O'BRIEN & GERE

June 22, 2011

Mr. John Spellman, P.E.
Project Manager
Remedial Bureau C
Division of Environmental Remediation
NYSDEC
625 Broadway
Albany, NY 12233-7014

RE: Construction Completion Report for the Mohawk Valley Oil Site Soil Excavation and Sediment/Dredge Containment Area Development

FILE: 1118.43175 (corres)

Dear Mr. Spellman:

Enclosed for approval is a printed and bound copy of the revised Construction Completion Report prepared for Phase 1 of the Remedial Action completed at the former Mohawk Valley Oil Site in Utica, New York. The Report, which was provided on March 9, 2011 (electronically) and March 15, 2011 (print), was revised pursuant to the comments you provided to National Grid. The enclosed document is the same as that which was made available to you electronically on June 21, 2011. This printed report includes the signed certification, text, tables and figures, but does not include a print of the numerous appendices. A compact disc is enclosed in the report containing the entire report including the appendices.

Very truly yours,

O'BRIEN & GERE ENGINEERS, INC.

Alfred R. Farrell, P.E.
Project Associate

cc: W. Jones, P.E. – National Grid
S. Anagnost, P.E. – O'Brien & Gere

Harbor Point Former MGP Site

UTICA, NEW YORK

Construction Completion Report

For the

Mohawk Valley Oil Site Soil Excavation and Sediment/Dredge Containment Area Development

NYSDEC Site Number:
633032

Prepared for:
National Grid
300 Erie Boulevard West
Syracuse NY, 13202

Prepared by:
O'Brien & Gere
333 West Washington Street
P.O. Box 4873
Syracuse, NY, 13221-4873
315-956-6100

MARCH 2011

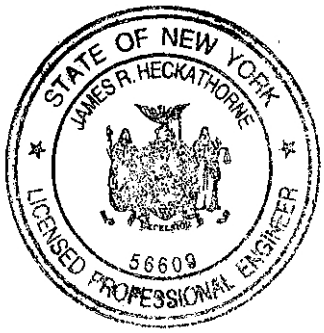
REVISED JUNE 2011

CERTIFICATIONS

I, James R. Heckathorne, am currently a registered professional engineer licensed by the State of New York. I had primary direct responsibility for construction inspection services of the remedial program activities, and I certify that the Remedial Design for the Mohawk Valley Oil Site Soil Excavation and Sediment/Dredge Containment Area Development project was implemented and that construction activities were completed in substantial conformance with the Department-approved Remedial Design documents, including:

- Basis of Design (Phase 1), Operable Unit 3 – Utica Harbor Sediments and Dredge Containment Area, Harbor Point Site, Utica, New York. January 2010
- Harbor Point (633021) and Mohawk Valley Oil (633032) Sites Record of Decision Modifications, November 15, 2010 (NYSDEC, 2010)

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, James R. Heckathorne, of O'Brien & Gere Engineers, Inc., am certifying as Owner's Designated Site Representative and I have been authorized and designated by National Grid to sign this certification for the site.



James R. Heckathorne, P.E.
Vice President
O'Brien & Gere Engineers, Inc.

56609	**6/21/11**	
NYS Professional Engineer #	Date	Signature

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LIST OF ACRONYMS

Acronym	Definition
RA	Remedial Action
MVO	Mohawk Valley Oil
ROD	Record of Decision
NYSDEC	New York State Department of Environmental Conservation
NIMO	Niagara Mohawk
NMPC	Niagara Mohawk Power Corporation
MGP	Manufactured Gas Plant
bgs	below ground surface
RAO	Remedial Action Objective
NAPL	Non-Aqueous Phase Liquid
PAH	Polycyclic Aromatic Hydrocarbons
CY	cubic yards
LLDPE	Linear Low-Density Polyethylene
LTTD	Low-Temperature Thermal Desorption
IRM	Interim Remedial Measure
OSHA	Occupational Safety and Health Administration
HASP	Health and Safety Plan
QAPP	Quality Assurance Project Plan
HAZMAT	hazardous material
TSDF	Treatment, Storage, and Disposal Facility
CQAP	Construction Quality Assurance Plan
SWPPP	Storm water Pollution Prevention Plan
CAMP	Community Air Monitoring Plan
VOC	Volatile Organic Compounds
SOP	Site Operation Plan
BOD	Basis of Design
NYSDOH	New York State Department of Health
GC	General Contractor
ROW	right-of-way
UST	Underground Storage Tank
GWTT	Ground/water Treatment & Technology, Inc.
QA/QC	Quality Assurance/Quality Control
DUSR	Data Usability Summary Report
DOT	Department of Transportation

CONSTRUCTION COMPLETION REPORT

1.0 BACKGROUND AND SITE DESCRIPTION

Niagara Mohawk Power Corporation entered into an Order on Consent with the New York State Department of Environmental Conservation (NYSDEC) in March 2002, to investigate and remediate an approximate 100-acre property located in the City of Utica, Oneida County, New York. The property subject to this ***Construction Completion Report*** (CCR), the Mohawk Valley Oil Site (MVO), was remediated to commercial/industrial use. The intended future use for the site is a passive recreational area which may include hiking/biking trails, parking areas or other use supporting a park-like setting.

The MVO Site is located in the County of Oneida, New York (Figure 1) and is identified as parcels T.A. #318.08-1-2, #318.08-1-3, and #318.08-1-4 on the City of Utica Tax maps. The MVO Site is situated on an approximately 4.5-acre triangular area bounded by Washington Street to the west, Harbor Point Road to the east and Lee Street to the south (Figure 2). The boundaries of the site are fully described in Appendix A: Survey Map, Metes and Bounds.

2.0 SUMMARY OF REMEDIAL ACTIONS

2.1 REMEDIAL ACTION OBJECTIVES

Based on the results of the Remedial Investigation, the following Remedial Action Objectives (RAOs) were identified for the MVO Site in the March 2002 ROD.

- Eliminate, to the extent practicable, the environmental threat associated with the migration of contaminated soil including coal tar/non-aqueous phase liquid (NAPL), purifier waste, contaminated groundwater, and contaminated surface water into adjacent Class C surface water bodies.

- Eliminate, to the extent practicable, the potential human health and environmental impacts associated with contamination of the groundwater resource from the

leaching of contaminants in soil and NAPL, and the migration of NAPL. Return groundwater to the NYSDEC Class GA Water Quality Criteria to the extent practicable.

- Eliminate, to the extent practicable, the potential human health and environmental impacts associated with human and terrestrial biota exposure to contaminated surface and subsurface soil, including NAPL.
- Eliminate, to the extent practicable, ingestion of groundwater, which does not attain Part 5, public drinking water standards, of the New York State Sanitary Code.
- Eliminate, to the extent practicable, the threat to the environment posed by the presence of contaminants within the regulatory floodway.

2.2 DESCRIPTION OF SELECTED REMEDY

The factors considered during the selection of the remedy are those listed in 6NYCRR 375-1.8. On November 18, 2010, a letter from the NYSDEC to National Grid summarized the NYSDEC-approved modifications made to the 2002 ROD for the Harbor Point and MVO Sites (NYSDEC, 2010). At the MVO Site, the March 2002 ROD required among other things that all soil containing greater than 1,000 mg/kg of polycyclic aromatic hydrocarbons (PAHs), or visual tar or NAPL contaminated soil to a depth of 9 feet bgs, be removed and treated. Coincidently, a separate March 2001 ROD required among other things that provisions be made to dispose sediment dredged from Utica Harbor. To accommodate these requirements, the Basis of Design (Phase 1), Operable Unit 3 – Utica Harbor Sediments and Dredge Containment Area, Harbor Point Site, Utica, New York (O'Brien & Gere, 2010) described that the following RAs would be completed on the MVO Site during the phase of work summarized by this Phase I construction completion report:

- A sheeted and lined excavation, covering an area of approximately 4.5 acres and extending to a depth of approximately 11.5 ft bgs, depending on grade elevations, would be made to accommodate up to approximately 80,000 cubic yards (CY) of

sediment to be dredged from Utica Harbor during a future phase of the Operable Unit 3 (OU3) RAs. Figure 3 shows the areas of excavation.

