ROUX

REMEDIAL ACTION WORK PLAN

Remedial Action Work Plan Implementation
MJ Painting Site
350 Franklin Street, Olean, New York

Revised: June 30, 2022

Prepared for:

MJ Painting Contractor Corp.
291 Homer Street
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CERTIFICATIONS

I, Brian Robinson, certify that I am currently a Qualified Environmental Professional as defined in 6 NYCRR Part 375 and that this Remedial Investigation/Alternatives Analysis Report was prepared in accordance with all applicable statutes and regulations and in substantial conformance with the DER Technical Guidance for Site Investigation and Remediation (DER-10).

Brian Robinson
Qualified Environmental Professional

6/30/22
Date

Signature

I, Noelle M. Clarke, P.E., certify that I am currently a NYS registered professional engineer and that this Remedial Investigation Report/Alternatives Analysis Report was prepared in accordance with all applicable statutes and regulations and in substantial conformance with the DER Technical Guidance for Site Investigation and Remediation (DER-10).

I certify that all information and statements in this certification are true. I understand that a false statement made herein is punishable as Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law.

Noelle M. Clarke, P.E.
NYS Professional Engineer # 072491

6/30/22
Date

Signature

Noelle M. Clarke
No. 072491

It is a violation of Article 130 of New York State Education Law for any person to alter this document in any way without the express written verification of adoption by any New York State licensed engineer in accordance with Section 7209(2), Article 145, New York State Education Law.

1.0 INTRODUCTION

MJ Painting Contractor Corp. (MJ Painting or the Volunteer), has elected to pursue cleanup and redevelopment of the property located at 350 Franklin Street, Olean, New York (the Site, see **Figures 1** and **2**), under the New York State Department of Environmental Conservation (NYSDEC) Brownfield Cleanup Program (BCP or Program). The Volunteer entered into the Brownfield Cleanup Agreement (BCA) with the NYSDEC and was accepted into the BCP as a volunteer on January 14, 2019. The Site is identified as BCP Site No. C905046 and consists of one 9.35-acre parcel, identified as City of Olean tax map parcel 94.040-1.2.3.

Currently, the Site is vacant and is zoned for industrial use. Industrial uses as defined in 6 New York Codes, Rules, and Regulations (NYCRR) Part 375-6 Environmental Remediation Programs are proposed for the Site. Although the redevelopment plan for the Site is not finalized, it is anticipated that when the development is completed, the Site will be used for future growth of the MJ Painting operations currently located at 291 Homer Street (BCP Site #C905042). The proposed development plan is compatible with the I – Industrial Use zoning of the Site.

Roux Associates, Inc. and Roux Environmental Engineering and Geology, D.P.C. (collectively referred to as Roux), on behalf of MJ Painting, have prepared the following Remedial Action Work Plan (RAWP) for the Site. The selected Remedial Action (RA), as described in the NYSDEC-approved Remedial Investigation/Alternatives Analysis Report (RI/AAR) and Decision Document (DD), includes:

- Removal or otherwise mitigation of the environmental risk related to subsurface structures (e.g., abandoned piping) to prevent potential discharge of contaminants to surrounding soil/fill;
- Excavation and off-Site disposal and/or in-situ solidification (ISS) of soil containing grossly contaminated material (GCM) (i.e., containing substantial quantities of mobile contamination in the form of light non-aqueous phase liquid [LNAPL]);
- Removal and/or mitigation of sources of groundwater contamination, such as GCM and soil with detections in excess of the applicable Protection to Groundwater Soil Cleanup Objective (PGSCO) criteria of contaminants detected in the groundwater above applicable Ambient Water Quality Standards and Guidance Values (AWQGSV), referred to herein as PGSCO-designated source material, by excavation, ISS, and LNAPL removal/recovery and disposal;
- Installation of additional monitoring wells throughout the Site to monitor for GCM (i.e., containing substantial quantities of mobile contamination in the form of LNAPL) and facilitate product evaluation and/or reduction measures (as necessary) post-certificate of completion (COC);
- Installation of a Site Cover System to prevent direct contact with contaminated soil remaining at the Site;
- Installation of contingency sub-slab depressurization system (SSDS) piping infrastructure and vapor barriers beneath any newly constructed buildings to address the potential for soil vapor intrusion (SVI). Short-term monitoring and/or mitigation of SVI as needed to comply with applicable guidelines and criteria is also included in the proposed remedy;
- Replacement of select groundwater monitoring wells if destroyed during Site excavation activities in areas not subject to ISS; and
- Implementation of institutional controls (ICs) including an environmental easement and Site Management Plan (SMP) to restrict the Site to commercial or industrial use, to prevent disturbance of contaminated soil remaining at the Site, provide for assessment and characterization to confirm the absence of GCM (i.e., material containing substantial quantities of mobile contamination in the form of LNAPL) prior to future disturbance, to restrict use of groundwater at the Site, to maintain the Site Cover System, conduct LNAPL removal (as necessary) and to monitor groundwater to confirm that groundwater source removal mitigates off-Site migration of contaminated groundwater.

The selected remedial approach removes or controls (by virtue of reducing mobility) source areas (i.e., GCM, PGSCO-designated source material, and/or LNAPL) to the greatest extent feasible, reduces exposure of any remaining petroleum-related impacts, reduces soil vapor migration into future buildings, and reduces the potential for off-Site migration of contaminated groundwater.

The remainder of this RAWP document is divided into the following sections:

- **Section 2 –** Describes the Site, its historical uses, and environmental conditions based on previous environmental investigations;
- **Section 3 –** Describes the previous remedial investigation field work activities conducted at the Site, including collection of surface soil samples, advancement of soil borings for the collection of subsurface soil samples, advancement of test pits to evaluate the extent of GCM, installation of new monitoring wells, gauging and collection of groundwater samples from new and existing monitoring wells, evaluation of the extent of LNAPL and the groundwater flow direction, installation of soil vapor monitoring points and collection of soil vapor samples; and the Conceptual Site Model of Site contamination;
- **Section 4 –** Provides a description of Remedial Goals at the Site; applicable standards, criteria, and guidance (SCGs); the Remedial Action Objectives (RAOs) identified for the Site; and a summary of the Alternative Analysis Report (AAR) conclusions;
- **Section 5 –** Provides a description of the components of the RA;
- **Section 6 –** Provides a discussion of the RAWP approach, including management of excavation and backfill materials, ISS performance requirements, and monitoring and management of odors and fugitive emissions;
- **Section 7 –** Provides a description of the quality assurance and quality control (QA/QC) procedures that will be implemented at the Site in addition to the quality assurance project plan (QAPP) developed for the Site, and the Construction Quality Control Plan (CQAP);
- **Section 8 –** Provides a discussion of RAWP support documents, including the Health and Safety Plan (HASP), Erosion and Sediment Control Plan (ESCP), Stormwater Pollution Prevention Plan (SWPPP), Citizen Participation Plan (CPP), Community Air Monitoring Plan (CAMP), and SMP;
- **Section 9 –** Provides a description of the reporting schedule and structure, including a brief description of the Final Engineering Report (FER) that will be prepared once the work is completed; and
- **Section 10 –** Provides a list of the principal personnel who will be conducting the work and their contact information, as well as an anticipated schedule for performing the work.

2.0 SITE DESCRIPTION AND HISTORY

The following sections provide pertinent background information, including the documented history of the Site, and the results of previous environmental investigation work conducted at the Site. All historic reports discussed below were provided in the January 14, 2019 BCP Application.

2.1 Site Description

The Site is located in the City of Olean, Cattaraugus County, New York, at 350 Franklin Street (see **Figures 1** and **2**). The Site consists of a vegetated (grass covered) undeveloped area adjacent to New York State highway I-86. No buildings or other structures exist at the Site except for two highway billboards. According to the City of Olean Assessor's Office on-line property information database, the Site, identified as tax map parcel 94.040-1.2.3, comprises 9.35 acres. The Site is categorized as industrial vacant and is zoned for commercial and industrial use. Properties in the vicinity (approximately a 0.5-mile radius) of the Site are primarily developed as mixed use and include residential, municipal, commercial, manufacturing and or industrial properties. Commercial oil recovery has historically occurred in the surrounding areas; according to the NYSDEC Oil & Gas Searchable Database, 289 active oil production wells exist within the Town of Olean, though there are no remaining active oil production wells within the City of Olean.

2.2 Contemplated Redevelopment Plan

The remedy under this RAWP is protective of human health and the environment consistent with the current zoning and potential end use. Although the redevelopment plan for the Site is not finalized, it is anticipated that when development is completed, the Site will be used for future growth of the MJ Painting operations currently located at 291 Homer Street. MJ Painting plans to construct new buildings at the Site for commercial use. The development plan is compatible with both the current I – Industrial Use zoning of the Site or GC – General Commercial Use.

2.3 Description of Surrounding Property

Review of neighboring properties and public thoroughfares and research of available information regarding the neighboring properties was performed to identify evidence of environmental concerns that could adversely impact the Site. Properties in the vicinity (approximately 0.5-mile radius) of the Site are primarily developed as mixed use and include residential, municipal, commercial, manufacturing, and industrial properties. The Site is bordered to the north/northwest by I-86; to the east by "All Weather Self Storage" at 302 Franklin Street and the Southern Tier Railroad Authority (STRA) property (S.B.L #94.048-1-3); to the southeast by "First Transit Inc" at 351 Franklin Street and "Scotts Rotary Seals" at 301 Franklin Street; and to the southwest by "Napoleon Engineering Services" at 1601 Johnson Street.

According to the U.S. Fish and Wildlife National Wetlands Inventory (FWS Wetland Mapper), Two Mile Creek is the only wetland located in the vicinity of the Site. Two Mile Creek is located directly northwest of the Site. According to the NYSDEC Protection of Waters Program, Two Mile Creek is considered a Class C Stream, which is the second lowest ranking used by the NYSDEC to classify waterways in New York. Class C Streams consist of waterways and or waterway segments that cannot be used as a drinking water source and are not suitable for swimming or contact activities, but are suitable for fisheries support or non-contact activities[1]. As discussed in

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[1] Higher classifications of waterways include Class A or AA (drinking water source) and Class B (suitable for swimming or contact activities).

previous Site submittals, the Site and surrounding areas are located within the Allegheny-Ohio-Mississippi River drainage basin and according to the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) for Olean, New York, the Site is within a Zone B floodplain area. Zone B areas are of moderate flood hazard, located between the limits of the 100-year and 500-year floods.

2.4 Historic Land Uses

According to the April 2006 Historic and Current Site Conditions Report prepared by AMEC Earth and Environmental (AMEC), the Site and section of Olean, New York, which surrounds the Site has historically been occupied with industrial operations including, but not limited to, petroleum storage and refining, leather tanneries, heavy and light manufacturing, chrome plating, fertilizer manufacturing, and railroad facilities. The Site and the properties immediately surrounding the area of the Site were primarily used as a petroleum refining facility between 1876 and approximately 1954. During this time, seepage pools were known to have been encountered and became a targeted location for oil production well installation.[2] Given the presence of naturally occurring oil in surrounding areas, it is possible that naturally occurring oil is also present at this Site.

From 1954 through 1964, Swan Finch Oil Company Olean Industries, Inc. stored grain and corn in approximately 60 tanks and buildings on the refinery property. From 1964 through 1981, Felmont Oil and Agway removed the old refinery tanks and buildings and constructed an anhydrous ammonia plant.

2.5 Historic Environmental Reports

The following sections provide an overview of the previous environmental inspections and investigations at the Site. Several previous investigations have been performed at the Site from 2005 through 2016.

2.5.1 Spill Number 0501100

According to the NYSDEC Spill Report Form for Spill Number 0501100, on April 27, 2005, at 5:06 am, a tractor-trailer owned and operated by Anthony Mast, Inc. was involved in a traffic accident on I-86 eastbound between exits 25 and 26 in Olean, New York. The accident involved the tractor-trailer overturning, causing a release of approximately 30 gallons of diesel fuel from a saddle tank of the truck. The diesel fuel was released onto the unpaved, grassy median Portville Trucking responded to the spill and cleaned up the immediate area with “speedi-dry.” NYSDEC, which was notified of the release at 5:45 am on April 27, 2005, assigned Spill Number 0501100.

On April 29, 2005, NYSDEC received a report of a sheen on the surface of the water and banks of Two-Mile Creek, which flows adjacent to 1-86. NYSDEC determined that the source of the sheen was a culvert that receives drainage from the bridge drains from I-86 in the area of the Anthony Mast, Inc. April 27, 2005 release. According to the NYSDEC Spill Report Form updated August 8, 2005, the observed sheen on the Two-Mile Creek extended from the culvert to the bridge on 24th Street, approximately 1.4 miles away. OP Tech Environmental Services, Inc. (OP Tech) responded to the sheen report and deployed absorbent pads and booms. No new spill number was issued by NYSDEC for the sheen found on the Two-Mile Creek. According to the NYSDEC Spill Report Form, the sheen on the Two-Mile Creek appeared to be flowing from the culvert associated with storm water drainage from I-86.

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[2] Seepage pools are a small pool of oil or gas that escapes to the surface.

On May 4, 2005, OP Tech excavated soil from the area around the storm water drainage culvert as part of release response actions associated with the Anthony Mast, Inc. diesel fuel release. While removing soils from ground surface to 6 inches (in) below ground surface (bgs), OP Tech personnel observed what they described to be a "sludge/oil material" directly below surficial soils. Under the direction of NYSDEC, OP Tech continued the excavation activities to an approximate depth of 4 to 5 feet (ft) bgs where they encountered groundwater with a "sludge/oil" material on the surface. NYSDEC determined that *"a very old product was present just under the area that had been excavated for the spill,"* and assigned Spill Number 0550226. Spill Number 0501100 was subsequently closed by NYSDEC on February 23, 2006.

2.5.2 Spill Number 0550226

In a June 7, 2005 letter to ExxonMobil, NYSDEC identified ExxonMobil as a responsible party for Spill Number 0550226 and requested investigation and remedial work. Subsequently, several investigations were performed under Roux oversight, on behalf of ExxonMobil, for Spill Number 0550226, which are summarized below:

- July/August 2007 – Roux conducted investigation activities which included the installation of soil borings to facilitate the collection of soil samples as well as discrete groundwater samples. The July/August 2007 subsurface investigation results are provided in the November 27, 2007 *Summary of Subsurface Investigation Report,* prepared by Roux, on behalf of ExxonMobil.
- January 2011 – Roux conducted additional investigation activities which included the installation of soil borings and monitoring wells to facilitate the collection of soil samples and groundwater samples to further evaluate the presence of petroleum impacts. The January 2011 subsurface investigation results are provided in the April 28, 2011 *Subsurface Investigation Summary Report,* prepared by Roux, on behalf of ExxonMobil.
- June and October 2011 – Roux conducted two additional rounds of ground water sampling in 2011, the results of which were provided in the February 28, 2012 *Ground Water Monitoring Summary Report,* prepared by Roux, on behalf of ExxonMobil.
- July and November 2012 – Roux conducted bi-annual ground water monitoring activities in of 2012, the results of which were provided in the April 1, 2013 *Bi-Annual Ground Water Monitoring and Subsurface Investigation Summary Report,* prepared by Roux, on behalf of ExxonMobil.
- December 2012/January 2013 – Roux conducted additional investigation activities which included the installation of soil borings and monitoring wells to facilitate the collection of soil samples and ground water samples to further evaluate the presence of petroleum impact. The December 2012/January 2013 investigation results are provided in the April 1, 2013 *Bi-Annual Ground Water Monitoring and Subsurface Investigation Summary Report*, prepared by Roux, on behalf of ExxonMobil.
- July 2013 – In a letter dated July 5, 2013 to ExxonMobil, NYSDEC closed Spill Number 0550226 on July 2, 2013 with a status of "inactive."

2.5.3 Spill Number 1300859

In a letter dated April 26, 2013 to ExxonMobil, NYSDEC issued Spill Number 1300859, indicating that *"This spill is associated with petroleum contained in, and potentially spilled from, abandoned dilapidated piping,"* potentially, *"…associated with the historic SOCONY Vacuum Refinery…"* located at 351 Franklin Street, Olean, New York (S.B.L. #94.040-1-29.1) and on the adjacent STRA property (S.B.L.s #94.048-1-3 and #94.040-1-26). Specifically, the "petroleum contained within the piping" was identified during remedial activities at the adjacent 301 Franklin Street property under the NYSDEC BCP (Scott Rotary Seals Site No. C905036). These remedial activities included *"the removal of abandoned refinery piping. Pipes extending off site were cut and capped at the property boundary"* and information pertaining to these pipes is provided in the Final Engineering Report (FER) prepared for the Scott Rotary Seals site.[3] Further, in the April 26, 2013 letter, NYSDEC requested that ExxonMobil initiate cleanup and removal activities of the "spill" including submittal of a remedial investigation work plan.

Following the initial investigation/remedial efforts conducted under Spill Number 1300859, the Site was expanded to include the 350 Franklin Street parcel. Subsequently, several investigations and remedial activities were performed at the 350 Franklin Street parcel under Roux oversight, on behalf of ExxonMobil, for Spill Number 1300859, which are summarized below:

October 2014 – A geophysical survey was performed at a portion of the 350 Franklin Street parcel to assist in further identifying abandoned piping and to better understand any additional potential subsurface features. Details regarding the October 2014 work is summarized in the April 14, 2015 *Piping Investigation Summary Report*, prepared by Roux, on behalf of ExxonMobil;

- June 2015 – A geophysical survey of the remainder of the 350 Franklin Street parcel was conducted to assist in further identifying abandoned piping and potential subsurface features. Details regarding the June 2015 work is summarized in the October 21, 2015 *Test Pit Investigation Summary Report,* prepared by Roux, on behalf of ExxonMobil;
- November/December 2015 – Test pitting to investigate subsurface features and identify areas of GCM was performed at 350 Franklin Street.[3] Details regarding the November/December 2015 work is summarized in the June 14, 2016 *Test Pit and Piping Investigation Summary Report*, prepared by Roux, on behalf of ExxonMobil;
- November/December 2016 – Test pitting and piping/GCM removal activities were performed at 350 Franklin Street. Details regarding the November/December 2016 work is summarized in the July 6, 2017 *Test Pit and Piping Investigation Summary Report*, prepared by Roux, on behalf of ExxonMobil.

Copies of the previously submitted reports described above were included as appendices to the BCP application.

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[3] The *Final Engineering Report* describes piping extending onto 351 Franklin Street (southwest of 301 Franklin Street) and the STRA property (east and southeast of 301 Franklin Street).

3.0 SUMMARY OF ENVIRONMENTAL CONDITIONS

3.1 Previous Remedial Investigations

The following sections summarize the previous remedial investigation conducted to characterize the nature and extent of contamination at the Site. Remedial Investigation (RI) activities were performed in accordance with the NYSDEC approved December 19, 2018 Remedial Investigation Work Plan (RIWP), the November 2, 2020 Supplemental Subsurface Investigation Work Plan (SSIWP), and the November 2, 2021 Pre-Design Investigation Work Plan (PDIWP). The initial RI was completed in 2019, at DEC's request the SSI was completed in December 2020 to further investigate targeted areas for the presence of GCM (i.e., containing substantial quantities of mobile contamination in the form of LNAPL). The PDI, completed in January 2022, was designed to characterize waste in the areas previously identified as containing GCM for disposal, characterize site soils for re-use, and install eight new monitoring wells to support continued evaluation of areas not previously identified as containing GCM. Collectively, results of the RIWP and SSIWP are summarized in RI/AAR that was previously provided to NYSDEC. The results of the PDI were summarized in an email provided to the NYDEC.

The conclusions of the RI are:

- Approximately 3,400 linear feet of subsurface former refinery piping is present at the Site;
- An estimated 12,000 tons of soil containing GCM is present at the Site;
- Surface and subsurface soil contamination exceeding Commercial Use Site Cleanup Objectives (SCOs) is present at the Site;
- Surface and subsurface soil PGSCO-designated-source material is present at the Site;
- Groundwater contamination exceeding Ambient Water Quality Standards and Guidance Values (AWQSGV) is present at the Site; and
- Light Non-Aqueous Phase Liquid (LNAPL) is present in portions of the Site.

A detailed discussion of contaminant conditions on-Site as indicated by previous remedial investigations is presented in Section 3.4.

3.1.1 Previous Remedial Investigation Scope

Soil samples were collected from 40 soil boring locations and submitted for laboratory analysis as part of RI activities as outlined in the RIWP and SSIWP. Site-wide analytical soil data was compared to the NYSDEC Subpart 375-6 Commercial Use SCOs in order to evaluate Site-wide soil quality and to determine contamination in soil, if present.

Following monitoring well development, two rounds of groundwater samples were collected from a total of 19 Site monitoring wells (first round in accordance with the RIWP, and second round in accordance with the SSIWP).[4] All monitoring wells were sampled using low-flow sampling methodology. Samples were collected for VOC, SVOC, and total and dissolved metals analysis. In accordance with the RIWP, select monitoring wells (MW-202, MW-208, RXMW-002, RXMW-003, RXMW-005, RXMW-006 and RXMW-007), were also sampled for PCB, Pesticide, Herbicide, and Total Cyanide analysis during the first sampling round. Groundwater analytical data was compared to the NYSDEC Class GA AWQSGVs per NYSDEC Division of Water Technical and Operational Guidance Series (TOGS) 1.1.1 Ambient Water Quality Standards and

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[4] Groundwater samples were not collected from monitoring wells that exhibited measurable amounts (> 0.01 ft) of LNAPL.

Guidance Values and Groundwater Effluent Limitations (June 1988). Furthermore, during the first sampling round, four monitoring wells were sampled for emerging contaminants 1,4-dioxane and PFAS at the Site. This sampling was performed in accordance with the June 2019 NYSDEC *Sampling for 1,4-Dioxane and PFAS Under DEC's Part 375 Remedial Programs* guidance document.

Soil vapor samples were collected from soil vapor points RXSV-001 through RXSV-009[5] on June 28 through July 2, 2019. Soil vapor samples were analyzed for VOCs by Alpha Analytical according to EPA Method TO-15.

As discussed above, the RI/AAR reports the methods, results, discussion of the nature and extent of Site contamination, and conclusions associated with the RI activities conducted as a volunteer in the NYSDEC BCP. All analytical data discussed in this Section are summarized on tables, and laboratory analytical reports presented as appendices in the RI/AAR.

3.1.2 Pre-Design Investigation Scope

Soil samples were collected from 48 soil boring locations and 56 surficial sample locations and submitted for laboratory analysis as part of PDI activities as outlined in the PDIWP. Site-wide analytical soil data was compared to the NYSDEC Subpart 375-6 Commercial Use SCOs in order to characterize for disposal waste in soil, if present or onsite reuse.

A total of 8 soil borings were completed as monitoring wells (RXMW-106 – RXMW-113) as outlined in the PDIWP. Following monitoring well development, one round of groundwater samples was collected from 6 of the 8 newly installed PDI monitoring wells.[6] Monitoring wells were sampled using low-flow sampling methodology. Samples were collected for VOC, SVOC, and total and dissolved metals analysis. Groundwater analytical data was compared to the NYSDEC Class GA AWQSGVs .

As discussed above, an email summary (PDI Summary) reporting the methods, results, and conclusions associated with the PDI activities conducted as a volunteer in the NYSDEC BCP was provided to the NYSDEC. All PDI analytical data discussed in this Section are summarized on tables, and laboratory analytical reports presented as **Appendix D**.

3.2 Site Hydrogeologic Conditions

The following sections provide a description of the geological and hydrogeological findings of the RI.

3.2.1 Site Geology

The Site is typically underlain by fill material characterized generally as brown sand and gravel. This fill material, containing brick, wood, ash, tar-like material, concrete, metal fragments, and glass, is present throughout the Site. Fill material extends from ground surface to as deep as 12 ft (RX-026 and RXMW-003). Native material present beneath the layer of fill is typically gray, but also tan or brown, silt, sand and gravel. Intermittent layers of silt and clay were observed throughout the Site ranging from ground surface (RX-023 and RXMW-007) to a maximum depth of approximately 17 ft bgs (RXMW-001 and RXMW-002). A generally continuous and non-impacted layer of clay and silt was observed throughout the Site with the depth of the top of the layer generally ranging from 25 ft bgs (RX-102) to 35 ft bgs (RX-100 and RXMW-103). The bottom of the layer was not encountered and therefore a layer thickness could not be determined. Cross-sections were provided as figures in the RI/AAR.

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[5] A duplicate sample was collected from soil vapor point RXSV-002.

[6] Groundwater samples were not collected from monitoring wells that exhibited measurable amounts (> 0.01 ft) of LNAPL.

Bedrock was not encountered during the investigation; refusals were encountered at varying depths across the Site during soil boring advancement, indicating that glacial till may be present at the Site. According to The New York State Department of Transportation (NYSDOT) Geology of New York State Geotechnical Design Manual, the Site, which is located on the Allegheny Plateau, is underlain by interbedded shales, siltstones and mostly weak and soft sandstones. The bedrock generally dips to the southwest at a low angle.

3.2.2 Site Hydrogeologic Setting

According to water-level data collected during the RI and PDI, the depth to water at the Site ranges from approximately 6 feet below grade to approximately 18 feet below grade (an elevation of approximately 1,409 ft North American Vertical Datum of 1988 (NAVD88) to 1,421 ft NAVD88).[7] Select monitoring wells (RXMW-005 and RXMW-001) indicate isolated areas of perched groundwater (likely due to intermittent layers of silt and clay discussed in **Section 3.2.1**). On the Site, there appears to be converging groundwater flow; once converged on the Site, groundwater appears to flow in a southerly direction. This groundwater flow pattern appears to be consistent throughout multiple groundwater gauging events.

3.3 Constituents of Concern

Based on the findings related to historic use of the Site, the RI the constituents of concern are presented below:

- **Surface, near surface and subsurface soil/fill**: GCM (i.e., containing substantial quantities of mobile contamination in the form of LNAPL), PGSCO-designated source material, arsenic, and SVOCs;
- **Groundwater**: SVOCs and VOCs; and
- **LNAPL.**

During the RI and PDI the extent of GCM (i.e., containing substantial quantities of mobile contamination in the form of LNAPL) in the subsurface was delineated by visual observations collected during test pit and soil boring activities (e.g. “detectable without laboratory analysis”). The Site GCM has been characterized as soil containing substantial quantities of mobile contamination in the form of LNAPL. GCM will be remediated by source removal and/or ISS to the extent practicable and feasible, as described in **Section 6**.

3.4 Conceptual Site Model and Contamination Conditions

The following sections describe the nature and extent of contamination of soil, groundwater, and soil vapor observed at the Site.

3.4.1 Soil Quality

Soil assessment was conducted at the Site to identify the nature and extent of contamination in surface soils and subsurface soils and to facilitate soil reuse characterization and waste characterization. Surface soils were evaluated to identify potential direct exposure risks at the Site. Subsurface soils were evaluated to delineate the horizontal and vertical extent of contamination and GCM (i.e., containing substantial quantities of mobile contamination in the form of LNAPL) beneath the Site.

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[7] Vertical data is referenced to New York State plan coordinate system NAVD88 as established with New York State Real Time Network (NYSNET) surveyed by Wendel on June 21, and July 8, 2019. This range of water table elevations does not include values from RXMW-001 or RXMW-005, which are screened across perched water tables.

3.4.1.1 Surface and Near Surface Soils

Surface soil samples were collected from immediately below the root zone and from one foot below the ground surface to characterize cover soil in anticipation for remedial efforts. As shown on **Figure 3**, Surficial (0 – 1 ft bgs) GCM (i.e., containing substantial quantities of mobile contamination in the form of LNAPL) was identified in 2 of 26 test pits, TP-I1 and TP-I2. A detailed description of surface and near surface soil conditions is summarized in the RI/AAR.

3.4.1.2 Subsurface Soils

Petroleum-related impacts to the subsurface were observed during the RI. The majority of petroleum-related impacts, except those surficial impacts noted in Section 3.4.1.1, were observed at depths greater than 7 ft bgs. It should be noted that as the test pitting proceeded below the water table, it was challenging to discern if petroleum-related impacts were present at depth or if sloughing of potential petroleum-related impacts from above was being observed. Seven locations (MW-100 [off-Site], MW-209, MW-212, SB-101, RX-102, RXMW-001, and TP-A3) where petroleum-related impacts were observed exhibited characteristics meeting the definition of GCM (i.e., containing substantial quantities of mobile contamination in the form of LNAPL). A detailed description of subsurface soil conditions is summarized in the RI/AAR.

3.4.1.3 Soil Reuse Characterization

Approximately 88,000 tons (50,000 cubic yards) of soil have been pre-characterized for re-use on-site. Soil reuse characterization samples were collected in accordance with NYDEC DER-10 Table 5.4(e)10 to determine whether material is suitable for reuse as SCO-compliant fill (eligible for use at any depth) or non SCO-compliant fill (eligible for use at depths greater than or equal to 1 foot bg). The results were presented in the PDI Summary email provided to NYSDEC and are summarized in **Table 5** and **Figure 6**. All testing was conducted according to the following characterization requirements in accordance with NYSDEC DER-10 Table 5.4(e)10:

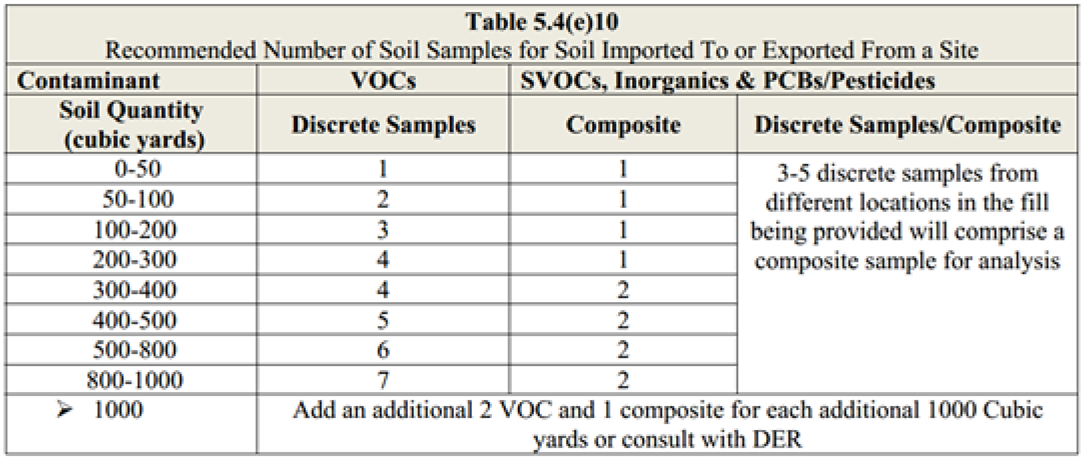

Table 5.4(e)10
Recommended Number of Soil Samples for Soil Imported To or Exported From a Site

Contaminant	VOCs	SVOCs, Inorganics & PCBs/Pesticides	
Soil Quantity (cubic yards)	**Discrete Samples**	**Composite**	**Discrete Samples/Composite**
0-50	1	1	3-5 discrete samples from different locations in the fill being provided will comprise a composite sample for analysis
50-100	2	1	
100-200	3	1	
200-300	4	1	
300-400	4	2	
400-500	5	2	
500-800	6	2	
800-1000	7	2	
➢ 1000	Add an additional 2 VOC and 1 composite for each additional 1000 Cubic yards or consult with DER		

Each composite sample was comprised of a minimum of three grab samples (samples for VOC analysis were collected as individual grabs in lieu of composites). Samples were analyzed for VOCs, SVOCs, metals, pesticides polychlorinated biphenyls (PCBs), and emerging contaminants identified in Appendix 5 of NYSDEC DER-10. All laboratory testing was performed by Alpha Analytical Laboratories, an independent, NYSDOH ELAP-approved laboratory.

Stockpiles designated for reuse as SCO-compliant fill and non SCO-compliant fill will be segregated to prevent comingling of materials. SCO-compliant fill are those soils which do not exceed the Commercial/Industrial SCOs or PGWSCOs for select petroleum related volatile organic compounds that have been identified at the site as defined by 6 NYCRR Part 375-6.8. Non-SCO-compliant fill are those soils which may exceed the Commercial/Industrial SCOs but do not exceed PGWSCOs for select petroleum related volatile organic compounds that have been identified at the site as defined by 6 NYCRR Part 375-6.8. Soils which exceed PGWSCOs for select petroleum related volatile organic compounds that have been identified at the site as defined by 6 NYCRR Part 375-6.8 are not eligible for reuse on-site and will be transported and disposed of off-site at a licensed and approved facility.

3.4.1.4 Waste Characterization

Material within the remedy area was pre-characterized for solid waste disposal at a permitted commercial solid waste disposal facility. Waste characterization samples were analyzed in accordance with the disposal requirements of the selected permitted commercial solid waste disposal facility. The analytical results were sent to the selected disposal facilities for approval. All laboratory testing was performed by Alpha Analytical Laboratories, an independent, NYSDOH ELAP-approved laboratory.

3.4.2 Underground Piping

Subsurface structures (e.g., abandoned piping) have the potential to contain and/or discharge contaminants to surrounding soil/fill, thereby acting as a potential source of contamination. Piping and pipe bedding can also act as a preferential pathway for transport of impacted groundwater and/or soil vapor. Apparent abandoned underground piping was encountered in several test pits during the RI (TP-A1, TP-E1, TP-E2, TP-F2, TP-F3, TP-H1 and TP-K2). Additionally, previous geophysical surveys and piping investigation activities performed at the Site identified approximately 3,400 linear feet of piping in the subsurface of the Site. A detailed description of subsurface piping is summarized in the RI/AAR.

3.4.3 Groundwater Quality

During the RI, two rounds of groundwater samples were collected from 19 Site monitoring wells. Petroleum-related contaminants (VOCs and SVOCs) were detected in excess of their individual AWQSGVs in groundwater along the upgradient (MW-100, MW-102, MW-104, MW-105, MW-106, MW-202, RXMW-105D, RXMW-105S and RXMW-003) and downgradient (RXMW-002, RXMW-006, RXMW-103, MW-206, MW-209, MW-216) property boundaries, indicating that contaminants may be migrating on-Site from an upgradient source and off-Site.

During the PDI, groundwater samples were collected from 6 of the 8 newly installed monitoring wells. Petroleum-related contaminants (VOCs) were detected in excess of their individual AWQSGVs in groundwater along the upgradient (RXMW-108, RXMW-110, and RXMW-111) and downgradient (RXMW-106, RXMW-107, and RXMW-112) property boundaries, indicating that contaminants may be migrating on-Site from an upgradient source and off-Site.

3.4.3.1 Groundwater Quality and LNAPL

As part of the RI soil and groundwater quality was evaluated to delineate the extent of GCM on-Site. The extent of GCM was delineated by observations of GCM (i.e., material containing mobile LNAPL) in the form of tar-like material, petroleum saturated soil, and separate phase hydrocarbons correlated with the observation of recoverable LNAPL in monitoring wells within the vicinity of the observed GCM, which are the sources and indicators of mobile contamination (i.e., the characteristics of GCM) at the Site. This performance-based designation of GCM at the Site was developed in cooperation with NYSDEC representatives and is described in **Section 5.2**.

Historically, LNAPL has been encountered at seven of the Site monitoring wells, although as of February 2022, LNAPL was only observed in four monitoring wells (MW-209, MW-212, RXMW-109, and RXMW-113). The presence of LNAPL in monitoring well RXMW-109, and intermittently in RXMW-001 and off-Site monitoring well MW-100 (located just north of the northern most property boundary) point to a likely off-Site source of LNAPL along the northern property boundary. The presence of LNAPL in MW-209, MW-212, and RXMW-113 are indicative of a localized source of LNAPL in this area of the Site.

While LNAPL was detected in monitoring well RXMW-006 in July and September 2019, shortly after installation, it has not been detected in RXMW-006 since. The initial presence of a small quantity of LNAPL in RXMW-006 is indicative of a small, localized source of petroleum-related impacts upgradient of this area, which was observed during test pitting activities; however, the lack of continued measurable LNAPL at RXMW-006 indicates that LNAPL is likely not mobile in that area of the Site and, therefore, impacted material does not meet the definition of GCM (i.e., containing mobile LNAPL).

3.4.3.2 Groundwater Quality and PGSCO-designated Source Material

As part of the RI soil and groundwater quality was evaluated to delineate the extent of PGSCO-designated source material on-Site. PGSCO-designated source material is defined by monitoring wells where soil analytical detections in excess of the PGSCOs are collocated with groundwater analytical detections in excess of AWQSGVs for the same analyte. This analytical-based definition of PGSCO-designated source material at the Site was developed in cooperation with NYSDEC representatives and is described in **Section 5.2**.

PGSCO-designated source areas have been identified in the vicinity of MW-106, MW-202, RXMW-105S, RXMW-003, RXMW-005, RXMW-110, and RXMW-111.

3.4.4 Soil Vapor and Air Quality

Petroleum-related VOCs are present at the Site though at relatively low levels. The potential on-Site source of petroleum-related soil vapor contamination is the petroleum-related impacts present in soil. Soil vapor typically travels vertically off source materials, but can spread laterally through diffusion and advection, or as groundwater flows. Soil vapor results from the RI indicate the following:

- Soil vapor contamination that may be the result of petroleum-related contaminants (i.e., benzene, ethylbenzene and xylenes) is present at the Site. As a result, contingency SSDS piping with soil vapor barriers as the sealing layer will be proactively installed beneath the buildings. Following short-term monitoring of SVI, the contingency system will be converted to an active mitigation system, as needed to comply with applicable guidelines and criteria to prevent potential exposure to these vapors.

3.4.5 Two Mile Creek

Based on groundwater gauging data from December 2020, the surface water elevation of Two Mile Creek (which flows generally from east to west) is higher than the groundwater table observed at the Site (excluding the perched water tables at RXMW-001 and RXMW-005). Additionally, groundwater flow at the Site appears to converge in the center of the Site, and then once converged, flow in a southerly direction away from Two Mile Creek; these conditions suggest that Two Mile Creek is a losing stream, and likely not receiving groundwater from the Site. Therefore, the migration of Site contaminants toward Two Mile Creek is not likely.

4.0 REMEDIAL ACTION PROGRAM

The following sections describe the Remedial Action program.

4.1 Remedial Goals, SCGs, and Remedial Action Objectives

Based upon the results of the previous Site investigations, and the current and potential future use of the Site, the remedial goals and RAOs have been developed for the Site. Also provided is a description of SCGs applicable to the remedial action. The NYSDEC DER-10 Technical Guidance for Site Investigation and Remediation (May 2010, Section 4.1) was used as a guide for developing the RAOs, SCGs, and remedial goals for the Site based upon a Commercial Use SCO approach. Given the existing property zoning, current land use, and reasonable, anticipated, future use of the Site, Industrial Use SCOs should be considered the most appropriate SCOs for the Site; however, to accommodate potential alternative uses of the land in the future, Commercial Use SCOs may be applicable and, therefore, will be utilized for purposes of this RAWP.

4.1.1 Remedial Goals

As described in Section 4.1 of the NYSDEC DER-10, the goal of the remedial program is to implement a remedy for a site that is protective of public health and the environment. In addition, DER-10 states:

- A remedial program that achieves a permanent clean-up of a contaminated site, including the restoration of groundwater to its classified use, is to be preferred over a remedial program that does not do so, assuming other criteria of a remedial program are also met.
- The selection of a remedy will take into account the current, intended, and reasonably anticipated future land uses of the site and its surroundings.

The proposed remedy for the Site will be fully protective of public health and the environment, taking into account the current, intended, and potential future land use as industrial or commercial use.

As specified in Section 4.1(d)(2) of DER-10, “an identifiable source of contamination shall be addressed by the remedial program in accordance with the following hierarchy of preference:

- Removal and/or treatment;
- Containment;
- Elimination of exposure; and
- Treatment of source at the point of exposure.”

In line with DER-10 and DER-31, the sustainability of the remedy is also evaluated and includes the process of examining the environmental footprint of Site clean-up activities and taking steps to minimize the environmental footprint. The core elements of green remediation include:

- Minimize total energy use and increase the percentage of energy provided by renewable sources;
- Minimize emissions of air pollutants and greenhouse gases;
- Minimize water use and preserve water quality;
- Conserve material resources and minimize waste; and
- Protect land and ecosystem services.

These elements were considered in the remedial alternative selection process and will be incorporated into the final remedial approach to the degree possible. As part of this RAWP, removal and/or treatment will be included as part of the proposed remedy. However, since there are many areas of the Site with no current public exposure to contamination, achievement of the remedial goals through containment of residual contamination and elimination of potential for exposure to residual contamination in the future will also be incorporated.

4.1.2 Standards, Criteria, and Guidance

Generally, SCGs are promulgated requirements ("standards" and "criteria") and non-promulgated guidance ("guidance") used by the NYSDEC and New York State Department of Health (NYSDOH) to regulate and evaluate the site remediation process. SCGs incorporate both the concept of "applicable or relevant and appropriate requirements" and the "to be considered" category of non-enforceable criteria or guidance, consistent with USEPA remediation programs.

