54	ND	ND
Aniline	48	NC	-	-	-	-	-	-	-
2-Methylphenol	100	NC	ND	88	0.76	0.42	ND	ND	ND
Di-n-butyl phthalate	100	NC	ND	ND	ND	ND	0.45	ND	ND
Phenol	100	0.33	ND	57	ND	ND	ND	16	ND
PCBs - EPA Method 808 (8082)									
Total Polychlorinated Biphenyls	1	0.1	ND	1.1	ND	0.287	0.54	0.6	0.16
Metals - Method SW 846 Series									
Arsenic	16	13	ND	ND	ND	ND	ND	ND	1.46
Barium	400	350	111	124	90.5	77.4	65.2	92.1	59.1
Cadmium	4.3	2.5	ND						
Chromium*	180	30	13.2	18.3	10.2	13.5	9.84	11.4	10.8
Copper	270	50	9.38	20.2	16.1	14.2	17.5	24.2	22.6
Lead	400	63	9.25	12.3	11.9	7.12	8.56	15.8	14.4
Mercury	0.81	0.18	ND						
Zinc	10000	109	74	146	83.3	108	95.9	188	260

1) Analytical Methods: VOCs - 8260B; SVOCs - 8270C; PCBs - 8082; total metals

6000/7000 Series Methods.

2) Shaded areas indicate result exceeds NYSDEC Part 375 Restricted Residential

3) Shaded areas indicate result exceeds NYSDEC Part 375 Unrestricted Soil

4) J = detected above the MDL, but below the RL; therefore, result is an estimated

concentration.

**5**) mg/kg = milligrams per kilogram (ppm)

6) NC = No Criteria

7) ND = Analyte included in the analysis, but not detected.

#### TABLE 60 SPAULDING COMPOSITES SITE SWMU7, OU 1/3/4 SUMMARY OF CONFIRMATION SOIL SAMPLE RESULTS Page 3 of 3

			023S	024B	010SR	009SR	0258	0265	028S
Date Sampled	NYSDEC Part 375 Restricted Residential	NYSDEC Part 375 Unrestricted	3/26/10 8:55	3/30/10 12:00	4/1/10 12:05	4/1/10 12:20	4/12/10 8:00	4/12/10 8:00	4/13/10 8:00
Location	Guidance Value	Guidance Value	SWMU 7	SWMU 7	SWMU 7	SWMU 7	SWMU 7	SWMU 7	SWMU 7
Depth Interval(ft)	Guidance value	Guidance value	2-10'	10'	0-2'	0-2'	2.5'	2.5'	2'
Units	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
VOCs									
1,4-Dichlorobenzene	13	1.8	ND	ND	ND	ND	-	ND	ND
Benzene	4.8	0.06	ND	ND	ND	ND	-	ND	ND
Ethylbenzene	41	1	ND	ND	ND	ND	-	ND	ND
Toluene	100	0.7	ND	ND	ND	ND	-	ND	ND
Trichloroethene	21	0.47	ND	ND	ND	ND	-	ND	ND
Xylenes, total	100	0.26	ND	ND	ND	ND	-	ND	ND
SVOCs - GC/MS (8270)									
Benzo[a]anthracene	1	1	ND	ND	ND	ND	-	0.13	ND
Benzo[a]pyrene	1	1	ND	ND	ND	ND	-	0.12	ND
Benzo[b]fluoranthene	1	1	ND	ND	ND	ND	-	0.15	ND
Benzo[k]fluoranthene	3.9	0.8	ND	ND	ND	ND	-	0.048	ND
Chrysene	3.9	1	ND	ND	ND	ND	-	0.11	ND
Dibenz[a,h]anthracene	0.33	0.33	ND	ND	ND	ND	-	0.021	ND
Fluoranthene	100	100	ND	ND	ND	ND	-	0.34	ND
Indeno[1,2,3-cd]pyrene	0.5	0.5	ND	ND	ND	ND	-	0.063	ND
Phenanthrene	100	100	ND	ND	ND	ND	-	0.31	ND
Pyrene	100	100	ND	ND	ND	ND	-	0.23	ND
Aniline	48	NC	-	-	-	-	-	ND	ND
2-Methylphenol	100	NC	ND	ND	ND	ND	-	ND	ND
Di-n-butyl phthalate	100	NC	2.8	ND	0.49	ND	-	0.23	ND
Phenol	100	0.33	ND	ND	ND	ND	-	ND	ND
PCBs - EPA Method 808 (8082)									
Total Polychlorinated Biphenyls	1	0.1	0.29	ND	0.3	0.079	1.4	ND	ND
Metals - Method SW 846 Series									
Arsenic	16	13	3.14	ND	2.02	ND	-	3	3.8
Barium	400	350	62.7	85.2	169	82.1	-	105	177
Cadmium	4.3	2.5	ND	ND	ND	ND	-	0.149	0.263
Chromium*	180	30	13.5	13.1	24.1	13.6	-	16.1	26.8
Copper	270	50	40.8	14	24.8	18.8	-	17.4	18.4
Lead	400	63	13.3	9.77	6.24	19.9	-	8.8	9.8
Mercury	0.81	0.18	ND	ND	ND	ND	-	0.0251	0.0179
Zinc	10000	109	409	82.3	103	779	-	74.2	70.3

1) Analytical Methods: VOCs - 8260B; SVOCs - 8270C; PCBs - 8082; total metals

6000/7000 Series Methods.

2) Shaded areas indicate result exceeds NYSDEC Part 375 Restricted Residential

3) Shaded areas indicate result exceeds NYSDEC Part 375 Unrestricted Soil

4) J = detected above the MDL, but below the RL; therefore, result is an estimated

concentration.

**5**) mg/kg = milligrams per kilogram (ppm)

6) NC = No Criteria

7) ND = Analyte included in the analysis, but not detected.

#### TABLE 61 SPAULDING COMPOSITES SITE SWMU8, OU 1/3/4 SUMMARY OF CONFIRMATION SOIL SAMPLE RESULTS Page 1 of 1

			001B	002S	006BR	004SR	005BRR
Date Sampled	NYSDEC Part 375 Restricted Residential	NYSDEC Part 375 Unrestricted	RTA0351-01	RTA0351-02	1/18/2010 12:35	1/18/2010 12:30	2/9/2010 12:05
Location	Guidance Value	Guidance Value	SWMU 8	SWMU 8	SWMU 8	SWMU 8	SWMU 8
Depth Interval(ft)	Guidance value	Guidance value	2	0-2	4	0-4	
Units	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
VOCs							
1,4-Dichlorobenzene	13	1.8	ND	ND	-	-	-
Benzene	4.8	0.06	ND	ND	-	-	-
Ethylbenzene	41	1	ND	ND	-	-	-
Toluene	100	0.7	0.048	ND	-	-	-
Trichloroethene	21	0.47	ND	ND	-	-	-
Xylenes, total	100	0.26	ND	ND	-	-	-
SVOCs - GC/MS (8270)							
Benzo[a]anthracene	1	1	ND	ND	-	-	-
Benzo[a]pyrene	1	1	ND	ND	-	-	-
Benzo[b]fluoranthene	1	1	ND	ND	-	-	-
Benzo[k]fluoranthene	3.9	0.8	ND	ND	-	-	-
Chrysene	3.9	1	ND	ND	-	-	-
Dibenz[a,h]anthracene	0.33	0.33	ND	ND	-	-	-
Fluoranthene	100	100	ND	ND	-	-	-
Indeno[1,2,3-cd]pyrene	0.5	0.5	ND	ND	-	-	-
Phenanthrene	100	100	ND	ND	-	-	-
Pyrene	100	100	ND	ND	-	-	-
Aniline	48	NC	ND	ND	-	-	-
2-Methylphenol	100	NC	ND	ND	-	-	-
Di-n-butyl phthalate	100	NC	ND	0.18	-	-	-
Phenol	100	0.33	ND	ND	-	-	-
PCBs - EPA Method 808 (8082)							
Total Polychlorinated Biphenyls	1	0.1	ND	ND	ND	ND	ND
Metals - Method SW 846 Series							
Arsenic	16	13	4.3	5.0	-	-	-
Barium	400	350	106	134	-	-	-
Cadmium	4.3	2.5	0.213	ND	-	-	-
Chromium*	180	30	15.6	21.2	-	-	-
Copper	270	50	25.7	21.5	-	-	-
Lead	400	63	14.3	9.3	-	-	-
Mercury	0.81	0.18	ND	ND	-	-	-
Zinc	10000	109	346	60.6	-	-	-

1) Analytical Methods: VOCs - 8260B; SVOCs - 8270C; PCBs - 8082; total metals 6000/7000 Series Methods.

2) Shaded areas indicate result exceeds NYSDEC Part 375 Restricted Residential

3) Shaded areas indicate result exceeds NYSDEC Part 375 Unrestricted Soil
4) J = detected above the MDL, but below the RL; therefore, result is an estimated

concentration.

5) mg/kg = milligrams per kilogram (ppm)

6) NC = No Criteria

7) ND = Analyte included in the analysis, but not detected.

#### TABLE 62 SPAULDING COMPOSITES SITE SWMU13, OU 1/3/4 SUMMARY OF CONFIRMATION SOIL SAMPLE RESULTS Page 1 of 3

			002B	003B	004S	0058	006S	007S	011BR
Date Sampled	NYSDEC Part 375 Restricted Residential	NYSDEC Part 375 Unrestricted	11/06/2009 08:47	11/06/2009 08:50	11/06/2009 08:52	11/06/2009 08:55	11/06/2009 08:57	11/06/2009 09:00	12/09/2009 09:05
Location	Guidance Value	Guidance Value	SWMU 13						
Depth Interval(ft)	Guidance value	Outdance value	3	3	0-3	0-3	0-3	0-3	6
Units	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
VOCs									
1,4-Dichlorobenzene	13	1.8	ND						
Benzene	4.8	0.06	ND						
Ethylbenzene	41	1	ND						
Toluene	100	0.7	ND						
Trichloroethene	21	0.47	ND						
Xylenes, total	100	0.26	ND						
SVOCs - GC/MS (8270)									
Benzo[a]anthracene	1	1	0.027	0.057	0.099	0.082	0.12	0.28	1.6
Benzo[a]pyrene	1	1	0.028	0.050	0.089	0.089	0.12	0.36	1.1
Benzo[b]fluoranthene	1	1	0.049	0.064	0.13	0.095	0.14	0.50	1.4
Benzo[k]fluoranthene	3.9	0.8	ND	0.034	0.065	0.055	0.072	0.26	0.71
Chrysene	3.9	1	0.029	0.056	0.13	0.091	0.14	0.39	1.6
Dibenz[a,h]anthracene	0.33	0.33	ND	ND	0.024	ND	ND	ND	ND
Fluoranthene	100	100	0.054	0.12	0.053	0.14	0.30	0.39	3.8
Indeno[1,2,3-cd]pyrene	0.5	0.5	ND	0.035	0.055	0.054	0.084	0.31	3.8
Phenanthrene	100	100	0.043	0.070	0.0089	0.086	0.0068	0.22	2.9
Pyrene	100	100	0.041	0.094	0.059	0.13	0.23	0.37	0.57
Aniline	48	NC	ND						
2-Methylphenol	100	NC	ND	ND	ND	0.021	0.011	ND	ND
Di-n-butyl phthalate	100	NC	0.16	0.48	ND	0.66	0.56	1.0	ND
Phenol	100	0.33	ND						
PCBs - EPA Method 808 (8082)									
Total Polychlorinated Biphenyls	1	0.1	ND						
Metals - Method SW 846 Series									
Arsenic	16	13	6.9	12.1	9.5	14.4	12.3	10.9	4.9
Barium	400	350	100	111	111	116	118	92.5	150
Cadmium	4.3	2.5	0.317	0.320	0.429	0.410	0.400	0.457	0.106
Chromium*	180	30	18.7	19.1	19.1	21.7	20.1	13.9	24.7
Copper	270	50	18.3	21.6	19	28	27	33.1	21.4
Lead	400	63	71.5	61.4	114	79.8	103	43.5	17.4
Mercury	0.81	0.18	0.0922	0.0696	0.164	0.137	0.129	0.163	0.0365
Zinc	10000	109	110	118	151	234	207	549	116

1) Analytical Methods: VOCs - 8260B; SVOCs - 8270C; PCBs - 8082; total metals 6000/7000 Series Methods.

2) Shaded areas indicate result exceeds NYSDEC Part 375 Restricted Residential

3) Shaded areas indicate result exceeds NYSDEC Part 375 Unrestricted Soil

4) J = detected above the MDL, but below the RL; therefore, result is an estimated

concentration.

5) mg/kg = milligrams per kilogram (ppm)

6) NC = No Criteria

7) ND = Analyte included in the analysis, but not detected.

#### TABLE 62 SPAULDING COMPOSITES SITE SWMU13, OU 1/3/4 SUMMARY OF CONFIRMATION SOIL SAMPLE RESULTS Page 2 of 3

			012BR	014SR	0158	021B	024S	016S	0258
Date Sampled	NYSDEC Part 375	NYSDEC Part 375	12/09/2009 09:10	12/09/2009 09:15	11/13/2009 12:30	11/13/2009 12:30	11/13/2009 12:35	11/13/2009 12:41	11/13/2009 12:45
Location	Restricted Residential		SWMU 13						
Depth Interval(ft)	Guidance Value	Guidance Value	6	0-5	0-3	3	0-3	0-3	0-3
Units	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
VOCs									
1.4-Dichlorobenzene	13	1.8	ND						
Benzene	4.8	0.06	ND						
Ethylbenzene	41	1	ND						
Toluene	100	0.7	ND						
Trichloroethene	21	0.47	ND						
Xylenes, total	100	0.26	ND						
SVOCs - GC/MS (8270)									
Benzo[a]anthracene	1	1	2.3	0.52	0.046	ND	ND	ND	ND
Benzo[a]pyrene	1	1	1.8	0.38	0.035	ND	ND	ND	ND
Benzo[b]fluoranthene	1	1	2.0	0.52	0.064	ND	ND	ND	ND
Benzo[k]fluoranthene	3.9	0.8	0.89	0.12	ND	ND	ND	ND	ND
Chrysene	3.9	1	2.1	0.52	0.046	ND	ND	ND	ND
Dibenz[a,h]anthracene	0.33	0.33	ND						
Fluoranthene	100	100	7.1	1.2	0.092	ND	0.10	ND	0.012
Indeno[1,2,3-cd]pyrene	0.5	0.5	6.2	1.2	0.021	ND	ND	ND	ND
Phenanthrene	100	100	4.8	0.98	0.069	ND	0.096	ND	0.013
Pyrene	100	100	0.78	0.19	0.080	ND	0.091	ND	0.011
Aniline	48	NC	ND						
2-Methylphenol	100	NC	ND						
Di-n-butyl phthalate	100	NC	ND	ND	1.1	ND	10	0.12	0.34
Phenol	100	0.33	ND	ND	ND	ND	1.5	ND	ND
PCBs - EPA Method 808 (8082)									
Total Polychlorinated Biphenyls	1	0.1	ND						
Metals - Method SW 846 Series									
Arsenic	16	13	5.5	4.4	5.1	3.2	6.5	4.7	3.9
Barium	400	350	195	126	110	78.9	131	178	118
Cadmium	4.3	2.5	0.101	0.081	ND	0.098	0.129	ND	ND
Chromium*	180	30	28.9	21.9	26.8	12.5	22.8	27.4	17.2
Copper	270	50	25.2	18.2	20	18.7	61	21.6	92.2
Lead	400	63	14.8	15.4	11	9.3	32.2	11	39.5
Mercury	0.81	0.18	0.0233	0.0186	0.0801	0.0142	0.0408	0.0188	0.0270
Zinc	10000	109	99.6	109	65.9	67.3	442	69.3	536

1) Analytical Methods: VOCs - 8260B; SVOCs - 8270C; PCBs - 8082; total metals 6000/7000 Series Methods.

2) Shaded areas indicate result exceeds NYSDEC Part 375 Restricted Residential

3) Shaded areas indicate result exceeds NYSDEC Part 375 Unrestricted Soil

4) J = detected above the MDL, but below the RL; therefore, result is an estimated

concentration.

5) mg/kg = milligrams per kilogram (ppm)

6) NC = No Criteria

7) ND = Analyte included in the analysis, but not detected.

#### TABLE 62 SPAULDING COMPOSITES SITE SWMU13, OU 1/3/4 SUMMARY OF CONFIRMATION SOIL SAMPLE RESULTS Page 3 of 3

			022B	009B	0138	026SR	017SR	027SR	034B
Date Sampled	NYSDEC Part 375	NYSDEC Part 375	11/13/2009 12:50	11/09/2009 14:00	11/09/2009 14:25	11/16/2009 09:45	2/3/2010 10:30	2/3/2010 10:50	4/20/2010 14:30
Location	Restricted Residential Guidance Value	Unrestricted Guidance Value	SWMU 13	SWMU 13	SWMU 13	SWMU 13	SWMU 13	SWMU 13	SWMU 13
Depth Interval(ft)	Guidance value	Guiualice value	3	3	0-3	0-5	0-5	0-5	
Units	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	PCBs Only	PCBs Only	mg/kg
VOCs									
1,4-Dichlorobenzene	13	1.8	ND	ND	ND	ND	-	-	ND
Benzene	4.8	0.06	ND	ND	ND	ND	-	-	ND
Ethylbenzene	41	1	ND	ND	ND	ND	-	-	ND
Toluene	100	0.7	ND	ND	0.0013	ND	-	-	ND
Trichloroethene	21	0.47	ND	ND	ND	ND	-	-	ND
Xylenes, total	100	0.26	ND	ND	ND	ND	-	-	ND
SVOCs - GC/MS (8270)									
Benzo[a]anthracene	1	1	ND	0.031	0.18	ND	-	-	0.024
Benzo[a]pyrene	1	1	ND	0.025	0.24	ND	-	-	0.028
Benzo[b]fluoranthene	1	1	ND	0.030	0.45	ND	-	-	0.035
Benzo[k]fluoranthene	3.9	0.8	ND	0.015	ND	ND	-	-	0.02
Chrysene	3.9	1	ND	0.029	0.20	ND	-	-	0.032
Dibenz[a,h]anthracene	0.33	0.33	ND	ND	0.12	ND	-	-	ND
Fluoranthene	100	100	0.052	0.057	0.21	ND	-	-	0.059
Indeno[1,2,3-cd]pyrene	0.5	0.5	ND	0.014	0.28	ND	-	-	0.018
Phenanthrene	100	100	0.046	0.041	0.18	ND	-	-	0.055
Pyrene	100	100	0.046	0.051	0.20	ND	-	-	0.051
Aniline	48	NC	ND	ND	ND	ND	-	-	ND
2-Methylphenol	100	NC	ND	ND	ND	ND	-	-	ND
Di-n-butyl phthalate	100	NC	2.4	0.78	1.2	ND	-	-	0.18
Phenol	100	0.33	ND	0.065	ND	ND	-	-	ND
PCBs - EPA Method 808 (8082)									
Total Polychlorinated Biphenyls	1	0.1	ND	0.035	0.518	ND			ND
Metals - Method SW 846 Series									
Arsenic	16	13	3.7	5.4	7.9	4.5	-	-	4.5
Barium	400	350	85.8	114	161	142	-	-	67.4
Cadmium	4.3	2.5	1.38	ND	ND	0.357	-	-	ND
Chromium*	180	30	12.3	15.8	7.42	23.1	-	-	13.1
Copper	270	50	205	22.2	98.4	30.6	-	-	16
Lead	400	63	80.1	12.5	50	11.4	-	-	7.6
Mercury	0.81	0.18	0.0380	0.0851	0.0444	0.0782	-	-	0.0134
Zinc	10000	109	409	65	434	310	-	-	49.2

1) Analytical Methods: VOCs - 8260B; SVOCs - 8270C; PCBs - 8082; total metals 6000/7000 Series Methods.

2) Shaded areas indicate result exceeds NYSDEC Part 375 Restricted Residential

3) Shaded areas indicate result exceeds NYSDEC Part 375 Unrestricted Soil

4) J = detected above the MDL, but below the RL; therefore, result is an estimated

concentration.

5) mg/kg = milligrams per kilogram (ppm)

6) NC = No Criteria

7) ND = Analyte included in the analysis, but not detected.

#### TABLE 63 SPAULDING COMPOSITES SITE SWMU14, OU 1/3/4 SUMMARY OF CONFIRMATION SOIL SAMPLE RESULTS Page 1 of 1

	1		0000	0020	0110	0100	0120	0140	0120
	NYSDEC Part 375	NYSDEC Part 375	002B 11/05/2009 13:32	003B 11/05/2009 13:35	011S 11/05/2009 14:00	012S 11/05/2009 14:05	013S 12/02/2009 10:30	014S 12/02/2009 10:30	013B 12/18/2009 12:00
Date Sampled	Restricted Residential	Unrestricted							
Location	Guidance Value	Guidance Value	SWMU 14						
Depth Interval(ft)			4	4	0-4	0-4	0-5	0-5	5
Units	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	(Resample of 005S)	(Resample of 014S)	mg/kg
VOCs									
1,4-Dichlorobenzene	13	1.8	ND						
Benzene	4.8	0.06	ND						
Ethylbenzene	41	1	ND						
Toluene	100	0.7	ND	ND	ND	ND	ND	0.0019	ND
Trichloroethene	21	0.47	ND						
Xylenes, total	100	0.26	ND						
SVOCs - GC/MS (8270)									
Benzo[a]anthracene	1	1	0.026	0.50	0.15	0.23	0.037	1.4	0.14
Benzo[a]pyrene	1	1	0.018	0.45	0.13	0.12	0.035	1.1	0.11
Benzo[b]fluoranthene	1	1	0.025	0.55	0.17	0.14	0.037	1.3	0.21
Benzo[k]fluoranthene	3.9	0.8	ND	0.16	0.055	ND	0.022	0.48	ND
Chrysene	3.9	1	0.021	0.46	0.14	0.18	0.036	1.1	0.13
Dibenz[a,h]anthracene	0.33	0.33	ND						
Fluoranthene	100	100	0.047	1.2	0.36	0.39	0.078	2.9	0.32
Indeno[1,2,3-cd]pyrene	0.5	0.5	ND	0.23	0.085	ND	0.019	0.56	0.078
Phenanthrene	100	100	0.042	0.97	0.27	ND	0.067	2.3	0.23
Pyrene	100	100	0.039	0.98	0.29	0.31	0.066	2.3	0.30
Aniline	48	NC	ND						
2-Methylphenol	100	NC	ND						
Di-n-butyl phthalate	100	NC	ND	ND	ND	1.2	ND	ND	ND
Phenol	100	0.33	ND						
PCBs - EPA Method 808 (8082)									
Total Polychlorinated Biphenyls	1	0.1	ND	ND	ND	0.34	ND	ND	ND
Metals - Method SW 846 Series									
Arsenic	16	13	4.5	5.4	4.4	6.8	4.6	6.7	6.5
Barium	400	350	115	110	96.2	154	181	97.2	44
Cadmium	4.3	2.5	0.693	0.238	0.132	0.580	2.15	2.46	3.24
Chromium*	180	30	19.5	19.5	18.4	24	22.2	17.2	13.7
Copper	270	50	29.2	41.7	32.4	380	49.1	1260	140
Lead	400	63	14.4	32.6	20.5	356	12.7	74.0	158
Mercury	0.81	0.18	0.0359	0.0510	0.0211	0.123	ND	0.100	0.02
Zinc	10000	109	4040	2590	964	6470	5590	1060	3430

1) Analytical Methods: VOCs - 8260B; SVOCs - 8270C; PCBs - 8082; total metals

6000/7000 Series Methods.

2) Shaded areas indicate result exceeds NYSDEC Part 375 Restricted Residential

3) Shaded areas indicate result exceeds NYSDEC Part 375 Unrestricted Soil

4) J = detected above the MDL, but below the RL; therefore, result is an estimated

concentration.

5) mg/kg = milligrams per kilogram (ppm)

6) NC = No Criteria

7) ND = Analyte included in the analysis, but not detected.

\*Sample location was overexcavated and resampled.

#### TABLE 64 SPAULDING COMPOSITES SITE SWMU26, OU 1/3/4 SUMMARY OF CONFIRMATION SOIL SAMPLE RESULTS Page 1 of 1

	NUCERIC D 4 255	NUCEECE A 255	016BRR	
Date Sampled	NYSDEC Part 375	NYSDEC Part 375	2/9/2010 12:00	
Location	Restricted Residential Guidance Value	Unrestricted Guidance Value	SWMU 26	
Depth Interval(ft)	Guidance value	Guidance value	<1	
Units	mg/kg	mg/kg	PCBs Only	
VOCs				
1,4-Dichlorobenzene	13	1.8	-	
Benzene	4.8	0.06	-	
Ethylbenzene	41	1	-	
Toluene	100	0.7	-	
Trichloroethene	21	0.47	-	
Xylenes, total	100	0.26	-	
SVOCs - GC/MS (8270)				
Benzo[a]anthracene	1	1	-	
Benzo[a]pyrene	1	1	-	
Benzo[b]fluoranthene	1	1	-	
Benzo[k]fluoranthene	3.9	0.8	-	
Chrysene	3.9	1	-	
Dibenz[a,h]anthracene	0.33	0.33	-	
Fluoranthene	100	100	-	
Indeno[1,2,3-cd]pyrene	0.5	0.5	-	
Phenanthrene	100	100	-	
Pyrene	100	100	-	
Aniline	48	NC	-	
2-Methylphenol	100	NC	-	
Di-n-butyl phthalate	100	NC	-	
Phenol	100	0.33	-	
PCBs - EPA Method 808 (8082)				
Total Polychlorinated Biphenyls	1	0.1	0.057	
Metals - Method SW 846 Series				
Arsenic	16	13	-	
Barium	400	350	-	
Cadmium	4.3	2.5	-	
Chromium*	180	30	-	
Copper	270	50	-	
Lead	400	63	-	
Mercury	0.81	0.18	-	
Zinc	10000	109	-	

1) Analytical Methods: VOCs - 8260B; SVOCs - 8270C; PCBs - 8082; total metals 6000/7000 Series Methods.

