Site Management Plan

Scott Rotary Seals Site
Olean, New York
BCP Site No. 905036

November 2012 0189-021-001
Updated September 2020
Updated September 2021

Prepared For: DST Properties NY, LLC
Scott Rotary Seals

TurnKey Environmental Restoration, LLC

2558 Hamburg Turnpike, Buffalo, New York | phone: (716) 856-0599 | fax: (716) 856-0583

BROWNFIELD CLEANUP PROGRAM

SITE MANAGEMENT PLAN

SCOTT ROTARY SEALS SITE
NYSDEC SITE NUMBER: C905036
OLEAN, NEW YORK

November 2012 0189-021-001
Updated September 2020
Updated September 2021

Prepared for:

Scott Rotary Seals

DST Properties NY, LLC
301 Franklin Street
Olean, New York

Prepared By:

TurnKey Environmental Restoration, LLC
2558 Hamburg Turnpike, Suite 300
Buffalo, NY 14218
(716) 856-0635

Revisions to Final Approved Site Management Plan:

Revision #	Submitted Date	Summary of Revision	DEC Approval Date
1	9/25/2020	PRR frequency, SVE termination, cessation of groundwater sampling & LNAPL monitoring	12/2/2020
2	8/2/2021	Termination of ASD System	9/23/2021

SITE MANAGEMENT PLAN
SCOTT ROTARY SEALS SITE
Table of Contents

Table of Contents

SITE MANAGEMENT PLAN
SCOTT ROTARY SEALS SITE
Table of Contents

LIST OF TABLES

LIST OF FIGURES

SITE MANAGEMENT PLAN
SCOTT ROTARY SEALS SITE
Table of Contents

APPENDICES

1.0 DESCRIPTION OF REMEDIAL PROGRAM

1.1 Introduction

This document is required as an element of the remedial program for the Scott Rotary Seals Site (hereinafter referred to as the "Site") under the New York State (NYS) Brownfield Cleanup Program (BCP) administered by New York State Department of Environmental Conservation (NYSDEC). The site was remediated in accordance with Brownfield Cleanup Agreement (BCA) Index# C905036-03-10, Site No. C905036, executed on March 12, 2010.

1.1.1 General

DST Properties NY, LLC entered into a BCA with the NYSDEC to remediate the approximate 2.0 acre parcel located at 301 Franklin Street, City of Olean, Cattaraugus County, New York. Under the terms of the BCA, DST Properties NY, LLC agreed to investigate and remediate the contaminated media at the Site. The Site location and boundaries of the approximate 2.0-acre Site are provided in Figures 1, 2 and 3. The boundaries of the Site are more fully described in the Environmental Easement (see Appendix A).

After completion of the remedial work described in the Remedial Action Work Plan (June 2011), some residual soil/fill, and groundwater contamination remained on-site, which is hereafter referred to as "remaining contamination." This Site Management Plan (SMP) was prepared to manage remaining contamination at the Site until the Environmental Easement is extinguished in accordance with ECL Article 71, Title 36. All reports associated with the Site can be viewed by contacting the NYSDEC or its successor agency managing environmental issues in New York State.

This SMP was prepared by TurnKey Environmental Restoration, LLC in association with Benchmark Environmental Engineering and Science, PLLC (TurnKey-Benchmark), on behalf of DST Properties NY, LLC, in accordance with the requirements in NYSDEC DER-10 Technical Guidance for Site Investigation and Remediation, dated May 2010, and the guidelines provided by NYSDEC. This SMP addresses the means for implementing the Institutional Controls (ICs) and Engineering Controls (ECs) that are required by the Environmental Easement for the Site.

1.1.2 Purpose

Certain contamination remains on-site after completion of the remedial action. Engineering and Institutional Controls (EC/ICs) have been incorporated into the Site remedy to control exposure to remaining contamination, if encountered, during the use of the Site to ensure protection of public health and the environment. An Environmental Easement granted to the NYSDEC, and recorded with the Cattaraugus County Clerk, requires compliance with this SMP and all EC/ICs placed on the Site. The ICs place restrictions on Site use, and mandate operation, maintenance, monitoring and reporting measures for all EC/ICs. This SMP specifies the methods necessary to ensure compliance with all ECs and ICs required by the Environmental Easement for contamination that remains at the Site. This plan has been approved by the NYSDEC, and compliance with this plan is required by the grantor of the Environmental Easement and the grantor's successors and assigns. This SMP may only be revised with the approval of the NYSDEC.

This SMP provides a detailed description of all procedures required to manage remaining contamination at the Site after completion of the Remedial Action, including (1) implementation and management of all EC/ICs; (2) media monitoring; (3) operation and maintenance of all treatment, collection, containment, or recovery systems; (4) performance of periodic inspections, certification of results, and submittal of Periodic Review Reports; and, (5) defining criteria for termination of treatment system operations.

To address these needs, this SMP includes (1) an Engineering and Institutional Control Plan for implementation and management of EC/ICs, including, where applicable, an Operation and Maintenance (O&M) plan for the related treatment systems; (2) an Excavation Plan; and (3) a Monitoring Plan.

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

It is important to note that:

- This SMP details the site-specific implementation procedures that are required by the Environmental Easement. Failure to properly implement the SMP is a violation of the environmental easement, which is grounds for revocation of the Certificate of Completion (COC).
- Failure to comply with this SMP is also a violation of Environmental Conservation Law, 6NYCRR Part 375 and the BCA (Index #C9-05036-03-10; Site #C905036) for the Site, and thereby subject to applicable penalties.

1.1.3 Revisions

Revisions to this plan will be proposed in writing to the NYSDEC's project manager. In accordance with the Environmental Easement for the Site, the NYSDEC will provide a notice of any approved changes to the SMP and append these notices to the SMP that is retained in its files. The original SMP was approved by NYSDEC in November 2012. In July 2020 and 2021, NYSDEC requested the SMP be updated to reflect revisions to the Site as indicated on the SMP revision log.

1.2 Site Background

1.2.1 Site Location and Description

The Scott Rotary Seals Site is located at 301 Franklin Street in the City of Olean, Cattaraugus County, New York and is identified as SBL 94.040-1-29.02. The Site is an approximate 2-acre parcel bounded by Franklin Street to the north, railroad tracks to the south and east, and former industrial properties to the west (see Figures 1-3). The boundaries of the BCP Site are more fully described in the- Environmental Easement (see Appendix A).

1.2.2 Site History

The Site was historically a portion of a larger petroleum refinery and petroleum bulk storage facility commonly known as the former Socony-Vacuum facility. The Site and surrounding area are documented as early as 1880 as being developed as a petroleum refinery with numerous ASTs and heavy industrial operations.

In September 2008, a Phase I Environmental Site Assessment (ESA) was completed by Neeson-Clark Associates, Inc. (Neeson) indicated that the Site was used for industrial purposes and was historically utilized as a bulk petroleum storage and refining facility. In November 2008, Neeson completed a limited subsurface investigation, which identified fill materials consisting of bricks, stone, concrete, and metal piping. Soil discoloration and odors of petroleum products were also noted during the investigation. The report concluded that the discoloration and odors would be consistent with degraded petroleum products.

In June 2009, TurnKey conducted a Phase II Environmental Investigation at the Site. During the investigation, contaminated soils, including petroleum odors, staining, and elevated photoionization detector (PID) were discovered Site-wide. Most locations exhibited strong petroleum odors and PID readings were over 1,000 parts per million (ppm) at several

locations. It was concluded that, based on visual/olfactory observations, PID measurements, and analytical results, significant site-wide petroleum-VOC and -SVOC impacts were evident, with grossly contaminated soils present in some areas, and that site remediation appeared warranted. DST submitted a draft Remedial Action Work Plan (RAWP) dated December 2009, which included Pre-Design Investigation activities, including additional surface samples, test pits and soil borings to further characterize the Site per BCP requirements. NYSDEC approved the investigation activities described in that work plan in July 2010 and fieldwork was completed in August 2010.

The qualitative field results were consistent with the findings of the 2009 Phase II Investigation; stained soils and petroleum-like odors were observed Site-wide with many sample locations exhibiting strong petroleum odors and elevated PID readings.

Based on the sampling results of the initial Pre-Design Investigation fieldwork and discussions with NYSDEC, DST submitted a Supplemental Investigation Work Plan to further evaluate groundwater conditions at the Site. Additional monitoring wells MW-4 through MW-6 were installed, developed, and sampled for VOCs in October 2010.

Upon completion of the initial and supplemental Pre-Design Investigation fieldwork, DST and TurnKey met with the NYSDEC to discuss the results and plan future investigation and remedial work. Based on the previous sampling results and discussions with NYSDEC personnel, DST submitted an Off-Site Investigation Work Plan to further evaluate potential off-site LNAPL near MW-6. Additional monitoring wells MW-7 and MW-8 were installed, developed, and sampled for VOCs in January 2011. VOCs including TICs were detected in groundwater, with all results being reported below their respective GWQS. LNAPL was not observed in any of the on-site or off-site wells during the January 2011 monitoring event.

In February 2011, an IRM Work Plan was submitted to the NYSDEC, which included: excavation and off-site disposal of soil/fill piles; removal, cleaning, and recycling of subsurface product piping; and additional exploratory trenching related to abandoned piping. The IRMs were completed between March and May 2011. Details of the IRMs are included in Section 1.4.

In June 2011, DST submitted a Remedial Action Work Plan (RAWP) based on the findings of the Pre-Design Investigation and completed IRMs. The RAWP included the limited excavation and off-site disposal of contaminated soil; installation of soil vapor extraction (SVE) system; removal of LNAPL from monitoring wells as necessary; installation

of an active sub-slab depressurization system within the building; and placement of a cover system in areas without building or hardscape (i.e., asphalt, concrete).

An Alternatives Analysis Report (AAR) was submitted to the Department (dated October 2011) which evaluated remedial alternatives in accordance with NYSDEC DER-10 guidance. The AAR evaluated four remedial scenarios, including no further action, commercial use cleanup, residential use cleanup and unrestricted use cleanup. Based on the findings of the AAR, and with agreement by the Department, the commercial use cleanup alternative was selected as the final remedial approach for the Site. The components and details of the remedial approach were fully detailed in the RAWP.

Remedial activities, including the IRM and RA, were completed between March 2010 and May 2012. Section 1.4 includes details of the RA.

1.2.3 Geologic Conditions

Overburden

The US Department of Agriculture Soil Conservation Service soil survey for Cattaraugus County, New York, indicates that the surrounding area describes Chenango gravelly silt loam, 0 to 3 percent slopes (ChA), as nearly level, very deep, and well drained. This permeability of this soil type is moderate or moderately rapid in the surface layer (0 to 9 inches) and subsoil (9 to 35 inches), and rapid in the substratum (35 to 72 inches).

The geology at the Site was investigated and is generally described as fill materials overlying native brown sand with gravel. The fill materials range in thickness up to 6 feet. Fill consists of silt, sand, and gravel with varying amounts of brick, metal, and concrete materials. Native materials consist of fine to coarse sand and gravel to the depths investigated (up to 32 fbgs).

Hydrogeology

The uppermost water bearing unit is within an unconfined sand and gravel layer. The depth to groundwater ranges between 13 to 26 feet below ground surface (fbgs). Groundwater in the uppermost water bearing unit generally flows toward the southeast, which is consistent with regional groundwater flow. Figure 4 shows the groundwater isopotential map for the Site using groundwater elevation date collected March 10, 2011.

1.3 Summary of Environmental Investigation Findings

A series of environmental investigations were performed to characterize the nature and extent of contamination at the Site. The results of the investigations are described in detail in the following reports:

- TurnKey Environmental Restoration, LLC. *Pre-Design Investigation Report: Scott Rotary Seals Site, Olean, New York, Revised June 2011.*
- TurnKey Environmental Restoration, LLC. *Remedial Action Work Plan: Scott Rotary Seals Site, Olean, New York, Revised June 2011.*

The purpose of the environmental investigations was to more fully define the nature and extent of contamination on the BCP Site and collect data of sufficient quantity and quality to perform the remedial alternatives evaluation. The field investigations were completed across the BCP Site, and off-site adjacent to MW-6, to delineate areas requiring remediation. On-site field activities included surface and subsurface soil sampling, monitoring well installation, groundwater sampling, and collection of hydrogeologic data.

Below is a summary of site conditions when the investigations were performed from 2009 to 2011:

- Based on surface soil data, arsenic, benzo(a)pyrene, and dibenz(a,h)anthracene were detected above Commercial SCOs. Samples collected from existing stockpiled soil/fill during the IRM contained elevated concentrations of arsenic, lead, copper, and mercury above Commercial SCOs.
- Based on subsurface soil data, VOCs, SVOCs, inorganics, pesticides, herbicides, and PCBs were not detected at concentrations above their respective Commercial SCOs. However, grossly contaminated soils, stained soils and petroleum-like odors were observed Site-wide. Many sample locations exhibited strong petroleum odors and PID readings over 1,000 ppm. PID screening results show that elevated concentrations of VOCs exist in the subsurface soils. The northwestern portion of the Site contains VOCs in subsurface soils in shallower locations relative to existing grades when compared to other areas of the Site. The highest VOCs concentrations are generally found directly above the water table in the smear zone.
- Based on groundwater sampling data, there were no exceedance of GWQS for VOCs, SVOCs, PCBs or herbicides in Site groundwater. Three inorganics (iron, magnesium, and manganese) and one pesticide did exceed GWQS. LNAPL was observed in wells MW-2, MW-4, and MW-6 in October 2010. LNAPL was not observed during subsequent well gauging events in January and March 2011.

- Subgrade Piping: During the August 2010 Pre-Design Investigation numerous subsurface pipes, ranging from 2-inch diameter to 12-inch diameter, were encountered at depths approximately four to six fbgs. Some of the discovered piping contained residual water-product/oil and pipe scale. In total, 5,761 linear feet of subgrade piping was exposed, tapped, evacuated of contents, removed, cleaned, and recycled. Locations of the IRM activities are shown on Figure 5.

1.4 Summary of Remedial Actions

The Site was remediated in accordance with the NYSDEC-approved Interim Remedial Measure (IRM) Work Plan dated February 2011 and Remedial Action Work Plan dated revised June 2011. The following is a summary of the IRM and RAs performed at the Site:

- Approximately 5,761 linear feet of subsurface product piping was exposed, tapped, evacuated of contents, removed, cleaned, and recycled. Piping that extended beyond the property boundary was capped and/or grouted at the apparent property line. No abandoned piping was encountered during additional exploratory trenching. Location and contents of the removed piping are noted on Figure 5.
- Approximately 1,489-gallons of oil/water mixture was pumped into an on-site temporary holding tank and ultimately disposed off-site. Piping contents from the abandoned piping, including seven 55-gallon drums of product/oil and 20, 55-gallon drums of pipe scale, were disposed at CWM Chemical Services, LLC, located in Model City, NY.
- During IRM excavation activities completed between March and May 2011, approximately 1,982-tons of on-site soil/fill debris piles, identified as North Pile, South Pile, East Pile and West Pile were excavated, loaded and transported off-site by RE Lorenz for disposal at Waste Management's Chaffee Landfill, located in Chaffee NY. A former tank pad was also removed and disposed off-site, as described above. Figure 5 shows the approximate location of the IRM excavation activities.
- During remedial excavation and redevelopment activities completed between July 2011 and May 2012, approximately 7,428 tons of shallow GCS to a depth of approximately 6 fbgs were excavated, loaded, and transported off-site by RE Lorenz for disposal at Waste Management's Chaffee Landfill, located in Chaffee, NY. Figure 6 shows the approximate extents of the excavation. In total, 9,410 tons of non-hazardous soil/fill were excavated, loaded, and transported off-site for disposal from the Site.
- Construction and maintenance of a composite cover system, including areas of the Site covered by the new building, concrete sidewalk, and equipment pads; asphalt parking and driveways; gravel and vegetated soil cover areas. Location and cover

system type and related detail are shown on Figure 7. Areas of the Site not covered by buildings and/or impermeable cover (i.e., concrete and asphalt), are covered by a minimum 12-inch of approved gravel (including crushed concrete), backfill and/or topsoil. Pre- and post-elevation data is shown on Figure 7.

- Construction and maintenance of a soil vapor extraction (SVE) system to address GCS in the deeper soil/fill from approximately 6 fbgs to the top of groundwater, including the installation of nine vapor extraction wells, installation of conveyance piping, mobilization, and installation of SVE mobile treatment trailer and secondary emission controls with two 1,000-lb vapor phase granular activated carbon (GAC).
- Installation of an active sub-slab depressurization (ASD) system within the building, in accordance with the approved Work Plan. Seven sub-slab extraction points, vent stack assemblies and extraction fans were installed throughout the new building. Location of the extraction points and vent stack piping are shown on Figure 8.
- LNAPL recovery using absorbent socks installed within MW-2 and MW-4 and a free product passive skimmer (Keck) is installed in MW-6 to address an apparent localized LNAPL layer in that area.
- Execution and recording of an Environmental Easement to restrict land use to commercial/industrial operations and prevent future exposure to any contamination remaining at the Site.
- Development and implementation of this Site Management Plan (SMP) for management of remaining contamination as required by the Environmental Easement., which includes plans for (1) Institutional and Engineering Controls, (2) excavation, (3) monitoring and reporting, and (4) operation and maintenance.

Remedial activities were completed at the Site in May 2012.

1.4.1 Removal of Contaminated Materials from the Site

The Scott Rotary Seals Site was remediated to remove or treat petroleum-impacted GCS and achieve Commercial SCOs. Table 1 presents a list of the Part 375 Commercial SCOs (Track 4) used for this Site. Materials removed from the Site included subsurface piping, recovered pipe product/product scale, petroleum-impacted soil/fill, and impacted ground/ pipe water.

Table 2 shows the total quantities of each category of material removed from the Site and the disposal locations.

1.4.2 Subsurface Piping - IRM

Approximately 5,761 linear feet of subsurface piping was removed during IRM activities between March and April 2011. Figure 5 shows the approximate location and contents of the encountered subsurface piping. Piping that extended beyond the property boundary was capped and/or grouted at the apparent property boundary.

Piping was identified, tapped to evacuate residual water/product mixture, and removed. After piping was emptied of residual contents, piping was transported off-site by RE Lorenz, Inc. for recycling as scrap at Gateway Materials, located on Union Road, Cheektowaga, NY.

Approximately 1,489 gallons of residual pipe water were evacuated from the subsurface pipes and stored in a temporary holding tank. Green Environmental Specialists, Inc. (Permit No. 9A-520) vacuumed out the residual water, cleaned the holding tank of residual sediments, and transported the water/sediment mixture off-site for disposal at Environmental & Industrial Contracting Services, Inc. (EICS) (EPA ID No. NY0001037605) located in Niagara Falls, NY for disposal.

Residual pipe scale and product sludge was removed from the pipe and containerized in 55-gallon drums. A total of 27 drums, including 20 drums of pipe scale and seven drums of oil sludge were transported off-site by Frank's Vacuum Truck Service, Inc. (Permit No. 9A-332) to CWM Chemical Services, LLC (EPA ID No. NYD049836679), located in Model City, NY.

Table 2 shows the total quantities of each category of material removed from the Site, the transporter's name and license number, and the disposal locations. Figure 5 shows the location of the remedial activities.

1.4.3 Remedial Soil Excavation

During IRM excavation activities completed between March and May 2011, approximately 1,982 tons of on-site soil/fill/debris piles, identified as North Pile, South Pile, East Pile and West Pile were excavated, loaded, and transported off-site by RE Lorenz for disposal at Waste Management's Chaffee Landfill, located in Chaffee NY. Figure 5 shows the approximate location of the soil/fill piles removed.

During remedial excavation and redevelopment activities completed between July 2011 and May 2012, approximately 7,428 tons of impacted soil/fill was excavated, loaded, and

transported off-site by RE Lorenz for disposal at Waste Management's Chaffee Landfill, located in Chaffee, NY. Figure 6 shows the approximate extents of the excavation.

In total, 9,410 tons of non-hazardous soil/fill were excavated, loaded, and transported off-site for disposal.

Table 2 shows the total quantities of each category of material removed from the Site, the transporter's name and license number, and the disposal locations. Figure 6 shows the location of the remedial activities.

1.4.4 Site-Related Treatment Systems

1.4.4.1 Active Sub-Slab Depressurization (ASD) System

An ASD system creates a low-pressure zone beneath a building slab using a powered fan connected via piping to create a negative pressure beneath the building foundation. The low pressure field prevents soil gas from entering the building. The ASD system used for this project was designed in accordance with the EPA design document entitled "Radon Prevention in the Design and Construction of Schools and Other Large Buildings" Third Printing with Addendum, June 1994 and the NYSDOH "Guidance for Evaluating Soil Vapor Intrusion in the State of New York" dated October 2006.

Prior to pouring the concrete floor slab of the new building, a polyethylene vapor barrier was placed above the subbase aggregate to act as a passive vapor barrier and assist in maintaining a sub-slab pressure differential.

The installation of the ASD system was completed in March 2012 by Mitigation Tech, in accordance with the approved Work Plan. The ASD system was operated continuously from September 2012 to July 2021. To evaluate potential soil vapor intrusion, three sub-slab vapor, one outdoor air, and three indoor air samples were collected on April 14, 2021 for analysis of VOCs via EPA Method TO-15. No samples contained VOCs at concentrations requiring further action. Based on these results, NYSDEC was petitioned to approve termination of the ASD system in a letter report dated July 25, 2021. On July 28, 2021, NYSDEC accepted the Soil Vapor Intrusion Assessment Report and indicated the ASD system could be terminated (see Appendix B).

1.4.4.2 Soil Vapor Extraction (SVE) System

Based on the presence of nuisance odors and elevated PID readings within deeper subsurface soil remaining after completion of the remedial activities, a soil vapor extraction

(SVE) system was installed on-site. SVE technology removes volatile compounds from soils by inducing negative pressure (vacuum) via a mechanical blower to enhance volatilization and remove soil vapors.

Installation of the SVE system was completed in March 2012, including the installation of nine SVE wells, associated conveyance piping, and placement of the trailer-mounted SVE system. The SVE system was operated between March 2012 and December 2015. At the outset of the SVE system operation vapor-phase activated carbon was used to treat the effluent air from the SVE trailer. The effluent air concentrations dropped, and odors were not evident over time. The NYSDEC was petitioned to terminate the usage of vapor-phase carbon which was granted by the NYSDEC in correspondence dated August 1, 2012.

The NYSDEC was petitioned in May 2013 to assess the discontinuation of operation of the SVE system as a significant reduction was observed in the mass removal rate and the mass removal rate was "leveling-off." The NYSDEC granted the request and, as such, the SVE discontinuation evaluation that included soil sampling and testing was undertaken and discussed in a letter report to the NYSDEC dated July 16, 2013. The split-spoon soil sampling from the four borings completed for the SVE discontinuation evaluation showed that the soil quality had greatly improved; gray staining had been reduced and the soils were predominantly yellowish-brown; odors were either absent or reduced from strong to slight; the VOC concentrations based on PID readings had decreased by a minimum of 80% to over 90%; the soil analytical data showed there were no exceedances of the Commercial SCOs; and the concentrations of contaminants decreased sharply in the SVE exhaust. This July 16, 2013 letter requested approval to terminate SVE System operation. On August 22, 2013, TurnKey responded to the Department's August 16 comment letter requesting SVE system mass removal rates and VOC concentrations at the blower prior to carbon treatment. On May 21, 2014, TurnKey requested that the SVE system be terminated. In a letter dated July 24, 2014 the Department denied the request but approved shutdown of the SVE system during the months of January through mid-June. On January 20, 2016, TurnKey again requested approval to terminate SVE operations since the mass removal rate had leveled off and was provided very limited benefit. The request was approved NYSDEC approvals.

SVE wells SVE-1 through SVE-9 were decommissioned on October 17 and 18, 2016; well decommissioning logs are provided in Appendix E.

1.4.4.3 LNAPL Recovery System

Based on the findings of the previous investigations, sporadic evidence of LNAPL (i.e., product and/or sheen) in MW-2, MW-4 and MW-6, likely attributable to seasonal fluctuations in groundwater elevations, was managed using hydrocarbon absorbent socks and a passive skimmer. Absorbent socks were installed in wells MW-2 and MW-4 at the LNAPL/water interface. During monthly inspections, socks that had obvious staining/saturation of LNAPL were removed and replaced with new socks. Used socks were containerized, labeled, characterized, and properly disposed off-site.

A free product passive skimmer (Petrotrap™) was installed in MW-6 to address an apparent localized LNAPL layer near well MW-6. Since no significant product was recovered with the Petrotrap™, it was replaced with an absorbent sock.

LNAPL monitoring was completed monthly beginning in 2009. Since LNAPL was not detected in the groundwater wells since 2013, TurnKey-Benchmark recommended in the 2016 Periodic Review Report (PRR) that LNAPL monitoring be discontinued. This recommendation was approved by the Department in letter dated September 8, 2016.

1.4.5 Remaining Contamination

The Scott Rotary Seals Site was remediated to remove and treat petroleum-impacted GCS and achieve Commercial SCOs, which is consistent with the intended use of the Site. Residual contamination remaining at the Site above Unrestricted SCOs and GWQS, included residual degraded petroleum, as evidenced by staining and nuisance odors, certain VOCs (including TICs), SVOCs (including TICs), and metals located from beneath the cover system demarcation layers, to the groundwater interface (approximately 13 to 26 fbgs). Constituents above regulatory guidelines were addressed through installation and operation of remedial systems (i.e., ASD and SVE systems), and the placement of a Site cover system, including the new building, concrete and asphalt covered areas, gravel, and vegetated soil cover areas.

When the excavation was deemed complete, a demarcation layer, consisting of an orange plastic mesh material, was installed to identify material being left in-place. The new building excavation was backfilled with select clean backfill (i.e., 2" ROC and structural stone), with areas outside of the new building and utility corridor being backfilled with approved on-site reuse of crushed concrete and on-site soil that met the requirements of reuse or was approved by the Department. Areas of the Site that were not covered by impermeable cover (i.e., building, concrete or asphalt) were backfilled to within 1 foot of the final surface

elevation, and a second demarcation layer was placed to identify the required 1-foot thick, clean topsoil, gravel/stone (including crushed concrete) from the underlying backfill.

As discussed in Section 1.4.4.2, the remaining contamination in subsurface soil/fill has been greatly reduced through the 3.5 years of SVE system operation. Subsurface soil analytical results are presented in Table 2 of the July 16, 2013 SVE System Discontinuation Request (see Appendix C). Mass removal rates are also presented in the Discontinuation Request.

Five groundwater monitoring events (May 10, 2013, December 6, 2013, July 18, 2014, December 4, 2014, and May 6, 2016) were completed at the Scott Rotary Seals Site that included sampling and analysis of groundwater collected from wells MW-1, MW-2, MW-3, MW-4, MW-5 and MW-6. The groundwater samples indicated that that the groundwater did not contain any exceedances of the GWQS, VOC TIC concentrations had been significantly reduced post-remediation, and there was a decreasing trend in the VOC TICs as groundwater traversed the Site. On this basis, the 2016 PRR recommended termination of the groundwater quality monitoring. This recommendation was approved in a September 8, 2016 letter from the NYSDEC. The 2017 PRR included a description of the groundwater monitoring well decommissioning. Appendix E includes the SVE and groundwater monitoring well decommissioning logs.

2.0 ENGINEERING & INSTITUTIONAL CONTROL PLAN

2.1 Introduction

2.1.1 General

Since residual soil and groundwater contamination remains beneath the Site, Engineering and Institutional Controls (EC/ICs) are required to protect public health and the environment. This EC/IC Plan describes the procedures for the implementation and management of all EC/ICs at the Site. The EC/IC Plan is one component of the SMP and is subject to revision by NYSDEC.

2.1.2 Purpose

This plan provides:

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

2.2 Engineering Controls

2.2.1 Cover System

Exposure to remaining contamination in soil/fill at the Site is prevented by a composite cover system placed across the surface of the Site. The cover system includes areas of the Site covered by the new building, concrete sidewalk, and equipment pads; asphalt parking and driveways; and gravel and vegetated soil cover areas. Location and cover system type and related detail are shown on Figure 7.

In areas of the Site where GCS was excavated to approximately 6 fbgs, an orange plastic mesh demarcation layer was installed upon completion of the excavation to identify material being left in-place prior to backfilling. Within the building footprint, select clean structural stone was backfilled and compacted in preparation for construction of the new building. The building concrete slab, including subbase and vapor barrier related to the ASD system, were installed prior to the approximate 6-inch thick concrete slab being poured.

For excavated areas of the Site that were outside of the building footprint, a demarcation layer was installed as described above, and approved on-site material was used for backfilling to approximately 1 fbgs. A second orange plastic mesh demarcation layer was then installed. In areas that received impermeable cover (asphalt or concrete) approved clean gravel/stone subbase material was placed in preparation for paving and or concrete (see Figure 7). In vegetated areas, approximately 6 to 9 inches of approved on-site material meeting Commercial SCOs was placed above the upper demarcation layer, with approximately 3 to 6 inches of approved topsoil being placed to promote vegetative growth.

In areas of the Site not excavated during remediation, an orange plastic mesh demarcation layer was installed in preparation for the 12-inch thick surface cover system installation, as described above. Figure 7 presents the location and cross section details for the different cover system types.

The Excavation Work Plan (Appendix F) outlines the procedures to be implemented in the event the cover system is breached, penetrated, or temporarily removed, and any underlying remaining contamination is disturbed. Procedures for the inspection and maintenance of this cover are provided in the Monitoring Plan included in Section 3.0 of this SMP.

2.3 Criteria for Completion of Remediation/Termination of Remedial Systems

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

2.3.1 Composite Cover System

The composite cover system is a permanent control, and the quality and integrity of this system will be inspected at defined, regular intervals in perpetuity.

2.4 Institutional Controls

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

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

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

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

- The property may only be used for commercial and industrial use provided that the long-term Engineering and Institutional Controls included in this SMP are employed.
- The property may not be used for a higher level of use, such as unrestricted, residential, and restricted-residential use without additional remediation and amendment of the Environmental Easement, as approved by the NYSDEC.

- All future activities on the property that will disturb remaining contaminated material must be conducted in accordance with this SMP.
- The use of the groundwater underlying the property is prohibited without treatment rendering it safe for intended use.
- The potential for vapor intrusion must be evaluated for any additional buildings developed on-site, and any potential impacts that are identified must be monitored or mitigated.
- Vegetable gardens and farming on the property are prohibited.

The Site owner or remedial party will submit to NYSDEC a written statement that certifies, under penalty of perjury, that (1) controls employed at the Controlled Property are unchanged from the previous certification or that any changes to the controls were approved by the NYSDEC and (2) nothing has occurred that impairs the ability of the controls to protect public health and environment or that constitute a violation or failure to comply with the SMP. NYSDEC retains the right to access such Controlled Property at any time to evaluate the continued maintenance of any and all controls. This certification shall be submitted annually, or an alternate frequency that NYSDEC may allow, and will be made by an expert that the NYSDEC finds acceptable.

2.4.1 Excavation Work Plan

The Site has been remediated for commercial use. Notification will be provided to the Department at least 15 days prior to any future intrusive work that will penetrate the cover system, or encounter or disturb the remaining contamination, including any modifications or repairs to the existing cover system. Any future intrusive work on the BCP Site will be performed in compliance with the Excavation Work Plan (EWP) that is attached as Appendix F to this SMP. Any work conducted pursuant to the EWP must also be conducted in accordance with the procedures defined in a Health and Safety Plan (HASP) and Community Air Monitoring Plan (CAMP) prepared for the site. A sample HASP is attached as Appendix G to this SMP that is in current compliance with DER-10, and 29CFR 1910, 29CFR 1926, and all other applicable Federal, State, and local regulations. Based on future changes to state and federal health and safety requirements, and specific methods employed by future contractors, the HASP and CAMP will be updated and re-submitted with the notification provided in Section A-1 of the EWP. Any intrusive construction work will be performed in

compliance with the EWP, HASP and CAMP, and will be included in the periodic inspection and certification reports (see Section 5).

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

2.4.2 Soil Vapor Intrusion Evaluation

Prior to the construction of any enclosed structures located on-site, an SVI evaluation will be performed to determine whether any mitigation measures are necessary to eliminate potential exposure to vapors in the proposed structure. Alternatively, an SVI mitigation system may be installed as an element of the building foundation without first conducting an SVI investigation. This mitigation system will include a vapor barrier and passive sub-slab depressurization system that is capable of being converted to an active system.

Prior to conducting an SVI investigation or installing a mitigation system, a work plan will be developed and submitted to the NYSDEC and NYSDOH for approval. This work plan will be developed in accordance with the most recent NYSDOH "Guidance for Evaluating Vapor Intrusion in the State of New York." Measures to be employed to mitigate potential vapor intrusion will be evaluated, selected, designed, installed, and maintained based on the SVI evaluation, the NYSDOH guidance, and construction details of the proposed structure. Any SVI sampling results, evaluations, and follow-up actions will also be summarized in the next Periodic Review Report.

2.5 Inspections and Notifications

2.5.1 Inspections

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

- Whether Engineering Controls continue to perform as designed.
- If these controls continue to be protective of public health and the environment.
- Compliance with requirements of this SMP and the Environmental Easement.
- Sampling and analysis of appropriate media during monitoring events.
- If Site records are complete and up to date.
- Changes, or needed changes, to the remedial or monitoring system.

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

Inspections will be conducted in accordance with the procedures set forth in the Monitoring Plan of this SMP.

2.5.2 Notifications

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

- 60-day advance notice of any proposed changes in site use that are required under the terms of the Brownfield Cleanup Agreement (BCA), 6NYCRR Part 375, and/or Environmental Conservation Law.
- 15-day advance notice of any proposed ground-intrusive activities pursuant to the Excavation Work Plan.
- Notice within 48-hours of any damage or defect to the foundations structures that reduces or has the potential to reduce the effectiveness of other Engineering Controls and likewise any action to be taken to mitigate the damage or defect.
- Notice within 48-hours of any emergency, such as a fire, flood, or earthquake that reduces or has the potential to reduce the effectiveness of Engineering Controls in place at the site, including a summary of actions taken, or to be taken, and the potential impact to the environment and the public.
- Follow-up status reports on actions taken to respond to any emergency event requiring ongoing responsive action shall be submitted to the NYSDEC within 45 days and shall describe and document actions taken to restore the effectiveness of the ECs.

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

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

2.6 Contingency Plan

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

This Contingency Plan, a summary of the Emergency Response Plan (Appendix A of the HASP), describes potential emergencies that may occur at the Site; procedures for responding to those emergencies; roles and responsibilities during emergency response; and training all workers must receive to follow emergency procedures. This Contingency Plan also describes the provisions this Site has made to coordinate its emergency response planning with other contractors on-site and with off-site emergency response organizations.

2.6.1 Emergency Telephone Numbers

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

Table 3: Emergency Contact Numbers

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

Table 4: Site Contact Numbers

Scott Rotary Seals (DST Properties NY, LLC)	Jeffrey Meister (763) 404-8040
TurnKey Environmental Restoration, LLC	(716) 856-0635

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

2.6.2 Map and Directions to Nearest Health Facility

Site Location: Scott Rotary Seals Site
Nearest Hospital Name: Olean General Hospital
Hospital Location: 515 Main Street, Olean NY
Hospital Telephone: (716) 373-2600

Directions to the Hospital:

1. Head northeast on Franklin Street
2. Turn RIGHT onto N. Union Street
3. Merge onto Main Street

Total Distance: 1.3 miles
Total Estimated Time: 6 minutes

Figure A-1 (included in SMP Appendix G – HASP) presents a Hospital Route Map.

2.6.3 Response Procedures

As appropriate, the fire department and other emergency response groups will be notified immediately by telephone of the emergency. The emergency telephone number list is found at the beginning of this Contingency Plan (Table 3, above). An emergency telephone list will also be posted prominently at the Site and made readily available to all personnel.

3.0 SITE MONITORING PLAN

3.1 Introduction

3.1.1 General

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

3.1.2 Purpose and Schedule

This Monitoring Plan describes the methods to be used for:

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

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

- Reporting requirements.
- Annual inspection and periodic certification.

Monitoring of the performance of the remedy will be conducted in accordance with Table 5. Monitoring programs are summarized in Table 5 and outlined in detail in Sections 3.2 and 3.3.

Table 5: Monitoring/Inspection Schedule

Monitoring Program	Frequency*	Matrix	Analysis
Site Inspection	Annual	--	--

* The frequency of events will be conducted as specified until otherwise approved by NYSDEC and NYSDOH

3.2 Cover System Monitoring

Site-wide inspection of the composite cover system, as described above, will be performed annually and after all severe weather conditions that may affect the cover system. The site-wide inspection form is provided in Appendix H.

The site-wide inspection will include a general visual evaluation of all areas of the Site. Non-paved areas (e.g., vegetated areas), concrete and asphalt paved areas, and gravel/stone areas across the Site will be inspected for erosion, absence of vegetation, and condition of impermeable surfaces (i.e., asphalt and concrete) to verify that these areas are being maintained, as appropriate to prevent direct contact with remaining contamination and potential off-site migration of remaining contaminants by surface water run-off. Any surface or subsurface disturbances related to redevelopment activities will be performed in compliance with the Excavation Work Plan (Appendix F).

3.3 Site-Wide Inspection

Site-wide inspections will be performed on a regular schedule at a minimum of once a year. Site-wide inspections will also be performed after all severe weather conditions that may affect EC/ICs. During the annual inspections, the NYSDEC auto-generated certification form will be completed (Appendix H). The form will compile sufficient information to assess the following:

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

3.4 Monitoring Reporting Requirements

Forms and any other information generated during inspections will be kept on file by the Site owner or its designated representative. All forms and other relevant reporting formats used during the inspection events will be (1) subject to approval by NYSDEC and (2) submitted at the time of the PRR.

All monitoring results will be reported to NYSDEC on a periodic basis in the PRR.

The report will include, at a minimum:

- Date of event
- Description of the activities performed
- Copies of all field forms completed
- Any observations, conclusions, or recommendations
- A determination as to whether conditions have changed since the last reporting event

Table 6 is a summary of the monitoring program deliverables.

Table 6: Schedule of Inspection Reports

Task	Monitoring Frequency*	Reporting Frequency*
Site Inspection	Annual	Annual

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

4.0 OPERATION & MAINTENANCE PLAN

4.1 General

The site remedy does not rely on any 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.

5.0 INSPECTIONS, REPORTING & CERTIFICATIONS

5.1 Site Inspections

5.1.1 Inspection Frequency

All inspections will be conducted at the frequency specified in the schedules provided in Section 3.0 of this SMP. At a minimum, a site-wide inspection will be conducted annually. Inspections of remedial components will also be conducted when a breakdown of any treatment system component has occurred or whenever a severe condition has taken place, such as an erosion or flooding event that may affect the ECs.

5.1.2 Inspection Forms, Sampling Data, & Maintenance Reports

The NYSDEC Institutional and Engineering Control Certification Form will be completed during the annual Site-wide inspection (see Appendix H). This form is auto-generated by the NYSDEC.

All applicable inspection forms and other records, including all media sampling data and system maintenance reports, generated for the site during the reporting period will be provided in electronic format in the PRR.

5.1.3 Evaluation of Records & Reporting

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

- EC/ICs are in place, are performing properly, and remain effective.
- The Monitoring Plan is being implemented.
- Operation and maintenance activities are being conducted properly.
- The site remedy continues to be protective of public health and the environment and is performing as designed in the RAWP and FER.

5.2 Certification of Engineering and Institutional Controls

After the last inspection of the reporting period, a qualified environmental professional or Professional Engineer licensed to practice in New York State (depending on the need to evaluate engineering systems) will prepare the following certification:

For each institutional or engineering control identified for the site, I certify that 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 and 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.
- 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.
- The information presented in this report is accurate and complete.
- I certify that all information and statements in this certification form are true. I understand that a false statement made herein is punishable as a Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law. I, [name], of [business address], am certifying as [Owner or Owner's Designated Site Representative] (and if the site consists of multiple properties): [I have been authorized and designated by all site owners to sign this certification] for the site.
- No new information has come to my attention, including groundwater monitoring data from wells located at the site boundary, if any, to indicate that the assumptions made in the qualitative exposure assessment of off-site contamination are no longer valid.

Every five years the following certification will be added:

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

The signed certification will be included in the PRR.

5.3 Periodic Review Report

A Periodic Review Report (PRR) was submitted to the Department every year, with the first PRR submitted in July 2014. The June 2017 PRR recommended a reduced reporting frequency of every three years, which was approved by the Department. The triennial cycle began on June 1, 2017. If the site is subdivided into separate parcels with different ownership, a single PRR will be prepared that addresses the site described in Appendix A (Metes and Bounds). The report will be prepared in accordance with NYSDEC DER-10 and submitted within 30 days of the end of each certification period. Media sampling results will also be incorporated into the PRR. The PRR will include:

- Identification, assessment, and certification of all ECs/ICs required by the remedy for the site.
- Results of the required annual Site inspections and severe condition inspections, if applicable.
- All applicable inspection forms and other records generated for the site during the reporting period in electronic format.
- A site evaluation, which includes the following:
  - The compliance of the remedy with the requirements of the site-specific Decision Document
  - Any new conclusions or observations regarding Site contamination based on inspections
  - Recommendations regarding any necessary changes to the remedy
  - The overall performance and effectiveness of the remedy

The PRR will be submitted in electronic format, with the fully executed NYSDEC Institutional and Engineering Control Certification Form submitted in hard-copy format, to the NYSDEC Regional Office in which the site is located.

5.4 Corrective Measures Plan

If any component of the remedy is found to have failed, or if the periodic certification cannot be provided due to the failure of an institutional or engineering control, a corrective measures plan will be submitted to the NYSDEC for approval. This plan will explain the failure and provide the details and schedule for performing work necessary to correct the

failure. Unless an emergency condition exists, no work will be performed pursuant to the corrective measures plan until it is approved by the NYSDEC.

TABLES

TABLE 1

COMMERCIAL SOIL CLEANUP OBJECTIVES

SCOTT ROTARY SEALS SITE
OLEAN, NEW YORK

Parameter	Commercial SCOs [1]
Volatile Organic Compounds (VOCs) - mg/kg	
1,1,1-Trichloroethane	**500**
1,1-Dichloroethane	**240**
1,1-Dichloroethene	**500**
1,2-Dichlorobenzene	**500**
1,2-Dichloroethane	**30**
cis-1,2-Dichloroethene	**500**
trans-1,2-Dichloroethene	**500**
1,3-Dichlorobenzene	**280**
1,4-Dichlorobenzene	**130**
1,4-Dioxane	**130**
Acetone	**500**
Benzene	**44**
Butylbenzene	**500**
Carbon tetrachloride	**22**
Chlorobenzene	**500**
Chloroform	**350**
Ethylbenzene	**390**
Hexachlorobenzene	**6**
Methyl ethyl ketone	**500**
Methyl tert butyl ether	**500**
Methylene chloride	**500**
n-Propylbenzene	**500**
sec-Butylbenzene	**500**
tert-Butylbenzene	**500**
Tetrachloroethene	**150**
Toluene	**500**
Trichloroethene	**200**
1,2,4-Trimethylbenzene	**190**
1,3,4-Trimethylbenzene	**190**
Vinyl chloride	**13**
Xylene	**500**

TABLE 1

COMMERCIAL SOIL CLEANUP OBJECTIVES

SCOTT ROTARY SEALS SITE
OLEAN, NEW YORK

Parameter	Commercial SCOs [1]
Semi-Volatile Organic Compounds (SVOCs) - mg/kg	
Acenaphthene	**500**
Acenaphthylene	**500**
Anthracene	**500**
Benzo(a)anthracene	**5.6**
Benzo(a)pyrene	**1**
Benzo(b)fluoranthene	**5.6**
Benzo(g,h,i)perylene	**500**
Benzo(k)fluoranthene	**56**
Chrysene	**56**
Dibenzo(a,h)anthracene	**0.56**
Fluoranthene	**500**
Fluorene	**500**
Indeno(1,2,3-cd)pyrene	**5.6**
m-Cresol	**500**
Naphthalene	**500**
o-Cresol	**500**
p-Cresol	**500**
Pentachlorophenol	**6.7**
Phenanthrene	**500**
Phenol	**500**
Pyrene	**500**
Metals - mg/kg	
Arsenic	**16**
Barium	**400**
Beryllium	**590**
Cadmium	**9.3**
Chromium, trivalent	**400**
Chromium, hexavalent	**1500**
Copper	**270**
Cyanide	**27**
Lead	**1000**
Manganese	**10000**
Mercury	**2.8**
Nickel	**310**
Selenium	**1500**
Silver	**1500**
Zinc	**10000**

TABLE 1

COMMERCIAL SOIL CLEANUP OBJECTIVES

SCOTT ROTARY SEALS SITE
OLEAN, NEW YORK

Parameter	Commercial SCOs [1]
Pesticides/Herbicides and PCBs - mg/kg	
Silvex (2,4,5-TP)	**500**
4,4'-DDE	**62**
4,4'-DDT	**47**
4,4'-DDD	**92**
Aldrin	**0.68**
alpha-BHC	**3.4**
beta-BHC	**3**
alpha-Chlordane	**24**
delta-BHC	**500**
Dibenzofuran	**350**
Dieldrin	**1.4**
Endosulfan I	**200**
Endosulfan II	**200**
Endosulfan sulfate	**200**
Endrin	**89**
Heptachlor	**15**
Lindane	**9.2**
Polychlorinated biphenyls (PCBs)	**1**

Notes:

1. Values per 6NYCRR NYSDEC Part 375 Soil Cleanup Objectives (SCOs).

TURNKEY ENVIRONMENTAL RESTORATION, LLC

TABLE 2

SUMMARY OF MATERIALS REMOVED FROM THE SITE

SCOTT ROTARY SEALS SITE
OLEAN, NEW YORK

Activity and Material/Item	Quantity	Units	Responsible Company	Trucking No.	Disposal Location
IRM Activities					
Non-hazardous soil/fill (Piles)	1,982	tons	RE Lorenz Construction, Inc.	9A-799	Waste Management - Chaffee Landfill, Chaffee NY
Subgrade Pipe Contents - Pipe Scale and Pipe Sludge	27	drums	Frank's Vacuum Truck Services, Inc.	9A-332 (NYD982792814)	CWM Chemical Services - Model City NY
Subgrade Pipe - Water/Product Mixture	1,489	gallons	Green Environmental Specialists, Inc.	9A-520	Environmental & Industrial Contracting Services, Inc. - Niagara Falls, NY
Subgrade Steel Pipe - Recycled as Scrap (5,761 ln ft)	77.07	tons	RE Lorenz Construction, Inc.	9A-799	Gateway Materials - Cheektowaga, NY
Remedial Activities					
Non-hazardous soil/fill	7,428	tons	RE Lorenz Construction, Inc.	9A-799	Waste Management - Chaffee Landfill, Chaffee NY

TURNKEY ENVIRONMENTAL RESTORATION, LLC

TABLE 7

CRITERIA FOR USE OF OFF-SITE SOIL

SCOTT ROTARY SEALS SITE
OLEAN, NEW YORK

Parameter	Allowable Concentration for Use of Off-Site Soil
Volatile Organic Compounds (mg/kg)	
1,1,1-Trichloroethane	0.68
1,1-Dichloroethane	0.27
1,1-Dichloroethene	0.33
1,2-Dichlorobenzene	1.1
1,2-Dichloroethane	0.02
1,2-Dichloroethene(cis)	0.25
1,2-Dichloroethene(trans)	0.19
1,3-Dichlorobenzene	2.4
1,4-Dichlorobenzene	1.8
1,4-Dioxane	0.1
Acetone	0.05
Benzene	0.06
Butylbenzene	12
Carbon tetrachloride	0.76
Chlorobenzene	1.1
Chloroform	0.37
Ethylbenzene	1
Hexachlorobenzene	3.2
Methyl ethyl ketone	0.12
Methyl tert-butyl ether	0.93
Methylene chloride	0.05
Propylbenzene-n	3.9
Sec-Butylbenzene	11
Tert-Butylbenzene	5.9
Tetrachloroethene	1.3
Toluene	0.7
Trichloroethene	0.47
Trimethylbenzene-1,2,4	3.6
Trimethylbenzene-1,3,5	8.4

TURNKEY ENVIRONMENTAL RESTORATION, LLC

TABLE 7

CRITERIA FOR USE OF OFF-SITE SOIL

SCOTT ROTARY SEALS SITE
OLEAN, NEW YORK

Parameter	Allowable Concentration for Use of Off-Site Soil
Volatile Organic Compounds (mg/kg)	
Vinyl chloride	0.02
Xylene (mixed)	1.6
Semi-Volatile Organic Compounds (mg/kg)	
Acenaphthene	98
Acenaphthylene	107
Anthracene	500
Benzo(a)anthracene	1
Benzo(a)pyrene	1
Benzo(b)fluoranthene	1.7
Benzo(g,h,i)perylene	500
Benzo(k)fluoranthene	1.7
Chrysene	1
Dibenz(a,h)anthracene	0.56
Fluoranthene	500
Fluorene	386
Indeno(1,2,3-cd)pyrene	5.6
m-Cresol(s)	0.33
Naphthalene	12
o-Cresol(s)	0.33
p-Cresol(s)	0.33
Pentachlorophenol	0.8
Phenanthrene	500
Phenol	0.33
Pyrene	500
Metals (mg/kg)	
Arsenic	16
Barium	400
Beryllium	47
Cadmium	7.5

TABLE 7

CRITERIA FOR USE OF OFF-SITE SOIL

SCOTT ROTARY SEALS SITE
OLEAN, NEW YORK

Parameter	Allowable Concentration for Use of Off-Site Soil
Metals (mg/kg)	
Chromium, Hexavalent [1]	19
Chromium, Trivalent [1]	1500
Copper	270
Cyanide	27
Lead	450
Manganese	2000
Mercury (total)	0.73
Nickel	130
Selenium	4
Silver	8.3
Zinc	2480
PCBs/Pesticides (mg/kg)	
2,4,5-TP Acid (Silvex)	3.8
4,4'-DDE	17
4,4'-DDT	47
4,4'-DDD	14
Aldrin	0.19
Alpha-BHC	0.02
Beta-BHC	0.09
Chlordane (alpha)	2.9
Delta-BHC	0.25
Dibenzofuran	210
Dieldrin	0.1
Endosulfan I	102
Endosulfan II	102
Endosulfan sulfate	200
Endrin	0.06
Heptachlor	0.38
Lindane	0.1
Polychlorinated biphenyls	1

TABLE 7

CRITERIA FOR USE OF OFF-SITE SOIL

SCOTT ROTARY SEALS SITE
OLEAN, NEW YORK

Parameter	Allowable Concentration for Use of Off-Site Soil
PFAS (ug/kg) [2]	
Perfluorobutanesulfonic acid	--
Perfluorohexanesulfonic acid	--
Perfluoroheptanesulfonic acid	--
Perfluorooctanesulfonic acid (PFOS)	< 1.0
Perfluorodecanesulfonic acid	--
Perfluorobutanoic acid	--
Perfluoropentanoic acid	--
Perfluorohexanoic acid	--
Perfluoroheptanoic acid	--
Perfluorooctanoic acid (PFOA)	< 1.0
Perfluorononanoic acid	--
Perfluorodecanoic acid	--
Perfluoroundecanoic acid	--
Perfluorododecanoic acid	--
Perfluorotridecanoic acid	--
Perfluorotetradecanoic acid	--
6:2 Fluorotelomer sulfonate	--
8:2 Fluorotelomer sulfonate	--
Perfluroroctanesulfonamide	--
N-methyl perfluorooctanesulfonamidoacetic acid	--
N-ethyl perfluorooctanesulfonamidoacetic acid	--

Notes:

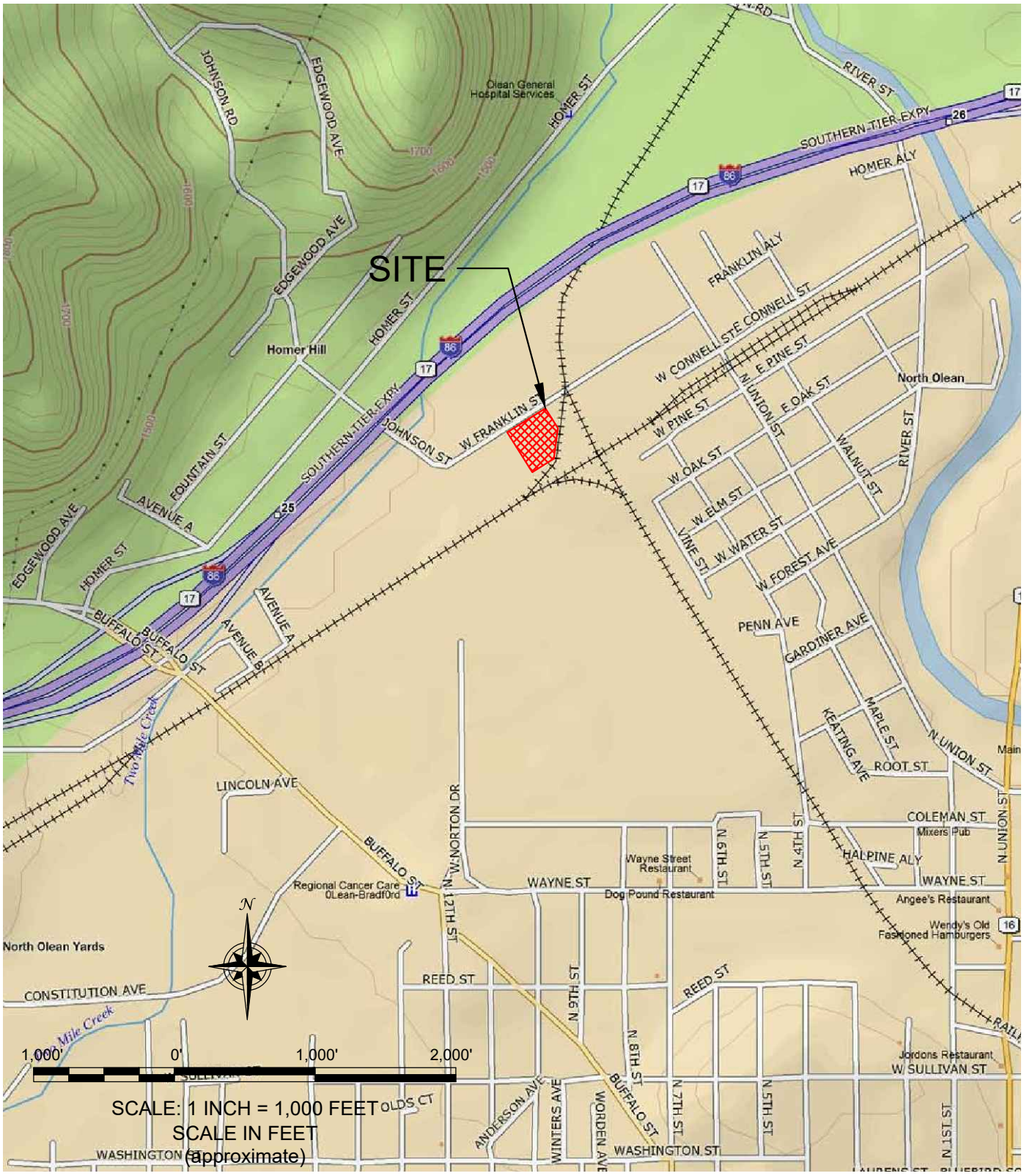
1. The SCO for hexavalent or trivalent chromium is considered to be met if the analysis for the total species of this contaminant is below the specific SCO for hexavalent chromium.

2. If PFOA or PFOS is detected in any sample at or above 1 µg/kg, then soil should be tested by SPLP and the leachate analyzed for PFAS. If the SPLP results exceed 10 ppt for either PFOA or PFOS (individually) then the source of backfill should be rejected, unless a site-specific exemption is provided by DER.

FIGURES

F:\CAD\TurnKey\Scott Rotary Seals\SMP Update\Figure 1; Site Location and Vicinity Map.dwg

FIGURE 1



TurnKey Environmental Restoration, LLC

2558 HAMBURG TURNPIKE
SUITE 300
BUFFALO, NY 14218
(716) 856-0635

PROJECT NO.: T0189-020-001

DATE: SEPTEMBER 2020

DRAFTED BY: CCB

SITE LOCATION AND VICINITY MAP

SITE MANAGEMENT PLAN

SCOTT ROTARY SEALS SITE

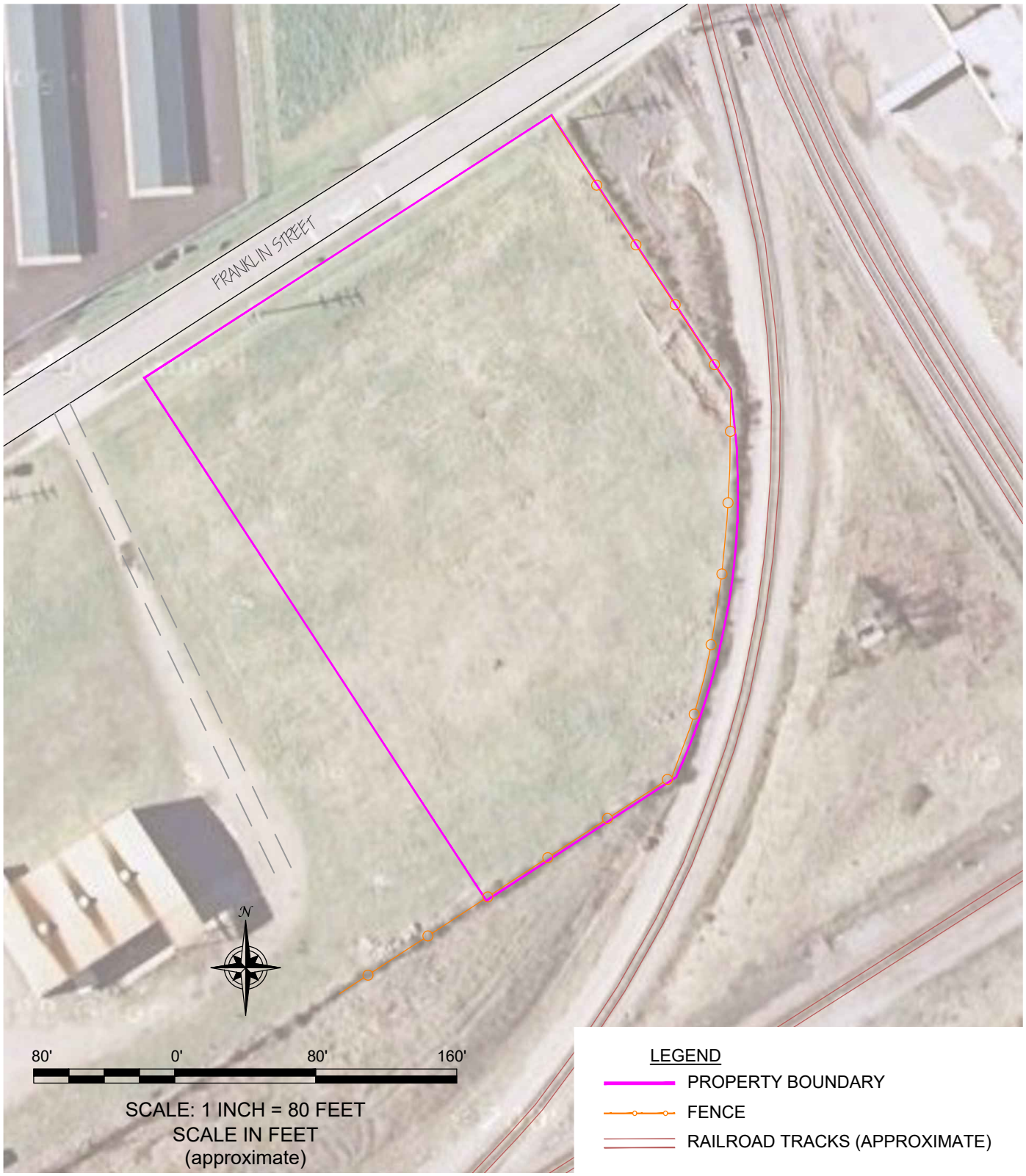
OLEAN, NEW YORK

PREPARED FOR

DST PROPERTIES NY, LLC

F:\CAD\TurnKey\Scott Rotary Seals\SMP Update\Figure 2; Site Plan (Pre-Redevelopment).dwg

FIGURE 2



TurnKey Environmental Restoration, LLC
2558 HAMBURG TURNPIKE
SUITE 300
BUFFALO, NY 14218
(716) 856-0635

PROJECT NO.: T0189-020-001

DATE: SEPTEMBER 2020

DRAFTED BY: CCB

SITE PLAN (PRE-REDEVELOPMENT)

SITE MANAGEMENT PLAN

SCOTT ROTARY SEALS SITE

OLEAN, NEW YORK

PREPARED FOR

DST PROPERTIES NY, LLC

F:\CAD\TurnKey\Scott Rotary Seals\SMP\SMP Figures 3-11.dwg

DATE: SEPTEMBER 2020
DRAFTED BY: CCB

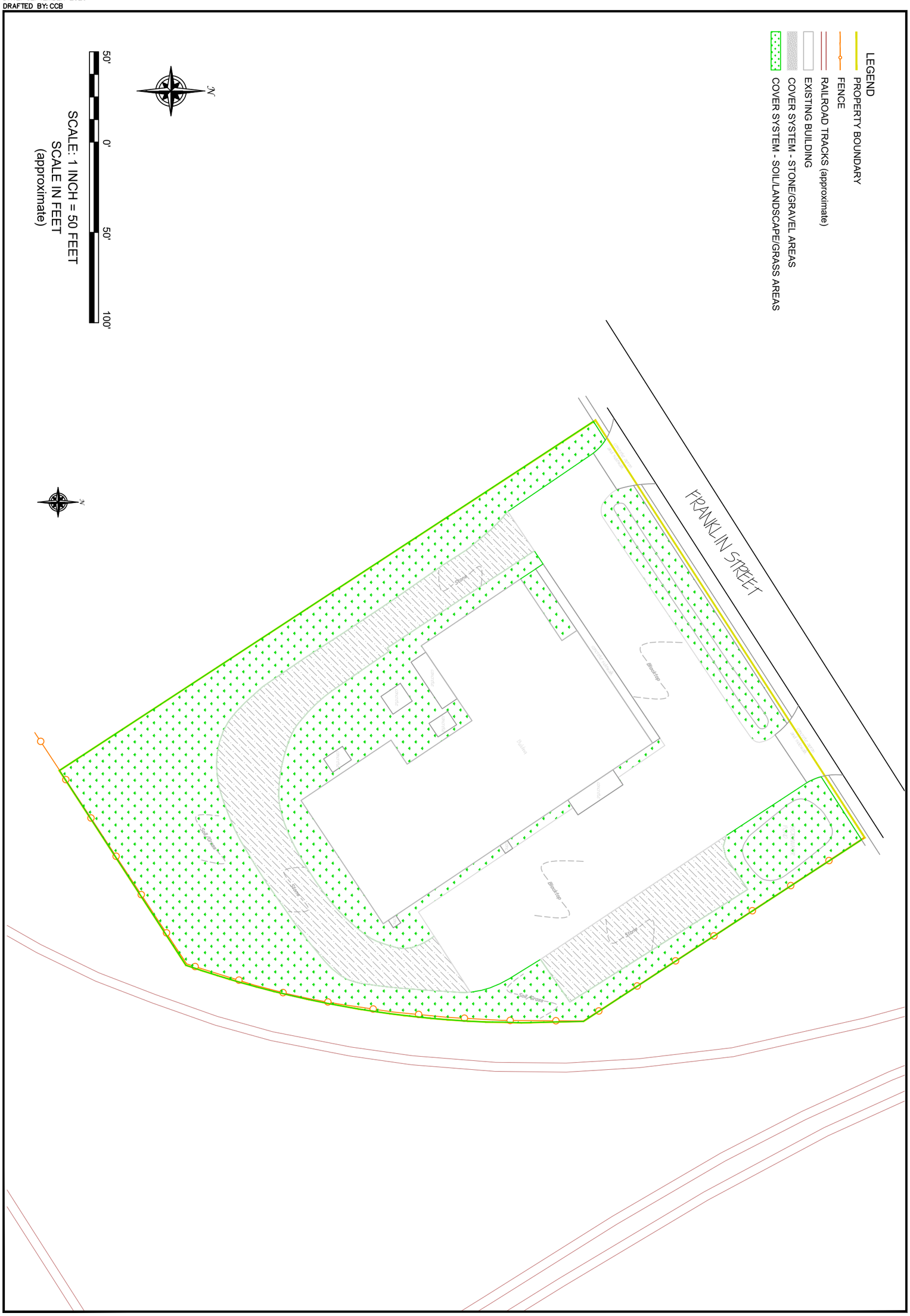


FIGURE 3

SITE PLAN (POST-REDEVELOPMENT)

SITE MANAGEMENT PLAN

SCOTT ROTARY SEALS SITE

OLEAN, NEW YORK

PREPARED FOR

DST PROPERTIES NY, LLC

TURNKEY ENVIRONMENTAL RESTORATION, LLC

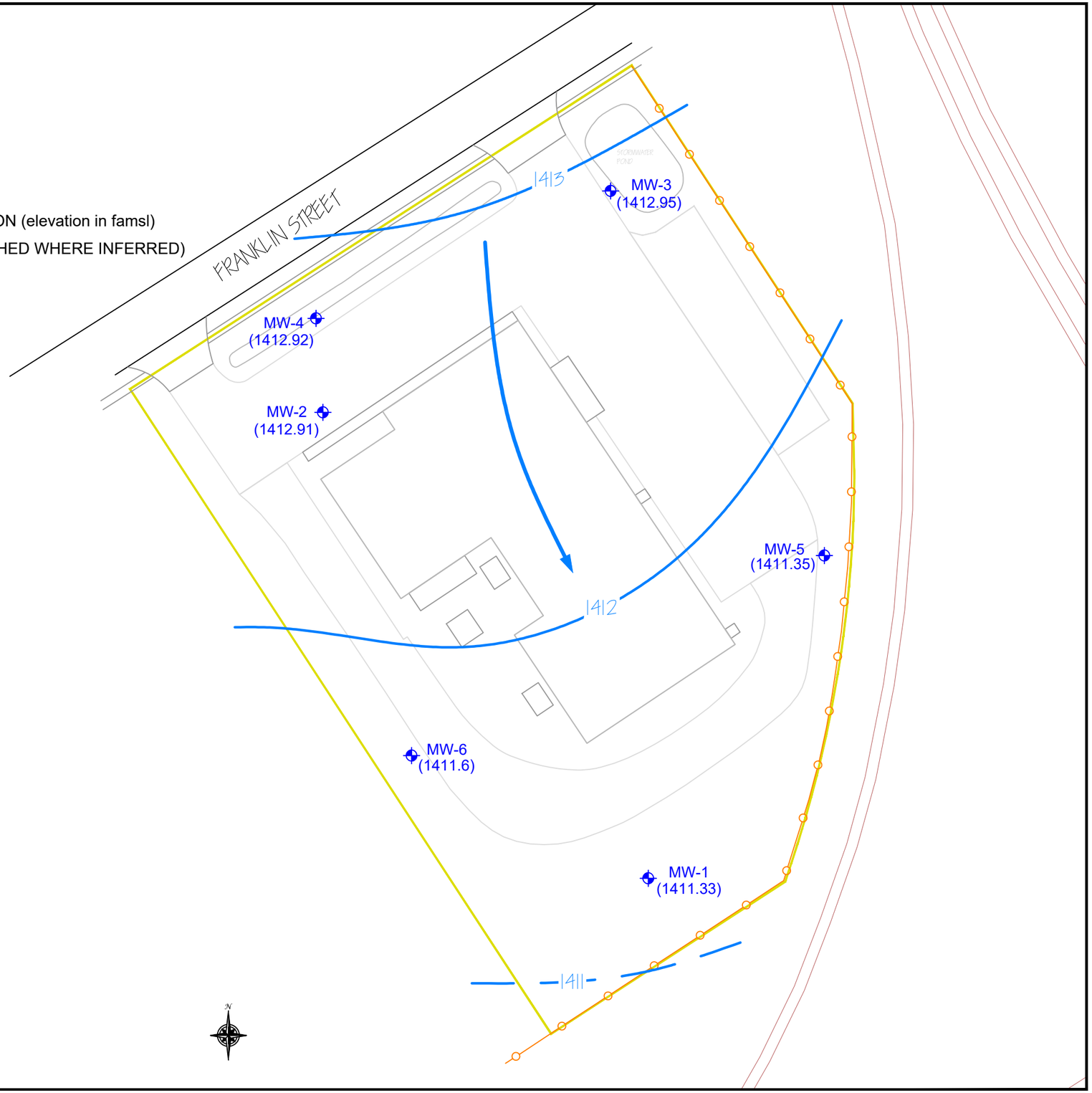
2558 HAMBURG TURNPIKE
SUITE 300
BUFFALO, NY 14218
(716) 856-0635

JOB NO.: T0189-020-001

F:\CAD\TurnKey\Scott Rotary Seals\SMP Update\SMP Figures 3-11.dwg

LEGEND

- PROPERTY BOUNDARY
- FENCE
- RAILROAD TRACKS (approximate)
- BUILDING
- MW-3 (1412.95) GROUNDWATER MONITORING WELL LOCATION (elevation in famsl)
- 1413 GROUNDWATER ELEVATION CONTOUR (DASHED WHERE INFERRED)
- GROUNDWATER FLOW DIRECTION



N

50' 0' 50' 100'

SCALE: 1 INCH = 50 FEET
SCALE IN FEET
(approximate)

DATE: SEPTEMBER 2020
DRAFTED BY: CCB

2558 HAMBURG TURNPIKE
SUITE 300
BUFFALO, NY 14218
(716) 856-0635

TURNKEY ENVIRONMENTAL RESTORATION, LLC

JOB NO.: T0189-020-001

GROUNDWATER ISOPOTENTIAL MAP (MARCH 2011)

SITE MANAGEMENT PLAN

SCOTT ROTARY SEALS SITE

OLEAN, NEW YORK

PREPARED FOR

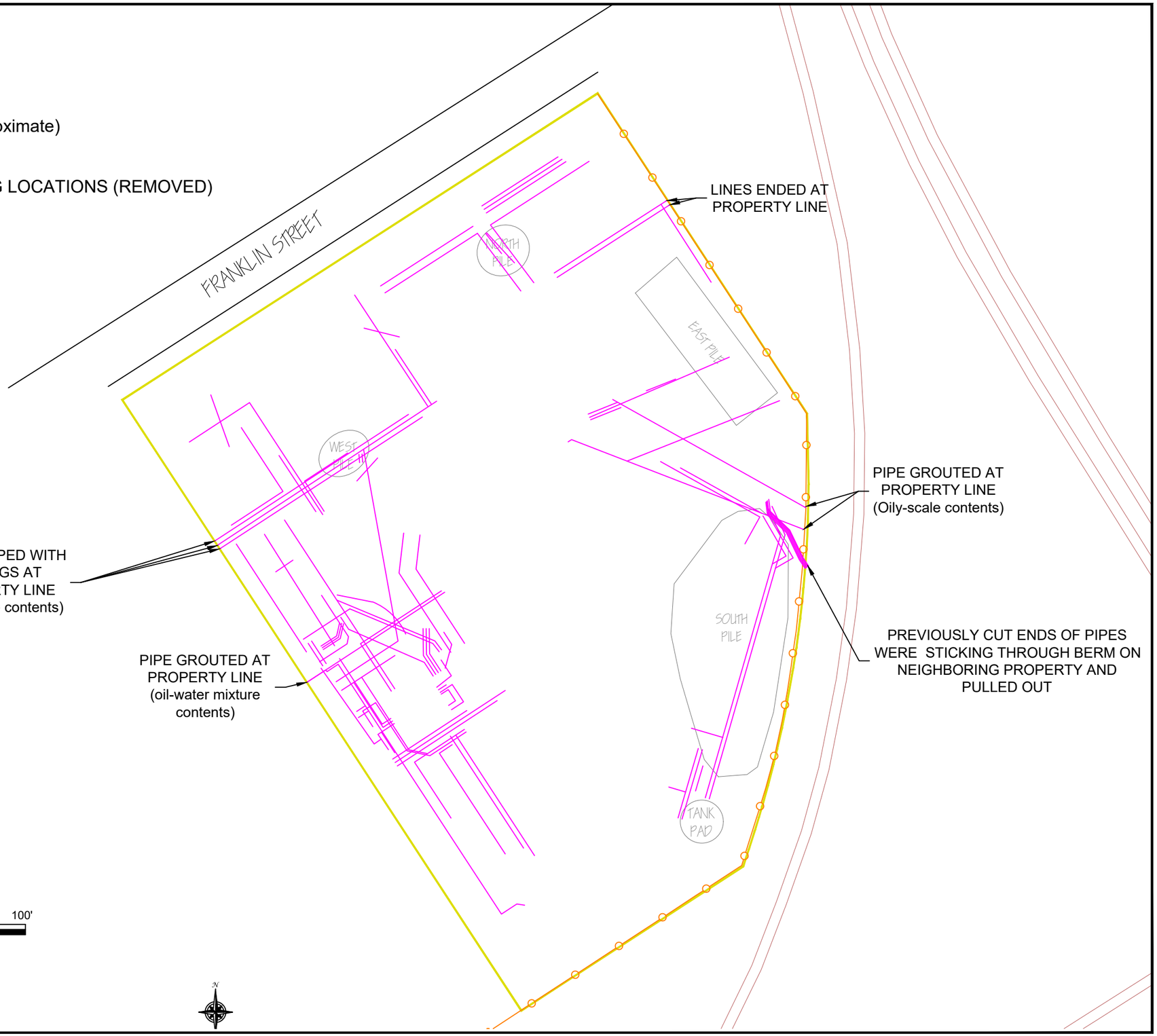
DST PROPERTIES NY, LLC

FIGURE 4

F:\CAD\TurnKey\Scott Rotary Seals\SMP Update\SMP Figures 3-11.dwg

LEGEND

- PROPERTY BOUNDARY
- FENCE
- RAILROAD TRACKS (approximate)
- BUILDING
- IRM SUBSURFACE PIPING LOCATIONS (REMOVED)



N

50' 0' 50' 100'

SCALE: 1 INCH = 50 FEET
SCALE IN FEET
(approximate)

DATE: SEPTEMBER 2020
DRAFTED BY: CCB

2558 HAMBURG TURNPIKE
SUITE 300
BUFFALO, NY 14218
(716) 856-0635

TURNKEY ENVIRONMENTAL RESTORATION, LLC

JOB NO.: T0189-020-001

IRM ACTIVITIES

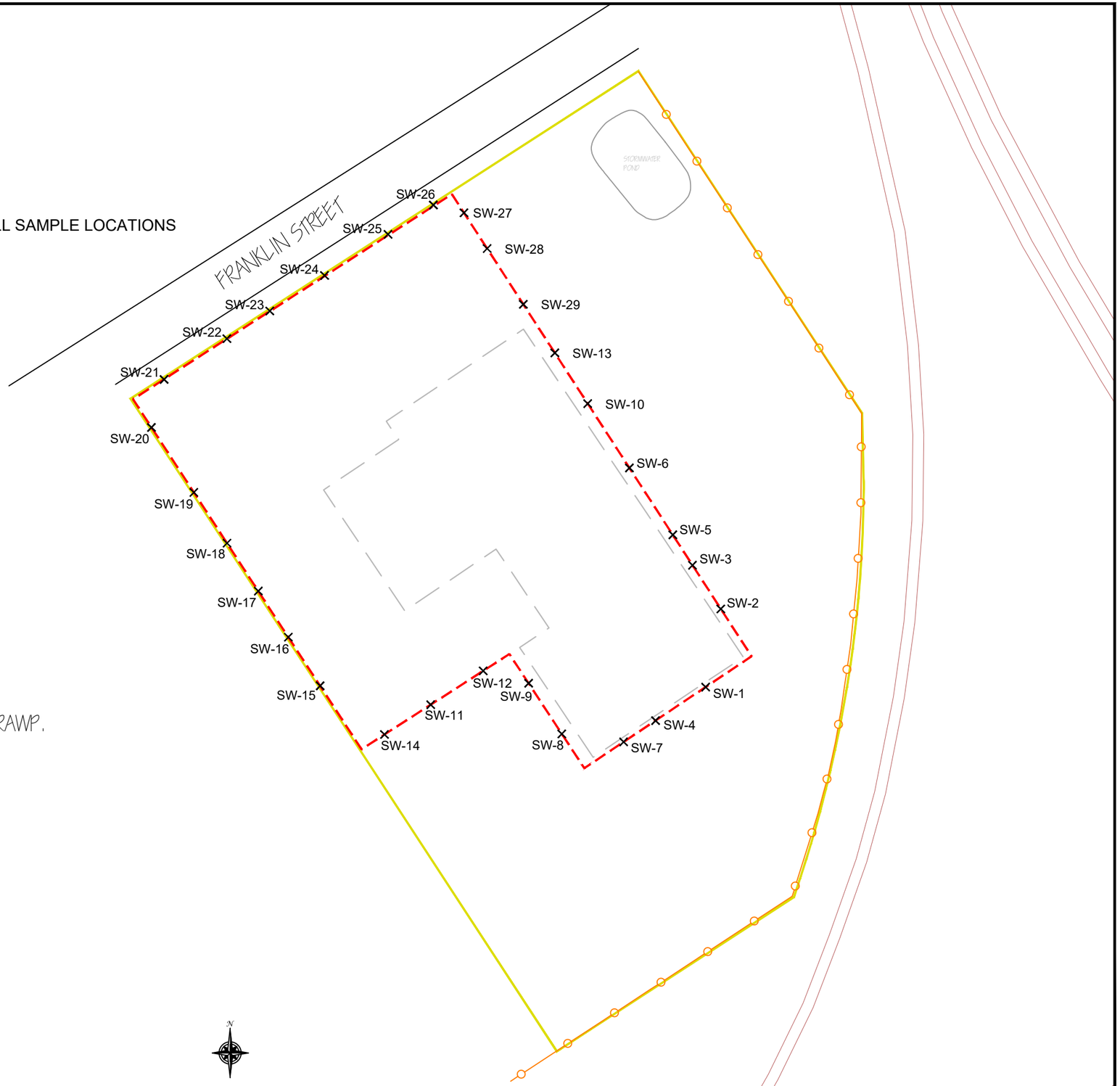
SITE MANAGEMENT PLAN
SCOTT ROTARY SEALS SITE
OLEAN, NEW YORK
PREPARED FOR
DST PROPERTIES NY, LLC

FIGURE 5

F:\CAD\TurnKey\Scott Rotary Seals\SMP Update\SMP Figures 3-11.dwg

LEGEND

- PROPERTY BOUNDARY
- FENCE
- RAILROAD TRACKS (approximate)
- BUILDING
- REMEDIAL EXCAVATION LIMITS
- SW-1 × POST-EXCAVATION CONFIRMATORY SIDEWALL SAMPLE LOCATIONS



Note: Remedial excavation completed to 1422 fmsl per the RAWP.

