Sterling Environmental Engineering, P.C.

NORTHEAST TREATERS OF NEW YORK, LLC
GREENE COUNTY, NEW YORK

Site Management Plan

NYSDEC Site Number: C420029

Prepared for:
Northeast Treaters of New York, LLC
796 Schoharie Turnpike
Athens, New York 10701

Prepared by:
Sterling Environmental Engineering, P.C.
24 Wade Road
Latham, New York 12110
(518) 456-4900

Revisions to Final Approved Site Management Plan:

Revision #	Date Submitted	Summary of Revision	NYSDEC Approval Date

July 15, 2016

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NEW YORK STATE BROWNFIELD CLEANUP PROGRAM

NORTHEAST TREATERS OF NEW YORK, LLC
ATHENS, NY
SITE #C420029

SITE MANAGEMENT PLAN

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JULY 2016

CERTIFICATION STATEMENT

I, Mark P. Millspaugh, P.E., certify that I am currently a NYS registered professional engineer as is 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).

NY PE 059182	7/15/2016	
NYS Professional Engineer #	Date	Signature

LIST OF ACRONYMS

Acronym	Definition
ACGIH	American Conference of Governmental Industrial Hygienists
As	Arsenic
Amsl	Above Mean Sea Level
ARARs	Applicable or Relevant and Appropriate Requirements
ASTM	American Society for Testing and Materials
AWII	Atlantic Wood Industries, Inc.
BCA	Brownfield Cleanup Agreement
BCP	Brownfield Cleanup Program
CAMP	Community Air Monitoring Plan
CCA	Chromated Copper Arsenate
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CFR	Code of Federal Regulations
Cr	Chromium
DER-10	Division of Environmental Remediation/Technical Guidance for Site Investigation and Remediation
EAF	Environmental Assessment Form
EC	Engineering Control
EWP	Excavation Work Plan
IDLH	Immediately Dangerous to Life or Health
HASP	Health and Safety Plan
IC	Institutional Control
MCL	Maximum Contaminant Levels
NIOSH	National Institute for Occupational Safety and Health
NYCRR	New York Codes, Rules and Regulations
NYSDEC	New York State Department of Environmental Conservation
NYSDOH	New York State Department of Health
OSHA	Occupational Safety and Health Administration
PAHs	Polycyclic Aromatic Hydrocarbons
PCBs	Poly-Chlorinated Biphenyls
PEL	Permissible Exposure Limits
PPM	Parts Per Million
PRR	Periodic Review Report
QAPP	Quality Assurance Project Plan
RAOs	Remedial Action Objectives
RAWP	Remedial Action Work Plan
RCRA	Resource Conservation and Recovery Act

LIST OF ACRONYMS
(Continued)

Acronym	Definition
REL	Recommended Exposure Limit
RI	Remedial Investigation
RSO	Remedial Site Optimization
ROD	Record of Decision
SCGs	Standards, Criteria and Guidance
SCOs	Soil Cleanup Objectives
SMP	Site Management Plan
SVOCs	Semi-Volatile Organic Compounds
TCLP	Toxicity Characteristic Leaching Procedure
TLV	Threshold Limit Value
TWA	Time-Weighted Average
USDA	United States Department of Agriculture
USEPA	United States Environmental Protection Agency
VOCs	Volatile Organic Compounds

EXECUTIVE SUMMARY

The following provides a summary of the controls implemented for the Site, as well as the inspections, monitoring, maintenance and reporting activities required by this Site Management Plan (SMP).

Site Identification – Site No. C420029
Northeast Treaters of New York, LLC
796 Schoharie Turnpike
Town of Athens, New York 10701

Institutional Controls (ICs):	1. The property may be used for industrial use.	
	2. Environmental Easement	
	3. All Engineering Controls (ECs) must be inspected at a frequency and in a manner defined in the SMP.	
Engineering Controls:	1. Cover system	
Inspections:		Frequency
1. Cover Inspection		Annually
Monitoring:		
1. Sediment Sampling at Drainage Swale Downgradient of SPDES Outfall #001*		Annually
Maintenance:		
1. Cover Maintenance		As needed
2. Swale Maintenance		As needed
Reporting:		
1. Periodic Review Report		Biennially

*SPDES Outfall #001 is monitored pursuant to Multi-Sector General Permit (MSGP) No. NYR00B991 independent of this SMP.

Further descriptions of the above requirements are provided in detail in the latter sections of this Site Management Plan.

1.0 INTRODUCTION

1.1 General

This Site Management Plan (SMP) is a required element of the remedial program for the Northeast Treaters of New York, LLC (Northeast Treaters) Site No. C420029 located in the Town of Athens, New York (hereinafter referred to as the "Site"). A Site Location Map is provided as Figure 1. The Site is currently in the New York State (NYS) Brownfield Cleanup Program (BCP) which is administered by New York State Department of Environmental Conservation (NYSDEC).

This SMP was prepared by Sterling Environmental Engineering, P.C. (STERLING), on behalf of Northeast Treaters, in accordance with the requirements of the NYSDEC's Technical Guidance for Site Investigation and Remediation ("DER-10"), dated May 3, 2010, and the guidelines provided by the NYSDEC. This SMP addresses the means for implementing the ICs and/or ECs that are required by the Environmental Easement for the Site.

Northeast Treaters entered into a Brownfield Cleanup Agreement (BCA) on December 31, 2014 with the NYSDEC to remediate the Site. A figure showing the boundaries of this Site is provided as Figure 2. The boundaries of the Site are more fully described in the metes and bounds site description that is part of the Environmental Easement provided in Appendix A.

The remedial program, conducted in accordance with the October 2, 2015 Remedial Work Plan and the December 7, 2015 Remedial Work Plan Addendum, consisted of limited excavation in support of Site redevelopment, removal of impacted sediment from facility catch basins and settling basin drainage swale, consolidation of impacted soil and sediment within the boundaries of the Site, and the installation of a protective cover system over the Site.

After completion of the remedial work, some impacted media (i.e. soil and sediment) remained at this Site, which is hereafter referred to as "remaining impacted media". Institutional and Engineering Controls (ICs and ECs) have been incorporated into the Site remedy to control exposure to remaining impacted media to ensure protection of public health and the environment. An Environmental Easement granted to the NYSDEC, and recorded with the Greene County Clerk, requires compliance with this SMP and all ECs and ICs placed on the Site.

This SMP was prepared to manage remaining impacted media at the Site until the Environmental Easement is extinguished in accordance with ECL Article 71, Title 36. The SMP has been approved by the NYSDEC, and compliance with the SMP is required by the grantor of the Environmental Easement and the grantor's successors and assigns. This SMP may only be revised with the approval of the NYSDEC.

It is important to note that:

- This SMP details the Site-specific implementation procedures that are required by the Environmental Easement. Failure to properly implement the SMP is a violation of the Environmental Easement, which is grounds for revocation of the Certificate of Completion;
- Failure to comply with this SMP is also a violation of Environmental Conservation Law, 6NYCRR Part 375 and BCA Index No. C420029-12-14 for the Site, and thereby subject to applicable penalties.

All reports associated with the Site can be viewed by contacting the NYSDEC or its successor agency managing environmental issues in New York State. A list of contacts for persons involved with the Site is provided in Appendix B of this SMP.

1.2 Revisions

Revisions to the SMP will be proposed in writing to the NYSDEC's project manager. Revisions will be necessary upon, but not limited to, the following: a change in media monitoring requirements, upgrades to or shutdown of a remedial system, post-remedial removal of contaminated sediment or soil, or other significant change to the Site conditions. In accordance with the Environmental Easement for the Site, the NYSDEC will provide a notice of any approved changes to the SMP, and append these notices to the SMP that is retained in its files.

1.3 Notifications

Notifications will be submitted by the property owner to the NYSDEC, as needed, in accordance with NYSDEC's DER-10 for the following reasons:

- 60-day advance notice of any proposed changes in Site use that are required under the terms of the BCA, 6NYCRR Part 375 and/or Environmental Conservation Law.
- 7-day advance notice of any field activity associated with the remedial program.
- 15-day advance notice of any proposed ground-intrusive activity pursuant to the Excavation Work Plan (EWP).
- Notice within 48-hours of any damage or defect to the foundation, structures or EC that reduces or has the potential to reduce the effectiveness of an EC, and likewise, any action to be taken to mitigate the damage or defect.
- Verbal notice by noon of the following day of any emergency, such as a fire; flood; or earthquake that reduces or has the potential to reduce the effectiveness of ECs 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 submitted to the NYSDEC within 45 days describing and documenting 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 30 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 BCA, and all approved work plans and reports, including this SMP.
- Within 45 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 to the NYSDEC.

Appendix B includes contact information for the above notification. The information in Appendix B will be updated as necessary to provide accurate contact information.

2.0 SUMMARY OF PREVIOUS INVESTIGATIONS AND REMEDIAL ACTIONS

This section provides a description of the location, layout and history of the Site; the nature and extent of impacts to environmental media, remedial activities performed, and all areas of remaining impacted media.

2.1 Site Location and Description

The Site is located in the Town of Athens, Greene County, New York and is identified a portion of Athens Tax Map Parcel 104.00-4-44 (see Figure 2). The Site is an approximate 4.056-acre area bounded by Northeast Treaters' facility stormwater basin to the north, a commercial garage to the south, undeveloped lands of Northeast Treaters to the east, and the Northeast Treaters lumber storage yard to the west (see Figure 2). The boundaries of the Site are more fully described in Appendix A –Environmental Easement. The owner of the Site parcel at the time of issuance of this SMP is Northeast Treaters.

2.2 Physical Setting

2.2.1 Land Use

The Site consists of a wood treatment process building and a lumber storage area. The Site is zoned industrial and is currently utilized for industrial wood treatment and storage by Northeast Treaters. No additional Site occupants are present at the time of issuance of this SMP.

The properties adjoining the Site and in the neighborhood surrounding the Site primarily include industrial, commercial, rural residential and agricultural properties. The properties immediately south of the Site include industrial and commercial properties; the properties immediately north of the Site include industrial and agricultural properties; the properties immediately east of the Site include industrial and rural residential properties; and the properties to the west of the Site include industrial properties.

2.2.2 Geology

The Site is located in the glaciated area that transitions from the Hudson-Mohawk Lowlands to the Alleghany Uplands physiographic provinces, approximately 2.3 miles west of the Hudson River. Soil maps indicate the Site consists of Covington and Madalin soils to the west and Kingsbury and Rhinebeck soils to the east. These soils are derived from glaciolacustrine (glacial lake) deposits, generally consist of clay and silt, and are described as poorly drained with varying transmissivities.

Soils penetrated during Remedial Investigation (RI) activities are consistent with the geologically mapped units described above on the Surficial Geologic Map of New York State, Hudson-Mohawk Sheet. Information from the soil borings drilled at the Site indicates that the sequence of materials beneath the Site (i.e., stratigraphy), in descending order is as follows:

- A layer of approximately 3 to 4 feet of fill material overlies the natural glaciolacustrine unit at the Site. Fill material is comprised of gray to light gray sand and gravel with pebbles and cobbles. The fill appears to have been placed to level the area for development and construction of buildings. The natural surface beneath the fill slopes gently to the west, based on review of the topographic map of the area (Figure 1). The fill is thicker in very limited areas of the Site where the underlying glaciolacustrine

material was excavated to install the existing wood treatment cylinder and associated sump system. Greater thicknesses of fill are not expected, other than at these locations, based on the known development history of the property.

- Glaciolacustrine deposits typically are comprised of fine-grained material (silt and clay) deposited in a glacial lake. The permeability of glaciolacustrine deposits typically is very low because they are comprised of fine grained sediments. The glaciolacustrine unit encountered in the soil borings drilled at the Site is described as light gray to light brown clay with some silt.

- Glacial till was encountered at depths ranging from nine (9) to 12.5 feet below grade beneath the glaciolacustrine unit; glacial till was not encountered in some soil borings which exceeded 12.5 feet below grade. Glacial till is comprised of a heterogeneous mixture of sand, gravel, silt, and clay with the matrix consisting primarily of silt and clay. The glaciolacustrine unit encountered in the soil borings drilled at the Site is described as fine-grained, neutral gray soil.

- Bedrock beneath the Site consists primarily of the middle Ordovician age Austin Glen Formation, comprised of interbedded graywacke and shale according to the New York State Geologic Bedrock Map. The depth to bedrock in the vicinity of the Site ranges from approximately 22 to 84 feet below grade as indicated by logs of water wells at the facility. Water Well Completion Reports are provided as Appendix C. Lithologic descriptions from the well logs indicate that bedrock consists of black and gray shale and some sandstone. Borings drilled at the Site for the RI reached a maximum depth of 15 feet and did not encounter bedrock.

A geologic cross section is shown in Figure 3. Site specific boring logs are provided in Appendix D.

2.2.3 Hydrogeology

Past studies of the Site indicate that the glacial till and glaciolacustrine units at the Site act as confining units that restrict the vertical movement of groundwater. To confirm this conclusion, four (4) temporary monitoring wells (identified as MW-1 to MW-4) were installed as part of the RI to determine the presence or absence of groundwater at the Site.

Piezometric data is provided in Table 1. Water Well Completion Reports and Well Construction Logs are provided in Appendix C. A well location map is provided as Figure 4. A well location map is provided as Figure 4.

During ground intrusive investigations perched water was encountered at some locations, but not all. Information gained during the site investigation indicates that the perched groundwater does not migrate, but mostly dissipates through evapotranspiration. Groundwater was not encountered in the underlying clay during ground intrusive investigations.

Piezometric measurements obtained from MW-1 through MW-4 during the RI (provided in Table 1) range between 0.4 feet below grade to no observed groundwater. Moreover, water levels recorded during the installation of facility water wells (see Appendix C) indicate piezometric levels within the boundaries of the Site are between ten (10) and 19.33 feet below grade. These data indicate water that infiltrates the paved area or at the margins of the paved area (e.g. MW-1)

migrates downward and perches on top of the natural glaciolacustrine material, and that perched water occurs in isolated locations, or is not present in the fill.

The nearest surface water, a tributary to Murderers Creek, is located approximately 1,000 feet to the north of the Site. Murderers Creek, a regulated Class C waterbody, is located approximately 1.6 miles to the north of the Site and flows towards Sleepy Hollow Lake, which is located approximately 1.6 miles to the east of the Site. Based on Site geology, discussed in Section 2.2.2, groundwater flow at the Site is to the west toward the facility's western settling basin. Local groundwater flow is northwest toward Murderers Creek and regional groundwater flow is east toward the Hudson River.

Information obtained from the NYSDEC Environmental Assessment Form (EAF) Mapper indicates the Site is not located over, or immediately adjoining, a primary, principal, or sole source aquifer. No sand or gravel water-bearing units were encountered in the soil borings drilled at the Site. Perched groundwater is occasionally present in the fill material immediately above the native clay.

Shallow monitoring wells MW-1 through MW-4 were destroyed and paved over during implementation of the remedial program.

2.3 Investigation and Remedial History

The following narrative provides a remedial history timeline and a brief summary of the available project records to document key investigative and remedial milestones for the Site. Full titles for each of the reports referenced below are provided in Section 8.0 - References.

2.3.1 Site History

The Northeast Treaters facility originally operated as a saw mill owned by Atlantic Wood Industries, Inc. (AWII). Operation as a pressure treating wood manufacturing facility began in 1979. For a period of time, the facility utilized chromated copper arsenate (CCA) to pressure treat wood products. In 2003, the facility switched to Micronized Copper Azole, a non-hazardous preservative. Prior to the implementation of the Site remedy and during its operation as a wood treatment facility, the Northeast Treaters facility consisted of three (3) main buildings: the Lumber Stacking Building, the Maintenance Building, and the Process Building. The Process Building is the only building located within the boundaries of the Site and has been substantially upgraded as part of Site redevelopment. Wood was treated in the Process Building in an 80 foot long by 6 foot diameter treatment cylinder.

2.3.2 Summary of Previous Investigations

Historical sampling locations investigated prior to 2014 are shown on Figure 5 and the respective analytical data are summarized in Table 2. Sample locations recently sampled by STERLING during and after 2014 are provided on Figure 6 and the respective analytical data are summarized in Tables 3a through 3k.

The facility has been subject to several environmental studies by the NYSDEC, the United States Environmental Protection Agency (USEPA) and the former Site owner. These studies include: (a) a 1989 "corrective action prior to loss of interim status" (CAPT LOIS) inspection prepared by A.T. Kearney under contract with USEPA; (b) a 1993 preliminary Resource Conservation and Recovery Act (RCRA) facility assessment prepared by TRC under contract with USEPA; (c) a

report entitled *Modified Phase I Environmental Site Assessment and Compliance Audit* dated December 1995 prepared by Groundwater Technology, Inc. at the request of AWII for Northeast Treaters (hereinafter "Phase I Site Assessment"); (d) a 1997 report prepared by KU Resources entitled *Report of Findings CCA Solution Recycle Sump (SWMU 3) Integrity Evaluation*; and (e) a 1999 report prepared by KU Resources entitled *Report of Findings Sampling Visit Work Plan Implementation* (hereinafter "KU Resources Report").

The Phase I Site Assessment, prepared utilizing American Society for Testing and Materials: Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process (ASTM E 1527), provides a summary of environmental conditions and includes the results of surficial soil sampling at various locations across the Northeast Treaters property, as well as the installation of borings to a depth of 13 to 22 feet. Samples were analyzed for total copper, total chromium, total arsenic, toxicity characteristic leaching procedure (TCLP) copper, TCLP chromium and TCLP arsenic.

Surface soils on the Northeast Treaters property were found to be impacted to varying degrees. The Phase I Site Assessment concluded that "In the opinion of Groundwater Technology, based upon our extensive knowledge of environmental conditions at wood preservation facilities, the results of the analyses performed should not be considered to be of environmental concern."

The Phase I Site Assessment also notes a spill of approximately three (3) pounds of arsenic pentoxide occurred on May 2, 1990. The approximate spill area is located adjacent to the Process Building as identified on Figure 5. A valve on the treatment tank was inadvertently left open and CCA solution was released onto the ground. The cleanup was completed under NYSDEC oversight. By letter dated August 21, 1990, the NYSDEC determined that remedial activities associated with the spill could be discontinued and the spill closed.

Investigations of the Site were conducted in 1997 and 1999 as a follow-up to the 1989 CAPT LOIS report. The first investigation focused on the area around the south sump while the second evaluated the south sump, the north sump, the drip pad and the former underground tank. The investigations, which are summarized in the KU Resources Report, provide a description of the sampling and reported analytical results. The sampling conducted by KU Resources focused on:

- CCA Solution Recycle Sump (south sump)
- Treating Cylinder Pit (north sump)
- Drip Pad
- Former Underground Tank

Background sampling was also performed. The KU Resources Report states that the drip pad is "compliant with RCRA Subpart W". The sampling results were interpreted to indicate no evidence of continuing releases. However, certain locations on the Northeast Treaters property were observed with concentrations consistent with incidental drippage through routine handling of treated lumber and CCA. The report further concludes that the observed CCA in soil is not mobile due to the substantial thickness of natural, low permeability clay unit beneath the gravel fill at the surface. NYSDEC's review of the 1999 investigation and report is summarized by the NYSDEC in a June 13, 2000 letter which allows for the remediation of impacted soils in the vicinity of the drip pad to be addressed upon drip pad closure and when the soils become accessible. The letter concludes that at the time of transmittal, "the RCRA Facility Assessment [indicated] that there are no other known releases from the Northeast Treaters facility that require RCRA corrective action."

On June 23, 2014, STERLING conducted focused sampling of subsurface soils and the existing concrete drip pad located within the Process Building. The findings of this sampling investigation were summarized in the *Sampling for Chromium and Arsenic in Drip Pad Concrete and Subsoils* report and incorporated into the *Drip Pad Work Plan* dated September 3, 2014. The primary purpose of this sampling event was to properly characterize concrete debris from the drip pad and subsurface soils. A total of 12 concrete samples and 20 soil samples were collected, at various depths, at four (4) sample locations within the footprint of the drip pad. Concrete and soil samples were analyzed for total metals and TCLP metals via USEPA Method 6010C. Samples were only analyzed for the hazardous components of CCA, arsenic and chromium. Sample results indicated that Site soils did not possess properties of a characteristic hazardous waste.

2.3.3 Remedial Investigation Summary

As discussed in the August 3, 2015 RI Report, soils were initially analyzed for volatile organic compounds (VOCs) semi-volatile organic compounds (SVOCs), metals, poly-chlorinated biphenyls (PCBs) and pesticides. From the sample results, metals exceeded the Commercial Soil Cleanup Objectives (SCOs) and the contaminants of concern were determined to be arsenic and chromium.

Initial samples collected during the RI were analyzed for hexavalent chromium and total chromium. Analysis showed that detections of hexavalent chromium were consistently a small percentage of the detected total chromium concentration. Therefore, with regard to chromium samples only, the remainder of soil samples were analyzed for total chromium, and result were compared to trivalent chromium SCOs to evaluate the magnitude and extent of environmental impacts at the Site.

Arsenic and chromium were detected in soil samples obtained beneath the facility's historic drip pad, on the soil along the perimeter of the drip pad, and in the soil of the undeveloped woodland area located to the north and east of the developed portion of the Site. Elevated concentrations of arsenic and chromium were also detected within catch basins both onsite and offsite in portions of the stormwater collection system hydraulically downgradient of the Site. Detections of arsenic exceeded the Unrestricted SCO (i.e. 13ppm) beneath the drip pad (maximum 1,360 ppm) and along the perimeter of the drip pad (maximum 206 ppm). Several sample locations immediately east of the Site contained arsenic concentrations above Unrestricted SCOs but below Residential SCOs (i.e. 16 ppm). Detections of chromium also exceeded the Unrestricted SCO (i.e. 30 ppm) in soil samples obtained beneath the drip pad (maximum 1,260 ppm) and along the perimeter of the drip pad (maximum 96.7 ppm).

Additionally, stormwater sediment samples were obtained near the outflow of the facility's settling basin located near the Northeast Treaters western property line. The maximum arsenic detection in the basin's outflow was 70 ppm (closest to the basin) with levels decreasing with distance from the basin.

Four monitoring wells (MW-1 to MW-4) were installed during the RI. Measurements in the wells indicate that perched water occurs in isolated locations, or is not present in the fill. Only MW-1 yielded sufficient water to be sampled, which was analyzed for chromium and arsenic. Sample analysis determined that the perched water was not impacted by Site contaminants of concern. Additionally, the bedrock groundwater, while not hydraulically connected to the drip pad, was found not be impacted by arsenic and chromium.

The RI concluded that concentrations of arsenic and chromium were detected in sufficient frequency and concentration in the onsite soil and offsite stormwater sediment to require evaluation for remedial action.

2.3.4 Summary of Remedial Activities

Remedial activities were conducted in accordance with the October 2, 2015 Remedial Work Plan and the December 7, 2015 Remedial Work Plan Addendum. The physical elements of the selected remedy, as shown in Figure 7, are as follows:

- Cover System – A Site protective cover to allow for commercial use of the Site. The cover consists of a combination of structures comprising the Site development (i.e. new Process Building, pavement, etc.) or one (1) foot of soil cover over a geotextile demarcation layer. The one (1) foot of soil cover will meet the requirements of 6 NYCRR Part 375-6.7(d).

- Limited Excavation – Excavation of impacted soil/sediment in the vicinity of the facility's basin exit swale, located downgradient of the facility's western settling basin. Excavated soil was consolidated onsite under the cover system.

- Removal of all Sediment from Impacted Catch Basins – Removal of impacted stormwater sediment from facility catch basins located hydraulically downgradient from the Site. Sediment removed from impacted catch basins was consolidated onsite under the cover system. Impacted soil is defined as soil which exceeds residential SCOs.

2.4 Remedial Action Objectives

The Remedial Action Objectives (RAOs) for the Site as listed in the Decision Document dated December 31, 2015 are as follows:

Soil

RAOs for Public Health Protection

- Prevent ingestion/direct contact with contaminated soil.

RAOs for Environmental Protection

- Prevent migration of contaminants that could result in groundwater or surface water impacts.
- Prevent impacts to biota from ingestion/direct contact with soil causing toxicity or impacts from bioaccumulation through the terrestrial food chain.

Sediment

RAOs for Public Health Protection

- Prevent direct contact with contaminated sediments.

RAOs for Environmental Protection

- Restore sediments to pre-release/background conditions to the extent feasible.

2.5 Remaining Impacted Media

This section provides a summary of remaining impacted media at the Site to identify environmental conditions that may be encountered in the event of future excavations or development at the Site.

2.5.1 Onsite Soil

Site soil was excavated from portions of the Site within the footprint of the new Process Building for the construction of structural members (i.e. piers, frostwalls, footers, etc.). Excavated Site soils were consolidated onsite under the protective cover. As such, arsenic and chromium remain onsite in similar concentrations to those identified in previous investigations (summarized in Section 2.3).

Tables 3a through 3k and Figures 8 through 11 summarize the results of soil samples collected during the RI and the concentrations of arsenic and chromium that remain at the Site after completion of the remedial action. Geotextile fabric was used as a demarcation layer at the Site to delineate the separation between impacted Site soil and the overlying protective cover material installed during the implementation of the remedy.

2.5.2 Offsite Soil and Sediment

Offsite soil and sediment impacted by Site contaminants of concern was excavated from the facility's basin exit swale located downgradient of the facility's western settling basin (see Figure 12). Excavated material was consolidated onsite under the protective cover. Post-excavation samples were collected offsite following the implementation of the remedy. A reduction in the concentration of chromium and arsenic was observed in post-excavation samples. Table 3k and Figure 12 summarize the results of offsite sediment samples collected prior to and after completion of the remedial action.

In accordance with the NYSDEC Decision Document, monitoring of offsite soil/sediment downgradient of the settling basin is required to assess the performance and effectiveness of the remedy. Post-excavation samples will be utilized as a baseline in support of the Monitoring and Sampling Plan provided in Section 4.0 of this SMP. The Monitoring and Sampling Plan described herein will aid in the determination of whether the existing settling pond and modified basin exit swale are effective in facilitating settlement of potentially impacted stormwater sediment from the Northeast Treaters property. The Site remedy is designed to eliminate impacted sediment in stormwater by effectively covering remaining impacted soil.

3.0 INSTITUTIONAL AND ENGINEERING CONTROL PLAN

3.1 General

Institutional Controls (ICs) and Engineering Controls (ECs) are required to protect human health and the environment because impacted soil remains at the Site beneath the protective cover system. This IC/EC Plan describes the procedures for the implementation and management of all

IC/ECs at the Site. The IC/EC Plan is one component of the SMP and is subject to revision by the NYSDEC.

This plan provides:

- A description of all IC/ECs on the Site;
- The basic implementation and intended role of each IC/EC;
- A description of the key components of the ICs set forth in the Environmental Easement;
- A description of the controls to be evaluated during each required inspection and periodic review;
- A description of plans and procedures to be followed for implementation of IC/ECs, such as the implementation of the Excavation Work Plan (EWP) (as provided in Appendix E) for the proper handling of remaining impacted media that may be disturbed during maintenance or redevelopment work on the Site; and
- Any other provisions necessary to identify or establish methods for implementing the IC/ECs required by the Site remedy, as determined by the NYSDEC.

3.2 Institutional Controls

A series of ICs are required by the Decision Document to: (1) implement, maintain and monitor Engineering Control (EC) systems; (2) prevent future exposure to remaining impacted media; and, (3) limit the use and development of the Site to commercial uses only. Adherence to these ICs on the Site is required by the Environmental Easement and will be implemented under this SMP. ICs identified in the Environmental Easement may not be discontinued without an amendment to or extinguishment of the Environmental Easement. The IC boundaries are shown on Figure 2. These ICs are:

- The property may be used for commercial use;
- All ECs must be operated and maintained as specified in this SMP;
- All ECs must be inspected at a frequency and in a manner defined in the SMP.
- Monitoring must be performed as defined in this SMP;
- Data and information pertinent to Site management must be reported at the frequency and in a manner as defined in this SMP;
- All future activities that will disturb remaining contaminated material must be conducted in accordance with this SMP;
- Monitoring to assess the performance and effectiveness of the remedy must be performed as defined in this SMP;
- Operation, maintenance, monitoring, inspection, and reporting of any mechanical or physical component of the remedy shall be performed as defined in this SMP;
- Access to the Site must be provided to agents, employees or other representatives of the State of New York with reasonable prior notice to the property owner to assure compliance with the restrictions identified by the Environmental Easement; and
- Vegetable gardens and farming on the Site are prohibited.

3.3 Engineering Controls

3.3.1 Protective Cover

Exposure to remaining impacted media at the Site is prevented by a protective cover system placed over the Site. This cover system includes the structures comprising the Site development (i.e. new Process Building, pavement, etc.) or one (1) foot of approved soil cover. Figure 7 presents the location of the cover system and applicable demarcation layers. The EWP provided in Appendix E outlines the procedures required to be implemented in the event the cover system is breached, penetrated or temporarily removed, and any underlying remaining impacted media is disturbed. Procedures for the inspection of this cover are provided in the Monitoring and Sampling Plan included in Section 4.0 of this SMP. Work conducted pursuant to the EWP must be conducted in accordance with the procedures defined in a OSHA-compliant Health and Safety Plan (HASP) and associated Community Air Monitoring Plan (CAMP) prepared for the Site and provided in Appendix F and Appendix G, respectively.

3.3.2 Offsite Settling Basin and Drainage Exit Swale

The facility's western settling basin was left in place during and following the implementation of the preferred remedy to manage facility stormwater drainage patterns. The basin will continue to serve as a settling basin for the facility stormwater management system intended to both slow and treat stormwater. Human exposure to remaining basin sediment located within the settling basin is remote because the basin contains water year-round.

The basin exit swale, located downgradient of the facility's western settling basin, was modified as part of the preferred remedy to prevent or minimize the offsite migration of impacted sediment from the settling basin.

In accordance with the NYSDEC Decision Document, a Closure Plan for the facility's western settling basin and downgradient drainage exit swale is provided as Appendix I of this SMP. This Closure Plan will be implemented in the event that the facility permanently ceases operation as a wood treatment facility or is permanently removed from State Pollutant Discharge Elimination System (SPDES) permit coverage.

As further discussed in the Closure Plan provided as Appendix I, an Investigative Work Plan will be prepared by the facility owner to initiate settling basin closure and to delineate the lateral and vertical impact to soil and sediment located hydraulically downgradient of the settling basin. The Investigative Work Plan will be prepared at the time of closure and will comply with then-current applicable Federal, State, and Local regulations. Any areas hydraulically downgradient of the settling basin that may have received contaminated overflow are applicable to the Closure Plan. The offsite settling basin and the area downgradient of the settling basin are shown on Figure 12. The Closure Plan is not applicable to the stormwater settling basin located adjacent to and north of the Site which was constructed as part of the Site redevelopment and which never received stormwater with potentially impacted sediment.

Figure 7 shows the location of the ECs for the Site. An As-Built drawing, signed and sealed by a professional engineer, is included in Appendix H.

3.3.4 Criteria for Completion of Remediation/Termination of Remedial Systems

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

The Site's cover system is a permanent control and the quality and integrity of this system will be inspected at defined, regular intervals in accordance with this SMP until such time as it is no longer required, with the approval of the NYSDEC.

4.0 MONITORING AND SAMPLING PLAN

4.1 General

This Monitoring and Sampling Plan describes the measures for evaluating the overall performance and effectiveness of the remedy. This Monitoring and Sampling Plan may only be revised with the approval of the NYSDEC. Details regarding the sampling procedures, data quality usability objectives, analytical methods, etc. for all samples collected as part of Site management for the Site are included in the Quality Assurance Project Plan (QAPP) provided in Appendix J.

This Monitoring and Sampling Plan describes the methods to be used for:

- Sampling and analysis of all appropriate media (i.e. sediment);
- Assessing compliance with applicable NYSDEC standards, criteria and guidance (SCGs), particularly groundwater standards and Part 375 SCOs for soil; and
- Evaluating Site information periodically to confirm that the remedy continues to be effective in protecting public health and the environment.

To adequately address these issues, this Monitoring and Sampling Plan provides:

- Sampling locations, protocol and frequency;
- Information on all designed monitoring systems;
- Analytical sampling program requirements; and
- Annual inspection and periodic certification.

Reporting requirements are provided in Section 7.0 of this SMP.

4.2 Site – Wide Inspection

Inspections of the components of the remedy will be performed at a one (1) year after issuance of the Certificate of Completion and annually thereafter for the first five (5) years. A long-term inspection schedule will be proposed for approval by the NYSDEC after year five (5) based on the results of the first five (5) years of inspection data. Modification to the frequency or duration of the inspections will require approval from the NYSDEC. Site-wide inspections will also be performed after all severe weather conditions that may affect ECs or monitoring devices. During these inspections, an inspection form will be completed as provided in Appendix K – Site Management Forms. 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; and
- Confirm that Site records are up to date.

Inspections of all remedial components installed at the Site will be conducted. A comprehensive Site-wide inspection of the remedial components will be conducted and documented according to the SMP schedule, regardless of the frequency of the Periodic Review Report. The inspections will determine and document the following:

- Whether ECs 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; and
- If Site records are complete and up to date.

Reporting requirements are outlined in Section 7.0 of this plan.

Inspections will also be performed in the event of an emergency. If an emergency, such as a natural disaster or an unforeseen failure of any of the ECs occurs that reduces or has the potential to reduce the effectiveness of ECs in place at the Site, verbal notice to the NYSDEC must be given by noon of the following day. In addition, an inspection of the Site will be conducted within five (5) days of the event to verify the effectiveness of the IC/ECs implemented at the Site by a qualified environmental professional, as determined by the NYSDEC. Written confirmation must be provided to the NYSDEC within seven (7) days of the event that includes a summary of actions taken, or to be taken, and the potential impact to the environment and the public.

4.3 Post-Remediation Media Monitoring and Sampling

Sediment samples shall be collected from the outflow of the western settling basin as specified in Table A. Sampling locations, required analytical parameters, and schedule are provided in Table A – Post Remediation Sediment Sampling Requirements and Schedule below. Modification to the frequency or sampling requirements will require approval from the NYSDEC.

Table A – Post Remediation Sediment Sampling Requirements and Schedule

Sediment Sampling Locations	Analytical Parameters	Schedule
MP-U MP-M MP-D	TAL Metals – USEPA Method 6010B (Total Arsenic and Total Chromium Only)	Annually

Detailed sample collection and analytical procedures and protocols are provided in Appendix J – Quality Assurance Project Plan (QAPP) and Sections 4.3.1 and 4.3.2. Sample locations are shown in Figure 13.

4.3.1 Sediment Sampling

Sampling of sediment that accumulates in the settling basin exit swale will be performed annually to assess the quality of the sediment following completion of the remedial actions. Modification to the sampling frequency or sampling requirements may only be modified with the approval of the NYSDEC. This SMP will be modified to reflect changes in sampling plans approved by the NYSDEC.

The locations of the offsite sediment sample locations have been designed based on the existing and anticipated drainage of the Site. The three (3) sediment sample locations are located along the centerline of the modified basin exit swale at the upstream, mid-stream and downstream sections of the swale as shown in Figure 13. Surface sediment samples will be collected at each location between grade surface and approximately two (2) inches below grade. Samples will be analyzed for total arsenic and total chromium via USEPA Method 6010B.

Deliverables for the sediment sampling program are specified in Section 7.0 – Reporting Requirements.

In the event that average concentrations of arsenic and/or chromium (and/or individual hot spot areas) are detected in the settling basin exit swale above commercial use SCOs, the facility owner will prepare a Response Plan to address impacted sediment to be submitted to, and approved by, the NYSDEC. The Response Plan will identify a manner in which to remove impacted sediment from the settling basin exit swale and manage impacted sediment in accordance with applicable State and local regulation. The Response Plan also will identify the likely transport mechanism for the sediment and describe measures to be implemented to mitigate further release of sediment from the settling basin.

4.3.2 Monitoring and Sampling Protocol

All sampling activities will be recorded in a field book or a separate daily field log and associated sampling log as provided in Appendix K - Site Management Forms. Other observations (e.g., condition of outflow area, condition of drainage swale, etc.) will be noted on the sampling log. The sampling log will serve as the inspection form for the monitoring network.

5.0 OPERATION AND MAINTENANCE PLAN

5.1 General

The Site remedy does not rely on any operating mechanical systems, such as groundwater treatment systems, 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.

6.0 PERIODIC ASSESSMENTS/EVALUATIONS

6.1 Climate Change Vulnerability Assessment

Increases in both the severity and frequency of storms/weather events, an increase in sea level elevations along with accompanying flooding impacts, shifting precipitation patterns and wide temperature fluctuation, resulting from global climactic change and instability, have the potential to significantly impact the performance, effectiveness and protectiveness of a given Site and

associated remedial systems. Vulnerability assessments provide information so that the Site and associated remedial systems are prepared for the impacts of the increased frequency and intensity of severe storms/weather events and associated flooding.

A Climate Change Vulnerability Assessment is not warranted given the distance/elevation between the Site and local/regional waterbodies (i.e. Murderers Creek, Sleepy Hollow Lake, Hudson River, etc.). Additionally, the Site is not located in a designated floodway or within one-half mile of a 100-year floodplain.

6.2 Green Remediation Evaluation

NYSDEC's DER-31 Green Remediation requires that green remediation concepts and techniques be considered during all stages of the remedial program including Site management, with the goal of improving the sustainability of the cleanup and summarizing the net environmental benefit of any implemented green technology. This section of the SMP provides a summary of any green remediation evaluations to be completed for the Site during Site management, and as reported in the Periodic Review Report (PRR).

This assessment may include a discussion of items listed below:

- Waste reduction and generation (i.e. hazardous and solid waste) associated with the operation of the Site in relation to former operation procedures;
- Energy usage (e.g. electrical usage for operation);
- Fuel usage associated with travel required for sampling and monitoring activities;
- Water for decontamination of sampling equipment; and
- Land and/or ecosystems impacts of implementation of the remedy.

6.2.1 Timing of Green Remediation Evaluations

For major remedial system components, green remediation evaluations and corresponding modifications will be undertaken as part of a formal Remedial System Optimization (RSO), or at any time that the Project Manager feels appropriate (e.g. during significant maintenance events or in conjunction with storm recovery activities).

Modifications resulting from green remediation evaluations will be routinely implemented and scheduled to occur during planned/routine operation and maintenance activities. Reporting of these modifications will be presented in the PRR.

6.2.2 Building Operations

Northeast Treaters redevelopment project was undertaken to upgrade facilities and operations to be more energy efficient and environmentally friendly by improving material handling, using the latest technological and energy efficient equipment and treating wood with materials that do not adversely impact the environment.

6.2.3 Frequency of Inspections, Sampling and Other Periodic Activities

Transportation to and from the Site and use of consumables in relation to visiting the Site in order to conduct inspections and or collect samples and shipping samples to a laboratory for analyses have direct and/or inherent energy costs. The schedule and/or means of these periodic activities

have been prepared so that these tasks can be accomplished in a manner that does not impact remedy protectiveness but reduces expenditure of energy or resources.

Consideration shall be given to:

- Reduced sampling frequencies;
- Reduced Site visits and inspections; and
- Coordination/consolidation of activities to maximize foreman/labor time.

6.2.4 Metrics and Reporting

As discussed in Section 7.0, information on energy usage, solid waste generation, transportation and shipping, water usage and land use and ecosystems will be recorded to facilitate and document consistent implementation of green remediation during Site management and to identify corresponding benefits; a set of metrics has been developed.

6.3 Remedial System Optimization

A Remedial Site Optimization (RSO) study will be conducted any time that the NYSDEC or the remedial party requests in writing that an in-depth evaluation of the remedy is needed. An RSO may be appropriate if any of the following occur:

- The remedial actions have not met or are not expected to meet RAOs in the timeframe estimated in the Decision Document;
- The management and operation of the remedial system is exceeding the estimated costs;
- The remedial system is not performing as expected or as designed;
- Previously unidentified source material may be suspected;
- Site conditions change due to development, change of use, change in groundwater use, etc.;
- There is an anticipated transfer of the Site management to another remedial party or agency; and
- A new and applicable remedial technology becomes available.

An RSO will provide a critique of a Site's conceptual model, give a summary of past performance, document current cleanup practices, summarize progress made toward the Site's cleanup goals, gather additional performance or media specific data and information and provide recommendations for improvements to enhance the ability of the present system to reach RAOs or to provide a basis for changing the remedial strategy.

The RSO study will focuses on overall Site cleanup strategy, process optimization and management with the intent of identifying impediments to cleanup and improvements to Site operations to increase efficiency, cost effectiveness and remedial timeframes. Green remediation technology and principals are to be considered when performing the RSO.

The phases of a RSO include:

- Work plan development;
- Work plan implementation;
- RSO Report; and

- Implementation of recommended actions and final report.

7.0 REPORTING REQUIREMENTS

7.1 Site Management Reports

All Site management inspection, maintenance and monitoring events will be recorded on the appropriate Site Management Forms provided in Appendix K. These forms are subject to NYSDEC revision.

All applicable inspection forms and other records, including media sampling data and system maintenance reports, generated for the Site during the reporting period will be provided in electronic format to the NYSDEC in accordance with the requirements of Table B and summarized in the Periodic Review Report.

Table B: Schedule of Monitoring/Inspection Reports

Task/Report	Reporting Frequency*
Site-Wide Inspection	Annually
Periodic Review Report	Biennially, or as otherwise determined by the NYSDEC

* The frequency of events will be conducted as specified until otherwise approved by the NYSDEC.

All interim monitoring/inspections reports will include, at a minimum:

- Date of event or reporting period;
- Name, company, and position of person(s) conducting monitoring/inspection activities;
- Description of the activities performed;
- Where appropriate, color photographs or sketches showing the approximate location of any problems or incidents noted (included either on the checklist/form or on an attached sheet);
- Type of samples collected (e.g., sub-slab vapor, indoor air, outdoor air, etc.);
- Copies of all field forms completed (e.g., well sampling logs, chain-of-custody documentation, etc.);
- Sampling results in comparison to appropriate standards/criteria;
- A figure illustrating sample type and sampling locations;
- Copies of all laboratory data sheets and the required laboratory data deliverables required for all points sampled (to be submitted electronically in the NYSDEC-identified format);
- Any observations, conclusions, or recommendations; and
- A determination as to whether contaminant conditions have changed since the last reporting event.

Routine maintenance event reporting forms will include, at a minimum:

- Date of event;
- Name, company, and position of person(s) conducting maintenance activities;
- Description of maintenance activities performed;
- Any modifications to the system;
- Where appropriate, color photographs or sketches showing the approximate location of any problems or incidents noted (included either on the checklist/form or on an attached sheet); and,
- Other documentation such as copies of invoices for maintenance work, receipts for replacement equipment, etc. (attached to the checklist/form).

Non-routine maintenance event reporting forms will include, at a minimum:

- Date of event;
- Name, company, and position of person(s) conducting non-routine maintenance/repair activities;
- Description of non-routine activities performed;
- Where appropriate, color photographs or sketches showing the approximate location of any problems or incidents (included either on the form or on an attached sheet); and
- Other documentation such as copies of invoices for repair work, receipts for replacement equipment, etc. (attached to the checklist/form).

Data will be reported in digital format as determined by the NYSDEC. Currently, data is to be supplied electronically and submitted to the NYSDEC EQuIS™ database in accordance with the requirements found at http://www.dec.ny.gov/chemical/62440.html.

7.2 Periodic Review Report

A Periodic Review Report (PRR) will be submitted to NYSDEC beginning sixteen (16) months after the Certificate of Completion is issued. After submittal of the initial Periodic Review Report, the next PRR shall be submitted biennially to NYSDEC or at another frequency as may be required by NYSDEC. 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 -Environmental Easement. The report will be prepared in accordance with NYSDEC's DER-10 and submitted within 30 days following the end of each certification period. Media sampling results will also be incorporated into the PRR. The report will include the following, unless not applicable:

- 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 Site management forms and other records generated for the Site during the reporting period in the NYSDEC-approved electronic format, if not previously submitted.
- A summary of any discharge monitoring data and/or information generated during the reporting period, with comments and conclusions.

- Data summary tables and graphical representations of contaminants of concern by media (groundwater, soil vapor, etc.), which include a listing of all compounds analyzed, along with the applicable standards, with all exceedances highlighted. These will include a presentation of past data as part of an evaluation of contaminant concentration trends.
- Results of all analyses, copies of all laboratory data sheets, and the required laboratory data deliverables for all samples collected during the reporting period will be submitted in digital format as determined by the NYSDEC. Currently, data is supplied electronically and submitted to the NYSDEC EQuIS™ database in accordance with the requirements found at: http://www.dec.ny.gov/chemical/62440.html.
- A Site evaluation, which includes the following:
  - The compliance of the remedy with the requirements of the Site-specific Remedial Action Work Plan (RAWP) and Decision Document;
  - The operation and the effectiveness of all treatment units, etc., including identification of any needed repairs or modifications;
  - Any new conclusions or observations regarding Site contaminants of concern based on inspections or data generated by the Monitoring and Sampling Plan for the media being monitored;
  - Recommendations regarding any necessary changes to the remedy and/or Monitoring and Sampling Plan;
  - Trends in contaminant levels in the affected media will be evaluated to determine if the remedy continues to be effective in achieving remedial goals as specified by the Decision Document; and
  - The overall performance and effectiveness of the remedy.

