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Environmental &
Water Resources
Engineering

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LETTER OF TRANSMITTAL

To:	Mr. Scott Deyette	Date:	January 23, 2014
	NYSDEC	Project No.	116820-1-1107
	Remedial Bureau C 625 Broadway	Re:	Revised Site Management Plan
	Albany, NY 12233-7014		Fort Edward (Canal Street) MGP

We are sending you the following enclosures:

No.	Type	Description
1	Electronic Copy	Revised Site Management Plan, Fort Edward (Canal Street) Former MGP Site, Fort Edward, NY, NYSDEC Site #V00472, Index #: D0-0001-0011

These are transmitted as checked below:

☒ For Approval ☐ For Your Use ☐ For Review/Comment ☐ As Requested ☐ Other

Message:

On behalf of National Grid, GEI is submitting this Revised Site Management Plan for your contingent approval predicated on NYSDEC receipt/review/approval of the Final Engineering Report (to be submitted shortly). Please let us know if you have any questions.

Signed:

Dan Kopcow, P.E., PMP
Project Manager

Copy to:
Albert DeMarco – NYSDOH
Steven Stucker – National Grid

If enclosures are not as noted, kindly notify us at once.

Site Management Plan

Fort Edward, NY (Canal Street)
Former MGP Site
Fort Edward, Washington County, New York
NYSDEC Site No. V00472

Prepared for:

National Grid
300 Erie Boulevard West
Syracuse, New York 13202

Prepared by:

GEI Consultants Inc., P.C.
1301 Trumansburg Road, Suite N
Ithaca, New York 14850

January 2014

"I, Daniel R. Kopcow, certify that I am currently a NYS registered professional engineer as defined in 6 NYCRR Part 375 and that this Site Management Plan was prepared in accordance with all applicable statutes and regulations and in substantial conformance with the DER Technical Guidance for Site Investigation and Remediation (DER-10) and that all activities were performed in full accordance with the DER-approved work plan and any DER-approved modifications."

Daniel R. Kopcow, P.E.

License Number 077276

SITE MANAGEMENT PLAN

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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 Village of Fort Edward, New York (Canal Street) former Manufactured Gas Plant (MGP) (hereinafter referred to as the "Site") under the New York State (NYS) Voluntary Cleanup Program (VCP) administered by New York State Department of Environmental Conservation (NYSDEC). A site remediation was conducted at the site in accordance with, Voluntary Cleanup Agreement (VCA) # D0-0001-0011, Site # V00472, which was executed on July 3, 2001. The Site location is presented on Figure 1.

1.1.1 General

National Grid entered into a VCA with the NYSDEC to remediate a 1.6 acre property located in the Village of Fort Edward, Washington County, New York. Figures showing the Site location and boundaries of this site are provided in Figures 1 and 2. The boundaries of the Site are more fully described in the metes and bounds Site description that accompanies the deed restriction (Appendix A).

An Interim Remedial Measure (IRM) was implemented at the Site in 2008 in accordance with 6NYCRR Part 375-1.8 (b) and (c) and included the removal of a tar tank, tar patties and shallow soils containing residual MGP material encountered in the western portion of the Site, south of the former gas building. A clay tile pipe containing coal tar was removed from the eastern edge of the shallow soil excavation to the eastern property boundary. A former peat-lined trench with coal tar was removed from a northern terminus near the former gas holder to the southern property boundary.

A 2012 Remedial Action Work Plan (RAWP) was drafted to address soils to be removed as part of a Remedial Action (RA) to include the off-site soils south of the MGP site (on the McCue property) and off-site soils east of the MGP site (on the Miller [formerly Robinson] and O'Mara properties). NYSDEC issued a Decision Document in March 2013 and approved the Remedial Design on July 26, 2013. The remedial action was implemented at the site in November 2013 and included the removal of off-site soils and associated clay pipe and an off-site septic tank.

Engineering Controls (ECs) were adopted to restrict potential exposures to deeper soils remaining at the Site and a deed restriction will be recorded to restrict subsurface excavation, use of groundwater, and single family home construction. The IRM, remedial action, and subsequent administrative controls are consistent with restricted residential use

of the Site. 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 Site Management Plan (SMP) was prepared was prepared by GEI Consultants, Inc., P.C. (GEI), on behalf of National Grid, to manage the Site in perpetuity in conjunction with the deed restriction and will be transferred to new ownership in accordance with the requirements of Section 6.2.1(c) of DER-10. This SMP satisfies the requirements in DER-10 and the guidelines provided by NYSDEC. This SMP addresses the means for implementing the Institutional Controls (ICs) and ECs that are required by the deed restriction for the Site.

1.1.2 Purpose

ECs have been incorporated into the Site remedy to ensure protection of human health and the environment. A deed restriction will be recorded with the Washington County Clerk, that provides an enforceable legal instrument to ensure compliance with this SMP and all EC/ICs placed on the Site. The ICs place restrictions on Site use, and mandate operation, maintenance, monitoring and reporting measures for the EC/ICs. This SMP specifies the methods necessary to ensure compliance with the EC/ICs required by the deed restriction and DER-10. This plan has been approved by the NYSDEC, and compliance with this plan is required by the grantor of the deed restriction and the grantor's successors and assigns. This SMP may only be revised with the approval of the NYSDEC.

This SMP provides a detailed description of the procedures required to manage remaining contamination at the site after completion of the Remedial Action, including (1) implementation and management of all EC/ICs; (2) management of future excavations in areas of remaining contamination; (3) monitoring; (4) maintenance of the cover systems; and (5) performance of periodic inspections, certification of results, and submittal of annual reports.

To address these needs, this SMP includes four plans: (1) an Engineering and Institutional Control Plan for implementation and management of EC/ICs; (2) an Excavation Plan which details the provisions for management of future excavations in areas of remaining contamination; (3) a Monitoring Plan for implementation of Site Monitoring; (4) an Operation and Maintenance Plan for implementation and maintenance of cover systems; and (5) a Site Management Reporting Plan for 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 deed restriction. Failure to properly implement the SMP is a violation of the deed restriction, 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 VCA (Index # D0-0001-0011; Site # V00472) for the site, and thereby subject to applicable penalties.

1.2 SITE BACKGROUND

National Grid (formerly Niagara Mohawk) and the New York State Department of Environmental Conservation (NYSDEC) entered into a Voluntary Cleanup Order (the VCO) (Index Number DO-0001-0011) in July 2001 to investigate and, as necessary, remediate, 24 locations that may at one time have been former manufactured gas plant (MGP) sites. The Fort Edward (Canal Street) Site ("the Site") was identified as one of these former MGP sites. National Grid has completed a series of site investigations and remedial actions at the Canal Street Site in order to comply with the VCO. These activities are documented in the following documents:

- Site Characterization/IRM Study (SC/IRM Study), submitted in final form to the NYSDEC in June 2007
- Interim Remedial Measure (IRM) Pre-Design Report, submitted in final form to the NYSDEC in October 2008
- Interim Remedial Measure (IRM) Work Plan, submitted in final form to the NYSDEC in April 2009
- Addenda to the IRM Work Plan
- Interim Remedial Measure (IRM) Construction Completion Report, submitted in final form and approved by NYSDEC in December 2011
- 2012 Remedial Action Work Plan (RAWP), approved by NYSDEC in a March 2013 Decision Document
- Remedial Design, approved by NYSDEC in July 26, 2013.

1.2.1 Site Location and Description

The Site is located at 22 Canal Street, in the Village of Fort Edward, Washington County, New York (see Figure 1)). This 1.6 acre parcel, identified as Tax Map 171.6-3-30.2, is zoned for residential use. It is on the east side of Canal Street, south of Notre Dame Street. The boundaries of the site are more fully described in Appendix A.

1.2.2 Site History

United Gas & Electric Light Co. conducted MGP activities at the Site between about 1900 and 1924. A 1900 Sanborn Fire Insurance (Sanborn) map shows a 33,000 cubic foot (ft^3)

gasometer (gas holder) and a gas building present on site. The 1924 Sanborn map indicated that the gasometer still existed and the gas building was used for “storage.” The 1932 Sanborn map indicated that the gasometer was no longer present and the gas building was vacant.

Prior to 2001, the gas building on-site was used as a private residence. It is unknown when the gas building was first used as a residence. Past residents of the property installed an in-ground swimming pool east of the building, inset within the foundation of the former gasometer. Former residents also had a burn pit in their yard, southeast of the swimming pool.

In October 2001, National Grid purchased the Site. In 2004, National Grid demolished the gas building and closed the swimming pool in place. National Grid discovered an underground cylindrical brick structure southeast of the swimming pool at this time. An underground steel pipe ran between the underground cylindrical brick structure and the former gas building. The pipe was found to be empty, did not contain MGP residual materials, and showed no evidence of having carried or released any MGP related residual materials. The cylindrical structure has been closed by backfilling it with clean fill.

Bluish soils, a clay tile pipe connected to a steel tank that contained stiff coal tar, and soils containing PAHs were delineated in the western portion of the Site (i.e. the fill slope south of the former gas building). A clay tile pipe was delineated running easterly to the property boundary, and a peat-lined trench containing coal tar was delineated running from the approximate former gas holder location southerly to the property boundary. These were MGP artifacts.

In February 2012, a Pre-Design Investigation (PDI) on the East property was undertaken to determine the location of the end of the clay pipe and determine the lateral extent of MGP-related contamination. The clay pipe was traced to the combined sewer outfall (CSO) pipe, where it was hand- excavated and was found to turn south, running adjacent and parallel to the CSO. Therefore, the CSO served as the eastern boundary of the excavation. As part of the same PDI investigation, on the South property, borings were performed to determine the horizontal limits of excavation for the peat-lined trench and to determine the horizontal limits of excavation for the dry well.

1.2.3 Geologic Conditions

A ring of concrete pavers is set in the vicinity of the former swimming pool with additional poured concrete slabs northeast of this ring. Dirt and ground cover overlay the perimeter of the poured concrete slabs.

Fill materials existed in the western portion of the Site adjacent to, and south of, the former location of the gas building. The fill material consisted of silty sand with some brick, ash and slag. The fill was underlain by brown silty sand which was approximately 2 to 6 feet in

thickness, where undisturbed. These materials were partially excavated during the IRM activities.

The silty sand was underlain by fine brown gray sand. The fine brown gray sand, in turn, was underlain by a gray-green medium to coarse sand with some rounded gravel. The gray-green sand graded to silty clay and clay at 25 to 28 feet below ground surface (ft bgs). The clay had a high plasticity and some fine sand lenses were observed in the top of the clay. These soils remain present at the site.

Monitoring well gauging data indicates groundwater flow across the Site is south towards Bond Creek. Groundwater was encountered at 5 to 7 ft bgs. A clay aquitard confines the aquifer at approximately 25 to 28 ft bgs.

1.3 SUMMARY OF REMEDIAL INVESTIGATION AND PRE-DESIGN INVESTIGATION FINDINGS

In accordance with the VCO with NYSDEC, National Grid has completed several phases of site investigation to evaluate site conditions. The results of these investigations are described in detail in the following reports and Remedial Action Work Plan:

- Data Summary - February 20, 2004
- Site Characterization/IRM Study Report - June 21, 2007
- IRM Pre-Design Report – October 2008
- Remedial Action Work Plan – June 2012

Generally, these investigations have determined that soils containing MGP artifacts and PAHs above criteria for restricted residential uses, as defined under the NYSDEC Environmental Remediation Program, 6NYCRR Part 375-1.8 (g)(2)(ii)) were present primarily between ground surface and approximately 2 ft bgs. Below is a summary of site conditions prior to completion of the IRM and remedial actions.

Soil

Various substances of natural and anthropogenic origin were detected at the Site. These included PAHs and metals at various sampling locations. PAHs, although potentially associated with MGP operations, are also a normal byproduct of combustion. PAHs were detected at concentrations exceeding the NYSDEC SCOs in soil samples collected from the western portion of the Site (i.e. the fill slope south of the former gas building), and at one location in the center of the Site adjacent to a burn pit used by the former Site resident. Metals are also a potential byproduct of MGP operations, however the analytical results suggest that their occurrence at the Site is associated with ambient soil characteristics.