- Soil excavated from the MVO Site containing greater than 1,000 mg/kg of PAHs, or visual tar or NAPL contaminated soil, would be temporarily placed into the lined containment cell constructed on the Harbor Point Site, described in the Basis of Design (O'Brien & Gere, 2010), presented to the NYSDEC on January 11, 2010 with a revision on January 29, 2010, and covered with a temporary 30-mil thick linear low-density polyethylene (LLDPE) geomembrane. These soils are to be treated and disposed during a future phase of the OU1 RAs.
- Soils excavated from the MVO Site containing less than 1,000 mg/kg of PAHs, and no visual tar or NAPL contaminated soil, would be removed off-site at a permitted landfill.

The Basis of Design was approved by the NYSDEC, in a letter to National Grid, dated February 2, 2010 (Appendix B).

3.0 INTERIM REMEDIAL MEASURES, OPERABLE UNITS AND REMEDIAL CONTRACTS

The Mohawk Valley Site Soil Excavation and Dredge Containment Cell Development project is one of several remedial action (RA) elements required to complete full remediation of the Harbor Point Site.

Since approximately 1993, several Interim Remedial Measures (IRMs) and phased RAs have been implemented on the Harbor Point Site. Several future RAs have yet to be implemented. All past and future IRMs and RAs will be summarized in the ***Final Engineering Report*** (FER) to be prepared at the conclusion of all remedial activities.

4.0 DESCRIPTION OF REMEDIAL ACTIONS PERFORMED

Remedial activities completed at the site were conducted in accordance with the NYSDEC-approved Remedial Design (RD) for the Mohawk Valley Oil Site, January 2010. All deviations from the RD are noted below.

4.1 GOVERNING DOCUMENTS

4.1.1 Site Specific Health & Safety Plan (HASP)

All remedial work performed under this RA was in full compliance with governmental requirements, including site and worker safety requirements mandated by Federal OSHA.

The Health and Safety Plan (HASP) (Michael L. Howe of CIH, May 5, 2010 and subsequently updated on August 13, 2010) was complied with for all remedial and invasive work performed at the site during this phase of construction at the former MVO Site. The HASP is included as Appendix C.

4.1.2 Quality Assurance Project Plan (QAPP)

A separate QAPP presenting specific policies, objectives, organization, functional activities and quality assurance/quality control activities designed to achieve the project data quality objectives was not required or prepared as part of the RD. Rather, the RD documents (O'Brien & Gere, 2010) including the technical specifications and special provisions presented specific criteria for performance, and where applicable testing and/or documentation requirements. Prior to initiating construction, the Contractor was required to prepare a QAPP (or Construction Quality Assurance Plan) to describe their proposed approach to comply with the performance and testing requirements identified in the RD for review by the Engineer.

4.1.3 Construction Quality Assurance Plan (CQAP)

Construction Quality Assurance Plan(s) (CQAPs) are utilized to manage performance of the RA tasks through designed and documented QA/QC methodologies applied in the field and in the lab. The RD documents required the Contractor to prepare a CQAP to provide a description of the observation and testing activities that would be used to monitor construction quality and confirm that remedial construction was in

conformance with the remediation objectives and specifications. The CQAP prepared by the Abscope Environmental, Inc. (Abscope) is provided as Appendix D to this report.

The CQAP identified the definable features of work, as derived from the RD documents, as follows:

- Temporary erosion and sediment pollution controls
- Installation of excavation supports
- Excavation of impacted soils
- Construction water management
- Installation of geocomposite clay liner (GCL)
- Installation of geomembrane

Rather than reiterating details of performance and testing contained in the RD documents and monitored by the Engineer for compliance through the review of shop drawings and other submittals made by the Contractor, the CQAP presented the Contractor's approach for:

- Preparation and maintenance of records
- Conduct of inspections during the preparatory phase, implementation (initial phase), and following completion of the construction
- Deficiency and corrective action documentation

4.1.4 Soil/Materials Handling Plan

The RD identified several staging areas that would be available for use by the Contractor on the Harbor Point Site during excavation of the MVO Site, but Abscope anticipated that the soil storage capacity of these areas would not be sufficient for efficient storage and handling of the material while awaiting the results of laboratory analyses. As such, to facilitate the transport and disposal of soil, Abscope proposed a test pit and sampling program in their Work Plan (Abscope, 2010) (Appendix D) so that the

soils could be pre-classified and pre-approved by the designated landfills. The Contractor's Work Plan was approved by the NYSDEC on May 27, 2010.

The excavation area was segmented into a 50 ft grid system and a total of 42 test pits were excavated to a depth of 11 ft for the purpose of pre-classifying the soils for disposal. Each test pit was visually examined while being excavated for the presence of NAPL saturation and a sample was collected for waste characterization analyses.

By pre-classifying, soils could be preapproved for disposal by the designated landfills. Soils were later segregated by visual examination during excavation. The pre-classification sampling allowed non-saturated, non-visually impacted soils to be direct loaded for transport to the landfill and minimized temporary on-site storage of soils.

All soil excavated from the MVO Site was segregated based on the presence or absence of NAPL or visible tar, and placed into temporary stockpiles within the footprint of the MVO excavation. NAPL containing material was subsequently transferred to Staging Area No. 3. Staging Area No. 2 was also used, when necessary, to temporarily stockpile soil not containing NAPL that was designated for off-site disposal as the stockpiles on the MVO Site became too large. All materials for off-site transport and disposal/recycling were handled in accordance with applicable local, State and Federal requirements. Air monitoring, dust control and erosion and sediment control measures remained in place during soil staging and loading activities.

Treatment, storage and disposal facilities (TSDFs) used in support of this project are identified later in the text. Approximately 80,450 CY of soil generated during the RA was transported to permitted landfills and 3,000 CY of soil exhibiting PAH concentrations greater than 1,000 mg/kg, or that were visually NAPL saturated, were staged on-site in the lined containment cells for treatment and disposal during a future phase of construction.

4.1.5 Storm Water Pollution Prevention Plan (SWPPP)

The SWPPP (O'Brien & Gere, 2010) is included in Appendix E. The erosion and sediment controls for remedial construction were performed in conformance with requirements presented in the New York State Guidelines for Urban Erosion and Sediment Control and the site-specific SWPPP.

The key elements for the site-specific SWPPP are the following:

- Reduce construction generated sediment in storm water discharge through erosion and sediment control practices
- Minimize sediment transport through protective measures
- Recognize potential pollution sources
- Take proper dust control measures
- Dispose of waste properly

4.1.6 Community Air Monitoring Plan

HSE was retained by National Grid to perform community air monitoring at the site while construction tasks were being conducted by Abscope during remedial activities, from May 17, 2010 until September 3, 2010. The Community Air Monitoring Plan (CAMP) included sampling and analyses for particulates (PM-10) and volatile organic carbons (VOCs) using sample equipment staged upwind and downwind of the work area. A total of 5 community air monitoring stations, each including monitors for PM-10 and VOCs, were established around the perimeter of the MVO Site.

There was one complaint of odor from employees at the NYS Canal Corporation facility, located across the harbor from the MVO Site. HSE and NYSDEC representatives, along with the National Grid Lead Engineer, met with the individuals on August 19, 2010 and presented information regarding the air monitoring program. The NYS Department of Health met a second time with the Canal Corp employees on October 20, 2010 and provided additional information regarding potential health impacts associated with the ongoing remedial activities. No subsequent odor complaints were received.

The CAMP and data file generated during the remedial activities is attached as Appendix F.

4.1.7 Contractor's Site Operations Plan (SOPS)

Abscope prepared a Work Plan (Appendix D) describing the project organization and sequence and approach for the major construction tasks. Separately, Abscope also provided a Health and Safety Plan (HASP) for the project.

The Remediation Engineer reviewed plans and submittals for this remedial project (i.e. those listed above, in addition to other Contractor and Subcontractor submittals) and confirmed that they were in compliance with the Basis of Design (O'Brien & Gere, 2010). The work plan documents were submitted to NYSDEC and New York State Department of Health (NYSDOH) prior to the start of work.