Certification of Institutional and Engineering Controls (ICs/ECs) will be included in the PRR.

7.2.1 Certification of Institutional and Engineering Controls

Following the last inspection of the reporting period, a qualified environmental professional will prepare, and include in the PRR, the following certification as per the requirements of NYSDEC DER-10:

"*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, [name], of [business address], am certifying as [Owner or Owner's Designated Site Representative]."

The following certification must be added every five (5) years:

- *The assumptions made in the qualitative exposure assessment remain valid.*

The signed certification will be included in the PRR.

The PRR will be submitted, in electronic format, to the NYSDEC Central Office, Regional Office in which the Site is located and the New York State Department of Health (NYSDOH) Bureau of Environmental Exposure Investigation. The PRR may need to be submitted in hard-copy format, if requested by the NYSDEC project manager.

7.3 Corrective Measures Work 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 IC/EC, a Corrective Measures Work 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 Work Plan until it has been approved by the NYSDEC.

7.4 Remedial Site Optimization Report

In the event that an RSO is to be performed (see Section 6.3), upon completion of an RSO, an RSO report must be submitted to the NYSDEC for approval. The RSO report will document the research/investigation and data gathering that was conducted, evaluate the results and facts obtained, present a revised conceptual Site model and present recommendations. RSO recommendations are to be implemented upon approval from the NYSDEC. Additional work plans, design documents, HASPs etc., may still be required to implement the recommendations, based upon the actions that need to be taken. A Final Engineering Report and update to the SMP may also be required.

The RSO report will be submitted, in electronic format, to the NYSDEC Central Office, Regional Office in which the Site is located, Site Control and the NYSDOH Bureau of Environmental Exposure Investigation.

8.0 REFERENCES

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Groundwater Technology, Inc., " Modified Phase I Environmental Site Assessment and Compliance Audit" (Phase I Site Assessment). 1995.

KU Resources, Inc., "Report of Findings - CCA Solution Recycle Sump (SWMU 3) Integrity Evaluation". 1997.

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TABLES

Table 1: Summary of Monitoring Well Locations and Groundwater Depths
Northeast Treaters of New York, LLC
796 Schoharie Turnpike, Town of Athens, New York

Well Characteristics	Monitoring Wells			
	MW-1	**MW-2**	**MW-3**	**MW-4**
Longitude	W073.838163	W073.838214	W073.838801	W073.838707
Latitude	N042.286563	N042.286030	N042.286307	N042.286666
Well Depth (ft)	6.50 (top of metal casing)	9.97 (top of stick-up)	6.00 (top of metal casing)	5.57 (top of metal casing)
Screened Interval (ft)	1.0-6.0	3.0-8.0	1.0-6.0	1.0-6.0
Screened Media	Fill/Clay	Clay	Fill/Clay	Fill/Clay
Depth to Groundwater (4/15/2015) (ft)	0.5	---	---	---
Depth to Groundwater (4/20/2015) (ft)	0.4	9.62	---	---
Depth to Groundwater (4/30/2015) (ft)	0.61	2.96	4.10	---
Depth to Groundwater (5/4/2015) (ft)	1.30	3.32	3.44	5.14

Notes:
--- = No water present at time of measurement.
Wells MW-1, MW-2, MW-3 and MW-4 were destroyed and paved over during remedial activities.

Table 2: Summary of Historical Soil Analytical Results
Northeast Treaters of New York, LLC (Formerly Atlantic Wood Industries, Inc.)
796 Schoharie Turnpike, Town of Athens, New York

			Analyte	Arsenic, Total Recoverable	Chromium, Total Recoverable	Chromium, Hexavalent	Copper, Total Recoverable	Arsenic, TCLP	Chromium, TCLP	Copper, TCLP
			Units	mg/kg	mg/kg	mg/kg	mg/kg	mg/L	mg/L	mg/L
			Soil Cleanup Objectives (Unrestricted)	13	30	1	50	---	---	---
			Soil Cleanup Objectives (Commercial)	16	1,500	400	270	---	---	---
			Soil Cleanup Objectives (Industrial)	16	6,800	800	10,000	---	---	---
Sample ID	**Sample Depth Interval**	**Sample Matrix**	**Date Sampled**							
C-1	14.5 - 15.5' bgs	Fill	11/12/1998-11/13/1998	5.40	22.3	< 2.50	---	---	---	---
C-1	15.5 - 16.0' bgs	Clay	11/12/1998-11/13/1998	8.60	34.2	< 2.80	---	---	---	---
C-2	4.5 - 5.0' bgs	Fill	11/12/1998-11/13/1998	192	229	17.6	---	---	---	---
C-2	5.0 - 5.5' bgs	Clay	11/12/1998-11/13/1998	28.6	79.1	< 2.60	---	---	---	---
C-3	4.25 - 4.5' bgs	Fill	11/12/1998-11/13/1998	662	580	21.6	---	---	---	---
C-3	4.5 - 5.25' bgs	Clay	11/12/1998-11/13/1998	22.1	47.0	< 2.70	---	---	---	---
C-4	6.25 - 6.5' bgs	Fill	11/12/1998-11/13/1998	246	155	10.0	---	---	---	---
C-4	7.0 - 7.5' bgs	Clay	11/12/1998-11/13/1998	6.20	40.5	3.40	---	---	---	---
C-5	4.5 - 5.5' bgs	Fill	11/12/1998-11/13/1998	7.50	39.9	< 2.40	---	---	---	---
C-6	13.5 - 14.0' bgs	Fill	11/12/1998-11/13/1998	16.0	41.9	< 2.40	---	---	---	---
C-6	14.0 - 14.5' bgs	Clay	11/12/1998-11/13/1998	8.50	425.5	< 2.70	---	---	---	---
C-7	6.5 - 7.0' bgs	Fill	11/12/1998-11/13/1998	70.9	46.5	< 2.20	---	---	---	---
C-7	7.0 - 7.5' bgs	Clay	11/12/1998-11/13/1998	10.6	41.8	< 2.60	---	---	---	---
C-B	3.5 - 4.0' bgs	Clay	11/12/1998-11/13/1998	6.60	29.0	< 2.50	---	---	---	---
C-8	6.0 - 6.5' bgs	Fill	11/12/1998-11/13/1998	25.2	99.0	3.50	---	---	---	---
C-8	6.5 - 7.0' bgs	Clay	11/12/1998-11/13/1998	9.50	36.4	< 2.70	---	---	---	---
C-9	7.0 - 7.5' bgs	Fill	11/12/1998-11/13/1998	50.9	29.8	< 2.10	---	---	---	---
C-9	7.5 - 8.0' bgs	Clay	11/12/1998-11/13/1998	6.70	36.9	< 2.60	---	---	---	---
C-10	7.0 - 7.5' bgs	Fill	11/12/1998-11/13/1998	404	312	42.0	---	---	---	---
C-10	7.5 - 8.0' bgs	Clay	11/12/1998-11/13/1998	21.3	348	4.30	---	---	---	---
C-11	2.5 - 3.0' bgs	Fill	11/12/1998-11/13/1998	74.1	21.4	< 2.10	---	---	---	---
C-11	3.0 - 3.5' bgs	Clay	11/12/1998-11/13/1998	10.8	42.8	< 2.50	---	---	---	---
C-12	2.0 - 2.5' bgs	Fill	11/12/1998-11/13/1998	9.20	730	< 2.10	---	---	---	---
C-12	2.5 - 3.0' bgs	Clay	11/12/1998-11/13/1998	41.7	108	< 2.50	---	---	---	---
C-13	1.5 - 2.0' bgs	Fill	11/12/1998-11/13/1998	71.7	84.7	3.80	---	---	---	---
C-13	2.0 - 2.5' bgs	Clay	11/12/1998-11/13/1998	6.90	32.8	< 2.50	---	---	---	---
C-14	1.5 - 2.0' bgs	Fill	11/12/1998-11/13/1998	911	120	30.5	---	---	---	---
C-14	2.0 - 2.5' bgs	Clay	11/12/1998-11/13/1998	23.8	48.8	< 2.60	---	---	---	---
C-15	2.5 - 3.0' bgs	Fill	11/12/1998-11/13/1998	75.0	28.3	3.40	---	---	---	---
C-15	3.0 - 3.5' bgs	Clay	11/12/1998-11/13/1998	8.50	40.8	< 2.50	---	---	---	---
BK-1	5.0 - 6.0' bgs	Clay	6/17/1997	< 2.85	24.0	< 4.98	---	---	---	---
B-1	5.5 - 8.5' bgs	Clay	6/17/1997	< 2.87	25.5	< 5.16	---	---	---	---
B-2	5.5 - 6.0' bgs	Clay	6/17/1997	< 2.87	28.6	< 5.47	---	---	---	---
B-3	5.2 - 5.8' bgs	Clay	6/17/1997	< 2.90	25.9	< 5.23	---	---	---	---
B-4	5.5 - 6.9' bgs	Clay	6/17/1997	< 2.88	29.0	< 5.37	---	---	---	---
B-5	6.0 - 7.5' bgs	Fill	6/17/1997	< 2.82	23.8	< 5.26	---	---	---	---
B-6	5.0 - 6.0' bgs	Clay	6/17/1997	< 2.95	32.7	< 5.18	---	---	---	---
B-7	5.0 - 8.0' bgs	Clay	6/17/1997	< 2.95	27.5	< 5.24	---	---	---	---
B-8	5.0 - 6.0' bgs	Clay	6/17/1997	< 2.86	42.3	< 4.90	---	---	---	---
B-9	5.0 - 6.0' bgs	Clay	6/17/1997	< 3.25	24.5	< 5.27	---	---	---	---
BSS-1	6.0 - 12.0" bgs	---	10/10/1995	4.40	33.8	---	33.8	< 0.03	< 0.01	< 0.01
BSS-2	6.0 - 12.0" bgs	---	10/10/1995	4.90	32.1	---	32.1	< 0.03	< 0.01	0.011
SS-1	6.0 - 12.0" bgs	---	10/10/1995	11.1	15.6	---	25.6	< 0.03	< 0.01	< 0.01
SS-2	12.0 - 18.0" bgs	---	10/10/1995	42.7	50.0	---	42.7	< 0.03	< 0.01	< 0.01
SS-3	14.0 - 20.0" bgs	---	10/10/1995	5.50	27.3	---	32.5	< 0.03	< 0.01	< 0.01
SS-4	16.0 - 22.0" bgs	---	10/10/1995	5.30	31.3	---	26.3	< 0.03	< 0.01	0.011
SS-5	15.0 - 21.0" bgs	---	10/10/1995	5.20	29.1	---	27.8	< 0.03	< 0.01	0.014
SS-6	13.0 - 19.0" bgs	---	10/10/1995	4.30	26.8	---	25.6	< 0.03	< 0.01	< 0.01
SS-7	15.0 - 21.0" bgs	---	10/10/1995	3.80	29.5	---	19.2	< 0.03	< 0.01	< 0.01
SS-8	15.0 - 21.0" bgs	---	10/10/1995	2.40	29.3	---	29.3	< 0.03	< 0.01	0.021
SS-9	19.0 - 25.0" bgs	---	10/10/1995	3.90	32.9	---	29.1	< 0.03	< 0.01	0.015
SS-10	15.0 - 21.0" bgs	---	10/10/1995	4.40	27.8	---	30.4	< 0.03	< 0.01	0.014
SS-A (DUP SS-9)	19.0 - 25.0" bgs	---	10/10/1995	2.40	34.6	---	30.8	< 0.03	< 0.01	< 0.01
P-1	3.0 - 5.0' bgs	Clay	10/30/1995	< 0.63	21.2	---	22.5	< 0.03	< 0.01	< 0.01
P-2	3.0 - 5.0' bgs	Clay	10/30/1995	10.6	28.6	---	28.6	< 0.03	< 0.01	0.012
SS-11	12.0" bgs	---	11/16/1995	---	---	---	---	---	---	---
SS-12	---	---	11/16/1995	128	105	---	34.0	< 0.03	0.028	0.010
SS-13	---	---	11/16/1995	10.3	18.9	---	15.8	< 0.03	< 0.01	0.011
SS-14	---	---	11/16/1995	7.70	25.3	---	20.0	< 0.03	< 0.01	0.016
SS-15	9.5 - 10.0' bgs	---	11/16/1995	8.20	25.0	---	27.6	< 0.03	< 0.01	< 0.01
SS-16	0.0 - 14.0" bgs	---	11/16/1995	48.4	38.9	---	31.6	< 0.03	< 0.01	0.014
SS-17	0.0 - 16.0" bgs	---	11/16/1995	18.9	20.0	---	22.1	< 0.03	< 0.01	0.012
SS-18	0.0 - 12.0" bgs	---	11/16/1995	22.6	31.0	---	17.9	< 0.03	< 0.01	0.014
SS-19	0.0 - 7.0" bgs	---	11/16/1995	6.30	32.4	---	33.8	< 0.03	< 0.01	< 0.01
SS-20	0.0 - 13.0" bgs	---	11/16/1995	16.2	32.4	---	23.0	< 0.03	< 0.01	< 0.01
SS-21	0.0 - 7.0" bgs	---	11/16/1995	9.20	30.6	---	18.1	< 0.03	< 0.01	< 0.01
SS-23	2.8' bgs	---	11/16/1995	5.70	29.9	---	22.1	< 0.03	< 0.01	0.011
SS-24	18.0" bgs	---	11/16/1995	6.50	30.8	---	32.1	< 0.03	< 0.01	< 0.01
SS-25	Surface	---	11/16/1995	---	---	---	---	---	---	---

Note:
--- = Not Applicable
< = Constituent not detected; value shown is the detection limit.
Values highlighted in yellow indicate exceedance of Unrestricted Use Soil Cleanup Objectives
Values highlighted in blue indicate exceedance of Commercial Use Soil Cleanup Objectives.
Values highlighted in gray indicate exceedance of Industrial Use Soil Cleanup Objectives.

Table 3a: Analytical Results for Full Parameter Sampling
Northeast Treaters of New York, LLC
796 Schoharie Turnpike,Town of Athens, New York
November 18-20, 2014

				Sample ID	SP01S	SP02S	SP03S	SP04S	SP05S	SP05D	SP06S	SP06D	DPP02ES	DPP05ES	DPP08ES	DPP10ES	DPP13ES	DPP16ES	SUMP FILL	SUMP Clay	DP01 FILL	DP01 Clay	DP03 FILL	DP03 Clay
				Sample Matrix	Fill	Fill	Fill	Fill	Fill	Soil	Fill	Soil	Fill	Fill	Fill	Fill	Fill	Fill	Fill	Soil	Fill	Soil	Fill	Soil
				Date Sampled	11/18/2014	11/18/2014	11/18/2014	11/18/2014	11/18/2014	11/18/2014	11/19/2014	11/19/2014	11/18/2014	11/18/2014	11/18/2014	11/19/2014	11/19/2014	11/18/2014	11/19/2014	11/19/2014	11/20/2014	11/20/2014	11/19/2014	11/19/2014
	Clay Cleanup Objectives																							
Semivolatiles (µg/kg)	**Unrestricted**	**Commercial**	**Industrial**																					
Acenaphthene	20,000	500,000	1,000,000		14 U	14 U	13 U	14 U	14 U	17 U	19 U	13 U	14 U	14 U	14 U	16 U	16 U	14 U	17 U	17 U	14 U	16 U	17 U	18 U
Acenaphthylene	100,000	500,000	1,000,000		16 U	16 U	15 U	16 U	16 U	20 U	22 U	16 U	16 U	16 U	16 U	18 U	18 U	16 U	19 U	19 U	17 U	19 U	20 U	21 U
Anthracene	100,000	500,000	1,000,000		15 U	15 U	14 U	15 U	15 U	18 U	20 U	15 U	15 U	15 U	71 J	17 U	17 U	15 U	18 U	18 U	16 U	18 U	19 U	20 U
Benzo[a]anthracene	1,000	5,600	11,000		14 U	14 U	13 U	14 U	14 U	17 U	19 U	13 U	14 U	14 U	1700	16 U	16 U	14 U	17 U	17 U	14 U	16 U	17 U	18 U
Benzo[a]pyrene	1,000	1,000	1,100		13 U	13 U	12 U	13 U	13 U	16 U	17 U	12 U	13 U	13 U	750	15 U	15 U	13 U	15 U	15 U	13 U	15 U	16 U	17 U
Benzo[b]fluoranthene	1,000	5,600	11,000		25 U	25 U	24 U	25 U	25 U	30 U	33 U	24 U	25 U	25 U	1800	28 U	28 U	25 U	30 U	29 U	25 U	29 U	31 U	32 U
Benzo[g,h,i]perylene	100,000	500,000	1,000,000		14 U	14 U	13 U	14 U	14 U	17 U	19 U	13 U	14 U	14 U	420	16 U	16 U	14 U	17 U	17 U	14 U	16 U	17 U	18 U
Benzo[k]fluoranthene	800	56,000	110,000		32 U	32 U	31 U	32 U	32 U	39 U	43 U	31 U	32 U	32 U	1500	36 U	37 U	33 U	39 U	38 U	33 U	38 U	40 U	42 U
Chrysene	1,000	56,000	110,000		19 U	19 U	18 U	19 U	19 U	24 U	26 U	19 U	19 U	19 U	1800	22 U	22 U	20 U	23 U	23 U	20 U	23 U	24 U	25 U
Dibenz(a,h)anthracene	330	560	1,100		12 U	12 U	11 U	12 U	12 U	14 U	16 U	11 U	12 U	12 U	140 J	13 U	13 U	12 U	14 U	14 U	12 U	14 U	15 U	15 U
Fluoranthene	100,000	500,000	1,000,000		13 U	13 U	12 U	40 J	13 U	16 U	17 U	12 U	13 U	53 J	2600	15 U	15 U	13 U	15 U	15 U	13 U	15 U	16 U	17 U
Fluorene	30,000	500,000	1,000,000		16 U	16 U	15 U	16 U	16 U	20 U	22 U	16 U	16 U	16 U	16 U	18 U	18 U	16 U	19 U	19 U	17 U	19 U	20 U	21 U
Indeno[1,2,3-cd]pyrene	500	5,600	11,000		15 U	15 U	14 U	15 U	15 U	18 U	20 U	15 U	15 U	15 U	440	17 U	17 U	15 U	18 U	18 U	16 U	18 U	19 U	20 U
m & p - Cresol	330	500,000	1,000,000		79 U	79 U	76 U	79 U	79 U	97 U	110 U	77 U	79 U	80 U	80 U	89 U	90 U	80 U	95 U	94 U	82 U	93 U	99 U	100 U
Naphthalene	12,000	500,000	1,000,000		16 U	16 U	15 U	16 U	16 U	20 U	22 U	16 U	16 U	16 U	16 U	18 U	18 U	16 U	19 U	19 U	17 U	19 U	20 U	21 U
o-Cresol	330	500,000	1,000,000		43 U	43 U	41 U	43 U	43 U	52 U	58 U	41 U	43 U	43 U	43 U	48 U	49 U	43 U	51 U	51 U	44 U	51 U	54 U	56 U
Pentachlorophenol	800	6,700	55,000		72 U	73 U	70 U	73 U	73 U	89 U	98 U	71 U	73 U	73 U	73 U	82 U	83 U	74 U	87 U	87 U	75 U	86 U	91 U	95 U
Phenanthrene	100,000	500,000	1,000,000		13 U	13 U	12 U	13 U	13 U	16 U	17 U	12 U	13 U	13 U	340 J	15 U	15 U	13 U	15 U	15 U	13 U	15 U	16 U	17 U
Phenol	330	500,000	1,000,000		43 U	43 U	41 U	43 U	43 U	52 U	58 U	41 U	43 U	43 U	43 U	48 U	49 U	43 U	51 U	51 U	44 U	51 U	54 U	56 U
Pyrene	100,000	500,000	1,000,000		15 U	15 U	14 U	15 U	15 U	18 U	20 U	15 U	15 U	49 J	2500	17 U	17 U	15 U	18 U	18 U	16 U	18 U	19 U	20 U

				Sample ID	SP01S	SP02S	SP03S	SP04S	SP05S	SP05D	SP06S	SP06D	DPP02ES	DPP05ES	DPP08ES	DPP10ES	DPP13ES	DPP16ES	SUMP FILL	SUMP Clay	DP01 FILL	DP01 Clay	DP03 FILL	DP03 Clay
				Sample Matrix	Fill	Fill	Fill	Fill	Fill	Soil	Fill	Soil	Fill	Fill	Fill	Fill	Fill	Fill	Fill	Soil	Fill	Soil	Fill	Soil
				Date Sampled	11/18/2014	11/18/2014	11/18/2014	11/18/2014	11/18/2014	11/18/2014	11/19/2014	11/19/2014	11/18/2014	11/18/2014	11/18/2014	11/19/2014	11/19/2014	11/18/2014	11/19/2014	11/19/2014	11/20/2014	11/20/2014	11/19/2014	11/19/2014
	Clay Cleanup Objectives																							
Volatiles (µg/kg)	**Unrestricted**	**Commercial**	**Industrial**																					
1,1,1-Trichloroethane	680	500,000	1,000,000		0.25 U * E	0.35 U	0.35 U	0.39 U	0.27 U	16 U	0.43 U	0.25 U	0.29 U	0.39 U	0.35 U	0.36 U	0.27 U	0.29 U	0.37 U	0.33 U	0.29 U	0.32 U	0.37 U	0.35 U
1,1-Dichloroethane	270	240,000	480,000		0.36 U * E	0.50 U	0.50 U	0.57 U	0.39 U	16 U	0.63 U	0.36 U	0.42 U	0.56 U	0.51 U	0.52 U	0.38 U	0.42 U	0.53 U	0.48 U	0.42 U	0.46 U	0.53 U	0.51 U
1,1-Dichloroethene	330	500,000	1,000,000		0.22 U * E	0.31 U	0.31 U	0.36 U	0.24 U	17 U	0.39 U	0.23 U	0.26 U	0.35 U	0.32 U	0.32 U	0.24 U	0.26 U	0.33 U	0.30 U	0.26 U	0.29 U	0.33 U	0.32 U
1,2-Dichlorobenzene	1,100	500,000	1,000,000		0.10 U * E	0.15 U	0.15 U * E	0.17 U * E	0.11 U * E	16 U	0.18 U	0.10 U	0.12 U	0.16 U * E	0.15 U	0.15 U * E	0.11 U * E	0.12 U	0.15 U	0.14 U	0.12 U	0.13 U	0.15 U	0.15 U
1,2-Dichloroethane	20	30,000	60,000		0.69 U * E	0.98 U	0.97 U	1.1 U	0.75 U	13 U	1.2 U	0.70 U	0.82 U	1.1 U	0.99 U	1.0 U	0.74 U	0.82 U	1.0 U	0.93 U	0.81 U	0.90 U	1.0 U	0.99 U
cis-1,2-Dichloroethene	250	500,000	1,000,000		0.34 U * E	0.48 U	0.48 U	0.55 U	0.37 U	14 U	0.60 U	0.35 U	0.41 U	0.54 U	0.49 U	0.49 U	0.37 U	0.40 U	0.51 U	0.46 U	0.40 U	0.44 U	0.51 U	0.49 U
trans-1,2-Dichloroethene	190	500,000	1,000,000		0.066 U * E	0.093 U	0.093 U	0.11 U	0.071 U	16 U	0.12 U	0.067 U	0.078 U	0.10 U	0.094 U	0.095 U	0.071 U	0.078 U	0.098 U	0.088 U	0.078 U	0.086 U	0.098 U	0.095 U
1,3-Dichlorobenzene	2,400	280,000	560,000		0.088 U * E	0.12 U	0.12 U * E	0.14 U * E	0.095 U * E	15 U	0.15 U	0.089 U	0.10 U	0.14 U * E	0.12 U	0.13 U * E	0.094 U * E	0.10 U	0.13 U	0.12 U	0.10 U	0.11 U	0.13 U	0.13 U
1,4-Dichlorobenzene	1,800	130,000	250,000		0.30 U * E	0.43 U	0.42 U * E	0.48 U * E	0.33 U * E	15 U	0.53 U	0.31 U	0.36 U	0.48 U * E	0.43 U	0.44 U * E	0.32 U * E	0.36 U	0.45 U	0.40 U	0.36 U	0.39 U	0.45 U	0.43 U
1,4-Dioxane	100	130,000	250,000		11 U * E	16 U	16 U	18 U	12 U	880 U	19 U	11 U	13 U	18 U	16 U	16 U	12 U	13 U	17 U	15 U	13 U	14 U	16 U	16 U
Acetone	50	500,000	1,000,000		6.5 B * ND E	6.3 B ND	7.6	7.0	8.5	140 J B ND	5.7 U	5.4 B	4.7 B ND	5.9 J	8.3	7.4 B	3.6 J B	14 B ND	12 B	18 B	15 B	17 B	23 B	20 B ND
Benzene	60	44,000	89,000		0.34 U * E	0.48 U	0.48 U	0.55 U	0.37 U	17 U	0.60 U	0.35 U	0.41 U	0.87 J	0.49 U	0.49 U	0.37 U	0.40 U	0.60 J	0.46 U	0.40 U	0.44 U	0.51 U	0.49 U
n-Butylbenzene	12,000	500,000	1,000,000		0.21 U * E	0.29 U	1.9 J * E	0.33 U * E	0.22 U * E	15 U	0.36 U	0.21 U	0.25 U	0.33 U * E	0.29 U	0.30 U * E	0.22 U * E	0.24 U	0.31 U	0.28 U	0.24 U	0.27 U	0.31 U	0.30 U
Carbon tetrachloride	760	22,000	44,000		0.043 U * E	0.061 U	0.060 U	0.069 U	0.046 U	12 U	0.075 U	0.044 U	0.051 U	0.068 U	0.061 U	0.062 U	0.046 U	0.051 U	0.064 U	0.057 U	0.051 U	0.056 U	0.064 U	0.062 U
Chlorobenzene	1,100	500,000	1,000,000		0.088 U * E	0.12 U	0.12 U * E	0.14 U	0.095 U	16 U	0.15 U	0.089 U	0.10 U	0.14 U	0.12 U	0.13 U	0.094 U * E	0.10 U	0.13 U	0.12 U	0.10 U	0.11 U	0.13 U	0.13 U
Chloroform	370	350,000	700,000		0.35 U * E	0.49 U	0.49 U	0.56 U	0.38 U	15 U	0.61 U	0.35 U	0.41 U	0.55 U	0.50 U	0.51 U	0.38 U	0.41 U	0.52 U	0.47 U	0.41 U	0.45 U	0.52 U	0.50 U
Ethylbenzene	1,000	390,000	780,000		0.054 U * E	0.076 U	0.076 U * E	0.087 U	0.058 U	16 U	0.095 U	0.055 U	0.064 U	0.085 U	0.077 U	0.078 U	0.058 U * E	0.064 U	1.8 J	0.072 U	41	0.070 U	2.2 J	0.078 U
Hexachlorobenzene	330	6,000	12,000		49 U E	49 U	47 U	49 U	49 U	60 U	67 U	48 U	49 U	50 U	49 U	56 U	56 U	50 U	59 U	59 U	51 U	58 U	62 U	65 U
Methyl Ethyl Ketone	120	500,000	1,000,000		1.8 U * E	2.5 U	2.5 U	2.8 U	1.9 U	68 U	3.1 U	1.8 U	2.1 U	2.8 U	2.5 U	2.5 U	1.9 U	2.5 J	2.6 U	5.8	5.4	3.3 J	4.2 J	5.9
Methyl tert-butyl ether	930	500,000	1,000,000		0.27 U * E	0.38 U	0.38 U	0.43 U	0.29 U	14 U	0.47 U	0.27 U	0.32 U	0.43 U	0.39 U	0.39 U	0.29 U	0.32 U	0.40 U	0.36 U	0.32 U	0.35 U	0.40 U	0.39 U
Methylene Chloride	50	500,000	1,000,000		0.80 J B * ND E	0.63 J B ND	0.79 J B ND	0.76 J B ND	0.48 U	21 U	1.4 J B ND	0.45 U	0.55 J B ND	0.70 U	0.65 J B ND	0.90 J B ND	0.49 J B ND	0.52 U	0.66 U	0.60 U	0.77 J B	0.58 U	0.87 J B ND	0.71 J B ND
N-Propylbenzene	3,900	500,000	1,000,000		0.25 U * E	0.35 U	0.35 U * E	0.39 U * E	0.27 U * E	16 U	0.43 U	0.25 U	0.29 U	0.39 U * E	0.35 U	0.36 U * E	0.27 U * E	0.29 U	0.37 U	0.33 U	0.33 J	0.32 U	0.37 U	0.35 U
sec-Butylbenzene	11,000	500,000	1,000,000		0.088 U * E	0.12 U	1.8 J * E	0.14 U * E	0.095 U * E	15 U	0.15 U	0.089 U	0.10 U	0.14 U * E	0.12 U	0.13 U * E	0.094 U * E	0.10 U	0.13 U	0.12 U	0.10 U	0.11 U	0.13 U	0.13 U
tert-Butylbenzene	5,900	500,000	1,000,000		0.20 U * E	0.28 U	0.28 U * E	0.32 U * E	0.21 U * E	14 U	0.35 U	0.20 U	0.24 U	0.31 U * E	0.28 U	0.29 U * E	0.21 U * E	0.23 U	0.29 U	0.27 U	0.23 U	0.26 U	0.29 U	0.29 U
Tetrachloroethene	1,300	150,000	300,000		0.23 U * E	0.33 U	0.32 U * E	0.37 U	0.25 U	16 U	0.40 U	0.23 U	0.27 U	0.36 U	0.33 U	0.33 U	0.25 U * E	0.27 U	0.34 U	0.31 U	0.27 U	0.30 U	0.34 U	0.33 U
Toluene	700	500,000	1,000,000		0.30 J * E	0.21 U	1.2 J * E	0.24 U	0.16 U	16 U	0.26 U	0.15 U	0.18 U	0.89 J	0.22 U	0.70 J	1.1 J * E	0.18 U	3.0 J	0.20 U	1.5 J	0.20 U	0.92 J	0.25 J
Trichloroethene	470	200,000	400,000		0.45 U * E	0.64 U	0.64 U	0.73 U	0.49 U	13 U	0.79 U	0.46 U	0.54 U	0.72 U	0.65 U	0.66 U	0.49 U	0.53 U	0.67 U	0.61 U	0.53 U	0.59 U	0.67 U	0.65 U
1,2,4-Trimethylbenzene	3,600	190,000	380,000		0.096 U * E	0.13 U	2.6 J * E	0.15 U * E	0.10 U * E	14 U	0.17 U	0.097 U	0.11 U	0.15 U * E	0.14 U	0.14 U * E	0.10 U * E	0.17 J	0.24 J	0.13 U	0.61 J	0.12 U	0.36 J	0.14 U
1,3,5-Trimethylbenzene	8,400	190,000	380,000		0.18 U * E	0.25 U	0.25 U * E	0.28 U * E	0.19 U * E	16 U	0.31 U	0.18 U	0.21 U	0.28 U * E	0.25 U	0.25 U * E	0.19 U * E	0.21 U	0.26 U	0.23 U	0.30 J	0.23 U	0.26 U	0.25 U
Vinyl chloride	20	13,000	27,000		0.53 U * E	0.74 U	0.74 U	0.84 U	0.57 U	16 U *	0.92 U	0.53 U	0.62 U	0.83 U	0.75 U	0.76 U	0.56 U	0.62 U	0.78 U	0.70 U	0.62 U	0.68 U	0.78 U	0.75 U
Xylenes, Total	260	500,000	1,000,000		0.042 U* E	0.059 U	0.059 U * E	0.067 U	0.046 U	17 U	0.074 U	0.043 U	0.050 U	0.067 U	0.060 U	0.061 U	0.045 U * E	0.050 U	13	0.056 U	270	0.60 J	12	0.060 U

Notes:
Values highlighted in yellow indicate exceedance of Unrestricted Use Clay Cleanup Objective.
Values highlighted in blue indicate exceedance of Commercial Use Clay Cleanup Objectives.
Values highlighted in gray indicate exceedance of Industrial Use Clay Cleanup Objectives.

Lab Qualifiers:
U = Not detected above the laboratory method detection limit shown.
J = Result is less than the laboratory reporting limit but greater than or equal to the method detection limit, and the concentration is an approximate value.
B = Compound was found in the blank sample.
* = Laboratory Control Sample (LCS) or Laboratory Control Sample Duplicate (LCSD) exceeds the control limits.

Data Validation Qualifiers:
ND = Not Detected. The associated number indicates the approximate sample concentration necessary to be detected significantly greater than the level of the highest associated blank.
E = Analyte is present. Reported value may be associated with a higher level of uncertainty than is normally expected with the analytical method .
R = Unreliable result; data is rejected or unusable. Analyte may or may not be present in the sample. Supporting data or information is necessary to confirm the result.

Table 3a: Analytical Results for Full Parameter Sampling
Northeast Treaters of New York, LLC
796 Schoharie Turnpike,Town of Athens, New York
November 18-20, 2014

			Sample ID	SP01S	SP02S	SP03S	SP04S	SP05S	SP05D	SP06S	SP06D	DPP02ES	DPP05ES	DPP08ES	DPP10ES	DPP13ES	DPP16ES	SUMP FILL	SUMP Clay	DP01 FILL	DP01 Clay	DP03 FILL	DP03 Clay
			Sample Matrix	Fill	Fill	Fill	Fill	Fill	Soil	Fill	Soil	Fill	Fill	Fill	Fill	Fill	Fill	Fill	Soil	Fill	Soil	Fill	Soil
			Date Sampled	11/18/2014	11/18/2014	11/18/2014	11/18/2014	11/18/2014	11/18/2014	11/19/2014	11/19/2014	11/18/2014	11/18/2014	11/18/2014	11/19/2014	11/19/2014	11/18/2014	11/19/2014	11/19/2014	11/20/2014	11/20/2014	11/19/2014	11/19/2014
	Clay Cleanup Objectives																						
Pesticides (µg/kg)	**Unrestricted**	**Commercial**	**Industrial**																				
Silvex (2,4,5-TP)	3,800	500,000	1,000,000	6.3 U	6.4 U	6.3 U	6.2 U	6.3 U	7.7 U	8.3 U	6.3 U	6.4 U	6.4 U	6.4 U	7.1 U	7.1 U	6.4 U	7.7 U	7.6 U	6.5 U	7.4 U	7.9 U	8.1 U
4,4'-DDE	3.3	62,000	120,000	36 U	3.8 U	3.7 U	3.6 U	0.36 U	0.44 U	25 U	0.36 U	19 U	0.37 U	0.36 U	42 U	20 U	19 U	0.45 U	0.44 U	0.37 U	0.42 U	0.76 J E	0.48 U
4,4'-DDT	3.3	47,000	94,000	41 U	4.2 U	4.1 U	4.0 U	0.41 U	0.50 U	28 U	0.40 U	21 U	0.41 U	0.41 U	47 U	23 U	21 U	2.1 E	0.50 U	0.41 U	0.47 U	0.52 U	0.53 U
4,4'-DDD	3.3	92,000	180,000	34 U	3.5 U	3.4 U	3.3 U	0.34 U	0.41 U	23 U	0.33 U	17 U	0.34 U	0.34 U	39 U	19 U	17 U	0.41 U	0.41 U	0.34 U	0.39 U	0.43 U	0.44 U
Aldrin	5.0	680	1,400	43 U	4.4 U	4.3 U	4.2 U	0.43 U	0.52 U	29 U	0.42 U	22 U	0.44 U	0.43 U	49 U	24 U	22 U	0.53 U	0.52 U	0.44 U	0.50 U	0.54 U	0.56 U
alpha-BHC	20	3,400	6,800	31 U	3.2 U	4.9 J B ND	3.1 U	1.5 J B ND	0.84 J B ND	21 U	1.2 J B ND	16 U	3.1 B ND	2.6 B ND	36 U	17 U	16 U	1.5 J B ND	1.2 J B ND	0.51 J	0.88 J	1.4 J B ND	1.3 J B ND
beta-BHC	36	3,000	14,000	31 U	3.2 U	3.1 U	3.1 U	0.31 U	0.38 U	21 U	0.31 U	16 U	1.8 R	1.9 R	36 U	17 U	16 U	0.38 U	0.38 U	0.32 U	0.36 U	0.40 U	2.7
alpha-Chlordane	94	24,000	47,000	86 U	9.0 U	8.7 U	8.5 U	0.86 U	1.1 U	59 U	0.86 U	44 U	0.88 U	0.86 U	99 U	48 U	44 U	1.1 U	1.1 U	0.88 U	1.0 U	1.1 U	1.1 U
delta-BHC	40	500,000	1,000,000	32 U	3.3 U	3.2 U	3.2 U	0.43 J	0.39 U	22 U	0.32 U	17 U	0.49 J JN	0.65 J R	37 U	18 U	17 U	0.40 U	0.39 U	0.33 U	0.38 U	0.41 U	0.42 U
Dibenzofuran	7,000	350,000	1,000,000	17 U	17 U	16 U	17 U	17 U	21 U	23 U	17 U	17 U	17 U	17 U	19 U	20 U	17 U	21 U	20 U	18 U	20 U	21 U	22 U
Dieldrin	5.0	1,400	2,800	42 U	4.3 U	4.2 U	4.1 U	0.42 U	0.51 U	28 U	0.41 U	21 U	0.43 U	0.42 U	**48**	23 U	21 U	0.51 U	0.51 U	0.43 U	0.49 U	0.53 U	0.54 U
Endosulfan I	2,400	200,000	920,000	33 U	3.5 U	3.3 U	3.3 U	0.33 U	0.41 U	23 U	0.33 U	17 U	0.34 U	0.33 U	38 U	19 U	17 U	0.41 U	0.41 U	0.34 U	0.39 U	0.42 U	0.44 U
Endosulfan II	2,400	200,000	920,000	31 U	3.2 U	3.1 U	3.1 U	0.31 U	0.38 U	21 U	0.31 U	16 U	0.32 U	0.31 U	36 U	17 U	16 U	0.38 U	0.38 U	0.32 U	0.36 U	0.40 U	0.41 U
Endosulfan sulfate	2,400	200,000	920,000	32 U	3.4 U	3.2 U	3.2 U	0.32 U	0.40 U	22 U	0.32 U	17 U	0.33 U	0.32 U	37 U	18 U	17 U	0.40 U	0.40 U	0.33 U	0.38 U	0.41 U	0.42 U
Endrin	14	89,000	410,000	34 U	3.6 U	3.4 U	3.4 U	0.34 U	0.42 U	23 U	0.34 U	18 U	0.35 U	0.34 U	40 U	19 U	18 U	0.42 U	0.42 U	0.35 U	0.40 U	0.44 U	0.45 U
Heptachlor	42	15,000	29,000	38 U	3.9 U	3.8 U	3.7 U	0.38 U	0.46 U	25 U	0.37 U	19 U	0.38 U	0.38 U	43 U	21 U	19 U	0.46 U	0.46 U	0.38 U	0.44 U	0.48 U	0.49 U
gamma-BHC (Lindane)	100	9,200	23,000	32 U	3.3 U	3.2 U	3.1 U	0.32 U	0.39 U	22 U	0.32 U	16 U	0.46 J	0.32 U	37 U	18 U	16 U	0.39 U	0.39 U	0.33 U	0.37 U	0.40 U	0.42 U

			Sample ID	SP01S	SP02S	SP03S	SP04S	SP05S	SP05D	SP06S	SP06D	DPP02ES	DPP05ES	DPP08ES	DPP10ES	DPP13ES	DPP16ES	SUMP FILL	SUMP Clay	DP01 FILL	DP01 Clay	DP03 FILL	DP03 Clay
			Sample Media	Fill	Fill	Fill	Fill	Fill	Soil	Fill	Soil	Fill	Fill	Fill	Fill	Fill	Fill	Fill	Soil	Fill	Soil	Fill	Soil
			Date Sampled	11/18/2014	11/18/2014	11/18/2014	11/18/2014	11/18/2014	11/18/2014	11/19/2014	11/19/2014	11/18/2014	11/18/2014	11/18/2014	11/19/2014	11/19/2014	11/18/2014	11/19/2014	11/19/2014	11/20/2014	11/20/2014	11/19/2014	11/19/2014
	Clay Cleanup Objectives																						
Metals (mg/kg)	**Unrestricted**	**Commercial**	**Industrial**																				
Arsenic, Total Recoverable	13	16	16	18.7 E	19.1 E	27.0 E	10.5 E	13.1 E	7.7 E	18.8 E	6.5 E	76.4 E	40.4 E	46.3 E	17.7 E	28.9 E	46.5 E	333 E	74.3 E	641 E	14.5 E	401 E	8.7 E
Barium, Total Recoverable	350	400	10,000	103 E	89.1 E	78.8 E	90.8 E	107 E	488 E	75.9 E	126 E	64.5 E	37.5 E	64.0 E	83.6 E	71.8 E	81.0 E	84.5 E	157 E	65.7 E	211 E	325 E	224 E
Beryllium, Total Recoverable	7.2	590	2,700	0.35	0.48	0.56	0.57	0.52	1.7	0.55	1.1	0.61	0.52	0.59	0.46	0.66	0.49	0.69	1.4	0.59	1.3	0.51	1.5
Cadmium, Total Recoverable	2.5	9.3	60	0.44	0.51	0.77	0.56	0.67	0.76	0.63	0.59	1.3	0.85	0.97	0.56	0.70	0.84	4.3	1.6	2.5	0.051 J	6.0	0.75
Chromium, hexavalent	1.0	400	800	0.70 J	0.29 U	0.29 U	0.28 U	0.28 U	0.35 U	1.2 E	0.29 U	0.38 J	0.65 J	1.1	0.33 U	0.32 U	0.82 J	5.2	0.35 U	2.0	0.34 U	0.86 J	0.37 U
Chromium, trivalent	30	1,500	6,800	9.6	17.4	26.8	16.8	13.7	30.7	25.4	23.5	62.1	36.4	39.4	20.6	32.9	40.9	161	169	614	35.9	97.8	31.8
Chromium, Total Recoverable	-	-	-	10.3 E	17.4 E	26.8 E	16.8 E	13.7 E	30.7 E	26.6	23.5	62.4 E	37.1 E	40.5 E	20.6	32.9	41.7 E	166 E	169 E	616 E	35.9 E	98.6 E	31.8 E
Copper, Total Recoverable	50	270	10,000	17.2 E	47.9 E	45.0 E	23.6 E	33.1 E	36.9 E	27.2 E	26.8 E	78.1 E	80.6 E	82.5 E	26.3 E	32.1 E	36.5 E	424 E	98.3 E	358 E	35.6 E	225 E	34.0 E
Cyanide, Total	27	27	10,000	0.48 U E	0.52 U E	0.51 U E	0.49 U E	3.0 E	0.63 U E	0.66 U E	0.49 U E	0.52 U	0.51 U	0.50 U	0.58 U	0.55 U	0.51 U	2.1 E	0.61 U	0.52 U E	0.60 U	0.61 U E	0.64 U
Lead, Total Recoverable	63	1,000	3,900	8.8 B E	12.1 B E	17.3 B E	15.4 B E	26.7 B E	18.2 B E	12.6	15.6	15.8 B E	16.6 B E	18.4 B E	13.0	16.2	13.4 B E	16.0	17.5	17.7	18.5	24.3	20.8
Manganese, Total Recoverable	1,600	10,000	10,000	187 B E	322 B E	454 B E	455 B E	1900 B E	294 B E	408 E	334 E	282 B E	226 B E	166 B E	399 E	150 E	193 B E	850 E	1080 E	405 B E	700 B E	5470 B E	774 B E
Mercury, Total Recoverable	0.18	2.8	5.7	0.025	0.023	0.027	0.016 J	0.025	0.046	0.017 J	0.019 J	0.023	0.031	0.028	0.024	0.039	0.024	0.030	0.029	0.023	0.029	0.023 J	0.028
Nickel, Total Recoverable	30	310	10,000	12.8 E	19.2 E	27.8 E	28.0 E	27.7 E	43.5 E	23.6	33.9	**31.3 E**	27.9 E	30.9 E	21.9	28.8	22.5 E	31.7	48.5	33.9	42.2	25.9	43.6
Selenium, Total Recoverable	3.9	1,500	6,800	0.41 U	0.45 U	0.46 U	0.66 J B	0.40 U	1.0 J B	0.57 U	0.40 U	0.44 U	0.42 U	0.64 J B	0.53 U	0.83 J	0.39 U	1.4 J	0.70 J	0.64 J	0.50 U	0.55 U	1.2 J
Silver, Total Recoverable	2.0	1,500	6,800	0.21 U	0.22 U	0.23 U	0.21 U	0.20 U	0.27 U	0.29 U	0.20 U	0.22 U	0.21 U	0.23 U	0.27 U	0.26 U	0.20 U	0.29 U	0.26 U	0.21 U	0.25 U	0.28 U	0.30 U
Zinc, Total Recoverable	109	10,000	10,000	26.4 B E	51.6 B E	66.0 B E	72.9 B E	65.8 B E	87.5 B E	54.9 B E	66.4 B E	149 B E	86.2 B E	71.7 B E	60.9 B E	66.8 B E	54.6 E	103 B E	82.1 B E	87.1 B E	81.5 B E	76.0 B E	93.6 B E

			Sample ID	SP01S	SP02S	SP03S	SP04S	SP05S	SP05D	SP06S	SP06D	DPP02ES	DPP05ES	DPP08ES	DPP10ES	DPP13ES	DPP16ES	SUMP FILL	SUMP Clay	DP01 FILL	DP01 Clay	DP03 FILL	DP03 Clay
			Sample Media	Fill	Fill	Fill	Fill	Fill	Soil	Fill	Soil	Fill	Fill	Fill	Fill	Fill	Fill	Fill	Soil	Fill	Soil	Fill	Soil
			Date Sampled	11/18/2014	11/18/2014	11/18/2014	11/18/2014	11/18/2014	11/18/2014	11/19/2014	11/19/2014	11/18/2014	11/18/2014	11/18/2014	11/19/2014	11/19/2014	11/18/2014	11/19/2014	11/19/2014	11/20/2014	11/20/2014	11/19/2014	11/19/2014
	Clay Cleanup Objectives																						
PCBs (mg/kg)	**Unrestricted**	**Commercial**	**Industrial**																				
Polychlorinated biphenyls, Total	0.1	1.0	25	0.11 U	0.11 U	0.11 U	0.099 U	0.11 U	0.15 U	0.14 U	0.12 U	0.10 U	0.11 U	0.11 U	0.12 U	0.11 U	0.12 U	0.12 U	0.14 U	0.10 U	0.12 U	0.12 U	0.15 U

Notes:
Values highlighted in yellow indicate exceedance of Unrestricted Use Clay Cleanup Objective.
Values highlighted in blue indicate exceedance of Commercial Use Clay Cleanup Objectives.
Values highlighted in gray indicate exceedance of Industrial Use Clay Cleanup Objectives.