Groundwater

Groundwater quality at the Site showed no significant residual impacts from the former MGP operation. Aside from trace level detections of phenol in two groundwater samples, no volatile or semivolatile organic compounds were detected in groundwater samples, and only phenol exceeded the NYSDEC Part 703.5 standards for class GA (source of drinking water) groundwater. Certain metals including aluminum, iron, manganese, and sodium were detected in groundwater, but were also detected in soils, indicating that they are naturally occurring in the subsurface environment and not a result of MGP operations.

Soil Vapor

No volatile or semivolatile organic compounds were detected in site media. Therefore, site conditions are not expected to have impacted soil vapor. Additionally, no buildings are present on Site; therefore, there is no risk of exposure to soil vapors accumulated within an occupied space.

Underground Storage Tanks and Piping

An underground storage tank containing coal tar, adjacent soils containing coal tar, and a clay tile pipe formerly connected to the tank were excavated and removed from the Site.

Additionally, there was an underground cylindrical brick structure which was closed in place in 2003 by backfilling it with clean fill. A steel pipe was unearthed between the underground cylindrical brick structure and the former gas building. The pipe was empty, did not contain MGP residual, and showed no evidence of having carried or released any MGP related residuals.

A clay tile pipe was excavated from the shallow soil excavation to the property boundary, and a peat-lined trench containing coal tar was removed from the approximate former gas holder location southerly to the property boundary. The remaining clay tile pipe which extends east to the CSO pipe was capped and left in place. The peat-lined trench extends south onto the adjacent property and includes an abandoned dry well.

1.4 SUMMARY OF REMEDIAL ACTIONS

The Site was remediated in accordance with the NYSDEC-approved IRM Pre-Design Report dated October 2008, the Interim Remedial Measure Work Plan dated April 2009, the subsequent addenda and correspondence included in Appendix A of the IRM Construction Completion Report, and Remedial Design approved by NYSDEC in July 26, 2013. The following is a summary of these activities:

1. Tank containing coal tar, adjacent soils containing coal tar, and the clay tile pipe formerly connected to the tank in the western portion of the Site: Excavation and removal. Replacement with clean imported stone.

2. Surface soils and hardened tar patties over shallow PAH-impacted soils on western portion of the Site: Surface soil removal during excavation of shallow soils, replacement with clean imported top soil, and establishment of vegetative cover.

3. Former Residential Burn Pit: Surface soil removal to 1 ft bgs and replacement with clean topsoil.

4. Shallow soils (0-2 ft bgs) in the western portion of the Site: Excavation and removal. A geotextile fabric was installed at the base of this excavation area. In turn, a highly visible plastic orange mesh (or equivalent) was placed over the geotextile fabric. Clean imported stone and/or topsoil was placed over the geotextile, and vegetative cover was established.

5. Construction and maintenance of a soil cover system consisting of a geotextile fabric overlain by a highly visible plastic orange mesh as demarcation installed over remaining soils at a minimum of 2 ft bgs, followed by emplacement of clean fill to prevent human exposure to residual impacted soil/fill remaining at the Site.

6. Off-site soils which exceed residential SCOs, as defined by 6 NYCRR Part 375-6.8: Excavation and transportation off-site for disposal and treated prior to disposal using thermal desorption. Clean fill meeting the requirements of DER-10, Appendix 5 was brought in to replace the excavated soil and restore the off-site properties.

7. Remaining clay tile pipe, peat-lined trench, and abandoned dry well: Excavated as part of the off-site soils remediation.

8. Execution and recording of an Environmental Easement to restrict land use and prevent future exposure to any contamination remaining at the Site.

9. National Grid will pursue rezoning the parcel, which is currently zoned for single-family residential use.

10. Implementation of this Site Management Plan for long term management of remaining contamination as required by the Environmental Easement, which includes plans for: (1) EC/ICs, (2) Monitoring, (3) Operation and Maintenance and (4) Reporting.

1.4.1 Site Excavations

Shallow soils in the western portion of the Site found to contain PAHs at concentrations exceeding the NYSDEC SCOs were excavated from grade to a depth of 2 ft bgs, and transported off site for disposal or thermal treatment. The soils at the former residential burn pit were also removed to 1 ft bgs. The areas from which these soils were excavated are shown on Figure 2. As shown on Figure 4, a small area was excavated from 2-6 feet bgs at the former coal tar tank location. A total of 2,691 tons of soil was excavated, and clean soils

were imported to replace the excavated soils. Off-site soils exceeding residential SCOs were excavated and transported off site and treated prior to disposal using thermal desorption. The areas from which these soils were excavated are shown on Figure 2. A total of 572 tons of soil was excavated, and clean soils were imported to replace the excavated soils. Excavation and backfill of the remaining clay tile pipe, peat-lined trench, and abandoned dry well were included as part of the off-site remediation. A list of the NY State 375-6.8(b) restricted residential SCOs used for comparison during this project is provided in Table 3.

1.4.2 Remaining Site-Related Residual Contamination

The ICs/ECs will address the following remaining contamination:

Soil

Impacts exceeding part 375-6.8(b) Restricted Residential Soil Cleanup Objectives (RRSCO) are present, as follows:

- PAHs are present at concentrations that range from 1,100 to 3,300 µg/Kg at sample location NG-GS-SW-1.5'-12.
- PAHs are present at concentrations that range from 600 to 2,300 µg/Kg at sample location NG-GS-SW-1.5'-13.
- PAHs are present at a concentration of 780 µg/Kg at sample location NG-GS-SW-1.5'-D1 Duplicate of SW-13.
- PAHs are present at concentrations that range from 2,100 to 6,500 µg/Kg at sample location NG-GS-SW-1.5'-14.
- PAHs are present at concentrations that range from 710 to 2,800 µg/Kg at sample location NG-GS-SW-3.5'-35.
- PAHs are present at concentrations that range from 930 to 4,100 µg/Kg at sample location NG-GS-SW-3.5'-D2 Duplicate of SW-35.
- PAHs are present at concentrations that range from 1,100 to 5,100 µg/Kg at sample location NG-GS-B-2'-43.
- PAHs are present at a concentration of 590 µg/Kg at sample location NG-GS-B-2'-15.
- PAHs are present at concentrations that range from 4,000 to 19,000 µg/Kg at sample location NG-GS-B-2'-16.

- PAHs are present at concentrations that range from 25,000 to 230,000 µg/Kg at sample location NG-GS-B-2'-17.
- PAHs are present at concentrations that range from 13,000 to 150,000 µg/Kg at sample location NG-GS-B-2'-18.
- PAHs are present at a concentration of 580 µg/Kg at sample location NG-GS-B-2'-20.
- PAHs are present at concentrations that range from 2,100 to 11,000 µg/Kg at sample location NG-GS-B-2'-21.
- PAHs are present at concentrations that range from 2,400 to 14,000 µg/Kg at sample location NG-GS-B-2'-22.
- PAHs are present at concentrations that range from 13,000 to 34,000 µg/Kg at sample location NG-GS-B-2'-D3 Duplicate of B-22.
- PAHs are present at concentrations that range from 930 to 5,200 µg/Kg at sample location NG-GS-B-6'-36.

Locations of these soil samples and results of analysis for metals, PAHs, and cyanide are depicted in **Figure 4 and Table 4**, respectively**.**

Table 4 and Figure 4 summarize the results of all subsurface soil samples remaining at the site after completion of Remedial Action that exceed the Track 1 (unrestricted) SCOs the site.

2.0 ENGINEERING & INSTITUTIONAL CONTROL PLAN

2.1 INTRODUCTION

2.1.1 General

Since 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 upon approval by NYSDEC.

EC/ICs are not required for remediated areas located on the East and South properties.

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 Deed Restriction;
- 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 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 Geotextile Fabric and Overlying Soil Cover

Exposure to residual impacted soils is prevented by a geotextile fabric, highly visible plastic orange mesh, and overlying soil cover. Specifically, there is a minimum of 24 inches of soil that meets soil cleanup standards for restricted residential use overlying the geotextile fabric. The Excavation Work Plan that appears in Section 2.3.1 outlines the required procedures to follow in the event the cover system is breached, penetrated or temporarily

removed, and any underlying soil is disturbed. Procedures for the inspection and maintenance of these covers are provided in the Monitoring Plan included in Section 4 of this SMP.

This cover system is a permanent control and the quality and integrity of this system will be inspected at defined, regular intervals in perpetuity. There is a highly visible plastic orange mesh placed over the geotextile fabric to alert personnel excavating below 24 inches of the presence of the geotextile fabric.

2.2.1.2 Chain Link Fence

Site access by non-authorized personnel is limited by the installation of a chain link fence along the northern, eastern, and southern property boundaries of the Site. The chain link fence is a permanent control and the quality and integrity of this system will be inspected at defined, regular intervals in perpetuity. A minimum distance of 2 feet on either side of the fence is to remain cleared of trees and shrubs to allow for inspection of the system. A sliding access gate has been installed on the eastern portion of the fence to allow for equipment access/egress from the East property.

2.2.2 Criteria for Completion of Remediation/Termination of Remedial Systems

Generally, remedial processes are considered completed when effectiveness monitoring indicates that the remedy has achieved the remedial action objectives identified by the decision document. The framework for determining when remedial processes are complete is provided in Section 6.6 of NYSDEC DER-10.

2.2.2.1 Geotextile Fabric and Overlying Soil Cover

The geotextile fabric and overlying soil cover system is a permanent control and the quality and integrity of this system will be inspected at defined, regular (annual) intervals in perpetuity.

2.2.2.2 Chain Link Fence

The chain link fence is a permanent control and the quality and integrity of this system will be inspected at defined, regular (annual) intervals in perpetuity.

2.3 INSTITUTIONAL CONTROLS

A series of Institutional Controls is required by the Decision Document] 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 uses only. Adherence to these

Institutional Controls on the Site is required by the Deed Restriction and will be implemented under this Site Management Plan. These Institutional Controls are:

- Compliance with the Deed Restriction and this SMP by the Grantor and the Grantor's successors and assigns.
- All Engineering Controls must be operated and maintained as specified in this SMP.
- All Engineering Controls on the Site must be inspected and certified 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 Deed Restriction may not be discontinued without an amendment to or extinguishment of the Deed Restriction.

The Site has a series of Institutional Controls in the form of site restrictions. Adherence to these Institutional Controls is required by the Deed Restriction. Site restrictions that apply to the Site are:

- The property may only be used for restricted residential 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 unrestricted residential, without additional remediation and amendment of the Deed Restriction, 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 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.

In addition, institutional controls in the form of Deed Restrictions apply to the controlled property. These restrictions:

- Require the remedial party (National Grid) to complete and submit to the Department a periodic certification of institutional and engineering controls in accordance with Part 375-1.8(h)(3); and

- Requires compliance with the Department-approved Site Management Plan.

- The list above is identical to the restrictions named in the Decision Document.

2.3.1 Excavation Work Plan

The Excavation Work Plan (EWP) that is attached as Appendix D to this SMP.

2.3.2 Community Air Monitoring Plan

The property is in a residential area. For this reason, continuous monitoring will be implemented along the north, south and west perimeter of the Site regardless of wind direction. Additional monitoring points will be established based on upwind and downwind requirements as dictated in DER-10. Continuous monitoring for particulates and VOCs will be conducted whenever site activities will expose remaining residual contamination, as shown in Table 4 and Figure 4. Continuous monitoring for particulates and VOCs will not be required for any site activities above 2 feet below grade. Periodic monitoring as described in DER-10 will be implemented during backfill and cover installation operations.