During the performance of the work, various NYSDEC and other regulatory approvals will be required as soil excavation activities are performed. Some of the key approvals, referenced within this RAWP, are provided in the table below:

Regulatory Agency	Approval	Status
General		
NYSDEC	Approval will be obtained for each proposed disposal facility prior to coordinating and transportation and disposal of hazardous or non-hazardous waste from the Site	Pending
NYSDEC	SPDES General Permit for Construction Activities (GP-0-20-001)	Pending
NYSDEC	Approval of all import/re-use backfill results as well as respective source material documentation	Pending
City of Olean Department of Public Works	Hydrant use	Pending
City of Olean Department of Public Works	Sewer discharge permit (a copy of any outside approvals for site water discharges will be provided to the NYSDEC prior to the start of such discharge)	Pending

The following table provides a list of identified SCGs that are potentially applicable to the remedial analysis of the Site.

The key SCGs are discussed below. For a full listing of all SCGs, see: http://www.dec.ny.gov/regulations/61794.html.

Citation	Title	Regulatory Agency
General		
DER-10	Technical Guidance for Site Investigation and Remediation	NYSDEC
DER-31	Green Remediation	NYSDEC
6 NYCRR Part 375	Environmental Remediation Programs	NYSDEC
29 CFR 1910.120	Hazardous Waste Operations and Emergency Response	US Department of Labor, OSHA
29 CFR 1926	Safety and Health Regulations for Construction	US Department of Labor, OSHA
No Citation Available	Analytical Services Protocol	NYSDEC
6 NYCRR Parts 750-757	State Pollutant Discharge Elimination System	NYSDEC
6 NYCRR Parts 750 757	General Permit for Construction Activities (GP-0-20-001)	NYSDEC
No Citation Available	New York State Stormwater Management Design Manual	NYSDEC
Soil		
CP-51	Soil Cleanup Guidance	NYSDEC
Groundwater		
6 NYCRR Part 700-705	Surface Water and Ground Water Classification Standards	NYSDEC
TOGS 1.1.1	Ambient Water Quality Standards and Guidance Values	NYSDEC
TOGS 2.1.3	Primary Water Supply Aquifer and Principal Aquifer Determinations	NYSDEC
Air		
No Citation Available	Final - Guidance for Evaluating Soil Vapor Intrusion in the State of New York	NYSDOH
ISS		
No Citation Available	NYSDEC In-Situ Solidification QA/QC	NYSDEC
Solid Waste		
6 NYCRR 360	Solid Waste Management Facilities	NYSDEC
6 NYCRR 364	Waste Transporters	NYSDEC

Legend:

SCG:	Standards, Criteria and Guidelines
NYCRR:	New York Code of Rules and Regulations
NYSDEC:	New York State Department of Environmental Conservation
NYSDOH:	New York State Department of Health
OSHA:	Occupational Safety and Health Administration
TOGS:	Technical Operational Guidance Series
TAGM HWR:	Technical and Administrative Guidance Memorandum - Hazardous Waste Remediation

SCGs for Groundwater

The SCGs for groundwater are compared to the NYSDEC AWQSGVs (NYSDEC TOGS 1.1.1) for Class GA groundwater. However, it should be noted that, although the groundwater beneath the Site is classified as Class GA, the groundwater is not used for drinking water in this area. Drinking water is, instead, supplied by the local municipality (City of Olean) through another source.

SCGs for Soil

Applicable SCGs for soil within the Site are the numerical SCOs found in the remedy selection process in 6 NYCRR Part 375 and DEC Soil Cleanup Guidance CP-51. The SCOs are categorized into Unrestricted Use SCOs and Restricted Use (Residential, Restricted Residential, Commercial, or Industrial) SCOs, as well as criteria for the protection of groundwater and ecological resources (which can also be satisfied by application of the Unrestricted Use SCOs). The applicability of each category of SCOs is determined based upon the current and reasonable, anticipated, future use of the Site. Given the existing Site zoning, current land use, and reasonable, anticipated, future use of the Site, Industrial Use SCOs would be an appropriate SCOs for the Site. However, to accommodate potential alternative uses of the land in the future, this RAWP will utilize the Commercial Use SCOs.

SCGs for Soil Vapor

The potential for soil vapor intrusion into any future buildings constructed on-Site will be evaluated after the remedial action is complete through the collection of soil vapor intrusion monitoring data as described in Section 6.9. The soil vapor intrusion monitoring data will be evaluated using the NYSDOH Guidance for Evaluating Soil Vapor Intrusion in the State of New York, (NYSDOH, 2006 and updated May 2017), referred to herein as the NYSDOH SVI Guidance, and any other applicable regulation and/or guidance documents in effect at the time of the sampling. It should be noted that while the NYSDOH SVI Guidance provides numeric criteria (in the form of guidance values and evaluation matrices) for a number of chlorinated VOCs it not does not provide chemical-specific guidance values or matrices for petroleum-related VOCs, which are the primary constituents of concern for this Site.

4.1.3 Remedial Action Objective

RAOs are medium or Area of Concern (AOC)-specific objectives for the protection of public health and the environment and are developed based on contaminant-specific SCGs to address contamination identified at the Site. The NYSDEC website contains updated guidance, listing RAOs for various media. These objectives have been taken from current NYSDEC guidance for groundwater, soil, and soil vapor:

RAOs are Site-specific statements that convey the goals for minimizing substantial risk to public health and the environment. RAOs have been defined for each of the contaminated Site media and consist of:

Groundwater

RAOs for Public Health Protection

- Prevent ingestion of groundwater with contaminant levels exceeding drinking water standards.
- Prevent contact with, or inhalation of volatiles, from contaminated groundwater.

RAOs for Environmental Protection

- Remove the source of ground or surface water contamination.

Soil

RAOs for Public Health Protection

- Prevent ingestion/direct contact with contaminated soil.
- Prevent inhalation of or exposure from contaminants volatilizing from contaminants in soil.

RAOs for Environmental Protection

- Prevent migration of contaminants that would result in groundwater or surface water contamination.

Soil Vapor

RAOs for Public Health Protection

- Mitigate impacts to public health resulting from existing, or the potential for, soil vapor intrusion into buildings at the site.

4.1.4 Identification of General Response Actions

General response actions (GRAs) are non-technology specific measures that can be performed to achieve the RAOs. GRAs include treatment, containment, extraction, excavation and disposal, institutional controls (ICs), or a combination of these actions.

The applicable GRAs for the Site are as follows:

- Treatment;
- Containment;
- Extraction;
- Excavation and disposal; and
- ICs.

4.2 Alternatives Analysis Report Summary

As described in Section 1, following the completion of the remedial investigation activities, Roux prepared an AAR which was included in the RI/AAR. The AAR provides findings of the remedial investigation activities described above in **Section 3.1**, the nature and extent of contamination at the Site, and a proposed remedy for the Site. The AAR concluded that further remediation was required at the Site to be protective of public health and the environment and to support redevelopment of the Site for commercial and/or industrial use.

Given the nature and extent of contamination present and history of heavy industrial use, the AAR determined that it would not be practicable to conduct a Track 1 cleanup. A Track 1 cleanup requires Site media to meet 6 NYCRR Part 375 Unrestricted Use SCOs which would allow the Site to be used for any purpose without restrictions (Unrestricted Use). The soil remediation component would achieve Unrestricted Use SCOs for all soil above bedrock. The groundwater remediation component may be achieved by a restriction on groundwater use if groundwater monitoring demonstrates to NYSDEC that there is a bulk reduction in groundwater contamination and contaminants are at asymptotic levels.

A Commercial Use Track 4 cleanup has been selected for the Site. The Track 4 alternative is protective of human health and the environment and is compliant with applicable SCGs. This remedial approach is less disruptive to the community, is consistent with future intended Site uses, is feasibly implementable, and represents a significant cost saving over a Track 1 approach.

The selected remedial approach removes or controls source areas (i.e., GCM [material containing mobile LNAPL] and/or PGSCO-designated source material) to the greatest extent feasible; reduces on-Site exposure to any remaining petroleum-related impacts, reduces the potential for soil vapor migration, and reduces the potential for off-Site migration of contaminated groundwater.

The selected remedial approach includes:

- Remove or otherwise mitigate the environmental risk related to subsurface structures (e.g., abandoned piping) to prevent potential discharge of contaminants to surrounding soil/fill;
- Excavation/and or ISS of soil containing GCM (i.e., containing mobile LNAPL) and/or mobile LNAPL recovery;
- Groundwater contamination (GCM and/or PGSCO-designated source material) source removal, fixation, and/or migration mitigation and monitoring;
- Site Cover System installation;
- Indoor air quality management through installation of a contingency for short-term monitoring and/or mitigation of SVI into future buildings; and
- Institutional controls.

The benefits of a Track 4 remedial approach would be: meets Site soil and groundwater RAOs, is technically practicable, less disruptive to Site and community, is implementable, and more cost effective than a Track 1 alternative.

5.0 CONTINUED EVALUATION

5.1 Remedial Extent

Where petroleum-related impacts were observed and there exist monitoring wells absent of observed LNAPL or PGSCO exceedances, GCM (i.e., material containing substantial quantities of mobile contamination in the form of LNAPL) or other source material is not present due to the immobile nature of the localized petroleum-related impacts. Prior to completion of the PDI there existed areas on Site where petroleum-related impacts had been observed but GCM or other source material has not been delineated due to the lack of wells in the vicinity to evaluate mobile LNAPL. As part of the PDI Roux installed, developed, and gauged monitoring wells in these areas for the presence of mobile LNAPL or PGSCO-designated source material and will continue monitoring throughout the duration of the RAWP implementation and as a Post-COC measure if needed. Those areas will be evaluated and managed consistent with the decisions matrices outlined in **Section 5.1.1** and **Section 5.1.2**.

The extent of GCM is defined by observations of recoverable LNAPL in monitoring wells within the vicinity of GCM (i.e., material containing mobile LNAPL) in the form of tar-like material, petroleum saturated soil, and separate phase hydrocarbons, which are the sources and indicators of mobile contamination (i.e., the characteristics of GCM) at the Site. This performance and SCO-based designation of PGSCO-designated source material at the Site was developed in cooperation with NYSDEC representatives.

5.1.1 LNAPL Remedial Decision Matrix

Locations exhibiting recoverable LNAPL greater than or equal to 1-foot in thickness gauged for three consecutive months during the Remedial Action Work Plan implementation will be designated GCM and will be subject to remedial action consistent with **Section 6.0**.

Locations with observable LNAPL greater than 1-inch thickness but which fail to meet the three consecutive months observation threshold of greater than 1-foot thickness of recoverable product will not be designated GCM, but will be designated as potential LNAPL sources. Locations designated potential LNAPL sources will be subject to a minimum of two years of semi-annual Post- COC product evaluation and/or reduction measures which include: passive or active capture, transmissivity testing, and/or long term monitoring. Following two years of semi-annual Post-COC product evaluation and/or reduction measures the necessity of additional remedial actions consistent with **Section 6.0** will be evaluated in cooperation with NYSDEC representatives.

Locations exhibiting recoverable LNAPL less than 1-inch in thickness will be designated for No Further Post-COC Remedial Action. Locations designated for No Further Post-COC Remedial Action (beyond monitoring) will be subject to installation of a BCP Track 4-compliant 1-foot thick cover prior to issuance of COC.

Remedial Decision Matrix

Observations	**LNAPL ≥ 1-foot**	**1-foot > LNAPL > 1-inch**	**LNAPL < 1-inch**
Presence of tar-like material and/or petroleum saturated soil	Remedial action consistent with Section 6.0 if observed for 3 consecutive months during RAWP implementation, else 2 years of semi-annual post-COC product evaluation and/or reduction measures	2 years of semi-annual post-COC product evaluation and/or reduction measures	BCP Track 4-compliant 1-foot thick cover. No further Post-COC remedial action (beyond monitoring) necessary.

5.1.2 PGSCO Remedial Decision Matrix

Locations considered PGSCO-designated sources will be subject to a semi-annual Post-COC groundwater monitoring and/or evaluation of groundwater concentration reduction measures which include: passive or active capture, transmissivity testing, and/or long term monitoring until PGSCO-detected constituents are not detected in groundwater above AWQSGVs during 2 consecutive semi-annual monitoring events.

Locations where PGSCOs are exceeded in Soil and where the PGSCO Constituent(s) are not observed in groundwater above AWQSGVs will be designated for No Further Post-COC Remedial Action based on PCSCO criteria. Locations designated for No Further Post-COC Remedial Action will be subject to installation of a BCP Track 4-compliant 1-foot thick cover prior to issuance of COC.

Locations where PGSCOs are not exceeded in Soil will be designated for No Further Post-COC Remedial Action based on PCSCO criteria. Locations designated for No Further Post-COC Remedial Action will be subject to installation of a BCP Track 4-compliant 1-foot thick cover prior to issuance of COC.

Remedial Decision Matrix (SCO)		
Observations	**PGSCO Constituent(s) Observed in Groundwater above AWQSGVs**	**PGSCO Constituent(s) Not Observed in Groundwater above AWQSGVs**
PGSCO Exceeded in Soil	Semi-annual post-COC groundwater monitoring and/or evaluation of groundwater concentration reduction measures	Not designated for further remedial action based on PGSCO criteria
PGSCO Not Exceeded in Soil	Not designated for further remedial action based on PGSCO criteria	

5.2 LNAPL Recovery and Monitoring Criteria

In order to monitor the effectiveness of the LNAPL recovery part of the remedy, LNAPL recovered from each of the wells will be measured on a regular basis (starting semi-annually, however recovery frequency will be dependent on observed site conditions), and the Site monitoring wells exhibiting LNAPL will be gauged on a regular basis (starting semi-annually, however monitoring frequency will be dependent on observed site conditions). Other Site monitoring wells (a subset excluding those which have exhibited LNAPL) will be gauged for LNAPL on an annual basis. The results of Site monitoring will be reported in accordance with the SMP. The continued use of conventional methods for LNAPL recovery will be evaluated on a well-specific basis. Monitoring cessation requirements will be proposed in the FER. Site monitoring wells that no longer need to be monitored, due to a lack of LNAPL and groundwater meeting the SCGs, will be requested to be abandoned. Remaining wells will continue to be monitored for LNAPL on a regular basis (starting semi-annually) until NYSDEC agrees monitoring can be terminated.

6.0 COMPONENTS OF THE REMEDIES

Descriptions of the proposed remedies, as selected in the approved RI/AAR and DD, are provided below.

The proposed remedy incorporates the following components:

- Excavation and disposal of GCM;
- In-situ solidification of GCM;
- Installation and utilization of LNAPL recovery wells;
- Maintenance/Installation of a Site Cover System;
- Soil vapor mitigation measures including the installation of contingency SSDS piping and soil vapor barrier sealing layer and post-construction SVI monitoring;
- Monitored Natural Attenuation (MNA); and
- ICs.

This section provides a description of the construction activities to be performed as part of the proposed remedy to address contamination, including, but not limited to, excavation, in-situ solidification, installation of the Site Cover System, and implementation of the long-term monitoring program. Each component of the proposed remedy is discussed below.

The remediation activities for this RAWP will consist of the following tasks to achieve the RAOs and complete a Track 4 cleanup of the Site:

- Pre-RAWP Implementation Tasks including:
    - Underground utility locate;
    - Health and Safety Plan development;
- Mobilization and Site preparation;
    - Site Access controls;
    - Temporary facilities install;
    - Monitoring well decommissioning. Monitoring wells that will be destroyed due to the implementation the remedy will be decommissioned according to Commissioner's Policy 43 (CP-43) and include: MW-100, MW-105S, MW-105D, MW-106, MW-202MW-209, MW-212, RXMW-001, and RXMW-005.
- Excavation of:
    - Approximately 100,000 tons of soil, including approximately 12,000 tons of soil containing GCM (as identified during the RI activities), located from grade to approximately 2 feet above the water table;
- Excavation support activities including:
    - Stockpiling of excavated material suitable for re-use on-Site and backfill brought to the Site, if necessary;
- Transport and disposal of designated excavated material (up to approximately 12,000 tons) as identified during RI activities at a permitted commercial solid waste disposal facility; and
- Source mitigation via in-situ solidification of approximately 35,000 cubic yards of material from the terminal depth of excavation (approximately 2 feet above the water table) to the extent of contamination as identified during the RI activities (approximately 25 to 35 ft bgs);
- Backfill and compaction of excavations with acceptable backfill material.

- Implementation of a Site Cover System comprised of one of the following (where necessary): 1) existing analytically confirmed Commercial Use SCO-compliant surface soil (top one foot), 2) a one foot thick soil cover system placed above a demarcation layer, or 3) Site improvements (e.g., one-foot thick building foundation or asphalt pavement, or any other hardscape materials with one foot thickness);
- Dust and odor management;
- Soil vapor mitigation contingency components , including:
  - Installation of a sealing layer vapor barrier membrane and contingency SSDS piping infrastructure beneath the proposed Site buildings to mitigate the potential migration of sub-slab soil vapors (associated with residual waste in the subsurface soil, if any) since all proposed development consists of slab-on-grade construction;
  - In the event the proposed soil vapor intrusion sampling described in Section 6.9 determines soil vapor intrusion mitigation is required, the contingency components will be converted into an active sub-slab depressurization system through the design and installation of a mechanical blower. The active mitigation system, if required, will meet the requirements of the NYSDOH soil vapor intrusion guidance document.
- Installation of groundwater monitoring and/or recovery wells;
- Implementation of institutional controls including an environmental easement and SMP to restrict the Site to commercial or industrial use, to prevent disturbance of contaminated soil remaining at the Site, to restrict use of groundwater at the Site, to maintain the Site Cover System and any SVI mitigation measures, and to monitor groundwater to confirm that groundwater source removal prevents off-Site migration of contaminated groundwater; and
- Site Restoration.

6.1 Pre-Remediation Tasks

6.1.1 Underground Utilities Location

Prior to performing any subsurface remediation activities, Roux will contact Dig Safely New York, Inc., and the City of Olean, New York water and sewer departments to identify and mark, if applicable, known utilities and/or pipelines in the vicinity of the Site. Several known utilities are located in the vicinity of the proposed work area (see **Figure 2**). A natural gas service pipeline runs south to north from Franklin Street to the NYSDOT Right-of Way. A sanitary sewer pipeline runs parallel to Johnson Street, on the Site approximately 40 feet from Johnson Street. An underground electric line runs from southwest to northeast along the norther property boundary. Utility corridors running from southwest to northeast and southeast to northwest have also been indicated on historical surveys. Excavation activities near these utilities will be conducted in consultation with the utility owner and utilities will be protected, as necessary.

6.1.2 Health and Safety Plan Development

Roux Associates has prepared a Site-specific Health and Safety Plan (HASP) that will be adhered to by all personnel involved in the work activities (see **Appendix A**). The Site-specific HASP was prepared in accordance with the Occupational Safety and Health Administration's (OSHA's) Hazardous Waste Operations and Emergency Response Standards (29 CFR 1910.120 and 1926.65) and other OSHA requirements for job safety and health protection, as well as Roux's Standard Operating Procedures. The Site-specific HASP includes Safety Data Sheets (SDS) for chemicals and materials being used and personal protective equipment (PPE) requirements specific to the type of work that will be conducted. Various documents were consulted while preparing the HASP, including the National Institutes of Safety and Health (NIOSH's) Occupation Safety and Health Guidance Manual for Hazardous Waste Activities.

Site-specific information in the HASP includes:

- Personnel training requirements;
- Description of field activities;
- Decontamination procedures;
- Waste disposal protocols;
- Monitoring procedures for Site operations;
- A hazard assessment;
- The designation of a Site Health and Safety Officer (SHSO);
- A heavy equipment exclusion zone policy; and
- A CAMP.

The HASP designates a SHSO who will report directly to the Project Manager and the Corporate Health and Safety Coordinator. The HASP will be subject to revision as necessary, based on new information that is identified during the field investigation and/or remedial activities. A copy of the Site-specific HASP will be on-Site at all times throughout the work activities.

Remedial construction specialty contractors (Contractors) working for Roux will be required to prepare and submit a Site-specific HASPs prior to initiation of work activities that will cover their employees and their project-specific tasks. Contractors will monitor general Site conditions for safety hazards to verify that all OSHA requirements outlined in 29 CFR Part 1910 and 1926 are adhered to.

6.2 Mobilization and Site Preparation

A project kick-off meeting will be conducted with MJ Painting, NYSDEC, Roux, and Contractors prior to the commencement of remedial activities. Contractors shall supply any labor and materials required for the removal, mitigation, and disposal of contaminated soil. In addition, all necessary insurance certificates, disposal facility permits, imported clean fill documentation, and any other required documents shall be obtained prior to mobilization. Treatability testing for ISS mix design shall be completed prior to mobilization of ISS subcontractors.

Mobilization and Site preparation activities will include:

1. Mobilization of equipment to the work area;
2. Installation of safety fencing and traffic barricades to delineate the work zones, act as a work Site security measure, and mark the truck loading and decontamination areas. Site preparation will include securing the Site by installing a safety fence around the perimeter of the work area on the Site;
3. Implementation of erosion and sediment control measures in accordance with the New York Guidelines for Urban Erosion and Sediment Control and the SWPPP in **Appendix C**. Hay bales will be placed at locations upgradient of the excavation area to control stormwater runoff and prevent surface water from entering or exiting the excavation. Any catch basin inlets proximate to the excavation area will be protected to prevent disturbed soil from entering. A stabilized construction entrance will be provided using crushed stone at the Franklin Street entrance(s); and
4. Set-up of temporary facilities (e.g., construction field trailer and portable toilets) and decontamination facilities, including decontamination pad in order to decontaminate trucks and other vehicles/equipment.

6.2.2 Site Access Controls

Site access is provided by a gravel driveway near the southern corner of the Site and is accessible from Franklin Street. Site access is limited to the north by I-86, and to the east by the adjacent property. The Site includes road frontage along Franklin Street, to the south and west respectively. Due to the open nature of the Site and the significant amount of road frontage, Site access will be controlled during the implementation of this Remedial Action Work Plan with the installation of chain link security fencing around the work area on the Site. Additionally, temporary safety construction fencing (i.e., 3-foot tall orange plastic) will be placed around the perimeter of the work area on portions of the Site to distinguish the work zone and further limit access.

6.3 Excavation

Excavation will be executed as depicted on **Figures 6 and 7**, to a depth of 2 feet above the water table (approximately 10 to 12 feet below grade). Roux estimates the total current scope to entail in total 100,000 total tons of excavation (at least 88,000 tons eligible for reuse and up to 12,000 tons to be disposed of offsite). The extent of GCM-driven excavation was defined by observations documented during RI activities of GCM (i.e., material containing mobile LNAPL) in the form of tar-like material, petroleum saturated soil, and separate phase hydrocarbons associated with the observation of LNAPL in monitoring wells within the vicinity of those impacts, which are the sources and indicators of mobile contamination (i.e., the characteristics of GCM) at the Site. This predefined extent of GCM at the Site was developed in cooperation with NYSDEC representatives and presented in the RI/AAR.

Excavation will commence following mobilization and Site preparation, as discussed in Section 6.2. The excavation sidewalls will be sloped to maintain both excavation sidewall stability and the geotechnical integrity of the surrounding ground surface and work area. The sloping will be determined by Roux personnel in consultation with the excavation contractor and will comply with OSHA requirements (29 CFR 1926 Subpart P). GCM encountered during the excavation of sloped sidewalls will be sent for off-Site disposal. GCM in excavation sidewalls will be chased and removed to achieve the RAOs, unless it is not technically feasible to do so.

If excavation in the vicinity of underground utilities is required, soft-digging techniques (e.g., hand digging) will be utilized and additional excavation sidewall stabilization measures may be employed (e.g., trench boxes, sheet piling).

In areas where physical limitations or Site restrictions limit the safe depth that may be achieved by sloping from meeting the excavation requirements, shoring or other means of support of excavation systems will be employed to provide safe access to the impacted material. It is estimated that approximately 500 linear feet of excavation sidewall situated adjacent to property boundaries may require sidewall support. Support of excavation (e.g., sheeting, shoring, bracing, and/or gravity walls etc.) will be designed, as required by federal, state, and local law, by a licensed professional engineer in the State of New York and installed by the Contractor.

6.3.1 Excavation Dewatering

The vertical extent of excavation is not anticipated to extend below the water table; therefore, groundwater dewatering is not required. If periodic dewatering is necessary due to stormwater infiltration, the excavation will be dewatered using a sump and pump method. A slotted polyvinyl chloride (PVC) pipe will be wrapped in geotextile fabric and placed in a sump in the corner of the excavation. A suction hose or submersible pump will be used to convey the stormwater to on-Site fractionation tanks or other secure means of temporary storage. The accumulated water will be characterized as required and either 1) transported off-Site for treatment and disposal at a permitted facility in accordance with applicable federal and state regulations; or 2) treated on-Site as necessary and discharged to the local publicly operated treatment works.

6.4 Off-Site Transportation and Disposal

As described in **Section 3.4.1.4**, waste disposal pre-characterization samples were collected prior to excavation to facilitate live-loading of excavated material for transportation and off-Site disposal. As a result of this pre-characterization Roux anticipates up to 12,000 tons of material may require off-site transport and disposal. Excavated material will be directly loaded into dump trailers or roll off containers to be positioned adjacent to the excavation area during filling. All transport of materials will be performed by licensed haulers in accordance with appropriate local, State, and Federal regulations, including 6 NYCRR Part 364. 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). The commercial solid waste disposal facility will provide waste manifests and disposal receipts, which will be submitted in the FER.

If scheduling of trucks, disposal facility acceptance, or other factors impede the off-Site shipment of excavated material, the excavated material will be retained on-Site in lined roll off containers or soil stockpiles and covered with polyethylene tarps (6-mil minimum thickness) secured in place during non-working hours. In the event that stockpiling is necessary, the soil will be stockpiled in segregated staging areas lined with two layers of 6-mil (12-mil total) sheeting with a perimeter berm. The staging areas will be sloped and equipped with a sump to collect water drained from the stockpiled excavated soils. The drained water will be collected and transferred to a frac tank, and either disposed off-Site or treated in the water treatment system (**Section 6.3.1**). Odors emanating from stockpiled material will be managed as described below (**Section 6.8**).

The Contractor will be responsible for ensuring that all outbound trucks are inspected and will be brushed or washed as required to remove loose soil at the truck wash before leaving the Site until the excavation is complete. Proposed Trucking Routes are provided in **Figure 5**.

6.5 In-Situ Solidification

ISS will consist of solidifying approximately 35,000 cubic yards of GCM-impacted soil in the saturated zone within the proposed excavation footprint to the terminal depth of GCM (approximately 25 to 35 feet below grade) identified and confirmed during previous investigations. The extent of ISS has been defined by characterization of existing soil analytical data and boring logs as well as visual observation of tar-like material, petroleum saturated soil, or separate phase hydrocarbons associated with observations of LNAPL in monitoring wells in the vicinity, which are the sources of mobile contamination (i.e., the characteristics of GCM) at the Site. This predefined extent of GCM at the Site was developed in cooperation with NYSDEC representatives and presented in the RI/AAR. ISS will commence following excavation, as discussed in **Section 6.3**. The horizontal extent of ISS is presented in **Figure 7**, the vertical extent of ISS is presented in **Table 1**.

The proposed ISS mix design consists of 6% Portland cement (PC) and 2% Ground Granulated Blast Furnace Slag (GGBFS) by wet weight of soil at an assumed wet density of 125 pounds per cubic foot (PCF). Roux intends to also limit the water to cement ratio below 0.8:1 during mixing; however, a maximum water to cement ratio of 2:1 may be utilized to reach the bottom of ISS elevations. Limiting the water to cement ratio will aid in reducing the total volume of swell/spoils generated. Final mix design will be refined based upon mix design testing to be completed prior to mobilization for the ISS phase of work. In addition to PC and GGBFS, fly ash may also be evaluated during mix design testing for possible inclusion in the final mix design. Further details of the proposed ISS are provided in Section 7.

6.5.1 In-Situ Solidification Performance Requirements

The solidified soil shall meet the physical testing criteria and characteristics listed in table below. The tests and observations criteria shall apply to samples that have been cured for 28 days. Samples achieving criteria listed below prior to 28 days curing shall be deemed acceptable.

Post-Treatment Performance Requirements

TEST	TEST VALUE
Min. Unconfined Compressive Strength (UCS), ASTM D1633	Minimum of 50 psi
Max. Permeability, ASTM D5084 (at 10 psi confining pressure)	1×10^{-6} cm/sec
Free Liquids	No Free Liquids
Mixing Uniformity	Material thoroughly and uniformly mixed vertically and horizontally within each cell
Mixing Depth	As shown on Drawings

ISS QA/QC protocols are discussed further in **Section 7**.

6.6 Backfill and Compaction

Upon confirmation via QA/QC sampling that ISS met design goals and specifications for remediation the excavation will be backfilled with acceptable backfill materials and placed/compacted as outlined below. Each new type and/or source of backfill will be approved by the NYSDEC prior to importing to the site.

6.6.1 Acceptable Backfill Materials

In accordance with Section 5.4(e) of NYSDEC DER-10, backfill material used on-Site may consist of the following materials:

1. Gravel, rock, or stone, consisting of virgin material, from a permitted mine or quarry may be imported, without chemical testing, if it meets the requirements of Section 5.4(e)5 of NYSDEC DER-10, or as otherwise approved by NYSDEC;
2. Recycled concrete or brick from a NYSDEC-registered construction and demolition debris processing facility may be imported, without chemical testing, if it meets the requirements of Section 5.4(e)5 of NYSDEC DER-10, or as otherwise approved by NYSDEC;
3. Imported soil/fill from known off-Site sources having no evidence of disposal or releases of hazardous substances, hazardous, toxic or radioactive wastes, if it meets allowable constituent levels for imported fill or soil for commercial use, provided in Appendix 5 of NYSDEC DER-10. 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;
4. On-Site non-GCM impacted soil/fill for re-use on-Site as subgrade (>1 ft bgs) backfill, beneath the Site Cover System consisting of soil or impervious hardscape surface cover (e.g., one-foot thick building concrete foundation or asphalt pavement or any other hardscape materials with one foot thickness); and
5. On-Site soil/fill, which meets 6 NYCRR, Part 375 Commercial Soil Cleanup Objectives (SCO), for re-use on-Site without limitation.
6. Gravel, rock, or stone approved by the NYSDEC for import from the Allegheny River project, and imported to the Site during 2021. Stone used at the Allegheny River Site qualified as a pre-determined beneficial use, as the material met the requirements of 6 NYCRR 360.12(c)(1)(ii): “fill material generated outside of New York City with no evidence of historical impacts such as reported spill events or visual or other indication (odors, etc.) of chemical or physical contamination.” The stone is comprised of light stone, No. 57 stone, and Item No. 4 aggregate that had been used in the construction of the access road over the flood levee and the causeway into the Allegheny River. 7,000 tons of total aggregate were imported from the Allegheny River Site in 2021, comprised of approximately 500 tons of No. 57 stone, 1,500 tons of Item No. 4 aggregate, and 5,000 tons of light stone.

6.6.2 Backfill Characterization Requirements

Backfill material not meeting the criteria for import without testing must meet chemical testing standards as described in Section 6.6.1. The backfill testing will be conducted according to the following characterization requirements in accordance with NYSDEC DER-10 Table 5.4(e)10:

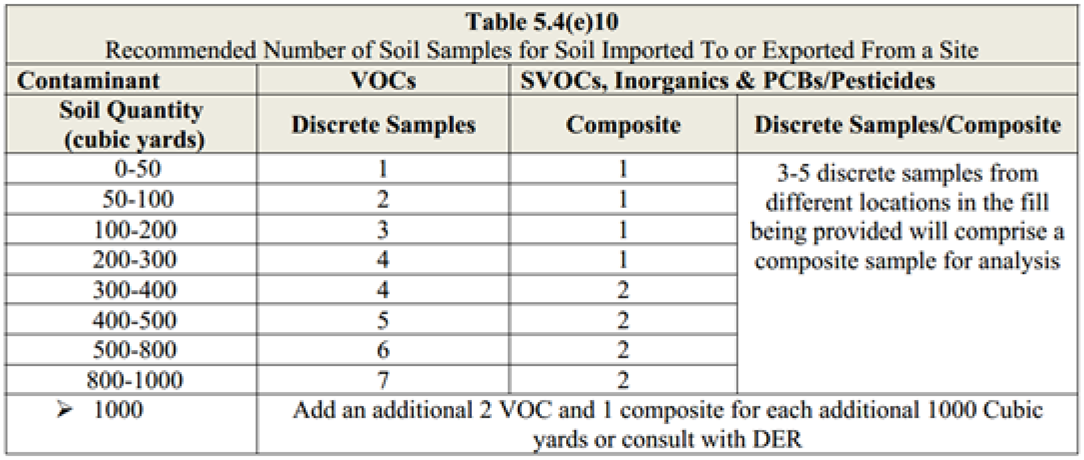

Table 5.4(e)10
Recommended Number of Soil Samples for Soil Imported To or Exported From a Site

Contaminant	**VOCs**	**SVOCs, Inorganics & PCBs/Pesticides**	
Soil Quantity (cubic yards)	**Discrete Samples**	**Composite**	**Discrete Samples/Composite**
0-50	1	1	3-5 discrete samples from different locations in the fill being provided will comprise a composite sample for analysis
50-100	2	1	
100-200	3	1	
200-300	4	1	
300-400	4	2	
400-500	5	2	
500-800	6	2	
800-1000	7	2	
➢ 1000	Add an additional 2 VOC and 1 composite for each additional 1000 Cubic yards or consult with DER		

Each composite sample will be comprised of a minimum of three grab samples (samples for VOC analysis will be collected as individual grabs in lieu of composites). Samples will be analyzed for VOCs, SVOCs, metals, pesticides, herbicides, polychlorinated biphenyls (PCBs), and emerging contaminants identified in Appendix 5 of NYSDEC DER-10 or the latest NYSDEC guidance on sampling emerging contaminants. All laboratory testing will be performed by an independent, NYSDOH ELAP-approved laboratory.

6.6.3 Placement of Backfill

Backfill will be brought to the Site on an as needed basis in order to minimize stockpiling. A sufficient distance will be maintained between the backfill placed into the excavation and the working face of the excavation or ISS to prevent contact or mixing with soil and GCM designated for removal. Wetting of the backfill soil during placement, spreading, and compaction will be performed as needed to maintain fugitive dust below the CAMP action limits. The backfill will be compacted to meet the appropriate requirements for redevelopment and confirmation compaction testing will be conducted upon completion.

6.7 Site Cover System

The proposed Site Cover System component includes construction of a BCP Track 4 compliant cover over the entire 9.35-acre Site. A Site Cover System will be utilized to eliminate soil exposure from residual contamination. The Site Cover System will be comprised of one of the following (where necessary): 1) existing analytically confirmed Commercial Use SCO compliant site surface soil (top one foot); 2) a one-foot thick BCP Track 4 compliant soil and/or gravel cover system placed above a demarcation layer; or 3) Site improvements (e.g., building foundation, asphalt pavement, or any other hardscape material of sufficient thickness to comply with local building codes and the designed use of the hardscape). The upper 6-inch of all soil cover (not including areas of gravel) will be composed of soil that is of sufficient quality to allow vegetation (e.g. grass) to become established. The approximate extents and configuration of the cover system remedy are illustrated on **Figure 8**.

The Site Cover System, which is a key component of the remedy, will be maintained in accordance with the SMP described in **Section 8.8**. The Site Cover System shall be inspected, and routine maintenance shall be conducted.

6.8 Dust and Odor Management

A CAMP, as more fully described in **Section 8.7**, will be implemented during Site excavation work to monitor dust and odor potentially emanating from the work area. CAMP implementation will include air monitoring and periodic odor inspections during excavation, backfill or soil management activities. Air monitoring and odor inspection results will be documented and reported in accordance with the CAMP.

If community air monitoring indicates the need for dust suppression or if dust is visually observed leaving the Site, Roux will apply a water spray across the excavation, surrounding areas, and on-Site haul roads as necessary to mitigate airborne dust formation and migration. Water will either be obtained from a public hydrant or provided by the on-Site water service, if available. Other dust suppression techniques that may be used to supplement the water spray include:

- Hauling materials in properly covered containers or vehicles;
- Restricting vehicle speeds on-Site; and
- Hydro-seeding of final grades (as applicable).

If community air monitoring indicates that VOC concentrations downwind of the excavation exceed the levels described in the CAMP or that noxious odors are migrating off-Site, a commercially available vapor suppression product such as Rusmar RusFoam® (Rusmar), will be applied to the active excavation areas, material contained in on-Site roll off containers or dump trailers, stockpiled material (if any), or other areas emitting VOCs or odors. Other techniques to control migration of fugitive organic vapors and/or odors may be employed, including:

- Limiting the excavation size;
- Backfilling portions of the excavation;
- Spraying water onto the excavation faces and equipment;
- Covering soil stockpiles (if any) with 6-mil polyethylene sheeting;
- Hauling waste materials off-Site in properly covered container;
- Odor masking; and/or
- Pausing operations until the wind conditions change such that fugitive organic vapors and/or odors are not migrating toward downwind receptors.

6.9 SVI Monitoring Program and Proposed SVI Engineering Contingency

The following sections describe the proposed SVI monitoring program to evaluate if SVI mitigation is necessary following remediation and engineering contingency measures for SVI mitigation, if required.

6.9.1 SVI Sampling and Analytical Protocol

In order to further evaluate the potential for sub-slab soil vapor intrusion following the remedial action for any future on-Site buildings, sub-slab soil vapor monitoring points will be installed. The configuration of the sub-slab soil vapor monitoring points shall follow the construction protocol as per the NYSDOH SVI Guidance. The proposed soil vapor monitoring point installation includes:

- Installation of one sub-slab soil vapor monitoring point location within any proposed on-Site building per 5000 square feet of floor space. Under the current proposed redevelopment plan this is satisfied by installation of three monitoring point locations. A supplemental sampling plan to assess soil vapor intrusion into the building will be submitted when the building design has been finalized.

All sub-slab soil vapor monitoring points will be installed to a depth of approximately 1.5 ft bgs (i.e., soil vapor sample depth interval is 0.5-1.5 ft bgs . Based on the proposed redevelopment plan the monitoring points shall be installed in accordance with the details contained in **Figure 10** and at the proposed locations are shown on **Figure 10**. Monitoring point installation will be adjusted as needed to accommodate changes to the final redevelopment plan.

An SVI monitoring program will be conducted to evaluate the potential for vapor intrusion. This program will include the collection of sub-slab soil vapor samples from the previously installed sub-slab soil vapor monitoring locations (as shown on **Figure 10**), along with the collection of concurrent indoor air quality samples in the same areas. All soil vapor points will be given a minimum of 48 hours for vapor conditions to stabilize prior to sampling. All samples will be collected in accordance with the NYSDOH SVI Guidance.

The configuration of the sub-slab soil vapor monitoring points shall follow the construction protocol as per the NYSDOH SVI Guidance. To sample the soil vapor monitoring points, six-liter SUMMA canisters fitted with eight-hour flow controllers and an in-line filter will be affixed to the soil vapor point tubing. Prior to collection of the samples, the vapor points will be purged of a minimum of one well volume. A tracer gas (i.e., laboratory grade helium) will be used to enrich the atmosphere in the immediate vicinity of the sampling location in order to test the efficacy of the seal and verify that ambient air is not being drawn into the sample. Following purging and verification with the tracer gas, the soil vapor sample will be directed to the laboratory supplied six-liter SUMMA canister. Upon opening the SUMMA canister valve, the vacuum present within the canister will extract the soil vapor from the subsurface into the canister. Based on a volume of six liters and a sample time of eight hours, soil vapor will be extracted at a flow rate of approximately 0.01 liters per minute.

Indoor air quality samples will be collected concurrently with and in a location near the sub-slab samples and in accordance with procedures specified by NYSDOH SVI Guidance and results will be compared to the NYSDOH SVI Guidance and other applicable guidance or regulations in effect at the time of sampling. An outdoor ambient air sample will also be collected concurrently. This will include the use of six-liter, lab-certified clean, SUMMA canisters fitted with an eight-hour flow controller. The canister will be placed four to five feet above the ground in the normal breathing zone. Meteorological data, including outdoor temperature, barometric pressure, wind speed and direction, and precipitation, will be collected on a daily basis throughout the duration of the sampling activities.

The field sampling team will maintain a log of the samples collected. The log will contain specific information about each sample, including, but not limited to, the following:

- Sample identification;
- Date, time, and duration of sample collection;
- Sample depth interval;
- Identity of samplers;
- Sampling methods and devices;
- Purge times;
- The canister vacuum before and after samples are collected;
- Apparent moisture content (i.e., dry, moist, saturated) of the sampling zone; and
- Chain of custody protocols and records used to track samples from sampling point to analysis.

Following collection of the soil vapor and indoor air quality samples, the samples will be shipped following proper chain-of-custody procedures to a laboratory that is part of the Environmental Laboratory Approved Program (ELAP) certified by the NYSDOH for analysis of VOCs in accordance with EPA Method TO-15.

6.9.2 Additional Screening and Monitoring Activities

In conjunction with the soil vapor monitoring point sampling, additional monitoring and Site controls will be instituted in an effort to identify the presence of soil vapor intrusion and prevent potential third-party exposure. Roux will conduct a walkthrough of the building and, using a PID, screen for traces of vapor in ambient indoor air. Additionally, prior to sampling, information will be collected regarding building use and operations and a chemical inventory will be taken to help inform the nature of impacts within building structures. Special consideration will be given to cracks in ground level concrete slabs, drains and other access ports which may serve as preferential pathways for vapor migrations, should any exist.