Lab Qualifiers:
U = Not detected above the laboratory method detection limit shown.
J = Result is less than the laboratory reporting limit but greater than or equal to the method detection limit, and the concentration is an approximate value.
B = Compound was found in the blank sample.
* = Laboratory Control Sample (LCS) or Laboratory Control Sample Duplicate (LCSD) exceeds the control limits.

Data Validation Qualifiers:
ND = Not Detected. The associated number indicates the approximate sample concentration necessary to be detected significantly greater than the level of the highest associated blank.
E = Analyte is present. Reported value may be associated with a higher level of uncertainty than is normally expected with the analytical method .
R = Unreliable result; data is rejected or unusable. Analyte may or may not be present in the sample. Supporting data or information is necessary to confirm the result.

Table 3b: Summary of Chromium and Arsenic Detections at Drip Pad Sample Locations
Northeast Treaters of New York, LLC
796 Schoharie Turnpike,Town of Athens, New York
November 19-20, 2014

			Analyte	Arsenic, Total Recoverable	Chromium, Total Recoverable	Chromium, hexavalent
			Units	mg/kg	mg/kg	mg/kg
			Soil Cleanup Objectives (Unrestricted)	13	30	1
			Soil Cleanup Objectives (Commercial)	16	1,500	400
			Soil Cleanup Objectives (Industrial)	16	6,800	800
Sample ID	**Sample Depth Interval**	**Sample Matrix**	**Date Sampled**			
SUMP Fill	1 - 3' bgs	Fill	11/19/2014	333	166	5.2
SUMP Clay	3 - 4' bgs	Soil	11/19/2014	74.3	169	0.35 U
SUMP A	5 - 6' bgs	Soil	11/19/2014	34.7	50.2	0.37 U
SUMP B	10 - 11' bgs	Soil	11/19/2014	6.4	26	0.37 U
SUMP C	14 - 15' bgs	Soil	11/19/2014	9.3	22.2	0.29 U
DP01 FILL	1 - 3' bgs	Fill	11/20/2014	641	616	2
DP01 CLAY	3 - 4' bgs	Soil	11/20/2014	14.5	35.9	0.34 U
DP01A	5 - 6' bgs	Soil	11/20/2014	12.6	30	0.33 U
DP01B	10 - 11' bgs	Soil	11/20/2014	5.3	21	0.34 U
DP01C	14 - 15' bgs	Soil	11/20/2014	7.9	25.4	0.38 U
DP02A	1 - 3' bgs	Fill	11/20/2014	1360	1260	9.4
DP02B	4 - 5' bgs	Soil	11/20/2014	6.3	31.6	0.37 U
DP02C	8 - 9' bgs	Soil	11/20/2014	7.9	24.5	3.5
DP03 FILL	1 - 3' bgs	Fill	11/19/2014	401	98.6	0.86 J
DP03 CLAY	3 - 4' bgs	Soil	11/19/2014	8.7	31.8	0.37 U
DP03A	5 - 6' bgs	Soil	11/19/2014	8.6	28.3	0.37
DP03B	10 - 11' bgs	Soil	11/19/2014	13.3	25.2	0.41 J
DP03C	14 - 15' bgs	Soil	11/19/2014	20.5	30.1	0.38 J
DP04A	1 - 3' bgs	Fill	11/20/2014	91.8	37.8	1.5
DP04B	3 - 4' bgs	Soil	11/20/2014	6.8	29.7	0.34 U
DP04C	5 - 6' bgs	Soil	11/20/2014	5.2	29.2	0.34 U
DP04D	10 - 11' bgs	Soil	11/20/2014	5.9	27.6	0.34 U
DP04E	14 - 15' bgs	Soil	11/20/2014	11	30.1	0.39 U

Notes:

Values highlighted in yellow indicate exceedance of Unrestricted Use Soil Cleanup Objectives.

Values highlighted in blue indicate exceedance of Commercial Use Soil Cleanup Objectives.

Values highlighted in gray indicate exceedance of Industrial Use Soil Cleanup Objectives.

Lab Qualifiers:

U = Not detected above the laboratory method detection limit shown.

J = Result is less than the laboratory reporting limit but greater than or equal to the method detection limit, and the concentration is an approximate value.

Data Validation Qualifier:

E = Analyte is present. Reported value may be associated with a higher level of uncertainty than is normally expected with the analytical method.

Table 3c: Summary of Chromium and Arsenic Detections at DPP Sample Locations
Northeast Treaters of New York, LLC
796 Schoharie Turnpike,Town of Athens, New York
November 17-20, 2014

			Analyte	Arsenic, Total Recoverable	Chromium, Total Recoverable	Chromium, Hexavalent
			Units	mg/kg	mg/kg	mg/kg
			Soil Cleanup Objectives (Unrestricted)	13	30	1
			Soil Cleanup Objectives (Commercial)	16	1,500	400
			Soil Cleanup Objectives (Industrial)	16	6,800	800
Sample ID	**Sample Depth Interval**	**Soil Matrix**	**Date Sampled**			
DPP01IS	0 - 1' bgs	Fill	11/17/2014	27.7	12.9	0.28 U
DPP01ID	3 - 5' bgs	Soil	11/17/2014	7.4	22.4	0.45 J
DPP01ES	0 - 1' bgs	Fill	11/17/2014	16.5	14.5	0.30 U
DPP02IS	0 - 1' bgs	Fill	11/17/2014	127	67.9	1.6
DPP02ES	0 - 2' bgs	Fill	11/18/2014	76.4	62.4	0.38 J
DPP02ED	3 - 4' bgs	Soil	11/18/2014	8.4	23.8	0.35 U
DPP03IS	0 - 1' bgs	Fill	11/17/2014	103	64.7	3.3
DPP03ID	3 - 5' bgs	Soil	11/17/2014	5.1	28.6	0.36 U
DPP03ES	0 - 1' bgs	Fill	11/17/2014	83.8	54.3	0.93
DPP04IS	0 - 1' bgs	Fill	11/17/2014	43.6	36.6	4.2
DPP04ES	0 - 1' bgs	Fill	11/17/2014	35.3	28.5	2.1
DPP04ED	3 - 5' bgs	Soil	11/17/2014	9.0	22.4	0.34 U
DPP05IS	0 - 1' bgs	Fill	11/17/2014	66.3	33.6	1.8
DPP05ID	3 - 5' bgs	Soil	11/17/2014	7.8	26.3	0.68 J
DPP05ES	0 - 3' bgs	Fill	11/18/2014	40.4	37.1	0.65 J
DPP06IS	0 - 1' bgs	Fill	11/17/2014	47.9	27.3	0.6 J
DPP06ES	0 - 1' bgs	Fill	11/17/2014	78.8	57.3	0.29 U
DPP06ED	3 - 5' bgs	Soil	11/17/2014	9.7	26.2	0.38 J
DPP07IS	0 - 1' bgs	Fill	11/17/2014	206	91.7	4.8
DPP07ID	4 - 7' bgs	Soil	11/17/2014	35.7	47.3	0.48 J
DPP07ES	0 - 2' bgs	Fill	11/17/2014	23.8	18.2	0.29 U
DPP08IS	0 - 1' bgs	Fill	11/17/2014	46.4	38.6	0.30 U
DPP08ES	0 - 2' bgs	Fill	11/18/2014	46.3	40.5	1.1
DPP08ED	4 - 5' bgs	Soil	11/18/2014	8.2	27	0.35 U

Notes:

Values highlighted in yellow indicate exceedance of Unrestricted Use Soil Cleanup Objectives.
Values highlighted in blue indicate exceedance of Commercial Use Soil Cleanup Objectives.
Values highlighted in gray indicate exceedance of Industrial Use Soil Cleanup Objectives.

Lab Qualifiers:
U = Not detected above the laboratory method detection limit shown.
J = Result is less than the laboratory reporting limit but greater than or equal to the method detection limit, and the concentration is an

Data Validation Qualifier:
E = Analyte is present. Reported value may be associated with a higher level of uncertainty than is normally expected with the analytical method.

Table 3c: Summary of Chromium and Arsenic Detections at DPP Sample Locations
Northeast Treaters of New York, LLC
796 Schoharie Turnpike,Town of Athens, New York
November 17-20, 2014

			Analyte	Arsenic, Total Recoverable	Chromium, Total Recoverable	Chromium, Hexavalent
			Units	mg/kg	mg/kg	mg/kg
			Soil Cleanup Objectives (Unrestricted)	13	30	1
			Soil Cleanup Objectives (Commercial)	16	1,500	400
			Soil Cleanup Objectives (Industrial)	16	6,800	800
Sample ID	**Sample Depth Interval**	**Soil Matrix**	**Date Sampled**			
DPP09IS	1 - 3' bgs	Fill	11/20/2014	72.4	17.8	0.29 U
DPP09ID	4 - 5' bgs	Soil	11/20/2014	10.4	30.1	0.35 U
DPP09ES	1 - 3' bgs	Fill	11/20/2014	86.1	96.7	3.1
DPP09ED	4 - 5' bgs	Soil	11/20/2014	12.6	30.1	0.59 J
DPP10IS	1 - 3' bgs	Fill	11/19/2014	9.3	15.5	0.32 U
DPP10ED	4 - 5' bgs	Soil	11/19/2014	6.4	22.5	0.62 U
DPP10ES	1 - 3' bgs	Fill	11/19/2014	17.7	20.6	0.33 U
DPP11IS	1 - 2' bgs	Fill	11/18/2014	34.6	34.5	1.9
DPP11ID	4 - 5' bgs	Soil	11/18/2014	11.3 E	27 E	0.46 J
DPP11ES	1 - 2' bgs	Fill	11/19/2014	35.8	34.3	2.5
DPP12IS	1 - 3' bgs	Fill	11/18/2014	30.4	31.8	1.1
DPP12ES	1 - 3' bgs	Fill	11/18/2014	62.4	50.1	2.5
DPP12ED	4 - 5' bgs	Soil	11/18/2014	11.1	27.5	0.37 U
DPP13IS	1 - 3' bgs	Fill	11/19/2014	24.6	28.4	0.90 J
DPP13ID	4 - 5' bgs	Soil	11/19/2014	9.1	25.1	0.33 U
DPP13ES	1 - 3' bgs	Fill	11/19/2014	28.9	32.9	0.32 U
DPP14IS	1 - 2' bgs	Fill	11/17/2014	24	23.4	1.7
DPP14ES	3 - 5' bgs	Fill	11/17/2014	52.9	34.6	0.33 J
DPP14ED	4 - 5' bgs	Soil	11/17/2014	7.0	30.3	0.35 U
DPP15IS	1 - 2' bgs	Fill	11/17/2014	104	77.2	1.6
DPP15ID	3 - 5' bgs	Soil	11/17/2014	6.7	30.6	2.0
DPP15ES	1 - 2' bgs	Fill	11/17/2014	7.9	17.9	0.32 J
DPP16IS	1 - 2' bgs	Fill	11/17/2014	35.8	37.3	0.82 J
DPP16ES	0 - 2' bgs	Fill	11/18/2014	46.5	41.7	0.82 J
DPP16ED	3 - 4' bgs	Soil	11/18/2014	7.4	26.6	0.36 U

Notes:

Values highlighted in yellow indicate exceedance of Unrestricted Use Soil Cleanup Objectives.
Values highlighted in blue indicate exceedance of Commercial Use Soil Cleanup Objectives.
Values highlighted in gray indicate exceedance of Industrial Use Soil Cleanup Objectives.

Lab Qualifiers:
U = Not detected above the laboratory method detection limit shown.
J = Result is less than the laboratory reporting limit but greater than or equal to the method detection limit, and the concentration is an

Data Validation Qualifier:
E = Analyte is present. Reported value may be associated with a higher level of uncertainty than is normally expected with the analytical method.

Table 3d: Summary of Chromium and Arsenic Detections at Site Permiter Sample Locations
Northeast Treaters of New York, LLC
796 Schoharie Turnpike,Town of Athens, New York

			Analyte	Arsenic, Total Recoverable	Chromium, Total Recoverable	Chromium, Hexavalent
			Units	mg/kg	mg/kg	mg/kg
			Soil Cleanup Objectives (Unrestricted)	13	30	1
			Soil Cleanup Objectives (Commercial)	16	1,500	400
			Soil Cleanup Objectives (Industrial)	16	6,800	800
Sample ID	**Sample Depth Interval**	**Sample Matrix**	**Date Sampled**			
SP01S	1 - 4' bgs	Fill	11/18/2014	18.7	10.3	0.70 J
SP01D	4 - 5' bgs	Soil	11/18/2014	6.2	23.8	0.36 U
SP02S	0 - 2' bgs	Fill	11/18/2014	19.1	17.4	0.29 U
SP02D	3 - 4' bgs	Soil	11/18/2014	3.8	32.7	0.37 U
SP03S	0 - 2' bgs	Fill	11/18/2014	27	26.8	0.29 U
SP03D	3 - 4' bgs	Soil	11/18/2014	6.7	23.6	0.36 U
SP04S	0 - 2' bgs	Fill	11/18/2014	10.5	16.8	0.28 U
SP04D	4 - 5' bgs	Soil	11/18/2014	8.9	30	0.35 U
SP05S	0 - 2' bgs	Fill	11/18/2014	13.1	13.7	0.28 U
SP05D	4 - 6' bgs	Soil	11/18/2014	7.7	30.7	0.35 U
SP06S	1 - 4' bgs	Fill	11/19/2014	18.8	26.6	1.2
SP06D	4 - 5' bgs	Soil	11/19/2014	6.5	23.5	0.29 U
SP07	0 - 1' bgs	Fill/Soil	01/22/2015	44.4	51.4 E	0.35 U
SP08	0 - 0.5' bgs	Fill/Soil	01/22/2015	9.7	32.5 E	0.36 U
SP09	0 - 1' bgs	Soil	01/22/2015	8.3	21.8 E	0.35 U
SP10	0 - 1' bgs	Soil	01/22/2015	6.1	0.28 U	0.35 U
SP11	0.5 - 1' bgs	Fill	01/22/2015	8.8	7.3 E	0.28 U
SP12	0.5 - 1' bgs	Fill	01/22/2015	9.0	7.6 E	0.28 U

Notes:

Values highlighted in yellow indicate exceedance of Unrestricted Use Soil Cleanup Objectives.

Values highlighted in blue indicate exceedance of Commercial Use Soil Cleanup Objectives.

Values highlighted in gray indicate exceedance of Industrial Use Soil Cleanup Objectives.

Lab Qualifiers:

U = Not detected above the laboratory method detection limit shown.

J = Result is less than the laboratory reporting limit but greater than or equal to the method detection limit, and the concentration is an approximate value.

Data Validation Qualifier:

E = Analyte is present. Reported value may be associated with a higher level of uncertainty than is normally expected with the analytical method.

Table 3d: Summary of Chromium and Arsenic Detections at Site Permiter Sample Locations
Northeast Treaters of New York, LLC
796 Schoharie Turnpike,Town of Athens, New York

			Analyte	Arsenic, Total Recoverable	Chromium, Total Recoverable	Chromium, Hexavalent
			Units	mg/kg	mg/kg	mg/kg
			Soil Cleanup Objectives (Unrestricted)	13	30	1
			Soil Cleanup Objectives (Commercial)	16	1,500	400
			Soil Cleanup Objectives (Industrial)	16	6,800	800
Sample ID	Sample Depth Interval	Sample Matrix	Date Sampled			
SP-13	0 - 1'	Soil	4/15/2015	24	28	0.2 U R
SP-13S	0 - 2"	Soil	4/15/2015	29	35	0.19 U R
SP-14	0 - 1'	Soil	4/15/2015	17	29	0.21 U R
SP-14S	0 - 2"	Soil	4/15/2015	18	29	0.21 U R
SP-15	0 - 1'	Soil	4/15/2015	16	27	0.22 U R
SP-15S	0 - 2"	Soil	4/15/2015	19	22	0.25 U R
SP-16	0 - 1'	Soil	4/15/2015	14	26 E	0.22 U
SP-16S	0 - 2"	Soil	4/15/2015	8.3	21 E	0.22 U
SP-17	0 - 1'	Soil	4/15/2015	20	22 E	0.2 U
SP-17S	0 - 2"	Soil	4/20/2015	13	17 E	0.2 U
SP-18	0 - 1'	Soil	4/15/2015	16	28 E	0.21 U
SP-18S	0 - 2"	Soil	4/15/2015	19	20 E	0.21 U
SP-19	0 - 1'	Soil	4/15/2015	13	23 E	0.21 U
SP-19S	0 - 2"	Soil	4/15/2015	19	25 E	0.2 U
SP-20	0 - 1'	Soil	4/15/2015	6.8	20 E	0.23 U
SP-20S	0 - 2"	Soil	4/15/2015	20	21 E	0.18 U
SP-21	0 - 1'	Fill	4/15/2015	15	17 E	0.17 U E
SP-21S	0 - 2"	Fill	4/15/2015	9.4	9.7 E	0.16 U E
SP-22	0.5 - 1'	Fill	4/15/2015	13	11 E	0.17 U E
SP-23	0.5 - 1'	Fill	4/15/2015	9.9	23 E	0.17 U E
SP-24	0.5 - 1'	Fill	4/15/2015	12	8.1 E	0.17 U E
SP-25	0.5 - 1'	Fill	4/15/2015	9	26 E	0.17 U E
SP-26	0.5 - 1'	Soil	4/15/2015	12	29	0.23 U E
SP-26S	0 - 2"	Fill/Soil	4/20/2015	13	27	0.22 U E

Notes:

Values highlighted in yellow indicate exceedance of Unrestricted Use Soil Cleanup Objectives.

Values highlighted in blue indicate exceedance of Commercial Use Soil Cleanup Objectives.

Values highlighted in gray indicate exceedance of Industrial Use Soil Cleanup Objectives.

Lab Qualifiers:

U = Not detected above the laboratory method detection limit shown.

J = Result is less than the laboratory reporting limit but greater than or equal to the method detection limit, and the concentration is an approximate value.

Data Validation Qualifier:

E = Analyte is present. Reported value may be associated with a higher level of uncertainty than is normally expected with the analytical method.

R = Unreliable result; data is rejected or unusable. Analyte may or may not be present in the sample. Supporting data or information is necessary to confirm the result.

Table 3e: Summary of Chromium and Arsenic Detections at Former Woodland Sample Locations
Northeast Treaters of New York, LLC
796 Schoharie Turnpike, Town of Athens, New York
April 15, 2015

Analyte				Arsenic, Total Recoverable	Chromium, Total Recoverable	Chromium, Hexavalent
Units				mg/kg	mg/kg	mg/kg
Soil Cleanup Objectives (Unrestricted)				13	30	1
Soil Cleanup Objectives (Commercial)				16	1,500	400
Soil Cleanup Objectives (Industrial)				16	6,800	800
Sample ID	**Sample Depth Interval**	**Sample Matrix**	**Date Sampled**			
OSS-1	0 - 2"	Soil	4/15/2015	46	46 E	0.24 U E
OSS-2	0 - 2"	Soil	4/15/2015	50	45 E	0.25 U E
OSS-3	0 - 2"	Soil	4/15/2015	34	39 E	0.51 U E
OSS-4	0 - 2"	Soil	4/15/2015	27	31	0.28 U R
OSS-5	.5 - 1'	Soil	4/20/2015	16	27	0.23 U E
OSS-5S	0 - 2"	Soil	4/20/2015	17	28	0.25 U E
OSS-6	.5 - 1'	Soil	4/20/2015	16	22	0.22 U E
OSS-6S	0 - 2"	Soil	4/20/2015	23	27	0.24 U E
OSS-7	.5 - 1'	Soil	4/20/2015	9.5	21	0.23 U E
OSS-7S	0 - 2"	Soil	4/20/2015	24	31	0.94 J
OSS-8	.5 - 1'	Soil	4/20/2015	11	25	0.24 U E
OSS-8S	0 - 2"	Soil	4/20/2015	17	26	0.31 U E
OSS-9	.5 - 1'	Soil	4/20/2015	12	21	0.21 U
OSS-9S	0 - 2"	Soil	4/20/2015	35	35	0.22 U E
OSS-10	.5 - 1'	Soil	4/20/2015	7.7	15	0.22 U E
OSS-10S	0 - 2"	Soil	4/20/2015	14	19	0.25 U E
OSS-11	.5 - 1'	Soil	4/20/2015	9.1	21	0.24 U E
OSS-11S	0 - 2"	Soil	4/20/2015	11	22	0.25 U E
OSS-12	.5 - 1'	Soil	4/20/2015	11	22	0.22 U E
OSS-12S	0 - 2"	Soil	4/20/2015	20	28	0.26 U E
OSS-13	.5 - 1'	Soil	4/20/2015	9.3	20	0.35 J
OSS-13S	0 - 2"	Soil	4/20/2015	19	30	0.32 U E
OSS-15	.5 - 1'	Soil	4/20/2015	8.5	23	0.23 U
OSS-15S	0 - 2"	Soil	4/20/2015	11	24	0.3 U
OSS-16	.5 - 1'	Soil	4/20/2015	12	29	0.28 U
OSS-16S	0 - 2"	Soil	4/20/2015	12	26	0.35 U
OSS-17	.5 - 1'	Soil	4/20/2015	7.7	24	0.23 U
OSS-17S	0 - 2"	Soil	4/20/2015	7.4	20	0.32 U
OSS-18	.5 - 1'	Soil	4/20/2015	7.2	26	0.24 U
OSS-18S	0 - 2"	Soil	4/20/2015	7.7	21	0.24 U
OSS-19	.5 - 1'	Soil	4/20/2015	7.1	20	0.23 U
OSS-19S	0 - 2"	Soil	4/20/2015	9.2	21	0.27 U E

Notes:

Values highlighted in yellow indicate exceedance of Unrestricted Use Soil Cleanup Objectives.
Values highlighted in blue indicate exceedance of Commercial Use Soil Cleanup Objectives.
Values highlighted in gray indicate exceedance of Industrial Use Soil Cleanup Objectives.

Lab Qualifiers:
U = Not detected above the laboratory method detection limit shown.
J = Result is less than the laboratory reporting limit but greater than or equal to the method detection limit, and the concentration is an approximate value.

Data Validation Qualifier:
E = Analyte is present. Reported value may be associated with a higher level of uncertainty than is normally expected with the analytical method.

R = Unreliable result; data is rejected or unusable. Analyte may or may not be present in the sample. Supporting data or information is necessary to confirm the result.

Table 3f: Summary of Chromium and Arsenic Detections at Catch Basin Locations
Northeast Treaters of New York, LLC
796 Schoharie Turnpike, Town of Athens, New York
April 15 & 20, 2015

			Analyte	Arsenic, Total Recoverable	Chromium, Total Recoverable	Chromium, Hexavalent
			Units	mg/kg	mg/kg	mg/kg
			Soil Cleanup Objectives (Unrestricted)	13	30	1
			Soil Cleanup Objectives (Commercial)	16	1,500	400
			Soil Cleanup Objectives (Industrial)	16	6,800	800
Sample ID	**Sample Depth Interval**	**Sample Matrix**	**Date Sampled**			
CB-01	0 - 2"	Sediment	4/15/2015	28	30 E	0.25 U E
CB-02	0 - 2"	Soil	4/15/2015	35	43 E	0.21 J E
CB-03	0 - 2"	Soil	4/15/2015	40	36 E	0.2 U E
CB-04	0 - 2"	Soil	4/15/2015	24	41	0.21 U E
CB-05	0 - 2"	Soil	4/15/2015	27	28	0.2 U E
CB-06	0 - 2"	Soil	4/15/2015	26	33	0.22 U E
CB-07	0 - 2"	Sediment	4/15/2015	36	35	0.34 J
CB-08	0 - 2"	Sediment	4/20/2015	39	87	0.33 J E

Notes:

Values highlighted in yellow indicate exceedance of Unrestricted Use Soil Cleanup Objectives.

Values highlighted in blue indicate exceedance of Commercial Use Soil Cleanup Objectives.

Values highlighted in gray indicate exceedance of Industrial Use Soil Cleanup Objectives.

Lab Qualifiers:

U = Not detected above the laboratory method detection limit shown.

J = Result is less than the laboratory reporting limit but greater than or equal to the method detection limit, and the concentration is an approximate value.

Data Validation Qualifier:

E = Analyte is present. Reported value may be associated with a higher level of uncertainty than is normally expected with the analytical method.

R = Unreliable result; data is rejected or unusable. Analyte may or may not be present in the sample. Supporting data or information is necessary to confimr the result.

Table 3g: Soil Sample Results - Total Recoverable Metals
Northeast Treaters of New York, LLC
796 Schoharie Turnpike,Town of Athens, New York
June 23, 2014

			Analyte	Arsenic, Total Recoverable	Chromium, Total Recoverable
			Units	mg/kg	mg/kg
			Soil Cleanup Objectives (Unrestricted)	13	30
			Soil Cleanup Objectives (Commercial)	16	1,500
			Soil Cleanup Objectives (Industrial)	16	6,800
Sample ID	**Sample Depth Interval**	**Sample Matrix**	**Date Sampled**		
S-1A	1.0 - 2.0' bgs	Fill	6/23/2014	1430	1060
S-1B	2.0 - 3.0' bgs	Fill	6/23/2014	95.3	316
S-1C	3.0 - 4.0' bgs	Soil	6/23/2014	6.7	20.6
S-1D	4.0 - 5.0' bgs	Soil	6/23/2014	17.1	37.3
S-1E	5.0 - 6.0' bgs	Soil	6/23/2014	9.2	25.6
S-2A	1.0 - 2.0' bgs	Fill	6/23/2014	26.0	11.7
S-2B	2.0 - 3.0' bgs	Fill	6/23/2014	10.1	20.8
S-2C	3.0 - 4.0' bgs	Soil	6/23/2014	8.0	17.3
S-2D	4.0 - 5.0' bgs	Soil	6/23/2014	7.2	17.3
S-2E	5.0 - 6.0' bgs	Soil	6/23/2014	8.4	16.7
S-3A	1.0 - 2.0' bgs	Fill	6/23/2014	56.8	76.5
S-3B	2.0 - 3.0' bgs	Fill	6/23/2014	7.5	24.9
S-3C	3.0 - 4.0' bgs	Soil	6/23/2014	9.0	29.8
S-3D	4.0 - 5.0' bgs	Soil	6/23/2014	6.7	19.9
S-3E	5.0 - 6.0' bgs	Soil	6/23/2014	7.0	22.9
S-4A	1.0 - 2.0' bgs	Fill	6/23/2014	78.0	55.0
S-4B	2.0 - 3.0' bgs	Fill	6/23/2014	39.7	66.8
S-4C	3.0 - 4.0' bgs	Soil	6/23/2014	53.2	46.2
S-4D	4.0 - 5.0' bgs	Soil	6/23/2014	64.1	40.7
S-4E	5.0 - 6.0' bgs	Soil	6/23/2014	52.6	47.3

Notes:
Values highlighted in yellow indicate exceedance of Unrestricted Use Soil Cleanup Objective.
Values highlighted in blue indicate exceedance of Commercial Use Soil Cleanup Objectives.
Values highlighted in gray indicate exceedance of Industrial Use Soil Cleanup Objectives.

Table 3h: Drip Pad Concrete Sample Results - Total Recoverable Metals
Northeast Treaters of New York, LLC
796 Schoharie Turnpike,Town of Athens, New York
June 23, 2014

		Analyte	Arsenic, Total Recoverable	Chromium, Total Recoverable
		Units	mg/kg	mg/kg
Sample ID	**Sample Matrix**	**Sample Depth Interval**		
C-1A	Concrete	0 - 3" bgs	7.6	262
C-1B	Concrete	3 - 6" bgs	740	1610
C-1C	Concrete	6 - 9" bgs	1290	726
C-2A	Concrete	0 - 3" bgs	7.4	20.0
C-2B	Concrete	3 - 6" bgs	8.6	15.5
C-2C	Concrete	6 - 9" bgs	6.7	13.1
C-3A	Concrete	0 - 3" bgs	9.1	257
C-3B	Concrete	3 - 6" bgs	48.7	61.0
C-3C	Concrete	6 - 9" bgs	88.5	96.0
C-4A	Concrete	0 - 3" bgs	8.5	299
C-4B	Concrete	3 - 6" bgs	198	111
C-4C	Concrete	6 - 9" bgs	448	237

Table 3i: Soil Sample Results - TCLP Metals
Northeast Treaters of New York, LLC
796 Schoharie Turnpike,Town of Athens, New York
June 23, 2014

		Parameter	Arsenic (mg/L)	Chromium (mg/L)
		Determination Level	50	6
Sample ID	Sample Matrix	Sample Depth Interval		
S-1A	Fill	1.0 - 2.0' bgs	0.85 B	0.054 J B
S-1B	Fill	2.0 - 3.0' bgs	0.059 J B	0.080 J B
S-1C	Soil	3.0 - 4.0' bgs	0.0077 J B	0.0084 J B
S-1D	Soil	4.0 - 5.0' bgs	0.019 J B	0.0073 J B
S-1E	Soil	5.0 - 6.0' bgs	0.010 J B	0.0069 J B
S-2A	Fill	1.0 - 2.0' bgs	0.011 J B	0.0068 J B
S-2B	Fill	2.0 - 3.0' bgs	0.0078 J B	0.0072 J B
S-2C	Soil	3.0 - 4.0' bgs	0.0094 J B	0.0067 J B
S-2D	Soil	4.0 - 5.0' bgs	0.0075 J B	0.014 J B
S-2E	Soil	5.0 - 6.0' bgs	0.0068 J B	0.0064 J B
S-3A	Fill	1.0 - 2.0' bgs	0.011 J B	0.018 J B
S-3B	Fill	2.0 - 3.0' bgs	0.0047 J B	0.0074 J B
S-3C	Soil	3.0 - 4.0' bgs	0.0062 J B	0.0066 J B
S-3D	Soil	4.0 - 5.0' bgs	0.0083 J B	0.0074 J B
S-3E	Soil	5.0 - 6.0' bgs	0.0095 J B	0.0086 J B
S-4A	Fill	1.0 - 2.0' bgs	0.016 J B	0.0077 J B
S-4B	Fill	2.0 - 3.0' bgs	0.25 J B	0.032 J B
S-4C	Soil	3.0 - 4.0' bgs	0.17 J B	0.010 J B
S-4D	Soil	4.0 - 5.0' bgs	0.21 J B	0.013 J B
S-4E	Soil	5.0 - 6.0' bgs	0.27 J B	0.015 J B

Bold indicates Contained-in Determination Level exceedance.

B - Compound was found in the blank and sample.

J - Result is less than the reporting limit but greater than or equal to the method detection limit and the concentration is an approximate value.

Table3j: Concrete Sample Results - TCLP Metals
Northeast Treaters of New York, LLC
796 Schoharie Turnpike,Town of Athens, New York
June 23, 2014

		Parameter	Arsenic (mg/L)		Chromium (mg/L)	
		Debris Rule / Universal Treatment Standard	5		0.6	
Sample ID	Sample Matrix	Sample Depth Interval				
C-1A	Concrete	0 - 3" bgs	0.0062	J B	**5.7**	B
C-1B	Concrete	3 - 6" bgs	0.015	J B	**5.3**	B
C-1C	Concrete	6 - 9" bgs	0.034	J B	**0.83**	B
C-2A	Concrete	0 - 3" bgs	0.0054	J B	0.14	J B
C-2B	Concrete	3 - 6" bgs	0.0069	J B	0.058	J B
C-2C	Concrete	6 - 9" bgs	0.0073	J	0.077	J B
C-3A	Concrete	0 - 3" bgs	0.0058	J B	**4.3**	B
C-3B	Concrete	3 - 6" bgs	0.0060	J B	0.25	J B
C-3C	Concrete	6 - 9" bgs	0.013	J B	**0.88**	B
C-4A	Concrete	0 - 3" bgs	0.0063	J B	**6.9**	B
C-4B	Concrete	3 - 6" bgs	0.013	J B	0.073	J B
C-4C	Concrete	6 - 9" bgs	0.037	J B	0.12	J B

Bold indicates Debris Rule exceedance.

B - Compound was found in the blank and sample.

J - Result is less than the reporting limit but greater than or equal to the method detection limit and the concentration is an approximate value.

Table 3k Summary of Chromium and Arsenic Detections at Settling Basin and Downgradient Swale
Northeast Treaters of New York, LLC
796 Schoharie Turnpike, Town of Athens, New York
August 17, 2015 & December 7, 2015

	Analyte	Arsenic, Total		Chromium, Total		Chromium, Hexavalent	
	Soil Cleanup Objectives (Unrestricted)	13		30		1	
	Units	mg/kg		mg/kg		mg/kg	
LOCATION	SAMPLING DATE		Qual		Qual		Qual
SB-1	8/17/2015	82		89		-	
SB-2	8/17/2015	210		320		-	
SB-3	8/17/2015	56		81		-	
SB-4	8/17/2015	34		41		-	
SB-5	8/17/2015	44		88		-	
DS-1	8/17/2015	70		92		-	
DS-2	8/17/2015	26		39		-	
WSW-1	12/7/2015	14		120		1.1	U
ESW-1	12/7/2015	12		23		0.57	J
B-1	12/7/2015	13		22		1.2	U
WSW-2	12/7/2015	28		46		1.4	U
ESW-2	12/7/2015	16		21		1.1	U
B-2	12/7/2015	12		17		1.2	U
WSW-3	12/7/2015	12		18		0.42	J
ESW-3	12/7/2015	12		20		1.4	U
B-3	12/7/2015	11		17		1.2	U
WSW-4	12/7/2015	26		30		1.4	U
ESW-4	12/7/2015	19		23		1.4	U
B-4	12/7/2015	19		26		1.3	U
MP-1	12/7/2015	20		28		2.6	U

Notes:

Values highlighted in yellow indicate exceedance of Unrestricted Use Soil Cleanup Objectives.

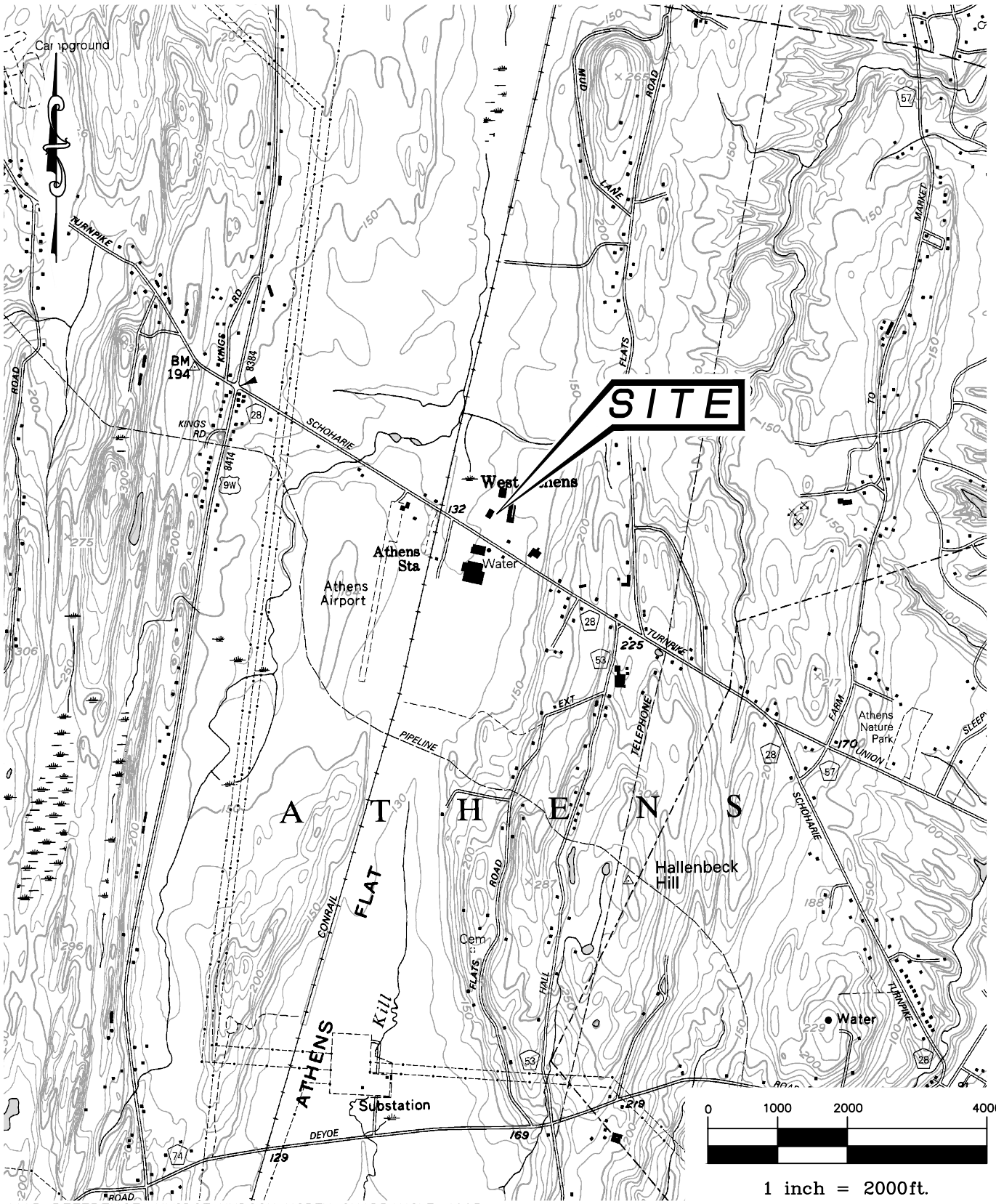
Values highlighted in gray indicate that the laboratory's method detection limit exceeds the Unrestricted Use Soil Cleanup Objectives.

Lab Qualifiers:

U = Not detected above the laboratory method detection limit shown.

J = Result is less than the laboratory reporting limit but greater than or equal to the method detection limit, and the concentration is an approximate value.

FIGURES



MAP REFERENCE: NYSDOT HUDSON NORTH QUADRANGLE, 1995.

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STERLING

Sterling Environmental Engineering, P.C.

24 Wade Road ♦ Latham, New York 12110

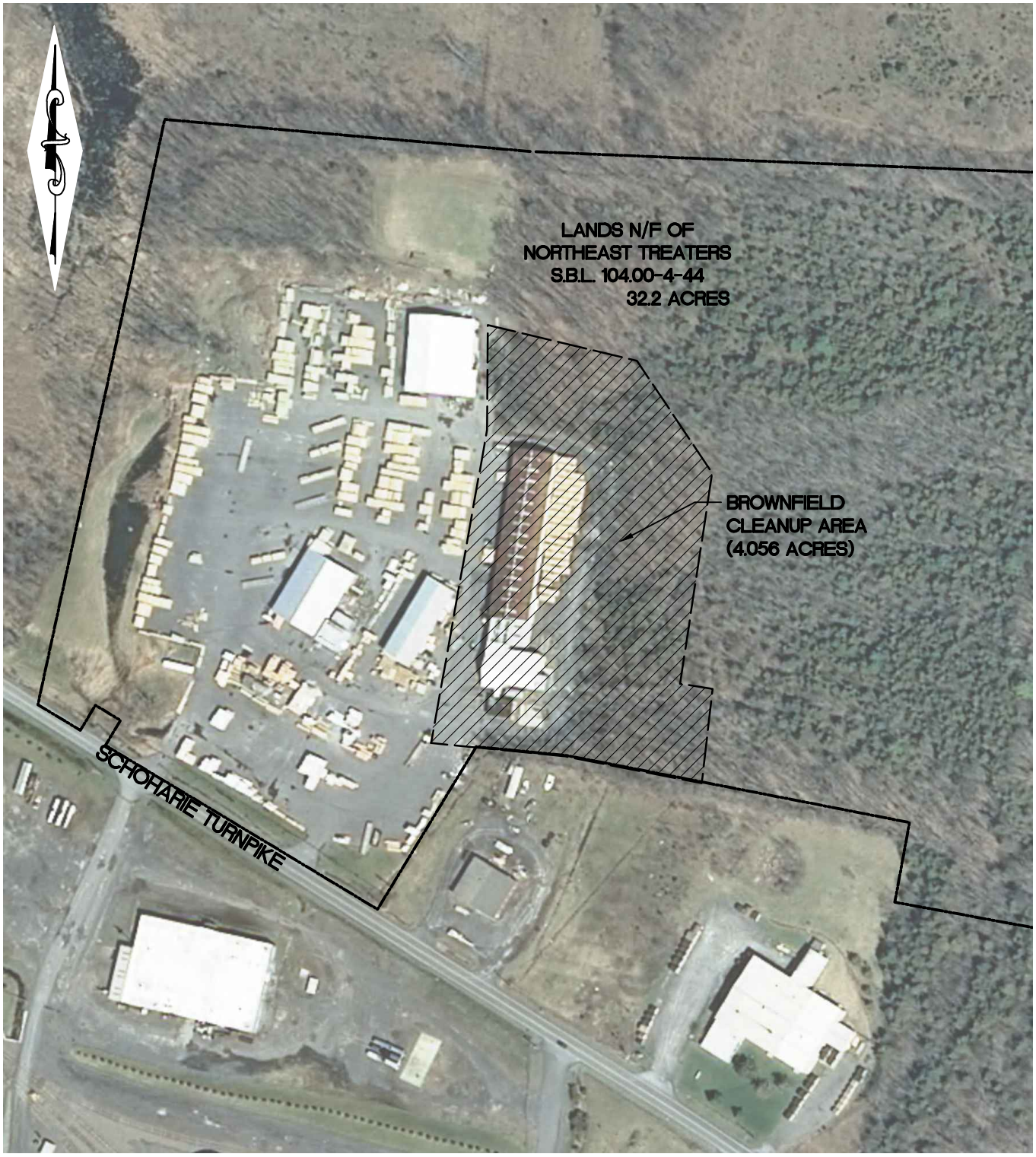
SITE LOCATION MAP

NORTHEAST TREATERS

SCHOHARIE TURNPIKE

TOWN OF ATHENS GREENE CO., N.Y.

PROJ. No.: 2014-08	DATE: 02/04/2016	SCALE: 1" = 2000'	DWG. NO. 2014-08001	FIGURE 1



LEGEND:

APPROXIMATE PROPERTY BOUNDARY

0 100 200 400

1 inch = 200 ft.

MAP REFERENCE: NEW YORK STATEWIDE DIGITAL ORTHOIMAGERY PROGRAM, PHOTOGRAPHY CIRCA 2013

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SUBJECT PROPERTY AND SITE MAP

NORTHEAST TREATERS

SCHOHARIE TURNPIKE

TOWN OF ATHENS GREENE CO., N.Y.