2.3.2.1 Particulate Monitoring, Response Levels, and Actions

Particulate concentrations will be monitored continuously at the upwind and downwind perimeters of the immediate work area, and along the north, south, and west Site boundary at temporary particulate monitoring stations. The particulate monitoring will be performed using miniature real time aerosol monitoring instrument capable of measuring particulate matter less than 10 micrometers in size (PM-10) and capable of integrating over a period of 15 minutes (or less) for comparison to the airborne particulate action level. The equipment must be equipped with an audible alarm to indicate exceedances of the action level. In addition, fugitive dust migration should be visually assessed during all work activities.

If the downwind PM-10 particulate level is 100 micrograms per cubic meter (mcg/m3) greater than background (upwind perimeter) for the 15-minute period or if airborne dust is observed leaving the work area, then dust suppression techniques must be employed. Work may continue with dust suppression techniques provided that downwind PM-10 particulate levels do not exceed 150 microgram per cubic meter (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 including the use of water spray on dust containing surfaces 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 must be recorded and be available for State (NYSDEC and NYSDOH) personnel to review upon request.

2.3.2.2 VOC Monitoring, Response Levels, and Actions

Continuous monitoring for VOCs will be conducted whenever site activities will expose remaining residual contamination, as shown in Table 4 and Figure 4. Continuous monitoring for VOCs will not be required for any site activities above 2 feet below grade. Periodic monitoring as described in DER-10 will be implemented during backfill and cover installation operations. Response levels and actions will be adopted per the New York State Department of Health Generic Community Air Monitoring Plan included as DER-10, Appendix 1A.

2.4 INSPECTIONS AND NOTIFICATIONS

2.4.1 Inspections

Inspections of all remedial components installed at the site will be conducted at the frequency specified in the SMP Monitoring Plan schedule. A comprehensive site-wide inspection will be conducted annually, regardless of the frequency of the Periodic Review Report. The inspections will determine and document the following:

- Whether Engineering Controls continue to perform as designed;
- If these controls continue to be protective of human health and the environment;
- Compliance with requirements of this SMP and the Environmental Easement;
- Achievement of remedial performance criteria;
- If site records are complete and up to date; and
- Changes, or needed changes, to the remedial or monitoring system.

Inspections will be conducted in accordance with the procedures set forth in the Monitoring Plan of this SMP (Section 3). The reporting requirements are outlined in the Periodic Review Reporting section of this plan (Section 5).

If an emergency, such as a natural disaster or an unforeseen failure of any of the ECs occurs, an inspection of the site will be conducted within 5 days of the event to verify the effectiveness of the EC/ICs implemented at the site by a qualified environmental professional as determined by NYSDEC.

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 Voluntary Cleanup Agreement (VCA), 6NYCRR Part 375.
- 7-day advance notice of any proposed ground-intrusive activities pursuant to the Excavation Work Plan.
- Notice within two (2) business days of any damage or defect to the foundation, structures or engineering control that reduces or has the potential to reduce the effectiveness of an Engineering Control and likewise any action to be taken to mitigate the damage or defect.
- Verbal notice within two (2) business days of any emergency, such as a fire, flood, or earthquake that reduces or has the potential to reduce the effectiveness of Engineering Controls in place at the site, with written confirmation within 7 days that includes a summary of actions taken, or to be taken, and the potential impact to the environment and the public.
- 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 Voluntary Cleanup Agreement (VCA) and all approved work plans and reports, including this SMP.

Within 15 days after the transfer of all or part of the site, the new owner's name, contact representative, and contact information will be confirmed in writing.

2.5 CONTINGENCY PLAN

Emergencies may include injury to personnel, fire or explosion, environmental release, or serious weather conditions. A Contingency Plan is included in Appendix D as part of the EWP.

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 a qualified environmental professional.

Table 1: Emergency Contact Information

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

Table 2: Contact Numbers

National Grid – Property Owner	Steven Stucker	315-428-5652 (office) 315-247-6490 (cell)
Scott Deyette, NYSDEC Project Manager, or NYSDEC Remedial Bureau	518-402-9662	
NYSDOH Project Manager, Albert DeMarco	(518) 402-7860	

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

2.5.2 Map and Directions to Nearest Health Facility

Site Location: 22 Canal Street, Fort Edward, NY 12828

Nearest Hospital Name: Glens Falls Hospital

Hospital Location: 12 Warren Street, Glens Falls, NY

Hospital Telephone: **(518) 926-7077**

Directions to the Hospital:

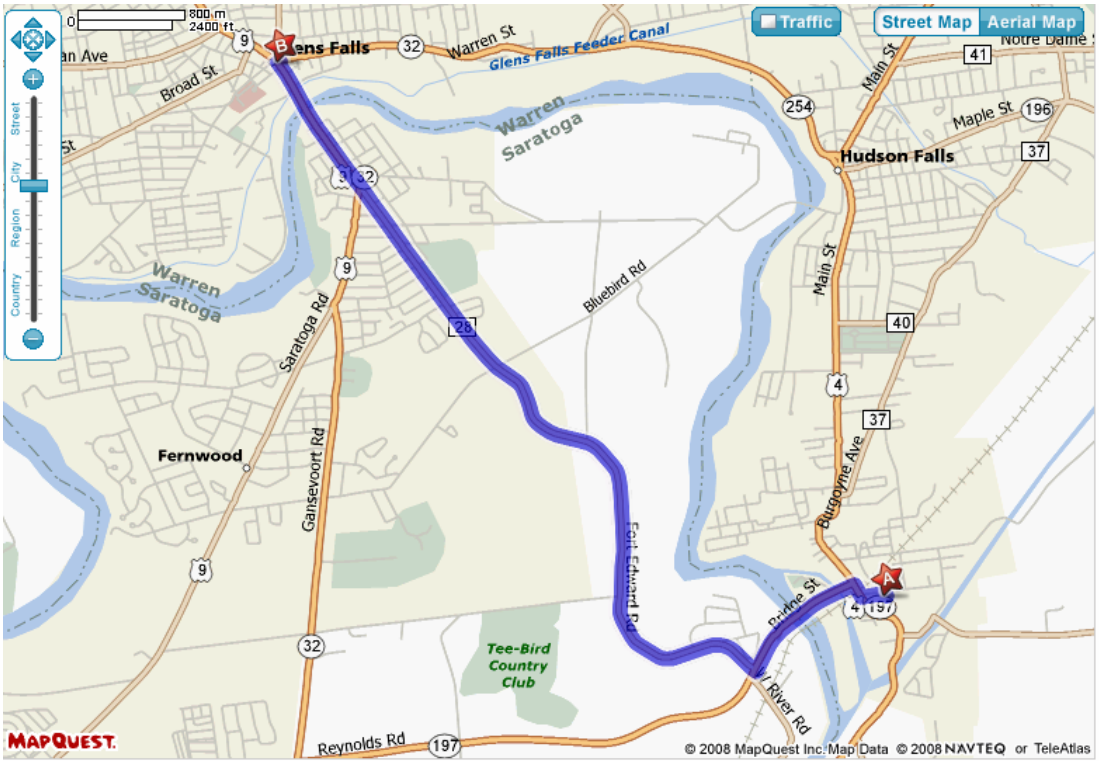
1. Start going northwest on Canal St toward Notre Dame St
2. Turn left onto Notre Dame St.
3. Turn right onto US-4/NY-197/Broadway.
4. Turn left onto Bridge St./NY-197. Continue to follow NY-197.
5. Turn right onto Fort Edward Rd/CR-28. Continue to follow CR-28. CR-28 becomes US-9/NY-32.
6. Continue through the round-about, hospital is two blocks further on the left.

Total Distance: 5.62 Miles Total Estimated Time: 12 minutes

2.5.3 Response Procedures

As appropriate, the fire department and other emergency response group will be notified immediately by telephone of an emergency. The emergency telephone number list is found above.

Map Showing Route from the Site to the Hospital:



3.0 SITE MONITORING PLAN

3.1 INTRODUCTION

3.1.1 General

The Monitoring Plan describes the measures for evaluating the performance and effectiveness of the implemented ECs to reduce or mitigate remaining contamination at the Site. Monitoring of Engineering Controls is described in Chapter 4, Operation, Monitoring and Maintenance Plan. This Monitoring Plan may only be revised with the approval of NYSDEC.

3.1.2 Purpose and Schedule

This Monitoring Plan describes the methods to be used for:

- Assessing compliance with applicable NYSDEC standards, criteria and guidance;
- Assessing achievement of the remedial performance criteria;
- Evaluating Site information periodically to confirm that the remedy continues to be effective in protecting public health and the environment; and
- Preparing the necessary reports for the various monitoring activities.

To adequately address these issues, this Monitoring Plan provides information on:

- Reporting requirements; and
- Annual inspection and certification.

Annual monitoring of the performance of the remedy will be conducted. Monitoring programs are outlined in detail in the following Sections.

3.2 ENGINEERING CONTROL SYSTEM MONITORING

3.2.1 Geotextile Cover System

A NYS Licensed Professional Engineer will monitor the geotextile cover system on an annual basis and will certify the condition of the geotextile cover system. No breaches in the soil/membrane cover system should occur.

The inspection frequency is subject to change with the approval of the NYSDEC. Unscheduled inspections and/or sampling may take place when a suspected failure of the cover system has been reported or an emergency occurs that is deemed likely to affect the

operation of the system. Inspection reports and records of any repairs made to the cover will be included in the Periodic Review Reports, as described in Section 5.

3.3 SITE-WIDE INSPECTION

Site-wide inspections will be performed on a regular schedule at a minimum of once per year. Site-wide inspections will also be performed after severe weather conditions that may affect ECs. During these inspections, the Field Inspection Report Form in **Appendix C** will be completed. The form will compile sufficient information to assess the following:

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

3.4 MONITORING REPORTING REQUIREMENTS

All forms, and other relevant reporting formats used during the monitoring/inspection events, will be (1) subject to approval by NYSDEC and (2) submitted at the time of the Periodic Review Report, as specified in the Reporting Plan of this SMP.

All monitoring results will be reported to NYSDEC on a periodic basis in the Periodic Review Report. The report (or letter) will include, at a minimum:

- Date of event;
- Description of the activities performed;
- Copies of completed field forms;
- Representative photographs;
- Figure, if necessary;
- Observations, conclusions, or recommendations; and
- Certification.

Data will be reported in hard copy or digital format as determined by NYSDEC.

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. Mowing and weed spraying will be performed as needed.

5.0 INSPECTIONS, REPORTING AND CERTIFICATIONS

5.1 SITE INSPECTIONS

5.1.1 Inspection Frequency

All inspections will be conducted at the frequency specified in the schedules provided in Section 3 Monitoring Plan and Section 4 Operation and Maintenance Plan of this SMP. At a minimum, a site-wide inspection will be conducted annually. Inspections of remedial components will also be conducted whenever a severe condition has taken place, such as an erosion or flooding event that may affect the ECs.

5.1.2 Inspection Forms, Sampling Data, and Maintenance Reports

All inspections and monitoring events will be recorded on the appropriate forms for their respective component which are contained in Appendix C. Additionally, the Field Inspection Report Form will be completed during the site-wide inspection (see Appendix C). These forms are subject to NYSDEC revision.

All applicable inspection forms and other records, including system maintenance reports, generated for the site during the reporting period will be provided in electronic format in the Periodic Review Report.

5.1.3 Evaluation of Records and Reporting

The results of the inspection and site monitoring data 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 Monitoring Plan is being implemented; and
- The site remedy continues to be protective of public health and the environment and is performing as designated by the Decision Document.

5.2 CERTIFICATION OF ENGINEERING AND INSTITUTIONAL CONTROLS

Every three (3) years, a Certification Statement signed by a licensed New York State Professional Engineer which will indicate (if applicable):

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

- The inspection of the site to confirm the effectiveness of the institutional and engineering controls required by the remedial program was performed under my direction;

- The institutional control and/or engineering control employed at this site is unchanged from the date the control was put in place, or last approved by the 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 engineering control systems are performing as designed and are effective;

- To the best of my knowledge and belief, the work and conclusions described in this certification are in accordance with the requirements of the site remedial program; and

- 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, [NYS-licensed professional engineer], of [business address], am certifying as [Owner or Owner’s Designated Site Representative] [I have been authorized and designated by all site owners to sign this certification] for the site.