4.1.8 Community Participation Plan

National Grid maintains a web page dedicated to the Harbor Point project. The web page is periodically updated after significant events are completed. The web page address is: http://www.harborpointsite.com/.

The NYS Department of Environmental Conservation mailed two Fact Sheets to local residents and business owners to report progress during the period the MVO project was underway. The Fact Sheets, released on October 26, 2009 and December 20, 2010, respectively, also provide information regarding future activities to be undertaken in the coming years.

4.2 REMEDIAL PROGRAM ELEMENTS

4.2.1 Contractors and Consultants

Various firms were engaged by National Grid during this phase of construction to complete the work required by the Basis of Design (O'Brien & Gere, 2010). The firms, period of involvement, and respective roles in completing the work are summarized below:

- Abscope Environmental, Inc. of Canastota, New York was the General Contractor (GC) responsible for the installation of the steel sheet pile wall, and for the excavation and disposal of soil. Design of the excavation support wall was prepared for Abscope by Kenney Geotechnical Engineering Services, PLLC.

- O’Brien & Gere Engineers, Inc. (O’Brien & Gere) of Syracuse, New York provided a full-time resident engineer for construction inspection starting on May 17, 2010 through completion of the work summarized in this report.
- HSE Consulting Services, LLC (HSE) conducted the community air monitoring at the site during construction beginning May 17, 2010 through completion of the work summarized in this report.
- Synapse Engineering was the Owner’s Representative during the project.
- EA Engineering, Science and Technology, Inc. (NYSDEC’s Representative).

4.2.2 Site Preparation

- Mobilization – On-site mobilization was initiated the week of May 3, 2010, following the pre-construction meeting on April 29, 2010.
- Demolition of Existing Building – On June 10, 2010, a pre-demolition asbestos survey was conducted on the one building situated within the MVO Site. The results, based on laboratory analysis reports, were determined to be negative for asbestos (Appendix G). On June 25, 2010, the building was razed, and two 275-gallon tanks were cleaned out and removed off-site. One tank contained waste oil mixture and the second a flammable liquid waste, both of which were transferred into two 55 gallon drums, respectively, that were disposed of on July 23, 2010 (Appendix H).
- Clearing and Grubbing - The work areas were cleared and grubbed as necessary to facilitate work activities. Brush, trees and woody debris were cut near the ground surface. Woody materials (chips, logs, and branches) were staged in an owner-approved location on the MVO Site and subsequently disposed off-site. Stumps or root balls grubbed out were placed with soil staging material for transport off-site with impacted soils. Clearing included the excavation and removal of existing concrete piers, slabs and foundations inside of the designated remedial excavations. If possible, material was broken or crushed with a hammer hoe to an acceptable size (3’ by 3’ or less). Concrete containing re-bar was transported off-site for disposal at a permitted facility as construction and

demolition debris. Concrete free of re-bar was staged on the Harbor Point Site to be used during later phases.

- Monitoring Well Abandonment

  As part of completing construction, it was necessary to abandon 20 monitoring wells (Table 1) located within the work areas. The monitoring wells were abandoned in accordance with requirements identified in the specifications. The abandonment field notes are provided as Appendix I.

- Vertical Steel Perimeter Wall

  The excavation support was designed by Christopher Kenney, a New York State licensed professional engineer, of Kenney Geotechnical Engineering Services, PLLC, on behalf of Abscope Environmental, Inc. Attached as Appendix J is the excavation support design.

  Provided in Appendix K are Record Drawings showing the location and profile of the sheeting installed. Table 2 lists the dates and corresponding quantities of sheeting installed. A total of 1,952 feet of sheeting was installed at the MVO Site. Prior to installing each sheet, the joint to be connected to the neighboring panel was filled with Swellseal sealant WA600ml.

  Once the sheet pile was installed, the surface soil was removed from outside the wall to create a trench with a depth of 6 ft and extending 6 ft from the wall. Removal of this soil was necessary based on the design prepared by Kenney Geotechnical to reduce the surcharge load so that the wall would be free-standing without use of tie-backs during the construction period.

- Decontamination pad construction – A ramp was constructed over sheeting in the MVO Site for truck wash use. The generated fluid ran off onto material that was hauled off-site.

- Access Road - An on-site access road was built as designed in the Record Drawings to eliminate truck traffic on public roads. Fencing was removed as required to install the gravel access road and 24 ft double swing gate.

- Construction Water Handling System – A modular tank and water treatment system were constructed on the Harbor Point Site for treatment of groundwater collected from 11 temporary wells installed within the footprint of the excavation

to prevent up flow of groundwater, and from the perimeter trench excavated around the sheet pile wall to prevent hydraulic pressure on the wall during construction.

- Utility marker layout - A National Grid representative was on-site May 18th and 19th to oversee test pitting to locate, mark, and ensure that no working gas lines were hit. On May 24, Premier Oil and Gas was on-site to locate and mark a 16" Force Main along Harbor Point Road for National Grid.

  Also, an existing dead Buckeye Petroleum pipeline was uncovered and cut on May 26 and 27, 2010, respectively by Buckeye Petroleum.

- Acquisition of agency approvals & permits – The only NYSDEC approval required for the MVO project was acceptance of the Basis of Design Report and accompanying contract drawings and specifications.

  The only non-agency approval required was permission from the City of Utica to temporarily occupy the City right-of-way (ROW) along Lee Street. Work in the ROW included installation of temporary construction fencing and excavation of a temporary 6 ft x 6 ft trench along the steel sheet pile wall (located on the property line). Correspondence with the City is included in Appendix B.

  Documentation of agency approvals required by the RD is included in Appendix B. Other non-agency permits relating to the remediation project are also provided in Appendix B.

- Pre-construction meeting with NYSDEC - A pre-construction meeting was held with NYSDEC and all contractors on April 29, 2010.

- Project Sign – The Harbor Point Site has a long history of investigation and remedial activities. Acceptable signage existed prior to implementation of the MVO project.

4.2.3 General Site Controls

- Site security - The perimeter of the MVO Site was previously surrounded by chain link fencing and an additional gate was installed prior to excavation to allow trucks to drive along Harbor Point Road. Gates were locked following completion of construction on a daily basis.

- Job site record keeping - A field book was used by the on-site O'Brien & Gere full-time resident engineer to record specific dates and activities that took place

during construction. Abscope personnel also kept records of construction activities.

- Erosion and sedimentation controls - A silt fence was installed on each side of the gravel access road and around the entire MVO excavation area. A silt fence was also installed around the concrete staging area (Staging Area No. 4) and around the modular tank. Hay bales were placed around the clean soil staging area (Staging Area No. 6) (Figure 2).
- Equipment decontamination and residual waste management - As specified in the Work Plan (Abscope, 2010), heavy equipment, materials and personnel that came into contact with impacted or potentially impacted material were visually inspected and decontaminated. Only those parts of the equipment that had been exposed to the contaminated materials were decontaminated. Methods used to decontaminate heavy equipment included:

    1. Cleaning all loose debris with a brush, broom or spade
    2. Rinsing equipment with water
    3. High pressure hot water washing and/or steam cleaning, as necessary

  Trucks loaded with soil for transport were visually inspected and decontaminated as necessary while on the plastic sheeting. Loose material was removed by brush, broom, or spade. Material removed was collected and returned to the soil staging area.
- Soil screening results – At the beginning of the project, it was anticipated that the soil storage capacity of the staging areas (Figure 2) might be insufficient to effectively store excavated soils while awaiting laboratory analytical data. To facilitate the transport and disposal of soil, a pre-excavation test pit and sampling program was proposed by Abscope. By pre-classifying, soils could be pre-approved for disposal by the designated landfills. Soils were segregated by visual examination during excavation. The pre-classification sampling allowed non-saturated, non-visually impacted soils to be direct loaded for transport to the landfill and minimized temporary on-site storage of soils.

  The excavation area was segmented into a 50 ft grid system and a total of 42 test pits were excavated to a depth of 11 ft for the purpose of pre-classifying the soils for disposal. Each test pit was visually examined while being excavated for the

presence of NAPL saturation and a sample was collected for waste characterization purposes.