PROJ. No.: 2014-08	DATE: 07/13/2016	SCALE: 1" = 200'	DWG. NO. 2014-08023	FIGURE 2

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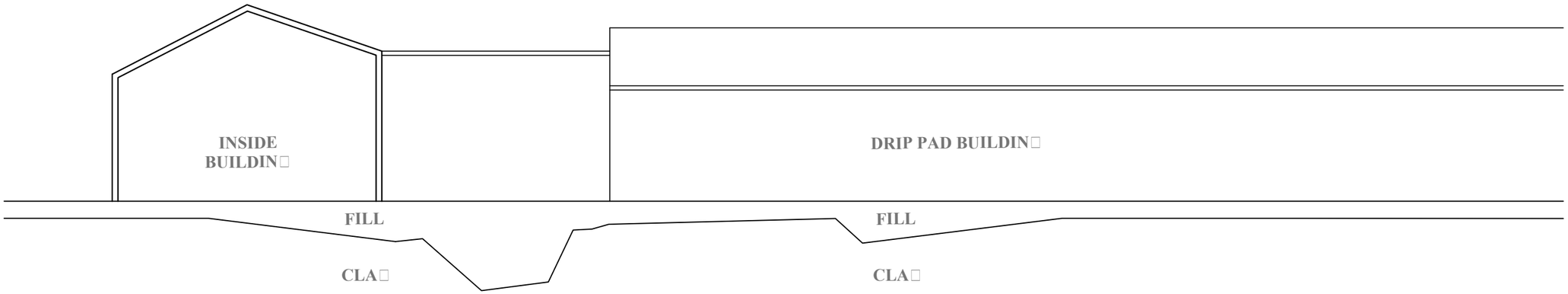
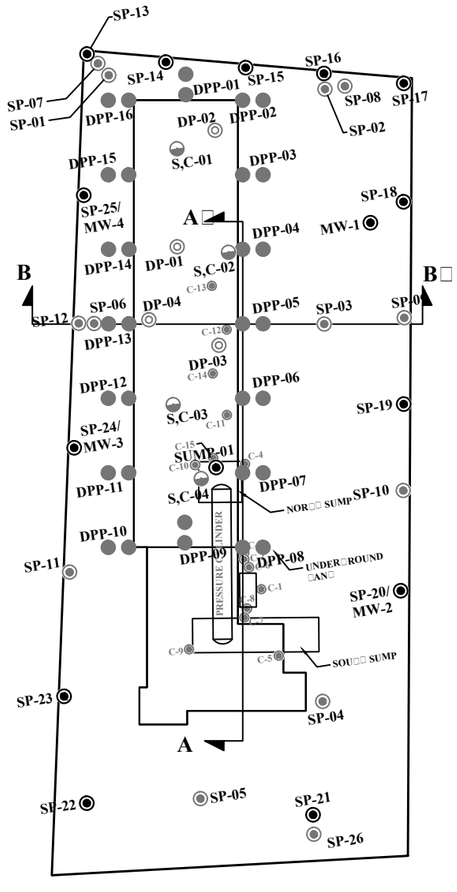


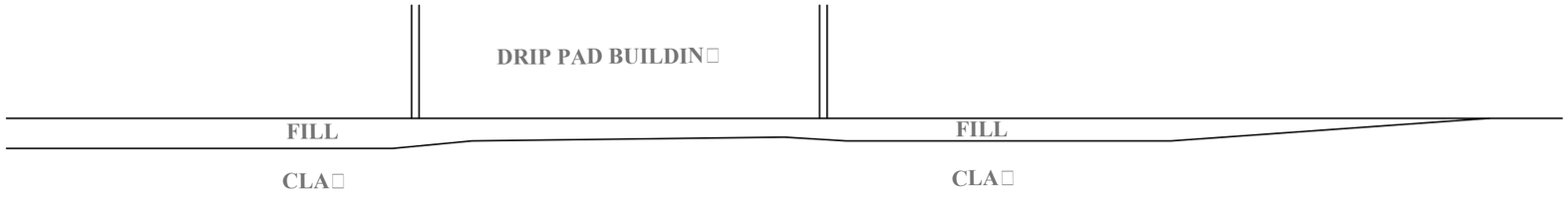
SECTION A-A□

SCALE: 1" □20□



GEOLOGICAL TESTING PLAN

SCALE: 1" □80□



SECTION B-B□

SCALE: 1" □20□

LEGEND:

◉ SUMP-01	SUMP SAMPLE LOCATIONS (SAMPLED 11/17-20/2014)
◎ DP-01	DRIP PAD SAMPLE LOCATIONS (SAMPLED 11/17-20/2014)
● DPP-01	DRIP PAD PERIMETER SAMPLE LOCATIONS (SAMPLED 11/17-20/2014)
◉ SP-01	SITE PERIMETER SAMPLE LOCATIONS (SP-01 - SP-06 SAMPLED 11/17-20/2014: SP-07 - SP-12 SAMPLED 1/22/15 SP-13 - SP-25 SAMPLED 4/15/15 SP-26 SAMPLED 4/20/15)
◒ S,C-01	DRIP PAD SAMPLE LOCATION (SAMPLED 6/23/14)
□ CB	CATCH BASIN (CB-01 -CB-07 SAMPLED 4/15/15 (CB-08 SAMPLED 4/20/15)

NOTE: LOCATIONS OF THE NORTH AND SOUTH SUMPS, PRESSURE CYLINDER, UNDERGROUND TAN□, AND SAMPLES C-1 THROUGH C-15 ARE APPRO□IMATE PER FIELD INSPECTIONS AND "SAMPLING LOCATIONS" DRAWING BY □U RESOURCES, INC□DATED APRIL 1999□

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GEOLOGICAL CROSS SECTIONS AND SAMPLE LOCATIONS
NORTHEAST TREATERS
SCHOHARIE TURNPIKE
TOWN OF ATHENS GREENE CO., N.Y.

PROJ. No.:	DATE:	SCALE:	DWG. NO.	FIGURE
2014–08	02/04/2016	AS NOTED	2014–08014	3

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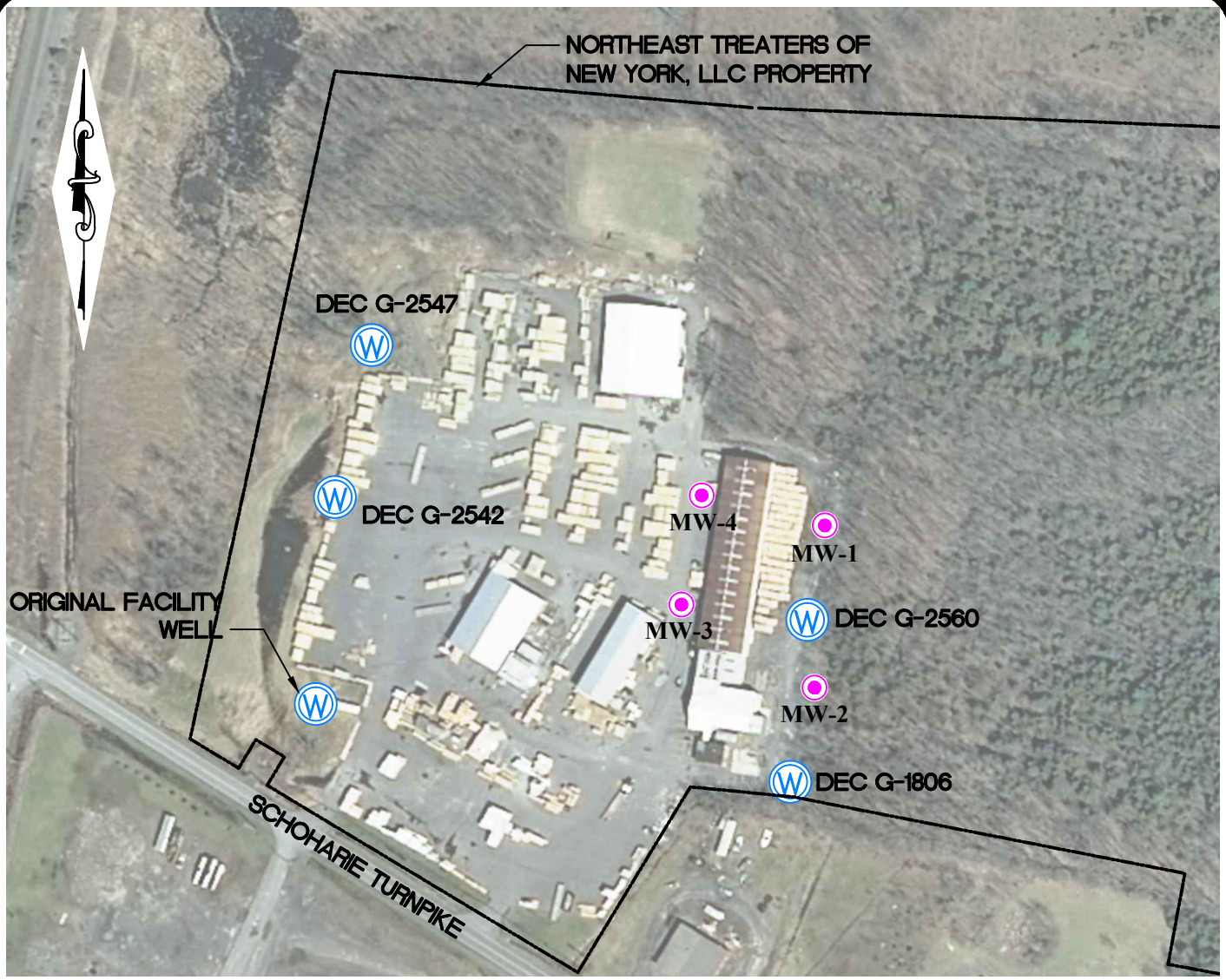

LEGEND:

WATER WELL LOCATIONS

APPROXIMATE PROPERTY BOUNDARY

MW-2 MONITORING WELL LOCATIONS (REMOVED WINTER 2015–2016)

0 100 200 400

1 inch = 200 ft.

WELL REFERENCES:

1. DEC WELLS G–2560 AND G–1806 ARE PLACED PER SURVEY OF EASTERLY BUILDING, BY OSTERTAG LAND SURVEYING, P.C., FEBRUARY 3, 2015.
2. DEC WELLS G–2547 AND G–2542 ARE PLACED PER DEC WATER WELL LOCATION REPORT COORDINATES, WITH FILED DATES OF NOVEMBER 20, 2007 AND SEPTEMBER 20, 2007.
3. ORIGINAL FACILITY WELL IS PLACED PER TOPOGRAPHIC SURVEY BY MCGRATH LAND SURVEYORS, NOVEMBER 5, 1991.

MAP REFERENCE: NEW YORK STATEWIDE DIGITAL ORTHOIMAGERY PROGRAM, PHOTOGRAPHY CIRCA 2013

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WATER WELL LOCATION MAP
NORTHEAST TREATERS
SCHOHARIE TURNPIKE
TOWN OF ATHENS GREENE CO., N.Y.

PROJ. No.: 2014–08	DATE: 02/04/2016	SCALE: 1" = 200'	DWG. NO. 2014–08012	FIGURE 4

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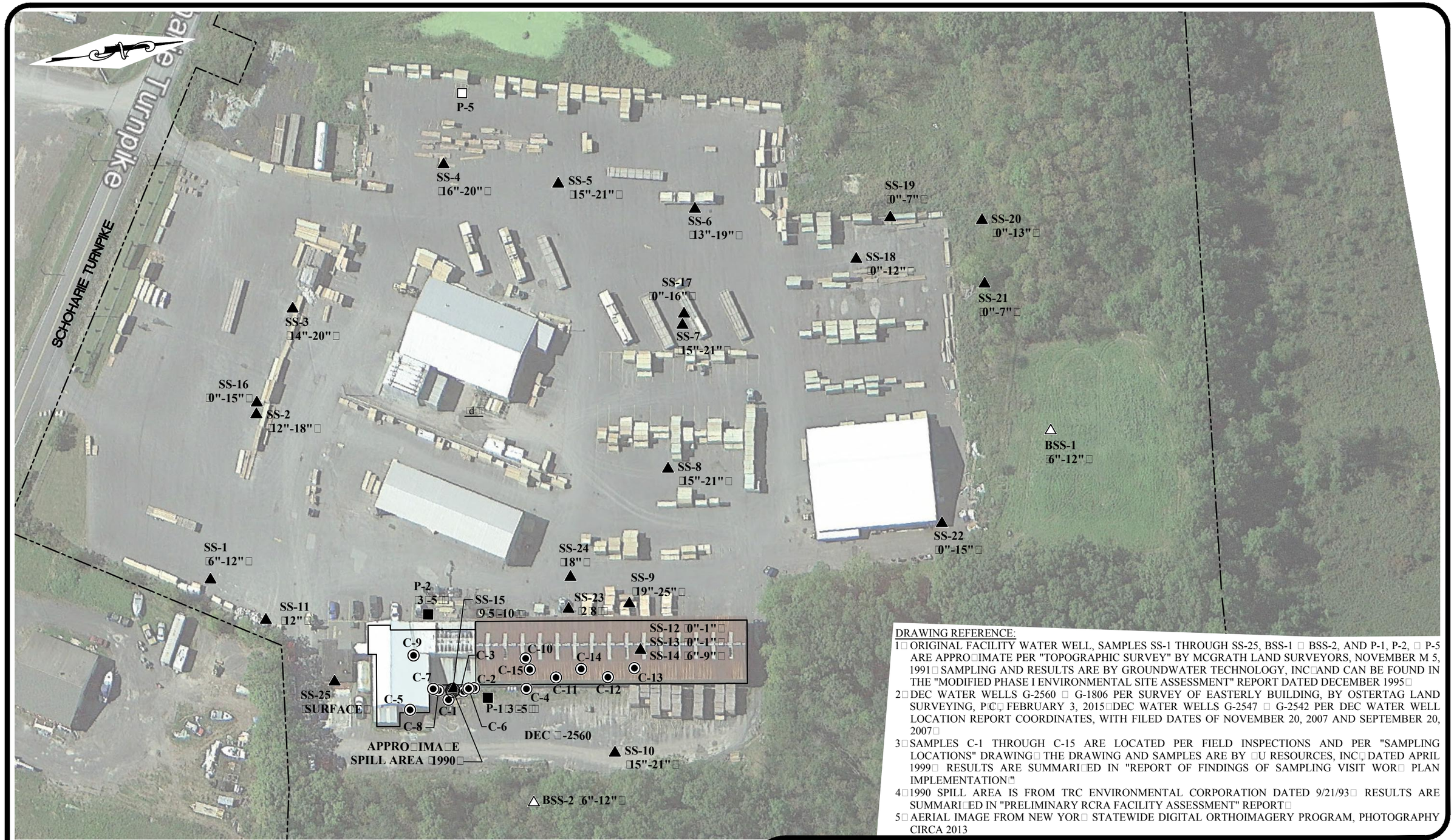

DRAWING REFERENCE:

1. ORIGINAL FACILITY WATER WELL, SAMPLES SS-1 THROUGH SS-25, BSS-1 BSS-2, AND P-1, P-2, P-5 ARE APPROIMATE PER "TOPOGRAPHIC SURVEY" BY MCGRATH LAND SURVEYORS, NOVEMBER M 5, 1991 SAMPLING AND RESULTS ARE BY GROUNDWATER TECHNOLOGY, INCAND CAN BE FOUND IN THE "MODIFIED PHASE I ENVIRONMENTAL SITE ASSESSMENT" REPORT DATED DECEMBER 1995
2. DEC WATER WELLS G-2560 G-1806 PER SURVEY OF EASTERLY BUILDING, BY OSTERTAG LAND SURVEYING, PC, FEBRUARY 3, 2015DEC WATER WELLS G-2547 G-2542 PER DEC WATER WELL LOCATION REPORT COORDINATES, WITH FILED DATES OF NOVEMBER 20, 2007 AND SEPTEMBER 20, 2007
3. SAMPLES C-1 THROUGH C-15 ARE LOCATED PER FIELD INSPECTIONS AND PER "SAMPLING LOCATIONS" DRAWING THE DRAWING AND SAMPLES ARE BY U RESOURCES, INC, DATED APRIL 1999 RESULTS ARE SUMMARIED IN "REPORT OF FINDINGS OF SAMPLING VISIT WOR PLAN IMPLEMENTATION
4. 1990 SPILL AREA IS FROM TRC ENVIRONMENTAL CORPORATION DATED 9/21/93 RESULTS ARE SUMMARIED IN "PRELIMINARY RCRA FACILITY ASSESSMENT" REPORT
5. AERIAL IMAGE FROM NEW YOR STATEWIDE DIGITAL ORTHOIMAGERY PROGRAM, PHOTOGRAPHY CIRCA 2013

LEGEND:

▲ SS-1 6"-12"	SURFACE SOIL SAMPLE (ONE OF SAMPLE)
△ BSS-1 6"-12"	BACGROUND SURFACE SOIL SAMPLE (ONE OF SAMPLE)
■ P-1 3-5	GEOPROBE SOIL SAMPLING LOCATION (SOIL DESCRIPTION ANALYTICAL DATA
□ P-5	GEOPROBE SOIL SAMPLING LOCATION (SOIL DESCRIPTION ONLY)
◉ C-1	SOIL SAMPLE LOCATIONS
——--——	PROPERTY BOUNDARY

0 40 80 160

1 inch = 80 ft.

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HISTORICAL SAMPLING LOCATIONS
NORTHEAST TREATERS
SCHOHARIE TURNPIKE
TOWN OF ATHENS GREENE CO., N.Y.

PROJ. No.:	DATE:	SCALE:	DWG. NO.	FIGURE
2014-08	02/04/2016	1" = 80'	2014-08024	5

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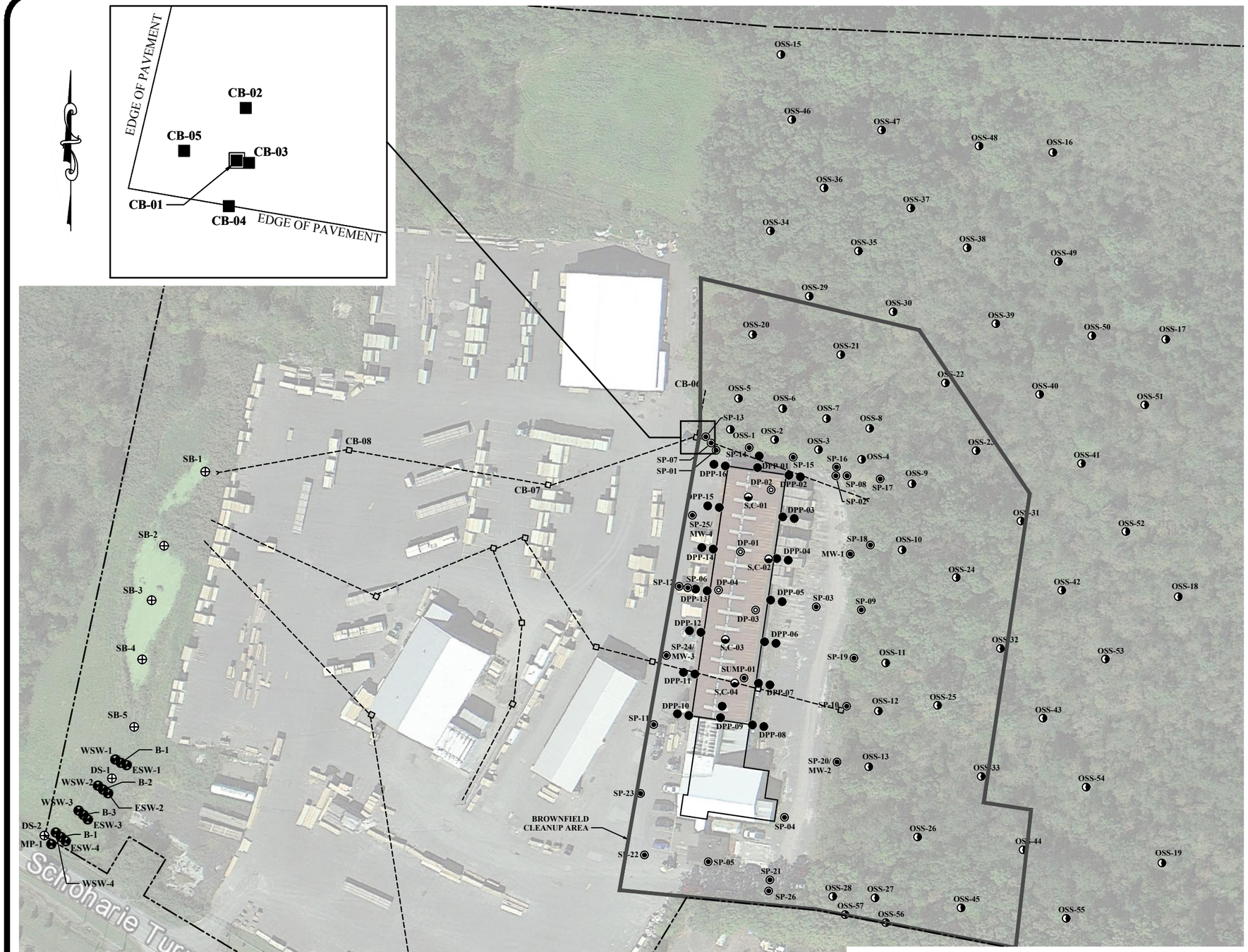

LEGEND:

OSS-01	OSS SAMPLE LOCATIONS (OSS-01 - OSS-04 SAMPLED 4/15/15 OSS-05 - OSS-19 SAMPLED 4/20/15 OSS-20 - OSS-55 SAMPLED 6/16/15 OSS-56 - OSS-57 SAMPLED 7/15/15)
SUMP-01	SUMP SAMPLE LOCATIONS (SAMPLED 11/17/14 - 11/20/14)
DP-01	DRIP PAD SAMPLE LOCATIONS (SAMPLED 11/17/14 - 11/20/14)
DPP-01	DRIP PAD PERIMETER SAMPLE LOCATIONS (SAMPLED 11/17/14 - 11/20/14)
SP-01	SITE PERIMETER SAMPLE LOCATIONS (SP-01 - SP-06 SAMPLED 11/17/14 - 11/20/14 SP-07 - SP-12 SAMPLED 1/22/15 SP-13 - SP-25 SAMPLED 4/15/15 SP-26 SAMPLED 4/20/15)
S,C-01	DRIP PAD SAMPLE LOCATION (SAMPLED 6/23/14)
CB	CATCH BASIN SAMPLE (CB-01 -CB-07 SAMPLED 4/15/15 (CB-08 SAMPLED 4/20/15)
ESW-1	SWALE SAMPLE LOCATION (SAMPLED 12/7/15)
SB-3	SETTLING BASIN SAMPLE LOCATION (SAMPLED 8/17/15)
	STORMWATER PIPE
	PROPERTY BOUNDARY

0 50' 100' 200'

1 inch = 100 ft.

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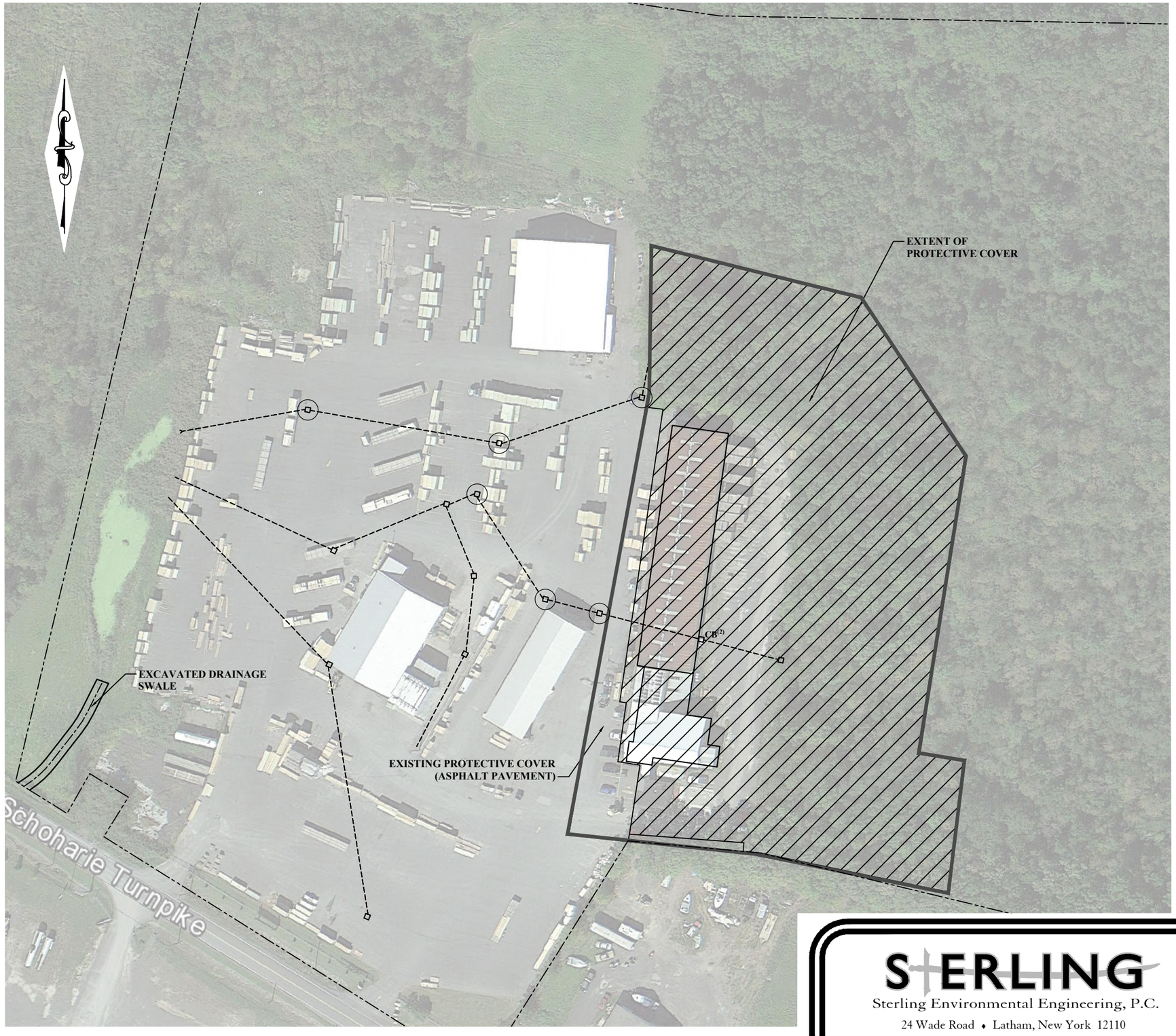
RECENT SAMPLE LOCATION MAP
NORTHEAST TREATERS
SCHOHARIE TURNPIKE
TOWN OF ATHENS GREENE CO., N.Y.

PROJ. No.:	DATE:	SCALE:	DWG. NO.	FIGURE
2014-08	07/13/2016	1" = 100'	2014-08025	6



LEGEND:

□CB	CATCH BASIN LOCATIONS
– – – – –	STORMWATER LINE
—– – –—–	PROPERTY BOUNDARY
———	BROWNFIELD CLEANUP AREA BOUNDARY (APPROX. 4.056 ACRES)
◯	CATCH BASINS CLEANED(3)

NOTES:
(1) THE ENTIRE BROWNFIELD CLEANUP AREA IS SUBJECT TO INSTITUTIONAL CONTROLS

(2) CATCH BASIN TO BE REMOVED PER FACILITY UPGRADE PLANS

(3) CATCH BASINS CLEANED BY REMOVING LOOSE SEDIMENT WITHIN THE CATCH BASIN WITH VACUUM TRUCK.

(4) IMPACTED SEDIMENT AND SOIL REMOVED FROM FACILITY CATCH BASINS AND EXCAVATED FOR THE ENGINEERED DRAINAGE SWALE WERE REUSED WITHIN THE BOUNDARIES OF THE B.C.A. AND BELOW THE PROTECTIVE COVER.

0 50' 100' 200'

1 inch = 100 ft.

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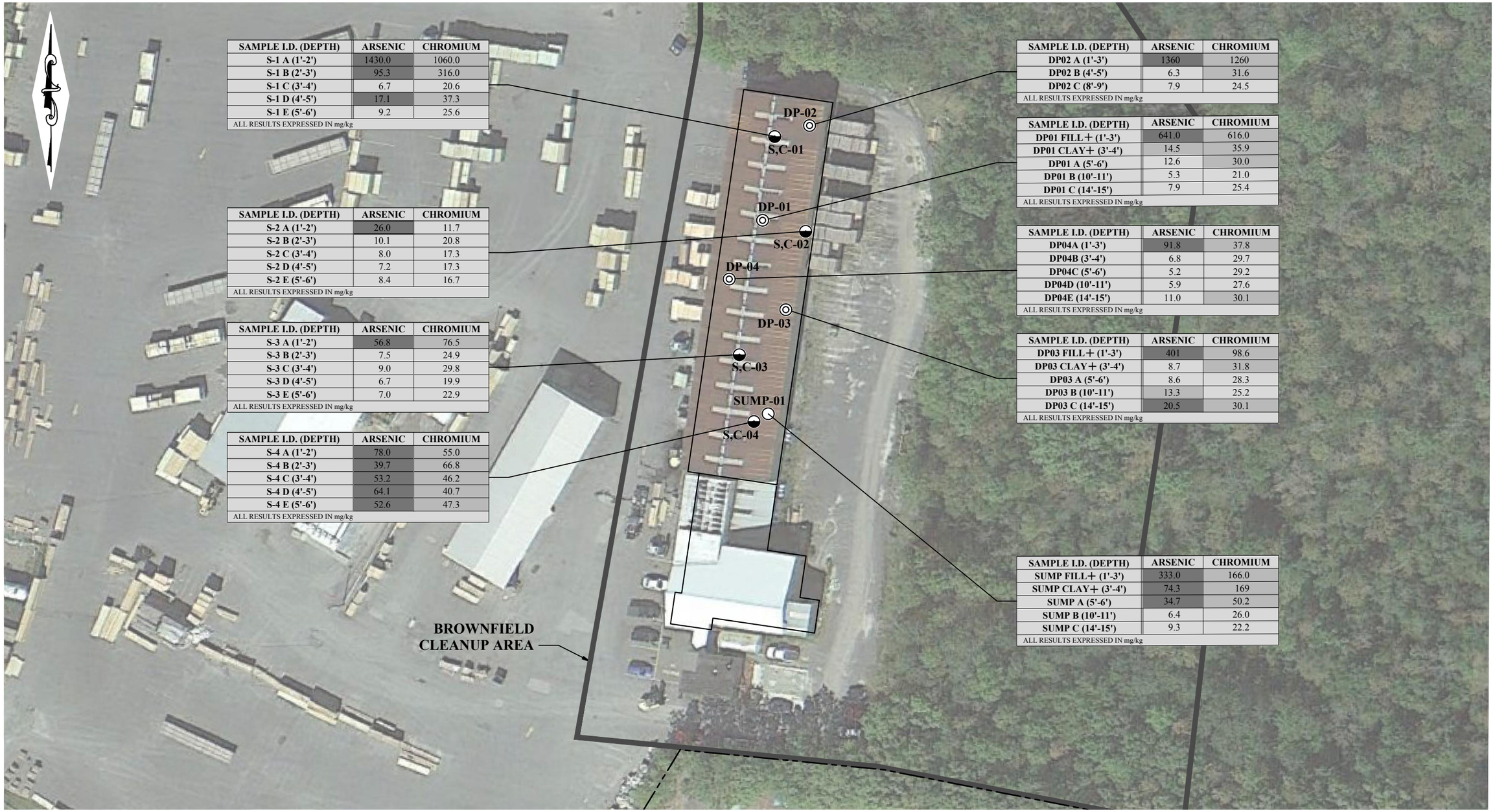
EXTENT OF REMEDY
NORTHEAST TREATERS
SCHOHARIE TURNPIKE
TOWN OF ATHENS GREENE CO., N.Y.

PROJ. No.: 2014-08	DATE: 07/13/2016	SCALE: 1" = 100'	DWG. NO. 2014-08041	FIGURE 7



SAMPLE I.D. (DEPTH)	ARSENIC	CHROMIUM
S-1 A (1'-2')	1430.0	1060.0
S-1 B (2'-3')	95.3	316.0
S-1 C (3'-4')	6.7	20.6
S-1 D (4'-5')	17.1	37.3
S-1 E (5'-6')	9.2	25.6

ALL RESULTS EXPRESSED IN mg/kg

SAMPLE I.D. (DEPTH)	ARSENIC	CHROMIUM
S-2 A (1'-2')	26.0	11.7
S-2 B (2'-3')	10.1	20.8
S-2 C (3'-4')	8.0	17.3
S-2 D (4'-5')	7.2	17.3
S-2 E (5'-6')	8.4	16.7

ALL RESULTS EXPRESSED IN mg/kg

SAMPLE I.D. (DEPTH)	ARSENIC	CHROMIUM
S-3 A (1'-2')	56.8	76.5
S-3 B (2'-3')	7.5	24.9
S-3 C (3'-4')	9.0	29.8
S-3 D (4'-5')	6.7	19.9
S-3 E (5'-6')	7.0	22.9

ALL RESULTS EXPRESSED IN mg/kg

SAMPLE I.D. (DEPTH)	ARSENIC	CHROMIUM
S-4 A (1'-2')	78.0	55.0
S-4 B (2'-3')	39.7	66.8
S-4 C (3'-4')	53.2	46.2
S-4 D (4'-5')	64.1	40.7
S-4 E (5'-6')	52.6	47.3

ALL RESULTS EXPRESSED IN mg/kg

SAMPLE I.D. (DEPTH)	ARSENIC	CHROMIUM
DP02 A (1'-3')	1360	1260
DP02 B (4'-5')	6.3	31.6
DP02 C (8'-9')	7.9	24.5

ALL RESULTS EXPRESSED IN mg/kg

SAMPLE I.D. (DEPTH)	ARSENIC	CHROMIUM
DP01 FILL+ (1'-3')	641.0	616.0
DP01 CLAY+ (3'-4')	14.5	35.9
DP01 A (5'-6')	12.6	30.0
DP01 B (10'-11')	5.3	21.0
DP01 C (14'-15')	7.9	25.4

ALL RESULTS EXPRESSED IN mg/kg

SAMPLE I.D. (DEPTH)	ARSENIC	CHROMIUM
DP04A (1'-3')	91.8	37.8
DP04B (3'-4')	6.8	29.7
DP04C (5'-6')	5.2	29.2
DP04D (10'-11')	5.9	27.6
DP04E (14'-15')	11.0	30.1

ALL RESULTS EXPRESSED IN mg/kg

SAMPLE I.D. (DEPTH)	ARSENIC	CHROMIUM
DP03 FILL+ (1'-3')	401	98.6
DP03 CLAY+ (3'-4')	8.7	31.8
DP03 A (5'-6')	8.6	28.3
DP03 B (10'-11')	13.3	25.2
DP03 C (14'-15')	20.5	30.1

ALL RESULTS EXPRESSED IN mg/kg

SAMPLE I.D. (DEPTH)	ARSENIC	CHROMIUM
SUMP FILL+ (1'-3')	333.0	166.0
SUMP CLAY+ (3'-4')	74.3	169
SUMP A (5'-6')	34.7	50.2
SUMP B (10'-11')	6.4	26.0
SUMP C (14'-15')	9.3	22.2

ALL RESULTS EXPRESSED IN mg/kg

LEGEND:

- ○ SUMP-01 — SUMP SAMPLE LOCATION (NOVEMBER 17-20, 2014)
- ◎ DP-01 — DRIP PAD SAMPLE LOCATION (NOVEMBER 17-20, 2014)
- ◒ S,C-01 — DRIP PAD SAMPLE LOCATION (JUNE 23, 2014)
- — — — PROPERTY BOUNDARY

+ Analyzed for all parameters identified in 6NYCRR PART 375-6.8

0 30 60 120

1 inch = 60 ft.

ARSENIC	CHROMIUM
13 mg/kg	30 mg/kg
16 mg/kg	1500 mg/kg

- SHADED VALUES INDICATE EXCEEDANCE OF RESPECTIVE SOIL CLEANUP OBJECTIVES:
- UNRESTRICTED USE
- COMMERCIAL USE

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SUMMARY OF CHROMIUM AND ARSENIC DETECTIONS AT DRIP PAD SAMPLE LOCATIONS
NORTHEAST TREATERS
SCHOHARIE TURNPIKE
TOWN OF ATHENS GREENE CO., N.Y.

PROJ. No.:	DATE:	SCALE:	DWG. NO.	FIGURE
2014-08	07/13/2016	1" = 60'	2014-08028	8

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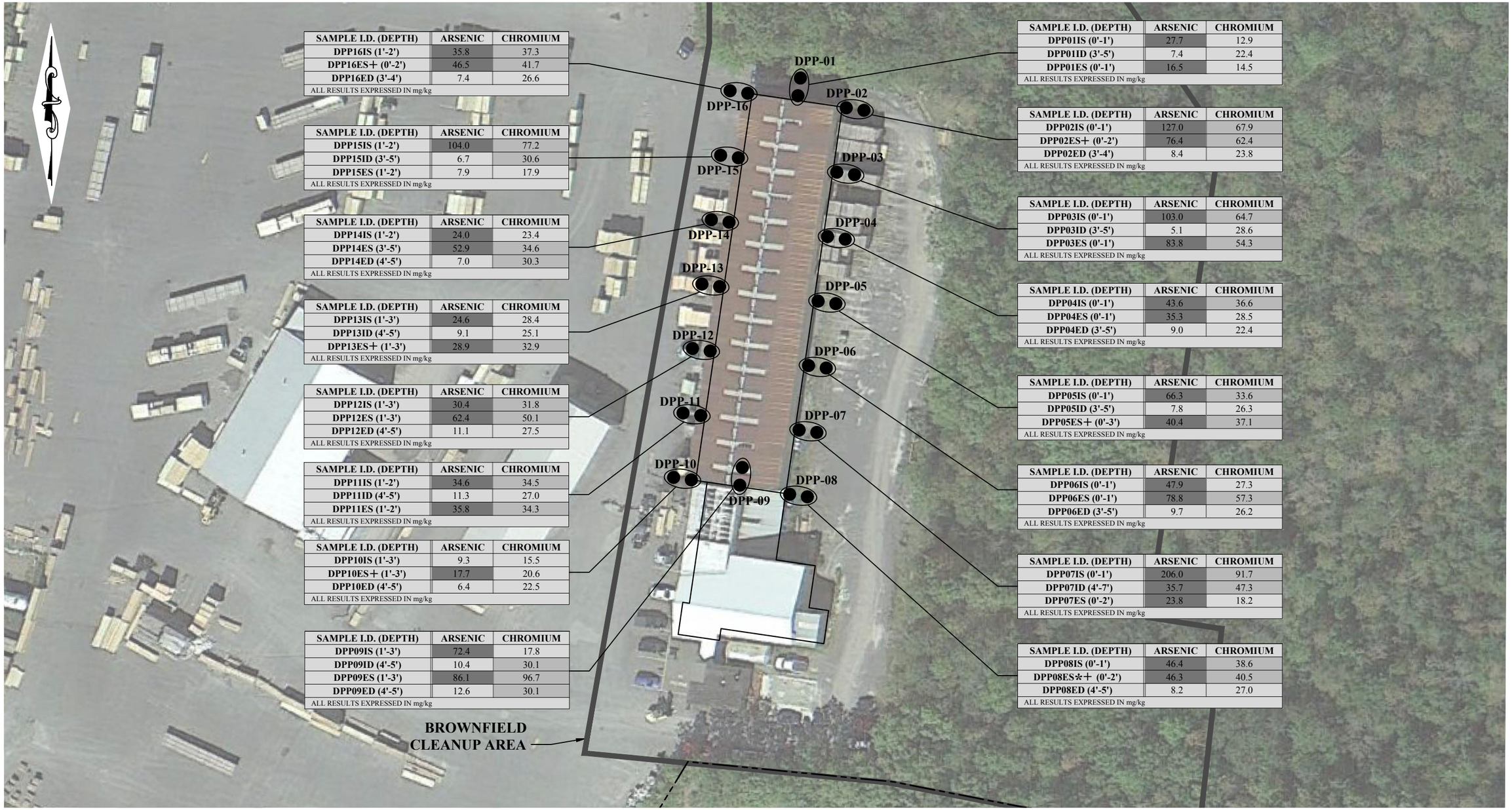

SAMPLE I.D. (DEPTH)	ARSENIC	CHROMIUM
DPP16IS (1'-2')	35.8	37.3
DPP16ES+ (0'-2')	46.5	41.7
DPP16ED (3'-4')	7.4	26.6
ALL RESULTS EXPRESSED IN mg/kg		

SAMPLE I.D. (DEPTH)	ARSENIC	CHROMIUM
DPP15IS (1'-2')	104.0	77.2
DPP15ID (3'-5')	6.7	30.6
DPP15ES (1'-2')	7.9	17.9
ALL RESULTS EXPRESSED IN mg/kg		

SAMPLE I.D. (DEPTH)	ARSENIC	CHROMIUM
DPP14IS (1'-2')	24.0	23.4
DPP14ES (3'-5')	52.9	34.6
DPP14ED (4'-5')	7.0	30.3
ALL RESULTS EXPRESSED IN mg/kg		

SAMPLE I.D. (DEPTH)	ARSENIC	CHROMIUM
DPP13IS (1'-3')	24.6	28.4
DPP13ID (4'-5')	9.1	25.1
DPP13ES+ (1'-3')	28.9	32.9
ALL RESULTS EXPRESSED IN mg/kg		

SAMPLE I.D. (DEPTH)	ARSENIC	CHROMIUM
DPP12IS (1'-3')	30.4	31.8
DPP12ES (1'-3')	62.4	50.1
DPP12ED (4'-5')	11.1	27.5
ALL RESULTS EXPRESSED IN mg/kg		

SAMPLE I.D. (DEPTH)	ARSENIC	CHROMIUM
DPP11IS (1'-2')	34.6	34.5
DPP11ID (4'-5')	11.3	27.0
DPP11ES (1'-2')	35.8	34.3
ALL RESULTS EXPRESSED IN mg/kg		

SAMPLE I.D. (DEPTH)	ARSENIC	CHROMIUM
DPP10IS (1'-3')	9.3	15.5
DPP10ES+ (1'-3')	17.7	20.6
DPP10ED (4'-5')	6.4	22.5
ALL RESULTS EXPRESSED IN mg/kg		

SAMPLE I.D. (DEPTH)	ARSENIC	CHROMIUM
DPP09IS (1'-3')	72.4	17.8
DPP09ID (4'-5')	10.4	30.1
DPP09ES (1'-3')	86.1	96.7
DPP09ED (4'-5')	12.6	30.1
ALL RESULTS EXPRESSED IN mg/kg		

SAMPLE I.D. (DEPTH)	ARSENIC	CHROMIUM
DPP01IS (0'-1')	27.7	12.9
DPP01ID (3'-5')	7.4	22.4
DPP01ES (0'-1')	16.5	14.5
ALL RESULTS EXPRESSED IN mg/kg		

SAMPLE I.D. (DEPTH)	ARSENIC	CHROMIUM
DPP02IS (0'-1')	127.0	67.9
DPP02ES+ (0'-2')	76.4	62.4
DPP02ED (3'-4')	8.4	23.8
ALL RESULTS EXPRESSED IN mg/kg		

SAMPLE I.D. (DEPTH)	ARSENIC	CHROMIUM
DPP03IS (0'-1')	103.0	64.7
DPP03ID (3'-5')	5.1	28.6
DPP03ES (0'-1')	83.8	54.3
ALL RESULTS EXPRESSED IN mg/kg		

SAMPLE I.D. (DEPTH)	ARSENIC	CHROMIUM
DPP04IS (0'-1')	43.6	36.6
DPP04ES (0'-1')	35.3	28.5
DPP04ED (3'-5')	9.0	22.4
ALL RESULTS EXPRESSED IN mg/kg		

SAMPLE I.D. (DEPTH)	ARSENIC	CHROMIUM
DPP05IS (0'-1')	66.3	33.6
DPP05ID (3'-5')	7.8	26.3
DPP05ES+ (0'-3')	40.4	37.1
ALL RESULTS EXPRESSED IN mg/kg		

SAMPLE I.D. (DEPTH)	ARSENIC	CHROMIUM
DPP06IS (0'-1')	47.9	27.3
DPP06ES (0'-1')	78.8	57.3
DPP06ED (3'-5')	9.7	26.2
ALL RESULTS EXPRESSED IN mg/kg		

SAMPLE I.D. (DEPTH)	ARSENIC	CHROMIUM
DPP07IS (0'-1')	206.0	91.7
DPP07ID (4'-7')	35.7	47.3
DPP07ES (0'-2')	23.8	18.2
ALL RESULTS EXPRESSED IN mg/kg		

SAMPLE I.D. (DEPTH)	ARSENIC	CHROMIUM
DPP08IS (0'-1')	46.4	38.6
DPP08ES✲+ (0'-2')	46.3	40.5
DPP08ED (4'-5')	8.2	27.0
ALL RESULTS EXPRESSED IN mg/kg		

LEGEND:

● DPP-01 DRIP PAD PERIMETER SAMPLE LOCATION (NOVEMBER 17-20, 2014)

— — — PROPERTY BOUNDARY

✲ Semi-Volatile Compounds: Benzo(a)anthracene, Benzo(b)fluoranthene, Benzo(k)fluoranthene, and Chrysene were detected at DPP08ES above Unrestricted-Use SCOs.

\+ Analyzed for all parameters identified in 6NYCRR PART 375-6.8

0 30 60 120

1 inch = 60 ft.

ARSENIC	CHROMIUM
13 mg/kg	30 mg/kg
16 mg/kg	1500 mg/kg

- SHADED VALUES INDICATE EXCEEDANCE OF RESPECTIVE SOIL CLEANUP OBJECTIVES:
- UNRESTRICTED USE
- COMMERCIAL USE

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SUMMARY OF CHROMIUM AND ARSENIC DETECTIONS AT DRIP PAD PERIMETER SAMPLE LOCATIONS
NORTHEAST TREATERS
SCHOHARIE TURNPIKE
TOWN OF ATHENS GREENE CO., N.Y.