5.3 PERIODIC REVIEW REPORT

A Periodic Review Report will be submitted to the Department every year, beginning fifteen months after approval of the Final Engineering Report 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 described in Appendix A. (Metes and Bounds). The report will be prepared in accordance with NYSDEC DER-10 and submitted within 30 days of the end of each certification period. Media sampling results will also 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 site evaluation, which includes the following:
    - The compliance of the remedy with the requirements of the site-specific Decision Document;
    - Any new conclusions or observations regarding site contamination based on inspections or data generated by the Monitoring Plan;
    - 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 format, to the NYSDEC Central Office, and in electronic format to NYSDEC Central Office, Regional Office and the NYSDOH Bureau of Environmental Exposure Investigation.

5.4 CORRECTIVE MEASURES PLAN

If any component of the 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

Tables

Table 3 - 375-6.8(b) Restricted Use Soil Cleanup Objectives

Contaminant	CAS Number	Protection of Public Health				Protection of Ecological Resources	Protection of Ground-water
		Residential	Restricted-Residential	Commercial	Industrial		
Metals							
Arsenic	7440-38-2	16[f]	16[f]	16[f]	16[f]	13[f]	16[f]
Barium	7440-39-3	350[f]	400	400	10,000 [d]	433	820
Beryllium	7440-41-7	14	72	590	2,700	10	47
Cadmium	7440-43-9	2.5[f]	4.3	9.3	60	4	7.5
Chromium, hexavalent [h]	18540-29-9	22	110	400	800	1[e]	19
Chromium, trivalent[h]	16065-83-1	36	180	1,500	6,800	41	NS
Copper	7440-50-8	270	270	270	10,000 [d]	50	1,720
Total Cyanide [h]		27	27	27	10,000 [d]	NS	40
Lead	7439-92-1	400	400	1,000	3,900	63[f]	450
Manganese	7439-96-5	2,000[f]	2,000[f]	10,000 [d]	10,000 [d]	1600[f]	2,000[f]
Total Mercury		0.81[j]	0.81[j]	2.8[j]	5.7[j]	0.18[f]	0.73
Nickel	7440-02-0	140	310	310	10,000 [d]	30	130
Selenium	7782-49-2	36	180	1,500	6,800	3.9[f]	4[f]
Silver	7440-22-4	36	180	1,500	6,800	2	8.3
Zinc	7440-66-6	2200	10,000 [d]	10,000 [d]	10,000 [d]	109[f]	2,480

Table 3 - 375-6.8(b) Restricted Use Soil Cleanup Objectives

Contaminant	CAS Number	Protection of Public Health				Protection of Ecological Resources	Protection of Ground-water
		Residential	Restricted-Residential	Commercial	Industrial		
PCBs/Pesticides							
2,4,5-TP Acid (Silvex)	93-72-1	58	100[a]	500[b]	1,000[c]	NS	3.8
4,4'-DDE	72-55-9	1.8	8.9	62	120	0.0033 [e]	17
4,4'-DDT	50-29-3	1.7	7.9	47	94	0.0033 [e]	136
4,4'-DDD	72-54-8	2.6	13	92	180	0.0033 [e]	14
Aldrin	309-00-2	0.019	0.097	0.68	1.4	0.14	0.19
alpha-BHC	319-84-6	0.097	0.48	3.4	6.8	0.04[g]	0.02
beta-BHC	319-85-7	0.072	0.36	3	14	0.6	0.09
Chlordane (alpha)	5103-71-9	0.91	4.2	24	47	1.3	2.9
delta-BHC	319-86-8	100[a]	100[a]	500[b]	1,000[c]	0.04[g]	0.25
Dibenzofuran	132-64-9	14	59	350	1,000[c]	NS	210
Dieldrin	60-57-1	0.039	0.2	1.4	2.8	0.006	0.1
Endosulfan I	959-98-8	4.8[i]	24[i]	200[i]	920[i]	NS	102
Endosulfan II	33213-65-9	4.8[i]	24[i]	200[i]	920[i]	NS	102
Endosulfan sulfate	1031-07-8	4.8[i]	24[i]	200[i]	920[i]	NS	1,000[c]
Endrin	72-20-8	2.2	11	89	410	0.014	0.06
Heptachlor	76-44-8	0.42	2.1	15	29	0.14	0.38
Lindane	58-89-9	0.28	1.3	9.2	23	6	0.1
Polychlorinated biphenyls	1336-36-3	1	1	1	25	1	3.2

Table 3 - 375-6.8(b) Restricted Use Soil Cleanup Objectives

Contaminant	CAS Number	Protection of Public Health				Protection of Ecological Resources	Protection of Ground-water
		Residential	Restricted-Residential	Commercial	Industrial		
Semivolatiles							
Acenaphthene	83-32-9	100[a]	100[a]	500[b]	1,000[c]	20	98
Acenapthylene	208-96-8	100[a]	100[a]	500[b]	1,000[c]	NS	107
Anthracene	120-12-7	100[a]	100[a]	500[b]	1,000[c]	NS	1,000[c]
Benz(a)anthracene	56-55-3	1[f]	1[f]	5.6	11	NS	1[f]
Benzo(a)pyrene	50-32-8	1[f]	1[f]	1[f]	1.1	2.6	22
Benzo(b)fluoranthene	205-99-2	1[f]	1[f]	5.6	11	NS	1.7
Benzo(g,h,i)perylene	191-24-2	100[a]	100[a]	500[b]	1,000[c]	NS	1,000[c]
Benzo(k)fluoranthene	207-08-9	1	3.9	56	110	NS	1.7
Chrysene	218-01-9	1[f]	3.9	56	110	NS	1[f]
Dibenz(a,h)anthracene	53-70-3	0.33[e]	0.33[e]	0.56	1.1	NS	1,000[c]
Fluoranthene	206-44-0	100[a]	100[a]	500[b]	1,000[c]	NS	1,000[c]
Fluorene	86-73-7	100[a]	100[a]	500[b]	1,000[c]	30	386
Indeno(1,2,3-cd)pyrene	193-39-5	0.5[f]	0.5[f]	5.6	11	NS	8.2
m-Cresol	108-39-4	100[a]	100[a]	500[b]	1,000[c]	NS	0.33[e]
Naphthalene	91-20-3	100[a]	100[a]	500[b]	1,000[c]	NS	12
o-Cresol	95-48-7	100[a]	100[a]	500[b]	1,000[c]	NS	0.33[e]
p-Cresol	106-44-5	34	100[a]	500[b]	1,000[c]	NS	0.33[e]
Pentachlorophenol	87-86-5	2.4	6.7	6.7	55	0.8[e]	0.8[e]
Phenanthrene	85-01-8	100[a]	100[a]	500[b]	1,000[c]	NS	1,000[c]
Phenol	108-95-2	100[a]	100[a]	500[b]	1,000[c]	30	0.33[e]
Pyrene	129-00-0	100[a]	100[a]	500[b]	1,000[c]	NS	1,000[c]

Table 3 - 375-6.8(b) Restricted Use Soil Cleanup Objectives

Contaminant	CAS Number	Protection of Public Health				Protection of Ecological Resources	Protection of Ground-water
		Residential	Restricted-Residential	Commercial	Industrial		
Volatiles							
1,1,1-Trichloroethane	71-55-6	100[a]	100[a]	500[b]	1,000[c]	NS	0.68
1,1-Dichloroethane	75-34-3	19	26	240	480	NS	0.27
1,1-Dichloroethene	75-35-4	100[a]	100[a]	500[b]	1,000[c]	NS	0.33
1,2-Dichlorobenzene	95-50-1	100[a]	100[a]	500[b]	1,000[c]	NS	1.1
1,2-Dichloroethane	107-06-2	2.3	3.1	30	60	10	0.02[f]
cis-1,2-Dichloroethene	156-59-2	59	100[a]	500[b]	1,000[c]	NS	0.25
trans-1,2-Dichloroethene	156-60-5	100[a]	100[a]	500[b]	1,000[c]	NS	0.19
1,3-Dichlorobenzene	541-73-1	17	49	280	560	NS	2.4
1,4-Dichlorobenzene	106-46-7	9.8	13	130	250	20	1.8
1,4-Dioxane	123-91-1	9.8	13	130	250	0.1[e]	0.1[e]
Acetone	67-64-1	100[a]	100[b]	500[b]	1,000[c]	2.2	0.05
Benzene	71-43-2	2.9	4.8	44	89	70	0.06
Butylbenzene	104-51-8	100[a]	100[a]	500[b]	1,000[c]	NS	12
Carbon tetrachloride	56-23-5	1.4	2.4	22	44	NS	0.76
Chlorobenzene	108-90-7	100[a]	100[a]	500[b]	1,000[c]	40	1.1
Chloroform	67-66-3	10	49	350	700	12	0.37
Ethylbenzene	100-41-4	30	41	390	780	NS	1
Hexachlorobenzene	118-74-1	0.33[e]	1.2	6	12	NS	3.2
Methyl ethyl ketone	78-93-3	100[a]	100[a]	500[b]	1,000[c]	100[a]	0.12
Methyl tert-butyl ether	1634-04-4	62	100[a]	500[b]	1,000[c]	NS	0.93

Table 3 - 375-6.8(b) Restricted Use Soil Cleanup Objectives

Contaminant	CAS Number	Protection of Public Health				Protection of Ecological Resources	Protection of Ground-water
		Residential	Restricted-Residential	Commercial	Industrial		
Methylene chloride	75-09-2	51	100[a]	500[b]	1,000[c]	12	0.05
n-Propylbenzene	103-65-1	100[a]	100[a]	500[b]	1,000[c]	NS	3.9
sec-Butylbenzene	135-98-8	100[a]	100[a]	500[b]	1,000[c]	NS	11
tert-Butylbenzene	98-06-6	100[a]	100[a]	500[b]	1,000[c]	NS	5.9
Tetrachloroethene	127-18-4	5.5	19	150	300	2	1.3
Toluene	108-88-3	100[a]	100[a]	500[b]	1,000[c]	36	0.7
Trichloroethene	79-01-6	10	21	200	400	2	0.47
1,2,4-Trimethylbenzene	95-63-6	47	52	190	380	NS	3.6
1,3,5-Trimethylbenzene	108-67-8	47	52	190	380	NS	8.4
Vinyl chloride	75-01-4	0.21	0.9	13	27	NS	0.02
Xylene (mixed)	1330-20-7	100[a]	100[a]	500[b]	1,000[c]	0.26	1.6

All soil cleanup objectives (SCOs) are in parts per million (ppm). NS=Not specified. See Technical Support Document (TSD). Footnotes

[a] The SCOs for residential, restricted-residential and ecological resources use were capped at a maximum value of 100 ppm. See TSD section 9.3.

[b] The SCOs for commercial use were capped at a maximum value of 500 ppm. See TSD section 9.3.

[c] The SCOs for industrial use and the protection of groundwater were capped at a maximum value of 1000 ppm. See TSD section 9.3.

[d] The SCOs for metals were capped at a maximum value of 10,000 ppm. See TSD section 9.3.

[e] For constituents where the calculated SCO was lower than the contract required quantitation limit (CRQL), the CRQL is used as the SCO value.

[f] For constituents where the calculated SCO was lower than the rural soil background concentration as determined by the Department and Department of Health rural soil survey, the rural soil background concentration is used as the Track 2 SCO value for this use of the site.

[g] This SCO is derived from data on mixed isomers of BHC.

[h] The SCO for this specific compound (or family of compounds) is considered to be met if the analysis for the total species of this contaminant is below the specific SCO.

[i] This SCO is for the sum of endosulfan I, endosulfan II, and endosulfan sulfate.

[j] This SCO is the lower of the values for mercury (elemental) or mercury (inorganic salts). See TSD Table 5.6-1.