6.9.3 SVI Monitoring Schedule

SVI monitoring will be conducted as soon as the building is fully enclosed and the building's heating, ventilation, and air conditioning system(s) is operational, prior to occupancy.

If the first round of SVI monitoring is not collected during the heating season, a confirmatory second round of SVI monitoring will be collected at the start of the next heating season (this may occur after building occupancy, depending on the construction sequence).

6.9.4 Review and Interpretation of SVI Results

All SVI monitoring results will be submitted to NYSDEC and NYSDOH within one month following receipt of laboratory reports. The soil vapor intrusion monitoring data will be evaluated using the NYSDOH SVI Guidance, and any other applicable regulation and/or guidance documents in effect at the time of the sampling. It should be noted that while the NYSDOH SVI Guidance provides numeric criteria (in the form of guidance values and evaluation matrices) for a number of chlorinated VOCs it not does not provide chemical-specific guidance values or matrices for petroleum-related VOCs, which are the primary constituents of concern for this Site. If, in consultation with NYSDEC and NYSDOH, mitigation is recommended, a second round of sub-slab, indoor, and ambient air samples will be collected immediately to confirm the first set of results. Both sets of vapor intrusion results will be submitted to the NYSDEC and NYSDOH for evaluation.

If soil vapor intrusion mitigation is determined to be necessary as part of the remedy for the Site, the contingency SSDS piping installed beneath the building will be incorporated into an operational active SSDS through the design and installation of a mechanical blower. Installation/operation of an active SSDS will, if needed as a component of the remedy for the Site, prevent the accumulation and lateral/vertical migration of soil vapors from below the slab. As an engineering contingency, the sub-slab piping required for an SSDS will be proactively installed during building construction, but this is not considered an EC unless mitigation is deemed necessary. These contingencies are discussed below.

If no sub-slab soil vapor impacts or potential SVI is demonstrated, including during the heating season, discontinuing the SVI monitoring program will be recommended. Any modification to the sampling schedule and any decision to discontinue soil vapor monitoring at any location(s) will be subject to NYSDEC and NYSDOH approval.

6.9.5 Proposed Engineering Contingency for SVI Mitigation

The proposed engineering contingency for SVI mitigation is described in the following sections.

6.9.5.1 Installation of Contingency Sub-Slab Depressurization System Piping

Since it would be very difficult and costly to retroactively install SSDS piping beneath the slab of the new building after construction, the SSDS piping will be proactively installed below the floor slab of the proposed building as shown on **Figure 10**. An SSDS would be designed to establish a negative pressure (i.e., pressure differential) beneath any newly-constructed building slab in an effort to eliminate a potential vapor-intrusion pathway between the vapor source (soil and groundwater) and the receptor (building interior). This would be accomplished by installing a layer of permeable sub-slab material, installation of SSDS piping, and soil vapor barrier within the foundation slab of the building. An SSDS is designed to function by venting sub-slab soil gases or providing a pathway to allow soil gas, if present, to migrate to the exterior of the building, rather than to enter a building.

The SSDS piping will be installed prior to pouring the concrete slab above the sealing layer soil vapor barrier and will consist of four-inch diameter perforated PVC collection pipes embedded in a 12-inch thick gravel layer interconnected with solid PVC piping. The SSDS piping will be transitioned to a steel pipe flange and capped at the floor slab for future connection to the roof, if needed. The SSDS piping will be capped so that no vapor is drawn through the piping unless SVI mitigation is deemed necessary based on the sampling described above. If activated, the SSDS will prevent the accumulation and lateral/vertical migration of soil vapors from below the slab and will become an important part of the remedy for the Site.

Subsurface SSDS piping will be constructed in accordance with Section 4.2 of NYSDOH SVI Guidance including the following provisions:

- SSDS piping will be designed by a professional engineer;
- System piping will be sealed with the appropriate sealant to prevent migration of potential vapors into the ground floor of the building since this the foundations planned are slab on grade foundations; and
- The collection pipe network will be covered by the sealing layer vapor barrier membrane, consisting of a vapor-resistant 20-mil thick polyethylene sheeting or equivalent.

If SVI mitigation is found to be necessary based on the results of the soil vapor monitoring program, and the SSDS piping needs to be converted to an active SSDS, the system will be designed in accordance with all provisions of Section 4.2 of NYSDOH SVI Guidance.

6.9.5.2 Post-Mitigation Monitoring

If SVI mitigation is found to be necessary and the SSDS is activated, post-mitigation monitoring of the building will be conducted in accordance with all provisions of Section 4.3 of NYSDOH SVI Guidance and will be described in the SMP that will be approved by NYSDEC and NYSDOH. Operation, maintenance, and monitoring (OM&M) activities would be performed in accordance with Section 4.4 of the NYSDOH SVI Guidance. A formal OM&M Plan would be submitted at that time.

6.10 Recovery Well Installation

As part of the remedy, recovery wells will be installed at locations and spacings indicated in **Figure 7**. Installation and utilization of LNAPL recovery wells along the property boundary will limit migration of impacted groundwater or LNAPL onto the Site from upgradient properties. The use of conventional methods for LNAPL recovery will be evaluated on a well-specific basis, as per the LNAPL Decision Flowchart **(Figure 11)** and will depend on the LNAPL transmissivity and annual recovery yield (assuming a minimum of semi-annual LNAPL recovery events). The use of skimming systems and/or manual bailing methods will continue in accordance with the LNAPL Decision Flowchart, until LNAPL transmissivity or annual recovery yield indicate that recovery is no longer practical.

6.10.1 Long-Term Monitoring

Long-term monitoring may be employed to verify the mitigation of on-Site LNAPL migration following remediation of the Site. Groundwater quality will be assessed at Site monitoring and recovery wells to establish a baseline of post RA conditions post-COC. Groundwater quality assessment activities will include water level gauging and collection of groundwater samples in general accordance with EPA low-flow sampling methodology. Groundwater gauging and sampling activities will be conducted in accordance with Section 3.7 of the NYSDEC DER-10.

Groundwater samples collected during this post-COC baseline sampling event will be submitted to a NYSDOH ELAP certified commercial laboratory for analyses including:

- VOCs by EPA Method 8260C including TICs;
- SVOCs by EPA Method 8270D including TICs; and
- Total TAL Metals by EPA Methods SW846 (unfiltered).

Based on the results of the baseline sampling event the SMP will be developed to target select well locations for semi-annual monitoring to be conducted until NYSDEC approves discontinuation of groundwater monitoring.

6.11 Institutional Controls

As described in the DD issued by the NYSDEC on December 23, 2021, ICs incorporated into this remedy may include an environmental easement, recording use restrictions that will, among other things, limit the future use to commercial or industrial, continue to prohibit the installation of potable wells or use of groundwater as drinking water, and implement an SMP (**Section 8.8**), in an effort to address the potential for contact or exposure to remaining contaminants in the event of Site development. In addition, based on the results of the soil vapor sampling data described in Section 6.9, the need for an active SSDS will be voluntarily evaluated for newly-constructed buildings or other structures, in an effort to address potential vapor intrusion concerns, if necessary. A general description of the purpose and typical construction elements of an SSDS are provided below.

Institutional controls at the Site, in the form of an environmental easement and a SMP as described in DER-10, will be implemented to restrict the use of groundwater at the Site, maintain the Site Cover System, provide procedures for management of soil disturbance activities, and describe groundwater monitoring and LNAPL recovery requirements. The environmental easement will identify all allowable uses of the Site, including its currently intended commercial and industrial use, which is consistent with the SCGs. The property owner, Mr. John, is prepared to agree to establish and maintain the easement in a form which is made enforceable by the State. The environmental easement will be executed prior to approval of the FER.

6.12 Site Restoration Activities and Demobilization

The equipment, materials, and temporary facilities installed during the remedial activities will be removed from the Site after implementation of the remedy. A certification from the remedial contractor will be prepared to confirm that all equipment used during the performance of the work has been properly decontaminated prior to leaving the Site. The surface of the remedy areas will be restored to meet the cover system design specifications and all applicable Track 4 BCP requirements as outlined in the DD.

Final Site restoration shall include:

- Restoration of disturbed portions of the Site to final grades suitable for the future site redevelopment plan; and
- Restoration sufficient to ensure the effectiveness and compliance with the remedial program.

7.0 QUALITY ASSURANCE AND QUALITY CONTROL

7.1 Quality Assurance Project Plan (QAPP)

The following QAPP has been prepared for the RA.

7.1.1 Project Organization

This QAPP was prepared in accordance with Section 2 of the NYSDEC DER-10. This project is managed by Brian Robinson of Roux Associates under the direction of Mike John Sr. of MJ Painting Contractor Corp. Additional information regarding principal project personnel is provided in Section 10.0. A Data Usability Summary Report (DUSR) will be prepared for any analytical samples collected during the RA in accordance with DER-10 (Appendix 2B), by a third-party subcontractor (Judy Harry, Data Validation Services), independent of the project team. Professional profiles of key team members are included in **Appendix E**.

7.1.2 Sampling Procedures

The following subsections discuss the conceptual sampling of the imported soil and ISS QA/QC sampling.

Soil samples will be collected in general accordance with the EPA's SOP 2012 for Soil Sampling, dated February 18, 2000. Ground water sampling will be conducted in general accordance with general EPA low flow sampling methodology.

7.1.2.1 Confirmation Sampling

Confirmation soil samples from excavation bottoms in areas that do not directly overly ISS areas will be collected at a frequency of one sample from the excavation bottom for every 900 square feet of bottom area. All of the excavation sidewalls will be sloped in such a manner that they will be considered excavation bottoms and sampled according. Soil samples will be submitted to NYSDOH ELAP certified commercial laboratory for analyses including:

- VOCs by EPA Methods 8260B including tentatively identified compounds (TICs);
- Semi-volatile organic compounds (SVOCs) by EPA Method 8270C including TICs; and
- Total Target Analyte List (TAL) Metals by EPA Methods 6010B/7470A.

In addition to the above analyses, the field observations of GCM will be recorded for each confirmation soil sample location to document that the full extent of GCM has been removed from the excavation. Field observations of GCM may include photographs, headspace monitoring via PID, and recorded visual observations. Further details about the excavation are discussed in in **Section 6.3**.

7.1.2.2 Import Soil Characterization Sampling

Import soil, if any, will require characterization analyses prior to use. Import characterization analysis parameters and frequency are in accordance with NYSDEC DER-10 Table 5.4(e)10 and are discussed in Section 6.6.

7.1.2.3 ISS QA/QC Sampling

Samples will be collected to ensure the ISS performance requirements for strength and permeability, described in Section 6.5, have been met in accordance with NYSDEC ISS QA/QC Guidance provided via email on February 18, 2022. To allow early coring information to be used for adjusting ISS operations, coring operations will be conducted prior to complete curing of the ISS material. Samples of the mixed soil will be collected while wet in accordance with the approved testing methods (ASTM D5084 for hydraulic conductivity, ASTM D2166 or D1633 for unconfined compressive strength). The first coring location will be completed when the ISS treatment project area is no more than 25 percent complete.

For high-strength material, a rock core is frequently required. Driven split spoons (typically using Direct Push tools but potentially using augers as well) may be used to collect core samples of the ISS material for lower strength materials. Rotosonic and compressed air drilling methods have not been successful in obtaining representative core samples. Cores must be no longer than five feet. If less than 60% of the core material is recovered from any of the coring runs, one new core hole must be drilled adjacent to the previous location. If the recovery from the adjacent core hole continues to be less than 60%, the contractor may abandon the location.

One core borehole shall be completed for every 5,000 square feet of ISS treatment area, but not less than two bore holes per treatment area. Core borehole locations shall be biased towards areas with the greatest soil contamination, and/or locations where difficulties in the ISS process were encountered. Core boreholes shall be placed in locations where individual treatment columns or cells overlap, to the extent possible. Core boreholes should be advanced to at least a foot below the monolith design. If coring reveals previously undocumented areas of contamination, delineation of that contamination may be required outside the QA/QC program. Core samples should be collected every 500 cubic yards. Additional sampling may be appropriate in areas of particular concern.

Core samples and related equipment will be visually inspected for the following criteria, and the results recorded:

- Visible NAPL
- Non-mechanical induced cracking within the core
- Percent of core sample recovered

In addition, indirect indications of unmixed NAPL should be recorded, such as:

- NAPL coating on drilling tools
- NAPL in drill wash tub, if water-based drilling methods are employed

Following inspection, cores will be submitted to a certified laboratory for ASTM D5084 for hydraulic conductivity, ASTM D2166 or D1633 for unconfined compressive strength testing. Duplicate core samples for all locations shall be archived following coring activities. Duplicate cores may be discarded upon final inspection by the NYSDEC. Following initial inspection, the NYSDEC may require duplicate cores to be retained to compare to future cores or to document issues that will need to be resolved. To allow any needed corrective actions to commence before the monolith cures to a point making corrective action difficult or impossible, NYSDEC will make every effort to provide feedback on core failures within 48-hours using remote methods when on-site inspection is not feasible . In order to identify potential areas of concern for the coring program, documentation on the volume/shrinkage of grout obtained during ISS installation shall be reviewed. Areas where excessive grout was lost during ISS implementation should be targeted for coring.

7.1.2.3.1 ISS Sampling Documentation

Documentation of the ISS QA/QC activities shall be included with the FER. Documentation will include (but not be limited to):

- Figure depicting boring locations
- Photographs of each core boring referenced
- Type of drilling method used
- Field coring logs

7.1.2.3.2 ISS Performance Concerns

The following conditions will warrant further attention and will be documented during ISS implementation:

- A continuous layer or seam of NAPL is noted within the core.
- NAPL coating is visible on drilling tools
- Visible NAPL is noted in the drill wash tub, if used
- Unconfined compressive strength below 50 psi
- Hydraulic conductivity greater than 1.0 x 10-6 cm/sec.
- Large sections (> 1 cubic foot) of unmixed material.

If one or more of the above conditions are noted, the NYSDEC will be notified to discuss the severity of the problem, the degree of concern, and whether any corrective action will be necessary.

A notification, by itself, does not necessarily mean a corrective action or additional borings or testing are warranted. For instance, small NAPL blebs may be present within properly mixed areas of the ISS monolith, and coring through such a bleb, especially before the monolith has achieved its maximum strength, could result in NAPL coating on drilling tools and/or NAPL in the drill wash water. The first step to determining whether corrective action is required will be to complete additional borings around the area of concern and determine if identified NAPL within the ISS mass is encapsulated, thus eliminating NAPL mobility and impact to the surrounding environment. While each sample must satisfy the definition on its own, a single test showing slightly elevated hydraulic conductivity would not necessarily require corrective action for that cell/column, but evaluation to ensure that it is not a systemic problem is required.

7.1.2.4 SVI Monitoring Sampling

An SVI monitoring program will be conducted to evaluate vapor intrusion into any future on-Site buildings. This program will include the collection of sub-slab soil vapor samples from sub-slab soil vapor monitoring locations (as shown on **Figure 10**), along with the collection of concurrent indoor air quality samples in the same. All soil vapor points will be given a minimum of 48 hours for vapor conditions to stabilize prior to sampling. All samples will be collected in accordance with the NYSDOH SVI Guidance and will be compared to the NYSDOH and other applicable guidance or regulations in effect at the time of sampling. Further details about the program are discussed in in **Section 6.9**.

7.1.3 Analytical Methods/Quality Assurance Summary Table

The following Analytical Methods/Quality Assurance Summary Tables have been prepared for the environmental and quality control samples for the proposed soil sampling:

Matrix: Soil

Sample Quantity	MS[1]/ MSD[1]	No. of Field Duplicates[1]	Analytical Method	Sample Preservative	Container/ Volume	Holding Time
Import Characterization (<20 samples)	1	1	VOCs EPA Method 8260C	MeOH	40-mL vial (glass)	14 days
				$NaHSO_4$	2 x 40-mL vial (glass)	
			SVOCs EPA Method 8270D	Cool to 4°C	4-oz jar (glass)	
			Total TAL Metals EPA Methods 6010C& 7470A		4-oz jar (glass)	180 days
			PCBs EPA Method 8082A		4-oz jar (glass)	14 days
			Pesticides EPA Method 8081B		4-oz jar (glass)	
			Herbicides EPA Method 8151A		4-oz jar (glass)	
			Total Cyanide EPA Method 9010B/C		4-oz jar (glass)	
			Emerging Contaminants (PFAS) EPA 537(M) LCMSMS-Isotope Dilution	Cool to 4°C	2 - 250 mL (HDPE or PP)	14 days to extract, 40 days to analysis
ISS QA/QC Samples (approximately 72 samples)	NA	4	ASTM D5084 hydraulic conductivity	None	Shelby Tube	NA (Tests to be run at 28 days)
			ASTM D1633 unconfined compressive strength	None	Shelby Tube	
SVI Monitoring Samples (approximately 6 samples)	1	1	VOCs EPA Method TO-15	None	6L-SUMMA cannister	14 days

Notes:

[1]- MS/MSD and Field Duplicates will be collected at a frequency of 1 per 20 samples

Dedicated soil sampling equipment will be utilized for each soil sample, rinsate blanks will not be required

Trip blanks will be collected at a frequency of one per container

MS/MSD = matrix spike/matrix spike duplicate

mL = milliliter

NA = Not Applicable

oz = ounce

MeOH = methanol

$NaHSO_4$ = sodium bisulfate

VOC = volatile organic compound

SVOC = semi-volatile organic compound

TAL = target analyte list

TPH = total petroleum hydrocarbons

7.1.4 Sampling Storage and Handling Requirements

All environmental soil samples collected will be properly preserved according to laboratory requirements, placed in appropriate containers as specified in the above table, and transported on ice under chain of custody to a NYSDOH ELAP certified laboratory.

All geotechnical soil samples collected will be properly preserved according to laboratory requirements, placed in appropriate containers as specified in the above table, and transported under chain of custody to an accredited laboratory.

7.2 Construction Quality Assurance Plan (CQAP)

Quality assurance/quality control procedures for all construction activities associated implementation of the remedial action construction are established in the Construction Quality Assurance Plan (CQAP), which is included in this section (**Section 7.2**) of the RAWP. The CQAP describes the Site-specific construction quality assurance and control measures that will be performed during remediation that will be implemented at the Site during implementation of the RAWP. The CQAP includes a program for construction observation and testing to verify performance of the remedial construction in accordance with the RAWP.

7.2.1 Project Organization

The implementation of the remedial action construction will be sequenced based on construction requirements, environmental considerations, and logistic limitations posed by the size and setting of the Site and proximity of adjacent structures. The project team is comprised of the Owner/Volunteer (MJ Painting), contractors, and consultants specializing in one or more critical aspects of the project. It is understood by the project team that close coordination and proper sequencing of all activities occurring on the Site will be crucial to the success of the remediation.

The project team and associated responsibilities are as follows.

7.2.1.1 MJ Painting (Owner/Volunteer) – General Contractor/ Construction Manager

Mike John, Sr., Project Manager

As Site owner, MJ Painting's Project Manager for the Site, Mr. Mike John, will provide general oversight of all aspects of the remediation. MJ Painting will be responsible for the review of all documents, reports, correspondence, etc., required by the RAWP and/or the BCA with the NYSDEC dated January 2019.

MJ Painting's Project Manager will be responsible for community notifications and addressing concerns with the adjacent property owners and local community on all remediation-related issues. MJ Painting will be immediately notified by the on-Site team of any complaints or concerns regarding the work raised by the adjacent property owners and or the general public.

MJ Painting is the General Contractor/ Construction Manager and will be responsible for the quality assurance of all of the tasks being implemented. MJ Painting will confirm that all components of the Site activities are conducted according to the requirements of the RAWP. MJ Painting will be responsible for verifying that the daily Site construction activities are in compliance with all of the safety requirements and regulations governing the Site activity; however, each subcontractor is responsible for the health and safety of their own personnel.

7.2.1.2 Roux Environmental Engineering and Geology, D.P.C. - Remedial Engineer

Noelle Clarke, P.E., Remedial Engineer

The Remedial Engineer for this project will be Noelle M. Clarke. The Remedial Engineer is a registered professional engineer licensed by the State of New York. The Remedial Engineer will have primary direct responsibility for implementation of the remedial program for the Site (BCP Site No. C905046). The Remedial Engineer will certify in the FER that the remedial activities were observed by qualified environmental professionals under her supervision and that the remediation requirements set forth in the Remedial Action Work Plan and any other relevant provisions of New York Environmental Conservation Law (NYECL) Section 27-1419 have been achieved in full conformance with that Plan. Other Remedial Engineer certification requirements are listed later in this RAWP.

The Remedial Engineer will coordinate the work of other contractors and subcontractors involved in all aspects of remedial construction, including soil excavation, stockpiling, characterization, removal, solidification, and disposal, air monitoring, emergency spill response services, import of backfill material, management of waste transport and disposal, and installation of contingency SVI mitigation system. The Remedial Engineer will be responsible for all appropriate communication with NYSDEC and NYSDOH.

The Remedial Engineer will review all pre-remedial plans submitted by contractors for compliance with this Remedial Action Work Plan and will certify compliance in the FER. Additionally, Ms. Noelle Clarke, the “Remedial Engineer,” a professional engineer licensed in the State of New York, will be responsible for certifying that the remediation construction was completed in substantial conformance with the approved RAWP and/or any NYSDEC approved field changes.

7.2.1.3 Roux Associates – Remedial Compliance and SSO

Ian Reed – Project Principal

Brian Robinson, – Project Manager
Brian Klaus – Quality Assurance Officer
TBD – Field Manager/Site Safety Officer (SSO)

Roux will coordinate all Site activities being implemented to achieve the remedial objectives defined in the RAWP. Roux will provide continual review of all quality control measures implemented by the contractors to ensure compliance with the Site’s remedial objectives. As such, Roux will provide oversight services for the duration of the remedial activities. Roux will be responsible for managing the transportation and disposal of contaminated waste and materials generated during the construction (if any), including:

- fill/soil/spoils;
- contaminated pipe, concrete, bricks or other construction debris;
- personal protective equipment and other miscellaneous debris; and
- construction wastewater.

TBD - Field Manager/ Site Safety Officer (SSO)

Roux will act as the SSO and implement the CAMP. Roux will provide continual review of all quality control measures implemented by the contractors to ensure compliance with the Site-specific HASP. CAMP monitoring data will be reported daily to the SSO and will be maintained on-Site. Action level exceedances will be reported to the SSO, the MJ Painting project manager and appropriate communication and action taken. All CAMP monitoring records will be included in the overall FER that will be submitted to the NYSDEC and NYSDOH and will include all of the CAMP data collected, daily monitoring station location maps, and copies of the action limit reports (if any). If an action limit report is generated due to VOC exceedances, the NYSDEC and NYSDOH will be notified within 24 hours of the exceedance.

The Quality Assurance Officer is responsible for conducting reviews, inspections, and audits to ensure the data collection is conducted in accordance with the QAPP/FSP. The Quality Assurance Officer's responsibilities range from ensuring effective field equipment decontamination procedures and proper sample collection to the review of all laboratory analytical data for completeness and usefulness. The Quality Assurance Officer reports to the Project Manager and makes independent recommendations to the field team. All on-Site quality control persons identified in the CQAP will provide daily briefings and/or reports to Roux on-Site personnel, identifying the tasks completed, the remedial measures achieved, and any other issues of concern.

7.2.1.4 Subcontractors

7.2.1.4.1 Environmental Laboratory

The need for an environmental laboratory is specific to backfill and air sampling and analysis. Eurofins Environment Testing America Laboratories (Eurofins) will be utilized for all remediation construction-related analytical requirements. If needed, Alpha Analytical Laboratories (Alpha) will be maintained as an alternative laboratory for this project. Eurofins and Alpha are NYSDOH ELAP certified laboratories. All results will be reported in EDDs prepared in accordance with NYSDEC requirements. Formal laboratory qualifications and QA/QC information packages for Eurofins and any other analytical laboratories proposed for the project will be submitted to the NYSDEC, if requested.

7.2.1.4.2 DUSR

A DUSR will be prepared by Judy Harry of Data Validation Services for soil reuse characterization samples, with appropriate data qualifiers added to the results. The DUSR will follow the NYSDEC's September 1997 DUSR guidelines and NYSDEC DER-10 guidance. The DUSR and any necessary qualifications to the data will be appended to the FER.

7.2.1.4.3 Earthwork Subcontractor

Licensed subcontractor(s) will be contracted to execute all earthwork, including clearing, grubbing, debris removal and demolition, excavation, backfill, compaction, loading of material for disposal, ISS, grading, and restoration. Subcontractors and their key personnel will be interviewed and vetted by Roux to ensure sufficient experience and competency with the relevant remedial technologies are available to the crew(s) implementing the RAWP.

7.2.1.4.4 Surveying Firm

A NYS licensed surveying firm, will be contracted to provide lines, grades, boundaries, benchmarks, topographic surveys, as built drawings, and any other survey work required for the proper execution and documentation of the work as required by the RAWP.

7.2.1.4.5 Waste Transporters and Disposal Facilities

Waste from the Site will be transported to appropriately permitted waste disposal facilities. This CQAP will be updated with the names of the facility or facilities, as required. If any is generated, non-impacted construction debris will be transported to a registered construction and demolition disposal facility.

As required, a qualifications package will be provided by each vendor contracted to transport waste from the Site to the designated soil disposal facilities and each designated disposal facility. The package shall include the following:

- proof of insurance and all current necessary waste transport permits for the waste type(s) being transported.
- Letters of Commitment or other appropriate documentation from all waste haulers and from all transfer, treatment, storage, and disposal facilities to be used for the project. The letters of commitment shall specifically identify the types and quantities of waste that the facility will be able to accept, the permit numbers for all facilities at which the waste will be accepted and all waste characterization requirements, if additional to waste characterization samples already collected. In the event that a facility (such as a privately owned treatment works) is prohibited from issuing a letter of commitment without a sample of the waste, a conditional-type letter will be acceptable. Such a conditional letter shall specifically state what types and quantities of waste the facility will accept.
- For each waste hauler.
  - Name and federal and state identification numbers, as applicable.
  - Address.
  - Name of responsible contact for the hauler.
  - Telephone number for the contact.
  - List of types and sizes of all transport vehicles and equipment to be used.
  - A description of proposed transportation route, method, and procedures for hauling waste material, including type of vehicles that will be used for each type of waste.
  - Copies of any and all necessary permits and authorizations for each type of waste transported.
- For each transfer, treatment, storage and disposal facility, the Contractor shall submit the following information.
  - Facility name and federal and state identification numbers.
  - Facility location.
  - Name of responsible contact for the facility.
  - Telephone number for contact.
  - Signed letter of agreement to accept waste.
  - Unit of measure utilized at facility for costing purposes.
  - Copies of all permits, licenses, letters of approval, and other authorizations to operate, held by the proposed facility as they pertain to receipt and management of waste derived from this Contract.

7.2.2 Construction Quality Control Testing

Implementation of quality control testing and measurement will be performed by the contractors conducting the specific Site tasks, as required. The quality control officers, defined in Section **7.2.1**, will be responsible for providing documentation of all testing and measurement results to Roux. Roux will be responsible for verifying that all quality control testing has been conducted in compliance with the RAWP and as specified herein.

Prior to initial quality control testing procedures:

1. Verify that the testing procedures are within the manufacturer’s recommendations.
2. Verify that the facilities’ testing equipment are available and comply with testing standards.
3. Check testing instrument calibrations against certified standards.
4. Verify the recording forms, including all the test documentation requirements have been prepared.

Specific task-driven testing/certification obligations as they relate to environmental aspects of the project are as follows:

- A New York State-licensed surveyor will conduct all of the necessary measurements.
- Disposal quantities are estimated at up to 12,000 tons. Up to 25,000 tons of soil may be disposed under the completed pre-characterized sampling, therefore additional waste characterization is not anticipated. Disposal in excess of the pre-characterized quantity, if any, will require waste characterization analyses prior to disposal. Waste characterization analysis parameters and frequency for waste leaving the Site, if any, are determined by the waste disposal facility's acceptance requirements. As required, waste will be tested in accordance with the soil disposal facility's analytical acceptance requirements. Results will be provided to the disposal facility for review.
- Approximately 88,000 tons (50,000 cubic yards) of soil have been pre-characterized for re-use on-site. Additional re-use, if any, will require characterization analyses prior to re-use. Re-use characterization analysis parameters and frequency are in accordance with NYSDEC DER-10 Table 5.4(e)10. Results were discussed in the PDI Summary email provided to NYSDEC and are summarized in **Table 5**.
- Import soil, if any, will require characterization analyses prior to import. Import characterization analysis parameters and frequency are in accordance with NYSDEC DER-10 Table 5.4(e)10. Results, as applicable, will be reported in the Final Engineering Report (FER).
- QA/QC samples will be collected to ensure the ISS performance requirements for strength and permeability, described in Section 6.5, have been met. To allow early coring information to be used for adjusting ISS operations, coring operations will be conducted prior to complete curing of the ISS material. Samples of the mixed soil will be collected in accordance with the approved testing methods (ASTM D5084 for hydraulic conductivity, ASTM D2166 or D1633 for unconfined compressive strength).
- The CAMP requires continuous real time monitoring of VOCs and particulates during all intrusive Site activities. This monitoring equipment will be inspected periodically throughout each day to check and manually record the concentrations of VOCs and particulates and to ensure that the equipment is working properly. The equipment will be repaired, recalibrated, or replaced, as necessary. The periodic measurements will be used to identify any potential risks of off-Site migration. This monitoring data will be collected and logged for review daily by Roux and made available for regulatory agency review. Action Limit Reports will be completed to document any and all action level exceedances, as defined in the CAMP.

All testing data will be managed in accordance with the above requirements and will be included in the FER to be prepared by Roux upon completion of all remedial objectives defined in the RAWP.

7.2.3 Project Coordination

During implementation of the remedial action construction, progress meetings/conference calls will be conducted periodically to assess the progress of the work, overall progress to date, quality control requirements, environmental and construction health and safety requirements, and future progress expectations. Those in attendance will include representatives from the Owner/Contractor, Roux and other subcontractors, as necessary. This will provide the opportunity for all Site tasks to be integrated and discussed collectively and provide for coordination of all Site activities to maintain the overall construction schedule. Routine task meetings will also be conducted on an as needed basis to insure proper communication between the contractors, tradesman, and supervisory personnel.

7.2.4 Remedial Action Construction Schedule

A schedule for the major elements of the remedial construction and the redevelopment construction are presented on **Table 2.**

7.2.5 Work Hours

The hours for operation of remedial construction will conform to the Local, State, and Federal code requirements or according to specific variances issued by the appropriate agency. NYSDEC will be notified by the Volunteer of any variances issued. NYSDEC reserves the right to deny alternate remedial construction hours.

7.2.6 Site Security

Security for the work, equipment, materials, supplies, facilities, personnel, and incidentals will be provided throughout the performance of the work at the Site. A perimeter chain-link fence is partially in place and will be expanded to encompass the work area and maintained by the Volunteer during implementation of the remedial action and redevelopment. Roux will maintain a sign in/sign out sheet for all visitors to the Site.

7.2.7 Traffic Control

All construction work will occur between 7 A.M. and 6 P.M. from Monday to Friday. MJ Painting may work longer hours and/or weekends, as permitted by the proper authorities. If work beyond these hours or on weekends is required, the proper authorities will be notified. Disturbances to the local community will be minimized to the extent practical.

Trucking for waste disposal from the Site and for backfill materials into the Site is throughout the duration of the work described in this RAWP. For any trucking required, the proposed truck routes for ingress and egress to the Site are shown in **Figure 5**.

All trucks loaded with Site materials will exit the vicinity of the Site using only these approved truck routes. These are the most appropriate routes and take into account: (a) limiting transport through residential areas and past sensitive sites; (b) use of city mapped truck routes; (c) prohibiting off-Site queuing of trucks entering the facility, to the extent practicable; (d) limiting total distance to major highways; (e) promoting safety in access to highways; and (f) overall safety in transport.

Trucks will be prohibited from stopping and idling in the neighborhood outside the project site, to the extent practical.

Egress points for truck and equipment transport from the Site will be kept clean of dirt and other materials during Site remediation.

The contractors operating on the Site will be responsible for providing all necessary personnel and materials (i.e., traffic lanes, safety cones, etc.) to control traffic entering and exiting the Site and for coordinating traffic control measures with the local Police Department, as necessary. Contractors operating on the Site shall be responsible for all applicable New York Department of Transportation (NYDOT) traffic control and notification requirements and incorporating those elements into this Traffic Control Plan.

7.2.8 Worker Training and Monitoring

All general Site workers (as defined in OSHA 1910.120 (e)(3)(i)) that will be involved with earth disturbance activities will have received a minimum of 40 hours of initial health and safety training for hazardous waste site operations (40 Hour HAZWOPER training) and meet the medical surveillance requirements included in the HASP.

7.2.9 Agency Approvals

All permits or government approvals required for remedial construction have been, or will be, obtained prior to the start of remedial construction.

The planned end use for the Site is in conformance with the prior and proposed use for the property.

A complete list of all local, regional and national governmental permits, certificates or other approvals or authorizations required to perform the remedial work is attached in **Table 3**. This list includes a citation of the law, statute or code to be complied with, the originating agency, and a contact name and phone number in that agency. This list will be updated in the FER, and all executed permits will be included as an appendix to the FER.

7.2.10 NYSDEC BCP Signage

A BCP project sign is no longer required.

7.2.11 Pre-Construction Meeting with NYSDEC

A project kick-off meeting will be conducted with the Volunteer, Roux and the major subcontractors prior to the commencement of any intrusive remedial activities proposed in this RAWP. The NYSDEC and NYSDOH will be notified at least seven days in advance of the proposed meeting date and will attend the pre-construction meeting at their discretion.

7.2.12 Emergency Contact Information

An emergency contact sheet with names and phone numbers is included in HASP (**Appendix A**). That document will define the specific project contacts for use by NYSDEC and NYSDOH in the case of a day or night emergency. Since the major subcontractors have not yet been selected, the emergency contact list will be updated prior to the start of work.

7.2.13 Remedial Action Costs

The total estimated cost of the Remedial Action is per year in annual post-COC operation, maintenance, monitoring and reporting costs. An itemized and detailed summary of estimated costs for all remedial activity is attached on **Table 4**.

8.0 REMEDIAL ACTIVITIES SUPPORT DOCUMENTS

The applicable documents supporting the RA are described below.

8.1 Site Specific Health and Safety Plan (HASP)

The Site-specific HASP is included in **Appendix A** and the CAMP is included within the HASP. All remedial work performed under this plan will be in full compliance with governmental requirements, including Site and worker safety requirements mandated by Federal Occupational Safety and Health Administration (OSHA).

The Volunteer and associated parties preparing the remedial documents submitted to the State and those performing the construction work, are completely responsible for the preparation of an appropriate HASP and for the appropriate performance of work according to that plan and applicable laws.

The HASP and requirements defined in this RAWP pertain to all remedial and invasive work performed at the Site until the issuance of a Certificate of Completion.

The Roux Site Safety Coordinator will be determined prior to implementation of the RA.

Though not anticipated, if required, confined space entry will comply with all OSHA requirements to address the potential risk posed by combustible and toxic gasses.

8.2 Quality Assurance Project Plan (QAPP)

The Quality Assurance Project Plan (**Section 7.1**) includes all procedures to be followed for sampling and analysis during the remedial action. The QAPP includes all requirements outlined in DER 10 Section 2.4.

8.3 Construction Quality Assurance Plan (CQAP)

The Quality Assurance Project Plan (**Section 7.2**) includes all procedures to be followed for construction during the remedial action.

8.4 Stormwater Pollution Prevention Plan (SWPPP)

A Stormwater Pollution Prevention Plan (SWPPP) is required for the remedial action. The SWPPP is presented in **Appendix C**. Before commencing construction activity, a Notice of Intent will be issued and coverage under the State Pollutant Discharge Elimination System (SPDES) General Permit for Stormwater Discharges from Construction Activity will be obtained.

8.5 Citizen Participation Plan (CPP)

NYSDEC will coordinate and lead community relations throughout the course of the project with support from MJ Painting and Roux as requested. A Citizen Participation (CP) Plan (**Appendix B**) has been approved by NYSDEC. A copy of the CP Plan has been placed in the Olean Public Library, the designated project document repository.

No changes will be made to approved Fact Sheets authorized for release by NYSDEC without written consent of the NYSDEC. No other information, such as brochures and flyers, will be included with the Fact Sheet mailing. Fact sheets will be sent electronically by the NYSDEC project manager.

Document repositories have been established at the following locations and contain all applicable project documents:

Olean Public Library

134 N Second St
Olean, NY 14760
Attention: Public Records
Phone: 716 372-0200
Library Hours of Operation:

Sunday:	Closed
Monday - Thursday:	9:00 – 9:00
Saturday:	10:00 – 2:00

8.6 Community Air Monitoring Plan (CAMP)

Real-time community air monitoring will be performed during remedial activities at the Site. A CAMP is is included within the HASP in **Appendix A**. Roux will monitor for airborne particulates and VOCs along the downwind perimeter of the work area. Air monitoring will occur during excavation, grading, and soil/fill handling activities. Any monitoring results which exceed the action levels set by the CAMP will be reported as described in Section 6.1. The CAMP is consistent with the requirements for community air monitoring at remediation sites as established by the NYSDOH and NYSDEC. Accordingly, the CAMP follows procedures and practices outlined under NYSDEC DER-10, including NYSDOH's Generic Community Air Monitoring Plan, and Fugitive Dust and Particulate Monitoring.

8.7 Site Management Plan (SMP)

A SMP detailing the institutional and engineering controls required for the Site, a monitoring plan for the Site, and the physical components of the remedy required to be operated, maintained, and monitored to assure continued effectiveness will be developed in accordance with DER-10. At a minimum the SMP will include an Institutional Control and Engineering Control (IEC) Plan, a Monitoring Plan, and an O&M Plan.

8.7.1 Institutional Control and Engineering Control Plan

Following completion of the RA, institutional and engineering controls will be implemented as described above. The institutional controls will include an environmental easement restricting property use to commercial or industrial uses, prohibiting the installation of a groundwater well on the Site for extraction of drinking water or process water without prior approval from NYSDOH or authorization from the county health department, and requiring that future excavations comply with the SMP. Excavation limitations will be detailed in an Excavation Plan, which will include plans and requirements for:

- Removal, handling, and management (transportation and disposal) of Site soil;
- Fill brought on to the Site;
- Handling groundwater encountered during future excavations;
- Repair of Site utilities;
- CAMP and HASP compliance; and
- DER notification.

The engineering controls at the Site will consist of the contingency SSDS beneath the future buildings on the Site, and a Site Cover System. The IEC Plan will consist of O&M plans for the SSDS, if activated, a requirement for the evaluation of SVI and implementation of SVI migration measures, if required, in future on-Site structures, and provisions for a soil vapor intrusion evaluation when a change in the use of an existing building occurs.

Lastly, the IEC will include provisions for the transfer of Site management responsibility upon property transfer.

8.7.2 Monitoring Plan

The Monitoring Plan will consist of groundwater and LNAPL monitoring, Site Cover System inspections, and SVI evaluations to demonstrate that the remedy is effective after the RA and continues to be protective of public health and the environment into the future.

Groundwater monitoring will include installation of a network of monitoring and/or recovery wells to assess upgradient; on-Site, and downgradient conditions in the vicinity of the Site; baseline sampling Post-COC following completion of the RA; and semi-annual groundwater monitoring for at least a year following the RA to demonstrate that the selected remedy has eliminated off-Site migration of contaminated groundwater.

9.0 REPORTING

9.1 Remedial Activities Reporting

Roux's personnel will be on-Site during all remedial activities to direct and monitor RAWP implementation and to conduct community air monitoring in accordance with the CAMP. Roux will document remedial activities through field notes, photographs, sketches and maintenance of electronic monitoring equipment records (i.e., downloading air monitoring data in accordance with the CAMP). Information that will be documented includes:

- Equipment and personnel working in the area, including subcontractors;
- Air monitoring results;
- Actions taken to address odor and dust, in accordance with the CAMP;
- Locations and depths of excavation;
- Locations and depths of solidification;
- Number and type of truckloads of soil/fill removed from the Site;
- Number and type of truckloads of backfill brought to the Site;
- Soil reuse quantities and locations;
- Proctor compaction testing results;
- Approximate sampling locations or GPS coordinates and sample designations for ISS QA/QC samples collected;
- Approximate quantities of groundwater and LNAPL pumped from excavations, if any;
- Number and type of truckloads of groundwater removed from the Site; and
- Details of contingency SSDS infrastructure and sealing layer vapor barrier installation.
- Details of baseline soil vapor monitoring program.
- Weekly SWPPP inspections

Photo documentation of remedial activities will be prepared by Roux's personnel throughout the project as necessary to convey typical work activities, changed conditions, and/or special circumstances.

Roux will maintain remedial documentation. The NYSDEC will be promptly notified of proposed modifications to this Work Plan. Relevant information will be submitted to the NYSDEC as part of the FER.

Air monitoring data gathered in accordance with the CAMP will be provided to NYSDEC on a weekly basis when remedial activities are being conducted. Any monitoring results which exceed the action levels set by the CAMP will be reported:

1. When identified, when a NYSDEC representative is present at the Site; or
2. Within two hours by phone call or e-mail, to a NYSDEC project manager when no NYSDEC representative is on-Site.