N

50 0' 50 100

SCALE: 1 INCH = 50 FEET
SCALE IN FEET
(approximate)

DATE: SEPTEMBER 2020
DRAFTED BY: CCB

2558 HAMBURG TURNPIKE
SUITE 300
BUFFALO, NY 14218
(716) 856-0635

JOB NO.: T0189-020-001

REMEDIAL EXCAVATION

SITE MANAGEMENT PLAN
SCOTT ROTARY SEALS SITE
OLEAN, NEW YORK
PREPARED FOR
DST PROPERTIES NY, LLC

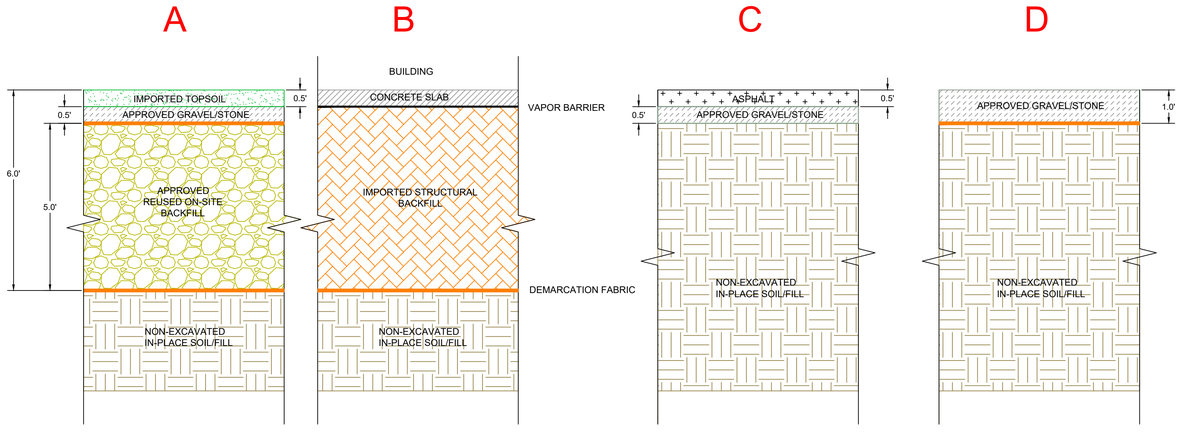
FIGURE 6

ELEVATION DATA POINTS:

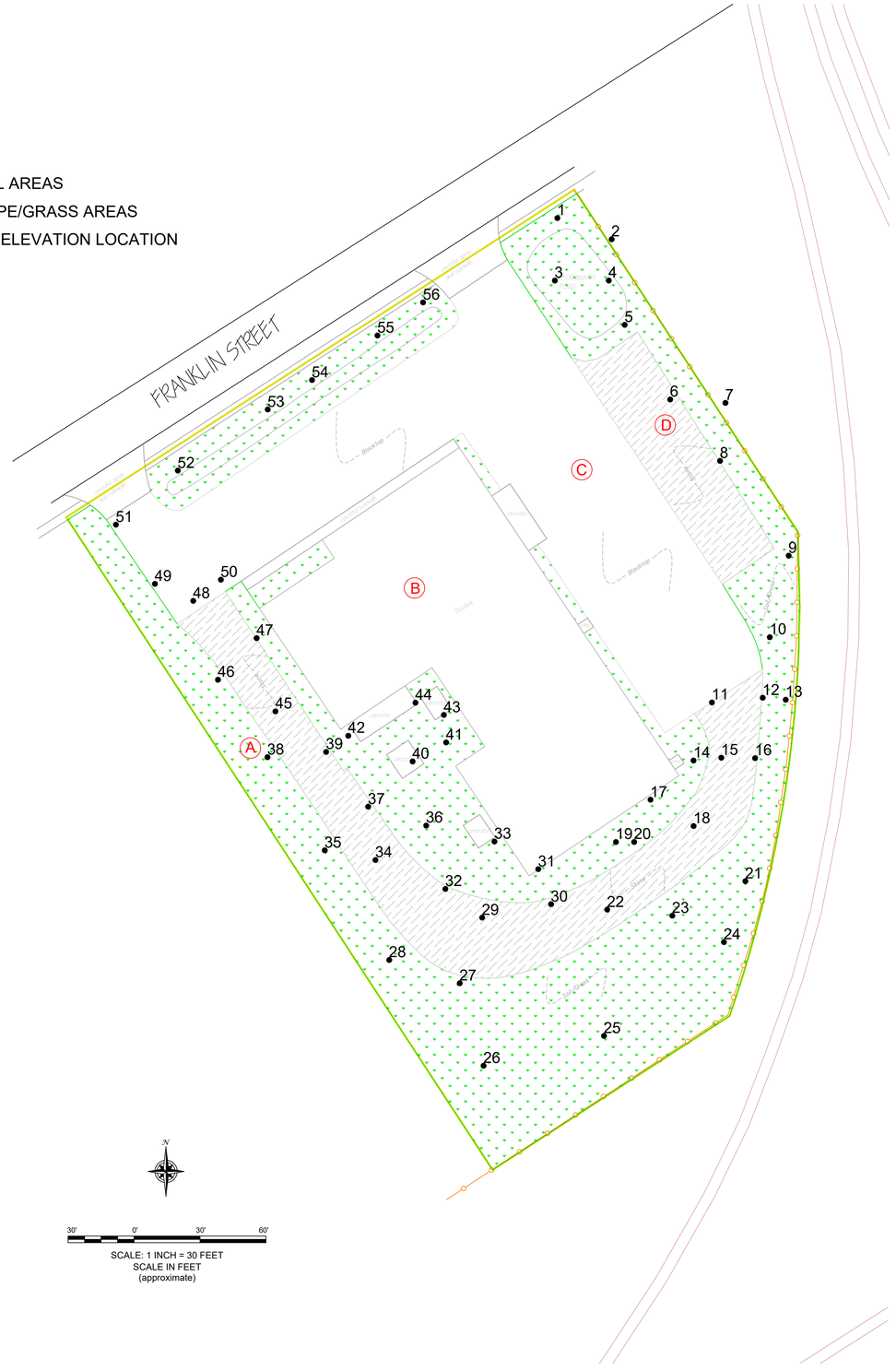
#	PRE	POST	DELTA	#	PRE	POST	DELTA
1	1424.37	1425.54	1.17	29	1427.26	1428.51	1.25
2	1424.43	1425.54	1.11	30	1427.33	1428.43	1.1
3	1424.78	1425.93	1.15	31	1427.03	1428.27	1.24
4	1421.92	1423.59	1.67	32	1427.15	1428.21	1.06
5	1426.18	1427.73	1.55	33	1427.15	1428.22	1.07
6	1427.93	1429.05	1.12	34	1427.68	1428.22	1.11
7	1429.3	1430.46	1.16	35	1428.83	1430.12	1.29
8	1428.99	1430.17	1.18	36	1426.73	1427.91	1.18
9	1429.81	1431.5	1.69	37	1426.93	1427.97	1.04
10	1427.8	1429.27	1.47	38	1427.58	1429.09	1.51
11	1426.98	1428.01	1.03	39	1426.83	1427.94	1.11
12	1427.99	1428.98	.99	40	1426.83	1427.98	1.15
13	1428.74	1430.39	1.65	41	1427.06	1428.17	1.11
14	1427.23	1428.33	1.1	42	1426.46	1427.57	1.11
15	1427.18	1428.3	1.12	43	1426.59	1427.83	1.24
16	1427.9	1428.93	1.03	44	1426.53	1427.55	1.02
17	1427.02	1428.66	1.64	45	1426.89	1428.07	1.18
18	1427.49	1428.64	1.15	46	1426.63	1428.07	1.44
19	1427.18	1428.35	1.17	47	1426.35	1427.52	1.17
20	1427.28	1428.31	1.03	48	1426.37	1427.45	1.08
21	1430.48	1431.88	1.4	49	1425.75	1426.97	1.22
22	1427.91	1429	1.09	50	1426.23	1427.29	1.06
23	1431.3	1432.32	1.02	51	1424.92	1426.01	1.09
24	1431.32	1432.79	1.47	52	1422.26	1423.28	1.02
25	1432.08	1433.44	1.36	53	1421.96	1423.05	1.09
26	1431.41	1432.81	1.4	54	1422.03	1423.16	1.13
27	1429.5	1430.78	1.28	55	1422.08	1423.12	1.04
28	1430.48	1431.53	1.05	56	1421.82	1423.11	1.29

NOTE:
1) Pre and Post elevation data presented in feet above mean sea level (famsl).

COVER SYSTEM DETAILS:



LEGEND
- PROPERTY BOUNDARY
- FENCE
- RAILROAD TRACKS (approximate)
- EXISTING BUILDING
- COVER SYSTEM - STONE/GRAVEL AREAS
- COVER SYSTEM - SOIL/LANDSCAPE/GRASS AREAS
- 22 • PRE- AND POST CONFIRMATORY ELEVATION LOCATION



BENCHMARK ENVIRONMENTAL ENGINEERING & SCIENCE, PLLC

TURNKEY Environmental Restoration, LLC

JOB NO.: T0189-020-001

REVISIONS

NO.	BY	DATE	REMARKS

SEAL

DRAWN BY: CCB
DATE: SEPTEMBER 2020
CHECKED BY: MAL
APPROVED BY: MAL

COVER SYSTEM LAYOUT AND DETAIL

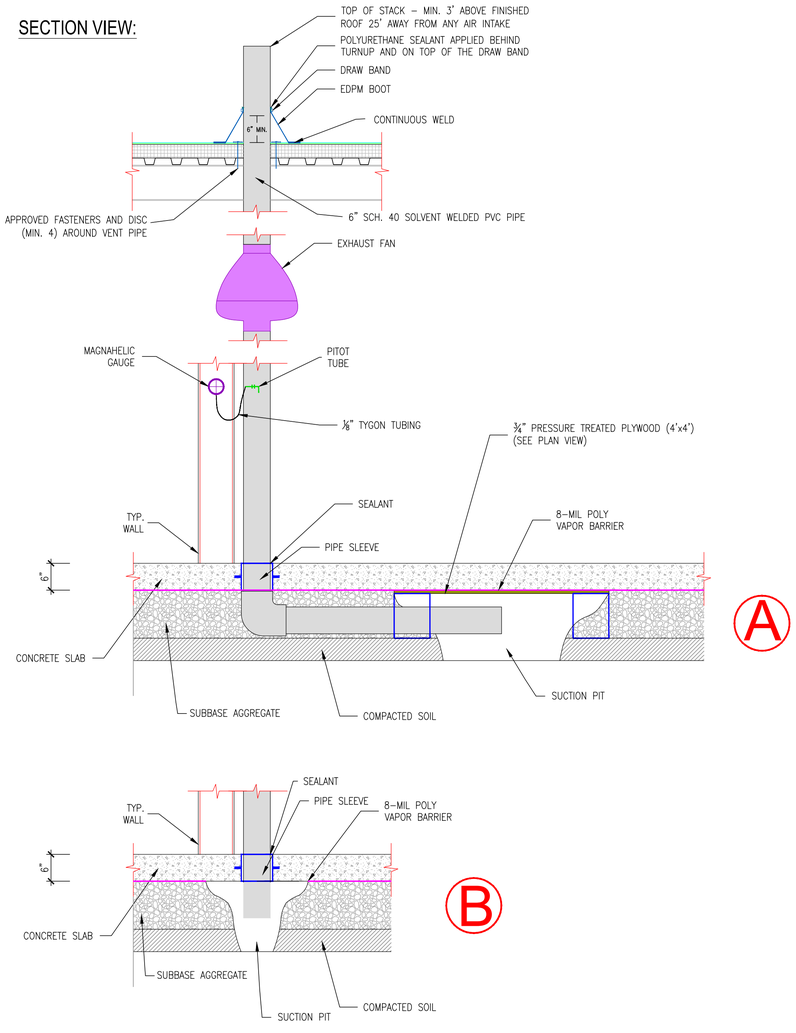
SITE MANAGEMENT PLAN
SCOTT ROTARY SEALS SITE
OLEAN, NEW YORK
PREPARED FOR
DST PROPERTIES NY, LLC

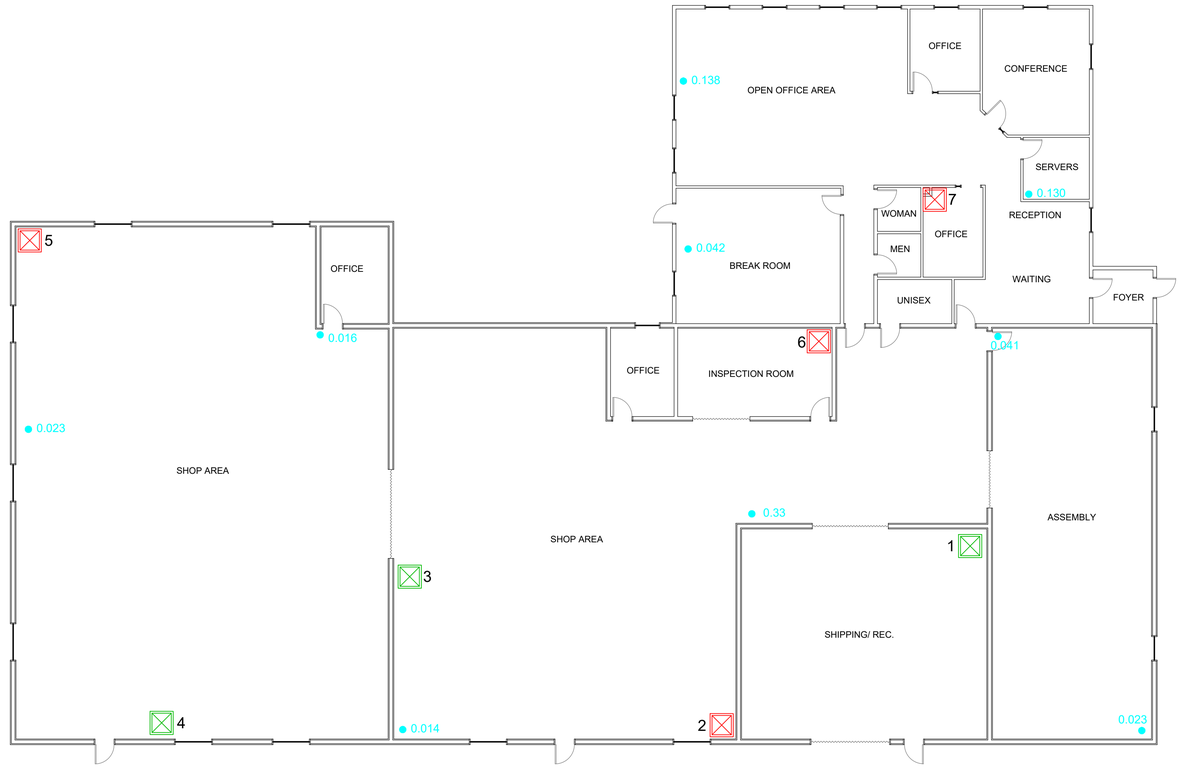
FIGURE 7

LEGEND:

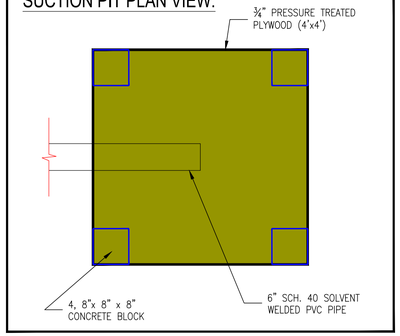
☒	5	SUCTION PIT LOCATION (SUCTION PIT STYLE A)
☒	4	SUCTION PIT LOCATION (SUCTION PIT STYLE B)
0.014 ●		PRESSURE TEST LOCATION AND READING

SECTION VIEW:





SUCTION PIT PLAN VIEW:



TURNKEY ENVIRONMENTAL RESTORATION, LLC
2558 HAMBURG TURNPIKE
SUITE 300
BUFFALO, NY 14218
(716) 856-0635

JOB NO.: T0189-020-001

REVISIONS

NO.	BY	DATE	REMARKS

SEAL

DRAWN BY: CCB
DATE: SEPTEMBER 2020
CHECKED BY: NTM
APPROVED BY: MAL

SUB-SLAB DEPRESSURIZATION SYSTEM AND DETAIL

SITE MANAGEMENT PLAN
SCOTT ROTARY SEALS SITE
OLEAN, NEW YORK
PREPARED FOR
DST PROPERTIES NY, LLC

FIGURE 8

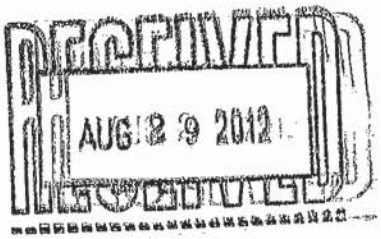
APPENDIX A

ENVIRONMENTAL EASEMENT

James K. Griffith
CATTARAUGUS COUNTY CLERK

Cattaraugus County Center 303 Court Street
Little Valley, NY 14755
(716) 938-9111
Fax: (716) 938-2773

Instrument Number
182302-001



No. of Pages: (including this cover page)	10
Receipt No.	182302
Date:	8/15/2012
Time:	02:24 PM
Document Type:	EASEMENT/RIGHT OF WAY
Parties To Transaction:	DST PROPERTIES TO NYS PEOPLE
Town/City:	CO - City of Olean

Delivered By:
KNOER GROUP

Return To:
KNOER GROUP
424 MAIN ST, STE 1820
BUFFALO NY 14202

Deed Information

Taxable Consideration:	$0.00
State Transfer Tax:	$0.00
RETT No.:	00196

Mortgage Information

Taxable Mortgage Amount:
Basic Mortgage Tax:
Special Mortgage Tax:
Additional Mortgage Tax:
Mortgage Serial No.:

State of New York
Cattaraugus County Clerk

This sheet constitutes the Clerk endorsement required by Section 316-A(5) & Section 319 of the Real Property Law of the State of New York.

James K. Griffith

Cattaraugus County Clerk

Please do not remove this page.

182302-001

Record and return to Sandra Nasca The Knoer Group 424 MAIN ST Suite 1820 BUFFALO, NY 14202

ENVIRONMENTAL EASEMENT GRANTED PURSUANT TO ARTICLE 71, TITLE 36 OF THE NEW YORK STATE ENVIRONMENTAL CONSERVATION LAW

THIS INDENTURE made as of this 7th day of August, 2012, between Owner(s) DST PROPERTIES NY, LLC, having an office at 13829 Jay Street NW, Andover, MN 55304, (the "Grantor"), and The People of the State of New York (the "Grantee."), acting through their Commissioner of the Department of Environmental Conservation (the "Commissioner", or "NYSDEC" or "Department" as the context requires) with its headquarters located at 625 Broadway, Albany, New York 12233.

WHEREAS, the Legislature of the State of New York has declared that it is in the public interest to encourage the remediation of abandoned and likely contaminated properties ("sites") that threaten the health and vitality of the communities they burden while at the same time ensuring the protection of public health and the environment; and

WHEREAS, the Legislature of the State of New York has declared that it is in the public interest to establish within the Department a statutory environmental remediation program that includes the use of Environmental Easements as an enforceable means of ensuring the performance of operation, maintenance, and/or monitoring requirements and the restriction of future uses of the land, when an environmental remediation project leaves residual contamination at levels that have been determined to be safe for a specific use, but not all uses, or which includes engineered structures that must be maintained or protected against damage to perform properly and be effective, or which requires groundwater use or soil management restrictions; and

WHEREAS, the Legislature of the State of New York has declared that Environmental Easement shall mean an interest in real property, created under and subject to the provisions of Article 71, Title 36 of the New York State Environmental Conservation Law ("ECL") which contains a use restriction and/or a prohibition on the use of land in a manner inconsistent with engineering controls which are intended to ensure the long term effectiveness of a site remedial program or eliminate potential exposure pathways to hazardous waste or petroleum; and

WHEREAS, Grantor, is the owner of real property located at the address of 301 Franklin Street in the City of Olean, County of Cattaraugus and State of New York, known and designated on the tax map of the County Clerk of Cattaraugus as tax map parcel numbers: Section 94.40 Block 1 Lot 29, being the same as that property conveyed to Grantor by deed dated January 21, 2009 and recorded in the Cattaraugus County Clerk's Office on March 12, 2009 in Instrument Number 117385-001. The property subject to this Environmental Easement (the "Controlled Property") comprises approximately 2.00 +/- acres, and is hereinafter more fully described in the Land Title Survey dated May 16, 2012, last revised on July 3, 2012 prepared by Millard, MacKay & Delles Land Surveyors, LLP, which will be attached to the Site Management Plan. The Controlled Property description and survey is set forth in and attached hereto as Schedule A; and

WHEREAS, the Department accepts this Environmental Easement in order to ensure the protection of public health and the environment and to achieve the requirements for remediation established for the Controlled Property until such time as this Environmental Easement is extinguished pursuant to ECL Article 71, Title 36; and

117385-001 ✓

NOW THEREFORE, in consideration of the mutual covenants contained herein and the terms and conditions of Brownfield Cleanup Agreement Index Number: C905036-03-10, Grantor conveys to Grantee a permanent Environmental Easement pursuant to ECL Article 71, Title 36 in, on, over, under, and upon the Controlled Property as more fully described herein ("Environmental Easement")

1. Purposes. Grantor and Grantee acknowledge that the Purposes of this Environmental Easement are: to convey to Grantee real property rights and interests that will run with the land in perpetuity in order to provide an effective and enforceable means of encouraging the reuse and redevelopment of this Controlled Property at a level that has been determined to be safe for a specific use while ensuring the performance of operation, maintenance, and/or monitoring requirements; and to ensure the restriction of future uses of the land that are inconsistent with the above-stated purpose.

2. Institutional and Engineering Controls. The controls and requirements listed in the Department approved Site Management Plan ("SMP") including any and all Department approved amendments to the SMP are incorporated into and made part of this Environmental Easement. These controls and requirements apply to the use of the Controlled Property, run with the land, are binding on the Grantor and the Grantor's successors and assigns, and are enforceable in law or equity against any owner of the Controlled Property, any lessees and any person using the Controlled Property.

A. (1) The Controlled Property may be used for:

Commercial as described in 6 NYCRR Part 375-1.8(g)(2)(iii) and Industrial as described in 6 NYCRR Part 375-1.8(g)(2)(iv)

(2) All Engineering Controls must be operated and maintained as specified in the Site Management Plan (SMP);

(3) All Engineering Controls must be inspected at a frequency and in a manner defined in the SMP.

(4) Groundwater and other environmental or public health monitoring must be performed as defined in the SMP;

(5) Data and information pertinent to Site Management of the Controlled Property must be reported at the frequency and in a manner defined in the SMP;

(6) All future activities on the property that will disturb remaining contaminated material must be conducted in accordance with the SMP;

(7) Monitoring to assess the performance and effectiveness of the remedy must be performed as defined in the SMP.

(8) Operation, maintenance, monitoring, inspection, and reporting of any mechanical or physical components of the remedy shall be performed as defined in the SMP.

[6/11]

(9) Access to the site must be provided to agents, employees or other representatives of the State of New York with reasonable prior notice to the property owner to assure compliance with the restrictions identified by this Environmental Easement.

B. The Controlled Property shall not be used for Residential or Restricted Residential purposes as defined in 6NYCRR 375-1.8(g)(2)(i) and (ii), and the above-stated engineering controls may not be discontinued without an amendment or extinguishment of this Environmental Easement.

C. The SMP describes obligations that the Grantor assumes on behalf of Grantor, its successors and assigns. The Grantor's assumption of the obligations contained in the SMP which may include sampling, monitoring, and/or operating a treatment system, and providing certified reports to the NYSDEC, is and remains a fundamental element of the Department's determination that the Controlled Property is safe for a specific use, but not all uses. The SMP may be modified in accordance with the Department's statutory and regulatory authority. The Grantor and all successors and assigns, assume the burden of complying with the SMP and obtaining an up-to-date version of the SMP from:

Site Control Section
Division of Environmental Remediation
NYSDEC
625 Broadway
Albany, New York 12233
Phone: (518) 402-9553

D. Grantor must provide all persons who acquire any interest in the Controlled Property a true and complete copy of the SMP that the Department approves for the Controlled Property and all Department-approved amendments to that SMP.

E. Grantor covenants and agrees that until such time as the Environmental Easement is extinguished in accordance with the requirements of ECL Article 71, Title 36 of the ECL, the property deed and all subsequent instruments of conveyance relating to the Controlled Property shall state in at least fifteen-point bold-faced type:

This property is subject to an Environmental Easement held by the New York State Department of Environmental Conservation pursuant to Title 36 of Article 71 of the Environmental Conservation Law.

F. Grantor covenants and agrees that this Environmental Easement shall be incorporated in full or by reference in any leases, licenses, or other instruments granting a right to

use the Controlled Property.

G. Grantor covenants and agrees that it shall annually, or such time as NYSDEC may allow, submit to NYSDEC a written statement by an expert the NYSDEC may find acceptable certifying under penalty of perjury, in such form and manner as the Department may require, that:

(1) the inspection of the site to confirm the effectiveness of the institutional and engineering controls required by the remedial program was performed under the direction of the individual set forth at 6 NYCRR Part 375-1.8(h)(3).

(2) the institutional controls and/or engineering controls employed at such site:

(i) are in-place;

(ii) are unchanged from the previous certification, or that any identified changes to the controls employed were approved by the NYSDEC and that all controls are in the Department-approved format; and

(iii) that nothing has occurred that would impair the ability of such control to protect the public health and environment;

(3) the owner will continue to allow access to such real property to evaluate the continued maintenance of such controls;

(4) nothing has occurred that would constitute a violation or failure to comply with any site management plan for such controls;

(5 the report and all attachments were prepared under the direction of, and reviewed by, the party making the certification;

(6) to the best of his/her knowledge and belief, the work and conclusions described in this certification are in accordance with the requirements of the site remedial program, and generally accepted engineering practices; and

(7) the information presented is accurate and complete.

3. Right to Enter and Inspect. Grantee, its agents, employees, or other representatives of the State may enter and inspect the Controlled Property in a reasonable manner and at reasonable times to assure compliance with the above-stated restrictions.

4. Reserved Grantor's Rights. Grantor reserves for itself, its assigns, representatives, and successors in interest with respect to the Property, all rights as fee owner of the Property, including:

A. Use of the Controlled Property for all purposes not inconsistent with, or limited by the terms of this Environmental Easement;

B. The right to give, sell, assign, or otherwise transfer part or all of the underlying fee interest to the Controlled Property, subject and subordinate to this Environmental Easement;

5. Enforcement

A. This Environmental Easement is enforceable in law or equity in perpetuity by Grantor, Grantee, or any affected local government, as defined in ECL Section 71-3603, against the owner of the Property, any lessees, and any person using the land. Enforcement shall not be defeated because of any subsequent adverse possession, laches, estoppel, or waiver. It is not a defense in any action to enforce this Environmental Easement that: it is not appurtenant to an

interest in real property; it is not of a character that has been recognized traditionally at common law; it imposes a negative burden; it imposes affirmative obligations upon the owner of any interest in the burdened property; the benefit does not touch or concern real property; there is no privity of estate or of contract; or it imposes an unreasonable restraint on alienation.

B. If any person violates this Environmental Easement, the Grantee may revoke the Certificate of Completion with respect to the Controlled Property.

C. Grantee shall notify Grantor of a breach or suspected breach of any of the terms of this Environmental Easement. Such notice shall set forth how Grantor can cure such breach or suspected breach and give Grantor a reasonable amount of time from the date of receipt of notice in which to cure. At the expiration of such period of time to cure, or any extensions granted by Grantee, the Grantee shall notify Grantor of any failure to adequately cure the breach or suspected breach, and Grantee may take any other appropriate action reasonably necessary to remedy any breach of this Environmental Easement, including the commencement of any proceedings in accordance with applicable law.

D. The failure of Grantee to enforce any of the terms contained herein shall not be deemed a waiver of any such term nor bar any enforcement rights.

6. Notice. Whenever notice to the Grantee (other than the annual certification) or approval from the Grantee is required, the Party providing such notice or seeking such approval shall identify the Controlled Property by referencing the following information:

County, NYSDEC Site Number, NYSDEC Brownfield Cleanup Agreement, State Assistance Contract or Order Number, and the County tax map number or the Liber and Page or computerized system identification number.

Parties shall address correspondence to:

Site Number: C905036
Office of General Counsel
NYSDEC
625 Broadway
Albany New York 12233-5500

With a copy to:

Site Control Section
Division of Environmental Remediation
NYSDEC
625 Broadway
Albany, NY 12233

All notices and correspondence shall be delivered by hand, by registered mail or by Certified mail and return receipt requested. The Parties may provide for other means of receiving and communicating notices and responses to requests for approval.

7. Recordation. Grantor shall record this instrument, within thirty (30) days of execution of this instrument by the Commissioner or her/his authorized representative in the office of the recording officer for the county or counties where the Property is situated in the manner prescribed by Article 9 of the Real Property Law.

8. Amendment. Any amendment to this Environmental Easement may only be executed by the Commissioner of the New York State Department of Environmental Conservation or the Commissioner's Designee, and filed with the office of the recording officer for the county or counties where the Property is situated in the manner prescribed by Article 9 of the Real Property Law.

9. Extinguishment. This Environmental Easement may be extinguished only by a release by the Commissioner of the New York State Department of Environmental Conservation, or the Commissioner's Designee, and filed with the office of the recording officer for the county or counties where the Property is situated in the manner prescribed by Article 9 of the Real Property Law.

10. Joint Obligation. If there are two or more parties identified as Grantor herein, the obligations imposed by this instrument upon them shall be joint and several.

IN WITNESS WHEREOF, Grantor has caused this instrument to be signed in its name.

GRANTOR: DST PROPERTIES NY, LLC

By: _____

Print Name: JEFFREY S. MEISTER

Title: PRESIDENT Date: 7/24/2012

Grantor's Acknowledgment

STATE OF MINNESOTA)
) ss:
COUNTY OF ANOKA)

On the 24 day of July, in the year 2012, before me, the undersigned, personally appeared Jeff meister, personally known to me or proved to me on the basis of satisfactory evidence to be the individual(s) whose name is (are) subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their capacity(ies), and that by his/her/their signature(s) on the instrument, the individual(s), or the person upon behalf of which the individual(s) acted, executed the instrument.

_____
Notary Public - State of Minnesota

JULIE WIMMER
COMM: #20048742
Notary Public - Notarial Seal
State of Minnesota
My Commission Expires 1/31/2014

THIS ENVIRONMENTAL EASEMENT IS HEREBY ACCEPTED BY THE

PEOPLE OF THE STATE OF NEW YORK, Acting By and Through the Department of Environmental Conservation as Designee of the Commissioner.

By: _____
Robert W. Schick, Director
Division of Environmental Remediation

Grantee's Acknowledgment

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

On the 7th day of August, in the year 2012, before me, the undersigned, personally appeared Robert W. Schick, personally known to me or proved to me on the basis of satisfactory evidence to be the individual(s) whose name is (are) subscribed to the within instrument and acknowledged to me that he/she/ executed the same in his/her/ capacity as Designee of the Commissioner of the State of New York Department of Environmental Conservation, and that by his/her/ signature on the instrument, the individual, or the person upon behalf of which the individual acted, executed the instrument.

_____
Notary Public - State of New York

David J. Chiusano
Notary Public, State of New York
No. 01CH5032146
Qualified in Schenectady County
Commission Expires August 22, 2014

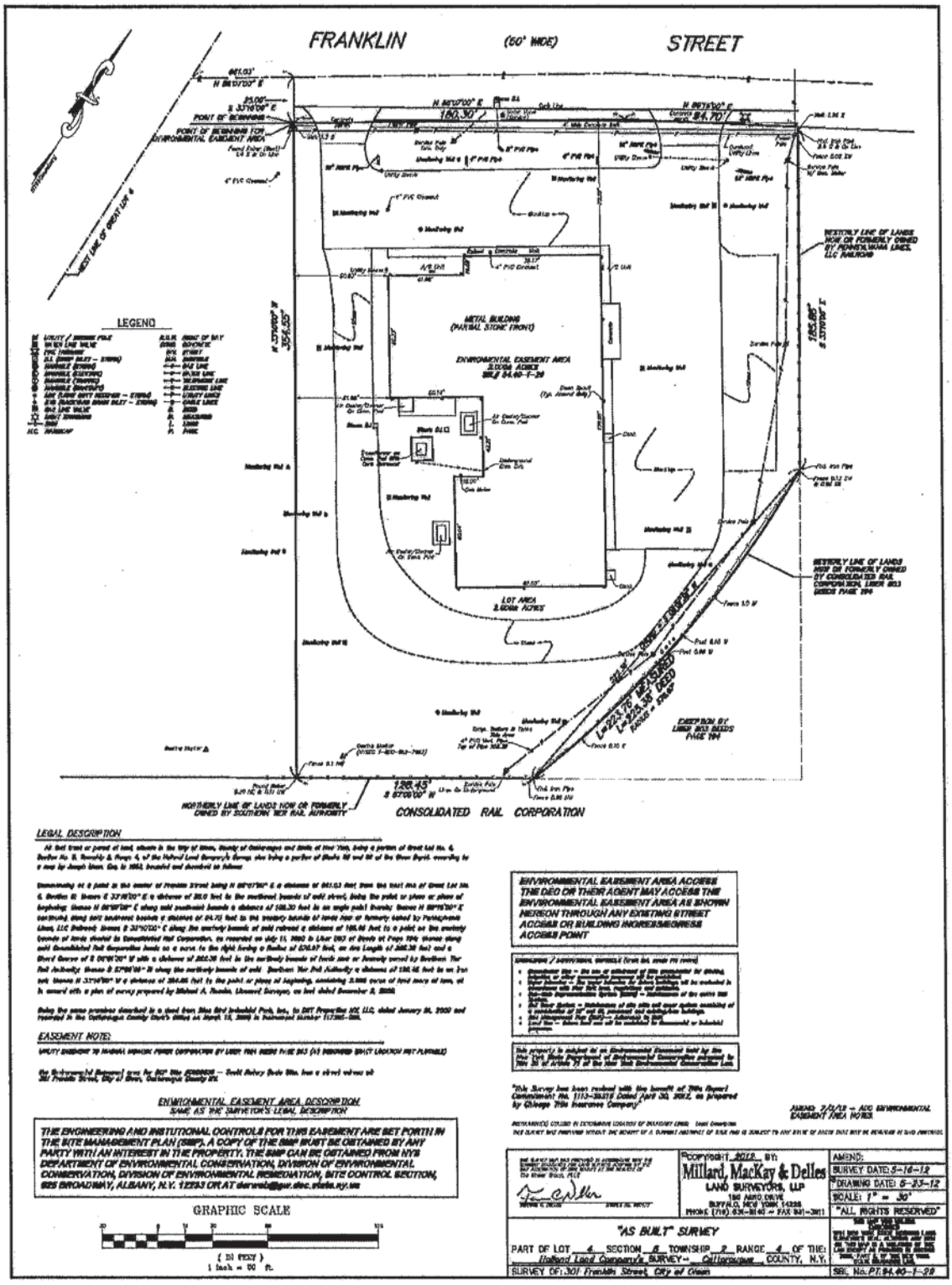
SCHEDULE "A"
ENVIRONMENTAL EASEMENT
PROPERTY DESCRIPTION

Address: 301 Franklin Street, City of Olean, Cattaraugus County, New York
Tax Map: 94.40-1-29

All that tract or parcel of land, situate in the City of Olean, County of Cattaraugus and State of New York, being a portion of Great Lot No. 4, Section No. 5, Township 2, Range 4, of the Holland Land Company's Survey, also being a portion of Blocks 65 and 66 of the Olean Depot. according to a map by Joseph Mann. Esq. In 1853, bounded and described as follows:

Commencing at a point in the center of Franklin Street being N 56°07'00" E a distance of 661.03 feet from the west line of Great Lot No. 4, Section 5; thence S 33°10'00" E a distance of 25.0 feet to the southeast bounds of said street, being the point or place of beginning; thence N 56°07'00" E along said southeast bounds a distance of 180.30 feet to an angle point therein; thence N 59°15'00" E continuing along said southeast bounds a distance of 94.70 feet to the westerly bounds of lands now or formerly owned by Pennsylvania Lines, LLC Railroad; thence S 33°10'00" E along the westerly bounds of said railroad a distance of 185.86 feet to a point on the westerly bounds of lands deeded to Consolidated Rail Corporation, as recorded on July 11, 1980 in Liber 803 of Deeds at Page 194; thence along said Consolidated Rail Corporation lands on a curve to the right having a Radius of 578.07feet, an Arc Length of 225.38 feet and a Chord Course of S 08°01'38" W with a distance of 222.36 feet to the northerly bounds of lands now or formerly owned by Southern Tier Rail Authority; thence S 57°00'00" W along the northerly bounds of said Southern Tier Rail Authority a distance of 128.45 feet to an iron set; thence N 33°10'00" W a distance of 354.55 feet to the point or place of beginning, containing 2.000 acres of land more or less, all in accord with a plan of survey prepared by Michael A. Roeske, Licensed Surveyor, as last dated December 2, 2008.

SURVEY



LEGAL DESCRIPTION

All that tract or parcel of land, situate in the City of Olean, County of Cattaraugus and State of New York, being a portion of Great Lot No. 4, Section No. 2, Township 4, Range 4, of the Holland Land Company's Survey, also being a portion of Blocks 58 and 59 of the Olean Survey, according to a map by Joseph Ellicott, Esq. in 1804, bounded and described as follows:

Commencing at a point in the center of Franklin Street being N 88°01'00" E a distance of 641.03 feet from the east line of Great Lot No. 4, Section 2; thence S 33°01'00" E a distance of 33.0 feet to the southeast bounds of said street, being the point or place of beginning; thence N 88°01'00" E along said southeast bounds a distance of 180.30 feet to an angle point; thence N 89°15'00" E continuing along said southeast bounds a distance of 94.70 feet to the westerly bounds of lands now or formerly owned by Pennsylvania Lines, LLC Railroad; thence S 33°01'00" E along the westerly bounds of said railroad a distance of 195.85 feet to a point on the westerly bounds of lands owned by Consolidated Rail Corporation, as recorded on July 15, 1980 in Liber 803 of Deeds at Page 194; thence along said Consolidated Rail Corporation lands on a curve to the right having a Radius of 5716.97 feet, an Arc Length of 222.76 feet and a Chord Course of S 06°01'00" W with a distance of 222.76 feet to the northerly bounds of lands now or formerly owned by Southern Tier Rail Authority; thence S 87°01'00" W along the northerly bounds of said Southern Tier Rail Authority a distance of 126.16 feet to an iron rod; thence N 33°01'00" W a distance of 354.55 feet to the point or place of beginning, containing 0.666 acres of land more or less, all in accord with a plan of survey prepared by Michael A. Rooks, Licensed Surveyor, as last dated December 8, 2008.

Being the same premises described by a deed from Olean Bird Industrial Park, Inc., to DRT Properties NYC LLC, dated January 26, 2009 and recorded in the Cattaraugus County Clerk's Office on April 15, 2009 in Instrument Number 117395-000.

EASEMENT NOTE:

UTILITY EASEMENT TO NIAGARA MOHAWK POWER CORPORATION BY LIBER 1101 DEEDS PAGE 363 (AS DESCRIBED SUBJECT LOCATION NOT PLOTTABLE)

Also Reciprocal Easement over the 60' ROW/ACCESS — Credit Valley Drive Site, for a street address of 301 Franklin Street, City of Olean, Cattaraugus County NY.

ENVIRONMENTAL EASEMENT AREA DESCRIPTION
SAME AS THE SURVEYOR'S LEGAL DESCRIPTION

THE ENGINEERING AND INSTITUTIONAL CONTROLS FOR THIS EASEMENT ARE SET FORTH IN THE SITE MANAGEMENT PLAN (SMP). A COPY OF THE SMP MUST BE OBTAINED BY ANY PARTY WITH AN INTEREST IN THE PROPERTY. THE SMP CAN BE OBTAINED FROM NYS DEPARTMENT OF ENVIRONMENTAL CONSERVATION, DIVISION OF ENVIRONMENTAL CONSERVATION, DIVISION OF ENVIRONMENTAL REMEDIATION, SITE CONTROL SECTION, 625 BROADWAY, ALBANY, N.Y. 12233 OR AT darweb@gw.dec.state.ny.us

GRAPHIC SCALE

(IN FEET)
1 inch = 60 ft.

ENVIRONMENTAL EASEMENT AREA ACCESS
THE DEC OR THEIR AGENT MAY ACCESS THE ENVIRONMENTAL EASEMENT AREA AS SHOWN HEREON THROUGH ANY EXISTING STREET ACCESS OR BUILDING INGRESS/EGRESS ACCESS POINT

"This Survey has been revised with the benefit of Title Report Commitment No. 1110-353171 dated April 30, 2012, as prepared by Chicago Title Insurance Company"

AMEND. 7/31/12 = ADD ENVIRONMENTAL EASEMENT AREA NOTES

"COPYRIGHT 2012 BY: Millard, MacKay & Delles LAND SURVEYORS, LLP 190 AUTO DRIVE BUFFALO, NEW YORK 14228 PHONE (716) 636-8040 — FAX 941-3611

AMEND:
SURVEY DATE: 5-16-12
DRAWING DATE: 5-23-12
SCALE: 1" = 30'
"ALL RIGHTS RESERVED"

"AS BUILT" SURVEY

PART OF LOT 4 SECTION 6 TOWNSHIP 2 RANGE 4 OF THE: Holland Land Company's SURVEY — Cattaraugus COUNTY, N.Y.

SURVEY OF: 301 Franklin Street, City of Olean

SBL No. P/T: 94.40-1-39

poor quality copy

APPENDIX B

ASD SYSTEM TERMINATION LETTER

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Division of Environmental Remediation
270 Michigan Avenue, Buffalo, NY 14203-2915
P: (716) 851-7220| F: (716) 851-7226
www.dec.ny.gov

July 28, 2021

Jeffrey Meister
DST Properties NY, LLC
13829 Jay Street NW
Andover, MN 55304

Re: Site Management (SM) -
Soil Vapor Intrusion Assessment Report
Scott Rotary Seals, Olean
Cattaraugus County, Site No.: **C905036**

Dear Jeffery Meister (as the Certifying Party):

The New York State Department of Environmental Conservation and the New York State Department of Health have reviewed and hereby accept your Soil Vapor Intrusion Assessment Report submitted June 25, 2021, after receiving confirmation that the active sub-slab depressurization (ASD) system was turned off for a week prior to sampling. Therefore, the ASD system can be terminated. Please submit a revised red-lined SMP indicating this change by **September 30, 2021**. If you have any questions, please contact me at 716-851-7220 or email: megan.kuczka@dec.ny.gov.

Sincerely,

Megan Kuczka
Environmental Program Specialist – 1

ec: Andrea Caprio – NYSDEC
Eric Hausamann – NYSDEC
Teresa Mucha, Esq. - NYSDEC
Eamonn O'Neil – NYSDOH
Charlotte Bethoney – NYSDOH
Lori Riker – Benchmark Environmental Engineering & Science, PLLC
Mike Lesakowski - Benchmark Environmental Engineering & Science, PLLC
Chelsea Kanaley – Benchmark Environmental Engineering & Science, PLLC

APPENDIX C

SVE SYSTEM DISCONTINUATION REQUESTS AND NYSDEC APPROVALS

July 16, 2013

Mr. Chad Staniszewski, P.E.
New York State Department of Environmental Conservation
Division of Environmental Remediation, Region 9
270 Michigan Avenue
Buffalo, New York 14203-2999

Re: **SVE System Discontinuation Request**
Scott Rotary Seals Site (Site No. C905036)
Olean NY

Dear Mr. Staniszewski:

TurnKey requested that the soil vapor extraction (SVE) discontinuation evaluation be completed that would include two soil borings and soil sampling and testing pursuant to our letter dated May 10, 2013 sent to you regarding the DST Properties NY, LLC and Scott Rotary Seals site in Olean, New York (see Attachment 1). On the basis of this information, the New York State Department of Environmental Conversation (NYSDEC) granted approval for the soil sampling in a letter from you to Mike Lesakowski on May 20, 2013 (see Attachment 1) with the proviso that one additional Geoprobe boring be completed in the vicinity of TP/SB-15 and that the borings be installed from ground surface to the water table and continuously field screened with a PID. This report summarizes the soil borings, sampling and testing associated with the discontinuation evaluation.

BACKGROUND

DST Properties NY, LLC (DST), has undertaken the redevelopment of the property located at 301 Franklin Street, Olean, New York under the New York State Brownfield Cleanup Program (BCP) and executed a Brownfield Cleanup Agreement (BCA) with the NYSDEC in March 2010. DST completed remedial work and has opened a new 15,000 square foot office building and warehouse. A certificate of completion (COC) was issued for the site in December 2012. As part of the remedial program, a SVE was installed and has been operated nearly continuously since March 2012. The operation, maintenance and monitoring (OMM) of the SVE system is part of the monitoring required in the approved Site Management Plan.

As described in the RAWP Section 3.2.5 SVE Discontinuation Criteria, there are two criteria that are to be met to initiate the discontinuation evaluation: 1) a significant reduction in mass removal rate; and 2) a decrease in the benefit of continued SVE operation due to a tailing-off of the mass removal rate. Both of these conditions were met as discussed in our May 10, 2013 letter (See Attachment 1).

Soil Sampling

The boring program was conducted on May 24, 2013 with NYSDEC oversight. Four (4) direct-push (Geoprobe®) boreholes, designated as SB-13-1 to SB-13-4 as shown on Figure 1, were completed to compare the results of previous soil samples with the current conditions based on observations of

odor, staining and photoionization (PID) readings. Borings SB-13-1 to SB-13-4 were completed proximate to historic borings/test pits as follows:

Current Boring	Historic Boring/Test Pit
SB-13-1	TP/SB-23
SB-13-2	TP-9
SB-13-3	TP/SB-15
SB-13-4	TP/SB-22

Note: Boring and test pits logs for these 8 locations are included in Attachment 2.

Boreholes were advanced to depths ranging from 11.5 to 24-feet below ground surface. All direct-push boreholes were advanced using 1.5-inch diameter x 4-foot long macro-core samplers. Continuous 4-foot sample cores were retrieved from the boring locations in clear PVC sleeves to allow for field characterization of the subsurface soils by TurnKey's environmental scientist. TurnKey personnel scanned each 4-foot core for total volatile organic vapors with a Mini Rae 2000 ™ PID equipped with a 10.6 eV lamp and noted visual and/or olfactory observations. All field observations including soil description, depths and PID readings at each boring location are summarized in the Field Borehole Log Sheets included in Attachment 2.

Two soil boring locations were selected for soil sample collection as agreed to with the NYSDEC. Dedicated stainless steel spoons were used to transfer the soil samples to the appropriate laboratory-provided glass containers. The samples were placed on ice in the field, and transported under Chain-of-Custody to Alpha Analytical for analysis of: USEPA Target Compound List (TCL) volatile organic compounds (VOCs) and tentatively identified compounds (TICs).

A copy of the laboratory analytical data is included in Attachment 3.

Findings

Historic boring and test pits revealed soils unsaturated to be stained gray in association with the petroleum-impacted soils with strong odors. By comparison, the unsaturated soils from borings SB-13-1 to SB-13-4 are now yellowish-brown and contain no odors or slight odors indicating the staining and odors have been removed by the SVE system. The PID screening results in the historic borings and the current borings are presented side-by-side in Table 1. The PID results reveal that the VOC concentrations in the soils have been greatly reduced. All of the unsaturated soil samples PID screening results are less than 200 ppm with the exception of one sample from SB-13-1[1] and most of the readings are less than 50 ppm. The VOC concentrations based on PID readings have been reduced by more than 80% and commonly more than 90%.

The soil analytical results are summarized in Table 2. Only constituents that were identified above analytical detection limits are listed on the table. For comparative purposes, NYSDEC Part 375 health-risk based Commercial Soil Cleanup Objectives (SCOs) are also presented on Table 2.

[1] The 6 to 8' sample from SB-13-1 contained a PID reading of 318 ppm. This sample was described as lean clay with a slight odor. This clay is a small discontinuous pocket and is less permeable than the bulk of the soils on the site (e.g., sand and gravel), and hence slightly less amenable to SVE extraction.

There were no exceedances of the CSCOs. The results from soil sample SB-13-2 (11.5-14') were very low with only one detection (methylene chloride at 0.0024 mg/kg). No TICs were identified. Sample SB-13-1 (6-8') contained only four compounds, the highest of which was methyl cyclohexane at a concentration of 0.24 mg/kg. TICs were detected in this sample at estimated concentrations of 110 to 590 mg/kg. Historic results of the nearby samples to SB-13-2 (11.5-14') and SB-13-1 (6-8') are also presented in Table 2. A comparison of the data (old versus new) indicates a significant decrease in compound concentrations which is consistent with the observations of the samples (staining and odor) and the reduction in the VOC concentrations based on PID readings.

SUMMARY AND CONCLUSIONS

The SVE system has removed over 7,600 pounds of contamination; however, the rate of removal has decreased by about 75% between 2012 and 2013. The system has reached quasi-equilibrium for a period of three months. Soil sampling from the four borings completed for this discontinuation evaluation showed that the soil quality has greatly improved; gray staining has been removed and the soils are predominantly yellowish-brown; odors are either absent or reduced from strong to slight; the VOC concentrations based on PID readings have been decreased by a minimum of 80% to over 90%; and the analytical data show there are no exceedances of the CSCOs and the concentrations of contaminants have decreased sharply.

The continued operation of the SVE system will provide only limited benefit. The grossly contaminated criteria of staining, odors, and PID readings have been largely remediated. The site is subject to the Site Management Plan which includes a cover system to protect employees and the public from incidental contact with the subsurface soils, an active sub-slab depressurization system to protect employees from exposure to potential vapors from entering the work space, and there are restrictions on excavations into the subsurface. As such, we request NYSDEC approval to terminate continued SVE operations.

Sincerely,
TurnKey Environmental Restoration, LLC

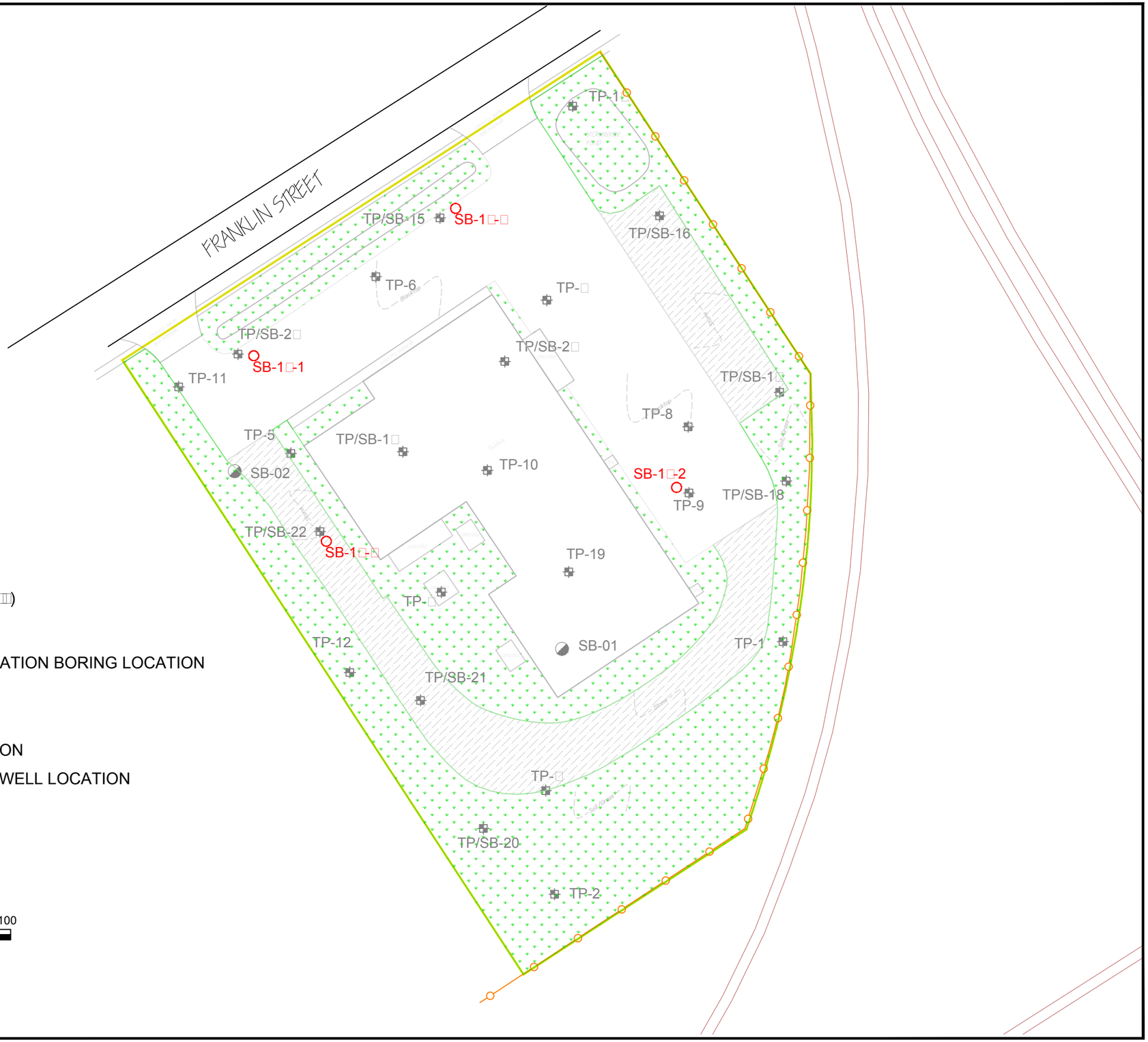
Raymond Laport, P.E.
Project Manager

Michael Lesakowski
Project Manager

cc: C. Wiech, Scott Rotary Seals (w/att.)
File: 189-013-001

FIGURES

F:\CAD\TurnKey\Scott Rotary Seals\2013 OM&M\F-2; SVE Soil Sampling Locations.dwg



LEGEND

- PROPERTY BOUNDARY
- FENCE
- RAILROAD TRACKS (□□□r□□□□ □□□)
- BUILDING
- SB-1□-2 SVE DISCONTINUATION EVALUATION BORING LOCATION
- TP-6 TEST PIT LOCATION
- SB-01 SOIL BORING LOCATION
- TP/SB-2□ TEST PIT/SOIL BORING LOCATION
- MW-□ GROUNDWATER MONITORING WELL LOCATION

N

50 0□ 50 100

SCALE: 1 INC□ = 50 FEET
SCALE IN FEET
(□□□r□□□□ □□□)

DATE: JULY 2013
DRAFTED BY: RFL

2558 HAMBURG TURNPIKE
SUITE 300
BUFFALO, NY 14218
(716) 856-0635

JOB NO.: 0189-001-□00

SAMPLING PLAN
SVE DISCONTINUATION EVALUATION

SCOTT ROTARY SEALS SITE
OLEAN, NEW YORK
PREPARED FOR
DST PROPERTIES NY, LLC

FIGURE 1

TABLES

TABLE 1

QUALITATIVE PID[1] SOIL SCREENING SUMMARY
SCOTT ROTARY SEALS SITE
301 FRANKLIN STREET
OLEAN, NEW YORK

	Current Boring	Historic Boring/Test Pit	Current Boring	Historic Boring/Test Pit	Current Boring	Historic Boring/Test Pit	Current Boring	Historic Boring/Test Pit	
Elevation (ft)	**SB-13-1 (TP/SB-23)**	**TP/SB-23**	**SB-13-3 (TP/SB-15)**	**TP/SB-15**	**SB-13-2 (TP-9)**	**TP-9**	**SB-13-4 (TP/SB-22)**	**TP/SB-22**	**Elevation (ft)**
1429								Ground Surface	1429
1428					Ground Surface		Ground Surface	11.3	1428
1427		Ground Surface		Ground Surface	0.4	ND	3.7		1427
1426	Ground Surface	2.3		ND				84.2	1426
1425	0.4		Ground Surface		0.7		15.5		1425
1424		1.6	35	791				14.7	1424
1423	0				0.5		15.3		1423
1422		69.6	41	1183				345	1422
1421	65				2.1		30.6		1421
1420		1316	6.6	1536				915	1420
1419	318				0.7		3		1419
1418		1767	12	1599				833	1418
1417	115				0.8		22.1		1417
1416		1700	4	1609				945	1416
1415	130				0.7	1254			1415
1414		1605	10	1861				1062	1414
1413	70								**1413**
1412		1607	12	1875				1082	**1412**
1411	195								**1411**
1410		1934	62.3	2048				1103	**1410**
1409	170								**1409**
1408		714		904					**1408**
1407	762								**1407**
1406		590		285					**1406**
1405	730								1405
1404		185		185					1404
1403	700								1403
1402									1402
1401									1401

1. Photoionization detector (PID) screening results in parts per million (ppm).

Notes:

ND = Not detected at that depth interval.

PID>1000 ppm

Groundwater elevation range based on water levels taken from on-Site wells

Table 2
Subsurface Soil Analytical Results
Scott Rotary Seals Site
301 Franklin Street
Olean, New York

Parameter [1]	Commercial SCOs[2] (mg/kg)	Current Boring	Histoic Boring/Test Pit		Current Boring	Historic Boring/Test Pit
		SB-13-1 (6-8')	TP-23 (8-10)	SB-23 (15-18)	SB-13-2 (11.5-14')	TP-9 (12-14)
PID Results →		**318**	**1767**	**1607-1934**	**0.7**	**1254**
Sample Date →		**May-13**	**Aug-10**	**Aug-10**	**May-13**	**Jun-09**
TCL plus STARS Volatile Organic Compounds (VOCs) - mg/kg [3]						
Acetone	**500**	ND	0.07	ND	ND	ND
Cyclohexane	**--**	0.014	ND	ND	ND	ND
Isopropylbenzene (Cumene)	**--**	0.0044	ND	ND	ND	ND
Methylcyclohexane	**--**	0.24	0.11	17	ND	ND
Methylene chloride	**500**	0.008 J	0.046 J	ND	0.0024 J	ND
p-Cymene (p-isopropyltoluene)	**--**	ND	0.021	ND	ND	ND
n-Butylbenzene	**500**	ND	0.027	ND	ND	ND
sec-Butylbenzene	**500**	ND	0.024	0.38 NJ	ND	0.0074
tert-Butylbenzene	**500**	ND	0.013	0.15 NJ	ND	ND
Tentatively Identified Compounds (TICs)	**--**	2.1	5.1	122	ND	8.5
Total VOCs	**--**	***2.4***	***5.4***	***139***	***0.0024***	***8.5***

Notes:
1. Only those parameters detected at a minimum of one sample location are presented in this table; all other compounds were reported as non-detect.
2. Values per NYSDEC Part 375 Restricted-Commercial Soil Cleanup Objectives (SCOs).
3. Sample results were reported by the laboratory in micograms per kilogram (ug/kg) and converted to milligram per kilogram (mg/kg) for comparison to SC

Definitions:
ND = Parameter not detected above laboratory detection limit.
"--" = No SCO available.
J = Estimated value; result is less than the sample quantitation limit but greater than zero.
NJ = The detection is tentative in identification and estimated in value.

ATTACHMENT 1

MAY 10, 2013 DISCONTINUATION EVALUATION LETTER
MAY 20, 2013 NYSDEC APPROVAL LETTER

May 10, 2013

Mr. Chad Staniszewski, P.E.
New York State Department of Environmental Conservation
Division of Environmental Remediation, Region 9
270 Michigan Avenue
Buffalo, New York 14203-2999

Re: **SVE Discontinuation Evaluation**
Scott Rotary Seals Site (Site No. C905036)
Olean NY

Dear Mr. Staniszewski:

As per the Remedial Action Work Plan (RAWP) and Site Management Plan (SMP) prepared for DST Properties NY, LLC and Scott Rotary Seals, TurnKey has been monitoring the soil vapor extraction system since March 2012. This purpose of this letter is to summarize the results of monitoring for the volatile organic compound (VOC) mass removal and propose the soil vapor extraction (SVE) discontinuation in accordance with the RAWP and SMP.

BACKGROUND

DST Properties NY, LLC (DST), has undertaken the redevelopment of the property located at 301 Franklin Street, Olean, New York under the New York State Brownfield Cleanup Program (BCP) and executed a Brownfield Cleanup Agreement (BCA) with the New York State Department of Environmental Conservation (NYSDEC) in March 2010. DST completed remedial work and has opened a new 10,000 square foot office building and warehouse. A certificate of completion (COC) was issued for the site in December 2012.

SVE SYSTEM

As part of the redevelopment, a soil vapor extraction system (SVE) was installed and has been operated nearly continuously since March 2012. The operation, maintenance and monitoring (OMM) of the SVE system is part of the monitoring required in the approved Site Management Plan. Table 1 attached provides a summary of the monitoring. As described in the RAWP Section 3.2.5 SVE Discontinuation Criteria, there are two criteria that are to be met to initiate the discontinuation evaluation: 1) a significant reduction in mass removal rate; and 2) a decrease in the benefit of continued SVE operation due to a tailing-off of the mass removal rate.

Table 2 Statistical Summary of Mass Removal Rates

Parameter	Summary of Mass Removal Rate (lbs/day)	
	2012	2013
Minimum	10.8	4.1
Maximum	60.1	12.4
Average	27.6	7.0

The purpose of the SVE system is to reduce the mass of VOCs from the vadose zone. As shown in Table 2 above, the range and average VOC mass removal rate has decreased significantly from 2012 to 2013; based on the average mass removal rate there is a 75% reduction from 2012 to 2013. This significant reduction in mass removal meets the first criterion for SVE discontinuation evaluation. Referring to Chart 1 attached, the SVE system has removed over 7,600 pounds of VOCs from the subsurface. Moreover, the rate of VOC mass removal has tailed-off (reached quasi-equilibrium) for the past 3 months, which meets the second criterion for SVE discontinuation evaluation (refer to Chart 2).

SVE Discontinuation Evaluation

On the basis of the foregoing, TurnKey on behalf of DST is proposing to collect post-treatment soil samples using the sampling, handling and testing procedures described in the RAWP and SMP.

We are prepared to initiate the SVE discontinuation evaluation once we receive your approval. If you have questions or comments, please contact us.

Sincerely,
TurnKey Environmental Restoration, LLC

Raymond Laport, P.E.
Project Manager

Michael Lesakowski
Project Manager

cc: C. Wiech, Scott Rotary Seals (w/att.)
File: 189-001-400

TABLES

Table 1
Summary of SVE System VOC Mass Removal
Scott Rotary Seals Site
Olean, New York

Date	Elapsed Time (days)	SVE Operation Time (days)	Time	Influent (Untreated) PID Reading (ppm)	Corrected Influent Concentration[1] (mg/m^3)	Air Flow Rate (SCFM)	Rate of VOC Removal (lb/day)	Total VOC Removal to Date (lb)	Notes
3/14/12	0	0	3:45 PM	93	439	349	13.8		
3/16/12	2	2	5:00 PM	230	1086	349	34.1	49	
3/30/12	16	16	8:45 AM	298	1407	349	44.1	583	
4/6/12	23	23	9:45 AM	286	1350	349	42.4	888	
4/13/12	30	30	8:00 AM	294	1388	349	43.5	1,185	
4/13/12	30	30	8:30 AM	73	345	349	10.8	1,186	Valved down the intake air from the system
4/17/12	34	34	1:06 PM		0				System shut-down for 22 days pending carbon testing and change-out.
5/9/12	56	34	11:50 AM	118	557	351	17.6	1,244	Restarted system
5/11/12	58	36	12:42 PM	222	1048	349	32.9	1,297	Adjusted system to close off addition of outdoor air
5/15/12	62	40	11:00 AM	248	1171	346	36.4	1,433	
5/21/12	68	46	9:00 AM	134	632	349	19.8	1,599	
5/22/12	69	47	9:00 AM	135	637	347	19.9	1,619	
5/30/12	77	55	4:00 PM	135	637	348	19.9	1,784	Blower down. Based on hour meter, blower went down at ~4:00 PM on May 30.
5/30/12	77	55	5:10 PM	166	784	345	24.3	1,784	
6/13/12	91	69	8:15 AM	166	784	345	24.3	2,116	
6/14/12	92	70	8:10 AM	185	873	348	27.3	2,162	
6/25/12	102	80	1:00 AM	185	873	348	27.3	2,454	System Shut Down
6/25/12	103	80	4:00 PM	144	680	348	21.2	2,454	System reactivated
7/31/12	139	116	2:23 PM	132	623	348	19.5	3,186	
8/2/12	141	118	10:50 AM	141	666	352	21.0	3,333	Carbon Removed, stack discharge
8/3/12	142	119	3:32 PM	141	546	348	17.1	3,356	Power outage; system down; used previous measurments for calculations
8/6/12	145	119	9:53 AM	134	519	351	16.3	3,356	System restarted
8/9/12	148	123	6:40 PM	134	519	352	16.4	3,411	Power outage; system down; used previous measurments for calculations
8/10/12	149	123	2:10 PM	123	476	346	14.8	3,411	
8/21/12	160	134	5:15 PM	139	538	348	16.8	3,587	
8/21/12	160	134	6:40 PM	187	724	343	22.3	3,589	Shut off extraction wells 2, 5, and 6
8/24/12	163	137	3:00 PM	199	770	346	23.9	3,654	
8/25/12	164	138	3:26 PM	199	770	342	23.7	3,679	System shut down
8/27/12	166	138	8:15 AM	180	697	342	21.4	3,679	Reactivated
9/1/12	171	143	2:55 PM	180	697	344	21.5	3,792	System Shut Down
9/4/12	174	143	8:20 AM	180	697	344	21.5	3,792	Reactivated
9/7/12	176	146	2:00 PM	180	697	343	21.5	3,849	
9/8/12	178	147	10:34 AM	505	1955	337	59.3	3,907	Used data from 9/19/12 for mass removal calculations
9/10/12	180	149	8:25 AM	505	1955	332	58.3	4,019	Used data from 9/19/12 for mass removal calculations
9/19/12	189	158	10:00 AM	505	1955	342	60.1	4,356	
9/19/12	189	158	2:00 PM	400	1548	342	47.6	4,365	Well 2 opened, 5 and 6 still off
9/25/12	194	164	4:25 PM	152	588	348	18.4	4,544	System down; no time known
9/26/12	195	165	1:00 AM	400	1548	343	47.7	4,578	Assumed extracted vapors returned to pre-shut down condition
10/12/12	212	181	12:00 PM	201	778	354	24.8	5,174	
10/21/12	221	190	10:17 AM	201	778	354	24.8	5,395	System shut-down due to high vac alarm; used data from 10/12/12 for mass calculations
11/14/12	245	190	3:30 PM	162	627	365	20.6	5,395	System repair to well SVE-2 (cracked pipe); used PID reading from 11/29/12 as PID malfunctioned
11/29/12	260	205	10:00 AM	162	627	365	20.6	5,699	SVE Wells 1, 7, 8 & 9 on; all other wells valved off
11/29/12	260	205	12:50 PM	333	1289	365	42.2	5,703	
12/4/12	265	210	12:50 PM	358	1385	365	45.4	5,922	
12/19/12	280	225	4:00 PM	115	445	365	14.6	6,376	
12/21/12	282	227	3:00 PM	240	929	365	30.4	6,441	
1/21/13	313	258	12:18 PM	51.2	198	365	6.5	7,012	
1/30/13	322	267	2:30 PM	97.4	377	365	12.4	7,098	
2/6/13	329	274	11:00 AM	91.2	353	365	11.6	7,180	
2/20/13	343	288	11:00 AM	37.5	145	365	4.8	7,294	All wells valved open except SVE-2
2/27/13	350	295	12:00 PM	35	135	365	4.4	7,326	
3/13/13	364	309	11:00 AM	32	124	365	4.1	7,386	
3/29/13	380	325	2:00 PM	59	228	354	7.3	7,477	
4/12/13	394	339	12:00 PM	50	194	365	6.3	7,572	
4/25/13	407	352	8:40 AM	45	174	377	5.9	7,650	

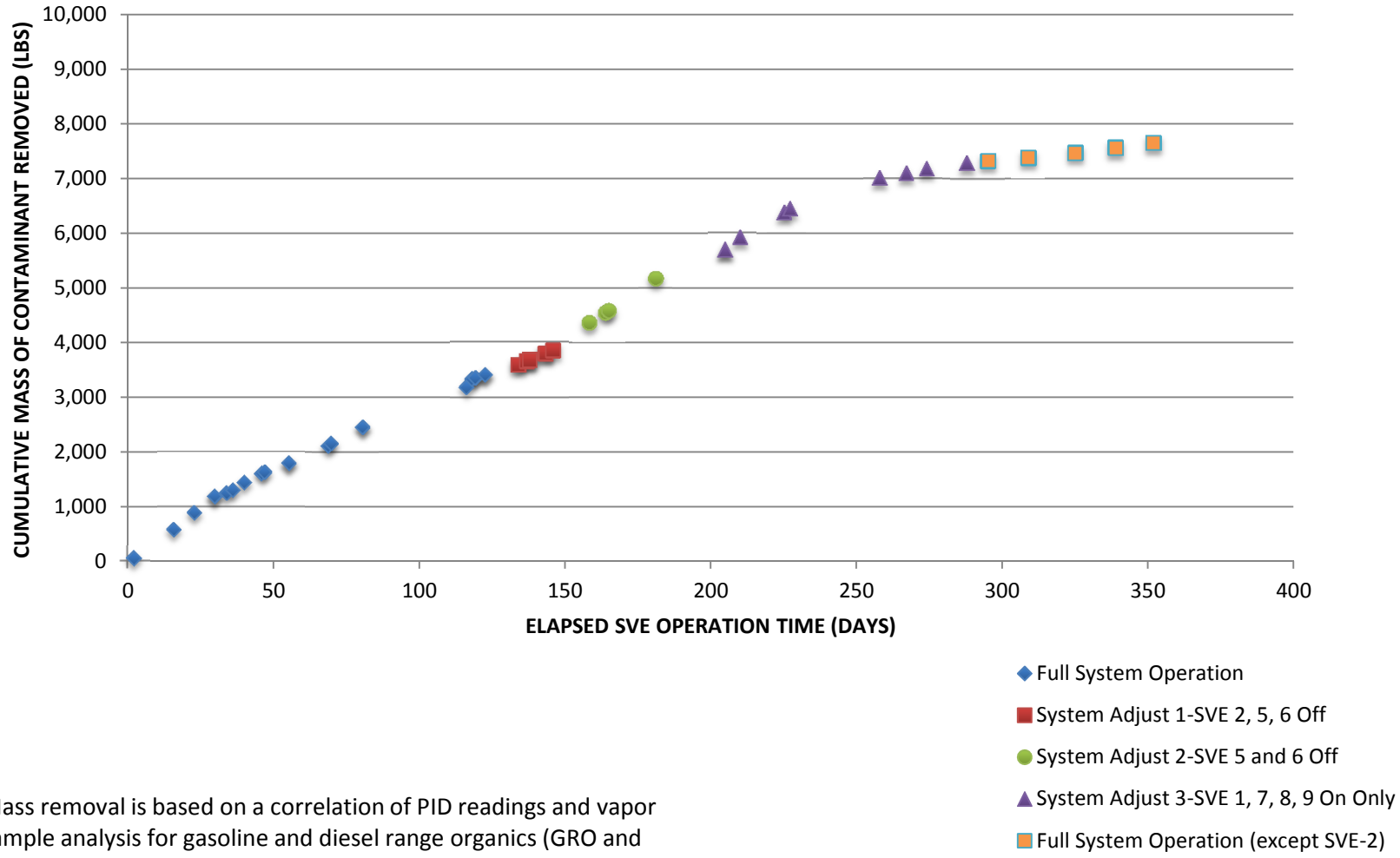
Notes:

1. The estimated mass of contamination recovered is based on ratio of the sum of the gasoline and diesel range organics (GRO and DRO) as measured by a vapor sample collected with a summa canister to the contemporaneous PID reading. Sample from 3/16/12 had a concentration of GRO and DRO of 890 mg/cubic meter which equates to a 3.87 ratio to the PID reading; Sample from 5/22/12 had a concentration of GRO and DRO of 750 mg/cubic meter which equates to a 5.56 ratio to the PID reading; used the average of the ratios of 4.72.