Table 4
Documentation Samples – Remaining Soils that Exceeded the Part 375-6.8(b) Restricted Residential SCOs

	Sample Location	West sidewall/ SW corner	West sidewall/ middle	West sidewall/ middle	West sidewall/ north	6' Exc. west sidewall/ north half	6' Exc. East sidewall/ north half	6' Exc. North sidewall/ east leg	6' Exc. East sidewall	6' Exc. South sidewall	6' Exc. West sidewall/ south half	6' Exc. West sidewall/ south half
	Sample ID	**NG-GS-SW-1.5'-12**	**NG-GS-SW-1.5'-13**	**NG-GS-SW-1.5'-D1 Duplicate of SW-13**	**NG-GS-SW-1.5'-14**	**NG-GS-SW-3.5'-30**	**NG-GS-SW-3.5'-31**	**NG-GS-SW-3.5'-32**	**NG-GS-SW-3.5'-33**	**NG-GS-SW-3.5'-34**	**NG-GS-SW-3.5'-35**	**NG-GS-SW-3.5'-D2 Duplicate of SW-35**
Analyte	**NY State Part 375-6.8(b) Restricted Residential SCOs**	**7/10/09**	**7/10/09**	**7/10/09**	**7/10/09**	**7/10/09**	**7/10/09**	**7/10/09**	**7/10/09**	**7/10/09**	**7/10/09**	**7/10/09**
TOTAL CYANIDE (mg/Kg)	27											
PERCENT SOLIDS (%)		**84**	**89**	**89**	**85**	**70**	**79**	**90**	**84**	**83**	**85**	**86**
PAHs (µg/Kg)												
Acenaphthene	100,000	15 U	**310**	7 U	**1,700**	1.8 U	8.1 U	1.4 U	1.5 U	1.5 U	7.5 U	7.3 U
Acenaphthylene	100,000	16 U	**540**	7.3 U	30 U	1.9 U	8.4 U	1.5 U	1.6 U	1.5 U	**270**	**290**
Anthracene	100,000	18 U	**1,200**	8.4 U	**2,700**	2.2 U	9.6 U	1.7 U	1.8 U	1.8 U	**730**	**950**
Benzo(a)anthracene	1,000	**2,000**	**2,100**	**620**	**5,500**	**32**	**200**	1.8 U	2 U	**84**	**2,200**	**3,300**
Benzo(a)pyrene	1,000	**2,500**	**2,200**	**890**	**6,300**	2.9 U	**450**	2.3 U	2.4 U	**120**	**2,600**	**3,900**
Benzo(b)fluoranthene	1,000	**3,300**	**2,300**	**900**	**6,500**	4.7 U	**260**	3.6 U	3.9 U	**94**	**2,800**	**4,100**
Benzo(g,h,i)perylene	100,000	**2,700**	**1,700**	**740**	**5,000**	2.9 U	**250**	2.2 U	2.4 U	**61**	**2,300**	**3,400**
Benzo(k)fluoranthene	3,900	**1,100**	**920**	**330**	**2,300**	6.1 U	**150**	4.7 U	5 U	**33**	**1,100**	**2,000**
Chrysene	3,900	**2,300**	**2,100**	**660**	**5,500**	1.5 U	**200**	1.1 U	1.2 U	**68**	**2,100**	**3,100**
Dibenzo(a,h)anthracene	330	**1,100**	**600**	8.7 U	**2,100**	2.3 U	10 U	1.7 U	1.9 U	1.9 U	**710**	**930**
Dibenzofuran		16 U	**230**	7.6 U	**1,000**							
Fluoranthene	100,000	**3,300**	**5,600**	**1,100**	**11,000**	**51**	**310**	1.5 U	1.7 U	**110**	**4,400**	**6,400**
Fluorene	100,000	14 U	**590**	6.7 U	**1,600**	1.7 U	7.7 U	1.3 U	1.4 U	1.4 U	**290**	**360**
Indeno(1,2,3-cd)pyrene	500	**2,500**	**1,500**	**780**	**4,600**	1.4 U	**460**	1.1 U	1.2 U	**100**	**1,900**	**2,700**
Naphthalene	100,000	20 U	9.4 U	9.4 U	**1,800**	2.4 U	11 U	1.9 U	2 U	2 U	10 U	9.7 U
Phenanthrene	100,000	**850**	**4,700**	**410**	**7,200**	1.8 U	8.1 U	1.4 U	1.5 U	**47**	**1,100**	**2,400**
Pyrene	100,000	**3,000**	**4,900**	**1,100**	**10,000**	**49**	**310**	0.77 U	0.83 U	**97**	**3,900**	**5,800**
2-Methylnaphthalene		12 U	5.7 U	5.7 U	**1,100**							

Notes:
NY State Part 375-SCOs effective December 2006
Bold values were detected in the sample
Bold and shaded values are above RRSCOs
mg/Kg = milligram per kilogram
µg/Kg = micrograms per kilogram
V = Estimated value based on validation criteria
U = Not detected at laboratory reporting limit
J = Estimated value
E = Semi-Quantitative value

Table 4
Documentation Samples – Remaining Soils that Exceeded
the Part 375-6.8(b) Restricted Residential SCOs

	Sample Location	Extra north exc. bottom north	Extra north exc. bottom south	Bottom/ SW Corner	Bottom/ western third	Bottom/ NW Corner	Bottom/ north middle	Bottom/ south middle	Bottom/ SE Corner	Bottom/ NE Corner	Bottom/ north middle	Bottom/ north middle	Bottom/ south half	Bottom/ north half
	Sample ID	**NG-GS-B-2'-43**	**NG-GS-B-3.5'-44**	**NG-GS-B-2'-15**	**NG-GS-B-2'-16'**	**NG-GS-B-2'-17**	**NG-GS-B-2'-18**	**NG-GS-B-2'-19**	**NG-GS-B-2'-20**	**NG-GS-B-2'-21**	**NG-GS-B-2'-22**	**NG-GS-B-2'-D3 Duplicate of B-22**	**NG-GS-B-6'-36**	**NG-GS-B-6'-37**
Analyte	**NY State Part 375-6.8(b) Restricted Residential SCOs**	**7/20/09**	**7/20/09**	**7/10/09**	**7/10/09**	**7/10/09**	**7/10/09**	**7/10/09**	**7/10/09**	**7/10/09**	**7/10/09**	**7/10/09**	**7/10/09**	**7/10/09**
TOTAL CYANIDE (mg/Kg)	27													
PERCENT SOLIDS (%)		**84**	**66**	**70**	**83**	**78**	**81**	**77**	**68**	**68**	**67**	**84**	**87**	**86**
PAHs (µg/Kg)														
Acenaphthene	100,000	7.5 U	1.9 U	9.1 U	**1,300**	**10,000**	310 U	8.2 U	9.2 U	18 U	9.4 U	300 U	7.3 U	7.3 U
Acenaphthylene	100,000	**450**	2 U	9.5 U	**1,200**	**19,000**	**16,000**	8.6 U	9.5 U	**1,100**	**1,100**	310 U	**460**	7.6 U
Anthracene	100,000	**510**	2.3 U	11 U	**5,200**	**45,000**	**47,000**	9.8 U	11 U	**2,800**	**1,200**	350 U	**2,100**	**400**
Benzo(a)anthracene	1,000	**3,100**	**72**	**390**	**17,000**	**97,000**	**53,000**	**170**	**440**	**9,500**	**10,000**	**23,000**	**5,100**	**380**
Benzo(a)pyrene	1,000	**3,300**	**130**	**670**	**18,000**	**92,000**	**53,000**	**430**	**680**	**9,600**	**6,100**	**23,000**	**3,700**	**570**
Benzo(b)fluoranthene	1,000	**5,100**	**120**	**580**	**19,000**	**97,000**	**57,000**	**270**	**420**	**11,000**	**14,000**	**34,000**	**5,200**	**550**
Benzo(g,h,i)perylene	100,000	**4,100**	**77**	**390**	**15,000**	**60,000**	**36,000**	**200**	**330**	**6,500**	**9,900**	**22,000**	**3,100**	**300**
Benzo(k)fluoranthene	3,900	**2,000**	**45**	**130**	**9,500**	**43,000**	**23,000**	27 U	**270**	**4,400**	**5,500**	**13,000**	**1,500**	24 U
Chrysene	3,900	**3,300**	**79**	**430**	**17,000**	**91,000**	**52,000**	**170**	**390**	**8,600**	**9,700**	**24,000**	**4,300**	**340**
Dibenzo(a,h)anthracene	330	**1,100**	2.4 U	11 U	**4,000**	**25,000**	390 U	10 U	11 U	**2,100**	**2,400**	370 U	**930**	9.1 U
Dibenzofuran														
Fluoranthene	100,000	**4,600**	**97**	**850**	**35,000**	**230,000**	**150,000**	**260**	**820**	**20,000**	**17,000**	**35,000**	**14,000**	**790**
Fluorene	100,000	7.2 U	1.8 U	8.7 U	**1,800**	**26,000**	**19,000**	7.9 U	8.7 U	**880**	**380**	280 U	**360**	**260**
Indeno(1,2,3-cd)pyrene	500	**3,400**	**130**	**590**	**12,000**	**58,000**	**38,000**	**450**	**580**	**5,700**	**8,100**	**28,000**	**2,700**	**480**
Naphthalene	100,000	10 U	2.6 U	12 U	40 U	430 U	**13,000**	11 U	12 U	25 U	13 U	400 U	9.7 U	9.8 U
Phenanthrene	100,000	**1,000**	1.9 U	**680**	**20,000**	**160,000**	**150,000**	8.3 U	**310**	**5,100**	**3,800**	**7,600**	**5,800**	**470**
Pyrene	100,000	**4,200**	**88**	**760**	**31,000**	**200,000**	**130,000**	**250**	**770**	**17,000**	**15,000**	**33,000**	**11,000**	**670**
2-Methylnaphthalene														