- Stockpile methods –
    - NAPL Impacted Soil - Soil designated to remain on-site for future thermal treatment (i.e. NAPL soils) was stockpiled then loaded at the MVO area into off-road dump trucks and transported to Staging Area No. 3 (Figure 2). Staging Area No. 3 is an approximate three acre bermed area lined with a 40 mil high density polyethylene (HDPE) liner system. A crushed limestone drainage layer overlies the liner and directs free liquids and precipitation to a collection vault. From the vault, the impacted water is pumped to the permanent on-site water treatment system. At the conclusion of the project, the impacted soil within the staging area was temporarily covered with a layer of 30 mil HDPE and awaits implementation of the LTTD project in 2012.
    - Clean Reusable Soil - Soil designated as clean was stockpiled in Staging Area No. 6 (Figure 2) for later re-use on-site. Clean soil was stockpiled then loaded at the MVO area into off-road dump trucks and transported to Staging Area No. 6 where it was off-loaded onto native ground. Staging Area No.6 was surrounded by hay bales for erosion control and the soil pile was wetted down as necessary to control dust problems. At the conclusion of the project, this soil material was used to backfill a portion of the perimeter trench around the sheeted MVO area.
    - Concrete Rubble – Clean concrete rubble from old foundations within the MVO area were broken into manageable sizes, stockpiled then loaded into off-road dump trailers and transported to Staging Area No. 4 (Figure 2) on the Harbor Point Site. From there the concrete was off-loaded directly onto the Holder foundation pad. This clean concrete rubble will be further crushed to a useable dimension and re-used on-site in the future.

4.2.4 Nuisance controls

- Truck wash and egress housekeeping - Two decontamination pads were built to wash trucks.
- Dust control - Soil piles were wetted down as necessary to prevent and control dust problems.

- Odor control - A Piian 300 FlexiFog misting system was installed along Harbor Point Road, the Lee Street fence line beginning at the intersection with Harbor Point Road and ending at Washington Street, and around the perimeter of Staging Area No. 3. The hose system pumped a mixture of potable water and Piian odor neutralizer through misting nozzles to eliminate odors and dust encountered while excavating during Phase I.
- Truck routing - An access road was built on May 14, 2010 to minimize traffic on public roads as described earlier in the report.
- Responding to complaints - There was an odor complaint on August 19, 2010. The complaint was addressed and determined a non-issue based on the air monitoring data.

4.2.5 CAMP results

HSE conducted community air monitoring at the site during construction using a total of four air monitoring stations, each station containing monitors for PM-10 and VOCs. Monitoring locations were established around the perimeter of the work area (i.e. one upwind and three downwind), and the sampling ran continuously during ground intrusive activities. Downwind concentrations of the particulates and VOCs were compared to the Upwind (background) concentration to determine if action levels established by the CAMP (i.e. 5 ppm for VOCs, and 100 micrograms per cubic meter for PM-10 for a 15-minute average) were exceeded.

HSE reviewed air monitoring data on a daily basis and briefed representatives of Abscope and O'Brien & Gere so that corrective actions, when necessary, could be taken to address the condition causing the action level(s) to be exceeded. Based on air sampling data collected and summarized in Appendix F, the particulate action level was exceeded briefly several times during intrusive activities. These exceedances were determined to be generated by construction vehicles when in use during certain phases of the project and in high wind conditions. During these events, dust suppression equipment (water truck) was employed and the PM-10 levels returned to below the action level. The VOC action level was never exceeded during the intrusive activities. Copies of all field data sheets relating to the CAMP are provided in Appendix F.

4.2.6 Reporting

- Weekly Reports
    - Synapse Engineering was responsible for documenting and distributing weekly progress meetings conducted by the by Owner's Representative and attended by the Engineer and Contractor. Weekly meeting minutes are included in Appendix L.
    - Abscope Environmental Inc. was responsible for documenting and distributing weekly Health and Safety Summaries, included in Appendix M.
    - HSE was responsible for documenting and distributing weekly Environmental Summaries regarding any odors, dust, or VOCs exceedances. Weekly summaries are included in Appendix N.
    - O'Brien & Gere was responsible for observing the work to later certify that the work was completed consistent with the design documents and approved modifications. Digital photos of the construction are included in electronic format in Appendix O, documenting various stages of the work.

4.3 CONTAMINATED MATERIALS REMOVAL

Several impacted media were encountered and managed during implementation of the MVO project, including:

- Heavily impacted soil containing elevated PAHs and/or NAPL (i.e. > 1000 ppm PAHs and/or exhibiting NAPL) resulting from former petroleum storage/processing and MGP operations and destined for thermal treatment.
- Mildly impacted soil (i.e. < 1000 ppm PAHs and/or exhibiting no NAPL) destined for recycling as landfill cover soil.
- Clean, reusable soil for on-site use
- Underground storage tanks (USTs)
- Construction water from dewatering activities and runoff management
- Demolition debris

Each impacted media and associated management methods are described in detail below.

4.3.1 Soil Containing PAHs and/or NAPL

The March 2002 ROD required that soil containing 1,000 ppm PAHs or visual tar or NAPL contaminated soil, where shown in Figure 10 of the 2002 ROD, be removed to a depth of 9 ft and treated (approximately 11,000 CY). However, the Proof of Concept Report (O'Brien & Gere, 2009), approved by the NYSDEC, outlined the changes in excavation plans for the MVO Site where rather than excavating the area restricted to that shown in Figure 10, the entire MVO Site was excavated to a depth of 11.5 ft bgs to accommodate the volume of sediment to be dredged from Utica Harbor during a separate RA task. Soil containing greater than 1,000 mg/kg of PAHs and visual tar or NAPL contaminated soil was removed from the MVO Site excavation and placed into Staging Area No. 3 (a lined and covered temporary cell) for treatment and disposal during a future phase of construction. Soil not exhibiting more than 1,000 mg/kg of PAHs, or visual tar or NAPL, was excavated and disposed off-site at approved landfills.

A list of the soil cleanup objectives (SCOs) for the contaminants of concern for this project is provided in Table 3.

A contour plan of the excavation is included on the Record Plan Sheet 1 of 1 Existing Conditions thru Post Excavation (C.T. Male Associates, P.C.) included in Appendix K.

4.3.1.1 Disposal Details

Excavation of the MVO project area began on June 29, 2010 and was completed on September 3, 2010. A total of 80,450 CY of soil was excavated from the MVO project area in order to accommodate the sediment volume anticipated from the future dredging of the Utica Harbor. The total volume removed was approximately two times the volume of impacted material anticipated in the ROD (March 2002).

The total volume of soil was managed in three ways, as follows:

- Mildly Impacted Soil (i.e. < 1000 ppm PAHs and/or exhibiting no NAPL)

  105,863 CY of mildly impacted soil was directly loaded into dump trailers and transported to one of three approved landfills. Landfill destinations were selected daily based on each site's capacity to receive and handle the soil in

compliance with its operating permit. Weather conditions also dictated which landfill was used.

- Ava Landfill (permit no. 6-3024-00009/00007) – 30,881 TONS (approx 25,500 CY); used as daily landfill cover.
- Seneca Meadows Landfill (permit no. 8-4532-00023/00001-01) – 46,100 TONS (approx 37,500 CY); used as daily landfill cover.
- Ontario County (Hyland) Landfill (permit no. 8-3244-00004/00001-0) – 51,651 TONS (approx 42,500 CY); used as daily landfill cover.

The identification of Mildly Impacted Soil was made visually by mutual observation and agreement between the NYSDEC's on-site monitor and National Grid's QA/QC engineer.

All Mildly Impacted Soils destined for off-site disposal were transported by Riccelli Trucking Co. of Syracuse, NY. On peak days, approximately 40 trucks were making over 100 trips per day to the landfill facilities.

- Heavily Impacted Soil (i.e. > 1000 ppm PAHs and/or exhibiting NAPL)

  3,000 CY of heavily impacted soil was staged then loaded at the MVO area into off-road dump trucks operated by Abscope and transported to the on-site Staging Area No. 3 (Figure 2).