Further, any monitoring results which exceed the action levels set by the CAMP will be summarized in the weekly CAMP report provided to NYSDEC, including the duration and actions taken in response to any such exceedance.

The NYSDOH project manager will be copied on all weekly CAMP reports and any notice of exceedances of CAMP action levels.

9.1.1 Monthly Progress Reports

Monthly (periodic progress) reports will be submitted to the NYSDEC and will summarize the progress of the RA accomplished during the reporting period.

9.2 Final Engineering Report

A FER will be prepared following completion of the RA activities in accordance with Section 5.8 of DER-10. The FER will describe the work performed as part of the remediation and will include:

- Introduction and background;
- A Site or area map showing the parcel(s) remediated, including significant Site features;
- Analytical results from the ISS QA/QC sampling;
- A Site map showing the lateral limits of the remediation;
- Tabular summaries of unit quantities including:
  - volume of soil excavated and disposition of excavated soil;
  - volume of ISS;
  - origin and volume of imported soil used for site restoration; and
  - volume and location of on-Site reuse soil.
- Documentation on the disposition of impacted soil and groundwater removed from the Site;
- Analytical data collected to characterize soil and water waste disposed off-Site and to characterize backfill (i.e., Site soil re-used as backfill and soil requiring testing that was brought to the Site for use as backfill);
- Analytical data collected as part of baseline soil vapor monitoring program;
- Photo documentation of remedial activities;
- Air monitoring data gathered in accordance with the CAMP;
- As-built drawings and specifications;
- A certification by a NYS professional engineer that all construction activities completed during the remediation were performed in accordance with the specifications provided in this RAWP, as approved by the NYSDEC, and that the activities were personally witnessed by a construction manager under the direct supervision of the professional engineer; and
- Text describing the remedial activities performed, any deviations from the RAWP and associated measures taken, and other pertinent information necessary to document that the Site activities were carried out in accordance with this RAWP.

Roux will maintain RAWP documentation. The NYSDEC will be promptly notified of proposed modifications to this RAWP. Relevant information will be submitted to the NYSDEC as part of the Final Engineering Report.

Roux will conduct a review of analytical data collected to characterize soil and water waste disposed of off-Site and to characterize backfill (i.e., Site soil reused as backfill and soil requiring testing that was brought to the Site for use as backfill).

In addition, a DUSR will be prepared for soil reuse characterization samples, with appropriate data qualifiers added to the results. The DUSR will follow the NYSDEC's September 1997 DUSR guidelines and NYSDEC DER-10 guidance. The DUSR and any necessary qualifications to the data will be appended to the FER.

10.0 PRINCIPAL PERSONNEL AND WORK SCHEDULE

10.1 Principal Personnel

Provided below is a list of key personnel involved in the work, contact information and their responsibilities:

Mike John, Sr. – Property Owner
MJ Painting Contractor Corp.
291 Homer Street
Olean, New York
(716) 373-3033
mikejohn@mjpaintingcontractor.com

Ian Reed
Principal Hydrogeologist
Roux Associates, Inc.
200 Summit Drive, Suite 500
Burlington, Massachusetts
(781) 569-4000
ireed@rouxinc.com

Noelle Clarke – Professional Engineer/Remedial Engineer
Principal Engineer
Roux Environmental Engineering and Geology, D.P.C.
209 Shafter Street
Islandia, New York
(631) 232-2600
nclarke@rouxinc.com

Brian Robinson – Project Manager
Senior Engineer
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Burlington, Massachusetts
(781) 569-4000
brobinson@rouxinc.com

Brian Klaus - Quality Assurance Officer
Senior Geologist
Roux Associates, Inc.
200 Summit Drive, Suite 500
Burlington, Massachusetts
(781) 569-4000
bklaus@rouxinc.com

10.2 Remedial Schedule

The work described in this RAWP will be initiated upon approval of this Work Plan and is tentatively scheduled to begin in the second quarter of 2022. **Table 2** outlines the proposed remedial schedule. All submittals shall be made by Roux to the NYSDEC within the necessary timeframe to receive Certificate of Completion by December 31, 2022. The draft Environmental Easement package shall be submitted by June 1, 2022. The draft SMP will be submitted to NYSDEC August 1, 2022. The draft FER will be submitted to NYSDEC by October 1, 2022. Should installation of an active SSDS be deemed necessary upon completion of soil vapor intrusion sampling at the proposed building, the SSDS design plans will be submitted to NYSDEC and NYSDOH prior to construction of the active SSDS.

Prepared By:

ROUX ASSOCIATES INC.

Brian Robinson	6/30/22	
Senior Engineer	Date	Signature
Ian Reed	6/30/22	
Project Principal	Date	Signature

ROUX ENVIRONMENTAL ENGINEERING AND GEOLOGY, D.P.C.

Noelle M. Clarke, P.E	6/30/22	
Principal Engineer	Date	Signature

TABLES

Table 1
Grossly Contaminated Media and ISS Thickness Summary Table
MJ Painting 350 Franklin Street, Olean, New York

Boring ID	Type	Ground Surface Elevation (ft.)	Total Depth (ft)	Total Depth - Elev (ft. AMSL)	SPH Identified in Boring Log?	SPH Depth (ft)		SPH Elev (ft AMSL)		SPH Thickness (ft)	GCM Identified ?	Target Depth of ISS
						Top	Bottom	Top	Bottom			
RX-008	Soil Boring	1427.30	18	1409.30	No	N/A	N/A	N/A	N/A	N/A	No	N/A
RX-009	Soil Boring	1427.06	28	1399.06	No	N/A	N/A	N/A	N/A	N/A	No	35
RX-010	Soil Boring	1427.72	28	1399.72	Yes	16	26	1411.72	1401.72	10	No	26
RX-011	Soil Boring	1424.83	14.3	1410.53	No	N/A	N/A	N/A	N/A	N/A	No	N/A
RX-012	Soil Boring	1424.87	13.2	1411.67	No	N/A	N/A	N/A	N/A	N/A	No	24
RX-013	Soil Boring	1424.87	17	1407.87	No	N/A	N/A	N/A	N/A	N/A	No	N/A
RX-014	Soil Boring	1424.80	18.1	1406.70	No	N/A	N/A	N/A	N/A	N/A	No	N/A
RX-015	Soil Boring	1427.25	28	1399.25	No	N/A	N/A	N/A	N/A	N/A	No	N/A
RX-016	Soil Boring	1428.58	32	1396.58	No	N/A	N/A	N/A	N/A	N/A	No	N/A
RX-017	Soil Boring	1428.11	28	1400.11	Yes	26	28	1402.11	1400.11	2	No	28
RX-018	Soil Boring	1424.82	28	1396.82	No	N/A	N/A	N/A	N/A	N/A	No	N/A
Rx-019	Soil Boring	1425.72	28	1397.72	No	N/A	N/A	N/A	N/A	N/A	No	N/A
RX-021	Soil Boring	1422.45	28	1394.45	No	N/A	N/A	N/A	N/A	N/A	No	N/A
RX-022	Soil Boring	1425.41	28	1397.41	No	N/A	N/A	N/A	N/A	N/A	No	N/A
RX-023	Soil Boring	1426.85	28	1398.85	No	N/A	N/A	N/A	N/A	N/A	No	28
RX-024	Soil Boring	1426.47	28	1398.47	No	N/A	N/A	N/A	N/A	N/A	No	N/A
RX-025	Soil Boring	1425.81	28	1397.81	No	N/A	N/A	N/A	N/A	N/A	No	N/A
RX-026	Soil Boring	1427.48	36	1391.48	No	N/A	N/A	N/A	N/A	N/A	No	28
RX-027	Soil Boring	1426.93	32	1394.93	No	N/A	N/A	N/A	N/A	N/A	No	23
RX-028	Soil Boring	1428.00	36	1392.00	No	N/A	N/A	N/A	N/A	N/A	No	N/A
RX-029	Soil Boring	1427.34	28	1399.34	No	16	19	1411.34	1408.34	3	No	19
RX-030	Soil Boring	1426.47	18.3	1408.17	No	N/A	N/A	N/A	N/A	N/A	No	27
RX-031	Soil Boring	1427.19	28	1399.19	No	N/A	N/A	N/A	N/A	N/A	No	35
RX-20	Soil Boring	N/A	28	N/A	No	N/A	N/A	N/A	N/A	N/A	No	N/A
SB-101	Soil Boring	1423.24	31	1392.24	Yes	15	21	1408.24	1402.24	6	Yes	21
SB-103	Soil Boring	1424.92	21.5	1403.42	Yes	13	19	1411.92	1405.92	6	No	19
SB-107	Soil Boring	1426.00	4	1422.00	No	N/A	N/A	N/A	N/A	N/A	No	N/A
SB-108	Soil Boring	1425.88	20.8	1405.08	No	N/A	N/A	N/A	N/A	N/A	No	N/A
TP-A1	Test Pit	N/A	21	N/A	No	N/A	N/A	N/A	N/A	N/A	No	N/A
TP-A2	Test Pit	N/A	24	N/A	No	N/A	N/A	N/A	N/A	N/A	No	N/A
TP-A3	Test Pit	1426.08	24	1402.08	Yes	17	24	1409.08	1402.08	7	Yes	24
TP-B1	Test Pit	N/A	24	N/A	No	N/A	N/A	N/A	N/A	N/A	No	20
TP-B2	Test Pit	N/A	25	N/A	No	N/A	N/A	N/A	N/A	N/A	No	N/A
TP-B3	Test Pit	N/A	24	N/A	No	N/A	N/A	N/A	N/A	N/A	No	N/A
TP-C1	Test Pit	N/A	24	N/A	No	N/A	N/A	N/A	N/A	N/A	No	N/A
TP-C2	Test Pit	N/A	25	N/A	No	N/A	N/A	N/A	N/A	N/A	No	N/A
TP-C3	Test Pit	N/A	23	N/A	No	N/A	N/A	N/A	N/A	N/A	No	N/A
TP-D1	Test Pit	1426.35	23	1403.35	Yes	11	23	1415.35	1403.35	12	Yes	23
TP-D2	Test Pit	1426.99	23	1403.99	Yes	7	23	1419.99	1403.99	16	Yes	23
TP-E1	Test Pit	1425.86	28	1397.86	Yes	18	28	1407.86	1397.86	10	Yes	28
TP-E2	Test Pit	1426.84	25	1401.84	Yes	18	25	1408.84	1401.84	7	Yes	25
TP-F1	Test Pit	N/A	25	N/A	Yes	20	25	N/A	N/A	5	No	25
TP-F2	Test Pit	N/A	25	N/A	Yes	19	25	N/A	N/A	6	No	25
TP-F3	Test Pit	N/A	23	N/A	Yes	13	23	N/A	N/A	10	No	23
TP-G1	Test Pit	N/A	24	N/A	Yes	8	24	N/A	N/A	16	No	24
TP-G2	Test Pit	N/A	18	N/A	No	N/A	N/A	N/A	N/A	N/A	No	N/A
TP-H1	Test Pit	N/A	24	N/A	No	N/A	N/A	N/A	N/A	N/A	No	N/A
TP-I1	Test Pit	N/A	24.5	N/A	No	N/A	N/A	N/A	N/A	N/A	No	N/A
TP-I2	Test Pit	N/A	22	N/A	Yes	19	22	N/A	N/A	3	No	22
TP-I3	Test Pit	N/A	21	N/A	No	N/A	N/A	N/A	N/A	N/A	No	N/A
TP-J1	Test Pit	N/A	24	N/A	No	N/A	N/A	N/A	N/A	N/A	No	N/A
TP-J2	Test Pit	N/A	24	N/A	Yes	16	24	N/A	N/A	8	No	24
TP-K1	Test Pit	N/A	15	N/A	No	N/A	N/A	N/A	N/A	N/A	No	N/A
TP-K2	Test Pit	N/A	20	N/A	Yes	20	N/A	N/A	N/A	N/A	No	N/A
MW-100	Well	1422.73	25	1397.73	Yes	8.3	21	1414.43	1401.73	12.7	Yes	21
MW-102	Well	1424.01	27	1397.01	Yes	19	23	1405.01	1401.01	4	No	23
MW-104	Well	1425.19	33	1392.19	Yes	29	33	1396.19	1392.19	4	No	33
MW-105	Well	1425.69	25	1400.69	No	N/A	N/A	N/A	N/A	N/A	No	N/A
MW-106	Well	1426.17	29	1397.17	Yes	23	25	1403.17	1401.17	2	Yes	25
MW-202	Well	1425.30	28	1397.30	Yes	19	24	1406.30	1401.30	5	Yes	24
MW-206	Well	1428.39	34	1394.39	No	N/A	N/A	N/A	N/A	N/A	No	N/A
MW-208	Well	1426.09	24	1402.09	Yes	5	20	1421.09	1406.09	15	No	20
MW-209	Well	1426.60	27	1399.60	Yes	21	27	1405.60	1399.60	6	Yes	27
MW-212	Well	1426.74	35	1391.74	Yes	16	35	1410.74	1391.74	19	Yes	35
MW-216	Well	1427.58	28	1399.58	Yes	18	20	1409.58	1407.58	2	No	20
RXMW-001	Well	1429.24	18.5	1410.74	No	N/A	N/A	N/A	N/A	N/A	No	20

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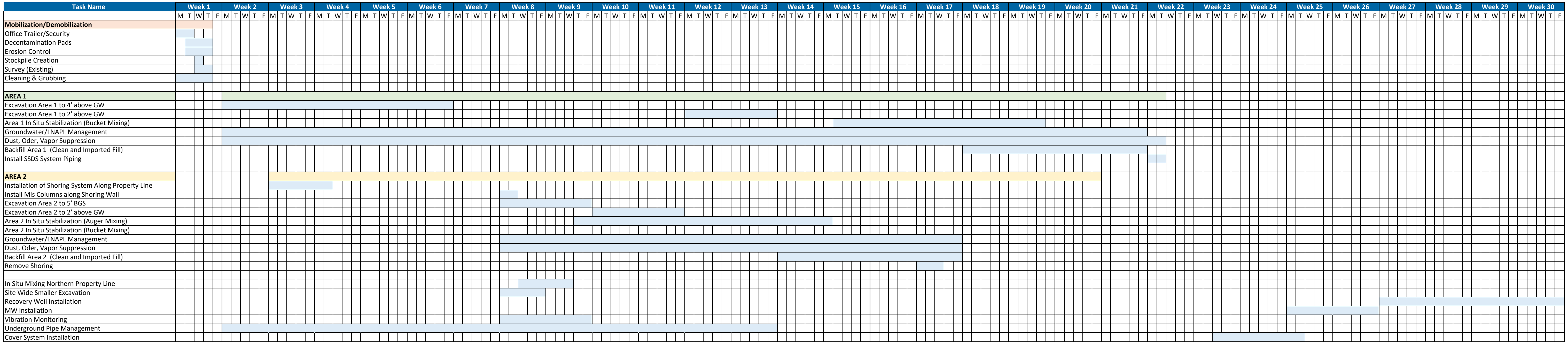
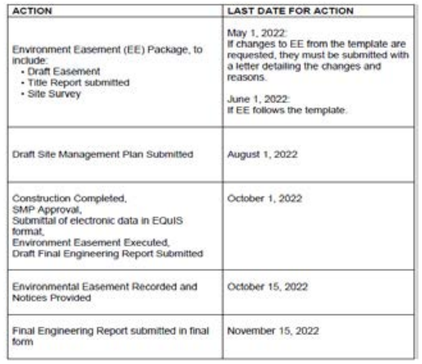
Boring ID	Type	Ground Surface Elevation (ft.)	Total Depth (ft)	Total Depth - Elev (ft. AMSL)	SPH Identified in Boring Log?	SPH Depth (ft)		SPH Elev (ft AMSL)		SPH Thickness (ft)	GCM Identified ?	Target Depth of ISS
						Top	Bottom	Top	Bottom			
RXMW-002	Well	1427.85	18	1409.85	No	N/A	N/A	N/A	N/A	N/A	No	N/A
RXMW-003	Well	1427.55	22	1405.55	No	N/A	N/A	N/A	N/A	N/A	No	N/A
RXMW-004	Well	1428.07	28	1400.07	No	N/A	N/A	N/A	N/A	N/A	No	N/A
RXMW-005	Well	1427.37	16	1411.37	No	N/A	N/A	N/A	N/A	N/A	No	N/A
RXMW-006	Well	1426.85	28	1398.85	No	N/A	N/A	N/A	N/A	N/A	No	N/A
RXMW-007	Well	1428.39	28	1400.39	No	N/A	N/A	N/A	N/A	N/A	No	N/A
RX-100	Soil Boring	1427.45	40	1387.45	No	N/A	N/A	N/A	N/A	N/A	No	N/A
RX-101	Soil Boring	1427.38	35	1392.38	Yes	20	27	1407.38	1400.38	7	No	27
RX-102	Soil Boring	1426.21	30	1396.21	Yes	15	20	1411.21	1406.21	5	Yes	20
RXMW-103	Well	1428.06	40	1388.06	No	N/A	N/A	N/A	N/A	N/A	No	N/A
RX-104	Soil Boring	1428.13	35	1393.13	No	N/A	N/A	N/A	N/A	N/A	No	N/A
RXMW-105S	Well	1426.36	35	1391.36	Yes	25	29	1401.36	1397.36	4	Yes	29
RXMW-105D										0		
RX-106	Soil Boring	1426.71	35	1391.71	No	26	28	1400.71	1398.71	2	No	28
RX-107	Soil Boring	1429.21	40	1389.21	No	N/A	N/A	N/A	N/A	N/A	No	N/A
RX-401	Soil Boring	1425.65	12	1413.65	Yes	6.5	11	1419.15	1414.65	4.5	Yes	24
RX-402	Soil Boring	1425.68	12	1413.68	Yes	11	12	1414.68	1413.68	1	Yes	28
RX-108	Soil Boring	1427.26	35	1392.26	No	N/A	N/A	N/A	N/A	N/A	No	N/A
RX-403	Soil Boring	1425.88	12	1413.88	No	N/A	N/A	N/A	N/A	N/A	No	28
RX-404	Soil Boring	1426.25	12	1414.25	Yes	8	12	1418.25	1414.25	4	Yes	29
RX-405	Soil Boring	1426.13	12	1414.13	Yes	11	12	1415.13	1414.13	1	Yes	29
RX-406	Soil Boring	1426.26	12	1414.26	Yes	8	10.5	1418.26	1415.76	2.5	Yes	25
RX-407	Soil Boring	1426.31	12	1414.31	No	N/A	N/A	N/A	N/A	N/A	No	25
RX-408	Soil Boring	1425.66	12	1413.66	No	N/A	N/A	N/A	N/A	N/A	No	24
RX-409	Soil Boring	1425.84	12	1413.84	No	N/A	N/A	N/A	N/A	N/A	No	28
RX-410	Soil Boring	1425.98	12	1413.98	Yes	9	12	1416.98	1413.98	3	Yes	28
RX-411	Soil Boring	1426.71	12	1414.71	Yes	7.5	12	1419.21	1414.71	4.5	Yes	29
RX-412	Soil Boring	1426.62	12	1414.62	No	N/A	N/A	N/A	N/A	N/A	No	29
RX-413	Soil Boring	1426.99	12	1414.99	No	N/A	N/A	N/A	N/A	N/A	No	25
RX-414	Soil Boring	1426.87	12	1414.87	No	N/A	N/A	N/A	N/A	N/A	No	25
RX-415	Soil Boring	1425.69	12	1413.69	No	N/A	N/A	N/A	N/A	N/A	No	24
RX-416	Soil Boring	1425.92	12	1413.92	Yes	6	12	1419.92	1413.92	6	Yes	28
RX-417	Soil Boring	1426.38	12	1414.38	No	N/A	N/A	N/A	N/A	N/A	No	28
RX-418	Soil Boring	1426.98	12	1414.98	No	N/A	N/A	N/A	N/A	N/A	No	28
RX-419	Soil Boring	1427.42	12	1415.42	No	N/A	N/A	N/A	N/A	N/A	No	28
RX-420	Soil Boring	1427.54	12	1415.54	Yes	8	12	1419.54	1415.54	4	Yes	28
RX-421	Soil Boring	1427.28	12	1415.28	No	N/A	N/A	N/A	N/A	N/A	No	28
RX-422	Soil Boring	1426.11	12	1414.11	No	N/A	N/A	N/A	N/A	N/A	No	23
RX-423	Soil Boring	1426.45	12	1414.45	No	N/A	N/A	N/A	N/A	N/A	No	23
RX-424	Soil Boring	1427.65	12	1415.65	No	N/A	N/A	N/A	N/A	N/A	No	23
RX-425	Soil Boring	1426.88	12	1414.88	No	N/A	N/A	N/A	N/A	N/A	No	23
RX-426	Soil Boring	1427.27	12	1415.27	No	N/A	N/A	N/A	N/A	N/A	No	23
RX-427	Soil Boring	1427.41	12	1415.41	Yes	8	12	1419.41	1415.41	4	Yes	23
RX-428	Soil Boring	1426.45	12	1414.45	No	N/A	N/A	N/A	N/A	N/A	No	23
RX-429	Soil Boring	1426.81	12	1414.81	No	N/A	N/A	N/A	N/A	N/A	No	23
RX-430	Soil Boring	1426.91	12	1414.91	No	N/A	N/A	N/A	N/A	N/A	No	23
RX-431	Soil Boring	1427.06	12	1415.06	Yes	5	8	1422.06	1419.06	3	Yes	23
RX-432	Soil Boring	1427.15	12	1415.15	Yes	6.5	10	1420.65	1417.15	3.5	Yes	23
RX-433	Soil Boring	1425.15	12	1413.15	Yes	8	12	1417.15	1413.15	4	Yes	24
RX-434	Soil Boring	1426.50	12	1414.50	No	N/A	N/A	N/A	N/A	N/A	No	24
RX-435	Soil Boring	1426.69	12	1414.69	No	N/A	N/A	N/A	N/A	N/A	No	24
RX-436	Soil Boring	1425.14	12	1413.14	No	N/A	N/A	N/A	N/A	N/A	No	24
RX-437	Soil Boring	1426.84	12	1414.84	No	N/A	N/A	N/A	N/A	N/A	No	24
RX-438	Soil Boring	1426.79	12	1414.79	No	N/A	N/A	N/A	N/A	N/A	No	24
RX-439	Soil Boring	1427.13	12	1415.13	Yes	8	12	1419.13	1415.13	4	Yes	24
RX-440	Soil Boring	1425.83	12	1413.83	No	N/A	N/A	N/A	N/A	N/A	No	24
RX-441	Soil Boring	1426.57	12	1414.57	No	N/A	N/A	N/A	N/A	N/A	No	24
RX-442	Soil Boring	1425.62	12	1413.62	No	N/A	N/A	N/A	N/A	N/A	No	20
RX-443	Soil Boring	1426.47	12	1414.47	No	N/A	N/A	N/A	N/A	N/A	No	27
RX-444	Soil Boring	1425.78	13	1412.78	No	N/A	N/A	N/A	N/A	N/A	No	20
RX-445	Soil Boring	1426.45	14	1412.45	No	N/A	N/A	N/A	N/A	N/A	No	27
RX-446	Soil Boring	1426.91	15	1411.91	No	N/A	N/A	N/A	N/A	N/A	No	20
RX-447	Soil Boring	1423.49	16	1407.49	No	N/A	N/A	N/A	N/A	N/A	No	21
RX-448	Soil Boring	1429.48	17	1412.48	Yes	5	12	1424.48	1417.48	7	Yes	20
RXMW-106	Well	1426.93	28	1398.93	No	N/A	N/A	N/A	N/A	N/A	No	N/A
RXMW-107	Well	1425.82	36	1389.82	No	N/A	N/A	N/A	N/A	N/A	No	N/A
RXMW-108	Well	1424.07	32	1392.07	Yes	18	20	1406.07	1404.07	2	No	20
RXMW-109	Well	1424.72	32	1392.72	Yes	19	27	1405.72	1397.72	8	No	27
RXMW-110	Well	1426.76	28	1398.76	No	N/A	N/A	N/A	N/A	N/A	No	N/A
RXMW-111	Well	1427.54	32	1395.54	No	N/A	N/A	N/A	N/A	N/A	No	N/A
RXMW-112	Well	1427.63	36	1391.63	Yes	16	34	1411.63	1393.63	18	No	34
RXMW-113	Well	1427.01	32	1395.01	No	N/A	N/A	N/A	N/A	N/A	No	N/A

Table 2

Remedial Schedule

MJ Painting Olean, New York





ACTION	LAST DATE FOR ACTION
Environment Easement (EE) Package, to include: • Draft Easement • Title Report submitted • Site Survey	May 1, 2022: If changes to EE from the template are requested, they must be submitted with a letter detailing the changes and reasons. June 1, 2022: If EE follows the template.
Draft Site Management Plan Submitted	August 1, 2022
Construction Completed, SMP Approval, Submittal of electronic data in EQuIS format, Environment Easement Executed, Draft Final Engineering Report Submitted	October 1, 2022
Environmental Easement Recorded and Notices Provided	October 15, 2022
Final Engineering Report submitted in final form	November 15, 2022

Table 3

Required Permits, Certificates, or Other Approvals and Authorizations

MJ Painting 350 Franklin Street, Olean, NY

Permit Name/Package		Format	Permit/Component Description	Completed By:	Certifications Required	Authorizer(s)
	Remedial Action Work Plan (RAWP)	Document	Remedial Action Work Plan	Roux	PE (NY)	NYSDEC
		Document	Citizen Participation Plan (Appendix B)			
		Document/CAD	Soil and Erosion Control Plan (Appendix C)			
		Document	Community Air Monitoring Plan (Appendix A, Section Appx. N)			NYSDEC & NYSDOH
		Form	NYSDEC Request to Import/Reuse Fill or Soil			NYSDEC
SPDES General Permit for Construction Activities (GP-0-20-001)	Stormwater Pollution Prevention Plan (SWPPP)	Form	Notice of Intent Form (electronic)	Roux	PE (NY)	NYSDEC
		Document	SWPPP (Appendix D)			
		CAD	Figure 1: Site Location Map			
			Construction Drawings - Extent of Work Area, contours. etc.			
			Drawing 1: Erosion and Sediment Control Plan			
			Drawing 2: Erosion and Sediment Control Details 1/2			
			Drawing 3: Erosion and Sediment Control Details 2/2			
		Document Appendices	A: Construction Duration Inspection Form			
			B: Modification Report Form			
			C: Site Soil Boring/Monitoring Well Logs			
			D: Test Pit Logs			
			E: Notice of Termination Form			
		Form	SWPPP Preparer Certification Form			
			Owner/Operator Certification Form			
	General Permit for Construction Activities (GP-0-20-001)	Document	General Permit	Roux	--	NYSDEC
		Document/Form	HC 209 - Notice to Disturb Greater than 5 Acres of Soil - Part II.C.3 of the SPDES General Permit for Stormwater Discharges from Construction Activity	Roux		
	Hydrant Use Permit	Document	Hydrant Use Permit	Contractor	--	City of Olean
	Water Discharge	Document	Water Discharge Permit	Contractor	--	City of Olean
	Waste Transporters - Part 364 Permit	Document	6 NYCRR Part 364 - Waste Transporter Registration	Contractor/Waste Transporter	--	NYSDEC
	Final Engineering Report	Document	Final Engineering Report	Roux	PE (NY)	NYSDEC

Notes:

- SPDES = State Pollution Discharge Elimination System.

Table 4
Summary of Estimated Costs
MJ Painting 350 Franklin Street, Olean, NY

		Cost - Pre-COC	**Cost - 10 years Post-COC**
Task	**Description**		
1.0	*NYSDEC Coordination*	*$17,000*	*$0*
2.0	*Community Air Monitoring Plan (CAMP)*	*$4,500*	*$0*
3.0	*Health & Safety Plan (HASP)*	*$4,500*	*$0*
4.0	*SWPPP*	*$23,994*	*$0*
Task	**Description**		
5.0	*Roux Labor - Bid Walk*	*$13,975*	*$0*
Task	**Description**		
5.1	*Roux Labor - Pre-RA Waste Characterization*	*$37,788*	*$0*
5.1A	*Subcontractors - Pre-RA Waste Characterization Drilling*	*$11,586*	*$0*
5.1B	*Subcontractors - Pre-RA Waste Characterization*	*$21,702*	*$0*
Task	**Description**		
5.2	*Roux Labor - Pre-RA Surficial Soil Reuse Characterization*	*$22,423*	*$0*
5.2B	*Subcontractors - Pre-RA Surficial Soil Reuse Characterization*	*$33,851*	*$0*
Task	**Description**		
5.3	*Roux Labor - RA Subsurface Soil Reuse Characterization*	*$24,543*	*$0*
5.3A	*Subcontractors - RA Subsurfacel Soil Reuse Drilling*	*$29,040*	*$0*
5.3B	*Subcontractors - RA Subsurface Soil Reuse Characterization*	*$67,598*	*$0*
Task	**Description**		
5.4	*Roux Labor - Pre-RA Monitoring Well Installation*	*$22,398*	*$0*
5.4A	*Subcontractors - Pre-RA Monitoring Well Installation Driller*	*$160,567*	*$0*
5.4B	*Subcontactor - Pre-RA Monitoring Well Lab Cost*	*$8,712*	*$0*
Task	**Description**		
6.0	*RA Excavation Oversight - Roux Labor*	*$371,124*	*$0*
6.0A	*RA ISS Oversight - Roux Labor*	*$337,806*	*$0*
6.0B	*RA Disposal - Roux Labor*	*$734,829*	*$0*
Task	**Description**		
6.1	*Subcontractors - Excavation*	*$2,694,423*	*$0*
6.1A	*Subcontractors - ISS*	*$2,879,136*	*$0*
Task	**Description**		
6.2	*Roux Labor - Soil Import Characterization*	*$15,622*	*$0*
6.2A	*Subcontractors - Soil Import Characterization*	*$47,917*	*$0*
Task	**Description**		
6.3	*Subcontractors - Survey*	*$62,700*	*$0*
Task	**Description**		
7.1	*Roux Labor - Well Installation*	*$28,393*	*$15,725*
7.2	*Subcontractors - Well Installation*	*$189,750*	*$21,753*
7.3	*Roux Labor - Long Term Monitoring*	*$0*	*$403,308*
7.4	*Subcontactor - Lab Cost*	*$9,945*	*$135,025*
		$7,875,822	**$575,811**
	35 % Contingency (Source: USACE/USEPA Guide to Developing and Documenting Costing Estimates document 540R000-002 Exhibit 5.6)	**$2,756,538**	**$201,534**
	TOTAL	**$10,632,360**	**$777,344**

Table 5

Soil Reuse Characterization Sampling Results

Summary of Volatile Organic Compounds in Soil.

MJ Painting; Olean, New York.