Notes:
NY State Part 375-SCOs effective December 2006
Bold values were detected in the sample
Bold and shaded values are above RRSCOs
mg/Kg = milligram per kilogram
µg/Kg = micrograms per kilogram
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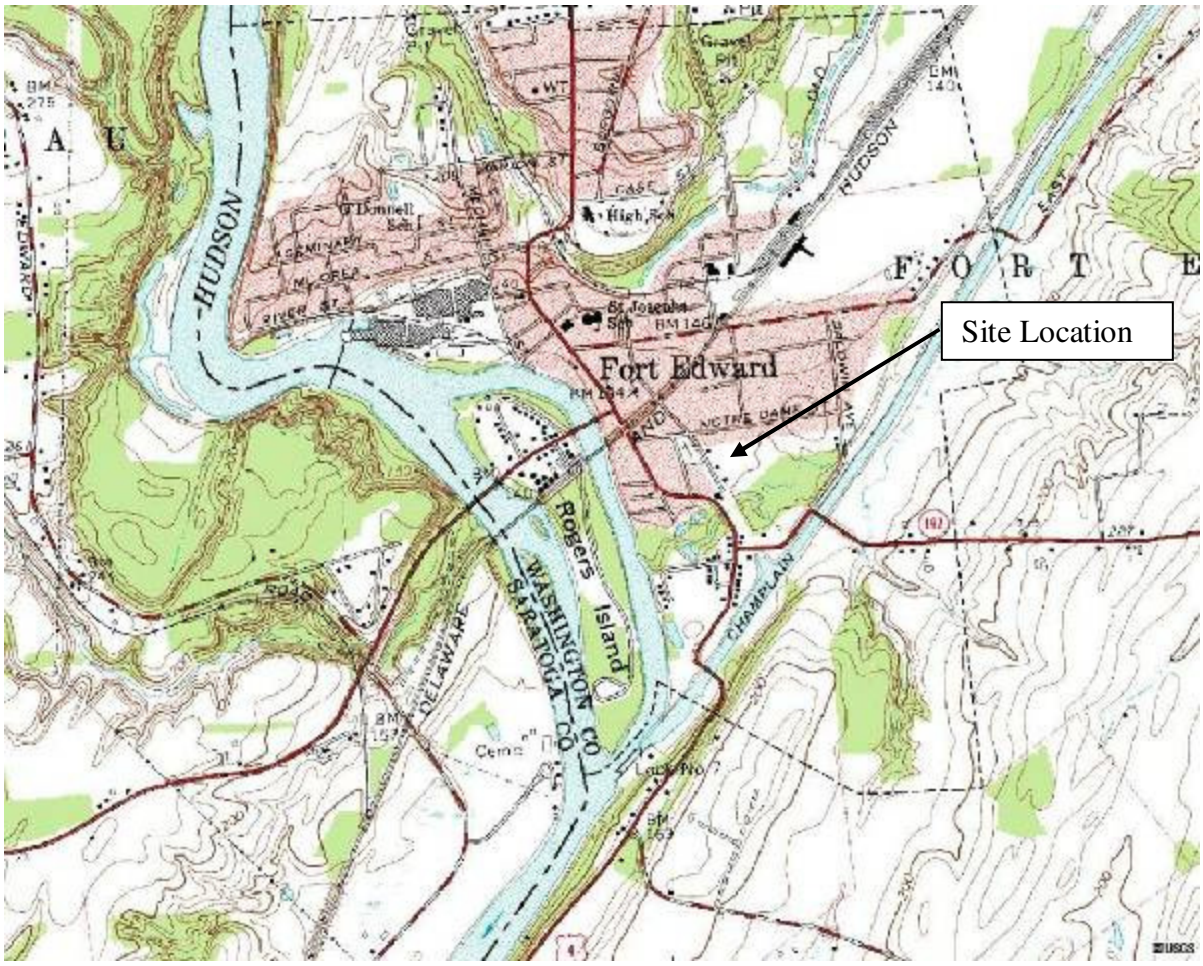
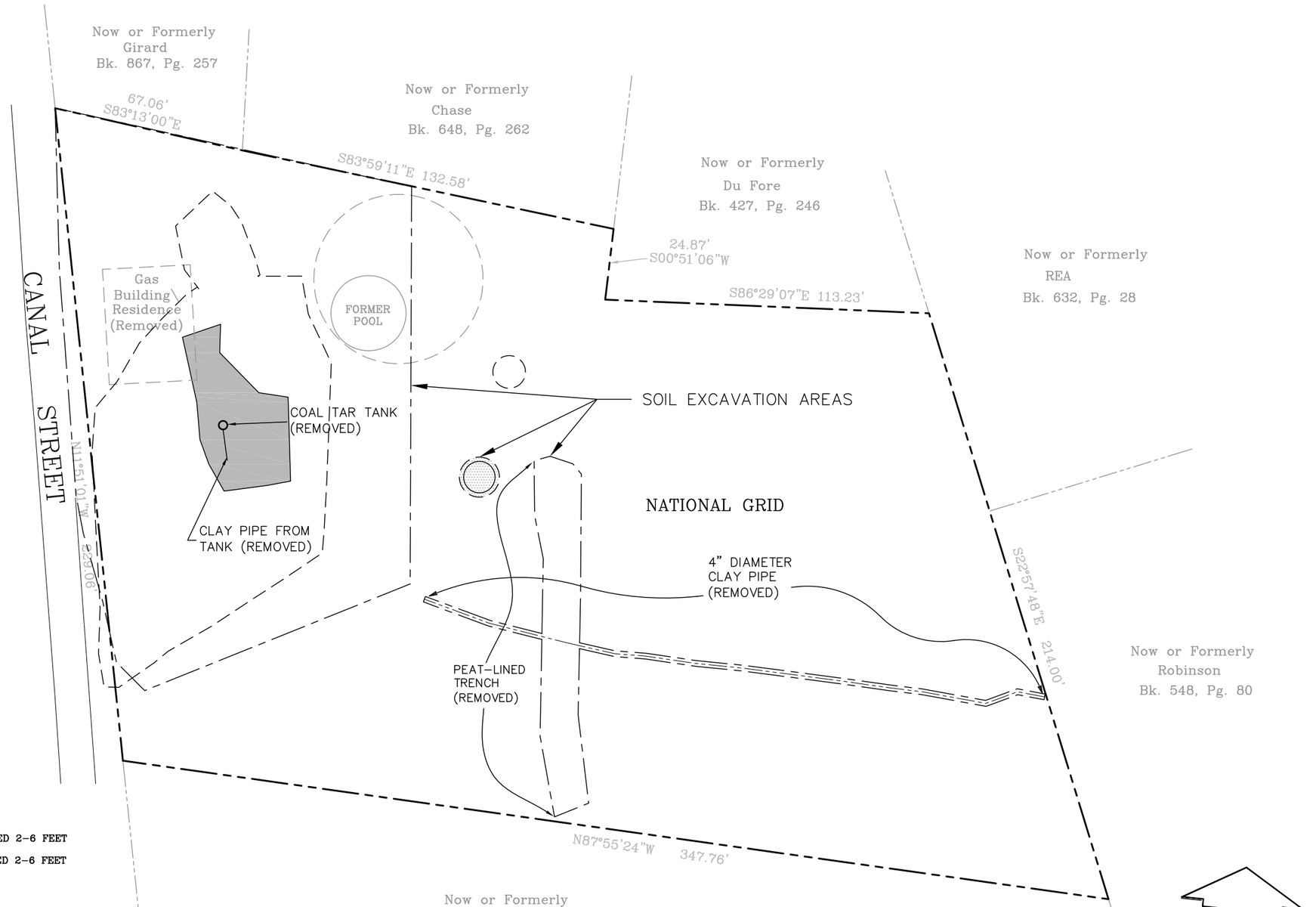
Figures



Source: USGS 7.5 minute quadrangle, Glens Falls, New York

MWH	**SITE MANAGEMENT PLAN** **Fort Edward, NY (Canal Street)** **Former MGP Site** **Fort Edward, Washington County, New York** **Site #V00472**	**Figure 1** **Site Location Map**



LEGEND

- PROPERTY BOUNDARY
- 2009 IRM EXCAVATION LIMIT–SOILS EXCAVATED 2–6 FEET
- 2010 IRM EXCAVATION LIMIT–SOILS EXCAVATED 2–6 FEET
- STRUCTURE REMOVED
- SOILS EXCAVATED 2–6 FEET (2009)

REFERENCES

1) MAP TITLED "MAP OF A SURVEY MADE FOR NIAGARA MOHAWK POWER CORP." BY VAN DUSEN & STEVES LAND SURVEYORS, LLC. DATED 11/20/2001,DWG. NO. 01248, S1.

REV	DATE	BY	DESCRIPTION

SCALE: 1"=40'

WARNING
0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED: RWM
DRAWN: VEN
CHECKED: RWM

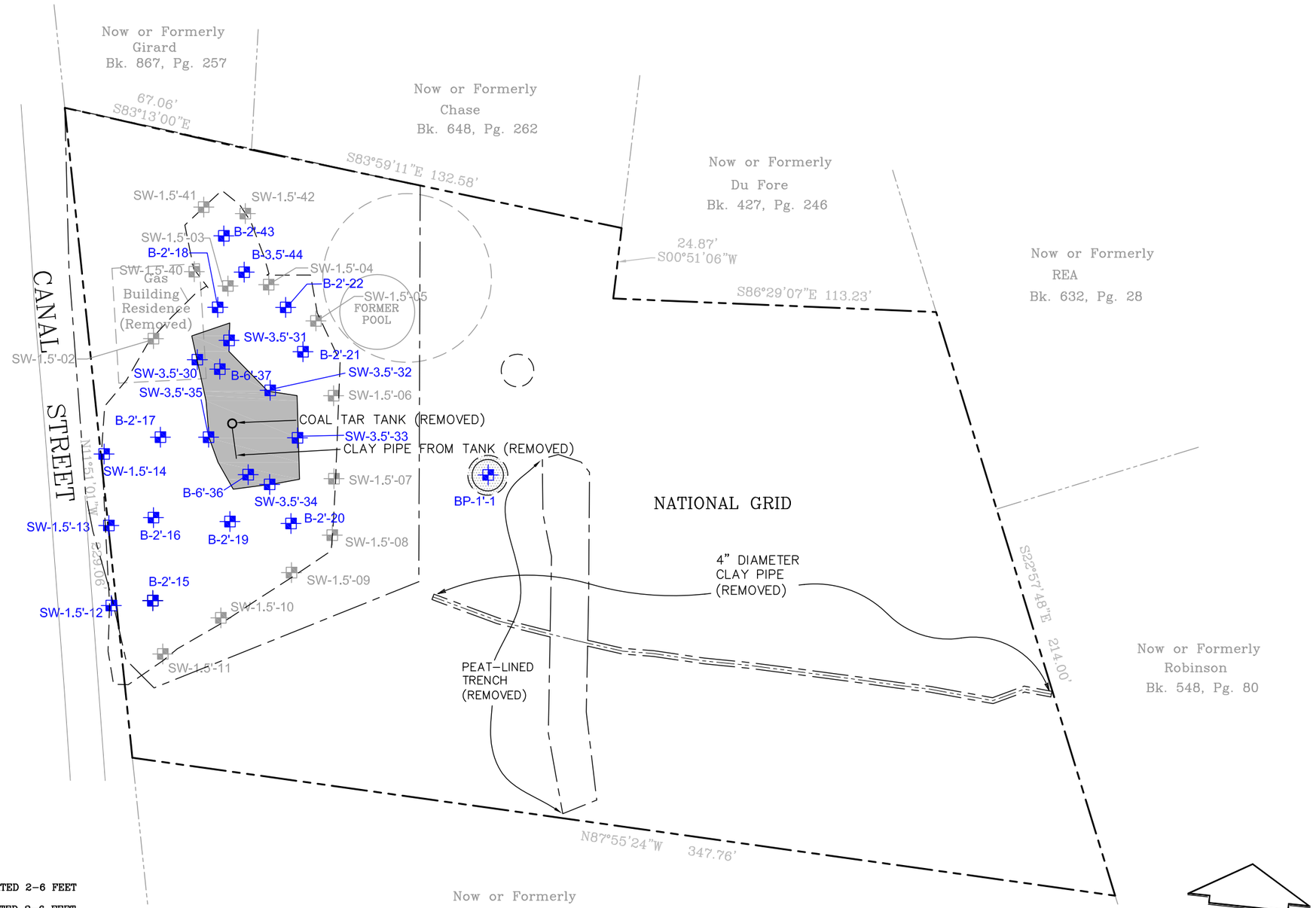
MWH

SITE MANAGEMENT PLAN
FT. EDWARD (CANAL STREET)
FORMER MGP SITE
FORT EDWARD, WASHINGTON COUNTY, NEW YORK
SITE# V00472

IRM REMEDIATION ACTIVITIES

FIGURE 2

S:\IND_PROJECTS\Niagara Mohawk\Mapping\1006921\2011\1007553SMP-01.dwg



NOTE:

ALL SOIL SAMPLES WERE COLLECTED FROM BETWEEN 1 AND 2 FEET BGS. ALL RESULTS WERE BELOW NY RRSCOS, EXCEPT AS SHOWN.