2) Shaded areas indicate result exceeds NYSDEC Part 375 Restricted Residential

3) Shaded areas indicate result exceeds NYSDEC Part 375 Unrestricted Soil

4) J = detected above the MDL, but below the RL; therefore, result is an estimated

concentration.

**5**) mg/kg = milligrams per kilogram (ppm)

6) NC = No Criteria

7) ND = Analyte included in the analysis, but not detected.

\*Sample location was overexcavated and resampled.

#### TABLE 65 SPAULDING COMPOSITES SITE SWMU35, OU 1/3/4 SUMMARY OF CONFIRMATION SOIL SAMPLE RESULTS Page 1 of 1

			001B	002R	003R	004R
Date Sampled	NYSDEC Part 375	NYSDEC Part 375	11/23/09 11:30	12/10/2009 09:00	12/10/2009 09:05	12/10/2009 09:05
Location	Restricted Residential Guidance Value	Unrestricted Guidance Value	SWMU 35	SWMU 35	SWMU 35	SWMU 35
Depth Interval(ft)	Guiuance value	Guidance value	5	0-10	0-10	0-10
Units	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
VOCs						
1,4-Dichlorobenzene	13	1.8	ND	ND	ND	ND
Benzene	4.8	0.06	0.0043	ND	ND	ND
Ethylbenzene	41	1	ND	ND	ND	ND
Toluene	100	0.7	0.18	ND	ND	ND
Trichloroethene	21	0.47	ND	ND	ND	ND
Xylenes, total	100	0.26	ND	ND	ND	ND
SVOCs - GC/MS (8270)						
Benzo[a]anthracene	1	1	ND	ND	0.23	ND
Benzo[a]pyrene	1	1	ND	ND	ND	ND
Benzo[b]fluoranthene	1	1	ND	ND	ND	ND
Benzo[k]fluoranthene	3.9	0.8	ND	ND	ND	ND
Chrysene	3.9	1	ND	ND	ND	ND
Dibenz[a,h]anthracene	0.33	0.33	ND	ND	ND	ND
Fluoranthene	100	100	ND	ND	0.17	ND
Indeno[1,2,3-cd]pyrene	0.5	0.5	ND	ND	ND	ND
Phenanthrene	100	100	ND	ND	ND	ND
Pyrene	100	100	ND	ND	ND	ND
Aniline	48	NC	ND	0.81	7.3	ND
2-Methylphenol	100	NC	ND	ND	0.69	ND
Di-n-butyl phthalate	100	NC	ND	2.5	31	0.085
Phenol	100	0.33	ND	0.28	ND	ND
PCBs - EPA Method 808 (8082)						
Total Polychlorinated Biphenyls	1	0.1	ND	ND	ND	ND
Metals - Method SW 846 Series						
Arsenic	16	13	4.5	4.4	4.9	4.6
Barium	400	350	90.1	86.4	117	180
Cadmium	4.3	2.5	0.111	0.178	0.335	0.170
Chromium*	180	30	25.2	14.3	16.5	17.9
Copper	270	50	20.1	18.8	38.4	27.9
Lead	400	63	8.1	10	15.6	10.5
Mercury	0.81	0.18	0.0096	0.0122	0.0197	0.0167
Zinc	10000	109	68.6	61.9	128	92.3

Analytical Methods: VOCs - 8260B; SVOCs - 8270C; PCBs - 8082; total metals
 Shaded areas indicate result exceeds NYSDEC Part 375 Restricted Residential

3) Shaded areas indicate result exceeds NYSDEC Part 375 Unrestricted Soil

**4**) J = detected above the MDL, but below the RL; therefore, result is an estimated concentration.

5) mg/kg = milligrams per kilogram (ppm)

**6**) NC = No Criteria

7) ND = Analyte included in the analysis, but not detected.

\*Sample location was overexcavated and resampled.

#### TABLE 66 SPAULDING COMPOSITES SITE SWMU36, OU 1/3/4 SUMMARY OF CONFIRMATION SOIL SAMPLE RESULTS Page 1 of 1

Sample ID			001B	003S	004S	0055	007S	0138	014B
Date Sampled	NYSDEC Part 375	NYSDEC Part 375 Unrestricted	12/03/2009 12:00	12/03/2009 12:00	12/03/2009 12:00	12/03/2009 12:00	12/03/2009 12:00	12/22/2009 11:20	12/22/2009 11:25
Location	Restricted Residential Guidance Value	Guidance Value	SWMU 36						
Depth Interval(ft)	Guidance value	Guidance value	5	0-5	0-5	0-5	0-5	0-4	4
Units	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
VOCs									
1,4-Dichlorobenzene	13	1.8	ND						
Benzene	4.8	0.06	1.1	0.023	0.14	ND	0.0013	0.0039	3.6
Ethylbenzene	41	1	0.0030	ND	ND	ND	ND	ND	0.016
Toluene	100	0.7	0.43	0.0042	0.53	0.00088	0.0014	ND	1.1
Trichloroethene	21	0.47	ND						
Xylenes, total	100	0.26	0.062	ND	ND	ND	ND	ND	0.34
SVOCs - GC/MS (8270)									
Benzo[a]anthracene	1	1	0.068	0.74	0.19	ND	0.023	0.042	0.056
Benzo[a]pyrene	1	1	0.059	0.77	0.19	ND	ND	0.047	0.063
Benzo[b]fluoranthene	1	1	0.081	0.91	0.37	ND	0.019	0.091	0.080
Benzo[k]fluoranthene	3.9	0.8	0.046	0.29	ND	ND	ND	ND	0.034
Chrysene	3.9	1	0.075	0.77	0.30	ND	0.018	0.044	0.060
Dibenz[a,h]anthracene	0.33	0.33	ND	0.13	0.050	ND	ND	0.014	0.019
Fluoranthene	100	100	0.16	2.0	0.37	ND	0.030	0.059	0.096
Indeno[1,2,3-cd]pyrene	0.5	0.5	0.049	0.49	0.17	ND	ND	0.041	0.056
Phenanthrene	100	100	0.19	1.5	0.22	ND	0.023	0.031	0.064
Pyrene	100	100	0.12	1.6	0.38	ND	0.029	0.050	0.080
Aniline	48	NC	ND						
2-Methylphenol	100	NC	ND						
Di-n-butyl phthalate	100	NC	0.10	ND	ND	ND	ND	ND	0.16
Phenol	100	0.33	ND	ND	0.062	ND	ND	ND	ND
PCBs - EPA Method 808 (8082)									
Total Polychlorinated Biphenyls	1	0.1	ND						
Metals - Method SW 846 Series									
Arsenic	16	13	7	10.1	7.6	8.4	6.1	5.7	8.2
Barium	400	350	207	165	268	147	100	171	135
Cadmium	4.3	2.5	0.270	1.86	3.64	ND	ND	0.534	3.01
Chromium*	180	30	28.3	24.7	50.1	26.5	20.6	25.3	20.3
Copper	270	50	135	173	533	35.5	96.4	68.6	128
Lead	400	63	57.6	104	260	13.4	17	58.6	102
Mercury	0.81	0.18	0.0527	0.425	0.646	ND	0.141	0.278	0.238
Zinc	10000	109	681	1170	6020	78.1	107	247	881

1) Analytical Methods: VOCs - 8260B; SVOCs - 8270C; PCBs - 8082; total metals 6000/7000 Series Methods.

2) Shaded areas indicate result exceeds NYSDEC Part 375 Restricted Residential

3) Shaded areas indicate result exceeds NYSDEC Part 375 Unrestricted Soil
4) J = detected above the MDL, but below the RL; therefore, result is an estimated

concentration.

5) mg/kg = milligrams per kilogram (ppm)

6) NC = No Criteria

7) ND = Analyte included in the analysis, but not detected.

#### TABLE 67 SPAULDING COMPOSITE SITE AOC 45, OU 1/3/4 SUMMARY OF CONFIRMATION SOIL SAMPLE RESULTS Page 1 of 2

Sample ID			005S	008S	011B	0128	0138	016B	0185
Date Sampled	NYSDEC Part 375 Restricted Residential Guidance Value	NYSDEC Part 375	11/30/2009 10:30	11/30/2009 10:30	12/01/2009 13:00	12/01/2009 13:00	12/01/2009 13:00	12/01/2009 13:00	12/01/2009 13:00
Location			AOC 45						
Depth Interval(ft)	Guidance Value	Guidance Value	0-4	0-4	4	0-4	0-4	4	0-4
Units	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
VOCs									
1,4-Dichlorobenzene	13	1.8	ND						
Benzene	4.8	0.06	ND	ND	ND	ND	0.0090	0.00088	0.0047
Ethylbenzene	41	1	ND	ND	0.0017	ND	0.0020	ND	ND
Toluene	100	0.7	ND	ND	0.0068	ND	0.00081	ND	0.0014
Trichloroethene	21	0.47	ND						
Xylenes, total	100	0.26	ND	ND	0.0044	ND	0.016	ND	ND
SVOCs - GC/MS (8270)									
Benzo[a]anthracene	1	1	0.15	ND	0.037	0.66	0.37	ND	0.19
Benzo[a]pyrene	1	1	0.16	ND	ND	0.60	0.31	ND	ND
Benzo[b]fluoranthene	1	1	0.13	ND	0.028	0.68	0.36	ND	0.20
Benzo[k]fluoranthene	3.9	0.8	ND	ND	ND	0.34	0.17	ND	ND
Chrysene	3.9	1	0.14	ND	0.031	0.61	0.30	ND	0.19
Dibenz[a,h]anthracene	0.33	0.33	ND						
Fluoranthene	100	100	0.24	ND	0.088	1.6	0.92	0.083	0.28
Indeno[1,2,3-cd]pyrene	0.5	0.5	0.070	ND	ND	0.38	0.20	ND	ND
Phenanthrene	100	100	0.20	ND	0.087	1.4	0.78	ND	ND
Pyrene	100	100	0.21	ND	0.066	1.2	0.73	ND	0.28
Aniline	48	NC	ND						
2-Methylphenol	100	NC	ND	ND	0.70	ND	ND	ND	ND
Di-n-butyl phthalate	100	NC	ND						
Phenol	100	0.33	ND	ND	3.7	ND	ND	ND	ND
PCBs - EPA Method 808 (8082)									
Total Polychlorinated Biphenyls	1	0.1	ND						
Metals - Method SW 846 Series									
Arsenic	16	13	6.2	4.0	5	3	5.4	7.2	10.3
Barium	400	350	103	161	160	52.6	125	143	207
Cadmium	4.3	2.5	0.112	0.147	0.402	0.484	1.27	0.584	1.66
Chromium*	180	30	13.6	25.2	31	13.8	20.6	20.5	34
Copper	270	50	19.1	18.5	40.1	58	46.4	62.5	264
Lead	400	63	15	11.7	11.7	54.2	127	72.2	180
Mercury	0.81	0.18	0.0223	0.0214	0.0159	0.0399	0.0303	0.164	0.794
Zinc	10000	109	64.8	98.2	121	165	511	162	707

1) Analytical Methods: VOCs - 8260B; SVOCs - 8270C; PCBs - 8082; total metals

2) Shaded areas indicate result exceeds NYSDEC Part 375 Restricted Residential

3) Shaded areas indicate result exceeds NYSDEC Part 375 Unrestricted Soil

4) J = detected above the MDL, but below the RL; therefore, result is an estimated

concentration.

5) mg/kg = milligrams per kilogram (ppm)

6) NC = No Criteria

7) ND = Analyte included in the analysis, but not detected.

#### TABLE 67 SPAULDING COMPOSITE SITE AOC 45, OU 1/3/4 SUMMARY OF CONFIRMATION SOIL SAMPLE RESULTS Page 2 of 2

Sample ID			021B	0228	004BR	009BR	010BR	017BR	002BRR
Date Sampled	NYSDEC Part 375	NYSDEC Part 375	12/02/2009 09:30	12/02/2009 09:30	01/27/2010 11:15	01/27/2010 11:25	01/27/2010 11:20	01/27/2010 11:30	2/12/2010 9:00am
Location	Restricted Residential Guidance Value		AOC 45						
Depth Interval(ft)	Guidance Value	Guidance Value	4	0-4	7	7	7	7	SVOCs only
Units	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
VOCs									
1,4-Dichlorobenzene	13	1.8	ND						
Benzene	4.8	0.06	0.0017	ND	ND	ND	ND	0.0030	-
Ethylbenzene	41	1	ND	ND	ND	ND	ND	ND	-
Toluene	100	0.7	0.0016	ND	ND	ND	ND	0.0036	-
Trichloroethene	21	0.47	ND	ND	ND	ND	ND	ND	-
Xylenes, total	100	0.26	ND	ND	ND	ND	ND	ND	-
SVOCs - GC/MS (8270)									
Benzo[a]anthracene	1	1	ND	0.40	ND	ND	ND	0.14	ND
Benzo[a]pyrene	1	1	ND	0.32	ND	ND	ND	ND	ND
Benzo[b]fluoranthene	1	1	ND	0.35	ND	ND	ND	0.12	ND
Benzo[k]fluoranthene	3.9	0.8	ND	0.22	ND	ND	ND	ND	ND
Chrysene	3.9	1	ND	0.35	ND	ND	ND	0.12	ND
Dibenz[a,h]anthracene	0.33	0.33	ND						
Fluoranthene	100	100	ND	0.67	ND	ND	ND	0.23	ND
Indeno[1,2,3-cd]pyrene	0.5	0.5	ND						
Phenanthrene	100	100	ND	0.64	ND	ND	ND	0.20	ND
Pyrene	100	100	ND	0.60	ND	ND	ND	0.18	ND
Aniline	48	NC	ND	ND	ND	ND	ND	ND	-
2-Methylphenol	100	NC	ND						
Di-n-butyl phthalate	100	NC	ND						
Phenol	100	0.33	ND						
PCBs - EPA Method 808 (8082)									
Total Polychlorinated Biphenyls	1	0.1	ND	ND	ND	ND	ND	ND	-
Metals - Method SW 846 Series									
Arsenic	16	13	5.2	7.6	4.1	4.2	5.7	5.5	-
Barium	400	350	147	112	184	179	174	179	-
Cadmium	4.3	2.5	0.553	1.19	ND	ND	ND	0.383	-
Chromium*	180	30	24	21.1	28.7	28.3	27.9	28.6	-
Copper	270	50	24.8	148	24.1	24	24.8	84	-
Lead	400	63	13	41.1	9.5	8.7	9.2	34.8	-
Mercury	0.81	0.18	0.0122	0.109	0.0200	0.0120	0.0108	0.0765	-
Zinc	10000	109	115	425	69.4	70.8	73	329	-

1) Analytical Methods: VOCs - 8260B; SVOCs - 8270C; PCBs - 8082; total metals

2) Shaded areas indicate result exceeds NYSDEC Part 375 Restricted Residential

3) Shaded areas indicate result exceeds NYSDEC Part 375 Unrestricted Soil

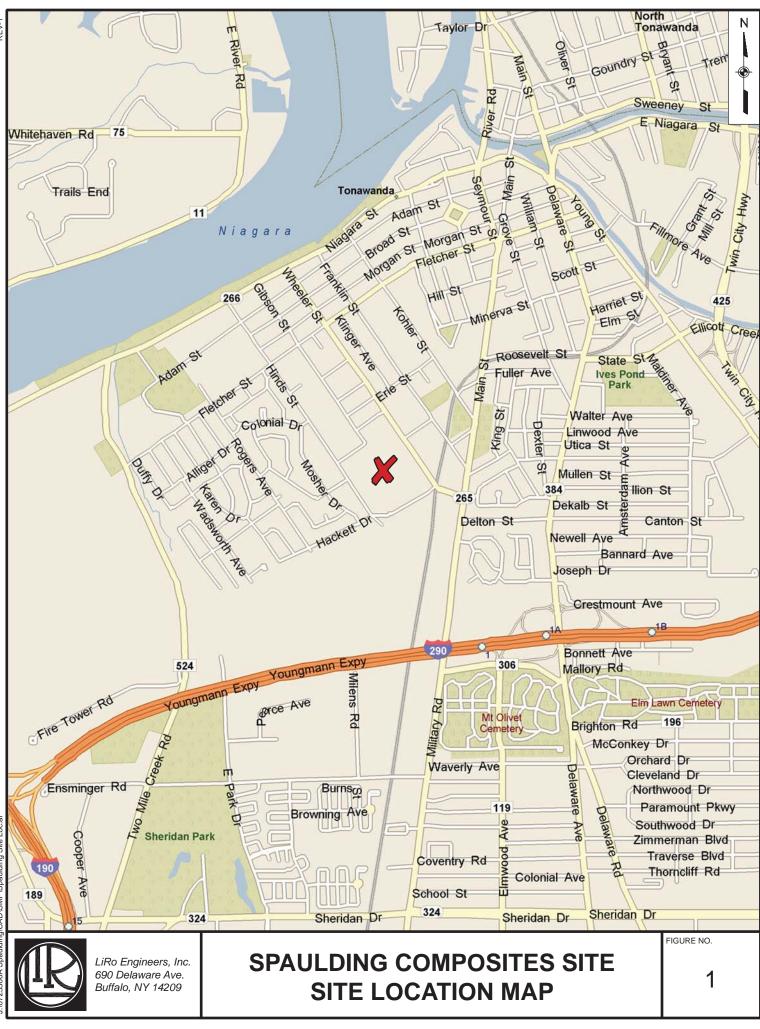
4) J = detected above the MDL, but below the RL; therefore, result is an estimated

concentration.

**5**) mg/kg = milligrams per kilogram (ppm)

6) NC = No Criteria

7) ND = Analyte included in the analysis, but not detected.



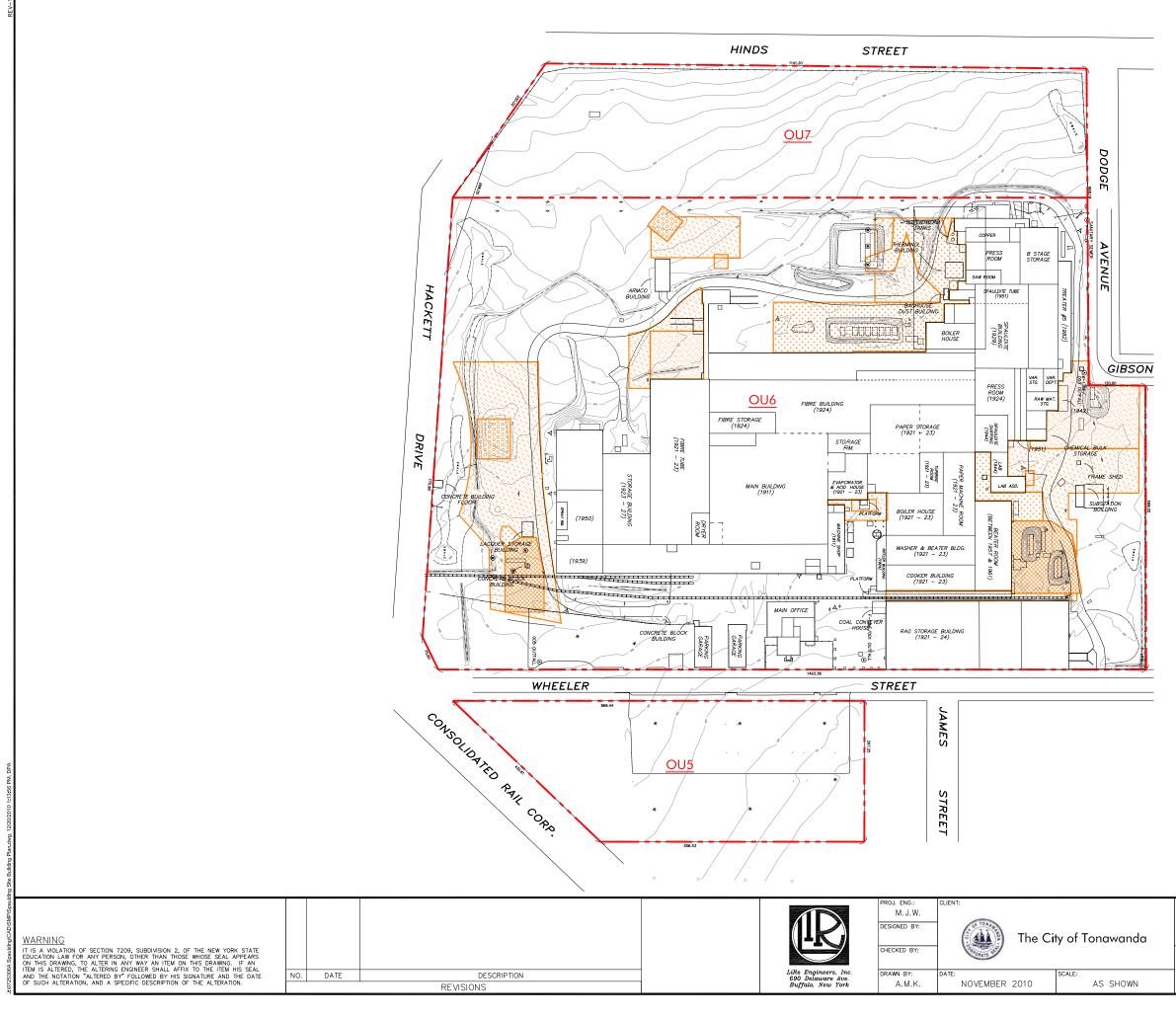


FIGURE OF SITE AND SITE BOUNDARIES

DRAWING TITLE:

JOB TITLE AND LOCATION:

SPAULDING COMPOSITES SITE SITE MANAGEMENT PLAN LIRO JOB NO.: 08-49-446 SHEET OF

100 0 100 SCALE IN FEET

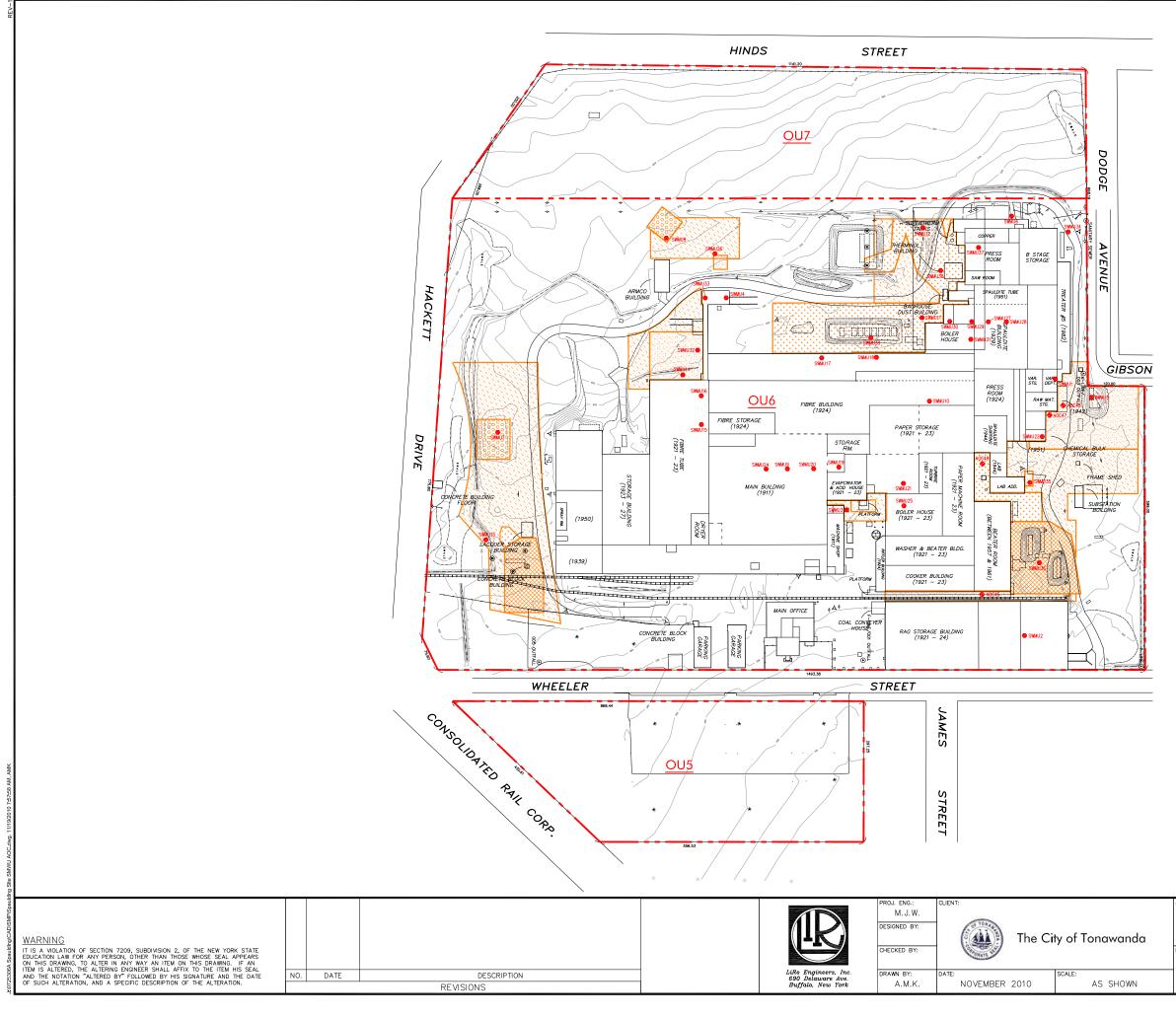
- - --- PROPERTY LIMIT/AREA DEMARCATION

- EXPANDED AREA OF CONTAMINATED WASTES (STATE SUPERFUND-EXCLUDED FROM PROJECT SCOPE)
- 004: MULTIPLE CONTAMINANT WASTES (STATE SUPERFUND-EXCLUDED FROM PROJECT SCOPE)
- OU3: PETROLEUM CONTAMINATED WASTES (STATE SUPERFUND-EXCLUDED FROM PROJECT SCOPE)
- OU2: PCB CONTAMINATED WASTES IRM AREAS (STATE SUPERFUND-EXCLUDED FROM PROJECT SCOPE)
- 001: REGULATED WASTES (STATE SUPERFUND-EXCLUDED FROM PROJECT SCOPE)

LEGEND



FIGURE NO.