Sample ID Sample Depth (ft bgs) Sample Date	NYSDEC GW Protection SCO	NYSDEC Commercial SCO	RX-201 0-1 11/15/2021	RX-202 0-1 11/15/2021	RX-203 0-1 11/15/2021	RX-204 0-1 11/15/2021	RX-205 0-1 11/9/2021	RX-206 0-1 11/9/2021	RX-207 0-1 11/9/2021	RX-208 0-1 11/15/2021	RX-209 0-1 11/15/2021	RX-210 0-1 11/15/2021	RX-211 0-1 11/15/2021	RX-212 0-1 11/15/2021	RX-213 0-1 11/15/2021	RX-214 0-1 11/15/2021	RX-215 0-1 11/15/2021	RX-216 0-1 11/16/2021	RX-217 0-1 11/16/2021	RX-218 0-1 11/17/2021	RX-219 0-1 11/17/2021	RX-220 0-1 11/17/2021	RX-221 0-1 11/17/2021	RX-222 0-1 11/17/2021
VOLATILE ORGANIC COMPOUNDS - 8260C (mg/kg)																								
1,1,1-Trichloroethane	0.68	500	0.00058 U	0.00064 U	0.00044 U	0.00046 U	0.00053 U	0.00097 U	0.00069 U	0.00067 U	0.00063 U	0.00051 U	0.00062 U	0.00061 U	0.00061 U	0.00053 U	0.00051 U	0.00044 U	0.00034 U	0.00047 U	0.00054 U	0.00056 U	0.00079 U	0.00058 U
1,1,2,2,-Tetrachloroethane	NS	NS	0.00058 U	0.00064 U	0.00044 U	0.00046 U	0.00053 U	0.00097 U	0.00069 U	0.00067 U	0.00063 U	0.00051 U	0.00062 U	0.00061 U	0.00061 U	0.00053 U	0.00051 U	0.00044 U	0.00034 U	0.00047 U	0.00054 U	0.00056 U	0.00079 U	0.00058 U
1,1,2-Trichloro-1,2,2-trifluoroethane	NS	NS	0.0046 U	0.0051 U	0.0035 U	0.0037 U	0.0042 U	0.0077 U	0.0055 U	0.0054 U	0.005 U	0.0041 U	0.005 U	0.0048 U	0.0049 U	0.0042 U	0.0041 U	0.0036 U	0.0028 U	0.0038 U	0.0043 U	0.0044 U	0.0063 U	0.0046 U
1,1,2-Trichloroethane	NS	NS	0.0012 U	0.0013 U	0.00088 U	0.00093 U	0.0011 U	0.0019 U	0.0014 U	0.0013 U	0.0012 U	0.001 U	0.0012 U	0.0012 U	0.0012 U	0.001 U	0.001 U	0.00089 U	0.00069 U	0.00094 U	0.0011 U	0.0011 U	0.0016 U	0.0012 U
1,1,-Dichloroethene	0.33	500	0.0012 U	0.0013 U	0.00088 U	0.00093 U	0.0011 U	0.0019 U	0.0014 U	0.0013 U	0.0012 U	0.001 U	0.0012 U	0.0012 U	0.0012 U	0.001 U	0.001 U	0.00089 U	0.00069 U	0.00094 U	0.0011 U	0.0011 U	0.0016 U	0.0012 U
1,1-Dichloroethane	0.27	240	0.0012 U	0.0013 U	0.00088 U	0.00093 U	0.0011 U	0.0019 U	0.0014 U	0.0013 U	0.0012 U	0.001 U	0.0012 U	0.0012 U	0.0012 U	0.001 U	0.001 U	0.00089 U	0.00069 U	0.00094 U	0.0011 U	0.0011 U	0.0016 U	0.0012 U
1,2,3-Trichlorobenzene	NS	NS	0.0023 U	0.0026 U	0.0018 U	0.0018 U	0.0021 U	0.0039 U	0.0028 U	0.0027 U	0.0025 U	0.002 U	0.0025 U	0.0024 U	0.0024 U	0.0021 U	0.002 U	0.0018 U	0.0014 U	0.0019 U	0.0021 U	0.0022 U	0.0032 U	0.0023 U
1,2,4-Trichlorobenzene	NS	NS	0.0023 U	0.0026 U	0.0018 U	0.0018 U	0.0021 U	0.0039 U	0.0028 U	0.0027 U	0.0025 U	0.002 U	0.0025 U	0.0024 U	0.0024 U	0.0021 U	0.002 U	0.0018 U	0.0014 U	0.0019 U	0.0021 U	0.0022 U	0.0032 U	0.0023 U
1,2,4-Trimethylbenzene	3.6	190	0.0023 U	0.0026 U	0.0018 U	0.0018 U	0.0021 U	0.0039 U	0.0028 U	0.0027 U	0.0025 U	0.002 U	0.0025 U	0.0024 U	0.0024 U	0.0021 U	0.002 U	0.0018 U	0.0014 U	0.0019 U	0.0021 U	0.0022 U	0.0032 U	0.0023 U
1,2-Dibromo-3-chloropropane	NS	NS	0.0035 U	0.0038 U	0.0026 U	0.0028 U	0.0032 U	0.0058 U	0.0042 U	0.004 U	0.0038 U	0.003 U	0.0038 U	0.0036 U	0.0037 U	0.0032 U	0.003 U	0.0027 U	0.0021 U	0.0028 U	0.0032 U	0.0033 U	0.0047 U	0.0035 U
1,2-Dibromoethane	NS	NS	0.0012 U	0.0013 U	0.00088 U	0.00093 U	0.0011 U	0.0019 U	0.0014 U	0.0013 U	0.0012 U	0.001 U	0.0012 U	0.0012 U	0.0012 U	0.001 U	0.001 U	0.00089 U	0.00069 U	0.00094 U	0.0011 U	0.0011 U	0.0016 U	0.0012 U
1,2-Dichlorobenzene	1.1	500	0.0023 U	0.0026 U	0.0018 U	0.0018 U	0.0021 U	0.0039 U	0.0028 U	0.0027 U	0.0025 U	0.002 U	0.0025 U	0.0024 U	0.0024 U	0.0021 U	0.002 U	0.0018 U	0.0014 U	0.0019 U	0.0021 U	0.0022 U	0.0032 U	0.0023 U
1,2-Dichloroethane	0.02	30	0.0012 U	0.0013 U	0.00088 U	0.00093 U	0.0011 U	0.0019 U	0.0014 U	0.0013 U	0.0012 U	0.001 U	0.0012 U	0.0012 U	0.0012 U	0.001 U	0.001 U	0.00089 U	0.00069 U	0.00094 U	0.0011 U	0.0011 U	0.0016 U	0.0012 U
1,2-Dichloroethene, Total	NS	NS	0.0012 U	0.0013 U	0.00088 U	0.00093 U	0.0011 U	0.0019 U	0.0014 U	0.0013 U	0.0012 U	0.001 U	0.0012 U	0.0012 U	0.0012 U	0.001 U	0.001 U	0.00089 U	0.00069 U	0.00094 U	0.0011 U	0.0011 U	0.0016 U	0.0012 U
1,2-Dichloropropane	NS	NS	0.0012 U	0.0013 U	0.00088 U	0.00093 U	0.0011 U	0.0019 U	0.0014 U	0.0013 U	0.0012 U	0.001 U	0.0012 U	0.0012 U	0.0012 U	0.001 U	0.001 U	0.00089 U	0.00069 U	0.00094 U	0.0011 U	0.0011 U	0.0016 U	0.0012 U
1,3,5-Trimethylbenzene	8.4	190	0.0023 U	0.0026 U	0.0018 U	0.0018 U	0.0021 U	0.0039 U	0.0028 U	0.0027 U	0.0025 U	0.002 U	0.0025 U	0.0024 U	0.0024 U	0.0021 U	0.002 U	0.0018 U	0.0014 U	0.0019 U	0.0021 U	0.0022 U	0.0032 U	0.0023 U
1,3-Dichlorobenzene	2.4	280	0.0023 U	0.0026 U	0.0018 U	0.0018 U	0.0021 U	0.0039 U	0.0028 U	0.0027 U	0.0025 U	0.002 U	0.0025 U	0.0024 U	0.0024 U	0.0021 U	0.002 U	0.0018 U	0.0014 U	0.0019 U	0.0021 U	0.0022 U	0.0032 U	0.0023 U
1,3-Dichloropropene, Total	NS	NS	0.00058 U	0.00064 U	0.00059 J	0.0006 J	0.00053 U	0.00097 U	0.00069 U	0.00067 U	0.00063 U	0.00051 U	0.00062 U	0.00061 U	0.00061 U	0.00053 U	0.00051 U	0.00044 U	0.00034 U	0.00047 U	0.00054 U	0.00056 U	0.00079 U	0.00058 U
1,4-Dichlorobenzene	1.8	130	0.0023 U	0.00033 J	0.0018 U	0.0018 U	0.0021 U	0.0039 U	0.0028 U	0.0027 U	0.0025 U	0.002 U	0.0025 U	0.0024 U	0.0024 U	0.0021 U	0.002 U	0.0018 U	0.0014 U	0.0019 U	0.0021 U	0.0022 U	0.0032 U	0.0023 U
1,4-Dioxane	0.1	130	0.093 U	0.1 U	0.07 U	0.074 U	0.085 U	0.15 U'	0.11 U'	0.11 U'	0.1 U	0.081 U	0.1 U	0.097 U	0.098 U	0.085 U	0.081 U	0.071 U	0.055 U	0.075 U	0.086 U	0.089 U	0.13 U'	0.093 U
2-Butanone	0.12	500	0.012 U	0.013 U	0.0088 U	0.0093 U	0.011 U	0.019 U	0.014 U	0.013 U	0.012 U	0.01 U	0.012 U	0.012 U	0.012 U	0.01 U	0.01 U	0.0089 U	0.0069 U	0.0094 U	0.011 U	0.011 U	0.016 U	0.012 U
2-Hexanone	NS	NS	0.012 U	0.013 U	0.0088 U	0.0093 U	0.011 U	0.019 U	0.014 U	0.013 U	0.012 U	0.01 U	0.012 U	0.012 U	0.012 U	0.01 U	0.01 U	0.0089 U	0.0069 U	0.0094 U	0.011 U	0.011 U	0.016 U	0.012 U
4-Methyl-2-Pentanone	NS	NS	0.012 U	0.013 U	0.0088 U	0.0093 U	0.011 U	0.019 U	0.014 U	0.013 U	0.012 U	0.01 U	0.012 U	0.012 U	0.012 U	0.01 U	0.01 U	0.0089 U	0.0069 U	0.0094 U	0.011 U	0.011 U	0.016 U	0.012 U
Acetone	0.05	500	0.012 U	0.013 U	0.0088 U	0.0093 U	0.011 U	0.019 U	0.014 U	0.013 U	0.012 U	0.01 U	0.012 U	0.012 U	0.012 U	0.01 U	0.01 U	0.0089 U	0.0069 U	0.0094 U	0.011 U	0.011 U	0.016 U	0.012 U
Benzene	0.06	44	0.00058 U	0.00064 U	0.00044 U	0.00046 U	0.00053 U	0.00097 U	0.00069 U	0.00067 U	0.00063 U	0.00051 U	0.00062 U	0.00061 U	0.00061 U	0.00053 U	0.00051 U	0.00044 U	0.00034 U	0.00047 U	0.00054 U	0.00056 U	0.00079 U	0.00058 U
Bromochloromethane	NS	NS	0.0023 U	0.0026 U	0.0018 U	0.0018 U	0.0021 U	0.0039 U	0.0028 U	0.0027 U	0.0025 U	0.002 U	0.0025 U	0.0024 U	0.0024 U	0.0021 U	0.002 U	0.0018 U	0.0014 U	0.0019 U	0.0021 U	0.0022 U	0.0032 U	0.0023 U
Bromodichloromethane	NS	NS	0.00058 U	0.00064 U	0.00044 U	0.00046 U	0.00053 U	0.00097 U	0.00069 U	0.00067 U	0.00063 U	0.00051 U	0.00062 U	0.00061 U	0.00061 U	0.00053 U	0.00051 U	0.00044 U	0.00034 U	0.00047 U	0.00054 U	0.00056 U	0.00079 U	0.00058 U
Bromoform	NS	NS	0.0046 U	0.0051 U	0.0035 U	0.0037 U	0.0042 U	0.0077 U	0.0055 U	0.0054 U	0.005 U	0.0041 U	0.005 U	0.0048 U	0.0049 U	0.0042 U	0.0041 U	0.0036 U	0.0028 U	0.0038 U	0.0043 U	0.0044 U	0.0063 U	0.0046 U
Bromomethane	NS	NS	0.0023 U	0.0026 U	0.0018 U	0.0018 U	0.0021 U	0.0039 U	0.0028 U	0.0027 U	0.0025 U	0.002 U	0.0025 U	0.0024 U	0.0024 U	0.0021 U	0.002 U	0.0018 U	0.0014 U	0.0019 U	0.0021 U	0.0022 U	0.0032 U	0.0023 U
Carbon disulfide	NS	NS	0.012 U	0.013 U	0.0088 U	0.0093 U	0.011 U	0.019 U	0.014 U	0.013 U	0.012 U	0.01 U	0.012 U	0.012 U	0.012 U	0.01 U	0.01 U	0.0089 U	0.0069 U	0.0094 U	0.011 U	0.011 U	0.016 U	0.012 U
Carbon tetrachloride	0.76	22	0.0012 U	0.0013 U	0.00088 U	0.00093 U	0.0011 U	0.0019 U	0.0014 U	0.0013 U	0.0012 U	0.001 U	0.0012 U	0.0012 U	0.0012 U	0.001 U	0.001 U	0.00089 U	0.00069 U	0.00094 U	0.0011 U	0.0011 U	0.0016 U	0.0012 U
Chlorobenzene	1.1	500	0.00058 U	0.00064 U	0.00044 U	0.00046 U	0.00053 U	0.00097 U	0.00069 U	0.00067 U	0.00063 U	0.00051 U	0.00062 U	0.00061 U	0.00061 U	0.00053 U	0.00051 U	0.00044 U	0.00034 U	0.00047 U	0.00054 U	0.00056 U	0.00079 U	0.00058 U
Chloroethane	NS	NS	0.0023 U	0.0026 U	0.0018 U	0.0018 U	0.0021 U	0.0039 U	0.0028 U	0.0027 U	0.0025 U	0.002 U	0.0025 U	0.0024 U	0.0024 U	0.0021 U	0.002 U	0.0018 U	0.0014 U	0.0019 U	0.0021 U	0.0022 U	0.0032 U	0.0023 U
Chloroform	0.37	350	0.0017 U	0.0019 U	0.0013 U	0.0014 U	0.0016 U	0.0029 U	0.0021 U	0.002 U	0.0019 U	0.0015 U	0.0019 U	0.0018 U	0.0018 U	0.0016 U	0.0015 U	0.0013 U	0.001 U	0.0014 U	0.0016 U	0.0017 U	0.0024 U	0.0017 U
Chloromethane	NS	NS	0.0046 U	0.0051 U	0.0035 U	0.0037 U	0.0042 U	0.0077 U	0.0055 U	0.0054 U	0.005 U	0.0041 U	0.005 U	0.0048 U	0.0049 U	0.0042 U	0.0041 U	0.0036 U	0.0028 U	0.0038 U	0.0043 U	0.0044 U	0.0063 U	0.0046 U
cis-1,2-Dichloroethene	0.25	500	0.0012 U	0.0013 U	0.00088 U	0.00093 U	0.0011 U	0.0019 U	0.0014 U	0.0013 U	0.0012 U	0.001 U	0.0012 U	0.0012 U	0.0012 U	0.001 U	0.001 U	0.00089 U	0.00069 U	0.00094 U	0.0011 U	0.0011 U	0.0016 U	0.0012 U
cis-1,3-Dichloropropene	NS	NS	0.00058 U	0.00064 U	0.00044 U	0.00046 U	0.00053 U	0.00097 U	0.00069 U	0.00067 U	0.00063 U	0.00051 U	0.00062 U	0.00061 U	0.00061 U	0.00053 U	0.00051 U	0.00044 U	0.00034 U	0.00047 U	0.00054 U	0.00056 U	0.00079 U	0.00058 U
Cyclohexane	NS	NS	0.012 U	0.013 U	0.0088 U	0.0093 U	0.011 U	0.019 U	0.014 U	0.013 U	0.012 U	0.01 U	0.012 U	0.012 U	0.012 U	0.01 U	0.01 U	0.0089 U	0.0069 U	0.0094 U	0.011 U	0.011 U	0.016 U	0.012 U
Dibromochloromethane	NS	NS	0.0012 U	0.0013 U	0.00088 U	0.00093 U	0.0011 U	0.0019 U	0.0014 U	0.0013 U	0.0012 U	0.001 U	0.0012 U	0.0012 U	0.0012 U	0.001 U	0.001 U	0.00089 U	0.00069 U	0.00094 U	0.0011 U	0.0011 U	0.0016 U	0.0012 U
Dichlorodifluoromethane	NS	NS	0.012 U	0.013 U	0.0088 U	0.0093 U	0.011 U	0.019 U	0.014 U	0.013 U	0.012 U	0.01 U	0.012 U	0.012 U	0.012 U	0.01 U	0.01 U	0.0089 U	0.0069 U	0.0094 U	0.011 U	0.011 U	0.016 U	0.012 U
Ethylbenzene	1	390	0.0012 U	0.0013 U	0.00088 U	0.00093 U	0.0011 U	0.0019 U	0.0014 U	0.0013 U	0.0012 U	0.001 U	0.0012 U	0.0012 U	0.0012 U	0.001 U	0.001 U	0.00089 U	0.00069 U	0.00094 U	0.0011 U	0.0011 U	0.0016 U	0.0012 U
Isopropylbenzene	NS	NS	0.0012 U	0.0013 U	0.00088 U	0.00093 U	0.0011 U	0.0019 U	0.0014 U	0.0013 U	0.0012 U	0.001 U	0.0012 U	0.0012 U	0.0012 U	0.001 U	0.001 U	0.00089 U	0.00069 U	0.00094 U	0.0011 U	0.0011 U	0.0016 U	0.0012 U
Methyl Acetate	NS	NS	0.0046 U	0.0051 U	0.0035 U	0.0037 U	0.0042 U	0.0077 U	0.0055 U	0.0054 U	0.005 U	0.0041 U	0.005 U	0.0048 U	0.0049 U	0.0042 U	0.0041 U	0.0036 U	0.0028 U	0.0038 U	0.0043 U	0.0044 U	0.0063 U	0.0046 U
Methyl cyclohexane	NS	NS	0.0046 U	0.0051 U	0.0035 U	0.0037 U	0.0042 U	0.0077 U	0.0055 U	0.0054 U	0.005 U	0.0041 U	0.005 U	0.0048 U	0.0049 U	0.0042 U	0.0041 U	0.0036 U	0.0028 U	0.0038 U	0.0043 U	0.0044 U	0.0063 U	0.0046 U
Methyl tertiary butyl ether (MTBE)	0.93	500	0.0023 U	0.0026 U	0.0018 U	0.0018 U	0.0021 U	0.0039 U	0.0028 U	0.0027 U	0.0025 U	0.002 U	0.0025 U	0.0024 U	0.0024 U	0.0021 U	0.002 U	0.0018 U	0.0014 U	0.0019 U	0.0021 U	0.0022 U	0.0032 U	0.0023 U
Methylene chloride	0.05	500	0.0058 U	0.0064 U	0.0044 U	0.0046 U	0.0053 U	0.0097 U	0.0069 U	0.0067 U	0.0063 U	0.0051 U	0.0062 U	0.0061 U	0.0061 U	0.0053 U	0.0051 U	0.0044 U	0.0034 U	0.0047 U	0.0054 U	0.0056 U	0.0079 U	0.0058 U
n-Butylbenzene	12	500	0.0012 U	0.0013 U	0.00088 U	0.00093 U	0.0011 U	0.0019 U	0.0014 U	0.0013 U	0.0012 U	0.001 U	0.0012 U	0.0012 U	0.0012 U	0.001 U	0.001 U	0.00089 U	0.00069 U	0.00094 U	0.0011 U	0.0011 U	0.0016 U	0.0012 U
n-Propylbenzene	3.9	500	0.0012 U	0.0013 U	0.00088 U	0.00093 U	0.0011 U	0.0019 U	0.0014 U	0.0013 U	0.0012 U	0.001 U	0.0012 U	0.0012 U	0.0012 U	0.001 U	0.001 U	0.00089 U	0.00069 U	0.00094 U	0.0011 U	0.0011 U	0.0016 U	0.0012 U
sec-Butylbenzene	11	500	0.0012 U	0.0013 U	0.00088 U	0.00093 U	0.0011 U	0.0019 U	0.0014 U	0.0013 U	0.0012 U	0.001 U	0.0012 U	0.0012 U	0.0012 U	0.001 U	0.001 U	0.00089 U	0.00069 U	0.00094 U	0.0011 U	0.0011 U	0.0016 U	0.0012 U
Styrene	NS	NS	0.0012 U	0.0013 U	0.00088 U	0.00093 U	0.0011 U	0.0019 U	0.0014 U	0.0013 U	0.0012 U	0.001 U	0.0012 U	0.0012 U	0.0012 U	0.001 U	0.001 U	0.00089 U	0.00069 U	0.00094 U	0.0011 U	0.0011 U	0.0016 U	0.0012 U
tert-Butylbenzene	5.9	500	0.0023 U	0.0026 U	0.0018 U	0.0018 U	0.0021 U	0.0039 U	0.0028 U	0.0027 U	0.0025 U	0.002 U	0.0025 U	0.0024 U	0.0024 U	0.0021 U	0.002 U	0.0018 U	0.0014 U	0.0019 U	0.0021 U	0.0022 U	0.0032 U	0.0023 U
Tetrachloroethene	1.3	150	0.00058 U	0.00064 U	0.00044 U	0.00046 U	0.00053 U	0.00097 U	0.00069 U	0.00067 U	0.00063 U	0.00051 U	0.00062 U	0.00061 U	0.00061 U	0.00053 U	0.00051 U	0.00044 U	0.00034 U	0.00047 U	0.00054 U	0.00056 U	0.00079 U	0.00058 U
Toluene	0.7	500	0.0012 U	0.0013 U	0.00088 U	0.00093 U	0.0011 U	0.0019 U	0.0014 U	0.0013 U	0.0012 U	0.001 U	0.0012 U	0.0012 U	0.0012 U	0.001 U	0.001 U	0.00089 U	0.00069 U	0.00094 U	0.0011 U	0.0011 U	0.0016 U	0.0012 U
trans-1,2-Dichloroethene	0.19	500	0.0017 U	0.0019 U	0.0013 U	0.0014 U	0.0016 U	0.0029 U	0.0021 U	0.002 U	0.0019 U	0.0015 U	0.0019 U	0.0018 U	0.0018 U	0.0016 U	0.0015 U	0.0013 U	0.001 U	0.0014 U	0.0016 U	0.0017 U	0.0024 U	0.0017 U
trans-1,3-Dichloropropene	NS	NS	0.0012 U	0.0013 U	0.00059 J	0.0006 J	0.0011 U	0.0019 U	0.0014 U	0.0013 U	0.0012 U	0.001 U	0.0012 U	0.0012 U	0.0012 U	0.001 U	0.001 U	0.00089 U	0.00069 U	0.00094 U	0.0011 U	0.0011 U	0.0016 U	0.0012 U
Trichloroethene	0.47	200	0.00058 U	0.00064 U	0.00044 U	0.00046 U	0.00053 U	0.00097 U	0.00069 U	0.00067 U	0.00063 U	0.00051 U	0.00062 U	0.00061 U	0.00061 U	0.00053 U	0.00051 U	0.00044 U	0.00034 U	0.00047 U	0.00054 U	0.00056 U	0.00079 U	0.00058 U
Trichlorofluoromethane	NS	NS	0.0046 U	0.0051 U	0.0035 U	0.0037 U	0.0042 U	0.0077 U	0.0055 U	0.0054 U	0.005 U	0.0041 U	0.005 U	0.0048 U	0.0049 U	0.0042 U	0.0041 U	0.0036 U	0.0028 U	0.0038 U	0.0043 U	0.0044 U	0.0063 U	0.0046 U
Vinyl chloride	0.02	13	0.0012 U	0.0013 U	0.00088 U	0.00093 U	0.0011 U	0.0019 U	0.0014 U	0.0013 U	0.0012 U	0.001 U	0.0012 U	0.0012 U	0.0012 U	0.001 U	0.001 U	0.00089 U	0.00069 U	0.00094 U	0.0011 U	0.0011 U	0.0016 U	0.0012 U
Xylene (m&p)	NS	NS	0.0023 U	0.0026 U	0.0018 U	0.0018 U	0.0021 U	0.0039 U	0.0028 U	0.0027 U	0.0025 U	0.002 U	0.0025 U	0.0024 U	0.0024 U	0.0021 U	0.002 U	0.0018 U	0.0014 U	0.0019 U	0.0021 U	0.0022 U	0.0032 U	0.0023 U
Xylene (o)	NS	NS	0.0012 U	0.0013 U	0.00088 U	0.00093 U	0.0011 U	0.0019 U	0.0014 U	0.0013 U	0.0012 U	0.001 U	0.0012 U	0.0012 U	0.0012 U	0.001 U	0.001 U	0.00089 U	0.00069 U	0.00094 U	0.0011 U	0.0011 U	0.0016 U	0.0012 U
Xylenes (Total)	1.6	500	0.0012 U	0.0013 U	0.00088 U	0.00093 U	0.0011 U	0.0019 U	0.0014 U	0.0013 U	0.0012 U	0.001 U	0.0012 U	0.0012 U	0.0012 U	0.001 U	0.001 U	0.00089 U	0.00069 U	0.00094 U	0.0011 U	0.0011 U	0.0016 U	0.0012 U
Total Volatile TICs	NS	NS	ND	ND	0.00652 J	0.00462 J	0.0414 J	0.0105 J	0.00764 J	0.00726 J	0.00651 J	0.00544 J	0.00667 J	0.00706 J	ND	ND	0.0225 J	ND	ND	ND	ND	ND	ND	ND

Notes:

NYSDEC GW Protection SCO = New York State Department of Environmental Conservation Groundwater Protection Soil Cleanup Objectives, from Table 375-6.8 of 6 NYCRR Part 375.

NYSDEC Commercial SCO = New York State Department of Environmental Conservation Restricted Commercial Use Soil Cleanup Objectives, from Table 375-6.8 of 6 NYCRR Part 375.

ft bgs = Feet below ground surface.

mg/kg = Milligrams per kilogram.

Green concentrations exceed the NYSDEC GW Protection SCO.

Highlighted concentrations exceed the NYSDEC Commercial SCO.

— = Sample not analyzed.

NS = No standard currently established.

ND = Not Detected.

U = Not detected above laboratory detection limit.

U' = Laboratory reporting limit exceeds the applicable regulatory standard or criteria being utilized.

J = Result below the reporting limit (estimated value).

DUP = Duplicate sample was taken.

When the applicable state standard applies to mixed isomers and the laboratory reports individual isomers, the total standard is listed for each isomer.

* = Sample was analyzed twice by the laboratory. Higher detections were reported.

Table 5

Soil Reuse Characterization Sampling Results

Summary of Volatile Organic Compounds in Soil.

MJ Painting; Olean, New York.

Sample ID	NYSDEC GW Protection SCO	NYSDEC Commercial SCO	RX-223	RX-224	RX-225	RX-226	RX-227	RX-228	RX-229	RX-230	RX-231	RX-232	RX-233	RX-234	RX-235	RX-236	RX-237	RX-238	RX-239	RX-240	RX-241	RX-242	RX-243	RX-244	RX-245	RX-246
Sample Depth (ft bgs)			0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1
Sample Date			11/17/2021	11/17/2021	11/17/2021	11/17/2021	11/18/2021	11/17/2021	11/17/2021	11/18/2021	1/5/2022	1/5/2022	1/4/2022	1/4/2022	1/7/2022	1/7/2022	1/7/2022	1/7/2022	1/7/2022	1/7/2022	1/5/2022	1/5/2022	1/7/2022	1/7/2022	1/5/2022	1/5/2022
VOLATILE ORGANIC COMPOUNDS - 8260C (mg/kg)																										
1,1,1-Trichloroethane	0.68	500	0.00071 U	0.00057 U	0.0005 U	0.00051 U	0.00068 U	0.00074 U	0.00058 U	0.00066 U	0.00075 U	0.00071 U	0.00057 U	0.0008 U	0.00086 U	0.0011 U	0.00072 U	0.0007 U	0.00094 U	0.0012 U	0.00048 U	0.00083 U	0.0011 U	0.0008 U	0.00054 U	0.00062 U
1,1,2,2,-Tetrachloroethane	NS	NS	0.00071 U	0.00057 U	0.0005 U	0.00051 U	0.00068 U	0.00074 U	0.00058 U	0.00066 U	0.00075 U	0.00071 U	0.00057 U	0.0008 U	0.00086 U	0.0011 U	0.00072 U	0.0007 U	0.00094 U	0.0012 U	0.00048 U	0.00083 U	0.0011 U	0.0008 U	0.00054 U	0.00062 U
1,1,2-Trichloro-1,2,2-trifluoroethane	NS	NS	0.0057 U	0.0045 U	0.004 U	0.0041 U	0.0054 U	0.0059 U	0.0046 U	0.0053 U	0.006 U	0.0057 U	0.0046 U	0.0064 U	0.0069 U	0.0092 U	0.0058 U	0.0056 U	0.0075 U	0.0094 U	0.0038 U	0.0067 U	0.0086 U	0.0064 U	0.0043 U	0.0049 U
1,1,2-Trichloroethane	NS	NS	0.0014 U	0.0011 U	0.001 U	0.001 U	0.0014 U	0.0015 U	0.0012 U	0.0013 U	0.0015 U	0.0014 U	0.0011 U	0.0016 U	0.0017 U	0.0023 U	0.0014 U	0.0014 U	0.0019 U	0.0024 U	0.00096 U	0.0017 U	0.0021 U	0.0016 U	0.0011 U	0.0012 U
1,1,-Dichloroethene	0.33	500	0.0014 U	0.0011 U	0.001 U	0.001 U	0.0014 U	0.0015 U	0.0012 U	0.0013 U	0.0015 U	0.0014 U	0.0011 U	0.0016 U	0.0017 U	0.0023 U	0.0014 U	0.0014 U	0.0019 U	0.0024 U	0.00096 U	0.0017 U	0.0021 U	0.0016 U	0.0011 U	0.0012 U
1,1-Dichloroethane	0.27	240	0.0014 U	0.0011 U	0.001 U	0.001 U	0.0014 U	0.0015 U	0.0012 U	0.0013 U	0.0015 U	0.0014 U	0.0011 U	0.0016 U	0.0017 U	0.0023 U	0.0014 U	0.0014 U	0.0019 U	0.0024 U	0.00096 U	0.0017 U	0.0021 U	0.0016 U	0.0011 U	0.0012 U
1,2,3-Trichlorobenzene	NS	NS	0.0028 U	0.0023 U	0.002 U	0.002 U	0.0027 U	0.003 U	0.0023 U	0.0026 U	0.003 U	0.0028 U	0.0023 U	0.0032 U	0.0034 U	0.0046 U	0.0029 U	0.0028 U	0.0038 U	0.0047 U	0.0019 U	0.0033 U	0.0043 U	0.0032 U	0.0022 U	0.0025 U
1,2,4-Trichlorobenzene	NS	NS	0.0028 U	0.0023 U	0.002 U	0.002 U	0.0027 U	0.003 U	0.0023 U	0.0026 U	0.003 U	0.0028 U	0.0023 U	0.0032 U	0.0034 U	0.0046 U	0.0029 U	0.0028 U	0.0038 U	0.0047 U	0.0019 U	0.0033 U	0.0043 U	0.0032 U	0.0022 U	0.0025 U
1,2,4-Trimethylbenzene	3.6	190	0.0028 U	0.0023 U	0.002 U	0.002 U	0.0027 U	0.003 U	0.0023 U	0.0026 U	0.003 U	0.0028 U	0.0023 U	0.0032 U	0.0034 U	0.0046 U	0.0029 U	0.0028 U	0.0038 U	0.0047 U	0.0019 U	0.0033 U	0.0043 U	0.0032 U	0.0022 U	0.0025 U
1,2-Dibromo-3-chloropropane	NS	NS	0.0043 U	0.0034 U	0.003 U	0.0031 U	0.0041 U	0.0044 U	0.0035 U	0.004 U	0.0045 U	0.0043 U	0.0034 U	0.0048 U	0.0052 U	0.0069 U	0.0043 U	0.0042 U	0.0056 U	0.0071 U	0.0029 U	0.005 U	0.0064 U	0.0048 U	0.0032 U	0.0037 U
1,2-Dibromoethane	NS	NS	0.0014 U	0.0011 U	0.001 U	0.001 U	0.0014 U	0.0015 U	0.0012 U	0.0013 U	0.0015 U	0.0014 U	0.0011 U	0.0016 U	0.0017 U	0.0023 U	0.0014 U	0.0014 U	0.0019 U	0.0024 U	0.00096 U	0.0017 U	0.0021 U	0.0016 U	0.0011 U	0.0012 U
1,2-Dichlorobenzene	1.1	500	0.0028 U	0.0023 U	0.002 U	0.002 U	0.0027 U	0.003 U	0.0023 U	0.0026 U	0.003 U	0.0028 U	0.0023 U	0.0032 U	0.0034 U	0.0046 U	0.0029 U	0.0028 U	0.0038 U	0.0047 U	0.0019 U	0.0033 U	0.0043 U	0.0032 U	0.0022 U	0.0025 U
1,2-Dichloroethane	0.02	30	0.0014 U	0.0011 U	0.001 U	0.001 U	0.0014 U	0.0015 U	0.0012 U	0.0013 U	0.0015 U	0.0014 U	0.0011 U	0.0016 U	0.0017 U	0.0023 U	0.0014 U	0.0014 U	0.0019 U	0.0024 U	0.00096 U	0.0017 U	0.0021 U	0.0016 U	0.0011 U	0.0012 U
1,2-Dichloroethene, Total	NS	NS	0.0014 U	0.0011 U	0.001 U	0.001 U	0.0014 U	0.0015 U	0.0012 U	0.0013 U	0.0015 U	0.0014 U	0.0011 U	0.0016 U	0.0017 U	0.0023 U	0.0014 U	0.0014 U	0.0019 U	0.0024 U	0.00096 U	0.0017 U	0.0021 U	0.0016 U	0.0011 U	0.0012 U
1,2-Dichloropropane	NS	NS	0.0014 U	0.0011 U	0.001 U	0.001 U	0.0014 U	0.0015 U	0.0012 U	0.0013 U	0.0015 U	0.0014 U	0.0011 U	0.0016 U	0.0017 U	0.0023 U	0.0014 U	0.0014 U	0.0019 U	0.0024 U	0.00096 U	0.0017 U	0.0021 U	0.0016 U	0.0011 U	0.0012 U
1,3,5-Trimethylbenzene	8.4	190	0.0028 U	0.0023 U	0.002 U	0.002 U	0.0027 U	0.003 U	0.0023 U	0.0026 U	0.003 U	0.0028 U	0.0023 U	0.0032 U	0.0034 U	0.0046 U	0.0029 U	0.0028 U	0.0038 U	0.0047 U	0.0019 U	0.0033 U	0.0043 U	0.0032 U	0.0022 U	0.0025 U
1,3-Dichlorobenzene	2.4	280	0.0028 U	0.0023 U	0.002 U	0.002 U	0.0027 U	0.003 U	0.0023 U	0.0026 U	0.003 U	0.0028 U	0.0023 U	0.0032 U	0.0034 U	0.0046 U	0.0029 U	0.0028 U	0.0038 U	0.0047 U	0.0019 U	0.0033 U	0.0043 U	0.0032 U	0.0022 U	0.0025 U
1,3-Dichloropropene, Total	NS	NS	0.00071 U	0.00057 U	0.0005 U	0.00051 U	0.00068 U	0.00074 U	0.00058 U	0.00066 U	0.00075 U	0.00071 U	0.00057 U	0.0008 U	0.00086 U	0.0011 U	0.00072 U	0.0007 U	0.00094 U	0.0012 U	0.00048 U	0.00083 U	0.0011 U	0.0008 U	0.00054 U	0.00062 U
1,4-Dichlorobenzene	1.8	130	0.0028 U	0.0023 U	0.002 U	0.002 U	0.0027 U	0.003 U	0.0023 U	0.0026 U	0.003 U	0.0028 U	0.0023 U	0.0032 U	0.0034 U	0.0046 U	0.0029 U	0.0028 U	0.0038 U	0.0047 U	0.0019 U	0.0033 U	0.0043 U	0.0032 U	0.0022 U	0.0025 U
1,4-Dioxane	0.1	130	0.11 U'	0.091 U	0.081 U	0.082 U	0.11 U'	0.12 U'	0.093 U	0.11 U'	0.12 U'	0.11 U'	0.091 U	0.13 U'	0.14 U'	0.18 U'	0.12 U'	0.11 U'	0.15 U'	0.19 U'	0.076 U	0.13 U'	0.17 U'	0.13 U'	0.087 U	0.099 U
2-Butanone	0.12	500	0.014 U	0.011 U	0.01 U	0.01 U	0.014 U	0.015 U	0.012 U	0.013 U	0.015 U	0.014 U	0.011 U	0.016 U	0.017 U	0.023 U	0.014 U	0.014 U	0.019 U	0.024 U	0.0096 U	0.017 U	0.021 U	0.016 U	0.011 U	0.012 U
2-Hexanone	NS	NS	0.014 U	0.011 U	0.01 U	0.01 U	0.014 U	0.015 U	0.012 U	0.013 U	0.015 U	0.014 U	0.011 U	0.016 U	0.017 U	0.023 U	0.014 U	0.014 U	0.019 U	0.024 U	0.0096 U	0.017 U	0.021 U	0.016 U	0.011 U	0.012 U
4-Methyl-2-Pentanone	NS	NS	0.014 U	0.011 U	0.01 U	0.01 U	0.014 U	0.015 U	0.012 U	0.013 U	0.015 U	0.014 U	0.011 U	0.016 U	0.017 U	0.023 U	0.014 U	0.014 U	0.019 U	0.024 U	0.0096 U	0.017 U	0.021 U	0.016 U	0.011 U	0.012 U
Acetone	0.05	500	0.019	0.011 U	0.01 U	0.01 U	0.014 U	0.015 U	0.012 U	0.013 U	0.015 U	0.014 U	0.011 U	0.016 U	0.017 U	0.042	0.014 U	0.014 U	0.019 U	0.024 U	0.0096 U	0.017 U	0.021 U	0.016 U	0.011 U	0.012 U
Benzene	0.06	44	0.00071 U	0.00057 U	0.0005 U	0.00051 U	0.00068 U	0.00074 U	0.00058 U	0.00066 U	0.00075 U	0.00071 U	0.00057 U	0.0008 U	0.00086 U	0.0011 U	0.00072 U	0.0007 U	0.00094 U	0.0012 U	0.00048 U	0.00083 U	0.0011 U	0.0008 U	0.00054 U	0.00062 U
Bromochloromethane	NS	NS	0.0028 U	0.0023 U	0.002 U	0.002 U	0.0027 U	0.003 U	0.0023 U	0.0026 U	0.003 U	0.0028 U	0.0023 U	0.0032 U	0.0034 U	0.0046 U	0.0029 U	0.0028 U	0.0038 U	0.0047 U	0.0019 U	0.0033 U	0.0043 U	0.0032 U	0.0022 U	0.0025 U
Bromodichloromethane	NS	NS	0.00071 U	0.00057 U	0.0005 U	0.00051 U	0.00068 U	0.00074 U	0.00058 U	0.00066 U	0.00075 U	0.00071 U	0.00057 U	0.0008 U	0.00086 U	0.0011 U	0.00072 U	0.0007 U	0.00094 U	0.0012 U	0.00048 U	0.00083 U	0.0011 U	0.0008 U	0.00054 U	0.00062 U
Bromoform	NS	NS	0.0057 U	0.0045 U	0.004 U	0.0041 U	0.0054 U	0.0059 U	0.0046 U	0.0053 U	0.006 U	0.0057 U	0.0046 U	0.0064 U	0.0069 U	0.0092 U	0.0058 U	0.0056 U	0.0075 U	0.0094 U	0.0038 U	0.0067 U	0.0086 U	0.0064 U	0.0043 U	0.0049 U
Bromomethane	NS	NS	0.0028 U	0.0023 U	0.002 U	0.002 U	0.0027 U	0.003 U	0.0023 U	0.0026 U	0.003 U	0.0028 U	0.0023 U	0.0032 U	0.0034 U	0.0046 U	0.0029 U	0.0028 U	0.0038 U	0.0047 U	0.0019 U	0.0033 U	0.0043 U	0.0032 U	0.0022 U	0.0025 U
Carbon disulfide	NS	NS	0.014 U	0.011 U	0.01 U	0.01 U	0.014 U	0.015 U	0.012 U	0.013 U	0.015 U	0.014 U	0.011 U	0.016 U	0.017 U	0.023 U	0.014 U	0.014 U	0.019 U	0.024 U	0.0096 U	0.017 U	0.021 U	0.016 U	0.011 U	0.012 U
Carbon tetrachloride	0.76	22	0.0014 U	0.0011 U	0.001 U	0.001 U	0.0014 U	0.0015 U	0.0012 U	0.0013 U	0.0015 U	0.0014 U	0.0011 U	0.0016 U	0.0017 U	0.0023 U	0.0014 U	0.0014 U	0.0019 U	0.0024 U	0.00096 U	0.0017 U	0.0021 U	0.0016 U	0.0011 U	0.0012 U
Chlorobenzene	1.1	500	0.00071 U	0.00057 U	0.0005 U	0.00051 U	0.00068 U	0.00074 U	0.00058 U	0.00066 U	0.00075 U	0.00071 U	0.00057 U	0.0008 U	0.00086 U	0.0011 U	0.00072 U	0.0007 U	0.00094 U	0.0012 U	0.00048 U	0.00083 U	0.0011 U	0.0008 U	0.00054 U	0.00062 U
Chloroethane	NS	NS	0.0028 U	0.0023 U	0.002 U	0.002 U	0.0027 U	0.003 U	0.0023 U	0.0026 U	0.003 U	0.0028 U	0.0023 U	0.0032 U	0.0034 U	0.0046 U	0.0029 U	0.0028 U	0.0038 U	0.0047 U	0.0019 U	0.0033 U	0.0043 U	0.0032 U	0.0022 U	0.0025 U
Chloroform	0.37	350	0.0021 U	0.0017 U	0.0015 U	0.0015 U	0.002 U	0.0022 U	0.0017 U	0.002 U	0.0022 U	0.0021 U	0.0017 U	0.0024 U	0.0026 U	0.0034 U	0.0022 U	0.0021 U	0.0028 U	0.0035 U	0.0014 U	0.0025 U	0.0032 U	0.0024 U	0.0016 U	0.0018 U
Chloromethane	NS	NS	0.0057 U	0.0045 U	0.004 U	0.0041 U	0.0054 U	0.0059 U	0.0046 U	0.0053 U	0.006 U	0.0057 U	0.0046 U	0.0064 U	0.0069 U	0.0092 U	0.0058 U	0.0056 U	0.0075 U	0.0094 U	0.0038 U	0.0067 U	0.0086 U	0.0064 U	0.0043 U	0.0049 U
cis-1,2-Dichloroethene	0.25	500	0.0014 U	0.0011 U	0.001 U	0.001 U	0.0014 U	0.0015 U	0.0012 U	0.0013 U	0.0015 U	0.0014 U	0.0011 U	0.0016 U	0.0017 U	0.0023 U	0.0014 U	0.0014 U	0.0019 U	0.0024 U	0.00096 U	0.0017 U	0.0021 U	0.0016 U	0.0011 U	0.0012 U
cis-1,3-Dichloropropene	NS	NS	0.00071 U	0.00057 U	0.0005 U	0.00051 U	0.00068 U	0.00074 U	0.00058 U	0.00066 U	0.00075 U	0.00071 U	0.00057 U	0.0008 U	0.00086 U	0.0011 U	0.00072 U	0.0007 U	0.00094 U	0.0012 U	0.00048 U	0.00083 U	0.0011 U	0.0008 U	0.00054 U	0.00062 U
Cyclohexane	NS	NS	0.014 U	0.011 U	0.01 U	0.01 U	0.014 U	0.015 U	0.012 U	0.013 U	0.015 U	0.014 U	0.011 U	0.016 U	0.017 U	0.023 U	0.014 U	0.014 U	0.019 U	0.024 U	0.0096 U	0.017 U	0.021 U	0.016 U	0.011 U	0.012 U
Dibromochloromethane	NS	NS	0.0014 U	0.0011 U	0.001 U	0.001 U	0.0014 U	0.0015 U	0.0012 U	0.0013 U	0.0015 U	0.0014 U	0.0011 U	0.0016 U	0.0017 U	0.0023 U	0.0014 U	0.0014 U	0.0019 U	0.0024 U	0.00096 U	0.0017 U	0.0021 U	0.0016 U	0.0011 U	0.0012 U
Dichlorodifluoromethane	NS	NS	0.014 U	0.011 U	0.01 U	0.01 U	0.014 U	0.015 U	0.012 U	0.013 U	0.015 U	0.014 U	0.011 U	0.016 U	0.017 U	0.023 U	0.014 U	0.014 U	0.019 U	0.024 U	0.0096 U	0.017 U	0.021 U	0.016 U	0.011 U	0.012 U
Ethylbenzene	1	390	0.0014 U	0.0011 U	0.001 U	0.001 U	0.0014 U	0.0015 U	0.0012 U	0.0013 U	0.0015 U	0.0014 U	0.0011 U	0.0016 U	0.0017 U	0.0023 U	0.0014 U	0.0014 U	0.0019 U	0.0024 U	0.00096 U	0.0017 U	0.0021 U	0.0016 U	0.0011 U	0.0012 U
Isopropylbenzene	NS	NS	0.0014 U	0.0011 U	0.001 U	0.001 U	0.0014 U	0.0015 U	0.0012 U	0.0013 U	0.0015 U	0.0014 U	0.0011 U	0.0016 U	0.0017 U	0.0023 U	0.0014 U	0.0014 U	0.0019 U	0.0024 U	0.00096 U	0.0017 U	0.0021 U	0.0016 U	0.0011 U	0.0012 U
Methyl Acetate	NS	NS	0.0057 U	0.0045 U	0.004 U	0.0041 U	0.0054 U	0.0059 U	0.0046 U	0.0053 U	0.006 U	0.0057 U	0.0046 U	0.0064 U	0.0069 U	0.0092 U	0.0058 U	0.0056 U	0.0075 U	0.0094 U	0.0038 U	0.0058 J	0.0086 U	0.0064 U	0.0043 U	0.0049 U
Methyl cyclohexane	NS	NS	0.0057 U	0.0045 U	0.004 U	0.0041 U	0.0054 U	0.0059 U	0.0046 U	0.0053 U	0.006 U	0.0057 U	0.0046 U	0.0064 U	0.0069 U	0.0092 U	0.0058 U	0.0056 U	0.0075 U	0.0094 U	0.0038 U	0.0067 U	0.0086 U	0.0064 U	0.0043 U	0.0049 U
Methyl tertiary butyl ether (MTBE)	0.93	500	0.0028 U	0.0023 U	0.002 U	0.002 U	0.0027 U	0.003 U	0.0023 U	0.0026 U	0.003 U	0.0028 U	0.0023 U	0.0032 U	0.0034 U	0.0046 U	0.0029 U	0.0028 U	0.0038 U	0.0047 U	0.0019 U	0.0033 U	0.0043 U	0.0032 U	0.0022 U	0.0025 U
Methylene chloride	0.05	500	0.0071 U	0.0057 U	0.005 U	0.0051 U	0.0068 U	0.0074 U	0.0058 U	0.0066 U	0.0075 U	0.0071 U	0.0057 U	0.008 U	0.0086 U	0.011 U	0.0072 U	0.007 U	0.0094 U	0.012 U	0.0048 U	0.0083 U	0.011 U	0.008 U	0.0054 U	0.0062 U
n-Butylbenzene	12	500	0.0014 U	0.0011 U	0.001 U	0.001 U	0.0014 U	0.0015 U	0.0012 U	0.0013 U	0.0015 U	0.0014 U	0.0011 U	0.0016 U	0.0017 U	0.0023 U	0.0014 U	0.0014 U	0.0019 U	0.0024 U	0.00096 U	0.0017 U	0.0021 U	0.0016 U	0.0011 U	0.0012 U
n-Propylbenzene	3.9	500	0.0014 U	0.0011 U	0.001 U	0.001 U	0.0014 U	0.0015 U	0.0012 U	0.0013 U	0.0015 U	0.0014 U	0.0011 U	0.0016 U	0.0017 U	0.0023 U	0.0014 U	0.0014 U	0.0019 U	0.0024 U	0.00096 U	0.0017 U	0.0021 U	0.0016 U	0.0011 U	0.0012 U
sec-Butylbenzene	11	500	0.0014 U	0.0011 U	0.001 U	0.001 U	0.0014 U	0.0015 U	0.0012 U	0.0013 U	0.0015 U	0.0014 U	0.0011 U	0.0016 U	0.0017 U	0.0023 U	0.0014 U	0.0014 U	0.0019 U	0.0024 U	0.00096 U	0.0017 U	0.0021 U	0.0016 U	0.0011 U	0.0012 U
Styrene	NS	NS	0.0014 U	0.0011 U	0.001 U	0.001 U	0.0014 U	0.0015 U	0.0012 U	0.0013 U	0.0015 U	0.0014 U	0.0011 U	0.0016 U	0.0017 U	0.0023 U	0.0014 U	0.0014 U	0.0019 U	0.0024 U	0.00096 U	0.0017 U	0.0021 U	0.0016 U	0.0011 U	0.0012 U
tert-Butylbenzene	5.9	500	0.0028 U	0.0023 U	0.002 U	0.002 U	0.0027 U	0.003 U	0.0023 U	0.0026 U	0.003 U	0.0028 U	0.0023 U	0.0032 U	0.0034 U	0.0046 U	0.0029 U	0.0028 U	0.0038 U	0.0047 U	0.0019 U	0.0033 U	0.0043 U	0.0032 U	0.0022 U	0.0025 U
Tetrachloroethene	1.3	150	0.00071 U	0.00057 U	0.0005 U	0.00051 U	0.00068 U	0.00074 U	0.00058 U	0.00066 U	0.00075 U	0.00071 U	0.00057 U	0.0008 U	0.00086 U	0.0011 U	0.00072 U	0.0007 U	0.00094 U	0.0012 U	0.00048 U	0.00083 U	0.0011 U	0.0008 U	0.00054 U	0.00062 U
Toluene	0.7	500	0.0014 U	0.0011 U	0.001 U	0.001 U	0.0014 U	0.0015 U	0.0012 U	0.0013 U	0.0015 U	0.0014 U	0.0011 U	0.0016 U	0.0017 U	0.0023 U	0.0014 U	0.0014 U	0.0019 U	0.0024 U	0.00096 U	0.0017 U	0.0021 U	0.0016 U	0.0011 U	0.0012 U
trans-1,2-Dichloroethene	0.19	500	0.0021 U	0.0017 U	0.0015 U	0.0015 U	0.002 U	0.0022 U	0.0017 U	0.002 U	0.0022 U	0.0021 U	0.0017 U	0.0024 U	0.0026 U	0.0034 U	0.0022 U	0.0021 U	0.0028 U	0.0035 U	0.0014 U	0.0025 U	0.0032 U	0.0024 U	0.0016 U	0.0018 U
trans-1,3-Dichloropropene	NS	NS	0.0014 U	0.0011 U	0.001 U	0.001 U	0.0014 U	0.0015 U	0.0012 U	0.0013 U	0.0015 U	0.0014 U	0.0011 U	0.0016 U	0.0017 U	0.0023 U	0.0014 U	0.0014 U	0.0019 U	0.0024 U	0.00096 U	0.0017 U	0.0021 U	0.0016 U	0.0011 U	0.0012 U
Trichloroethene	0.47	200	0.00071 U	0.00057 U	0.0005 U	0.00051 U	0.00068 U	0.00074 U	0.00058 U	0.00066 U	0.00075 U	0.00071 U	0.00057 U	0.0008 U	0.00086 U	0.0011 U	0.00072 U	0.0007 U	0.00094 U	0.0012 U	0.00048 U	0.00083 U	0.0011 U	0.0008 U	0.00054 U	0.00062 U
Trichlorofluoromethane	NS	NS	0.0057 U	0.0045 U	0.004 U	0.0041 U	0.0054 U	0.0059 U	0.0046 U	0.0053 U	0.006 U	0.0057 U	0.0046 U	0.0064 U	0.0069 U	0.0092 U	0.0058 U	0.0056 U	0.0075 U	0.0094 U	0.0038 U	0.0067 U	0.0086 U	0.0064 U	0.0043 U	0.0049 U
Vinyl chloride	0.02	13	0.0014 U	0.0011 U	0.001 U	0.001 U	0.0014 U	0.0015 U	0.0012 U	0.0013 U	0.0015 U	0.0014 U	0.0011 U	0.0016 U	0.0017 U	0.0023 U	0.0014 U	0.0014 U	0.0019 U	0.0024 U	0.00096 U	0.0017 U	0.0021 U	0.0016 U	0.0011 U	0.0012 U
Xylene (m&p)	NS	NS	0.0028 U	0.0023 U	0.002 U	0.002 U	0.0027 U	0.003 U	0.0023 U	0.0026 U	0.003 U	0.0028 U	0.0023 U	0.0032 U	0.0034 U	0.0046 U	0.0029 U	0.0028 U	0.0038 U	0.0047 U	0.0019 U	0.0033 U	0.0043 U	0.0032 U	0.0022 U	0.0025 U
Xylene (o)	NS	NS	0.0014 U	0.0011 U	0.001 U	0.001 U	0.0014 U	0.0015 U	0.0012 U	0.0013 U	0.0015 U	0.0014 U	0.0011 U	0.0016 U	0.0017 U	0.0023 U	0.0014 U	0.0014 U	0.0019 U	0.0024 U	0.00096 U	0.0017 U	0.0021 U	0.0016 U	0.0011 U	0.0012 U
Xylenes (Total)	1.6	500	0.0014 U	0.0011 U	0.001 U	0.001 U	0.0014 U	0.0015 U	0.0012 U	0.0013 U	0.0015 U	0.0014 U	0.0011 U	0.0016 U	0.0017 U	0.0023 U	0.0014 U	0.0014 U	0.0019 U	0.0024 U	0.00096 U	0.0017 U	0.0021 U	0.0016 U	0.0011 U	0.0012 U
Total Volatile TICs	NS	NS	0.00368 J	ND	0.00399 J	0.0338 J	0.00889 J	0.00617 J	0.0239 J	0.00586 J	ND	0.00474 J	ND	ND	ND	0.00497 J	ND	ND	ND	ND	ND	ND	0.0792 J	ND	ND	ND

Notes:

NYSDEC GW Protection SCO = New York State Department of Environmental Conservation Groundwater Protection Soil Cleanup Objectives, from Table 375-6.8 of 6 NYCRR Part 375.