ATTACHMENT 1

CHARTS

Chart 1
CUMULATIVE MASS REMOVAL VERSUS TIME
SVE SYSTEM
SCOTT ROTARY SEALS



Mass removal is based on a correlation of PID readings and vapor sample analysis for gasoline and diesel range organics (GRO and DRO) measured in influent air.

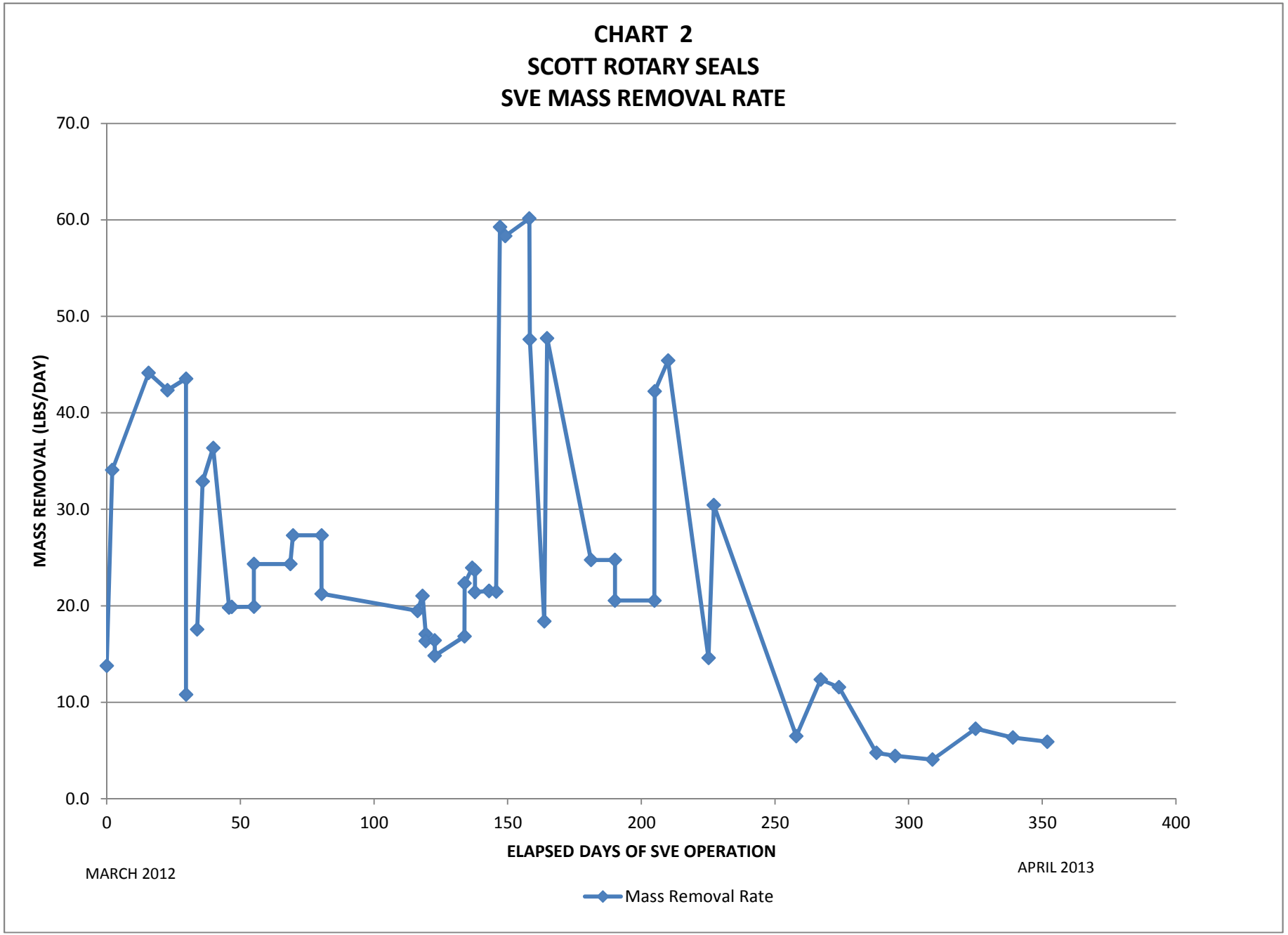


CHART 2
SCOTT ROTARY SEALS
SVE MASS REMOVAL RATE
MASS REMOVAL (LBS/DAY)
70.0
60.0
50.0
40.0
30.0
20.0
10.0
0.0
0
50
100
150
200
250
300
350
400
ELAPSED DAYS OF SVE OPERATION
MARCH 2012
APRIL 2013
Mass Removal Rate

New York State Department of Environmental Conservation
Division of Environmental Remediation, Region 9
270 Michigan Avenue, Buffalo, New York 14203-2915
Phone: (716) 851-7220 • **Fax:** (716) 851-7226
Website: www.dec.ny.gov

Joe Martens
Commissioner

May 20, 2013

Mr. Michael Lesakowski
TurnKey Environmental Restoration, LLC
2558 Hamburg Turnpike - Suite 300
Buffalo, New York 14218

Dear Mr. Lesakowski:

Scott Rotary Seals Site; C905036
Olean, Cattaraugus County
Soil Vapor Extraction System

The New York State Department of Environmental Conservation (Department) has reviewed the Soil Vapor Extraction System (SVE) Discontinuation Evaluation work plan letter dated May 16, 2013. As discussed, the work plan is approved provided the following conditions are met:

1. One additional geoprobe boring will be completed in the immediate vicinity of historic sample location TP/SB-15.

2. All borings will be installed from ground surface to the water table and continuously field screened with a calibrated PID throughout the depth of the boring. It is anticipated that two samples in total will be collected for VOC analysis. Additional samples may be collected if necessary.

The goal of this sampling effort is to determine whether or not the required soil cleanup objective of grossly contaminated soil remediation has been achieved. The applicant must justify this objective has been achieved in order to permanently discontinue operation of the SVE system.

If you have any questions, please feel free to contact me at (716) 851-7220.

Sincerely,

Chad Staniszewski, P.E.
Project Manager

CS:sz

ec: Mr. Martin Doster, NYSDEC
Mr. Matthew Forcucci, NYS Department of Health
Ms. Crystal Wiech, Scott Rotary Seals

ATTACHMENT 2

BORING LOGS

Project No: 0189-013-001

Borehole Number: SB-13-1

Project: 301 Franklin St - 2013 OM&M/LNAPL

A.K.A.:

Client: DST Properties NY, LLC

Logged By: BMG

Site Location: 301 Franklin Street, Olean, NY

Checked By:

TurnKey Environmental Restoration, LLC
2558 Hamburg Turnpike, Suite 300
Buffalo, NY 14218
(716) 856-0635

SUBSURFACE PROFILE			SAMPLE						
Depth (fbgs)	Elev. /Depth	Description (ASTM D2488: Visual-Manual Procedure)	Sample No.	SPT N-Value	Recovery (ft)	Symbol	PID VOCs (ppm)	Lab Sample	Well Completion Details or Remarks
0.0	0.0	Ground Surface							
	0.0 / -0.8	***Asphalt and Subbase***							
	0.8	***Silty Sand with Fill*** Brown, moist, fine to carse sand with some non-plastic fines and few brick, loose, no odor	S-1	NA	1.8'		0.4 0.0		
5.0	-5.0 / 5.0	***Lean Clay*** Gray to brown, moist, medium plasticity fines with few fine to coarse rounded gravel, firm, slight odor	S-2	NA	2.0'		65.0 318.0	Sampled	
	-8.0 / 8.0	***Silty Sand*** Yellowish brown, moist, fine sand with some non-plastic fines and few fine to coarse rounded gravel, dense, slight odor	S-3	NA	3.2'		115.0 130.0		
10.0	-12.0 / 12.0	***Well Graded Sand with Silt and Gravel*** Yelowish Brown, moist to wet (15'), fine to coarse sand with some fine to coarse rounded gravel with few non-plastic fines, dense, slight odor	S-4	NA	2.8'		70.0 195.0		First water
15.0	-16.5 / 16.5	***Well Graded Sand with Silt and Gravel*** Yelowish Brown, wet, fine to coarse sand with some fine to coarse rounded gravel with few non-plastic fines, dense, moderate odor	S-5	NA	2.2'		170.0 762.0		
20.0			S-6	NA	1.8'		730.0 700.0		
	-24.0 / 24.0	End of Borehole							
25.0									
30.0									

Drilled By: Russo Development, Inc.
Drill Rig Type: AMS Power Probe 9500 VTR
Drill Method: Direct push
Comments:
Drill Date(s): 5-24-13

Hole Size: 2"
Stick-up: NA
Datum: NA

Sheet: 1 of 1

Project No: 0189-013-001

Borehole Number: SB-13-2

Project: 301 Franklin St - 2013 OM&M/LNAPL

A.K.A.:

Client: DST Properties NY, LLC

Logged By: BMG

Site Location: 301 Franklin Street, Olean, NY

Checked By:

TurnKey Environmental Restoration, LLC
2558 Hamburg Turnpike, Suite 300
Buffalo, NY 14218
(716) 856-0635

SUBSURFACE PROFILE			SAMPLE						
Depth (fbgs)	Elev. /Depth	Description (ASTM D2488: Visual-Manual Procedure)	Sample No.	SPT N-Value	Recovery (ft)	Symbol	PID VOCs ppm (0 / 500 / 1000)	Lab Sample	Well Completion Details or Remarks
0.0	0.0	Ground Surface							
	0.0 -0.8	***Asphalt and Subbase***							
	0.8	***Silty Sand*** Yellowish brown, moist, fine sand with some non-plastic fines and few fine to coarse rounded gravel, dense, no odor, refusal at 14' on suspected bolders	S-1	NA	1.7'		0.4 0.7		
5.0			S-2	NA	2.6'		0.5 2.1		
10.0			S-3	NA	0.7'		0.7 0.8		
			S-4	NA	2.0'		0.7	Sampled	
	-14.0 14.0	End of Borehole							
15.0									
20.0									
25.0									
30.0									

Drilled By: Russo Development, Inc.
Drill Rig Type: AMS Power Probe 9500 VTR
Drill Method: Direct push
Comments:
Drill Date(s): 5-24-13

Hole Size: 2"
Stick-up: NA
Datum: NA

Sheet: 1 of 1

Project No: 0189-013-001

Borehole Number: SB-13-3

Project: 301 Franklin St - 2013 OM&M/LNAPL

A.K.A.:

Client: DST Properties NY, LLC

Logged By: BMG

Site Location: 301 Franklin Street, Olean, NY

Checked By:

TurnKey Environmental Restoration, LLC
2558 Hamburg Turnpike, Suite 300
Buffalo, NY 14218
(716) 856-0635

SUBSURFACE PROFILE			SAMPLE						
Depth (fbgs)	Elev. /Depth	Description (ASTM D2488: Visual-Manual Procedure)	Sample No.	SPT N-Value	Recovery (ft)	Symbol	PID VOCs ppm (0 / 500 / 1000)	Lab Sample	Well Completion Details or Remarks
0.0	0.0	Ground Surface							
	0.0	***Silty Sand with Fill*** Brown, moist, fine to carse sand with some non-plastic fines and few brick, loose, no odor	S-1	NA	1.9'		35.0 41.0		
5.0			S-2	NA	3.2'		6.6 12.0		
	-7.0 7.0	***Silty Sand with Gravel*** Yellowish brown, moist, fine sand with some non-plastic fines and little fine to coarse rounded gravel, dense, no odor to faint odor (14-16')	S-3	NA	2.0'		4.0 10.0		
10.0			S-4	NA	1.2'		12.0 62.3		
15.0	-16.0 16.0	Low recovery, Refusal at 18.5' on suspected bolder	S-5	NA	0.1'		0.0		
	-18.5 18.5	End of Borehole							
20.0									
25.0									
30.0									

Drilled By: Russo Development, Inc.
Drill Rig Type: AMS Power Probe 9500 VTR
Drill Method: Direct push
Comments:
Drill Date(s): 5-24-13

Hole Size: 2"
Stick-up: NA
Datum: NA

Sheet: 1 of 1

Project No: 0189-013-001

Borehole Number: SB-13-4

Project: 301 Franklin St - 2013 OM&M/LNAPL

A.K.A.:

Client: DST Properties NY, LLC

Logged By: BMG

Site Location: 301 Franklin Street, Olean, NY

Checked By:

TurnKey Environmental Restoration, LLC
2558 Hamburg Turnpike, Suite 300
Buffalo, NY 14218
(716) 856-0635

SUBSURFACE PROFILE			SAMPLE						
Depth (fbgs)	Elev. /Depth	Description (ASTM D2488: Visual-Manual Procedure)	Sample No.	SPT N-Value	Recovery (ft)	Symbol	PID VOCs ppm (0 / 500 / 1000)	Lab Sample	Well Completion Details or Remarks
0.0	0.0	Ground Surface							
	0.0 to -0.8	***Road Base***							
	-0.8 to 0.8	***Sandy Silt with Fill*** Brown, moist, non-plastic fines with some fine to carse sand, few fine to coarse gravel, and few brick, loose, no odor	S-1	NA	3.2'		3.7 15.5		
	-4.5 to 4.5	***Silt with Sand*** Yellowish brown, moist, non-plastic fines with little fine sand, and few fine to coarse gravel, dense, no odor	S-2	NA	0.7'		15.3 30.6		
	-8.0 to 8.0	***Silty Sand with Gravel*** Yellowish brown, moist, fine sand with some non-plastic fines and little fine to coarse rounded gravel, no odor, dense, refusal on suspected large bolder	S-3	NA	1.8'		3.0 22.1		
10.0	-11.5 / 11.5	End of Borehole							
15.0									
20.0									
25.0									
30.0									

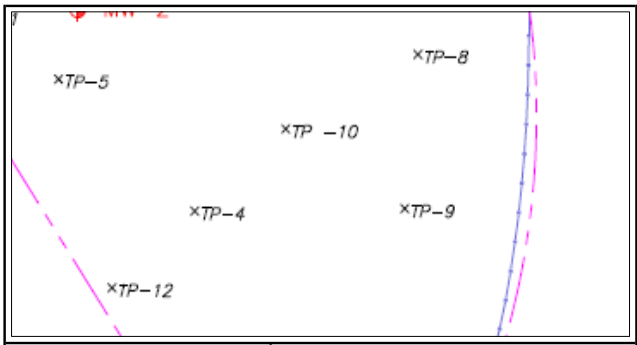
Drilled By: Russo Development, Inc.
Drill Rig Type: AMS Power Probe 9500 VTR
Drill Method: Direct push
Comments:
Drill Date(s): 5-24-13

Hole Size: 2"
Stick-up: NA
Datum: NA

Sheet: 1 of 1

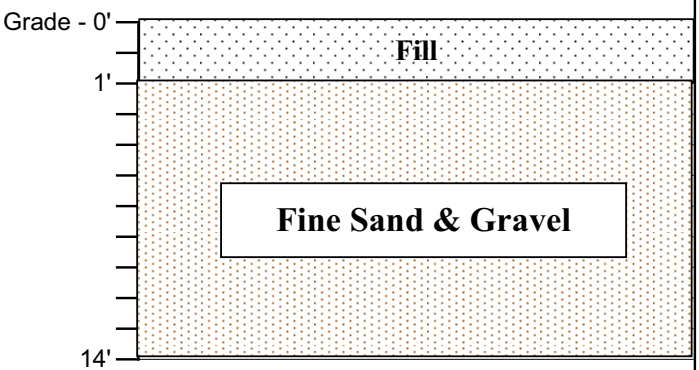
TEST PIT EXCAVATION LOG

Project:	Phase II Investigation	TEST PIT I.D.:	**TP-9**
Project No.:	0189-001-100	Excavation Date:	06/24/09
Client:	Scott Rotary Seals	Excavation Method:	CASE 9010B Excavator
Location:	350 Franklin Street, Olean, NY	Logged / Checked By:	TAB/BCH



TIME				
Start:	14:11	Length:	11.5 ft.	(approx.)
End:	14:35	Width:	3.5 ft.	(approx.)
		Depth:	14.0 ft.	(approx.)

Test Pit Cross Section:



Depth (fbgs)	(ASTM D2488: Visual Manual Procedure) Description	PID Scan (ppm)	Photos Y / N	Samples Collected (fbgs)
0.0-1.0	Black/dark brown, moist, fill, non-plastic fines with some fine sand, with piping and red brick debris, medium dense, loose when disturbed.	0.0	y	n
1.0-12.0	Dark brown, moist, Fine Sand and Gravel, with some non-plastic fines, with few cobbles, medium dense, loosewhen disturbed.	0.0	y	n
12.0-14.0	As above, dark grey, strong petroleum-like odor.	1254.0	y	y

COMMENTS:

Project No: 0189-001-104

Borehole Number: TP-15/SB-15

Project: Scott Rotary Seals Site

A.K.A.:

Client: DST Properties NY, LLC & Scott Rotary Seals

Logged By: BMG

Site Location: 301 Franklin Street, Olean, NY

Checked By: BCH

TurnKey Environmental Restoration, LLC
2558 Hamburg Turnpike, Suite 300
Buffalo, NY 14218
(716) 856-0635

SUBSURFACE PROFILE

Depth (fbgs)	Elev. /Depth	Description (ASTM D2488: Visual-Manual Procedure)
		Data from 0-17 fbgs and samples TP-15 (3-4') and TP-15 (15-17') shown herein were collected from test pit TP-15.
0.0	0.0	Ground Surface
		Fill Dark brown, moist, bricks with some fine sand and rounded gravel and trace glass and metal debris, loose when disturbed
2.0	-2.0 / 2.0	***Well Graded Sand with Gravel*** Gray, moist to wet (18'), fine to coarse sand with some rounded fine to coarse gravel, dense, loose when disturbed, strong odor
24.0	-24.0 / 24.0	End of Borehole

SAMPLE

Sample No.	SPT N-Value	Recovery (ft)	Symbol
S-1	NA	2.1'	
S-2	NA	1.9'	

PID VOCs (ppm): 0.0, 791.0, 1183.0, 1536.0, 1599.0, 1609.0, 1861.0, 1875.0, 2048.0, 904.0, 285.0, 185.0

Lab Sample: TP-15 (3-4'); TP-15 (15-17'); SB-15 (17-20')

Well Completion Details or Remarks: Test pit TP-15; First water

Drilled By: Trec Environmental, Inc.
Drill Rig Type: Geoprobe 6620DT
Drill Method: Direct push
Comments: Concrete floor at 2' to SE, two 10" pipes at 2' parallel to road, orientated TP between pipes
Drill Date(s): 8-19-10

Hole Size: 3"
Stick-up: NA
Datum: NA
Sheet: 1 of 1

Project No: 0189-001-104

Borehole Number: TP-22/SB-22

Project: Scott Rotary Seals Site

A.K.A.:

Client: DST Properties NY, LLC & Scott Rotary Seals

Logged By: BMG

Site Location: 301 Franklin Street, Olean, NY

Checked By: BCH

TurnKey Environmental Restoration, LLC
2558 Hamburg Turnpike, Suite 300
Buffalo, NY 14218
(716) 856-0635

SUBSURFACE PROFILE

Depth (fbgs)	Elev. /Depth	Description (ASTM D2488: Visual-Manual Procedure)
-3.0		*Data from 0-18 fbgs and sample TP-22 (16-18') shown herein were collected from test pit TP-22.*
	0.0 / 0.0	Ground Surface
2.0		***Fill*** Dark brown, moist, fine sand and gravel with few brick and trace glass and metal debris, loose when disturbed
	-3.0 / 3.0	***Well Graded Sand with Gravel*** Gray, moist, fine to coarse sand with some rounded fine to coarse gravel, loose when disturbed, slight to strong (8') odor
7.0		
12.0		
17.0		
	-19.7 / 19.7	Refusal at 19.7'
22.0		End of Borehole

SAMPLE

Sample No.	SPT N-Value	Recovery (ft)	Symbol	Lab Sample
S-1	NA	2.1		TP-22 (16-18')

PID VOCs (ppm, 0 – 1000 – 2000)

11.3
84.2
14.7
345.0
915.0
833.0
945.0
1062.0
1082.0
1103.0

Well Completion Details or Remarks: *Test pit*

Drilled By: TREC Environmental, Inc.
Drill Rig Type: Geoprobe 6620DT
Drill Method: Direct Push
Comments: 30' NE of TP found pipes orientated parrallel (1 ftbg) and perpendicular (1.5 ftbg) to road
Drill Date(s): 8-19-10

Hole Size: 3"
Stick-up: NA
Datum: NA
Sheet: 1 of 1

Project No: 0189-001-104

Borehole Number: TP-23/SB-23

Project: Scott Rotary Seals Site

A.K.A.:

Client: DST Properties NY, LLC & Scott Rotary Seals

Logged By: BMG

Site Location: 301 Franklin Street, Olean, NY

Checked By: BCH

TurnKey Environmental Restoration, LLC
2558 Hamburg Turnpike, Suite 300
Buffalo, NY 14218
(716) 856-0635

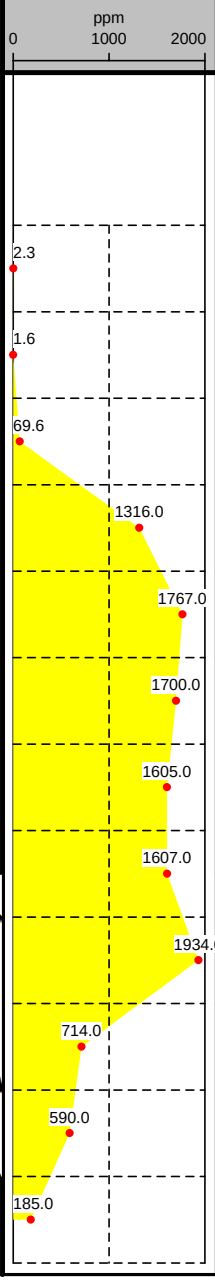
SUBSURFACE PROFILE

Depth (fbgs)	Elev. /Depth	Description (ASTM D2488: Visual-Manual Procedure)
		Data from 0-15 fbgs and sample TP-23 (8-10') shown herein were collected from test pit TP-23.
	0.0	Ground Surface
	0.0	***Well Graded Sand with Gravel*** Brown, moist, fine to coarse sand with some rounded fine to coarse gravel, dense, loose when disturbed,
	-4.0	
	4.0	***Same as above*** Gray, strong odor
	-10.0	
	10.0	***Same as above*** Wet (18')
	-22.1	
	22.1	Refusal at 22.1'
		End of Borehole

SAMPLE

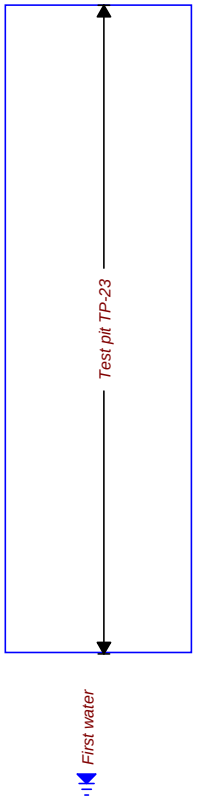
Sample No.	SPT N-Value	Recovery (ft)	Symbol
S-1	NA	0.7'	
S-2	NA	1.8'	
S-3	NA	2.8'	

PID VOCs (ppm)



Lab Sample: TP-23 (8-10'); SB-23 (15-18')

Well Completion Details or Remarks



Drilled By: TREC Environmental, Inc.
Drill Rig Type: Geoprobe 6620DT
Drill Method: Direct Push
Comments:
Drill Date(s): 8-19-10

Hole Size: 3"
Stick-up: NA
Datum: NA

Sheet: 1 of 1

ATTACHMENT 3

ANALYTICAL LABORATORY REPORT

ANALYTICAL REPORT

Lab Number:	L1309519
Client:	Benchmark & Turnkey Companies 2558 Hamburg Turnpike Suite 300 Buffalo, NY 14218
ATTN:	Mike Lesakowski
Phone:	(716) 856-0599
Project Name:	SCOTT ROTARY
Project Number:	0189-013-001
Report Date:	06/03/13

Certifications & Approvals: NY (11627), CT (PH-0141), NH (2206), NJ NELAP (MA015), RI (LAO00299), PA (68-02089), LA NELAP (03090), FL (E87814), TX (T104704419), WA (C954), DOD (L2217.01), USDA (Permit #P330-11-00109), US Army Corps of Engineers.

Eight Walkup Drive, Westborough, MA 01581-1019
508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com

Project Name: SCOTT ROTARY
Project Number: 0189-013-001

Lab Number: L1309519
Report Date: 06/03/13

Alpha Sample ID	Client ID	Sample Location	Collection Date/Time
L1309519-01	SB-13-1 (6-8')	Not Specified	05/24/13 09:50
L1309519-02	SB-13-3 (12-16')	Not Specified	05/24/13 10:30
L1309519-03	SB-13-2 (11.5-14')	Not Specified	05/24/13 13:50

Project Name: SCOTT ROTARY
Project Number: 0189-013-001

Lab Number: L1309519
Report Date: 06/03/13

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet all of the requirements of NELAC, for all NELAC accredited parameters. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. Performance criteria for CAM and RCP methods allow for some LCS compound failures to occur and still be within method compliance. In these instances, the specific failures are not narrated but are noted in the associated QC table. This information is also incorporated in the Data Usability format for our Data Merger tool where it can be reviewed along with any associated usability implications. Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances the specific failure is not narrated but noted in the associated QC table. The information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications.

Please see the associated ADEx data file for a comparison of laboratory reporting limits that were achieved with the regulatory Numerical Standards requested on the Chain of Custody.

HOLD POLICY
For samples submitted on hold, Alpha's policy is to hold samples free of charge for 30 days from the date the project is completed. After 30 days, we will dispose of all samples submitted including those put on hold unless you have contacted your Client Service Representative and made arrangements for Alpha to continue to hold the samples.

Please contact Client Services at 800-624-9220 with any questions.

Project Name:	SCOTT ROTARY	**Lab Number:**	L1309519
Project Number:	0189-013-001	**Report Date:**	06/03/13

Case Narrative (continued)

Report Submission

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature: Cynthia McQueen

Title: Technical Director/Representative Date: 06/03/13

ORGANICS

VOLATILES

Project Name: SCOTT ROTARY
Project Number: 0189-013-001
Lab Number: L1309519
Report Date: 06/03/13

SAMPLE RESULTS

Lab ID: L1309519-01 D
Client ID: SB-13-1 (6-8')
Sample Location: Not Specified
Matrix: Soil
Analytical Method: 1,8260C
Analytical Date: 05/30/13 14:44
Analyst: BN
Percent Solids: 87%

Date Collected: 05/24/13 09:50
Date Received: 05/24/13
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	8.0	J	ug/kg	29	5.7	2.5
1,1-Dichloroethane	ND		ug/kg	4.3	0.51	2.5
Chloroform	ND		ug/kg	4.3	1.1	2.5
Carbon tetrachloride	ND		ug/kg	2.9	0.60	2.5
1,2-Dichloropropane	ND		ug/kg	10	0.65	2.5
Dibromochloromethane	ND		ug/kg	2.9	0.88	2.5
1,1,2-Trichloroethane	ND		ug/kg	4.3	0.87	2.5
Tetrachloroethene	ND		ug/kg	2.9	0.40	2.5
Chlorobenzene	ND		ug/kg	2.9	1.0	2.5
Trichlorofluoromethane	ND		ug/kg	14	0.35	2.5
1,2-Dichloroethane	ND		ug/kg	2.9	0.42	2.5
1,1,1-Trichloroethane	ND		ug/kg	2.9	0.32	2.5
Bromodichloromethane	ND		ug/kg	2.9	0.66	2.5
trans-1,3-Dichloropropene	ND		ug/kg	2.9	0.34	2.5
cis-1,3-Dichloropropene	ND		ug/kg	2.9	0.36	2.5
Bromoform	ND		ug/kg	11	1.2	2.5
1,1,2,2-Tetrachloroethane	ND		ug/kg	2.9	0.49	2.5
Benzene	ND		ug/kg	2.9	0.34	2.5
Toluene	ND		ug/kg	4.3	0.32	2.5
Ethylbenzene	ND		ug/kg	2.9	0.42	2.5
Chloromethane	ND		ug/kg	14	2.2	2.5
Bromomethane	ND		ug/kg	5.7	0.97	2.5
Vinyl chloride	ND		ug/kg	5.7	0.40	2.5
Chloroethane	ND		ug/kg	5.7	0.90	2.5
1,1-Dichloroethene	ND		ug/kg	2.9	0.59	2.5
trans-1,2-Dichloroethene	ND		ug/kg	4.3	0.60	2.5
Trichloroethene	ND		ug/kg	2.9	0.44	2.5
1,2-Dichlorobenzene	ND		ug/kg	14	0.52	2.5
1,3-Dichlorobenzene	ND		ug/kg	14	0.52	2.5
1,4-Dichlorobenzene	ND		ug/kg	14	0.69	2.5
Methyl tert butyl ether	ND		ug/kg	5.7	0.30	2.5

Project Name: SCOTT ROTARY **Lab Number:** L1309519

Project Number: 0189-013-001 **Report Date:** 06/03/13

SAMPLE RESULTS

Lab ID: L1309519-01 D Date Collected: 05/24/13 09:50

Client ID: SB-13-1 (6-8') Date Received: 05/24/13

Sample Location: Not Specified Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
p/m-Xylene	ND		ug/kg	5.7	0.92	2.5
o-Xylene	ND		ug/kg	5.7	0.78	2.5
cis-1,2-Dichloroethene	ND		ug/kg	2.9	0.43	2.5
Styrene	ND		ug/kg	5.7	0.89	2.5
Dichlorodifluoromethane	ND		ug/kg	29	0.62	2.5
Acetone	ND		ug/kg	29	8.9	2.5
Carbon disulfide	ND		ug/kg	29	5.7	2.5
2-Butanone	ND		ug/kg	29	1.0	2.5
4-Methyl-2-pentanone	ND		ug/kg	29	0.70	2.5
2-Hexanone	ND		ug/kg	29	0.54	2.5
Bromochloromethane	ND		ug/kg	14	0.56	2.5
1,2-Dibromoethane	ND		ug/kg	11	0.51	2.5
1,2-Dibromo-3-chloropropane	ND		ug/kg	14	2.3	2.5
Isopropylbenzene	4.4		ug/kg	2.9	0.48	2.5
1,2,3-Trichlorobenzene	ND		ug/kg	14	0.48	2.5
1,2,4-Trichlorobenzene	ND		ug/kg	14	2.3	2.5
Methyl Acetate	ND		ug/kg	57	2.2	2.5
Cyclohexane	14	J	ug/kg	57	3.1	2.5
1,4-Dioxane	ND		ug/kg	290	50.	2.5
Freon-113	ND		ug/kg	57	0.78	2.5
Methyl cyclohexane	240		ug/kg	11	3.6	2.5
Tentatively Identified Compounds						
Unknown Cyclohexane	590	J	ug/kg			2.5
Unknown Cyclohexane	320	J	ug/kg			2.5
Decane, 4-methyl-	110	NJ	ug/kg			2.5
Cyclohexane, butyl-	120	NJ	ug/kg			2.5
Decane, 3-methyl-	130	NJ	ug/kg			2.5
Decane, 2,9-dimethyl-	160	NJ	ug/kg			2.5
Unknown	110	J	ug/kg			2.5
Unknown Alkane	190	J	ug/kg			2.5
Unknown	160	J	ug/kg			2.5
Unknown	210	J	ug/kg			2.5

Project Name: SCOTT ROTARY **Lab Number:** L1309519

Project Number: 0189-013-001 **Report Date:** 06/03/13

SAMPLE RESULTS

Lab ID: L1309519-01 D Date Collected: 05/24/13 09:50

Client ID: SB-13-1 (6-8') Date Received: 05/24/13

Sample Location: Not Specified Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor

Volatile Organics by GC/MS - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	103		70-130
Toluene-d8	119		70-130
4-Bromofluorobenzene	103		70-130
Dibromofluoromethane	102		70-130

Project Name: SCOTT ROTARY
Project Number: 0189-013-001
Lab Number: L1309519
Report Date: 06/03/13

SAMPLE RESULTS

Lab ID: L1309519-03
Client ID: SB-13-2 (11.5-14')
Sample Location: Not Specified
Matrix: Soil
Analytical Method: 1,8260C
Analytical Date: 05/30/13 15:11
Analyst: BN
Percent Solids: 94%

Date Collected: 05/24/13 13:50
Date Received: 05/24/13
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	2.4	J	ug/kg	11	2.1	1
1,1-Dichloroethane	ND		ug/kg	1.6	0.19	1
Chloroform	ND		ug/kg	1.6	0.39	1
Carbon tetrachloride	ND		ug/kg	1.1	0.22	1
1,2-Dichloropropane	ND		ug/kg	3.7	0.24	1
Dibromochloromethane	ND		ug/kg	1.1	0.33	1
1,1,2-Trichloroethane	ND		ug/kg	1.6	0.32	1
Tetrachloroethene	ND		ug/kg	1.1	0.15	1
Chlorobenzene	ND		ug/kg	1.1	0.37	1
Trichlorofluoromethane	ND		ug/kg	5.3	0.13	1
1,2-Dichloroethane	ND		ug/kg	1.1	0.16	1
1,1,1-Trichloroethane	ND		ug/kg	1.1	0.12	1
Bromodichloromethane	ND		ug/kg	1.1	0.24	1
trans-1,3-Dichloropropene	ND		ug/kg	1.1	0.13	1
cis-1,3-Dichloropropene	ND		ug/kg	1.1	0.14	1
Bromoform	ND		ug/kg	4.2	0.44	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	1.1	0.18	1
Benzene	ND		ug/kg	1.1	0.12	1
Toluene	ND		ug/kg	1.6	0.12	1
Ethylbenzene	ND		ug/kg	1.1	0.16	1
Chloromethane	ND		ug/kg	5.3	0.83	1
Bromomethane	ND		ug/kg	2.1	0.36	1
Vinyl chloride	ND		ug/kg	2.1	0.15	1
Chloroethane	ND		ug/kg	2.1	0.34	1
1,1-Dichloroethene	ND		ug/kg	1.1	0.22	1
trans-1,2-Dichloroethene	ND		ug/kg	1.6	0.22	1
Trichloroethene	ND		ug/kg	1.1	0.16	1
1,2-Dichlorobenzene	ND		ug/kg	5.3	0.19	1
1,3-Dichlorobenzene	ND		ug/kg	5.3	0.19	1
1,4-Dichlorobenzene	ND		ug/kg	5.3	0.26	1
Methyl tert butyl ether	ND		ug/kg	2.1	0.11	1

Project Name: SCOTT ROTARY **Lab Number:** L1309519

Project Number: 0189-013-001 **Report Date:** 06/03/13

SAMPLE RESULTS

Lab ID: L1309519-03 Date Collected: 05/24/13 13:50

Client ID: SB-13-2 (11.5-14') Date Received: 05/24/13

Sample Location: Not Specified Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
p/m-Xylene	ND		ug/kg	2.1	0.34	1
o-Xylene	ND		ug/kg	2.1	0.29	1
cis-1,2-Dichloroethene	ND		ug/kg	1.1	0.16	1
Styrene	ND		ug/kg	2.1	0.33	1
Dichlorodifluoromethane	ND		ug/kg	11	0.23	1
Acetone	ND		ug/kg	11	3.3	1
Carbon disulfide	ND		ug/kg	11	2.1	1
2-Butanone	ND		ug/kg	11	0.38	1
4-Methyl-2-pentanone	ND		ug/kg	11	0.26	1
2-Hexanone	ND		ug/kg	11	0.20	1
Bromochloromethane	ND		ug/kg	5.3	0.21	1
1,2-Dibromoethane	ND		ug/kg	4.2	0.19	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	5.3	0.84	1
Isopropylbenzene	ND		ug/kg	1.1	0.18	1
1,2,3-Trichlorobenzene	ND		ug/kg	5.3	0.18	1
1,2,4-Trichlorobenzene	ND		ug/kg	5.3	0.84	1
Methyl Acetate	ND		ug/kg	21	0.81	1
Cyclohexane	ND		ug/kg	21	1.1	1
1,4-Dioxane	ND		ug/kg	110	18.	1
Freon-113	ND		ug/kg	21	0.29	1
Methyl cyclohexane	ND		ug/kg	4.2	1.3	1
Tentatively Identified Compounds						
No Tentatively Identified Compounds	ND		ug/kg			1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	104		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	102		70-130
Dibromofluoromethane	103		70-130

Project Name: SCOTT ROTARY
Project Number: 0189-013-001

Lab Number: L1309519
Report Date: 06/03/13

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 05/30/13 08:43
Analyst: BN

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01,03 Batch: WG611643-3					
Methylene chloride	2.4	J	ug/kg	10	2.0
1,1-Dichloroethane	ND		ug/kg	1.5	0.18
Chloroform	ND		ug/kg	1.5	0.37
Carbon tetrachloride	ND		ug/kg	1.0	0.21
1,2-Dichloropropane	ND		ug/kg	3.5	0.23
Dibromochloromethane	ND		ug/kg	1.0	0.31
1,1,2-Trichloroethane	ND		ug/kg	1.5	0.30
Tetrachloroethene	ND		ug/kg	1.0	0.14
Chlorobenzene	ND		ug/kg	1.0	0.35
Trichlorofluoromethane	ND		ug/kg	5.0	0.12
1,2-Dichloroethane	ND		ug/kg	1.0	0.15
1,1,1-Trichloroethane	ND		ug/kg	1.0	0.11
Bromodichloromethane	ND		ug/kg	1.0	0.23
trans-1,3-Dichloropropene	ND		ug/kg	1.0	0.12
cis-1,3-Dichloropropene	ND		ug/kg	1.0	0.13
Bromoform	ND		ug/kg	4.0	0.41
1,1,2,2-Tetrachloroethane	ND		ug/kg	1.0	0.17
Benzene	ND		ug/kg	1.0	0.12
Toluene	ND		ug/kg	1.5	0.11
Ethylbenzene	ND		ug/kg	1.0	0.15
Chloromethane	ND		ug/kg	5.0	0.78
Bromomethane	ND		ug/kg	2.0	0.34
Vinyl chloride	ND		ug/kg	2.0	0.14
Chloroethane	ND		ug/kg	2.0	0.32
1,1-Dichloroethene	ND		ug/kg	1.0	0.20
trans-1,2-Dichloroethene	ND		ug/kg	1.5	0.21
Trichloroethene	ND		ug/kg	1.0	0.15
1,2-Dichlorobenzene	ND		ug/kg	5.0	0.18
1,3-Dichlorobenzene	ND		ug/kg	5.0	0.18
1,4-Dichlorobenzene	ND		ug/kg	5.0	0.24
Methyl tert butyl ether	ND		ug/kg	2.0	0.10

Project Name: SCOTT ROTARY
Project Number: 0189-013-001

Lab Number: L1309519
Report Date: 06/03/13

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 05/30/13 08:43
Analyst: BN

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01,03 Batch: WG611643-3					
p/m-Xylene	ND		ug/kg	2.0	0.32
o-Xylene	ND		ug/kg	2.0	0.27
cis-1,2-Dichloroethene	ND		ug/kg	1.0	0.15
Styrene	ND		ug/kg	2.0	0.31
Dichlorodifluoromethane	ND		ug/kg	10	0.22
Acetone	ND		ug/kg	10	3.1
Carbon disulfide	ND		ug/kg	10	2.0
2-Butanone	ND		ug/kg	10	0.36
4-Methyl-2-pentanone	ND		ug/kg	10	0.24
2-Hexanone	ND		ug/kg	10	0.19
Bromochloromethane	ND		ug/kg	5.0	0.20
1,2-Dibromoethane	ND		ug/kg	4.0	0.18
1,2-Dibromo-3-chloropropane	ND		ug/kg	5.0	0.79
Isopropylbenzene	ND		ug/kg	1.0	0.17
1,2,3-Trichlorobenzene	ND		ug/kg	5.0	0.17
1,2,4-Trichlorobenzene	ND		ug/kg	5.0	0.79
Methyl Acetate	ND		ug/kg	20	0.76
Cyclohexane	ND		ug/kg	20	1.1
1,4-Dioxane	ND		ug/kg	100	17.
Freon-113	ND		ug/kg	20	0.27
Methyl cyclohexane	ND		ug/kg	4.0	1.3
Tentatively Identified Compounds					
No Tentatively Identified Compounds	ND		ug/kg		

Project Name: SCOTT ROTARY
Project Number: 0189-013-001

Lab Number: L1309519
Report Date: 06/03/13

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 05/30/13 08:43
Analyst: BN

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01,03 Batch: WG611643-3					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	109		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	104		70-130
Dibromofluoromethane	106		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: SCOTT ROTARY

Project Number: 0189-013-001

Lab Number: L1309519

Report Date: 06/03/13

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01,03 Batch: WG611643-1 WG611643-2								
Methylene chloride	114		115		70-130	1		30
1,1-Dichloroethane	98		94		70-130	4		30
Chloroform	100		95		70-130	5		30
Carbon tetrachloride	95		87		70-130	9		30
1,2-Dichloropropane	99		96		70-130	3		30
Dibromochloromethane	95		94		70-130	1		30
2-Chloroethylvinyl ether	105		105			0		30
1,1,2-Trichloroethane	101		100		70-130	1		30
Tetrachloroethene	90		80		70-130	12		30
Chlorobenzene	95		92		70-130	3		30
Trichlorofluoromethane	107		95		70-139	12		30
1,2-Dichloroethane	103		104		70-130	1		30
1,1,1-Trichloroethane	94		87		70-130	8		30
Bromodichloromethane	100		98		70-130	2		30
trans-1,3-Dichloropropene	97		96		70-130	1		30
cis-1,3-Dichloropropene	99		98		70-130	1		30
1,1-Dichloropropene	96		87		70-130	10		30
Bromoform	92		89		70-130	3		30
1,1,2,2-Tetrachloroethane	99		96		70-130	3		30
Benzene	97		93		70-130	4		30
Toluene	93		88		70-130	6		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: SCOTT ROTARY

Project Number: 0189-013-001

Lab Number: L1309519

Report Date: 06/03/13

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01,03 Batch: WG611643-1 WG611643-2								
Ethylbenzene	94		88		70-130	7		30
Chloromethane	92		87		52-130	6		30
Bromomethane	103		100		57-147	3		30
Vinyl chloride	102		91		67-130	11		30
Chloroethane	101		93		50-151	8		30
1,1-Dichloroethene	96		88		65-135	9		30
trans-1,2-Dichloroethene	96		90		70-130	6		30
Trichloroethene	96		90		70-130	6		30
1,2-Dichlorobenzene	94		93		70-130	1		30
1,3-Dichlorobenzene	94		91		70-130	3		30
1,4-Dichlorobenzene	94		90		70-130	4		30
Methyl tert butyl ether	101		101		66-130	0		30
p/m-Xylene	94		89		70-130	5		30
o-Xylene	94		90		70-130	4		30
cis-1,2-Dichloroethene	97		94		70-130	3		30
Dibromomethane	104		103		70-130	1		30
Styrene	95		92		70-130	3		30
Dichlorodifluoromethane	99		89		30-146	11		30
Acetone	**155**	Q	**145**	Q	54-140	7		30
Carbon disulfide	98		89		59-130	10		30
2-Butanone	128		127		70-130	1		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: SCOTT ROTARY

Project Number: 0189-013-001

Lab Number: L1309519

Report Date: 06/03/13

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01,03 Batch: WG611643-1 WG611643-2								
Vinyl acetate	105		104		70-130	1		30
4-Methyl-2-pentanone	97		94		70-130	3		30
1,2,3-Trichloropropane	100		97		68-130	3		30
2-Hexanone	101		94		70-130	7		30
Bromochloromethane	102		102		70-130	0		30
2,2-Dichloropropane	92		85		70-130	8		30
1,2-Dibromoethane	99		98		70-130	1		30
1,3-Dichloropropane	102		100		69-130	2		30
1,1,1,2-Tetrachloroethane	93		90		70-130	3		30
Bromobenzene	94		91		70-130	3		30
n-Butylbenzene	93		85		70-130	9		30
sec-Butylbenzene	92		85		70-130	8		30
tert-Butylbenzene	90		84		70-130	7		30
o-Chlorotoluene	96		90		70-130	6		30
p-Chlorotoluene	95		90		70-130	5		30
1,2-Dibromo-3-chloropropane	82		80		68-130	2		30
Hexachlorobutadiene	83		75		67-130	10		30
Isopropylbenzene	90		85		70-130	6		30
p-Isopropyltoluene	90		84		70-130	7		30
Naphthalene	92		89		70-130	3		30
Acrylonitrile	102		101		70-130	1		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: SCOTT ROTARY

Project Number: 0189-013-001

Lab Number: L1309519

Report Date: 06/03/13

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01,03 Batch: WG611643-1 WG611643-2								
Isopropyl Ether	101		99		66-130	2		30
tert-Butyl Alcohol	99		92		70-130	7		30
n-Propylbenzene	93		87		70-130	7		30
1,2,3-Trichlorobenzene	88		87		70-130	1		30
1,2,4-Trichlorobenzene	88		84		70-130	5		30
1,3,5-Trimethylbenzene	93		87		70-130	7		30
1,2,4-Trimethylbenzene	94		88		70-130	7		30
Methyl Acetate	108		102		51-146	6		30
Ethyl Acetate	95		94		70-130	1		30
Acrolein	72		73		70-130	1		30
Cyclohexane	96		85		59-142	12		30
1,4-Dioxane	111		105		65-136	6		30
1,1,2-Trichloro-1,2,2-Trifluoroethane	104		93		50-139	11		30
1,4-Diethylbenzene	89		84		70-130	6		30
4-Ethyltoluene	92		87		70-130	6		30
1,2,4,5-Tetramethylbenzene	90		87		70-130	3		30
Tetrahydrofuran	98		97		66-130	1		30
Ethyl ether	111		110		67-130	1		30
trans-1,4-Dichloro-2-butene	97		92		70-130	5		30
Methyl cyclohexane	98		88		70-130	11		30
Ethyl-Tert-Butyl-Ether	101		101		70-130	0		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: SCOTT ROTARY

Project Number: 0189-013-001

Lab Number: L1309519

Report Date: 06/03/13

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01,03 Batch: WG611643-1 WG611643-2								
Tertiary-Amyl Methyl Ether	99		99		70-130	0		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	102		103		70-130
Toluene-d8	99		100		70-130
4-Bromofluorobenzene	104		101		70-130
Dibromofluoromethane	104		105		70-130

INORGANICS
&
MISCELLANEOUS

Project Name: SCOTT ROTARY
Project Number: 0189-013-001
Lab Number: L1309519
Report Date: 06/03/13

SAMPLE RESULTS

Lab ID: L1309519-01
Client ID: SB-13-1 (6-8')
Sample Location: Not Specified
Matrix: Soil
Date Collected: 05/24/13 09:50
Date Received: 05/24/13
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	87.3		%	0.100	NA	1	-	05/29/13 00:54	30,2540G	RD

Project Name: SCOTT ROTARY
Project Number: 0189-013-001

Lab Number: L1309519
Report Date: 06/03/13

SAMPLE RESULTS

Lab ID: L1309519-03
Client ID: SB-13-2 (11.5-14')
Sample Location: Not Specified
Matrix: Soil

Date Collected: 05/24/13 13:50
Date Received: 05/24/13
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	94.1		%	0.100	NA	1	-	05/29/13 00:54	30,2540G	RD

Lab Duplicate Analysis
Batch Quality Control

Project Name: SCOTT ROTARY
Project Number: 0189-013-001

Lab Number: L1309519
Report Date: 06/03/13

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01,03 QC Batch ID: WG611070-1 QC Sample: L1309297-01 Client ID: DUP Sample						
Solids, Total	94.8	94.9	%	0		20

Project Name: SCOTT ROTARY
Project Number: 0189-013-001

Lab Number: L1309519
Report Date: 06/03/13

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Reagent H2O Preserved Vials Frozen on: NA

Cooler Information **Custody Seal**

Cooler	
A	Absent

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1309519-01A	Vial Large unpreserved	A	N/A	3.2	Y	Absent	TS(7),NYTCL-8260(14)
L1309519-02A	Vial Large unpreserved	A	N/A	3.2	Y	Absent	HOLD()
L1309519-03A	Vial Large unpreserved	A	N/A	3.2	Y	Absent	TS(7),NYTCL-8260(14)

Container Comments

L1309519-01A

*Values in parentheses indicate holding time in days

Project Name:	SCOTT ROTARY	**Lab Number:**	L1309519
Project Number:	0189-013-001	**Report Date:**	06/03/13

GLOSSARY

Acronyms

EDL - Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).

EPA - Environmental Protection Agency.

LCS - Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

LCSD - Laboratory Control Sample Duplicate: Refer to LCS.

LFB - Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

MDL - Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

MS - Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.

MSD - Matrix Spike Sample Duplicate: Refer to MS.

NA - Not Applicable.

NC - Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.

NI - Not Ignitable.

RL - Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

RPD - Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.

SRM - Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.

Footnotes

1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Data Qualifiers

A - Spectra identified as "Aldol Condensation Product".

B - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than five times (5x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit.

C - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.

D - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.

E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.

G - The concentration may be biased high due to matrix interferences (i.e, co-elution) with non-target compound(s). The result should be considered estimated.

H - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.

I - The RPD between the results for the two columns exceeds the method-specified criteria; however, the lower value has been reported

Report Format: DU Report with "J" Qualifiers

Project Name:	SCOTT ROTARY	**Lab Number:**	L1309519
Project Number:	0189-013-001	**Report Date:**	06/03/13

Data Qualifiers

due to obvious interference.

M - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.

NJ - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.

P - The RPD between the results for the two columns exceeds the method-specified criteria.

Q - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)

R - Analytical results are from sample re-analysis.

RE - Analytical results are from sample re-extraction.

J - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs).

ND - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.

Report Format: DU Report with "J" Qualifiers

Project Name:	SCOTT ROTARY	**Lab Number:**	L1309519
Project Number:	0189-013-001	**Report Date:**	06/03/13

REFERENCES

1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IV, 2007.

30 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WPCF. 18th Edition. 1992.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.

Certificate/Approval Program Summary

Last revised December 19, 2012 - Westboro Facility

The following list includes only those analytes/methods for which certification/approval is currently held.
For a complete listing of analytes for the referenced methods, please contact your Alpha Customer Service Representative.

Connecticut Department of Public Health Certificate/Lab ID: PH-0574. ***NELAP Accredited Solid Waste/Soil.***

Drinking Water (Inorganic Parameters: Color, pH, Turbidity, Conductivity, Alkalinity, Chloride, Free Residual Chlorine, Fluoride, Calcium Hardness, Sulfate, Nitrate, Nitrite, Aluminum, Antimony, Arsenic, Barium, Beryllium, Cadmium, Calcium, Chromium, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Nickel, Selenium, Silver, Sodium, Thallium, Zinc, Total Dissolved Solids, Total Organic Carbon, Total Cyanide, Perchlorate. Organic Parameters: Volatile Organics 524.2, Total Trihalomethanes 524.2, 1,2-Dibromo-3-chloropropane (DBCP) 504.1, Ethylene Dibromide (EDB) 504.1, 1,4-Dioxane (Mod 8270). Microbiology Parameters: Total Coliform-MF mEndo (SM9222B), Total Coliform – Colilert (SM9223, Enumeration and P/A), E. Coli. – Colilert (SM9223, Enumeration and P/A), HPC – Pour Plate (SM9215B), Fecal Coliform – MF m-FC (SM9222D), Fecal Coliform-EC Medium (SM 9221E).

Wastewater/Non-Potable Water (Inorganic Parameters: Color, pH, Conductivity, Acidity, Alkalinity, Chloride, Total Residual Chlorine, Fluoride, Total Hardness, Silica, Sulfate, Sulfide, Ammonia, Kjeldahl Nitrogen, Nitrate, Nitrite, O-Phosphate, Total Phosphorus, Aluminum, Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Calcium, Chromium, Hexavalent Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Strontium, Thallium, Tin, Titanium, Vanadium, Zinc, Total Residue (Solids), Total Dissolved Solids, Total Suspended Solids (non-filterable), BOD, CBOD, COD, TOC, Total Cyanide, Phenolics, Foaming Agents (MBAS), Bromide, Oil and Grease. Organic Parameters: PCBs, Organochlorine Pesticides, Technical Chlordane, Toxaphene, Acid Extractables (Phenols), Benzidines, Phthalate Esters, Nitrosamines, Nitroaromatics & Isophorone, Polynuclear Aromatic Hydrocarbons, Haloethers, Chlorinated Hydrocarbons, Volatile Organics, TPH (HEM/SGT), CT-Extractable Petroleum Hydrocarbons (ETPH), MA-EPH, MA-VPH. Microbiology Parameters: Total Coliform – MF mEndo (SM9222B), Total Coliform – MTF (SM9221B), E. Coli – Colilert (SM9223 Enumeration), HPC – Pour Plate (SM9215B), Fecal Coliform – MF m-FC (SM9222D), Fecal Coliform – A-1 Broth (SM9221E), Enterococcus - Enterolert.

Solid Waste/Soil (Inorganic Parameters: pH, Sulfide, Aluminum, Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Calcium, Chromium, Hexavalent Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Thallium, Tin, Vanadium, Zinc, Total Cyanide, Ignitability, Phenolics, Corrosivity, TCLP Leach (1311), SPLP Leach (1312 metals only), Reactivity. Organic Parameters: PCBs, PCBs in Oil, Organochlorine Pesticides, Technical Chlordane, Toxaphene, CT-Extractable Petroleum Hydrocarbons (ETPH), MA-EPH, MA-VPH, Dicamba, 2,4-D, 2,4,5-T, 2,4,5-TP(Silvex), Dalapon, Volatile Organics (SW 8260), Acid Extractables (Phenols) (SW 8270), Benzidines (SW 8270), Phthalates (SW 8270), Nitrosamines (SW 8270), Nitroaromatics & Cyclic Ketones (SW 8270), PAHs (SW 8270), Haloethers (SW 8270), Chlorinated Hydrocarbons (SW 8270).)

Maine Department of Human Services Certificate/Lab ID: 2009024.
Drinking Water (Inorganic Parameters: SM9215B, 9222D, 9223B, EPA 180.1, 353.2, SM2130B, 2320B, 2540C, 4500Cl-D, 4500CN-C, 4500CN-E, 4500F-C, 4500H+B, 4500NO3-F, EPA 200.7, EPA 200.8, 245.1, EPA 300.0. Organic Parameters: 504.1, 524.2.)

Wastewater/Non-Potable Water (Inorganic Parameters: EPA 120.1, 1664A, 350.1, 351.1, 353.2, 410.4, 420.1, SM2320B, 2510B, 2540C, 2540D, 426C, 4500Cl-D, 4500Cl-E, 4500CN-C, 4500CN-E, 4500F-B, 4500F-C, 4500H+B, 4500Norg-B, 4500Norg-C, 4500NH3-B, 4500NH3-G, 4500NO3-F, 4500P-B, 4500P-E, 5210B, 5220D, 5310C, 9010B, 9040B, 9030B, 7470A, 7196A, 2340B, EPA 200.7, 6010B, 6010C, 200.8, 6020, 245.1, 1311, 1312, 3005A, Enterolert, 9223B, 9222D. Organic Parameters: 608, 624, 625, 8081A, 8081B, 8082, 8082A, 8330, 8151A, 8260B, 8260C, 8270C, 8270D, 3510C, 3630C, 5030B, ME-DRO, ME-GRO, MA-EPH, MA-VPH.)

Solid Waste/Soil (Inorganic Parameters: 9010B, 9012A, 9014, 9030B, 9040B, 9045C, 6010B, 6010C, 6020, 6020A, 7471A, 7471B, 7196A, 9050A, 1010, 1030, 9065, 1311, 1312, 3005A, 3050B. Organic Parameters: ME-DRO, ME-GRO, MA-EPH, MA-VPH, 8260B, 8270C, 8270D, 8330, 8151A, 8081A, 8081B, 8082, 8082A, 3540C, 3546, 3580A, 3630C, 5030B, 5035.)

Massachusetts Department of Environmental Protection Certificate/Lab ID: M-MA086.
*Drinking Water (*Inorganic Parameters: (EPA 200.8 for: Sb,As,Ba,Be,Cd,Cr,Cu,Pb,Ni,Se,Tl) (EPA 200.7 for: Ba,Be,Ca,Cd,Cr,Cu,Na,Ni) 245.1, (300.0 for: Nitrate-N, Fluoride, Sulfate); (EPA 353.2 for: Nitrate-N, Nitrite-N); (SM4500NO3-F for: Nitrate-N and Nitrite-N); 4500F-C, 4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, 2320B, SM2540C, SM4500H-B. Organic Parameters: (EPA 524.2 for: Trihalomethanes, Volatile Organics); (504.1 for: 1,2-Dibromoethane, 1,2-Dibromo-3-Chloropropane), EPA 332. Microbiology Parameters: SM9215B; ENZ. SUB. SM9223; ColilertOT SM9223B; MF-SM9222D.)

*Non-Potable Water (*Inorganic Parameters:, (EPA 200.8 for: Al,Sb,As,Be,Cd,Cr,Cu,Pb,Mn,Ni,Se,Ag,Tl,Zn); (EPA 200.7 for: Al,Sb,As,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Mo,Ni,K,Se,Ag,Na,Sr,Ti,Tl,V,Zn); 245.1, SM4500H,B, EPA 120.1, SM2510B, 2540C, 2340B, 2320B, 4500CL-E, 4500F-BC, 426C, SM4500NH3-BH, (EPA 350.1 for: Ammonia-N), LACHAT 10-107-06-1-B for Ammonia-N, SM4500NO3-F, 353.2 for Nitrate-N, SM4500NH3-BC-NES, EPA 351.1, SM4500P-E, 4500P-B,E, 5220D, EPA 410.4, SM 5210B, 5310C, 4500CL-D, EPA 1664, SM14 510AC, EPA 420.1, SM4500-CN-CE, SM2540D.
Organic Parameters: (EPA 624 for Volatile Halocarbons, Volatile Aromatics),(608 for: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT,Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs-Water), (EPA 625 for SVOC Acid Extractables and SVOC Base/Neutral Extractables), 600/4-81-045-PCB-Oil. Microbiology Parameters: (ColilertQT SM9223B; Enterolert-QT: SM9222D-MF.)

New Hampshire Department of Environmental Services Certificate/Lab ID: 200307. ***NELAP Accredited.***
Drinking Water (Inorganic Parameters: SM 9222B, 9223B, 9215B, EPA 200.7, 200.8, 300.0, SM4500CN-E, 4500H+B, 4500NO3-F, 2320B, 2510B, 2540C, 4500F-C, 5310C, 2120B, EPA 332.0. Organic Parameters: 504.1, 524.2.)

Non-Potable Water (Inorganic Parameters: SM9222D, 9221B, 9222B, 9221E-EC, EPA 3005A, 200.7, 200.8, 245.1, SW-846 6010C, 6020A, 7196A, 7470A, SM3500-CR-D, EPA 120.1, 300.0, 350.1, 350.2, 351.1, 353.2, 410.4, 420.1, 426C, 1664A, SW-846 9010B, 9010C, 9030, 9040B, 9040C, SM2120B, 2310B, 2320B, 2340B, 2540B, 2540D, 4500H+B, 4500CL-E, 4500CN-E, 4500NH3-H, 4500NO3-F, 4500NO2-B, 4500P-E, 4500-S2-D, 4500SO3-B, 5210B, 5220D, 2510B, 2540C, 4500F-C, 5310C, 5540C, LACHAT 10-204-00-1-A, LACHAT 10-107-06-2-D, 3060A. Organic Parameters: SW-846 3510C, 3630C, 5030B, 8260C, 8270D, 8330, EPA 624, 625, 608, SW-846 8082A, 8081B, 8015C, 8151A, 8330, 8270D-SIM.)

Solid & Chemical Materials (Inorganic Parameters: SW-846 6010C, 6020A, 7196A, 7471B, 1010, 1010A, 1030, 9010C, 9012B, 9014, 9030B, 9040C, 9045C, 9045D, 9050, 9065, 9251, 1311, 1312, 3005A, 3050B, 3060A. Organic Parameters: SW-846 3540C, 3546, 3050B, 3580A, 3620D, 3630C, 5030B, 5035, 8260C, 8270D, 8270D-SIM, 8330, 8151A, 8015B, 8015C, 8082A, 8081B.)

New Jersey Department of Environmental Protection Certificate/Lab ID: MA935. ***NELAP Accredited.***
Drinking Water (Inorganic Parameters: SM9222B, 9221E, 9223B, 9215B, 4500CN-CE, 4500NO3-F, 4500F-C, EPA 300.0, 200.7, 200.8, 245.1, 2540C, SM2120B, 2320B, 2510B, 5310C, SM4500H-B. Organic Parameters: EPA 332, 504.1, 524.2.)

Non-Potable Water (Inorganic Parameters: SM5210B, EPA 410.4, SM5220D, 4500Cl-E, EPA 300.0, SM2120B, 2340B, SM4500F-BC, EPA 200.7, 200.8, 351.1, LACHAT 10-107-06-2-D, EPA 353.2, SM4500NO3-F, 4500NO2-B, EPA 1664A, SM5310B, C or D, 4500-PE, EPA 420.1, SM510ABC, SM4500P-B5+E, 2540B, 2540C, 2540D, EPA 120.1, SM2510B, SM2520B, SM15 426C, 9222D, 9221B, 9221C, 9221E, 9222B, 9215B, 2310B, 2320B, 4500NH3-H, 4500-S D, EPA 350.1, 350.2, SW-846 1312, 7470A, 5540C, SM4500H-B, 4500SO3-B, SM3500Cr-D, 4500CN-CE, EPA 245.1, SW-846 9040B, 9040C, 3005A, 3015, EPA 6010B, 6010C, 6020, 6020A, 7196A, 3060A, SW-846 9010C, 9030B. Organic Parameters: SW-846 8260B, 8260C, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 3510C, EPA 608, 624, 625, SW-846 3630C, 5030B, 8011, 8015C, 8081A, 8081B, 8082, 8082A, 8151A, 8330, 1,4-Dioxane by NJ Modified 8270, 8015B, NJ EPH.)

Solid & Chemical Materials (Inorganic Parameters: SW-846, 6010B, 6010C, 6020, 6020A, 7196A, 3060A, 9030B, 1010, 1010A, 1030, 1311, 1312, 3005A, 3050B, 7471A, 7471B, 9010C, 9012B, 9014, 9038, 9040B, 9040C, 9045C, 9045D, 9050A, 9065, 9251. Organic Parameters: SW-846 8015B, 8015C, 8081A, 8081B, 8082, 8082A, 8151A, 8330, 8260B, 8260C, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 3540C, 3546, 3580A, 3620C, 3630C, 5030B, 5035L, 5035H, NJ EPH.)

New York Department of Health Certificate/Lab ID: 11148. ***NELAP Accredited.***
Drinking Water (Inorganic Parameters: SM9223B, 9222B, 9215B, EPA 200.8, 200.7, 245.2, SM5310C, EPA 332.0, SM2320B, EPA 300.0, SM2120B, 4500CN-E, 4500F-C, 4500NO3-F, 2540C, SM 2510B. Organic Parameters: EPA 524.2, 504.1.)

Non-Potable Water (Inorganic Parameters: SM9221E, 9222D, 9221B, 9222B, 9215B, 5210B, 5310C, EPA 410.4, SM5220D, 2310B-4a, 2320B, EPA 200.7, 300.0, SM4500CL-E, 4500F-C, SM15 426C, EPA 350.1, SM4500NH3-BH, EPA 351.1, LACHAT 10-107-06-2, EPA 353.2, SM4500-NO3-F, 4500-NO2-B, 4500P-E, 2540C, 2540B, 2540D, EPA 200.8, EPA 6010B, 6010C, 6020, 6020A, EPA 7196A, SM3500Cr-D, EPA 245.1, 7470A, SM2120B, LACHAT 10-204-00-1-A, 4500CN-CE, EPA 1664A, EPA 420.1, SM14 510C, EPA 120.1, SM2510B, SM4500S-D, SM5540C, EPA 3005A, 3015, 9010C, 9030B. Organic Parameters: EPA 624, 8260B, 8260C, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 625, 608, 8081A, 8081B, 8151A, 8330, 8082, 8082A, EPA 3510C, 5030B.)

Solid & Hazardous Waste (Inorganic Parameters: EPA 1010A, 1030, EPA 6010B, 6010C, 7196A, 7471A, 7471B, 9012B, 9014, 9065, 9050A, EPA 1311, 1312, 3005A, 3050B, 9010C, 9030B, 9040C, 9045D. Organic Parameters: EPA 8260B, 8260C, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 8015B, 8015C, 8081A, 8081B, 8151A, 8330, 8082 8082A, 3540C,

3546, 3580A, 5030B, 5035A-H, 5035A-L.)

North Carolina Department of the Environment and Natural Resources Certificate/Lab ID : 666. (Inorganic Parameters: SM2310B, 2320B, 4500Cl-E, 4500Cn-E, 9014, Lachat 10-204-00-1-X, 1010A, 1030, 4500NO3-F, 353.2, 4500P-E, 4500SO4-E, 300.0, 4500S-D, 5310B, 5310C, 6010C, 6020A, 200.7, 200.8, 3500Cr-B, 7196A, 245.1, 7470A, 7471B, 1311,1312. Organic Parameters: 608, 8081B, 8082A, 624, 8260B, 625, 8270D, 8151A, 8015C, 504.1, MA-EPH, MA-VPH.)

Drinking Water Program Certificate/Lab ID: 25700. (Inorganic Parameters: Chloride EPA 300.0. Organic Parameters: 524.2)

Pennsylvania Department of Environmental Protection Certificate/Lab ID : 68-03671. ***NELAP Accredited.***
Drinking Water (Inorganic Parameters: 200.7, 200.8, 300.0, 332.0, 2120B, 2320B, 2510B, 2540C, 4500-CN-CE, 4500F-C, 4500H+-B, 4500NO3-F, 5310C. Organic Parameters: EPA 524.2, 504.1)

Non-Potable Water (Inorganic Parameters: EPA 120.1, 1312, 3005A,3015, 3060A, 200.7, 200.8, 410.4, 1664A, SM2540D, 5210B, 5220D, 4500-P,BE, 245.1, 300.0, 350.1, 350.2, 351.1, 353.2, 420.1, 6010C, 6020A, 7196A, 7470A, 9030B, 2120B, 2310B, 2320B, 2510B, 2540B, 2540C, 3500Cr-D, 426C, 4500CN-CE, 4500Cl-E, 4500F-B, 4500F-C, 4500H+-B, 4500NH3-H, 4500NO2-B, 4500NO3-F, 4500S-D, 4500SO3-B, 5310BCD, 5540C, 9010C, 9040C. Organic Parameters: EPA 3510C, 3630C, 5030B, 625, 624, 608, 8081B, 8082A, 8151A, 8260C, 8270D, 8270D-SIM, 8330, 8015C, NJ-EPH.)

Solid & Hazardous Waste (Inorganic Parameters: EPA 350.1, 1010, 1030, 1311, 1312, 3005A, 3050B, 3060A, 6010C, 6020A, 7196A, 7471B, 9010C, 9012B, 9014, 9040B, 9045D, 9050A, 9065, SM 4500NH3-BH, 9030B, 9038, 9251. Organic Parameters: 3540C, 3546, 3580A, 3620C, 3630C, 5035, 8015C, 8081B, 8082A, 8151A, 8260C, 8270D, 8270D-SIM, 8330, NJ-EPH.)

Rhode Island Department of Health Certificate/Lab ID: LAO00065. ***NELAP Accredited via NJ-DEP.***
Refer to MA-DEP Certificate for Potable and Non-Potable Water.
Refer to NJ-DEP Certificate for Potable and Non-Potable Water.

Texas Commisson on Environmental Quality Certificate/Lab ID: T104704476. ***NELAP Accredited.***
Non-Potable Water (Inorganic Parameters: EPA 120.1, 1664, 200.7, 200.8, 245.1, 245.2, 300.0, 350.1, 351.1, 353.2, 410.4, 420.1, 6010, 6020, 7196, 7470, 9040, SM 2120B, 2310B, 2320B, 2510B, 2540B, 2540C, 2540D, 426C, 4500CL-E, 4500CN-E, 4500F-C, 4500H+B, 4500NH3-H, 4500NO2B, 4500P-E, 4500 $S2^{-}$D, 510C, 5210B, 5220D, 5310C, 5540C. Organic Parameters: EPA 608, 624, 625, 8081, 8082, 8151, 8260, 8270, 8330.)