  The identification of Heavily Impacted Soil was made visually by mutual observation and agreement between the NYSDEC's on-site monitor and National Grid's QA/QC engineer.

- Clean Reusable Soil

  900 CY of clean, reusable soil was direct loaded at the MVO area into off-road dump trucks operated by Abscope and transported to the on-site Staging Area No. 6 (Figure 2)

  The identification of Clean – Reusable Soil was made visually by mutual observation and agreement between the NYSDEC's on-site monitor and National Grid's QA/QC engineer.

4.3.1.2 On-Site Reuse

Clean – reusable soil was the only material reused on-site during implementation of the MVO project. 900 CY of this soil material was used to backfill a portion of the perimeter trench around the sheeted MVO area. Approval to reuse the clean soil in this manner was given by the NYSDEC's on-site monitor in consultation with the NYSDEC Project Manager.

4.3.2 Underground storage tanks (USTs)

Seven abandoned Underground Storage Tanks (USTs) were uncovered during the Phase I RA at the MVO Site. Table 4 lists the discovered tanks, their contents (if any) and size, and the dates NYSDEC was notified. Once uncovered, the tanks were removed from the excavation and staged on-site until all tanks were uncovered, registered with the NYSDEC and disposed of. Appendix H includes a disposal record for each tank.

4.3.2.1 Disposal Details

All metal tanks were pressure washed in Staging Area No. 2 before being transported and temporarily staged on the former Holder foundation. After cleaning, the tanks were cut into manageable size, loaded onto a dump truck by Abscope and delivered to Crash's Capscrap Metals on West River Road in Frankfort, NY in the City of Utica for recycling.

4.3.3 Construction Water from dewatering activities and runoff management

Abscope installed a two level groundwater extraction system to facilitate dewatering of the MVO project site. Nine actively pumped extraction wells were installed around the inside perimeter and two in the center of the sheeted excavation area in the lower water bearing zone at a depth of approximately 60 feet bgs. The purpose of these eleven wells was to temporarily lower the water table within the excavation zone and relieve its upward hydraulic pressure.

In addition to the deep, pumped extraction system, a groundwater collection trench was constructed around the outside perimeter of the steel sheet pile wall surrounding the excavation. This collection system intercepted the shallow water table and diverted the flow, via gravity, to a single collection sump. Precipitation falling on the graded bottom of the excavation was also diverted to the collection sump located in the

southwest corner of the excavation. All sources of water were combined via a manifold pipe system and pumped to the temporary water treatment system erected in the Material Handling Facility.

4.3.3.1 Disposal Details

Abscope, as the prime contractor, subcontracted with Ground/Water Treatment & Technology, Inc. (GWTT) to supply and operate a 500 gpm treatment system. The treatment system included the following major components:

- One 600,000-gallon settling/equalization tank
- One 11,000-gallon aeration and mix tank
- Two 10,000-gallon mix tanks
- A 21,000-gallon clarifier
- Three multi-bag filters, parallel operation
- Four multi-cartridge filters, parallel operation
- Four 10,000 lb carbon vessels, two parallel trains of vessels in series operation
- Two 175 cubic foot ion exchange vessels, parallel operation
- Two 5,000-gallon sludge thickening tanks
- 40-cubic foot filter press with conveyor and 20 yard sludge tank
- 5,000-gallon sodium hydroxide tank with secondary containment
- 275-gallon sulfuric acid tote with secondary containment
- 2,000-gallon flocculation tank
- 275-gallon coagulant tank

Effluent from the treatment system was discharged to the Mohawk River under the conditions of the Effluent Limits and Monitoring Requirements established for Site No. 6-33-021, that are attached as part of Appendix B.

4.3.4 Demolition Debris

A combined total of approximately 44.39 tons of demolition debris was disposed off-site as C&D waste resulting from removal of the former auto repair garage and various concrete foundations associated with the former MGP and Texaco tank farm operations.

The former auto repair garage was a 2,600 sq ft brick structure with concrete floors/foundations and a wood roof supported on steel web beams and covered with felt roofing material. A pre-demolition investigation was conducted by HSE to confirm the presence of asbestos and lead contaminates. The pre-demolition investigation report is attached as Appendix G. The waste streams originating from this structure included brick, reinforced concrete, wood, structural metal beams, roofing material, glass, and sheetrock and flooring materials.

The former concrete foundations were generally classified as clean concrete or concrete coated with oils, tar or other contaminants.

4.3.4.1 Disposal Details

- Former Auto Repair Garage – C&D waste resulting from the demolition of the former garage was disposed of at the Oneida-Herkimer Solid Waste Authority landfill.

- Former Tank Foundations – Approximately 3,410 tons of concrete rubble was placed into Staging Area No. 4 for on-site reuse. The remainder of concrete rubble was sent off-site to the Oneida-Herkimer Solid Waste Authority landfill as C&D waste.

4.3.4.2 On-Site Reuse

The 3,410 tons of clean concrete rubble from old foundations within the MVO area were broken into manageable sizes, direct loaded into off-road dump trailers and transported to Staging Area No. 4 on the Harbor Point Site (Figure 2). This clean concrete rubble will be further processed to a useable dimension and reused on-site in the future.

4.4 REMEDIAL PERFORMANCE/DOCUMENTATION SAMPLING

The only performance criteria specified in the ROD for the MVO project area was the removal and treatment of soil, to a depth of 9 feet bgs, containing greater than 1,000 mg/kg of polycyclic aromatic hydrocarbons (PAHs), or visual tar or NAPL contaminated soil. The quantity of impacted soil meeting those criteria was estimated at approximately 11,000 CY.

During design of the soil removal portion of the project, National Grid decided to utilize the excavated MVO area as the future repository for sediments required to be dredged from the Utica Harbor. To accommodate the anticipated volume of sediments, approximately 84,000 CY was ultimately removed from the MVO project area in preparation for its secondary use as a dredge disposal site. To achieve the volume required for disposal of the sediment, the entire MVO area (approximately 4.5 acres) was excavated to a depth of 11.5 feet bgs (Figure 3). As such, the entire volume of impacted soil requiring removal was wholly part of the larger volume removed for the secondary use. Under this circumstance, the only performance criteria required by the NYSDEC during implementation was the visual confirmation of the presence of visual tar or NAPL contaminated soil.

Visual confirmation was made daily by the NYSDEC on-site representative. Based on the NYSDEC's representative, soils were disposed of as described in section 4.3.1 above. No laboratory sampling or data validation was required for this phase of the work.

4.5 IMPORTED BACKFILL

4.5.1 Sediments

Utica Harbor sediments were hydraulically dredged by the NYS Canal Corporation in the autumn of 2010. Approximately 59,000 CY of sediments were piped to and discharged into the lined MVO containment cell shortly after the tar and NAPL impacted soils were removed. Placement of Harbor sediments in the MVO containment cell were approved by the NYSDEC based on review of the Basis of Design (Phase 1), Operable Unit 3 – Utica Harbor Sediments and Dredge Containment Area, Harbor Point Site, Utica, New York (O'Brien & Gere, 2010).

No analytical sampling was conducted on the sediments as the MVO area was designed as an engineered containment cell.

4.5.2 Steel Sheet Pile Wall Perimeter Trench

During construction of the MVO Containment Cell, a temporary collection trench was constructed around the entire perimeter of the steel sheet pile wall as described in section 4.3.3. The trench was 6 feet wide by 6 feet deep bgs. At the conclusion of sediment placement within the containment cell, the outside trench was backfilled with either Clean-Reusable Soil (Section 4.3.1) or Imported Backfill from an off-site source.

900 CY of clean-reusable soil was relocated from Staging Area No. 6 (Figure 2) back into the perimeter trench in the area shown on Figure 3. Also, approximately 3720 CY of off-site common fill was imported from Poland Sand and Gravel. Appendix Q includes chemical analytical results for backfill from Barrett Paving.

4.6 CONTAMINATION REMAINING AT THE SITE

At the conclusion of the MVO project, several future RAs have yet to be implemented in the overall remediation of the Harbor Point Site; including:

- PAH Removal Areas
- Groundwater Plume Adjacent to Utica Harbor
- Holder Foundation Area
- Coal Gas Plant Area
- Northern Area with surface soil concerns.