NYSDEC Commercial SCO = New York State Department of Environmental Conservation Restricted Commercial Use Soil Cleanup Objectives, from Table 375-6.8 of 6 NYCRR Part 375.

ft bgs = Feet below ground surface.

mg/kg = Milligrams per kilogram.

Green concentrations exceed the NYSDEC GW Protection SCO.

Highlighted concentrations exceed the NYSDEC Commercial SCO.

— = Sample not analyzed.

NS = No standard currently established.

ND = Not Detected.

U = Not detected above laboratory detection limit.

U' = Laboratory reporting limit exceeds the applicable regulatory standard or criteria being utilized.

J = Result below the reporting limit (estimated value).

DUP = Duplicate sample was taken.

When the applicable state standard applies to mixed isomers and the laboratory reports individual isomers, the total standard is listed for each isomer.

* = Sample was analyzed twice by the laboratory. Higher detections were reported.

Table 5
Soil Reuse Characterization Sampling Results
Summary of Volatile Organic Compounds in Soil.
MJ Painting; Olean, New York.

Sample ID	NYSDEC GW Protection SCO	NYSDEC Commercial SCO	RX-247	RX-247 DUP	RX-248	RX-401	RX-401	RX-401	RX-401	RX-401	RX-401	RX-402	RX-403	RX-403	RX-403	RX-403	RX-403	RX-404	RX-404	RX-404	RX-405	RX-405	RX-405	RX-405	RX-405	RX-405 DUP
Sample Depth (ft bgs)			0-1	0-1	0-1	0-1	4	6	7-10	7.5*	11.5	8	0-1	4	6*	9	11	7-10	8	11	0-1	3	6	7	11	11
Sample Date			1/7/2022	1/7/2022	1/7/2022	11/12/2021	11/12/2021	11/12/2021	11/12/2021	11/12/2021	11/12/2021	11/12/2021	11/12/2021	11/12/2021	11/12/2021	11/12/2021	11/12/2021	11/12/2021	11/12/2021	11/12/2021	11/15/2021	11/15/2021	11/15/2021	11/15/2021	11/15/2021	11/15/2021
VOLATILE ORGANIC COMPOUNDS - 8260C (mg/kg)																										
1,1,1-Trichloroethane	0.68	500	0.00057 U	0.00054 U	0.0006 U	0.00072 U	0.00076 U	0.0011 U	0.037 U	0.0006 U	0.033 U	0.033 U	0.0014 U	0.13 U	0.0014 U	0.035 U	0.028 U	0.034 U	0.036 U	0.029 U	0.00092 U	0.001 U	0.039 U	0.028 U	0.028 U	0.065 U
1,1,2,2,-Tetrachloroethane	NS	NS	0.00057 U	0.00054 U	0.0006 U	0.00072 U	0.00076 U	0.0011 U	0.037 U	0.0006 U	0.033 U	0.033 U	0.0014 U	0.13 U	0.0014 U	0.035 U	0.028 U	0.034 U	0.036 U	0.029 U	0.00092 U	0.001 U	0.039 U	0.028 U	0.028 U	0.065 U
1,1,2-Trichloro-1,2,2-trifluoroethane	NS	NS	0.0046 U	0.0043 U	0.0048 U	0.0057 U	0.006 U	0.0085 U	0.3 U	0.0048 U	0.26 U	0.26 U	0.011 U	1 U	0.011 U	0.28 U	0.22 U	0.27 U	0.29 U	0.23 U	0.0074 U	0.0081 U	0.31 U	0.22 U	0.23 U	0.52 U
1,1,2-Trichloroethane	NS	NS	0.0011 U	0.0011 U	0.0012 U	0.0014 U	0.0015 U	0.0021 U	0.074 U	0.0012 U	0.065 U	0.066 U	0.0027 U	0.26 U	0.0027 U	0.07 U	0.055 U	0.068 U	0.072 U	0.058 U	0.0018 U	0.002 U	0.078 U	0.056 U	0.057 U	0.13 U
1,1,-Dichloroethene	0.33	500	0.0011 U	0.0011 U	0.0012 U	0.0014 U	0.0015 U	0.0021 U	0.074 U	0.0012 U	0.065 U	0.066 U	0.0027 U	0.26 U	0.0027 U	0.07 U	0.055 U	0.068 U	0.072 U	0.058 U	0.0018 U	0.002 U	0.078 U	0.056 U	0.057 U	0.13 U
1,1-Dichloroethane	0.27	240	0.0011 U	0.0011 U	0.0012 U	0.0014 U	0.0015 U	0.0021 U	0.074 U	0.0012 U	0.065 U	0.066 U	0.0027 U	0.26 U	0.0027 U	0.07 U	0.055 U	0.068 U	0.072 U	0.058 U	0.0018 U	0.002 U	0.078 U	0.056 U	0.057 U	0.13 U
1,2,3-Trichlorobenzene	NS	NS	0.0023 U	0.0022 U	0.0024 U	0.0029 U	0.003 U	0.0042 U	0.15 U	0.0024 U	0.13 U	0.13 U	0.0054 U	0.52 U	0.0054 U	0.14 U	0.11 U	0.14 U	0.05 J	0.12 U	0.0037 U	0.0041 U	0.16 U	0.11 U	0.11 U	0.26 U
1,2,4-Trichlorobenzene	NS	NS	0.0023 U	0.0022 U	0.0024 U	0.0029 U	0.003 U	0.0042 U	0.15 U	0.0024 U	0.13 U	0.13 U	0.0054 U	0.52 U	0.0054 U	0.14 U	0.11 U	0.14 U	0.14 U	0.12 U	0.0037 U	0.0041 U	0.16 U	0.11 U	0.11 U	0.26 U
1,2,4-Trimethylbenzene	3.6	190	0.0023 U	0.0022 U	0.0024 U	0.0029 U	0.003 U	0.0042 U	0.081 J	0.13 J	0.43	0.069 J	0.0054 U	**7.6**	0.68	0.14 U	0.11 U	0.82	0.49	0.08 J	0.0037 U	0.0041 U	0.26	0.11 U	0.11 U	0.3
1,2-Dibromo-3-chloropropane	NS	NS	0.0034 U	0.0032 U	0.0036 U	0.0043 U	0.0045 U	0.0064 U	0.22 U	0.0036 U	0.2 U	0.2 U	0.0082 U	0.78 U	0.0081 U	0.21 U	0.16 U	0.2 U	0.22 U	0.18 U	0.0055 U	0.0061 U	0.23 U	0.17 U	0.17 U	0.39 U
1,2-Dibromoethane	NS	NS	0.0011 U	0.0011 U	0.0012 U	0.0014 U	0.0015 U	0.0021 U	0.074 U	0.0012 U	0.065 U	0.066 U	0.0027 U	0.26 U	0.0027 U	0.07 U	0.055 U	0.068 U	0.072 U	0.058 U	0.0018 U	0.002 U	0.078 U	0.056 U	0.057 U	0.13 U
1,2-Dichlorobenzene	1.1	500	0.0023 U	0.0022 U	0.0024 U	0.0029 U	0.003 U	0.0042 U	0.15 U	0.0024 U	0.13 U	0.13 U	0.0054 U	0.52 U	0.0054 U	0.14 U	0.11 U	0.14 U	0.14 U	0.12 U	0.0037 U	0.0041 U	0.16 U	0.11 U	0.11 U	0.26 U
1,2-Dichloroethane	0.02	30	0.0011 U	0.0011 U	0.0012 U	0.0014 U	0.0015 U	0.0021 U	0.074 U'	0.0012 U	0.065 U'	0.066 U'	0.0027 U	0.26 U'	0.0027 U	0.07 U'	0.055 U'	0.068 U'	0.072 U'	0.058 U'	0.0018 U	0.002 U	0.078 U'	0.056 U'	0.057 U'	0.13 U'
1,2-Dichloroethene, Total	NS	NS	0.0011 U	0.0011 U	0.0012 U	0.0014 U	0.0015 U	0.0021 U	0.074 U	0.0012 U	0.065 U	0.066 U	0.0027 U	0.26 U	0.0027 U	0.07 U	0.055 U	0.068 U	0.072 U	0.058 U	0.0018 U	0.002 U	0.078 U	0.056 U	0.057 U	0.13 U
1,2-Dichloropropane	NS	NS	0.0011 U	0.0011 U	0.0012 U	0.0014 U	0.0015 U	0.0021 U	0.074 U	0.0012 U	0.065 U	0.066 U	0.0027 U	0.26 U	0.0027 U	0.07 U	0.055 U	0.068 U	0.072 U	0.058 U	0.0018 U	0.002 U	0.078 U	0.056 U	0.057 U	0.13 U
1,3,5-Trimethylbenzene	8.4	190	0.0023 U	0.0022 U	0.0024 U	0.0029 U	0.003 U	0.0042 U	0.025 J	0.042 J	0.07 J	0.13 U	0.0054 U	1.2	0.18 J	0.14 U	0.11 U	0.44	0.57	0.12	0.0037 U	0.0041 U	0.083 J	0.015 J	0.034 J	0.67
1,3-Dichlorobenzene	2.4	280	0.0023 U	0.0022 U	0.0024 U	0.0029 U	0.003 U	0.0042 U	0.15 U	0.0024 U	0.13 U	0.13 U	0.0054 U	0.52 U	0.0054 U	0.14 U	0.11 U	0.14 U	0.14 U	0.12 U	0.0037 U	0.0041 U	0.16 U	0.11 U	0.11 U	0.26 U
1,3-Dichloropropene, Total	NS	NS	0.00057 U	0.00054 U	0.0006 U	0.00072 U	0.00076 U	0.0011 U	0.037 U	0.0006 U	0.033 U	0.033 U	0.0014 U	0.13 U	0.0014 U	0.035 U	0.028 U	0.034 U	0.036 U	0.029 U	0.00092 U	0.001 U	0.039 U	0.028 U	0.028 U	0.065 U
1,4-Dichlorobenzene	1.8	130	0.0023 U	0.0022 U	0.0024 U	0.0029 U	0.003 U	0.0042 U	0.15 U	0.0024 U	0.13 U	0.13 U	0.0054 U	0.052 J	0.0054 U	0.14 U	0.11 U	0.14 U	0.14 U	0.12 U	0.0037 U	0.0041 U	0.16 U	0.11 U	0.11 U	0.26 U
1,4-Dioxane	0.1	130	0.091 U	0.086 U	0.097 U	0.11 U'	0.12 U'	0.17 U'	5.9 U'	0.096 U	5.2 U'	5.3 U'	0.22 U'	21 U'	0.22 U'	5.6 U'	4.4 U'	5.4 U'	5.8 U'	4.7 U'	0.15 U'	0.16 U'	6.2 U'	4.4 U'	4.6 U'	10 U'
2-Butanone	0.12	500	0.011 U	0.011 U	0.012 U	0.014 U	0.015 U	0.046	0.74 U'	0.012 U	0.65 U'	0.66 U'	0.027 U	2.6 U'	0.027 U	0.7 U'	0.55 U'	0.68 U'	0.72 U'	0.58 U'	0.018 U	0.02 U	0.78 U'	0.56 U'	0.57 U'	1.3 U'
2-Hexanone	NS	NS	0.011 U	0.011 U	0.012 U	0.014 U	0.015 U	0.021 U	0.74 U	0.012 U	0.65 U	0.66 U	0.027 U	2.6 U	0.027 U	0.7 U	0.55 U	0.68 U	0.72 U	0.58 U	0.018 U	0.02 U	0.78 U	0.56 U	0.57 U	1.3 U
4-Methyl-2-Pentanone	NS	NS	0.011 U	0.011 U	0.012 U	0.014 U	0.015 U	0.021 U	0.74 U	0.012 U	0.65 U	0.66 U	0.027 U	2.6 U	0.027 U	0.7 U	0.55 U	0.68 U	0.72 U	0.58 U	0.018 U	0.02 U	0.78 U	0.56 U	0.57 U	1.3 U
Acetone	0.05	500	0.011 U	0.011 U	0.012 U	0.014 U	**0.055**	**0.16**	**0.53 J**	0.26	0.65 U'	0.66 U'	0.027 U	2.6 U'	**0.16**	0.7 U'	0.55 U'	0.68 U'	0.72 U'	0.58 U'	0.018 U	0.02 U	0.78 U'	0.56 U'	0.57 U'	1.3 U'
Benzene	0.06	44	0.00057 U	0.00054 U	0.0006 U	0.00072 U	0.00076 U	0.0011 U	0.037 U	0.0006 U	0.033 U	0.033 U	0.0014 U	**0.95**	**0.33**	0.035 U	0.028 U	0.032 J	0.057	0.028 J	0.00092 U	0.0011	**0.12**	0.024 J	0.024 J	**0.19**
Bromochloromethane	NS	NS	0.0023 U	0.0022 U	0.0024 U	0.0029 U	0.003 U	0.0042 U	0.15 U	0.0024 U	0.13 U	0.13 U	0.0054 U	0.52 U	0.0054 U	0.14 U	0.11 U	0.14 U	0.14 U	0.12 U	0.0037 U	0.0041 U	0.16 U	0.11 U	0.11 U	0.26 U
Bromodichloromethane	NS	NS	0.00057 U	0.00054 U	0.0006 U	0.00072 U	0.00076 U	0.0011 U	0.037 U	0.0006 U	0.033 U	0.033 U	0.0014 U	0.13 U	0.0014 U	0.035 U	0.028 U	0.034 U	0.036 U	0.029 U	0.00092 U	0.001 U	0.039 U	0.028 U	0.028 U	0.065 U
Bromoform	NS	NS	0.0046 U	0.0043 U	0.0048 U	0.0057 U	0.006 U	0.0085 U	0.3 U	0.0048 U	0.26 U	0.26 U	0.011 U	1 U	0.011 U	0.28 U	0.22 U	0.27 U	0.29 U	0.23 U	0.0074 U	0.0081 U	0.31 U	0.22 U	0.23 U	0.52 U
Bromomethane	NS	NS	0.0023 U	0.0022 U	0.0024 U	0.0029 U	0.003 U	0.0042 U	0.15 U	0.0024 U	0.13 U	0.13 U	0.0054 U	0.52 U	0.0054 U	0.14 U	0.11 U	0.14 U	0.14 U	0.12 U	0.0037 U	0.0041 U	0.16 U	0.11 U	0.11 U	0.26 U
Carbon disulfide	NS	NS	0.011 U	0.011 U	0.012 U	0.014 U	0.015 U	0.021 U	0.74 U	0.012 U	0.65 U	0.66 U	0.027 U	2.6 U	0.027 U	0.7 U	0.55 U	0.68 U	0.72 U	0.58 U	0.018 U	0.02 U	0.78 U	0.56 U	0.57 U	1.3 U
Carbon tetrachloride	0.76	22	0.0011 U	0.0011 U	0.0012 U	0.0014 U	0.0015 U	0.0021 U	0.074 U	0.0012 U	0.065 U	0.066 U	0.0027 U	0.26 U	0.0027 U	0.07 U	0.055 U	0.068 U	0.072 U	0.058 U	0.0018 U	0.002 U	0.078 U	0.056 U	0.057 U	0.13 U
Chlorobenzene	1.1	500	0.00057 U	0.00054 U	0.0006 U	0.00072 U	0.00076 U	0.0011 U	0.037 U	0.0006 U	0.033 U	0.033 U	0.0014 U	0.13 U	0.0014 U	0.035 U	0.028 U	0.034 U	0.036 U	0.029 U	0.00092 U	0.001 U	0.039 U	0.028 U	0.028 U	0.065 U
Chloroethane	NS	NS	0.0023 U	0.0022 U	0.0024 U	0.0029 U	0.003 U	0.0042 U	0.15 U	0.0024 U	0.13 U	0.13 U	0.0054 U	0.52 U	0.0054 U	0.14 U	0.11 U	0.14 U	0.14 U	0.12 U	0.0037 U	0.0041 U	0.16 U	0.11 U	0.11 U	0.26 U
Chloroform	0.37	350	0.0017 U	0.0016 U	0.0018 U	0.0022 U	0.0023 U	0.0032 U	0.11 U	0.0018 U	0.098 U	0.099 U	0.0041 U	0.39 U'	0.004 U	0.1 U	0.083 U	0.1 U	0.11 U	0.088 U	0.0028 U	0.003 U	0.12 U	0.083 U	0.086 U	0.19 U
Chloromethane	NS	NS	0.0046 U	0.0043 U	0.0048 U	0.0057 U	0.006 U	0.0085 U	0.3 U	0.0048 U	0.26 U	0.26 U	0.011 U	1 U	0.011 U	0.28 U	0.22 U	0.27 U	0.29 U	0.23 U	0.0074 U	0.0081 U	0.31 U	0.22 U	0.23 U	0.52 U
cis-1,2-Dichloroethene	0.25	500	0.0011 U	0.0011 U	0.0012 U	0.0014 U	0.0015 U	0.0021 U	0.074 U	0.0012 U	0.065 U	0.066 U	0.0027 U	0.26 U'	0.0027 U	0.07 U	0.055 U	0.068 U	0.072 U	0.058 U	0.0018 U	0.002 U	0.078 U	0.056 U	0.057 U	0.13 U
cis-1,3-Dichloropropene	NS	NS	0.00057 U	0.00054 U	0.0006 U	0.00072 U	0.00076 U	0.0011 U	0.037 U	0.0006 U	0.033 U	0.033 U	0.0014 U	0.13 U	0.0014 U	0.035 U	0.028 U	0.034 U	0.036 U	0.029 U	0.00092 U	0.001 U	0.039 U	0.028 U	0.028 U	0.065 U
Cyclohexane	NS	NS	0.011 U	0.011 U	0.012 U	0.014 U	0.0016 J	0.0014 J	0.37 J	0.44 J	1.2	0.66	0.027 U	8.6	1.3 J	1	1.4	1	3.4	0.98	0.018 U	0.0013 J	6	1.1	0.92	11
Dibromochloromethane	NS	NS	0.0011 U	0.0011 U	0.0012 U	0.0014 U	0.0015 U	0.0021 U	0.074 U	0.0012 U	0.065 U	0.066 U	0.0027 U	0.26 U	0.0027 U	0.07 U	0.055 U	0.068 U	0.072 U	0.058 U	0.0018 U	0.002 U	0.078 U	0.056 U	0.057 U	0.13 U
Dichlorodifluoromethane	NS	NS	0.011 U	0.011 U	0.012 U	0.014 U	0.015 U	0.021 U	0.74 U	0.012 U	0.65 U	0.66 U	0.027 U	2.6 U	0.027 U	0.7 U	0.55 U	0.68 U	0.72 U	0.58 U	0.018 U	0.02 U	0.78 U	0.56 U	0.57 U	1.3 U
Ethylbenzene	1	390	0.0011 U	0.0011 U	0.0012 U	0.0014 U	0.0015 U	0.0021 U	0.022 J	0.036 J	0.065 U	0.066 U	0.0027 U	**1.1**	0.22	0.07 U	0.055 U	0.081	0.067 J	0.034 J	0.0018 U	0.002 U	0.031 J	0.056 U	0.057 U	0.099 J
Isopropylbenzene	NS	NS	0.0011 U	0.0011 U	0.0012 U	0.0014 U	0.00084 J	0.0021 U	0.047 J	0.038 J	1.2	0.16	0.0027 U	1.6	0.2	0.26	0.33	0.21	0.7	0.13	0.0018 U	0.002 U	0.42	0.088	0.084	1.4
Methyl Acetate	NS	NS	0.0046 U	0.0043 U	0.0048 U	0.0057 U	0.006 U	0.0085 U	0.3 U	0.45	0.26 U	0.26 U	0.011 U	0.83 J	0.011 U	0.28 U	0.22 U	0.11 J	0.29 U	0.23 U	0.0074 U	0.0081 U	0.31 U	0.22 U	0.23 U	0.52 U
Methyl cyclohexane	NS	NS	0.0046 U	0.0043 U	0.0048 U	0.0057 U	0.0058 J	0.0036 J	1.7	1.8	24	3	0.011 U	98	5.7	2.5	4	4.3	14	3.8	0.0074 U	0.0081 U	18	2.9	2.4	36
Methyl tertiary butyl ether (MTBE)	0.93	500	0.0023 U	0.0022 U	0.0024 U	0.0029 U	0.003 U	0.0042 U	0.15 U	0.0024 U	0.13 U	0.13 U	0.0054 U	0.52 U	0.0054 U	0.14 U	0.11 U	0.14 U	0.14 U	0.12 U	0.0037 U	0.0041 U	0.16 U	0.11 U	0.11 U	0.26 U
Methylene chloride	0.05	500	0.0057 U	0.0054 U	0.006 U	0.0072 U	0.0076 U	0.011 U	0.37 U'	0.006 U	0.33 U'	0.33 U'	0.014 U	1.3 U'	0.014 U	0.35 U'	0.28 U'	0.34 U'	0.36 U'	0.29 U'	0.0092 U	0.01 U	0.39 U'	0.28 U'	0.28 U'	0.65 U'
n-Butylbenzene	12	500	0.0011 U	0.0011 U	0.0012 U	0.0014 U	0.0015 U	0.0021 U	0.23	0.15	1.2	0.19	0.0027 U	3.7	0.11 J	0.2	0.32	0.28	0.87	0.12	0.0018 U	0.002 U	0.18	0.026 J	0.048 J	0.93
n-Propylbenzene	3.9	500	0.0011 U	0.0011 U	0.0012 U	0.0014 U	0.0015 U	0.0021 U	0.045 J	0.093	2.4	0.26	0.0027 U	2.9	0.26	0.5	0.58	0.38	1.3	0.23	0.0018 U	0.002 U	0.67	0.16	0.15	2.5
sec-Butylbenzene	11	500	0.0011 U	0.0011 U	0.0012 U	0.0014 U	0.00054 J	0.0021 U	0.23	0.12	0.91	0.13	0.0027 U	1.8	0.12 J	0.24	0.26	0.12	0.34	0.054 J	0.0018 U	0.002 U	0.28	0.049 J	0.04 J	0.63
Styrene	NS	NS	0.0011 U	0.0011 U	0.0012 U	0.0014 U	0.0015 U	0.0021 U	0.074 U	0.0012 U	0.015 J	0.066 U	0.0027 U	0.067 J	0.0027 U	0.07 U	0.055 U	0.068 U	0.015 J	0.058 U	0.0018 U	0.002 U	0.078 U	0.039 J	0.043 J	0.082 J
tert-Butylbenzene	5.9	500	0.0023 U	0.0022 U	0.0024 U	0.0029 U	0.00032 J	0.0042 U	0.15	0.079 J	0.25	0.055 J	0.0054 U	0.7	0.031 J	0.045 J	0.052 J	0.014 J	0.041 J	0.12 U	0.0037 U	0.0041 U	0.04 J	0.11 U	0.11 U	0.066 J
Tetrachloroethene	1.3	150	0.00057 U	0.00054 U	0.0006 U	0.00072 U	0.00076 U	0.0011 U	0.037 U	0.0006 U	0.033 U	0.033 U	0.0014 U	0.13 U	0.0014 U	0.035 U	0.028 U	0.034 U	0.036 U	0.029 U	0.00092 U	0.001 U	0.039 U	0.028 U	0.028 U	0.065 U
Toluene	0.7	500	0.0011 U	0.0011 U	0.0012 U	0.0014 U	0.0015 U	0.0021 U	0.074 U	0.0012 U	0.036 J	0.066 U	0.0027 U	**1.2**	**1.7**	0.07 U	0.03 J	0.054 J	0.12	0.034 J	0.0018 U	0.002 U	0.28	0.036 J	0.031 J	0.31
trans-1,2-Dichloroethene	0.19	500	0.0017 U	0.0016 U	0.0018 U	0.0022 U	0.0023 U	0.0032 U	0.11 U	0.0018 U	0.098 U	0.099 U	0.0041 U	0.39 U'	0.004 U	0.1 U	0.083 U	0.1 U	0.11 U	0.088 U	0.0028 U	0.003 U	0.12 U	0.083 U	0.086 U	0.19 U
trans-1,3-Dichloropropene	NS	NS	0.0011 U	0.0011 U	0.0012 U	0.0014 U	0.0015 U	0.0021 U	0.074 U	0.0012 U	0.065 U	0.066 U	0.0027 U	0.26 U	0.0027 U	0.07 U	0.055 U	0.068 U	0.072 U	0.058 U	0.0018 U	0.002 U	0.078 U	0.056 U	0.057 U	0.13 U
Trichloroethene	0.47	200	0.00057 U	0.00054 U	0.0006 U	0.00072 U	0.00076 U	0.0011 U	0.037 U	0.0006 U	0.033 U	0.033 U	0.0014 U	0.13 U	0.0014 U	0.035 U	0.028 U	0.034 U	0.036 U	0.029 U	0.00092 U	0.001 U	0.039 U	0.028 U	0.028 U	0.065 U
Trichlorofluoromethane	NS	NS	0.0046 U	0.0043 U	0.0048 U	0.0057 U	0.006 U	0.0085 U	0.3 U	0.0048 U	0.26 U	0.26 U	0.011 U	1 U	0.011 U	0.28 U	0.22 U	0.27 U	0.29 U	0.23 U	0.0074 U	0.0081 U	0.31 U	0.22 U	0.23 U	0.52 U
Vinyl chloride	0.02	13	0.0011 U	0.0011 U	0.0012 U	0.0014 U	0.0015 U	0.0021 U	0.074 U'	0.0012 U	0.065 U'	0.066 U'	0.0027 U	0.26 U'	0.0027 U	0.07 U'	0.055 U'	0.068 U'	0.072 U'	0.058 U'	0.0018 U	0.002 U	0.078 U'	0.056 U'	0.057 U'	0.13 U'
Xylene (m&p)	NS	NS	0.0023 U	0.0022 U	0.0024 U	0.0029 U	0.003 U	0.0042 U	0.098 J	0.2	0.04 J	0.13 U	0.0054 U	6.2	2.3	0.14 U	0.11 U	0.35	1.2	0.17	0.0037 U	0.0041 U	0.8	0.053 J	0.064 J	1.3
Xylene (o)	NS	NS	0.0011 U	0.0011 U	0.0012 U	0.0014 U	0.0015 U	0.0021 U	0.042 J	0.03 J	0.044 J	0.066 U	0.0027 U	1.5	0.59	0.07 U	0.055 U	0.094	0.27	0.028 J	0.0018 U	0.002 U	0.16	0.056 U	0.057 U	0.22
Xylenes (Total)	1.6	500	0.0011 U	0.0011 U	0.0012 U	0.0014 U	0.0015 U	0.0021 U	0.14 J	0.23 J	0.084 J	0.066 U	0.0027 U	**7.7**	**2.9**	0.07 U	0.055 U	0.44	1.5	0.2 J	0.0018 U	0.002 U	0.96	0.053 J	0.064 J	1.5
Total Volatile TICs	NS	NS	0.00994 J	ND	0.0104 J	ND	ND	ND	ND	ND	ND	14.7 J	ND	ND	ND	ND	ND	67.5 J	67.5 J	67.5 J	ND	ND	ND	ND	ND	102 J

Notes:

NYSDEC GW Protection SCO = New York State Department of Environmental Conservation Groundwater Protection Soil Cleanup Objectives, from Table 375-6.8 of 6 NYCRR Part 375.

NYSDEC Commercial SCO = New York State Department of Environmental Conservation Restricted Commercial Use Soil Cleanup Objectives, from Table 375-6.8 of 6 NYCRR Part 375.

ft bgs = Feet below ground surface.

mg/kg = Milligrams per kilogram.

Green concentrations exceed the NYSDEC GW Protection SCO.

Highlighted concentrations exceed the NYSDEC Commercial SCO.

— = Sample not analyzed.

NS = No standard currently established.

ND = Not Detected.

U = Not detected above laboratory detection limit.

U' = Laboratory reporting limit exceeds the applicable regulatory standard or criteria being utilized.

J = Result below the reporting limit (estimated value).

DUP = Duplicate sample was taken.

When the applicable state standard applies to mixed isomers and the laboratory reports individual isomers, the total standard is listed for each isomer.

* = Sample was analyzed twice by the laboratory. Higher detections were reported.

Table 5
Soil Reuse Characterization Sampling Results
Summary of Volatile Organic Compounds in Soil.
MJ Painting; Olean, New York.