Solid & Hazardous Waste (Inorganic Parameters: EPA 1311, 1312, 9012, 9014, 9040, 9045, 9050, 9065.)

Virginia Division of Consolidated Laboratory Services Certificate/Lab ID: 460195. ***NELAP Accredited.***
Drinking Water (Inorganic Parameters: EPA 200.7, 200.8, 300.0, 2510B, 2120B, 2540C, 4500CN-CE, 245.2, 2320B, 4500F-C, 4500NO3-F, 5310C. Organic Parameters: EPA 504.1, 524.2.)

Non-Potable Water (Inorganic Parameters: EPA 120.1, 1664A, 200.7, 200.8, 245.1, 300.0, 3005A, 3015, 1312, 6010B, 6010C, 3060A, 353.2, 420.1, 6020, 6020A, SM4500S-D, SM4500-CN-CE, Lachat 10-204-00-1-X, 7196A, 7470A, 9010B, 9040B, 2310B, 2320B, 2510B, 2540B, 2540C, 3500Cr-D, 426C, 4500Cl-E, 4500F-B, 4500F-C, 4500PE, 510AC, 5210B, 5310B 5310C, 5540C. Organic Parameters: EPA 3510C, 3630C, 5030B, 8260B, 608, 624, 625, 8081A, 8081B, 8082, 8082A, 8151A, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 8330,)

Solid & Hazardous Waste (Inorganic Parameters: EPA 1010A, 1030, 3060A, 3050B, 1311, 1312, 6010B, 6010C, 6020, , 7196A, 7471A, 7471B, 6020A, 9030B, 9010B, 9012A, 9014 9040B, 9045C, 9050A, 9065. Organic Parameters: EPA 5030B, 5035, 3540C, 3546, 355B0, 3580A, 3630C, 6020A, 8260B, 8015B, 8015C, 8081A, 8081B, 8082, 8082A, 8151A, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 8330.)

Department of Defense, L-A-B Certificate/Lab ID: L2217.
Drinking Water (Inorganic Parameters: SM 4500H-B. Organic Parameters: EPA 524.2, 504.1.)

Non-Potable Water (Inorganic Parameters: EPA 200.7, 200.8, 6010B, 6010C, 6020, 6020A, 245.1, 245.2, 7470A, 9040B, 9010B, 180.1. 300.0, 332.0, 6860, 353.2, 410.4, 9060, 1664A, SM 4500CN-E, 4500H-B, 4500NO3-F, 4500CL-D, 5220D, 5310C, 2130B, 2320B, 2540C, 3005A, 3015, 9010B, 9056, 7196A, 3500-Cr-D. Organic Parameters: EPA 8260B, 8260C, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 8330A, 8082, 8082A, 8081A, 8081B, 3510C, 5030B, MassDEP EPH, MassDEP VPH.)

Solid & Hazardous Waste (Inorganic Parameters: EPA 200.7, 6010B, 6010C, 7471A, 6860, 1311, 1312, 3050B, 7196A, 9010B, 9012A, 9040B, 9045C, 3500-CR-D, 4500CN-CE, 2540G, Organic Parameters: EPA 8260B, 8260C, 8270C,

8270D, 8270C-SIM, 8270D-SIM, 8330A/B-prep, 8082, 8082A, 8081A, 8081B, 3540C, 3546, 3580A, 5035A, MassDEP EPH, MassDEP VPH.)

The following analytes are not included in our current NELAP/TNI Scope of Accreditation:
EPA 8260B: Freon-113, 1,2,4,5-Tetramethylbenzene, 4-Ethyltoluene. **EPA 8330A:** PETN, Picric Acid, Nitroglycerine, 2,6-DANT, 2,4-DANT. **EPA 8270C:** Methyl naphthalene, Dimethyl naphthalene, Total Methylnapthalenes, Total Dimethylnaphthalenes, 1,4-Diphenylhydrazine (Azobenzene). **EPA 625:** 4-Chloroaniline, 4-Methylphenol. Total Phosphorus in a soil matrix, Chloride in a soil matrix, TKN in a soil matrix, NO2 in a soil matrix, NO3 in a soil matrix. **EPA 9071:** Total Petroleum Hydrocarbons, Oil & Grease.

CHAIN OF CUSTODY

PAGE_____ OF_____

Date Rec'd in Lab: 5/25/13

ALPHA Job #: L1309519

ALPHA ANALYTICAL
WESTBORO, MA TEL: 508-898-9220 FAX: 508-898-9193
MANSFIELD, MA TEL: 508-822-9300 FAX: 508-822-3288

Client Information

Client: Turnkey Env.
Address: 2558 Hamburg Turnpike Buffalo NY
Phone: 716-225-3314
Fax:
Email: bgreene@turnkeyllc.com
☐ These samples have been previously analyzed by Alpha

Project Information

Project Name: Scott Rotary
Project Location:
Project #: 0189-013-001
Project Manager: Mike Lesakowski
ALPHA Quote #:

Turn-Around Time

☒ Standard ☐ RUSH (only confirmed if pre-approved!)
Date Due: 6/02/13 Time:

Report Information - Data Deliverables

☐ FAX ☒ EMAIL
☐ ADEx ☐ Add'l Deliverables

Billing Information

☐ Same as Client info PO #:

Regulatory Requirements/Report Limits

State /Fed Program	Criteria

Other Project Specific Requirements/Comments/Detection Limits:

Cat B

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	ANALYSIS: 8260 VOCs TCL + TICs	SAMPLE HANDLING	TOTAL # BOTTLES
09519 1	SB-13-1 (6-8')	5-24-13	950	S	BMG	X		
2	SB-13-3 (12-16')	"	1080	S	BMG	X	Hold	
3	SB-13-2 (11.5-14')	"	1350	S	BMG	X	Hold	

SAMPLE HANDLING: Filtration _____ ☐ Done ☐ Not needed ☐ Lab to do; Preservation ☐ Lab to do (Please specify below); Sample Specific Comments

Container Type	A																		
Preservative	A																		

Relinquished By:	Date/Time	Received By:	Date/Time
Brooke Greene	5-24-13/1440	Alexander Tully	5-24-13 15:00
Alexander Tully	5-24 16:55		5/25/13 10:44

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. All samples submitted are subject to Alpha's Terms and Conditions. See reverse side.

FORM NO: 01-01 (rev. 14-OCT-07)

New York State Department of Environmental Conservation
Division of Environmental Remediation, Region 9
270 Michigan Avenue, Buffalo, New York 14203-2915
Phone: (716) 851-7220 • **Fax:** (716) 851-7226
Website: www.dec.ny.gov

AUG 19 2013

Joe Martens
Commissioner

August 16, 2013

Mr. Michael Lesakowski
TurnKey Environmental Restoration, LLC
2558 Hamburg Turnpike - Suite 300
Buffalo, New York 14218

Dear Mr. Lesakowski:

Scott Rotary Seals Site; C905036
Olean, Cattaraugus County
SVE System

The Department has reviewed the report dated July 16, 2013 requesting to discontinue operation of the soil vapor extraction (SVE) system at the above-referenced site. The Department has the following comments regarding this request:

1. Are chemical specific VOC concentrations available that can be used to compare soil vapor concentrations (at the blower prior to carbon treatment) over time?

2. Please provide recent SVE system mass removal rates (the most recent data provided in Table 1 in Attachment 1 is April 2013).

If you have any questions, please feel free to contact me at (716) 851-7220.

Sincerely,

Chad Staniszewski, P.E.
Project Manager

CS:sz

ec: Mr. Martin Doster, NYSDEC
Mr. Matthew Forcucci, NYS Department of Health
Ms. Crystal Wiech, Scott Rotary Seals

August 22, 2013

Mr. Chad Staniszewski, P.E.
New York State Department of Environmental Conservation
Division of Environmental Remediation, Region 9
270 Michigan Avenue
Buffalo, New York 14203-2999

Re: **Response to NYSDEC's Comments to**
SVE System Discontinuation Request
Scott Rotary Seals Site (Site No. C905036)
Olean NY

Dear Mr. Staniszewski:

Pursuant to the New York State Department of Environmental Conservation (NYSDEC) letter dated August 16, 2013, TurnKey Environmental Restoration (TurnKey) is providing a response to your comments. Your comments are shown in italics followed by our response.

1. *Are chemical specific VOC concentrations available that can be used to compare soil vapor concentrations (at the blower prior to carbon treatment) over time?*

Response: Two air samples were collected prior to carbon treatment on March 16, 2012 and again on May 22, 2012. No additional sampling was done. The results of the testing for specific compounds were included with the Soil Vapor Extraction System DAR Analysis Report submitted to NYSDEC in July 2012 when we requested to discontinue carbon usage.

2. *Please provide recent SVE system mass removal rates (the most recent data provided in Table 1 in Attachment 1 is April 2013.*

Response: The attached Table 1 contains the updated system monitoring data.

Sincerely,
TurnKey Environmental Restoration, LLC

Raymond Laport, P.E.
Project Manager

Michael Lesakowski
Project Manager

cc: C. Wiech, Scott Rotary Seals
Mr. Martin Doster (NYSDEC)
Mr. Matthew Forcucci, NYS Department of Health
File: 189-013-001

TABLES

Table 1
Summary of SVE System VOC Mass Removal
Scott Rotary Seals Site
Olean, New York

Date	Elapsed Time (days)	SVE Operation Time (days)	Time	Influent (Untreated) PID Reading (ppm)	Corrected Influent Concentration[1] (mg/m^3)	Air Flow Rate (SCFM)	Rate of VOC Removal (lb/day)	Total VOC Removal to Date (lb)	Notes
3/14/12	0	0	3:45 PM	93	439	349	13.8		
3/16/12	2	2	5:00 PM	230	1086	349	34.1	49	
3/30/12	16	16	8:45 AM	298	1407	349	44.1	583	
4/6/12	23	23	9:45 AM	286	1350	349	42.4	888	
4/13/12	30	30	8:00 AM	294	1388	349	43.5	1,185	
4/13/12	30	30	8:30 AM	73	345	349	10.8	1,186	Valved down the intake air from the system
4/17/12	34	34	1:06 PM		0				System shut-down for 22 days pending carbon testing and change-out.
5/9/12	56	34	11:50 AM	118	557	351	17.6	1,186	Restarted system
5/11/12	58	36	12:42 PM	222	1048	349	32.9	1,238	Adjusted system to close off addition of outdoor air
5/15/12	62	40	11:00 AM	248	1171	346	36.4	1,374	
5/21/12	68	46	9:00 AM	134	632	349	19.8	1,541	
5/22/12	69	47	9:00 AM	135	637	347	19.9	1,560	
5/30/12	77	55	4:00 PM	135	637	348	19.9	1,725	Blower down. Based on hour meter, blower went down at ~4:00 PM on May 30.
5/30/12	77	55	5:10 PM	166	784	345	24.3	1,725	
6/13/12	91	69	8:15 AM	166	784	345	24.3	2,057	
6/14/12	92	70	8:10 AM	185	873	348	27.3	2,083	
6/25/12	102	80	1:00 AM	185	873	348	27.3	2,375	System Shut Down
6/25/12	103	80	4:00 PM	144	680	348	21.2	2,375	System reactivated
7/31/12	139	116	2:23 PM	132	623	348	19.5	3,107	
8/2/12	141	118	10:50 AM	141	666	352	21.0	3,144	Carbon Removed, stack discharge
8/3/12	142	119	3:32 PM	141	546	348	17.1	3,167	Power outage; system down; used previous measurments for calculations
8/6/12	145	119	9:53 AM	134	519	351	16.3	3,167	System restarted
8/9/12	148	123	6:40 PM	134	519	352	16.4	3,222	Power outage; system down; used previous measurments for calculations
8/10/12	149	123	2:10 PM	123	476	346	14.8	3,222	
8/21/12	160	134	5:15 PM	139	538	348	16.8	3,398	
8/21/12	160	134	6:40 PM	187	724	343	22.3	3,399	Shut off extraction wells 2, 5, and 6
8/24/12	163	137	3:00 PM	199	770	346	23.9	3,465	
8/25/12	164	138	3:26 PM	199	770	342	23.7	3,489	System shut down
8/27/12	166	138	8:15 AM	180	697	342	21.4	3,489	Reactivated
9/1/12	171	143	2:55 PM	180	697	344	21.5	3,603	System Shut Down
9/4/12	174	143	8:20 AM	180	697	344	21.5	3,603	Reactivated
9/7/12	176	146	2:00 PM	180	697	343	21.5	3,660	
9/8/12	178	147	10:34 AM	505	1955	337	59.3	3,718	Used data from 9/19/12 for mass removal calculations
9/10/12	180	149	8:25 AM	505	1955	332	58.3	3,830	Used data from 9/19/12 for mass removal calculations
9/19/12	189	158	10:00 AM	505	1955	342	60.1	4,367	
9/19/12	189	158	2:00 PM	400	1548	342	47.6	4,376	Well 2 opened, 5 and 6 still off
9/25/12	194	164	4:25 PM	152	588	348	18.4	4,555	System down; no time known
9/26/12	195	165	1:00 AM	400	1548	343	47.7	4,589	Assumed extracted vapors returned to pre-shut down condition
10/12/12	212	181	12:00 PM	201	778	354	24.8	5,186	
10/21/12	221	190	10:17 AM	201	778	354	24.8	5,407	System shut-down due to high vac alarm; used data from 10/12/12 for mass
11/14/12	245	190	3:30 PM	162	627	365	20.6	5,407	System repair to well SVE-2 (cracked pipe); used PID reading from 11/29/12 as PID malfunctioned
11/29/12	260	205	10:00 AM	162	627	365	20.6	5,710	SVE Wells 1, 7, 8 & 9 on; all other wells valved off
11/29/12	260	205	12:50 PM	333	1289	365	42.2	5,714	
12/4/12	265	210	12:50 PM	358	1385	365	45.4	5,933	
12/19/12	280	225	4:00 PM	115	445	365	14.6	6,388	
12/21/12	282	227	3:00 PM	240	929	365	30.4	6,432	
1/21/13	313	258	12:18 PM	51.2	198	365	6.5	7,002	
1/30/13	322	267	2:30 PM	97.4	377	365	12.4	7,088	
2/6/13	329	274	11:00 AM	91.2	353	365	11.6	7,170	
2/20/13	343	288	11:00 AM	37.5	145	365	4.8	7,284	All wells valved open except SVE-2
2/27/13	350	295	12:00 PM	35	135	365	4.4	7,316	
3/13/13	364	309	11:00 AM	32	124	365	4.1	7,376	
3/29/13	380	325	2:00 PM	59	228	354	7.3	7,467	
4/12/13	394	339	12:00 PM	50	194	365	6.3	7,562	
4/25/13	407	352	8:40 AM	45	174	377	5.9	7,640	
5/8/13	420	365	3:00 PM	45	174	380	6.0	7,719	Blower motor failed; tried to restart on 5/10/13; unsuccessful. Used readings from 4/25/13 for mass calculations
5/10/13	422	367	10:00 AM		0			7,719	
7/12/13	485	367	4:00 PM	121.1	469	320	13.5	7,719	Ordered new blower and drive for blower. System restarted on 7/12/13. Wells 1, 3, 7, 8 & 9
7/17/13	490	372	10:30 AM	150.4	582	348	18.2	7,795	
8/7/13	511	393	10:00 AM	162.2	628	348	19.7	8,192	

Notes:

1. The estimated mass of contamination recovered is based on ratio of the sum of the gasoline and diesel range organics (GRO and DRO) as measured by a vapor sample collected with a summa canister to the contemporaneous PID reading. Sample from 3/16/12 had a concentration of GRO and DRO of 890 mg/cubic meter which equates to a 3.87 ratio to the PID reading; Sample from 5/22/12 had a concentration of GRO and DRO of 750 mg/cubic meter which equates to a 5.56 ratio to the PID reading; used the average of the ratios of 4.72.

May 21, 2014

Mr. Chad Staniszewski, P.E.
New York State Department of Environmental Conservation
Division of Environmental Remediation, Region 9
270 Michigan Avenue
Buffalo, New York 14203-2999

Re: **SVE System Discontinuation Request**
Scott Rotary Seals Site (Site No. C905036)
Olean NY

Dear Mr. Staniszewski:

TurnKey Environmental Restoration (TurnKey) is requesting to terminate soil vapor extraction (SVE) operations at the DST Properties NY, LLC and Scott Rotary Seals site in Olean, New York.

BACKGROUND

DST Properties NY, LLC (DST), has undertaken the redevelopment of the property located at 301 Franklin Street, Olean, New York under the New York State Brownfield Cleanup Program (BCP) and executed a Brownfield Cleanup Agreement (BCA) with the NYSDEC in March 2010. DST completed remedial work and has opened a new 15,000 square foot office building and warehouse. A certificate of completion (COC) was issued for the site in December 2012. As part of the remedial program, a SVE system was installed and has been operated nearly continuously since March 2012. The operation, maintenance and monitoring (OMM) of the SVE system is part of the monitoring required in the approved Site Management Plan.

As described in the RAWP Section 3.2.5 SVE Discontinuation Criteria, there are two criteria that are to be met to initiate the discontinuation evaluation: 1) a significant reduction in mass removal rate; and 2) a decrease in the benefit of continued SVE operation due to a tailing-off of the mass removal rate. Both of these conditions were met as discussed in our May 10, 2013 letter to the New York State Department of Environmental Conservation (NYSDEC). As such, TurnKey on behalf of DST and Scott Rotary Seals undertook the discontinuation evaluation which included soil sampling and testing which was discussed in a letter report to the NYSDEC dated July 16, 2013. The NYSDEC responded to the July 16 report with two questions in a letter dated August 16, 2013 to which TurnKey responded in a letter dated August 22, 2013.

SVE Operations

The SVE system is still in operation; although due to the severity of the 2014 winter, there was a period of about 2.5 months (February to mid-April 2014) during which the conveyance pipes from the SVE wells to the SVE trailer were frozen and the system operation was shut down. Table 1 provides the history of measurements that were made during the Operation, Maintenance and Monitoring (OMM) for the SVE system. The SVE system has removed over 10,000 pounds of VOCs (Refer to Chart 1). The mass removed appears to have reached quasi-equilibrium (leveled-off). The rate of removal (Chart 2) has decreased from an average removal rate of about 28 lbs per

day in 2012, to 16 lbs per day in 2013 to 5 pounds per day in 2014 which represents over an 80% reduction in the mass removal rate.

Soil sampling from the four borings completed for the discontinuation evaluation showed that the soil quality has greatly improved; gray staining has been removed and the soils are predominantly yellowish-brown; odors are either absent or reduced from strong to slight; the VOC concentrations based on PID readings have been decreased by a minimum of 80% to over 90%; and the analytical data show there are no exceedances of the CSCOs and the concentrations of contaminants have decreased sharply.

Conclusions

The continued operation of the SVE system will provide only limited benefit. The grossly contaminated criteria of staining, odors, and PID readings have been remediated. The site is subject to the Site Management Plan which includes a cover system to protect employees and the public from incidental contact with the subsurface soils, an active sub-slab depressurization system to protect employees from exposure to potential vapors from entering the work space, and there are restrictions on excavations into the subsurface. As such, we request NYSDEC approval to terminate SVE operations.

Sincerely,
TurnKey Environmental Restoration, LLC

Raymond Laport, P.E.
Project Manager

Michael Lesakowski
Project Manager

cc: C. Wiech, Scott Rotary Seals
Mr. Matthew Forcucci, NYS Department of Health
File: 189-014-001

TABLE AND CHARTS

Table 1
Summary of SVE System VOC Mass Removal
Scott Rotary Seals Site
Olean, New York

Date	Elapsed Time	SVE Operation Time	Time	Influent (Untreated) PID Reading	Corrected Influent Concentration[1]	Air Flow Rate	Volume of Air Processed		Rate of VOC Removal		VOCs Removed Since Last Monitoring Period		Total VOC Removal to Date		Notes
	(days)	(days)		(ppm)	(mg/m^3)	(SCFM)	(CF/day)	(m^3/day)	(kg/day)	(lb/day)	(kg)	(lb)	(kg)	(lb)	
3/14/12	0	0	3:45 PM	93	439	349	502560	1.42E+04	6.2	13.8					
3/16/12	2	2	5:00 PM	230	1086	349	502560	1.42E+04	15.4	34.1	22.3	49.1	22.3	49	
3/30/12	16	16	8:45 AM	298	1407	349	502560	1.42E+04	20.0	44.1	242.2	534.0	264.4	583	
4/6/12	23	23	9:45 AM	286	1350	349	502560	1.42E+04	19.2	42.4	138.1	304.5	402.5	888	
4/13/12	30	30	8:00 AM	294	1388	349	502560	1.42E+04	19.7	43.5	134.9	297.5	537.5	1,185	
4/13/12	30	30	8:30 AM	73	345	349	502466	1.42E+04	4.9	10.8	0.3	0.6	537.7	1,186	Valved down the intake air from the system
4/17/12	34	34	1:06 PM		0										System shut-down for 22 days pending carbon testing and change-out.
5/9/12	56	34	11:50 AM	118	557	351	504778	1.43E+04	8.0	17.6	0.0	0.0	537.7	1,186	Restarted system
5/11/12	58	36	12:42 PM	222	1048	349	502551	1.42E+04	14.9	32.9	23.9	52.7	561.6	1,238	Adjusted system to close off addition of outdoor air
5/15/12	62	40	11:00 AM	248	1171	346	497523	1.41E+04	16.5	36.4	61.7	136.0	623.3	1,374	
5/21/12	68	46	9:00 AM	134	632	349	501872	1.42E+04	9.0	19.8	75.4	166.2	698.7	1,541	
5/22/12	69	47	9:00 AM	135	637	347	499767	1.42E+04	9.0	19.9	9.0	19.9	707.7	1,560	
5/30/12	77	55	4:00 PM	135	637	348	500437	1.42E+04	9.0	19.9	74.8	165.0	782.5	1,725	Blower down. Based on hour meter, blower went down at ~4:00 PM on May 30.
5/30/12	77	55	5:10 PM	166	784	345	497358	1.41E+04	11.0	24.3	0.0	0.0	782.5	1,725	
6/13/12	91	69	8:15 AM	166	784	345	497358	1.41E+04	11.0	24.3	150.4	331.6	932.9	2,057	
6/14/12	92	70	8:10 AM	185	873	348	500690	1.42E+04	12.4	27.3	11.7	25.7	944.6	2,083	
6/25/12	102	80	1:00 AM	185	873	348	500690	1.42E+04	12.4	27.3	132.5	292.1	1077.0	2,375	System Shut Down
6/25/12	103	80	4:00 PM	144	680	348	500690	1.42E+04	9.6	21.2	0.0	0.0	1077.0	2,375	System reactivated
7/31/12	139	116	2:23 PM	132	623	348	500690	1.42E+04	8.8	19.5	331.8	731.7	1408.9	3,107	
8/2/12	141	118	10:50 AM	141	666	352	506250	1.43E+04	9.5	21.0	17.0	37.5	1425.9	3,144	Carbon Removed, stack discharge
8/3/12	142	119	3:32 PM	141	546	348	500858	1.42E+04	7.7	17.1	10.3	22.6	1436.2	3,167	Power outage; system down; used previous measurments for calculations
8/6/12	145	119	9:53 AM	134	519	351	504796	1.43E+04	7.4	16.3	0.0	0.0	1436.2	3,167	System restarted
8/9/12	148	123	6:40 PM	134	519	352	507323	1.44E+04	7.4	16.4	25.0	55.2	1461.2	3,222	Power outage; system down; used previous measurments for calculations
8/10/12	149	123	2:10 PM	123	476	346	498682	1.41E+04	6.7	14.8	0.0	0.0	1461.2	3,222	
8/21/12	160	134	5:15 PM	139	538	348	501111	1.42E+04	7.6	16.8	79.9	176.1	1541.1	3,398	
8/21/12	160	134	6:40 PM	187	724	343	494073	1.40E+04	10.1	22.3	0.5	1.2	1541.6	3,399	Shut off extraction wells 2, 5, and 6
8/24/12	163	137	3:00 PM	199	770	346	497872	1.41E+04	10.9	23.9	29.9	65.9	1571.5	3,465	
8/25/12	164	138	3:26 PM	199	770	342	492661	1.40E+04	10.7	23.7	11.0	24.2	1582.4	3,489	System shut down
8/27/12	166	138	8:15 AM	180	697	342	492330	1.39E+04	9.7	21.4	0.0	0.0	1582.4	3,489	Reactivated
9/1/12	171	143	2:55 PM	180	697	344	495330	1.40E+04	9.8	21.5	51.4	113.4	1633.9	3,603	System Shut Down
9/4/12	174	143	8:20 AM	180	697	344	495162	1.40E+04	9.8	21.5	0.0	0.0	1633.9	3,603	Reactivated
9/7/12	176	146	2:00 PM	180	697	343	493656	1.40E+04	9.7	21.5	25.9	57.0	1659.7	3,660	
9/8/12	178	147	10:34 AM	505	1955	337	485537	1.37E+04	26.9	59.3	26.4	58.1	1686.1	3,718	Used data from 9/19/12 for mass removal calculations
9/10/12	180	149	8:25 AM	505	1955	332	477806	1.35E+04	26.5	58.3	50.8	111.9	1736.9	3,830	Used data from 9/19/12 for mass removal calculations
9/19/12	189	158	10:00 AM	505	1955	342	492661	1.40E+04	27.3	60.1	243.7	537.4	1980.6	4,367	
9/19/12	189	158	2:00 PM	400	1548	342	492661	1.40E+04	21.6	47.6	4.1	9.0	1984.7	4,376	Well 2 opened, 5 and 6 still off
9/25/12	194	164	4:25 PM	152	588	348	501026	1.42E+04	8.3	18.4	81.1	178.8	2065.8	4,555	System down; no time known
9/26/12	195	165	1:00 AM	400	1548	343	493823	1.40E+04	21.6	47.7	15.6	34.4	2081.4	4,589	Assumed extracted vapors returned to pre-shut down condition
10/12/12	212	181	12:00 PM	201	778	354	509630	1.44E+04	11.2	24.8	270.5	596.5	2351.9	5,186	
10/21/12	221	190	10:17 AM	201	778	354	509630	1.44E+04	11.2	24.8	100.2	221.0	2452.1	5,407	System shut-down due to high vac alarm; used data from 10/12/12 for mass
11/14/12	245	190	3:30 PM	162	627	365	524977	1.49E+04	9.3	20.6	0.0	0.0	2452.1	5,407	System repair to well SVE-2 (cracked pipe); used PID reading from 11/29/12 as PID malfunctioned
11/29/12	260	205	10:00 AM	162	627	365	524977	1.49E+04	9.3	20.6	137.7	303.5	2589.8	5,710	
11/29/12	260	205	12:50 PM	333	1289	365	524977	1.49E+04	19.2	42.2	1.7	3.7	2591.5	5,714	
12/4/12	265	210	12:50 PM	358	1385	365	524977	1.49E+04	20.6	45.4	99.4	219.1	2690.8	5,933	
12/19/12	280	225	4:00 PM	115	445	365	524977	1.49E+04	6.6	14.6	206.2	454.6	2897.0	6,388	SVE Wells 1, 7, 8 & 9 on; all other wells valved off
12/21/12	282	227	3:00 PM	240	929	365	524977	1.49E+04	13.8	30.4	19.8	43.6	2916.8	6,432	
1/21/13	313	258	12:18 PM	51.2	198	365	524977	1.49E+04	2.9	6.5	258.7	570.5	3175.5	7,002	
1/30/13	322	267	2:30 PM	97.4	377	365	524977	1.49E+04	5.6	12.4	38.9	85.7	3214.4	7,088	
2/6/13	329	274	11:00 AM	91.2	353	365	524977	1.49E+04	5.2	11.6	37.2	82.0	3251.6	7,170	

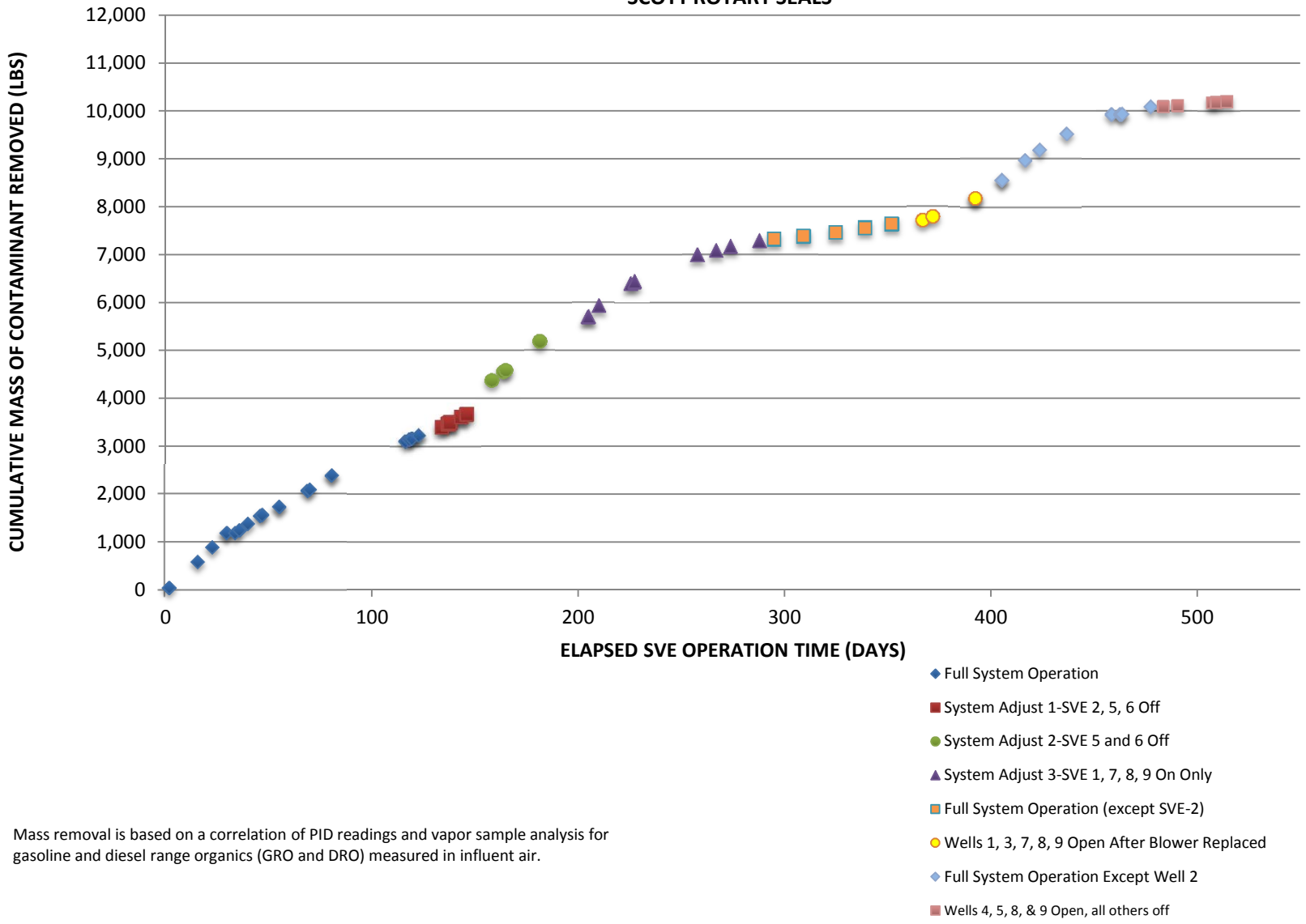
Table 1
Summary of SVE System VOC Mass Removal
Scott Rotary Seals Site
Olean, New York

Date	Elapsed Time	SVE Operation Time	Time	Influent (Untreated) PID Reading	Corrected Influent Concentration[1]	Air Flow Rate	Volume of Air Processed		Rate of VOC Removal		VOCs Removed Since Last Monitoring Period		Total VOC Removal to Date		Notes
	(days)	(days)		(ppm)	(mg/m^3)	(SCFM)	(CF/day)	(m^3/day)	(kg/day)	(lb/day)	(kg)	(lb)	(kg)	(lb)	
2/20/13	343	288	11:00 AM	37.5	145	365	524977	1.49E+04	2.2	4.8	51.8	114.3	3303.4	7,284	All wells valved open except SVE-2
2/27/13	350	295	12:00 PM	35	135	365	524977	1.49E+04	2.0	4.4	14.7	32.4	3318.1	7,316	
3/13/13	364	309	11:00 AM	32	124	365	524977	1.49E+04	1.8	4.1	26.9	59.3	3345.0	7,376	
3/29/13	380	325	2:00 PM	59	228	354	509630	1.44E+04	3.3	7.3	41.4	91.3	3386.4	7,467	
4/12/13	394	339	12:00 PM	50	194	365	524977	1.49E+04	2.9	6.3	42.9	94.7	3429.3	7,562	
4/25/13	407	352	8:40 AM	45	174	377	543571	1.54E+04	2.7	5.9	35.7	78.8	3465.1	7,640	
5/8/13	420	365	3:00 PM	45	174	380	547217	1.55E+04	2.7	6.0	35.7	78.7	3500.7	7,719	Blower motor failed; tried to restart on 5/10/13; unsuccessful. Used readings from 4/25/13 for mass calculations
5/10/13	422	367	10:00 AM		0								3500.7	7,719	
7/12/13	485	367	4:00 PM	121.1	469	320	460635	1.30E+04	6.1	13.5	0.0	0.0	3500.7	7,719	Ordered new blower and drive for blower. System restarted on 7/12/13. Wells 1, 3, 7, 8, 9, on.
7/17/13	490	372	10:30 AM	150.4	582	348	501787	1.42E+04	8.3	18.2	34.3	75.7	3535.0	7,795	
8/7/13	511	393	10:00 AM	162.2	628	348	501787	1.42E+04	8.9	19.7	180.3	397.6	3715.4	8,192	System down, assume system off from 8/7 to 9/10.
9/10/13	545	393	2:00 PM	162.2	628	348	501787	1.42E+04	8.9	19.7	0.0	0.0	3715.4	8,192	Restart system
9/23/13	558	405	8:45 AM	325.3	1259	343	493823	1.40E+04	17.6	38.8	169.5	373.7	3884.9	8,566	Condensate tank shut down system each month, drained condensate tank upon arrival and restarted system. Mass removal assumes 1 week of down time per month between September and January. PID readings were recorded after system restart.
9/23/13	558	405	9:50 AM	365	1413	320	460635	1.30E+04	18.4	40.6	0.8	1.8	3885.7	8,568	
10/11/13	576	417	1:00 PM	290	1122	320	460635	1.30E+04	14.6	32.3	184.0	405.8	4069.7	8,974	
10/18/13	583	424	11:00 AM	327	1265	254	365058	1.03E+04	13.1	28.8	95.9	211.4	4165.6	9,185	
11/7/13	603	437	12:00 PM	260	1006	246	354114	1.00E+04	10.1	22.2	151.1	333.2	4316.7	9,518	
12/6/13	632	459	11:00 AM	181	700	246	354114	1.00E+04	7.0	15.5	187.9	414.3	4504.6	9,933	
12/10/13	636	463	3:00 PM		0								4504.6	9,933	System shut down
1/10/14	667	464	10:30 AM	153	592	238	342828	9.71E+03	5.7	12.7	2.3	5.1	4506.9	9,938	System reactivated
1/24/14	681	477	8:30 AM	74.5	288	354	509630	1.44E+04	4.2	9.2	68.9	152.0	4575.8	10,090	
1/30/14	687	483	9:10 AM										4575.8	10,090	Frozen pipes, system down from 1/31/14 to 4/18/14
4/18/14	765	483	5:20 PM	43.9	170	230	331162	9.38E+03	1.6	3.5	0.0	0.0	4575.8	10,090	Restart system
4/25/14	772	490	2:20 PM	45.45	176	230	331162	9.38E+03	1.6	3.6	11.1	24.6	4587.0	10,114	No PID reading made, assumed average of readings before and after
5/12/14	789	507	11:05 AM	47	182	230	331162	9.38E+03	1.7	3.8	28.3	62.4	4615.3	10,177	Wells-4, 5, 8 and 9 open, Wells, 1, 2, 3, 6, & 7 closed
5/14/14	791	509	9:30 AM	43.2	167	230	331162	9.38E+03	1.6	3.5	3.2	7.0	4618.4	10,184	
5/19/14	796	514	10:00 AM	41.6	161	230	331162	9.38E+03	1.5	3.3	7.7	17.0	4626.2	10,201	

Notes:

1. The estimated mass of contamination recovered is based on ratio of the sum of the gasoline and diesel range organics (GRO and DRO) as measured by a vapor sample collected with a summa canister to the contemporaneous PID reading. Sample from 3/16/12 had a concentration of GRO and DRO of 890 mg/cubic meter which equates to a 3.87 ratio to the PID reading; Sample from 5/22/12 had a concentration of GRO and DRO of 750 mg/cubic meter which equates to a 5.56 ratio to the PID reading; used the average of the ratios of 4.72.

Chart 1
CUMULATIVE MASS REMOVAL VERSUS TIME
SVE SYSTEM
SCOTT ROTARY SEALS



Mass removal is based on a correlation of PID readings and vapor sample analysis for gasoline and diesel range organics (GRO and DRO) measured in influent air.

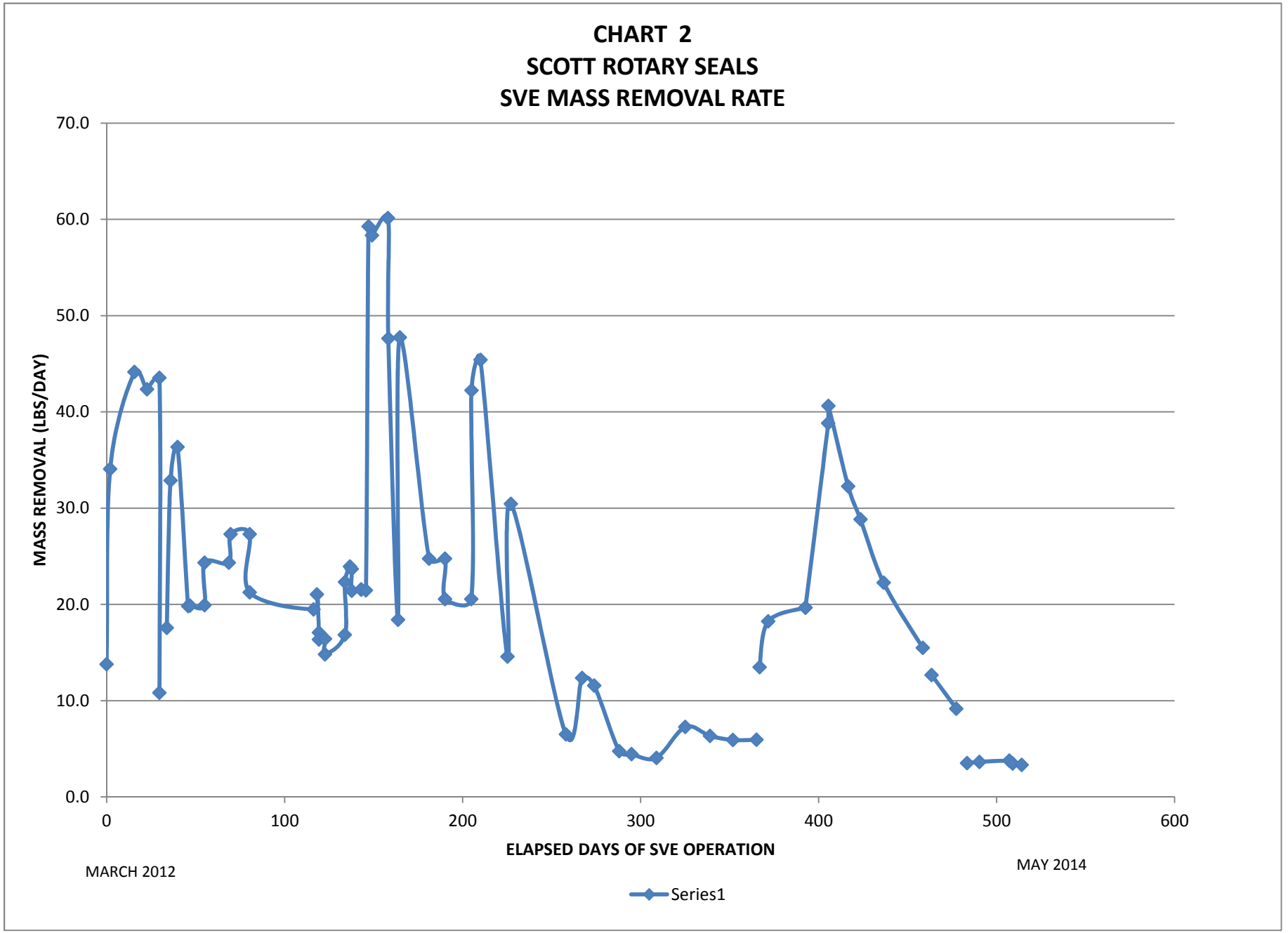


CHART 2
SCOTT ROTARY SEALS
SVE MASS REMOVAL RATE
MASS REMOVAL (LBS/DAY)
70.0
60.0
50.0
40.0
30.0
20.0
10.0
0.0
0
100
200
300
400
500
600
ELAPSED DAYS OF SVE OPERATION
MARCH 2012
MAY 2014
Series1

New York State Department of Environmental Conservation
Division of Environmental Remediation, Region 9
270 Michigan Avenue, Buffalo, New York 14203-2915
Phone: (716) 851-7220 • **FAX:** (716) 851-7226
Website: www.dec.ny.gov

Joe Martens
Commissioner

July 24, 2014

Mr. Michael Lesakowski
TurnKey Environmental Restoration, LLC
2558 Hamburg Turnpike - Suite 300
Buffalo, New York 14218

Dear Mr. Lesakowski:

Scott Rotary Seals Site; C905036
Olean, Cattaraugus County
SVE System

The Department, in consultation with the New York State Department of Health (NYSDOH), has reviewed your May 21, 2014 letter requesting to discontinue operation of the soil vapor extraction (SVE) system at the above-referenced site. Based upon the data submitted with your request, the SVE system remains effective at removing significant quantities of subsurface VOCs from approximately July through December. Mass removal rates drop significantly during the months of January through May/June. Therefore, the Department approves shutdown of the SVE system during the months of January through mid June. The system should continue to be operated from approximately mid June through December. This time period may be slightly modified based upon weather conditions at shutdown and start-up.

If you have any questions, please feel free to contact me at (716) 851-7220.

Sincerely,

Chad Staniszewski, P.E.
Project Manager

CS:sz
ec: Mr. Martin Doster, NYSDEC
Mr. Matthew Forcucci, NYSDOH
Ms. Crystal Wiech, Scott Rotary Seals

January 20, 2016

Mr. Benjamin McPherson.
New York State Department of Environmental Conservation
Division of Environmental Remediation, Region 9
270 Michigan Avenue
Buffalo, New York 14203-2999

Re: **SVE System Discontinuation Request**
Scott Rotary Seals Site (Site No. C905036)
Olean NY

Dear Mr. McPherson:

TurnKey Environmental Restoration (TurnKey) is requesting to terminate soil vapor extraction (SVE) operations at the DST Properties NY, LLC and Scott Rotary Seals site in Olean, New York.

BACKGROUND

DST Properties NY, LLC (DST), undertook the redevelopment of the property located at 301 Franklin Street, Olean, New York under the New York State Brownfield Cleanup Program (BCP) and executed a Brownfield Cleanup Agreement (BCA) with the New York State Department of Environmental Conservation (NYSDEC) in March 2010. DST completed remedial work and has opened a new 15,000 square foot office building and warehouse. A certificate of completion (COC) was issued for the site in December 2012. As part of the remedial program, a soil vapor extraction (SVE) system was installed and has been operated nearly continuously since March 2012. The operation, maintenance and monitoring (OMM) of the SVE system is part of the monitoring required in the approved Site Management Plan.

As described in the Remedial Action Work Plan (RAWP) Section 3.2.5 SVE Discontinuation Criteria, there are two criteria that are to be met to initiate the discontinuation evaluation: 1) a significant reduction in mass removal rate; and 2) a decrease in the benefit of continued SVE operation due to a tailing-off of the mass removal rate. Both of these conditions were met as discussed in our May 10, 2013 letter to the NYSDEC. As such, TurnKey on behalf of DST and Scott Rotary Seals undertook the discontinuation evaluation which included soil sampling at four test borings and testing of selected soil samples which was discussed in a letter report to the NYSDEC dated July 16, 2013. To summarize the findings from the July 16, 2013 letter report, soil sampling from the four borings showed that the soil quality has greatly improved; gray staining was removed and the soils were predominantly yellowish-brown; odors were either absent or reduced from strong to slight; the VOC concentrations based on PID readings decreased by a minimum of 80% to over 90%; and the analytical data showed there were no exceedances of the CSCOs and the concentrations of contaminants had decreased sharply.

TurnKey requested termination of the SVE system in a letter to the NYSDEC dated May 21, 2014. The NYSDEC denied this request in a letter dated July 24, 2014; however, reduced SVE operating

time was approved by the Department which included SVE operations between mid-June and December only.

SVE Operations

The SVE system was in operation until the end of December 2015. Chart 1 presents a graph of the mass of VOCs removed over the life of its operation. The system has been modified over time to extract vadose zone air from the wells exhibiting the highest photoionization detector (PID) readings. The SVE system is presented on the plan view as shown on Figure 1.

Table 1 provides the history of measurements that were made during the OMM for the SVE system. The SVE system has removed over 13,000 pounds of VOCs (Refer to Chart 1); however, it appears the mass removal rate has reached quasi-equilibrium (leveled-off) as shown on Chart 1. The rate of removal has decreased from an average removal rate of about 31.5 lbs per day in 2012 to 1.4 lbs per day in 2015, which represents a 96% reduction in the mass removal rate (refer to Table below).

Summary of Mass Removal Rates

Parameter	Summary of Mass Removal Rate (lbs/day)			
	2012	2013	2014	2015
Minimum	10.8	5.0	4.1	0.4
Maximum	73.4	49.6	25.2	3.9
Average	31.5	19.4	9.9	1.4

Conclusions

The continued operation of the SVE system will provide only limited benefit. The grossly contaminated criteria of staining, odors, and PID readings have been remediated. The site is subject to the Site Management Plan which includes a cover system to protect employees and the public from incidental contact with the subsurface soils, an active sub-slab depressurization system to protect employees from exposure to potential vapors from entering the work space, and there are restrictions on excavations into the subsurface. As such, we request NYSDEC approval to terminate SVE operations.

Sincerely,
TurnKey Environmental Restoration, LLC

Raymond Laport, P.E.
Senior Project Engineer

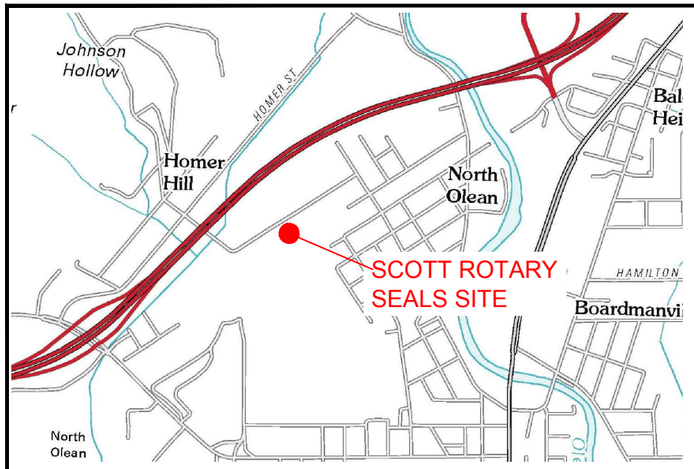
Michael Lesakowski
Project Manager

cc: C. Wiech, Scott Rotary Seals
Mr. Matthew Forcucci, NYS Department of Health
File: 189-015-001

TURNKEY

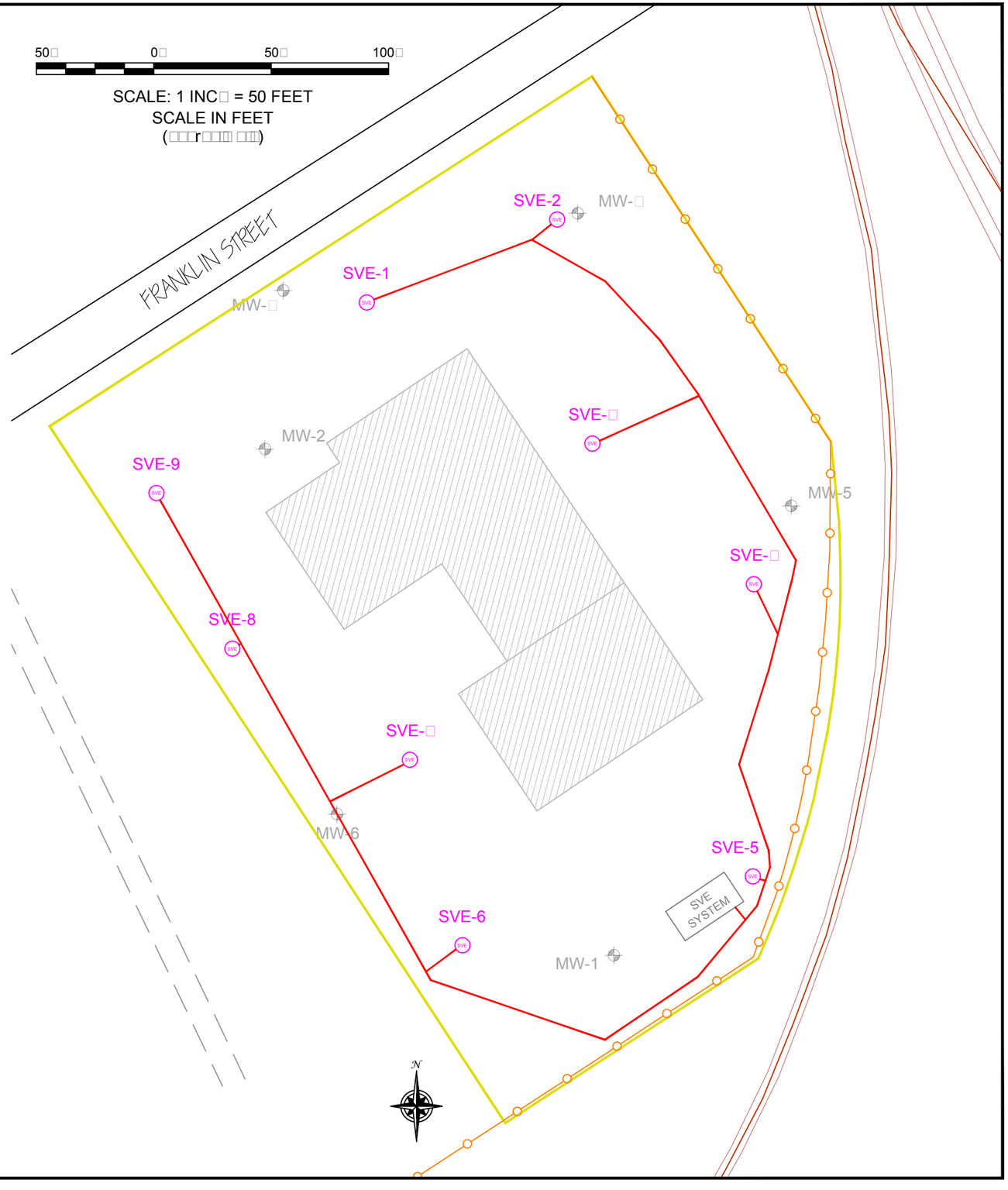
FIGURE

F:\CAD\TurnKey\Scott Rotary Seals\NYSDEC Correspondence\Figure 1 SVE Discontinuation.dwg



50□ 0□ 50□ 100□

SCALE: 1 INC□ = 50 FEET
SCALE IN FEET
(□□□r□□□□ □□□)



LEGEND

- PROPERTY BOUNDARY
- FENCE
- RAILROAD TRACKS (□□□r□□□□ □□□)
- MW-□ GW MONITORING WELL LOCATION
- SVE-□ SVE WELL LOCATION
- SVE PIPING

DATE: NOVEMBER 2015
DRAFTED BY: RFL

2558 HAMBURG TURNPIKE
SUITE 300
BUFFALO, NY 14218
(716) 856-0635

TURNKEY ENVIRONMENTAL RESTORATION, LLC

JOB NO.: 0189-01□-001

SVE DISCONTINUATION EVALUATION

OPERATION, MAINTENANCE AND MONITORING

SCOTT ROTARY SEALS SITE
OLEAN, NEW YORK

PREPARED FOR
DST PROPERTIES NY, LLC

FIGURE 1

TABLES AND CHART

TABLE 1
Summary of SVE System VOC Mass Removal
Scott Rotary Seals Site
Olean, New York

Date	Elapsed Time (days)	SVE Operation Time (days)	Influent (Untreated) PID Reading (ppm)	Corrected Influent Concentration[1] (mg/m^3)	Volume of Air Processed (CF/day)	Rate of VOC Removal (lb/day)	VOCs Removed Since Last Monitoring Period (lb)	Total VOC Removal to Date (lb)	Notes
3/14/12	0	0	93	439	502560	13.8			
3/16/12	2	2	230	1086	502560	34.1	49.1	49	
3/30/12	16	16	298	1407	502560	44.1	534.0	583	
4/6/12	23	23	286	1350	502560	42.4	304.5	888	
4/13/12	30	30	294	1388	502560	43.5	297.5	1,185	In 30 days nearly consumed 2,000 lbs of carbon
4/13/12	30	30	73	345	502466	10.8	0.6	1,186	Valved down the intake air from the system
4/17/12	34	34		0					System shut-down for 22 days pending carbon testing and change-out.
5/9/12	56	34	118	557	504778	17.6		1,186	Restarted system
5/11/12	58	36	222	1048	502551	32.9	52.7	1,238	Adjusted system to close off addition of outdoor air
5/15/12	62	40	248	1171	497523	36.4	136.0	1,374	
5/21/12	68	46	134	632	501872	19.8	166.2	1,541	
5/22/12	69	47	135	637	499767	19.9	19.9	1,560	
5/30/12	77	55	135	637	500437	19.9	165.0	1,725	Blower down. Based on hour meter, blower went down at ~4:00 PM on May 30.
5/30/12	77	55	166	784	497358	24.3	0.0	1,725	
6/13/12	91	69	166	784	497358	24.3	331.6	2,057	
6/14/12	92	70	185	873	500690	27.3	25.7	2,083	
6/25/12	102	80	185	873	500690	27.3	292.1	2,375	System Shut Down
6/25/12	103	80	144	680	500690	21.2	0.0	2,375	System reactivated
7/31/12	139	116	132	623	500690	19.5	731.7	3,107	
8/2/12	141	118	141	666	506250	21.0	37.5	3,144	Carbon Removed, stack discharge
8/3/12	142	119	141	666	500858	20.8	24.9	3,169	Power outage; system down; used previous measurments for calculations
8/6/12	145	119	134	632	504796	19.9	0.0	3,169	System restarted
8/9/12	148	123	134	632	507323	20.0	67.3	3,236	Power outage; system down; used previous measurments for calculations
8/10/12	149	123	123	581	498682	18.1	0.0	3,236	
8/21/12	160	134	139	656	501111	20.5	214.8	3,451	
8/21/12	160	134	187	883	494073	27.2	1.4	3,452	Shut off extraction wells 2, 5, and 6
8/24/12	163	137	199	939	497872	29.2	80.3	3,533	
8/25/12	164	138	199	939	492661	28.9	29.6	3,562	System shut down
8/27/12	166	138	180	850	492330	26.1	0.0	3,562	Reactivated
9/1/12	171	143	180	850	495330	26.3	138.3	3,701	System Shut Down
9/4/12	174	143	180	850	495162	26.3	0.0	3,701	Reactivated
9/7/12	176	146	180	850	493656	26.2	69.6	3,770	
9/8/12	178	147	505	2385	485537	72.3	70.9	3,841	Used data from 9/19/12 for mass removal calculations
9/10/12	180	149	505	2385	477806	71.1	136.5	3,978	Used data from 9/19/12 for mass removal calculations
9/19/12	189	158	505	2385	492661	73.4	655.5	4,633	
9/19/12	189	158	400	1888	492661	58.1	11.0	4,644	Well 2 opened, 5 and 6 still off
9/25/12	194	164	152	717	501026	22.4	218.1	4,862	System down; no time known
9/26/12	195	165	400	1888	493823	58.2	42.0	4,904	Assumed extracted vapors returned to pre-shut down condition
10/12/12	212	181	201	949	509630	30.2	727.5	5,632	
10/21/12	221	190	201	949	509630	30.2	269.5	5,901	System shut-down due to high vac alarm; used data from 10/12/12 for mass calculations
11/14/12	245	190	162	765	524977	25.1	0.0	5,901	System repair to well SVE-2 (cracked pipe); used PID reading from 11/29/12 as PID malfunctioned
11/29/12	260	205	162	765	524977	25.1	370.2	6,271	
11/29/12	260	205	333	1572	524977	51.5	4.5	6,276	
12/4/12	265	210	358	1690	524977	55.4	267.3	6,543	
12/19/12	280	225	115	543	524977	17.8	554.4	7,098	SVE Wells 1, 7, 8 & 9 on; all other wells valved off
12/21/12	282	227	240	1133	524977	37.1	53.2	7,151	
1/21/13	313	258	51.2	242	524977	7.9	695.8	7,847	
1/30/13	322	267	97.4	460	524977	15.1	104.5	7,951	
2/6/13	329	274	91.2	430	524977	14.1	100.0	8,051	
2/20/13	343	288	37.5	177	524977	5.8	139.4	8,191	
2/27/13	350	295	35	165	524977	5.4	39.5	8,230	
3/13/13	364	309	32	151	524977	5.0	72.4	8,302	
3/29/13	380	325	59	278	509630	8.9	111.3	8,414	All wells valved open except SVE-2
4/12/13	394	339	50	236	524977	7.7	115.5	8,529	
4/25/13	407	352	45	212	543571	7.2	96.1	8,625	

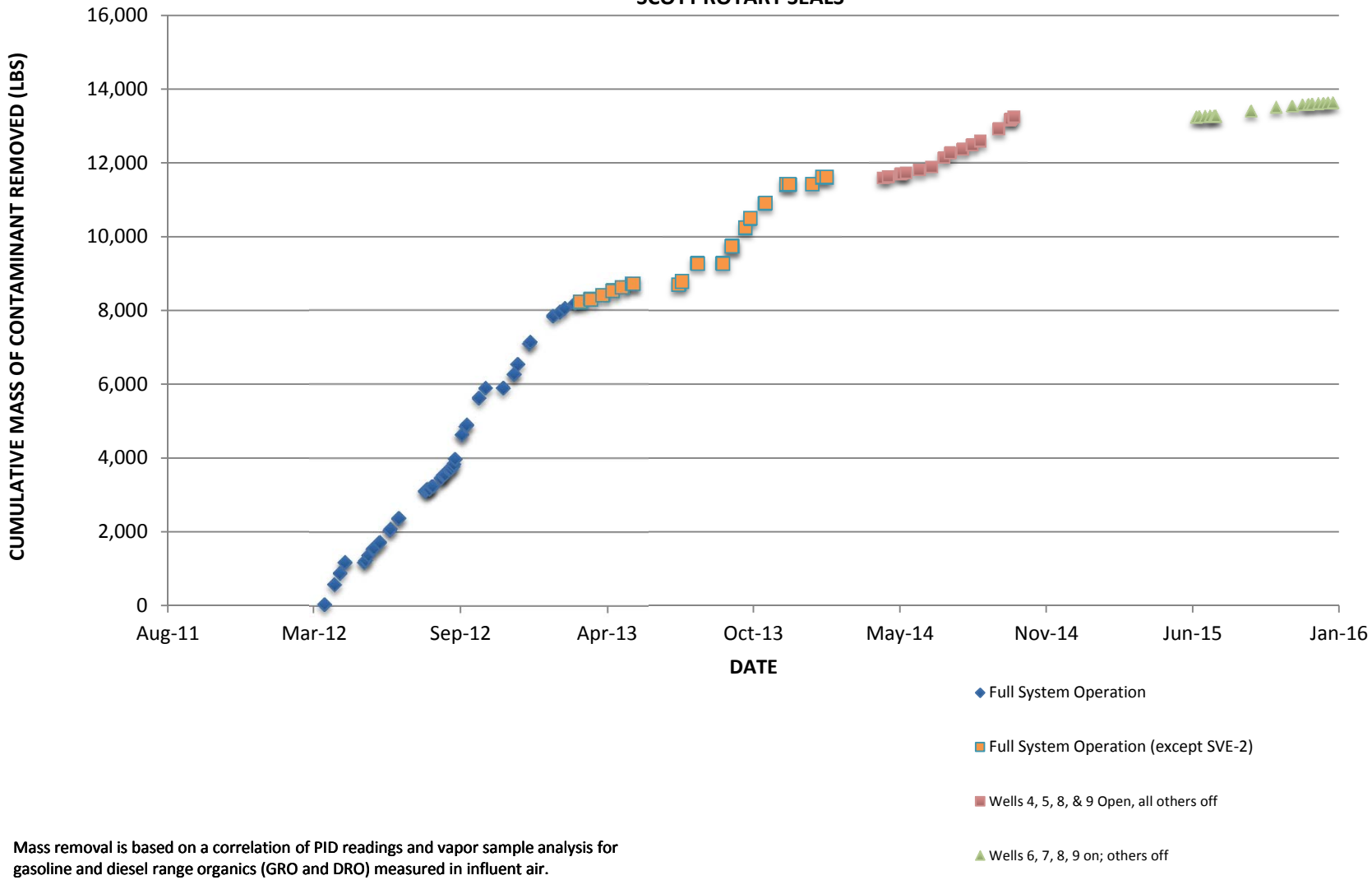
TABLE 1
Summary of SVE System VOC Mass Removal
Scott Rotary Seals Site
Olean, New York

Date	Elapsed Time (days)	SVE Operation Time (days)	Influent (Untreated) PID Reading (ppm)	Corrected Influent Concentration[1] (mg/m^3)	Volume of Air Processed (CF/day)	Rate of VOC Removal (lb/day)	VOCs Removed Since Last Monitoring Period (lb)	Total VOC Removal to Date (lb)	Notes
5/8/13	420	365	45	212	547217	7.3	95.9	8,721	Blower motor failed; tried to restart on 5/10/13; unsuccessful. Used readings from 4/25/13 for mass calculations
5/10/13	422	367		0			0.0	8,721	
7/12/13	485	367	121.1	572	460635	16.4	0.0	8,721	Ordered new blower and drive for blower. System restarted on 7/12/13. Wells 1, 3, 7, 8, 9, on.
7/17/13	490	372	150.4	710	501787	22.2	92.3	8,813	
8/7/13	511	393	162.2	766	501787	24.0	484.9	9,298	System down, assume system off from 8/7 to 9/10.
9/10/13	545	393	162.2	766	501787	24.0	0.0	9,298	Restart system
9/23/13	558	405	325.3	1535	493823	47.3	455.8	9,754	Condensate tank shut down system each month, drained condensate tank upon arrival and restarted system. Mass removal assumes 1 week of down time per month between September and January. PID readings were recorded after system restart.
9/23/13	558	405	365	1723	460635	49.6	2.2	9,756	
10/11/13	576	417	290	1369	460635	39.4	494.9	10,251	
10/18/13	583	424	327	1543	365058	35.2	257.8	10,509	
11/7/13	603	437	260	1227	354114	27.1	406.3	10,916	
12/6/13	632	459	181	854	354114	18.9	505.3	11,421	
12/10/13	636	463		0			0.0	11,421	System shut down
1/10/14	667	464	153	722	342828	15.5	6.3	11,427	System reactivated
1/24/14	681	477	74.5	352	509630	11.2	185.4	11,613	
1/30/14	687	483		0			0.0	11,613	Frozen pipes, system down from 1/31/14 to 4/18/14
4/18/14	765	483	43.9	207	331162	4.3	0.0	11,613	Restart system
4/25/14	772	490	45.45	215	331162	4.4	30.0	11,642	No PID reading made, assumed average of readings before and after
5/12/14	789	507	47	222	331162	4.6	76.1	11,719	Wells-4, 5, 8 and 9 open, Wells, 1, 2, 3, 6, & 7 closed
5/14/14	791	509	43.2	204	331162	4.2	8.5	11,727	
5/19/14	796	514	41.6	196	331162	4.1	20.8	11,748	
6/6/14	814	532	47.2	223	331162	4.6	78.4	11,826	
6/23/14	831	549	47.4	224	331162	4.6	78.5	11,905	
7/10/14	848	566	227.6	1074	375688	25.2	250.4	12,155	
7/18/14	856	574	40	189	375688	4.4	121.6	12,277	
8/4/14	873	591	66.7	315	375688	7.4	100.2	12,377	
8/17/14	886	604	89.6	423	375688	9.9	111.8	12,489	
8/28/14	897	615	89.6	423	375688	9.9	108.6	12,597	System down to power loss, restarted. Used previous PID reading for estimating mass withdrawl.
9/22/14	922	640	142	670	375688	15.7	322.3	12,920	
10/8/14	937	656	153	722	354114	16.0	246.3	13,166	
10/9/14	938	657	150	708	354114	15.7	15.8	13,182	
10/13/14	942	661	150	708	354114	15.7	62.6	13,244	System shut-down and demobilized.
5/29/15	1171	661	3	14	396108	0.4	0.0	13,244	System remobilized, temporary power restored, system activated, transfer pump malfunction. Wells 1, 2, 3, 4, 5 off, 6, 7, 8, 9 on
6/19/15	1192	661	5.4	25	396108	0.6	0.0	13,244	Transfer pump part received and installed; system restarted.
6/23/15	1196	665	10	47	396108	1.2	3.5	13,248	
7/1/15	1204	669	10	47	370410	1.1	4.6	13,252	Influent PID readings based on 6/23/15 reading
7/8/15	1210	675	10	47	370410	1.1	7.2	13,260	Power Loss; Influent PID readings based on 6/23/15 reading
7/13/15	1216	675	10	47	370410	1.1	7.2	13,260	Restart system; Influent PID readings based on 6/23/15 reading
7/15/15	1218	677	20	94	396108	2.3	3.7	13,263	
8/17/15	1250	710		0					PID not working, system running
9/2/15	1267	727	33	156	396108	3.9	151.7	13,415	
10/6/15	1301	761	17.7	84	386031	2.0	99.8	13,515	System shut down due to high water, drain condensate tank restart system
10/28/15	1323	782	9.6	45	375688	1.1	33.6	13,548	Power failure (high winds); restart system
11/11/15	1337	796	26.7	126	375688	3.0	28.1	13,577	System off, high water, system restart
11/19/15	1345	804	9.5	45	396108	1.1	16.3	13,593	System off, high water, system restart
11/24/15	1350	809	11.3	53	396108	1.3	6.1	13,599	
12/2/15	1358	817	17.6	83	375688	1.9	13.2	13,612	
12/9/15	1365	824	4.8	23	396108	0.6	8.7	13,621	
12/15/15	1371	830	13.1	62	396108	1.5	6.2	13,627	
12/22/15	1378	837	6.1	29	375688	0.7	7.7	13,635	System off, high water, system restart
12/29/15	1385	845	6.2	29	375688	0.7	4.9	13,640	System off, high water, system restart

Notes:

1. The estimated mass of contamination recovered is based on ratio of the sum of the gasoline and diesel range organics (GRO and DRO) as measured by a vapor sample collected with a summa canister to the contemporaneous PID reading. Sample from 3/16/12 had a concentration of GRO and DRO of 890 mg/cubic meter which equates to a 3.87 ratio to the PID reading; Sample from 5/22/12 had a concentration of GRO and DRO of 750 mg/cubic meter which equates to a 5.56 ratio to the PID reading; used the average of the ratios of 4.72.

Chart 1
CUMULATIVE MASS REMOVAL VERSUS TIME
SVE SYSTEM
SCOTT ROTARY SEALS



Mass removal is based on a correlation of PID readings and vapor sample analysis for gasoline and diesel range organics (GRO and DRO) measured in influent air.

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Division of Environmental Remediation, Region 9
270 Michigan Avenue, Buffalo, NY 14203-2915
P: (716) 851-7220 I F: (716) 851-7226
www.dec.ny.gov

March 7, 2016

Michael Lesakowski
Turnkey Environmental Restoration, LLC
2558 Hamburg Turnpike
Suite 300
Buffalo, NY 14218

Dear Mr. Lesakowski:

SVE Discontinuation Request
Scott Rotary Seals Site (BCP Site No.: C905036)
Olean (C) Cattaraugus County

The Department has reviewed your Discontinuance Request, submitted to the Department on January 20, 2016, and approves your proposal to terminate SVE System operation at this Site. Please submit a work plan to demobilize the SVE system and decommission wells, in accordance with *CP-43: Groundwater Monitoring Well Decommissioning Policy*, by April 5, 2016.

If you have any questions or comments, please contact me at 716-851-7220 or e-mail: David.Szymanski@dec.ny.gov

Sincerely,

David Szymanski
Environmental Program Specialist -1

DS/tm

ec: Chad Staniszewski, P.E. - NYSDEC
Raymond Laport, P.E. – Turnkey Environment Restorations, LLC
Crystal Weich – Scott Rotary Seals
Matthew Forcucci - NYSDOH

APPENDIX D

MAY 2016 GROUNDWATER MONITORING LETTER REPORT

May 18, 2016

Ms. Crystal Wiech
Scott Rotary Seals
4775 Route 16
Hinsdale, New York 14743

Re: Groundwater Monitoring Letter Report
301 Franklin Street (BCP Site No. 905036)
Olean, New York

Dear Ms. Wiech:

TurnKey Environmental Restoration, LLC (TurnKey) has completed an additional round of groundwater sampling and testing on behalf of Scott Rotary Seals (aka DST Properties NY, LLC) following the New York State Department of Environmental Conservation's (NYSDEC) request for additional analytical data at the above referenced site (BCP Site No. 905036). The NYSDEC requested additional groundwater sampling and testing data prior to their making a decision on monitoring well abandonment. This letter report summarizes the results of the groundwater sampling event that occurred on May 6, 2016.

Background

The Scott Rotary Seals Site, located in the City of Olean, and identified as SBL 94.040-1-29.02, is an approximate 2-acre parcel bounded by Franklin Street to the north, railroad tracks to the south and east, and commercial and former industrial properties to the west (see Figures 1 and 2). The Site was historically a portion of a larger petroleum refinery and bulk petroleum storage and distribution facility formerly known as Socony.

DST Properties NY, LLC entered into a Brownfield Cleanup Agreement (BCA) with the NYSDEC in 2010 to remediate and redevelop the site as a rotary union and timing valve manufacturer and commercial office space. The remedial activities began in March 2011 and were completed in July 2012. The Certificate of Completion (COC) was issued for the Site on December 11, 2012. Groundwater samples have been collected from this site since 2009

as documented in the 2015 Periodic Review Report. In addition, Light Non-Aqueous Phase Liquid (LNAPL) monitoring has been completed monthly in wells MW-2, MW-4 and MW-6; LNAPL has not been detected in over two years.

Scope of Work

A groundwater sampling event was completed on May 6, 2016 at the Scott Rotary Seals Site that included sampling and analysis of groundwater collected from wells MW-1, MW-2, MW-3, MW-4, MW-5 and MW-6 using the procedures in the approved Site Management Plan (SMP). A groundwater sample was obtained from each well and analyzed for target compound list (TCL) volatile organic compounds (VOCs), Commissioner Policy (CP51) VOCs, and Tentatively Identified Compounds (TICs) using USEPA Method 8260C. Field notes from the groundwater sampling event are contained in Attachment 1 (of the electronic version). Groundwater elevations from 2009 through 2016 are summarized in Table 1 and groundwater flow direction as interpolated from the May 6, 2016 measurements is presented on Figure 3. Table 2 summarizes the analytical results from the May 6, 2016 sampling event as well as historic groundwater monitoring events completed by TurnKey. Laboratory analytical packages for the sampling events are in Attachment 2 (of the electronic version).

Results

The groundwater elevations (Table 1) were contoured as shown on Figure 3 using the May 2016 water level data. Overall groundwater flow direction in the uppermost sand and gravel aquifer is toward the southeast consistent with the prior groundwater contour maps.

Analytical results from May 6, 2016 (Refer to Table 2) indicated that VOCs were not detected above NYSDEC Class GA groundwater quality standards (GWQS) as listed in NYSDEC Division of Water Technical and Operational Guidance Series (TOGS) (1.1.1) in any of the groundwater samples. VOC TICs were detected in the groundwater samples ranging between concentrations of 8 and 110 ug/L.

The temporal concentrations of VOC TICs are presented graphically on Figure 4. VOC TICs have decreased significantly from the pre-remediation results and continue to show a downward trend. For example, total VOC TICs were reported at a concentration of 1,100 and 26,000 ug/l from sampling in June 2009 at wells MW-3 and MW-2, respectively. The May 6, 2016 results from well MW-3, 10 ug/L, and well MW-2, 110 ug/L, continue to

show that the groundwater quality is improving. LNAPL monitoring data are presented in Table 3 and LNAPL has not been detected since 2013.