PROJ. No.: 2014-08	DATE: 07/13/2016	SCALE: 1" = 60'	DWG. NO. 2014-08029	FIGURE 9

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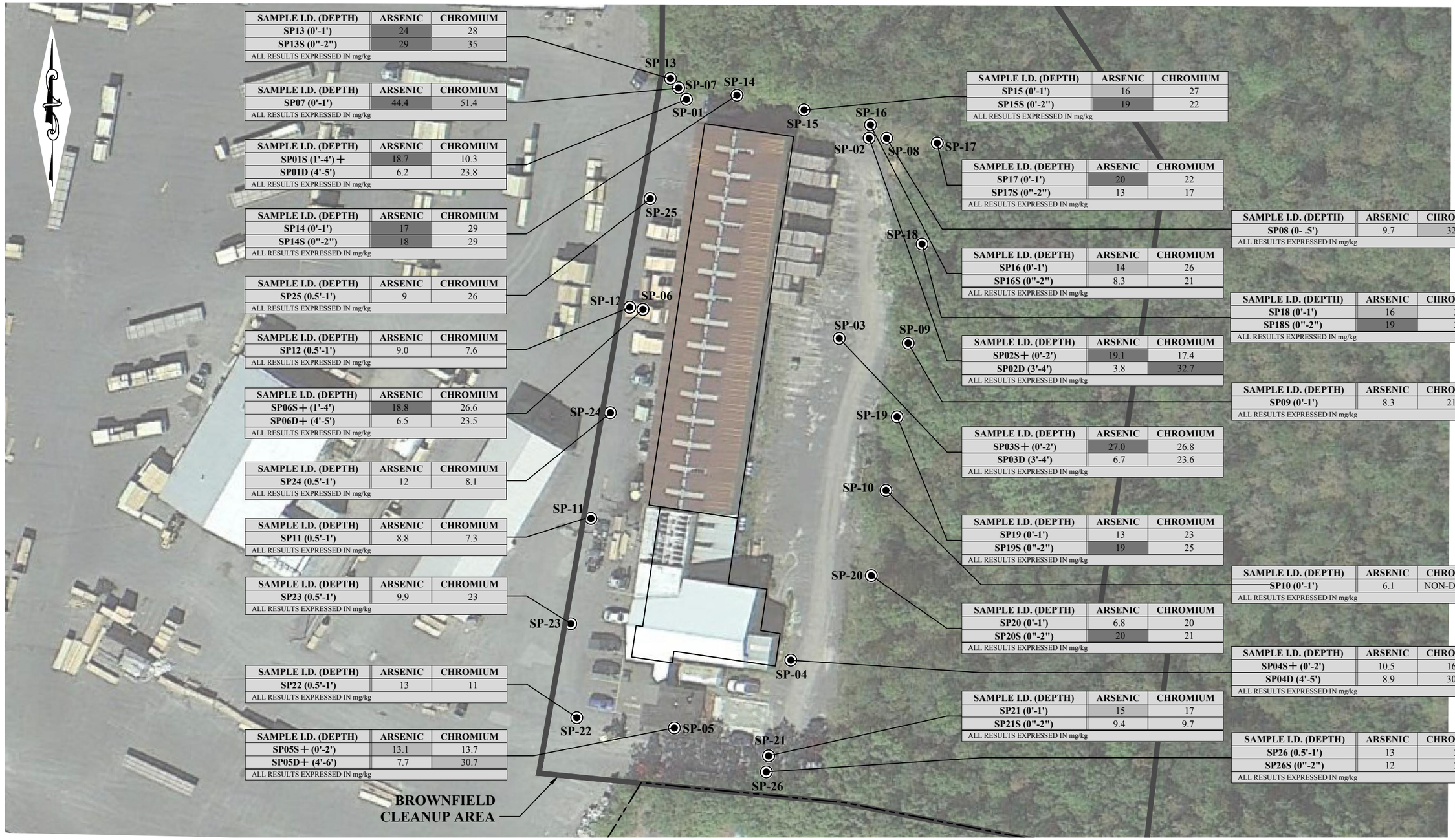

SAMPLE I.D. (DEPTH)	ARSENIC	CHROMIUM
SP13 (0'-1')	24	28
SP13S (0"-2")	29	35

ALL RESULTS EXPRESSED IN mg/kg

SAMPLE I.D. (DEPTH)	ARSENIC	CHROMIUM
SP07 (0'-1')	44.4	51.4

ALL RESULTS EXPRESSED IN mg/kg

SAMPLE I.D. (DEPTH)	ARSENIC	CHROMIUM
SP01S (1'-4')+	18.7	10.3
SP01D (4'-5')	6.2	23.8

ALL RESULTS EXPRESSED IN mg/kg

SAMPLE I.D. (DEPTH)	ARSENIC	CHROMIUM
SP14 (0'-1')	17	29
SP14S (0"-2")	18	29

ALL RESULTS EXPRESSED IN mg/kg

SAMPLE I.D. (DEPTH)	ARSENIC	CHROMIUM
SP25 (0.5'-1')	9	26

ALL RESULTS EXPRESSED IN mg/kg

SAMPLE I.D. (DEPTH)	ARSENIC	CHROMIUM
SP12 (0.5'-1')	9.0	7.6

ALL RESULTS EXPRESSED IN mg/kg

SAMPLE I.D. (DEPTH)	ARSENIC	CHROMIUM
SP06S+ (1'-4')	18.8	26.6
SP06D+ (4'-5')	6.5	23.5

ALL RESULTS EXPRESSED IN mg/kg

SAMPLE I.D. (DEPTH)	ARSENIC	CHROMIUM
SP24 (0.5'-1')	12	8.1

ALL RESULTS EXPRESSED IN mg/kg

SAMPLE I.D. (DEPTH)	ARSENIC	CHROMIUM
SP11 (0.5'-1')	8.8	7.3

ALL RESULTS EXPRESSED IN mg/kg

SAMPLE I.D. (DEPTH)	ARSENIC	CHROMIUM
SP23 (0.5'-1')	9.9	23

ALL RESULTS EXPRESSED IN mg/kg

SAMPLE I.D. (DEPTH)	ARSENIC	CHROMIUM
SP22 (0.5'-1')	13	11

ALL RESULTS EXPRESSED IN mg/kg

SAMPLE I.D. (DEPTH)	ARSENIC	CHROMIUM
SP05S+ (0'-2')	13.1	13.7
SP05D+ (4'-6')	7.7	30.7

ALL RESULTS EXPRESSED IN mg/kg

SAMPLE I.D. (DEPTH)	ARSENIC	CHROMIUM
SP15 (0'-1')	16	27
SP15S (0'-2")	19	22

ALL RESULTS EXPRESSED IN mg/kg

SAMPLE I.D. (DEPTH)	ARSENIC	CHROMIUM
SP17 (0'-1')	20	22
SP17S (0"-2")	13	17

ALL RESULTS EXPRESSED IN mg/kg

SAMPLE I.D. (DEPTH)	ARSENIC	CHROMIUM
SP08 (0- .5')	9.7	32.5

ALL RESULTS EXPRESSED IN mg/kg

SAMPLE I.D. (DEPTH)	ARSENIC	CHROMIUM
SP16 (0'-1')	14	26
SP16S (0"-2")	8.3	21

ALL RESULTS EXPRESSED IN mg/kg

SAMPLE I.D. (DEPTH)	ARSENIC	CHROMIUM
SP18 (0'-1')	16	28
SP18S (0"-2")	19	20

ALL RESULTS EXPRESSED IN mg/kg

SAMPLE I.D. (DEPTH)	ARSENIC	CHROMIUM
SP02S+ (0'-2')	19.1	17.4
SP02D (3'-4')	3.8	32.7

ALL RESULTS EXPRESSED IN mg/kg

SAMPLE I.D. (DEPTH)	ARSENIC	CHROMIUM
SP09 (0'-1')	8.3	21.8

ALL RESULTS EXPRESSED IN mg/kg

SAMPLE I.D. (DEPTH)	ARSENIC	CHROMIUM
SP03S+ (0'-2')	27.0	26.8
SP03D (3'-4')	6.7	23.6

ALL RESULTS EXPRESSED IN mg/kg

SAMPLE I.D. (DEPTH)	ARSENIC	CHROMIUM
SP19 (0'-1')	13	23
SP19S (0"-2")	19	25

ALL RESULTS EXPRESSED IN mg/kg

SAMPLE I.D. (DEPTH)	ARSENIC	CHROMIUM
SP10 (0'-1')	6.1	NON-DETECT

ALL RESULTS EXPRESSED IN mg/kg

SAMPLE I.D. (DEPTH)	ARSENIC	CHROMIUM
SP20 (0'-1')	6.8	20
SP20S (0"-2")	20	21

ALL RESULTS EXPRESSED IN mg/kg

SAMPLE I.D. (DEPTH)	ARSENIC	CHROMIUM
SP04S+ (0'-2')	10.5	16.8
SP04D (4'-5')	8.9	30.0

ALL RESULTS EXPRESSED IN mg/kg

SAMPLE I.D. (DEPTH)	ARSENIC	CHROMIUM
SP21 (0'-1')	15	17
SP21S (0"-2")	9.4	9.7

ALL RESULTS EXPRESSED IN mg/kg

SAMPLE I.D. (DEPTH)	ARSENIC	CHROMIUM
SP26 (0.5'-1')	13	29
SP26S (0"-2")	12	27

ALL RESULTS EXPRESSED IN mg/kg

LEGEND:

SP-01 — SITE PERIMETER SAMPLE LOCATION (NOVEMBER 17-20, 2014 AND JANUARY 22, 2015)

PROPERTY BOUNDARY

0 30 60 120

1 inch = 60 ft.

+ Analyzed for all parameters identified in 6NYCRR PART 375-6.8

ARSENIC	CHROMIUM
13 mg/kg	30 mg/kg
16 mg/kg	1500 mg/kg

- SHADED VALUES INDICATE EXCEEDANCE OF RESPECTIVE SOIL CLEANUP OBJECTIVES:
- UNRESTRICTED USE
- COMMERCIAL USE

STERLING

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24 Wade Road ♦ Latham, New York 12110

SUMMARY OF CHROMIUM AND ARSENIC DETECTIONS AT SITE PERIMETER SAMPLE LOCATIONS

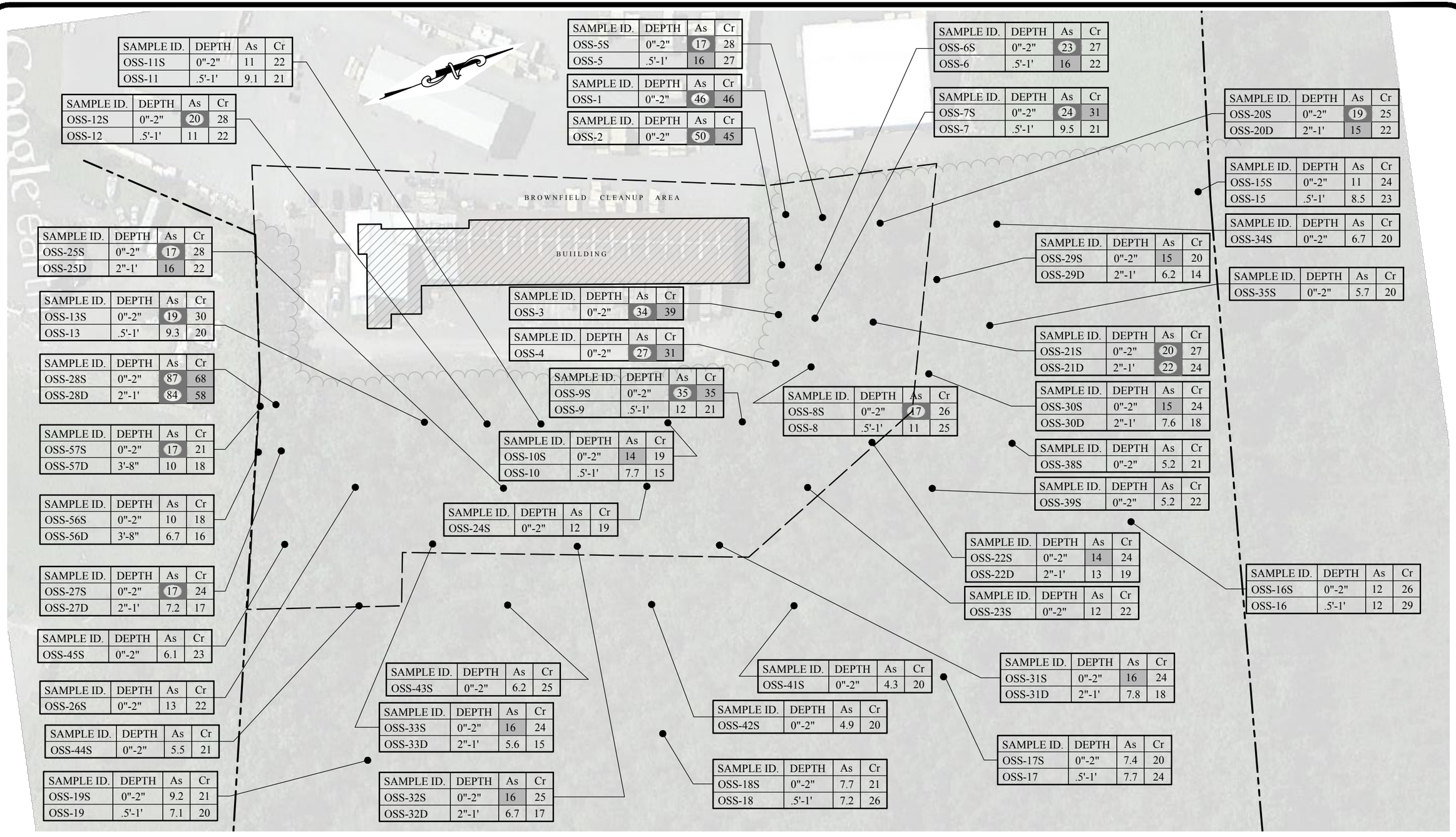
NORTHEAST TREATERS

SCHOHARIE TURNPIKE

TOWN OF ATHENS GREENE CO., N.Y.

PROJ. No.:	DATE:	SCALE:	DWG. NO.	FIGURE
2014-08	07/13/2016	1" = 60'	2014-08030	10

S:\Drawings\2014-08 - Northeast Treaters of New York - Athens NY\2014-08030_F-7 - SitePerimeterSummary (FER).dwg CAD 7/13/2016 11:49 AM



SAMPLE ID.	DEPTH	As	Cr
OSS-11S	0"-2"	11	22
OSS-11	.5'-1'	9.1	21

SAMPLE ID.	DEPTH	As	Cr
OSS-12S	0"-2"	20	28
OSS-12	.5'-1'	11	22

SAMPLE ID.	DEPTH	As	Cr
OSS-25S	0"-2"	17	28
OSS-25D	2"-1'	16	22

SAMPLE ID.	DEPTH	As	Cr
OSS-13S	0"-2"	19	30
OSS-13	.5'-1'	9.3	20

SAMPLE ID.	DEPTH	As	Cr
OSS-28S	0"-2"	87	68
OSS-28D	2"-1'	84	58

SAMPLE ID.	DEPTH	As	Cr
OSS-57S	0"-2"	17	21
OSS-57D	3'-8"	10	18

SAMPLE ID.	DEPTH	As	Cr
OSS-56S	0"-2"	10	18
OSS-56D	3'-8"	6.7	16

SAMPLE ID.	DEPTH	As	Cr
OSS-27S	0"-2"	17	24
OSS-27D	2"-1'	7.2	17

SAMPLE ID.	DEPTH	As	Cr
OSS-45S	0"-2"	6.1	23

SAMPLE ID.	DEPTH	As	Cr
OSS-26S	0"-2"	13	22

SAMPLE ID.	DEPTH	As	Cr
OSS-44S	0"-2"	5.5	21

SAMPLE ID.	DEPTH	As	Cr
OSS-19S	0"-2"	9.2	21
OSS-19	.5'-1'	7.1	20

SAMPLE ID.	DEPTH	As	Cr
OSS-5S	0"-2"	17	28
OSS-5	.5'-1'	16	27

SAMPLE ID.	DEPTH	As	Cr
OSS-1	0"-2"	46	46

SAMPLE ID.	DEPTH	As	Cr
OSS-2	0"-2"	50	45

SAMPLE ID.	DEPTH	As	Cr
OSS-3	0"-2"	34	39

SAMPLE ID.	DEPTH	As	Cr
OSS-4	0"-2"	27	31

SAMPLE ID.	DEPTH	As	Cr
OSS-9S	0"-2"	35	35
OSS-9	.5'-1'	12	21

SAMPLE ID.	DEPTH	As	Cr
OSS-10S	0"-2"	14	19
OSS-10	.5'-1'	7.7	15

SAMPLE ID.	DEPTH	As	Cr
OSS-24S	0"-2"	12	19

SAMPLE ID.	DEPTH	As	Cr
OSS-43S	0"-2"	6.2	25

SAMPLE ID.	DEPTH	As	Cr
OSS-33S	0"-2"	16	24
OSS-33D	2"-1'	5.6	15

SAMPLE ID.	DEPTH	As	Cr
OSS-32S	0"-2"	16	25
OSS-32D	2"-1'	6.7	17

SAMPLE ID.	DEPTH	As	Cr
OSS-8S	0"-2"	17	26
OSS-8	.5'-1'	11	25

SAMPLE ID.	DEPTH	As	Cr
OSS-41S	0"-2"	4.3	20

SAMPLE ID.	DEPTH	As	Cr
OSS-42S	0"-2"	4.9	20

SAMPLE ID.	DEPTH	As	Cr
OSS-18S	0"-2"	7.7	21
OSS-18	.5'-1'	7.2	26

SAMPLE ID.	DEPTH	As	Cr
OSS-6S	0"-2"	23	27
OSS-6	.5'-1'	16	22

SAMPLE ID.	DEPTH	As	Cr
OSS-7S	0"-2"	24	31
OSS-7	.5'-1'	9.5	21

SAMPLE ID.	DEPTH	As	Cr
OSS-20S	0"-2"	19	25
OSS-20D	2"-1'	15	22

SAMPLE ID.	DEPTH	As	Cr
OSS-15S	0"-2"	11	24
OSS-15	.5'-1'	8.5	23

SAMPLE ID.	DEPTH	As	Cr
OSS-34S	0"-2"	6.7	20

SAMPLE ID.	DEPTH	As	Cr
OSS-29S	0"-2"	15	20
OSS-29D	2"-1'	6.2	14

SAMPLE ID.	DEPTH	As	Cr
OSS-35S	0"-2"	5.7	20

SAMPLE ID.	DEPTH	As	Cr
OSS-21S	0"-2"	20	27
OSS-21D	2"-1'	22	24

SAMPLE ID.	DEPTH	As	Cr
OSS-30S	0"-2"	15	24
OSS-30D	2"-1'	7.6	18

SAMPLE ID.	DEPTH	As	Cr
OSS-38S	0"-2"	5.2	21

SAMPLE ID.	DEPTH	As	Cr
OSS-39S	0"-2"	5.2	22

SAMPLE ID.	DEPTH	As	Cr
OSS-22S	0"-2"	14	24
OSS-22D	2"-1'	13	19

SAMPLE ID.	DEPTH	As	Cr
OSS-23S	0"-2"	12	22

SAMPLE ID.	DEPTH	As	Cr
OSS-16S	0"-2"	12	26
OSS-16	.5'-1'	12	29

SAMPLE ID.	DEPTH	As	Cr
OSS-31S	0"-2"	16	24
OSS-31D	2"-1'	7.8	18

SAMPLE ID.	DEPTH	As	Cr
OSS-17S	0"-2"	7.4	20
OSS-17	.5'-1'	7.7	24

NOTES

ALL VALUES IN MG/KG
LOCATIONS OSS-1 THROUGH OSS-4 SAMPLED ON 4/15/2015
LOCATIONS OSS-5 THROUGH OSS-19 SAMPLED ON 4/20/2015
LOCATIONS OSS-20 THROUGH OSS-45 SAMPLED ON 6/16/2015
LOCATIONS OSS-56 AND OSS-57 SAMPLED ON 7/23/2015

LEGEND

BCA BOUNDARY LINE
PROPERTY LINE
EDGE OF WOODS
APPROXIMATE SOIL SAMPLE LOCATION

As = ARSENIC Cr = CHROMIUM
LIGHT GRAY INDICATES EXCEEDANCE OF UNRESTRICTED USE SOIL CLEANUP OBJECTIVES
DARK GRAY INDICATES EXCEEDANCE OF COMMERCIAL USE SOIL CLEANUP OBJECTIVES

As	Cr
13 mg/kg	30 mg/kg
16 mg/kg	1500 mg/kg

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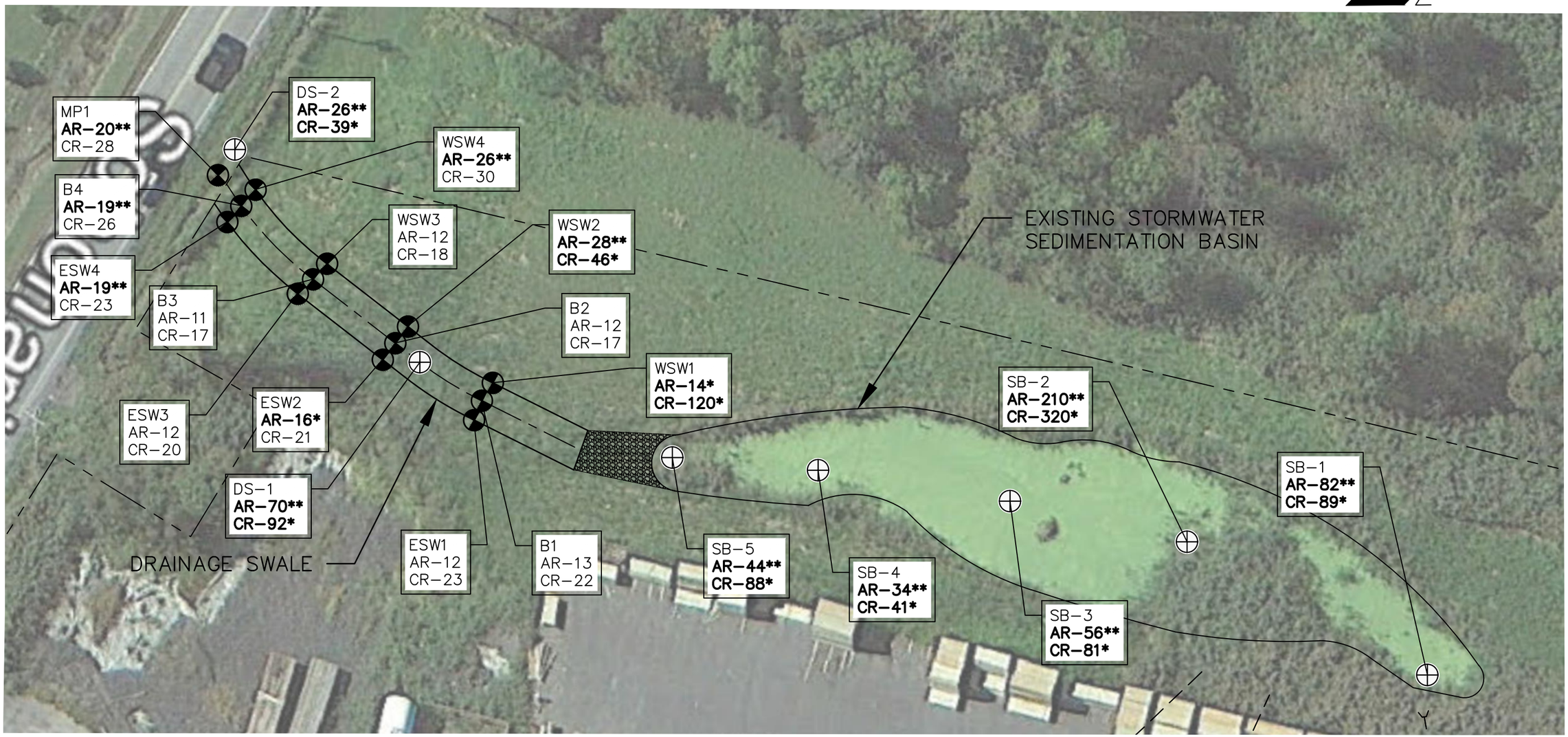
SUMMARY OF CHROMIUM AND ARSENIC DETECTIONS AT OSS SAMPLE LOCATIONS
NORTHEAST TREATERS
SCHOHARIE TURNPIKE
TOWN OF ATHENS GREENE CO., N.Y.

PROJ. No.:	DATE:	SCALE:	DWG. NO.	FIGURE
2014–08	07/13/2016	1" = 80'	2014–08043	11



POST EXCAVATION SAMPLE
(SAMPLED 12/7/15)

SEDIMENT BASIN SAMPLE
(SAMPLED 8/17/15)

* EXCEEDS UNRESTRICTED STANDARDS
(AR – 13, CR – 30)

** EXCEEDS COMMERCIAL STANDARDS
(AR – 16, CR – 1,500)

AR–ARSENIC VALUE
CR–CHROMIUM (TOTALS) VALUE
ALL VALUES IN PPM

0 15' 30' 60'

1 inch = 30 ft.

MAP REFERENCE: NEW YORK STATEWIDE DIGITAL ORTHOIMAGERY PROGRAM, PHOTOGRAPHY CIRCA 2013

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SUMMARY OF CHROMIUM AND ARSENIC DETECTIONS
AT SETTLING BASIN AND EXIT SWALE
NORTHEAST TREATERS
SCHOHARIE TURNPIKE
TOWN OF ATHENS GREENE CO., N.Y.

PROJ. No.: 2014–08	DATE: 02/04/2016	SCALE: 1" = 30'	DWG. NO. 2014–08101	FIGURE 12

S:\Drawings\2014-08 – Northeast Treaters of New York – Athens NY\2014-08101 – SW Swale Sampling.dwg SWEETT 2/12/2016 10:27 AM

SAMPLE LOCATION

MAP REFERENCE: NEW YORK STATEWIDE DIGITAL ORTHOIMAGERY PROGRAM, PHOTOGRAPHY CIRCA 2013

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MONITORING PLAN
SAMPLE LOCATION MAP
NORTHEAST TREATERS
SCHOHARIE TURNPIKE
TOWN OF ATHENS GREENE CO., N.Y.

PROJ. No.: 2014–08	DATE: 02/04/2016	SCALE: 1" = 30'	DWG. NO. 2014–08102	FIGURE 13

S:\Drawings\2014-08 – Northeast Treaters of New York – Athens NY\2014-08102 – Monitoring Plan Sample Locations.dwg SWEETT 2/11/2016 1:47 PM

APPENDIX A

ENVIRONMENTAL EASEMENT

TO BE PROVIDED AT LATER DATE

APPENDIX B

SITE CONTACT LIST

NORTHEAST TREATERS OF NEW YORK, LLC.
796 SCHOHARIE TURNPIKE, ATHENS, NY
SITE #C420029

LIST OF SITE CONTACTS

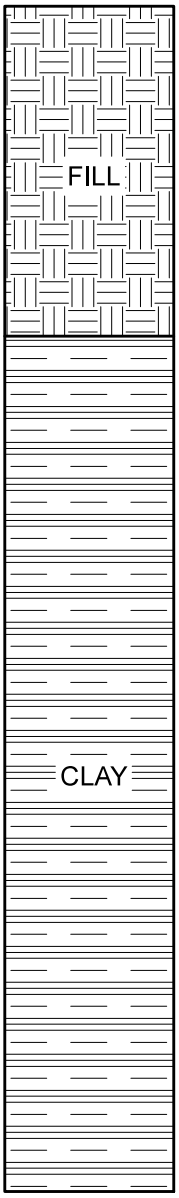
Name	**Phone/Email Address**
Northeast Treaters of New York, LLC Site Owner & Remedial Party	518-945-2660 greg@netreaters.com
Sterling Environmental Engineering, P.C. Qualified Environmental Professional	518-456-4900 sterling@sterlingenvironmental.com
James A. Quinn, PE NYSDEC DER Project Manager	518-357-2273 james.quinn@dec.ny.gov
NYSDEC Regional Hazardous Waste Engineer	518-357-2273
NYSDEC Site Control	518-402-9569
Young/Sommer LLC Remedial Party Attorney	518-438-9907 info@youngsommer.com

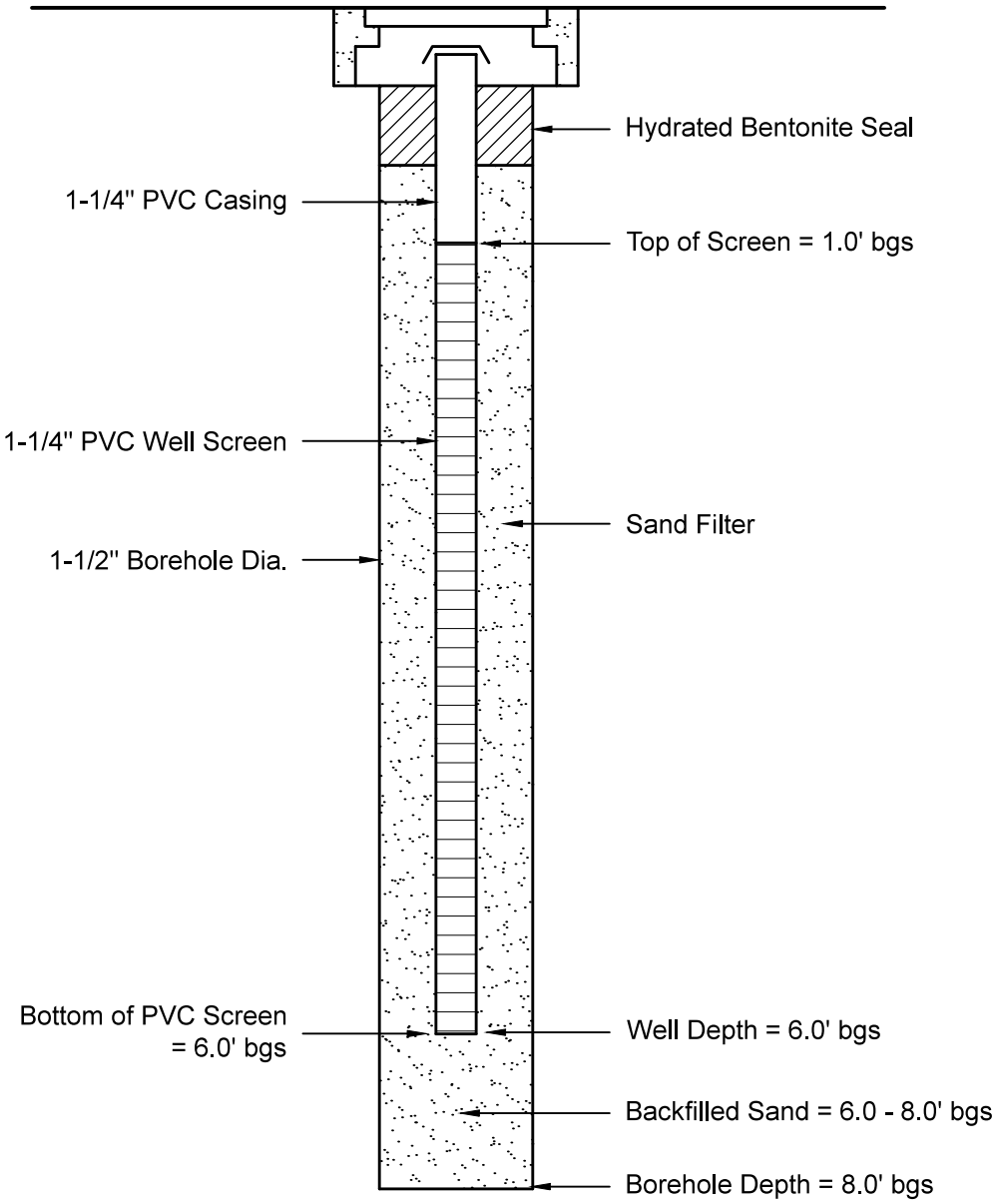
This table will be updated as necessary to include all site contacts necessary for implementation of the Site Management Plan.

APPENDIX C

WATER WELL COMPLETION REPORTS
AND MONITORING WELL CONSTRUCTION LOGS

STRATIGRAPHY





LEGEND

Fill (0.0 - 2.0')	Brown to gray sand and gravel; Medium coarse to coarse; Occasional pebbles and cobbles; Loose; Dry
Glaciolacustrine Clay (2.0 – 8.0')	Dark gray to gray brown clay; Some silt; Mottled (brown); Stiff to medium stiff; Dry

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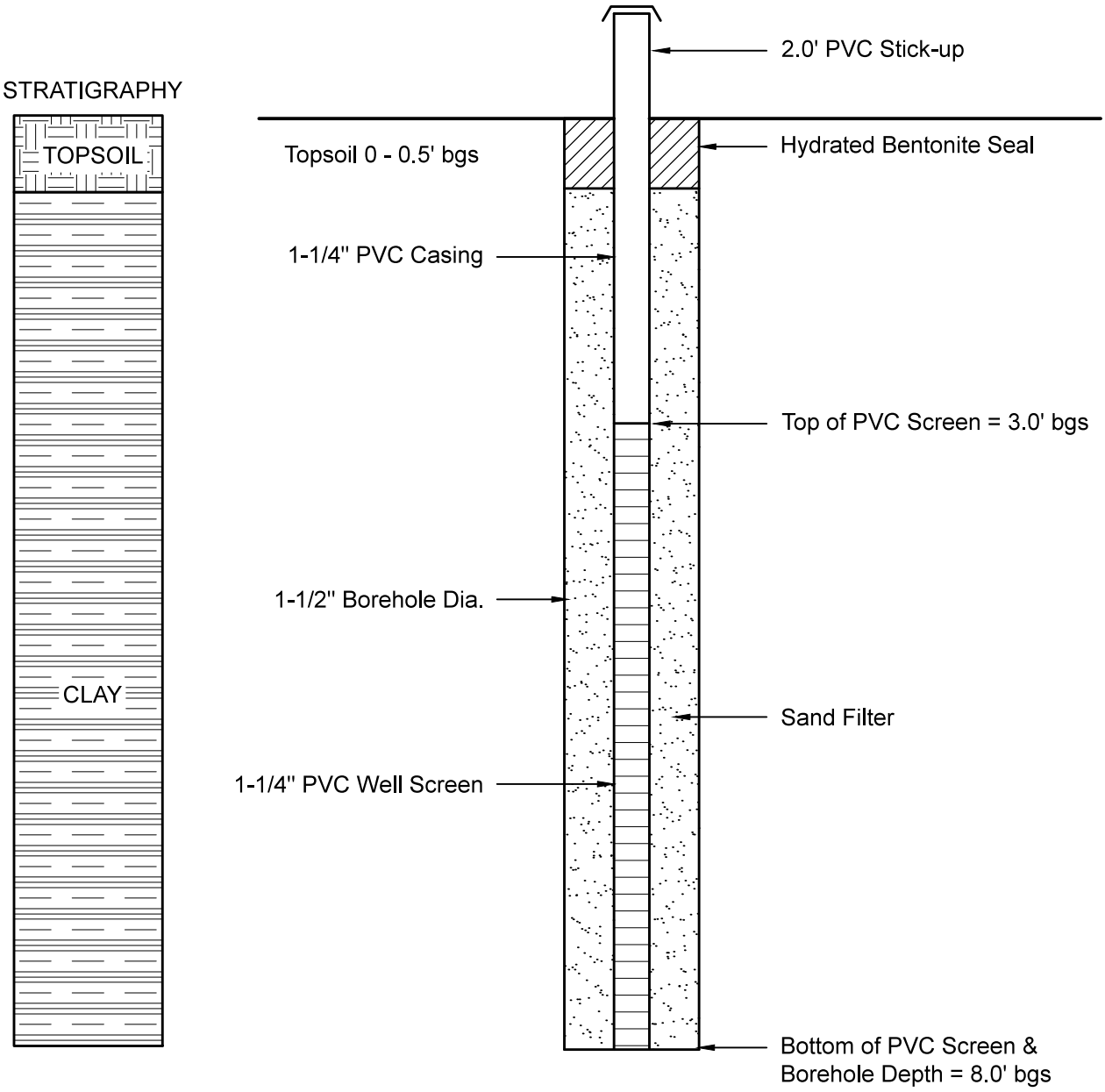
WELL CONSTRUCTION DIAGRAM
MW–1
NORTHEAST TREATERS
SCHOHARIE TURNPIKE
TOWN OF ATHENS GREEN CO., N.Y.

PROJ. No.:	DATE:	SCALE:	DWG. NO.	FIGURE
2014–08	7/30/15	NONE	2014–08027	1



LEGEND

Organic Loam (0.0 – 0.5')	
Glaciolacustrine Clay (0.5 – 8.0')	Dark gray to gray clay; Some silt; Mottled (brown); Medium stiff to stiff; Dry

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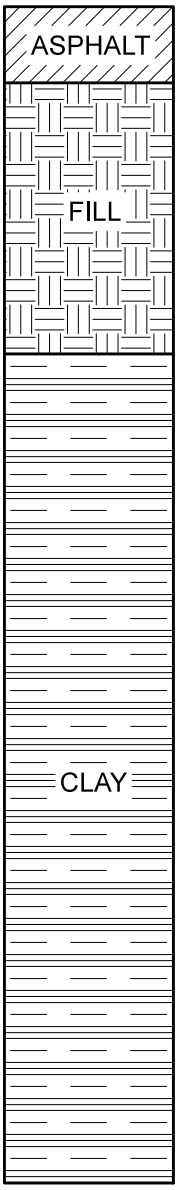
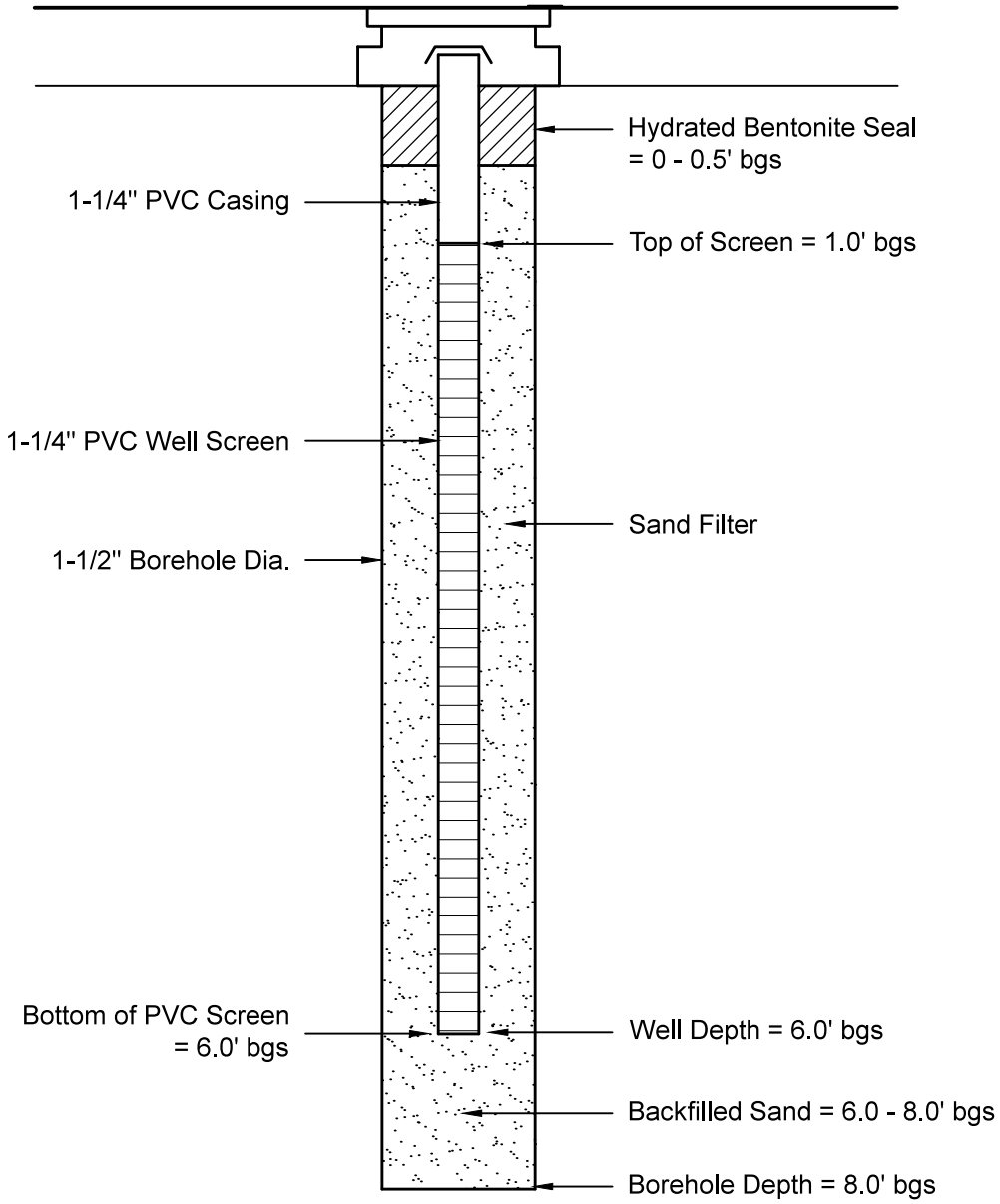
WELL CONSTRUCTION DIAGRAM
MW–2
NORTHEAST TREATERS
SCHOHARIE TURNPIKE
TOWN OF ATHENS GREEN CO., N.Y.

PROJ. No.:	DATE:	SCALE:	DWG. NO.	FIGURE
2014–08	7/30/15	NONE	2014–08027	2

STRATIGRAPHY





LEGEND

Asphalt (0.0 – 05')

Fill (0.5 – 1.8')	Brown to gray sand and gravel; Medium coarse to coarse; Occasional cobbles and pebbles; Loose; Dry
Glaciolacustrine Clay (1.8 – 8.0')	Dark gray to gray brown clay; Some silt; Mottled (brown); Medium stiff to stiff; Dry

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WELL CONSTRUCTION DIAGRAM
MW–3
NORTHEAST TREATERS
SCHOHARIE TURNPIKE
TOWN OF ATHENS GREEN CO., N.Y.

PROJ. No.:	DATE:	SCALE:	DWG. NO.	FIGURE
2014–08	7/30/15	NONE	2014–08027	3

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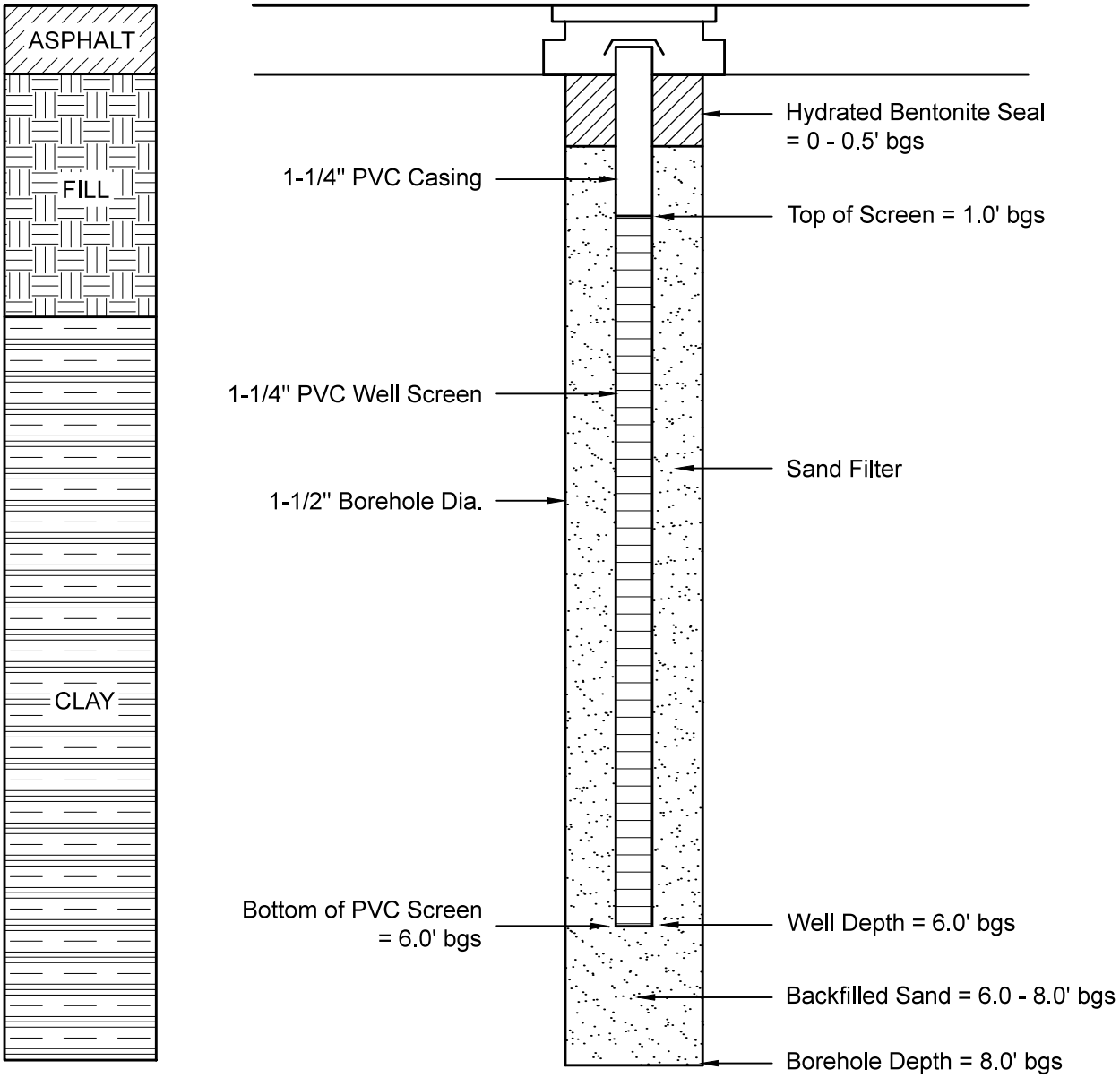
STRATIGRAPHY



LEGEND

Asphalt (0.0 – 0.1')

Fill (0.1 – 2.0')	Brown to gray sand and gravel; Medium coarse to coarse; Occasional pebbles and cobbles; Loose; Dry
Glaciolacustrine Clay (2.0 – 8.0')	Dark gray to gray brown clay; Some silt; Mottled (brown); Medium stiff to stiff; Dry

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WELL CONSTRUCTION DIAGRAM
MW–4
NORTHEAST TREATERS
SCHOHARIE TURNPIKE
TOWN OF ATHENS GREEN CO., N.Y.