SITE PLAN SHOWING
INDIVIDUAL SMWUs AND AOCs

DRAWING TITLE:

JOB TITLE AND LOCATION:

#### SPAULDING COMPOSITES SITE SITE MANAGEMENT PLAN

FIGURE NO.

LIRO JOB NO.: 07-25-306A SHEET OF

3

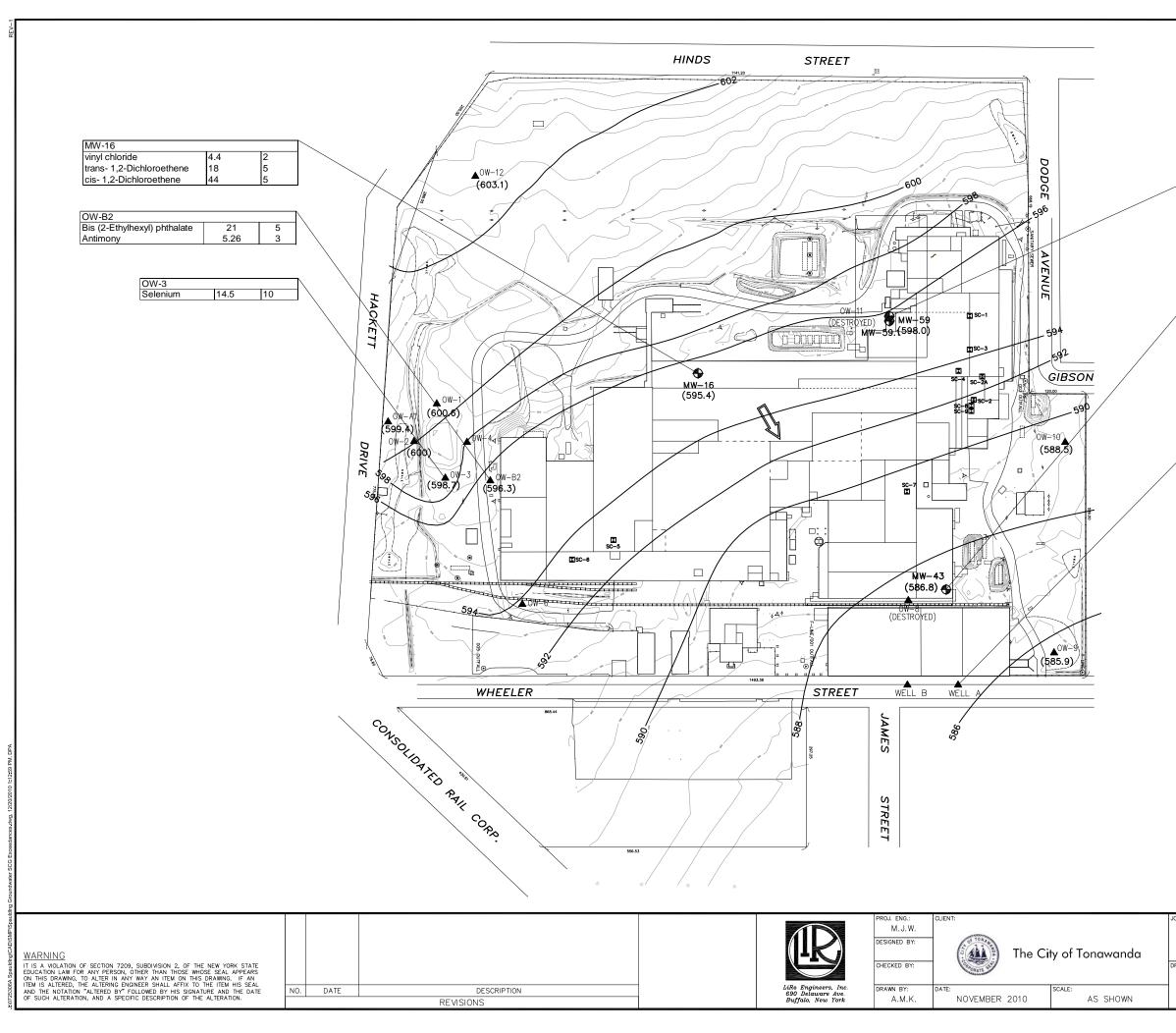
00 0 100 SCALE IN FEET

- - PROPERTY LIMIT/AREA DEMARCATION

- EXPANDED AREA OF CONTAMINATED WASTES (STATE SUPERFUND-EXCLUDED FROM PROJECT SCOPE)
- OU4: MULTIPLE CONTAMINANT WASTES (STATE SUPERFUND-EXCLUDED FROM PROJECT SCOPE)
- OU3: PETROLEUM CONTAMINATED WASTES (STATE SUPERFUND-EXCLUDED FROM PROJECT SCOPE)
- OU2: PCB CONTAMINATED WASTES IRM AREAS (STATE SUPERFUND-EXCLUDED FROM PROJECT SCOPE)
- 001: REGULATED WASTES (STATE SUPERFUND-EXCLUDED FROM PROJECT SCOPE)
- AOC
- SWMU

LEGEND

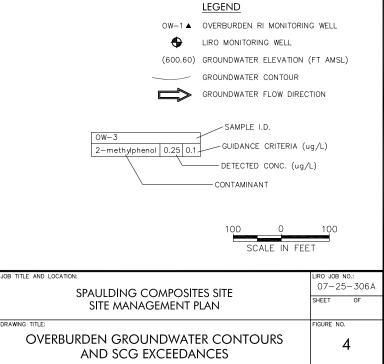


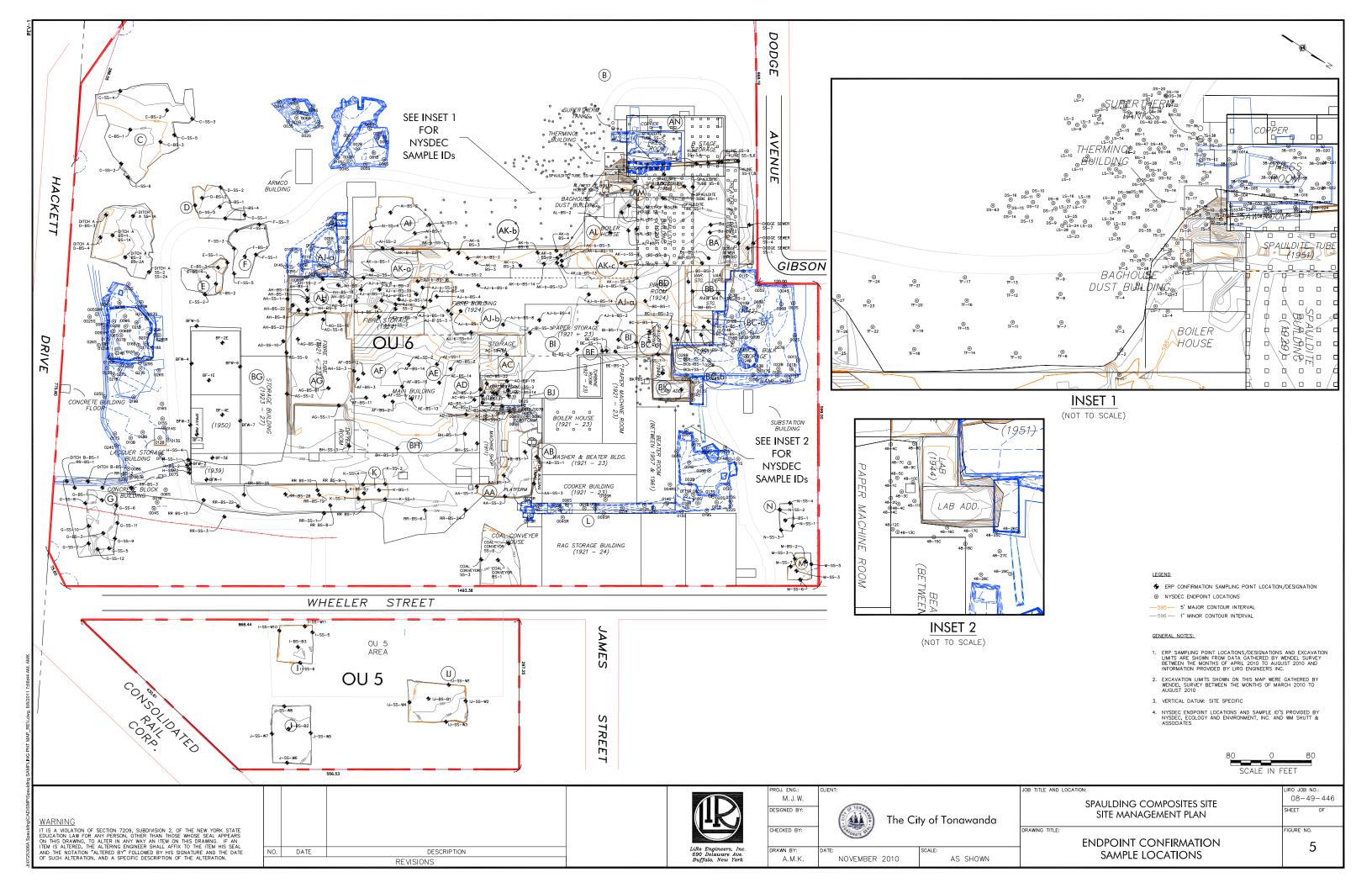


MW-59			
Arsenic	72.1	25	
Lead	32	25	
Thallium	4.43	4	

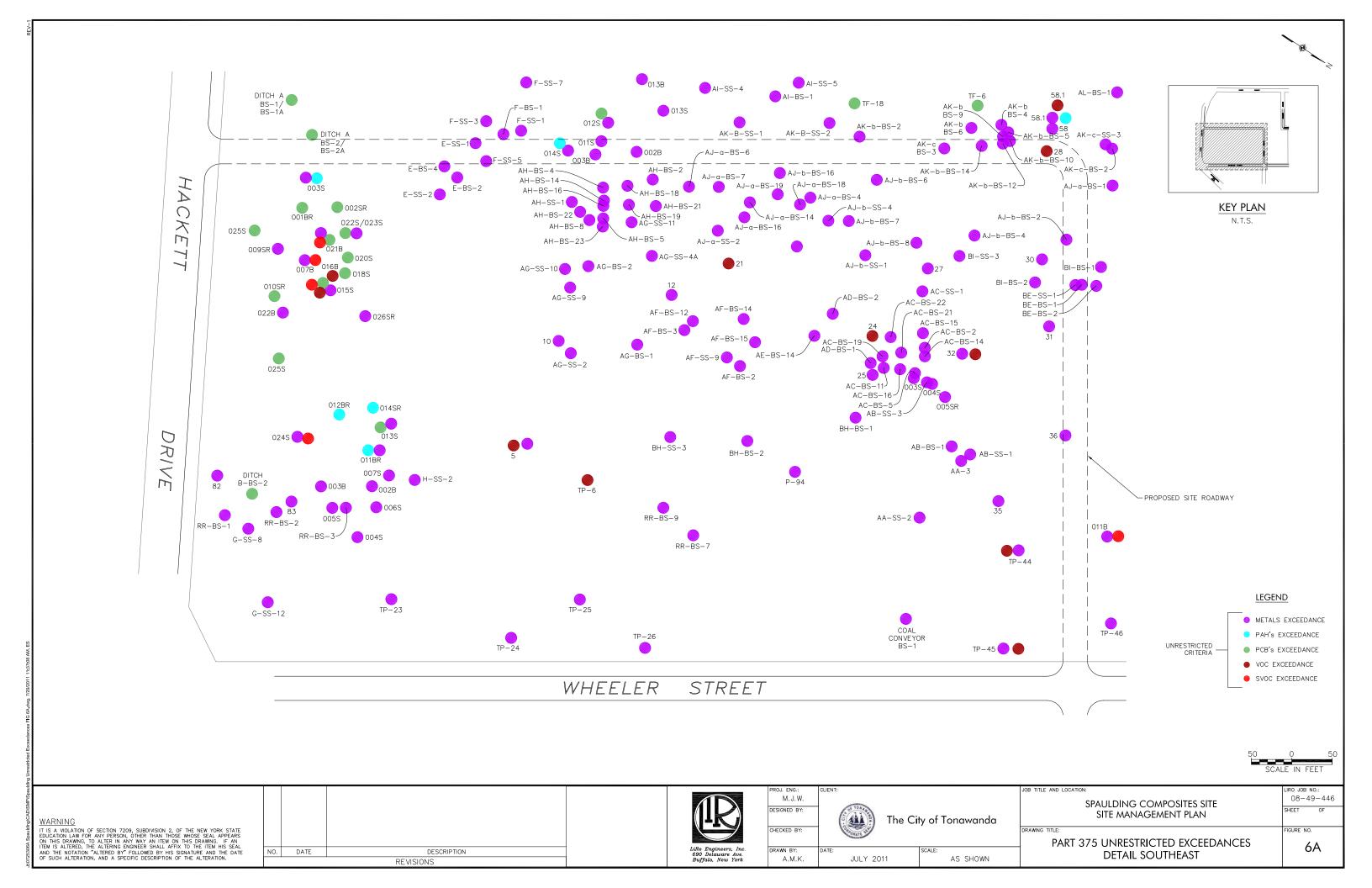
MW-43		
Acetone	85	50
2-Butanone	60	50
2-Hexanone	58	50
Formaldehyde	61	8
Antimony	41.5	3
Lead	26	25