A final recitation of *Contamination Remaining at the Site* will be detailed in the Final Engineering Report (FER) prepared at the conclusion of all RAs. Similarly, all Engineering and Institutional Controls and long term operation and maintenance associated with or required by the complete remediation of the Harbor Point Site will be identified and detailed in the FER.

Below is a discussion of contamination remaining in the MVO project area subject to this report.

4.6.1 Within the limits of the MVO Containment Cell

All soil within the limits of the MVO Containment Cell (approx. 84,000 CY) was removed to a depth of approximately 11½ feet bgs; 2½ feet deeper than required by the

ROD. As a result, the approximate 11,000 CY of MGP and petroleum impacted soil identified in the ROD were removed. The bottom of the entire excavated area terminated within a natural clay deposit. Throughout implementation, the bottom of the excavation was visually inspected for the presence of remaining MGP or petroleum impacts and none were observed.

Upon completion of the above removal, approximately 59,000 CY of Harbor sediment was hydraulically pumped into the prepared MVO containment cell. The containment cell will be the final repository for the Harbor sediments.

4.6.2 Containment Wall Perimeter Trench

During construction of the MVO project, a six feet wide by six feet deep trench was excavated outside the entire perimeter of the steel sheet pile containment wall. At certain locations along the trench, tar, NAPL, or heavily MGP-impacted soil was observed on the outer sidewall of the trench. Figure 3 shows the locations of the observed contamination. No analytical sampling was performed within the limits of the perimeter trench.

Those areas shown on Figure 3 will be remediated as part of future RAs (i.e. PAH Removal Areas).

4.6.3 Groundwater

Groundwater around and beneath the MVO Containment Cell project area is impacted by MGP and petroleum constituents. Future phases of the overall Harbor Point remediation project will address remaining groundwater impacts in this area.

4.7 TEMPORARY COVERING OF STOCKPILED SOIL

Approximately 3,000 CY of soil containing greater than 1,000 mg/kg of PAHs or visual tar or NAPL was placed in Staging Area No. 3 in the southwest corner of the main site (Figure 2). The soil staged in Staging Area No. 3 was covered with a temporary 30-mil HDPE membrane pending treatment and/or disposal during a future phase of work (Figure 4). The liner panels were seamed together, however since the liner is intended to be temporary the seams were not tested nor was the liner covered with soil.

4.8 OTHER ENGINEERING CONTROLS

Since remaining contaminated groundwater and sediment exists at the site, Engineering Controls (EC) are required to protect human health and the environment. The MVO Site has the following primary ECs, as described in the following subsections.

4.8.1 Groundwater Cutoff Wall

The vertical steel perimeter wall installed to support the excavation during construction was left in place to serve as an impermeable wall for the Harbor sediment containment cell and to prevent horizontal migration of groundwater from the sediment placed in the containment cell. The perimeter wall was driven into and tied to the underlying layer of native clay present at the base on the containment cell excavation.

4.8.2 Clay Liner

Bentomat clay liner was placed at the floor of the excavation, above the underlying layer of native clay that was present, to serve as an additional layer of protection to prevent vertical groundwater flow between the placed sediment and groundwater containing zone below the naturally occurring aquitard layer of native clay.

4.8.3 Sediment Pore Water Collection

To facilitate dewatering of dredged sediment during future phases, a french drain and sump were built in the MVO Site containment cell as shown in the Record Drawings (Appendix K). Also, a 6-inch layer of Type B fill (stone) obtained from the Litchfield Plant of W.F. Saunders & Sons and Barrett Paving Materials Inc. was placed at the base of the excavation above the Bentomat clay liner. A Department of Transportation (DOT) Source Certification was issued for Barrett Paving on January 20, 2010.

In the future, a submersible pump and buried forcemain will be installed to transfer pore water draining from the sediment to the groundwater treatment system constructed to treat groundwater recovered from the Harbor Point Site.

4.8.4 Fencing

The MVO Site is surrounded by a perimeter chain link fence and gates to control access on to the site.

4.8.5 Low Permeability Cover

In the future, once the sediment placed into the containment cell is sufficiently dewatered and capable of supporting weight, a low permeability cover will be constructed above the Dredge Containment Cell. The low permeability cover likely will be constructed using a geomembrane with a protective layer of barrier material (24 inches thick) and topsoil (6 inches thick) placed above. Details of the cover design including grading plans will be developed and submitted to the DEC during a future phase of work at the Harbor Point Site.

4.9 INSTITUTIONAL CONTROLS

No Institutional Controls specific to the MVO project were implemented as part of this phase of the overall Harbor Point remediation project. Future Institutional Controls will be discussed in the FER.

4.10 DEVIATIONS FROM THE REMEDIAL ACTION WORK PLAN

The work plan initially provided to the NYSDEC included in it plans for a downward flowing passive filter made of a section of sheeted pile constructed inside the Dredge Containment Cell alongside the perimeter sheet pile wall. The passive filter was to be filled with layers of sand and granular activated carbon to filter suspended solids and organic compounds. Dredge water from the containment cell would flow over the interior wall, flow down through the filter media, then an under drain would discharge the filtered water to Utica Harbor. Subsequent to submitting the work plan to the NYSDEC, however, it was decided by National Grid and O'Brien & Gere that use of pumps and pressure vessels to provide for treatment of the dredge water would be more reliable and afford greater flexibility in the event that conditions encountered required more water treatment capacity. Aside from this change, no deviations from the Department approved design plans were made. The excavation and disposal of soil from the former MVO Site was completed in accordance with the Basis of Design (O'Brien & Gere, 2010) and Harbor Point (633021) and Mohawk Valley Oil (633032) Sites Record of Decision Modifications (NYSDEC, 2010). Also, the sediment containment cell comprised of the

steel sheet pile perimeter wall, Bentomat clay liner and layer of crushed stone was constructed in accordance with the documents identified above.

References

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NYSDEC, 2001. ***Record of Decision, Niagara Mohawk Harbor Point Site, Operable Unit 3, Utica Harbor Sediments and Dredge Disposal Areas, Utica, Oneida County, Site Number 6-33-021,*** **New York State Department of Environmental Conservation, March 2001.**

NYSDEC, 2002. ***Record of Decision, NIMO-Harbor Point Property Operable Unit No. 1 – Peninsula (Site No. 6-33-021), New York Tar Emulsion Product Site (Site No. 6-33-031), and the Mohawk Valley Oil Site (Site No. 6-33-02),*** **New York State Department of Environmental Conservation, March 2002.**

NYSDEC, 2010. Harbor Point Site, Site 6-33-021, Utica, Oneida Co. OU 1 ROD modifications, New York State Department of Environmental Conservation C, 18 November, 2010.

O'Brien & Gere, 2009. Proof of Concept Report. O'Brien & Gere, 24 March, 2009.

O'Brien & Gere, 2010. Basis of Design (Phase I), Operable Unit 3 – Utica Harbor Sediments and Dredge Containment Area, Harbor Point Site, Utica, New York. O'Brien ***& Gere, 8 January, 2010.***

Table 1: Abandoned Monitoring Wells

MW-412 (S)	MW-414 (I)	MW-215 (I)	MW-411 (S)	MW-402 (S)	MW-403 (S)	MW-212 (S)
MW-408 (I)	MW-413 (I)	MW-210 (S)	MW-410 (I)	MW-401 (I)	MW-409 (I)	MW-SC3 (S)
MW-406 (D)	MW-214 (S)	MW-211 (I)	MW-SC2 (S)	MW-404 (I)	MW-213 (I)	

Table 2: Sheeting Installation

Date	**Number of Sheets**	**Length (ft)**
6/1/10	55	254
6/2/10	36	161
6/4/10	52	235.4
6/7/10	40	179.1
6/14/10	28	128.8
6/15/10	63	282.8
6/16/10	48	214.8
6/17/10	44	196.5
6/19/10	18	86
6/21/10	23	105
6/29/10	24	109
		Total: 1952 ft.