Conclusions

The results of VOC testing show that the groundwater quality does not contain any exceedances of the GWQS; VOC TICs are present at very low concentrations, have been significantly reduced post-remediation and continue to show a downward trend. LNAPL has not been detected in over two years in the monitoring wells.

Recommendations

We recommend that no further groundwater sampling or LNAPL monitoring be completed. The groundwater wells are recommended to be abandoned in accordance with NYSDECs CP-43: "Groundwater Monitoring Well Decommissioning Policy."

Please contact us if you have any questions.

Sincerely,
TurnKey Environmental Restoration, LLC

Michael A. Lesakowski
Sr. Project Manager

Cc: Chad Staniszewski, NYSDEC Region 9

TABLES

TABLE 1

SUMMARY OF GROUNDWATER ELEVATIONS
SCOTT ROTARY SEALS SITE
OLEAN, NEW YORK

Location	Date	Grade	TOR Elevation (ft)	DTP (if present) (fbTOR)	DTW (fbTOR)	Product Thickness (feet)	Groundwater Elevation (ft)	Corrected Groundwater Elevation [1] (ft)
MW-1	6/29/09	1431.89	1435.04	--	27.58	--	1407.46	1407.46
	8/19/10	1431.89	1435.04	--	28.40	--	1406.64	1406.64
	10/26/10	1431.89	1435.04	--	29.01	--	1406.03	1406.03
	3/10/11	1431.89	1435.04	--	23.71	--	1411.33	1411.33
	5/10/13	1431.89	1432.60	--	23.57	--	1409.03	1409.03
	12/6/13	1431.89	1432.60	--	25.52	--	1407.08	1407.08
	7/18/14	1431.89	1432.60	--	23.32	--	1409.28	1409.28
	8/4/14	1431.89	1432.60	--	24.11	--	1408.49	1408.49
	12/4/14	1431.89	1432.60	--	25.29	--	1407.31	1407.31
	5/6/16	1431.89	1432.60	--	23.50	--	1409.10	1409.10
MW-2	6/29/09	1425.84	1428.19	--	18.61	--	1409.58	1409.58
	8/19/10	1425.84	1428.19	--	19.51	--	1408.68	1408.68
	10/26/10	1425.84	1428.19	20.34	20.35	0.01	1407.84	1407.85
	3/10/11	1425.84	1428.19	--	15.28	--	1412.91	1412.91
	9/18/2012	1425.84	1428.19	--	18.54	--	1409.65	1409.65
	11/29/2012	1425.84	1428.19	--	17.79	--	1410.40	1410.40
	1/21/2013	1425.84	1428.19	--	--	--	NA	NA
	2/20/2013	1425.84	1428.19	--	--	--	NA	NA
	3/13/2013	1425.84	1428.19	--	--	--	NA	NA
	4/12/2013	1425.84	1428.19	--	14.96	--	1413.23	1413.23
	5/10/13	1425.84	1426.66	--	15.08	--	1411.58	1411.58
	6/5/2013	1425.84	1426.66	--	16.02	--	1410.64	1410.64
	7/12/2013	1425.84	1426.66	--	16.05	--	1410.61	1410.61
	8/7/2013	1425.84	1426.66	--	16.78	--	1409.88	1409.88
	9/10/2013	1425.84	1426.66	--	18.22	--	1408.44	1408.44
	9/23/2013	1425.84	1426.66	--	--	--	NA	NA
	10/11/2013	1425.84	1426.66	--	18.52	--	1408.14	1408.14
	10/18/2013	1425.84	1428.19	--	--	--	NA	NA
	11/7/2013	1425.84	1428.19	--	18.32	--	1409.87	1409.87
	12/6/13	1425.84	1428.19	--	17.37	--	1410.82	1410.82
	1/10/2014	1425.84	1428.19	--	15.44	--	1412.75	1412.75
	4/25/2014	1425.84	1428.19	--	14.51	--	1413.68	1413.68
	5/12/2014	1425.84	1428.19	--	14.39	--	1413.80	1413.80
	6/6/2014	1425.84	1428.19	--	14.27	--	1413.92	1413.92

TABLE 1

SUMMARY OF GROUNDWATER ELEVATIONS
SCOTT ROTARY SEALS SITE
OLEAN, NEW YORK

Location	Date	Grade	TOR Elevation (ft)	DTP (if present) (fbTOR)	DTW (fbTOR)	Product Thickness (feet)	Groundwater Elevation (ft)	Corrected Groundwater Elevation [1] (ft)
MW-2 (Cont)	7/10/2014	1425.84	1428.19	--	15.14	--	1413.05	1413.05
	7/18/14	1425.84	1428.19	--	15.01	--	1413.18	1413.18
	8/4/14	1425.84	1428.19	--	15.64	--	1412.55	1412.55
	9/22/14	1425.84	1428.19	--	15.79	--	1412.40	1412.40
	10/9/2014	1425.84	1428.19	--	15.82	--	1412.37	1412.37
	11/3/2014	1425.84	1428.19	--	17.73	--	1410.46	1410.46
	12/4/14	1425.84	1428.19	--	17.29	--	1410.90	1410.90
	5/6/16	1425.84	1428.19	--	14.98	--	1413.21	1413.21
MW-3	6/29/09	1426.24	1428.26	--	18.79	--	1409.47	1409.47
	8/19/10	1426.24	1428.26	--	19.52	--	1408.74	1408.74
	10/26/10	1426.24	1428.26	--	20.38	--	1407.88	1407.88
	3/10/11	1426.24	1428.26	--	15.31	--	1412.95	1412.95
	5/10/13	1426.24	1426.29	--	14.71	--	1411.58	1411.58
	12/6/13	1426.24	1426.29	--	17.00	--	1409.29	1409.29
	7/18/14	1426.24	1426.29	--	14.64	--	1411.65	1411.65
	8/4/14	1426.24	1426.29	--	15.27	--	1411.02	1411.02
	12/4/14	1426.24	1426.29	--	16.90	--	1409.39	1409.39
	5/6/16	1426.24	1426.29	--	14.68	--	1411.61	1411.61
MW-4	10/26/10	1425.85	1427.61	19.71	19.72	0.01	1407.89	1407.90
	3/10/11	1425.85	1427.61	--	14.69	--	1412.92	1412.92
	9/18/2012	1425.85	1427.61	--	15.99	--	1411.62	1411.62
	11/29/2012	1425.85	1427.61	--	15.22	--	1412.39	1412.39
	1/21/2013	1425.85	1427.61	--	--	--	NA	NA
	2/20/2013	1425.85	1427.61	--	--	--	NA	NA
	3/13/2013	1425.85	1427.61	--	--	--	NA	NA
	4/12/2013	1425.85	1427.61	--	12.37	--	1415.24	1415.24
	5/10/13	1425.85	1427.61	--	12.47	--	1415.14	1415.14
	6/5/2013	1425.85	1427.61	--	13.41	--	1414.20	1414.20
	7/12/2013	1425.85	1427.61	--	13.42	--	1414.19	1414.19
	8/7/2013	1425.85	1427.61	--	14.25	--	1413.36	1413.36
	9/10/2013	1425.85	1427.61	--	15.61	--	1412.00	1412.00
	9/23/2013	1425.85	1427.61	--	--	--	NA	NA
	10/11/2013	1425.85	1427.61	--	15.91	--	1411.70	1411.70
	10/18/2013	1425.85	1427.61	--	--	--	NA	NA
	11/7/2013	1425.85	1427.61	--	15.72	--	1411.89	1411.89
	12/6/13	1425.85	1427.61	--	14.79	--	1412.82	1412.82

TABLE 1

SUMMARY OF GROUNDWATER ELEVATIONS
SCOTT ROTARY SEALS SITE
OLEAN, NEW YORK

Location	Date	Grade	TOR Elevation (ft)	DTP (if present) (fbTOR)	DTW (fbTOR)	Product Thickness (feet)	Groundwater Elevation (ft)	Corrected Groundwater Elevation [1] (ft)
MW-4 (Cont)	1/10/2014	1425.85	1427.61	--	12.87	--	1414.74	1414.74
	4/25/2014	1425.85	1427.61	--	11.99	--	1415.62	1415.62
	5/12/2014	1425.85	1427.61	--	11.84	--	1415.77	1415.77
	6/6/2014	1425.85	1427.61	--	11.73	--	1415.88	1415.88
	7/10/2014	1425.85	1427.61	--	12.54	--	1415.07	1415.07
	7/18/14	1425.85	1427.61	--	12.40	--	1415.21	1415.21
	8/4/14	1425.85	1427.61	--	13.05	--	1414.56	1414.56
	9/22/14	1425.85	1427.61	--	13.21	--	1414.40	1414.40
	10/9/2014	1425.85	1427.61	--	13.26	--	1414.35	1414.35
	11/3/2014	1425.85	1427.61	--	15.24	--	1412.37	1412.37
	12/4/14	1425.85	1427.61	--	14.73	--	1412.88	1412.88
	5/6/16	1425.85	1427.61	--	12.39	--	1415.22	1415.22
MW-5	10/26/10	1430.78	1433.26	--	27.17	--	1406.09	1406.09
	3/10/11	1430.78	1433.26	--	21.91	--	1411.35	1411.35
	5/10/13	1430.78	1429.46	--	20.23	--	1409.23	1409.23
	12/6/13	1430.78	1429.46	--	22.17	--	1407.29	1407.29
	7/18/14	1430.78	1429.46	--	20.01	--	1409.45	1409.45
	8/4/14	1430.78	1429.46	--	20.82	--	1408.64	1408.64
	12/4/14	1430.78	1429.46	--	21.96	--	1407.50	1407.50
	5/6/16	1430.78	1429.46	--	20.18	--	1409.28	1409.28
MW-6	10/26/10	1430.78	1434.02	27.80	28.68	0.88	1405.34	1406.04
	3/10/11	1430.78	1434.02	--	22.42	--	1411.60	1411.60
	3/11/11	1430.78	1434.02	--	23.42	--	1410.60	1410.60
	3/12/11	1430.78	1434.02	--	24.42	--	1409.60	1409.60
	3/13/11	1430.78	1434.02	--	25.42	--	1408.60	1408.60
	3/14/11	1430.78	1434.02	--	26.42	--	1407.60	1407.60
	3/15/11	1430.78	1434.02	--	27.42	--	1406.60	1406.60
	9/18/2012	1430.78	1434.02	--	19.71	--	1414.31	1414.31
	11/29/2012	1430.78	1434.02	19.22	19.23	0.01	1414.79	1414.80
	1/21/2013	1430.78	1434.02	18.00	18.01	0.01	1416.01	1416.02
	2/20/2013	1430.78	1434.02	18.21	18.22	0.01	1415.80	1415.81
	3/13/2013	1430.78	1434.02	18.03	18.04	0.01	1415.98	1415.99
	4/12/2013	1430.78	1434.02	17.87	17.88	0.01	1416.14	1416.15
	5/10/13	1430.78	1434.02	--	17.91	--	1416.11	1416.11
	6/5/2013	1430.78	1434.02	--	18.74	--	1415.28	1415.28

TABLE 1

SUMMARY OF GROUNDWATER ELEVATIONS
SCOTT ROTARY SEALS SITE
OLEAN, NEW YORK

Location	Date	Grade	TOR Elevation (ft)	DTP (if present) (fbTOR)	DTW (fbTOR)	Product Thickness (feet)	Groundwater Elevation (ft)	Corrected Groundwater Elevation [1] (ft)
MW-6 (Cont)	7/12/2013	1430.78	1434.02	--	18.60	--	1415.42	1415.42
	8/7/2013	1430.78	1434.02	--	18.81	--	1415.21	1415.21
	9/10/2013	1430.78	1434.02	20.87	21.93	1.06	1412.09	1412.94
	9/23/2013	1430.78	1434.02	--	20.6	--	1413.42	1413.42
	10/11/2013	1430.78	1434.02	20.7	20.8	0.10	1413.22	1413.30
	10/18/2013	1430.78	1434.02	20.05	20.06	0.01	1413.96	1413.97
	11/7/2013	1430.78	1434.02	--	20.78	--	1413.24	1413.24
	12/6/2013	1430.78	1434.02	--	19.15	--	1414.87	1414.87
	12/6/13	1430.78	1434.02	--	19.18	--	1414.84	1414.84
	1/10/2014	1430.78	1434.02	--	18.11	--	1415.91	1415.91
	4/25/2014	1430.78	1434.02	--	17.45	--	1416.57	1416.57
	5/12/2014	1430.78	1434.02	--	17.31	--	1416.71	1416.71
	6/6/2014	1430.78	1434.02	--	17.14	--	1416.88	1416.88
	7/10/2014	1430.78	1434.02	--	17.98	--	1416.04	1416.04
	7/18/14	1430.78	1429.92	--	17.86	--	1412.06	1412.06
	8/4/14	1430.78	1429.92	--	18.46	--	1411.46	1411.46
	9/22/14	1430.78	1429.92	--	18.51	--	1411.41	1411.41
	10/9/2014	1430.78	1429.92	--	18.62	--	1411.30	1411.30
	11/3/2014	1430.78	1429.92	--	20.09	--	1409.83	1409.83
	12/4/14	1430.78	1429.92	--	19.41	--	1410.51	1410.51
	5/6/16	1430.78	1429.92	--	17.65	--	1412.27	1412.27
MW-7	3/10/11	1430.12	1432.97	--	21.37	--	1411.60	1411.60
	12/4/14	1430.12	1432.97	--	23.84	--	1409.13	1409.13
	5/6/16	1430.12	1432.97	--	20.68	--	1412.29	1412.29
MW-8	3/10/11	1431.08	1434.01	--	20.59	--	1413.42	1413.42
	12/4/14	1431.08	1434.01	--	23.29	--	1410.72	1410.72
	5/6/16	1431.08	1434.01	--	21.42	--	1412.59	1412.59

Notes:

1. Groundwater Elevation corrected for product level using assumed specific gravity of 0.80.
2. All elevations are feet relative to NAVD 1988.

TOR = Top of riser
DTP = Depth to product
DTW = Depth to water

TABLE 2

SUMMARY OF GROUNDWATER ANALYTICAL RESULTS

SCOTT ROTARY SEALS SITE

OLEAN, NEW YORK

Parameter [1]	GWQS[2]	Sample Locations																										
		MW-1								MW-2								MW-3										
		6/29/09	8/19/10	10/28/10	5/10/13	12/6/13	7/18/14	12/4/14	5/5/16	6/29/09	8/19/10	10/28/10	5/10/13	12/6/13	7/18/14	12/4/14	5/6/16	6/29/09	8/19/10	10/28/10	5/10/13	12/6/13	12/6/13 [5]	7/18/14	7/18/14 [5]	12/4/14	12/4/14 [5]	5/6/16	5/6/2016 [5]
Volatile Organic Compounds (VOCs) - ug/L																												
Acetone	**50**	ND	ND J	ND	14	ND	4.8 J	ND	2.9 J B	**200 DJ**	ND J	ND	16	ND	3.7 J	ND	3.7 J B	ND	ND J	ND	3.9 J	ND	ND	2.6 J	2.6 J	ND	ND	ND	ND
Benzene	**1**	ND	ND J	ND	ND	ND	ND	ND	ND	ND	ND J	ND	ND	ND	ND	0.16 J	ND	ND	ND J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Butanone (MEK)	**50**	ND	ND J	ND	9.1	ND	ND	ND	ND	ND	ND J	ND	35	ND	ND	ND	ND	ND	ND J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon disulfide	**60**	27 D	ND J	ND	ND	ND	ND	ND	ND	29 D	ND J	ND	ND	ND	ND	ND	ND	ND	ND J	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.4 J
Chloroethane	**5**	ND	ND J	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.7 J	ND	ND	ND	ND	ND	ND J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloromethane (Methyl chloride)	**5**	ND	ND J	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.6 J	ND	ND	ND	ND	ND	ND J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Cyclohexane	**--**	ND	ND J	ND	ND	ND	ND	ND	ND	ND	ND J	3 D	ND	ND	ND	ND	ND	ND	ND J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	**3**	ND	ND J	ND	ND	ND	ND	ND	ND	ND	ND J	ND	ND	ND	ND	ND	0.88 J	ND	ND J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	**5**	ND	ND J	ND	ND	0.76	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylcyclohexane	**--**	ND	ND J	ND	0.74 J	0.53 J	ND	ND	ND	5,200	260 J	200 D	13 J	ND	ND	2.8 J	5.8 J	44 D	ND J	ND	ND	0.3 J	ND	ND	ND	ND	ND	ND	ND
Naphthalene	**10**	ND	NT	NT	ND	ND	ND	ND	ND	ND	NT	ND	ND	ND	ND	ND	2.7	ND	NT	NT	ND	ND	ND	1 J	ND	ND	ND	ND	0.74 J
p/m-Xylene [4]	**5**	ND	ND J	ND	ND	2 JB	ND	ND	ND	ND	ND	ND	ND	4.2 JB	ND	ND	ND	ND	ND J	ND	ND	1.4 JB	1 JB	ND	ND	ND	ND	ND	ND
p-Cymene (p-isopropyltoluene)	**5**	ND	ND J	ND	ND	1.5 J	ND	ND	ND	ND	ND J	ND	ND	ND	ND	ND	ND	ND	ND J	ND	ND	1.6 J	1.6 J	ND	ND	ND	ND	ND	ND
1,2,4-Trimethylbenzene	**5**	ND	ND J	ND	ND	0.74 J	ND	ND	ND	ND	ND J	ND	ND	1.8 J	ND	ND	ND	ND	ND J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
sec-Butylbenzene	**5**	ND	ND J	ND	ND	ND	ND	ND	ND	**43 D**	ND J	ND	1.4 J	ND	1.7 J	1.6 J	1.4 J	ND	ND J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
tert-Butylbenzene	**5**	ND	1.7 J	1.4	0.81 J	1.5 J	0.96 J	1.1 J	1.1 J	ND	ND J	ND	1.6 J	ND	1.7 J	1.5 J	1.5 J	ND	ND J	ND	ND	1.6 J	1.6 J	ND	ND	1.5 J	1.5 J	ND	ND
Tentatively Identified Compounds (TICs)[3]	**--**	410 J	110 J	71.2 J	245.2 J	21.4 J	71 J	48 J	26 J	26000 J	800 J	461 J	192 J	74.8 J	313 J	160 J	110 J	1122 J	ND J	ND	198.8 J	31.9 J	50.6 J	82.3 J	261 J	59 J	73 J	10 J	59 J

Parameter [1]	GWQS[2]	Sample Locations																			(Off-Site)	
		MW-4						MW-5							MW-6						MW-7	MW-8
		10/28/10	5/10/13	12/6/13	7/18/14	12/4/14	5/6/16	10/28/10	5/10/13	5/10/13 [5]	12/6/13	7/18/14	12/4/14	5/6/16	10/28/10	5/10/13	12/6/13	7/18/14	12/4/14	5/6/16	1/17/11	1/17/11
Volatile Organic Compounds (VOCs) - ug/L																						
Acetone	**50**	ND	11	ND	4.7 J	ND	1.6 J B	3.2	17	12	ND	2.3 J	ND	2.4 JB	ND	5.7	3.1 J	2.4 J	ND	ND	6.3	ND
Benzene	**1**	ND	ND	ND	ND	0.16 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Butanone (MEK)	**50**	ND	32	ND	ND	ND	ND	ND	8.1	9.6	ND	ND	ND	ND	ND	11	ND	ND	3.8 J	ND	1.7	ND
Carbon disulfide	**60**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.5 J	ND	ND
Chloroethane	**5**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloromethane (Methyl chloride)	**5**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Cyclohexane	**--**	3.9 DJ	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.35 J	ND	ND
1,2-Dichlorobenzene	**3**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.1	0.8 J	ND	ND	ND	0.84 J	1.1	0.98
Ethylbenzene	**5**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylcyclohexane	**--**	390 D	3.7 J	2.8 J	ND	ND	1.5 J	ND	1.6 J	1.8 J	1.6 J	ND	ND	ND	7 D	1.3 J	0.92 J	ND	ND	0.66 J	71 D	6.2
Naphthalene	**10**	NT	ND	ND	ND	ND	1.2 J	NT	ND	ND	ND	1 J	ND	ND	NT	ND	ND	ND	ND	2.5	NT	NT
p/m-Xylene [4]	**5**	ND	ND	**5.2 JB**	ND	ND	ND	ND	ND	ND	1.2 JB	ND	ND	ND	ND	ND	1.2 JB	ND	ND	ND	ND	ND
p-Cymene (p-isopropyltoluene)	**5**	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.88 J	ND	ND	ND	ND	ND	1.4 J	ND	ND	ND	ND	ND
1,2,4-Trimethylbenzene	**5**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.79 J	0.74 J	ND	ND	ND	ND	ND
sec-Butylbenzene	**5**	3.2 DJ	0.87 J	ND	ND	1.2 J	ND	ND	ND	ND	ND	ND	ND	ND	2.2 D	1.1 J	0.79 J	0.73 J	ND	0.82 J	ND	ND
tert-Butylbenzene	**5**	ND	ND	ND	0.74 J	0.96 J	ND	4.3	ND	ND	0.88 J	ND	ND	ND	2.2	1.5 J	1.4 J	1.3 J	1.0 J	1.2 J	2.2	1.9
Tentatively Identified Compounds (TICs)[3]	**--**	645 J	278 J	43.2 J	261 J	110 J	38 J	314 J	37.9 J	47.6 J	8.8 J	20 J	20 J	7.6 J	192.3 J	201 J	51.2 J	514 J	150 J	110 J	226 J	346 J

Notes:

1. Only those parameters detected at a minimum of one sample location are presented in this table; all other compounds were reported as non-detect.
2. Values per NYSDEC Part 703 Groundwater Quality Standards (GWQS).
3. Excludes TICs identified in the laboratory blank.
4. m/p-xylene detected in trip blank for December 6, 2013 sampling event.
5. Blind Dupllicate

Definitions:

ND = Parameter not detected above laboratory detection limit. NT = Not tested
"--" = No Groundwater Standard
J = Estimated value; result is less than the sample quantitation limit but greater than zero.
B = Parameter detected in blank.
D= All compounds were identified in an analyisis at the secondary dilution factor.
B = Analyte was detected in the associated blank as well as in the sample.
NT = Not Tested

BOLD = Sample result exceeds NYSDEC Groundwater Quality Standards.

TABLE 3

Scott Rotary Seals Site (C905036)

LNAPL System Inspection Log

Date	Time	Inspector's Initials	MW-2				MW-4				MW-6				
			Product Present? (Y / N)	Product Depth (fbTOR)	Water Level (fbTOR)	Change Absorbent Sock? (Y / N)	Product Present? (Y / N)	Product Depth (fbTOR)	Water Level (fbTOR)	Change Absorbent Sock? (Y / N)	Product Present? (Y / N)	Skimmer Operational? (Y / N)	Product Depth (fbTOR)	Water Level (fbTOR)	Change Absorbent Sock? (Y / N)
9/18/2012	12:00	PWW	N	NP	18.54	N	N	NP	15.99	N	N	Y	NP	19.71	NA
11/29/2012	13:30	PWW	N	NP	17.79	N	N	NP	15.22	N	Y	Y	19.22	19.23	NA
1/21/2013	13:15	PWW	N	NP	--	N	N	NP	--	N	Y	Y	18.00	18.01	NA
2/20/2013	13:15	PWW	N	NP	--	N	N	NP	--	N	Y	Y	18.21	18.22	NA
3/13/2013	13:15	PWW	N	NP	--	N	N	NP	--	N	Y	Y	18.03	18.04	NA
4/12/2013	12:50	PWW	N	NP	14.96	N	N	NP	12.37	N	Y	Y	17.87	17.88	NA
5/10/2013	15:00	JAE	N	NP	15.08	N	N	NP	12.49	N	N	Y	NP	17.91	NA
6/5/2013	11:00	BMG	N	NP	16.02	N	N	NP	13.41	N	N	Y	NP	18.74	NA
7/12/2013	12:00	BMG	N	NP	16.05	N	N	NP	13.42	N	N	NA	NP	18.60	N [1]
8/7/2013	9:00	BMG	N	NP	16.78	N	N	NP	14.25	N	N	NA	NP	18.81	N
9/10/2013	15:20	BMG	N	NP	18.22	N	N	NP	15.61	N	Y	NA	20.87	21.93	Y
9/23/2013	9:15	BMG	N	NP	--	N	N	NP	--	N	N	NA	NP	20.6	N
10/11/2013	9:00	BMG	N	NP	18.52	N	N	NP	15.91	N	Y	NA	20.7	20.8	N
10/18/2013	9:00	BMG	N	NP	--	N	N	NP	--	N	Y	NA	20.05	20.06	N
11/7/2013	10:50	BMG	N	NP	18.32	N	N	NP	15.72	N	N	NA	NP	20.78	N
12/6/2013	9:30	BMG	N	NA	17.45	N	N	NP	14.82	N	N	NA	NP	19.15	N
1/10/2014	10:15	BMG	N	NP	15.44	N	N	NP	12.87	N	N	NA	NP	18.11	N
4/25/2014	13:00	PWW	N	NP	14.51	N	N	NP	11.99	N	N	NA	NP	17.45	N
5/12/2014	11:00	JCT	N	NP	14.39	N	N	NP	11.84	N	N	NA	NP	17.31	N
6/6/2014	12:20	PWW	N	NP	14.27	N	N	NP	11.73	N	N	NA	NP	17.14	N
7/10/2014	8:20	PWW	N	NP	15.14	N	N	NP	12.54	N	N	NA	NP	17.98	N
8/4/2014	11:30	PWW	N	NP	15.64	N	N	NP	13.05	N	N	NA	NP	18.46	N
9/22/2014	11:00	PWW	N	NP	15.79	N	N	NP	13.21	N	N	NA	NP	18.51	N
10/9/2014	12:00	PWW	N	NP	15.82	N	N	NP	13.26	N	N	NA	NP	18.62	N
11/3/2014	9:30	PWW	N	NP	17.73	N	N	NP	15.24	N	N	NA	NP	20.09	N
12/4/2014	12:30	PWW	N	NP	17.89	N	N	NP	14.73	N	N	NA	NP	19.41	N
1/6/2015	12:00	PWW	N	NP	17.34	N	N	NP	14.75	N	N	NA	NP	19.44	N
2/23/2015	13:00	PWW	SEE NOTE 2												
3/12/2015	10:30	ML	N	NP	17.71	N	N	NP	15.14	N	N	NA	NP	19.54	N
4/15/2015	13:30	ML	N	NP	14.3	N	N	NP	11.73	N	N	NA	NP	16.92	N
5/29/2015	12:00	PWW	N	NP	14.62	N	N	NP	12.01	N	N	NA	NP	17.01	N
6/19/2015	16:00	PWW	N	NP	14.3	N	N	NP	12.1	N	N	NA	NP	18.11	N
7/15/2015	12:43	ML	N	NP	15.43	N	N	NP	12.83	N	N	NA	NP	18.24	N
8/17/2018	12:57	ML	N	NP	16.73	N	N	NP	14.11	N	N	NA	NP	14.8 ?	N
9/2/2015	13:30	PWW	N	NP	17.53	N	N	NP	15.04	N	N	NA	NP	19.45	N
10/6/2015	13:40	ML	N	NP	17.79	N	N	NP	15.22	N	N	NA	NP	19.14	N
11/11/2015	9:15	ML	N	NP	17.28	N	N	NP	14.71	N	N	NA	NP	19.03	N
12/2/2015	11:20	ML	N	NP	16.72	N	N	NP	14.19	N	N	NA	NP	18.98	N
1/5/2016	10:15	ML	N	NP	15.12	N	FROZEN				N	NA	NP	17.48	N
2/2/2016	9:36	ML	N	NP	15.57	N	N	NP	12.99	N	N	NA	NP	18.2	N
3/1/2016	9:47	ML	N	NP	14.87	N	N	NP	12.29	N	N	NA	NP	17.22	N
4/14/2016	9:38	ML	N	NP	15.13	N	N	NP	12.54	N	N	NA	NP	17.72	N
5/6/2016	11:54	ML	N	NP	14.98	N	N	NP	12.39	N	N	NA	NP	17.65	N

NP= Not present

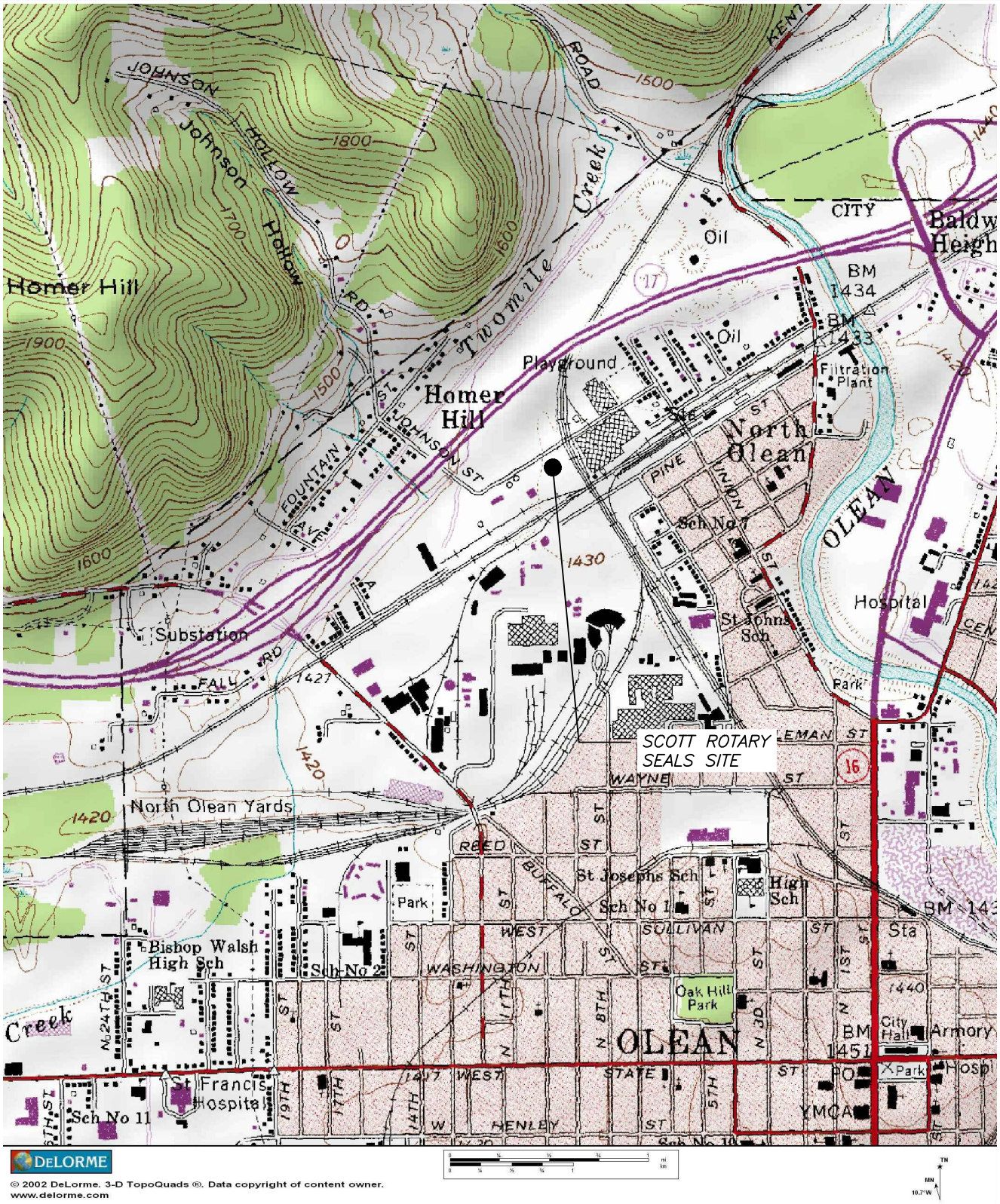
Notes:

Date	
7/12/2013	1) Replace oil skimmer at MW-6 with absorbent sock.
2/23/2015	2) Wells inaccessible due to ice.

FIGURES

F:\CAD\TurnKey\Scott Rotary Seals\2015 Groundwater Monitoring Report\Figure 1; Site Location and Vicinity.dwg

FIGURE 1



TurnKey Environmental Restoration, LLC
2558 HAMBURG TURNPIKE
SUITE 300
BUFFALO, NY 14218
(716) 856-0599

PROJECT NO.: 0189-015-001

DATE: MAY 2016

DRAFTED BY: RFL

SITE VICINITY AND LOCATION MAP

GROUNDWATER MONITORING REPORT

SCOTT ROTARY SEALS SITE

OLEAN, NEW YORK

PREPARED FOR

DST PROPERTIES NY, LLC

F:\CAD\TurnKey\Scott Rotary Seals\NYSDEC Correspondence\GW Monitoring Report\Figure 2; Site Plan Post-Development Aerial.dwg

Not to Scale

Property Boundary (Approximate)

TURNKEY ENVIRONMENTAL RESTORATION, LLC
2558 HAMBURG TURNPIKE
SUITE 300
BUFFALO, NY 14218
(716) 856-0635

PROJECT NO.: 0189-015-001

DATE: MAY 2016

DRAFTED BY: RFL

SITE PLAN

GROUNDWATER MONITORING REPORT

SCOTT ROTARY SEALS SITE

OLEAN, NEW YORK

PREPARED FOR

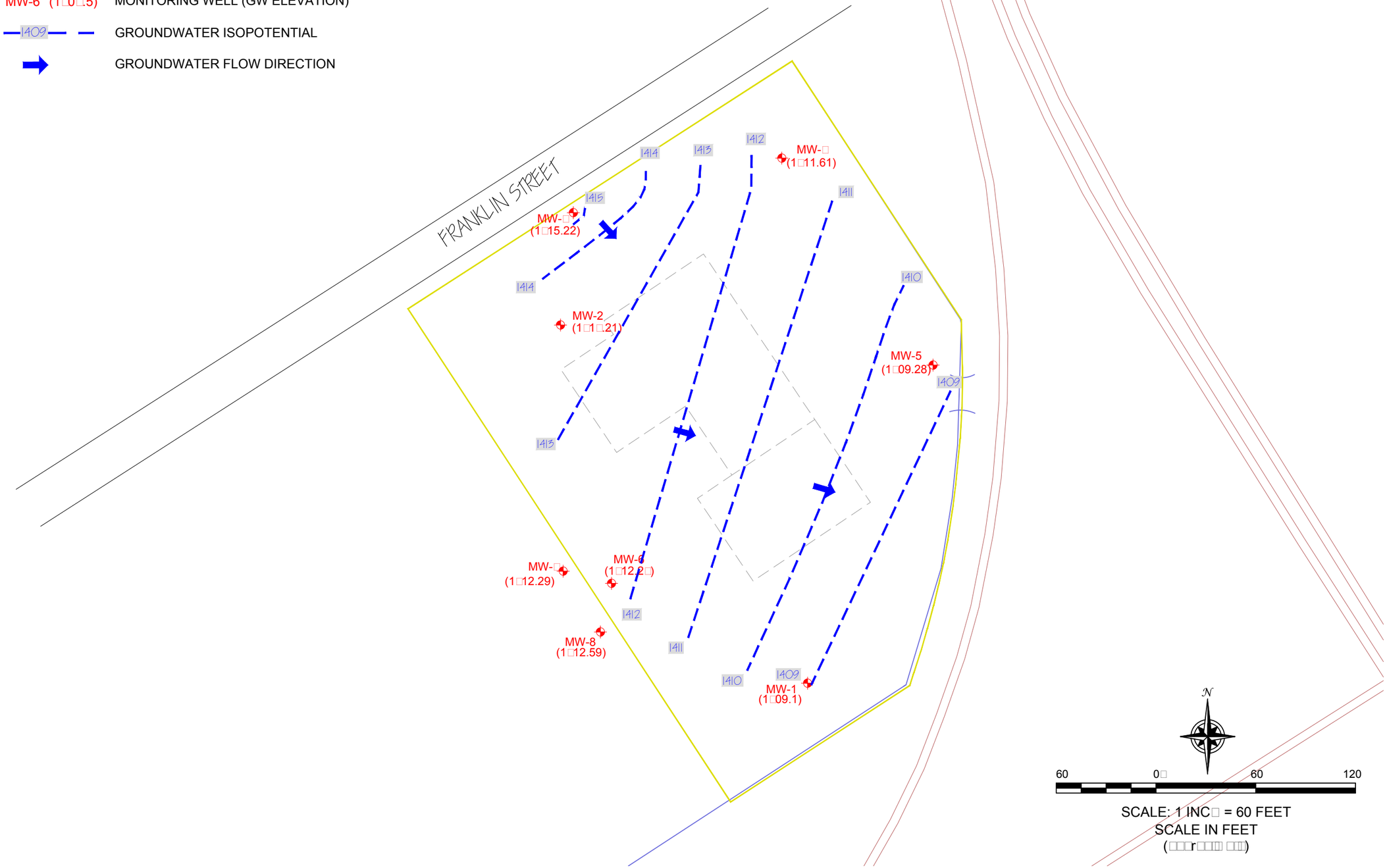
DST PROPERTIES NY, LLC

FIGURE 2

F:\CAD\TurnKey\Scott Rotary Seals\NYSDEC Correspondence\GW Monitoring Report\Figure 3; Groundwater2.dwg

LEGEND:

PROPERTY BOUNDARY
FENCE
RAILROAD TRACKS (APPRO□IMATE)
MW-6 (1□0□5) MONITORING WELL (GW ELEVATION)
1409 GROUNDWATER ISOPOTENTIAL
GROUNDWATER FLOW DIRECTION



DATE: DECEMBER 2014
DRAFTED BY: RFL

2558 HAMBURG TURNPIKE
SUITE 300
BUFFALO, NY 14218
(716) 856-0635

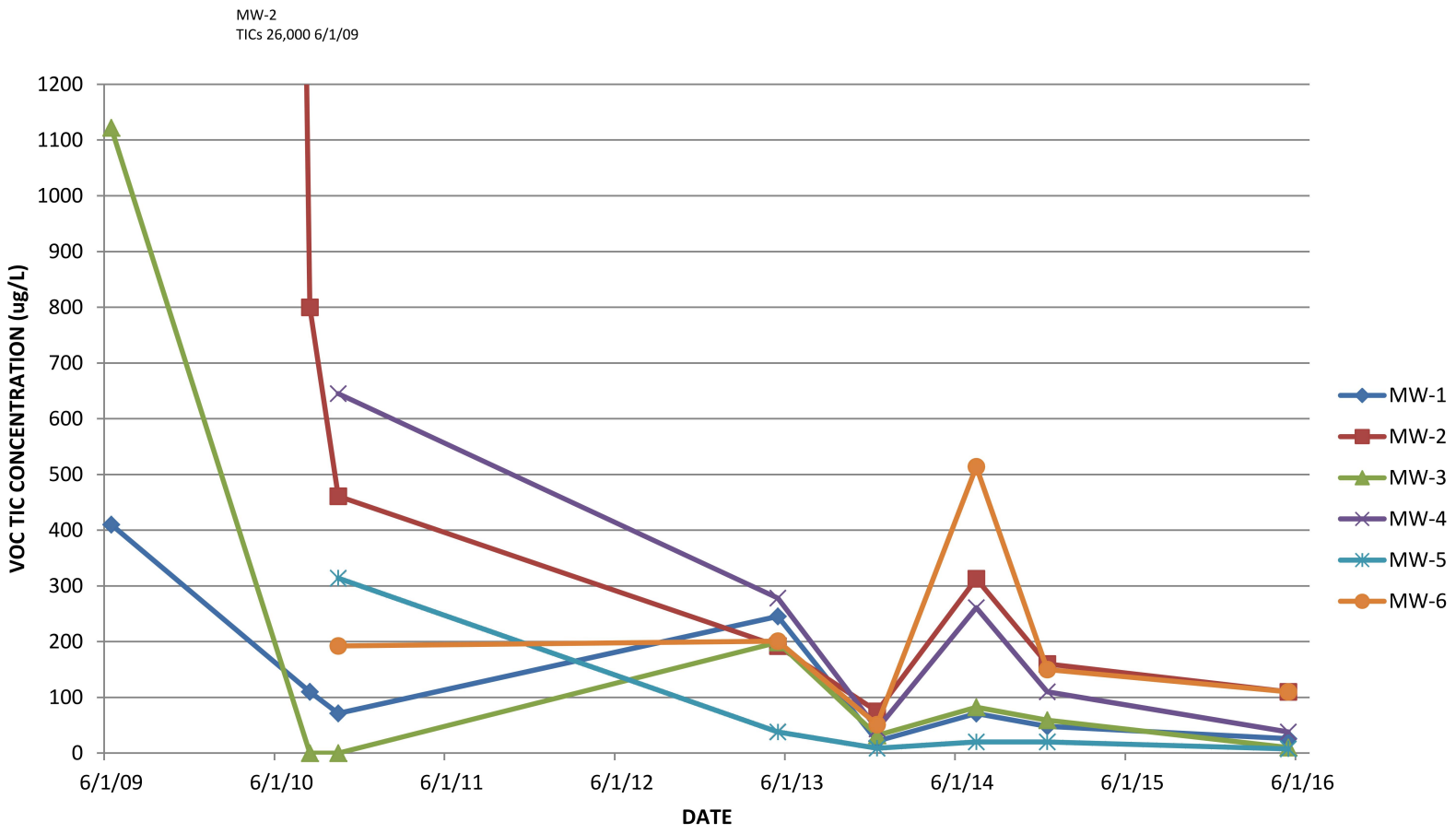
JOB NO.: 0189-015-105

GROUNDWATER ELEVATION 5/6/16

GROUNDWATER MONITORING REPORT
SCOTT ROTARY SEALS SITE
OLEAN, NEW YORK
PREPARED FOR
DST PROPERTIES NY, LLC

FIGURE 3

F:\CAD\TurnKey\Scott Rotary Seals\NYSDEC Correspondence\GW Monitoring Report\Figure 4; VOC TIC.dwg



NOTES: VOC = VOLATILE ORGANIC COMPOUND; TIC = TENTATIVELY IDENTIFIED COMPOUND. CONCENTRATION IN MICROGRAMS PER LITER (ug/L).

TURNKEY ENVIRONMENTAL RESTORATION, LLC

2558 HAMBURG TURNPIKE
SUITE 300
BUFFALO, NY 14218
(716) 856-0635

PROJECT NO.: 0189-015-001

DATE: MAY 2016

DRAFTED BY: RFL

GROUNDWATER SUMMARY OF VOC TICs

GROUNDWATER MONITORING REPORT

SCOTT ROTARY SEALS SITE

OLEAN, NEW YORK

PREPARED FOR

DST PROPERTIES NY, LLC

FIGURE 4

ATTACHMENT 1

GROUNDWATER SAMPLING FIELD NOTES

GROUNDWATER FIELD FORM

Project Name: Scott Rotary Seal
Location: 301 Franklin St. Olean NY
Project No.: T0189-016-001
Date: May 6, 2016
Field Team: PLW / MJL

Well No. MW-1			Diameter (inches): 2"			Sample Date / Time: 5/6/16 11:50			
Product Depth (fbTOR): —			Water Column (ft): 7.16			DTW when sampled: 23.55			
DTW (static) (fbTOR): 23.05			One Well Volume (gal): 1.17			Purpose: ☐ Development ☐ Sample ☒ Purge & Sample			
Total Depth (fbTOR): 30.66			Total Volume Purged (gal): .75			Purge Method: low flow			
Time	Water Level (fbTOR)	Acc. Volume (gallons)	pH (units)	Temp. (deg. C)	SC (uS)	Turbidity (NTU)	DO (mg/L)	ORP (mV)	Appearance & Odor
11:34	0 Initial	7.1	6.57	13.7	2646	29.2	1.69	-44	Slight sheen / odor
11:40	1 23.55	7.25	6.73	13.9	2596	16.9	1.08	-71	clear / slight sheen / odor
11:42	2 23.55	7.50	6.78	13.8	2606	13.7	1.20	-72	" "
11:46	3 23.55	7.75	6.80	13.8	2607	14.0	1.12	-84	" "
	4								
	5								
	6								
	7								
	8								
	9								
	10								
Sample Information:									
11:50	S1 23.55	.75	6.33	14.0	2589	11.9	1.11	-85	clear / No odor
—	S2 —	—	—	—	—	—	—	—	—

Well No. MW-6			Diameter (inches): 2"			Sample Date / Time: 5/6/16 12:10			
Product Depth (fbTOR): —			Water Column (ft): 9.37			DTW when sampled: 17.56			
DTW (static) (fbTOR): 17.65			One Well Volume (gal): 1.53			Purpose: ☐ Development ☐ Sample ☒ Purge & Sample			
Total Depth (fbTOR): 26.92			Total Volume Purged (gal): 1.25			Purge Method: low flow			
Time	Water Level (fbTOR)	Acc. Volume (gallons)	pH (units)	Temp. (deg. C)	SC (uS)	Turbidity (NTU)	DO (mg/L)	ORP (mV)	Appearance & Odor
12:04	0 Initial	2.1	7.18	14.8	1832	20.7	1.10	-189	clear / Petro-like odor, sheen
12:06	1 17.56	.25	7.10	13.7	1819	14.8	.97	-222	"
12:07	2 17.56	.50	7.01	13.4	1929	10.0	.90	-244	" "
12:08	3 17.56	.75	7.00	13.7	1926	7.41	.92	-254	clear / sheen / slight odor
12:09	4 17.56	1.0	6.97	13.5	1832	5.4	1.27	-260	clear / no odor
	5								
	6								
	7								
	8								
	9								
	10								
Sample Information:									
12:10	S1 17.56	1.25	6.97	12.9	1841	3.68	1.15	-260	clear / No odor
—	S2 —	—	—	—	—	—	—	—	—

REMARKS: MW-1 MS/MSD collected

Note: All measurements are in feet, distance from top of riser.

Volume Calculation

Diam.	Vol. (g/ft)
1"	0.041
2"	0.163
4"	0.653
6"	1.469

Stabilization Criteria

Parameter	Criteria
pH	± 0.1 unit
SC	± 3%
Turbidity	± 10%
DO	± 0.3 mg/L
ORP	± 10 mV

PREPARED BY:

GROUNDWATER FIELD FORM

Project Name: Scott Rotary Seal Date: May 6, 2016
Location: 301 Franklin St. Olean NY Project No.: T0189-016-001 Field Team: PWW / MJL

Well No. MW-3			Diameter (inches): 2"			Sample Date / Time: 5/6/16 10:57			
Product Depth (fbTOR): —			Water Column (ft): 12.74			DTW when sampled: 14.69			
DTW (static) (fbTOR): 14.68			One Well Volume (gal): 2.08			Purpose: ☐ Development ☐ Sample ☒ Purge & Sample			
Total Depth (fbTOR): 27.42			Total Volume Purged (gal): 1.0			Purge Method: low-flow			
Time	Water Level (fbTOR)	Acc. Volume (gallons)	pH (units)	Temp. (deg. C)	SC (uS)	Turbidity (NTU)	DO (mg/L)	ORP (mV)	Appearance & Odor
10:48	0 Initial	1.10	6.28	13.3	1695	377	2.76	174	Slight Turbidity, slight product sheen, no odor
10:50	1 14.69	.25	6.91	12.5	1649	95.6	2.51	162	clear, slight product sheen, no odor
10:52	2 14.69	7.50	6.95	12.3	1622	67.0	2.44	157	clear, slight product sheen, no odor
10:54	3 14.69	.75	7.01	12.0	1632	50.9	2.26	145	clear, slight product sheen, no odor
10:55	4 14.69	1.0	7.01	11.5	1642	38.0	2.16	155	clear, slight sheen, no odor
	5								
	6								
	7								
	8								
	9								
	10								
Sample Information:									
10:57	S1 14.69	1.0	7.01	12.4	1610	35.5	1.92	131	clear, no odor, slight sheen
—	S2 —	—	—	—	—	—	—	—	—

Well No. MW-5			Diameter (inches): 2"			Sample Date / Time: 5/6/16 11:22			
Product Depth (fbTOR): —			Water Column (ft): 7.96			DTW when sampled: 20.25			
DTW (static) (fbTOR): 20.18			One Well Volume (gal): 1.30			Purpose: ☐ Development ☐ Sample ☒ Purge & Sample			
Total Depth (fbTOR): 28.14			Total Volume Purged (gal): .75			Purge Method: low-flow			
Time	Water Level (fbTOR)	Acc. Volume (gallons)	pH (units)	Temp. (deg. C)	SC (uS)	Turbidity (NTU)	DO (mg/L)	ORP (mV)	Appearance & Odor
11:15	0 Initial	2.1	7.02	12.7	1761	144	5.99	147	Slight Turbidity, no odor
11:17	1 20.25	2.25	7.04	12.1	1753	96.3	6.25	135	clear, no odor
11:19	2 20.26	.25	6.99	12.1	1755	54.1	5.76	149	" "
11:21	3 20.25	7.5	7.01	12.1	1747	34.0	5.15	149	" "
	4								
	5								
	6								
	7								
	8								
	9								
	10								
Sample Information:									
11:22	S1 20.26	.75	7.02	11.9	1745	24.5		143	clear, no odor
—	S2 —	—	—	—	—	—	—	—	—

REMARKS: Blind Dup collected on MW-3

Note: All measurements are in feet, distance from top of riser.

Volume Calculation

Diam.	Vol. (g/ft)
1"	0.041
2"	0.163
4"	0.653
6"	1.469

Stabilization Criteria

Parameter	Criteria
pH	± 0.1 unit
SC	± 3%
Turbidity	± 10%
DO	± 0.3 mg/L
ORP	± 10 mV

PREPARED BY:

GROUNDWATER FIELD FORM

Project Name: Scott Rotary Seal Date: May 6, 2016
Location: 30 Franklin St. Olean, NY Project No.: T0189-016-001 Field Team: PWW / MJL

Well No. MW-2			Diameter (inches): 2"			Sample Date / Time: 5/6/16 12:53			
Product Depth (fbTOR):			Water Column (ft): 13.02			DTW when sampled: 15.10			
DTW (static) (fbTOR): 14.98			One Well Volume (gal): 2.12			Purpose: ☐ Development ☐ Sample ☒ Purge & Sample			
Total Depth (fbTOR): 28.00			Total Volume Purged (gal): 1.25			Purge Method: Low Flow			
Time	Water Level (fbTOR)	Acc. Volume (gallons)	pH (units)	Temp. (deg. C)	SC (uS)	Turbidity (NTU)	DO (mg/L)	ORP (mV)	Appearance & Odor
12:45	0 Initial	0.1	6.79	15.7	1492	129	—	-197	slight odor, sheen, Turbid
12:47	1 15.10	0.25	6.75	14.5	1469	226	—	-192	Turbid Sheen slight odor
12:48	2 15.10	0.5	6.84	14.6	1456	162	—	-191	" "
12:50	3 15.10	0.75	6.84	14.5	1471	89.2	.80	-196	" "
12:52	4 15.10	1.0	6.81	14.4	1471	59.8	.80	-193	Slight sheen slight odor clear
	5								
	6								
	7								
	8								
	9								
	10								
Sample Information:									
12:53	S1 15.10	1.25	6.79	14.1	1478	41.3	.95	-188	clear slight odor
—	S2 —	—	—	—	—	—	—	—	

Well No. MW-4			Diameter (inches): 2"			Sample Date / Time: 5/6/16			
Product Depth (fbTOR):			Water Column (ft): 12.47			DTW when sampled: 12.58			
DTW (static) (fbTOR): 12.39			One Well Volume (gal): 2.03			Purpose: ☐ Development ☐ Sample ☒ Purge & Sample			
Total Depth (fbTOR): 24.86			Total Volume Purged (gal): 1.25			Purge Method: Low Flow			
Time	Water Level (fbTOR)	Acc. Volume (gallons)	pH (units)	Temp. (deg. C)	SC (uS)	Turbidity (NTU)	DO (mg/L)	ORP (mV)	Appearance & Odor
12:29	0 Initial	7.1	7.07	15.1	1692	>1,000	.73	-193	Turbid, slight odor, sheen
12:30	1 12.58	7.25	6.72	13.7	1757	204	.90	-189	" "
12:31	2 12.58	7.5	6.61	13.3	1890	90.5	1.09	-199	slight Turbid, slight odor
12:32	3 12.58	7.75	6.61	13.2	1979	76.2	1.09	-197	" "
12:34	4 12.58	7.1	6.65	13.1	2033	60.9	1.06	-199	" "
	5								
	6								
	7								
	8								
	9								
	10								
Sample Information:									
12:35	S1 12.58	1.25	6.64	13.1	2029	50.0	.95	-189	clear, no odor
—	S2 —	—	—	—	—	—	—	—	

REMARKS: MW-8 WL → 21.42
MW-7 WL → 20.68
No DO due to heavy sheen on MW-2

Note: All measurements are in feet, distance from top of riser.

Volume Calculation

Diam.	Vol. (g/ft)
1"	0.041
2"	0.163
4"	0.653
6"	1.469

Stabilization Criteria

Parameter	Criteria
pH	± 0.1 unit
SC	± 3%
Turbidity	± 10%
DO	± 0.3 mg/L
ORP	± 10 mV

PREPARED BY:

TurnKey Environmental Restoration, LLC

EQUIPMENT CALIBRATION LOG

PROJECT INFORMATION:

Project Name: Scott Rotary

Project No.: T0199-01-V101

Client: DST Properties

Date: May 6th 2016

Instrument Source: ☐ BM ☐ Rental

METER TYPE	UNITS	TIME	MAKE/MODEL	SERIAL NUMBER	CAL. BY	STANDARD	POST CAL. READING	SETTINGS
☒ pH meter	units	800	Myron L Company Ultra Meter 6P	6213516 ☒ 6212375 ☐ 6223973 ☐	PWW	4.00 7.00 10.01	3.99 7.0 10.0	4.0 7.0 10.0 } OK
☒ Turbidity meter	NTU	805	Hach 2100P or 2100Q Turbidimeter	06120C020523 ☒ 07110C026405 ☐ 13120C030432 ☐	PWW	< 0.4 or 10 for 2100 Q 20 100 800	.3 21 101 811	0.4 20 100 800 } OK
☐ Sp. Cond. meter	uS mS	810	Myron L Company Ultra Meter 6P	6213516 ☒ 6212375 ☐ 6223973 ☐	PWW	1413 mS @ 25 °C	1413	1413 ok
☐ PID	ppm		MinRAE 2000			open air zero ____ ppm Iso. Gas		MIBK response factor = 1.0
☒ Dissolved Oxygen	ppm	815	HACH Model HQ30d	0807000023281 ☐ 10050041867 ☒ 140200100319 ☐	PWW	100% Satuartion	100% 96.3% Slope	100% ok
☐ Particulate meter	mg/m³					zero air		
☐ Oxygen	%					open air		
☐ Hydrogen sulfide	ppm					open air		
☐ Carbon monoxide	ppm					open air		
☐ LEL	%					open air		
☐ Radiation Meter	uR/H					background area		

ADDITIONAL REMARKS:

PREPARED BY: [signature] **DATE:** 5/6/16

ATTACHMENT 2

ANALYTICAL DATA

ANALYTICAL REPORT

Lab Number:	L1613787
Client:	Turnkey Environmental Restoration, LLC 2558 Hamburg Turnpike Suite 300 Buffalo, NY 14218
ATTN:	Paul Werthman
Phone:	(716) 856-0599
Project Name:	DST PROPERTIES
Project Number:	T0189-016-001
Report Date:	05/13/16

Certifications & Approvals: MA (M-MA086), NY (11148), CT (PH-0574), NH (2003), NJ NELAP (MA935), RI (LAO00065), ME (MA00086), PA (68-03671), VA (460195), MD (348), IL (200077), NC (666), TX (T104704476), DOD (L2217), USDA (Permit #P-330-11-00240).

Eight Walkup Drive, Westborough, MA 01581-1019
508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com

Project Name: DST PROPERTIES
Project Number: T0189-016-001

Lab Number: L1613787
Report Date: 05/13/16

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L1613787-01	MW-1	WATER	301 FRANKLIN STREET OLEAN, NY	05/06/16 11:50	05/06/16
L1613787-02	MW-2	WATER	301 FRANKLIN STREET OLEAN, NY	05/06/16 12:53	05/06/16
L1613787-03	MW-3	WATER	301 FRANKLIN STREET OLEAN, NY	05/06/16 10:57	05/06/16
L1613787-04	MW-4	WATER	301 FRANKLIN STREET OLEAN, NY	05/06/16 12:35	05/06/16
L1613787-05	MW-5	WATER	301 FRANKLIN STREET OLEAN, NY	05/06/16 11:22	05/06/16
L1613787-06	MW-6	WATER	301 FRANKLIN STREET OLEAN, NY	05/06/16 12:10	05/06/16
L1613787-07	DUP	WATER	301 FRANKLIN STREET OLEAN, NY	05/06/16 08:00	05/06/16
L1613787-08	TRIP BLANK	WATER	301 FRANKLIN STREET OLEAN, NY	05/06/16 09:00	05/06/16

Project Name:	DST PROPERTIES	**Lab Number:**	L1613787
Project Number:	T0189-016-001	**Report Date:**	05/13/16

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. All specific QC information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications. Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances the specific failure is not narrated but noted in the associated QC table. The information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications.

Please see the associated ADEx data file for a comparison of laboratory reporting limits that were achieved with the regulatory Numerical Standards requested on the Chain of Custody.

HOLD POLICY

For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Client Service Representative and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Client Services at 800-624-9220 with any questions.

Project Name:	DST PROPERTIES	**Lab Number:**	L1613787
Project Number:	T0189-016-001	**Report Date:**	05/13/16

Case Narrative (continued)

Report Submission

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature: Melissa Cripps

Title: Technical Director/Representative Date: 05/13/16

ORGANICS

VOLATILES

Project Name: DST PROPERTIES **Lab Number:** L1613787

Project Number: T0189-016-001 **Report Date:** 05/13/16

SAMPLE RESULTS

Lab ID: L1613787-01
Client ID: MW-1
Sample Location: 301 FRANKLIN STREET OLEAN, NY
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 05/12/16 15:46
Analyst: PD

Date Collected: 05/06/16 11:50
Date Received: 05/06/16
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.13	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.14	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.14	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1

Project Name: DST PROPERTIES **Lab Number:** L1613787

Project Number: T0189-016-001 **Report Date:** 05/13/16

SAMPLE RESULTS

Lab ID: L1613787-01 Date Collected: 05/06/16 11:50

Client ID: MW-1 Date Received: 05/06/16

Sample Location: 301 FRANKLIN STREET OLEAN, NY Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
Xylenes, Total	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	2.9	J	ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
tert-Butylbenzene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
Naphthalene	ND		ug/l	2.5	0.70	1
n-Propylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Cyclohexane	ND		ug/l	10	0.27	1
1,4-Dioxane	ND		ug/l	250	41.	1
Freon-113	ND		ug/l	2.5	0.70	1
Methyl cyclohexane	ND		ug/l	10	0.40	1

Project Name: DST PROPERTIES **Lab Number:** L1613787

Project Number: T0189-016-001 **Report Date:** 05/13/16

SAMPLE RESULTS

Lab ID: L1613787-01 Date Collected: 05/06/16 11:50

Client ID: MW-1 Date Received: 05/06/16

Sample Location: 301 FRANKLIN STREET OLEAN, NY Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Tentatively Identified Compounds						
Total TIC Compounds	26	J	ug/l			1
Unknown	7.2	J	ug/l			1
Butane, 2,2-dimethyl-	1.6	NJ	ug/l			1
Butane, 2,3-Dimethyl-	5.6	NJ	ug/l			1
Unknown Aromatic	1.3	J	ug/l			1
Unknown	1.3	J	ug/l			1
Unknown	2.5	J	ug/l			1
Unknown Aromatic	1.3	J	ug/l			1
Unknown Aromatic	2.0	J	ug/l			1
Unknown Aromatic	1.5	J	ug/l			1
Unknown Benzene	1.7	J	ug/l			1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	99		70-130
Toluene-d8	96		70-130
4-Bromofluorobenzene	101		70-130
Dibromofluoromethane	98		70-130

Project Name: DST PROPERTIES
Project Number: T0189-016-001
Lab Number: L1613787
Report Date: 05/13/16

SAMPLE RESULTS

Lab ID: L1613787-02
Client ID: MW-2
Sample Location: 301 FRANKLIN STREET OLEAN, NY
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 05/12/16 18:56
Analyst: PK

Date Collected: 05/06/16 12:53
Date Received: 05/06/16
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.13	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.14	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.14	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	0.88	J	ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1

Project Name: DST PROPERTIES **Lab Number:** L1613787

Project Number: T0189-016-001 **Report Date:** 05/13/16

SAMPLE RESULTS

Lab ID: L1613787-02 Date Collected: 05/06/16 12:53

Client ID: MW-2 Date Received: 05/06/16

Sample Location: 301 FRANKLIN STREET OLEAN, NY Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
Xylenes, Total	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	3.7	J	ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	1.4	J	ug/l	2.5	0.70	1
tert-Butylbenzene	1.5	J	ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
Naphthalene	2.7		ug/l	2.5	0.70	1
n-Propylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Cyclohexane	ND		ug/l	10	0.27	1
1,4-Dioxane	ND		ug/l	250	41.	1
Freon-113	ND		ug/l	2.5	0.70	1
Methyl cyclohexane	5.8	J	ug/l	10	0.40	1

Project Name: DST PROPERTIES **Lab Number:** L1613787

Project Number: T0189-016-001 **Report Date:** 05/13/16

SAMPLE RESULTS

Lab ID: L1613787-02 Date Collected: 05/06/16 12:53

Client ID: MW-2 Date Received: 05/06/16

Sample Location: 301 FRANKLIN STREET OLEAN, NY Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Tentatively Identified Compounds						
Total TIC Compounds	110	J	ug/l			1
Butane, 2,3-Dimethyl-	11	NJ	ug/l			1
Unknown Cycloalkane	16	J	ug/l			1
Unknown Cycloalkane	14	J	ug/l			1
Unknown Cycloalkane	9.0	J	ug/l			1
Unknown Cycloalkane	8.6	J	ug/l			1
Unknown Cycloalkane	7.1	J	ug/l			1
Unknown	15	J	ug/l			1
Unknown Aromatic	10	J	ug/l			1
Unknown	10	J	ug/l			1
Unknown Naphthalene	8.5	J	ug/l			1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	94		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	105		70-130
Dibromofluoromethane	96		70-130

Project Name: DST PROPERTIES **Lab Number:** L1613787

Project Number: T0189-016-001 **Report Date:** 05/13/16

SAMPLE RESULTS

Lab ID: L1613787-03
Client ID: MW-3
Sample Location: 301 FRANKLIN STREET OLEAN, NY
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 05/12/16 19:19
Analyst: PK

Date Collected: 05/06/16 10:57
Date Received: 05/06/16
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.13	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.14	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.14	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1

Project Name: DST PROPERTIES **Lab Number:** L1613787

Project Number: T0189-016-001 **Report Date:** 05/13/16

SAMPLE RESULTS

Lab ID: L1613787-03 Date Collected: 05/06/16 10:57

Client ID: MW-3 Date Received: 05/06/16

Sample Location: 301 FRANKLIN STREET OLEAN, NY Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
Xylenes, Total	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
tert-Butylbenzene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
Naphthalene	ND		ug/l	2.5	0.70	1
n-Propylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Cyclohexane	ND		ug/l	10	0.27	1
1,4-Dioxane	ND		ug/l	250	41.	1
Freon-113	ND		ug/l	2.5	0.70	1
Methyl cyclohexane	ND		ug/l	10	0.40	1

Project Name: DST PROPERTIES **Lab Number:** L1613787

Project Number: T0189-016-001 **Report Date:** 05/13/16

SAMPLE RESULTS

Lab ID: L1613787-03 Date Collected: 05/06/16 10:57

Client ID: MW-3 Date Received: 05/06/16

Sample Location: 301 FRANKLIN STREET OLEAN, NY Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Tentatively Identified Compounds						
Total TIC Compounds	10	J	ug/l			1
Unknown	8.6	J	ug/l			1
Unknown Aromatic	1.4	J	ug/l			1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	93		70-130
Toluene-d8	94		70-130
4-Bromofluorobenzene	99		70-130
Dibromofluoromethane	98		70-130

Project Name: DST PROPERTIES **Lab Number:** L1613787

Project Number: T0189-016-001 **Report Date:** 05/13/16

SAMPLE RESULTS

Lab ID: L1613787-04
Client ID: MW-4
Sample Location: 301 FRANKLIN STREET OLEAN, NY
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 05/12/16 19:43
Analyst: PK

Date Collected: 05/06/16 12:35
Date Received: 05/06/16
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.13	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.14	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.14	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1

Project Name: DST PROPERTIES **Lab Number:** L1613787

Project Number: T0189-016-001 **Report Date:** 05/13/16

SAMPLE RESULTS

Lab ID: L1613787-04 Date Collected: 05/06/16 12:35

Client ID: MW-4 Date Received: 05/06/16

Sample Location: 301 FRANKLIN STREET OLEAN, NY Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
Xylenes, Total	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	1.6	J	ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
tert-Butylbenzene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
Naphthalene	1.2	J	ug/l	2.5	0.70	1
n-Propylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Cyclohexane	ND		ug/l	10	0.27	1
1,4-Dioxane	ND		ug/l	250	41.	1
Freon-113	ND		ug/l	2.5	0.70	1
Methyl cyclohexane	1.5	J	ug/l	10	0.40	1

Project Name: DST PROPERTIES **Lab Number:** L1613787

Project Number: T0189-016-001 **Report Date:** 05/13/16

SAMPLE RESULTS

Lab ID: L1613787-04 Date Collected: 05/06/16 12:35

Client ID: MW-4 Date Received: 05/06/16

Sample Location: 301 FRANKLIN STREET OLEAN, NY Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Tentatively Identified Compounds						
Total TIC Compounds	38	J	ug/l			1
Sulfur Dioxide	8.3	NJ	ug/l			1
Butane, 2,3-Dimethyl-	3.5	NJ	ug/l			1
Pentane, 2,3-dimethyl-	3.0	NJ	ug/l			1
Unknown	2.7	J	ug/l			1
Unknown Cycloalkane	2.7	J	ug/l			1
Unknown Cycloalkane	3.6	J	ug/l			1
Unknown Cycloalkane	3.2	J	ug/l			1
Unknown Benzene	3.5	J	ug/l			1
Unknown Aromatic	5.0	J	ug/l			1
Unknown Naphthalene	2.6	J	ug/l			1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	94		70-130
Toluene-d8	95		70-130
4-Bromofluorobenzene	101		70-130
Dibromofluoromethane	98		70-130

Project Name: DST PROPERTIES **Lab Number:** L1613787

Project Number: T0189-016-001 **Report Date:** 05/13/16

SAMPLE RESULTS

Lab ID: L1613787-05
Client ID: MW-5
Sample Location: 301 FRANKLIN STREET OLEAN, NY
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 05/12/16 20:06
Analyst: PK

Date Collected: 05/06/16 11:22
Date Received: 05/06/16
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.13	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.14	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.14	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1

Project Name: DST PROPERTIES **Lab Number:** L1613787

Project Number: T0189-016-001 **Report Date:** 05/13/16

SAMPLE RESULTS

Lab ID: L1613787-05 Date Collected: 05/06/16 11:22

Client ID: MW-5 Date Received: 05/06/16

Sample Location: 301 FRANKLIN STREET OLEAN, NY Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
Xylenes, Total	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	2.4	J	ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
tert-Butylbenzene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
Naphthalene	ND		ug/l	2.5	0.70	1
n-Propylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Cyclohexane	ND		ug/l	10	0.27	1
1,4-Dioxane	ND		ug/l	250	41.	1
Freon-113	ND		ug/l	2.5	0.70	1
Methyl cyclohexane	ND		ug/l	10	0.40	1

Tentatively Identified Compounds				
Total TIC Compounds	7.6	J	ug/l	1
Unknown	7.6	J	ug/l	1

Project Name: DST PROPERTIES **Lab Number:** L1613787

Project Number: T0189-016-001 **Report Date:** 05/13/16

SAMPLE RESULTS

Lab ID: L1613787-05 Date Collected: 05/06/16 11:22

Client ID: MW-5 Date Received: 05/06/16

Sample Location: 301 FRANKLIN STREET OLEAN, NY Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor

Volatile Organics by GC/MS - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	93		70-130
Toluene-d8	94		70-130
4-Bromofluorobenzene	99		70-130
Dibromofluoromethane	98		70-130

Project Name: DST PROPERTIES
Project Number: T0189-016-001
Lab Number: L1613787
Report Date: 05/13/16

SAMPLE RESULTS

Lab ID: L1613787-06
Client ID: MW-6
Sample Location: 301 FRANKLIN STREET OLEAN, NY
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 05/12/16 20:29
Analyst: PK

Date Collected: 05/06/16 12:10
Date Received: 05/06/16
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.13	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.14	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.14	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	0.84	J	ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1

Project Name: DST PROPERTIES **Lab Number:** L1613787

Project Number: T0189-016-001 **Report Date:** 05/13/16

SAMPLE RESULTS

Lab ID: L1613787-06 Date Collected: 05/06/16 12:10

Client ID: MW-6 Date Received: 05/06/16

Sample Location: 301 FRANKLIN STREET OLEAN, NY Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
Xylenes, Total	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.5	1
Carbon disulfide	1.5	J	ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	0.82	J	ug/l	2.5	0.70	1
tert-Butylbenzene	1.2	J	ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
Naphthalene	2.5		ug/l	2.5	0.70	1
n-Propylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Cyclohexane	0.35	J	ug/l	10	0.27	1
1,4-Dioxane	ND		ug/l	250	41.	1
Freon-113	ND		ug/l	2.5	0.70	1
Methyl cyclohexane	0.66	J	ug/l	10	0.40	1

Project Name: DST PROPERTIES **Lab Number:** L1613787

Project Number: T0189-016-001 **Report Date:** 05/13/16

SAMPLE RESULTS

Lab ID: L1613787-06 Date Collected: 05/06/16 12:10

Client ID: MW-6 Date Received: 05/06/16

Sample Location: 301 FRANKLIN STREET OLEAN, NY Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Tentatively Identified Compounds						
Total TIC Compounds	110	J	ug/l			1
Unknown	8.3	J	ug/l			1
Unknown	61	J	ug/l			1
Unknown Benzene	4.6	J	ug/l			1
Unknown Benzene	3.5	J	ug/l			1
Unknown Aromatic	4.1	J	ug/l			1
Unknown Benzene	4.4	J	ug/l			1
Unknown Aromatic	4.2	J	ug/l			1
Unknown Aromatic	7.3	J	ug/l			1
Unknown Aromatic	3.5	J	ug/l			1
Unknown Naphthalene	6.1	J	ug/l			1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	95		70-130
Toluene-d8	94		70-130
4-Bromofluorobenzene	100		70-130
Dibromofluoromethane	99		70-130

Project Name: DST PROPERTIES **Lab Number:** L1613787

Project Number: T0189-016-001 **Report Date:** 05/13/16

SAMPLE RESULTS

Lab ID: L1613787-07
Client ID: DUP
Sample Location: 301 FRANKLIN STREET OLEAN, NY
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 05/12/16 20:52
Analyst: PK

Date Collected: 05/06/16 08:00
Date Received: 05/06/16
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.13	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.14	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.14	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1

Project Name: DST PROPERTIES **Lab Number:** L1613787

Project Number: T0189-016-001 **Report Date:** 05/13/16

SAMPLE RESULTS

Lab ID: L1613787-07 Date Collected: 05/06/16 08:00

Client ID: DUP Date Received: 05/06/16

Sample Location: 301 FRANKLIN STREET OLEAN, NY Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
Xylenes, Total	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.5	1
Carbon disulfide	1.4	J	ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
tert-Butylbenzene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
Naphthalene	0.74	J	ug/l	2.5	0.70	1
n-Propylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Cyclohexane	ND		ug/l	10	0.27	1
1,4-Dioxane	ND		ug/l	250	41.	1
Freon-113	ND		ug/l	2.5	0.70	1
Methyl cyclohexane	ND		ug/l	10	0.40	1

Project Name: DST PROPERTIES **Lab Number:** L1613787

Project Number: T0189-016-001 **Report Date:** 05/13/16

SAMPLE RESULTS

Lab ID: L1613787-07 Date Collected: 05/06/16 08:00

Client ID: DUP Date Received: 05/06/16

Sample Location: 301 FRANKLIN STREET OLEAN, NY Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Tentatively Identified Compounds						
Total TIC Compounds	59	J	ug/l			1
Unknown	10	J	ug/l			1
Unknown	38	J	ug/l			1
Unknown	1.6	J	ug/l			1
Unknown Aromatic	1.2	J	ug/l			1
Unknown	1.0	J	ug/l			1
Unknown	1.2	J	ug/l			1
Unknown	2.0	J	ug/l			1
Unknown Aromatic	1.2	J	ug/l			1
Benzene, pentamethyl-	1.6	NJ	ug/l			1
Unknown Aromatic	1.5	J	ug/l			1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	93		70-130
Toluene-d8	94		70-130
4-Bromofluorobenzene	99		70-130
Dibromofluoromethane	99		70-130