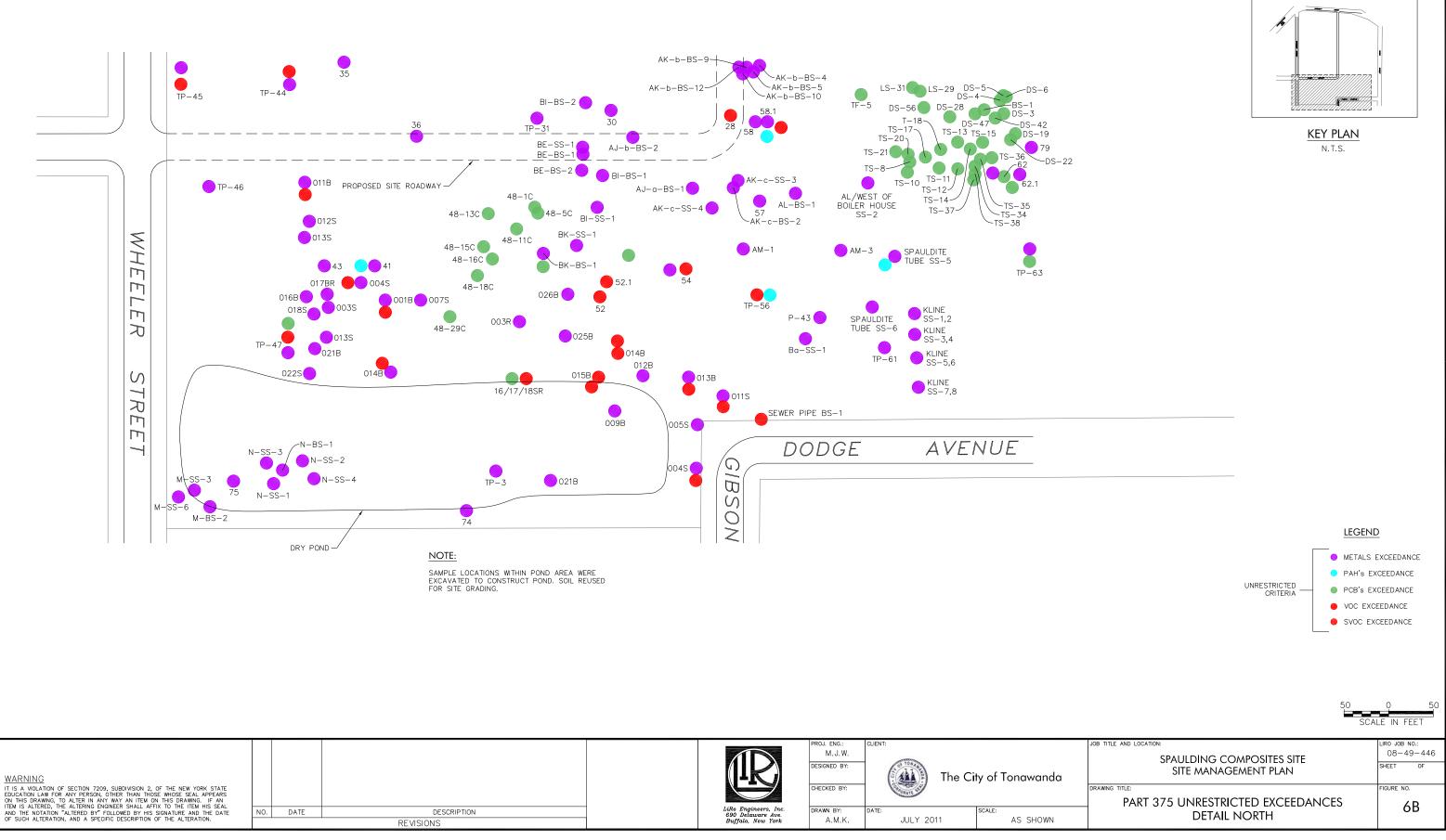
/	MW-A		
	Antimony	128	3

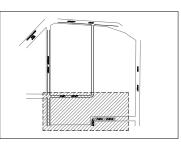


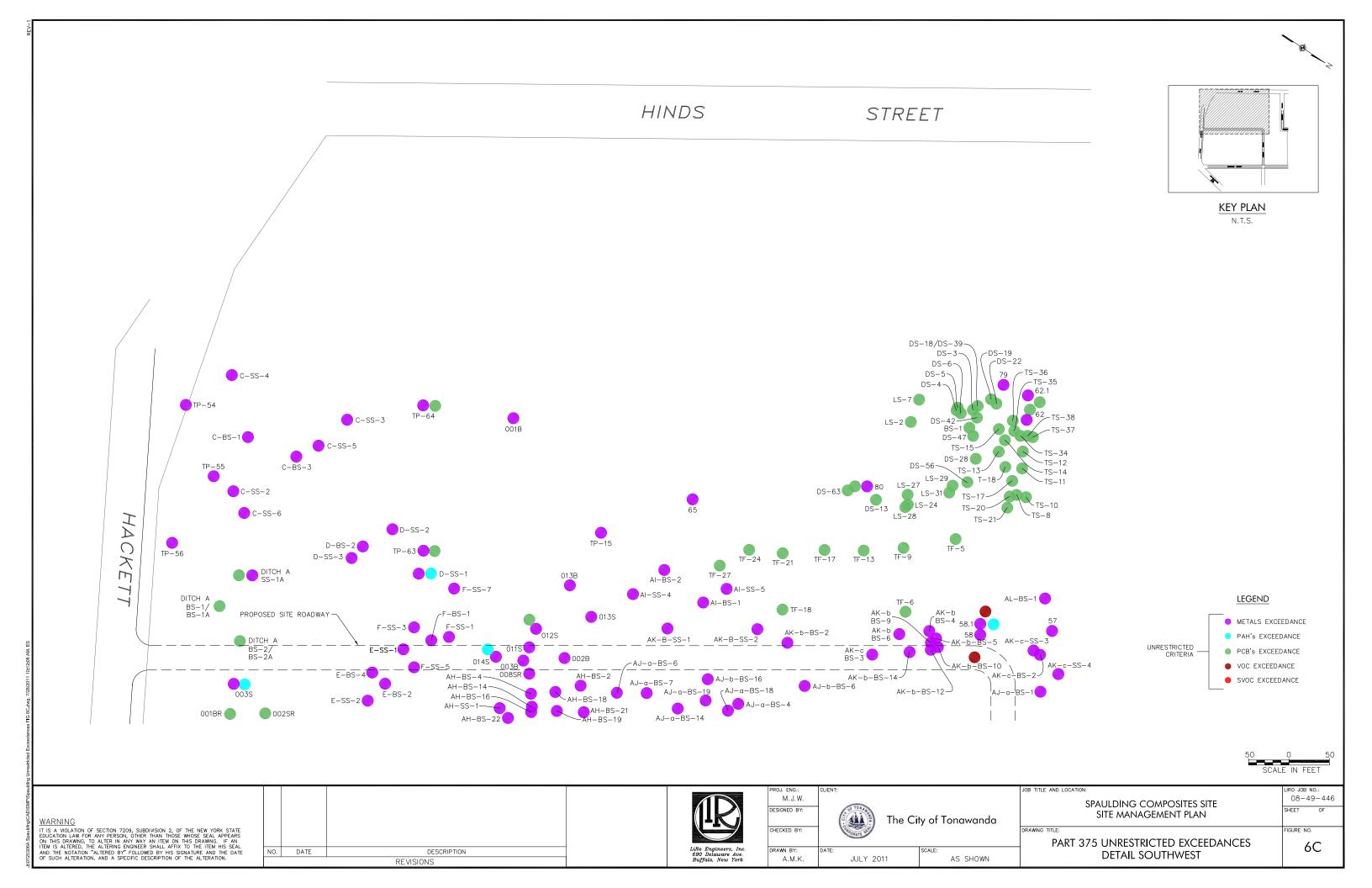


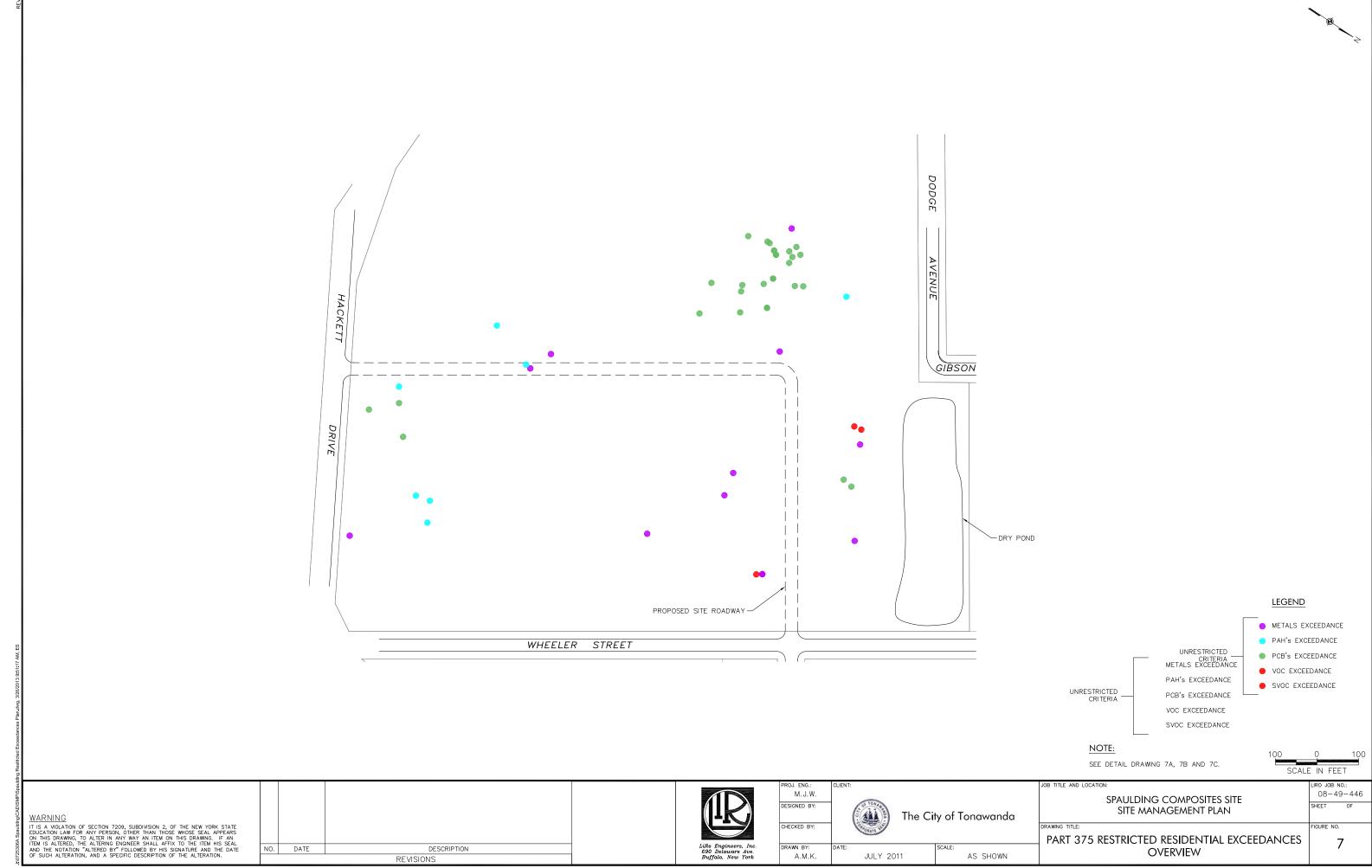


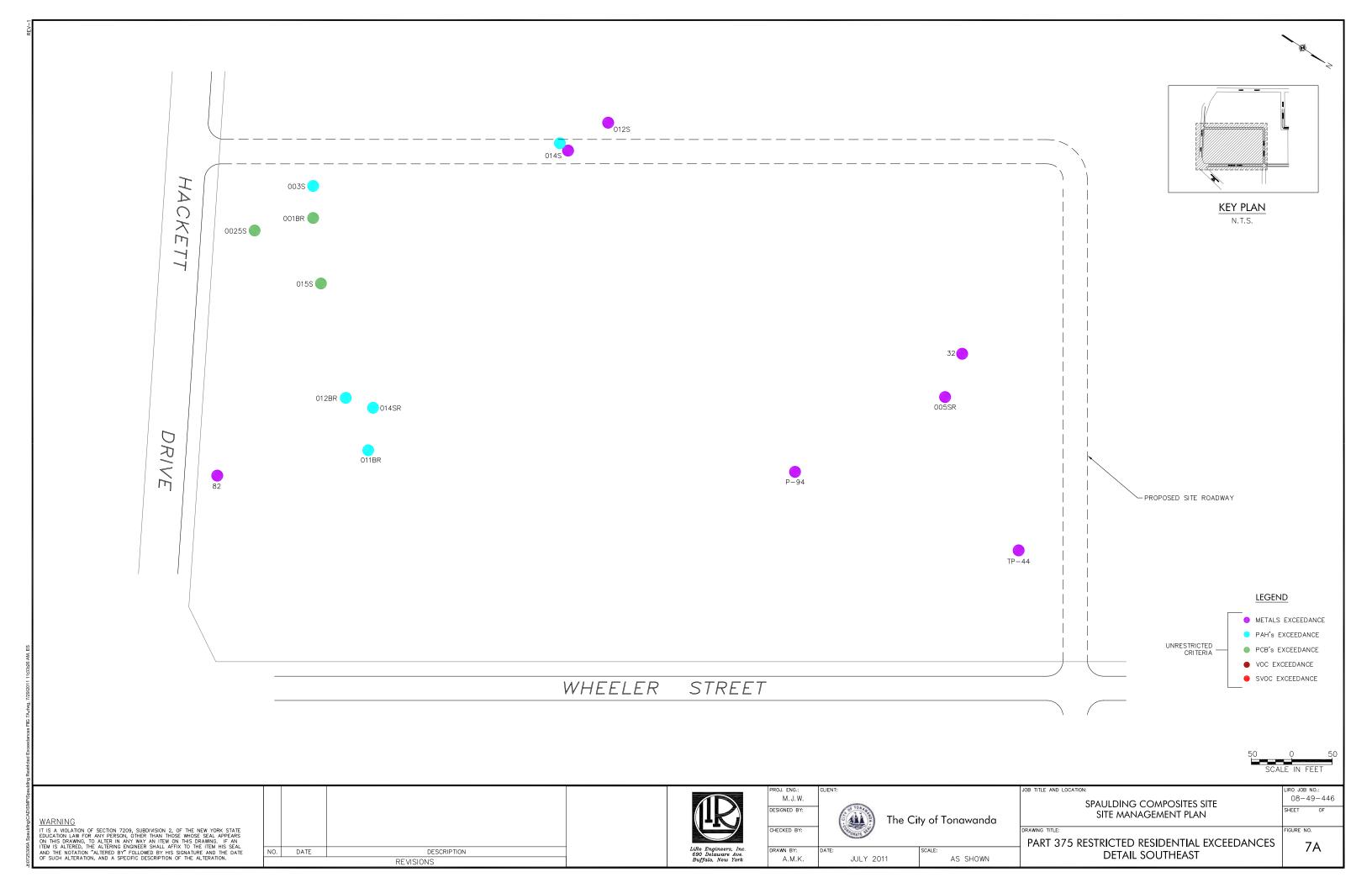


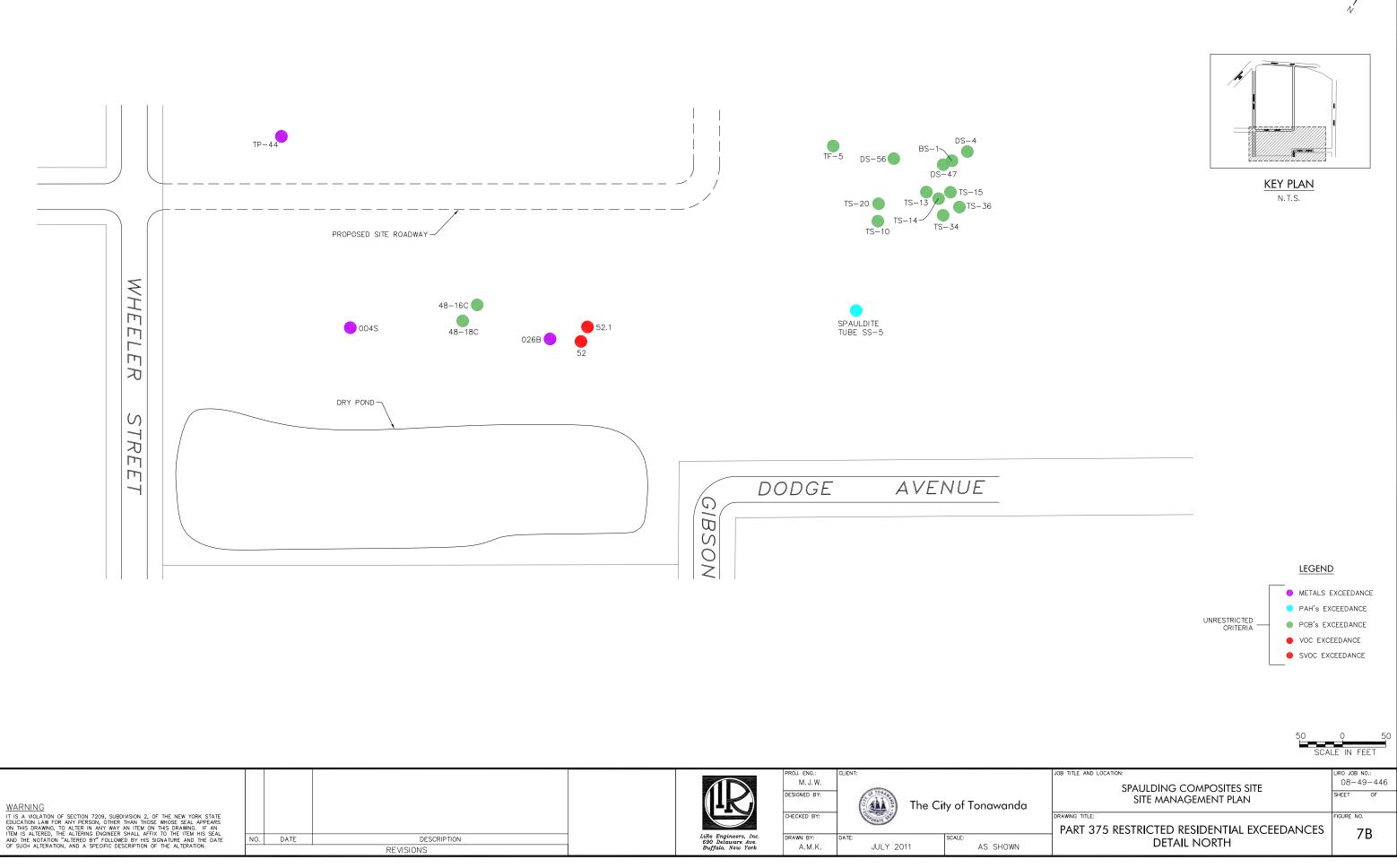


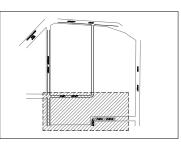


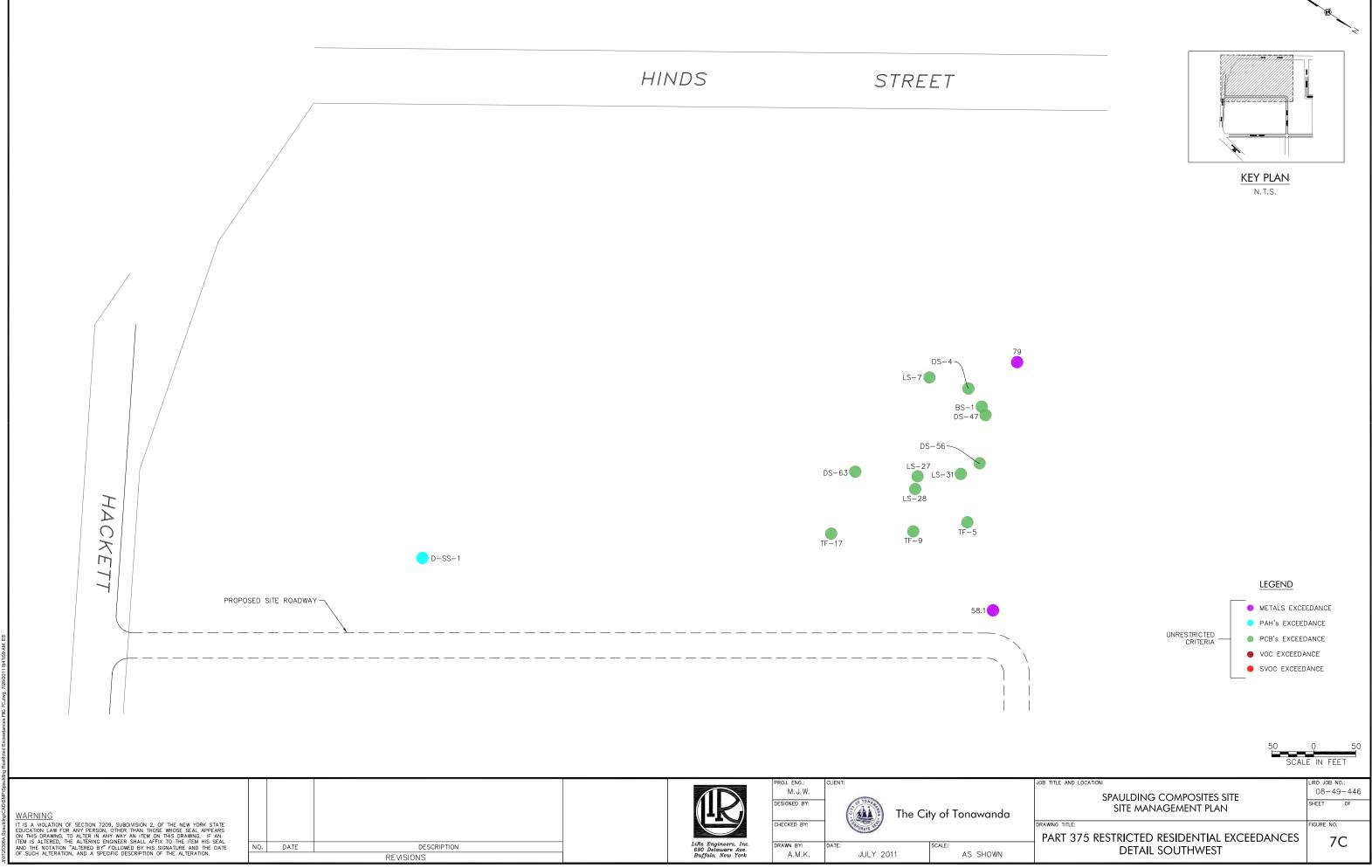


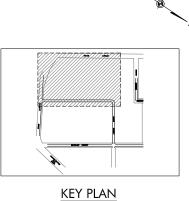


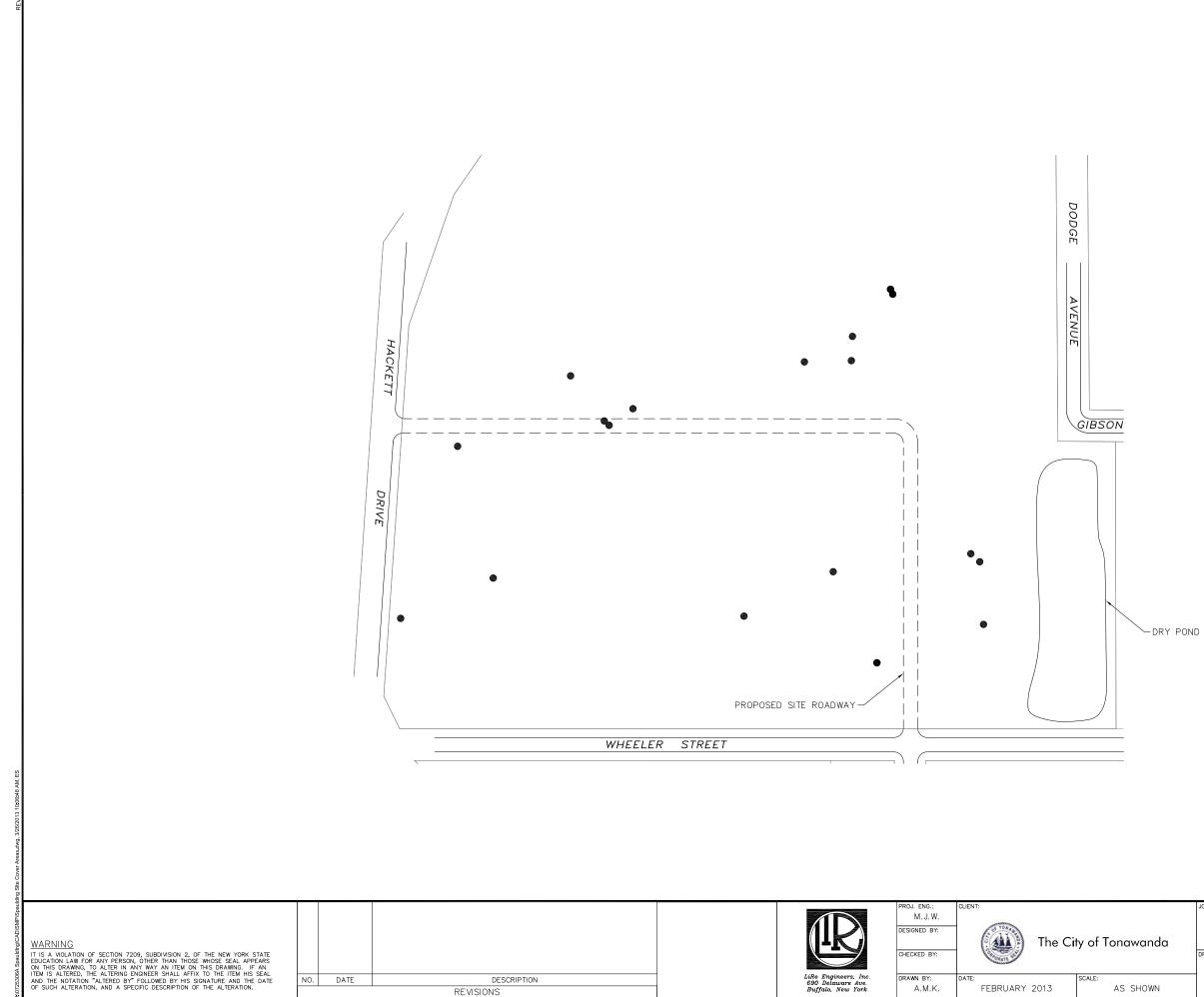












● SOIL WITHIN TWO FEET OF PE-COV SURFACE EXCEEDS RESTRICTED RESI CLEANUP OBJECTIVES (SCOS). A SIT REQUIRED TO BE MAINTAINED IN THE	DENTIAL SOIL E COVER IS
100 SCAL	0 100 E IN FEET
JOB TITLE AND LOCATION: SPAULDING COMPOSITES SITE SITE MANAGEMENT PLAN	LIRO JOB NO.: 08-49-446 SHEET OF
DRAWING TITLE: SITE COVER AREAS	FIGURE NO. 7D

#### LEGEND

Ø

# APPENDIX A EXCAVATION WORK PLAN

# APPENDIX A – EXCAVATION WORK PLAN

# A-1 NOTIFICATION

At least 15 days prior to the start of any activity that is anticipated to encounter remaining contamination, the Site owner or their representative will notify the Department. Currently, this notification will be made to:

Greg Sutton Regional Hazardous Waste Remediation Engineer 270 Michigan Avenue Buffalo, New York 14203 (716) 851-7220

This notification will include:

- A detailed description of the work to be performed, including the location and areal extent, plans for Site re-grading, intrusive elements or utilities to be installed below the soil cover, and estimated volumes of contaminated soil to be excavated and any work that may impact an engineering control,
- A summary of environmental conditions anticipated in the work areas, including the nature and concentration levels of contaminants of concern, potential presence of grossly contaminated media, and plans for any pre-construction sampling;
- A schedule for the work, detailing the start and completion of all intrusive work,
- A summary of the applicable components of this EWP,
- A statement that the work will be performed in compliance with this EWP and 29 CFR 1910.120,
- A copy of the contractor's health and safety plan, in electronic format, if it differs from the HASP provided in Appendix D of this document,
- Identification of disposal facilities for potential waste streams,
- Identification of sources of any anticipated backfill, along with all required chemical testing results.

# A-2 SOIL SCREENING METHODS

Visual, olfactory and instrument-based soil screening will be performed by a qualified environmental professional during development excavations into known or potentially contaminated material (remaining contamination). Soil screening will be performed regardless of when the invasive work is done and will include all excavation and invasive work performed during development, such as excavations for foundations and utility work, after issuance of the COC.

Soils will be segregated based on previous environmental data and screening results into material that requires off-site disposal, material that requires testing, material that can be returned to the subsurface, and material that can be used as cover soil.

## A-3 STOCKPILE METHODS

Soil stockpiles will be continuously encircled with a berm and/or silt fence. 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 NYSDEC.

## A-4 MATERIALS EXCAVATION AND LOAD OUT

A qualified environmental professional or person under their supervision will oversee all invasive work and the excavation and load-out of all excavated material.

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

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

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

A truck wash will be operated on-Site. The qualified environmental professional will be responsible for ensuring that all outbound trucks carrying excavated materials will be washed at the truck wash 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.

The qualified environmental professional 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.

# A-5 CONTAMINATED MATERIALS TRANSPORT OFF-SITE

All transport of contaminated 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. Loosefitting canvas-type truck covers will be prohibited. If loads contain wet material capable of producing free liquid, truck liners will be used.

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

All trucks loaded with Site materials will exit the vicinity of the Site using only approved truck routes. Approved truck routes will take 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; (f) overall safety in transport; and [(g) community input, as appropriate.

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

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

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

## A-6 MATERIALS DISPOSAL OFF-SITE

All soil/fill/solid waste excavated and removed from the Site will be treated as contaminated and 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 this 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 soils 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. 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 contaminated soils taken off-site will be handled, at minimum, as a Municipal Solid Waste per 6NYCRR 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 (6NYCRR Part 360-16 Registration Facility).

# A-7 MATERIALS REUSE ON-SITE

Chemical criteria for on-site reuse of material have been approved by NYSDEC. Any materials proposed for re-use on-site shall meet the criteria contained in 6 NYCRR Part 375 for Restricted Residential

use. The qualified environmental professional will ensure that procedures defined for materials reuse in this SMP are followed and that unacceptable material does not remain on-site.

Organic matter (wood, roots, stumps, etc.) or other solid waste derived from clearing and grubbing of the Site will not be reused on-Site.

## A-8 FLUIDS MANAGEMENT

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

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 SPDES permit.

## A-9 COVER SYSTEM RESTORATION

After the completion of soil removal and any other invasive activities the cover system will be restored in a manner that complies with the OU6 Record of Decision.

## A-10 BACKFILL FROM OFF-SITE SOURCES

All materials proposed for import onto the Site will be approved by the qualified environmental professional and will be in compliance with provisions in this SMP 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.

All imported soils will meet the backfill and cover soil quality standards established in 6NYCRR 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 6 NYCRR Part 375 for Restricted Residential use. 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.

# A-11 STORMWATER POLLUTION PREVENTION

A formal project specific Stormwater Pollution Prevention Plan (SWPPP) will be developed for construction projects 1 acre or more in size that conforms to the requirements of NYSDEC Division of Water guidelines and NYSDEC regulations. However, for projects less than 1 acre in size, the following general erosion and sediment control practices shall be used:

Silt fencing or hay bales will be installed around the entire perimeter of the construction area, 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 as soon as practical.

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

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

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

Erosion and sediment control measures identified in the 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

## A-12 CONTINGENCY PLAN

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

Sampling will be performed on product, sediment and surrounding soils, etc. as necessary to determine the nature of the material and proper disposal method. Chemical analysis will be performed for 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 Review Reports prepared pursuant to Section 5 of the SMP.

# A-13 COMMUNITY AIR MONITORING PLAN

For any work requiring notification under this SMP, a figure showing the location of air sampling stations shall be developed based on generally prevailing wind conditions. The locations will be adjusted on a daily or more frequent basis based on actual wind directions to provide an upwind and at least two downwind monitoring stations. For any such work adjacent to residential areas, a fixed monitoring location should be established between the work area and residences. Air monitoring will be conducted in compliance with the Community Air Monitoring Plan (CAMP) outlined below.

#### A-13.1 <u>Vapor Monitoring</u>

#### **VOC Monitoring**

Volatile organic compounds (VOCs) will be monitored at the downwind perimeter of the immediate work area (i.e., the exclusion zone) on a continuous basis. Upwind VOC concentrations will be measured at the start of each workday and periodically thereafter to establish background conditions particularly if wind direction changes. The VOC monitoring will be performed using a MiniRae2000 photoionization detector (PID) equipped with a 10.6 eV lamp (or equivalent). The equipment shall be capable of calculating 15-minute running average concentrations, which will be compared to the levels specified below.

- If the ambient air concentration of total organic vapors at the downwind perimeter of the work area or exclusion zone exceeds 5 parts per million (ppm) above background for the 15-minute average, work activities must be temporarily halted and monitoring continued. If the total organic vapor level readily decreases (per instantaneous readings) below 5 ppm over background, work activities can resume with continued monitoring.
- If total organic vapor levels at the downwind perimeter of the work area or exclusion zone persist at levels in excess of 5 ppm over background but less than 25 ppm, work activities must be halted, the source of vapors identified, corrective actions taken to abate emissions, and monitoring continued. After these steps, work activities can resume provided that the total organic vapor level 200 feet downwind of the exclusion zone or half the distance to the nearest potential receptor or residential/commercial structure, whichever is less -but in no case less than 20 feet, is below 5 ppm over background for the 15-minute average.
- ➢ If the organic vapor level is above 25 ppm at the perimeter of the work area, activities must be shutdown.

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

#### Dust Monitoring

Particulate concentrations will be monitored continuously at the upwind and downwind perimeters of the exclusion zone at temporary particulate monitoring stations. Three dust monitoring stations (one upwind and two downwind of the excavation area) will be established prior to the start of work each day based on the wind direction. In the event of a prevailing wind shift, the locations will be re-evaluated and any changes will be documented.

The particulate monitoring shall be performed using a TSI 8520 DustTrack particulate monitor or equivalent. The instrument shall provide real-time monitoring and will be configured to measure particulate matter less than 10 micrometers in size (PM-10). The instrument will be programmed to integrate readings over a period of 15 minutes for comparison to the airborne particulate action level. The equipment will be equipped with an audible alarm to indicate exceedance of the action levels which are described below.

- If the downwind PM-10 particulate level is 100 micrograms per cubic meter (mcg/m) greater than background (upwind perimeter) for the 15-minute period or if airborne dust is observed leaving the work area, then dust suppression techniques must be employed. Fugitive dust generation can be minimized if the majority of work is conducted in moist soil. The source of the dust will be identified and dust suppression techniques such as misting surfaces with water or covering (i.e., for onsite stockpiles) will be implemented to reduce the generation of fugitive dust. Work may continue with dust suppression techniques provided that downwind PM-10 particulate levels do not exceed 150 mcg/m3 above the upwind level and provided that no visible dust is migrating from the work area.
- If, after implementation of dust suppression techniques, downwind PM-10 particulate levels are greater than 150 mcg/m3 above the upwind level, work must be stopped and a re-evaluation of activities initiated. Work can resume provided that dust suppression measures and other controls are successful in reducing the downwind PM-10 particulate concentration to within 150 mcg/m3 of the upwind level and in preventing visible dust migration.

All readings will be recorded and be available for State (DEC and DOH) personnel to review. In addition, fugitive dust migration will be visually assessed during all work activities.

# A-14 ODOR CONTROL PLAN

This odor control plan is capable of controlling emissions of nuisance odors off-site and on-site, if there are residents or tenants on the property. If nuisance odors are identified 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's Remediation Engineer, 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. 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.

# A-15 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 though 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 of larger sites will be done in stages to limit the area of exposed, unvegetated soils vulnerable to dust production.
- 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.

# <u>APPENDIX B</u> METES AND BOUNDS

Proposed Description Spaulding Fibre 310 Wheeler Avenue City of Tonawanda, New York

ALL THAT TRACT OR PARCEL OF LAND situate in the City of Tonawanda, County of Erie, and State of New York, being part of Lot(s) 87 & 88, of the New York State Mile Reservation, being sub lots 65 thru 108, in Block 6, and sub lots 115 thru 137, in Block 5, of Map Cover 42, also sub lots 211 thru 328, sub lots 337 thru 344 & part of sub lot 329, 336, and 333 thru 336, and Eight thru Eleventh Avenues, of Map Cover 596 and that part of Gibson Avenue discontinued by Common Council Resolution dated 03/05/56, and being more particularly described as follows:

#### PARCEL A

BEGINNING at a point in the easterly line of Wheeler Street at the northwesterly corner of sub lot 137, in Block 5 of Map Cover 42, distant 132.00 feet southerly from the southerly line of James Street (66' wide); Thence southerly along the easterly line of Wheeler Street a distance of 868.44 feet to the northwesterly line of lands formerly conveyed to the Buffalo and Niagara Falls Railroad (now Conrail) (100' wide) also being a point in the southeasterly line of lands conveyed to Spaulding Fibre Co., as recorded under Liber 4917 of deeds at page 421. and the southerly corner of sub lot 115, in Block 5, of Map Cover 42; Thence northerly along the northwesterly line of said lands conveyed to Conrail a distance of 430.61 feet to a point in the easterly line of sub lot 121, in Block 5, Map Cover 42; Thence northwesterly along the northwest of 556.54 feet to the northeasterly corner of sub lot 137, in Block 5, Map Cover 42; Thence southwesterly along the northerly line of said sub lot 137 a distance of 297.25 feet to the point of beginning, containing .