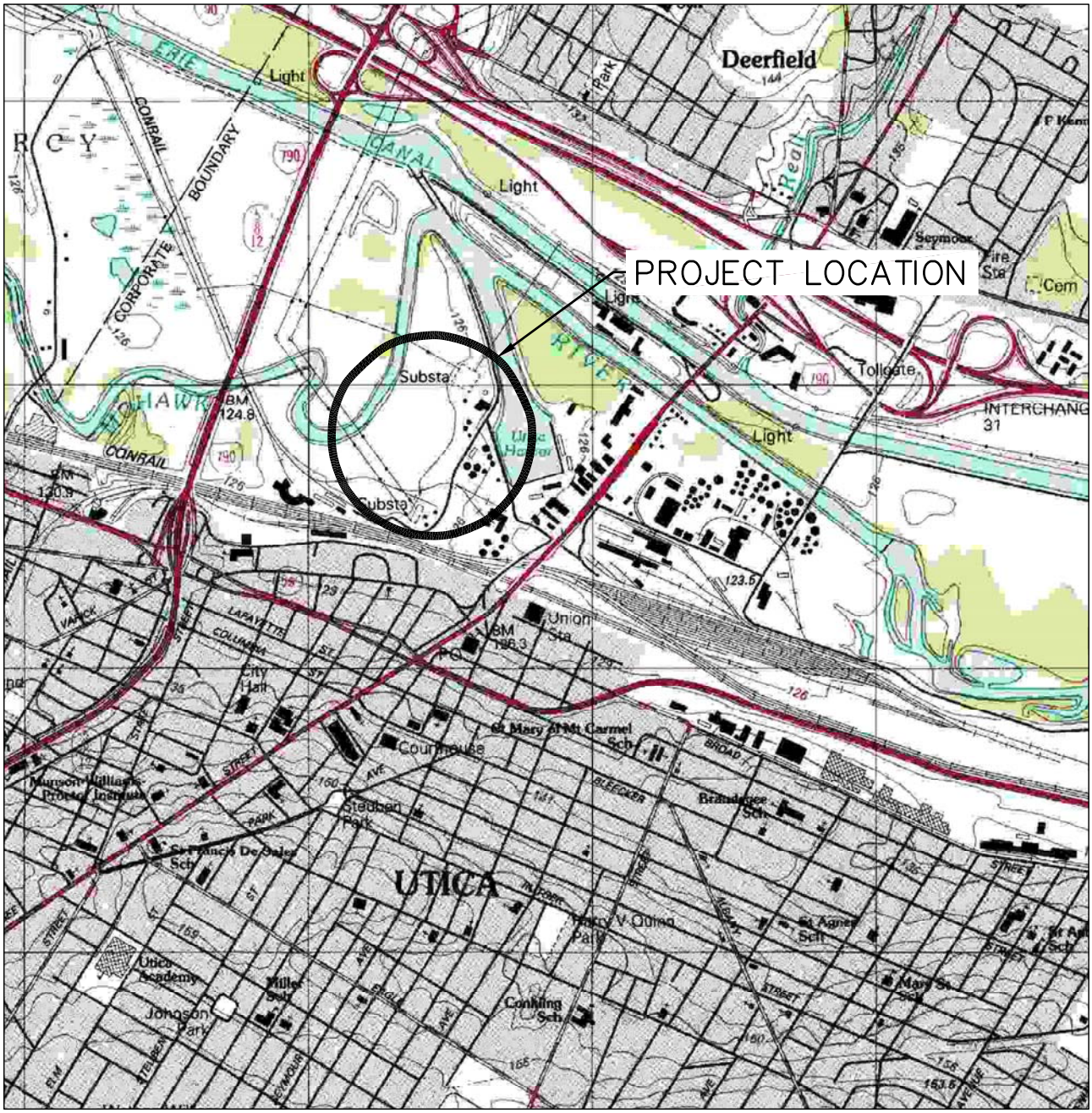
Table 3: Soil Cleanup Objectives (SCOs)

As Presented in March 2002 Record of Decision	**As Implemented in accordance with ROD Modification**
Removal of soil exhibiting concentrations in excess of 1,000 mg/kg of polynuclear aromatic hydrocarbons (PAH) to a depth of 9 ft from a portion of the MVO Site, as shown in the March 2002 ROD (NYSDEC, 2002)	All soil from the MVO Site was removed to a depth of approximately 11.5 ft below ground surface to provide capacity for containment of sediment to be later dredged from Utica Harbor.

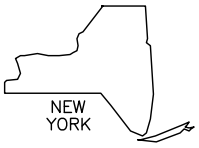
Table 4: Abandoned USTs Removed

Tank ID #	**Date Discovered/ NYSDEC notification date**	**Spill Numbers**	**Dimensions**	**Contents**
1	6/29/10	*	48” Ø x 6’	Empty
2	7/21/10	*	48” Ø x 6’	Water containing Gasoline
3	8/19/10	1005607	60” Ø x 14’	#6 fuel oil
4	8/23/10	1005712	36” Ø x 10’	Empty
5	8/26/10	1005849	60” Ø x 24’	Water containing Gasoline
6	8/26/10	1005849	60” Ø x 18’	Water containing Gasoline
7	8/26/10	1005865	48” Ø x 67’’	Water containing Oil
*No spill number assigned by NYSDEC because it was not anticipated to uncover more USTs. When the third UST was discovered, NYSDEC began assigning spill numbers.				

FIGURE 1



ADAPTED FROM: UTICA EAST QUADRANGLE, STATE OF NY U.S.G.S. 7.5 MIN. QUAD



QUADRANGLE LOCATION

NATIONAL GRID
HARBOR POINT SITE – UTICA, NY

SITE LOCATION MAP

NOT TO SCALE

FILE NO. 1118.43175.200
FEBRUARY 2011

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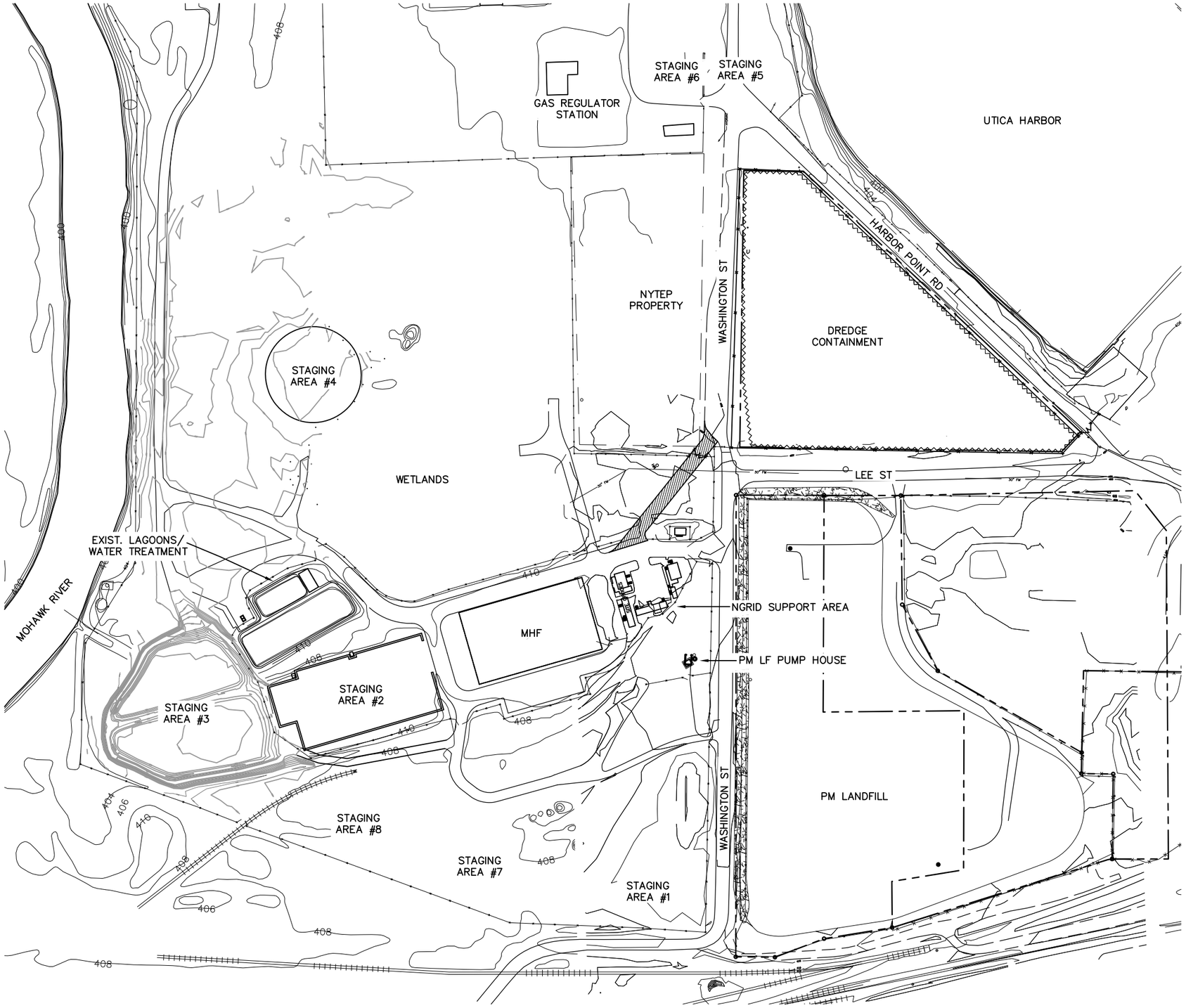
I:\NATIONAL-GRID.1118\43175.HARBOR-POINT-CO\DOCS\DWG\HARBOR POINT SUMMARY REPORT\43175-200-FIG1.DWG