PROJ. No.:	DATE:	SCALE:	DWG. NO.	FIGURE
2014–08	7/30/15	NONE	2014–08027	4

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NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

(1) County Greene

(2) Town Athens

(3) DEC Well Number G 1806

WELL COMPLETION REPORT

(4) OWNER
Northeast Treaters of NY, LLC

(5) ADDRESS
796 Schoharie Turnpike, Athens, NY 12015

(6) LOCATION OF WELL (See Instructions On Reverse)
Show Lat/Long if available and method used: 796 Schoharie Turnpike, Athens, NY
☒ GPS ☐ DEC Website ☐ Map Interpolation N 42° 17.341' W073° 50.153'

LOG *

Ground Surface EL. 1716 ft. above sea level

Top Of Casing is located +2' ft.above (+) or below (-) ground surface

(7) DEPTH OF WELL BELOW LAND SURFACE (Feet): 802 feet

(8) DEPTH TO GROUNDWATER BELOW LAND SURFACE (Feet): 19'4" DATE MEASURED: 8/24/04

CASINGS

(9) DIAMETER: 6" Steel casing in. | in. | in. | in.

(10) LENGTH: 60 ft. | ft. | ft. | in.

(11) GROUT TYPE / SEALING: Bentonite grout & drive shoe

(12) GROUT / SEALING INTERVAL (Feet) FROM 60' TO 20'

SCREENS

(13) MAKE & MATERIAL

(14) OPENINGS

(15) DIAMETER: in. | in. | in. | in.

(16) LENGTH: ft. | ft. | ft. | in.

(17) DEPTH TO TOP OF SCREEN, FROM TOP OF CASING (Feet)

YIELD TEST

(18) DATE: 8/24/04

(19) DURATION OF TEST: 4 hours

(20) LIFT METHOD ☒ Pump ☐ Air Lift ☐ Bail

(21) STABILIZED DISCHARGE (GPM): 2 GPM

(22) STATIC LEVEL PRIOR TO TEST (feet/inches below top of casing): 19' 4"

(23) MAXIMUM DRAWDOWN (Stabilized) (feet/inches below top of casing): 300 feet

(24) RECOVERY (Time in hours/minutes): 4 hours

(25) Was the water produced during test discharged away from immediate area? Yes X No ___

PUMP INSTALLATION

(26) PUMP INSTALLED? YES X NO ___

(27) DATE: 8/20/04

(28) PUMP INSTALLER: Hanson Well Drilling & Pump Co., Inc.

(29) TYPE: submersible

(30) MAKE: Gould

(31) MODEL: 5GS20412

(32) MAXIMUM CAPACITY (GPM): 9 GPM

(33) PUMP INSTALLATION LEVEL FROM TOP OF CASING (Feet): 760'

(34) METHOD OF DRILLING ☒ Rotary ☐ Cable Tool ☐ Other ___

(35) USE OF WATER (see instructions for choices): Domestic

(36) DATE DRILLING WORK STARTED: 8/18/04

(37) DATE DRILLING WORK COMPLETED: 8/19/04

(38) DATE REPORT FILED: 8/26/04

(39) DRILLER & COMPANY: Brian R. Wilcox, Hanson Well Drilling & Pump Co., Inc.

(40) DEC REGISTRATION NO.: 10005

TOP OF WELL

0'to 20'	Clay
20'to55'	Gravel
55'to460'	Gray shale
460'to802'	Black & gray Shale

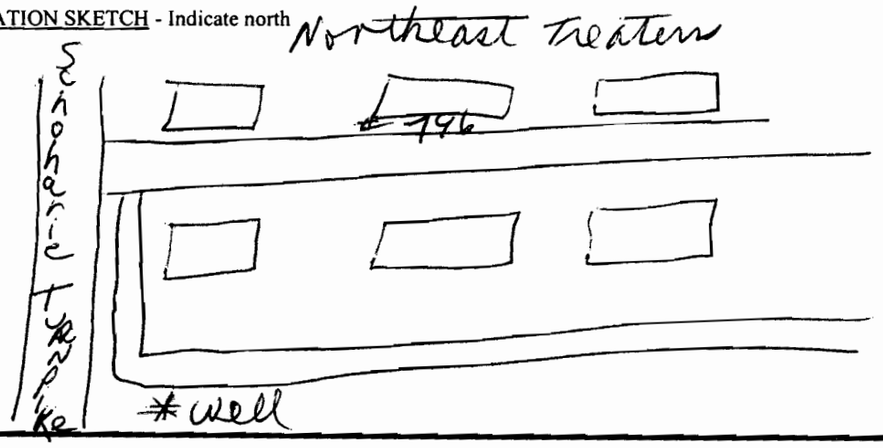
802 Feet
BOTTOM OF HOLE

* Show log of geologic materials encountered with depth below ground surface, water bearing beds and water levels in each; casings; screens; pump; additional pumping tests and other matters of interest, e.g., water quality (sulphur, salt, methane). Describe repair work. Attach separate sheet if necessary.

See further instructions titled "Instructions for New York State Well Completion Report".

NYSDEC COPY

LOCATION SKETCH - Indicate north



NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

(1) COUNTY Greene

(2) TOWN Athens

Well #1

(3) DEC Well Number G2542

WATER WELL COMPLETION REPORT

(4) OWNER Northeast Treaters Of N.Y. L.C.C

(5) ADDRESS 696 Schoharie Turnpike Athens, N.Y.

(6) LOCATION OF WELL (See Instructions On Reverse)
Show Lat/Long if available and method used: 42' 17.20N, 073' 50.42W
☒ GPS ☐ Map Interpolation

(7) DEPTH OF WELL BELOW LAND SURFACE (feet): 83

(8) DEPTH TO GROUNDWATER BELOW LAND SURFACE (feet): 2 DATE MEASURED: 8-14-07

CASINGS

(9) DIAMETER	in. | 6	in. |	in. |	in.
(10) LENGTH	ft. | 80' 6"	ft. |	ft. |	in.

(11) GROUT TYPE / SEALING: Bentionite

(12) GROUT / SEALING INTERVAL (feet) FROM 20 TO 5

SCREENS

(13) MAKE & MATERIAL		(14) OPENINGS		
(15) DIAMETER	in. |	in. |	in. |	in.
(16) LENGTH	ft. |	ft. |	ft. |	in.

(17) DEPTH TO TOP OF SCREEN, FROM TOP OF CASING (Feet)

YIELD TEST

(18) DATE: 8-15-07

(19) DURATION OF TEST: 6 hrs.

(20) LIFT METHOD ☒ Pump ☐ Air Lift ☐ Bail

(21) STABILIZED DISCHARGE (GPM): 15+

(22) STATIC LEVEL PRIOR TO TEST (feet/inches below top of casing): 2

(23) MAXIMUM DRAWDOWN (Stabilized) (feet/inches below top of casing): 7.6

(24) RECOVERY (Time in hours/minutes): overnite

(25) Was the water produced during the test discharged away from immediate area? Yes ___ No X

PUMP INSTALLATION

(26) PUMP INSTALLED? YES ___ NO ___

(27) DATE

(28) PUMP INSTALLER

(29) TYPE

(30) MAKE

(31) MODEL

(32) MAXIMUM CAPACITY (GPM)

(33) PUMP INSTALLATION LEVEL FROM TOP OF CASING (Feet)

(34) METHOD OF DRILLING ☐ Rotary ☒ Cable Tool ☐ Other ___

(35) USE OF WATER (See instructions for choices): Domestic

(36) DATE DRILLING WORK STARTED: 8-12-07

(37) DATE DRILLING WORK COMPLETED: 8-14-07

(38) DATE REPORT FILED: 9-20-07

(39) REGISTERED COMPANY: L.H. Heimburge

(40) DEC REGISTRATION NO.: NYRD 10186

(41) CERTIFIED DRILLER (Print name): L.H. Heimburge

(42) CERTIFIED DRILLER SIGNATURE: L.H. Heimburge

* Show log of geologic materials encountered with depth below ground surface, water bearing beds and water levels in each; casings; screens; pump; additional pumping tests and other matters of interest, e.g., water quality (sulphur, salt, methane). Describe repair work. Attach separate sheet if necessary.

LOG *

Ground Surface EL. 106 ft. above sea level

Top Of Casing is located 1+ ft. above (+) or below (-) ground surface

TOP OF WELL

fill		4
black clay		10
brown sticky clay		20
light gray clay		45
dark gray clay soft		60
tough light gray clay		76
H20 large sandstone slab broken quartz shale layers shale gravel		83
bedrock	???	
		83

BOTTOM OF HOLE

NYSDEC COPY

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

(1) COUNTY Greene

(2) TOWN Athens

(3) DEC Well Number G 2547

WATER WELL COMPLETION REPORT

(4) OWNER Northeast Treaters Of N.Y. L.L.C.

(5) ADDRESS 696 Schoharie Turnpike Athens N.Y.

(6) LOCATION OF WELL (See Instructions On Reverse) Show Lat/Long if available and method used: 43' 17.23N, 073' 50.41W

☒ GPS ☐ Map Interpolation

(7) DEPTH OF WELL BELOW LAND SURFACE (feet) 210

(8) DEPTH TO GROUNDWATER BELOW LAND SURFACE (feet) 4 DATE MEASURED 8-31-07

CASINGS

(9) DIAMETER in. | 6 | in. | | in. | | in.

(10) LENGTH ft. | 86 | ft. | | ft. | | in.

(11) GROUT TYPE / SEALING Bentionite & clay

(12) GROUT / SEALING INTERVAL (feet) FROM 30 TO 5

SCREENS

(13) MAKE & MATERIAL

(14) OPENINGS

(15) DIAMETER in. | | in. | | in. | | in.

(16) LENGTH ft. | | ft. | | ft. | | in.

(17) DEPTH TO TOP OF SCREEN, FROM TOP OF CASING (Feet)

YIELD TEST

(18) DATE 9-4-07

(19) DURATION OF TEST 8

(20) LIFT METHOD ☒ Pump ☐ Air Lift ☐ Bail

(21) STABILIZED DISCHARGE (GPM) 20

(22) STATIC LEVEL PRIOR TO TEST (feet/inches below top of casing) 4

(23) MAXIMUM DRAWDOWN (Stabilized) (feet/inches below top of casing)

(24) RECOVERY (Time in hours/minutes) overnite

(25) Was the water produced during the test discharged away from immediate area? Yes X No

PUMP INSTALLATION

(26) PUMP INSTALLED? YES X NO

(27) DATE 10-07-07

(28) PUMP INSTALLER L.Heimburge

(29) TYPE submersible

(30) MAKE goulds

(31) MODEL 10GS05

(32) MAXIMUM CAPACITY (GPM) 20

(33) PUMP INSTALLATION LEVEL FROM TOP OF CASING (Feet) 60

(34) METHOD OF DRILLING ☐ Rotary ☒ Cable Tool ☐ Other

(35) USE OF WATER (See instructions for choices) Industrial

(36) DATE DRILLING WORK STARTED 8-20-07

(37) DATE DRILLING WORK COMPLETED 8-31-07

(38) DATE REPORT FILED 11-20-07

(39) REGISTERED COMPANY L.H. Heimburge Well Drilling

(40) DEC REGISTRATION NO. NYRD 10186

(41) CERTIFIED DRILLER (Print name) L.H. Heimburge

(42) CERTIFIED DRILLER SIGNATURE * L.H. Heimburge

* By signing this document I hereby affirm that: (1) I am certified to supervise water well drilling activities as defined by Environmental Conservation Law §15-1502; (2) this water well was constructed in accordance with water well standards promulgated by the New York State Department of Health; (3) under the penalty of perjury the information provided in this Well Completion Report is true, accurate and complete, and I understand that any false statement made herein is punishable as a class A Misdemeanor under Penal Law §210.45.

(43) LOG

Ground Surface EL. 101 ft. above sea level

Top Of Casing is located _____ ft. above (+) or below (-) ground surface

TOP OF WELL

fill	5
brown sticky clay	20
tough light gray clay	30
soft dark gray clay	50
tough sticky dark gray clay	
large angular shale gravel w/ fine coarse gravel w/ clay streaks	84
fractured bedrock sandstone & shale w/ quartz layers (NORMANSKILL FORMATION)	210

BOTTOM OF HOLE

NYSDEC COPY

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

(1) COUNTY Greene

(2) TOWN Athens

(3) DEC Well Number: G 2560

WATER WELL COMPLETION REPORT

(4) OWNER: Northeast Treaters Of N.Y. L.L.C.

(5) ADDRESS: 696 Schoharie Turnpike, Athens, N.Y.

(6) LOCATION OF WELL (See Instructions On Reverse)
Show Lat/Long if available and method used:
☒ GPS ☐ Map Interpolation 42° 17.18 N, 073° 50.30 W

(7) DEPTH OF WELL BELOW LAND SURFACE (feet): 265

(8) DEPTH TO GROUNDWATER BELOW LAND SURFACE (feet): 8 DATE MEASURED: 9-20-07

CASINGS

(9) DIAMETER	in. | 6	in. |	in. |	in.
(10) LENGTH	ft. | 26	ft. |	ft. |	in.

(11) GROUT TYPE / SEALING: Bentionite

(12) GROUT / SEALING INTERVAL (feet) FROM 4 TO 22

SCREENS

(13) MAKE & MATERIAL		(14) OPENINGS		
(15) DIAMETER	in. |	in. |	in. |	in.
(16) LENGTH	ft. |	ft. |	ft. |	in.

(17) DEPTH TO TOP OF SCREEN, FROM TOP OF CASING (Feet)

YIELD TEST

(18) DATE: 9-20-07

(19) DURATION OF TEST: 2 hrs.

(20) LIFT METHOD ☐ Pump ☐ Air Lift ☒ Bail

(21) STABILIZED DISCHARGE (GPM): 2-3 g.p.m.

(22) STATIC LEVEL PRIOR TO TEST (feet/inches below top of casing): 10

(23) MAXIMUM DRAWDOWN (Stabilized) (feet/inches below top of casing): 260

(24) RECOVERY (Time in hours/minutes): overnite

(25) Was the water produced during the test discharged away from immediate area? Yes X No

PUMP INSTALLATION

(26) PUMP INSTALLED? YES X NO

(27) DATE: oct. 2007

(28) PUMP INSTALLER: L.Heimburge

(29) TYPE: Submersible

(30) MAKE: Goulds

(31) MODEL: 7GSo5412L

(32) MAXIMUM CAPACITY (GPM): 9 g.p.m.

(33) PUMP INSTALLATION LEVEL FROM TOP OF CASING (Feet): 255

(34) METHOD OF DRILLING ☐ Rotary ☒ Cable Tool ☐ Other

(35) USE OF WATER (See instructions for choices): Industrial

(36) DATE DRILLING WORK STARTED: 9-5-07

(37) DATE DRILLING WORK COMPLETED: 9-20-07

(38) DATE REPORT FILED: 11-20-07

(39) REGISTERED COMPANY: L.H.Heimburge Well Drilling

(40) DEC REGISTRATION NO.: NYRD 10186

(41) CERTIFIED DRILLER (Print name): L.H.Heimburge

(42) CERTIFIED DRILLER SIGNATURE*: L.H.Heimburge

* By signing this document I hereby affirm that: (1) I am certified to supervise water well drilling activities as defined by Environmental Conservation Law §15-1502; (2) this water well was constructed in accordance with water well standards promulgated by the New York State Department of Health; (3) under the penalty of perjury the information provided in this Well Completion Report is true, accurate and complete, and I understand that any false statement made herein is punishable as a class A Misdemeanor under Penal Law §210.45.

(43) LOG

Ground Surface EL. 108 ft. above sea level

Top Of Casing is located 3 ft. above (+) or below (-) ground surface

TOP OF WELL

FILL		5
BROWN CLAY		12
GRAY CLAY		19
BROKEN SHALE COBBLES & HARDPAN		22
BEDROCK SANDSTONE & SHALE		35
	85	
	90	fractured shale & quartz
	150	fractured
	160	shale & quartz
		265

BOTTOM OF HOLE

NYSDEC COPY

APPENDIX D

BORING LOGS

STERLING
Sterling Environmental Engineering, P.C.

Boring ID: SP - 18

Project Name/No. Northeast Treaters / 2014-08 Location: Athens, NY
Drilling Contractor/Personnel: SJB - Ralph Ciccateri
Drilling Equip./Method: Geoprobe 5400 Inspector: Joe Spaulding
Sampling Method: Direct Push Size/Type of Bit: 1 1/2" Geoprobe
Elevation/Ground Surface: Not Measured Start/Finish Date: 4-15-2015 / 4-15-2015
Depth to Groundwater (date): None When Drilled Well Type: None

Depth (ft.)	Sample No.	Recovery (ft.)	Geologic Description	Comments:
0.0				
0.5	S - 1	2.7'	- Dark brown; Organic Loam; moist; Occasional cobbles/pebbles (Top soil) ~0.5' (0.5')	- Lab Sample SP-18S collected at 0.0-2.0" and SP-18 collected at 0.0-1.0'
1.0				
1.5				- Backfilled hole with Bentonite, Placed pink flag at borehole location
2.0			- Dark gray to gray clay; some silt; mottled (brown); medium stiff to stiff; dry.	
2.5				
3.0				
3.5				
4.0				
4.5			Bottom of Boring at 4.0'	
5.0				
5.5				
6.0				
6.5				
7.0				
7.5				
8.0				
8.5				
9.0				
9.5				
10.0				

Proportions: Trace = 0 - 10% Little = 10 - 20% Some = 20 - 35% And = 35 - 50%

STERLING
Sterling Environmental Engineering, P.C.

Boring ID: SP - 19

Project Name/No. Northeast Treaters / 2014-08 Location: Athens, NY
Drilling Contractor/Personnel: SJB - Ralph Ciccateri
Drilling Equip./Method: Geoprobe 5400 Inspector: Joe Spaulding
Sampling Method: Direct Push Size/Type of Bit: 1 1/2" Geoprobe
Elevation/Ground Surface: Not Measured Start/Finish Date: 4-15-2015 / 4-15-2015
Depth to Groundwater (date): None When Drilled Well Type: None

Depth (ft.)	Sample No.	Recovery (ft.)	Geologic Description	Comments:
0.0				
0.5	S - 1	3.7'	- Dark brown; Organic Loam; moist; occasional cobbles/pebbles (Top soil) ~0.5' 0.5'	- Lab Sample SP-19S collected at 0.0-2.0" and SP-19 collected at 0.0-1.0' - DUP 2 taken at 0.0-1.0' - Backfilled hole with Bentonite, Placed pink flag at borehole location
1.0				
1.5				
2.0				
2.5			- Dark gray to gray clay; some silt; mottled (brown); medium stiff to stiff; dry.	
3.0				
3.5				
4.0				
4.5			Bottom of Boring at 4.0'	
5.0				
5.5				
6.0				
6.5				
7.0				
7.5				
8.0				
8.5				
9.0				
9.5				
10.0				

Proportions: Trace = 0 - 10% Little = 10 - 20% Some = 20 - 35% And = 35 - 50%

STERLING
Sterling Environmental Engineering, P.C.

Boring ID: SP - 20

Project Name/No. Northeast Treaters / 2014-08 Location: Athens, NY
Drilling Contractor/Personnel: SJB - Ralph Ciccateri
Drilling Equip./Method: Geoprobe 5400 Inspector: Joe Spaulding
Sampling Method: Direct Push Size/Type of Bit: 1 1/2" Geoprobe
Elevation/Ground Surface: Not Measured Start/Finish Date: 4-15-2015 / 4-15-2015
Depth to Groundwater (date): None When Drilled Well Type: 1 1/4" PVC

Depth (ft.)	Sample No.	Recovery (ft.)	Geologic Description	Comments:
0.0				
0.5	S - 1	3.2'	- Dark brown; Organic Loam; Occasional cobbles/pebbles moist; (Top soil) ~0.5' 0.5'	- Lab Sample SP-20S collected at 0.0-2.0" and SP-20 collected at 0.0-1.0' - Monitoring Well MW-2 installed. See separte well installation diagram.
1.0				
1.5				
2.0				
2.5				
3.0				
3.5				
4.0			- Dark gray to gray clay; some silt; mottled (brown); medium stiff to stiff; dry.	
4.5	S - 2	4.0'		
5.0				
5.5				
6.0				
6.5				
7.0				
7.5				
8.0			Bottom of Boring at 8.0'	
8.5				
9.0				
9.5				
10.0				

Proportions: Trace = 0 - 10% Little = 10 - 20% Some = 20 - 35% And = 35 - 50%

STERLING
Sterling Environmental Engineering, P.C.

Boring ID: SP - 21

Project Name/No. Northeast Treaters / 2014-08 Location: Athens, NY
Drilling Contractor/Personnel: SJB - Ralph Ciccateri
Drilling Equip./Method: Geoprobe 5400 Inspector: Joe Spaulding
Sampling Method: Direct Push Size/Type of Bit: 1 1/2" Geoprobe
Elevation/Ground Surface: Not Measured Start/Finish Date: 4-15-2015 / 4-15-2015
Depth to Groundwater (date): None When Drilled Well Type: None

Depth (ft.)	Sample No.	Recovery (ft.)	Geologic Description	Comments:
0.0				
0.5	S - 1	3.8'	- Asphalt 5.0" - Brown to gray sand and gravel; medium coarse to coarse; trace clay and silt; occasional cobbles/pebbles; loose; dry; (fill material) 1.0' - Dark gray to gray clay; some silt; mottled (brown); medium stiff to stiff; dry.	- Lab Sample SP - 21S collected at 0 - 2.0" and sample SP - 21 collected at 0 - 1.0'
1.0				
1.5				
2.0				
2.5				
3.0				
3.5				
4.0			Bottom of Boring at 4.0'	
4.5				
5.0				
5.5				
6.0				
6.5				
7.0				
7.5				
8.0				
8.5				
9.0				
9.5				
10.0				

Proportions: Trace = 0 - 10% Little = 10 - 20% Some = 20 - 35% And = 35 - 50%

STERLING
Sterling Environmental Engineering, P.C.

Boring ID: SP - 22

Project Name/No. Northeast Treaters / 2014-08 Location: Athens, NY
Drilling Contractor/Personnel: SJB - Ralph Ciccateri
Drilling Equip./Method: Geoprobe 5400 Inspector: Joe Spaulding
Sampling Method: Direct Push Size/Type of Bit: 1 1/2" Geoprobe
Elevation/Ground Surface: Not Measured Start/Finish Date: 4-15-2015 / 4-15-2015
Depth to Groundwater (date): None When Drilled Well Type: None

Depth (ft.)	Sample No.	Recovery (ft.)	Geologic Description	Comments:
0.0				
0.5	S - 1	3.1'	- Asphalt 5.0"	- Lab Sample SP - 22 collected at 0 - 1.0'
1.0			- Brown to gray sand and gravel; medium coarse to coarse; trace clay and silt; occasional cobbles/pebbles; loose; dry; (fill material) 1.7'	
1.5				
2.0				
2.5			- Dark gray to gray clay; some silt; mottled (brown); medium stiff to stiff; dry.	
3.0				
3.5				
4.0				
4.5			Bottom of Boring at 4.0'	
5.0				
5.5				
6.0				
6.5				
7.0				
7.5				
8.0				
8.5				
9.0				
9.5				
10.0				

Proportions: Trace = 0 - 10% Little = 10 - 20% Some = 20 - 35% And = 35 - 50%

STERLING
Sterling Environmental Engineering, P.C.

Boring ID: SP - 23

Project Name/No. Northeast Treaters / 2014-08 Location: Athens, NY
Drilling Contractor/Personnel: SJB - Ralph Ciccateri
Drilling Equip./Method: Geoprobe 5400 Inspector: Joe Spaulding
Sampling Method: Direct Push Size/Type of Bit: 1 1/2" Geoprobe
Elevation/Ground Surface: Not Measured Start/Finish Date: 4-15-2015 / 4-15-2015
Depth to Groundwater (date): None When Drilled Well Type: None

Depth (ft.)	Sample No.	Recovery (ft.)	Geologic Description	Comments:
0.0				
0.5	S - 1	3.2'	- Asphalt 5.0"	- Lab Sample SP - 23 collected at 0 - 1.0'
1.0			- Brown to gray sand and gravel; medium coarse to coarse; trace clay and silt; occasional cobbles/pebbles; loose; dry; (fill material)	
1.5				
2.0			2.1'	
2.5			- Dark gray to gray clay; some silt; mottled (brown); medium stiff to stiff; dry.	
3.0				
3.5				
4.0				
4.5			Bottom of Boring at 4.0'	
5.0				
5.5				
6.0				
6.5				
7.0				
7.5				
8.0				
8.5				
9.0				
9.5				
10.0				

Proportions: Trace = 0 - 10% Little = 10 - 20% Some = 20 - 35% And = 35 - 50%

STERLING
Sterling Environmental Engineering, P.C.

Boring ID: SP - 24

Project Name/No. Northeast Treaters / 2014-08 Location: Athens, NY
Drilling Contractor/Personnel: SJB - Ralph Ciccateri
Drilling Equip./Method: Geoprobe 5400 Inspector: Joe Spaulding
Sampling Method: Direct Push Size/Type of Bit: 1 1/2" Geoprobe
Elevation/Ground Surface: Not Measured Start/Finish Date: 4-15-2015 / 4-15-2015
Depth to Groundwater (date): None When Drilled Well Type: None

Depth (ft.)	Sample No.	Recovery (ft.)	Geologic Description	Comments:
0.0				
0.5	S - 1	2.6'	- Asphalt 5.0"	- Lab Sample SP-24 collected at 0.0-1.0'
1.0			- Brown to gray sand and gravel; medium coarse to coarse; occasional cobbles/pebbles; loose; dry; (fill material)	- Monitoring Well MW-3 installed. See separte well installation diagram.
1.5				
2.0			1.8'	
2.5				
3.0				
3.5				
4.0				
4.5	S - 2	4.0'	- Dark gray to gray brown clay; some silt; mottled (brown); medium stiff to stiff; dry.	
5.0				
5.5				
6.0				
6.5				
7.0				
7.5				
8.0			Bottom of Boring @ 8.0'	
8.5				
9.0				
9.5				
10.0				

Proportions: Trace = 0 - 10% Little = 10 - 20% Some = 20 - 35% And = 35 - 50%

STERLING
Sterling Environmental Engineering, P.C.

Boring ID: SP - 25

Project Name/No. Northeast Treaters / 2014-08 Location: Athens, NY
Drilling Contractor/Personnel: SJB - Ralph Ciccateri
Drilling Equip./Method: Geoprobe 5400 Inspector: Joe Spaulding
Sampling Method: Direct Push Size/Type of Bit: 1 1/2" Geoprobe
Elevation/Ground Surface: Not Measured Start/Finish Date: 4-15-2015 / 4-15-2015
Depth to Groundwater (date): None When Drilled Well Type: None

Depth (ft.)	Sample No.	Recovery (ft.)	Geologic Description	Comments:
0.0				
0.5	S - 1	3.6'	- 2.0" of Asphalt - Brown to gray sand and gravel; medium coarse to coarse; occasional cobbles/pebbles; loose; dry; (fill material) 2.0'	- Lab Sample SP-25 collected at 0.0-1.0' - Monitoring Well MW-4 installed. See separte well installation diagram.
1.0				
1.5				
2.0				
2.5				
3.0				
3.5				
4.0				
4.5	S - 2	4.0'	- Dark gray to gray brown clay; some silt; mottled (brown); medium stiff to stiff; dry.	
5.0				
5.5				
6.0				
6.5				
7.0				
7.5				
8.0			Bottom of Boring 8.0'	
8.5				
9.0				
9.5				
10.0				

Proportions: Trace = 0 - 10% Little = 10 - 20% Some = 20 - 35% And = 35 - 50%

STERLING
Sterling Environmental Engineering, P.C.

Boring ID: MW - 1

Project Name/No. Northeast Treaters / 2014-08 Location: Athens, NY
Drilling Contractor/Personnel: SJB - Ralph Ciccateri
Drilling Equip./Method: Geoprobe 5400 Inspector: Joe Spaulding
Sampling Method: Direct Push Size/Type of Bit: 1 1/2" Geoprobe
Elevation/Ground Surface: Not Measured Start/Finish Date: 4-15-2015 / 4-15-2015
Depth to Groundwater (date): None When Drilled Well Type: None

Depth (ft.)	Sample No.	Recovery (ft.)	Geologic Description	Comments:
0.0				
0.5	S - 1	2.9'	- Brown to gray sand and gravel; medium coarse to coarse; occasional cobbles/pebbles; loose; dry; (fill material)	- Monitoring Well MW-1 installed. See separte well installation diagram.
1.0				
1.5				
2.0			2.0'	
2.5				
3.0				
3.5				
4.0				
4.5	S - 2	4.0'	- Dark gray to gray brown clay; some silt; mottled (brown); medium stiff to stiff; dry.	
5.0				
5.5				
6.0				
6.5				
7.0				
7.5				
8.0			Bottom of Boring 8.0'	
8.5				
9.0				
9.5				
10.0				

Proportions: Trace = 0 - 10% Little = 10 - 20% Some = 20 - 35% And = 35 - 50%

APPENDIX E

EXCAVATION WORK PLAN
(EWP)

Sterling Environmental Engineering, P.C.

NEW YORK STATE BROWNFIELD CLEANUP PROGRAM

NORTHEAST TREATERS OF NEW YORK, LLC
ATHENS, NY
SITE #C420029

EXCAVATION WORK PLAN (EWP)

Prepared for:

Northeast Treaters of New York, LLC
796 Schoharie Turnpike
Athens, New York 12015

Prepared by:

Sterling Environmental Engineering, P.C.
24 Wade Road
Latham, New York 12110

March 31, 2015
Revised April 20, 2016

"Serving our clients and the environment since 1993"

NEW YORK STATE BROWNFIELD CLEANUP PROGRAM

NORTHEAST TREATERS OF NEW YORK, LLC
ATHENS, NY
SITE #C420029

EXCAVATION WORK PLAN (EWP)

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Figures

Appendices

EXECUTIVE SUMMARY

This Excavation Work Plan (EWP) has been prepared for the Northeast Treaters of New York, LLC (Northeast Treaters) site, which is included in the Brownfield Cleanup Program (BCP) as Site #C420029, in anticipation of future soil intrusive activities that present a reasonable possibility to encounter chromium and arsenic impacted soils in excess of site cleanup criteria.

1.0 APPLICABLILITY AND NOTIFICATION

This EWP only applies to the BCP area, located on the easternmost portion of the Northeast Treaters property, as defined by the executed copy of the Brownfield Cleanup Agreement dated December 31, 2014. The New York State Department of Environmental Conservation (NYSDEC) requires this EWP for future soil intrusive activities that present a reasonable possibility to encounter chromium and arsenic impacted soils in excess of site cleanup criteria. This EWP is not triggered if existing data, and/or testing performed prior to soil intrusive activities, indicates that soil to be disturbed during soil intrusive activities meets site cleanup criteria.

At least 15 days prior to the start of any activity anticipated to encounter contamination, the site owner or their representative will notify the NYSDEC. The table below includes contact information for the above notification. The information on this table will be updated as necessary to provide accurate contact information.

Notification Contact Information

Chief, Site Control Section	(518) 402-9569
Regional Hazardous Waste Engineer	(518) 357-2273

This notification will include:

- A detailed description of the work to be performed, including the location and areal extent, plans for site regrading, intrusive elements or utilities to be installed, estimated volumes of contaminated soil to be excavated and any work that may impact an engineering control;
- A summary of environmental conditions anticipated in the work areas, including the nature and concentration levels of contaminants of concern, potential presence of grossly contaminated media, and plans for any pre-construction sampling;
- A schedule for the work, detailing the start and completion of all intrusive work;
- A summary of the applicable components of this EWP;
- A statement that the work will be performed in compliance with this EWP and 29 CFR 1910.120;
- A copy of the contractor's Health and Safety Plan (HASP), in electronic format, if it differs from the HASP provided in Appendix A of the Remedial Investigation Work Plan for the site;
- Identification of disposal facilities for potential waste streams; and
- Identification of sources of any anticipated backfill, along with required chemical testing results.

2.0 SOIL ASSESSMENT METHODS

The primary contaminants of concern for the BCP Site are chromium and arsenic. These compounds cannot be detected by visual, olfactory or instrument-based soil screening. Therefore, an assessment will be performed by a qualified environmental professional or remediation engineer during all remedial and development excavations into known or potentially contaminated material at the BCP site to determine the likelihood of encountering soil impacted by chromium or arsenic, based on data from the site remedial investigation and existing data. An assessment will be performed for all invasive work at the BCP site, such as excavations for foundations, underground utility work, or other necessary ground intrusive work.

Soils will be segregated based on previous environmental data into material that requires offsite disposal, material that requires further testing, material that can be returned to the subsurface, and clean material that can be used as cover soil.

3.0 STOCKPILE METHODS

Approximate stockpile locations are shown in Figure 1. During construction or remedial activities relating to the BCP site, stockpiles will be managed in a designated area(s) within the boundaries of the BCP site. The BCP site will be physically delineated during remedial activities. Stockpiles of contaminated or potentially contaminated material will be 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 of contaminated or potentially contaminated material will be covered at all times with appropriately anchored tarps. Stockpiles of contaminated or potentially contaminated material will be inspected at a minimum once each week and after every storm event and damaged tarp covers will be promptly replaced. Results of inspections will be recorded in a logbook and maintained at the site and available for inspection by NYSDEC.

Stockpiles of uncontaminated material, which meets Track 1 unrestricted use soil cleanup objectives (SCOs), will be subject to erosion and sediment control practices pursuant to the State Pollutant Discharge Elimination System (SPDES) General Permit for Stormwater Discharges from Construction Activities (Permit No. GP-0-15-002).

4.0 MATERIALS EXCAVATION AND LOADOUT

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

The presence of utilities and easements on the site will be investigated by the qualified environmental professional to the extent such utilities and easements are modified or added after remedial activities are completed. It will be determined whether a risk or impediment to the planned work under this EWP is posed by utilities or easements on the site.

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

A tire wash will be operated onsite for work performed under this EWP. The qualified environmental professional will be responsible for ensuring that all egress points for truck and equipment transport from the site are free of loose soil and other materials derived from the site during intrusive excavation activities. Only outbound trucks that come in contact with chromium and arsenic impacted soil will be required to be washed at the truck wash before leaving the site until the activities performed under this section are complete. Locations where vehicles enter or exit the site shall be inspected daily for evidence of offsite soil tracking.

5.0 MATERIALS TRANSPORT OFFSITE

Transport of materials will be performed by licensed haulers in accordance with appropriate local, State, and Federal regulations. Haulers will be appropriately licensed and trucks properly placarded.

Material transported by trucks exiting the site will be secured with tight-fitting covers. Loose-fitting canvas-type truck covers will be prohibited. If loads contain wet material capable of producing free liquid, truck liners will be used. Truck wheels that come in contact with chromium and arsenic impacted soils will be washed prior to leaving the site or if determined to be necessary by the qualified environmental professional. Truck wash waters will be collected and disposed of offsite in an appropriate manner.

The truck transport route is provided as Appendix A. All trucks loaded with site materials will exit the site using only this approved truck route which takes into account: (a) limiting transport through residential areas and past sensitive sites; (b) use of city or town mapped truck routes; (c) prohibiting offsite queuing of trucks entering the facility; (d) limiting total distance to major highways; (e) promoting safety in access to highways; (f) overall safety in transport; and (g) community input (if necessary).

Trucks will be prohibited from stopping and idling in the neighborhood outside the project site. Egress points for truck and equipment transport from the site will be kept free of loose soil and related materials during site remediation and development. Queuing of trucks will be performed onsite in order to minimize offsite disturbance. Offsite queuing will be prohibited.

6.0 MATERIALS MANAGEMENT OFFSITE

All soil/fill/solid waste excavated and removed from the BCP site will be classified as contaminated and regulated material, unless specially approved by the NYSDEC, and will be transported and disposed in accordance with all local, State and Federal regulations. Offsite disposal locations for excavated soils will be identified in the pre-excavation notification. This will include estimated quantities and a breakdown by class of disposal facility if appropriate, i.e. hazardous waste disposal facility, solid waste landfill, petroleum treatment facility, construction and demolition (C&D) recycling facility, etc. Actual disposal quantities and associated documentation will be reported to the NYSDEC in the Periodic Review Report. This documentation will include: waste profiles, test results, facility acceptance letters, manifests, bills of lading and facility receipts.

Non-hazardous, contaminated fill and soils removed from the BCP site will be handled, at minimum, as a Municipal Solid Waste in accordance with 6 NYCRR Part 360-1.2. Material that does not meet Track 1 unrestricted use SCOs is prohibited from being taken to a New York State recycling facility (6 NYCRR Part 360-16 Registration Facility). Uncontaminated soil/fill from the BCP site that meets Track 1 unrestricted use SCOs may be reused (i.e. clean soil or fill removed for development purposes).

7.0 MATERIALS REUSE ONSITE

If excavated soil does not present characteristics indicating it is potentially contaminated (see Section 2.0) and is planned for reuse elsewhere on the property, where reuse is defined as material that originates at the BCP site and does not leave the property, a composite soil sample will be collected in accordance with DER-10 requirements. Chemical criteria for reuse of material elsewhere on the site will be established by the NYSDEC in the forthcoming decision document based on current and reasonably anticipated future land use.

NYSDEC DER-10 recommends one (1) composite soil sample be collected from five (5) locations within each stockpile (up to 300 cy). Sampling will be conducted in accordance with DER-10 Sections 5.4(e)4 and 5.4(e)10. A duplicate sample will also be collected for every twenty (20) composite soil samples collected. Composite soil samples will be analyzed for total chromium (Cr) and total arsenic (As).

Soil samples will be composited by placing equal portions of fill/soil from each of the five (5) composite sample locations from one (1) soil stockpile into a clean, stainless steel or Pyrex glass mixing bowl. The soil/fill will be thoroughly homogenized using a stainless steel scoop or trowel and transferred to containers provided by the laboratory. Sample containers will then be labeled and a Chain-of-Custody form will be prepared.

The qualified environmental professional will ensure that procedures defined for materials reuse in this EWP are followed and that unacceptable excavated soil does not remain onsite. Contaminated onsite material, including historic fill and contaminated soil, that is acceptable for reuse onsite will be placed below the 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 onsite will be sampled for asbestos and the results will be reported to the NYSDEC for acceptance. Concrete crushing or processing onsite will not be performed without prior NYSDEC approval. Organic matter (wood, roots, stumps, etc.) or other solid waste derived from clearing and grubbing of the site will not be reused onsite.

8.0 FLUIDS MANAGEMENT

All liquids to be removed from the BCP 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 may be recharged back to the land surface or subsurface of the BCP site, if testing indicates that the liquids meet applicable standards, criteria and guidance values.

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

9.0 COVER SYSTEM RESTORATION

After the completion of soil removal and any other invasive activities performed under this EWP, the cover system will be restored in a manner that complies with this EWP. Any previously existing demarcation layer will be replaced to provide a visual reference to the top of any remaining contaminated soil that would require adherence to special conditions for disturbance as defined in this EWP. If the type

of cover system changes from that which exists prior to the excavation (i.e., a soil cover is replaced by asphalt) a modification of the cover element of the remedy and the upper surface of the remaining contaminated soil will be deemed to have occurred. A figure showing the modified surface will be included in the subsequent Periodic Review Report and in any updates to the Site Management Plan.

10.0 BACKFILL FROM OFFSITE SOURCES

All materials proposed for import onto the BCP site will be approved by the qualified environmental professional and will be in compliance with provisions in this EWP prior to receipt at the site. Material from industrial sites, spill sites, or other environmental remediation sites or potentially contaminated sites will not be imported to the BCP site.

Soils imported as part of work performed under this EWP will meet the backfill and cover soil quality standards established in 6 NYCRR 375-6.7(d). The applicable soil quality standards are based on an evaluation of the land use, protection of groundwater and protection of ecological resources criteria. 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.

In accordance with NYSDEC DER-10, sampling is required for all imported soil for use as backfill or cover material. Sampling frequency of the material will be determined by a qualified environmental professional or remediation engineer. A minimum of one (1) sample will be analyzed from every new source, at the following sampling frequency for:

(1) soil or sand imported from a virgin mine/pit, at least one round of characterization samples for the initial 100 cubic yards of material;
(2) material sources other than a virgin mine/pit (e.g., a former manufacturing site), in accordance with Table 5.4(e)10 of DER-10; or
(3) sites where large amounts of cover material/backfill are required, the sampling frequency can be reduced from that specified in Table 5.4(e)10 once a trend of compliance is established. Sampling frequency may be modified from DER-10 requirements only with the approval of the NYSDEC.

According to NYSDEC DER-10, one (1) composite soil sample will be collected from five (5) locations within each stockpile (up to 300 cy). Sampling will be conducted in accordance with DER-10 Table 5.4(e)10. A duplicate sample will also be collected for every twenty (20) composite soil samples collected. Composite soil samples will be analyzed for Total Cr and As.

Soil samples will be composited by placing equal portions of fill/soil from each of the five (5) composite sample locations from one (1) soil stockpile into a clean, stainless steel or Pyrex glass mixing bowl. The soil/fill will be thoroughly homogenized using a stainless steel scoop or trowel and transferred to containers provided by the laboratory. Sample containers will then be labeled and a Chain-of-Custody form will be prepared.

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.

11.0 STORMWATER POLLUTION PREVENTION

As mandated by the SPDES General Permit for Stormwater Discharges from Construction Activities (Permit No. GP-0-15-002), construction projects exceeding one (1) acre must specify procedures for stormwater pollution prevention. The area of soil to be disturbed during remedial activities outlined in the Remedial Work Plan (RWP) is currently less than one (1) acre, and therefore a Stormwater Pollution Prevention Plan (SWPPP) is not required. However, the area of soil to be disturbed may exceed one (1) acre based on the results of the Predesign Sampling Investigation. If the one (1) acre threshold is exceeded a SWPPP will be prepared.

Erosion and sediment control measures identified in the RWP (i.e. silt fencing, erosion control socks or tubes, or hay bales) shall be observed to ensure proper implementation and operation. Discharge locations or points, if accessible, may be inspected to ascertain whether erosion control measures are effective in preventing significant impacts to receiving waters.

12.0 CONTINGENCY PLAN

It is highly unlikely that buried drums or underground storage tanks (USTs), or previously unidentified contaminant sources, will be encountered during soil excavation activities, based on the known site history. However, if such conditions are encountered a work plan will be provided to the NYSDEC for prompt approval to minimize interruption of the construction schedule. Construction-related excavation will continue elsewhere on the BCP site until the plan is approved by the NYSDEC. Following NYSDEC approval, appropriately trained personnel will excavate all of the drums and/or USTs while following all applicable Federal, State, and local regulations. Removed drums and USTs will be properly characterized and disposed at a permitted facility. The soil/fill surrounding the buried drums or USTs will be considered potentially contaminated and will be stockpiled and characterized.

Sampling will be performed on product, sediment and surrounding soils, etc. in accordance with DER-10 to determine the nature of the material and proper disposal method. Chemical analysis will be performed for a full list of analytes (TAL metals; TCL volatiles and semi-volatiles, TCL pesticides and PCBs), unless the site history and previous sampling results provide a sufficient justification to limit the list of analytes. In this case, a reduced list of analytes will be proposed to the NYSDEC for approval prior to sampling.

Identification of unknown or unexpected contaminated media identified by screening during invasive site work will be promptly communicated by telephone to NYSDEC's Project Manager. Reportable quantities of petroleum product associated with a release will also be reported to the NYSDEC Spills Hotline.