Sample ID	NYSDEC GW Protection SCO	NYSDEC Commercial SCO	RX-406	RX-407	RX-407	RX-407	RX-407	RX-407	RX-409	RX-409	RX-409	RX-409	RX-410	RX-410	RX-410	RX-411	RX-411	RX-411	RX-411	RX-411	RX-413	RX-413	RX-413	RX-414	RX-415	RX-415
Sample Depth (ft bgs)			11	0-1	3	6	8	11	4	7	8	11	8	10-12	11	3	6.5	7-10	8	12	3	9	11	6	5	7.5
Sample Date			11/15/2021	11/15/2021	11/15/2021	11/15/2021	11/15/2021	11/15/2021	11/12/2021	11/12/2021	11/12/2021	11/12/2021	11/12/2021	11/12/2021	11/12/2021	11/12/2021	11/12/2021	11/12/2021	11/12/2021	11/12/2021	11/15/2021	11/15/2021	11/15/2021	11/15/2021	11/16/2021	11/16/2021
VOLATILE ORGANIC COMPOUNDS - 8260C (mg/kg)																										
1,1,1-Trichloroethane	0.68	500	0.03 U	0.0007 U	0.001 U	0.00071 U	0.00075 U	0.033 U	0.00085 U	0.044 U	0.034 U	0.026 U	0.00065 U	0.00055 U	0.031 U	0.00089 U	0.077 U	0.032 U	0.038 U	0.031 U	0.00053 U	0.03 U	0.029 U	0.001 U	0.00082 U	0.00052 U
1,1,2,2,-Tetrachloroethane	NS	NS	0.03 U	0.0007 U	0.001 U	0.00071 U	0.00075 U	0.033 U	0.00085 U	0.044 U	0.034 U	0.026 U	0.00065 U	0.00055 U	0.031 U	0.00089 U	0.077 U	0.032 U	0.038 U	0.031 U	0.00053 U	0.03 U	0.029 U	0.001 U	0.00082 U	0.00052 U
1,1,2-Trichloro-1,2,2-trifluoroethane	NS	NS	0.24 U	0.0056 U	0.0083 U	0.0057 U	0.006 U	0.26 U	0.0068 U	0.35 U	0.27 U	0.21 U	0.0052 U	0.0044 U	0.25 U	0.0071 U	0.62 U	0.26 U	0.31 U	0.25 U	0.0042 U	0.24 U	0.24 U	0.0081 U	0.0066 U	0.0041 U
1,1,2-Trichloroethane	NS	NS	0.06 U	0.0014 U	0.0021 U	0.0014 U	0.0015 U	0.065 U	0.0017 U	0.087 U	0.067 U	0.053 U	0.0013 U	0.0011 U	0.062 U	0.0018 U	0.15 U	0.065 U	0.077 U	0.062 U	0.001 U	0.06 U	0.059 U	0.002 U	0.0016 U	0.001 U
1,1,-Dichloroethene	0.33	500	0.06 U	0.0014 U	0.0021 U	0.0014 U	0.0015 U	0.065 U	0.0017 U	0.087 U	0.067 U	0.053 U	0.0013 U	0.0011 U	0.062 U	0.0018 U	0.15 U	0.065 U	0.077 U	0.062 U	0.001 U	0.06 U	0.059 U	0.002 U	0.0016 U	0.001 U
1,1-Dichloroethane	0.27	240	0.06 U	0.0014 U	0.0021 U	0.0014 U	0.0015 U	0.065 U	0.0017 U	0.087 U	0.067 U	0.053 U	0.0013 U	0.0011 U	0.062 U	0.0018 U	0.15 U	0.065 U	0.077 U	0.062 U	0.001 U	0.06 U	0.059 U	0.002 U	0.0016 U	0.001 U
1,2,3-Trichlorobenzene	NS	NS	0.12 U	0.0028 U	0.0042 U	0.0028 U	0.003 U	0.13 U	0.0034 U	0.17 U	0.13 U	0.1 U	0.0026 U	0.0022 U	0.12 U	0.0036 U	0.31 U	0.13 U	0.15 U	0.12 U	0.0021 U	0.12 U	0.12 U	0.004 U	0.0033 U	0.0021 U
1,2,4-Trichlorobenzene	NS	NS	0.12 U	0.0028 U	0.0042 U	0.0028 U	0.003 U	0.13 U	0.0034 U	0.17 U	0.13 U	0.1 U	0.0026 U	0.0022 U	0.12 U	0.0036 U	0.31 U	0.13 U	0.15 U	0.12 U	0.0021 U	0.12 U	0.12 U	0.004 U	0.0033 U	0.0021 U
1,2,4-Trimethylbenzene	3.6	190	0.27	0.0028 U	0.0013 J	0.0013 J	0.004	0.7	0.0034 U	1.5	0.031 J	0.23	0.00099 J	0.055	0.11 J	0.0011 J	2.6	0.62	0.51	0.078 J	0.00038 J	0.058 J	0.16	0.004	0.0033 U	0.0021 U
1,2-Dibromo-3-chloropropane	NS	NS	0.18 U	0.0042 U	0.0062 U	0.0042 U	0.0045 U	0.2 U	0.0051 U	0.26 U	0.2 U	0.16 U	0.0039 U	0.0033 U	0.19 U	0.0053 U	0.46 U	0.19 U	0.23 U	0.18 U	0.0032 U	0.18 U	0.18 U	0.0061 U	0.0049 U	0.0031 U
1,2-Dibromoethane	NS	NS	0.06 U	0.0014 U	0.0021 U	0.0014 U	0.0015 U	0.065 U	0.0017 U	0.087 U	0.067 U	0.053 U	0.0013 U	0.0011 U	0.062 U	0.0018 U	0.15 U	0.065 U	0.077 U	0.062 U	0.001 U	0.06 U	0.059 U	0.002 U	0.0016 U	0.001 U
1,2-Dichlorobenzene	1.1	500	0.12 U	0.0028 U	0.0042 U	0.0028 U	0.003 U	0.13 U	0.0034 U	0.17 U	0.13 U	0.1 U	0.0026 U	0.0022 U	0.12 U	0.0036 U	0.31 U	0.13 U	0.15 U	0.12 U	0.0021 U	0.12 U	0.12 U	0.004 U	0.0033 U	0.0021 U
1,2-Dichloroethane	0.02	30	0.06 U'	0.0014 U	0.0021 U	0.0014 U	0.0015 U	0.065 U'	0.0017 U	0.087 U'	0.067 U'	0.053 U'	0.0013 U	0.0011 U	**0.021 J**	0.0018 U	0.15 U'	0.065 U'	0.077 U'	0.062 U'	0.001 U	0.06 U'	0.059 U'	0.002 U	0.0016 U	0.001 U
1,2-Dichloroethene, Total	NS	NS	0.06 U	0.0014 U	0.0021 U	0.0014 U	0.0015 U	0.065 U	0.0017 U	0.087 U	0.067 U	0.053 U	0.0013 U	0.0011 U	0.062 U	0.0018 U	0.15 U	0.065 U	0.077 U	0.062 U	0.001 U	0.06 U	0.059 U	0.002 U	0.0016 U	0.001 U
1,2-Dichloropropane	NS	NS	0.06 U	0.0014 U	0.0021 U	0.0014 U	0.0015 U	0.065 U	0.0017 U	0.087 U	0.067 U	0.053 U	0.0013 U	0.0011 U	0.062 U	0.0018 U	0.15 U	0.065 U	0.077 U	0.062 U	0.001 U	0.06 U	0.059 U	0.002 U	0.0016 U	0.001 U
1,3,5-Trimethylbenzene	8.4	190	0.22	0.0028 U	0.0012 J	0.00074 J	0.00096 J	0.3	0.0034 U	0.58	0.13 U	0.054 J	0.00036 J	0.023	0.059 J	0.0018 J	0.65	0.18	0.11 J	0.029 J	0.0021 U	0.12 U	0.068 J	0.0029 J	0.00042 J	0.0021 U
1,3-Dichlorobenzene	2.4	280	0.12 U	0.0028 U	0.0042 U	0.0028 U	0.003 U	0.13 U	0.0034 U	0.17 U	0.13 U	0.1 U	0.0026 U	0.0022 U	0.12 U	0.0036 U	0.31 U	0.13 U	0.15 U	0.12 U	0.0021 U	0.12 U	0.12 U	0.004 U	0.0033 U	0.0021 U
1,3-Dichloropropene, Total	NS	NS	0.03 U	0.0007 U	0.001 U	0.00071 U	0.00075 U	0.033 U	0.00085 U	0.044 U	0.034 U	0.026 U	0.00065 U	0.00055 U	0.031 U	0.00089 U	0.077 U	0.032 U	0.038 U	0.031 U	0.00053 U	0.03 U	0.029 U	0.001 U	0.00082 U	0.00052 U
1,4-Dichlorobenzene	1.8	130	0.12 U	0.0028 U	0.0042 U	0.0028 U	0.003 U	0.13 U	0.0034 U	0.17 U	0.13 U	0.1 U	0.0026 U	0.0022 U	0.12 U	0.0036 U	0.31 U	0.13 U	0.15 U	0.12 U	0.0021 U	0.12 U	0.12 U	0.004 U	0.0033 U	0.0021 U
1,4-Dioxane	0.1	130	4.8 U'	0.11 U'	0.17 U'	0.11 U'	0.12 U'	5.2 U'	0.14 U'	7 U'	5.4 U'	4.2 U'	0.1 U	0.088 U	5 U'	0.14 U'	12 U'	5.2 U'	6.1 U'	4.9 U'	0.085 U	4.8 U'	4.7 U'	0.16 U'	0.13 U'	0.082 U
2-Butanone	0.12	500	0.6 U'	0.014 U	0.059	0.045	0.015 U	0.65 U'	0.01 J	0.87 U'	0.67 U'	0.53 U'	0.011 J	0.011 U	0.62 U'	0.018 U	1.5 U'	0.65 U'	0.77 U'	0.62 U'	0.01 U	0.6 U'	0.59 U'	0.046	0.023	0.01 U
2-Hexanone	NS	NS	0.6 U	0.014 U	0.021 U	0.014 U	0.015 U	0.65 U	0.017 U	0.87 U	0.67 U	0.53 U	0.013 U	0.011 U	0.62 U	0.018 U	1.5 U	0.65 U	0.77 U	0.62 U	0.01 U	0.6 U	0.59 U	0.02 U	0.016 U	0.01 U
4-Methyl-2-Pentanone	NS	NS	0.6 U	0.014 U	0.021 U	0.014 U	0.015 U	0.65 U	0.017 U	0.87 U	0.67 U	0.53 U	0.013 U	0.011 U	0.62 U	0.018 U	1.5 U	0.65 U	0.77 U	0.62 U	0.01 U	0.6 U	0.59 U	0.02 U	0.016 U	0.01 U
Acetone	0.05	500	0.6 U'	0.014 U	**0.22**	**0.094**	**0.053**	0.65 U'	0.044	0.87 U'	0.67 U'	0.53 U'	0.039	0.011 U	0.62 U'	0.025	1.5 U'	0.65 U'	0.77 U'	0.62 U'	0.01 U	0.6 U'	0.59 U'	**0.14**	**0.25**	0.02
Benzene	0.06	44	0.03 U	0.0007 U	0.0012	0.0018	0.0038	0.033 U	0.00085 U	0.049	0.034 U	0.026 U	0.00083	0.011	0.035	0.0082	**0.29**	0.056	**0.13**	0.046	0.0016	0.03 U	0.029 U	0.0008 J	0.00082 U	0.00017 J
Bromochloromethane	NS	NS	0.12 U	0.0028 U	0.0042 U	0.0028 U	0.003 U	0.13 U	0.0034 U	0.17 U	0.13 U	0.1 U	0.0026 U	0.0022 U	0.12 U	0.0036 U	0.31 U	0.13 U	0.15 U	0.12 U	0.0021 U	0.12 U	0.12 U	0.004 U	0.0033 U	0.0021 U
Bromodichloromethane	NS	NS	0.03 U	0.0007 U	0.001 U	0.00071 U	0.00075 U	0.033 U	0.00085 U	0.044 U	0.034 U	0.026 U	0.00065 U	0.00055 U	0.031 U	0.00089 U	0.077 U	0.032 U	0.038 U	0.031 U	0.00053 U	0.03 U	0.029 U	0.001 U	0.00082 U	0.00052 U
Bromoform	NS	NS	0.24 U	0.0056 U	0.0083 U	0.0057 U	0.006 U	0.26 U	0.0068 U	0.35 U	0.27 U	0.21 U	0.0052 U	0.0044 U	0.25 U	0.0071 U	0.62 U	0.26 U	0.31 U	0.25 U	0.0042 U	0.24 U	0.24 U	0.0081 U	0.0066 U	0.0041 U
Bromomethane	NS	NS	0.12 U	0.0028 U	0.0042 U	0.0028 U	0.003 U	0.13 U	0.0034 U	0.17 U	0.13 U	0.1 U	0.0026 U	0.0022 U	0.12 U	0.0036 U	0.31 U	0.13 U	0.15 U	0.12 U	0.0021 U	0.12 U	0.12 U	0.004 U	0.0033 U	0.0021 U
Carbon disulfide	NS	NS	0.6 U	0.014 U	0.021 U	0.014 U	0.015 U	0.65 U	0.017 U	0.87 U	0.67 U	0.53 U	0.013 U	0.011 U	0.62 U	0.018 U	1.5 U	0.65 U	0.77 U	0.62 U	0.01 U	0.6 U	0.59 U	0.02 U	0.016 U	0.01 U
Carbon tetrachloride	0.76	22	0.06 U	0.0014 U	0.0021 U	0.0014 U	0.0015 U	0.065 U	0.0017 U	0.087 U	0.067 U	0.053 U	0.0013 U	0.0011 U	0.062 U	0.0018 U	0.15 U	0.065 U	0.077 U	0.062 U	0.001 U	0.06 U	0.059 U	0.002 U	0.0016 U	0.001 U
Chlorobenzene	1.1	500	0.03 U	0.0007 U	0.001 U	0.00071 U	0.00075 U	0.033 U	0.00085 U	0.044 U	0.034 U	0.026 U	0.00065 U	0.00055 U	0.0082 J	0.00089 U	0.077 U	0.032 U	0.038 U	0.031 U	0.00053 U	0.03 U	0.029 U	0.001 U	0.00032 J	0.00052 U
Chloroethane	NS	NS	0.12 U	0.0028 U	0.0042 U	0.0028 U	0.003 U	0.13 U	0.0034 U	0.17 U	0.13 U	0.1 U	0.0026 U	0.0022 U	0.12 U	0.0036 U	0.31 U	0.13 U	0.15 U	0.12 U	0.0021 U	0.12 U	0.12 U	0.004 U	0.0033 U	0.0021 U
Chloroform	0.37	350	0.091 U	0.0021 U	0.0031 U	0.0021 U	0.0022 U	0.098 U	0.0025 U	0.13 U	0.1 U	0.079 U	0.0019 U	0.0016 U	0.094 U	0.0027 U	0.23 U	0.097 U	0.12 U	0.092 U	0.0016 U	0.09 U	0.088 U	0.003 U	0.0025 U	0.0015 U
Chloromethane	NS	NS	0.24 U	0.0056 U	0.0083 U	0.0057 U	0.006 U	0.26 U	0.0068 U	0.35 U	0.27 U	0.21 U	0.0052 U	0.0044 U	0.25 U	0.0071 U	0.62 U	0.26 U	0.31 U	0.25 U	0.0042 U	0.24 U	0.24 U	0.0081 U	0.0066 U	0.0041 U
cis-1,2-Dichloroethene	0.25	500	0.06 U	0.0014 U	0.0021 U	0.0014 U	0.0015 U	0.065 U	0.0017 U	0.087 U	0.067 U	0.053 U	0.0013 U	0.0011 U	0.062 U	0.0018 U	0.15 U	0.065 U	0.077 U	0.062 U	0.001 U	0.06 U	0.059 U	0.002 U	0.0016 U	0.001 U
cis-1,3-Dichloropropene	NS	NS	0.03 U	0.0007 U	0.001 U	0.00071 U	0.00075 U	0.033 U	0.00085 U	0.044 U	0.034 U	0.026 U	0.00065 U	0.00055 U	0.031 U	0.00089 U	0.077 U	0.032 U	0.038 U	0.031 U	0.00053 U	0.03 U	0.029 U	0.001 U	0.00082 U	0.00052 U
Cyclohexane	NS	NS	3.7	0.014 U	0.0018 J	0.0031 J	0.016	5	0.017 U	0.16 J	0.64 J	2	0.00086 J	0.33	2.4	0.071	4.6	3.5	4.2	0.68	0.0012 J	0.3 J	1.2	0.032	0.028	0.042
Dibromochloromethane	NS	NS	0.06 U	0.0014 U	0.0021 U	0.0014 U	0.0015 U	0.065 U	0.0017 U	0.087 U	0.067 U	0.053 U	0.0013 U	0.0011 U	0.062 U	0.0018 U	0.15 U	0.065 U	0.077 U	0.062 U	0.001 U	0.06 U	0.059 U	0.002 U	0.0016 U	0.001 U
Dichlorodifluoromethane	NS	NS	0.6 U	0.014 U	0.021 U	0.014 U	0.015 U	0.65 U	0.017 U	0.87 U	0.67 U	0.53 U	0.013 U	0.011 U	0.62 U	0.018 U	1.5 U	0.65 U	0.77 U	0.62 U	0.01 U	0.6 U	0.59 U	0.02 U	0.016 U	0.01 U
Ethylbenzene	1	390	0.03 J	0.0014 U	0.00053 J	0.00026 J	0.0005 J	0.38	0.0017 U	0.19	0.067 U	0.053 U	0.00026 J	0.0084	0.009 J	0.0065	0.26	0.23	0.13	0.01 J	0.0002 J	0.06 U	0.016 J	0.00073 J	0.0016 U	0.001 U
Isopropylbenzene	NS	NS	0.46	0.0014 U	0.00063 J	0.00046 J	0.00091 J	0.95	0.00024 J	0.12	0.15	0.37	0.00041 J	0.03	0.1	0.0013 J	1	1.6	1.3	0.23	0.001 U	0.15	0.56	0.00058 J	0.0016 U	0.00038 J
Methyl Acetate	NS	NS	0.065 J	0.0056 U	0.0083 U	0.0057 U	0.006 U	0.26 U	0.0068 U	0.35	0.12 J	0.21 U	0.0052 U	0.0044 U	0.25 U	0.0071 U	0.41 J	0.26 U	0.31 U	0.25 U	0.0042 U	0.24 U	0.24 U	0.0081 U	0.0066 U	0.0041 U
Methyl cyclohexane	NS	NS	11	0.0056 U	0.0063 J	0.0073	0.05	15	0.0014 J	1.1	3.4	12	0.0032 J	8.1	6.5	0.28	25	17	18	1.9	0.0011 J	1.7	4.2	0.07	0.03	0.071
Methyl tertiary butyl ether (MTBE)	0.93	500	0.12 U	0.0028 U	0.0042 U	0.0028 U	0.003 U	0.13 U	0.0034 U	0.17 U	0.13 U	0.1 U	0.0026 U	0.0022 U	0.12 U	0.0036 U	0.31 U	0.13 U	0.15 U	0.12 U	0.0021 U	0.12 U	0.12 U	0.004 U	0.0033 U	0.0021 U
Methylene chloride	0.05	500	0.3 U'	0.007 U	0.01 U	0.0071 U	0.0075 U	0.33 U'	0.0085 U	0.44 U'	0.34 U'	0.26 U'	0.0065 U	0.0055 U	0.31 U'	0.0089 U	0.77 U'	0.32 U'	0.38 U'	0.31 U'	0.0053 U	0.3 U'	0.29 U'	0.01 U	0.043	0.0052 U
n-Butylbenzene	12	500	0.62	0.0014 U	0.0021 U	0.0014 U	0.0034	1	0.0017 U	0.25	0.31	0.36	0.00036 J	0.012	0.057 J	0.00061 J	0.46	1.6	1.2	0.23	0.001 U	0.15	0.64	0.002 U	0.0016 U	0.001 U
n-Propylbenzene	3.9	500	1	0.0014 U	0.0006 J	0.0014 U	0.0014 J	2.1	0.0017 U	0.34	0.08	0.7	0.00046 J	0.05	0.18	0.002	1.6	3.4	2.6	0.42	0.001 U	0.32	1	0.00051 J	0.0016 U	0.001 U
sec-Butylbenzene	11	500	0.27	0.0014 U	0.00036 J	0.00043 J	0.0021	0.33	0.0017 U	0.21	0.44	0.36	0.00053 J	0.0076	0.038 J	0.00054 J	0.29	0.72	0.54	0.11	0.001 U	0.062	0.21	0.00034 J	0.0016 U	0.0027
Styrene	NS	NS	0.046 J	0.0014 U	0.0021 U	0.0014 U	0.0015 U	0.065 U	0.0017 U	0.072 J	0.02 J	0.053 U	0.0013 U	0.0011 U	0.062 U	0.0018 U	0.15 U	0.065 U	0.077 U	0.062 U	0.001 U	0.06 U	0.059 U	0.002 U	0.0016 U	0.001 U
tert-Butylbenzene	5.9	500	0.026 J	0.0028 U	0.0042 U	0.0028 U	0.003 U	0.024 J	0.0034 U	0.48	0.2	0.08 J	0.00028 J	0.0011 J	0.12 U	0.00021 J	0.069 J	0.12 J	0.092 J	0.016 J	0.0021 U	0.12 U	0.021 J	0.004 U	0.00023 J	0.0032
Tetrachloroethene	1.3	150	0.03 U	0.0007 U	0.001 U	0.00071 U	0.00075 U	0.033 U	0.00085 U	0.044 U	0.034 U	0.026 U	0.00065 U	0.00055 U	0.031 U	0.00089 U	0.077 U	0.032 U	0.038 U	0.031 U	0.00053 U	0.03 U	0.029 U	0.001 U	0.00082 U	0.00052 U
Toluene	0.7	500	0.039 J	0.0014 U	0.0021 U	0.002	0.0043	0.053 J	0.0017 U	0.074 J	0.067 U	0.04 J	0.0011 J	0.051	0.065	0.007	0.34	0.16	0.19	0.038 J	0.001 U	0.06 U	0.038 J	0.0018 J	0.0016 U	0.00073 J
trans-1,2-Dichloroethene	0.19	500	0.091 U	0.0021 U	0.0031 U	0.0021 U	0.0022 U	0.098 U	0.0025 U	0.13 U	0.1 U	0.079 U	0.0019 U	0.0016 U	0.094 U	0.0027 U	0.23 U'	0.097 U	0.12 U	0.092 U	0.0016 U	0.09 U	0.088 U	0.003 U	0.0025 U	0.0015 U
trans-1,3-Dichloropropene	NS	NS	0.06 U	0.0014 U	0.0021 U	0.0014 U	0.0015 U	0.065 U	0.0017 U	0.087 U	0.067 U	0.053 U	0.0013 U	0.0011 U	0.062 U	0.0018 U	0.15 U	0.065 U	0.077 U	0.062 U	0.001 U	0.06 U	0.059 U	0.002 U	0.0016 U	0.001 U
Trichloroethene	0.47	200	0.03 U	0.0007 U	0.001 U	0.00071 U	0.00075 U	0.033 U	0.00085 U	0.044 U	0.034 U	0.026 U	0.00065 U	0.00055 U	0.031 U	0.00089 U	0.077 U	0.032 U	0.038 U	0.031 U	0.00053 U	0.03 U	0.029 U	0.001 U	0.00082 U	0.00052 U
Trichlorofluoromethane	NS	NS	0.24 U	0.0056 U	0.0083 U	0.0057 U	0.006 U	0.26 U	0.0068 U	0.35 U	0.27 U	0.21 U	0.0052 U	0.0044 U	0.25 U	0.0071 U	0.62 U	0.26 U	0.31 U	0.25 U	0.0042 U	0.24 U	0.24 U	0.0081 U	0.0066 U	0.0041 U
Vinyl chloride	0.02	13	0.06 U'	0.0014 U	0.0021 U	0.0014 U	0.0015 U	0.065 U'	0.0017 U	0.087 U'	0.067 U'	0.053 U'	0.0013 U	0.0011 U	0.062 U'	0.0018 U	0.15 U'	0.065 U'	0.077 U'	0.062 U'	0.001 U	0.06 U'	0.059 U'	0.002 U	0.0016 U	0.001 U
Xylene (m&p)	NS	NS	0.48	0.0028 U	0.0028 J	0.0023 J	0.003	0.54	0.0034 U	0.56	0.13 U	0.11	0.0013 J	0.092	0.16	0.011	1.5	0.66	0.55	0.14	0.0021 U	0.12 U	0.11 J	0.0042	0.0033 U	0.0021 U
Xylene (o)	NS	NS	0.11	0.0014 U	0.0012 J	0.0011 J	0.0013 J	0.2	0.0017 U	0.1	0.022 J	0.028 J	0.00086 J	0.017	0.041 J	0.005	0.43	0.19	0.16	0.038 J	0.001 U	0.06 U	0.035 J	0.0025	0.0016 U	0.00033 J
Xylenes (Total)	1.6	500	0.59	0.0014 U	0.004 J	0.0034 J	0.0043 J	0.74	0.0017 U	0.66	0.022 J	0.14 J	0.0022 J	0.11	0.2 J	0.016	**1.9**	0.85	0.71	0.18 J	0.001 U	0.06 U	0.15 J	0.0067	0.0016 U	0.00033 J
Total Volatile TICs	NS	NS	75.7 J	ND	ND	ND	ND	ND	0.0671 J	0.0671 J	0.0671 J	0.0671 J	0.251 J	0.251 J	0.251 J	0.394 J	0.394 J	0.394 J	0.394 J	0.394 J	0.0324 J	0.0324 J	0.0324 J	0.298 J	0.527 J	0.527 J

Notes:

NYSDEC GW Protection SCO = New York State Department of Environmental Conservation Groundwater Protection Soil Cleanup Objectives, from Table 375-6.8 of 6 NYCRR Part 375.

NYSDEC Commercial SCO = New York State Department of Environmental Conservation Restricted Commercial Use Soil Cleanup Objectives, from Table 375-6.8 of 6 NYCRR Part 375.

ft bgs = Feet below ground surface.

mg/kg = Milligrams per kilogram.

Green concentrations exceed the NYSDEC GW Protection SCO.

Highlighted concentrations exceed the NYSDEC Commercial SCO.

— = Sample not analyzed.

NS = No standard currently established.

ND = Not Detected.

U = Not detected above laboratory detection limit.

U' = Laboratory reporting limit exceeds the applicable regulatory standard or criteria being utilized.

J = Result below the reporting limit (estimated value).

DUP = Duplicate sample was taken.

When the applicable state standard applies to mixed isomers and the laboratory reports individual isomers, the total standard is listed for each isomer.

* = Sample was analyzed twice by the laboratory. Higher detections were reported.

Table 5

Soil Reuse Characterization Sampling Results
Summary of Volatile Organic Compounds in Soil.
MJ Painting; Olean, New York.

Sample ID	NYSDEC GW Protection SCO	NYSDEC Commercial SCO	RX-415	RX-416	RX-416	RX-417	RX-417	RX-417	RX-417 DUP	RX-417	RX-417	RX-418	RX-418	RX-418	RX-418	RX-419	RX-419	RX-419	RX-419	RX-420
Sample Depth (ft bgs)			11	3	10-12	0-1	3	7	7	9	10-12	3	6	9	10-12	3	6	9	10-12	0-1
Sample Date			11/16/2021	11/16/2021	11/16/2021	11/11/2021	11/11/2021	11/11/2021	11/11/2021	11/11/2021	11/11/2021	11/11/2021	11/11/2021	11/11/2021	11/11/2021	11/15/2021	11/15/2021	11/15/2021	11/15/2021	11/15/2021
VOLATILE ORGANIC COMPOUNDS - 8260C (mg/kg)																				
1,1,1-Trichloroethane	0.68	500	0.00069 U	0.00085 U	0.00031 J	0.00063 U	0.00069 U	0.0015 U	0.0016 U	0.087 U	0.052 U	0.00068 U	0.00076 U	0.04 U	0.00044 U	0.00055 U	0.082 U	0.00087 U	0.00067 U	0.00047 U
1,1,2,2,-Tetrachloroethane	NS	NS	0.00069 U	0.00085 U	0.00056 U	0.00063 U	0.00069 U	0.0015 U	0.0016 U	0.087 U	0.052 U	0.00068 U	0.00076 U	0.04 U	0.00044 U	0.00055 U	0.082 U	0.00087 U	0.00067 U	0.00047 U
1,1,2-Trichloro-1,2,2-trifluoroethane	NS	NS	0.0056 U	0.0068 U	0.0045 U	0.005 U	0.0055 U	0.012 U	0.013 U	0.7 U	0.42 U	0.0054 U	0.0061 U	0.32 U	0.0035 U	0.0044 U	0.65 U	0.0069 U	0.0053 U	0.0038 U
1,1,2-Trichloroethane	NS	NS	0.0014 U	0.0017 U	0.0011 U	0.0012 U	0.0014 U	0.003 U	0.0032 U	0.17 U	0.1 U	0.0014 U	0.0015 U	0.08 U	0.00087 U	0.0011 U	0.16 U	0.0017 U	0.0013 U	0.00094 U
1,1,-Dichloroethene	0.33	500	0.0014 U	0.0017 U	0.0011 U	0.0012 U	0.0014 U	0.003 U	0.0032 U	0.17 U	0.1 U	0.0014 U	0.0015 U	0.08 U	0.00087 U	0.0011 U	0.16 U	0.0017 U	0.0013 U	0.00094 U
1,1-Dichloroethane	0.27	240	0.0014 U	0.0017 U	0.0011 U	0.0012 U	0.0014 U	0.003 U	0.0032 U	0.17 U	0.1 U	0.0014 U	0.0015 U	0.08 U	0.00087 U	0.0011 U	0.16 U	0.0017 U	0.0013 U	0.00094 U
1,2,3-Trichlorobenzene	NS	NS	0.0028 U	0.0034 U	0.0022 U	0.0025 U	0.0028 U	0.0061 U	0.0065 U	0.35 U	0.21 U	0.0027 U	0.003 U	0.16 U	0.0017 U	0.0022 U	0.33 U	0.0035 U	0.0027 U	0.0019 U
1,2,4-Trichlorobenzene	NS	NS	0.0028 U	0.0034 U	0.0022 U	0.0025 U	0.0028 U	0.0061 U	0.0065 U	0.35 U	0.21 U	0.0027 U	0.003 U	0.16 U	0.0017 U	0.0022 U	0.33 U	0.0035 U	0.0027 U	0.0019 U
1,2,4-Trimethylbenzene	3.6	190	0.0016 J	0.0025 J	0.039	0.0025 U	0.0028 U	0.0061 U	0.0065 U	1	0.61	0.0027 U	0.0007 J	0.14 J	0.0017 U	0.0016 J	**3.9**	2.7	0.52	0.002
1,2-Dibromo-3-chloropropane	NS	NS	0.0042 U	0.0051 U	0.0034 U	0.0038 U	0.0041 U	0.0091 U	0.0097 U	0.52 U	0.31 U	0.004 U	0.0046 U	0.24 U	0.0026 U	0.0033 U	0.49 U	0.0052 U	0.004 U	0.0028 U
1,2-Dibromoethane	NS	NS	0.0014 U	0.0017 U	0.0011 U	0.0012 U	0.0014 U	0.003 U	0.0032 U	0.17 U	0.1 U	0.0014 U	0.0015 U	0.08 U	0.00087 U	0.0011 U	0.16 U	0.0017 U	0.0013 U	0.00094 U
1,2-Dichlorobenzene	1.1	500	0.0028 U	0.0034 U	0.0022 U	0.0025 U	0.0028 U	0.0061 U	0.0065 U	0.35 U	0.21 U	0.0027 U	0.003 U	0.16 U	0.0017 U	0.0022 U	0.33 U	0.0035 U	0.0027 U	0.0019 U
1,2-Dichloroethane	0.02	30	0.0014 U	0.0017 U	0.0011 U	0.0012 U	0.0014 U	0.003 U	0.0032 U	0.17 U'	0.1 U'	0.0014 U	0.0015 U	0.08 U'	0.00087 U	0.0011 U	0.16 U'	0.0017 U	0.0013 U	0.00094 U
1,2-Dichloroethene, Total	NS	NS	0.0014 U	0.0017 U	0.0011 U	0.0012 U	0.0014 U	0.003 U	0.0032 U	0.17 U	0.1 U	0.0014 U	0.0015 U	0.08 U	0.00087 U	0.0011 U	0.16 U	0.0017 U	0.0013 U	0.00094 U
1,2-Dichloropropane	NS	NS	0.0014 U	0.0017 U	0.0011 U	0.0012 U	0.0014 U	0.003 U	0.0032 U	0.17 U	0.1 U	0.0014 U	0.0015 U	0.08 U	0.00087 U	0.0011 U	0.16 U	0.0017 U	0.0013 U	0.00094 U
1,3,5-Trimethylbenzene	8.4	190	0.00099 J	0.00065 J	0.0022 U	0.0025 U	0.0028 U	0.0061 U	0.0065 U	0.29 J	0.3	0.0027 U	0.0004 J	0.032 J	0.0017 U	0.00042 J	1.4	0.45	0.044	0.0019 U
1,3-Dichlorobenzene	2.4	280	0.0028 U	0.0034 U	0.0022 U	0.0025 U	0.0028 U	0.0061 U	0.0065 U	0.35 U	0.21 U	0.0027 U	0.003 U	0.16 U	0.0017 U	0.0022 U	0.33 U	0.0035 U	0.0027 U	0.0019 U
1,3-Dichloropropene, Total	NS	NS	0.00069 U	0.00085 U	0.00056 U	0.00063 U	0.00069 U	0.0015 U	0.0016 U	0.087 U	0.052 U	0.00068 U	0.00076 U	0.04 U	0.00044 U	0.00055 U	0.082 U	0.00087 U	0.00067 U	0.00047 U
1,4-Dichlorobenzene	1.8	130	0.0028 U	0.0034 U	0.0022 U	0.0025 U	0.0028 U	0.0061 U	0.0065 U	0.35 U	0.21 U	0.0027 U	0.003 U	0.16 U	0.0017 U	0.0022 U	0.33 U	0.0035 U	0.0027 U	0.0019 U
1,4-Dioxane	0.1	130	0.11 U'	0.14 U'	0.09 U	0.1 U	0.11 U'	0.24 U'	0.26 U'	14 U'	8.3 U'	0.11 U'	0.12 U'	6.4 U'	0.07 U	0.088 U	13 U'	0.14 U'	0.11 U'	0.075 U
2-Butanone	0.12	500	0.014 U	0.041	0.011 U	0.012 U	0.014 U	0.035	0.062	1.7 U'	1 U'	0.014 U	0.015 U	0.8 U'	0.0087 U	0.011 U	1.6 U'	0.017 U	0.013 U	0.0094 U
2-Hexanone	NS	NS	0.014 U	0.017 U	0.011 U	0.012 U	0.014 U	0.03 U	0.032 U	1.7 U	1 U	0.014 U	0.015 U	0.8 U	0.0087 U	0.011 U	1.6 U	0.017 U	0.013 U	0.0094 U
4-Methyl-2-Pentanone	NS	NS	0.014 U	0.017 U	0.011 U	0.012 U	0.014 U	0.03 U	0.032 U	1.7 U	1 U	0.014 U	0.015 U	0.8 U	0.0087 U	0.011 U	1.6 U	0.017 U	0.013 U	0.0094 U
Acetone	0.05	500	0.03	**0.16**	0.011 U	0.012 U	0.014 U	**0.2**	**0.3**	1.7 U'	1 U'	0.014 U	**0.066**	0.8 U'	0.022	0.011 U	1.6 U'	**0.22**	**0.079**	0.0094 U
Benzene	0.06	44	0.00026 J	0.00085 U	0.00056 U	0.00063 U	0.00069 U	0.0015 U	0.0016 U	**0.39**	**0.28**	0.00068 U	0.00093	**0.093**	0.00044 U	0.00025 J	**2.9**	**0.073**	0.018	0.00047 U
Bromochloromethane	NS	NS	0.0028 U	0.0034 U	0.0022 U	0.0025 U	0.0028 U	0.0061 U	0.0065 U	0.35 U	0.21 U	0.0027 U	0.003 U	0.16 U	0.0017 U	0.0022 U	0.33 U	0.0035 U	0.0027 U	0.0019 U
Bromodichloromethane	NS	NS	0.00069 U	0.00085 U	0.00056 U	0.00063 U	0.00069 U	0.0015 U	0.0016 U	0.087 U	0.052 U	0.00068 U	0.00076 U	0.04 U	0.00044 U	0.00055 U	0.082 U	0.00087 U	0.00067 U	0.00047 U
Bromoform	NS	NS	0.0056 U	0.0068 U	0.0045 U	0.005 U	0.0055 U	0.012 U	0.013 U	0.7 U	0.42 U	0.0054 U	0.0061 U	0.32 U	0.0035 U	0.0044 U	0.65 U	0.0069 U	0.0053 U	0.0038 U
Bromomethane	NS	NS	0.0028 U	0.0034 U	0.0022 U	0.0025 U	0.0028 U	0.0061 U	0.0065 U	0.35 U	0.21 U	0.0027 U	0.003 U	0.16 U	0.0017 U	0.0022 U	0.33 U	0.0035 U	0.0027 U	0.0019 U
Carbon disulfide	NS	NS	0.014 U	0.017 U	0.011 U	0.012 U	0.014 U	0.03 U	0.032 U	1.7 U	1 U	0.014 U	0.015 U	0.8 U	0.0087 U	0.011 U	1.6 U	0.017 U	0.013 U	0.0094 U
Carbon tetrachloride	0.76	22	0.0014 U	0.0017 U	0.0011 U	0.0012 U	0.0014 U	0.003 U	0.0032 U	0.17 U	0.1 U	0.0014 U	0.0015 U	0.08 U	0.00087 U	0.0011 U	0.16 U	0.0017 U	0.0013 U	0.00094 U
Chlorobenzene	1.1	500	0.00069 U	0.00085 U	0.00056 U	0.00063 U	0.00069 U	0.0015 U	0.0016 U	0.087 U	0.052 U	0.00068 U	0.00076 U	0.04 U	0.00044 U	0.00055 U	0.082 U	0.00087 U	0.00067 U	0.00047 U
Chloroethane	NS	NS	0.0028 U	0.0034 U	0.0022 U	0.0025 U	0.0028 U	0.0061 U	0.0065 U	0.35 U	0.21 U	0.0027 U	0.003 U	0.16 U	0.0017 U	0.0022 U	0.33 U	0.0035 U	0.0027 U	0.0019 U
Chloroform	0.37	350	0.0021 U	0.0026 U	0.0017 U	0.0019 U	0.0021 U	0.0046 U	0.0048 U	0.26 U	0.16 U	0.002 U	0.0023 U	0.12 U	0.0013 U	0.0016 U	0.24 U	0.0026 U	0.002 U	0.0014 U
Chloromethane	NS	NS	0.0056 U	0.0068 U	0.0045 U	0.005 U	0.0055 U	0.012 U	0.013 U	0.7 U	0.42 U	0.0054 U	0.0061 U	0.32 U	0.0035 U	0.0044 U	0.65 U	0.0069 U	0.0053 U	0.0038 U
cis-1,2-Dichloroethene	0.25	500	0.0014 U	0.0017 U	0.0011 U	0.0012 U	0.0014 U	0.003 U	0.0032 U	0.17 U	0.1 U	0.0014 U	0.0015 U	0.08 U	0.00087 U	0.0011 U	0.16 U	0.0017 U	0.0013 U	0.00094 U
cis-1,3-Dichloropropene	NS	NS	0.00069 U	0.00085 U	0.00056 U	0.00063 U	0.00069 U	0.0015 U	0.0016 U	0.087 U	0.052 U	0.00068 U	0.00076 U	0.04 U	0.00044 U	0.00055 U	0.082 U	0.00087 U	0.00067 U	0.00047 U
Cyclohexane	NS	NS	0.017	0.017 U	9.5	0.012 U	0.014 U	0.0099 J	0.011 J	4	4.2	0.014 U	0.0099 J	0.31 J	0.0087 U	0.00064 J	1.3 J	0.33	0.23	0.0094 U
Dibromochloromethane	NS	NS	0.0014 U	0.0017 U	0.0011 U	0.0012 U	0.0014 U	0.003 U	0.0032 U	0.17 U	0.1 U	0.0014 U	0.0015 U	0.08 U	0.00087 U	0.0011 U	0.16 U	0.0017 U	0.0013 U	0.00094 U
Dichlorodifluoromethane	NS	NS	0.014 U	0.017 U	0.011 U	0.012 U	0.014 U	0.03 U	0.032 U	1.7 U	1 U	0.014 U	0.015 U	0.8 U	0.0087 U	0.011 U	1.6 U	0.017 U	0.013 U	0.0094 U
Ethylbenzene	1	390	0.0014 U	0.00029 J	0.0011 U	0.0012 U	0.0014 U	0.003 U	0.0032 U	0.42	0.09 J	0.0014 U	0.00037 J	0.091	0.00016 J	0.00043 J	**2.4**	0.85	0.049	0.00022 J
Isopropylbenzene	NS	NS	0.0014 U	0.00027 J	1	0.0012 U	0.0014 U	0.003 U	0.0032 U	0.93	0.57	0.0014 U	0.00082 J	0.14	0.00068 J	0.00021 J	0.27	0.16	0.04	0.00094 U
Methyl Acetate	NS	NS	0.0056 U	0.0068 U	0.0045 U	0.005 U	0.0055 U	0.012 U	0.013 U	0.3 J	0.19 J	0.0054 U	0.0061 U	0.32 U	0.0035 U	0.0044 U	0.65 U	0.0069 U	0.0053 U	0.0038 U
Methyl cyclohexane	NS	NS	0.014	0.0026 J	57	0.005 U	0.0055 U	0.013	0.018	18	16	0.0054 U	0.027	2.3	0.002 J	0.0044 U	2.7	0.25	0.12	0.0038 U
Methyl tertiary butyl ether (MTBE)	0.93	500	0.0028 U	0.0034 U	0.0022 U	0.0025 U	0.0028 U	0.0061 U	0.0065 U	0.35 U	0.21 U	0.0027 U	0.003 U	0.16 U	0.0017 U	0.0022 U	0.33 U	0.0035 U	0.0027 U	0.0019 U
Methylene chloride	0.05	500	0.0069 U	0.0085 U	0.0056 U	0.0063 U	0.0069 U	0.015 U	0.016 U	0.87 U'	0.52 U'	0.0068 U	0.0076 U	0.4 U'	0.0044 U	0.0055 U	0.82 U'	0.0087 U	0.0067 U	0.0047 U
n-Butylbenzene	12	500	0.0014 U	0.0017 U	0.11	0.0012 U	0.0014 U	0.003 U	0.0032 U	1.4	0.84	0.0014 U	0.0015 U	0.31	0.0017	0.0011 U	0.28	0.035	0.012	0.00094 U
n-Propylbenzene	3.9	500	0.0014 U	0.00038 J	1.4	0.0012 U	0.0014 U	0.003 U	0.0032 U	0.75	0.31	0.0014 U	0.00061 J	0.17	0.00054 J	0.00024 J	0.75	0.21	0.042	0.00094 U
sec-Butylbenzene	11	500	0.0014 U	0.00044 J	1.6	0.0012 U	0.0014 U	0.003 U	0.0032 U	1.5	1.2	0.0014 U	0.00026 J	0.15	0.00081 J	0.0011 U	0.094 J	0.01	0.0045	0.00094 U
Styrene	NS	NS	0.0014 U	0.0017 U	0.0011 U	0.0012 U	0.0014 U	0.003 U	0.0032 U	0.17 U	0.1 U	0.0014 U	0.0015 U	0.08 U	0.00087 U	0.0011 U	0.16 U	0.0017 U	0.0013 U	0.00094 U
tert-Butylbenzene	5.9	500	0.00018 J	0.00065 J	0.84	0.0025 U	0.0028 U	0.0061 U	0.0065 U	0.63	0.66	0.0027 U	0.003 U	0.034 J	0.00026 J	0.0022 U	0.33 U	0.0035 U	0.0027 U	0.0019 U
Tetrachloroethene	1.3	150	0.00069 U	0.00085 U	0.00056 U	0.00063 U	0.00069 U	0.0015 U	0.0016 U	0.087 U	0.052 U	0.00068 U	0.00076 U	0.04 U	0.00044 U	0.00055 U	0.082 U	0.00087 U	0.00067 U	0.00047 U
Toluene	0.7	500	0.0014 U	0.0017 U	0.015	0.0012 U	0.0014 U	0.003 U	0.0032 U	**0.99**	0.45	0.0014 U	0.0015	0.3	0.00087 U	0.0011 U	**9.8**	0.23	0.049	0.00094 U
trans-1,2-Dichloroethene	0.19	500	0.0021 U	0.0026 U	0.0017 U	0.0019 U	0.0021 U	0.0046 U	0.0048 U	0.26 U'	0.16 U	0.002 U	0.0023 U	0.12 U	0.0013 U	0.0016 U	0.24 U'	0.0026 U	0.002 U	0.0014 U
trans-1,3-Dichloropropene	NS	NS	0.0014 U	0.0017 U	0.0011 U	0.0012 U	0.0014 U	0.003 U	0.0032 U	0.17 U	0.1 U	0.0014 U	0.0015 U	0.08 U	0.00087 U	0.0011 U	0.16 U	0.0017 U	0.0013 U	0.00094 U
Trichloroethene	0.47	200	0.00069 U	0.00085 U	0.00056 U	0.00063 U	0.00069 U	0.0015 U	0.0016 U	0.087 U	0.052 U	0.00068 U	0.00076 U	0.04 U	0.00044 U	0.00055 U	0.082 U	0.00087 U	0.00067 U	0.00047 U
Trichlorofluoromethane	NS	NS	0.0056 U	0.0068 U	0.0045 U	0.005 U	0.0055 U	0.012 U	0.013 U	0.7 U	0.42 U	0.0054 U	0.0061 U	0.32 U	0.0035 U	0.0044 U	0.65 U	0.0069 U	0.0053 U	0.0038 U
Vinyl chloride	0.02	13	0.0014 U	0.0017 U	0.0011 U	0.0012 U	0.0014 U	0.003 U	0.0032 U	0.17 U'	0.1 U'	0.0014 U	0.0015 U	0.08 U'	0.00087 U	0.0011 U	0.16 U'	0.0017 U	0.0013 U	0.00094 U
Xylene (m&p)	NS	NS	0.001 J	0.0012 J	0.079	0.0025 U	0.0028 U	0.0061 U	0.0065 U	1.8	0.58	0.0027 U	0.0015 J	0.32	0.0017 U	0.0022 U	11	0.2	0.036	0.0019 U
Xylene (o)	NS	NS	0.00041 J	0.0007 J	0.023	0.0012 U	0.0014 U	0.003 U	0.0032 U	0.41	0.22	0.0014 U	0.00058 J	0.066 J	0.00087 U	0.00093 J	2.5	1.8	0.62	0.00053 J
Xylenes (Total)	1.6	500	0.0014 J	0.0019 J	0.1	0.0012 U	0.0014 U	0.003 U	0.0032 U	**2.2**	0.8	0.0014 U	0.0021 J	0.39 J	0.00087 U	0.00093 J	**14**	**2 J**	0.66	0.00053 J
Total Volatile TICs	NS	NS	0.527 J	0.101 J	0.101 J	ND	ND	ND	0.234 J	ND	ND	ND	ND	ND	ND	0.0254 J	0.0254 J	0.0254 J	0.0254 J	0.0398 J

Notes:

NYSDEC GW Protection SCO = New York State Department of Environmental Conservation Groundwater Protection Soil Cleanup Objectives, from Table 375-6.8 of 6 NYCRR Part 375.
NYSDEC Commercial SCO = New York State Department of Environmental Conservation Restricted Commercial Use Soil Cleanup Objectives, from Table 375-6.8 of 6 NYCRR Part 375.
ft bgs = Feet below ground surface.
mg/kg = Milligrams per kilogram.
Green concentrations exceed the NYSDEC GW Protection SCO.
Highlighted concentrations exceed the NYSDEC Commercial SCO.
— = Sample not analyzed.
NS = No standard currently established.
ND = Not Detected.
U = Not detected above laboratory detection limit.
U' = Laboratory reporting limit exceeds the applicable regulatory standard or criteria being utilized.
J = Result below the reporting limit (estimated value).
DUP = Duplicate sample was taken.
When the applicable state standard applies to mixed isomers and the laboratory reports individual isomers, the total standard is listed for each isomer.
* = Sample was analyzed twice by the laboratory. Higher detections were reported.

Table 5

Soil Reuse Characterization Sampling Results
Summary of Volatile Organic Compounds in Soil.
MJ Painting; Olean, New York.