FIGURE 2



I:\NATIONAL-GRID.1118\43175.HARBOR-POINT-CO\DOCS\DWG\HARBOR POINT SUMMARY REPORT\43175-201-FIG2.DWG

NATIONAL GRID
HARBOR POINT SITE
UTICA, NEW YORK

SITE PLAN

1"=200' 200 0 200

FILE NO. 1118.43175.201
FEBRUARY 2011

O'BRIEN & GERE

FIGURE 3

APPROX. LIMITS OF PREVIOUSLY EXCAVATED MATERIAL USED AS BACKFILL (TYP)

PERIMETER FENCE (TYP)

PROPERTY BOUNDARY (TYP)

APPROX. LOCATION OF VISUALLY STAINED SOILS OBSERVED OUTSIDE THE MVO SHEETED EXCAVATION (TYP)

SHEETPILE WALL (TYP)
(LIMITS OF EXCAVATION)

UTICA HARBOR

NYTEP PROPERTY

NEW YORK EMULSIONS
(REPUTED OWNER)
LIBER 879, PAGE 24

NIAGARA MOHAWK POWER CORPORATION
(NOW OR FORMERLY)
T.A. #318.8-1-2

PEOPLE OF THE STATE OF NEW YORK
(REPUTED OWNER)

NIAGARA MOHAWK POWER CORPORATION
(NOW OR FORMERLY)
T.A. #318.8-1-3

DREDGE CONTAINMENT

NIAGARA MOHAWK POWER CORPORATION
(NOW OR FORMERLY)
T.A. #318.8-1-4

WASHINGTON ST

HARBOR POINT RD

LEE ST

NIAGARA MOHAWK POWER CORPORATION
(NOW OR FORMERLY)
T.A. #318.01-1-5

NIAGARA MOHAWK POWER CORPORATION
(NOW OR FORMERLY)
T.A. #318.01-1-6

PM LANDFILL

MONARCH CHEMICALS, INC.
(T.A #318.08-1-6)

I:\NATIONAL-GRID.1118\43175.HARBOR-POINT-CO\DOCS\DWG\HARBOR POINT SUMMARY REPORT\43175-201-FIG2.DWG

NATIONAL GRID
HARBOR POINT SITE
UTICA, NEW YORK

LIMITS OF EXCAVATION

1"=100' 100 0 100

FILE NO. 1118.43175.202
FEBRUARY 2011

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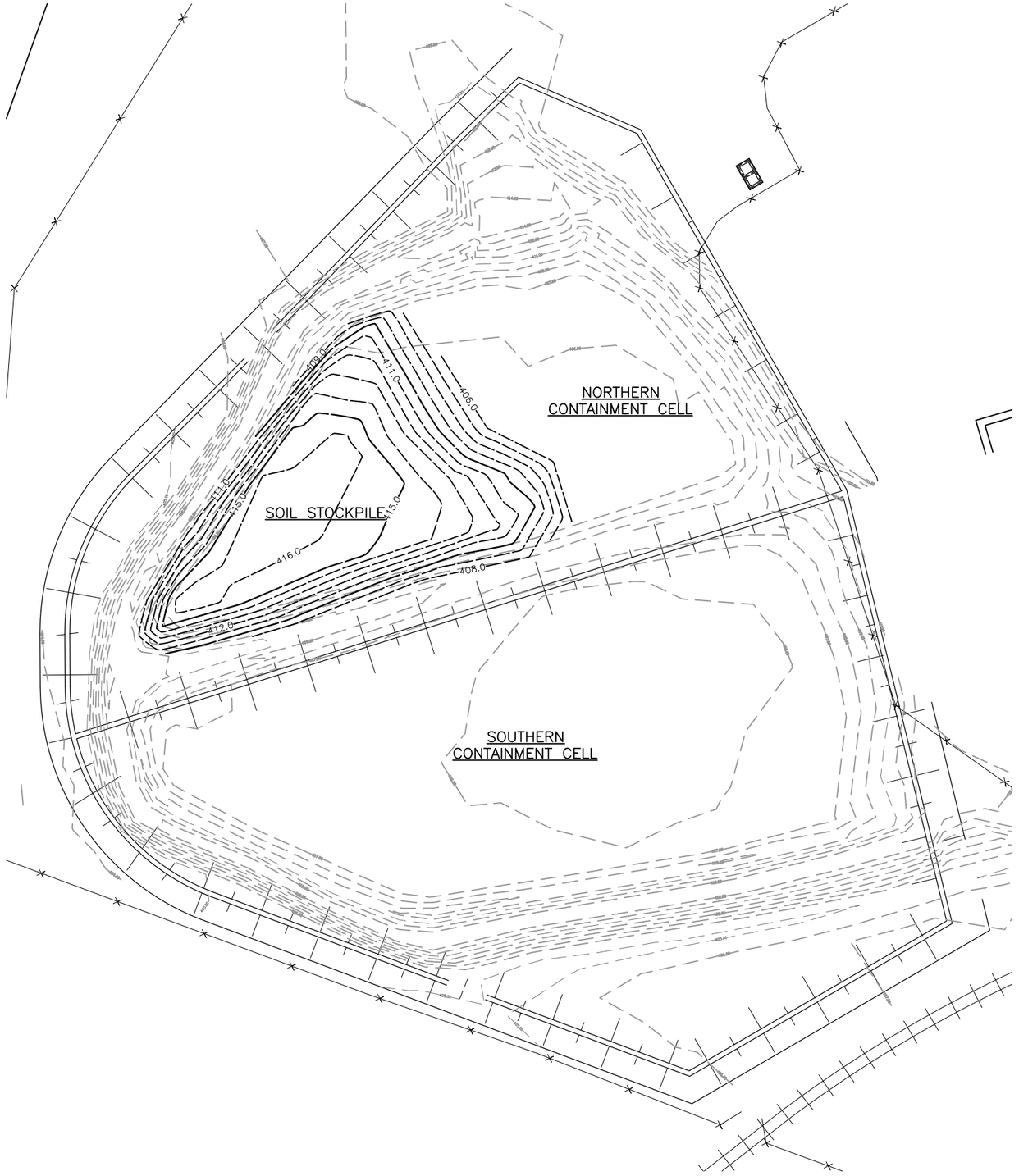
FIGURE 4



NATIONAL GRID
HARBOR POINT SITE
UTICA, NEW YORK

STAGING AREA PLAN

1"=50' 50 0 50

FILE NO. 1118.43175.203
FEBRUARY 2011

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