#### PARCEL B

BEGINNING at a point in the westerly line of Wheeler Avenue, distant 38 feet north of its intersection with the southeasterly line of Lot 87 of the Mile Reservation Line, also being the northeast corner of lands conveyed to the City of Tonawanda as recorded under Liber 6182 of deeds at page 240,; Thence northerly along the westerly line of Wheeler Avenue a distance of 1493.38 feet to the northerly line of sub lot 66, in Block 6, Map Cover 42; Thence southwesterly along the northerly line of sub lot(s) 66 and 65, in Block 6, Map Cover 42 a distance of 599.00 feet to a point in the easterly line of Gibson Street (66' wide); Thence southeasterly along the easterly line of Gibson Street a distance of 120.00 feet, to its intersection with the southerly line of Dodge Avenue (formerly Seventh Ave.) (66' wide); Thence southwesterly along the southerly line of Dodge Avenue a distance of 668.19 feet to its intersection with the easterly line of Hinds Street (66' wide); Thence southeasterly along the easterly line of Hinds Street a distance of 1141.20 feet, to the northwesterly corner of lands conveyed to the City of Tonawanda as recorded under Liber 6355 of deeds at page 516; Thence southeasterly along the northeasterly line of said lands conveyed to the City of Tonawanda at an interior angle of 124°03′26″ a distance of 200.0 feet; Thence southeasterly along a line at an interior angle of 164°26'45" a distance of 288.05 feet to a point in the southeasterly line of Lot 88 of the Mile Reservation, also being a point in the northerly line of Hackett Drive (65' wide); Thence easterly along the southeasterly line of Lot 88 and Lot 87 of the Mile Reservation and the northerly line of Hackett Drive a distance of 775.80 feet to the southwest corner of said lands conveyed to the City of Tonawanda as recorded in the Erie County Clerk's Office under Liber 6182 of deeds at page 240; Thence northeasterly along the northwesterly line of said lands conveyed to the City of Tonawanda under Liber 6182 of deeds at page 240 a distance of 75.6 feet to the point of beginning.

Proposed Description Spaulding Fibre 310 Wheeler Avenue City of Tonawanda, New York

ALL THAT TRACT OR PARCEL OF LAND situate in the City of Tonawanda, County of Erie, and State of New York, being part of Lot 87, of the New York State Mile Reservation, being part Map Cover 42, and being more particularly described as follows:

#### PARCEL 1 (OU 1, 2 & 3)

COMMENCING at a point in the westerly line of Wheeler Avenue, distant 162.76 feet north of its intersection with the southeasterly line of Lot 87 of the Mile Reservation Line; Thence westerly along a line perpendicular to the aforementioned line a distance of 130.85 feet to the Point of Beginning; Thence southwesterly turning an angle to the right from the aforementioned line of 170°48'04" a distance of 125.3 feet more or less; Thence southwesterly along a line at an interior angle of 207°08'28" a distance of 64.3 feet more or less; Thence westerly along a line at an interior angle of 138°36'49" a distance of 86.1 feet more or less; Thence westerly along a line at an interior angle of 189°49'00" a distance of 127.6 feet more or less; Thence southwesterly along a line at an interior angle of 189°49'00" a distance or less to a point in the easterly line of Gibson Street (undeveloped) as shown on said Map Cover 42, and discontinued by Common Council Resolution on March 5, 1956; Thence northerly along the easterly line of Gibson Street at an interior angle of 76°53'30" a distance of 142.5 feet more or less; Thence northeasterly along a line at an interior angle of 92°45'47" a distance of 189.7 feet more or less; Thence northeasterly along a line at an interior angle of 185°08'18" a distance of 303.8 feet more or less; Thence southwesterly along a line at an interior angle of 185°08'18" a distance of 303.8 feet more or less; Thence southwesterly along a line at an interior angle of 109.2 feet more or less to the point of beginning, containing 59,722 square feet more or less. Proposed Description State Superfund Parcel Spaulding Fibre 310 Wheeler Avenue City of Tonawanda, New York

ALL THAT TRACT OR PARCEL OF LAND situate in the City of Tonawanda, County of Erie, and State of New York, being part of Lot 88, of the New York State Mile Reservation, being part of Map Cover 596, and being more particularly described as follows:

#### PARCEL 2 (OU 1, & 4)

COMMENCING at a point in the easterly line of Hinds Street, distant 151.20 feet north of its intersection with the northwest corner of lands conveyed to the City of Tonawanda by deed recorded in the Erie County Clerk's Office under Liber 6355 of deeds at page 516, also being the southerly line of Tenth Avenue (undeveloped), as shown on said Map Cover 596; Thence easterly along the southerly line of Tenth Avenue a distance of 332.16 feet to the Point of Beginning, said point being the intersection of the northerly line of Tenth Avenue with the easterly line of a 50 foot wide easement granted to Niagara Mohawk Power Corporation as recorded in the Erie County Clerk's Office under Liber 6166 of deeds at page 486; Thence northerly along the easterly line of said easement granted to the Niagara Mohawk Power Corporation a distance of 163.7 feet more or less; Thence easterly along a line perpendicular to the aforementioned line a distance of 83.3 feet more or less; Thence southerly along a line perpendicular to the aforementioned line being the northerly line of Tenth Avenue; Thence westerly along a line perpendicular to the aforementioned line being the northerly line of Tenth Avenue; Thence westerly along a line perpendicular to the aforementioned line being the northerly line of Tenth Avenue; Thence westerly along a line perpendicular to the aforementioned line being the northerly line of Tenth Avenue; Thence westerly along a line perpendicular to the aforementioned line being the northerly line of Tenth Avenue a distance of 83.3 feet more or less to the Point of Beginning, containing 13,636 square feet more or less.

Proposed Description State Superfund Parcel Spaulding Fibre 310 Wheeler Avenue City of Tonawanda, New York

ALL THAT TRACT OR PARCEL OF LAND situate in the City of Tonawanda, County of Erie, and State of New York, being part of Lot(s) 87 & 88, of the New York State Mile Reservation, being part of Map Cover 596, and being more particularly described as follows:

#### PARCEL 3 (OU 4)

COMMENCING at a point in the easterly line of Hinds Street, distant 151.20 feet north of its intersection with the northwest corner of lands conveyed to the City of Tonawanda by deed recorded in the Erie County Clerk's Office under Liber 6355 of deeds at page 516 also being the southerly line of Tenth Avenue (undeveloped), as shown on said Map Cover 596; Thence easterly along the southerly line of Tenth Avenue a distance of 578.77 feet to the Point of Beginning, said point being the intersection of the southerly line of Tenth Avenue with the easterly line of an existing blacktop driveway; Thence northerly along the easterly line of said blacktop driveway being a curved line to the left having a radius of 149.7 feet more or less said curve's chord having an angle to the right from the aforementioned line of 64°54'01", a distance along the curve of 120.8 feet more or less to a point of reverse curvature; Thence northerly continuing along the easterly line of said blacktop driveway having a radius of 137.8 feet more or less, said curve's chord having an angle to the right from the previous curve's chord of 166°00'00" a distance along the curve of 72.9 feet more or less; Thence easterly along a line at an interior angle of 50°53'05" with the previous chord a distance of 28.8 feet more or less;; Thence northerly along a line perpendicular to the aforementioned line a distance of 1.8 feet more or less; Thence easterly along a line perpendicular to the aforementioned line a distance of 29.9 feet more or less; Thence southerly along a line perpendicular to the aforementioned line a distance of 22.0 feet more or less; Thence easterly along a line perpendicular to the aforementioned line a distance of 29.0 feet more or less; Thence northerly along a line perpendicular to the aforementioned line a distance of 22.0 feet more or less; Thence easterly along a line perpendicular to the aforementioned line a distance of 88.6 feet more

or less; Thence southerly along a line perpendicular to the aforementioned line a distance of 4.5 feet more or less; Thence easterly along a line perpendicular to the aforementioned line a distance of 13.5 feet more or less; Thence southerly along a line perpendicular to the aforementioned line a distance of 107.75 feet more or less; Thence easterly along a line perpendicular to the aforementioned line a distance of 22.5 feet more or less; Thence southerly along a line an interior angle of 91°19'24" a distance of 49.1 feet more or less; Thence westerly along a line perpendicular to the aforementioned line a distance of less; Thence westerly along a line perpendicular to the aforementioned line a distance or less; Thence westerly along a line perpendicular to the aforementioned line a distance or less; Thence westerly along a line perpendicular to the aforementioned line a distance or less; Thence westerly along a line perpendicular to the aforementioned line a distance or less; Thence westerly along a line perpendicular to the aforementioned line a distance or less; Thence westerly along a line perpendicular to the aforementioned line a distance or less; Thence westerly along a line perpendicular to the aforementioned line a distance of 118.1 feet more or less to the point of beginning, containing 21,953 square feet more or less.

Proposed Description State Superfund Parcel Spaulding Fibre 310 Wheeler Avenue City of Tonawanda, New York

ALL THAT TRACT OR PARCEL OF LAND situate in the City of Tonawanda, County of Erie, and State of New York, being part of Lot 88, of the New York State Mile Reservation, being part of Map Cover 596, and being more particularly described as follows:

### PARCEL 4 (OU 4)

COMMENCING at a point in the easterly line of Hinds Street, being distant 281.73 feet south of its intersection with the southerly line of Dodge Avenue; Thence easterly along a line perpendicular to the aforementioned line a distance of 320.78 feet to the Point of Beginning; Thence easterly at an angle to the right of 179°04'53" with the aforementioned line a distance of 27.0 feet more or less; Thence northerly along a line perpendicular to the aforementioned line a distance of 24.05 feet more or less; Thence easterly along a line perpendicular to the aforementioned line a distance of 103.7 feet more or less; Thence southerly along a line perpendicular to the aforementioned line a distance of 16.7 feet more or less; Thence easterly along a line perpendicular to the aforementioned line a distance of 19.2 feet more or less; Thence southerly along a line perpendicular to the aforementioned line a distance of 17.4 feet more or less; Thence easterly along a line perpendicular to the aforementioned line a distance of 21.1 feet more or less; Thence northerly along a line perpendicular to the aforementioned line a distance of 41.5 feet more or less; Thence easterly along a line perpendicular to the aforementioned line a distance of 8.0 feet more or less; Thence southerly along a line perpendicular to the aforementioned line a distance of 52.2 feet more or less; Thence easterly along a line perpendicular to the aforementioned line a distance of 40.4 feet more or less; Thence southerly along a line perpendicular to the aforementioned line a distance of 40.45 feet more of less; Thence easterly along a line perpendicular to the aforementioned line a distance of 64.6 feet more or less; Thence southerly along a line perpendicular to the aforementioned line a distance of 305.8 feet more or less;

Thence westerly along a line perpendicular to the aforementioned line a distance of 101.0 feet more or less; Thence northerly along a line perpendicular to the aforementioned line a distance of 203.0 feet more or less; Thence westerly along a line perpendicular to the aforementioned line a distance of 183.0 feet more or less; Thence northerly along a line perpendicular to the aforementioned line a distance of 164.0 feet more or less to the Point of Beginning, containing 64,975 square feet more or less.

Proposed Description State Superfund Parcel Spaulding Fibre 310 Wheeler Avenue City of Tonawanda, New York

ALL THAT TRACT OR PARCEL OF LAND situate in the City of Tonawanda, County of Erie, and State of New York, being part of Lot 87, of the New York State Mile Reservation, being part of Map Cover 596, and being more particularly described as follows:

### PARCEL 5 (OU 4)

BEGINNING at the intersection of the southerly line of Dodge Avenue with the easterly line of Gibson Street; Thence northerly along the easterly line of Gibson Street a distance of 120.0 feet to the northerly line of lands now or formerly conveyed to Spaulding Fibre Co., as recorded in the Erie County Clerk's Office under Liber 5860 of deeds at page 635; Thence easterly along the northerly line of said lands conveyed to Spaulding Fibre Co., at an interior angle of 90°31'16" a distance of 226.7 feet more or less; Thence southerly along a line perpendicular to the aforementioned line a distance of 150.9 feet more or less; Thence easterly along a line perpendicular to the aforementioned line a distance of 53.7 feet more or less; Thence northerly along a line perpendicular to the aforementioned line a distance of 18.0 feet more or less; Thence easterly along a line perpendicular to the aforementioned line a distance of 171.8 feet more or less; Thence southerly along a line perpendicular to the aforementioned line a distance of 417.6 feet more or less; Thence westerly along a line perpendicular to the aforementioned line a distance of 18.2 feet more or less; Thence northerly along a line perpendicular to the aforementioned line a distance of 264.1 feet more or less; Thence westerly along a line perpendicular to the aforementioned line a distance of 190.1 feet more or less; Thence southerly along a line perpendicular to the aforementioned line a distance of 77.0 feet more or less; Thence westerly along a line perpendicular to the aforementioned line a distance of 103.3 feet more or less; Thence northerly along a line perpendicular to the aforementioned line a distance of 33.0 feet more or less. Thence easterly along a line perpendicular to the aforementioned line a distance of 85.5 feet more or less; Thence northerly along a line perpendicular to the aforementioned line a distance of 74.0 feet more or less;

Thence westerly along a line perpendicular to the aforementioned line a distance of 35.5 feet more or less; Thence southerly along a line perpendicular to the aforementioned line a distance of 37.0 feet more or less; Thence westerly along a line perpendicular to the aforementioned line a distance of 77.0 feet more or less; Thence northerly along a line perpendicular to the aforementioned line a distance of 81.8 feet more or less; Thence westerly along a line perpendicular to the aforementioned line a distance of 81.8 feet more or less; Thence westerly along a line perpendicular to the aforementioned line a distance of 58.9 feet more or less; Thence northerly along a line perpendicular to the aforementioned line a distance of 24.5 feet more or less; Thence westerly along a line perpendicular to the aforementioned line a distance of 64.0 feet more or less; Thence northerly along a line perpendicular to the aforementioned line a distance of 10.8 feet more or less; Thence westerly along a line perpendicular to the aforementioned line a distance of 16.9 feet more or less; Thence northerly along a line perpendicular to the aforementioned line a distance of 16.9 feet more or less; Thence northerly along a line perpendicular to the aforementioned line a distance of 16.9 feet more or less; Thence northerly along a line perpendicular to the aforementioned line a distance of 16.9 feet more or less; Thence northerly along a line perpendicular to the aforementioned line a distance of 10.8 feet more or less; Thence northerly along a line perpendicular to the aforementioned line a distance of 16.9 feet more or less; Thence northerly along a line perpendicular to the aforementioned line a distance of 20.0 feet more or less; Thence northerly along a line perpendicular to the aforementioned line a distance of 40.3 feet more or less to a point in the southerly line of Dodge Avenue; Thence easterly along the southerly line of Dodge Avenue a distance of 45.1 feet more or less to the point of beginning, containing 99,632 square feet

Proposed Description State Superfund Parcel Spaulding Fibre 310 Wheeler Avenue City of Tonawanda, New York

ALL THAT TRACT OR PARCEL OF LAND situate in the City of Tonawanda, County of Erie, and State of New York, being part of Lot 87, of the New York State Mile Reservation, being part of Map Cover 596, and being more particularly described as follows:

# PARCEL 6 (OU 4)

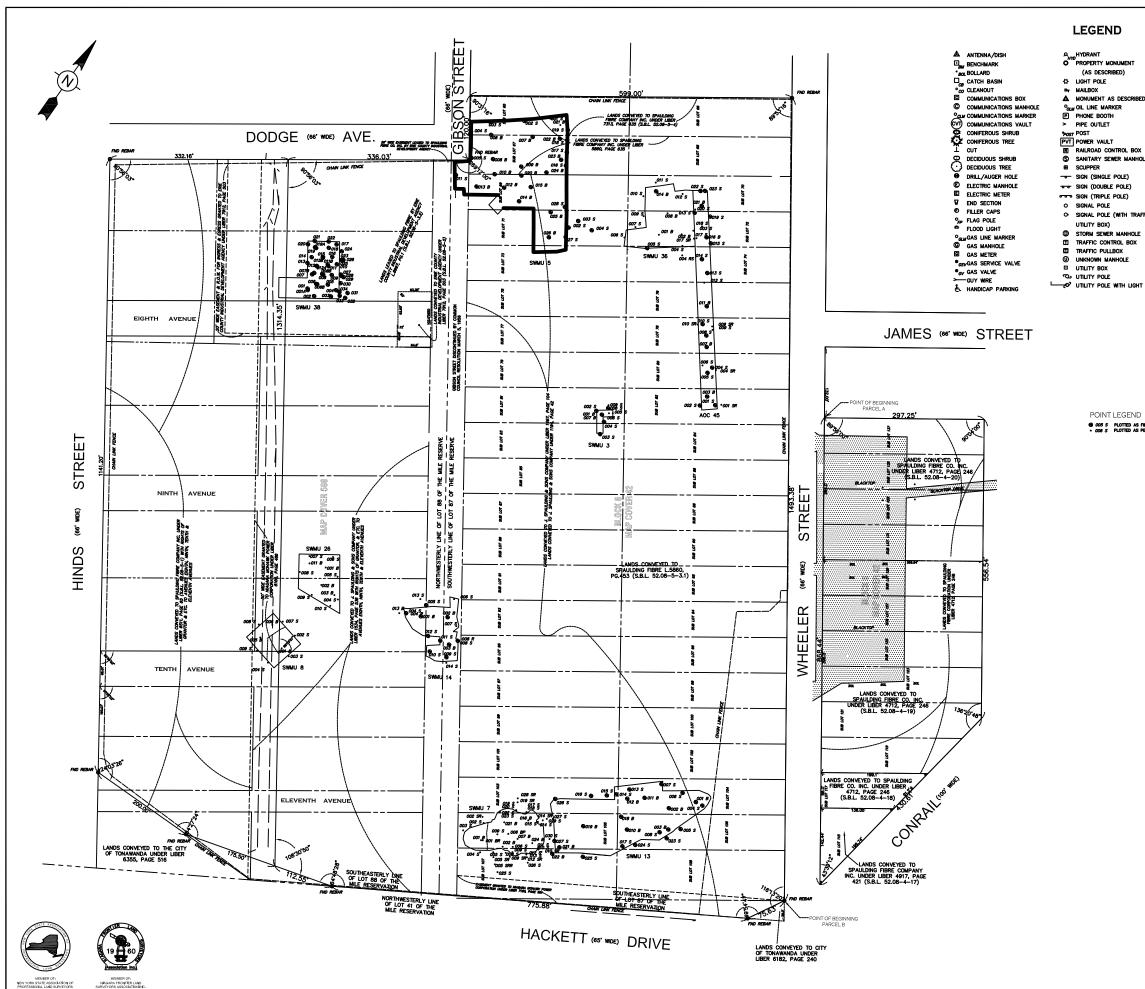
COMMENCING at a point in the westerly line of Wheeler Street distant 551.38 feet southerly from its intersection with the northerly line of lands now or formerly conveyed to Spaulding Fibre Co., as recorded in the Erie County Clerk's Office under Liber 5860 of deeds at page 635; Thence westerly along a line perpendicular to the aforementioned line a distance of 308.16 feet to the Point of Beginning; Thence southerly along a line perpendicular to the aforementioned line a distance of 88.1 feet more or less; Thence westerly along a line perpendicular to the aforementioned line a distance of 38.1 feet more or less; Thence southerly along a line perpendicular to the aforementioned line a distance of 38.1 feet more or less; Thence southerly along a line perpendicular to the aforementioned line a distance or less; Thence southerly along a line perpendicular to the aforementioned line a distance or less; Thence westerly along a line perpendicular to the aforement or less; Thence westerly along a line perpendicular to the aforement or less; Thence westerly along a line perpendicular to the aforement or less; Thence westerly along a line perpendicular to the aforement or less; Thence westerly along a line perpendicular to the aforement or less; Thence westerly along a line perpendicular to the aforement or less; Thence westerly along a line perpendicular to the aforement or less; Thence westerly along a line perpendicular to the aforementioned line a distance of 15.0 feet more or less; Thence northerly along a line perpendicular to the aforementioned line a distance of 40.1 feet more or less; Thence easterly along a line perpendicular to the aforementioned line a distance of 63.5 feet more or less to the point of beginning, containing 5,249 square feet more or less.

Proposed Description State Superfund Parcel Spaulding Fibre 310 Wheeler Avenue City of Tonawanda, New York

ALL THAT TRACT OR PARCEL OF LAND situate in the City of Tonawanda, County of Erie, and State of New York, being part of Lot 87, of the New York State Mile Reservation, being part of Map Cover 596, and being more particularly described as follows:

# PARCEL 7 (OU 4)

COMMENCING at the intersection of the southerly line of Dodge Avenue with the easterly line of Gibson Street; Thence westerly along the northerly line of Dodge Avenue also being the northerly line of lands now or formerly conveyed to Spaulding Fibre Co., as recorded in the Erie County Clerk's Office under Liber 5860 of deeds at page 635; a distance of 206.39 feet; Thence southerly from the northerly line of said lands conveyed to Spaulding Fibre Co., at an interior angle of 90° a distance of 40.26 feet to the Point of Beginning; Thence continuing southerly along the aforementioned line a distance of 222.65 feet more or less; Thence westerly along a line perpendicular to the aforementioned line a distance of 132.4 feet more or less; Thence northerly along a line perpendicular to the aforementioned line a distance of ress; Thence easterly along a line perpendicular to the aforementioned line a distance of 130.4 feet more or less; Thence easterly along a line perpendicular to the aforement or less; Thence easterly along a line perpendicular to the aforementioned line a distance of 51.05 feet more or less; Thence easterly along a line perpendicular to the aforementioned line a distance of 59.7 feet more or less; Thence easterly along a line perpendicular to the aforementioned line a distance of 130.15 feet more or less; Thence easterly along a line perpendicular to the aforementioned line a distance of 130.15 feet more or less; Thence easterly along a line perpendicular to the aforementioned line a distance of 130.15 feet more or less; Thence easterly along a line perpendicular to the aforementioned line a distance of 54.7 feet more or less to the point of beginning, containing 18,442 square feet more or less.



BED	• • •	WATER MANHOLE WATER METER WATER SERVICE VALVE WATER VALVE WELL YARD DRAIN		
		Berm Centerline of Road Centerline of Ditch Fence (Chainlink)	lılılı 	
X IOLE		FENCE (WOOD) GAS MAIN		
		Guide Rail (Box Beam) Guide Rail (W Beam) Overhead Wires Lot Line Parcel Line		
AFFIC		RIGHT OF WAY LINE SANITARY SEWER LINE		
E		STORM SEWER LINE TREE LINE UNDERGROUND CONDUIT UNDERGROUND ELECTRIC WATER MAIN		

005 S PLOTTED AS FIELD MEASURED
 008 S PLOTTED AS PER FIELD NOTES

CITY OF TONAWANDA     CITY OF TONAWANDA       COUNTY OF ERIE, STATE OF NEW YORK     Provine III       PART OF LOT(S) 87 & 88, TOWNSHIP 12, RANGE 8     37 CENTRAL AVE.       DAWN FOR LOT(S) 87 & 88, TOWNSHIP 12, RANGE 8     37 CENTRAL AVE.       DAWN YORK STATE MILE RESERVE     37 CENTRAL AVE.       310 WHEELER STREET     PH 716-683-016       SWMU SITE MAP     WW.WISCHUT.COM	DRAWING REVISIONS TEM DATE DESCRIPTION 1 01/24/2011 ADDED POINT LEGEND				
RK 37 CENTRAL AVE 37 CENTRAL AVE PH. 716-683-561 FAX 716-683-50169 WWW.WMSCHUTT.COM	83	CHECKED BY: GCW			WARNING: MARNING: ALENDENTIS DOCUMENT SIN VIOLATION OF THE LAWE EXCEPTING ANS PROVIDED IN SECTION 7029. PART OF THE NEW VORK STATE EDUCATION LAW. M. SOCUTT & ASSOCIATES P.C.
¥					ONLY COPIES FROM THE ORIGINAL OF THIS STIVET WAR MARKED WITH AN ORIGINAL OF THE LAND SURVERS SHALL BE EMBOSED SEAL AND SURVERS SHALL BE CONSIDERED TO BE WALD THUE COPIES
CITY OF TONAWANDA COUNTY OF ERIE, STATE OF NEW YORK PART OF LOT(S) 87 & 88, TOWNSHIP 12, RANGE 8 NEW YORK STATE MILE RESERVE 310 WHEELER STREET SWMU SITE MAP	WM SCHUTT	A S S O C NATE S	37 CENTRAL AVE.	LANCASTER, NY 14086-2143	PH. 716-683-5961 FAX 716-683-0169 WWW WMSCHUTT COM
	CITY OF TONAWANDA COUNTY OF ERIE. STATE OF NEW YORK	PART OF LOT(S) 87 & 88, TOWNSHIP 12, RANGE 8	NEW YORK STATE MILE RESERVE		310 WHEELER STREET SWMU SITE MAP

THIS SURVEY WAS PREPARED WITHOUT THE BENEFIT
OF AN UP-TO-DATE ABSTRACT OF TITLE AND IS SUBJECT
TO ANY STATE OF FACTS THAT MAY BE REVEALED BY AN
EXAMINATION OF SUCH.