13.0 COMMUNITY AIR MONITORING PLAN

This EWP is to be utilized in coordination with the Community Air Monitoring Plan (CAMP) established for this project. Locations of air sampling stations will be adjusted on a daily or more frequent basis based on observed wind directions to provide at least one (1) upwind and one (1) downwind monitoring station. All monitoring readings will be recorded and made available for NYSDEC and NYSDOH personnel to review. Exceedances of action levels listed in the CAMP will be reported to NYSDEC and NYSDOH Project Managers.

14.0 ODOR CONTROL PLAN

This BCP site does not represent an odor risk. Notwithstanding, this odor control plan addresses the control of emissions of nuisance odors. Specific odor control methods to be used on a routine basis are described below. If nuisance odors are identified at the site boundary, or if odor complaints are received specific to work at the BCP site, work at the BCP site will be halted and the source of odors will be identified and corrected. Work will not resume until all nuisance odors have been abated. NYSDEC and NYSDOH will be notified of all odor events and of any other complaints about the project. Implementation of all odor controls, including the halt of work, is the responsibility of Northeast Treaters' Remediation Engineer, and any measures that are implemented will be discussed in the Periodic Review Report.

All necessary means will be employed to prevent onsite and offsite nuisances relative to the BCP site. At a minimum, these measures will include: (a) limiting the area of open excavations and size of soil stockpiles; (b) shrouding open excavations with tarps and other covers; and (c) using foams to cover exposed odorous soils. If odors develop and cannot be otherwise controlled, additional means to eliminate odor nuisances will include: (d) direct load-out of soils to trucks for offsite disposal; (e) use of chemical odorants in spray or misting systems; and, (f) use of staff to monitor odors in surrounding neighborhoods.

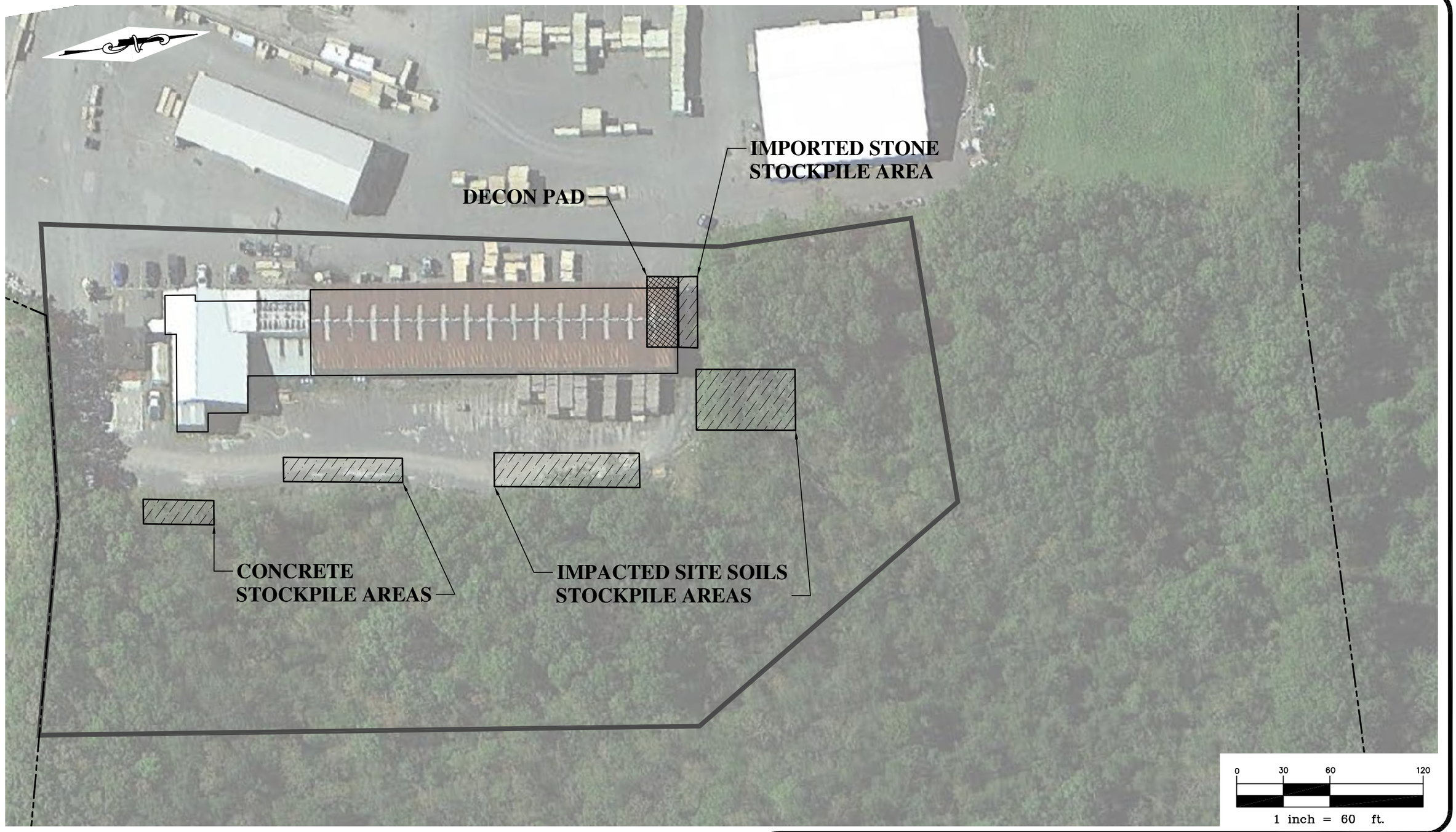
If nuisance odors develop during intrusive work that cannot be corrected, or where the control of nuisance odors cannot otherwise be achieved due to onsite conditions or close proximity to sensitive receptors, odor control will be achieved by sheltering the excavation and handling areas in a temporary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

15.0 DUST CONTROL PLAN

The Dust Control Plan (DCP) for the BCP site addresses dust management during invasive onsite work including the items listed below:

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

FIGURE 1



LEGEND:

PROPERTY BOUNDARY

BROWNFIELD CLEANUP AREA BOUNDARY (APPROXIMATELY 3.9 ACRES)

S:\Drawings\2014-08 - Northeast Treaters of New York - Athens NY\2014-08043.StockpileLocations.dwg 9/16/2015 12:01 PM

STERLING

Sterling Environmental Engineering, P.C.

24 Wade Road ♦ Latham, New York 12110

APPROXIMATE STOCKPILE LOCATIONS

NORTHEAST TREATERS

SCHOHARIE TURNPIKE

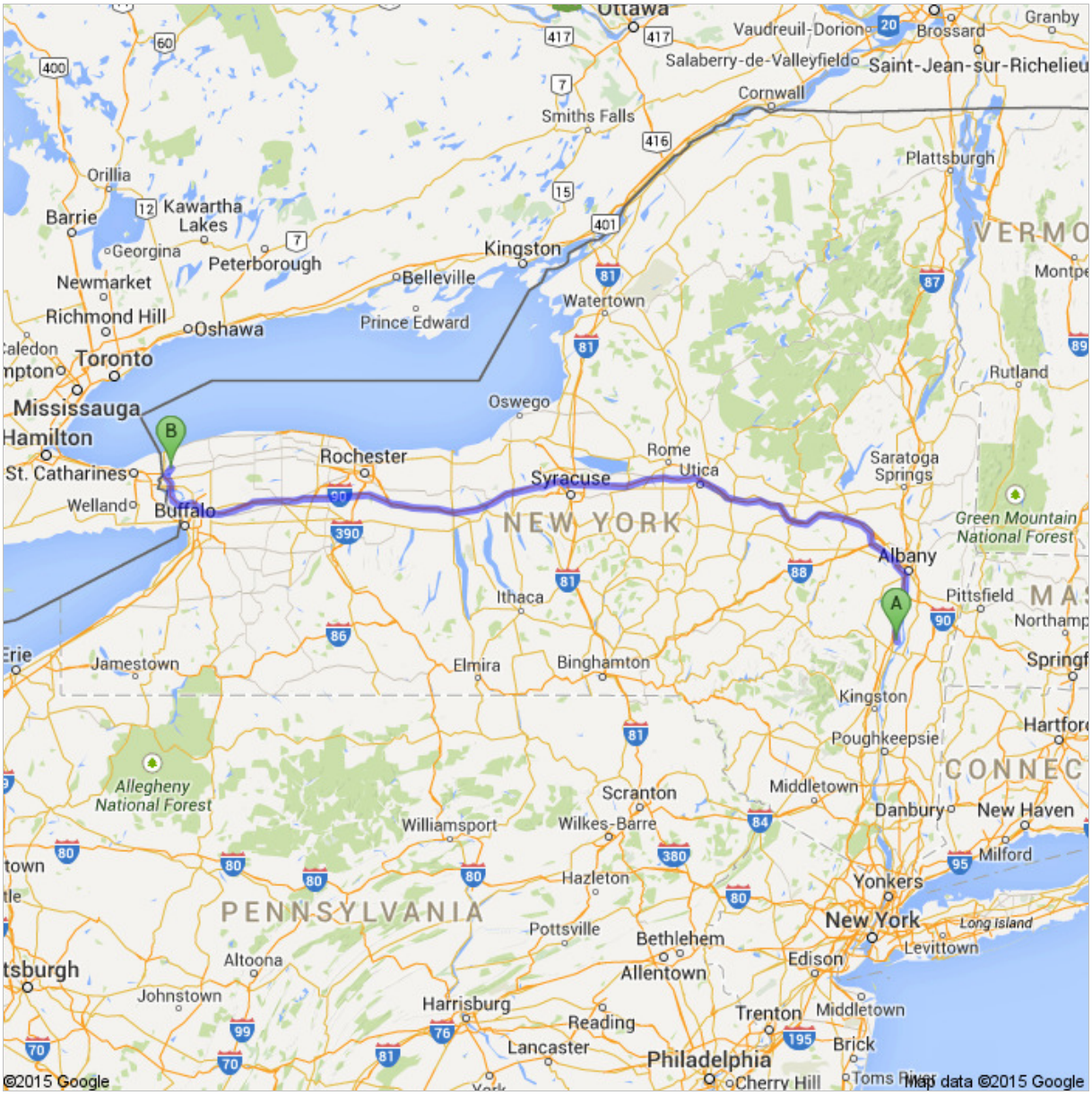
TOWN OF ATHENS GREENE CO., N.Y.

PROJ. No.: 2014-08	DATE: 9/16/15	SCALE: 1" = 60'	DWG. NO. 2014-08040	FIGURE 1

APPENDIX A

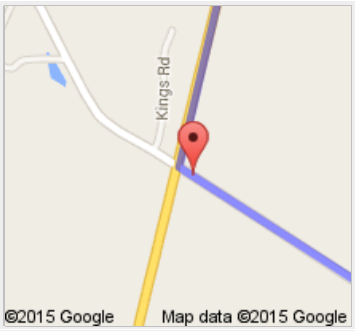
TRUCK TRANSPORT ROUTE

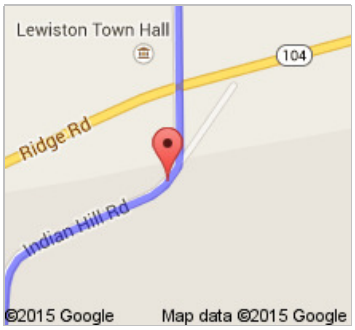
Directions to CWM Chemical Services Inc
1550 Balmer Rd, Model City, NY 14107 - (716) 286-1550
332 mi – about **4 hours 59 mins**



Northeast Treaters of NY LLC
796 Schoharie Turnpike, Athens, NY 12015 - (518) 945-2660

	1. Head **northwest** on **Schoharie Turnpike** About 1 min	go 0.9 mi total 0.9 mi
9W	2. Turn right onto **US-9W N** About 9 mins	go 7.4 mi total 8.2 mi
	3. Turn right onto the ramp to **I-87 N** Toll road	go 0.2 mi total 8.4 mi
87	4. Keep left at the fork, follow signs for **Interstate 87 N/Albany** and merge onto **I-87 N** Toll road About 21 mins	go 23.6 mi total 32.0 mi
915H	5. Continue onto **NY-915H** Toll road About 1 min	go 1.2 mi total 33.2 mi
90	6. Merge onto **I-90 W** Toll road About 3 hours 55 mins	go 271 mi total 304 mi
	7. Take exit **50** for **I-290** toward **Niagara Falls** Toll road	go 0.4 mi total 304 mi
290	8. Continue onto **I-290 W** About 10 mins	go 9.5 mi total 314 mi
	9. Take the **Interstate 190 N** exit toward **Niagara Falls**	go 0.3 mi total 314 mi
190	10. Merge onto **I-190 N** Partial toll road About 14 mins	go 13.9 mi total 328 mi
	11. Take exit **25A** for **NY-265** toward **Lewiston**	go 0.1 mi total 328 mi
265	12. Turn left onto **NY-265 N**	go 0.1 mi total 328 mi
	13. Turn right onto **Upper Mountain Rd** About 4 mins	go 2.5 mi total 331 mi
	14. Slight left onto **Indian Hill Rd** About 46 secs	go 0.4 mi total 331 mi
	15. Slight left onto **Model City Rd** About 1 min	go 0.5 mi total 332 mi





CWM Chemical Services Inc
1550 Balmer Rd, Model City, NY 14107 - (716) 286-1550

APPENDIX F

HEALTH AND SAFETY PLAN
(HASP)

Sterling Environmental Engineering, P.C.

NORTHEAST TREATERS OF NEW YORK, LLC
ATHENS, NY
BCP #C420029

HEALTH AND SAFETY PLAN (HASP)

Prepared for:

Northeast Treaters of New York, LLC
796 Schoharie Turnpike
Athens, New York 12015

Prepared by:

Sterling Environmental Engineering, P.C.
24 Wade Road
Latham, New York 12110

October 30, 2014

"Serving our clients and the environment since 1993"

NORTHEAST TREATERS OF NEW YORK, LLC
ATHENS, NEW YORK
BCP #C420029

HEALTH AND SAFETY PLAN (HASP)

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Tables

Appendices

1.0 GENERAL INFORMATION

The Health and Safety Plan (HASP) identifies specific measures to be taken to ensure that hazardous substances or conditions do not adversely impact the health and safety of personnel and the general community (public) for Site operations. The HASP is intended to identify potential hazards and appropriate precautions as defined by OSHA 29 CFR 1910.120 (Hazardous Waste Operations and Emergency Response).

All personnel working on this project must read this HASP, acknowledge understanding of this plan, and abide by its requirements.

In general, personnel are responsible for complying with all regulations and policies applicable to the work they are performing. The Project Manager is authorized to stop work if any personnel/subcontractor fails to adhere to the required health and safety procedures.

In addition to this HASP, each contractor must provide a HASP that addresses minimum training requirements for activities specific to the project and identified potential hazards specific to the project that are not discussed herein.

2.0 DESIGNATION OF RESPONSIBILITIES

Implementing this HASP is the responsibility of the Project Manager. The Project Manager will be designated prior to any Site activities and can be the contractor hired for a particular project, or an independent consultant hired by the Owner.

The Project Manager is responsible for:

- Ensuring the availability, use, and proper maintenance of specified personal protective equipment, decontamination, and other health or safety equipment.
- Maintaining a high level of safety awareness among personnel/subcontractors and communicating pertinent matters to them promptly.
- Ensuring all field activities are performed in a manner consistent with this HASP.
- Monitoring for dangerous conditions during field activities.
- Ensuring proper decontamination of personnel and equipment.
- Coordinating with emergency response personnel and medical support facilities.
- Initiating immediate corrective actions in the event of an emergency or unsafe condition.
- Notifying the New York State Department of Environmental Conservation (NYSDEC) and project owner of any emergency, unsafe condition, problem encountered, or exception to the requirements of this HASP.
- Recommending improved health and safety measures to the NYSDEC.

The Project Manager must be present for all intrusive investigative activities. However, the presence of the Project Manager shall in no way relieve any person or company of its obligations to comply with the requirements of the HASP and all applicable Federal, State and local laws and regulations.

All personnel involved in the project must be familiar with and conform to the safety protocols prescribed in this HASP, and communicate any relevant experience or observations to the Project Manager to ensure that these valuable inputs improve overall safety. Individual project members are the key elements in ensuring health and safety compliance. Every project member is considered responsible for implementing and following this HASP.

3.0 SITE PROPERTY SPECIFIC HEALTH AND SAFETY CONCERNS

3.1 Suspected Contaminant Hazards

Concentrations of chromium and arsenic above industrial soil cleanup objectives (SCOs) are known to be present at the Northeast Treaters of New York, LLC (Northeast Treaters) property. Documented historical use of the property and previous investigations conducted at the property suggest that organic vapors and/or explosive gases are not a concern at the Northeast Treaters property.

Although unlikely, unknown or unexpected materials of a hazardous nature may be encountered during ground intrusive activities. No work will be conducted if field observations or field measurements indicate that there is potential uncontrolled exposure to undefined hazards, or that exposures may exceed protection afforded by the requirements in this HASP.

3.2 Personal Protective Equipment (PPE)

Suspected hazards that may be encountered by workers during ground intrusive and construction activities, action levels and corresponding required actions, and the PPE level required for workers is as follows:

TABLE 1

AIR MONITORING METHODS, ACTION LEVELS, AND PROTECTIVE LEVELS FOR PERSONNEL

Hazard	Monitoring Unit	Action Level	Protective Levels/Action	Monitoring Schedule
Dust	Particulate Monitor Miniram or Equivalent	< 5 mg/m^3 above background in the breathing zone.	Level D-Continue Work	Continuous for ground intrusive activities.
		5-10 mg/m^3 above background in the breathing zone.	Level C-Continue Work	
		> 10 mg/m^3 above background in the breathing zone.	STOP WORK EVACUATE AREA (1)	

(1) For all circumstances where work is stopped, the NYSDEC must be notified.

No work is anticipated requiring Levels B or A PPE and very limited work in Level C. If air monitoring results require PPE upgrades from Level D, then only medically qualified, trained personnel experienced in the use and limitations of air purifying or supplied air respirators will be used. Air purifying respirators with High-Efficiency Particulate Air (HEPA) filters, capable of removing particles of 0.3 micron or larger from air at 99.97% or greater efficiency, should be used when exposure to dust is a potential risk.

Unless the Project Manager directs otherwise, respirators used for organic vapors or particulates should have cartridges changed after eight (8) hours of use, or at the end of each shift, or when any indication of

breakthrough or excessive resistance to breathing is detected. OSHA regulations require a Respiratory Protection Program for companies that require employees to enter areas where respirators are required and such Respiratory Protection Programs must address the requirements for replacement of cartridges.

3.3 Suspected Safety Hazards

Suspected safety hazards include those inherent with the operation of heavy equipment such as drill rigs or excavators, and proximity to excavations. Inspections to ensure appropriate safety measures are in place and the use of lockout and tagout procedures during maintenance of this equipment will control these inherent hazards. Personal protective equipment (PPE) including hard hats, safety shoes and eye protection will be worn to augment other safety precautions.

Drilling rigs and excavators must not operate closer than thirty (30) feet to any overhead lines, measured directly between any part of the equipment and the lines themselves except where electrical distribution and transmission lines have been de-energized and visibly grounded at the point of work, or where insulating barriers have been erected to prevent physical contact with the lines. If drilling or excavating is required within thirty (30) feet of any overhead lines, a written work plan must be provided by the contractor or other equipment operator that includes special measures designed to mitigate the risks and is in accordance with 29 CFR 1926.550(a)(15). The work plan must be reviewed and approved by written signature by the Project Manager.

Care must be taken to ensure loose clothing does not get tangled in any moving equipment associated with drilling rigs or excavators.

All excavations will be maintained to prevent access by unauthorized persons and will be filled or fenced off by the end of the workday. Absolutely no one will be permitted in the excavations, except the operator of equipment where the operator is always located above ground level. If equipment breaks down within the excavation, the equipment will have to be towed out of the excavation for repair. All subsurface samples will be obtained by operation of the excavating equipment and will be collected from the excavator bucket.

3.4 Excavator and Drill Rig Operations

Excavation will be performed with a track-mounted excavator or backhoe. To conduct soil borings, a hollow-stem auger or direct push drilling rig will be used. Working with or near this equipment poses potential hazards, including being struck by or pinched/caught by equipment, potentially resulting in serious physical bodily harm or inhaling dust from concrete coring.

In particular, the following precautions will be used to reduce the potential for injuries and accidents:

- The inspection of excavator and drill rig brakes, hydraulic lines, light signals, fire extinguishers, fluid levels, steering, tires, horn, and other safety devices will be conducted prior to the initial mobilization and checked routinely throughout the project.

- Excavator and drill rig cabs will be kept free of all non-essential items and all loose items will be secured.

- Excavators and drill rigs will be provided with necessary safety equipment, including seat belts.

- Drill rig cables and auger flight connections will be checked for evidence of wear. Frayed or broken cables or defective connections will be replaced immediately.

- Parking brakes will be set before shutting off any heavy equipment or vehicle.

- All employees will be briefed on the potential hazards prior to the start of each excavation or drilling project.

3.5 Adverse Weather

Drilling or excavating is dangerous during electrical storms. All field activity must terminate during thunderstorms. Extreme heat and cold, ice and heavy rain can produce unsafe conditions for drilling work. Such conditions, when present, will be evaluated on a case-by-case basis to determine if work shall terminate.

3.6 Fire and Explosion

Use of gasoline or diesel powered equipment increases the risk of fire and explosion hazards. Contractors will be required to store diesel fuel and gasoline in metal cans with self-closing lids and flash arrestors.

3.7 Requirement to Conduct Utility Mark Out

Prior to the start of any subsurface work, underground utilities and piping that may pose a potential hazard will be identified and located. DigSafely.NewYork or equivalent service will be called and underground utilities will be located and marked. Also, the location of privately owned utility lines will be determined.

In the event a pipe or line is struck, work will stop and the Emergency Action Plan will be implemented (see Section 5.0).

3.8 Confined Space Entry

Confined space entry is not anticipated for excavating and sampling activities. If a project requires confined space entry, a specific HASP will be implemented.

"Confined Space" is defined as a space that:

1. *"is large enough and so configured that an employee can bodily enter and perform assigned work;*
2. *has limited or restricted means for entry or exit (for example, tanks, vessels, silos, storage bins, hoppers, vaults, and pits are spaces that may have limited means of entry); and*
3. *is not designed for continuous employee occupancy."*

3.9 Excavation and Sampling Work Zones

One of the basic elements of an effective HASP is the delineation of work zones for each ground intrusive location. The purpose of establishing work zones is to:

- Reduce the accidental spread of hazardous substances by workers or equipment from the contaminated areas to the clean areas;
- Confine work activities to the appropriate areas, thereby minimizing the likelihood of accidental exposures;

- Facilitate the location and evacuation of personnel in case of an emergency; and
- Prevent unauthorized personnel from entering controlled areas.

Although a work site may be divided into as many zones as necessary to ensure minimal employee exposure to hazardous substances, this HASP uses the three (3) most frequently identified zones: the Exclusion Zone, Decontamination Zone, and Support Zone. Movement of personnel and equipment between these zones should be minimized and restricted to specific access control points to minimize the spreading of contamination.

- Exclusion Zone

  During investigative work, the Exclusion Zone is the immediate excavation, test pit, borehole, or other area where contamination is either known or expected to occur and where the greatest potential for exposure exists.

  Unprotected onlookers will be restricted from the excavation location so that they are at least twenty-five (25) feet upwind or fifty (50) feet downwind of excavation or drilling activities.

- Decontamination Zone

  During investigative work, a Decontamination Zone will be established at the perimeter of the Exclusion Zone, and will include the personnel, equipment and supplies that are needed to decontaminate equipment. The size will be selected by the Project Manager to conduct the necessary decontamination activities. Personnel and equipment in the Exclusion Zone must pass through this zone before leaving or entering the Support Zone. The necessary decontamination must be completed in this zone and the requirements are described in Section 6.0. This zone should always be established and maintained upwind of the Exclusion Zone.

- Support Zone

  During investigative work, the areas located beyond the Decontamination Zone will be considered the Support Zone. Break areas, operational direction and support facilities will be located in this area. Eating and drinking will be allowed only in the Support Zone.

3.10 Natural Hazards

Work that takes place in the natural environment may be affected by plants and animals that are known to be hazardous to humans. Spiders, bees, wasps, hornets, ticks, poison oak and poison ivy are only some of the hazards that may be encountered. Individuals who may potentially be exposed to these hazards should be made aware of their existence and instructed in their identification. Emergencies resulting from contact with a natural hazard should be handled through the normal medical emergency channels. Individuals who are sensitive or allergic to these types of natural hazards should indicate their susceptibility to the Project Manager.

3.11 Heat and Cold Stress Hazards

If work is to be conducted during the winter, cold stress is a concern to the health and safety of personnel. Because disposable clothing such as Tyvek does not "breathe", perspiration does not evaporate and the suits can become wet. Wet clothes combined with cold temperatures can lead to hypothermia. If the air temperature is less than 40 degrees Fahrenheit (°F) and a worker's clothes become wet due to perspiration, the worker must change to dry clothes.

3.12 Signs and Symptoms of Cold Stress

- **Incipient frostbite**: is a mild form of cold stress characterized by sudden blanching or whitening of the skin.

- **Chilblain:** is an inflammation of the hands and feet caused by exposure to cold moisture. It is characterized by a recurrent localized itching, swelling, and painful inflammation of the fingers, toes, or ears. Such a sequence produces severe spasms, accompanied by pain.

- **Second-degree frostbite** is manifested by skin which has a white, waxy appearance and is firm to the touch. Individuals with this condition are generally not aware of its seriousness, because the underlying nerves are frozen and unable to transmit signals to warm the body. Immediate first aid and medical treatment are required.

- **Third-degree frostbite** will appear as blue, blotchy skin. This tissue is cold, pale and solid. Immediate medical attention is required.

- **Hypothermia** develops when body temperature falls below a critical level. In extreme cases, cardiac failure and death may occur. Immediate medical attention is warranted when the following symptoms are observed:

    - Involuntary shivering;
    - Irrational behavior;
    - Slurred speech;
    - Sluggishness; and
    - Loss of consciousness.

3.13 Preventing Cold Related Illness/Injury

- Train personnel to identify the signs and symptoms of cold stress. Require field personnel to wear proper clothing for cold, wet and windy conditions, including layers that can be adjusted to changing weather conditions. It is important to keep hands and feet dry.

- Field personnel working in extremely cold conditions must take frequent short breaks in warm, dry shelters to allow their body temperature to increase. If possible, field work should be scheduled during the warmest part of the day. The buddy system should be used so that personnel can assist each other in recognizing signs of cold stress.

- Drink warm, sweet beverages and avoid drinks with caffeine and alcohol. Eat warm, high-calorie foods.

- Personnel with medical conditions such as diabetes, hypertension or cardiovascular disease or who take certain medications, may be at increased risk for cold stress.

3.14 Treatment of Cold Related Injuries

If cold stress symptoms are evident, the affected person must move into a warm, dry sheltered area and all wet clothing should be removed and replaced with dry clothing. If frostbite is suspected, the affected person should be treated by trained medical personnel.

3.15 Signs and Symptoms of Heat Stress

Wearing PPE also puts a worker at a considerable risk for developing heat stress. This can result in health effects ranging from heat fatigue to serious illness or death. Consequently, regular monitoring, remaining hydrated and other precautions are vital.

- **Heat Rash** may result from continuous exposure to heat and humid air.

- **Heat Cramps** are caused by heavy sweating with inadequate electrolyte replacement. Signs and symptoms include:

    - Muscle spasms; and
    - Pain in the hands, feet and abdomen.

- **Heat Exhaustion** occurs from increased stress on various body organs, including inadequate blood circulation due to cardiovascular insufficiency or dehydration. Signs and symptoms include:

    - Pale, cool, and moist skin;
    - Heavy sweating; and
    - Dizziness, fainting, and nausea.

- **Heat Stroke** is the most serious form of heat stress. Temperature regulation fails, and the body temperature rises to critical levels. Immediate action must be taken to cool the body before serious injury or death occurs. Competent medical help must be obtained. Signs and symptoms are:

    - Red, hot, and unusually dry skin;
    - Lack of or reduced perspiration;
    - Dizziness and confusion;
    - Strong, rapid pulse; and
    - Loss of consciousness.

3.16 Preventing Heat Related Illness/Injury

Proper training and preventive measures will help avert serious illness and loss of work productivity. Preventing heat stress is particularly important because once someone suffers from heat stroke or heat exhaustion that person may be predisposed to additional heat injuries. To avoid heat stress, the following steps should be taken:

- Have workers drink sixteen (16) oz. (0.5 liter) of fluid (preferably water or diluted drinks) before beginning work. Urge workers to drink a cup or two every fifteen (15) to twenty (20) minutes, or at each monitoring break. A total of 1 to 1.6 gallons (four (4) to six (6) liters) of fluid per day are recommended, but more may be necessary to maintain body weight.

- If possible, adjust work schedules to avoid the hottest parts of the day.

- Encourage workers to maintain an optimal level of physical fitness.

- Shelter (air-conditioned, if possible) or shaded areas should be provided to protect personnel during rest periods.

- Train workers to recognize, identify, and treat heat stress.

For workers wearing standard work clothes, recommendations for monitoring and work/rest schedules are those approved by American Conference of Governmental Industrial Hygienists (ACGIH) and National Institute of Occupational Safety and Health (NIOSH). Workers wearing semi-permeable PPE or impermeable PPE should be monitored when the temperature in the work area is above 70°F.

3.17 Noise Hazards

Work that involves the use of heavy equipment such as a drill rig or excavator can expose workers to noise during field activities that can result in noise-induced hearing loss. The Project Manager will monitor the noise exposure and will determine whether noise protection is warranted for each of the workers. The Project Manager will ensure that either ear muffs or disposable foam earplugs are available and are used by the workers in the immediate vicinity of the field operation as required.

3.18 Slip, Trip and Fall Hazards

Ground intrusive locations can contain a number of slip, trip and fall hazards for workers, such as:

- Holes, pits, or ditches
- Excavation faces
- Slippery surfaces
- Steep grades
- Uneven grades
- Snow and ice
- Sharp objects

All workers must be instructed to keep back three (3) feet from the top edge of excavation faces.

Drill auger sections will be stored on the transport vehicle as long as possible to avoid creating a trip hazard. Drill auger sections and other tools will be stored in neat arrangements convenient to the driller, but sufficiently distant from the immediate area around the drill rig to minimize trip hazards.

Workers will be instructed to look for potential safety hazards and immediately inform the Project Manager regarding any new hazards. If the hazard cannot be immediately removed, actions must be taken to warn workers about the hazard.

3.19 Modifications to this Plan

Requirements and guidelines in this HASP are subject to modification by the Project Manager in response to additional information obtained during field work regarding the potential for exposure to hazards.

4.0 MEDICAL SURVEILLANCE PROGRAM

4.1 General

Workers who participate in field activities that meet the following criteria will be included in the Medical Surveillance Program:

- All who may be exposed to hazardous substances or health hazards at or above permissible exposure limits, without regard to the use of respirators, for thirty (30) days or more per year, as required by 1926.65(f)(2)(i-iv).

- All who wear a respirator for thirty (30) days or more every year as required by 1926.62(f)(2)(i-iv).

- All who are injured because of overexposure from an incident involving hazardous substances or health hazards.

4.2 Frequency of Medical Exams

Medical examinations and consultations will be provided on the following schedule to the workers who meet the above listed general qualifications:

- Prior to assignment to a work site, if any of the criteria noted above are anticipated.

- At least once every twelve (12) months, unless the physician believes a longer interval (not greater than two (2) years) is appropriate.

- As soon as possible upon notification that a worker has developed signs or symptoms indicating possible overexposure to hazardous materials.

5.0 EMERGENCY ACTION PLAN

Workers will use the following standard emergency procedures. The Project Manager will be notified of any emergency and be responsible for ensuring that the appropriate procedures are followed and that the Project Manager is notified. A first aid kit, an eye wash unit that can provide a minimum flow rate of 0.4 GPM for fifteen (15) minutes, and a fire extinguisher rated 20A-B-C (or higher) will be readily available to workers. All workers will be trained in use of emergency supplies. Questions regarding procedures and practices described in the HASP should be directed to the Project Manager.

5.1 Notification

Any symptoms of adverse health, regardless of the suspected cause, are to be immediately reported to the Project Manager.

Upon the occurrence of an emergency, including an unplanned chemical release, fire or explosion, workers will be alerted and the area evacuated immediately. The Project Manager will notify the ambulance service, fire department and/or police department, as required. Emergency contact telephone numbers are provided below. Re-entry to the work area will be limited to those required to assist injured workers or for firefighting or spill control. Anyone entering the work area following an emergency incident must wear appropriate protective equipment.

5.2 Emergency Services

Contact Name	Telephone Number
Emergency Services	911
Owner: Northeast Treaters of New York, LLC	(518) 945-2660
Columbia Memorial Hospital	(518) 828-7601
Poison Control Center	(800) 222-1222
NYSDEC Spills Emergency Response Program	(800) 457-7362

A map showing the preferred route to the hospital with written directions is presented in Appendix A-1; and written directions are also included on the map.

The following alarm systems will be utilized to alert workers to evacuate the restricted area:

- Direct Verbal Communication
- Radio Communication or Equivalent
- Portable or Fixed Telephone

The following standard hand signals will also be used as necessary:

Hand Signal	Message
Hand gripping throat	Can't breathe/out of air
Grip co-worker's wrist	Leave area immediately, no debate!
Hands on top of head	Need assistance
Thumbs up	Yes/O.K.
Thumbs down	No/Problem

Upon activation of an alarm, workers will proceed to a designated assembly area. The designated assembly area will be determined on a daily basis by the Project Manager and updated as necessary depending upon work conditions, weather, air monitoring, etc. The location of the designated assembly area will be clearly marked and communicated to employees daily or upon relocation of the area. Workers gathered in the designated assembly area will remain there until their presence has been noted. A tally of workers on the daily restricted area access roster will be made as necessary to ensure all workers have been properly evacuated and accounted for.

Workers may return to the designated work area following authorization by the Project Manager.

5.3 Personal Injury

If anyone within a work area is injured and cannot leave the restricted area without assistance, emergency medical services will be notified (see Section 5.0) and appropriate first aid will be administered by certified Emergency Medical Technicians (EMTs).

5.4 Fire/Explosion

Upon the occurrence of a fire beyond the incipient stage or an explosion anywhere on the worksite property, the fire department will be alerted and all personnel moved to a safe distance from the involved area.

5.5 Equipment Failure

If any equipment fails to operate properly, the Project Manager will determine the effect of this failure on continuing operations. If the failure affects the safety of workers (e.g., failure of monitoring equipment) or prevents completion of the planned tasks, all workers will leave the work area until appropriate corrective actions have been taken.

5.6 Record Keeping

The Project Manager will maintain records of reports concerning occupational injuries and illnesses in accordance with 29 CFR 1904.

6.0 DECONTAMINATION

6.1 Contamination Prevention Methods

The Project Manager will make all workers aware of the potential for contamination. The following procedures will be established to minimize contact with waste:

- Workers will not walk through areas obvious of contamination;
- Workers will not directly touch potentially hazardous substances;
- Workers will wear gloves when touching soil or waste;
- Workers will wear disposable outer garments where appropriate; and
- Excavated soils will be placed on plastic sheeting and covered with plastic sheeting at the end of the workday.

6.2 Decontamination Methods

6.2.1 Cleaning of Field Sampling Equipment

All equipment and tools used to collect samples for chemical analyses, including spatulas, spoons, scoops, trowels, split-spoons, augers, etc. will be decontaminated using the following procedures:

- non-phosphate detergent wash;
- potable water or distilled/deionized water rinse; and
- air or oven-dry.

If the equipment is to be stored for future use, allow to dry and then wrap in aluminum foil (shiny-side out) or seal in plastic bags.

Collect or dispose of all decontamination fluids in accordance with site/project-specific requirements.

6.2.2 Personal Clothing Decontamination

All footwear worn in and around the contamination area will be washed down using soap and water to remove soil or oily residue remnants. If disposable gloves, boots or suits (such as Tyvek® suits) are worn, such are to be removed and disposed in a designated 55-gallon drum or garbage bag onsite for future disposal. Any other clothing that comes in contact with the potentially contaminated material should not be worn more than 24-hours and should be washed prior to wearing again.

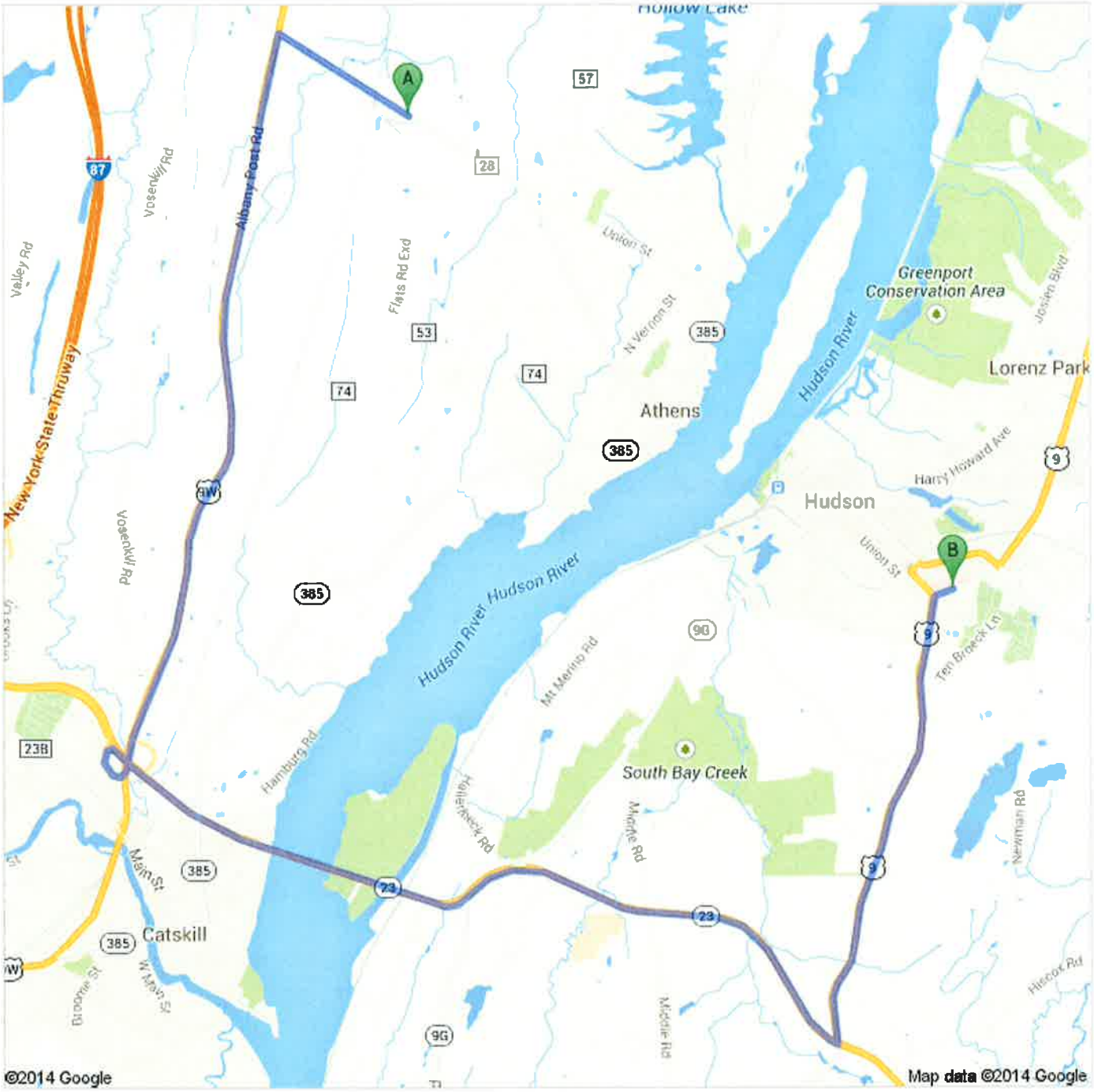
2014-08\Reports\Health and Safety Plan_HASP_txt.doc

APPENDIX A-1

DIRECTIONS TO COLUMBIA MEMORIAL HOSPITAL

Google

Directions to Columbia Memorial Hospital: Vigna Lauren MD
71 Prospect Ave, Hudson, NY 12534
13.1 mi – about **18 mins**



Northeast Treaters of NY LLC
796 Schoharie Turnpike, Athens, NY 12015

1.	Head **northwest** on **Schoharie Turnpike** About 1 min	go 0.9 mi total 0.9 mi
2.	Turn left onto **US-9W S/Albany Post Rd S** About 5 mins	go 4.3 mi total 5.2 mi
3.	Slight right onto the **NY-23** ramp to **Cairo/Hudson**	go 0.3 mi total 5.5 mi
4.	Turn right onto **NY-23 E** (signs for **State Highway 23 E**) Partial toll road About 7 mins	go 4.8 mi total 10.3 mi
5.	Turn left onto **U.S. 9 N** About 4 mins	go 2.7 mi total 13.0 mi
6.	Slight right onto **Prospect Ave** Destination will be on the left	go 0.1 mi total 13.1 mi

Columbia Memorial Hospital: Vigna Lauren MD
71 Prospect Ave, Hudson, NY 12534

APPENDIX G

COMMUNITY AIR MONITORING PLAN (CAMP)

NEW YORK STATE BROWNFIELD CLEANUP PROGRAM

NORTHEAST TREATERS OF NEW YORK, LLC
ATHENS, NY
SITE #C420029

COMMUNITY AIR MONITORING PLAN (CAMP)

1.0 INTRODUCTION

This Community Air Monitoring Plan (CAMP) has been prepared for the Northeast Treaters of New York, LLC (Northeast Treaters) site located at 796 Schoharie Turnpike, in the Town of Athens, Greene County, New York. This CAMP only applies to ground intrusive activities associated with the BCP area (the Site), located on the easternmost portion of the Northeast Treaters property, as defined by the executed copy of the Brownfield Cleanup Agreement dated December 31, 2014. The Site is included in the Brownfield Cleanup Program (BCP) as Site #C420029. This CAMP provides the methods and procedures for real-time air monitoring to be implemented during the disturbance of Site soils relating to construction or remedial activities. This CAMP is to be utilized in coordination with the Health and Safety Plan (HASP), Excavation Work Plan (EWP), and Dust Control Plan (DCP) established for the project. Actions and requirements to protect the health and safety of onsite workers from airborne contaminants are addressed in the HASP.

This CAMP provides for real-time air monitoring of particulates at the downwind perimeter of each designated work area when remediation-related ground-intrusive activities, such as excavation or drilling, are implemented at the Site. The CAMP was developed from the New York State Department of Health (NYSDOH) Generic CAMP provided in the DER-10 Technical Guidance for Site Investigation and Remediation. This CAMP provides a measure of protection for the downwind community (potential receptors include residences, businesses, and personnel not directly involved with work activities) from potential airborne contaminant releases as a direct result of investigative and remedial work activities. Contractors should employ Best Management Practices (BMPs) and common sense measures to minimize dust and odors around work areas.

Analytical results of previous sampling investigations conducted at the Site indicate that contamination is restricted to heavy metals (i.e. chromium and arsenic). No volatile organic compounds (VOCs) were detected at or above New York State Department of Environmental Conservation (NYSDEC) unrestricted use soil cleanup objectives (SCOs) in samples collected during the Remedial Investigation and subsequent supplemental sampling events. As such, Site conditions only require particulate monitoring and no VOC monitoring is proposed.

2.0 PARTICULATE MONITORING

Monitoring for particulates will be required during remediation-related ground intrusive activities and will include monitoring the upwind and downwind perimeters of the exclusion zone or work area, at a minimum. The particulate monitoring must use real-time monitoring equipment capable of measuring particulate matter less than ten (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.

As outlined in NYSDEC DER-10 Appendix 1B: Fugitive Dust & Particulate Monitoring, the monitoring equipment must meet, at a minimum, the following performance standards:

(a) Objects to be measured: Dust, mists or aerosols;
(b) Measurement Ranges: 0.001 to 400 mg/m^3 (1 to 400,000 :ug/m^3);
(c) Precision (2-sigma) at constant temperature: +/- 10 :g/m^3 for one second averaging; and +/- 1.5 g/m3 for sixty second averaging;
(d) Accuracy: +/- 5% of reading +/- precision (Referred to gravimetric calibration with SAE fine test dust (mmd= 2 to 3 :m, g= 2.5, as aerosolized);
(e) Resolution: 0.1% of reading or 1g/m3, whichever is larger;
(f) Particle Size Range of Maximum Response: 0.1-10;
(g) Total Number of Data Points in Memory: 10,000;
(h) Logged Data: Each data point with average concentration, time/date and data point number
(i) Run Summary: overall average, maximum concentrations, time/date of maximum, total number of logged points, start time/date, total elapsed time (run duration), STEL concentration and time/date occurrence, averaging (logging) period, calibration factor, and tag number;
(j) Alarm Averaging Time (user selectable): real-time (1-60 seconds) or STEL (15 minutes), alarms required;
(k) Operating Time: 48 hours (fully charged NiCd battery); continuously with charger;
(l) Operating Temperature: -10 to 50o C (14 to 122o F); and
(m) Particulate levels will be monitored upwind and immediately downwind at the working site and integrated over a period not to exceed 15 minutes.