LEGEND

- PROPERTY BOUNDARY
- EXCAVATION DOCUMENTATION SAMPLES SUBSEQUENTLY OVER-EXCAVATED DURING 2010 IRM ACTIVITIES
- EXCAVATION DOCUMENTATION SAMPLES OF SOILS REMAINING IN PLACE (SEE TABLE 4 FOR ANALYTICAL RESULTS)
- 2009 IRM EXCAVATION LIMIT-SOILS EXCAVATED 2-6 FEET
- 2010 IRM EXCAVATION LIMIT-SOILS EXCAVATED 2-6 FEET
- STRUCTURE REMOVED
- SOILS EXCAVATED 2-6 FEET (2009)

REFERENCES

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REV	DATE	BY	DESCRIPTION

SCALE: 1"=40'

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DESIGNED: RWM
DRAWN: VEN
CHECKED: RWM

MWH

SITE MANAGEMENT PLAN
FT. EDWARD (CANAL STREET)
FORMER MGP SITE
FORT EDWARD, WASHINGTON COUNTY, NEW YORK
SITE# V00472

EXCAVATION AND DOCUMENTATION SAMPLE LOCATIONS

FIGURE 4

S:\IND_PROJECTS\Niagara_Mohawk\Mapping\1006921\2011\1007553SMP-10.dwg

Appendix C

Field Inspection Report Form

FIELD INSPECTION REPORT

Former MGP Site
Fort Edward, New York

Date: _____ Time: _____
Technician: _____ Weather: _____

Site Controls				
Fence Condition	GOOD	FAIR	DAMAGED	COMMENTS:
Soil Above Geotextile	GOOD	FAIR	DAMAGED	COMMENTS:
Front Boulders	GOOD	FAIR	DAMAGED	COMMENTS:
Rear Gate Condition	GOOD	FAIR	DAMAGED	COMMENTS:
Padlock-NG/CDMSmith	OPERATIONAL	NON-OPERATIONAL		COMMENTS:

General Site Conditions				
Condition of Parking area	GOOD	FAIR	POOR	COMMENTS:
Evidence of any Intrusive Activities	NONE	MINOR	SIGNIFICANT	COMMENTS:
Vegetative Growth	GOOD	FAIR	POOR	COMMENTS:
Agricultural or Vegetable Gardens	YES	NO		COMMENTS:
Site Been Mowed	YES	NO		COMMENTS:
Evidence of Vandalizim	YES	NO		COMMENTS:
Litter	NONE	MINOR	SIGNIFICANT	COMMENTS:

General Comments:

Appendix D

Excavation Work Plan

GEI Consultants

Geotechnical
Environmental and
Water Resources
Engineering

Excavation Work Plan

Fort Edward, New York (Canal Street) Former MGP Site

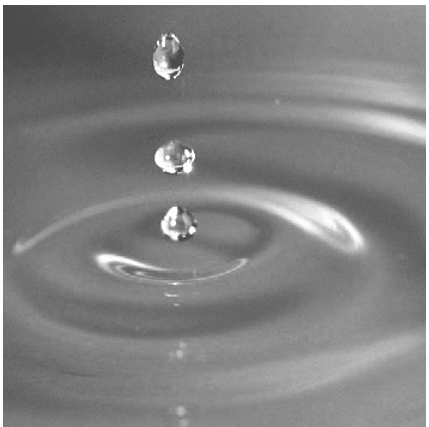
Washington County, New York
NYSDEC Site No.: V00472
NYSDEC Consent Index No.: D0-0001-0011

Submitted to:
National Grid
300 Erie Boulevard West
Syracuse, New York 13202

Submitted by:
GEI Consultants, Inc., P.C.
1301 Trumansburg Road, Suite N
Ithaca, New York 14850
607-216-8955

Revision 0
December 2013

Project #116820-1-1107



Daniel Kopcow, P.E.
Project Manager

Table of Contents

1. Introduction

The following document was prepared using the NYSDEC Site Management Plan (SMP) template dated March 2010 (found at http://www.dec.ny.gov/chemical/48236.html). The report format has been revised to correlate more closely to the Site-specific features, remedies, and decisions.

1.1 General

Any future intrusive work at the Canal Street former Manufactured Gas Plant (MGP) Site in the Village of Fort Edward, Washington County, New York (the Site) that will penetrate, encounter or disturb the geotextile and/or residual subsurface soils, including any modifications or repairs to the existing cover system, will be performed in compliance with this Excavation Work Plan (EWP) pursuant to the Site Management Plan (SMP), and the Site's Formal Agreement.

The provisions of this excavation work plan will be applied at the Site in accordance with the property specific appendices in the SMP.

1.1.1 Notifications

At least 10 days prior to the start of any activity that is anticipated to penetrate the soil or disturb the geotextile cover, or encounter remaining contamination, the Site owner, or their representative will notify the New York State Department of Environmental Conservation (NYSDEC). Currently, this notification will be made to:

Mr. Scott Deyette
Chief, Inspection Unit
Remedial Bureau C, Division of Environmental Remediation
NYS Department of Environmental Conservation
625 Broadway
Albany, New York 12233-7014

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 ground surface, estimated volumes of contaminated soil to be excavated and any work that may impact an Institutional Control (IC) or Engineering Control (EC).

- 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 Code of Federal Regulations (CFR) 1910.120.
- A copy of the Health and Safety Plan (HASP), in electronic format, if it differs from the HASP provided in the SMP.
- Identification of disposal facilities for potential waste streams.
- Identification of sources of any anticipated backfill, along with all required chemical testing results.

1.2 Site Preparation

Prior to performing any intrusive work, the Site preparation features will be implemented and remain in-place throughout the duration of the work.

1.2.1 Site Security

The objectives of the Site Security Plan at the Site are to prevent the vandalism/destruction of construction equipment, to prevent access, and minimize health and safety concerns for the surrounding residential neighborhood.

A temporary fence will be erected around the perimeter of the work area. The fence will extend around all work areas to include the excavation area, waste handling equipment, and storage areas, if any. The fence will have one gate (at a minimum) that will have the ability to be locked at the end of each working day.

1.2.2 On-Site Personnel

A qualified environmental professional meeting the requirements of Department of Environmental Remediation (DER)-10 or a person under their supervision will be on site to oversee all intrusive activities at the Site in accordance with Section 3.3(a)1 of DER-10.

A full-time Health and Safety officer will be on site. Based on the specific scope of work, the Site Health and Safety officer may have other project duties on site.

1.3 Materials Excavation and Transport

The owner of the property and their contractors are solely responsible for safe execution of all invasive and other work performed under this EWP. A qualified environmental professional or person under their supervision will oversee all invasive work and the excavation and load-out of all excavated material.

1.3.1 Soil Screening Methods

Visual, olfactory, and instrument-based soil screening will be performed by the qualified environmental professional during all remedial and 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 No Further Action letter (NFA).

Soils will be segregated based on previous environmental data and real-time 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.

1.3.2 Utility Protection Requirements

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.

Utility mark outs will be maintained for the duration of the work. Copies of all one call numbers/tickets/utilities plates/private utility location information/test pit logs will be provided to the qualified environmental professional prior to beginning intrusive activities. The qualified environmental professional will maintain copies on site in a clearance package.

A utility search and identification will be conducted prior to commencement of intrusive field activities and all potential conflicts will be resolved. A utility survey of the area of intrusive activities will be conducted by a private utility locating service and all suspected utility locations will be marked out.

1.3.3 Stockpile Methods

Soils may need to be stockpiled on Site. Stockpiles should be located as close to the gravel parking area as possible to facilitate load in and load out with minimal vehicular traffic on the vegetated portions of the Site.

Soil stockpiles will be placed in lined and bermed stockpile areas or lined and covered roll-off containers. 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 inspected, at a minimum, once each week and after every storm event. Results of inspections will be recorded in a logbook, maintained at the Site, and available for inspection by NYSDEC.

Stockpiles and rolloffs will be kept covered at all times with appropriate covers. Stockpiles will be routinely inspected and damaged covers will be promptly replaced.

1.3.4 Materials Excavation, Vehicle Load Out and Off-Site Transport

Excavation from grade level to the geotextile fabric will first be initiated by hand to visually identify the depth below grade that the geotextile will be encountered. Upon confirmation of depth, the Contractor may remove overlying soils using mechanical equipment; however, careful inspection and repair of any damage will be required in accordance with Section 2.4.9 of the SMP.

Cover soils will be removed from the geotextile fabric in an area larger than the anticipated excavation. At least 2 feet of additional cover shall be exposed to ensure the geotextile fabric can be cleanly cut, and an adequate overlap can be maintained during installation of replacement fabric. The exposed fabric area shall not be used as staging area for soils excavated from beneath the cover, and appropriate precautions shall be taken to prevent dropping of excavated soils onto the cover or tracking of contaminated soils by equipment or personnel onto the exposed cover surface.

Excavations below the cover shall be sloped, benched, or shielded as though no geotextile fabric were present. Excavation stabilization measures shall not be designed with any accommodation for additional stabilization provided by the fabric cover. Excavations will not be conducted beneath the cover material so as to undermine geotextile fabric to remain in place. If the excavation is to be enlarged, appropriate steps will be taken to uncover additional fabric and remove it, allowing for adequate overlap.

Vehicles will be visually inspected upon arrival to the Site. Vehicles with visible dirt will not be allowed to access the Site. Loaded vehicles leaving the Site will be appropriately lined, securely covered, manifested, and placarded in accordance with appropriate Federal, State, local, and New York State Department of Transportation (NYSDOT) requirements (and all other applicable transportation requirements).

If loads contain wet material capable of producing free liquid, the truck will be made watertight with plastic truck liners before loading occurs. Care will be exercised when loading trucks so as not to spill material on the outside of the trucks. Alternately, a

NYSDEC-approved amendment will be used to reduce the moisture content prior to shipment off site.

Contaminated material transported by trucks exiting the Site will be secured with tight-fitting covers. Loose-fitting canvas-type truck covers will be prohibited. Once a truck is filled with excavated material, spray-on odor suppressing materials such as Rusmar Foam or Biosolve® may be used to reduce potential volatile organic compound (VOC) emissions during transit, if necessary. A plastic tarp will then be used to cover the excavated materials.

The truck will then exit the excavation area and proceed immediately to a decontamination pad. Trucks will be visually inspected (i.e., box sidewalls, box tailgate, and tires, etc.), cleaned with brushes/brooms, and decontaminated with pressure sprayers, if necessary, prior to leaving the Site. The qualified environmental professional will be responsible for ensuring that all outbound trucks are decontaminated in accordance with the Decontamination Plan (Section 1.6) before leaving the Site.

Locations where vehicles enter or exit the Site shall be inspected daily for evidence of off-site soil tracking. Egress points for truck and equipment transport from the Site will be kept clean of dirt and other materials during Site remediation and development. 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 activities. Cleaning of the adjacent streets will be performed, as needed, to maintain a clean condition with respect to Site-derived materials.

All transport of materials will be performed by licensed haulers in accordance with appropriate local, State, and Federal regulations, including Title 6 of the New York Code of Rules and Regulations Part 364 (6 NYCRR Part 364). Haulers will be appropriately licensed and trucks properly placarded.

Trucks will be prohibited from stopping and idling in the neighborhood outside the project site. Queuing of trucks will be performed on site in order to minimize off-site disturbance. Off-site queuing will be prohibited.

1.3.5 Off-Site Disposal of Soils

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 6 NYCRR Part 360) and Federal regulations. Characterization of the soils may happen before or during site activities. The qualified environmental professional will make the determination if material will be transported as regulated material, construction and debris, or other. 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.

Proposed off-site disposal facilities for excavated soil will be identified in the pre-excavation notification. This notification will include estimated quantities and a breakdown by class of disposal facility if appropriate, (i.e., hazardous waste disposal facility, thermal treatment 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 may include: waste profiles, test results, facility acceptance letters, manifests, bills of lading and facility receipts.

Soils that contain too high a water content to be transported safely (e.g., without risk of a liquid spill off site) must be amended on site prior to shipment off site. Dewatering activities will be utilized, if necessary, to control water levels within the excavation. All amendments used at the Site will meet NYSDEC requirements.

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, thermal treatment 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 may 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 a minimum, as a Municipal Solid Waste per 6 NYCRR Part 360-1.2. Material that does not meet Track 1 unrestricted Soil Cleanup Objectives (SCOs) is prohibited from being taken to a New York State recycling facility (6 NYCRR Part 360-16 Registration Facility).

1.3.6 Liquid Management and Disposal

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

Precautions will be taken to prevent spills or leaks from dewatering systems from impacting clean cover soils or exposed geotextile fabric next to excavations. This includes use of tarps and bags to cover pumps and hoses upon removal from excavations, collection of trapped water from pumps and pipes in appropriate containers for characterization and disposal, and management of containers to prevent overflow or spills.