SCALE: 1"=80' GRAPHIC SCALE IN FEET

# APPENDIX C

# **ENVIRONMENTAL EASEMENT**

# ENVIRONMENTAL EASEMENT GRANTED PURSUANT TO ARTICLE 71, TITLE 36 OF THE NEW YORK STATE ENVIRONMENTAL CONSERVATION LAW

THIS INDENTURE made this <u>14th</u> day of <u>Accust</u>, 2012, between Owner(s) THE CITY OF TONAWANDA, having an office at 200 Niagara Street, Tonawanda, New York 14150, County of Erie, State of New York (the "Grantor"), and The People of the State of New York (the "Grantee."), acting through their Commissioner of the Department of Environmental Conservation (the "Commissioner", or "NYSDEC" or "Department" as the context requires) with its headquarters located at 625 Broadway, Albany, New York 12233.

WHEREAS, the Legislature of the State of New York has declared that it is in the public interest to encourage the remediation of abandoned and likely contaminated properties ("sites") that threaten the health and vitality of the communities they burden while at the same time ensuring the protection of public health and the environment; and

WHEREAS, the Legislature of the State of New York has declared that it is in the public interest to establish within the Department a statutory environmental remediation program that includes the use of Environmental Easements as an enforceable means of ensuring the performance of operation, maintenance, and/or monitoring requirements and the restriction of future uses of the land, when an environmental remediation project leaves residual contamination at levels that have been determined to be safe for a specific use, but not all uses, or which includes engineered structures that must be maintained or protected against damage to perform properly and be effective, or which requires groundwater use or soil management restrictions; and

WHEREAS, the Legislature of the State of New York has declared that Environmental Easement shall mean an interest in real property, created under and subject to the provisions of Article 71, Title 36 of the New York State Environmental Conservation Law ("ECL") which contains a use restriction and/or a prohibition on the use of land in a manner inconsistent with engineering controls which are intended to ensure the long term effectiveness of a site remedial program or eliminate potential exposure pathways to hazardous waste or petroleum; and

WHEREAS, Grantor, is the owner of real property located at the address of Hinds Street, 310 Wheeler Street and 332 Wheeler Street in the City of Tonawanda, County of Erie and State of New York, known and designated on the tax map of the County Clerk of Erie as tax map parcel numbers: Section: 52.08 Block: 5 Lot 1 [Hinds Street]; Section: 52.08 Block: 5 Lot(s) 2, 3.1, 3.2 [310 Wheeler Street] and Section 52.08 Block: 5 Lot: 4 [332 Wheeler Street], being the same as that property conveyed to Grantor by Treasurer's deed dated October 6, 2009 recorded on October 7, 2009 in the Erie County Clerk's Office in Liber 11170 of deeds at page 8163 and Treasurer's deed dated February 18, 2011 recorded on February 23, 2011 in the Erie County Clerk's Office in Liber 11199 of Deeds at page 681. The property subject to this Environmental Easement (the "Controlled Property") comprises approximately 31.294 +/- acres, and is hereinafter more fully described in the Land Title Survey dated December 28, 2010 revised on January 30, 2012 and Survey dated June 23, 2011 revised on March 15, 2012 prepared by Wm. Schutt Associates , which will be attached to the Site Management Plan. The Controlled Property description is set forth in and attached hereto as Schedule A; and



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Environmental Easement Page 1

ERIE COUNTY CLERK'S OFFICE WHEREAS, the Department accepts this Environmental Easement in order to ensure the protection of public health and the environment and to achieve the requirements for remediation established for the Controlled Property until such time as this Environmental Easement is extinguished pursuant to ECL Article 71, Title 36; and

**NOW THEREFORE**, in consideration of the mutual covenants contained herein and the terms and conditions of State Assistance Contract Number: C 303379, Grantor conveys to Grantee a permanent Environmental Easement pursuant to ECL Article 71, Title 36 in, on, over, under, and upon the Controlled Property as more fully described herein ("Environmental Easement")

1. <u>Purposes</u>. Grantor and Grantee acknowledge that the Purposes of this Environmental Easement are: to convey to Grantee real property rights and interests that will run with the land in perpetuity in order to provide an effective and enforceable means of encouraging the reuse and redevelopment of this Controlled Property at a level that has been determined to be safe for a specific use while ensuring the performance of operation, maintenance, and/or monitoring requirements; and to ensure the restriction of future uses of the land that are inconsistent with the above-stated purpose.

2. <u>Institutional and Engineering Controls</u>. The controls and requirements listed in the Department approved Site Management Plan ("SMP") including any and all Department approved amendments to the SMP are incorporated into and made part of this Environmental Easement. These controls and requirements apply to the use of the Controlled Property, run with the land, are binding on the Grantor and the Grantor's successors and assigns, and are enforceable in law or equity against any owner of the Controlled Property, any lessees and any person using the Controlled Property.

A. (1) The Controlled Property may be used for:

# Restricted Residential as described in 6 NYCRR Part 375-1.8(g)(2)(ii), Commercial as described in 6 NYCRR Part 375-1.8(g)(2)(iii) and Industrial as described in 6 NYCRR Part 375-1.8(g)(2)(iv)

(2) All Engineering Controls must be operated and maintained as specified in the Site Management Plan (SMP);

(3) All Engineering Controls must be inspected at a frequency and in a manner defined in the SMP.

(4) Groundwater and other environmental or public health monitoring must be performed as defined in the SMP;

(5) Data and information pertinent to Site Management of the Controlled Property must be reported at the frequency and in a manner defined in the SMP;

(6) All future activities on the property that will disturb remaining contaminated material must be conducted in accordance with the SMP;

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(7) Monitoring to assess the performance and effectiveness of the remedy must be performed as defined in the SMP.

(8) Operation, maintenance, monitoring, inspection, and reporting of any mechanical or physical components of the remedy shall be performed as defined in the SMP.

(9) Access to the site must be provided to agents, employees or other representatives of the State of New York with reasonable prior notice to the property owner to assure compliance with the restrictions identified by this Environmental Easement.

B. The Controlled Property shall not be used for Residential purposes as defined in  $6NYCRR\ 375-1.8(g)(2)(i)$ , and the above-stated engineering controls may not be discontinued without an amendment or extinguishment of this Environmental Easement.

C. The SMP describes obligations that the Grantor assumes on behalf of Grantor, its successors and assigns. The Grantor's assumption of the obligations contained in the SMP which may include sampling, monitoring, and/or operating a treatment system, and providing certified reports to the NYSDEC, is and remains a fundamental element of the Department's determination that the Controlled Property is safe for a specific use, but not all uses. The SMP may be modified in accordance with the Department's statutory and regulatory authority. The Grantor and all successors and assigns, assume the burden of complying with the SMP and obtaining an up-to-date version of the SMP from:

Site Control Section Division of Environmental Remediation NYSDEC 625 Broadway Albany, New York 12233 Phone: (518) 402-9553

D. Grantor must provide all persons who acquire any interest in the Controlled Property a true and complete copy of the SMP that the Department approves for the Controlled Property and all Department-approved amendments to that SMP.

E. Grantor covenants and agrees that until such time as the Environmental Easement is extinguished in accordance with the requirements of ECL Article 71, Title 36 of the ECL, the property deed and all subsequent instruments of conveyance relating to the Controlled Property shall state in at least fifteen-point bold-faced type:

# This property is subject to an Environmental Easement held by the New York State Department of Environmental Conservation pursuant to Title 36 of Article 71 of the Environmental Conservation Law.

F. Grantor covenants and agrees that this Environmental Easement shall be incorporated in full or by reference in any leases, licenses, or other instruments granting a right to use the Controlled Property.

G. Grantor covenants and agrees that it shall annually, or such time as NYSDEC may allow, submit to NYSDEC a written statement by an expert the NYSDEC may find acceptable certifying under penalty of perjury, in such form and manner as the Department may require, that:

(1) the inspection of the site to confirm the effectiveness of the institutional and engineering controls required by the remedial program was performed under the direction of the individual set forth at 6 NYCRR Part 375-1.8(h)(3).

- (2) the institutional controls and/or engineering controls employed at such site:
  - (i) are in-place;

(ii) are unchanged from the previous certification, or that any identified changes to the controls employed were approved by the NYSDEC and that all controls are in the Department-approved format; and

(iii) that nothing has occurred that would impair the ability of such control to protect the public health and environment;

(3) the owner will continue to allow access to such real property to evaluate the continued maintenance of such controls;

(4) nothing has occurred that would constitute a violation or failure to comply with any site management plan for such controls;

(5 the report and all attachments were prepared under the direction of, and reviewed by, the party making the certification;

(6) to the best of his/her knowledge and belief, the work and conclusions described in this certification are in accordance with the requirements of the site remedial program, and generally accepted engineering practices; and

(7) the information presented is accurate and complete.

3. <u>Right to Enter and Inspect.</u> Grantee, its agents, employees, or other representatives of the State may enter and inspect the Controlled Property in a reasonable manner and at reasonable times to assure compliance with the above-stated restrictions.

4. <u>Reserved Grantor's Rights</u>. Grantor reserves for itself, its assigns, representatives, and successors in interest with respect to the Property, all rights as fee owner of the Property, including:

A. Use of the Controlled Property for all purposes not inconsistent with, or limited by the terms of this Environmental Easement;

B. The right to give, sell, assign, or otherwise transfer part or all of the underlying fee interest to the Controlled Property, subject and subordinate to this Environmental Easement;

5. <u>Enforcement</u>

A. This Environmental Easement is enforceable in law or equity in perpetuity by Grantor, Grantee, or any affected local government, as defined in ECL Section 71-3603, against the owner of the Property, any lessees, and any person using the land. Enforcement shall not be defeated because of any subsequent adverse possession, laches, estoppel, or waiver. It is not a defense in any action to enforce this Environmental Easement that: it is not appurtenant to an interest in real property; it is not of a character that has been recognized traditionally at common law; it imposes a negative burden; it imposes affirmative obligations upon the owner of any [6/11]

interest in the burdened property; the benefit does not touch or concern real property; there is no privity of estate or of contract; or it imposes an unreasonable restraint on alienation.

B. If any person violates this Environmental Easement, the Grantee may revoke the Certificate of Completion with respect to the Controlled Property.

C. Grantee shall notify Grantor of a breach or suspected breach of any of the terms of this Environmental Easement. Such notice shall set forth how Grantor can cure such breach or suspected breach and give Grantor a reasonable amount of time from the date of receipt of notice in which to cure. At the expiration of such period of time to cure, or any extensions granted by Grantee, the Grantee shall notify Grantor of any failure to adequately cure the breach or suspected breach, and Grantee may take any other appropriate action reasonably necessary to remedy any breach of this Environmental Easement, including the commencement of any proceedings in accordance with applicable law.

D. The failure of Grantee to enforce any of the terms contained herein shall not be deemed a waiver of any such term nor bar any enforcement rights.

6. <u>Notice</u>. Whenever notice to the Grantee (other than the annual certification) or approval from the Grantee is required, the Party providing such notice or seeking such approval shall identify the Controlled Property by referencing the following information:

County, NYSDEC Site Number, NYSDEC Brownfield Cleanup Agreement, State Assistance Contract or Order Number, and the County tax map number or the Liber and Page or computerized system identification number.

Parties shall address correspondence to:	Site Number: E915050/915050 Office of General Counsel NYSDEC 625 Broadway Albany New York 12233-5500
With a copy to:	Site Control Section Division of Environmental Remediation NYSDEC 625 Broadway Albany, NY 12233

All notices and correspondence shall be delivered by hand, by registered mail or by Certified mail and return receipt requested. The Parties may provide for other means of receiving and communicating notices and responses to requests for approval.

7. <u>Recordation</u>. Grantor shall record this instrument, within thirty (30) days of execution of this instrument by the Commissioner or her/his authorized representative in the office of the recording officer for the county or counties where the Property is situated in the manner prescribed by Article 9 of the Real Property Law.

8. <u>Amendment</u>. Any amendment to this Environmental Easement may only be executed by the Commissioner of the New York State Department of Environmental Conservation or the [6/11]

Environmental Easement Page 5

Commissioner's Designee, and filed with the office of the recording officer for the county or counties where the Property is situated in the manner prescribed by Article 9 of the Real Property Law.

9. <u>Extinguishment.</u> This Environmental Easement may be extinguished only by a release by the Commissioner of the New York State Department of Environmental Conservation, or the Commissioner's Designee, and filed with the office of the recording officer for the county or counties where the Property is situated in the manner prescribed by Article 9 of the Real Property Law.

10. <u>Joint Obligation</u>. If there are two or more parties identified as Grantor herein, the obligations imposed by this instrument upon them shall be joint and several.

IN WITNESS WHEREOF, Grantor has caused this instrument to be signed in its name.

**GRANTOR: THE CITY OF TONAWANDA** 

Print Name: <u>RONALD J. PILOZZI</u>

Title: <u>MAYOR</u>	Date:	May	11th,	2012
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### **Grantor's Acknowledgment**

STATE OF NEW YORK ) COUNTY OF EME

On the  $\underline{11}$  day of  $\underline{M}$ , in the year 20  $\underline{12}$ , before me, the undersigned, personally appeared  $\underline{R}$  and  $\underline{T}$ .  $\underline{R}$  personally known to me or proved to me on the basis of satisfactory evidence to be the individual(s) whose name is (are) subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their capacity(ies), and that by his/her/their signature(s) on the instrument, the individual(s), or the person upon behalf of which the individual(s) acted, executed the instrument.

Notary Public - State of New York

BONALD C. TRABUCCO, Esq. Notary Public State of New York Qualified in Erie County My Commission Expires Sept. 30, 20 13

THIS ENVIRONMENTAL EASEMENT IS HEREBY ACCEPTED BY THE PEOPLE OF THE STATE OF NEW YORK, Acting By and Through the Department of Environmental Conservation as Designee of the Commissioner.

By:

Røbert W. Schick, Director Division of Environmental Remediation

Grantee's Acknowledgment

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

On the  $14^{12}$  day of  $40^{12}$ , in the year  $20^{12}$ , before me, the undersigned, personally appeared <u>Robert W. Schick</u>, personally known to me or proved to me on the basis of satisfactory evidence to be the individual(s) whose name is (are) subscribed to the within instrument and acknowledged to me that he/she/ executed the same in his/her/ capacity as Designer of the Commissioner of the State of New York Department of Environmental Conservation, and that by his/her/ signature on the instrument, the individual, or the person upon behalf of which the individual acted, executed the instrument.

stary Public - State of New York

David J. Chiusano Notary Public, State of New York No. 01CH5032146 Qualified in Schenectady County Commission Expires August 22, 20

### SCHEDULE "A" PROPERTY DESCRIPTION

ENVIRONMENTAL EASEMENT DESCRIPTION SITE NOS. E915050/915050

BEGINNING AT A POINT IN THE WESTERLY LINE OF WHEELER STREET, DISTANT 38 FEET NORTH OF ITS INTERSECTION WITH THE SOUTHEASTERLY LINE OF LOT 87 OF THE MILE RESERVATION LINE, ALSO BEING THE NORTHEAST CORNER OF LANDS CONVEYED TO THE CITY OF TONAWANDA AS RECORDED UNDER LIBER 6182 OF DEEDS AT PAGE 240,; THENCE NORTHERLY ALONG THE WESTERLY LINE OF WHEELER STREET A DISTANCE OF 1493.38 FEET TO THE NORTHERLY LINE OF SUB LOT 66, IN BLOCK 6, MAP COVER 42; THENCE SOUTHWESTERLY ALONG THE NORTHERLY LINE OF SUB LOT(S) 66 AND 65, IN BLOCK 6, MAP COVER 42 A DISTANCE OF 599.00 FEET TO A POINT IN THE EASTERLY LINE OF GIBSON STREET (66' WIDE); THENCE SOUTHEASTERLY ALONG THE EASTERLY LINE OF GIBSON STREET A DISTANCE OF 120.00 FEET. TO ITS INTERSECTION WITH THE SOUTHERLY LINE OF DODGE AVENUE (FORMERLY SEVENTH AVE.) ( 66' WIDE); THENCE SOUTHWESTERLY ALONG THE SOUTHERLY LINE OF DODGE AVENUE A DISTANCE OF 331.40 FEET TO ITS INTERSECTION WITH THE EASTERLY LINE OF A 50' WIDE EASEMENT TO NIAGARA MOHAWK POWER CORPORATION, RECORDED UNDER LIBER 6166 OF DEEDS AT PAGE 480; THENCE SOUTHEASTERLY ALONG THE EAST LINE OF SAID 50' WIDE EASEMENT A DISTANCE OF 1344.24 FEET TO A POINT ON THE THE SOUTHEASTERLY LINE OF LOT 88 OF THE MILE RESERVATION, ALSO BEING A POINT IN THE NORTHERLY LINE OF HACKETT DRIVE (65' WIDE); THENCE EASTERLY ALONG THE SOUTHEASTERLY LINE OF LOT 88 AND LOT 87 OF THE MILE RESERVATION AND THE NORTHERLY LINE OF HACKETT DRIVE A DISTANCE OF 878.14 FEET TO THE SOUTHWEST CORNER OF SAID LANDS CONVEYED TO THE CITY OF TONAWANDA AS RECORDED IN THE ERIE COUNTY CLERK'S OFFICE UNDER LIBER 6182 OF DEEDS AT PAGE 240; THENCE NORTHEASTERLY ALONG THE NORTHWESTERLY LINE OF SAID LANDS CONVEYED TO THE CITY OF TONAWANDA UNDER LIBER 6182 OF DEEDS AT PAGE 240 A DISTANCE OF 75.63 FEET TO THE POINT OF BEGINNING, CONTAINING 31.294 ACRES MORE OR LESS.

### **RESIDENTIAL PARCEL "A" DESCRIPTION**

BEGINNING AT A POINT IN THE EASTERLY LINE OF WHEELER STREET AT THE NORTHWESTERLY CORNER OF SUB LOT 137, IN BLOCK 5 OF MAP COVER 42, DISTANT 132.00 FEET SOUTHERLY FROM THE SOUTHERLY LINE OF JAMES STREET (66' WIDE); THENCE SOUTHERLY ALONG THE EASTERLY LINE OF WHEELER STREET A DISTANCE OF 868.44 FEET TO THE NORTHWESTERLY LINE OF LANDS FORMERLY CONVEYED TO THE BUFFALO AND NIAGARA FALLS RAILROAD (NOW CONRAIL) (100' WIDE) ALSO BEING A POINT IN THE SOUTHEASTERLY LINE OF LANDS CONVEYED TO SPAULDING FIBRE CO., AS RECORDED UNDER LIBER 4917 OF DEEDS AT PAGE 421. AND THE SOUTHERLY CORNER OF SUB LOT 115, IN BLOCK 5, OF MAP COVER 42; THENCE NORTHERLY ALONG THE NORTHWESTERLY LINE OF SAID LANDS CONVEYED TO CONRAIL A DISTANCE OF 430.61 FEET TO A POINT IN THE EASTERLY LINE OF SUB LOT 121, IN BLOCK 5, MAP COVER 42; THENCE NORTHWESTERLY ALONG THE EASTERLY LINE OF SUB LOTS 121 THRU 137 IN BLOCK 5, MAP COVER 42 A DISTANCE OF 556.54 FEET TO THE NORTHEASTERLY CORNER OF SUB LOT 137, IN BLOCK 5, MAP COVER 42; THENCE SOUTHWESTERLY ALONG THE NORTHERLY LINE OF SUB LOT 137, N BLOCK 5, MAP COVER 42; THENCE SOUTHWESTERLY ALONG THE NORTHERLY LINE OF SAID SUB LOT 137 A DISTANCE OF 297.25 FEET TO THE POINT OF BEGINNING, CONTAINING 4.862 ACRES MORE OR LESS.

### **RESIDENTIAL PARCEL "B" DESCRIPTION**

ALL THAT TRACT OR PARCEL OF LAND SITUATE IN THE CITY OF TONAWANDA, COUNTY OF ERIE, AND STATE OF NEW YORK, BEING PART OF LOT 88, OF THE NEW YORK STATE MILE RESERVATION, BEING SUB LOTS 211 THRU 315, SUB LOTS 316 THRU 328, SUB LOTS 344 THRU 338 AND A PORTION OF SUB LOTS 329, 330, 333 THRU 337, OF MAP COVER 596 A PORTION OF EIGHT, NINTH TENTH AND ELEVENTH AVENUE (ALL UNDEVELOPED) AND BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT A POINT IN THE INTERSECTION OF THE SOUTHERLY LINE OF DODGE AVENUE (FORMERLY SEVENTH AVENUE) WITH THE EASTERLY LINE OF HINDS STREET; THENCE SOUTHERLY ALONG THE EASTERLY LINE OF HINDS STREET A DISTANCE OF 1141.20 FEET TO A POINT AT THE NORTHWEST CORNER OF LANDS CONVEYED TO THE CITY OF TONAWANDA AS RECORDED UNDER LIBER 6355 OF DEEDS AT PAGE 516; THENCE SOUTHEASTERLY ALONG THE NORTHEASTERLY LINE OF SAID LANDS CONVEYED TO THE CITY OF TONAWANDA AND THRU SUB LOTS 329, 330, 333 THRU 337 AT AN INTERIOR ANGLE OF 124°03'26" A DISTANCE OF 347.70 FEET TO A POINT IN THE SOUTHEASTERLY LINE OF LOT 88, ALSO BEING A POINT IN THE NORTHERLY LINE OF HACKETT DRIVE; THENCE EASTERLY ALONG THE SOUTHEASTERLY LINE OF LOT 88 AND THE NORTHERLY LINE OF HACKETT DRIVE A DISTANCE OF 48.77 FEET TO A POINT IN THE EASTERLY LINE OF A 50 FOOT WIDE EASEMENT GRANTED TO NIAGARA MOHAWK POWER CORPORATION AS RECORDED UNDER LIBER 6166 OF DEEDS AT PAGE 480; THENCE NORTHERLY ALONG THE EASTERLY LINE OF SAID EASEMENT GRANTED TO NIAGARA MOHAWK POWER CORPORATION A DISTANCE OF 1344.24 FEET TO A POINT IN THE SOUTHERLY LINE OF DODGE AVENUE: THENCE WESTERLY ALONG THE SOUTHERLY LINE OF DODGE AVENUE A DISTANCE OF 336.79 FEET TO THE POINT OF BEGINNING, CONTAINING 9.706 ACRES MORE OR LESS.

## PARCEL 1 (OU 1, 2 & 3) STATESUPERFUND SITE NO. 915050

COMMENCING at a point in the westerly line of Wheeler Avenue, distant 162.76 feet north of its intersection with the southeasterly line of Lot 87 of the Mile Reservation Line; Thence westerly along a line perpendicular to the aforementioned line a distance of 130.85 feet to the Point of Beginning; Thence southwesterly turning an angle to the right from the aforementioned line of 170°48'04" a distance of 125.3 feet more or less; Thence southwesterly along a line at an interior angle of 207°08'28" a distance of 64.3 feet more or less; Thence westerly along a line at an interior angle of 138°36'49" a distance of 86.1 feet more or less; Thence westerly along a line at an interior angle of 188°36'49" a distance of 86.1 feet more or less; Thence westerly along a line at an interior angle of 187°55'44" a distance of 92.4 feet more or less; Thence southwesterly along a line at an interior angle of 187°55'44" a distance of 92.4 feet more or less to a point in the easterly line of Gibson Street (undeveloped) as shown on said Map Cover 42, and discontinued by Common Council Resolution on March 5, 1956; Thence northerly along the easterly along a line at an interior angle of 142.5 feet more or less; Thence northeasterly along a line at an interior angle of 92°45'47" a distance of 303.8 feet more or less; Thence southwesterly along a line at an interior or less; Thence northeasterly along a line at an interior angle of 92°45'47" a distance of 303.8 feet more or less; Thence northeasterly along a line at an interior angle of 75°32'46" a distance of 303.8 feet more or less; Thence southwesterly along a line at an interior angle of 75°32'46" a distance of 109.2 feet more or less; Thence southwesterly along a line at an interior angle of 75°32'46" a distance of 109.2 feet more or less to the point of beginning, containing 59,722 square feet more or less.

## PARCEL 2 (OU 1, & 4) STATESUPERFUND SITE NO. 915050

COMMENCING at a point in the easterly line of Hinds Street, distant 151.20 feet north of its intersection with the northwest corner of lands conveyed to the City of Tonawanda by deed recorded in the Erie County Clerk's Office under Liber 6355 of deeds at page 516, also being the southerly line of Tenth Avenue (undeveloped), as shown on said Map Cover 596; Thence easterly along the southerly line of Tenth Avenue a distance of 332.16 feet to the Point of Beginning, said point being the intersection of the northerly line of Tenth Avenue with the easterly line of a 50 foot wide easement granted to Niagara Mohawk Power Corporation as recorded in the Erie County Clerk's Office under Liber 6166 of deeds at page 486; Thence northerly along the easterly line of said easement granted to the Niagara Mohawk Power Corporation a

distance of 163.7 feet more or less; Thence easterly along a line perpendicular to the aforementioned line a distance of 83.3 feet more or less; Thence southerly along a line perpendicular to the aforementioned line a distance of 163.7 feet to a point in the northerly line of Tenth Avenue; Thence westerly along a line perpendicular to the aforementioned line being the northerly line of Tenth Avenue a distance of 83.3 feet more or less to the Point of Beginning, containing 13,636 square feet more or less.