Project Name: DST PROPERTIES **Lab Number:** L1613787

Project Number: T0189-016-001 **Report Date:** 05/13/16

SAMPLE RESULTS

Lab ID: L1613787-08
Client ID: TRIP BLANK
Sample Location: 301 FRANKLIN STREET OLEAN, NY
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 05/12/16 21:16
Analyst: PK

Date Collected: 05/06/16 09:00
Date Received: 05/06/16
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.13	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.14	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.14	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1

Project Name: DST PROPERTIES **Lab Number:** L1613787

Project Number: T0189-016-001 **Report Date:** 05/13/16

SAMPLE RESULTS

Lab ID: L1613787-08 Date Collected: 05/06/16 09:00

Client ID: TRIP BLANK Date Received: 05/06/16

Sample Location: 301 FRANKLIN STREET OLEAN, NY Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
Xylenes, Total	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	2.3	J	ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
tert-Butylbenzene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
Naphthalene	ND		ug/l	2.5	0.70	1
n-Propylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Cyclohexane	ND		ug/l	10	0.27	1
1,4-Dioxane	ND		ug/l	250	41.	1
Freon-113	ND		ug/l	2.5	0.70	1
Methyl cyclohexane	ND		ug/l	10	0.40	1

Tentatively Identified Compounds				
Total TIC Compounds	23	J	ug/l	1
Unknown	23	J	ug/l	1

Project Name: DST PROPERTIES **Lab Number:** L1613787

Project Number: T0189-016-001 **Report Date:** 05/13/16

SAMPLE RESULTS

Lab ID: L1613787-08 Date Collected: 05/06/16 09:00

Client ID: TRIP BLANK Date Received: 05/06/16

Sample Location: 301 FRANKLIN STREET OLEAN, NY Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor

Volatile Organics by GC/MS - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	92		70-130
Toluene-d8	94		70-130
4-Bromofluorobenzene	99		70-130
Dibromofluoromethane	98		70-130

Project Name: DST PROPERTIES
Project Number: T0189-016-001
Lab Number: L1613787
Report Date: 05/13/16

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 05/12/16 10:21
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG893396-3					
Methylene chloride	ND		ug/l	2.5	0.70
1,1-Dichloroethane	ND		ug/l	2.5	0.70
Chloroform	ND		ug/l	2.5	0.70
Carbon tetrachloride	ND		ug/l	0.50	0.13
1,2-Dichloropropane	ND		ug/l	1.0	0.13
Dibromochloromethane	ND		ug/l	0.50	0.15
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50
Tetrachloroethene	ND		ug/l	0.50	0.18
Chlorobenzene	ND		ug/l	2.5	0.70
Trichlorofluoromethane	ND		ug/l	2.5	0.70
1,2-Dichloroethane	ND		ug/l	0.50	0.13
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70
Bromodichloromethane	ND		ug/l	0.50	0.19
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14
Bromoform	ND		ug/l	2.0	0.65
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.14
Benzene	ND		ug/l	0.50	0.16
Toluene	ND		ug/l	2.5	0.70
Ethylbenzene	ND		ug/l	2.5	0.70
Chloromethane	ND		ug/l	2.5	0.70
Bromomethane	ND		ug/l	2.5	0.70
Vinyl chloride	ND		ug/l	1.0	0.07
Chloroethane	ND		ug/l	2.5	0.70
1,1-Dichloroethene	ND		ug/l	0.50	0.14
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70
Trichloroethene	ND		ug/l	0.50	0.18
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70

Project Name: DST PROPERTIES
Project Number: T0189-016-001

Lab Number: L1613787
Report Date: 05/13/16

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 05/12/16 10:21
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG893396-3					
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70
Methyl tert butyl ether	ND		ug/l	2.5	0.70
p/m-Xylene	ND		ug/l	2.5	0.70
o-Xylene	ND		ug/l	2.5	0.70
Xylenes, Total	ND		ug/l	2.5	0.70
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70
Styrene	ND		ug/l	2.5	0.70
Dichlorodifluoromethane	ND		ug/l	5.0	1.0
Acetone	ND		ug/l	5.0	1.5
Carbon disulfide	ND		ug/l	5.0	1.0
2-Butanone	ND		ug/l	5.0	1.9
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0
2-Hexanone	ND		ug/l	5.0	1.0
Bromochloromethane	ND		ug/l	2.5	0.70
1,2-Dibromoethane	ND		ug/l	2.0	0.65
n-Butylbenzene	ND		ug/l	2.5	0.70
sec-Butylbenzene	ND		ug/l	2.5	0.70
tert-Butylbenzene	ND		ug/l	2.5	0.70
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70
Isopropylbenzene	ND		ug/l	2.5	0.70
p-Isopropyltoluene	ND		ug/l	2.5	0.70
Naphthalene	ND		ug/l	2.5	0.70
n-Propylbenzene	ND		ug/l	2.5	0.70
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70

Project Name: DST PROPERTIES
Project Number: T0189-016-001
Lab Number: L1613787
Report Date: 05/13/16

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 05/12/16 10:21
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG893396-3					
Methyl Acetate	ND		ug/l	2.0	0.23
Cyclohexane	ND		ug/l	10	0.27
1,4-Dioxane	ND		ug/l	250	41.
Freon-113	ND		ug/l	2.5	0.70
Methyl cyclohexane	ND		ug/l	10	0.40

Tentatively Identified Compounds

Total TIC Compounds	3.8	J	ug/l
Unknown	3.8	J	ug/l

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	92		70-130
Toluene-d8	97		70-130
4-Bromofluorobenzene	99		70-130
Dibromofluoromethane	98		70-130

Project Name: DST PROPERTIES
Project Number: T0189-016-001
Lab Number: L1613787
Report Date: 05/13/16

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 05/12/16 18:33
Analyst: PK

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 02-08 Batch: WG893621-3					
Methylene chloride	ND		ug/l	2.5	0.70
1,1-Dichloroethane	ND		ug/l	2.5	0.70
Chloroform	ND		ug/l	2.5	0.70
Carbon tetrachloride	ND		ug/l	0.50	0.13
1,2-Dichloropropane	ND		ug/l	1.0	0.13
Dibromochloromethane	ND		ug/l	0.50	0.15
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50
Tetrachloroethene	ND		ug/l	0.50	0.18
Chlorobenzene	ND		ug/l	2.5	0.70
Trichlorofluoromethane	ND		ug/l	2.5	0.70
1,2-Dichloroethane	ND		ug/l	0.50	0.13
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70
Bromodichloromethane	ND		ug/l	0.50	0.19
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14
Bromoform	ND		ug/l	2.0	0.65
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.14
Benzene	ND		ug/l	0.50	0.16
Toluene	ND		ug/l	2.5	0.70
Ethylbenzene	ND		ug/l	2.5	0.70
Chloromethane	ND		ug/l	2.5	0.70
Bromomethane	ND		ug/l	2.5	0.70
Vinyl chloride	ND		ug/l	1.0	0.07
Chloroethane	ND		ug/l	2.5	0.70
1,1-Dichloroethene	ND		ug/l	0.50	0.14
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70
Trichloroethene	ND		ug/l	0.50	0.18
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70

Project Name: DST PROPERTIES
Project Number: T0189-016-001

Lab Number: L1613787
Report Date: 05/13/16

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 05/12/16 18:33
Analyst: PK

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 02-08 Batch: WG893621-3					
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70
Methyl tert butyl ether	ND		ug/l	2.5	0.70
p/m-Xylene	ND		ug/l	2.5	0.70
o-Xylene	ND		ug/l	2.5	0.70
Xylenes, Total	ND		ug/l	2.5	0.70
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70
Styrene	ND		ug/l	2.5	0.70
Dichlorodifluoromethane	ND		ug/l	5.0	1.0
Acetone	ND		ug/l	5.0	1.5
Carbon disulfide	ND		ug/l	5.0	1.0
2-Butanone	ND		ug/l	5.0	1.9
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0
2-Hexanone	ND		ug/l	5.0	1.0
Bromochloromethane	ND		ug/l	2.5	0.70
1,2-Dibromoethane	ND		ug/l	2.0	0.65
n-Butylbenzene	ND		ug/l	2.5	0.70
sec-Butylbenzene	ND		ug/l	2.5	0.70
tert-Butylbenzene	ND		ug/l	2.5	0.70
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70
Isopropylbenzene	ND		ug/l	2.5	0.70
p-Isopropyltoluene	ND		ug/l	2.5	0.70
Naphthalene	ND		ug/l	2.5	0.70
n-Propylbenzene	ND		ug/l	2.5	0.70
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70

Project Name: DST PROPERTIES
Project Number: T0189-016-001
Lab Number: L1613787
Report Date: 05/13/16

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 05/12/16 18:33
Analyst: PK

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 02-08 Batch: WG893621-3					
Methyl Acetate	ND		ug/l	2.0	0.23
Cyclohexane	ND		ug/l	10	0.27
1,4-Dioxane	ND		ug/l	250	41.
Freon-113	ND		ug/l	2.5	0.70
Methyl cyclohexane	ND		ug/l	10	0.40

Tentatively Identified Compounds

Total TIC Compounds	4.8	J	ug/l
Sulfur Dioxide	4.8	NJ	ug/l

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	94		70-130
Toluene-d8	95		70-130
4-Bromofluorobenzene	99		70-130
Dibromofluoromethane	98		70-130

Lab Control Sample Analysis
Batch Quality Control

Project Name: DST PROPERTIES
Project Number: T0189-016-001

Lab Number: L1613787
Report Date: 05/13/16

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG893396-1 WG893396-2								
Methylene chloride	108		110		70-130	2		20
1,1-Dichloroethane	104		105		70-130	1		20
Chloroform	104		106		70-130	2		20
2-Chloroethylvinyl ether	**65**	Q	**61**	Q	70-130	6		20
Carbon tetrachloride	93		96		63-132	3		20
1,2-Dichloropropane	104		104		70-130	0		20
Dibromochloromethane	93		92		63-130	1		20
1,1,2-Trichloroethane	103		103		70-130	0		20
Tetrachloroethene	105		107		70-130	2		20
Chlorobenzene	102		104		75-130	2		20
Trichlorofluoromethane	100		101		62-150	1		20
1,2-Dichloroethane	102		102		70-130	0		20
1,1,1-Trichloroethane	107		107		67-130	0		20
Bromodichloromethane	106		104		67-130	2		20
trans-1,3-Dichloropropene	89		88		70-130	1		20
cis-1,3-Dichloropropene	94		94		70-130	0		20
1,1-Dichloropropene	106		108		70-130	2		20
Bromoform	85		83		54-136	2		20
1,1,2,2-Tetrachloroethane	100		98		67-130	2		20
Benzene	106		106		70-130	0		20
Toluene	101		102		70-130	1		20

Lab Control Sample Analysis
Batch Quality Control

Project Name: DST PROPERTIES
Project Number: T0189-016-001

Lab Number: L1613787
Report Date: 05/13/16

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG893396-1 WG893396-2								
Ethylbenzene	101		102		70-130	1		20
Chloromethane	91		94		64-130	3		20
Bromomethane	96		97		39-139	1		20
Vinyl chloride	103		104		55-140	1		20
Chloroethane	105		105		55-138	0		20
1,1-Dichloroethene	108		110		61-145	2		20
trans-1,2-Dichloroethene	107		109		70-130	2		20
Trichloroethene	102		104		70-130	2		20
1,2-Dichlorobenzene	104		104		70-130	0		20
1,3-Dichlorobenzene	102		104		70-130	2		20
1,4-Dichlorobenzene	101		103		70-130	2		20
Methyl tert butyl ether	108		106		63-130	2		20
p/m-Xylene	105		106		70-130	1		20
o-Xylene	106		108		70-130	2		20
cis-1,2-Dichloroethene	108		109		70-130	1		20
Dibromomethane	105		105		70-130	0		20
1,2,3-Trichloropropane	99		98		64-130	1		20
Acrylonitrile	107		107		70-130	0		20
Isopropyl Ether	102		102		70-130	0		20
tert-Butyl Alcohol	121		112		70-130	8		20
Styrene	109		111		70-130	2		20

Lab Control Sample Analysis
Batch Quality Control

Project Name: DST PROPERTIES
Project Number: T0189-016-001

Lab Number: L1613787
Report Date: 05/13/16

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG893396-1 WG893396-2								
Dichlorodifluoromethane	92		92		36-147	0		20
Acetone	108		102		58-148	6		20
Carbon disulfide	114		116		51-130	2		20
2-Butanone	95		91		63-138	4		20
Vinyl acetate	95		93		70-130	2		20
4-Methyl-2-pentanone	92		88		59-130	4		20
2-Hexanone	89		86		57-130	3		20
Acrolein	100		100		40-160	0		20
Bromochloromethane	109		110		70-130	1		20
2,2-Dichloropropane	96		97		63-133	1		20
1,2-Dibromoethane	106		106		70-130	0		20
1,3-Dichloropropane	103		102		70-130	1		20
1,1,1,2-Tetrachloroethane	104		104		64-130	0		20
Bromobenzene	104		105		70-130	1		20
n-Butylbenzene	102		103		53-136	1		20
sec-Butylbenzene	102		104		70-130	2		20
tert-Butylbenzene	89		91		70-130	2		20
o-Chlorotoluene	99		102		70-130	3		20
p-Chlorotoluene	100		102		70-130	2		20
1,2-Dibromo-3-chloropropane	99		100		41-144	1		20
Hexachlorobutadiene	116		115		63-130	1		20

Lab Control Sample Analysis
Batch Quality Control

Project Name: DST PROPERTIES
Project Number: T0189-016-001

Lab Number: L1613787
Report Date: 05/13/16

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG893396-1 WG893396-2								
Isopropylbenzene	103		104		70-130	1		20
p-Isopropyltoluene	96		97		70-130	1		20
Naphthalene	99		92		70-130	7		20
n-Propylbenzene	100		101		69-130	1		20
1,2,3-Trichlorobenzene	117		108		70-130	8		20
1,2,4-Trichlorobenzene	113		108		70-130	5		20
1,3,5-Trimethylbenzene	102		103		64-130	1		20
1,2,4-Trimethylbenzene	102		102		70-130	0		20
Methyl Acetate	99		97		70-130	2		20
Ethyl Acetate	101		97		70-130	4		20
Cyclohexane	95		96		70-130	1		20
Ethyl-Tert-Butyl-Ether	106		104		70-130	2		20
Tertiary-Amyl Methyl Ether	93		91		66-130	2		20
1,4-Dioxane	122		116		56-162	5		20
Freon-113	105		107		70-130	2		20
1,4-Diethylbenzene	95		96		70-130	1		20
4-Ethyltoluene	102		104		70-130	2		20
1,2,4,5-Tetramethylbenzene	93		94		70-130	1		20
Ethyl ether	104		104		59-134	0		20
trans-1,4-Dichloro-2-butene	74		72		70-130	3		20
Iodomethane	**63**	Q	76		70-130	19		20

Lab Control Sample Analysis
Batch Quality Control

Project Name: DST PROPERTIES
Project Number: T0189-016-001

Lab Number: L1613787
Report Date: 05/13/16

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG893396-1 WG893396-2								
Methyl cyclohexane	105		106		70-130	1		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	93		92		70-130
Toluene-d8	97		98		70-130
4-Bromofluorobenzene	98		99		70-130
Dibromofluoromethane	100		100		70-130

Lab Control Sample Analysis
Batch Quality Control

Project Name: DST PROPERTIES
Project Number: T0189-016-001

Lab Number: L1613787
Report Date: 05/13/16

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 02-08 Batch: WG893621-1 WG893621-2								
Methylene chloride	112		107		70-130	5		20
1,1-Dichloroethane	105		100		70-130	5		20
Chloroform	106		102		70-130	4		20
2-Chloroethylvinyl ether	**57**	Q	**60**	Q	70-130	5		20
Carbon tetrachloride	89		85		63-132	5		20
1,2-Dichloropropane	105		102		70-130	3		20
Dibromochloromethane	94		93		63-130	1		20
1,1,2-Trichloroethane	103		102		70-130	1		20
Tetrachloroethene	103		98		70-130	5		20
Chlorobenzene	103		99		75-130	4		20
Trichlorofluoromethane	88		83		62-150	6		20
1,2-Dichloroethane	103		101		70-130	2		20
1,1,1-Trichloroethane	104		98		67-130	6		20
Bromodichloromethane	106		103		67-130	3		20
trans-1,3-Dichloropropene	91		88		70-130	3		20
cis-1,3-Dichloropropene	95		93		70-130	2		20
1,1-Dichloropropene	103		98		70-130	5		20
Bromoform	90		88		54-136	2		20
1,1,2,2-Tetrachloroethane	100		100		67-130	0		20
Benzene	106		103		70-130	3		20
Toluene	101		97		70-130	4		20

Lab Control Sample Analysis
Batch Quality Control

Project Name: DST PROPERTIES
Project Number: T0189-016-001

Lab Number: L1613787
Report Date: 05/13/16

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 02-08 Batch: WG893621-1 WG893621-2								
Ethylbenzene	101		95		70-130	6		20
Chloromethane	94		**59**	Q	64-130	**46**	Q	20
Bromomethane	59		72		39-139	20		20
Vinyl chloride	98		89		55-140	10		20
Chloroethane	105		101		55-138	4		20
1,1-Dichloroethene	103		99		61-145	4		20
trans-1,2-Dichloroethene	107		104		70-130	3		20
Trichloroethene	102		99		70-130	3		20
1,2-Dichlorobenzene	106		102		70-130	4		20
1,3-Dichlorobenzene	105		99		70-130	6		20
1,4-Dichlorobenzene	104		99		70-130	5		20
Methyl tert butyl ether	111		112		63-130	1		20
p/m-Xylene	105		99		70-130	6		20
o-Xylene	107		102		70-130	5		20
cis-1,2-Dichloroethene	111		106		70-130	5		20
Dibromomethane	107		105		70-130	2		20
1,2,3-Trichloropropane	100		99		64-130	1		20
Acrylonitrile	108		108		70-130	0		20
Isopropyl Ether	105		102		70-130	3		20
tert-Butyl Alcohol	121		114		70-130	6		20
Styrene	111		106		70-130	5		20

Lab Control Sample Analysis
Batch Quality Control

Project Name: DST PROPERTIES
Project Number: T0189-016-001

Lab Number: L1613787
Report Date: 05/13/16

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 02-08 Batch: WG893621-1 WG893621-2								
Dichlorodifluoromethane	83		79		36-147	5		20
Acetone	114		112		58-148	2		20
Carbon disulfide	110		105		51-130	5		20
2-Butanone	103		106		63-138	3		20
Vinyl acetate	98		98		70-130	0		20
4-Methyl-2-pentanone	93		93		59-130	0		20
2-Hexanone	92		91		57-130	1		20
Acrolein	96		99		40-160	3		20
Bromochloromethane	111		109		70-130	2		20
2,2-Dichloropropane	94		90		63-133	4		20
1,2-Dibromoethane	107		105		70-130	2		20
1,3-Dichloropropane	103		102		70-130	1		20
1,1,1,2-Tetrachloroethane	105		102		64-130	3		20
Bromobenzene	107		102		70-130	5		20
n-Butylbenzene	100		93		53-136	7		20
sec-Butylbenzene	99		93		70-130	6		20
tert-Butylbenzene	88		82		70-130	7		20
o-Chlorotoluene	101		96		70-130	5		20
p-Chlorotoluene	102		96		70-130	6		20
1,2-Dibromo-3-chloropropane	98		97		41-144	1		20
Hexachlorobutadiene	106		102		63-130	4		20

Lab Control Sample Analysis
Batch Quality Control

Project Name: DST PROPERTIES
Project Number: T0189-016-001

Lab Number: L1613787
Report Date: 05/13/16

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 02-08 Batch: WG893621-1 WG893621-2								
Isopropylbenzene	102		96		70-130	6		20
p-Isopropyltoluene	95		89		70-130	7		20
Naphthalene	109		104		70-130	5		20
n-Propylbenzene	99		93		69-130	6		20
1,2,3-Trichlorobenzene	112		117		70-130	4		20
1,2,4-Trichlorobenzene	112		113		70-130	1		20
1,3,5-Trimethylbenzene	103		96		64-130	7		20
1,2,4-Trimethylbenzene	103		97		70-130	6		20
Methyl Acetate	98		98		70-130	0		20
Ethyl Acetate	104		103		70-130	1		20
Cyclohexane	86		82		70-130	5		20
Ethyl-Tert-Butyl-Ether	108		108		70-130	0		20
Tertiary-Amyl Methyl Ether	96		96		66-130	0		20
1,4-Dioxane	124		113		56-162	9		20
Freon-113	96		92		70-130	4		20
1,4-Diethylbenzene	93		89		70-130	4		20
4-Ethyltoluene	103		97		70-130	6		20
1,2,4,5-Tetramethylbenzene	94		90		70-130	4		20
Ethyl ether	105		105		59-134	0		20
trans-1,4-Dichloro-2-butene	86		81		70-130	6		20
Iodomethane	**66**	Q	77		70-130	15		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: DST PROPERTIES

Project Number: T0189-016-001

Lab Number: L1613787

Report Date: 05/13/16

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 02-08 Batch: WG893621-1 WG893621-2								
Methyl cyclohexane	95		91		70-130	4		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	90		93		70-130
Toluene-d8	97		96		70-130
4-Bromofluorobenzene	100		99		70-130
Dibromofluoromethane	100		101		70-130

Matrix Spike Analysis
Batch Quality Control

Project Name: DST PROPERTIES
Project Number: T0189-016-001

Lab Number: L1613787
Report Date: 05/13/16

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 QC Batch ID: WG893396-4 WG893396-5 QC Sample: L1613787-01 Client ID: MW-1												
Methylene chloride	ND	10	11	115		12	122		70-130	9		20
1,1-Dichloroethane	ND	10	11	114		12	119		70-130	9		20
Chloroform	ND	10	11	111		12	117		70-130	9		20
Carbon tetrachloride	ND	10	10	102		11	109		63-132	10		20
1,2-Dichloropropane	ND	10	11	114		12	119		70-130	9		20
Dibromochloromethane	ND	10	9.8	98		10	104		63-130	2		20
1,1,2-Trichloroethane	ND	10	11	112		12	117		70-130	9		20
Tetrachloroethene	ND	10	11	109		12	118		70-130	9		20
Chlorobenzene	ND	10	11	107		11	114		75-130	0		20
Trichlorofluoromethane	ND	10	12	116		12	116		62-150	0		20
1,2-Dichloroethane	ND	10	11	111		12	116		70-130	9		20
1,1,1-Trichloroethane	ND	10	12	116		12	123		67-130	0		20
Bromodichloromethane	ND	10	11	114		12	120		67-130	9		20
trans-1,3-Dichloropropene	ND	10	9.5	95		10	100		70-130	5		20
cis-1,3-Dichloropropene	ND	10	9.7	97		10	103		70-130	3		20
1,1-Dichloropropene	ND	10	12	118		12	124		70-130	0		20
Bromoform	ND	10	9.1	91		10	100		54-136	9		20
1,1,2,2-Tetrachloroethane	ND	10	12	116		12	121		67-130	0		20
Benzene	ND	10	12	115		12	121		70-130	0		20
Toluene	ND	10	11	106		11	113		70-130	0		20
Ethylbenzene	ND	10	11	109		12	115		70-130	9		20

Matrix Spike Analysis
Batch Quality Control

Project Name: DST PROPERTIES
Project Number: T0189-016-001

Lab Number: L1613787
Report Date: 05/13/16

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 QC Batch ID: WG893396-4 WG893396-5 QC Sample: L1613787-01 Client ID: MW-1												
Chloromethane	ND	10	5.9	**59**	Q	12	124		64-130	**68**	Q	20
Bromomethane	ND	10	4.9	49		5.9	59		39-139	19		20
Vinyl chloride	ND	10	12	116		13	127		55-140	8		20
Chloroethane	ND	10	10	101		12	117		55-138	18		20
1,1-Dichloroethene	ND	10	12	116		12	125		61-145	0		20
trans-1,2-Dichloroethene	ND	10	11	114		12	124		70-130	9		20
Trichloroethene	ND	10	11	112		12	118		70-130	9		20
1,2-Dichlorobenzene	ND	10	11	112		12	120		70-130	9		20
1,3-Dichlorobenzene	ND	10	10	105		11	114		70-130	10		20
1,4-Dichlorobenzene	ND	10	10	104		11	113		70-130	10		20
Methyl tert butyl ether	ND	10	12	120		13	128		63-130	8		20
p/m-Xylene	ND	20	22	110		24	118		70-130	9		20
o-Xylene	ND	20	22	112		24	121		70-130	9		20
cis-1,2-Dichloroethene	ND	10	11	114		12	123		70-130	9		20
Dibromomethane	ND	10	11	115		12	120		70-130	9		20
1,2,3-Trichloropropane	ND	10	11	113		12	118		64-130	9		20
Acrylonitrile	ND	10	12	123		13	**133**	Q	70-130	8		20
Isopropyl Ether	ND	10	12	115		12	119		70-130	0		20
tert-Butyl Alcohol	6.0J	50	75	**150**	Q	79	**158**	Q	70-130	5		20
Styrene	ND	20	23	116		25	124		70-130	8		20
Dichlorodifluoromethane	ND	10	10	106		10	105		36-147	0		20

Matrix Spike Analysis
Batch Quality Control

Project Name: DST PROPERTIES
Project Number: T0189-016-001

Lab Number: L1613787
Report Date: 05/13/16

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 QC Batch ID: WG893396-4 WG893396-5 QC Sample: L1613787-01 Client ID: MW-1												
Acetone	2.9J	10	15	**151**	Q	15	**151**	Q	58-148	0		20
Carbon disulfide	ND	10	12	126		13	**133**	Q	51-130	8		20
2-Butanone	ND	10	12	116		12	119		63-138	0		20
Vinyl acetate	ND	10	11	112		11	115		70-130	0		20
4-Methyl-2-pentanone	ND	10	12	118		12	122		59-130	0		20
2-Hexanone	ND	10	12	125		13	130		57-130	8		20
Acrolein	ND	10	15	153		15	153		40-160	0		20
Bromochloromethane	ND	10	11	113		12	121		70-130	9		20
2,2-Dichloropropane	ND	10	9.5	95		10	102		63-133	5		20
1,2-Dibromoethane	ND	10	11	113		12	120		70-130	9		20
1,3-Dichloropropane	ND	10	11	113		12	117		70-130	9		20
1,1,1,2-Tetrachloroethane	ND	10	11	108		12	116		64-130	9		20
Bromobenzene	ND	10	11	107		12	115		70-130	9		20
n-Butylbenzene	ND	10	10	103		11	111		53-136	10		20
sec-Butylbenzene	ND	10	10	105		11	113		70-130	10		20
tert-Butylbenzene	ND	10	9.9	99		11	106		70-130	11		20
o-Chlorotoluene	ND	10	10	103		11	110		70-130	10		20
p-Chlorotoluene	ND	10	10	104		11	111		70-130	10		20
1,2-Dibromo-3-chloropropane	ND	10	12	118		12	123		41-144	0		20
Hexachlorobutadiene	ND	10	10	101		11	113		63-130	10		20
Isopropylbenzene	ND	10	11	108		12	116		70-130	9		20

Matrix Spike Analysis
Batch Quality Control

Project Name: DST PROPERTIES
Project Number: T0189-016-001

Lab Number: L1613787
Report Date: 05/13/16

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 QC Batch ID: WG893396-4 WG893396-5 QC Sample: L1613787-01 Client ID: MW-1												
p-Isopropyltoluene	ND	10	9.7	97		10	105		70-130	3		20
Naphthalene	ND	10	17	**171**	Q	19	**186**	Q	70-130	11		20
n-Propylbenzene	ND	10	10	105		11	112		69-130	10		20
1,2,3-Trichlorobenzene	ND	10	14	**145**	Q	16	**162**	Q	70-130	13		20
1,2,4-Trichlorobenzene	ND	10	13	**135**	Q	14	**143**	Q	70-130	7		20
1,3,5-Trimethylbenzene	ND	10	10	106		11	113		64-130	10		20
1,2,4-Trimethylbenzene	ND	10	11	106		11	115		70-130	0		20
Methyl Acetate	ND	10	11	112		11	111		70-130	0		20
Ethyl Acetate	ND	10	12	117		12	119		70-130	0		20
Cyclohexane	ND	10	11	108		11	110		70-130	0		20
Ethyl-Tert-Butyl-Ether	ND	10	12	120		13	127		70-130	8		20
Tertiary-Amyl Methyl Ether	ND	10	11	106		11	114		66-130	0		20
1,4-Dioxane	ND	500	1200	**241**	Q	750	149		56-162	**46**	Q	20
Freon-113	ND	10	11	114		12	119		70-130	9		20
1,4-Diethylbenzene	ND	10	9.6	96		10	105		70-130	4		20
4-Ethyltoluene	ND	10	11	106		11	114		70-130	0		20
1,2,4,5-Tetramethylbenzene	ND	10	10	101		11	111		70-130	10		20
Ethyl ether	ND	10	11	108		12	118		59-134	9		20
trans-1,4-Dichloro-2-butene	ND	10	9.2	93		10	102		70-130	8		20
Methyl cyclohexane	ND	10	11	114		12	121		70-130	9		20

Matrix Spike Analysis
Batch Quality Control

Project Name: DST PROPERTIES
Project Number: T0189-016-001

Lab Number: L1613787
Report Date: 05/13/16

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 QC Batch ID: WG893396-4 WG893396-5 QC Sample: L1613787-01 Client ID: MW-1												

Surrogate	MS % Recovery	MS Qualifier	MSD % Recovery	MSD Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	99		96		70-130
4-Bromofluorobenzene	101		101		70-130
Dibromofluoromethane	101		100		70-130
Toluene-d8	96		96		70-130

Project Name: DST PROPERTIES
Project Number: T0189-016-001

Lab Number: L1613787
Report Date: 05/13/16

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information Custody Seal

Cooler	
A	Absent

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1613787-01A	Vial HCl preserved	A	N/A	4.0	Y	Absent	NYTCL-8260-R2(14)
L1613787-01A1	Vial HCl preserved	A	N/A	4.0	Y	Absent	NYTCL-8260-R2(14)
L1613787-01A2	Vial HCl preserved	A	N/A	4.0	Y	Absent	NYTCL-8260-R2(14)
L1613787-01B	Vial HCl preserved	A	N/A	4.0	Y	Absent	NYTCL-8260-R2(14)
L1613787-01B1	Vial HCl preserved	A	N/A	4.0	Y	Absent	NYTCL-8260-R2(14)
L1613787-01B2	Vial HCl preserved	A	N/A	4.0	Y	Absent	NYTCL-8260-R2(14)
L1613787-01C	Vial HCl preserved	A	N/A	4.0	Y	Absent	NYTCL-8260-R2(14)
L1613787-01C1	Vial HCl preserved	A	N/A	4.0	Y	Absent	NYTCL-8260-R2(14)
L1613787-01C2	Vial HCl preserved	A	N/A	4.0	Y	Absent	NYTCL-8260-R2(14)
L1613787-02A	Vial HCl preserved	A	N/A	4.0	Y	Absent	NYTCL-8260-R2(14)
L1613787-02B	Vial HCl preserved	A	N/A	4.0	Y	Absent	NYTCL-8260-R2(14)
L1613787-02C	Vial HCl preserved	A	N/A	4.0	Y	Absent	NYTCL-8260-R2(14)
L1613787-03A	Vial HCl preserved	A	N/A	4.0	Y	Absent	NYTCL-8260-R2(14)
L1613787-03B	Vial HCl preserved	A	N/A	4.0	Y	Absent	NYTCL-8260-R2(14)
L1613787-03C	Vial HCl preserved	A	N/A	4.0	Y	Absent	NYTCL-8260-R2(14)
L1613787-04A	Vial HCl preserved	A	N/A	4.0	Y	Absent	NYTCL-8260-R2(14)
L1613787-04B	Vial HCl preserved	A	N/A	4.0	Y	Absent	NYTCL-8260-R2(14)
L1613787-04C	Vial HCl preserved	A	N/A	4.0	Y	Absent	NYTCL-8260-R2(14)
L1613787-05A	Vial HCl preserved	A	N/A	4.0	Y	Absent	NYTCL-8260-R2(14)
L1613787-05B	Vial HCl preserved	A	N/A	4.0	Y	Absent	NYTCL-8260-R2(14)
L1613787-05C	Vial HCl preserved	A	N/A	4.0	Y	Absent	NYTCL-8260-R2(14)
L1613787-06A	Vial HCl preserved	A	N/A	4.0	Y	Absent	NYTCL-8260-R2(14)
L1613787-06B	Vial HCl preserved	A	N/A	4.0	Y	Absent	NYTCL-8260-R2(14)
L1613787-06C	Vial HCl preserved	A	N/A	4.0	Y	Absent	NYTCL-8260-R2(14)
L1613787-07A	Vial HCl preserved	A	N/A	4.0	Y	Absent	NYTCL-8260-R2(14)
L1613787-07B	Vial HCl preserved	A	N/A	4.0	Y	Absent	NYTCL-8260-R2(14)
L1613787-07C	Vial HCl preserved	A	N/A	4.0	Y	Absent	NYTCL-8260-R2(14)
L1613787-08A	Vial HCl preserved	A	N/A	4.0	Y	Absent	NYTCL-8260-R2(14)
L1613787-08B	Vial HCl preserved	A	N/A	4.0	Y	Absent	NYTCL-8260-R2(14)

*Values in parentheses indicate holding time in days

Project Name:	DST PROPERTIES	**Lab Number:**	L1613787
Project Number:	T0189-016-001	**Report Date:**	05/13/16

GLOSSARY

Acronyms

EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Footnotes

1	- The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Data Qualifiers

A	- Spectra identified as "Aldol Condensation Product".
B	- The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).

Report Format: DU Report with 'J' Qualifiers

Project Name:	DST PROPERTIES	**Lab Number:**	L1613787
Project Number:	T0189-016-001	**Report Date:**	05/13/16

Data Qualifiers

C - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.

D - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.

E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.

G - The concentration may be biased high due to matrix interferences (i.e, co-elution) with non-target compound(s). The result should be considered estimated.

H - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.

I - The lower value for the two columns has been reported due to obvious interference.

M - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.

NJ - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.

P - The RPD between the results for the two columns exceeds the method-specified criteria.

Q - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)

R - Analytical results are from sample re-analysis.

RE - Analytical results are from sample re-extraction.

S - Analytical results are from modified screening analysis.

J - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs).

ND - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.

Report Format: DU Report with 'J' Qualifiers

Project Name:	DST PROPERTIES	**Lab Number:**	L1613787
Project Number:	T0189-016-001	**Report Date:**	05/13/16

REFERENCES

1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IV, 2007.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.

Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility
EPA 524.2: 1,2-Dibromo-3-chloropropane, 1,2-Dibromoethane, m/p-xylene, o-xylene
EPA 624: 2-Butanone (MEK), 1,4-Dioxane, tert-Amylmethyl Ether, tert-Butyl Alcohol, m/p-xylene, o-xylene
EPA 625: Aniline, Benzoic Acid, Benzyl Alcohol, 4-Chloroaniline, 3-Methylphenol, 4-Methylphenol.
EPA 1010A: NPW: Ignitability
EPA 6010C: NPW: Strontium; SCM: Strontium
EPA 8151A: NPW: 2,4-DB, Dicamba, Dichloroprop, MCPA, MCPP; SCM: 2,4-DB, Dichloroprop, MCPA, MCPP
EPA 8260C: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene, Isopropanol; SCM: Iodomethane (methyl iodide), Methyl methacrylate (soil); 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.
EPA 8270D: NPW: Pentachloronitrobenzene, 1-Methylnaphthalene, Dimethylnaphthalene,1,4-Diphenylhydrazine; SCM: Pentachloronitrobenzene, 1-Methylnaphthalene, Dimethylnaphthalene,1,4-Diphenylhydrazine.
EPA 9010: NPW: Amenable Cyanide Distillation, Total Cyanide Distillation
EPA 9038: NPW: Sulfate
EPA 9050A: NPW: Specific Conductance
EPA 9056: NPW: Chloride, Nitrate, Sulfate
EPA 9065: NPW: Phenols
EPA 9251: NPW: Chloride
SM3500: NPW: Ferrous Iron
SM4500: NPW: Amenable Cyanide, Dissolved Oxygen; SCM: Total Phosphorus, TKN, NO2, NO3.
SM5310C: DW: Dissolved Organic Carbon

Mansfield Facility
EPA 8270D: NPW: Biphenyl; SCM: Biphenyl, Caprolactam
EPA 8270D-SIM Isotope Dilution: SCM: 1,4-Dioxane
SM 2540D: TSS
SM2540G: SCM: Percent Solids
EPA 1631E: SCM: Mercury
EPA 7474: SCM: Mercury
EPA 8081B: NPW and SCM: Mirex, Hexachlorobenzene.
EPA 8082A: NPW: PCB: 1, 5, 31, 87,101, 110, 141, 151, 153, 180, 183, 187.
EPA 8270-SIM: NPW and SCM: Alkylated PAHs.
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene, n-Butylbenzene, n-Propylbenzene, sec-Butylbenzene, tert-Butylbenzene.
Biological Tissue Matrix: ***8270D-SIM; 3050B; 3051A; 7471B; 8081B; 8082A; 6020A:*** Lead***; 8270D:*** bis(2-ethylhexyl)phthalate, Butylbenzylphthalate, Diethyl phthalate, Dimethyl phthalate, Di-n-butyl phthalate, Di-n-octyl phthalate, Fluoranthene, Pentachlorophenol.

The following analytes are included in our Massachusetts DEP Scope of Accreditation, Westborough Facility:

Drinking Water
EPA 200.8: Sb,As,Ba,Be,Cd,Cr,Cu,Pb,Ni,Se,Tl; **EPA 200.7**: Ba,Be,Ca,Cd,Cr,Cu,Na; **EPA 245.1:** Mercury;
EPA 300.0: Nitrate-N, Fluoride, Sulfate; **EPA 353.2**: Nitrate-N, Nitrite-N; **SM4500NO3-F**: Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B**
EPA 332: Perchlorate.
Microbiology: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT, Enterolert-QT.**

Non-Potable Water
EPA 200.8: Al,Sb,As,Be,Cd,Cr,Cu,Pb,Mn,Ni,Se,Ag,Tl,Zn;
EPA 200.7: Al,Sb,As,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Mo,Ni,K,Se,Ag,Na,Sr,Ti,Tl,V,Zn;
EPA 245.1, SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2340B, SM2320B, SM4500CL-E, SM4500F-BC, SM426C, SM4500NH3-BH, **EPA 350.1**: Ammonia-N, **LACHAT 10-107-06-1-B**: Ammonia-N, **SM4500NO3-F,**
EPA 353.2: Nitrate-N**, SM4500NH3-BC-NES, EPA 351.1, SM4500P-E, SM4500P-B, E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, SM14 510AC, EPA 420.1, SM4500-CN-CE, SM2540D.**
EPA 624: Volatile Halocarbons & Aromatics,
EPA 608: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs
EPA 625: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045**: PCB-Oil.
Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, SM9222D-MF**.

For a complete listing of analytes and methods, please contact your Alpha Project Manager.

NEW YORK CHAIN OF CUSTODY

ALPHA ANALYTICAL

Westborough, MA 01581
8 Walkup Dr.
TEL: 508-898-9220
FAX: 508-898-9193

Mansfield, MA 02048
320 Forbes Blvd
TEL: 508-822-9300
FAX: 508-822-3288

Service Centers
Mahwah, NJ 07430: 35 Whitney Rd, Suite 5
Albany, NY 12205: 14 Walker Way
Tonawanda, NY 14150: 275 Cooper Ave, Suite 105

Page 1 of 1

Date Rec'd in Lab: 5/7/16

ALPHA Job #: L1613787

Client Information

Client: Benchmark Environmental
Address: 2558 Hamburg Turnpike,Ste300
Buffalo, NY 14218
Phone: 716-856-0599
Fax: (716) 856-0583
Email: pwerthman@benchmarkees.com

Project Information

Project Name: DST Properties
Project Location: 301 Franklin Street Olean, NY
Project #: 10199-0116-002
(Use Project name as Project #) ☐
Project Manager: Candace Fox
ALPHAQuote #:

Turn-Around Time

Standard ☑ Due Date:
Rush (only if pre approved) ☐ # of Days:

Deliverables

☐ ASP-A ☐ ASP-B
☐ EQuIS (1 File) ☐ EQuIS (4 File)
☑ Other

Regulatory Requirement

☐ NY TOGS ☐ NY Part 375
☐ AWQ Standards ☐ NY CP-51
☐ NY Restricted Use ☑ Other
☐ NY Unrestricted Use
☐ NYC Sewer Discharge

Billing Information

☑ Same as Client Info
PO #

Disposal Site Information

Please identify below location of applicable disposal facilities.
Disposal Facility:
☐ NJ ☐ NY
☐ Other: NA

These samples have been previously analyzed by Alpha ☑

Other project specific requirements/comments:

CAT - B

Please specify Metals or TAL.

ANALYSIS

NYTCL-8260+CP51+TICs

Sample Filtration
☐ Done
☐ Lab to do
Preservation
☐ Lab to do
(Please Specify below)

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	NYTCL-8260+CP51+TICs	Sample Specific Comments	Total Bottles
13787 - 01	MW-1	5/6/16	11:50	Water	PWW	X		3
02	MW-2		12:53	Water	PWW	X		3
03	MW-3		10:57	Water	PWW	X		3
04	MW-4		12:35	Water	PWW	X		3
05	MW-5		11:22	Water	PWW	X		3
06	MW-6		12:10	Water	PWW	X		3
06	MS (MW-1)			Water	PWW	X		3
06	MSD (MW-1)			Water	PWW	X		3
07	DUP		8:00	Water	PWW	X		3
08	Trip Blank	5/6/16	9:00	DI Water		X		2

Container Type: A
Preservative: H

Preservative Code:
A = None
B = HCl
C = HNO_3
D = H_2SO_4
E = NaOH
F = MeOH
G = $NaHSO_4$
H = $Na_2S_2O_3$
K/E = Zn Ac/NaOH
O = Other

Container Code
P = Plastic
A = Amber Glass
V = Vial
G = Glass
B = Bacteria Cup
C = Cube
O = Other
E = Encore
D = BOD Bottle

Westboro: Certification No: MA935
Mansfield: Certification No: MA015

Relinquished By:	Date/Time	Received By:	Date/Time
John Vitko (AAL)	5/6/16	(AAL)	5/6/16 1845 5/7/16 0145

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. BY EXECUTING THIS COC, THE CLIENT HAS READ AND AGREES TO BE BOUND BY ALPHA'S TERMS & CONDITIONS.

Form No: 01-25 (rev. 30-Sept-2013)

APPENDIX E

SVE AND GROUNDWATER MONITORING WELL DECOMMISSIONING LOGS

FIGURE 3

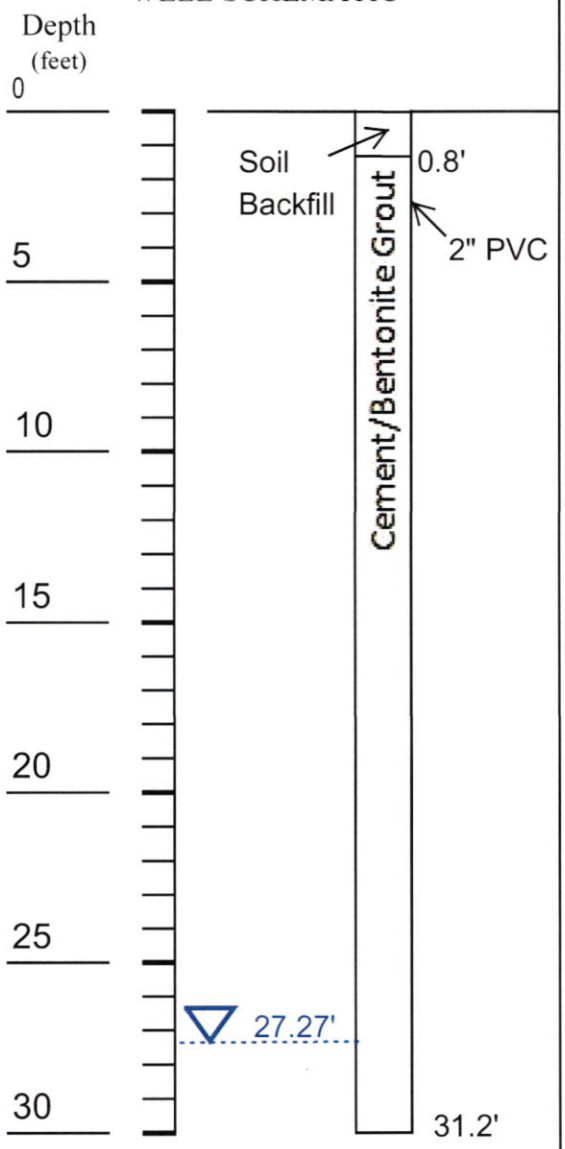
WELL DECOMMISSIONING RECORD

Site Name: Scott Rotary Seal	Well I.D.: MW 1
Site Location: Olean, NY	Driller: Dale Gramza
Drilling Co.: Nature's Way Environmental	Inspector:
	Date: 10/17/16

DECOMMISSIONING DATA
(Fill in all that apply)

OVERDRILLING	
Interval Drilled	
Drilling Method(s)	
Borehole Dia. (in.)	
Temporary Casing Installed? (y/n)	
Depth temporary casing installed	
Casing type/dia. (in.)	
Method of installing	
CASING PULLING	
Method employed	
Casing retrieved (feet)	
Casing type/dia. (in)	
CASING PERFORATING	
Equipment used	
Number of perforations/foot	
Size of perforations	
Interval perforated	
GROUTING	
Interval grouted (FBLS)	0 to 31.2
# of batches prepared	1
For each batch record:	
Quantity of water used (gal.)	7.8
Quantity of cement used (lbs.)	94
Cement type	Type I & II
Quantity of bentonite used (lbs.)	3.9 lbs
Quantity of calcium chloride used (lbs.)	
Volume of grout prepared (gal.)	10
Volume of grout used (gal.)	6.0

WELL SCHEMATIC*



COMMENTS: Grouted in place. Displace and remove 0.7 gallons of water.

* Sketch in all relevant decommissioning data, including: interval overdrilled, interval grouted, casing left in hole, well stickup, etc.

11-8-16

Drilling Contractor

Department Representative

FIGURE 3

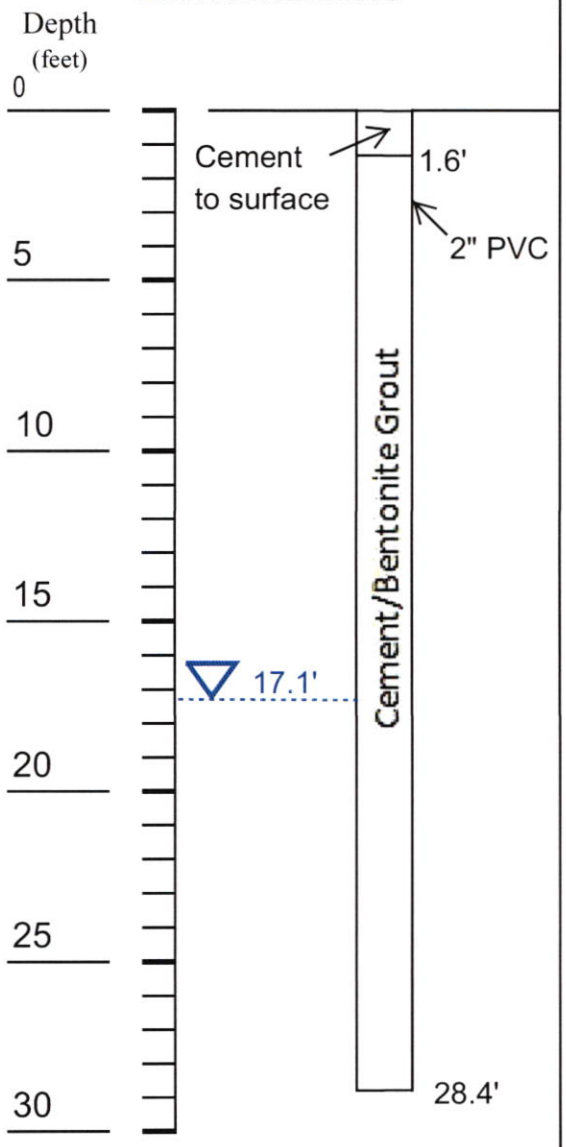
WELL DECOMMISSIONING RECORD

Site Name: Scott Rotary Seal	Well I.D.: MW 2
Site Location: Olean, NY	Driller: Dale Gramza
Drilling Co.: Nature's Way Environmental	Inspector:
	Date: 10/18/16

DECOMMISSIONING DATA
(Fill in all that apply)

OVERDRILLING	
Interval Drilled	
Drilling Method(s)	
Borehole Dia. (in.)	
Temporary Casing Installed? (y/n)	
Depth temporary casing installed	
Casing type/dia. (in.)	
Method of installing	
CASING PULLING	
Method employed	
Casing retrieved (feet)	
Casing type/dia. (in)	
CASING PERFORATING	
Equipment used	
Number of perforations/foot	
Size of perforations	
Interval perforated	
GROUTING	
Interval grouted (FBLS)	0 to 28.0
# of batches prepared	1
For each batch record:	
Quantity of water used (gal.)	7.8
Quantity of cement used (lbs.)	94
Cement type	Type I & II
Quantity of bentonite used (lbs.)	3.9 lbs
Quantity of calcium chloride used (lbs.)	
Volume of grout prepared (gal.)	10
Volume of grout used (gal.)	5.1

WELL SCHEMATIC*



COMMENTS: Grouted in place. Displace and remove 1.9 gallons of water.

* Sketch in all relevant decommissioning data, including: interval overdrilled, interval grouted, casing left in hole, well stickup, etc.

11-8-16

Drilling Contractor

Department Representative

FIGURE 3

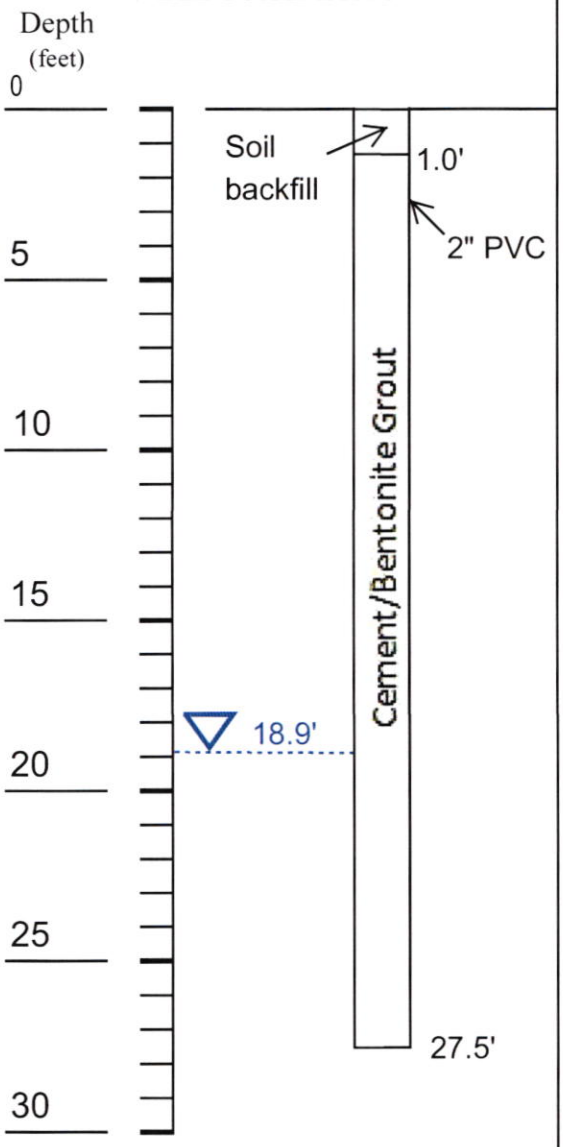
WELL DECOMMISSIONING RECORD

Site Name: Scott Rotary Seal	Well I.D.: MW 3
Site Location: Olean, NY	Driller: Dale Gramza
Drilling Co.: Nature's Way Environmental	Inspector:
	Date: 10/17/16

DECOMMISSIONING DATA
(Fill in all that apply)

OVERDRILLING	
Interval Drilled	
Drilling Method(s)	
Borehole Dia. (in.)	
Temporary Casing Installed? (y/n)	
Depth temporary casing installed	
Casing type/dia. (in.)	
Method of installing	
CASING PULLING	
Method employed	
Casing retrieved (feet)	
Casing type/dia. (in)	
CASING PERFORATING	
Equipment used	
Number of perforations/foot	
Size of perforations	
Interval perforated	
GROUTING	
Interval grouted (FBLS)	0 to 27.5
# of batches prepared	1
For each batch record:	
Quantity of water used (gal.)	7.8
Quantity of cement used (lbs.)	94
Cement type	Type I & II
Quantity of bentonite used (lbs.)	3.9 lbs
Quantity of calcium chloride used (lbs.)	
Volume of grout prepared (gal.)	10
Volume of grout used (gal.)	5.0

WELL SCHEMATIC*



COMMENTS: Grouted in place. Displace and remove 1.5 gallons of water.

* Sketch in all relevant decommissioning data, including: interval overdrilled, interval grouted, casing left in hole, well stickup, etc.

11-8-16

Drilling Contractor

Department Representative

FIGURE 3

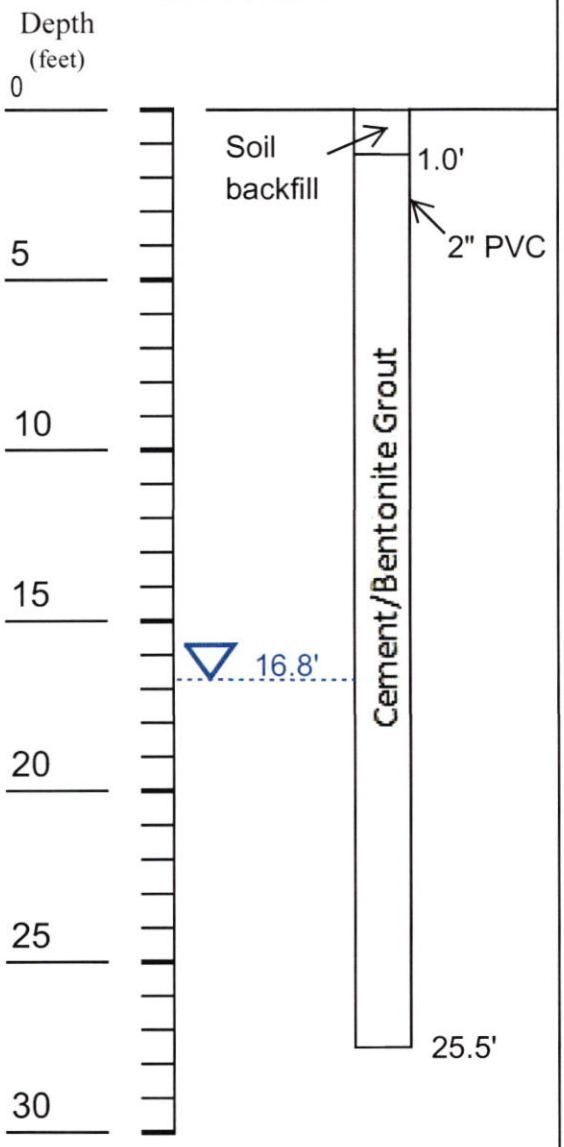
WELL DECOMMISSIONING RECORD

Site Name: Scott Rotary Seal	Well I.D.: MW 4
Site Location: Olean, NY	Driller: Dale Gramza
Drilling Co.: Nature's Way Environmental	Inspector:
	Date: 10/17/16

DECOMMISSIONING DATA
(Fill in all that apply)

OVERDRILLING	
Interval Drilled	
Drilling Method(s)	
Borehole Dia. (in.)	
Temporary Casing Installed? (y/n)	
Depth temporary casing installed	
Casing type/dia. (in.)	
Method of installing	
CASING PULLING	
Method employed	Pull & Rem
Casing retrieved (feet)	3.5'
Casing type/dia. (in)	2"
CASING PERFORATING	
Equipment used	
Number of perforations/foot	
Size of perforations	
Interval perforated	
GROUTING	
Interval grouted (FBLS)	0 to 25.5
# of batches prepared	1
For each batch record:	
Quantity of water used (gal.)	7.8
Quantity of cement used (lbs.)	94
Cement type	Type I & II
Quantity of bentonite used (lbs.)	3.9 lbs
Quantity of calcium chloride used (lbs.)	
Volume of grout prepared (gal.)	10
Volume of grout used (gal.)	4.8

WELL SCHEMATIC*



COMMENTS: Grouted in place. Displace and remove 1.5 gallons of water.

* Sketch in all relevant decommissioning data, including: interval overdrilled, interval grouted, casing left in hole, well stickup, etc.

11-8-16

Drilling Contractor

Department Representative

FIGURE 3

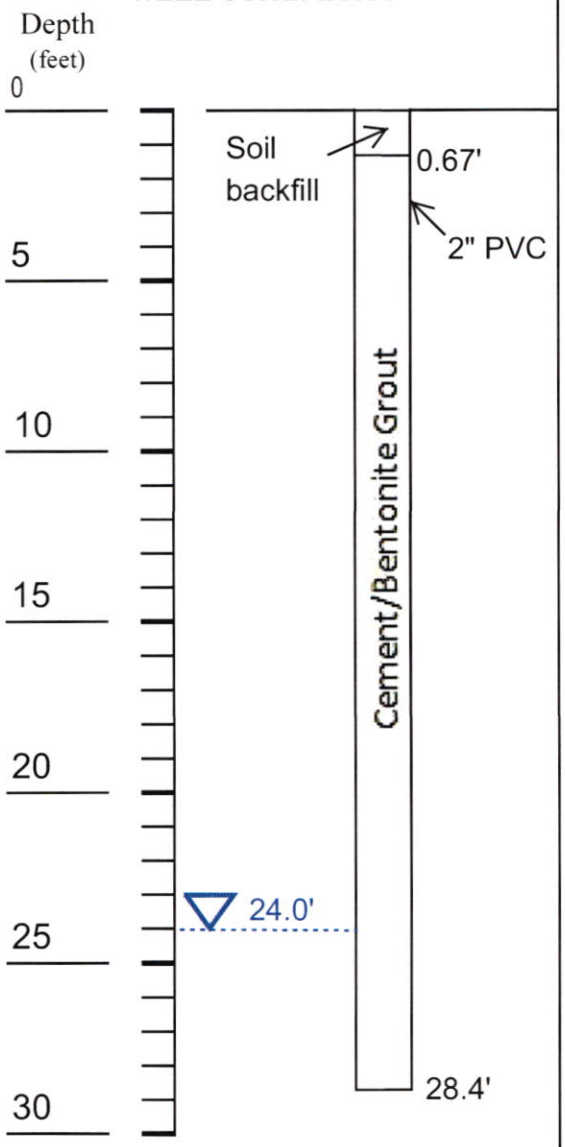
WELL DECOMMISSIONING RECORD

Site Name: Scott Rotary Seal	Well I.D.: MW 5
Site Location: Olean, NY	Driller: Dale Gramza
Drilling Co.: Nature's Way Environmental	Inspector:
	Date: 10/17/16

DECOMMISSIONING DATA
(Fill in all that apply)

OVERDRILLING	
Interval Drilled	
Drilling Method(s)	
Borehole Dia. (in.)	
Temporary Casing Installed? (y/n)	
Depth temporary casing installed	
Casing type/dia. (in.)	
Method of installing	
CASING PULLING	
Method employed	
Casing retrieved (feet)	
Casing type/dia. (in)	2"
CASING PERFORATING	
Equipment used	
Number of perforations/foot	
Size of perforations	
Interval perforated	
GROUTING	
Interval grouted (FBLS)	0 to 28.4
# of batches prepared	1
For each batch record:	
Quantity of water used (gal.)	7.8
Quantity of cement used (lbs.)	94
Cement type	Type I & II
Quantity of bentonite used (lbs.)	3.9 lbs
Quantity of calcium chloride used (lbs.)	
Volume of grout prepared (gal.)	10
Volume of grout used (gal.)	6

WELL SCHEMATIC*



COMMENTS: Grouted in place. Displace and remove 1.0 gallons of water.

* Sketch in all relevant decommissioning data, including: interval overdrilled, interval grouted, casing left in hole, well stickup, etc.

11-8-16

Drilling Contractor

Department Representative

FIGURE 3

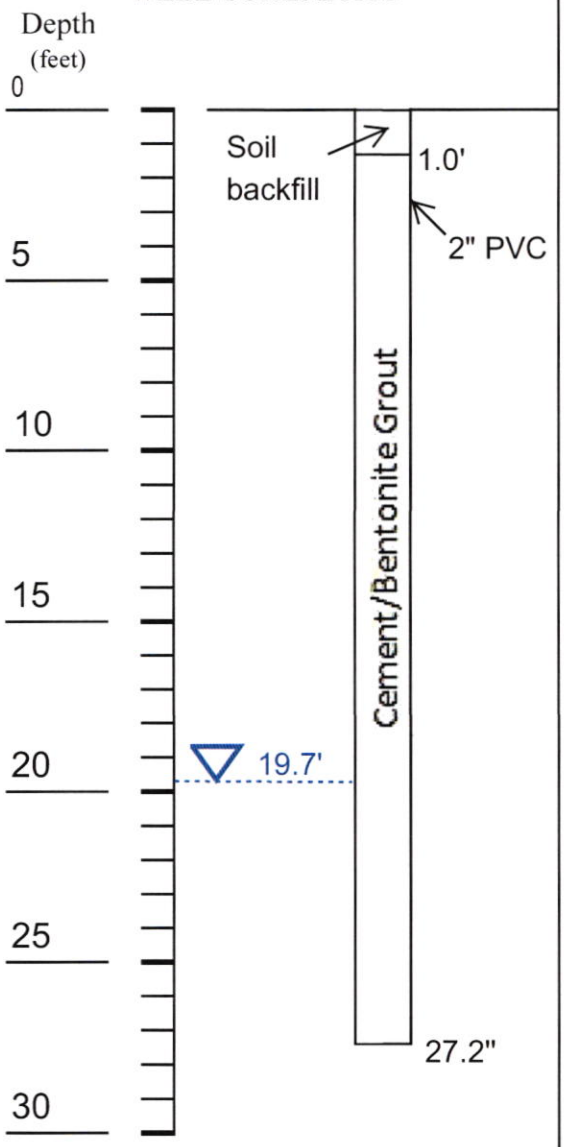
WELL DECOMMISSIONING RECORD

Site Name: Scott Rotary Seal	Well I.D.: MW 6
Site Location: Olean, NY	Driller: Dale Gramza
Drilling Co.: Nature's Way Environmental	Inspector:
	Date: 10/17/16

DECOMMISSIONING DATA
(Fill in all that apply)

OVERDRILLING	
Interval Drilled	
Drilling Method(s)	
Borehole Dia. (in.)	
Temporary Casing Installed? (y/n)	
Depth temporary casing installed	
Casing type/dia. (in.)	
Method of installing	
CASING PULLING	
Method employed	
Casing retrieved (feet)	
Casing type/dia. (in)	
CASING PERFORATING	
Equipment used	
Number of perforations/foot	
Size of perforations	
Interval perforated	
GROUTING	
Interval grouted (FBLS)	0.5 to 27.2'
# of batches prepared	1
For each batch record:	
Quantity of water used (gal.)	7.8
Quantity of cement used (lbs.)	94
Cement type	Type I & II
Quantity of bentonite used (lbs.)	3.9 lbs
Quantity of calcium chloride used (lbs.)	
Volume of grout prepared (gal.)	10
Volume of grout used (gal.)	6

WELL SCHEMATIC*



COMMENTS: Grouted in place. Displace and remove 1.3 gallons of water.

* Sketch in all relevant decommissioning data, including: interval overdrilled, interval grouted, casing left in hole, well stickup, etc.

11-8-16

Drilling Contractor

Department Representative

FIGURE 3

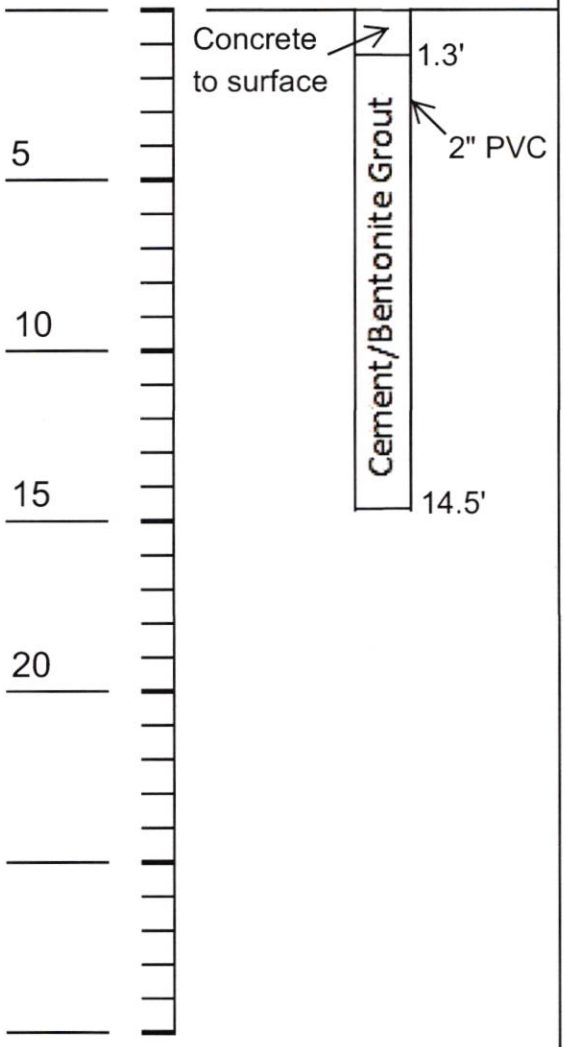
WELL DECOMMISSIONING RECORD

Site Name: Scott Rotary Seal	Well I.D.: SVE 1
Site Location: Olean, NY	Driller: Dale Gramza
Drilling Co.: Nature's Way Environmental	Inspector:
	Date: 10/18/16

DECOMMISSIONING DATA
(Fill in all that apply)

OVERDRILLING	
Interval Drilled	
Drilling Method(s)	
Borehole Dia. (in.)	
Temporary Casing Installed? (y/n)	
Depth temporary casing installed	
Casing type/dia. (in.)	
Method of installing	
CASING PULLING	
Method employed	
Casing retrieved (feet)	
Casing type/dia. (in)	
CASING PERFORATING	
Equipment used	
Number of perforations/foot	
Size of perforations	
Interval perforated	
GROUTING	
Interval grouted (FBLS)	0 to 14.5
# of batches prepared	1
For each batch record:	
Quantity of water used (gal.)	7.8
Quantity of cement used (lbs.)	94
Cement type	Type I & II
Quantity of bentonite used (lbs.)	3.9 lbs
Quantity of calcium chloride used (lbs.)	
Volume of grout prepared (gal.)	10
Volume of grout used (gal.)	2.8

WELL SCHEMATIC*



COMMENTS: Grouted in place. SVE well. Dry. No water.

* Sketch in all relevant decommissioning data, including: interval overdrilled, interval grouted, casing left in hole, well stickup, etc.

11-8-16

Drilling Contractor

Department Representative

FIGURE 3

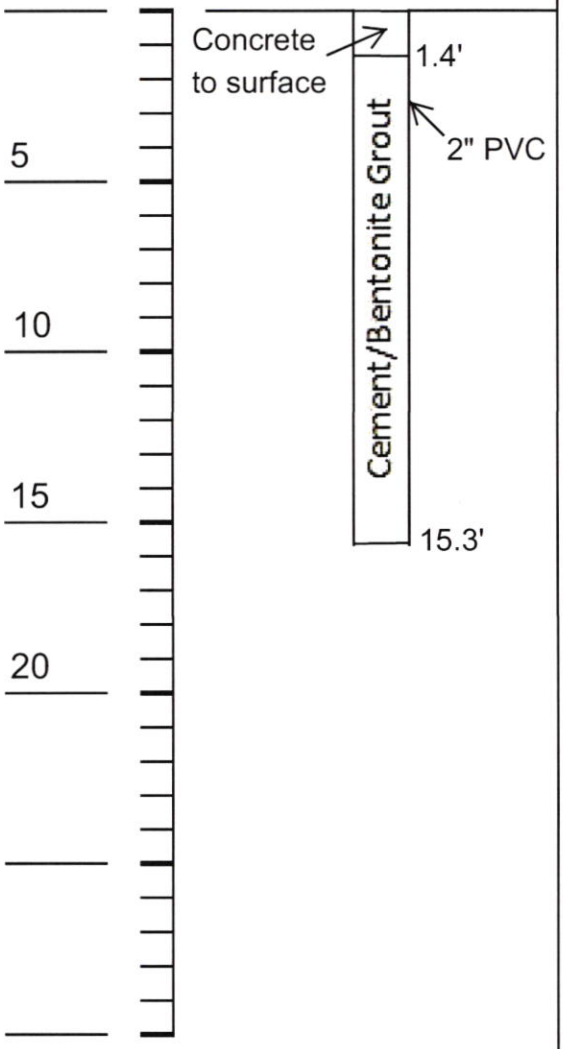
WELL DECOMMISSIONING RECORD

Site Name: Scott Rotary Seal	Well I.D.: SVE 2
Site Location: Olean, NY	Driller: Dale Gramza
Drilling Co.: Nature's Way Environmental	Inspector:
	Date: 10/18/16

DECOMMISSIONING DATA
(Fill in all that apply)

OVERDRILLING	
Interval Drilled	
Drilling Method(s)	
Borehole Dia. (in.)	
Temporary Casing Installed? (y/n)	
Depth temporary casing installed	
Casing type/dia. (in.)	
Method of installing	
CASING PULLING	
Method employed	
Casing retrieved (feet)	
Casing type/dia. (in)	
CASING PERFORATING	
Equipment used	
Number of perforations/foot	
Size of perforations	
Interval perforated	
GROUTING	
Interval grouted (FBLS)	0 to 15.3
# of batches prepared	1
For each batch record:	
Quantity of water used (gal.)	7.8
Quantity of cement used (lbs.)	94
Cement type	Type I & II
Quantity of bentonite used (lbs.)	3.9 lbs
Quantity of calcium chloride used (lbs.)	
Volume of grout prepared (gal.)	10
Volume of grout used (gal.)	2.9

WELL SCHEMATIC*



COMMENTS: Grouted in place. SVE well. Dry. No water.

* Sketch in all relevant decommissioning data, including: interval overdrilled, interval grouted, casing left in hole, well stickup, etc.

11-8-16

Drilling Contractor

Department Representative

FIGURE 3

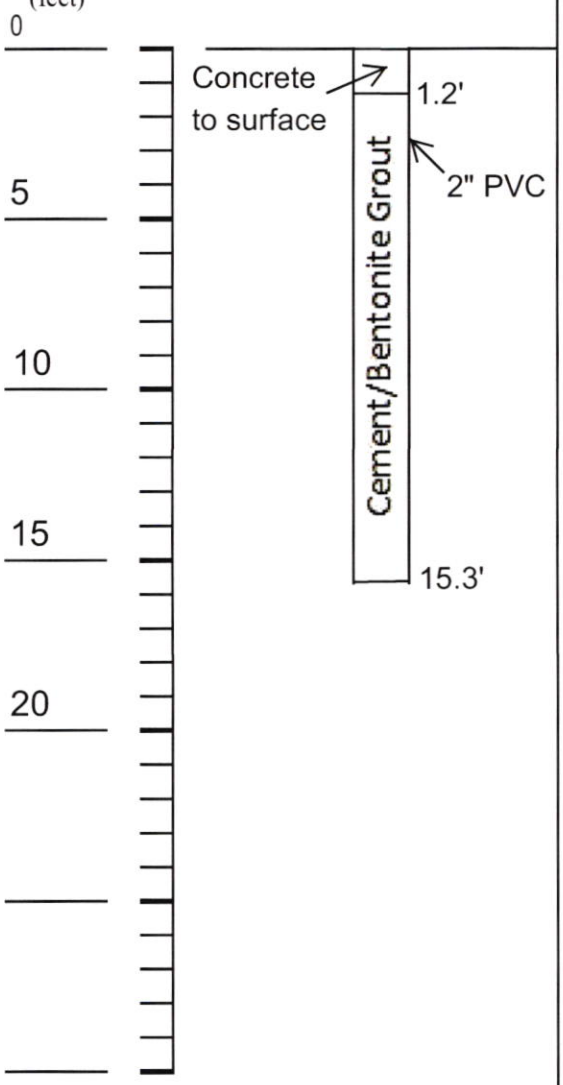
WELL DECOMMISSIONING RECORD

Site Name: Scott Rotary Seal	Well I.D.: SVE 3
Site Location: Olean, NY	Driller: Dale Gramza
Drilling Co.: Nature's Way Environmental	Inspector:
	Date: 10/18/16

DECOMMISSIONING DATA
(Fill in all that apply)

OVERDRILLING	
Interval Drilled	
Drilling Method(s)	
Borehole Dia. (in.)	
Temporary Casing Installed? (y/n)	
Depth temporary casing installed	
Casing type/dia. (in.)	
Method of installing	
CASING PULLING	
Method employed	
Casing retrieved (feet)	
Casing type/dia. (in)	
CASING PERFORATING	
Equipment used	
Number of perforations/foot	
Size of perforations	
Interval perforated	
GROUTING	
Interval grouted (FBLS)	0 to 15.3
# of batches prepared	1
For each batch record:	
Quantity of water used (gal.)	7.8
Quantity of cement used (lbs.)	94
Cement type	Type I & II
Quantity of bentonite used (lbs.)	3.9 lbs
Quantity of calcium chloride used (lbs.)	
Volume of grout prepared (gal.)	10
Volume of grout used (gal.)	2.8

WELL SCHEMATIC*



COMMENTS: Grouted in place. SVE well. Dry. No water.