The equipment will be equipped with an audible alarm to indicate exceedance of the action level. The action level is 150 ug/m^3 (15 minutes average). In addition, fugitive dust migration will be visually assessed during all work activities. Calibration will be in accordance with the HASP and the instrument manufacturer's recommendations.

The upwind sampling station will be situated upwind of the largest dust producing activity occurring at the Site at the boundary of the work zone. Similarly, the downwind sampling station will be directly downwind of the largest dust producing activity at the boundary of the work zone.

The action level is 150 ug/m^3 (15 minutes average). This short-term interval will provide a real-time assessment of onsite air quality to assure both health and safety. If particulate levels are detected in excess of 150 ug/m^3, the upwind background level must be confirmed immediately. If the working Site particulate measurement is greater than 100 ug/m^3 above the background level, additional dust suppression techniques must be implemented to reduce the generation of fugitive dust and corrective action taken to protect Site personnel and reduce the potential for contaminant migration. Corrective measures may include increasing the level of personal protection for onsite personnel and implementing additional dust suppression techniques (See the DCP for a description of dust suppression techniques). Should the action level of 150 ug/m^3 continue to be exceeded work must stop and DER must be notified. The notification shall include a description of the control measures implemented to prevent further exceedances.

All readings must be recorded and be available for review by the NYSDOH, NYSDEC and Greene County Health Department, if requested.

The sampling locations will be periodically adjusted to account for observed changes in wind direction.

3.0 FORMS FOR MONITORING AND RESPONSE

Air monitoring of particulate concentrations will be documented using the air monitoring form provided in Appendix 1. This form is to be completed on a daily basis and records of this form must be made available for NYSDEC and NYSDOH review upon request.

Response action to observed exceedances will be documented using the form provided in Appendix 2. This form must also be made available for NYSDEC and NYSDOH review upon request.

2014-08\Reports\CAMP\CAMP_txt_Rev1.docx

APPENDIX 1

AIR MONITORING FORM

NORTHEAST TREATERS OF NEW YORK, LLC
TOWN OF ATHENS, NEW YORK

Air Monitoring Form

Name ________________________ **Weather Conditions** _________________
Date ________________________ **Wind Direction** _____________________

Particulate Concentrations (mg/m^3)

WORK AREA		UPWIND		DOWNWIND	
Time	Concentration	Time	Concentration	Time	Concentration

APPENDIX 2

EXCEEDANCES AND ACTIONS TAKEN

NORTHEAST TREATERS OF NEW YORK, LLC
TOWN OF ATHENS, NEW YORK

Exceedances and Actions Taken

Name _____ **Date** _____

Time _____ **Weather Conditions** _____

Location of Exceedance _____ **Wind Direction** _____

Type of Exceedance:

_____

_____

_____

_____

_____

_____

_____

Action Taken:

_____

_____

_____

_____

_____

_____

_____

APPENDIX H

AS-BUILT DRAWING

LEGEND

UTILITY POLE	UP / 12872
GUY WIRE	
CATCH BASIN	CB
WATER VALVE	WV
LIGHT POLE	LP
HYDRANT	HYD
ELEC TRANSFORMER	TR
GAS PRESURE REDUCER	GPR
PROPERTY LINE	
SANITARY SEWER LINE	S
CULVERT	
STORM DRAIN	
CHAIN LINK FENCE	X
OVERHEAD WIRES	AE
UNDERGROUND WIRES	UE
WATER LINE	W
GAS LINE	G
WATER SUPPLY WELL	W

DRAWING REFERENCES:

SURVEY BY SANTO ASSOCIATES LAND SURVEYING AND ENGINEERING, P.C. DATED JULY 8, 2016.

SURVEY REFERENCES:

1. "SURVEY AND MAP OF LANDS PROPERTY CONVEYED BY ERICH A. SCHUBERT & KARL O. NIE TO CROSS, AUSTIN & IRELAND LUMBER CO.", PREPARED BY FRANK AMBROSIO, DATED FEBRUARY 1975, AND FILED ON MAY 16, 1975 IN THE GREENE COUNTY CLERK'S OFFICE IN EASI-H 123-1098.
2. "SURVEY AND MAP OF LANDS OF DAVID HAZEN", PREPARED BY SANTO ASSOCIATES, P.C., DATED NOVEMBER 5, 1995, DRAWING NUMBER 3917.
3. "PROPOSED BOUNDARY LINE CHANGE BETWEEN TAX PARCELS 104.00-4-30 AND 104.00-4-40 PREPARED FOR NORTHEAST TREATERS, LLC", PREPARED BY OSTERTAG LAND SURVEYING, P.C., DATED MAY 27, 2015, AND REVISED THROUGH JULY 07, 2015, DRAWING NUMBER 5596.
4. "SURVEY AND MAP OF LANDS OF JERRY J. BUSH", PREPARED BY S. SANTO ASSOCIATES, DATED JANUARY 30, 1985 AND FILED ON MARCH 28, 1989 IN THE GREENE COUNTY CLERK'S OFFICE IN EASI-E 212-93.
5. "SKETCH PLAT PROPOSED SUBDIVISION AND MAP OF LANDS OF MARY VAN HOESEN", PREPARED BY SANTO ASSOCIATES, P.C., DATED DECEMBER 10, 1997 AND REVISED THROUGH DECEMBER 22, 1999, DRAWING NUMBER CG4273 AND FILED ON MAY 19, 2000 IN THE GREENE COUNTY CLERK'S OFFICE IN EASI-A 2000-47.
6. "PROPOSED TREATMENT BUILDING NORHTEAST TREATERS OF NEW YORK, LLC, 796 SCHOHARIE TURNPIKE, ATHENS, NY, SHEET C2 STORMWATER PLAN", PREPARED BY K A MARTIN ENGINEER, PLLC, DATED NOVEMBER 2013 AND REVISED THROUGH APRIL 18, 2014, PRO# 13-019.

LICENSED PROFESSIONAL ENGINEER
GREGG P. MILLSPAUGH
089162
STATE OF NEW YORK

NO.	DATE	RECORD OF WORK	DRN	CKD	APPR

PROJECT

PROJ. ENGR.:	MPM
PROJ. NO.:	2014-08
PREPARED BY:	TAS
DRAFTED BY:	TAS
CHECKED BY:	
APPROVED BY:	
DATUM:	NA
CONTOUR INTERVAL =	NA FEET

0 15' 30' 60' 120'
1" = 60'

REMEDIAL CONSTRUCTION
AS BUILT DRAWING
NORTHEAST TREATERS
SCHOHARIE TURNPIKE
TOWN OF ATHENS GREEN CO., NEW YORK

STERLING
Sterling Environmental Engineering, P.C.
24 Wade Road • Latham, New York 12110

DATE: 07/13/2016 | SCALE: 1" = 60' | DWG. NO. 2014-08104 | SHEET 1 OF 1

S:\Drawings\2014-08 - Northeast Treaters of New York - Athens NY\2014-08104_Dwg-1 - As Built Drawing.dwg 7/13/2016 10:02 AM SMETT

APPENDIX I

SETTLING BASIN CLOSURE PLAN

Sterling Environmental Engineering, P.C.

NORTHEAST TREATERS OF NEW YORK, LLC
ATHENS, NEW YORK

SETTLING BASIN CLOSURE PLAN

Prepared for:

Northeast Treaters of New York, LLC
796 Schoharie Turnpike
Athens, New York 12015

Prepared by:

Sterling Environmental Engineering, P.C.
24 Wade Road
Latham, New York 12110

April 28, 2016

"Serving our clients and the environment since 1993"

NORTHEAST TREATERS OF NEW YORK, LLC
ATHENS, NEW YORK

SETTLING BASIN CLOSURE PLAN

Table of Contents

Figures

1.0 INTRODUCTION AND PURPOSE

Pursuant to the requirements of the December 2015 New York State Department of Environmental Conservation (NYSDEC) Decision Document, this Settling Basin Closure Plan was prepared by Sterling Environmental Engineering (STERLING) on behalf of Northeast Treaters of New York, LLC (hereinafter "Northeast Treaters"). This Settling Basin Closure Plan is a component of the Site Management Plan (SMP) for Brownfield Cleanup Program (BCP) Site No. C420029. The subject Northeast Treaters facility property is located at 796 Schoharie Turnpike in the Town of Athens, Greene County, New York. The location of the Northeast Treaters property is presented on Figure 1.

This Settling Basin Closure Plan only applies to the western stormwater settling basin located within the Environmental Easement description appended to the SMP (hereinafter, "the settling basin") and is to be implemented in the event that the Northeast Treaters facility permanently ceases operation as a wood treatment facility or is permanently removed from State Pollutant Discharge Elimination System (SPDES) permit coverage. The purpose of this Settling Basin Closure Plan is to address soil and sediment, located within and hydraulically downgradient of the settling basin, which may be impacted by BCP Site-related Contaminants of Concern (COCs). Heavy metals chromium and arsenic have been identified as BCP Site-related COCs as discussed in the SMP. Upon permanent facility closure, this Settling Basin Closure Plan will be utilized in coordination with applicable requirements of the NYSDEC approved SMP and the notification and closure requirements of 6 NYCRR Part 750.

This Settling Basin Closure Plan may only be revised and amended with the approval of the NYSDEC. Prior to the planned closure of the settling basin, review and revision of this work plan is encouraged to address new information, changes to Site conditions and planned future use of the Site.

2.0 EXISTING DATA AND PREVIOUS INVESTIGATIONS

Relevant data and sampling investigations conducted in the immediate vicinity of the settling basin are summarized below.

2.1 Geology and Hydrology

The Site slopes slightly towards the west. Predominant soils in the vicinity of the Site consist of dark brown to dark gray clay and silty clay. The bedrock in the vicinity of the Site is shale and is estimated to exist at a depth ranging from 60 to 100 feet below grade.

The nearest surface water, a tributary to Murderers Creek, is located approximately 1,000 feet to the north of the Northeast Treaters facility. Murderers Creek, a regulated Class C waterbody, is located approximately 1.6 miles to the north of the Northeast Treaters facility and flows towards Sleepy Hollow Lake, located approximately 1.6 miles to the east of the facility.

Federal and State regulated wetlands (Wetland No. HN-108) are located northwest of the subject settling basin.

The Northeast Treaters facility is not located in a designated floodway or within one-half (½) mile of a 100 year floodplain.

2.2 Investigation of Settling Basin and Downgradient Drainage Swale

Sterling Environmental Engineering, P.C. (STERLING) conducted a sampling investigation of the settling basin on August 17, 2015. The settling basin is regulated by a NYSDEC SPDES Multi-Sector General Permit (MSGP). The purpose of the sampling investigation was to evaluate the presence of chromium and arsenic in, and downstream of, the settling basin. Verbal comments were received from the NYSDEC prior to the sampling investigation and were incorporated into the scope of the investigation. Sample locations associated with the investigation are shown on Figure 2.

Sample locations were based on the requirements of DER-10 (paragraph 3.9(c)) and NYSDEC verbal comments. Sample locations SB-2 and SB-5 are biased toward the inflow and outflow areas within the settling basin, respectively. Sample locations SB-1, SB-3 and SB-4 were equally distributed along the axis of the basin to further characterize sediment located within the settling basin. Sample locations DS-1 and DS-2 were investigated to characterize surface soil and sediment within the downstream drainage swale.

Sediment samples SB-1 through SB-5 were obtained within the settling basin and were collected using a posthole digger, a stainless steel bowl, a stainless steel spoon, and laboratory approved sample containers. Sediment at these sample locations was muddy, black in color, and had an organic odor. An attempt was made to obtain a one-foot sediment core using a ½-inch diameter PVC tube and a hammer. However, a sediment core could not be collected within the PVC tube due to high water content of the sediment. The PVC tube could not be advanced below approximately one (1) foot below the surface of the basin sediment due to the compacted cohesive soils underlying the basin sediment.

A surface sediment sample was obtained with a stainless steel spoon at sample location DS-1 located within the downstream drainage swale. No surface water was observed at sample location DS-1 at the time the sample was collected. Sediment was obtained with a stainless steel spoon at sample location DS-2. Approximately three (3) inches of standing surface water was observed at sample location DS-2.

A summary of the analytical results associated with the Settling Basin Sampling Investigation is as follows.

SUMMARY OF SETTLING BASIN SEDIMENT ANALYTICAL RESULTS

Northeast Treaters of New York, LLC

796 Schoharie Turnpike, Town of Athens, NY

August 17, 2015

Sample No.	Approx. Liquid Depth to Sediment Surface (feet)	Total Arsenic (ppm)	Total Chromium (ppm)
SB-1	< 1	82	89
SB-2	3.5	210	320
SB-3	3	56	81
SB-4	2	34	41
SB-5	< 1	44	88
DS-1	0	70	92
DS-2	< 0.5	26	39

Notes:

The unrestricted use Soil Cleanup Objective for Arsenic is 13 ppm

The unrestricted use Soil Cleanup Objective for Trivalent Chromium is 30 ppm

The highest concentrations of chromium and arsenic were detected at sample location SB-2, located in the approximate area of the influent stormwater lines. The lowest concentrations of chromium and arsenic were detected at sample location DS-2, located near the western property boundary of the Northeast Treaters property and within the downstream drainage swale. With the exception of sample locations SB-2 and DS-2, detections of chromium and arsenic ranged from 41 to 92 ppm and 34 to 82 ppm, respectively.

2.3 Post-Excavation Drainage Swale Sample Results

To remedy chromium and arsenic impacts identified by the sampling investigation described in Section 2.2, a modified drainage swale was constructed to reduce suspended sediment in effluent water leaving the Northeast Treaters property. Accumulated sediment was excavated along the swale from an area approximately six (6) feet wide and from the existing ground surface to a depth of approximately one (1) foot below grade to remove impacted sediment identified during the August 17, 2015 sampling investigation. Excavation activities and post-excavation sampling were conducted on December 7, 2015.

Comments were received from the NYSDEC and the New York State Department of Health (NYSDOH) prior to excavation activities and post excavation sampling. The NYSDEC was present onsite during the excavation of the drainage swale.

Post-excavation samples were collected by STERLING and consisted of four (4) soil samples at approximately equidistant intervals along the centerline of the excavation (B-1 through B-4), and two (2) corresponding sidewall samples on either side of each centerline sample at a depth of six (6) to twelve inches (WSW-1 through WSW-4 and ESW-1 through ESW-4). One (1) surface sample (MP-1) was collected adjacent to the most downgradient edge of excavation at a depth of 0-2" below grade as requested by NYSDEC and NYSDOH. Soil samples were analyzed for total arsenic and total chromium

via United States Environmental Protection Agency (USEPA) Method 6010C and hexavalent chromium via USEPA Method 7196A. Sample results are presented in Figure 2.

Hexavalent chromium was not detected above the Unrestricted Use Soil Cleanup Objective (SCO) or the laboratory's reporting limit. Detections of total chromium are one (1) to two (2) orders of magnitude greater in concentration when compared to the concentration of hexavalent chromium, if detected. Therefore, detected concentrations of total chromium are considered representative of trivalent chromium concentrations, and are compared to trivalent chromium SCOs in Figure 2.

2.4 Conclusions of Investigative Sampling

Data summarized herein indicate that the sediment in the settling basin and the downstream drainage swale contain chromium and arsenic above background concentrations. Detections of chromium and arsenic decrease with increasing distance from the settling basin at downstream drainage locations. Soil and sediment, located within and hydraulically downgradient of the settling basin, impacted by BCP Site-related COCs above background concentrations must be addressed upon facility closure or when the settling basin is permanently removed from SPDES permit coverage.

3.0 ANTICIPATED SETTLING BASIN CLOSURE PROCEDURE

This section establishes settling basin closure procedures to be implemented upon permanent closing of the wood-treatment facility to address soil and sediment, located within and hydraulically downgradient of the settling basin, which may be impacted by BCP Site-related COCs. The following closure procedures will be implemented in coordination with applicable requirements of the NYSDEC approved SMP and the notification and closure requirements of 6 NYCRR Part 750.

Revisions and/or amendments to this Settling Basin Closure Plan should be submitted for NYSDEC approval following an environmental investigation to incorporate new information and changes to Site conditions.

3.1 Investigative Work Plan

An Investigative Work Plan will be prepared by the facility owner to initiate settling basin closure procedures. The purpose of the Investigative Work Plan will be to delineate the lateral and vertical impact to soil and sediment located hydraulically downgradient of the settling basin. Additionally, liquid media within the settling basin will be sampled to determine whether the liquid requires treatment. Detailed sample collection and analytical procedures and protocols are described in the Quality Assurance Project Plan provided as an appendix of the SMP.

The Investigative Work Plan prepared by the facility owner will be submitted to the NYSDEC for review, and an environmental investigation will be conducted pursuant to a NYSDEC-approved Investigative Work Plan.

3.2 Notification and Closure Requirements

Following the execution of the Investigative Work Plan, settling basin closure will be conducted in accordance with 6 NYCRR Part 750-2.11(c), or the then-current NYSDEC SPDES closure requirement and, if applicable, the closure requirements of Part 360. Closure requirements of 6 NYCRR Part 750-2.11(c) are as follows:

(c) Disposal system closures shall conform with the following procedures:

(1) On or before 60 calendar days prior to taking the system out of service a permittee shall:

(i) submit to the regional water engineer the following information concerning closure activities:

(a) the date the system will cease operation;
(b) the date the influent and effluent pipes will be sealed;
(c) plans (signed and sealed by a New York State licensed professional engineer) for final disposition of the physical facilities, including all treatment units, outfall line, and all mechanical and electrical equipment and piping;
(d) plans (signed and sealed by a New York State licensed professional engineer) for elimination of all equipment and/or conditions that could possibly pose a safety hazard, either during or after shut-down of operations;
(e) verification that there are no lines in the collection system which are cross connected (receiving both sanitary and storm water) or which do not contain adequate conveyance capacity;
(f) the name of the licensed individual responsible for the maintenance and operation of the wastewater pumping station and/or disposal system systems that are still to be maintained; and

(ii) notify the regional water engineer, in writing, concerning any deactivated lagoons or other actual or potential discharges to ground water which may exist at the site.

(2) Proper management and/or removal of all residual materials (collected grit and screenings, scums, sand bed material, and dried or liquid sludges), as well as filter media, and all other solids from the treatment process that may remain in the abandoned treatment works is required.

(i) The permittee shall submit to the regional water engineer proof of ownership of or contractual arrangement with an operation or operations permitted to manage all such waste materials. A contract with a hauler will only be accepted as proof of proper waste management if documentation of management at an approved site or sites is included. In addition, all necessary State or Federal permits/approvals must accompany the submission.

(ii) All residual material shall be removed within 180 calendar days after the system is taken out of service. Proof of proper residuals management shall be submitted to the regional water engineer within 30 calendar days after their removal. The dates of removal and quantities removed shall be specified.

Remaining liquid within the settling basin will be discharged to the downgradient drainage swale under the provisions of, and prior to the termination of, the facility's SPDES permit.

Closure will be implemented in a manner that is consistent with the Remedial Action Objectives (RAOs) outlined in Section 2.4 of the SMP. Consistent with 6 NYCRR Part 750-2.11(c)(1) and (2), alternatives which may be considered to achieve RAOs include capping impacted soil and sediment in place with deed restrictions and site management obligations, excavation of impacted sediment and offsite disposal,

and in-situ treatment. Consistent with the conclusions of the alternatives analysis summarized in the October 2, 2015 Remedial Work Plan and the December 7, 2015 Remedial Work Plan Addendum, the preferred remedy at the date of this report consists of consolidation, capping and institutional controls as described in Section 3.3, below. Closure activities will comply with applicable Federal, State and Local regulations in place at the time of closure.

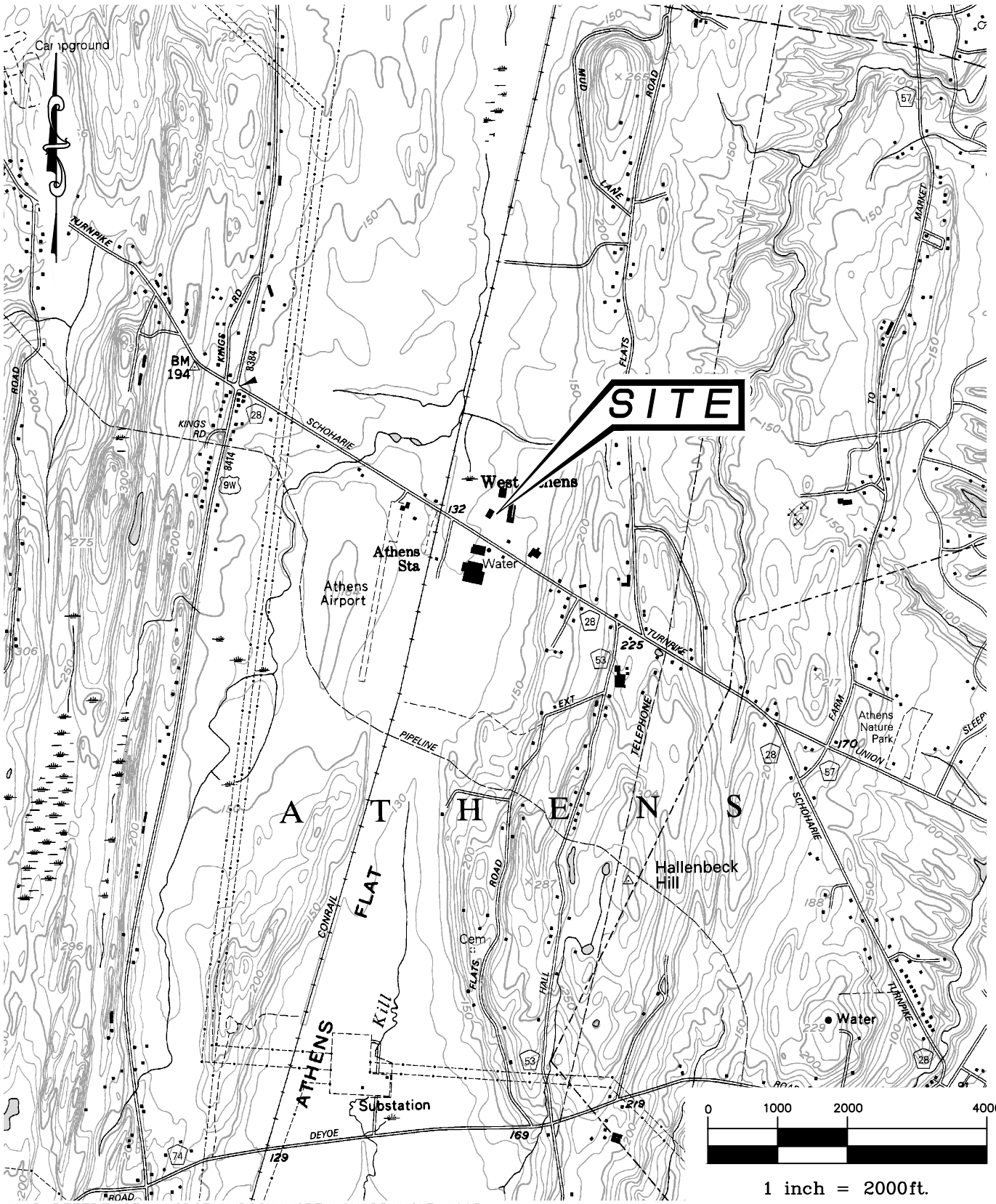
3.3 Consolidation, Capping and Institutional Controls

As stated above, the preferred remedy at the date of this report is for sediment and soil impacted by Site-related COCs above background concentrations to be left in place, to the extent practical. Impacted sediment contained in place may be stabilized to prevent the migration of contaminants, if necessary. Following liquid removal, impacted soils located beyond the footprint of the settling basin may be consolidated within the footprint of the settling basin to achieve intended Site grades. The area will be properly graded and an impermeable protective cover will be installed in accordance with DER-10 requirements over impacted media identified by the environmental investigation conducted pursuant to the Investigative Work Plan described in Section 3.1. This closure plan is consistent with the Remedial Action Objectives and the approved Site remedy. The final closure plan will be subject to DEC approval and must conform to then applicable regulatory standards.

4.0 POST CLOSURE CONTROLS

Permanent use restrictions and institutional controls will be implemented for the soil consolidation and capped areas associated with the settling basin closure. These restrictions will include, but not be limited to: (1) restrictions on the use of groundwater as potable water, if determined necessary by NYSDEC; (2) maintenance of the protective cover; and (3) restrictions limiting future use to uses that are compatible with the closure/remedy. Such restrictions already exist pursuant to the SMP and should be reviewed and revised, if appropriate, with the approval of the NYSDEC following settling basin closure.

FIGURES



MAP REFERENCE: NYSDOT HUDSON NORTH QUADRANGLE, 1995.

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STERLING

Sterling Environmental Engineering, P.C.

24 Wade Road ♦ Latham, New York 12110

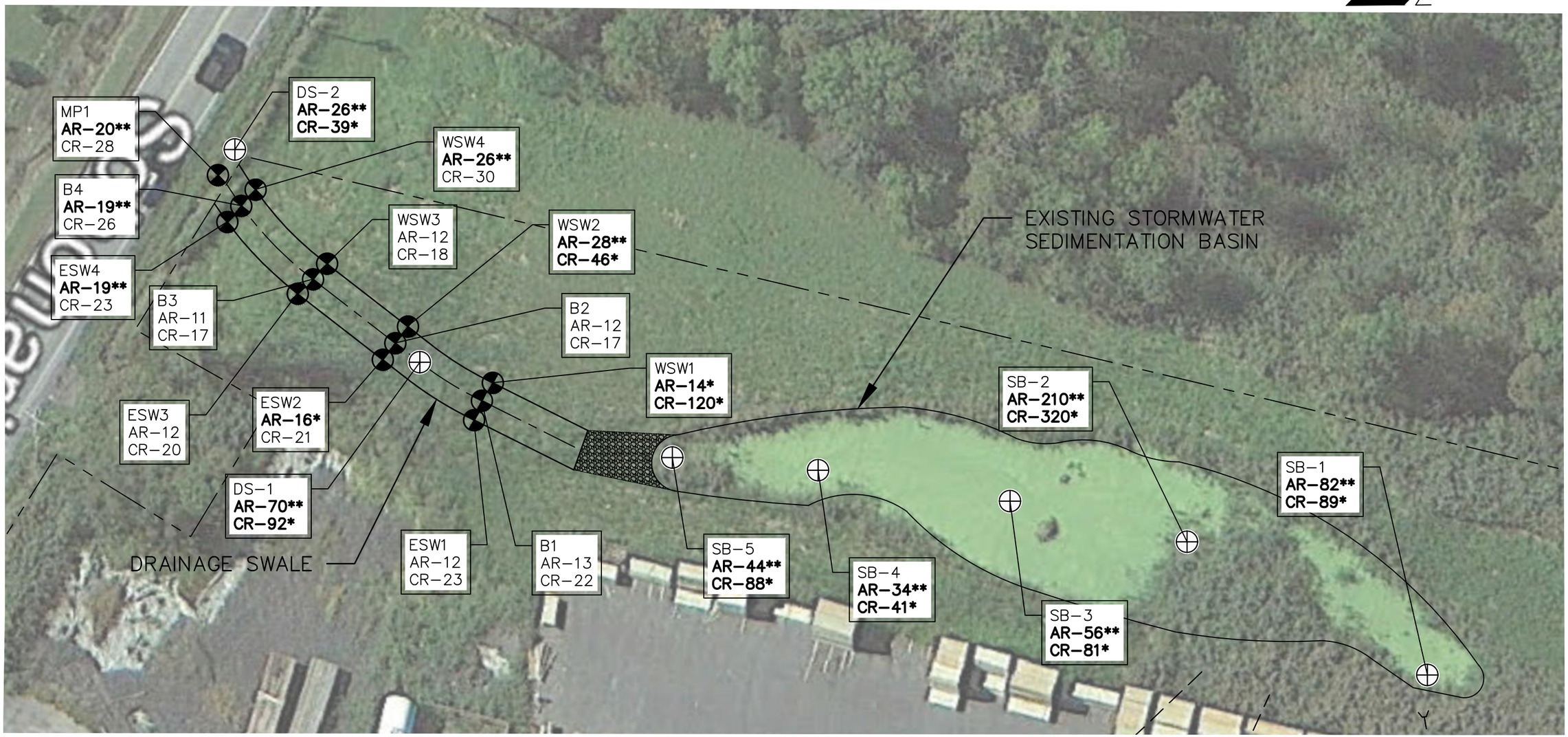
SITE LOCATION MAP

NORTHEAST TREATERS

SCHOHARIE TURNPIKE

TOWN OF ATHENS GREENE CO., N.Y.

PROJ. No.: 2014-08	DATE: 02/04/2016	SCALE: 1" = 2000'	DWG. NO. 2014-08001	FIGURE 1



POST EXCAVATION SAMPLE
(SAMPLED 12/7/15)

SEDIMENT BASIN SAMPLE
(SAMPLED 8/17/15)

* EXCEEDS UNRESTRICTED STANDARDS
(AR – 13, CR – 30)

** EXCEEDS COMMERCIAL STANDARDS
(AR – 16, CR – 1,500)

AR–ARSENIC VALUE
CR–CHROMIUM (TOTALS) VALUE
ALL VALUES IN PPM

0 15' 30' 60'

1 inch = 30 ft.

MAP REFERENCE: NEW YORK STATEWIDE DIGITAL ORTHOIMAGERY PROGRAM, PHOTOGRAPHY CIRCA 2013

STERLING
Sterling Environmental Engineering, P.C.
24 Wade Road • Latham, New York 12110

SUMMARY OF CHROMIUM AND ARSENIC DETECTIONS
AT SETTLING BASIN AND EXIT SWALE
NORTHEAST TREATERS
SCHOHARIE TURNPIKE
TOWN OF ATHENS GREENE CO., N.Y.

PROJ. No.: 2014–08	DATE: 02/04/2016	SCALE: 1" = 30'	DWG. NO. 2014–08101	FIGURE 2

S:\Drawings\2014-08 – Northeast Treaters of New York – Athens NY\2014-08101 – SW Swale Sampling.dwg SWEETT 2/12/2016 10:31 AM

APPENDIX J

QUALITY ASSURANCE PROJECT PLAN (QAPP)

NORTHEAST TREATERS OF NEW YORK, LLC
ATHENS, NEW YORK

QUALITY ASSURANCE PROJECT PLAN

1.0 QUALITY ASSURANCE PROJECT PLAN (QAPP)

The purpose of the Quality Assurance Project Plan (QAPP) is to develop and describe detailed sample collection and analytical procedures that ensure high quality, valid data is collected to evaluate the implemented remedies at the Northeast Treaters of New York, LLC (Northeast Treaters) Brownfield Cleanup Program (BCP) Site No. C420029. The procedures described herein apply to sampling and analysis that may be necessary following completion of remedial actions, as described in the Site Management Plan (SMP)

1.1 Annual Monitoring

The sampling frequency or sampling requirements specified in the SMP may only be modified with the approval of the New York State Department of Environmental Conservation (NYSDEC). The SMP may be modified to reflect changes in sampling plans approved by the NYSDEC. Information pertaining to sample locations and analytical parameters by media are set forth in Section 4.3 of the NYSDEC-approved SMP prepared for the Northeast Treaters BCP site.

1.2 Settling Basin Closure

Samples collected as part of settling basin closure will be collected and analyzed in accordance with NYSDEC July 2005 Analytical Services Protocol (ASP) or latest ASP revision. Closure of the settling basin described in an appendix of the SMP.

1.3 Laboratory Sample Custody Procedures

A New York State Department of Health (NYSDOH) Environmental Laboratory Accreditation Program (ELAP) certified laboratory meeting the requirements for sample custody procedures, including cleaning and handling sample containers and analytical equipment will be used.

1.4 Data Quality Requirements and Assessments

Data quality requirements and assessments are provided in the NYSDEC ASP, which includes the detection limit for each analyte and sample matrix. Note that the quantification limits, estimated accuracy, accuracy protocol, estimated precision and precision protocol are determined by the laboratory and will be in conformance with the requirements of the NYSDEC ASP (latest revision).

1.5 Sample Identification

Each sample container will have a durable label affixed to it that specifies the following sample information:

- Sample location;
- Sample type;
- Sample identification number;

- Date and time of sample collection;
- Laboratory analyte; and
- Preservative type (if applicable).

1.6 Sample Preservation, Handling and Shipment

All analytical samples will be placed in the appropriate sample containers as specified in the NYSDEC ASP. The holding time criteria identified for the individual methods of the ASP will be followed.

Prior to shipment to the laboratory, the sample containers will be checked for proper identification and compared to the field logbook for accuracy. The samples will be wrapped with a cushioning material and will be placed in a cooler with ice immediately after sample collection and maintained at 4 degrees Celsius (4°C) throughout the duration of the sampling event and subsequent shipment to and storage at the analytical laboratory until analysis.

Chain of Custody Forms will be placed in a sealed plastic bag and taped to the underside of the cooler lid. The cooler will be sealed with packaging tape and custody seals will be placed in such a manner that any opening of the cooler prior to arrival at the laboratory can be detected.

All samples will be shipped to ensure laboratory receipt within 48 hours of sample collection in accordance with NYSDEC requirements. The laboratory will be notified prior to the shipment of the samples.

1.7 Decontamination Procedures

All field sampling equipment should be sterile and dedicated to a particular sampling location. In situations where this is not possible, decontamination procedures will be used to reduce the risk of cross-contamination between sample locations. A decontamination station will be established at an area located away from the suspected source of contamination, however close enough to the sampling area to keep equipment handling to a minimum.

All non-disposable equipment will be decontaminated prior to initial use, prior to moving to a new sampling location and prior to leaving the site. Different decontamination procedures are used for various types of equipment as discussed below. When using field decontamination, it is advisable to start sampling in the area of the site with the lowest known contamination and proceed to the areas of highest suspected contamination.

1.7.1 Decontamination Procedures for Excavation and Drilling Equipment

All equipment such as drill rigs, backhoes and other mobile equipment will receive an initial cleaning prior to use at the site. The equipment will also be decontaminated prior to leaving the site. Unless otherwise specified, all wash/rinse solutions can be discharged to the ground on the site property.

Drilling and excavation equipment will be decontaminated in the following manner:

- Scrub all surfaces thoroughly with a non-residual, non-ionic detergent (such as Alconox) and tap water, using a brush to remove particulate matter or surface film. This is necessary in order to remove any solids buildup on the back of the rig, auger flights, drill rods, drilling head, etc. Any loose paint chips, paint flakes and rust must also be removed.

- Auger flights, rods, drill bits and excavation buckets, vehicular wheels and tracks must be steam cleaned prior to leaving the site.

- All downhole/drilling items, such as split spoon samplers, or any equipment that comes in direct contact with site soil will be decontaminated by steam cleaning.

1.7.2 Decontamination Procedures for Sampling Equipment

Teflon, PVC, polyethylene, polystyrene and stainless steel sampling equipment decontamination procedures will be as follows:

- Wash thoroughly with non-residual, non-ionic detergent (such as Alconox) and clean potable distilled water, using a brush to remove particulate matter or surface film.

- Rinse thoroughly with distilled water and air dry.

1.8 Field Work Documentation

Proper management and documentation of field work is essential to ensure that all necessary work is conducted in accordance with the SMP and QAPP in an efficient and qualified manner.

1.8.1 Field Log Book

Field log books must be bound and should have consecutively numbered, water resistant pages. All pertinent information regarding the site and sampling procedures must be documented. Notations should be made in log book fashion, noting the time and date of all entries. Information recorded in this field logbook should include, but not be limited to, the following:

- Project name and address.

- Name, address and telephone number of field contact.

- Site address.

- Purpose of sampling.

- Location of sampling point(s).

- Number(s) and volume(s) of sample(s) taken.

- Description of sampling point and sampling methodology.

- Date and time of collection, arrival and departure.

- Sample distribution and method of storage and transportation.

- References, such as sketches of the sampling site or photographs of sample collection.

- Field observations, including results of field analyses (e.g., pH, temperature, specific

conductance), water levels, drilling logs, and organic vapor and air quality measurements.

- Signature of personnel responsible for completing log entries.

1.8.2 Chain of Custody Forms

The Chain of Custody Form is initiated at the laboratory with bottle preparation and is shipped with the bottles. The Chain of Custody remains with the sample(s) at all times and lists the name of the person assuming responsibility for the samples. This person is tasked with ensuring secure and appropriate handling of the bottles and samples. When the form is complete, it should indicate that there were no lapses in sample accountability.

A sample is considered to be in an individual's custody if any of the following conditions are met:

- It is in the individual's physical possession,
- It is in the individual's view after being in his or her physical possession,
- It is secured by the individual so that no one can tamper with it, or
- The individual puts it in a designated and identified secure area.

At a minimum, the following information shall be provided on the Chain of Custody:

- Project name and address
- Project number
- Sample identification number
- Date
- Time
- Sample location
- Sample type
- Analysis requested
- Number and volume of containers
- Type of waste
- Sampler(s) name(s) and signature(s)
- Spaces for relinquished by/received by signature and date/time.

The Chain of Custody Form is filled out and signed by the person performing the sampling. The original of the form travels with the sample(s) and is signed and dated each time the sample is relinquished to another party, until it reaches the laboratory or analysis is complete. The field sampler keeps one copy and a copy is retained for the project file. Each cooler will have a Chain of Custody that corresponds with the samples for that cooler.

1.8.3 Field Changes and Corrective Action Notification

Whenever there is a required or recommended investigation/sampling change or correction, the NYSDEC Project Manager contact must be notified for approval.

1.9 Monitoring Equipment Calibration Procedures and Preventative Maintenance

The following information regarding equipment will be maintained for the project:

1. Equipment calibration and operating procedures will include provisions for documentation of frequency, conditions, standards and records reflecting the calibration procedures, methods of usage and repair history of the monitoring unit. Calibration of field equipment will be performed daily at the site so background conditions can be taken into consideration and the instrument calibrated accordingly.

2. Critical spare parts, necessary tools and manuals will be available to facilitate equipment maintenance and repair.

1.10 Disposal of Site Soil, Groundwater and Personal Protective Equipment (PPE)

During sampling, site soil and water may be generated from drill cuttings, drilling fluids, development water and purge water.

Soil and groundwater generated from ground intrusive activities must be contained and samples analyzed to determine if disposal to an offsite permitted facility is required or if the soil may be reused onsite as backfill and/or if water can be disposed to the stormwater drainage system.

Soiled personal protective equipment (PPE) and disposable sampling equipment will be considered solid waste and contained and disposed offsite. If hazardous waste contamination of PPE or disposable equipment is suspected due to elevated measurements of screening instruments, visual observations, odors or other means, PPE and equipment will be drummed and secured onsite and an approved disposal method will be employed.

1.11 Laboratory Data Deliverables and Reporting Requirements

Monitoring samples for the site require Category A data deliverables as defined in the NYSDEC ASP, July 2005 (or latest available version).

Category B data deliverables will be required for the remedial process closure to determine if monitoring can be terminated for the site. A Data Usability Summary Report (DUSR) will be generated by an independent third party for the Category B data deliverables.

1.12 Laboratory Trip Blanks

The laboratory supplies trip blank samples with sample containers when Volatile Organic Compounds (VOCs) are analyzed. The purpose of trip blanks is to detect additional sources of VOCs that might potentially influence contaminant values reported in actual samples both quantitatively and qualitatively. The following are potential sources of contamination:

- Laboratory reagent water

- Sample containers

- Cross contamination in shipment

- Contact with analytical instrumentation during preparation of the sample containers and analysis of the samples at the laboratory

- Laboratory reagents used in analytical procedures

A trip blank consists of a set of 40 mL sample vials filled by the laboratory with demonstrated analyte free water. Trip blanks should be handled, transported and analyzed in the same manner as the samples acquired that day, except the trip blank samples are not opened in the field. Trip blanks must accompany samples at a rate of one (1) set per shipment. The temperature of the trip blanks must be maintained at 4 degrees Celsius (4°C) while onsite and during shipment. Trip blanks must be returned to the laboratory with the same set of bottles they accompanied in the field.

1.13 Duplicates and Matrix Spike/Matrix Spike Duplicates

Duplicate and matrix spike/matrix spike duplicates are required at a frequency of one (1) per twenty (20) samples. The selected location for collecting these sample types may be randomly chosen. Duplicate and matrix spike/matrix spike duplicate samples are not required for routine monitoring.

Matrix spike samples are quality control procedures, consistent with NYSDEC ASP specifications, used by the laboratory as part of its internal Quality Assurance/Quality Control program. The matrix and matrix spike duplicates are aliquots of a designated sample (water or soil) which are spiked with known quantities of specified compounds. The matrix spike/matrix spike duplicates are used to evaluate the matrix effect of the sample upon the analytical methodology as well as to determine the precision of the applicable analytical method.

APPENDIX K

SITE MANAGEMENT FORMS

NORTHEAST TREATERS OF NEW YORK, LLC.
796 SCHOHARIE TURNPIKE, ATHENS, NY
SITE #C420029

SITE-WIDE INSPECTION FORM

Date: _____

Inspected By: _____ Weather Conditions: _____

Site Property Item	Condition		Remarks
	Acceptable	Not Acceptable	
1. Compliance with SMP/Environmental Easements			
2. Condition of Protective Cover a. Asphalt b. Soil c. Concrete			**a.**
			b.
			c.
3. General Site Conditions at Time of Inspection			
4. Site Records Up-To-Date			
5. Additional Comments/Notes:			

NORTHEAST TREATERS OF NEW YORK, LLC.
796 SCHOHARIE TURNPIKE, ATHENS, NY
SITE #C420029

SAMPLING SUMMARY

Date: _____

Sampled By: _____ Weather Conditions: _____

Sample ID	Collection Date & Time	Analysis	Physical Description of Materials (ie. Soil type, texture, moisture, color, odor,etc)	Comments
Overall Conditions:				
Additional Comments:				

Summary of Green Remediation Metrics for Site Management

Site Name: _____ Site Code: _____
Address: _____ City: _____
State: _____ Zip Code: _____ County: _____

Initial Report Period (Start Date of period covered by the Initial Report submittal)
Start Date: _____

Current Reporting Period
Reporting Period From: _____ To: _____

Contact Information
Preparer's Name: _____ Phone No.: _____
Preparer's Affiliation: _____

I. Energy Usage: Quantify the amount of energy used directly on-site and the portion of that derived from renewable energy sources.

	Current Reporting Period	**Total to Date**
Fuel Type 1 (e.g. natural gas (cf))		
Fuel Type 2 (e.g. fuel oil, propane (gals))		
Electricity (kWh)		
Of that Electric usage, provide quantity:		
Derived from renewable sources (e.g. solar, wind)		
Other energy sources (e.g. geothermal, solar thermal (Btu))		

Provide a description of all energy usage reduction programs for the site in the space provided on Page 3.

II. Solid Waste Generation: Quantify the management of solid waste generated on-site.

	Current Reporting Period (tons)	**Total to Date (tons)**
Total waste generated on-site		
OM&M generated waste		
Of that total amount, provide quantity:		
Transported off-site to landfills		
Transported off-site to other disposal facilities		
Transported off-site for recycling/reuse		
Reused on-site		

Provide a description of any implemented waste reduction programs for the site in the space provided on Page 3.

III. Transportation/Shipping: Quantify the distances travelled for delivery of supplies, shipping of laboratory samples, and the removal of waste.

	Current Reporting Period (miles)	**Total to Date (miles)**
Standby Engineer/Contractor		
Laboratory Courier/Delivery Service		
Waste Removal/Hauling		

Provide a description of all mileage reduction programs for the site in the space provided on Page 3. Include specifically any local vendor/services utilized that are within 50 miles of the site.

IV. Water Usage: Quantify the volume of water used on-site from various sources.

	Current Reporting Period (gallons)	**Total to Date (gallons)**
Total quantity of water used on-site		
Of that total amount, provide quantity:		
Public potable water supply usage		
Surface water usage		
On-site groundwater usage		
Collected or diverted stormwater usage		

Provide a description of any implemented water consumption reduction programs for the site in the space provided on Page 3.

V. Land Use and Ecosystems: Quantify the amount of land and/or ecosystems disturbed and the area of land and/or ecosystems restored to a pre-development condition (i.e. Green Infrastructure).

	Current Reporting Period (acres)	**Total to Date (acres)**
Land disturbed		
Land restored		

Provide a description of any implemented land restoration/green infrastructure programs for the site in the space provided on Page 3.

Description of green remediation programs reported above (Attach additional sheets if needed)
Energy Usage:
Waste Generation:
Transportation/Shipping:
Water usage:
Land Use and Ecosystems:
Other:

CERTIFICATION BY CONTRACTOR

I, _____ (**Name**) do hereby certify that I am _____ (**Title**) of the Company/Corporation herein referenced and contractor for the work described in the foregoing application for payment. According to my knowledge and belief, all items and amounts shown on the face of this application for payment are correct, all work has been performed and/or materials supplied, the foregoing is a true and correct statement of the contract account up to and including that last day of the period covered by this application.

_____

Date **Contractor**