#### PARCEL 3 (OU 4) STATESUPERFUND SITE NO. 915050

COMMENCING at a point in the easterly line of Hinds Street, distant 151.20 feet north of its intersection with the northwest corner of lands conveyed to the City of Tonawanda by deed recorded in the Erie County Clerk's Office under Liber 6355 of deeds at page 516 also being the southerly line of Tenth Avenue (undeveloped), as shown on said Map Cover 596; Thence easterly along the southerly line of Tenth Avenue a distance of 578.77 feet to the Point of Beginning, said point being the intersection of the southerly line of Tenth Avenue with the easterly line of an existing blacktop driveway; Thence northerly along the easterly line of said blacktop driveway being a curved line to the left having a radius of 149.7 feet more or less said curve's chord having an angle to the right from the aforementioned line of 64°54'01", a distance along the curve of 120.8 feet more or less to a point of reverse curvature; Thence northerly continuing along the easterly line of said blacktop driveway having a radius of 137.8 feet more or less, said curve's chord having an angle to the right from the previous curve's chord of 166°00'00" a distance along the curve of 72.9 feet more or less; Thence easterly along a line at an interior angle of 50°53'05" with the previous chord a distance of 28.8 feet more or less;; Thence northerly along a line perpendicular to the aforementioned line a distance of 1.8 feet more or less; Thence easterly along a line perpendicular to the aforementioned line a distance of 29.9 feet more or less; Thence southerly along a line perpendicular to the aforementioned line a distance of 22.0 feet more or less; Thence easterly along a line perpendicular to the aforementioned line a distance of 29.0 feet more or less; Thence northerly along a line perpendicular to the aforementioned line a distance of 22.0 feet more or less; Thence easterly along a line perpendicular to the aforementioned line a distance of 88.6 feet more or less; Thence southerly along a line perpendicular to the aforementioned line a distance of

4.5 feet more or less; Thence easterly along a line perpendicular to the aforementioned line a distance of 13.5 feet more or less; Thence southerly along a line perpendicular to the aforementioned line a distance of 107.75 feet more or less; Thence easterly along a line perpendicular to the aforementioned line a distance of 22.5 feet more or less; Thence southerly along a line at an interior angle of 91°19'24" a distance of 49.1 feet more or less; Thence westerly along a line perpendicular to the aforementioned line a distance of 49.1 feet more or less; Thence westerly along a line perpendicular to the aforementioned line a distance of 118.1 feet more or less to the point of beginning, containing 21,953 square feet more or less.

#### PARCEL 4 (OU 4) STATESUPERFUND SITE NO. 915050

COMMENCING at a point in the easterly line of Hinds Street, being distant 281.73 feet south of its intersection with the southerly line of Dodge Avenue; Thence easterly along a line perpendicular to the aforementioned line a distance of 320.78 feet to the Point of Beginning; Thence easterly at an angle to the right of 179°04'53" with the aforementioned line a distance of 27.0 feet more or less; Thence northerly along a line perpendicular to the aforementioned line a distance of 24.05 feet more or less; Thence easterly along a line perpendicular to the aforementioned line a distance of 103.7 feet more or less; Thence southerly along a line perpendicular to the aforementioned line a distance of 16.7 feet more or less; Thence easterly along a line perpendicular to the aforementioned line a distance of 19.2 feet more or less; Thence southerly along a line perpendicular to the aforementioned line a distance of 17.4 feet more or less; Thence easterly along a line perpendicular to the aforementioned line a distance of 21.1 feet more or less; Thence northerly along a line perpendicular to the aforementioned line a distance of 41.5 feet more or less; Thence easterly along a line perpendicular to the aforementioned line a distance of 8.0 feet more or less; Thence southerly along a line perpendicular to the aforementioned line a distance of 52.2 feet more or less; Thence easterly along a line perpendicular to the aforementioned line a distance of 40.4 feet more or less; Thence southerly along a line perpendicular to the aforementioned line a distance of 40.45 feet more of less; Thence easterly along a line perpendicular to the aforementioned line a distance of 64.6 feet more or less; Thence southerly along a line perpendicular to the aforementioned line a distance of 305.8 feet more or less;

Thence westerly along a line perpendicular to the aforementioned line a distance of 101.0 feet more or less;

Thence northerly along a line perpendicular to the aforementioned line a distance of 203.0 feet more or less; Thence westerly along a line perpendicular to the aforementioned line a distance of 183.0 feet more or less; Thence northerly along a line perpendicular to the aforementioned line a distance of 164.0 feet more or less to the Point of Beginning, containing 64,975 square feet more or less.

#### PARCEL 5 (OU 4) STATESUPERFUND SITE NO. 915050

BEGINNING at the intersection of the southerly line of Dodge Avenue with the easterly line of Gibson Street; Thence northerly along the easterly line of Gibson Street a distance of 120.0 feet to the northerly line of lands now or formerly conveyed to Spaulding Fibre Co., as recorded in the Erie County Clerk's Office under Liber 5860 of deeds at page 635; Thence easterly along the northerly line of said lands conveyed to Spaulding Fibre Co., at an interior angle of 90°31'16" a distance of 226.7 feet more or less; Thence southerly along a line perpendicular to the aforementioned line a distance of 150.9 feet more or less; Thence easterly along a line perpendicular to the aforementioned line a distance of 53.7 feet more or less; Thence northerly along a line perpendicular to the aforementioned line a distance of 18.0 feet more or less; Thence easterly along a line perpendicular to the aforementioned line a distance of 171.8 feet more or less; Thence southerly along a line perpendicular to the aforementioned line a distance of 417.6 feet more or less; Thence westerly along a line perpendicular to the aforementioned line a distance of 18.2 feet more or less; Thence northerly along a line perpendicular to the aforementioned line a distance of 264.1 feet more or less; Thence westerly along a line perpendicular to the aforementioned line a distance of 190.1 feet more or less; Thence southerly along a line perpendicular to the aforementioned line a distance of 77.0 feet more or less; Thence westerly along a line perpendicular to the aforementioned line a distance of 103.3 feet more or less; Thence northerly along a line perpendicular to the aforementioned line a distance of 33.0 feet more or less. Thence easterly along a line perpendicular to the aforementioned line a distance of 85.5 feet more or less; Thence northerly along a line perpendicular to the aforementioned line a distance of 74.0 feet more or less; Thence westerly along a line perpendicular to the aforementioned line a distance of 35.5 feet more or less; Thence southerly along a line perpendicular to the aforementioned line a distance of 37.0 feet more or less; Thence westerly

along a line perpendicular to the aforementioned line a distance of 77.0 feet more or less; Thence northerly along a line perpendicular to the aforementioned line a distance of 81.8 feet more or less; Thence westerly along a line perpendicular to the aforementioned line a distance of 58.9 feet more or less; Thence northerly along a line perpendicular to the aforementioned line a distance of 24.5 feet more or less; Thence westerly along a line perpendicular to the aforementioned line a distance of 64.0 feet more or less; Thence northerly along a line perpendicular to the aforementioned line a distance of 10.8 feet more or less; Thence westerly along a line perpendicular to the aforementioned line a distance of 16.9 feet more or less; Thence northerly along a line perpendicular to the aforementioned line a distance of 17.7 feet more or less; Thence northerly along a line perpendicular to the aforementioned line a distance of 20.0 feet more or less; Thence westerly along a line perpendicular to the aforementioned line a distance of 20.0 feet more or less; Thence northerly along a line perpendicular to the aforementioned line a distance of 20.0 feet more or less; Thence northerly along a line perpendicular to the aforementioned line a distance of 40.3 feet more or less to a point in the southerly line of Dodge Avenue; Thence easterly along the southerly line of Dodge Avenue a distance of 45.1 feet more or less to the point of beginning, containing 99,632 square feet more or less.

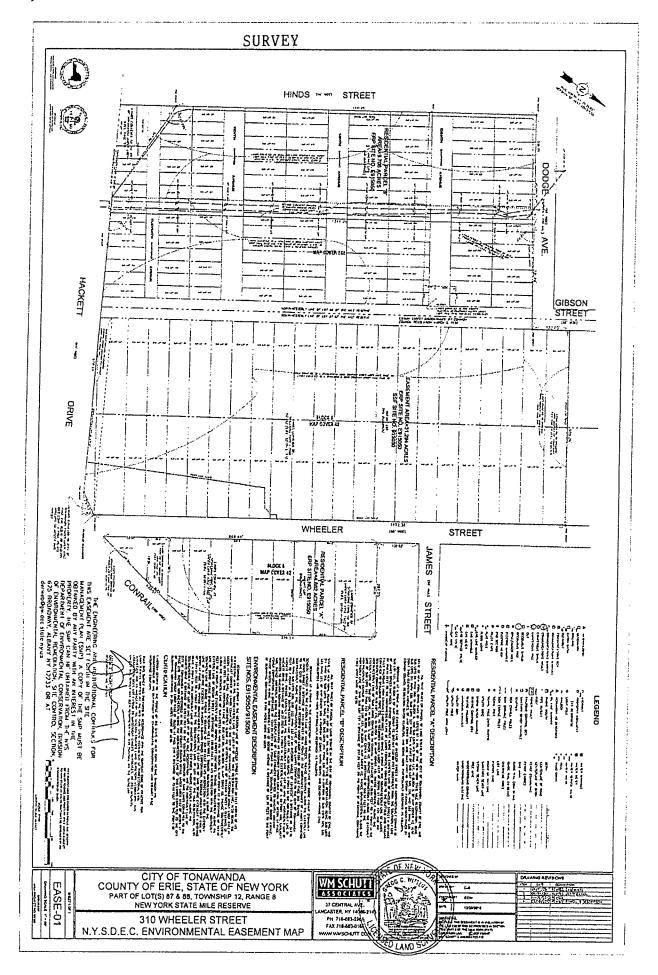
## PARCEL 6 (OU 4) STATESUPERFUND SITE NO. 915050

COMMENCING at a point in the westerly line of Wheeler Street distant 551.38 feet southerly from its intersection with the northerly line of lands now or formerly conveyed to Spaulding Fibre Co., as recorded in the Erie County Clerk's Office under Liber 5860 of deeds at page 635; Thence westerly along a line perpendicular to the aforementioned line a distance of 308.16 feet to the Point of Beginning; Thence southerly along a line perpendicular to the aforementioned line a distance of 38.1 feet more or less; Thence westerly along a line perpendicular to the aforementioned line a distance of 38.1 feet more or less; Thence southerly along a line perpendicular to the aforementioned line a distance of 36.0 feet more or less; Thence southerly along a line perpendicular to the aforementioned line a distance of 36.0 feet more or less; Thence northerly along a line perpendicular to the aforementioned line a distance of 10.4 feet more or less; Thence northerly along a line perpendicular to the aforementioned line a distance of 84.0 feet more or less; Thence northerly along a line perpendicular to the aforementioned line a distance of 15.0 feet more or less; Thence westerly along a line perpendicular to the aforementioned line a distance of 40.1 feet more or less; Thence northerly along a line perpendicular to the aforementioned line a distance of 40.1 feet more or less; Thence northerly along a line perpendicular to the aforementioned line a distance of 40.1 feet more or less; Thence northerly along a line perpendicular to the aforementioned line a distance of 40.1 feet more or less; Thence northerly along a line perpendicular to the aforementioned line a distance of 40.1 feet more or less; Thence northerly along a line perpendicular to the aforementioned line a distance of 40.5 feet more or less; Thence northerly along a line perpendicular to the aforementioned line a distance of 40.5 feet more or less; Thence easterly along a line perpendicular to the aforementioned line a distance of 63.5 feet more or less to the point

of beginning, containing 5,249 square feet more or less.

#### PARCEL 7 (OU 4) STATESUPERFUND SITE NO. 915050

COMMENCING at the intersection of the southerly line of Dodge Avenue with the easterly line of Gibson Street; Thence westerly along the northerly line of Dodge Avenue also being the northerly line of lands now or formerly conveyed to Spaulding Fibre Co., as recorded in the Erie County Clerk's Office under Liber 5860 of deeds at page 635; a distance of 206.39 feet; Thence southerly from the northerly line of said lands conveyed to Spaulding Fibre Co., at an interior angle of 90° a distance of 40.26 feet to the Point of Beginning; Thence continuing southerly along the aforementioned line a distance of 132.4 feet more or less; Thence westerly along a line perpendicular to the aforementioned line a distance of 41.4 feet more or less; Thence easterly along a line perpendicular to the aforementioned line a distance of 51.05 feet more or less; Thence easterly along a line perpendicular to the aforementioned line a distance of 51.05 feet more or less; Thence easterly along a line perpendicular to the aforementioned line a distance of 51.05 feet more or less; Thence easterly along a line perpendicular to the aforementioned line a distance of 51.05 feet more or less; Thence easterly along a line perpendicular to the aforementioned line a distance of 51.05 feet more or less; Thence easterly along a line perpendicular to the aforementioned line a distance of 51.05 feet more or less; Thence easterly along a line perpendicular to the aforementioned line a distance of 51.05 feet more or less; Thence easterly along a line perpendicular to the aforementioned line a distance of 50.7 feet more or less; Thence easterly along a line perpendicular to the aforementioned line a distance of 50.7 feet more or less; Thence easterly along a line perpendicular to the aforementioned line a distance of 50.7 feet more or less; Thence easterly along a line perpendicular to the aforementioned line a distance of 50.7 feet more or less; Thence easterly along a line perpendicular to the aforementioned line a distance of 50.7 feet more or less; The



# **APPENDIX D**

# **EXAMPLE HEALTH AND SAFETY PLAN**

# CONSTRUCTION HEALTH AND SAFETY PLAN For the CONSTRUCTON PROJECT

West 34<sup>th</sup>, West 35<sup>th</sup> and West 36<sup>th</sup> Street,

# December 2011

Submitted To: New York City Department of Environmental Protection 59-17 Junction Boulevard, 17th Floor, Flushing, NY 11373

Prepared by:



LiRo Engineers, Inc. 703 Lorimer Street Brooklyn, NY 11211

# **PROJECT SUMMARY**

### Scope and Applicability

The purpose of this Construction Health and Safety plan (CHASP) is to define requirements and protocols to be implemented during site redevelopment construction activities that will be conducted at Project Blocks 1, 2 & 3 (the Site) of the Midblock Park and Boulevard System. The parcels are located on a blocks bounded by West 36<sup>th</sup> Street to the north, West 33<sup>th</sup> Street to the South, 10<sup>th</sup> Avenue to the east and 11<sup>th</sup> Avenue to the West as shown on Figure 2. The work is being completed for the \_\_\_\_\_. This CHASP is intended to address health and safety issues of on-site construction workers and the surrounding community pertaining to environmental concerns discovered during previous environmental investigations.

The environmental consultant (EC), prime contractor, and subcontractors are responsible for implementing health and safety plans and programs for their own employees in accordance with all Occupational Health and Safety Administration (OSHA) requirements. In addition, the contractor is responsible for a comprehensive CHASP which addresses all site redevelopment construction activities in accordance with all other applicable OSHA standards (i.e., the General Construction Standard).

### Potential Chemical Hazards

Based on previous investigations at the site, potential chemical hazards include metals, specifically lead, and mercury and semi-volatile organic compounds (SVOCs), specifically polycyclic aromatic hydrocarbons (PAHs).

### **EMERGENCY CONTACTS**

The following list provides names and telephone numbers for emergency contact personnel. In the event of a medical emergency, personnel will take direction from the Health and Safety Officer (HSO) and notify the appropriate emergency organization. In the event of a fire or spill, the Site Supervisor will notify the appropriate local, state, and federal agencies.

Organization	Contact	Telephone
Ambulance		911
Police Department		911
Fire Department		911
Con Edison Co. of New York	gas or electrical emergency	800-752-6633
HSO	TBD	TBD
Environmental Project Manager		

A map to the nearest hospital is provided following page 10-4.

### TRAINING REQUIREMENTS

All personnel must receive adequate site-specific training, in the form of an On-site Health and Safety Briefing given by the Project HSO (PHSO) prior to participating in on-site field work. The briefing will include a review of this Health and Safety Plan (HASP) with emphasis on the following.

- Protection of the adjacent community from hazardous dust or vapors which may be released during intrusive activities.
- Attention to health effects and hazards of substances suspected to be present on-site.
- Hazards and protection against heat/cold.
- The need for vigilance in personal protection, and the importance of attention to proper use, fit, and care of personal protective equipment (PPE).
- The effectiveness and limitations of PPE.
- Prescribed decontamination procedures.
- Site control, including work zones, access, and security.
- The proper observance of daily health and safety practices, such as the entry and exit of work zones and site, proper hygiene during lunch, break, etc.
- Recognition in oneself or in others of physical conditions requiring immediate medical attention, and application of simple first aid measures.
- Emergency procedures to be followed (with rehearsals) in cases of fire, explosion, or sudden release of hazardous gases.

Should the Site HSO (SHSO) determine that substantial levels of contamination are present (based on visual and olfactory indicators or analytical measurements), he/she shall cease operations and consult with the PHSO to determine if an upgrade of PPE is warranted. The SHSO may also, upon conference with the Project HSO, determine whether or not field conditions warrant the requirement that all personnel conducting field activities be required to possess certification in health and safety practices for hazardous waste operations as specified in the Federal OSHA Regulations (29 CFR 1910.120) (revised March 6, 1990). Paragraph (e) (2) of the aforementioned referenced regulations requires that each employee, at the time of job assignment, receive a minimum of 40 hours of initial instruction off the site, and a minimum of three days of supervised field experience.

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## **1.0 INTRODUCTION**

The purpose of this Construction Health and Safety Plan (CHASP) is to set forth in an orderly and logical fashion, appropriate health and safety procedures to be followed by on-site construction workers during site redevelopment construction activities at the proposed No. 7 Subway Extension and \_\_\_\_. The tasks associated with the rationale for this plan are as follows.

- Excavation, trenching and stockpiling
- Dewatering
- Utility installation
- Above ground soil handling, transportation and disposal

This document will serve not only to explain the chemical and physical hazards associated with excavation, but will also outline approved measures for dealing with such hazards. The Contractor and site Subcontractors are also responsible for implementing health and safety programs to address all other applicable regulations including OSHA's General Industry and Construction Standards.

The procedures presented in this plan comply with the following regulatory or guidance documents.

- USEPA National Emission Standards for Hazardous Air Pollutants (NESHAP), 40 CFR 61.
- <u>OSHA Occupational Safety and Health Regulations</u>, 29 CFR 1910/1926, U.S. Department of Labor, Occupational Safety and Health Administration, OSHA, March 6, 1990.
- OSHA Occupational Safety and Health Standards for Emergency Action Plan (Means of Egress), 29 CFR 1910.38.
- OSHA Occupational Safety and Health Standards, Hazardous Waste Operations and Emergency Response, 29 CFR 1910.120.
- USEPA Order 1440.2, Health and Safety Requirements for Employees Engaged in Field Activities, July 12, 1981.
- NIOSH/OSHA/USEPA, <u>Occupational Safety and Health Guidance manual for</u> <u>Hazardous Waste Site Activities</u>, October 1985.
- <u>Standard Operating Safety Guides</u>, United States Environmental Protection Agency, Office of Emergency and Remedial Response, November 1984.

The Project Health and Safety Officer (PHSO) will be responsible for the development and implementation of project Health and Safety protocols. All personnel involved in on-site activities under this Health and Safety Plan (HASP) will be required to follow the HASP protocols, as directed by the Site Health and Safety Officer (SHSO). In addition, site primary contractor and subcontractor(s) will be required to designate a SHSO for their personnel and to follow, at a minimum, the requirements of all associated health and safety plans.

The SHSO reports directly to the PHSO. The SHSO will work full-time on-site and may also be one of the project field engineers or managers who have appropriate OSHA training.

## 2.0 **RESPONSIBILITIES**

The following is a summary of the health and safety responsibilities of various project personnel.

# 2.1 <u>Project Health and Safety Officer</u>

The responsibilities of the PHSO are to develop and coordinate the Site Health and Safety Program and provide necessary direction and supervision to the SHSO. He will identify the most direct route to the closest hospital. The PHSO will review and confirm changes in personal protection requirements when site conditions are found to be different than those originally anticipated.

The PHSO will be involved in all discussions on health and safety matters with New York State Department of Environmental Conservation (NYSDEC), Occupational Safety and Health Administration (OSHA), local health authorities, or other governmental or labor representatives. In addition, this individual will provide the SHSO with details concerning the task-specific health and safety considerations.

## 2.2 <u>Site Health and Safety Officer</u>

The responsibilities of the SHSO are as follows.

- Implement this HASP on-site on a full-time basis.
- Enforce day-to-day health and safety protocols in effect on-site.
- Require that all personnel entering the site understand the provisions of this HASP.
- Conduct periodic training sessions in proper use and maintenance of personal protective equipment (PPE) and safety practices.
- Conduct periodic emergency response drills.
- Conduct periodic health and safety meetings.
- Direct and advise on-site personnel, visitors, and subcontractor(s) SHSO(s) on all aspects, especially changes, related to health and safety requirements at the site.
- Conduct necessary health and safety monitoring.
- Administer an air monitoring program.
- Monitor site conditions and determine all necessary changes in levels of personal protection and, if warranted, execute work stoppages.
- Report changes in site conditions and changes in PPE requirements to the PHSO.
- Prepare accident/incident reports.

The SHSO reports directly to the PHSO.

# 2.3 Key Personnel

LiRo Engineers, Inc. (LiRo) personnel responsible for implementation of this CHASP are identified on the following table.

Name	Title	Address	Contact Numbers
TBD	Environmental		
	Project Manager		
TBD, CIH	Project Health		
	& Safety Officer		
TBD	Site Health &		
	Safety Officer		

The Prime Contractor and their subcontractors will be responsible for developing a similar list of key personnel for CHASP implementation.

### 3.0 SITE BACKGROUND

Requisite work is being performed at the request of \_\_\_\_\_ and consists of site redevelopment construction activities. The property planned for future site development will be on blocks bounded by West 36<sup>th</sup> Street to the north, West 33<sup>th</sup> Street to the South, 10<sup>th</sup> Avenue to the east and 11<sup>th</sup> Avenue to the West (Figure 1). The Subject Site, historically, was used as maintenance garage, railroad right-of-way, vehicle parking, an auto repair facility, warehousing, manufacturing, commercial offices, retail shops and residential space.

The activities anticipated for the Site new roads and utilities are removal of existing surface structures, excavation/filling of current grades to final road design grades, compaction of the fill, installation of sanitary and storm sewers, water mains, electrical lines, communication lines, steam lines, side walks and curbing, traffic control signals, and site landscaping. The depth of excavation will depend upon the final design of the utilities, however it is assumed to range from 0 feet below ground surface (ft bgs) to 20 ft bgs.

The activities anticipated for the Site Park are removal of existing surface structures excavation/filling of current grades to final design grades, construction of a berm and gabion wall, construction of a café, installation of sidewalks and landscaping. The café is planned for the midblock park area and will include a basement.

### 3.1 <u>Project Background/Scope of Work</u>

### 4.0 TRAINING REQUIREMENTS

All personnel must receive adequate site-specific training, in the form of an On-site Health and Safety Briefing given by the PHSO prior to participating in on-site field work. The briefing will include a review of this HASP with emphasis on the following.

- Protection of the adjacent community from hazardous vapors which may be released during intrusive activities.
- Attention to health effects and hazards of substances known to be present on-site.
- Hazards and protection against heat/cold.
- The need for vigilance in personal protection, and the importance of attention to proper use, fit, and care of PPE.
- The effectiveness and limitations of PPE.
- Prescribed decontamination procedures.
- Site control, including work zones, access, and security.
- The proper observance of daily health and safety practices, such as the entry and exit of work zones and site, proper hygiene during lunch, break, etc.
- Recognition in oneself or in others of physical conditions requiring immediate medical attention, and application of simple first aid measures.
- Emergency procedures to be followed (with rehearsals) in cases of fire, explosion, or sudden release of hazardous gases.

Health and Safety Meetings will be conducted daily by the SHSO and will cover protective clothing and other equipment to be used that day, potential chemical and physical hazards, emergency procedures, and conditions and activities from the previous day.

Should the SHSO determine that substantial levels of contamination are present (based on visual and olfactory indicators and/or analytical measurements), he/she may cease operations and consult with the PHSO to determine if an upgrade of PPE is warranted. The SHSO may also, upon conference with the PHSO, determine whether or not field conditions warrant the requirement that all personnel conducting field activities be required to possess certification in health and safety practices for hazardous waste operations as specified in the Federal OSHA Regulations (29 CFR 1910.120) (revised March 6, 1990). Paragraph (e) (2) of the aforementioned referenced regulations requires that each employee, at the time of job assignment, receive a minimum of 40 hours of initial instruction off the site, and a minimum of three days of supervised field experience.

### 5.0 MEDICAL SURVEILLANCE REQUIREMENTS

All personnel who engage in waste site activities for 30 days or more per year are required to participate in a Medical Surveillance Program. All project personnel involved in onsite activities in the contaminated areas at the site will be required to undergo annual medical examinations. This examination must take place not more than one year prior to and one year after the completion of site work and must be conducted by a physician who is board-certified in occupational medicine. The physician will have been made familiar with the job-related duties of each worker examined.

Components of the Medical Surveillance Program are shown in Table 5-1. The physician must certify whether the individual is fit to conduct work on hazardous waste sites using personal protection, or whether he or she must work within certain restrictions.

Any person exposed to high levels of hazardous substances will be required to undergo a repeat medical exam at or before the conclusion of the project to determine possible health impacts. Any person suffering a lost-time injury or illness must receive medical approval prior to returning to work on-site. When employment is terminated for any reason, the employee must receive an exit medical examination.

All medical records will be held by the employer for the period of employment plus at least 30 years, in accordance with OSHA regulations on confidentiality and any other applicable regulations and will be made available to OSHA upon request.