Containers for storage of liquids for transport off site will be located as close to the gravel parking area as possible to minimize vehicular traffic on vegetated areas of the Site.

Contaminated liquids from decontamination of equipment and personnel will be pumped into storage tanks (such as fractionalization [frac] tanks) and disposed of off site. A licensed liquid waste hauler will remove this liquid from the Site and properly dispose of this material in accordance with all applicable regulations. Solid material collected in the frac tank, as a result of settling, will be bulked with soils and sent to an appropriately licensed disposal facility, as necessary.

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

1.3.7 Disposal Record Keeping

All manifests and/or bills of lading (BOLs) may be reviewed by the NYSDEC and will be signed by a qualified environmental representative or a person under their supervision.

A log of all shipments and copies of all manifests and/or BOLs will be on site for reference. 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, BOLs, and facility receipts.

1.4 Backfilling

The qualified environmental professional or person under their supervision will oversee all backfilling operations and review all soil analyses to ensure it meets the required criteria. The soil analytical results will be sent to the NYSDEC for review prior to backfilling operations.

1.4.1 Soil Reuse

Excavation materials shall fall into four categories for evaluation of their potential for re-use:

1. Type K Topsoil (Top 6”) in soil cover over geotextile fabric
2. Type B Soil (6” – 24” bgs) in soil cover over geotextile fabric
3. Type B Soil (>24” bgs) below geotextile fabric
4. Native soils below or outside Interim Remedial Measure (IRM) excavation areas

Materials will be segregated based upon these categories in separate stockpiles placed on plastic liners and managed in accordance with Section 1.3.3 above.

Samples will be collected from each of the four categories at a minimum of one sample per 10 cubic yards of material.

Material that meets the Restricted Residential Use SCOs listed in Table 375-6.8(b) of 6 NYCRR Part 375 meet the chemical criteria for on-site reuse. Prior to reuse, samples will be collected and analyzed by an Environmental Laboratory Approval Program (ELAP)-certified laboratory for total VOCs via U.S. Environmental Protection Agency (EPA) Method 8260, total semi-volatile organic compounds (SVOCs) via EPA Method 8270, polychlorinated biphenyls (PCBs) via EPA Method 8082, Total Petroleum Hydrocarbons (TPH) via EPA Method 8015, and total cyanide via EPA Method 9010/9014.

Contaminated on-site material, including historic fill and contaminated soil, that is acceptable for reuse on site, will be placed below a demarcation layer or impervious surface, and will not be reused within a cover soil layer, within landscaping berms, or as backfill for subsurface utility lines.

Any demolition material proposed for reuse on site will be sampled for asbestos and the results will be reported to the NYSDEC for acceptance. Concrete crushing or processing on site will not be performed. Organic matter (wood, roots, stumps, etc.) or other solid waste derived from clearing and grubbing of the Site will not be reused on site.

Soils proposed for reuse will be segregated in separate stockpiles from soils to be shipped off site for disposal.

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.

1.4.2 Backfill Using Imported Material

All materials proposed for import onto the Site will be approved in advance by the qualified environmental professional and the NYSDEC project manager, and will be in compliance with provisions in this SMP prior to receipt at the Site. Material from industrial sites, spill sites, 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 6 NYCRR 375-6.7(d). Based on an evaluation of the land use, protection of groundwater and protection of ecological resources criteria, the resulting soil quality standards are the Restricted Residential Use SCOs listed in Table 375-6.8(b) of 6 NYCRR Part 375. 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.

At a minimum, backfill samples will be analyzed for Resource Conservation and Recovery Act (RCRA) 8 Metals, PCBs by EPA Method 8082, VOCs by EPA Method 8260 or New York State Analytical Service Protocol (NYSASP) Method 95.1, and SVOCs by EPA Method 8270C or NYSASP Method 95-2. Alternatively, certified "clean" backfill meeting the NYSDOT specifications can be used. Its clean nature must be documented in a letter or certification from the provider, and provided to NYSDEC.

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.

1.4.3 Cover System Restoration

In the event that the clean fill or geotextile fabric is disturbed in the future and by any other invasive activities, the cover system will be restored in a manner that complies with the Decision Document. The specific minimum cover system requirements are listed in the SMP. During any future disturbances, a demarcation layer, consisting of orange snow fencing material or equivalent material may be placed to provide a visual reference to the top of the 'Remaining Contamination Zone', the zone that requires adherence to special conditions for disturbance of remaining contaminated soils defined in the SMP.

Geotextile fabric removed from the excavation to allow access to soils below 2 ft bgs will not be re-used. New geotextile fabric matching the existing fabric in place will be installed with a minimum 2-foot overlap over existing fabric to remain along the perimeter of the excavation. To the extent possible, staples shall be used to affix the new fabric layer to the existing fabric. Orange construction fencing matching the existing will be laid on top of the new layer so that no gaps exist between the new and the existing fencing.

Backfill above the cover will be completed using imported clean fill that matches existing materials, graded to match existing grades and prevent precipitation accumulation. Materials between the geotextile fabric and the topsoil layer will be placed in at least two lifts with each lift compacted to 90% maximum dry density. Topsoil will be placed in the top 6" and will not be compacted. Vegetation shall be restored to match existing.

1.5 Stormwater Pollution Prevention

Silt fencing or hay bales will be installed around the entire perimeter of the construction area.

Barriers and hay bale checks will be installed and inspected once a week and after every storm event. Inspections will be conducted by National Grid SIR or its representative. Results of inspections will be recorded in a logbook and available for inspection by NYSDEC. All necessary repairs shall be made immediately.

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

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

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

Erosion and sediment control measures identified in the 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.

1.6 Decontamination Plan

The objectives of the Decontamination Plan at the Site are to provide the procedures and equipment necessary to decontaminate personnel and equipment to prevent cross-contamination from the excavation area to public areas (i.e., highways, roads, support trailer, vehicles, etc.) This plan does not replace the decontamination procedures outlined in the HASP.

The Contractor will establish decontamination areas for the following activities:

- Personnel decontamination
- Equipment decontamination

1.6.1 Personnel Decontamination Station

A personnel decontamination station where workers can drop equipment and remove personal protective equipment (PPE) will be set up within the work zone. It will be equipped with materials suitable for personnel decontamination based on the Contractor's HASP and the work being conducted. This may include basins for water and detergent, and trash bags or cans for containing disposable PPE and discarded materials.

1.6.2 Equipment Decontamination Station

Heavy equipment decontamination will be performed within the limits of the on-site decontamination pads. Heavy contamination will be brushed off equipment using a broom and/or brushes within the excavation area prior to movement to the decontamination pads to decrease the amount of respirable particulates leaving the remediation area. If necessary, at the decontamination/anti tracking pad, all heavy equipment will be pressure washed before leaving the Site. All equipment leaving the Site will be decontaminated per these guidelines, if necessary.

In addition, any equipment previously utilized to excavate impacted material will be decontaminated prior to use in backfilling (e.g., excavator bucket).

Decontamination/anti-tracking pads will be located and operated at any point that equipment leaves the Site. The decontamination pad(s) will be sufficiently sized to ensure that the largest piece of equipment can be adequately decontaminated. Provisions will be made to control overspray at the decontamination pad(s).

Wastewater from equipment decontamination will be collected and pumped into the frac tank or drums. Soils collected from the decontamination pads will be bulked with the excavated material and sent to the properly licensed disposal facility as necessary.

1.7 Odor and Dust Controls

Excavation activities at remediation sites have the potential to generate airborne dust and vapors (VOCs) that have the potential to migrate off site.

Odor controls will be capable of controlling emissions of nuisance odors off site and on site. 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 the New York State Department of Health (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 qualified environmental professional, 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: (1) limiting the area of open excavations and size of soil stockpiles; (2) shrouding open excavations with tarps and other covers; and (3) using foams to cover exposed odorous soils. If odors develop and cannot be otherwise controlled, additional means to eliminate odor nuisances will include: (4) direct load-out of soils to

trucks for off-site disposal; (5) use of chemical odorants in spray or misting systems; and, (6) use of staff to monitor odors in surrounding neighborhoods.

Odor suppressant systems consisting of chemical foam (e.g., Rusmar foam, Biosolve®) or other approved methods may be provided to prevent odors, if necessary. Keep sufficient odor suppressant on site to manage the odors generated from the excavated materials, including, but not limited to open excavations, limited stockpiles, or materials loaded into trucks for transportation and disposal. The odor suppressant system will be stored near the excavation and will be easily mobile. Open excavations will be backfilled or covered at the end of each working day to suppress odors, if necessary.

Dust controls that will address dust management during invasive on-site work will include, at a minimum, the items listed below:

- Dust suppression may be achieved through the use of a dedicated on-site water truck, a source of water on site, or through the use of odor control agent. The truck or on-site water source will be equipped with a nozzle capable of spraying water directly onto site areas including excavations and stockpiles.
- On-site roads will be limited in total area to minimize the area required for water truck sprinkling.

In recognition of this potential hazard, the NYSDOH has promulgated a Community Air Monitoring Program (CAMP) that establishes action levels of respirable dust and VOCs that are protective of the surrounding community. The requirements of the CAMP are contained in Appendix 1A of the DER-10 Technical Guidance for the Site Investigations and Remediation. The CAMP is intended to supplement, but be discrete from the air-monitoring program implemented by the Contractor for purposes of evaluating Site worker health and safety. Conditions within the excavation area will be monitored in accordance with the Contractor's HASP. Conditions on the perimeter will be monitored in accordance with the CAMP.

1.7.1 CAMP Summary

A Site-specific CAMP was prepared for the Site as part of the SMP. The CAMP is included in Section 2.3.2 of the SMP for reference purposes. The CAMP is in compliance with DER-10 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 CAMP will be updated and re-submitted for NYSDEC approval.

During times of ground intrusive activities, perimeter air monitoring will be conducted using a combination of real-time (continuous and almost instantaneous) air monitoring at fixed locations and walk-around supplemental monitoring using hand-held instruments on an as-

needed basis. Contaminants commonly found at former MGP sites will be monitored, including VOCs and dust. The CAMP will include a plan that defines Alert Levels, Response Levels, Action Levels, and specific response activities to be implemented during working hours if an exceedance of an Alert Level, Response Level, or Action Level for a measured compound occurs. The response actions, potentially including work stoppage, are intended to prevent or significantly reduce the migration of airborne contaminants from the Site.

Exceedances of action levels listed in the CAMP will be reported to NYSDEC and NYSDOH Project Managers.

1.8 Other Nuisances

It will be determined if a plan for rodent control will be developed and utilized by the contractor prior to and during site clearing and site grubbing, and during all remedial work.

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

1.9 Contingency Plan

If underground tanks or other previously unidentified contaminant sources are found during post-remedial 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 full a full list of analytes (Target Analyte List [TAL] metals; Target Compound List [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 also be included in the Periodic Review Reports prepared pursuant to Section 5 of the SMP.

1.10 Reporting

Following the completion of the work, a summation will be included in the Periodic Review Report. The report should include a summary of activities, any changes to the work plan, the final disposal of both solid and hazardous waste, and contain a statement that the work was performed in accordance with the SMP. Specific components of the report may include:

- Record drawings, specifications, addenda, and approved changes.
- The actual volumes of excavated material and treated/discharged wastewater.
- The results of documentation analyses.
- Other plans and figures (if required), photographs, cross sections, data summary tables, and appendices.
- Approved permits.
- Summary of construction work, meetings, and changes in work scope.
- Shipping manifests and Bills of Lading (BOLs) for contaminated soil, clean fill, and construction dewatering liquids.
- Summary of Air Monitoring Data collected during the intrusive activities.
- Certification that material transported off site was disposed of at a properly licensed disposal facility or Treatment Storage and/or Disposal Facility.

The Periodic Review Report should be submitted to the NYSDEC for review in accordance with the SMP.