* Sketch in all relevant decommissioning data, including: interval overdrilled, interval grouted, casing left in hole, well stickup, etc.

11-8-16

Drilling Contractor

Department Representative

FIGURE 3

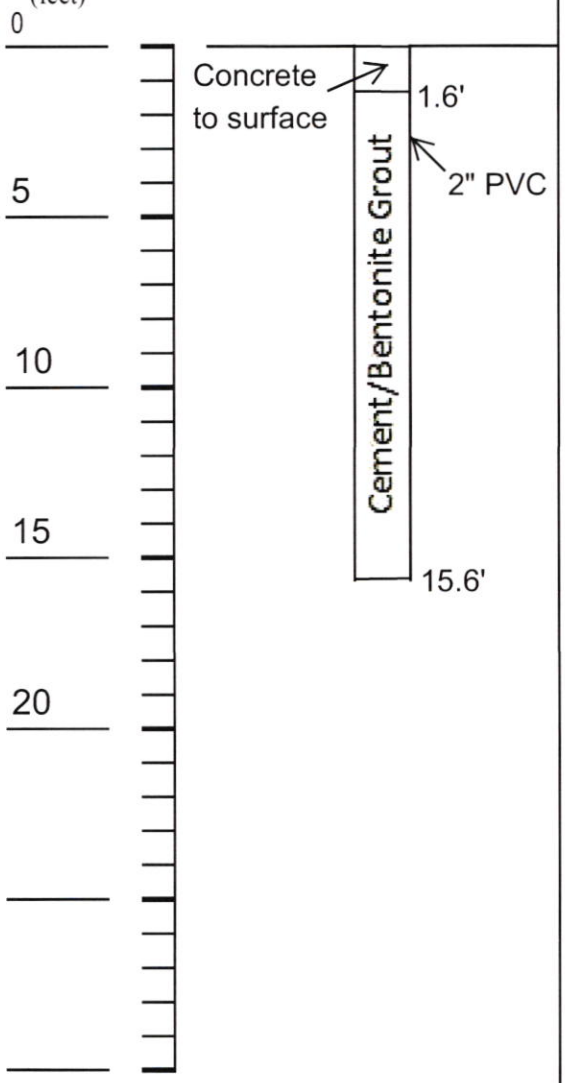
WELL DECOMMISSIONING RECORD

Site Name: Scott Rotary Seal	Well I.D.: SVE 4
Site Location: Olean, NY	Driller: Dale Gramza
Drilling Co.: Nature's Way Environmental	Inspector:
	Date: 10/18/16

DECOMMISSIONING DATA
(Fill in all that apply)

OVERDRILLING	
Interval Drilled	
Drilling Method(s)	
Borehole Dia. (in.)	
Temporary Casing Installed? (y/n)	
Depth temporary casing installed	
Casing type/dia. (in.)	
Method of installing	
CASING PULLING	
Method employed	
Casing retrieved (feet)	
Casing type/dia. (in)	
CASING PERFORATING	
Equipment used	
Number of perforations/foot	
Size of perforations	
Interval perforated	
GROUTING	
Interval grouted (FBLS)	0 to 15.6
# of batches prepared	1
For each batch record:	
Quantity of water used (gal.)	7.8
Quantity of cement used (lbs.)	94
Cement type	Type I & II
Quantity of bentonite used (lbs.)	3.9 lbs
Quantity of calcium chloride used (lbs.)	
Volume of grout prepared (gal.)	10
Volume of grout used (gal.)	2.8

WELL SCHEMATIC*



COMMENTS: Grouted in place. SVE well. Dry. No water.

* Sketch in all relevant decommissioning data, including: interval overdrilled, interval grouted, casing left in hole, well stickup, etc.

11-8-16

Drilling Contractor

Department Representative

FIGURE 3

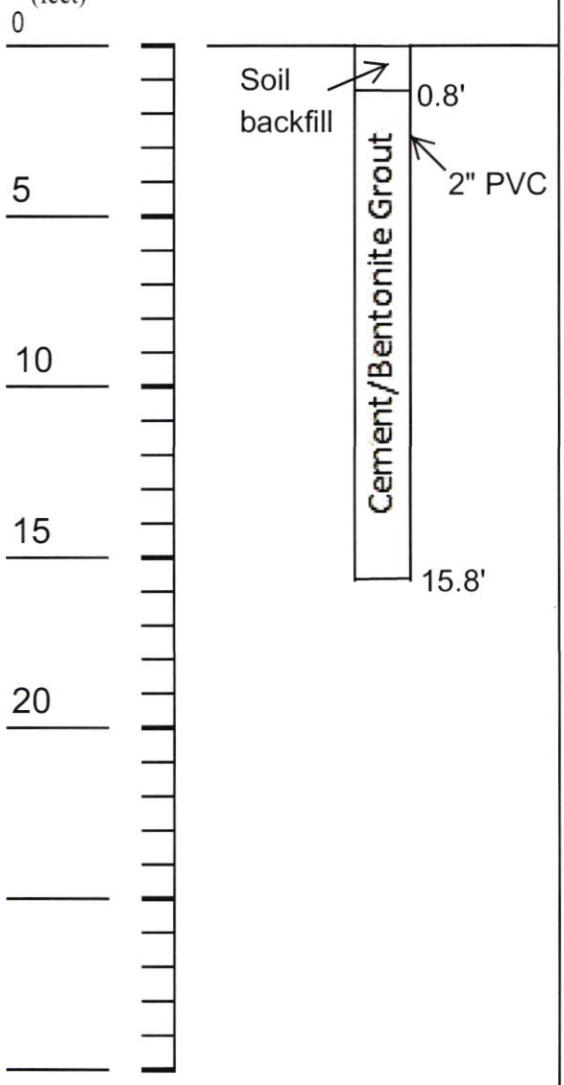
WELL DECOMMISSIONING RECORD

Site Name: Scott Rotary Seal	Well I.D.: SVE 5
Site Location: Olean, NY	Driller: Dale Gramza
Drilling Co.: Nature's Way Environmental	Inspector:
	Date: 10/17/16

DECOMMISSIONING DATA
(Fill in all that apply)

OVERDRILLING	
Interval Drilled	
Drilling Method(s)	
Borehole Dia. (in.)	
Temporary Casing Installed? (y/n)	
Depth temporary casing installed	
Casing type/dia. (in.)	
Method of installing	
CASING PULLING	
Method employed	
Casing retrieved (feet)	
Casing type/dia. (in)	
CASING PERFORATING	
Equipment used	
Number of perforations/foot	
Size of perforations	
Interval perforated	
GROUTING	
Interval grouted (FBLS)	0 to 15.8
# of batches prepared	1
For each batch record:	
Quantity of water used (gal.)	7.8
Quantity of cement used (lbs.)	94
Cement type	Type I & II
Quantity of bentonite used (lbs.)	3.9 lbs
Quantity of calcium chloride used (lbs.)	
Volume of grout prepared (gal.)	10
Volume of grout used (gal.)	3

WELL SCHEMATIC*



COMMENTS: Grouted in place. SVE well. Dry. No water.

* Sketch in all relevant decommissioning data, including: interval overdrilled, interval grouted, casing left in hole, well stickup, etc.

11-2-16

Drilling Contractor

Department Representative

FIGURE 3

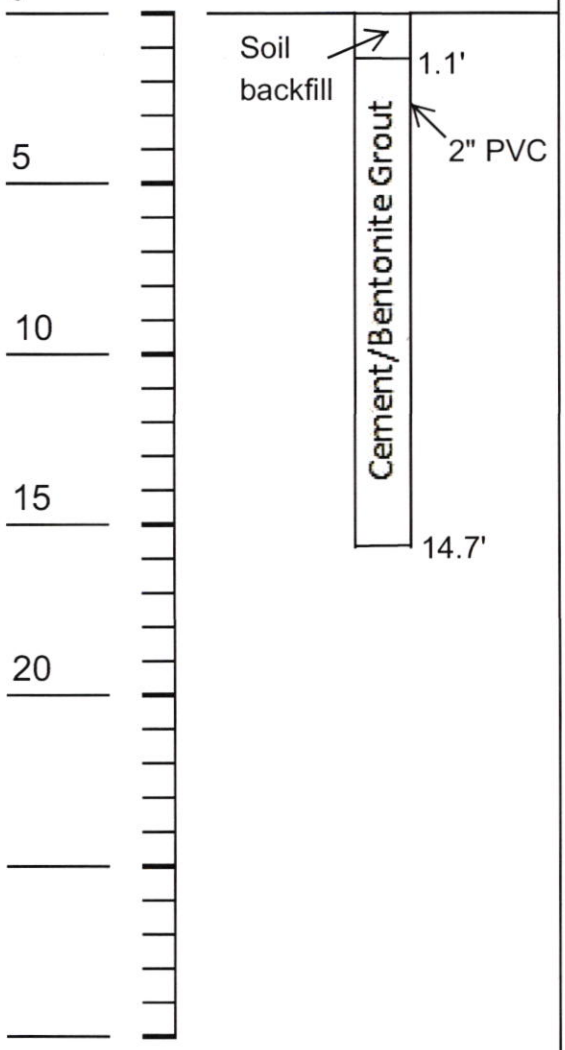
WELL DECOMMISSIONING RECORD

Site Name: Scott Rotary Seal	Well I.D.: SVE 6
Site Location: Olean, NY	Driller: Dale Gramza
Drilling Co.: Nature's Way Environmental	Inspector:
	Date: 10/17/16

DECOMMISSIONING DATA
(Fill in all that apply)

OVERDRILLING	
Interval Drilled	
Drilling Method(s)	
Borehole Dia. (in.)	
Temporary Casing Installed? (y/n)	
Depth temporary casing installed	
Casing type/dia. (in.)	
Method of installing	
CASING PULLING	
Method employed	
Casing retrieved (feet)	
Casing type/dia. (in)	
CASING PERFORATING	
Equipment used	
Number of perforations/foot	
Size of perforations	
Interval perforated	
GROUTING	
Interval grouted (FBLS)	0 to 14.7
# of batches prepared	1
For each batch record:	
Quantity of water used (gal.)	7.8
Quantity of cement used (lbs.)	94
Cement type	Type I & II
Quantity of bentonite used (lbs.)	3.9 lbs
Quantity of calcium chloride used (lbs.)	
Volume of grout prepared (gal.)	10
Volume of grout used (gal.)	2.5

WELL SCHEMATIC*



COMMENTS: Grouted in place. SVE well. Dry. No water.

* Sketch in all relevant decommissioning data, including: interval overdrilled, interval grouted, casing left in hole, well stickup, etc.

11-8-16

Drilling Contractor

Department Representative

FIGURE 3

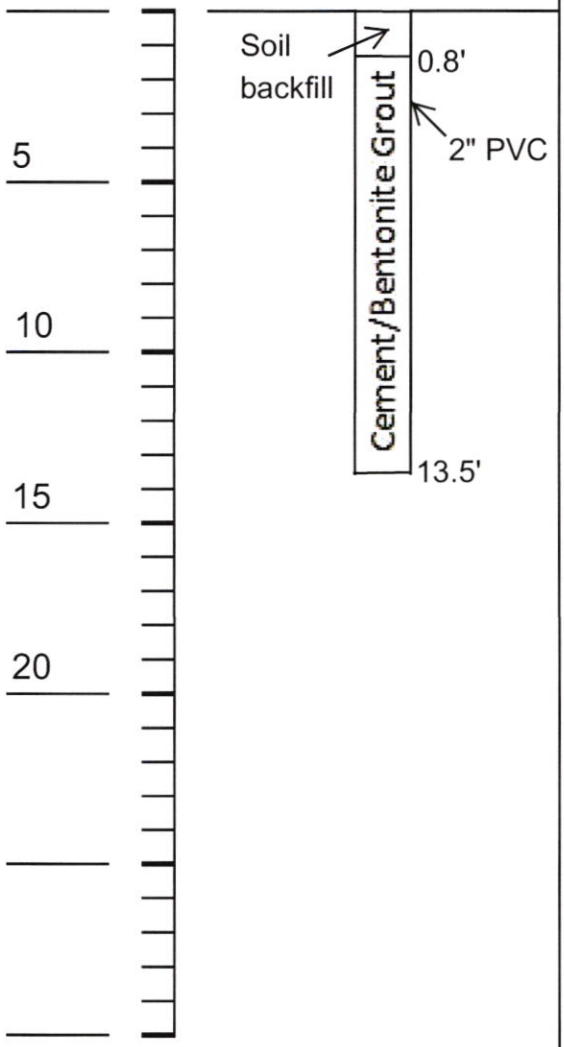
WELL DECOMMISSIONING RECORD

Site Name: Scott Rotary Seal	Well I.D.: SVE 7
Site Location: Olean, NY	Driller: Dale Gramza
Drilling Co.: Nature's Way Environmental	Inspector:
	Date: 10/17/16

DECOMMISSIONING DATA
(Fill in all that apply)

OVERDRILLING	
Interval Drilled	
Drilling Method(s)	
Borehole Dia. (in.)	
Temporary Casing Installed? (y/n)	
Depth temporary casing installed	
Casing type/dia. (in.)	
Method of installing	
CASING PULLING	
Method employed	
Casing retrieved (feet)	
Casing type/dia. (in)	
CASING PERFORATING	
Equipment used	
Number of perforations/foot	
Size of perforations	
Interval perforated	
GROUTING	
Interval grouted (FBLS)	0 to 13.5
# of batches prepared	1
For each batch record:	
Quantity of water used (gal.)	7.8
Quantity of cement used (lbs.)	94
Cement type	Type I & II
Quantity of bentonite used (lbs.)	3.9 lbs
Quantity of calcium chloride used (lbs.)	
Volume of grout prepared (gal.)	10
Volume of grout used (gal.)	2.6

WELL SCHEMATIC*



COMMENTS: Grouted in place. SVE well. Dry. No water.

* Sketch in all relevant decommissio uding: interval overdrilled, interval groute hole, well stickup, etc.

11-8-16

Drilling Contractor

Department Representative

FIGURE 3

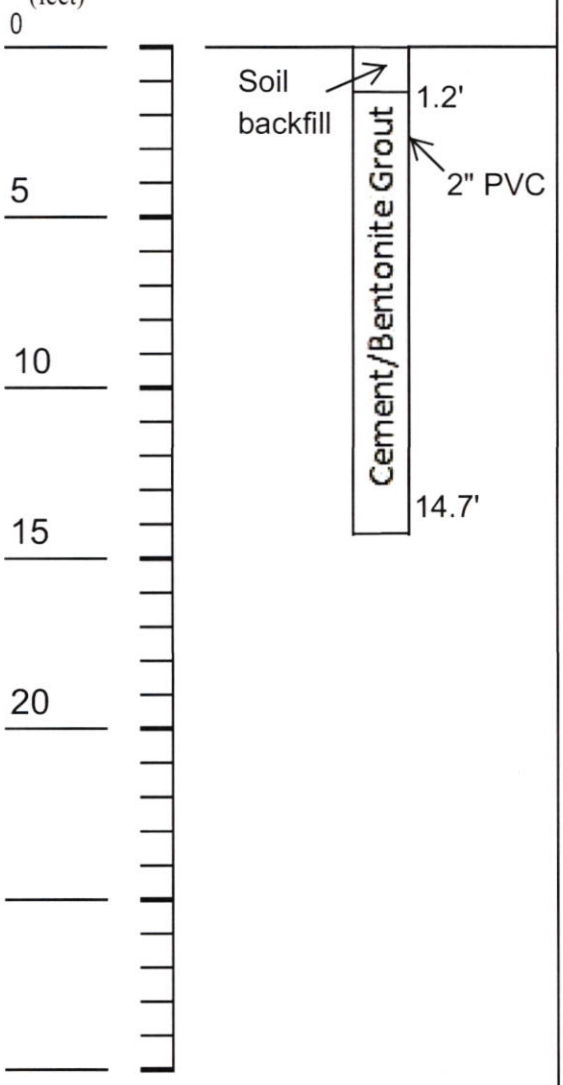
WELL DECOMMISSIONING RECORD

Site Name: Scott Rotary Seal	Well I.D.: SVE 8
Site Location: Olean, NY	Driller: Dale Gramza
Drilling Co.: Nature's Way Environmental	Inspector:
	Date: 10/18/16

DECOMMISSIONING DATA
(Fill in all that apply)

OVERDRILLING	
Interval Drilled	
Drilling Method(s)	
Borehole Dia. (in.)	
Temporary Casing Installed? (y/n)	
Depth temporary casing installed	
Casing type/dia. (in.)	
Method of installing	
CASING PULLING	
Method employed	
Casing retrieved (feet)	
Casing type/dia. (in)	
CASING PERFORATING	
Equipment used	
Number of perforations/foot	
Size of perforations	
Interval perforated	
GROUTING	
Interval grouted (FBLS)	0 to 14.7
# of batches prepared	1
For each batch record:	
Quantity of water used (gal.)	7.8
Quantity of cement used (lbs.)	94
Cement type	Type I & II
Quantity of bentonite used (lbs.)	3.9 lbs
Quantity of calcium chloride used (lbs.)	
Volume of grout prepared (gal.)	10
Volume of grout used (gal.)	2.6

WELL SCHEMATIC*



COMMENTS: Grouted in place. SVE well. Dry. No water.

* Sketch in all relevant decommissioning: interval overdrilled, interval grouted, hole, well stickup, etc.

11-8-16

Drilling Contractor

Department Representative

FIGURE 3

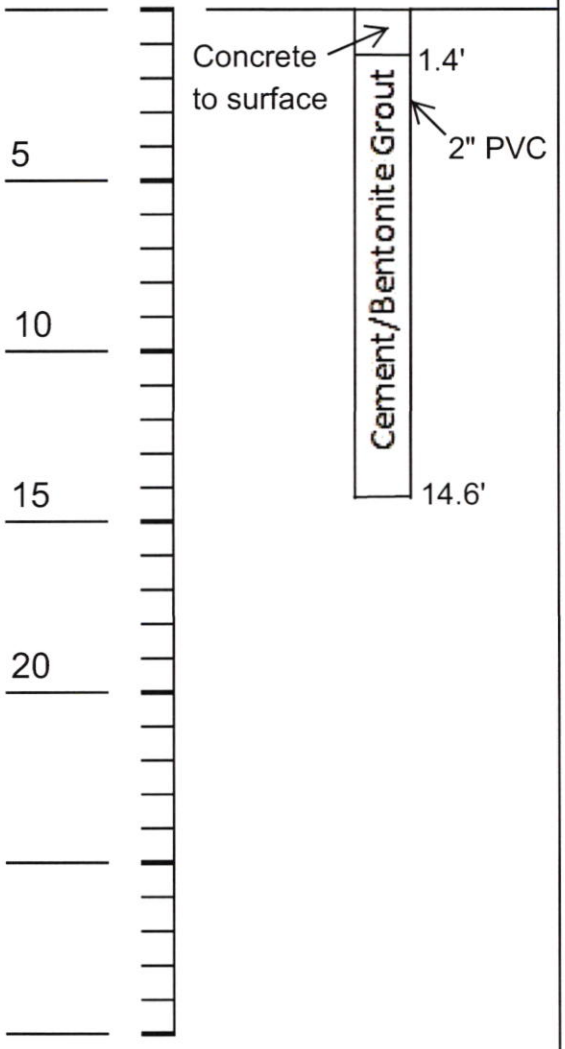
WELL DECOMMISSIONING RECORD

Site Name: Scott Rotary Seal	Well I.D.: SVE 9
Site Location: Olean, NY	Driller: Dale Gramza
Drilling Co.: Nature's Way Environmental	Inspector:
	Date: 10/18/16

DECOMMISSIONING DATA
(Fill in all that apply)

OVERDRILLING	
Interval Drilled	
Drilling Method(s)	
Borehole Dia. (in.)	
Temporary Casing Installed? (y/n)	
Depth temporary casing installed	
Casing type/dia. (in.)	
Method of installing	
CASING PULLING	
Method employed	
Casing retrieved (feet)	
Casing type/dia. (in)	
CASING PERFORATING	
Equipment used	
Number of perforations/foot	
Size of perforations	
Interval perforated	
GROUTING	
Interval grouted (FBLS)	0 to 14.6
# of batches prepared	1
For each batch record:	
Quantity of water used (gal.)	7.8
Quantity of cement used (lbs.)	94
Cement type	Type I & II
Quantity of bentonite used (lbs.)	3.9 lbs
Quantity of calcium chloride used (lbs.)	
Volume of grout prepared (gal.)	10
Volume of grout used (gal.)	2.9

WELL SCHEMATIC*



COMMENTS: Grouted in place. SVE well. Dry. No water.

* Sketch in all relevant decommissio uding: interval overdrilled, interval groute hole, well stickup, etc.

11-8-16

Drilling Contractor

Department Representative

APPENDIX F

EXCAVATION WORK PLAN

BROWNFIELD CLEANUP PROGRAM
FINAL ENGINEERING REPORT

SMP APPENDIX F
EXCAVATION WORK PLAN

SCOTT ROTARY SEALS SITE
NYSDEC SITE NUMBER: C905036
OLEAN, NEW YORK

November 2012
Updated September 2020

0189-020-001

Prepared for:

Scott Rotary Seals

DST Properties NY, LLC
301 Franklin Street
Olean, New York

Prepared By:

TurnKey Environmental Restoration, LLC
2558 Hamburg Turnpike, Suite 300
Buffalo, NY 14218
(716) 856-0635

SITE MANAGEMENT PLAN
APPENDIX F: EXCAVATION WORK PLAN
ROTARY SEALS SITE

Table of Contents

F-1: NOTIFICATION

At least 15 days prior to the start of any activity that is anticipated to encounter remaining contamination, the site owner or their representative will notify the Department. Currently, this notification will be made to:

Ms. Megan Kuczka
Environmental Program Specialist 1
NYSDEC – Region 9
270 Michigan Ave.
Buffalo, NY 14203

This notification will include:

- A detailed description of the work to be performed, including the location and areal extent, plans for site re-grading, intrusive elements, or utilities to be installed below the cover system, 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 29CFR 1910.120; A copy of the contractor's health and safety plan, in electronic format, if it differs from the HASP provided in Appendix G of the Site Management Plan (SMP); Identification of disposal facilities for potential waste streams
- Identification of sources of any anticipated backfill, along with all required chemical testing results

F-2: SOIL SCREENING METHODS

Visual, olfactory, and instrument-based soil screening will be performed by a qualified environmental professional during all remedial and development excavations into known or potentially contaminated material (remaining contamination). Soil screening will be performed regardless of when the invasive work is done and will include all excavation and invasive work performed during development, such as excavations for foundations and utility work, after issuance of the COC.

Soils will be segregated based on previous environmental data and screening results into material that requires off-site disposal, material that requires testing, material that can be returned to the subsurface, and material that can be used as cover soil.

F-3: STOCKPILE METHODS

Material that requires testing and/or off-site disposal will be placed on and covered with polyethylene sheeting to prevent infiltration of precipitation and wind erosion. If off-site disposal of the material is planned, the stockpiled impacted material will be characterized per the requirements of a permitted disposal facility. Stockpiled impacted material will not remain on-site for more than 90 days. Upon obtaining an approved waste profile, the impacted material will be transported and disposed of off-site.

Soil stockpiles will be continuously encircled with a berm and/or silt fence. Hay bales will be used as needed near catch basins, surface waters and other discharge points.

Stockpiles will be covered with appropriately anchored tarps. Stockpiles will be routinely inspected, and damaged tarp covers will be promptly replaced.

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

F-4: MATERIALS EXCAVATION AND LOAD OUT

A qualified environmental professional, or person under their supervision, will oversee all invasive work and the excavation and load-out of all excavated material.

The owner of the property and its contractors are solely responsible for safe execution of all invasive and other work performed under this Plan.

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

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

A truck wash will be operated on-site, if deemed necessary. The qualified environmental professional, or person under their supervision, will be responsible for ensuring

that outbound trucks will be washed at the truck wash before leaving the site until the activities performed under this section are complete.

Locations where vehicles enter or exit the site shall be inspected daily for evidence of off-site soil tracking.

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

F-5: MATERIALS TRANSPORT OFF-SITE

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

Material transported by trucks exiting the site will be secured with tight-fitting covers, when appropriate based on material and waste characterization. If loads contain wet material capable of producing free liquid, truck liners will be used.

If necessary, trucks will be washed prior to leaving the site. Truck wash waters will be collected and disposed of off-site in an appropriate manner.

Truck transport routes will be described in the excavation notification based on the disposal facility location.

All trucks loaded with site materials will exit the vicinity of the site using only approved truck routes. Trucking routes will consider (a) limiting transport through residential areas and past sensitive sites; (b) use of city mapped truck routes; (c) prohibiting off-site queuing of trucks entering the facility; (d) limiting total distance to major highways; (e) promoting safety in access to highways; and (f) overall safety in transport.

Egress points for truck and equipment transport from the site will be kept clean of dirt and other materials during site remediation and development.

Queuing of trucks will be performed on-site to minimize off-site disturbance. Off-site queuing will be prohibited.

F-6: MATERIALS DISPOSAL OFF-SITE

All soil/fill/solid waste excavated and removed from the site will be treated as contaminated and regulated material unless waste characterization analytical results determine otherwise. Any material requiring off-site disposal will be transported and disposed in accordance with all local, State (including 6NYCRR Part 360) and Federal regulations. If disposal of soil/fill from this site is proposed for unregulated off-site disposal (i.e., clean soil removed for development purposes), a formal request with an associated plan will be made to the NYSDEC. Unregulated off-site management of materials from this site will not occur without formal NYSDEC approval.

Off-site disposal locations for excavated soil/fill will be identified in the pre-excavation notification, as described in Section F-1. This will include estimated quantities and a breakdown by class of disposal facility. Actual disposal quantities and associated documentation will be reported to the NYSDEC in the Periodic Review Report (PRR). This documentation will include waste profiles, test results, facility acceptance letters, manifests, bills of lading and facility receipts.

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

F-7: MATERIALS REUSE ON-SITE

"Reuse on-site" means reuse of material that originates at the Site and does not leave the Site during excavation. The criteria under which soil/fill originating on-site may be used on-site are presented below.

- **Excavated, Non-Impacted On-Site Soil/Fill:** Non-impacted soil/fill (i.e., soil/fill that does not exhibit visible evidence of contamination and does not exhibit PID readings that exceed 100 parts per million (ppm) that is excavated from the Site may be used on-site as backfill beneath the cover system without special handling. The qualified environmental professional will ensure that procedures defined for materials reuse in this SMP are followed and that unacceptable material does not remain on-site.
- **Excavated, Potentially Impacted On-Site Soil/Fill:** Potentially impacted soil/fill (i.e., soils that exhibit visible evidence of contamination or with elevated PID readings (above 100 ppm) may not be used on-site unless tested and determined to meet the chemical criteria for Commercial SCOs per 6NYCRR Part

375. Excavated on-site material meeting Commercial SCOs, is acceptable for re-use on-site as backfill beneath the cover system.

Chemical criteria for on-site reuse of material have been approved by NYSDEC and are listed in Table 1 of the SMP. The qualified environmental professional will ensure that procedures defined for materials reuse in this SMP are followed and that unacceptable material does not remain on-site. Contaminated on-site material, including historic fill and contaminated soil, that is acceptable for re-use on-site 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.

F-8: FLUIDS MANAGEMENT

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

If water generated during large-scale construction activities is proposed to be discharged to surface waters (i.e., a local pond, stream, or river), the discharge will be performed under a SPDES permit.

F-9: COVER SYSTEM RESTORATION

After the completion of soil removal and any other invasive activities the cover system will be restored in a manner that complies with the SMP and FER. The demarcation layer will be replaced to provide a visual reference to the top of the remaining in-place material. If the type of cover system changes from that which exists prior to the excavation (i.e., a soil cover is replaced by asphalt), this will constitute a modification of the cover element of the remedy, and a figure showing the modified surface will be included in the subsequent PRR and in any updates to the Site Management Plan.

F-10: BACKFILL FROM OFF-SITE SOURCES

The criteria under which off-site material may be used as backfill are presented below.

- **Off-Site Soil/Fill:** Off-site soil/fill may be used as backfill if it originates from known sources having no evidence of disposal or releases of hazardous substances; hazardous, toxic or radioactive wastes; or petroleum, and is tested and meet the

criteria shown on Table 7 of the SMP in accordance with Appendix 5 of DER-10. In addition, no off-site materials meeting the definition of a solid waste as defined in 6 NYCRR, Part 360-1.2 (a) shall be used as backfill. The criteria presented in Table 7 of the SMP represent the lesser of the Commercial Soil Cleanup Objectives (SCOs) or levels protective of groundwater quality as published in 6NYCRR Part 375-6.7(d)(c) and 375-6.8.

- **Other Off-Site Material:** Certain material may be imported as backfill, without chemical testing, provided it contains less than 10% (by weight) material that would pass through a size 80 sieve: 1) Rock or stone, consisting of virgin material from a permitted mine or quarry; 2) Recycled concrete, brick, or asphalt from a NYSDEC-registered or permitted C&D debris processing facility (as specified in Section 360-16.1 of 6 NYCRR Part 360) that conforms to Section 304 of the New York State Department of Transportation Standard Specifications Construction and Materials Volume 1 (2002). As stated in Section 360-16.4(b)(2), the facility may only accept recognizable, uncontaminated, non-pulverized C&D debris or C&D debris from other authorized C&D processing facilities. According to Section 360-16.2(c), "uncontaminated" means C&D debris that is not mixed or commingled with other solid waste at the point of generation, processing, or disposal, and that is not contaminated with spills of a petroleum product, hazardous waste, or industrial waste.

Off-site borrow soils shall be tested to assure conformance with the criteria identified above. If an off-site soil/fill borrow source is of unknown origin or originates from a commercial, industrial, or urban site, then a tiered approach based on the volume of impacted soil/fill being excavated will be used to determine the frequency of characterization sampling in accordance with DER-10.

Grab samples will be collected for VOC analysis. For all other required analyses, a minimum of four grab samples will be collected to form a single composite sample. Approximately equal aliquots of the grab samples will be composited in the field using a stainless steel trowel and bowl. The trowel and bowl shall be decontaminated with a non-phosphate detergent (e.g., Alconox®) and potable water wash solution followed by a distilled water rinse between sampling locations. The soil/fill samples will be analyzed for TCL VOCs, TCL SVOCs, pesticides, PCBs, RCRA metals, and cyanide in accordance with USEPA SW-846 Methodology by a NYSDOH ELAP-certified laboratory, and emerging contaminants

including perfluoroalkyl substances (PFAS) in accordance with the Guidelines for Sampling and Analysis of PFAS[1]. Analytical results will be reported in the PRR.

All materials proposed for import onto the site will be approved by the qualified environmental professional and will comply with provisions in this SMP prior to receipt at the site.

Material from industrial sites, spill sites, or other environmental remediation sites or potentially contaminated sites will not be imported to the Site without prior approval by NYSDEC.

All imported soils will meet the backfill and cover soil quality standards established in 6NYCRR 375-6.7(d). Based on an evaluation of the land use, protection of groundwater and protection of ecological resources criteria, the resulting soil quality standards are listed in Table 7 of the SMP. Soils that meet 'exempt' fill requirements under 6NYCRR Part 360, but do not meet backfill or cover soil objectives for this site, will not be imported onto the site without prior approval by NYSDEC. Solid waste will not be imported onto the site.

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

F-11: STORMWATER POLLUTION PREVENTION

If construction activities disturb more than 1 acre of land, barriers and hay bale checks will be installed and inspected once a week and after every storm event. Results of inspections will be recorded in a logbook and maintained at the site and available for inspection by NYSDEC. All necessary repairs shall be made immediately.

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

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

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

[1] NYSDEC's January 2020 Guidelines for Sampling and Analysis of PFAS under NYSDEC's Part 375 Remedial Programs (https://www.dec.ny.gov/docs/remediation_hudson_pdf/pfassampanaly.pdf)

Erosion and sediment control measures identified in the SMP shall be observed to ensure that they are operating correctly. Where discharge locations or points are accessible, they shall be inspected to ascertain whether erosion control measures are effective in preventing significant impacts to receiving waters

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

F-12: CONTINGENCY PLAN

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

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

Identification of unknown or unexpected contaminated media identified by screening during invasive site work will be promptly communicated by phone to NYSDEC's Project Manager. Reportable quantities of petroleum product will also be reported to the NYSDEC spills hotline. These findings will be also included in the periodic reports prepared pursuant to Section 5 of the SMP.

F-13: COMMUNITY AIR MONITORING PLAN

Community air monitoring for organic vapors will be performed at the downwind perimeter of the exclusion zone on a continuous basis during intrusive activities performed outdoors that may be reasonably expected to potentially release organic vapors, or when sustained readings are detected in the work zone (i.e., proximate to the source of the intrusive activity). Otherwise, the monitoring will be performed on an hourly basis. A photoionization detector (PID) or other equipment will be suitable to the types of contaminants known or suspected to be present will be used and will be capable of calculating 15-minute running average concentrations. All air monitoring equipment will be calibrated at least daily, and an

upwind concentration will be taken at least daily to establish background conditions. The 15-minute average concentrations will be compared to the levels specified below.

ORGANIC VAPOR PERIMETER MONITORING:

- If the ambient air concentration of total organic vapors at the downwind perimeter of the work area or exclusion zone exceeds 5 parts per million (ppm) above background for the 15-minute average, work activities must be temporarily halted and monitoring continued. If the total organic vapor level readily decreases (per instantaneous readings) below 5 ppm over background, work activities can resume with continued monitoring.
- If total organic vapor levels at the downwind perimeter of the work area or exclusion zone persist at levels more than 5 ppm over background but less than 25 ppm, work activities must be halted, the source of vapors identified, corrective actions taken to abate emissions, and monitoring continued. After these steps, work activities can resume provided that the total organic vapor level 200 feet downwind of the exclusion zone or half the distance to the nearest potential receptor or residential/commercial structure, whichever is less - but in no case less than 20 feet, is below 5 ppm over background for the 15-minute average.
- If the organic vapor level is above 25 ppm at the perimeter of the work area, activities must be shutdown.
- All 15-minute readings must be recorded and be available for State (DEC and DOH) personnel to review. Instantaneous readings, if any, used for decision purposes should also be recorded.

EXPLOSIVE VAPORS:

Explosive vapor community air monitoring will be performed at the downwind perimeter of the Site on a continuous basis whenever sustained atmospheric concentrations of greater than 10% of the LEL are recorded in the exclusion zone. If sustained atmospheric concentrations of greater than 10% LEL are recorded at the downwind Site perimeter, the local Fire Department will be contacted.

AIRBORNE PARTICULATE COMMUNITY AIR MONITORING

Respirable (PM-10) particulate monitoring will be performed on a continuous basis at the downwind perimeter of the exclusion zone. The monitoring will be performed using real-time monitoring equipment capable of measuring less than PM-10 and integrating over a period of 15 minutes for comparison to the airborne particulate action levels. The equipment

will be equipped with an audible alarm to indicate exceedance of the action level. In addition, fugitive dust migration will be visually assessed during all work activities. All readings will be recorded and will be available for NYSDEC and NYSDOH review. Readings will be interpreted as follows:

- If the downwind PM-10 particulate level is 100 micrograms per cubic meter (ug/m^3) greater than the background reading for the 15-minute period or if airborne dust is observed leaving the work area, then dust suppression techniques must be employed. Work may continue with dust suppression provided that the downwind PM-10 particulate levels do not exceed 150 ug/m^3 above the background level and that visible dust is not migrating from the work area.
- If, after implementation of dust suppression techniques downwind PM-10 levels are greater than 150 ug/m^3 above the background level, work activities must be stopped, and dust suppression controls re-evaluated. Work can resume provided that supplemental dust suppression measures and/or other controls are successful in reducing the downwind PM-10 particulate concentration to within 150 ug/m^3 of the background level and in preventing visible dust migration.

The location of air sampling stations will be based on generally prevailing wind conditions. These locations will be adjusted on a daily or more frequent basis based on actual wind directions to provide upwind and downwind monitoring stations.

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

F-14: ODOR CONTROL PLAN

This odor control plan is capable of controlling emissions of nuisance odors off-site. If nuisance odors are identified at the Site boundary, or if odor complaints are received, work will be halted, and the source of odors will be identified and corrected. Work will not resume until all nuisance odors have been abated. NYSDEC and NYSDOH will be notified of all odor events and of any other complaints about the project. Implementation of all odor controls, including the halt of work, is the responsibility of the property owner's Remediation Engineer, and any measures that are implemented will be discussed in the PRR.

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

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

If nuisance odors develop during intrusive work that cannot be corrected, or where the control of nuisance odors cannot otherwise be achieved due to on-site conditions or 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.

F-15: DUST CONTROL PLAN

Dust suppression techniques will be employed as necessary to mitigate fugitive dust from non-vegetated or disturbed soil/fill during post-remediation construction and redevelopment.

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

- Dust suppression will be achieved using a dedicated on-site water truck for road wetting. The truck will be capable of spraying water directly onto off-road areas including excavations and stockpiles.
- Clearing and grubbing of larger sites will be done in stages to limit the area of exposed, unvegetated soils vulnerable to dust production.
- Gravel will be used on roadways to provide a clean and dust-free road surface.
- On-site roads will be limited in total area to minimize the area required for water truck sprinkling.
- Covering or proof-rolling excavated areas and materials after excavation activity ceases.
- Reducing the excavation size and/or number of excavations.

F-16: OTHER NUISANCES

A plan will be developed and used by the contractor for all remedial work to ensure compliance with local ordinances, as necessary (e.g., rodent control, noise control).

APPENDIX G

HASP/CAMP

Health and Safety Plan for Site Management Activities

Scott Rotary Seals Site
Olean, New York

July 2012
Updated September 2020

0189-001-400

Prepared For:

DST Properties NY, LLC
and

Scott Rotary Seals

Prepared By:

TurnKey Environmental Restoration, LLC

2558 Hamburg Turnpike, Suite 300, Buffalo, New York | phone: (716) 856-0599 | fax: (716) 856-0583

SITE MANAGEMENT PLAN
APPENDIX G

HEALTH AND SAFETY PLAN

SCOTT ROTARY SEALS SITE
OLEAN, NEW YORK

September 2012
Updated September 2020

0189-020-001

Prepared for:

DST Properties NY, LLC

and

Scott Rotary Seals

Prepared by:

TurnKey Environmental Restoration, LLC

SCOTT ROTARY SEALS SITE
HASP FOR SITE MANAGEMENT ACTIVITIES

ACKNOWLEDGEMENT

Plan Reviewed by (initial):

Corporate Health and Safety Director: Thomas H. Forbes, P.E.

Project Manager: Michael A. Lesakowski

Designated Site Safety and Health Officer: Brock M. Green

Acknowledgement:
I acknowledge that I have reviewed the information contained in this site-specific Health and Safety Plan, and understand the hazards associated with performance of the field activities described herein. I agree to comply with the requirements of this plan.

NAME (PRINT)	SIGNATURE	DATE

TURNKEY

SCOTT ROTARY SEALS SITE
HASP FOR SITE MANAGEMENT ACTIVITIES

TABLE OF CONTENTS

SCOTT ROTARY SEALS SITE
HASP FOR SITE MANAGEMENT ACTIVITIES

TABLE OF CONTENTS

SCOTT ROTARY SEALS SITE
HASP FOR SITE MANAGEMENT ACTIVITIES

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

APPENDICES

1.0 INTRODUCTION

1.1 General

In accordance with OSHA requirements contained in 29CFR 1910.120, this Health and Safety Plan (HASP) describes the specific health and safety practices and procedures to be employed by TurnKey Environmental Restoration, LLC and Benchmark Environmental Engineering & Science, PLLC employees (referred to jointly hereafter as "TurnKey-Benchmark") during Site management activities at the Scott Rotary Seals Site located at 301 Franklin Street in the City of Olean, New York (see Figure 1). This HASP presents procedures for TurnKey-Benchmark employees who will be involved with field activities; it does not cover the activities of other contractors, subcontractors, or other individuals on the Site. These firms will be required to develop and enforce their own HASPs as discussed in Section 2.0. TurnKey-Benchmark accepts no responsibility for the health and safety of contractor, subcontractor, or other personnel.

This HASP presents information on known Site health and safety hazards using available historical information, and identifies the equipment, materials and procedures that will be used to eliminate or control these hazards. Environmental monitoring will be performed during field activities to provide real-time data for on-going assessment of potential hazards.

1.2 Background

The subject property (hereinafter, the "Project Site" or the "Site") is an approximate 2-acre parcel of vacant land located in a historic heavy industrial area of the City of Olean, New York. The parcel is bound by railroad tracks to the south and east and former industrial properties to the north and west.

The Site was historically a portion of a larger petroleum refinery and petroleum bulk storage facility commonly known as the former Socony-Vacuum facility. The Site and surrounding area were historically developed as a petroleum refinery with numerous ASTs and heavy industrial operations.

DST Properties NY, LLC (DST) has elected to pursue cleanup and redevelopment of the Scott Rotary Seals Site under the New York State Brownfield Cleanup Program (BCP or Program) administered by New York State Department of Environmental Conservation

(NYSDEC). The site was remediated in accordance with Brownfield Cleanup Agreement (BCA) (Index# C905036-03-10) Site # No. C905036, which was executed on March 12, 2010.

1.3 Known and Suspected Environmental Conditions

1.3.1 September 2008 – Phase I Environmental Site Assessment

Neeson-Clark Associates, Inc. (Neeson) conducted a Phase I Environmental Site Assessment (ESA) of the subject property in September 2008. Neeson indicated that the Site was used for industrial purposes since approximately 1880 and was historically utilized as a bulk petroleum storage and refining facility. Neeson recommended a subsurface investigation due to historic use of the Site.

1.3.2 November 2008 – Limited Phase II Site Investigation

A Limited Subsurface Investigation Letter Report was completed by Neeson-Clark Associates, Inc. on November 11, 2008. The area of the subsurface investigation was limited to the suspected areas of former ASTs. The investigation included excavation of six test pits to approximately 10 feet below grade and collection of soil samples from 5 of the 6 test pits for analysis of VOCs and SVOCs. The subsurface investigation revealed the presence of fill materials consisting of brick, stone, concrete, and metal piping. Soil discoloration and odors of petroleum products were also noted during the test pit excavations. The report concluded that the discoloration and odors would be consistent with degraded petroleum products.

1.3.3 July 2009 – Phase II Site Investigation

TurnKey conducted a Phase II Environmental Investigation at the Site in June 2009. The investigation included the excavation of 12 test pits, completion of 3 soil borings, and installation of 3 groundwater monitoring wells on-site. Soil and groundwater samples were collected and analyzed via USEPA SW-846 methods, with Category B deliverable packages, for Target Compound List (TCL) plus NYSDEC Spill Technology and Remediation Series (STARS) list VOCs, STARS List SVOCs, Resource Conservation and Recovery Act (RCRA) metals and polychlorinated biphenyls (PCBs) during the investigation.

During the investigation, grossly contaminated soils, stained soils, and petroleum-like odors were observed site-wide. Most locations exhibited strong petroleum odors and photoionization detector (PID) readings were over 1,000 ppm at several locations. The Phase II Investigation identified the presence of elevated benzo(a)anthracene, chrysene, and mercury

in soil, and acetone, sec-butylbenzene, phenanthrene in groundwater above NYSDEC GWQS. Elevated concentrations of VOC TICs (up to 183,600 ug/kg) and SVOC TICs (up to 320,100 ug/kg) were also detected in each of the soil samples analyzed. Similarly, elevated concentrations of VOC TICs (up to 26,000 ug/L) and SVOC TICs (up to 8,640 ug/L) were detected in each of the groundwater samples. It was concluded that, based on visual/olfactory observations, PID measurements, and analytical results, significant site-wide petroleum-VOC and -SVOC impacts were present, with grossly contaminated soils present in some areas, and that remediation was warranted.

1.3.4 Pre-Design Investigation

A Pre-Design Investigation was completed to supplement the Phase II investigations and further characterize the Site in accordance with BCP requirements. The investigation was completed in three phases as follows:

August 2010 – Initial Pre-Design Investigation

DST submitted a draft Remedial Action (RA) Work Plan dated December 2009, which included pre-design investigation activities, including additional surface samples, test pits and soil borings to further characterize the Site per BCP requirements. NYSDEC approved the investigation activities described in that work plan in July 2010 and fieldwork was completed in August 2010.

Four surface soil/fill samples, identified as SS-1 through SS-4 were collected across the Site and analyzed for TCL plus STARS VOCs, TCL SVOCs, RCRA metals, PCBs, herbicides, and pesticides. Arsenic was detected above its Part 375 Commercial Soil Cleanup Objective (SCO) at all four sample locations at concentrations ranging from 18.5 milligrams per kilogram (mg/kg) to 42.4 mg/kg. Sample locations SS-2 and SS-4 slightly exceeded the Commercial SCO for benzo(a)pyrene with a concentration of 1.5 mg/kg observed in each of those samples and sample location SS-4 slightly exceeded the Commercial SCO for dibenz(a,h)anthracene with a concentration of 1.5 mg/kg. No other analytes were detected above Commercial SCOs.

The subsurface investigation included the excavation of 12 test pits and the advancement of 12 on-site soil borings. Selected subsurface soil/fill samples were analyzed for TCL plus STARS VOCs including TICs and TCL SVOCs including TICs. Subsurface soil/fill samples TP-15 (3-4'), TP-16 (15-17'), and TP-20 (16-18') were also analyzed for TAL metals, PCBs, herbicides and pesticides for BCP characterization purposes. The qualitative field

results were consistent with the findings of the 2009 Phase II Investigation; stained soils and petroleum-like odors were observed Site-wide with many sample locations exhibiting strong petroleum odors and elevated PID readings, with higher PID readings generally found in the northwestern portion of the Site. Furthermore, subsurface piping was encountered in numerous test pits at depths of approximately four to six feet below ground surface (fbgs). Subsurface soil analytical results indicated that elevated concentrations of VOCs (up to 472 mg/kg total VOCs), and to a lesser extent, SVOCs (up to 270 mg/kg) were present in subsurface soils.

Groundwater samples were collected from existing monitoring wells MW-1, MW-2 and MW-3 and analyzed for TCL plus STARS list VOCs including TICs, TCL SVOCs including TICs, TAL metals, PCBs, herbicides, and pesticides. VOCs including TICs were detected in groundwater at concentrations ranging from non-detect (MW-3) to 1,060 ug/L (MW-2).

October 2010 – Supplemental Pre-Design Investigation

Based on the sampling results of the initial Pre-Design Investigation fieldwork and discussions with NYSDEC, DST submitted a Supplemental Investigation Work Plan to further evaluate groundwater conditions at the Site. Additional monitoring wells MW-4 through MW-6 were installed, developed, and sampled for VOCs in October 2010. Total VOCs were detected in groundwater at concentrations ranging from non-detect (MW-3) to 1,042 ug/L in MW-4, which is the farthest up-gradient monitoring well on-site. No individual VOC analytes were detected above their respective GWQS; VOC TICs concentrations accounted for most of the total VOCs detected in groundwater. During this phase of the investigation light non-aqueous phase liquid (LNAPL) was observed in MW-2 (at 0.01 ft. thick), MW-4 (at 0.01 ft. thick) and MW-6 (at 0.88 ft. thick).

January 2011 – Off-Site Investigation

Upon completion of the initial and supplemental Pre-Design Investigation fieldwork, DST and TurnKey met with the NYSDEC to discuss the results and plan future investigation and remedial work. Based on the previous sampling results and discussions with NYSDEC personnel, DST submitted an Off-Site Investigation Work Plan to further evaluate potential off-site LNAPL near MW-6. Additional monitoring wells MW-7 and MW-8 were installed, developed, and sampled for VOCs in January 2011. VOCs including TICs were detected in groundwater, with all results below their respective GWQS. LNAPL was not observed in any

wells on-site or off-site at that time. Groundwater gauging completed in March 2011 was consistent with January 2011 observations.

1.3.5 Interim Remedial Measures

In February 2011, an IRM Work Plan was submitted to the NYSDEC, which included excavation and off-site disposal of soil/fill piles; removal, cleaning, and recycling of subsurface product piping; and, additional exploratory trenching related to abandoned piping. The IRMs were completed between March and May 2011. Details of the IRMs are included in Section 3.0 below.

1.3.6 Remedial Action Work Plan

In June 2011, DST submitted a Remedial Action (RA) Work Plan based on the findings of the Pre-Design Investigation and completed IRMs. The RA Work Plan included limited excavation and off-site disposal of all identified shallow (i.e., to approximately 6 fbgs) grossly contaminated soil (GCS); installation of soil vapor extraction (SVE) system to address deeper GCS that was not excavated; removal of LNAPL from monitoring wells as necessary; installation of an active sub-slab depressurization (ASD) system within the building; and, placement of a cover system in areas without building or hardscape (i.e., asphalt, concrete). Details of the RA are described in Section 1.5.

1.4 Parameters of Interest

Based on the previous investigations, constituents of concern (COCs) in soil and groundwater at the Site are petroleum-related VOCs and SVOCs.

1.5 Overview of IRM and Remedial Activities

The Site was remediated in accordance with the NYSDEC-approved February 2011 Interim Remedial Measure (IRM) Work Plan and June 2011 Remedial Action (RA) Work. TurnKey-Benchmark personnel were present on-site during all IRM and RA field activities. The following is a summary of the IRM and Remedial Actions performed at the Site:

- Approximately 5,761 linear feet of subsurface piping, 1,489 gallons of oil/water mixture, and 9,410 tons of soil/fill were removed and transported off-site for disposal.
- Construction and maintenance of a composite cover system.

- Construction and maintenance of the SVE system including nine vapor extraction wells.
- Construction and maintenance of the ASD system including seven sub-slab extraction points.

2.0 ORGANIZATIONAL STRUCTURE

This chapter of the HASP describes the lines of authority, responsibility, and communication as they pertain to health and safety functions at the Site. The purpose of this chapter is to identify the personnel who impact the development and implementation of the HASP and to describe their roles and responsibilities. This chapter also identifies other contractors and subcontractors involved in work operations and establishes the lines of communications among them for health and safety matters. The organizational structure described in this chapter is consistent with the requirements of 29CFR 1910.120(b)(2). This section will be reviewed by the Project Manager and updated as necessary to reflect the current organizational structure at this Site.

2.1 Roles and Responsibilities

All TurnKey-Benchmark personnel on the Site must comply with the minimum requirements of this HASP. The specific responsibilities and authority of management, safety and health, and other personnel on this Site are detailed in the following paragraphs.

2.1.1 Corporate Health and Safety Director

The TurnKey-Benchmark Corporate Health and Safety Director is ***Mr. Thomas Forbes, P.E.*** The Corporate Health and Safety Director is responsible for developing and implementing the Health and Safety program and policies for Benchmark-TurnKey and consulting with corporate management to ensure adequate resources are available to properly implement these programs and policies. The Corporate Health and Safety Director coordinates TurnKey-Benchmark's Health and Safety training and medical monitoring programs and assists project management and field staff in developing site-specific health and safety plans.

2.1.2 Project Manager

The Project Manager for this Site is ***Mr. Michael Lesakowski.*** The Project Manager has the responsibility and authority to direct all TurnKey-Benchmark work operations at the Site. The Project Manager coordinates safety and health functions with the Site Safety and Health Officer (SSHO) and bears ultimate responsibility for proper implementation of this HASP. He may delegate authority to expedite and facilitate any application of the program,

including modifications to the overall project approach as necessary to circumvent unsafe work conditions. Specific duties of the Project Manager include:

- Preparing and coordinating the Work Plan for the Site.
- Providing TurnKey-Benchmark workers with work assignments and overseeing their performance.
- Coordinating health and safety efforts with the SSHO.
- Reviewing the emergency response coordination plan to assure its effectiveness.
- Serving as the primary liaison with Site contractors and the property owner.

2.1.3 Site Safety and Health Officer

The Site Safety and Health Officer (SSHO) for this Site is ***Mr. Brock Greene***. The qualified alternate SSHO is ***Mr. Richard Dubisz.*** The SSHO reports to the Project Manager. The SSHO is on-site or readily accessible to the Site during all work operations and has the authority to halt Site work if unsafe conditions are detected. The specific responsibilities of the SSHO are:

- Managing the safety and health functions for TurnKey-Benchmark personnel on the Site.
- Serving as the point of contact for safety and health matters.
- Ensuring that TurnKey-Benchmark field personnel working on the Site have received proper training (per 29 CFR Part 1910.120(e)), that they have obtained medical clearance to wear respiratory protection (per 29 CFR Part 1910.134), and that they are properly trained in the selection, use and maintenance of personal protective equipment, including qualitative respirator fit testing.
- Performing or overseeing Site monitoring as required by the HASP.
- Assisting in the preparation and review of the HASP.
- Maintaining site-specific safety and health records as described in this HASP.
- Coordinating with the Project Manager, Site Workers, and Contractor's SSHO as necessary for safety and health efforts.

2.1.4 Site Workers

Site workers are responsible for: complying with this HASP or a more stringent HASP, if appropriate (i.e., Contractor and Subcontractor's HASP); using proper PPE; reporting unsafe acts and conditions to the SSHO; and following the safety and health instructions of

the Project Manager and SSHO.

2.1.5 Other Site Personnel

Other Site personnel who will have health and safety responsibilities will include the Drilling Contractor, who will be responsible for developing, implementing, and enforcing a Health and Safety Plan equally stringent or more stringent than TurnKey-Benchmark's HASP. TurnKey-Benchmark assumes no responsibility for the health and safety of anyone outside its direct employ. Each Contractor's HASP shall cover all non-TurnKey/Benchmark Site personnel. Each Contractor shall assign a SSHO who will coordinate with TurnKey-Benchmark's SSHO as necessary to ensure effective lines of communication and consistency between contingency plans.

In addition to TurnKey-Benchmark and Contractor personnel, other individuals who may have responsibilities in the work zone include subcontractors and governmental agencies performing Site inspection work (i.e., NYSDEC). The Contractor shall be responsible for ensuring that these individuals have received OSHA-required training (29CFR 1910.120(e)), including initial, refresher and site-specific training, and shall be responsible for the safety and health of these individuals while they are on-site.

3.0 HAZARD EVALUATION

Due to the presence of certain contaminants at the Site, the possibility exists that workers will be exposed to hazardous substances during subgrade activities beneath the cover system. The principal routes of exposure would be direct contact with and incidental ingestion of soil, and through the inhalation of contaminated particles or vapors. Other points of exposure may include direct contact with groundwater. In addition, the use of drilling and/or medium to large-sized construction equipment (e.g., excavator) will also present conditions for potential physical injury to workers. Further, since work will be performed outdoors, the potential exists for heat/cold stress to impact workers, especially those wearing protective equipment and clothing. Adherence to the medical evaluations, worker training relative to chemical hazards, safe work practices, proper personal protection, environmental monitoring, establishment work zones and Site control, appropriate decontamination procedures and contingency planning outlined herein will reduce the potential for chemical exposures and physical injuries.

3.1 Chemical Hazards

Shallow grossly contaminated soil/fill was excavated and disposed off-site during remedial activities. The shallow remedial excavations goal was to remove GCS from the upper six feet in the vicinity of the new building and potential utility corridors along the northern section of the Site (see Figure 6 of the SMP). The potential to contact residual contamination does remain on-site. Table 1 lists exposure limits for airborne concentrations of the COCs identified to-date. Brief descriptions of the toxicology of the prevalent COCs and related health and safety guidance and criteria are provided below.

- **Volatile Organic Compounds (VOCs)** present at elevated concentration may include benzene, toluene, ethylbenzene, total xylenes (BTEX), 1,2,4-trimethylbenzene, 1,3,5-trimethylbenzene, naphthalene and n-propylbenzene. These VOCs are typically associated with storage and handling of petroleum products.
- **Arsenic (CAS #7440-38-2)** is a naturally occurring element and is usually found combined with one or more elements, such as oxygen or sulfur. Inhalation is a more important exposure route than ingestion. First phase exposure symptoms include nausea, vomiting, diarrhea, and pain in the stomach. Prolonged contact is corrosive to the skin and mucus membranes. Arsenic is considered a Group A human carcinogen by the USEPA. Exposure via inhalation is associated with an increased

risk of lung cancer. Exposure via the oral route is associated with an increased risk of skin cancer.

- **Copper (CAS #7440-50-8)** is a chemical element found in humans as an essential trace nutrient; however, at high concentrations it can be poisonous. The most common rout of exposure for copper poisoning is ingestion. Symptoms of acute copper poisoning are vomiting, hematemesis, hypotension, coma, jaundice, gastrointestinal distress. Chronic exposure to high levels of copper can damage the liver and kidneys.
- **Lead (CAS #7439-92-1)** can affect almost every organ and system in our bodies. The most sensitive is the central nervous system, particularly in children. Lead also damages kidneys and the immune system. The effects are the same whether it is breathed or swallowed. Lead may decrease reaction time, cause weakness in fingers, wrists or ankles and possibly affect memory. Lead may cause anemia.
- **Zinc (CAS #7440-66-6)** is a chemical element found in humans as a trace nutrient; however high concentrations can be poisonous. Consumption of excess zinc can cause ataxia, lethargy, copper deficiency, and death in very high concentrations. The most common route of exposure is ingestion and inhalation of zinc oxide.
- **Mercury (CAS #7439-97-6)** is used in industrial applications to produce caustic and chlorine, and in electrical control equipment and apparatus. Over-exposure to mercury may cause coughing, chest pains, bronchitis, pneumonia, indecision, headaches, fatigue, and salivation. Mercury is a skin and eye irritant.
- **Polycyclic Aromatic Hydrocarbons (PAHs)** are SVOCs formed from pyrolysis and incomplete combustion of organic matter such as fossil fuel. PAH aerosols formed during the combustion process disperse throughout the atmosphere, resulting in the deposition of PAH condensate in soil, water and on vegetation. In addition, several products formed from petroleum processing operations (e.g., roofing materials and asphalt) also contain elevated levels of PAHs. Hence, these compounds are widely dispersed in the environment. PAHs are characterized by a molecular structure containing three or more fused, unsaturated carbon rings. Seven of the PAHs are classified by USEPA as probable human carcinogens (Class B2) including benzo(a)pyrene, benzo(a)anthracene (Site COC), benzo(b)fluoranthene, benzo(k)fluoranthene, chrysene (Site COC), dibenz(a,h)anthracene, and indeno(1,2,3-cd)pyrene. The primary route of exposure to PAHs is through incidental ingestion and inhalation of contaminated particulates. PAHs are characterized by an organic odor and exist as oily liquids in pure form. Acute exposure symptoms may include acne-type blemishes in areas of the skin exposed to sunlight.

With respect to the Site management activities discussed in Section 1.5, possible routes of exposure to the abovementioned contaminants are presented in Table 2. The use of proper respiratory equipment, as outlined in Section 7.0 of this HASP, will minimize the potential for exposure to airborne contamination. Exposure to contaminants through dermal and other routes will also be minimized by using protective clothing (Section 7.0), safe work practices (Section 6.0), and proper decontamination procedures (Section 12.0).

3.2 Physical Hazards

Site management field activities may present the following physical hazards:

- The potential for physical injury during heavy construction equipment use, such as backhoes, excavators, and drilling equipment.
- The potential for heat/cold stress to employees during the summer/winter months (see Section 10.0).
- The potential for slip and fall injuries due to rough, uneven terrain, and/or open excavations.

These hazards represent only some of the possible means of injury that may be present during Site management activities at the Site. Since it is impossible to list all potential sources of injury, it shall be the responsibility of each individual to exercise proper care and caution during all phases of the work.

4.0 TRAINING

4.1 Site Workers

All personnel performing Site management activities (such as, but not limited to, equipment operators, general laborers, and drillers) who may be exposed to hazardous substances, health hazards, or safety hazards and their supervisors/managers responsible for the Site shall receive training in accordance with 29CFR 1910.120(e) before they are permitted to engage in operations in the exclusion zone or contaminant reduction zone. This training includes an initial 40-hour Hazardous Waste Site Worker Protection Course, an 8-hour Annual Refresher Course after the initial 40-hour training, and 3 days of actual field experience under the direct supervision of a trained, experienced supervisor. Additional site-specific training shall also be provided by the SSHO prior to the start of field activities. A description of topics to be covered by this training is provided below.

4.1.1 Initial and Refresher Training

Initial and refresher training is conducted by a qualified instructor as specified under OSHA 29CFR 1910.120(e)(5) and is specifically designed to meet the requirements of OSHA 29CFR 1910.120(e)(3) and 1910.120(e)(8). The training covers, as a minimum, the following topics:

- OSHA HAZWOPER regulations.
- Site safety and hazard recognition, including chemical and physical hazards.
- Medical monitoring requirements.
- Air monitoring, permissible exposure limits, and respiratory protection level classifications.
- Appropriate use of personal protective equipment (PPE), including chemical compatibility and respiratory equipment selection and use.
- Work practices to minimize risk.
- Work zones and Site control.
- Safe use of engineering controls and equipment.
- Decontamination procedures.
- Emergency response and escape.
- Confined space entry procedures.

- Heat and cold stress monitoring.
- Elements of a Health and Safety Plan.
- Spill containment.

Initial training also incorporates workshops for PPE and respiratory equipment use (Levels A, B and C), and respirator fit testing. Records and certification received from the course instructor documenting each employee's successful completion of the training identified above are maintained on file at TurnKey-Benchmark's Buffalo, NY office. Contractors and Subcontractors are required to provide similar documentation of training for all their personnel who will be involved in on-site work activities.

Any employee who has not been certified as having received health and safety training in conformance with 29CFR 1910.120(e) is prohibited from working in the exclusion and contamination reduction zones, or to engage in any on-site work activities that may involve exposure to hazardous substances or wastes.

4.1.2 Site Training

Site workers are given a copy of the HASP and provided a site-specific briefing prior to the commencement of work to ensure that employees are familiar with the HASP and the information and requirements it contains. The Site briefing shall be provided by the SSHO prior to initiating field activities and shall include:

- Names of personnel and alternates responsible for Site safety and health.
- Safety, health, and other hazards present on the Site.
- The site lay-out including work zones and places of refuge.
- The emergency communications system and emergency evacuation procedures.
- Use of PPE.
- Work practices by which the employee can minimize risks from hazards.
- Safe use of engineering controls and equipment on the site.
- Medical surveillance, including recognition of symptoms and signs of over-exposure as described in Chapter 5 of this HASP.
- Decontamination procedures as detailed in Chapter 12 of this HASP.
- The emergency response plan as detailed in Chapter 15 of this HASP.

- Confined space entry procedures, if required, as detailed in Chapter 13 of this HASP.
- The spill containment program as detailed in Chapter 9 of this HASP.
- Site control as detailed in Chapter 11 of this HASP.

Supplemental health and safety briefings will also be conducted by the SSHO on an as-needed basis during the work. Supplemental briefings are provided as necessary to notify employees of any changes to this HASP because of information gathered during ongoing Site characterization and analysis. Conditions for which the SSHO may schedule additional briefings include, but are not limited to, a change in Site conditions (e.g., based on monitoring results); changes in the work schedule/plan; newly discovered hazards; and safety incidents occurring during Site work.

4.2 Supervisor Training

On-site safety and health personnel who are directly responsible for or who supervise the safety and health of workers engaged in hazardous waste operations (i.e., SSHO) shall receive, in addition to the appropriate level of worker training described in Section 4.1, 8 additional hours of specialized supervisory training, in compliance with 29CFR 1910.120(e)(4).

4.3 Emergency Response Training

Emergency response training is addressed in Appendix A-1 of this HASP, Emergency Response Plan.

4.4 Site Visitors

Each Contractor's SSHO will provide a site-specific briefing to all Site visitors and other non-TurnKey-Benchmark personnel who enter the Site beyond the Site entry point. The site-specific briefing will provide information about Site hazards, the Site layout including work zones and places of refuge, the emergency communications system and emergency evacuation procedures, and other pertinent safety and health requirements as appropriate.

Site visitors will not be permitted to enter the exclusion zone or contaminant reduction zones unless they have received the level of training required for Site workers as described in Section 4.1.

5.0 MEDICAL MONITORING

Medical monitoring examinations are provided to TurnKey-Benchmark employees as stipulated under 29CFR Part 1910.120(f). These exams include initial employment, annual and employment termination physicals for all TurnKey-Benchmark employees involved in hazardous waste site field operations. Post-exposure examinations are also provided for employees who may have been injured, received a health impairment, or developed signs or symptoms of over-exposure to hazardous substances or were accidentally exposed to substances at concentrations above the permissible exposure limits without necessary personal protective equipment. Such exams are performed as soon as possible following development of symptoms or the known exposure event.

Medical evaluations are performed by ADP Screening & Selection Services, an occupational health care provider under contract with TurnKey-Benchmark. ADP's local facility is Health Works WNY, Seneca Square Plaza, 1900 Ridge Road, West Seneca, New York 14224. The facility can be reached at (716) 712-0670 to schedule routine appointments or post-exposure examinations.

Medical evaluations are conducted according to the TurnKey-Benchmark Medical Monitoring Program and include an evaluation of the workers' ability to use respiratory protective equipment. The purpose of the medical evaluation is to determine an employee's fitness for duty on hazardous waste sites; and to establish baseline medical data. The examinations include:

- Occupational/medical history review.
- Physical exam, including vital sign measurement.
- Spirometry testing.
- Eyesight testing.
- Audio testing (minimum baseline and exit, annual for employees routinely exposed to greater than 85db).
- EKG (for employees >40 years age or as medical conditions dictate).
- Chest X-ray (baseline and exit, and every 5 years).
- Blood biochemistry (including blood count, white cell differential count, serum multiplastic screening).
- Medical certification of physical requirements (i.e., sight, musculoskeletal, cardiovascular) for safe job performance and to wear respiratory protection

equipment.

In conformance with OSHA regulations, TurnKey-Benchmark will maintain and preserve medical records for a period of 30 years following termination of employment. Employees are provided a copy of the physician' post-exam report and have access to their medical records and analyses.

6.0 SAFE WORK PRACTICES

All TurnKey-Benchmark employees shall conform to the following safe work practices during all on-site work activities conducted within the exclusion and contamination reduction zones:

- Eating, drinking, chewing gum or tobacco, smoking, or any practice that increases the probability of hand-to-mouth contact is strictly prohibited.
- The hands and face must be thoroughly washed upon leaving the work area and prior to engaging in any activity indicated above.
- Respiratory protective equipment and clothing must be worn by all personnel entering the Site as required by the HASP or as modified by the Site safety officer. Excessive facial hair (i.e., beards, long mustaches, or sideburns) that interferes with the satisfactory respirator-to-face seal is prohibited.
- Contact with surfaces/materials either suspected or known to be contaminated will be avoided to minimize the potential for transfer to personnel, cross contamination and need for decontamination.
- Medicine and alcohol can synergize the effects of exposure to toxic chemicals. Due to possible contraindications, use of prescribed drugs should be reviewed with the TurnKey-Benchmark occupational physician. Alcoholic beverage and illegal drug intake are strictly forbidden during the workday.
- All personnel shall be familiar with standard operating safety procedures and additional instructions contained in this Health and Safety Plan.
- On-site personnel shall use the "buddy" system. No one may work alone (i.e., out of earshot or visual contact with other workers) in the exclusion zone.
- Personnel and equipment in the contaminated area shall be minimized, consistent with effective Site operations.
- All employees have the obligation to immediately report and if possible, correct unsafe work conditions.
- Use of contact lenses on-site will not be permitted. Spectacle kits for insertion into full-face respirators will be provided for TurnKey-Benchmark employees, as requested and required.

The recommended specific safety practices for working around the contractor's equipment (e.g., backhoes, bulldozers, excavators, drill rigs etc.) are as follows:

- Although the Contractor and subcontractors are responsible for their equipment and safe operation of the Site, TurnKey-Benchmark personnel are also responsible

for their own safety.

- Subsurface work will not be initiated without first clearing underground utility services.
- Heavy equipment should not be operated within 20 feet of overhead wires. This distance may be increased if windy conditions are anticipated or if lines carry high voltage. The Site should also be sufficiently clear to ensure the project staff can move around the heavy machinery safely.
- Care should be taken to avoid overhead wires when moving heavy-equipment from location to location.
- Hard hats, safety boots and safety glasses must be worn in the vicinity of heavy equipment. Hearing protection is also recommended.
- The work Site should be kept neat. This will prevent personnel from tripping and will allow for fast emergency exit from the Site.
- Proper lighting must be provided when working at night.
- Construction activities should be discontinued during an electrical storm or severe weather conditions.
- The presence of combustible gases should be checked before igniting any open flame.
- Personnel shall stand upwind of any construction operation when not immediately involved in sampling/logging/observing activities.
- Personnel will not approach the edge of an unsecured trench/excavation closer than 2 feet.

7.0 PERSONAL PROTECTIVE EQUIPMENT

7.1 Equipment Selection

Personal protective equipment (PPE) will be donned when work activities may result in exposure to physical or chemical hazards beyond acceptable limits, and when such exposure can be mitigated through appropriate PPE. The selection of PPE will be based on an evaluation of the performance characteristics of the PPE relative to the requirements and limitations of the Site, the task-specific conditions and duration, and the hazards and potential hazards identified at the Site.

Equipment designed to protect the body against contact with known or suspect chemical hazards are grouped into four categories according to the degree of protection afforded. These categories are consistent with United States Environmental Protection Agency (USEPA) Level of Protection designation:

- **Level A:** Should be selected when the highest level of respiratory, skin, and eye protection is needed.
- **Level B:** Should be selected when the highest level of respiratory protection is needed, but a lesser level of skin protection is required. Level B protection is the minimum level recommended on initial Site entries until the hazards have been further defined by on-site studies. Level B (or Level A) is also necessary for oxygen-deficient atmospheres.
- **Level C:** Should be selected when the types of airborne substances are known, the concentrations have been measured and the criteria for using air-purifying respirators are met. In atmospheres where no airborne contaminants are present, Level C provides dermal protection only.
- **Level D:** Should not be worn on any Site with elevated respiratory or skin hazards. This is generally a work uniform providing minimal protection.

OSHA requires the use of certain PPE under conditions where an immediate danger to life and health (IDLH) may be present. Specifically, OSHA 29CFR 1910.120(g)(3)(iii) requires use of a positive pressure self-contained breathing apparatus, or positive pressure air-line respirator equipped with an escape air supply when chemical exposure levels present a substantial possibility of immediate serious injury, illness or death, or impair the ability to escape. Similarly, OSHA 29CFR 1910.120(g)(3)(iv) requires donning totally-encapsulating chemical protective suits (with a protection level equivalent to Level A protection) in

conditions where skin absorption of a hazardous substance may result in a substantial possibility of immediate serious illness, injury or death, or impair the ability to escape.

In situations where the types of chemicals, concentrations, and possibilities of contact are unknown, the appropriate level of protection must be selected based on professional experience and judgment until the hazards can be further characterized. The individual components of clothing and equipment must be assembled into a full protective ensemble to protect the worker from site-specific hazards, while at the same time minimizing hazards and drawbacks of the personal protective gear itself. Ensemble components are detailed below for levels A/B, C, and D protection.

7.2 Protection Ensembles

7.2.1 Level A/B Protection Ensemble

Level A/B ensembles include similar respiratory protection; however, Level A provides a higher degree of dermal protection than Level B. Use of Level A over Level B is determined by: comparing the concentrations of identified substances in the air with skin toxicity data, and assessing the effect of the substance (by its measured air concentrations or splash potential) on the small area of the head and neck unprotected by Level B clothing. The recommended PPE for level A/B is:

- Pressure-demand, full-face piece self-contained breathing apparatus (MSHA/-NIOSH approved) or pressure-demand supplied-air respirator with escape self-contained breathing apparatus (SCBA)
- Chemical-resistant clothing. For Level A, clothing consists of totally-encapsulating chemical resistant suit. Level B incorporates hooded one-or two-piece chemical splash suit
- Inner and outer chemical resistant gloves
- Chemical-resistant safety boots/shoes
- Hardhat

7.2.2 Level C Protection Ensemble

Level C protection is distinguished from Level B by the equipment used to protect the respiratory system, assuming the same type of chemical-resistant clothing is used. The main selection criterion for Level C is that conditions permit wearing an air-purifying device. The device (when required) must be an air-purifying respirator (MSHA/NIOSH approved)

equipped with filter cartridges. Cartridges must be able to remove the substances encountered. Respiratory protection will be used only with proper fitting, training, and the approval of a qualified individual. In addition, an air-purifying respirator can be used only if: oxygen content of the atmosphere is at least 19.5% in volume; substances are identified and concentrations measured; substances have adequate warning properties; the individual passes a qualitative fit-test for the mask; and an appropriate cartridge/canister is used, and its service limit concentration is not exceeded. Recommended PPE for Level C conditions includes:

- Full-face piece, air-purifying respirator equipped with MSHA and NIOSH approved organic vapor/acid gas/dust/mist combination cartridges or as designated by the SSHO
- Chemical-resistant clothing (hooded, one or two-piece chemical splash suit or disposable chemical-resistant one-piece suit)
- Inner and outer chemical-resistant gloves
- Chemical-resistant safety boots/shoes
- Hardhat

An air-monitoring program is part of all response operations when atmospheric contamination is known or suspected. It is particularly important that the air be monitored thoroughly when personnel are wearing air-purifying respirators. Continual surveillance using direct-reading instruments is needed to detect any changes in air quality necessitating a higher level of respiratory protection.