# TABLE 5-1

# COMPONENTS OF MEDICAL SURVEILLANCE

- Medical and occupational history
- Physical examination, with particular attention to the cardiopulmonary system, general physical fitness, skin, blood-forming, hepatic, renal, and nervous systems
- Urinalysis, to include:
  - color
  - appearance
  - specific gravity
  - pH
  - ketones
  - protein
  - glucose
  - blood
  - bilirubin
  - leukocyte esterase
  - nitrite
  - WBC
  - RBC
  - casts
  - bacteria
  - epithelial cells
  - crystals
  - yeasts
  - heavy metals arsenic, lead, mercury
- Blood analysis, to include:
  - complete blood count
  - hemoglobin
  - albumin, globulin, total protein
  - bilirubin direct and total
  - g-glutamyl transpeptidase
  - serum glutamic oxalacetic transaminase
  - lactic dehydrogenase
  - alkaline phosphatase
  - sodium
  - potassium

# TABLE 5-1 (Continued)

- chloride
- magnesium
- calcium
- phosphorus
- lead
- uric acid
- BUN (blood urea nitrogen)
- creatinine
- cholesteral
- triglycerides
- glucose
- iron
- Pulmonary function test
- Additional tests as appropriate, including:
  - chest X-ray
  - electrocardiogram
  - audiogram

## 6.0 SITE HAZARD EVALUATION

This Chapter is intended to prepare on-site construction workers for any possible hazards that may be present on-site and specific hazards that are known based the Subject Site's Phase II investigation results. The chemical hazards identified in previous investigation work, are PAH's and metals, as mentioned in Section 3.1 and are further-discussed in Section 6.1.

The general site construction hazards are discussed below.

# 6.1 <u>Chemical Hazards</u>

Health/safety characteristics and exposure limits of contaminants known or suspected at the project site are listed in Table 6-1. The risk of exposure can be by the dermal or respiratory route, depending on the type of compound and intrusive activity being conducted.

Health hazard information and procedures, including respiratory and personal protection levels, will be evaluated in the event that additional environmental contaminants are detected at the site.

All personnel must assume that the disturbance of soil and groundwater through excavation activities in the contaminated areas at the site could potentially result in employee exposure to any of the contaminants identified in Table 6-1. Therefore, appropriate levels of respiratory protection and personal protective clothing and equipment will be required to ensure worker safety during intrusive activities. Levels of respiratory protection and the required clothing for each exposure level are further defined in Section 8 of this HASP.

# 6.2 <u>Radiation Hazards</u>

No radiation hazards are known or expected at the site.

# 6.3 <u>Biological Hazards</u>

# 6.3.1 Animals

During site operations, animals such as dogs, pigeons, sea gulls, mice, and rats may be encountered. Workers should use discretion and avoid all contact with animals. Bites and scratches from animals can be painful and if the animal is rabid, the potential for contracting rabies exists. Contact with mice and rat droppings may lead to contracting hantavirus. Inhalation of dried pigeon droppings may lead to psittacosis; crytococcosis and histoplasmosis are also diseases associated with exposure to dried bird droppings but these are less likely to occur in this occupational setting.

# 6.3.2 Insects

Insects, including bees, wasps, hornets, mosquitoes, and spiders, may be present at this site. Some individuals may have severe allergic reaction to an insect bite or sting that can result in a life threatening condition. In addition, mosquito bites may lead to St. Louis encephalitis or West Nile encephalitis. Personnel that may have been bitten or stung by an insect at the site should notify the SHSO of such immediately. The following is a list of preventative measures.

- Apply insect repellent prior to fieldwork and/or as often as needed throughout the shift.
- Wear proper protective clothing (work boots, socks, and light colored pants).
- When walking in wooded areas, to the extent possible, avoid contact with bushes, tall grass, or brush.
- Field personnel who may have insect allergies (e.g., bee sting) should provide this information to the SHSO prior to commencing work, and will have allergy medication on-site.

The SHSO will instruct the project personnel in the recognition and procedures for the encountering potentially hazardous insects at the site.

Lyme disease is caused by infection from a deer tick that carries a spirochete. During the painless tick bite, the spirochete may be transmitted into the bloodstream, which could lead to the worker contracting Lyme disease. This flu like illness occurs out of season, commonly happening between May and October when ticks are more active. Symptoms can include a stiff neck, chills, fever, sore throat, headache, fatigue, and joint pain. If left untreated, Lyme disease can cause serious nerve or heart problems as well as a disabling type of arthritis. If personnel feel sick or have signs similar to those above, they should notify the SHSO immediately.

It is recommended that personnel check themselves when in areas that could harbor deer ticks, wear light color clothing and visually check themselves and their buddy when coming from wooded or vegetation covered areas. If a tick is found biting an individual, the SHSO should be contacted immediately. The tick can be removed by pulling gently at the head with tweezers. The affected area should then be disinfected with an antiseptic wipe.

# 6.4 <u>Physical Hazards</u>

Physical hazards include the dangers of tripping and falling on uneven ground, operation of heavy equipment such as excavators, vehicular traffic, and utilities either above-ground or buried. The following are physical hazards which may be encountered during investigation activities.

**6.4.1** <u>**Tripping Hazards**</u> - An area of risk associated with on-site activities is presented by uneven or cracked concrete, curb stones, or equipment which may be present at the site thereby creating a potential tripping hazard. During intrusive work, care should be taken to mark (with orange paint) or remove any obstacles within the work zone.

**6.4.2** <u>Cuts and Lacerations</u> - Field activities that involve excavation and sampling activities usually involve contact with various types of machinery. At least one person on-site must be currently certified in first aid and CPR. Personnel trained and certified in first aid should be prepared to take care of cuts and bruises as well as other minor injuries. A first aid kit approved by the American Red Cross will be available during all field activities.

# TABLE 6-1

# HAZARD CHARACTERISTICS OF CONTAMINANTS AT THE PROPOSED HUDSON YARD CONSTRUCTON PROJECT

Substance	Flammabi	lity/Reactivity	Toxicity/Carcinogenicity	Standards*
Mercury		nmable. Emits	Toxic by ingestion, skin absorption and	0.1 mg/m <sup>3</sup> (OSHA CEILING)
	toxic fumes	s when heated.	inhalation of vapors and fumes. Neurological,	
			pulmonary and renal toxin.	
Lead	Not flammable. Emits toxic		Toxic by ingestion and inhalation of dust or	30 ug/m3 (OSHA ACTION LIMIT
	fumes when heated.		fumes. Lead poisoning in children is common.	8-hr. TWA)
			Neurological toxin and reproductive hazard.	
				50 ug/m3 (OSHA PEL-TWA)
Semi-Volatile	Normally	flammable	May cause respiratory tract irritation and	NIOSH 100 parts per million
Organic	liquids	with strong	anesthetic effects, they may also produce	(ppm)
Compounds	irritating	odors, strong	dermatitis, headaches and nausea.	
(SVOCs)	oxidizers			

NOTES- next page

1) - Standards are 8-Hour Time-Weighted Averages (TWAs) unless otherwise noted.

2) - Adopted values are limits which have been proposed for the first time, or for which a change in the "Adopted" listing has been proposed under the notice of intended changes by the American Conference of Governmental Industrial Hygienists.

3) - TLV-C-Ceiling - The exposure that should not be exceeded, even instantaneously.

4) - TLV-STEL - Short term exposure limit - 15 minute TWA exposure which should not be exceeded at any time during a workday.

#### REFERENCES

"Threshold Limit Values and Biological Exposure Indices for 1990-1991." American Conference of Governmental Industrial Hygienists, Cincinnati, Ohio, 1990. Department of Labor, Occupational Safety and Health Administration, 29 CFR, Part 1910, Air Contaminants, Final Rate, January 19, 1989.

"Pocket Guide to Chemical Hazards." National Institute for Occupational Safety and Health Administration, Publication No. 90-117, Cincinnati, Ohio, June, 1990. Hawley, Fessner G. <u>The Condensed Chemical Dictionary</u>, Tenth Edition, New York: Van Nostrand Reinhold, 1981.

Sax, R. Irving. Dangerous Properties of Industrial Materials, Sixth Edition, New York, Van Nostrand Reinhold, 1984.

**6.4.3** <u>Lifting Hazards</u> - Improper lifting techniques by workers is one of the leading causes of industrial injuries. Field workers may be required to lift heavy objects. Therefore, all members of the field crew should be trained in the proper methods of lifting heavy objects. All workers should be cautious against lifting objects too heavy for one person.

**6.4.4** <u>Utility Hazards</u> - Before conducting any excavation, drilling or demolition, the contractor will be responsible for locating and verifying all existing utilities at the work location (i.e., call the NYC and Long Island One-Call Center).

**6.4.5** <u>**Traffic Hazards**</u> - All traffic shall be maintained and protected at all times consistent with local, state, and federal, and agency regulations regarding such traffic.

**6.4.6** <u>**Permit Required Confined Spaces**</u> - If any person is required to enter an excavation greater than 4 feet, it is considered a confined space entry. All persons required to work in confined spaces will receive training at least annually in the following.

- Entry permit system
- Entry and rescue procedures
- Use of safety equipment
- General first aid
- Use of respirators
- Work practices as described in the Confined Space Entry Plan
- Monitoring results

Persons will be made aware of hazards associated with confined spaces. Before entering a confined space, work teams will review the Confined Space Entry Plan. Specific hazards of each confined space will be discussed.

# 6.4.7 <u>High Noise</u>

The SHSO will make a determination as to the sound intensity and select appropriate engineering controls. To minimize worker exposure, ear plugs or earmuffs will be used.

# 6.5 <u>Heat Stress</u>

The combination of high ambient temperature, high humidity, physical exertion, and personal protective apparel which limits the dissipation of body heat and moisture can cause heat stress. The SHSO is responsible for monitoring heat stress in the field team personnel.

It should be noted that during hazardous waste site work, the use of chemical protective clothing (CPC) can compromise the evaporative cooling from sweat. Personal cooling devices may be effective in protecting workers wearing CPC. NIOSH recommends physiological measurements of oral temperature or pulse rate with the use of total encapsulating clothing levels

(Level A protection).

The following prevention, recognition, and treatment strategies will be implemented to protect personnel from heat stress. Personnel will be trained to recognize the symptoms of heat stress, and to apply the appropriate treatment.

- 1. <u>Prevention</u>
  - a. <u>Provide plenty of liquids.</u> Available in the Support Zone will be a 50% solution of fruit punch or the like in water, or plain water to be taken with salted foods such as pretzels.
  - b. <u>Work in pairs</u>. No individual will attempt to undertake any activity alone.
  - c. <u>Provide cooling devices.</u> A spray hose and a source of water will be provided to reduce body temperature, cool protective clothing, and/or act as a quick-drench shower in case of an exposure incident.
  - d. <u>Adjustment of the work schedule.</u> As is practicable, the most labor intensive tasks should be carried out during the coolest part of the day.

# 2. <u>Recognition and Treatment</u>

Any person who observes any of the following forms of heat stress, either in himself or in another worker, will report this information to the SHSO as soon as possible.

- a. <u>Heat Rash (or prickly heat)</u>:
  - Cause: Continuous exposure to hot and humid air, aggravated by chafing clothing.
  - Symptoms: Eruption of red pimples around sweat ducts accompanied by intense itching and tingling.
  - Treatment: Remove source of irritation and cool skin with water or wet cloths.
- b. <u>Heat Cramps (or heat prostration)</u>:

Cause: Profuse perspiration accompanied by inadequate replenishment of body water and electrolytes.

Symptoms: Sudden development of pain and/or muscle spasms in the abdominal region.

Treatment: Remove the worker to the Contamination Reduction Zone. Provide fluids orally. Remove protective clothing. Decrease body temperatures and allow a period of rest in a cool location.

### c. <u>Heat Exhaustion</u>

- Cause: Overexertion in a hot environment and profuse perspiration accompanied by inadequate replenishment of body water and electrolytes. A serious condition.
- Symptoms: Muscular weakness, staggering gait, nausea, dizziness, shallow breathing, pale and clammy skin, approximately normal body temperature.
- Treatment: Perform the following while simultaneously making arrangements for transport to a medical facility: Remove the worker to the Contamination Reduction Zone. Remove protective clothing. Lie the worker down on his or her back, in a cool place, and raise the feet 6 to 12 inches. Keep warm, but loosen all clothing. If conscious, provide sips of a salt water solution, using one teaspoon of salt in 12 ounces of water. Transport the worker to a medical facility.

# d. <u>Heat Stroke</u>

- Cause: Same as heat exhaustion. An extremely serious condition.
- Symptoms: <u>Dry and hot skin</u>, dry mouth, dizziness, nausea, headache, rapid pulse.
- Treatment: Cool worker immediately by immersing or spraying with cool water or sponge bare skin after removing protective clothing. Transport to hospital.

# 6.6 <u>Cold Exposure</u>

Exposure to cold weather, wet conditions and extreme wind-chill factors may result in excessive loss of body heat (hypothermia) and/or frost bite. To guard against cold exposure and to prevent cold injuries, appropriate warm clothing should be worn, warm shelter must be readily available, work/rest regimens should be planned that do not result in significant lowering of metabolic heat load which may worsen cold stress, and the physical conditions of on-site field

personnel should be closely monitored. Personnel and supervisors working on-site will be made aware of the signs and symptoms of frost bite and hypothermia such as shivering, reduced blood pressure, reduced coordination, drowsiness, impaired judgment, fatigue, pupils dilated but reactive to light, and numbing of the toes and fingers. The potential for wetting of protective clothing should be of concern, since wet clothing (from sweat or splashes) will provide poor insulation against the cold.

# 7.0 SITE CONTROL

In order to keep unauthorized personnel from entering the contaminated work areas during excavation activities without proper protective equipment, and for good control of overall site safety, two work zones will be established at the perimeter of the contaminated area work zone. The two work zones are the Support Zone and the Contamination Reduction Zone/Exclusion Zone. Actual zone width will be determined by optimal size of work area and by local obstructions. A brief description of the site work zones follows.

# 7.1 <u>Support Zone</u>

The Support Zone at the site will be a mobile unit (automobile) including a cellular telephone for communication. The Support Zone will be located as near as practicable to the active work areas and decontamination areas.

# 7.2 <u>Contamination Reduction Zone/Exclusion Zone</u>

Due to the setting for this project, the Contamination Reduction Zone (CRZ) and Exclusion Zone (EZ) will be incorporated into one zone. This zone will be mobile and the location will be dependent upon where the active excavation areas are located. The CRZ/EZ will be established within a 20-foot radius around each excavation, where possible. The decontamination of personnel, light equipment, and heavy equipment will be performed at each location as described in Section 11.

# 7.3 <u>Temporary Storage Facilities</u>

A temporary storage location will be established at the site for the storage of any decontamination water and disposable clothing. The facility will be situated away from vehicular and pedestrian traffic.

# 7.4 <u>Site Visitation</u>

It is possible that officials from NYSDEC and other regulating bodies with jurisdiction will visit the site during operations. It is also possible that an OSHA representative will wish to inspect the site. If visiting a site location where contamination is present, all such officials must meet the same training requirements of on-site contaminated area workers before going into any active Contamination Reduction Zone/Exclusion Zone. Because of the nature of the work, contaminated area work zones will be continually supervised. Signs will be used to prevent the entrance of unauthorized visitors.

All visitors must supply their own PPE.

### 8.0 PERSONAL PROTECTION

Based on known site contaminant levels, work at the site is planned to begin in Level D PPE. However, since unexpected levels of hazardous materials may become evident, various levels of protection will be available during site activities. Components of all levels of personal protection that will be available are listed in Table 8-1. Planned levels of protection for various activities are given in Table 8-2.

In the event that unexpected levels of organic vapors are encountered, any personnel working at Level D or D+ protection will cease operations. The SHSO will consult with the PHSO to decide if a higher level of personal protection is required as well as if and when Level D or Level D+ protection may be resumed.

Some modification in safety equipment (e.g., switching from polycoated disposable coveralls to standard disposable coveralls) may be implemented in order to balance concerns for full contaminant protection against concerns for the possibility of heat stress resulting from the need to wear more restrictive protective equipment. Such modifications may be implemented only if approved in advance by the SHSO, following consultation with the PHSO. Protective equipment which fully complies with the requirements of all required levels of protection will be immediately available at all times on the site.

Level C respiratory protection will normally be provided using NIOSH-approved fullface respirators, with P100 combination filter cartridges approved for removal of organic vapors, particulate, gases, and fumes. The HEPA/OVA filter cartridges will be changed at the end of each workday or when breakthrough occurs, whichever comes first. All team members will be fit-tested for respirators using irritant smoke. Due to difficulties in achieving a proper seal between face and mask, persons with facial hair will not be allowed to work in areas requiring respiratory protection.

A site log with required sign-in and sign-out procedures wills serve to document the amount of time spent on-site by each team member.

# **TABLE 8-1**

# **COMPONENTS OF PERSONAL PROTECTION LEVELS**

Level D Protection	Level D+ Protection
Safety glasses with side shields (or goggles)	Safety glasses with side shields (or goggles)
Hard Hat	Hard Hat
Face Shield (optional)	Face Shield (Optional)
Ordinary coveralls	Standard disposable coveralls
Ordinary work gloves	Inner gloves of snug-fitting latex or vinyl
Steel-toe, steel-shank works shoes or boots (chemical resistant)	Outer gloves of neoprene or nitrile
Ordinary work gloves	Steel-toe, steel-shank
	Outer boots of neoprene or butyl rubber
	Disposable outer "booties"

# 9.0 DECONTAMINATION PROCEDURES

## 9.1 Decontamination of Personnel

Decontamination of personnel will be performed at each Contamination Reduction Zone/Exclusion Zone. This can be accomplished by washing and rinsing the outer gloves and outer boots over a portable decontamination trough. Disposable clothing can then be removed and discarded into a 30-gallon trash can with a vinyl liner. If personnel are wearing respiratory protection, the above procedures will be followed and the respirator will be removed, sanitized, and placed in a plastic bag.

# 9.2 <u>Remedial Activity-Derived Waste</u>

All PPE related remedial activity-derived waste materials (PPE, decontamination waste) will be placed in labeled containers and appropriately disposed.

# **10.0 EMERGENCY PROCEDURES**

The most likely incidents for which emergency measures might be required are:

- a sudden release of hazardous gases/vapors during excavation;
- an explosion or fire occurring during excavation; and,
- a heavy equipment-related accident, or other accident resulting in personal injury.

Emergency procedures established to respond to these incidents are covered under the sections that follow.

# 10.1 <u>Communications</u>

A cellular telephone will be maintained by the SHSO (Phone # TBD) during the entire project.

# 10.2 Escape Routes

As part of the pre job safety meeting, workers will be informed of approved escape routes and the primary assembly area for the purpose of accountability.

In the event of a sudden release of hazardous materials, fire or failure of permanent or temporary structures, all personnel will be required to immediately leave the work area and proceed to the assembly area through approved escape routes. This may require personnel to move from the Exclusion Zone directly into an on-site area without proper decontamination. At the conclusion of the emergency, they should move to the Contamination Reduction Zone for proper decontamination.

# 10.3 Evacuation Signal

In the event of a sudden release, fire or other catastrophe requiring immediate evacuation of the site, an alarm signal will be sounded. Sounding of an air horn (or similar) will be the responsibility of the contractor or other designated representative(s). NYCDEP, the Project Manager, and the PHSO will be notified by telephone, and later by written report whenever a site evacuation is executed.

# 10.4 Fire/Explosion

It will be the responsibility of the contractor to have a fire extinguisher available at the work location. Contractor personnel (employees and supervisors) have the responsibility for initiating fire prevention measures such as the continuous removal of combustible and flammable debris from the work area and its appropriate decontamination and disposal.

In the event of a fire that cannot be controlled with available equipment, or in the event of

an explosion, the local fire department will be summoned immediately by the SHSO, who shall aprise them of the situation upon their arrival. DEP will also be notified.

# 10.5 First Aid

First aid for personal injuries will be administered by the SHSO. If a site worker should require further treatment, he will be transported to the hospital in a vehicle maintained on-site for this purpose, or an ambulance will be summoned. The on-site vehicle will carry written directions to the hospital as well as a map showing the route.

All accidents, however insignificant, will be reported to the SHSO. Personnel designated to administer first aid will have received a minimum of eight hours training in first aid and CPR, and be certified by the American Red Cross.

# 10.6 <u>Emergency Assistance</u>

The following list of names, telephone numbers, and location of police, fire, hospital, and other agencies whose services might be required, or from whom information might be needed, will be carried in the on-site vehicle.

Fire Department: 911

- Police Department: 911
- NYSDEC Emergency Hotline: 1-800-457-7362

The route to the hospital is shown on Figure 3.

If an ambulance should have to be called to the site, the injured person should meet the ambulance outside the CRZ/Exclusion Zone if possible. If a head or spinal injury is suspected and the person is unconscious, medical personnel may have to come into the CRZ/Exclusion Zone. Medical personnel will be given the minimum amount of protective equipment necessary to ensure their safety while providing medical attention. If circumstances permit, proper decontamination procedures will be followed upon leaving the CRZ/Exclusion Zone.

# 10.8 <u>Spills</u>

If any petroleum products or hazardous wastes are spilled the contractor shall contain and clean up these materials in accordance with the project approved spill response plans.

# 10.9 <u>Reports</u>

Standard OSHA formats will be used for reporting any emergencies that occur on the site.

# 10.10 Accident Investigations and Reporting

# 10.10.1 Accident Investigations

All accidents requiring first aid which occur incidental to activities on-site will be investigated. The investigation format will include the following:

- interviews with witnesses;
- photos, if applicable; and,
- necessary actions to alleviate the problem.

# 10.10.2 Accident Reports

In the event that an accident or some other incident such as a fire or an overexposure to toxic chemicals occurs during the course of the project, the PHSO will be telephoned within one hour and receive a written notification within 48 hours. The report shall include the following items.

- Name, telephone number, and location of the contractor.
- Name and title of person(s) reporting.
- Date and time of accident/incident.
- Location of accident/incident
- Brief summary of accident/incident giving pertinent details, including type of operation ongoing at the time of the accident.
- Cause of accident/incident.
- Casualties (fatalities, disabling injuries)
- Details of any existing chemical hazard or contamination.
- Estimated property damage, if applicable.
- Nature of damage, effect on contract schedule.
- Action taken to insure safety and security.
- Other damage or injuries sustained (public or private).

# 11.0 COMMUNITY AIR MONITORING PLAN

If above background air monitoring results for Volatile Organic Compounds (VOCs) are encountered in the worker breathing zone, vapor air monitoring will be conducted in compliance with the Community Air Monitoring Plan (CAMP) outlined below.

Continuous monitoring for VOCs will be conducted during all ground intrusive activities (i.e., excavation). 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 with a photo-ionization detector (PID) equipped with a 10.6 eV lamp capable of calculating 15-minute running average concentrations. The following actions will be taken based on organic vapor levels measured.

- If total organic vapor levels exceed 5 ppm above background for 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 hot 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 hot zone, activities will be shutdown.

All 15-minute readings will be recorded and available for NYSDEC and New York State Department of Health (NYSDOH) personnel to review. Instantaneous readings, if any, will also be recorded.

# 11.1 Vapor Emission Response Plan

If the ambient air concentration of organic vapors exceeds 5 ppm above background at the perimeter of the work zone, excavation activities will be halted or odor controls will be employed, and monitoring continued. If the organic vapor level decreases below 5 ppm above background, excavation activities can resume, provided:

• the organic vapor level 200 ft. downwind of the hot zone or half the distance to the nearest residential or commercial structure, whichever is less, is below 1 ppm over background; and,

• more frequent intervals of monitoring, as directed by the SHSO, are conducted.

If the organic vapor level is greater than 5 ppm above background at the perimeter of the hot zone, work activities must be shut down or odor controls must be employed. When work shut-down occurs, downwind air monitoring as directed by the SHSO will be implemented to ensure that vapor emission does not impact the nearest residential or commercial structure at levels exceeding those specified in the Major Vapor Emission section.

# 11.2 Major Vapor Emission

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

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

If either of the following criteria is exceeded in the 20 Foot Zone, then the Major Vapor Emission Response Plan shall automatically be implemented;

- sustained organic vapor levels approaching 5 ppm above background for a period of more than 30 minutes; or,
- organic vapor levels greater than 5 ppm above background for any time period.
- 11.3 Major Vapor Emission Response Plan

Upon activation, the following activities will be undertaken.

- 1. The local police authorities will immediately be contacted by the SHSO and advised of the situation.
- 2. Frequent air monitoring will be conducted at 30-minute intervals within the 20 Foot Zone. If two successive readings below action levels are measured, air monitoring may be halted or modified by the SHSO.
- 3. All Emergency contacts will go into effect as appropriate.

# 11.4 Dust Monitoring

Particulate concentrations will be monitored continuously at the upwind and downwind perimeters of the exclusion zone at temporary particulate monitoring stations. Dust monitoring stations will be established prior to the start of work each day based on the wind direction. In the event of a prevailing wind shift, the locations will be re-evaluated and any changes will be documented.

The particulate monitoring shall be performed using a TSI 8520 DustTrack particulate monitor or equivalent. The instrument shall provide real-time monitoring and will be configured to measure particulate matter less than 10 micrometers in size (PM-10). The instrument will be programmed to integrate readings over a period of 15 minutes for comparison to the airborne particulate action level. The equipment will be equipped with an audible alarm to indicate exceedance of the action levels which are described below.

- If the downwind PM-10 particulate level is 100 micrograms per cubic meter (mcg/m) greater than background (upwind perimeter) for the 15-minute period or if airborne dust is observed leaving the work area, then dust suppression techniques must be employed. Fugitive dust generation can be minimized if the majority of work is conducted in moist soil. The source of the dust will be identified and dust suppression techniques such as misting surfaces with water or covering (i.e., for on-site stockpiles) will be implemented to reduce the generation of fugitive dust. Work may continue with dust suppression techniques provided that downwind PM-10 particulate levels do not exceed 150 mcg/m3 above the upwind level and provided that no visible dust is migrating from the work area.
- If, after implementation of dust suppression techniques, downwind PM-10 particulate levels are greater than 150 mcg/m3 above the upwind level, work must be stopped and a re-evaluation of activities initiated. Work can resume provided that dust suppression measures and other controls are successful in reducing the downwind PM-10 particulate concentration to within 150 mcg/m3 of the upwind level and in preventing visible dust migration.

All readings will be recorded and be available for State (NYSDEC and NYSDOH) personnel to review. In addition, fugitive dust migration will be visually assessed during all work activities.