7.2.3 Level D Protection Ensemble

As indicated above, Level D protection is primarily a work uniform. It can be worn in areas where only boots can be contaminated, where there are no inhalable toxic substances and where the atmospheric contains at least 19.5% oxygen. Recommended PPE for Level D includes:

- Coveralls
- Safety boots/shoes
- Safety glasses or chemical splash goggles
- Hardhat
- Optional gloves; escape mask; face shield

7.2.4 Recommended Level of Protection for Site Tasks

Based on current information regarding both the contaminants suspected to be present at the Site and the various tasks that are included in the remedial activities, the minimum required levels of protection for these tasks shall be as identified in Table 3.

8.0 EXPOSURE MONITORING

8.1 General

During intrusive activities beneath the cover system, the potential for organic vapors and/or particulates to be released to the air exists. Ambient breathing zone concentrations may at times, exceed the permissible exposure limits (PELs) established by OSHA for the individual compounds (see Table 1), in which case respiratory protection will be required. Respiratory and dermal protection may be modified (upgraded or downgraded) by the SSHO based upon real-time field monitoring data.

8.1.1 On-Site Work Zone Monitoring

TurnKey personnel will conduct routine, real-time air monitoring during all intrusive construction phases such as excavation, backfilling, drilling, etc. The work area will be monitored at regular intervals using a photo-ionization detector (PID), combustible gas meter and a particulate meter. Observed values will be recorded and maintained as part of the permanent field record.

Additional air monitoring measurements may be made by TurnKey personnel to verify field conditions during subcontractor oversight activities. Monitoring instruments will be protected from surface contamination during use. Additional monitoring instruments may be added if the situations or conditions change. Monitoring instruments will be calibrated in accordance with manufacturer's instructions before use.

8.1.2 Off-Site Community Air Monitoring

In addition to on-site monitoring within the work zone(s), monitoring at the downwind portion of the Site perimeter will be conducted. This will provide a real-time method for determination of vapor and/or particulate releases to the surrounding community due to ground intrusive investigation work.

Ground intrusive activities are defined by NYSDOH Appendix 1A Generic Community Air Monitoring Plan and attached as Appendix A-3. Ground intrusive activities include soil/waste excavation and handling, test pitting or trenching, and the installation of soil borings or monitoring wells. Non-intrusive activities include the collection of soil and sediment samples or the collection of groundwater samples from existing wells. Continuous monitoring is required for ground intrusive activities and periodic monitoring is required for

non-intrusive activities. Periodic monitoring consists of taking a reading upon arrival at a sample location, monitoring while opening a well cap or overturning soil, monitoring while bailing a well, and taking a reading prior to leaving a sampling location. This may be upgraded to continuous if the sampling location is near individuals not involved in the Site activity (i.e., on a curb of a busy street). The action levels below will be used during periodic monitoring.

8.2 Monitoring Action Levels

8.2.1 On-Site Work Zone Action Levels

The PID, or other appropriate instrument(s), will be used by TurnKey personnel to monitor organic vapor concentrations as specified in this HASP. Combustible gas will be monitored with the "combustible gas" option on the combustible gas meter or other appropriate instrument(s). In addition, fugitive dust/particulate concentrations will be monitored during major soil intrusion (i.e., well/boring installation) using a real-time particulate monitor as specified in this plan. In the absence of such monitoring, appropriate respiratory protection for particulates shall be donned. Sustained readings obtained in the breathing zone may be interpreted (in regard to other Site conditions) as follows for TurnKey-Benchmark personnel:

- Total atmospheric concentrations of unidentified vapors or gases ranging from 0 to 1 ppm above background on the PID) - Continue operations under Level D (see Appendix A).
- Total atmospheric concentrations of unidentified vapors or gases yielding sustained readings from >1 ppm to 5 ppm above background on the PID (vapors not suspected of containing high levels of chemicals toxic to the skin) - Continue operations under Level C (see Appendix A).
- Total atmospheric concentrations of unidentified vapors or gases yielding sustained readings of >5 ppm to 50 ppm above background on the PID - Continue operations under Level B, re-evaluate and alter (if possible) construction methods to achieve lower vapor concentrations.
- Total atmospheric concentrations of unidentified vapors or gases above 50 ppm on the PID - Discontinue operations and exit the work zone immediately.

The explosimeter will be used to monitor levels of both combustible gases and oxygen during field activities. Action levels based on the instrument readings shall be as follows:

- Less than 10% LEL - Continue engineering operations with caution.

- 10-25% LEL - Continuous monitoring with extreme caution, determine source/cause of elevated reading.
- Greater than 25% LEL - Explosion hazard, evaluate source and leave the Work Zone.
- 19.5% - 21% oxygen - proceed with extreme caution; attempt to determine potential source of oxygen displacement.
- Less than 19.5% oxygen - leave work zone immediately.
- 21-25% oxygen - Continue engineering operations with caution.
- Greater than 25% oxygen - Fire hazard potential, leave Work Zone immediately.

The particulate monitor will be used to monitor respirable dust concentrations during all intrusive activities and during handling of Site soil/fill. Action levels based on the instrument readings shall be as follows:

- Less than 50 μg/m^3 - Continue field operations.
- 50-150 μg/m^3 - Don dust/particulate mask or equivalent
- Greater than 150 μg/m^3 - Don dust/particulate mask or equivalent. Initiate engineering controls to reduce respirable dust concentration (i.e., wetting of excavated soils or tools at discretion of Site Safety and Health Officer).

Readings with the organic vapor analyzer, combustible gas meter, and particulate monitor will be recorded and documented on the appropriate Project Field Forms. All instruments will be calibrated daily before use and the procedure will be documented on the appropriate Project Field Forms.

8.2.2 Community Air Monitoring Action Levels

In addition to the action levels prescribed in Section 8.2.1 for Benchmark personnel on-site, the following criteria shall also be adhered to for the protection of downwind receptors consistent with NYSDOH requirements (Appendix C):

- **ORGANIC VAPOR PERIMETER MONITORING:**
  - If the ambient air concentration of total organic vapors at the downwind perimeter of the work area or exclusion zone exceeds 5 parts per million (ppm) above background for the 15-minute average, work activities must be temporarily halted and monitoring continued. If the total organic vapor level readily decreases (per instantaneous readings) below 5 ppm over background, work activities can resume with continued monitoring.

- If total organic vapor levels at the downwind perimeter of the work area or exclusion zone persist at levels in excess of 5 ppm over background but less than 25 ppm, work activities must be halted, the source of vapors identified, corrective actions taken to abate emissions, and monitoring continued. After these steps, work activities can resume provided that the total organic vapor level 200 feet downwind of the exclusion zone or half the distance to the nearest potential receptor or residential/commercial structure, whichever is less - but in no case less than 20 feet, is below 5 ppm over background for the 15-minute average.
- If the organic vapor level is above 25 ppm at the perimeter of the work area, activities must be shutdown.
- All 15-minute readings must be recorded and be available for State (DEC and DOH) personnel to review. Instantaneous readings, if any, used for decision purposes should also be recorded.

o **Special Requirements for Work Within 20 Feet of Potentially Exposed Individuals or Structures**

- When work areas are within 20 feet of potentially exposed populations or occupied structures, the continuous monitoring locations for VOCs and particulates must reflect the nearest potentially exposed individuals and the location of ventilation system intakes for nearby structures. The use of engineering controls such as vapor/dust barriers, temporary negative-pressure enclosures, or special ventilation devices should be considered to prevent exposures related to the work activities and to control dust and odors. Consideration should be given to implementing the planned activities when potentially exposed populations are at a minimum, such as during weekends or evening hours in non-residential settings.
- If total VOC concentrations opposite the walls of occupied structures or next to intake vents exceed 1 ppm, monitoring should occur within the occupied structure(s). Background readings in the occupied spaces must be taken prior to commencement of the planned work. Any unusual background readings should be discussed with NYSDOH prior to commencement of the work.
- If total particulate concentrations opposite the walls of occupied structures or next to intake vents exceed 150 mcg/m3, work activities should be suspended until controls are implemented and are successful in reducing the total particulate concentration to 150 mcg/m3 or less at the monitoring point.
- Depending upon the nature of contamination and remedial activities, other parameters (e.g., explosivity, oxygen, hydrogen sulfide, carbon monoxide) may

also need to be monitored Response levels and actions should be pre-determined, as necessary, for each site.

Additionally, if following the cessation of work and efforts to abate the emission source are unsuccessful, and if sustained organic vapor levels exceed 25 ppm above background within the 20-foot zone for more than 30 minutes, then the **Major Vapor Emission Response Plan** (see below) will automatically be placed into effect.

- **MAJOR VAPOR EMISSION RESPONSE PLAN:**

  Upon activation, the following activities will be undertaken:

  1. All Emergency Response Contacts as listed in this HASP and the Emergency Response Plan (Appendix A) will be advised.
  2. The local police authorities will immediately be contacted by the SSHO and advised of the situation.
  3. The Site Safety and Health Officer will determine if site workers can safely undertake source abatement measures. Abatement measures may include covering the source area with clean fill or plastic sheeting or consolidating contaminated materials to minimize surface area. The Site Safety and Health Officer will adjust worker personal protective equipment as necessary to protect workers from over-exposure to organic vapors.

The following personnel are to be notified in the listed sequence if a Major Vapor Emission Plan is activated:

Responsible Person	Contact	Phone Number
SSHO	Police	911
SSHO	State Emergency Response Hotline	(800) 457-7362

Additional emergency numbers are listed in the Emergency Response Plan included as Appendix A.

- **EXPLOSIVE VAPORS:**
  - Sustained atmospheric concentrations of greater than 10% LEL in the work area - Initiate combustible gas monitoring at the downwind portion of the Site perimeter.

- Sustained atmospheric concentrations of greater than 10% LEL at the downwind Site perimeter – Halt work and contact local Fire Department.

o **AIRBORNE PARTICULATE COMMUNITY AIR MONITORING**

Respirable (PM-10) particulate monitoring will be performed on a continuous basis at the upwind and downwind perimeter of the exclusion zone. The monitoring will be performed using real-time monitoring equipment capable of measuring PM-10 and integrating over a period of 15-minutes for comparison to the airborne particulate action levels. The equipment will be equipped with an audible alarm to indicate exceedance of the action level. In addition, fugitive dust migration will be visually assessed during all work activities. All readings will be recorded and will be available for NYSDEC and NYSDOH review. Readings will be interpreted as follows:

- If the downwind PM-10 particulate level is 100 micrograms per cubic meter (ug/m^3) greater than the background (upwind perimeter) reading for the 15-minute period or if airborne dust is observed leaving the work area, then dust suppression techniques must be employed. Work may continue with dust suppression provided that the downwind PM-10 particulate levels do not exceed 150 ug/m^3 above the upwind level and that visible dust is not migrating from the work area.
- If, after implementation of dust suppression techniques downwind PM-10 levels are greater than 150 ug/m^3 above the upwind level, work activities must be stopped, and dust suppression controls re-evaluated. Work can resume provided that supplemental dust suppression measures and/or other controls are successful in reducing the downwind PM-10 particulate concentration to within 150 ug/m^3 of the upwind level and in preventing visible dust migration.

Pertinent emergency response information including the telephone number of the Fire Department is included in the Emergency Response Plan (Appendix A).

9.0 SPILL RELEASE/RESPONSE

This chapter of the HASP describes the potential for and procedures related to spills or releases of known or suspected petroleum and/or hazardous substances on the Site. The purpose of this Section of the HASP is to plan appropriate response, control, counter-measures, and reporting, consistent with OSHA requirements in 29CFR 1910.120(b)(4)(ii)(J) and (j)(1)(viii). The spill containment program addresses the following elements:

- Potential hazardous material spills and available controls.
- Initial notification and evaluation.
- Spill response.
- Post-spill evaluation.

9.1 Potential Spills and Available Controls

An evaluation was conducted to determine the potential for hazardous material and oil/petroleum spills at this Site. For this evaluation, hazardous materials posing a significant spill potential are:

- CERCLA Hazardous Substances as identified in 40CFR Part 302, where such materials pose the potential for release above their corresponding Reportable Quantity (RQ).
- Extremely Hazardous Substances as identified in 40CFR Part 355, Appendix A, where such materials pose the potential for release above their corresponding RQ.
- Hazardous Chemicals as defined under Section 311(e) of the Emergency Planning and Community Right-To-Know Act of 1986, where such chemicals are present or will be stored above 10,000 lbs.
- Toxic Chemicals as defined in 40CFR Part 372, where such chemicals are present or will be stored above 10,000 lbs.
- Chemicals regulated under 6NYCRR Part 597, where such materials pose the potential for release above their corresponding RQ.

Oil/petroleum products are considered to pose a significant spill potential whenever the following situations occur:

- The potential for a "harmful quantity" of oil (including petroleum and non-petroleum-based fuels and lubricants) to reach navigable waters of the U.S. exists (40CFR Part 112.4). Harmful quantities are considered by USEPA to be volumes that could form a visible sheen on the water or violate applicable water quality

standards.

- The potential for any amount of petroleum to reach any waters of NY State, including groundwater, exists. Petroleum, as defined by NY State in 6NYCRR Part 612, is a petroleum-based heat source, energy source, or engine lubricant/ maintenance fluid.
- The potential for any release, to soil or water, of petroleum from a bulk storage facility regulated under 6NYCRR Part 612. A regulated petroleum storage facility is defined by NY State as a site having stationary tank(s) and intra-facility piping, fixtures and related equipment with an aggregate storage volume of 1,100 gallons or greater.

The evaluation indicates that, based on Site history and decommissioning records, a hazardous material spill and/or a petroleum product spill is not likely to occur during Site management efforts.

9.2 Initial Spill Notification and Evaluation

Any worker who discovers a hazardous substance or oil/petroleum spill will immediately notify the Project Manager and SSHO. The worker will, to the best of his/her ability, report the material involved, the location of the spill, the estimated quantity of material spilled, the direction/flow of the spill material, related fire/explosion incidents, if any, and any associated injuries. The Emergency Response Plan presented in Appendix A-1 of this HASP will immediately be implemented if an emergency release has occurred.

Following initial report of a spill, the Project Manager will make an evaluation as to whether the release exceeds RQ levels. If an RQ level is exceeded, the Project Manager will notify the Site owner and NYSDEC at 1-800-457-7362 within 2 hours of spill discovery. The Project Manager will also determine what additional agencies (e.g., USEPA) are to be contacted regarding the release, and will follow-up with written reports as required by the applicable regulations.

9.3 Spill Response

For all spill situations, the following general response guidelines will apply:

- Only those personnel involved in overseeing or performing containment operations will be allowed within the spill area. If necessary, the area will be roped, ribboned, or otherwise blocked off to prevent unauthorized access.
- Appropriate PPE, as specified by the SSHO, will be donned before entering the

spill area.

- Ignition points will be extinguished/removed if fire or explosion hazards exist.
- Surrounding reactive materials will be removed.
- Drains or drainage in the spill area will be blocked to prevent inflow of spilled materials or applied materials.

For minor spills, the Contractor will maintain a Spill Control and Containment Kit in the Field Office or other readily accessible storage location. The kit will consist of, at a minimum, a 50 lb. bag of "speedy dry" granular absorbent material, absorbent pads, shovels, empty 5-gallon pails and an empty open-top 55-gallon drum. Spilled materials will be absorbed and shoveled into a 55-gallon drum for proper disposal (NYSDEC approval will be secured for on-site treatment of the impacted soils/absorbent materials, if applicable). Impacted soils will be hand-excavated to the point that no visible signs of contamination remain and will be drummed with the absorbent.

In the event of a major release or a release that threatens surface water, a spill response contractor will be called to the Site. The response contractor may use heavy equipment (e.g., excavator, backhoe, etc.) to berm the soils surrounding the spill Site or create diversion trenching to mitigate overland migration or release to navigable waters. Where feasible, pumps will be used to transfer free liquid to storage containers. Spill control/cleanup contractors in the Western New York area that may be contacted for assistance include:

- The Environmental Service Group of NY, Inc.: (716) 695-6720
- Allied Environmental Services of NY, LLC: (800) 992-5781
- Environmental Products and Services of Vermont, Inc.: (800) 577-4557

9.4 Post-Spill Evaluation

If a reportable quantity of hazardous material or oil/petroleum is spilled as determined by the Project Manager, a written report will be prepared as indicated in Section 9.2. The report will identify the root cause of the spill, type and amount of material released, date/time of release, response actions, agencies notified and/or involved in cleanup, and procedures to be implemented to avoid repeat incidents. In addition, all re-useable spill cleanup and containment materials will be decontaminated, and spill kit supplies/disposable items will be replenished.

10.0 HEAT/COLD STRESS MONITORING

Since some of the work activities at the Site will be scheduled for both the summer and winter months, measures will be taken to minimize heat/cold stress to TurnKey-Benchmark employees. The SSHO and/or his or her designee will be responsible for monitoring TurnKey-Benchmark field personnel for symptoms of heat/cold stress.

10.1 Heat Stress Monitoring

Personal protective equipment may place an employee at risk of developing heat stress, a common and potentially serious illnesses often encountered at construction, landfill, waste disposal, industrial or other unsheltered sites. The potential for heat stress is dependent on several factors, including environmental conditions, clothing, workload, physical conditioning, and age. Personal protective equipment may severely reduce the body's normal ability to maintain temperature equilibrium (via evaporation and convection) and require increased energy expenditure due to its bulk and weight.

Proper training and preventive measures will mitigate the potential for serious illness. Heat stress prevention is particularly important because once a person suffers from heat stroke or heat exhaustion, that person may be predisposed to additional heat related illness. To avoid heat stress, the following steps should be taken:

- Adjust work schedules.
- Modify work/rest schedules according to monitoring requirements.
- Mandate work slowdowns as needed.
- Perform work during cooler hours of the day if possible or at night if adequate lighting can be provided.
- Provide shelter (air-conditioned, if possible) or shaded areas to protect personnel during rest periods.
- Maintain worker's body fluids at normal levels. This is necessary to ensure that the cardiovascular system functions adequately. Daily fluid intake must approximately equal the amount of water lost in sweat (i.e., eight fluid ounces must be ingested for approximately every 1 lb of weight lost). The normal thirst mechanism is not sensitive enough to ensure that enough water will be consumed to replace lost perspiration. When heavy sweating occurs, workers should be encouraged to drink more.
- Train workers to recognize the symptoms of heat related illness.

Heat-Related Illness - Symptoms:

- Heat rash may result from continuous exposure to heat or 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, moist skin; heavy sweating; dizziness; nausea; fainting.
- 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 and death occur. Competent medical help must be obtained. Signs and symptoms are red, hot, usually dry skin; lack of or reduced perspiration; nausea; dizziness and confusion; strong, rapid pulse; coma.

The monitoring of personnel wearing protective clothing should commence when the ambient temperature is 70 degrees Fahrenheit or above. For monitoring the body's recuperative ability to excess heat, one or more of the following techniques should be used as a screening mechanism.

- Heart rate may be measured by the radial pulse for 30 seconds as early as possible in the resting period. The rate at the beginning of the rest period should not exceed 100 beats per minute. If the rate is higher, the next work period should be shortened by 10 minutes (or 33%), while the length of the rest periods stay the same, If the pulse rate is 100 beats per minute at the beginning of the nest rest period, the following work cycle should be further shortened by 33%.
- Body temperature may be measured orally with a clinical thermometer as early as possible in the resting period. Oral temperature at the beginning of the rest period should not exceed 99.6 degrees Fahrenheit. If it does, the next work period should be shortened by 10 minutes (or 33%), while the length of the rest period remains the same. However, if the oral temperature exceeds 99.6 degrees Fahrenheit at the beginning of the next period, the work cycle may be further shortened by 33%. Oral temperature should be measured at the end of the rest period to make sure that it has dropped below 99.6 degrees Fahrenheit. No TurnKey-Benchmark employee will be permitted to continue wearing semi-permeable or impermeable garments when his/her oral temperature exceeds 100.6 degrees Fahrenheit.

10.2 Cold Stress Monitoring

Exposure to cold conditions may result in frostbite or hypothermia, each of which progresses in stages as shown below.

- **Frostbite** occurs when body tissue (usually on the extremities) begins to freeze. The three states of frostbite are:

  1) **Frost nip** - This is the first stage of the freezing process. It is characterized by a whitened area of skin, along with a slight burning or painful sensation. Treatment consists of removing the victim from the cold conditions, removal of boots and gloves, soaking the injured part in warm water (102 to 108 degrees Fahrenheit) and drinking a warm beverage. Do not rub skin to generate friction/ heat.

  2) **Superficial Frostbite** - This is the second stage of the freezing process. It is characterized by a whitish gray area of tissue, which will be firm to the touch but will yield little pain. The treatment is identical for Frost nip.

  3) **Deep Frostbite** - In this final stage of the freezing process the affected tissue will be cold, numb and hard and will yield little to no pain. Treatment is identical to that for Frost nip.

- **Hypothermia** is a serious cold stress condition occurring when the body loses heat at a rate faster than it is produced. If untreated, hypothermia may be fatal. The stages of hypothermia may not be clearly defined or visible at first, but generally include:

  1) Shivering
  2) Apathy (i.e., a change to an indifferent or uncaring mood)
  3) Unconsciousness
  4) Bodily freezing

  Employees exhibiting signs of hypothermia should be treated by medical professionals. Steps that can be taken while awaiting help include:

  1) Remove the victim from the cold environment and remove wet or frozen clothing. (Do this carefully as frostbite may have started.)

  2) Perform active re-warming with hot liquids for drinking (Note: do not give the victim any liquid containing alcohol or caffeine) and a warm water bath (102 to 108 degrees Fahrenheit).

  3) Perform passive re-warming with a blanket or jacket wrapped around the victim.

In any potential cold stress situation, it is the responsibility of the SSHO to encourage the following:

- Education of workers to recognize the symptoms of frostbite and hypothermia.
- Workers should dress warmly, with more layers of thin clothing as opposed to one thick layer.
- Personnel should remain active and keep moving.
- Personnel should be allowed to take shelter in heated areas, as necessary.
- Personnel should drink warm liquids (no caffeine or alcohol if hypothermia has set in).
- For monitoring the body's recuperation from excess cold, oral temperature recordings should occur:
    - At the Site Safety Technicians discretion when suspicion is based on changes in a worker's performance or mental status.
    - At a workers request.
    - As a screening measure, two times per shift, under unusually hazardous conditions (e.g., wind chill less than 20 degrees Fahrenheit or wind chill less than 30 degrees Fahrenheit with precipitation).
    - As a screening measure, whenever anyone worker on-site develops hypothermia.

Any person developing moderate hypothermia (a core body temperature of 92 degrees Fahrenheit) will not be allowed to return to work for 48 hours without the recommendation of a qualified medical doctor.

11.0 WORK ZONES AND SITE CONTROL

Work zones around the areas designated for construction activities will be established daily and communicated to all employees and other Site users by the SSHO. It shall be each Contractor's SSHO's responsibility to ensure that all Site workers are aware of the work zone boundaries and to enforce proper procedures in each area. The zones will include:

- Exclusion Zone ("Hot Zone") - The area where contaminated materials may be exposed, excavated, or handled and all areas where contaminated equipment or personnel may travel. The zone will be delineated by flagging tape. All personnel entering the Exclusion Zone must wear the prescribed level of personal protective equipment identified in Section 7.
- Contamination Reduction Zone - The zone where decontamination of personnel and equipment takes place. Any potentially contaminated clothing, equipment and samples must remain in the Contamination Reduction Zone until decontaminated.
- Support Zone - The part of the site that is considered non-contaminated or "clean." Support equipment will be in this zone, and personnel may wear normal work clothes within this zone.

In the absence of other task-specific work zone boundaries established by the SSHO, the following boundaries will apply to all investigation and construction activities involving disruption or handling of Site soils or groundwater:

- Exclusion Zone: 50 foot radius from the outer limit of the sampling/construction activity.
- Contaminant Reduction Zone: 100 foot radius from the outer limit of the sampling/construction activity.
- Support Zone: Areas outside the Contaminant Reduction Zone.

Access of non-essential personnel to the Exclusion and Contamination Reduction Zones will be strictly controlled by the SSHO. Only personnel who are essential to the completion of the task will be allowed access to these areas if they are wearing the prescribed level of protection. Entrance of all personnel must be approved by the SSHO.

The SSHO will maintain a Health and Safety Logbook containing the names of TurnKey-Benchmark workers and their level of protection. The zone boundaries may be changed by the SSHO as environmental conditions warrant, and to respond to the necessary changes in work locations on-site.

12.0 DECONTAMINATION

12.1 Decontamination for TurnKey-Benchmark Employees

The degree of decontamination required is a function of the task and the environment within which it occurs. The following decontamination procedure will remain flexible, thereby allowing the decontamination crew to respond appropriately to the changing environmental conditions that may arise at the Site. All TurnKey-Benchmark personnel on-site shall follow the procedure below, or the Contractor's procedure (if applicable), whichever is more stringent.

Station 1 - Equipment Drop: Deposit visibly contaminated (if any) re-useable equipment used in the contamination reduction and exclusion zones (tools, containers, monitoring instruments, radios, clipboards, etc.) on plastic sheeting.

Station 2 - Boots and Gloves Wash and Rinse: Scrub outer boots and outer gloves. Deposit tape and gloves in waste disposal container.

Station 3 - Tape, Outer Boot and Glove Removal: Remove tape, outer boots, and gloves. Deposit tape and gloves in waste disposal container.

Station 4 - Canister or Mask Change: If worker leaves exclusive zone to change canister (or mask), this is the last step in the decontamination procedure. Worker's canister is exchanged, new outer gloves and boot cover donned, and worker returns to duty.

Station 5 - Outer Garment/Face Piece Removal: Protective suit removed and deposited in separate container provided by Contractor. Face piece or goggles are removed if used. Avoid touching face with fingers. Face piece and/or goggles deposited on plastic sheet. Hard hat removed and placed on plastic sheet.

Station 6 - Inner Glove Removal: Inner gloves are the last personal protective equipment to be removed. Avoid touching the outside of the gloves with bare fingers. Dispose of these gloves in waste disposal container.

Following PPE removal, personnel shall wash hands, face, and forearms with absorbent wipes. If field activities proceed for six consecutive months or longer, shower facilities will be provided for worker use in accordance with OSHA 29CFR 1910.120(n).

12.2 Decontamination for Medical Emergencies

In the event of a minor, non-life threatening injury, personnel should follow the decontamination procedures as defined, and then administer first-aid.

In the event of a major injury or other serious medical concern (e.g., heat stroke), immediate first-aid is to be administered and the victim transported to the hospital in lieu of further decontamination efforts unless exposure to a Site contaminant would be considered "Immediately Dangerous to Life or Health."

12.3 Decontamination of Field Equipment

Decontamination of heavy equipment will be conducted by the Contractor in accordance with his approved HASP in the Contamination Reduction Zone. As a minimum, this will include manually removing heavy soil contamination, followed by steam cleaning on an impermeable pad.

Decontamination of all tools used for sample collection purposes will be conducted by TurnKey-Benchmark personnel. It is expected that all tools will be constructed of nonporous, nonabsorbent materials (i.e., metal), which will aid in the decontamination effort. Any tool or part of a tool made of porous, absorbent material (i.e., wood) will be placed into suitable containers and prepared for disposal.

Decontamination of bailers, split-spoons, spatula knives, and other tools used for environmental sampling and examination shall be as follows:

- Disassemble the equipment
- Water wash to remove all visible foreign matter.
- Wash with detergent.
- Rinse all parts with distilled-deionized water.
- Allow to air dry.
- Wrap all parts in aluminum foil or polyethylene.

13.0 CONFINED SPACE ENTRY

OSHA 29CFR 1910.146 identifies a confined space as a space that is large enough and so configured that an employee can physically enter and do assigned work, has limited or restricted means for entry and exit, and is not intended for continuous employee occupancy. Confined spaces include, but are not limited to, trenches, storage tanks, process vessels, pits, sewers, tunnels, underground utility vaults, pipelines, sumps, wells, and excavations.

Confined space entry by TurnKey-Benchmark employees is not anticipated to be necessary to complete any Site management field. If the scope of work changes or confined space entry appears necessary, the Project Manager will be consulted to determine if feasible engineering alternatives to confined space entry can be implemented. If confined space entry by TurnKey-Benchmark employees cannot be avoided through reasonable engineering measures, task-specific confined space entry procedures will be developed, and a confined-space entry permit will be issued through TurnKey-Benchmark's corporate Health and Safety Director. TurnKey-Benchmark employees shall not enter a confined space without these procedures and permits in place.

14.0 FIRE PREVENTION AND PROTECTION

14.1 General Approach

Recommended practices and standards of the National Fire Protection Association (NFPA) and other applicable regulations will be followed in the development and application of Project Fire Protection Programs. When required by regulatory authorities, the project management will prepare and submit a Fire Protection Plan for the approval of the contracting officers, authorized representative, or other designated official. Essential considerations for the Fire Protection Plan will include:

- Proper Site preparation and safe storage of combustible and flammable materials.
- Availability of coordination with private and public fire authorities.
- Adequate job-site fire protection and inspections for fire prevention.
- Adequate indoctrination and training of employees.

14.2 Equipment and Requirements

Fire extinguishers will be provided by each Contractor and are required on all heavy equipment and in each field trailer. Fire extinguishers will be inspected, serviced, and maintained in accordance with the manufacturer's instructions. As a minimum, all extinguishers shall be checked monthly and weighed semi-annually, and recharged if necessary. Recharge or replacement shall be mandatory immediately after each use.

14.3 Flammable and Combustible Substances

All storage, handling or use of flammable and combustible substances will be under the supervision of qualified persons. All tanks, containers, and pumping equipment, whether portable or stationary, used for the storage and handling of flammable and combustible liquids, will meet the recommendations of the National Fire Protection Association.

14.4 Hot Work

If the scope of work necessitates welding or blowtorch operation, the hot work permit presented in Appendix C-2 will be completed by the SSHO and reviewed/issued by the Project Manager.

15.0 EMERGENCY INFORMATION

In accordance with OSHA 29CFR Part 1910, an Emergency Response Plan is attached to this HASP as Appendix A-1 and includes the hospital route map as Figure A-1.

TABLES

TURNKEY ENVIRONMENTAL RESTORATION, LLC

TABLE 1

TOXICITY DATA FOR CONSTITUENTS OF CONCERN

Scott Rotary Seals Site
Olean, New York

Parameter	Synonyms	CAS No.	Code	Concentration Limits [1]		
				PEL	TLV	IDLH
Volatile Organic Compounds (VOCs): ppm						
Acetone	*none*	67-64-1	*none*	1,000	500	2,500
sec-butylbenzene	Butyl benzene	135-98-8	*none*	--	--	--
Semi-volatile Organic Compounds (SVOCs)[2]: ppm						
Benzo(a)anthracene	*none*	56-55-3	*none*	--	--	--
Chrysene	*none*	218-01-9	*none*	--	--	--
Phenanthrene	*none*	85-01-8	*none*	--	--	--

Notes:

1. Concentration limits as reported by NIOSH Pocket Guide to Chemical Hazards, February 2004 (NIOSH Publication No. 97-140, fourth printing with changes and updates).
2. " -- " = concentration limit not available; exposure should be minimized to the extent feasible through appropriate engineering controls & PPE.

Explanation:

Ca = NIOSH considers constituent to be a potential occupational carcinogen.
C-## = Ceiling Level equals the maximum exposure concentration allowable during the work day.
IDLH = Immediately Dangerous to Life or Health.
ND indicates that an IDLH has not as yet been determined.
TLV = Threshold Limit Value, established by American Conference of Industrial Hygienists (ACGIH), equals the max. exposure concentration allowable for 8 hrs/day, 40 hrs/wk.
TLVs are the amounts of chemicals in the air that almost all healthy adult workers are predicted to be able to tolerate without adverse effects. There are three types.
TLV-TWA (TLV-Time-Weighted Average) which is averaged over the normal eight-hour day/forty-hour work week. (Most TLVs.)
TLV-STEL or Short Term Exposure Limits are 15 minute exposures that should not be exceeded for even an instant. It is not a stand alone value but is accompanied by the TLV-TWA.
TLV-C or Ceiling limits are the concentration that should not be exceeded during any part of the working exposure.
Unless the initials "STEL" or "C" appear in the Code column, the TLV value should be considered to be the eight-hour TLV-TWA.
PEL = Permissible Exposure Limit, established by OSHA, equals the maximium exposure conconcentration allowable for 8 hours per day @ 40 hours per week

TABLE 2

POTENTIAL ROUTES OF EXPOSURE TO THE CONSTITUENTS OF CONCERN

Scott Rotary Seals Site
Olean, New York

Activity [1]	Direct Contact with Soil/Fill	Inhalation of Vapors or Dust	Direct Contact with Groundwater
1. Subsurface Excavation Work	x	x	x
2. Active Sub-Slab Depressurization (ASD) System Operation and Maintenance	x	x	

TURNKEY ENVIRONMENTAL RESTORATION, LLC

TABLE 3

REQUIRED LEVELS OF PROTECTION
FOR SITE MANAGEMENT TASKS

Scott Rotary Seals Site
Olean, New York

Activity	Respiratory Protection [1]	Clothing	Gloves [2]	Boots [2, 3]	Other Required PPE/Modifications [2, 4]
1. Subsurface Excavation Work	Level D (upgrade to Level C if necessary)	Work Uniform or Tyvek	L/N	outer: L inner: STSS	HH SGSS
2. Active Sub-Slab Depressurization (ASD) System Operation and Maintenance	Level D (upgrade to Level C if necessary)	Work Uniform or Tyvek	L/N	outer: L inner: STSS	HH SGSS

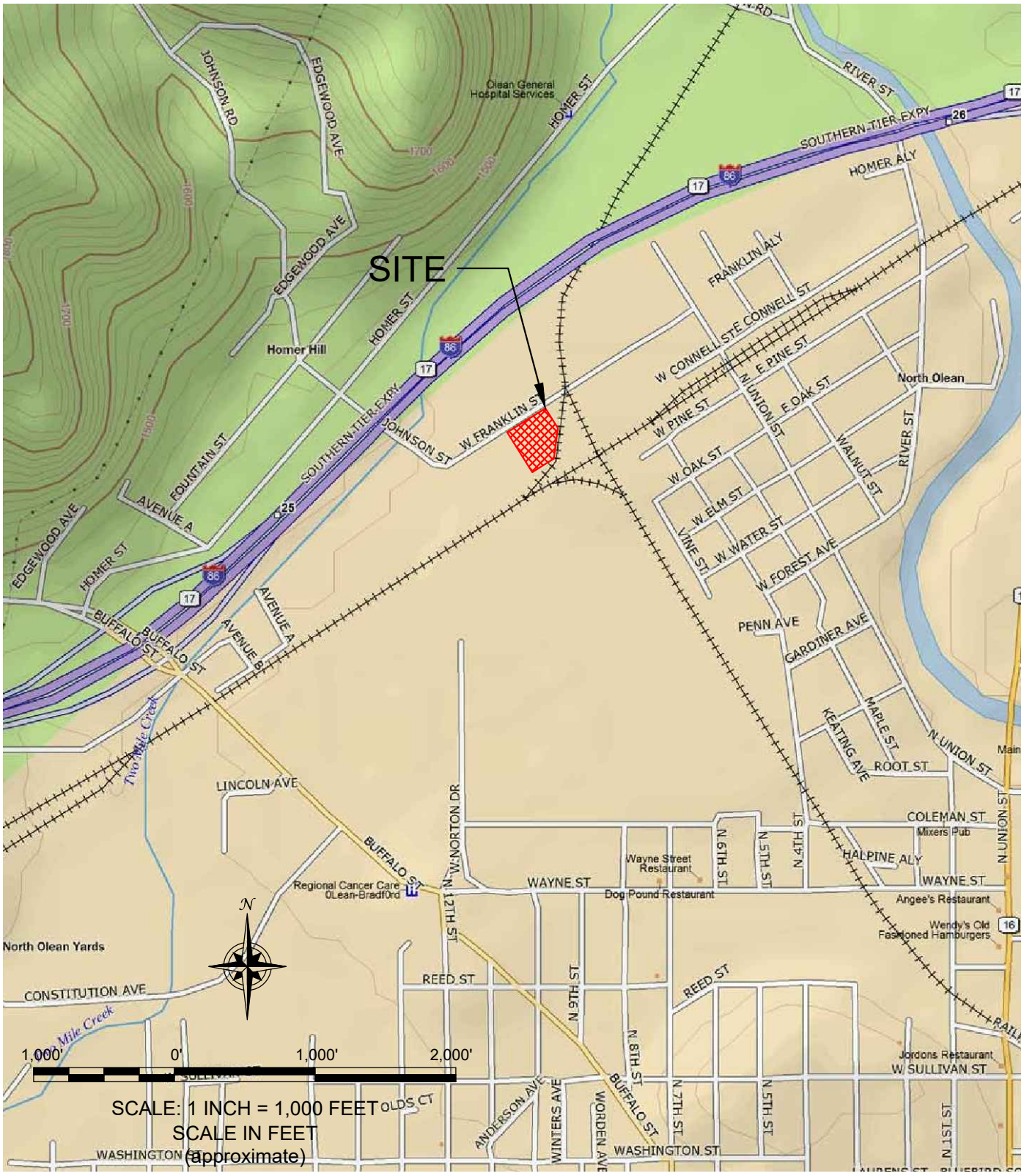
Notes:

1. Respiratory equipment shall conform to guidelines presented in Section 7.0 of this HASP. The Level C requirement is an air-purifying respirator equiped with organic compound/acid gas/dust cartridge.
2. HH = hardhat; L= Latex; L/N = latex inner glove, nitrile outer glove; N = Nitrile; S = Saranex; SG = safety glasses; SGSS = safety glasses with sideshields; STSS = steel toe safety shoes.
3. Latex outer boot (or approved overboot) required whenever contact with contaminated materials may occur. SSHO may downgrade to STSS (steel-toed safety shoes) if contact will be limited to cover/replacement soils.
4. Dust masks shall be donned as directed by the SSHO (site safety and health officer) or site safety technician whenever potentially contaminated airborne particulates (i.e., dust) are present in significant amounts in the breathing zone. Goggles may be substituted with safety glasses w/side-shields whenever contact with contaminated liquids is not anticipated.

FIGURES

F:\CAD\TurnKey\Scott Rotary Seals\SMP Update\Figure 1; Site Location and Vicinity Map.dwg

FIGURE 1



TurnKey Environmental Restoration, LLC

2558 HAMBURG TURNPIKE
SUITE 300
BUFFALO, NY 14218
(716) 856-0635

PROJECT NO.: T0189-020-001

DATE: SEPTEMBER 2020

DRAFTED BY: CCB

SITE LOCATION AND VICINITY MAP

SITE MANAGEMENT PLAN

SCOTT ROTARY SEALS SITE

OLEAN, NEW YORK

PREPARED FOR

DST PROPERTIES NY, LLC

APPENDIX A

EMERGENCY RESPONSE PLAN

EMERGENCY RESPONSE PLAN
for
SITE MANAGEMENT ACTIVITIES

SCOTT ROTARY SEALS SITE
NYSDEC SITE NUMBER: C905036
OLEAN, NEW YORK

September 2012 0189-020-001
Updated September 2020

Prepared for:

DST Properties NY, LLC

and

Scott Rotary Seals

Prepared By:

TurnKey Environmental Restoration, LLC
2558 Hamburg Turnpike, Suite 300
Buffalo, NY 14218
(716) 856-0635

SCOTT ROTARY SEALS SITE
HEALTH AND SAFETY PLAN FOR SITE MANAGEMENT ACTIVITIES
APPENDIX A: EMERGENCY RESPONSE PLAN

TABLE OF CONTENTS

LIST OF FIGURES

1.0 GENERAL

This report presents the site-specific Emergency Response Plan (ERP) referenced in the Site Health and Safety Plan (HASP) prepared for Site management activities at the Scott Rotary Seals Site in Olean, New York. This appendix of the HASP describes potential emergencies that may occur at the Site; procedures for responding to those emergencies; roles and responsibilities during emergency response; and training all workers must receive on following emergency procedures. This ERP also describes the provisions this Site has made to coordinate its emergency response planning with other contractors on-site and with off-site emergency response organizations.

This ERP is consistent with the requirements of 29 CFR 1910.120(l) and provides the following site-specific information:

- Pre-emergency planning.
- Personnel roles, lines of authority, and communication.
- Emergency recognition and prevention.
- Safe distances and places of refuge.
- Evacuation routes and procedures.
- Decontamination procedures.
- Emergency medical treatment and first aid.
- Emergency alerting and response procedures.
- Critique of response and follow-up.
- Emergency personal protective equipment (PPE) and equipment.

2.0 PRE-EMERGENCY PLANNING

This Site has been evaluated for potential emergency occurrences, based on site hazards, the required work tasks, the site topography, and prevailing weather conditions. The results of that evaluation indicate the potential for the following site emergencies to occur at the locations indicated.

Type of Emergency:

1. Medical, due to physical injury
2. Fire

Source of Emergency:

1. Slip/trip/fall
2. Fire

Location of Source:

1. Non-specific

3.0 ON-SITE EMERGENCY RESPONSE EQUIPMENT

Emergency procedures may require specialized equipment to facilitate worker rescue, contamination control and reduction, or post-emergency clean up. Emergency response equipment available on the Site is listed below. The equipment inventory and storage locations are based on the potential emergencies described above. This equipment inventory is designed to meet on-site emergency response needs and any specialized equipment needs that off-site responders might require because of the hazards at this Site but not ordinarily stocked.

Any additional personal protective equipment (PPE) required and stocked for emergency response is also listed below. During an emergency, the Emergency Response Coordinator (ERC) is responsible for specifying the level of PPE required for emergency response. At a minimum, PPE used by emergency responders will comply with Section 7.0, Personal Protective Equipment, of this HASP. Emergency response equipment is inspected at regular intervals and maintained in good working order. The equipment inventory is replenished as necessary to maintain response capabilities.

Emergency Equipment	Quantity	Location
First Aid Kit	1	Site Vehicle
Chemical Fire Extinguisher	2 (minimum)	All heavy equipment and Site Vehicle

Emergency PPE	Quantity	Location
Full-face respirator	1 for each worker	Site Vehicle
Chemical-resistant suits	4 (minimum)	Site Vehicle

4.0 EMERGENCY PLANNING MAPS

An area-specific map of the Site will be developed daily during performance of field activities. The map will be marked to identify critical on-site emergency planning information, including emergency evacuation routes, a place of refuge, an assembly point, and the locations of key site emergency equipment. Site zone boundaries will be shown to alert responders to known areas of contamination. There are no major topographical features, however the direction of prevailing winds/weather conditions that could affect emergency response planning are also marked on the map. The map will be posted at site-designated place of refuge and inside the Benchmark personnel field vehicle.

5.0 EMERGENCY CONTACTS

The following identifies the emergency contacts for this ERP.

Project Manager: *Michael Lesakowski*
Work: (716) 856-0635

Corporate Health and Safety Director: *Thomas H. Forbes, P.E.*
Work: (716) 856-0599
Mobile: (716) 864-1730

Site Safety and Health Officer (SSHO): *Brock M. Greene*
Work: (716) 856-0599
Mobile: (716) 225-3314

Alternate SSHO: *Richard L. Dubisz*
Work: (716) 856-0635
Mobile: (716) 998-4334

OLEAN GENERAL HOSPITAL (ER):	(716) 373-2600
OLEAN FIRE DEPT:	(716) 376-5687 or 911
OLEAN AMBULANCE:	(716) 376-5685 or 911
OLEAN POLICE DEPT:	(716) 376-5678 or 911
STATE EMERGENCY RESPONSE HOTLINE:	(800) 457-7362
NATIONAL RESPONSE HOTLINE:	(800) 424-8802
NYSDOH:	(518) 402-7860
NYSDEC:	(716) 851-7220
NYSDEC 24-HOUR SPILL HOTLINE:	(800) 457-7252

The Site location is:
Scott Rotary Seals Site
301 Franklin Street
Olean, New York 14760
Site Phone Number: (Insert Cell Phone or Field Trailer): _____

6.0 EMERGENCY ALERTING & EVACUATION

Internal emergency communication systems are used to alert workers to danger, convey safety information, and maintain site control. Any effective system can be employed. Two-way radio headsets or field telephones are often used when work teams are far from the command post. Hand signals and air-horn blasts are also commonly used. Every system must have a backup. It shall be the responsibility of each contractor's SSHO to ensure an adequate method of internal communication is understood by all personnel entering the site. Unless all personnel are otherwise informed, the following signals shall be used.

1) Emergency signals by portable air horn, siren, or whistle: two short blasts, personal injury; continuous blast, emergency requiring site excavation.

2) Visual signals: hand gripping throat, out of air/cannot breathe; hands on top of head, need assistance; thumbs up, affirmative/ everything is OK; thumbs down, no/negative; grip partner's wrist or waist, leave area immediately.

If evacuation notice is given, site workers leave the worksite with their respective buddies, if possible, by way of the nearest exit. Emergency decontamination procedures detailed in Section 12.0 of the HASP are followed to the extent practical without compromising the safety and health of site personnel. The evacuation routes and assembly area will be determined by conditions at the time of the evacuation based on wind direction, the location of the hazard source, and other factors as determined by rehearsals and inputs from emergency response organizations. Wind direction indicators are located so that workers can determine a safe up wind or cross wind evacuation route and assembly area if not informed by the emergency response coordinator at the time the evacuation alarm sounds. Since work conditions and work zones within the site may be changing on daily basis, it shall be the responsibility of the construction SSHO to review evacuation routes and procedures as necessary and to inform all TurnKey-Benchmark workers of any changes.

Personnel exiting the site will gather at a designated assembly point. To determine that everyone has successfully exited the site, personnel will be accounted for at the assembly site. If any worker cannot be accounted for, notification is given to the SSHO so that appropriate action can be initiated. Contractors and subcontractors on this site have coordinated their emergency response plans to ensure that these plans are compatible, and

that source(s) of potential emergencies are recognized, alarm systems are clearly understood, and evacuation routes are accessible to all personnel relying upon them.

7.0 EXTREME WEATHER CONDITIONS

In the event of adverse weather conditions, the SSHO in conjunction with the Contractor's SSHO will determine if engineering operations can continue without sacrificing the health and safety of site personnel. Items to be considered prior to determining if work should continue include but are not limited to:

- Potential for heat/cold stress.
- Weather-related construction hazards (e.g., flooding or wet conditions producing undermining of structures or sheeting, high wind threats, etc).
- Limited visibility.
- Potential for electrical storms.
- Limited site access/egress (e.g., due to heavy snow)

8.0 EMERGENCY MEDICAL TREATMENT & FIRST AID

Personnel Exposure:

The following general guidelines will be employed in instances where health impacts threaten to occur, or acute exposure is realized:

- Skin Contact: Use copious amounts of soap and water. Wash/rinse affected area for at least 15 minutes. Decontaminate and provide medical attention. Eyewash stations will be provided on site. If necessary, transport to the hospital.
- Inhalation: Move to fresh air and, if necessary, transport to the hospital.
- Ingestion: Decontaminate and transport to the hospital.

Personal Injury:

Minor first-aid will be applied on-site as deemed necessary. In the event of a life threatening injury, the individual should be transported to the hospital via ambulance. The SSHO will supply available chemical specific information to appropriate medical personnel as requested.

First aid kits will conform to Red Cross and other applicable good health standards and shall consist of a weatherproof container with individually sealed packages for each type of item. First aid kits will be fully equipped before being sent out on each job and will be checked weekly by the SSHO to ensure that the expended items are replaced.

Directions to Olean General Hospital (see Figure A-1):

The following directions describe the best route from the Site to the Hospital:

- Travel northeast along Franklin St. toward N Union St.
- Turn right onto North Union St.
- Stay straight to go onto Main St.
- Turn left onto Main St.
- Hospital is on the right at 515 Main St.

9.0 EMERGENCY RESPONSE CRITIQUE & RECORD KEEPING

Following an emergency, the SSHO and Project Manager shall review the effectiveness of this Emergency Response Plan (ERP) in addressing notification, control, and evacuation requirements. Updates and modifications to this ERP shall be made accordingly. It shall be the responsibility of each contractor to establish and assure adequate records of the following:

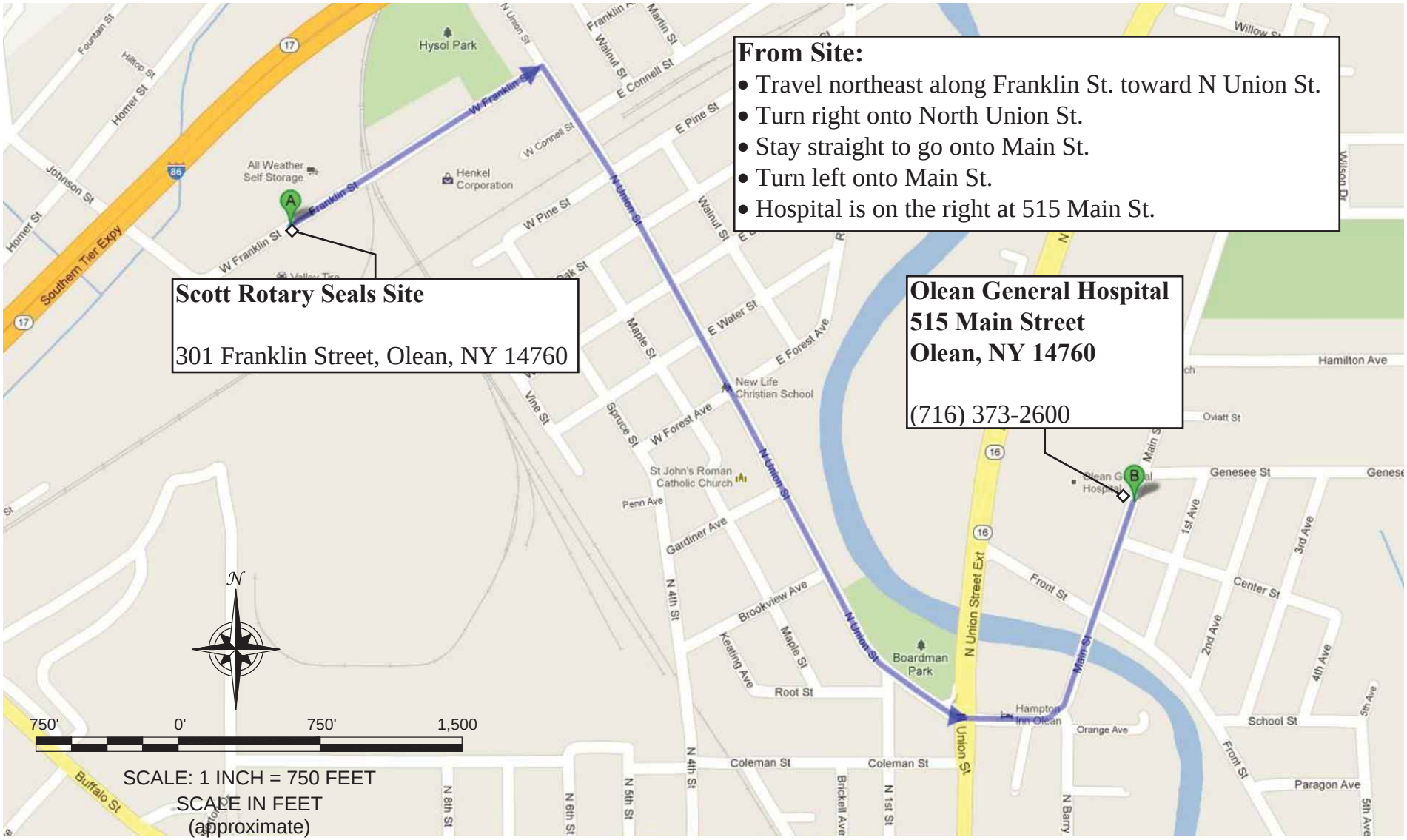
- Occupational injuries and illnesses.
- Accident investigations.
- Reports to insurance carrier or State compensation agencies.
- Reports required by the client.
- Records and reports required by local, state, federal and/or international agencies.
- Property or equipment damage.
- Third party injury or damage claims.
- Environmental testing logs.
- Explosive and hazardous substances inventories and records.
- Records of inspections and citations.
- Safety training.

10.0 EMERGENCY RESPONSE TRAINING

All persons who enter the worksite, including visitors, shall receive a site-specific briefing about anticipated emergency situations and the emergency procedures by the SSHO. Where this site relies on off-site organizations for emergency response, the training of personnel in those off-site organizations has been evaluated and is deemed adequate for response to this site.

FIGURE

F:\CAD\TurnKey\Scott Rotary Seals\SMP Update\ERP\Figure A-1; Hospital Route Map.dwg



TurnKey Environmental Restoration, LLC
2558 HAMBURG TURNPIKE
SUITE 300
BUFFALO, NY 14218
(716) 856-0635

PROJECT NO.: T0189-020-001

DATE: SEPTEMBER 2020

DRAFTED BY: CCB

HOSPITAL ROUTE MAP

EMERGENCY RESPONSE PLAN

SCOTT ROTARY SEALS SITE

OLEAN, NEW YORK

PREPARED FOR

DST PROPERTIES NY, LLC

FIGURE A-1

APPENDIX B

HOT WORK PERMIT FORM

HOT WORK PERMIT

PART 1 - INFORMATION

Issue Date:

Date Work to be Performed: Start: | Finish (permit terminated):

Performed By:

Work Area:

Object to be Worked On:

PART 2 - APPROVAL

(for 1, 2 or 3: mark Yes, No or NA)*

Will working be on or in: | Finish (permit terminated):

1. Metal partition, wall, ceiling covered by combustible material?	yes	no
2. Pipes, in contact with combustible material?	yes	no
3. Explosive area?	yes	no

* = If any of these conditions exist (marked "yes"), a permit will not be issued without being reviewed and approved by Thomas H. Forbes (Corporate Health and Safety Director). Required Signature below.

PART 3 - REQUIRED CONDITIONS**

(Check all conditions that must be met)

	PROTECTIVE ACTION		PROTECTIVE EQUIPMENT
	Specific Risk Assessment Required		Goggles/visor/welding screen
	Fire or spark barrier		Apron/fireproof clothing
	Cover hot surfaces		Welding gloves/gauntlets/other:
	Move movable fire hazards, specifically		Wellintons/Knee pads
	Erect screen on barrier		Ear protection: Ear muffs/Ear plugs
	Restrict Access		B.A.: SCBA/Long Breather
	Wet the ground		Respirator: Type:
	Ensure adequate ventilation		Cartridge:
	Provide adequate supports		Local Exhaust Ventilation
	Cover exposed drain/floor or wall cracks		Extinguisher/Fire blanket
	Fire watch (must remain on duty during duration of permit)		Personal flammable gas monitor
	Issue additional permit(s):		

Other precautions:

** Permit will not be issued until these conditions are met.

SIGNATURES

Orginating Employee: | Date:

Project Manager: | Date:

Part 2 Approval: | Date:

APPENDIX C

NYSDOH GENERIC COMMUNITY AIR MONITORING PLAN

Appendix 1A
New York State Department of Health
Generic Community Air Monitoring Plan

Overview

A Community Air Monitoring Plan (CAMP) requires real-time monitoring for volatile organic compounds (VOCs) and particulates (i.e., dust) at the downwind perimeter of each designated work area when certain activities are in progress at contaminated sites. The CAMP is not intended for use in establishing action levels for worker respiratory protection. Rather, its intent is to provide a measure of protection for the downwind community (i.e., off-site receptors including residences and businesses and on-site workers not directly involved with the subject work activities) from potential airborne contaminant releases as a direct result of investigative and remedial work activities. The action levels specified herein require increased monitoring, corrective actions to abate emissions, and/or work shutdown. Additionally, the CAMP helps to confirm that work activities did not spread contamination off-site through the air.

The generic CAMP presented below will be sufficient to cover many, if not most, sites. Specific requirements should be reviewed for each situation in consultation with NYSDOH to ensure proper applicability. In some cases, a separate site-specific CAMP or supplement may be required. Depending upon the nature of contamination, chemical- specific monitoring with appropriately-sensitive methods may be required. Depending upon the proximity of potentially exposed individuals, more stringent monitoring or response levels than those presented below may be required. Special requirements will be necessary for work within 20 feet of potentially exposed individuals or structures and for indoor work with co-located residences or facilities. These requirements should be determined in consultation with NYSDOH.

Reliance on the CAMP should not preclude simple, common-sense measures to keep VOCs, dust, and odors at a minimum around the work areas.

Community Air Monitoring Plan

Depending upon the nature of known or potential contaminants at each site, real-time air monitoring for VOCs and/or particulate levels at the perimeter of the exclusion zone or work area will be necessary. Most sites will involve VOC and particulate monitoring; sites known to be contaminated with heavy metals alone may only require particulate monitoring. If radiological contamination is a concern, additional monitoring requirements may be necessary per consultation with appropriate DEC/NYSDOH staff.

Continuous monitoring will be required for all ground intrusive activities and during the demolition of contaminated or potentially contaminated structures. Ground intrusive activities include, but are not limited to, soil/waste excavation and handling, test pitting or trenching, and the installation of soil borings or monitoring wells.

Periodic monitoring for VOCs will be required during non-intrusive activities such as the collection of soil and sediment samples or the collection of groundwater samples from existing monitoring wells. “Periodic” monitoring during sample collection might reasonably consist of taking a reading upon arrival at a sample location, monitoring while opening a well cap or

overturning soil, monitoring during well baling/purging, and taking a reading prior to leaving a sample location. In some instances, depending upon the proximity of potentially exposed individuals, continuous monitoring may be required during sampling activities. Examples of such situations include groundwater sampling at wells on the curb of a busy urban street, in the midst of a public park, or adjacent to a school or residence.

VOC Monitoring, Response Levels, and Actions

Volatile organic compounds (VOCs) must be monitored at the downwind perimeter of the immediate work area (i.e., the exclusion zone) on a continuous basis or as otherwise specified. Upwind concentrations should be measured at the start of each workday and periodically thereafter to establish background conditions, particularly if wind direction changes. The monitoring work should be performed using equipment appropriate to measure the types of contaminants known or suspected to be present. The equipment should be calibrated at least daily for the contaminant(s) of concern or for an appropriate surrogate. The equipment should be capable of calculating 15-minute running average concentrations, which will be compared to the levels specified below.

1. If the ambient air concentration of total organic vapors at the downwind perimeter of the work area or exclusion zone exceeds 5 parts per million (ppm) above background for the 15-minute average, work activities must be temporarily halted and monitoring continued. If the total organic vapor level readily decreases (per instantaneous readings) below 5 ppm over background, work activities can resume with continued monitoring.

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

3. If the organic vapor level is above 25 ppm at the perimeter of the work area, activities must be shutdown.

4. All 15-minute readings must be recorded and be available for State (DEC and NYSDOH) personnel to review. Instantaneous readings, if any, used for decision purposes should also be recorded.

Particulate Monitoring, Response Levels, and Actions

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

1. If the downwind PM-10 particulate level is 100 micrograms per cubic meter (mcg/m^3) greater than background (upwind perimeter) for the 15-minute period or if airborne dust is observed leaving the work area, then dust suppression techniques must be employed. Work may continue with dust suppression techniques provided that downwind PM-10 particulate levels do not exceed 150 mcg/m^3 above the upwind level and provided that no visible dust is migrating from the work area.

2. If, after implementation of dust suppression techniques, downwind PM-10 particulate levels are greater than 150 mcg/m^3 above the upwind level, work must be stopped and a re-evaluation of activities initiated. Work can resume provided that dust suppression measures and other controls are successful in reducing the downwind PM-10 particulate concentration to within 150 mcg/m^3 of the upwind level and in preventing visible dust migration.

3. All readings must be recorded and be available for State (DEC and NYSDOH) and County Health personnel to review.

December 2009

Appendix 1B
Fugitive Dust and Particulate Monitoring

A program for suppressing fugitive dust and particulate matter monitoring at hazardous waste sites is a responsibility on the remedial party performing the work. These procedures must be incorporated into appropriate intrusive work plans. The following fugitive dust suppression and particulate monitoring program should be employed at sites during construction and other intrusive activities which warrant its use:

1. Reasonable fugitive dust suppression techniques must be employed during all site activities which may generate fugitive dust.

2. Particulate monitoring must be employed during the handling of waste or contaminated soil or when activities on site may generate fugitive dust from exposed waste or contaminated soil. Remedial activities may also include the excavation, grading, or placement of clean fill. These control measures should not be considered necessary for these activities.

3. Particulate monitoring must be performed using real-time particulate monitors and shall monitor particulate matter less than ten microns (PM10) with the following minimum performance standards:

(a) Objects to be measured: Dust, mists or aerosols;
(b) Measurement Ranges: 0.001 to 400 mg/m3 (1 to 400,000 :ug/m3);
(c) Precision (2-sigma) at constant temperature: +/- 10 :g/m3 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 50^{o} C (14 to 122^{o} F);
(m) Particulate levels will be monitored upwind and immediately downwind at the working site and integrated over a period not to exceed 15 minutes.

4. In order to ensure the validity of the fugitive dust measurements performed, there must be appropriate Quality Assurance/Quality Control (QA/QC). It is the responsibility of the remedial party to adequately supplement QA/QC Plans to include the following critical features: periodic instrument calibration, operator training, daily instrument performance (span) checks, and a record keeping plan.

5. The action level will be established at 150 ug/m3 (15 minutes average). While conservative,

this short-term interval will provide a real-time assessment of on-site air quality to assure both health and safety. If particulate levels are detected in excess of 150 ug/m3, the upwind background level must be confirmed immediately. If the working site particulate measurement is greater than 100 ug/m3 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 on-site personnel and implementing additional dust suppression techniques (see paragraph 7). Should the action level of 150 ug/m3 continue to be exceeded work must stop and DER must be notified as provided in the site design or remedial work plan. The notification shall include a description of the control measures implemented to prevent further exceedances.

6. It must be recognized that the generation of dust from waste or contaminated soil that migrates off-site, has the potential for transporting contaminants off-site. There may be situations when dust is being generated and leaving the site and the monitoring equipment does not measure PM10 at or above the action level. Since this situation has the potential to allow for the migration of contaminants off-site, it is unacceptable. While it is not practical to quantify total suspended particulates on a real-time basis, it is appropriate to rely on visual observation. If dust is observed leaving the working site, additional dust suppression techniques must be employed. Activities that have a high dusting potential--such as solidification and treatment involving materials like kiln dust and lime--will require the need for special measures to be considered.

7. The following techniques have been shown to be effective for the controlling of the generation and migration of dust during construction activities:

(a) Applying water on haul roads;
(b) Wetting equipment and excavation faces;
(c) Spraying water on buckets during excavation and dumping;
(d) Hauling materials in properly tarped or watertight containers;
(e) Restricting vehicle speeds to 10 mph;
(f) Covering excavated areas and material after excavation activity ceases; and
(g) Reducing the excavation size and/or number of excavations.

Experience has shown that the chance of exceeding the 150ug/m3 action level is remote when the above-mentioned techniques are used. When techniques involving water application are used, care must be taken not to use excess water, which can result in unacceptably wet conditions. Using atomizing sprays will prevent overly wet conditions, conserve water, and provide an effective means of suppressing the fugitive dust.

8. The evaluation of weather conditions is necessary for proper fugitive dust control. When extreme wind conditions make dust control ineffective, as a last resort remedial actions may need to be suspended. There may be situations that require fugitive dust suppression and particulate monitoring requirements with action levels more stringent than those provided above. Under some circumstances, the contaminant concentration and/or toxicity may require additional monitoring to protect site personnel and the public. Additional integrated sampling and chemical analysis of the dust may also be in order. This must be evaluated when a health and safety plan is developed and when appropriate suppression and monitoring requirements are established for protection of health and the environment.

APPENDIX H

SITE-WIDE INSPECTION FORMS

Periodic Review Report
Annual Site Inspection

Property Name: Scott Rotary Seals Site	Project No.:
Client: DST Properties NY, LLC	
Property Address: 301 Franklin Street, Olean, NY 14760	
BCP Site No.: C905036	PRR Due Date:
Preparer's Name:	Date/Time:

CERTIFICATION

The results of this inspection were discussed with the Site Manager. Any corrective actions required have been identified and noted in this report, and a supplemental Corrective Action Form has been completed. Proper implementation of these corrective actions have been discussed with the Site Manager, agreed upon, and scheduled.

Preparer / Inspector:	**Date:**
Signature:	
Next Scheduled Site Inspection Date:	

Property Access

1. Is the access road in need of repair?	☐ yes	☐ no	☐ N/A
2. Sufficient signage posted (No Trespassing)?	☐ yes	☐ no	☐ N/A
3. Has there been any noted or reported trespassing?	☐ yes	☐ no	☐ N/A

Please note any irregularities/ changes in site access and security:

Final Surface Cover / Vegetation

The integrity of the vegetative soil cover or other surface coverage (e.g., asphalt, concrete) over the entire Site must be maintained. The following documents the condition of the above.

1. Final Cover is in Place and in good condition?	☐ yes	☐ no	☐ N/A
Cover consists of (mainly):			
2. Evidence of erosion?	☐ yes	☐ no	☐ N/A
3. Cracks visible in pavement?	☐ yes	☐ no	☐ N/A
4. Evidence of distressed vegetation/turf?	☐ yes	☐ no	☐ N/A
5. Evidence of unintended traffic and/or rutting?	☐ yes	☐ no	☐ N/A
6. Evidence of uneven settlement and/or ponding?	☐ yes	☐ no	☐ N/A

Final Surface Cover / Vegetation (continued)

7. Damage to any surface coverage? ☐ yes ☐ no ☐ N/A

If yes to any question above, please provide more information below.

Soil Vapor Extraction System (SVE)

Is the system(s) currently running? ☐ yes ☐ no ☐ N/A

Has regular maintenance and monitoring been documented and enclosed or referenced?
☐ yes ☐ no ☐ N/A

Active Sub-Slab Depressurization System (ASD)

Are there one or more ASD systems currently running at the Site? ☐ yes ☐ no ☐ N/A

System No. _____ Reading: _____
System No. _____ Reading: _____

Has regular maintenance and monitoring been documented and enclosed or referenced?
☐ yes ☐ no ☐ N/A

Groundwater Monitoring

Is there a plan in place and currently being followed? ☐ yes ☐ no ☐ N/A

Are the wells currently intact and operational? ☐ yes ☐ no ☐ N/A

When was the most recent sampling event report and submittal? Date: _____

When is the next projected sampling event? Date: _____

Periodic Review Report
Annual Site Inspection

Property Use Changes / Site Development

Has some or all of the site property been sold, subdivided, merged, or undergone a tax map amendment during the reporting period? ☐ yes ☐ no ☐ N/A

Has the property usage changed, or site been redeveloped since the last inspection? ☐ yes ☐ no ☐ N/A

If yes, please list with date: _____

New Information

Has any new information been brought to the owner/engineer's attention regarding any and/or all engineering and institutional controls and their operation and effectiveness? ☐ yes ☐ no ☐ N/A

Comments: _____

Notes and Comments:

Please attach the following, if applicable:

1. Site sketch
2. Photographs
3. Monitoring and maintenance records
4. Corrective Action Form

Enclosure 2
NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
Site Management Periodic Review Report Notice
Institutional and Engineering Controls Certification Form

Site Details **Box 1**

Site No. **C905036**

Site Name Scott Rotary Seals

Site Address: 301 Franklin Street Zip Code: 14760
City/Town: Olean
County: Cattaraugus
Site Acreage: 2.000

Reporting Period: ~~May 02, 2017 to May 02, 2020~~
June 1, 2017 to May 31, 2020

	YES	NO
1. Is the information above correct?	☐	☑
If NO, include handwritten above or on a separate sheet.		
2. Has some or all of the site property been sold, subdivided, merged, or undergone a tax map amendment during this Reporting Period?	☐	☑
3. Has there been any change of use at the site during this Reporting Period (see 6NYCRR 375-1.11(d))?	☐	☑
4. Have any federal, state, and/or local permits (e.g., building, discharge) been issued for or at the property during this Reporting Period?	☐	☑
If you answered YES to questions 2 thru 4, include documentation or evidence that documentation has been previously submitted with this certification form.		
5. Is the site currently undergoing development?	☐	☑

Box 2

	YES	NO
6. Is the current site use consistent with the use(s) listed below? Commercial and Industrial	☑	☐
7. Are all ICs/ECs in place and functioning as designed?	☑	☐

IF THE ANSWER TO EITHER QUESTION 6 OR 7 IS NO, sign and date below and DO NOT COMPLETE THE REST OF THIS FORM. Otherwise continue.

A Corrective Measures Work Plan must be submitted along with this form to address these issues.

Signature of Owner, Remedial Party or Designated Representative Date

Box 2A

	YES	NO
8. Has any new information revealed that assumptions made in the Qualitative Exposure Assessment regarding offsite contamination are no longer valid?	☐	☑

If you answered YES to question 8, include documentation or evidence that documentation has been previously submitted with this certification form.

9. Are the assumptions in the Qualitative Exposure Assessment still valid? (The Qualitative Exposure Assessment must be certified every five years)	☑	☐

If you answered NO to question 9, the Periodic Review Report must include an updated Qualitative Exposure Assessment based on the new assumptions.

SITE NO. C905036 **Box 3**

Description of Institutional Controls

Parcel	Owner	Institutional Control
94.040-1-29.02	DST Properties NY, LLC	Ground Water Use Restriction Landuse Restriction Monitoring Plan Site Management Plan O&M Plan Soil Management Plan IC/EC Plan

The Environmental Easement filed on 08/15/2012 requires compliance with the approved Site Management Plan (SMP) dated November 2012. Controls required under the SMP include:

- Property may only be used for commercial or industrial uses. Lower uses (residential/restricted residential), farming and vegetable gardens prohibited.
- Groundwater use restriction.
- soil and hardscape cover system covering the entire surface of the site (approximately 2 acres)
- Active sub-slab depressurization system to mitigate potential vapor intrusion into the existing on-site building. Future on-site buildings require vapor intrusion assessment or mitigation.
- Monthly system monitoring. Annual site inspection and certifications.

Box 4

Description of Engineering Controls

Parcel	Engineering Control
94.040-1-29.02	Vapor Mitigation Cover System

Box 5

Periodic Review Report (PRR) Certification Statements

1. I certify by checking "YES" below that:

   a) the Periodic Review report and all attachments were prepared under the direction of, and reviewed by, the party making the certification;

   b) 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 generally accepted engineering practices; and the information presented is accurate and compete.

YES	NO
☑	☐

2. If this site has an IC/EC Plan (or equivalent as required in the Decision Document), for each Institutional or Engineering control listed in Boxes 3 and/or 4, I certify by checking "YES" below that all of the following statements are true:

   (a) the Institutional Control and/or Engineering Control(s) employed at this site is unchanged since the date that the Control was put in-place, or was last approved by the Department;

   (b) nothing has occurred that would impair the ability of such Control, to protect public health and the environment;

   (c) 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;

   (d) nothing has occurred that would constitute a violation or failure to comply with the Site Management Plan for this Control; and

   (e) if a financial assurance mechanism is required by the oversight document for the site, the mechanism remains valid and sufficient for its intended purpose established in the document.

YES	NO
☑	☐

IF THE ANSWER TO QUESTION 2 IS NO, sign and date below and DO NOT COMPLETE THE REST OF THIS FORM. Otherwise continue.

A Corrective Measures Work Plan must be submitted along with this form to address these issues.

Signature of Owner, Remedial Party or Designated Representative

Date

IC CERTIFICATIONS
SITE NO. C905036

Box 6

SITE OWNER OR DESIGNATED REPRESENTATIVE SIGNATURE

I certify that all information and statements in Boxes 1,2, and 3 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 Jeff Meister (print name) at DST Properties NY, LLC, 301 Franklin Street, Olean, NY 14760 (print business address),

am certifying as President and Owner (Owner or Remedial Party)

for the Site named in the Site Details Section of this form.

Jeff Meister 2020.05.15 14:07:35 -05'00' 5/15/2020

Signature of Owner, Remedial Party, or Designated Representative Rendering Certification — Date

IC/EC CERTIFICATIONS

Box 7

Professional Engineer Signature

I certify that all information in Boxes 4 and 5 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 Lori E. Riker, P.E. at Benchmark Environmental Engineering & Science, PLLC, 2558 Hamburg Turnpike, Suite 300 Buffalo, NY 14218,
print name — print business address

am certifying as a Professional Engineer for the Owner
(Owner or Remedial Party)

Signature of Professional Engineer, for the Owner or Remedial Party, Rendering Certification

Stamp (Required for PE)

5/15/2020
Date