Sample ID	NYSDEC GW	NYSDEC	RX-420	RX-420	RX-420	RX-420	RX-421	RX-422	RX-422	RX-422	RX-422	RX-422	RX-423	RX-423	RX-423	RX-423	RX-424	RX-424	RX-424	RX-424	RX-425	RX-425	RX-425 DUP	RX-425	RX-425
Sample Depth (ft bgs)	Protection	Commercial	3	7	7-10	10-12	11	0-1	3	7	10	10-12	3	7	8	10-12	3	6.5	9	10-12	0-1	2	2	7	7-10
Sample Date	SCO	SCO	11/15/2021	11/15/2021	11/15/2021	11/15/2021	11/11/2021	11/10/2021	11/10/2021	11/10/2021	11/10/2021	11/10/2021	11/11/2021	11/11/2021	11/11/2021	11/11/2021	11/11/2021	11/11/2021	11/11/2021	11/11/2021	11/11/2021	11/11/2021	11/11/2021	11/11/2021	11/11/2021
VOLATILE ORGANIC COMPOUNDS - 8260C (mg/kg)																									
1,1,1-Trichloroethane	0.68	500	0.00069 U	0.0011 U	0.045 U	0.037 U	0.046 U	0.00062 U	0.00063 U	0.085 U	0.036 U	0.029 U	0.00072 U	0.087 U	0.049 U	0.00025 U	0.00056 U	0.00092 U	0.052 U	0.065 U	0.00061 U	0.00086 U	0.00062 U	0.0019 U	0.0011 U
1,1,2,2,-Tetrachloroethane	NS	NS	0.00069 U	0.0011 U	0.045 U	0.037 U	0.046 U	0.00062 U	0.00063 U	0.085 U	0.036 U	0.029 U	0.00072 U	0.087 U	0.049 U	0.00025 U	0.00056 U	0.00092 U	0.052 U	0.065 U	0.00061 U	0.00086 U	0.00062 U	0.0019 U	0.0011 U
1,1,2-Trichloro-1,2,2-trifluoroethane	NS	NS	0.0055 U	0.0091 U	0.36 U	0.3 U	0.37 U	0.005 U	0.005 U	0.68 U	0.29 U	0.23 U	0.0058 U	0.7 U	0.4 U	0.002 U	0.0045 U	0.0074 U	0.41 U	0.52 U	0.0049 U	0.0068 U	0.005 U	0.015 U	0.0089 U
1,1,2-Trichloroethane	NS	NS	0.0014 U	0.0023 U	0.09 U	0.074 U	0.092 U	0.0012 U	0.0013 U	0.17 U	0.073 U	0.058 U	0.0014 U	0.17 U	0.099 U	0.00049 U	0.0011 U	0.0018 U	0.1 U	0.13 U	0.0012 U	0.0017 U	0.0012 U	0.0039 U	0.0022 U
1,1,-Dichloroethene	0.33	500	0.0014 U	0.0023 U	0.09 U	0.074 U	0.092 U	0.0012 U	0.0013 U	0.17 U	0.073 U	0.058 U	0.0014 U	0.17 U	0.099 U	0.00049 U	0.0011 U	0.0018 U	0.1 U	0.13 U	0.0012 U	0.0017 U	0.0012 U	0.0039 U	0.0022 U
1,1-Dichloroethane	0.27	240	0.0014 U	0.0023 U	0.09 U	0.074 U	0.092 U	0.0012 U	0.0013 U	0.17 U	0.073 U	0.058 U	0.0014 U	0.17 U	0.099 U	0.00049 U	0.0011 U	0.0018 U	0.1 U	0.13 U	0.0012 U	0.0017 U	0.0012 U	0.0039 U	0.0022 U
1,2,3-Trichlorobenzene	NS	NS	0.0028 U	0.0045 U	0.18 U	0.15 U	0.18 U	0.0025 U	0.0025 U	0.34 U	0.15 U	0.12 U	0.0029 U	0.35 U	0.2 U	0.00099 U	0.0022 U	0.0037 U	0.21 U	0.26 U	0.0024 U	0.0034 U	0.0025 U	0.0077 U	0.0045 U
1,2,4-Trichlorobenzene	NS	NS	0.0028 U	0.0045 U	0.18 U	0.15 U	0.18 U	0.0025 U	0.0025 U	0.34 U	0.15 U	0.12 U	0.0029 U	0.35 U	0.2 U	0.00099 U	0.0022 U	0.0037 U	0.21 U	0.26 U	0.0024 U	0.0034 U	0.0025 U	0.0077 U	0.0045 U
1,2,4-Trimethylbenzene	3.6	190	0.0028 U	0.033	**21**	3.2	**38**	0.0025 U	0.00046 J	1.4	0.039 J	0.087 J	0.0029 U	0.8	0.35	0.0012	0.0022 U	0.01	1.4	2.8	0.0024 U	0.0034 U	0.0025 U	0.019	0.17
1,2-Dibromo-3-chloropropane	NS	NS	0.0041 U	0.0068 U	0.27 U	0.22 U	0.28 U	0.0037 U	0.0038 U	0.51 U	0.22 U	0.17 U	0.0043 U	0.52 U	0.3 U	0.0015 U	0.0034 U	0.0055 U	0.31 U	0.39 U	0.0037 U	0.0051 U	0.0037 U	0.012 U	0.0067 U
1,2-Dibromoethane	NS	NS	0.0014 U	0.0023 U	0.09 U	0.074 U	0.092 U	0.0012 U	0.0013 U	0.17 U	0.073 U	0.058 U	0.0014 U	0.17 U	0.099 U	0.00049 U	0.0011 U	0.0018 U	0.1 U	0.13 U	0.0012 U	0.0017 U	0.0012 U	0.0039 U	0.0022 U
1,2-Dichlorobenzene	1.1	500	0.0028 U	0.0045 U	0.18 U	0.15 U	0.18 U	0.0025 U	0.0025 U	0.34 U	0.15 U	0.12 U	0.0029 U	0.35 U	0.2 U	0.00099 U	0.0022 U	0.0037 U	0.21 U	0.26 U	0.0024 U	0.0034 U	0.0025 U	0.0077 U	0.0045 U
1,2-Dichloroethane	0.02	30	0.0014 U	0.0023 U	0.09 U'	0.074 U'	0.092 U'	0.0012 U	0.0013 U	0.17 U'	0.073 U'	0.058 U'	0.0014 U	0.17 U'	0.099 U'	0.00049 U	0.0011 U	0.0018 U	0.1 U'	0.13 U'	0.0012 U	0.0017 U	0.0012 U	0.0039 U	0.00098 J
1,2-Dichloroethene, Total	NS	NS	0.0014 U	0.0023 U	0.09 U	0.074 U	0.092 U	0.0012 U	0.0013 U	0.17 U	0.073 U	0.058 U	0.0014 U	0.17 U	0.0017 U	0.00049 U	0.0011 U	0.0018 U	0.0013 U	0.0021 U	0.0012 U	0.0017 U	0.0012 U	0.0039 U	0.0022 U
1,2-Dichloropropane	NS	NS	0.0014 U	0.0023 U	0.09 U	0.074 U	0.092 U	0.0012 U	0.0013 U	0.17 U	0.073 U	0.058 U	0.0014 U	0.17 U	0.099 U	0.00049 U	0.0011 U	0.0018 U	0.1 U	0.13 U	0.0012 U	0.0017 U	0.0012 U	0.0039 U	0.0022 U
1,3,5-Trimethylbenzene	8.4	190	0.0028 U	0.01	7.9	0.13 J	1.8	0.0025 U	0.00026 J	1.8	0.041 J	0.028 J	0.0029 U	0.38	0.13 J	0.00099 U	0.0022 U	0.004	0.25	0.29	0.0024 U	0.0034 U	0.0025 U	0.0083	0.013
1,3-Dichlorobenzene	2.4	280	0.0028 U	0.0045 U	0.18 U	0.15 U	0.18 U	0.0025 U	0.0025 U	0.34 U	0.15 U	0.12 U	0.0029 U	0.35 U	0.2 U	0.00099 U	0.0022 U	0.0037 U	0.21 U	0.26 U	0.0024 U	0.0034 U	0.0025 U	0.0077 U	0.0045 U
1,3-Dichloropropene, Total	NS	NS	0.00069 U	0.0011 U	0.045 U	0.037 U	0.046 U	0.00062 U	0.00063 U	0.085 U	0.036 U	0.029 U	0.00072 U	0.087 U	0.00084 U	0.00025 U	0.00056 U	0.00092 U	0.00066 U	0.001 U	0.00061 U	0.00086 U	0.00062 U	0.0019 U	0.0011 U
1,4-Dichlorobenzene	1.8	130	0.0028 U	0.0045 U	0.18 U	0.15 U	0.022 J	0.0025 U	0.0025 U	0.34 U	0.15 U	0.12 U	0.0029 U	0.35 U	0.2 U	0.00099 U	0.0022 U	0.0037 U	0.21 U	0.26 U	0.0024 U	0.0034 U	0.0025 U	0.0077 U	0.0045 U
1,4-Dioxane	0.1	130	0.11 U'	0.18 U'	7.2 U'	6 U'	7.4 U'	0.1 U	0.1 U	14 U'	5.8 U'	4.6 U'	0.12 U'	14 U'	7.9 U'	0.039 U	0.09 U	0.15 U'	8.3 U'	10 U'	0.098 U	0.14 U'	0.099 U	0.31 U'	0.18 U'
2-Butanone	0.12	500	0.014 U	0.078	0.9 U'	0.74 U'	0.92 U'	0.012 U	0.013 U	1.7 U'	0.73 U'	0.58 U'	0.014 U	1.7 U'	0.99 U'	0.0049 U	0.011 U	0.018	**0.44 J**	1.3 U'	0.012 U	0.017 U	0.012 U	0.039 U	0.022 U
2-Hexanone	NS	NS	0.014 U	0.023 U	0.9 U	0.74 U	0.92 U	0.012 U	0.013 U	1.7 U	0.73 U	0.58 U	0.014 U	1.7 U	0.99 U	0.0049 U	0.011 U	0.018 U	1 U	1.3 U	0.012 U	0.017 U	0.012 U	0.039 U	0.022 U
4-Methyl-2-Pentanone	NS	NS	0.014 U	0.023 U	0.9 U	0.74 U	0.92 U	0.012 U	0.013 U	1.7 U	0.73 U	0.58 U	0.014 U	1.7 U	0.99 U	0.0049 U	0.011 U	0.018 U	1 U	1.3 U	0.012 U	0.017 U	0.012 U	0.039 U	0.022 U
Acetone	0.05	500	0.014 U	**0.28**	0.9 U'	0.74 U'	0.92 U'	0.012 U	**0.077**	1.7 U'	0.73 U'	0.58 U'	0.014 U	1.7 U'	0.99 U'	0.0049 U	0.011 U	**0.061**	1 U'	1.3 U'	0.012 U	0.014 J	0.012 U	**0.85**	**0.092**
Benzene	0.06	44	0.00053 J	0.01	**0.4**	**0.13**	**0.7**	0.00062 U	0.00073	**0.22**	0.014 J	0.013 J	0.00026 J	**0.19**	**0.064**	0.00025 U	0.00056 U	0.0071	**0.68**	**0.3**	0.00061 U	0.00086 U	0.00062 U	0.0017 J	0.0079
Bromochloromethane	NS	NS	0.0028 U	0.0045 U	0.18 U	0.15 U	0.18 U	0.0025 U	0.0025 U	0.34 U	0.15 U	0.12 U	0.0029 U	0.35 U	0.2 U	0.00099 U	0.0022 U	0.0037 U	0.21 U	0.26 U	0.0024 U	0.0034 U	0.0025 U	0.0077 U	0.0045 U
Bromodichloromethane	NS	NS	0.00069 U	0.0011 U	0.045 U	0.037 U	0.046 U	0.00062 U	0.00063 U	0.085 U	0.036 U	0.029 U	0.00072 U	0.087 U	0.049 U	0.00025 U	0.00056 U	0.00092 U	0.052 U	0.065 U	0.00061 U	0.00086 U	0.00062 U	0.0019 U	0.0011 U
Bromoform	NS	NS	0.0055 U	0.0091 U	0.36 U	0.3 U	0.37 U	0.005 U	0.005 U	0.68 U	0.29 U	0.23 U	0.0058 U	0.7 U	0.4 U	0.002 U	0.0045 U	0.0074 U	0.41 U	0.52 U	0.0049 U	0.0068 U	0.005 U	0.015 U	0.0089 U
Bromomethane	NS	NS	0.0028 U	0.0045 U	0.18 U	0.15 U	0.18 U	0.0025 U	0.0025 U	0.34 U	0.15 U	0.12 U	0.0029 U	0.35 U	0.2 U	0.00099 U	0.0022 U	0.0037 U	0.21 U	0.26 U	0.0024 U	0.0034 U	0.0025 U	0.0077 U	0.0045 U
Carbon disulfide	NS	NS	0.014 U	0.023 U	0.9 U	0.74 U	0.92 U	0.012 U	0.013 U	1.7 U	0.73 U	0.58 U	0.014 U	1.7 U	0.99 U	0.0049 U	0.011 U	0.018 U	1 U	1.3 U	0.012 U	0.017 U	0.012 U	0.039 U	0.022 U
Carbon tetrachloride	0.76	22	0.0014 U	0.0023 U	0.09 U	0.074 U	0.092 U	0.0012 U	0.0013 U	0.17 U	0.073 U	0.058 U	0.0014 U	0.17 U	0.099 U	0.00049 U	0.0011 U	0.0018 U	0.1 U	0.13 U	0.0012 U	0.0017 U	0.0012 U	0.0039 U	0.0022 U
Chlorobenzene	1.1	500	0.00069 U	0.0011 U	0.045 U	0.037 U	0.046 U	0.00062 U	0.00063 U	0.085 U	0.036 U	0.029 U	0.00072 U	0.087 U	0.049 U	0.00025 U	0.00056 U	0.00092 U	0.052 U	0.065 U	0.00061 U	0.00086 U	0.00062 U	0.0019 U	0.0011 U
Chloroethane	NS	NS	0.0028 U	0.0045 U	0.18 U	0.15 U	0.18 U	0.0025 U	0.0025 U	0.34 U	0.15 U	0.12 U	0.0029 U	0.35 U	0.2 U	0.00099 U	0.0022 U	0.0037 U	0.21 U	0.26 U	0.0024 U	0.0034 U	0.0025 U	0.0077 U	0.0045 U
Chloroform	0.37	350	0.0021 U	0.0034 U	0.14 U	0.11 U	0.14 U	0.0019 U	0.0019 U	0.25 U	0.11 U	0.086 U	0.0022 U	0.26 U	0.15 U	0.00074 U	0.0017 U	0.0028 U	0.16 U	0.19 U	0.0018 U	0.0026 U	0.0019 U	0.0058 U	0.0034 U
Chloromethane	NS	NS	0.0055 U	0.0091 U	0.36 U	0.3 U	0.37 U	0.005 U	0.005 U	0.68 U	0.29 U	0.23 U	0.0058 U	0.7 U	0.4 U	0.002 U	0.0045 U	0.0074 U	0.098 J	0.52 U	0.0049 U	0.0068 U	0.005 U	0.015 U	0.0089 U
cis-1,2-Dichloroethene	0.25	500	0.0014 U	0.0023 U	0.09 U	0.074 U	0.092 U	0.0012 U	0.0013 U	0.17 U	0.073 U	0.058 U	0.0014 U	0.17 U	0.099 U	0.00049 U	0.0011 U	0.0018 U	0.1 U	0.13 U	0.0012 U	0.0017 U	0.0012 U	0.0039 U	0.0022 U
cis-1,3-Dichloropropene	NS	NS	0.00069 U	0.0011 U	0.045 U	0.037 U	0.046 U	0.00062 U	0.00063 U	0.085 U	0.036 U	0.029 U	0.00072 U	0.087 U	0.049 U	0.00025 U	0.00056 U	0.00092 U	0.052 U	0.065 U	0.00061 U	0.00086 U	0.00062 U	0.0019 U	0.0011 U
Cyclohexane	NS	NS	0.014 U	0.01 J	6.5	0.91	3.4	0.012 U	0.073	35	3	3.8	0.014 U	0.52 J	0.23 J	0.017	0.011 U	0.0048 J	0.1 J	0.21 J	0.012 U	0.017 U	0.012 U	0.36	0.25
Dibromochloromethane	NS	NS	0.0014 U	0.0023 U	0.09 U	0.074 U	0.092 U	0.0012 U	0.0013 U	0.17 U	0.073 U	0.058 U	0.0014 U	0.17 U	0.099 U	0.00049 U	0.0011 U	0.0018 U	0.1 U	0.13 U	0.0012 U	0.0017 U	0.0012 U	0.0039 U	0.0022 U
Dichlorodifluoromethane	NS	NS	0.014 U	0.023 U	0.9 U	0.74 U	0.92 U	0.012 U	0.013 U	1.7 U	0.73 U	0.58 U	0.014 U	1.7 U	0.99 U	0.0049 U	0.011 U	0.018 U	1 U	1.3 U	0.012 U	0.017 U	0.012 U	0.039 U	0.022 U
Ethylbenzene	1	390	0.0014 U	0.0011 J	**9**	**2.4**	1	0.0012 U	0.00032 J	**1.1**	0.073 U	0.058 U	0.0014 U	0.053 J	0.075 J	0.00049 U	0.0011 U	0.0046	0.67	0.63	0.0012 U	0.0017 U	0.0012 U	0.0044	0.0013 J
Isopropylbenzene	NS	NS	0.0014 U	0.0029	1.6	0.25	3.2	0.0012 U	0.00027 J	8.2	0.3	0.4	0.0014 U	0.39	0.14	0.0021	0.0011 U	0.0063	0.1	0.28	0.0012 U	0.0017 U	0.0012 U	0.0016 J	0.013
Methyl Acetate	NS	NS	0.0055 U	0.0091 U	0.36 U	0.3 U	0.37 U	0.005 U	0.005 U	0.68 U	0.29 U	0.23 U	0.0058 U	0.96	0.4 U	0.002 U	0.0045 U	0.0074 U	0.41 U	0.31 J	0.0049 U	0.0068 U	0.005 U	0.015 U	0.0089 U
Methyl cyclohexane	NS	NS	0.0055 U	0.025	10	2.4	14	0.005 U	0.12	460	13	16	0.00094 J	4.3	1.9	0.094	0.0045 U	0.021	0.86	2.8	0.0049 U	0.0068 U	0.005 U	0.81	0.59
Methyl tertiary butyl ether (MTBE)	0.93	500	0.0028 U	0.0045 U	0.18 U	0.15 U	0.18 U	0.0025 U	0.0025 U	0.34 U	0.15 U	0.12 U	0.0029 U	0.35 U	0.2 U	0.00099 U	0.0022 U	0.0037 U	0.21 U	0.26 U	0.0024 U	0.0034 U	0.0025 U	0.0077 U	0.0045 U
Methylene chloride	0.05	500	0.0069 U	0.011 U	0.45 U'	0.37 U'	0.46 U'	0.0062 U	0.0063 U	0.85 U'	0.36 U'	0.29 U'	0.0072 U	0.87 U'	0.49 U'	0.0025 U	0.0056 U	0.0092 U	0.52 U'	0.65 U'	0.0061 U	0.0086 U	0.0062 U	0.019 U	0.011 U
n-Butylbenzene	12	500	0.0014 U	0.00052 J	1	0.18	3	0.0012 U	0.0013 U	3.4	0.21	0.35	0.0014 U	0.24	0.31	0.0061	0.0011 U	0.0014 J	0.25	0.72	0.0012 U	0.0017 U	0.0012 U	0.0011 J	0.014
n-Propylbenzene	3.9	500	0.0014 U	0.0019 J	2.7	0.39	**6.1**	0.0012 U	0.0013 U	**13**	0.52	0.59	0.0014 U	0.35	0.11	0.00049 U	0.0011 U	0.0046	0.31	0.47	0.0012 U	0.0017 U	0.0012 U	0.0027 J	0.018
sec-Butylbenzene	11	500	0.0014 U	0.00097 J	0.65	0.12	1.7	0.0012 U	0.0013 U	8.2	0.25	0.38	0.0014 U	0.21	0.17	0.019	0.0011 U	0.002	0.07 J	0.28	0.0012 U	0.0017 U	0.0012 U	0.00076 J	0.0071
Styrene	NS	NS	0.0014 U	0.0023 U	0.09 U	0.074 U	0.023 J	0.0012 U	0.0013 U	0.17 U	0.073 U	0.058 U	0.0014 U	0.17 U	0.099 U	0.00049 U	0.0011 U	0.0018 U	0.1 U	0.031 J	0.0012 U	0.0017 U	0.0012 U	0.0039 U	0.0022 U
tert-Butylbenzene	5.9	500	0.0028 U	0.0045 U	0.043 J	0.15 U	0.18 U	0.0025 U	0.00019 J	5.4	0.11 J	0.14	0.0029 U	0.059 J	0.05 J	0.014	0.0022 U	0.00044 J	0.21 U	0.049 J	0.0024 U	0.0034 U	0.0025 U	0.0077 U	0.0011 J
Tetrachloroethene	1.3	150	0.00069 U	0.0011 U	0.045 U	0.037 U	0.046 U	0.00062 U	0.00063 U	0.085 U	0.036 U	0.029 U	0.00072 U	0.087 U	0.049 U	0.00025 U	0.00056 U	0.00092 U	0.052 U	0.065 U	0.00061 U	0.00086 U	0.00062 U	0.0019 U	0.0011 U
Toluene	0.7	500	0.0014 U	0.0045	**1.3**	0.16	**2.5**	0.0012 U	0.0018	**4.3**	0.059 J	0.053 J	0.0014 U	0.47	0.26	0.0019	0.0011 U	0.02	**2.6**	**1.4**	0.0012 U	0.0017 U	0.0012 U	0.0038 J	0.014
trans-1,2-Dichloroethene	0.19	500	0.0021 U	0.0034 U	0.14 U	0.11 U	0.14 U	0.0019 U	0.0019 U	0.25 U'	0.11 U	0.086 U	0.0022 U	0.26 U'	0.15 U	0.00074 U	0.0017 U	0.0028 U	0.16 U	0.19 U	0.0018 U	0.0026 U	0.0019 U	0.0058 U	0.0034 U
trans-1,3-Dichloropropene	NS	NS	0.0014 U	0.0023 U	0.09 U	0.074 U	0.092 U	0.0012 U	0.0013 U	0.17 U	0.073 U	0.058 U	0.0014 U	0.17 U	0.099 U	0.00049 U	0.0011 U	0.0018 U	0.1 U	0.13 U	0.0012 U	0.0017 U	0.0012 U	0.0039 U	0.0022 U
Trichloroethene	0.47	200	0.00069 U	0.0011 U	0.045 U	0.037 U	0.046 U	0.00062 U	0.00063 U	0.085 U	0.036 U	0.029 U	0.00072 U	0.087 U	0.049 U	0.00025 U	0.00056 U	0.00092 U	0.052 U	0.065 U	0.00061 U	0.00086 U	0.00062 U	0.0019 U	0.0011 U
Trichlorofluoromethane	NS	NS	0.0055 U	0.0091 U	0.36 U	0.3 U	0.37 U	0.005 U	0.005 U	0.68 U	0.29 U	0.23 U	0.0058 U	0.7 U	0.4 U	0.002 U	0.0045 U	0.0074 U	0.41 U	0.52 U	0.0049 U	0.0068 U	0.005 U	0.015 U	0.0089 U
Vinyl chloride	0.02	13	0.0014 U	0.0023 U	0.09 U'	0.074 U'	0.092 U'	0.0012 U	0.0013 U	0.17 U'	0.073 U'	0.058 U'	0.0014 U	0.17 U'	0.099 U'	0.00049 U	0.0011 U	0.0018 U	0.1 U'	0.13 U'	0.0012 U	0.0017 U	0.0012 U	0.0039 U	0.0022 U
Xylene (m&p)	NS	NS	0.0028 U	0.01	5.5	0.23	3.7	0.0025 U	0.0011 J	4.4	0.14 J	0.11 J	0.0029 U	0.98	0.45	0.00099 U	0.0022 U	0.016	2.7	1.9	0.0024 U	0.0034 U	0.0025 U	0.016	0.018
Xylene (o)	NS	NS	0.0014 U	0.0085	16	4.2	0.73	0.0012 U	0.00058 J	4.3	0.06 J	0.055 J	0.0014 U	0.3	0.13	0.0026	0.0011 U	0.0078	0.6	0.4	0.0012 U	0.0017 U	0.0012 U	0.009	0.0084
Xylenes (Total)	1.6	500	0.0014 U	0.019	**22**	**4.4**	**4.4**	0.0012 U	0.0017 J	**8.7**	0.2 J	0.17 J	0.0014 U	1.3	0.58	0.0026	0.0011 U	0.024	**3.3**	**2.3**	0.0012 U	0.0017 U	0.0012 U	0.025	0.026
Total Volatile TICs	NS	NS	0.0398 J	0.0398 J	0.0398 J	11.9 J	135 J	0.00687 J	0.00687 J	0.00687 J	0.00687 J	0.00687 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

Notes:

NYSDEC GW Protection SCO = New York State Department of Environmental Conservation Groundwater Protection Soil Cleanup Objectives, from Table 375-6.8 of 6 NYCRR Part 375.

NYSDEC Commercial SCO = New York State Department of Environmental Conservation Restricted Commercial Use Soil Cleanup Objectives, from Table 375-6.8 of 6 NYCRR Part 375.

ft bgs = Feet below ground surface.

mg/kg = Milligrams per kilogram.

Green concentrations exceed the NYSDEC GW Protection SCO.

Highlighted concentrations exceed the NYSDEC Commercial SCO.

— = Sample not analyzed.

NS = No standard currently established.

ND = Not Detected.

U = Not detected above laboratory detection limit.

U' = Laboratory reporting limit exceeds the applicable regulatory standard or criteria being utilized.

J = Result below the reporting limit (estimated value).

DUP = Duplicate sample was taken.

When the applicable state standard applies to mixed isomers and the laboratory reports individual isomers, the total standard is listed for each isomer.

* = Sample was analyzed twice by the laboratory. Higher detections were reported.

Table 5
Soil Reuse Characterization Sampling Results
Summary of Volatile Organic Compounds in Soil.
MJ Painting; Olean, New York.

Sample ID	NYSDEC GW Protection SCO	NYSDEC Commercial SCO	RX-425	RX-426	RX-426	RX-426	RX-426	RX-427	RX-427	RX-427	RX-427	RX-428	RX-428	RX-428	RX-428	RX-429	RX-429	RX-429	RX-429	RX-429	RX-430	RX-430	RX-430	RX-430	RX-431	RX-431
Sample Depth (ft bgs)			10-12	3	7	7-10	10-12	2-3	6	7-10	10-12	2	7.5	10	10-12	0-1	3	6	9	10-12	2	6.5	7-10	10-12	3.5	7
Sample Date			11/11/2021	11/11/2021	11/11/2021	11/11/2021	11/11/2021	11/16/2021	11/16/2021	11/16/2021	11/16/2021	11/10/2021	11/10/2021	11/10/2021	11/10/2021	11/10/2021	11/10/2021	11/10/2021	11/10/2021	11/10/2021	11/10/2021	11/10/2021	11/10/2021	11/10/2021	11/10/2021	11/10/2021
VOLATILE ORGANIC COMPOUNDS - 8260C (mg/kg)																										
1,1,1-Trichloroethane	0.68	500	0.034 U	0.0007 U	0.052 U	0.06 U	0.095 U	0.00052 U	0.00044 U	0.00096 U	0.00054 U	0.00065 U	0.00091 U	0.036 U	0.001 U	0.00053 U	0.00092 U	0.0012 U	0.06 U	0.00045 U	0.00054 U	0.00064 U	0.038 U	0.028 U	0.00067 U	0.043 U
1,1,2,2,-Tetrachloroethane	NS	NS	0.034 U	0.0007 U	0.052 U	0.06 U	0.095 U	0.00052 U	0.00044 U	0.00096 U	0.00054 U	0.00065 U	0.00091 U	0.036 U	0.001 U	0.00053 U	0.00092 U	0.0012 U	0.06 U	0.00045 U	0.00054 U	0.00064 U	0.038 U	0.028 U	0.00067 U	0.043 U
1,1,2-Trichloro-1,2,2-trifluoroethane	NS	NS	0.27 U	0.0056 U	0.42 U	0.48 U	0.76 U	0.0041 U	0.0035 U	0.0077 U	0.0043 U	0.0052 U	0.0073 U	0.29 U	0.0082 U	0.0043 U	0.0074 U	0.0093 U	0.48 U	0.0036 U	0.0044 U	0.0051 U	0.3 U	0.22 U	0.0054 U	0.34 U
1,1,2-Trichloroethane	NS	NS	0.068 U	0.0014 U	0.1 U	0.12 U	0.19 U	0.001 U	0.00088 U	0.0019 U	0.0011 U	0.0013 U	0.0018 U	0.072 U	0.002 U	0.0011 U	0.0018 U	0.0023 U	0.12 U	0.0009 U	0.0011 U	0.0013 U	0.075 U	0.056 U	0.0013 U	0.085 U
1,1,-Dichloroethene	0.33	500	0.068 U	0.0014 U	0.1 U	0.12 U	0.19 U	0.001 U	0.00088 U	0.0019 U	0.0011 U	0.0013 U	0.0018 U	0.072 U	0.002 U	0.0011 U	0.0018 U	0.0023 U	0.12 U	0.0009 U	0.0011 U	0.0013 U	0.075 U	0.056 U	0.0013 U	0.085 U
1,1-Dichloroethane	0.27	240	0.068 U	0.0014 U	0.1 U	0.12 U	0.19 U	0.001 U	0.00088 U	0.0019 U	0.0011 U	0.0013 U	0.0018 U	0.072 U	0.002 U	0.0011 U	0.0018 U	0.0023 U	0.12 U	0.0009 U	0.0011 U	0.0013 U	0.075 U	0.056 U	0.0013 U	0.085 U
1,2,3-Trichlorobenzene	NS	NS	0.14 U	0.0028 U	0.21 U	0.24 U	0.38 U	0.0021 U	0.0018 U	0.0038 U	0.0022 U	0.0026 U	0.0036 U	0.14 U	0.0041 U	0.0021 U	0.0037 U	0.0047 U	0.24 U	0.0018 U	0.0022 U	0.0025 U	0.15 U	0.11 U	0.0027 U	0.17 U
1,2,4-Trichlorobenzene	NS	NS	0.14 U	0.0028 U	0.21 U	0.24 U	0.38 U	0.0021 U	0.0018 U	0.0038 U	0.0022 U	0.0026 U	0.0036 U	0.14 U	0.0041 U	0.0021 U	0.0037 U	0.0047 U	0.24 U	0.0018 U	0.0022 U	0.0025 U	0.15 U	0.11 U	0.0027 U	0.17 U
1,2,4-Trimethylbenzene	3.6	190	**14**	0.0028 U	0.63	**6.8**	**21**	0.0021 U	0.0018 U	0.0022 J	**4**	0.0026 U	0.0036 U	0.037 J	0.0041 U	0.0021 U	0.0037 U	0.0053	0.71	0.06	0.0022 U	0.00044 J	0.19	**12**	0.0027 U	**5.5**
1,2-Dibromo-3-chloropropane	NS	NS	0.2 U	0.0042 U	0.31 U	0.36 U	0.57 U	0.0031 U	0.0026 U	0.0058 U	0.0032 U	0.0039 U	0.0055 U	0.22 U	0.0062 U	0.0032 U	0.0055 U	0.007 U	0.36 U	0.0027 U	0.0033 U	0.0038 U	0.22 U	0.17 U	0.004 U	0.26 U
1,2-Dibromoethane	NS	NS	0.068 U	0.0014 U	0.1 U	0.12 U	0.19 U	0.001 U	0.00088 U	0.0019 U	0.0011 U	0.0013 U	0.0018 U	0.072 U	0.002 U	0.0011 U	0.0018 U	0.0023 U	0.12 U	0.0009 U	0.0011 U	0.0013 U	0.075 U	0.056 U	0.0013 U	0.085 U
1,2-Dichlorobenzene	1.1	500	0.14 U	0.0028 U	0.21 U	0.24 U	0.38 U	0.0021 U	0.0018 U	0.0038 U	0.0022 U	0.0026 U	0.0036 U	0.14 U	0.0041 U	0.0021 U	0.0037 U	0.0047 U	0.24 U	0.0018 U	0.0022 U	0.0025 U	0.15 U	0.11 U	0.0027 U	0.17 U
1,2-Dichloroethane	0.02	30	0.068 U'	0.0014 U	0.1 U'	0.12 U'	0.19 U'	0.001 U	0.00088 U	0.0019 U	0.0011 U	0.0013 U	0.0018 U	0.072 U'	0.002 U	0.0011 U	0.0018 U	0.0023 U	0.12 U'	0.0009 U	0.0011 U	0.0013 U	0.075 U'	0.056 U'	0.0013 U	0.085 U'
1,2-Dichloroethene, Total	NS	NS	0.068 U	0.0014 U	0.1 U	0.12 U	0.19 U	0.001 U	0.00088 U	0.0019 U	0.0011 U	0.0013 U	0.0018 U	0.072 U	0.002 U	0.0011 U	0.0018 U	0.0023 U	0.12 U	0.0009 U	0.0011 U	0.0013 U	0.075 U	0.056 U	0.0013 U	0.085 U
1,2-Dichloropropane	NS	NS	0.068 U	0.0014 U	0.1 U	0.12 U	0.19 U	0.001 U	0.00088 U	0.0019 U	0.0011 U	0.0013 U	0.0018 U	0.072 U	0.002 U	0.0011 U	0.0018 U	0.0023 U	0.12 U	0.0009 U	0.0011 U	0.0013 U	0.075 U	0.056 U	0.0013 U	0.085 U
1,3,5-Trimethylbenzene	8.4	190	1.5	0.0028 U	0.43	3.6	6.2	0.0021 U	0.0018 U	0.0038 U	0.58	0.0026 U	0.0036 U	0.019 J	0.0041 U	0.0021 U	0.0037 U	0.0016 J	0.22 J	0.0036	0.0022 U	0.0025 U	0.056 J	0.74	0.0027 U	1.8
1,3-Dichlorobenzene	2.4	280	0.14 U	0.0028 U	0.21 U	0.037 J	0.38 U	0.0021 U	0.0018 U	0.0038 U	0.0022 U	0.0026 U	0.0036 U	0.14 U	0.0041 U	0.0021 U	0.0037 U	0.0047 U	0.24 U	0.0018 U	0.0022 U	0.0025 U	0.15 U	0.11 U	0.0027 U	0.17 U
1,3-Dichloropropene, Total	NS	NS	0.034 U	0.0007 U	0.052 U	0.06 U	0.095 U	0.00052 U	0.00044 U	0.00096 U	0.00054 U	0.00065 U	0.00091 U	0.036 U	0.001 U	0.00053 U	0.00092 U	0.0012 U	0.06 U	0.00045 U	0.00054 U	0.00064 U	0.038 U	0.028 U	0.00067 U	0.043 U
1,4-Dichlorobenzene	1.8	130	0.14 U	0.0028 U	0.21 U	0.24 U	0.38 U	0.0021 U	0.0018 U	0.0038 U	0.0022 U	0.0026 U	0.0036 U	0.14 U	0.0041 U	0.0021 U	0.0037 U	0.0047 U	0.24 U	0.0018 U	0.0022 U	0.0025 U	0.15 U	0.11 U	0.0027 U	0.17 U
1,4-Dioxane	0.1	130	5.4 U'	0.11 U'	8.4 U'	9.6 U'	15 U'	0.082 U	0.07 U	0.15 U'	0.086 U	0.1 U	0.14 U'	5.8 U'	0.16 U'	0.085 U	0.15 U'	0.19 U'	9.5 U'	0.072 U	0.087 U	0.1 U	6 U'	4.4 U'	0.11 U'	6.8 U'
2-Butanone	0.12	500	0.68 U'	0.014 U	1 U'	1.2 U'	1.9 U'	0.01 U	0.0088 U	0.019 U	0.011 U	0.013 U	0.015 J	0.72 U'	0.02 U	0.011 U	0.018 U	0.028	1.2 U'	0.009 U	0.011 U	0.013 U	0.75 U'	0.56 U'	0.013 U	0.85 U'
2-Hexanone	NS	NS	0.68 U	0.014 U	1 U	1.2 U	1.9 U	0.01 U	0.0088 U	0.019 U	0.011 U	0.013 U	0.018 U	0.72 U	0.02 U	0.011 U	0.018 U	0.023 U	1.2 U	0.009 U	0.011 U	0.013 U	0.75 U	0.56 U	0.013 U	0.85 U
4-Methyl-2-Pentanone	NS	NS	0.68 U	0.014 U	1 U	1.2 U	1.9 U	0.01 U	0.0088 U	0.019 U	0.011 U	0.013 U	0.018 U	0.72 U	0.02 U	0.011 U	0.018 U	0.023 U	1.2 U	0.009 U	0.011 U	0.013 U	0.75 U	0.56 U	0.013 U	0.85 U
Acetone	0.05	500	0.68 U'	0.014 U	1 U'	1.2 U'	1.9 U'	0.01 U	0.0088 U	0.019 U	0.011 U	0.013 U	**0.09**	0.72 U'	0.02 U	0.011 U	0.018 U	**0.17**	1.2 U'	0.045	0.011 U	**0.056**	0.75 U'	0.56 U'	0.013 U	0.85 U'
Benzene	0.06	44	0.027 J	0.00056 J	0.038 J	**0.79**	**1.1**	0.00052 U	0.00044 U	0.003	0.0015	0.00065 U	0.0024	0.036 U	0.001 U	0.00053 U	0.00077 J	0.006	**0.69**	0.00077	0.00054 U	0.00082	0.024 J	0.028 U	0.00065 J	**0.32**
Bromochloromethane	NS	NS	0.14 U	0.0028 U	0.21 U	0.24 U	0.38 U	0.0021 U	0.0018 U	0.0038 U	0.0022 U	0.0026 U	0.0036 U	0.14 U	0.0041 U	0.0021 U	0.0037 U	0.0047 U	0.24 U	0.0018 U	0.0022 U	0.0025 U	0.15 U	0.11 U	0.0027 U	0.17 U
Bromodichloromethane	NS	NS	0.034 U	0.0007 U	0.052 U	0.06 U	0.095 U	0.00052 U	0.00044 U	0.00096 U	0.00054 U	0.00065 U	0.00091 U	0.036 U	0.001 U	0.00053 U	0.00092 U	0.0012 U	0.06 U	0.00045 U	0.00054 U	0.00064 U	0.038 U	0.028 U	0.00067 U	0.043 U
Bromoform	NS	NS	0.27 U	0.0056 U	0.42 U	0.48 U	0.76 U	0.0041 U	0.0035 U	0.0077 U	0.0043 U	0.0052 U	0.0073 U	0.29 U	0.0082 U	0.0043 U	0.0074 U	0.0093 U	0.48 U	0.0036 U	0.0044 U	0.0051 U	0.3 U	0.22 U	0.0054 U	0.34 U
Bromomethane	NS	NS	0.14 U	0.0028 U	0.21 U	0.24 U	0.38 U	0.0021 U	0.0018 U	0.0038 U	0.0022 U	0.0026 U	0.0036 U	0.14 U	0.0041 U	0.0021 U	0.0037 U	0.0047 U	0.24 U	0.0018 U	0.0022 U	0.0025 U	0.15 U	0.11 U	0.0027 U	0.17 U
Carbon disulfide	NS	NS	0.68 U	0.014 U	1 U	1.2 U	1.9 U	0.01 U	0.0088 U	0.019 U	0.011 U	0.013 U	0.018 U	0.72 U	0.02 U	0.011 U	0.018 U	0.023 U	1.2 U	0.009 U	0.011 U	0.013 U	0.75 U	0.56 U	0.013 U	0.85 U
Carbon tetrachloride	0.76	22	0.068 U	0.0014 U	0.1 U	0.12 U	0.19 U	0.001 U	0.00088 U	0.0019 U	0.0011 U	0.0013 U	0.0018 U	0.072 U	0.002 U	0.0011 U	0.0018 U	0.0023 U	0.12 U	0.0009 U	0.0011 U	0.0013 U	0.075 U	0.056 U	0.0013 U	0.085 U
Chlorobenzene	1.1	500	0.034 U	0.0007 U	0.052 U	0.06 U	0.095 U	0.00052 U	0.00044 U	0.00096 U	0.00054 U	0.00065 U	0.00091 U	0.036 U	0.001 U	0.00053 U	0.00092 U	0.0012 U	0.06 U	0.00045 U	0.00054 U	0.00064 U	0.038 U	0.028 U	0.00067 U	0.043 U
Chloroethane	NS	NS	0.14 U	0.0028 U	0.21 U	0.24 U	0.38 U	0.0021 U	0.0018 U	0.0038 U	0.0022 U	0.0026 U	0.0036 U	0.14 U	0.0041 U	0.0021 U	0.0037 U	0.0047 U	0.24 U	0.0018 U	0.0022 U	0.0025 U	0.15 U	0.11 U	0.0027 U	0.17 U
Chloroform	0.37	350	0.1 U	0.0021 U	0.16 U	0.18 U	0.29 U	0.0015 U	0.0013 U	0.0029 U	0.0016 U	0.0019 U	0.0027 U	0.11 U	0.0031 U	0.0016 U	0.0028 U	0.0035 U	0.18 U	0.0014 U	0.0016 U	0.0019 U	0.11 U	0.083 U	0.002 U	0.13 U
Chloromethane	NS	NS	0.27 U	0.0056 U	0.42 U	0.48 U	0.76 U	0.0041 U	0.0035 U	0.0077 U	0.0043 U	0.0052 U	0.0073 U	0.29 U	0.0082 U	0.0043 U	0.0074 U	0.0093 U	0.48 U	0.0036 U	0.0044 U	0.0051 U	0.3 U	0.22 U	0.0054 U	0.34 U
cis-1,2-Dichloroethene	0.25	500	0.068 U	0.0014 U	0.1 U	0.12 U	0.19 U	0.001 U	0.00088 U	0.0019 U	0.0011 U	0.0013 U	0.0018 U	0.072 U	0.002 U	0.0011 U	0.0018 U	0.0023 U	0.12 U	0.0009 U	0.0011 U	0.0013 U	0.075 U	0.056 U	0.0013 U	0.085 U
cis-1,3-Dichloropropene	NS	NS	0.034 U	0.0007 U	0.052 U	0.06 U	0.095 U	0.00052 U	0.00044 U	0.00096 U	0.00054 U	0.00065 U	0.00091 U	0.036 U	0.001 U	0.00053 U	0.00092 U	0.0012 U	0.06 U	0.00045 U	0.00054 U	0.00064 U	0.038 U	0.028 U	0.00067 U	0.043 U
Cyclohexane	NS	NS	4.1	0.014 U	2.8	8.1	18	0.01 U	0.0088 U	0.012 J	0.26	0.013 U	0.018 U	0.63 J	0.02 U	0.011 U	0.018 U	0.023 U	0.22 J	0.0055 J	0.011 U	0.026	0.55 J	3.8	0.0056 J	18
Dibromochloromethane	NS	NS	0.068 U	0.0014 U	0.1 U	0.12 U	0.19 U	0.001 U	0.00088 U	0.0019 U	0.0011 U	0.0013 U	0.0018 U	0.072 U	0.002 U	0.0011 U	0.0018 U	0.0023 U	0.12 U	0.0009 U	0.0011 U	0.0013 U	0.075 U	0.056 U	0.0013 U	0.085 U
Dichlorodifluoromethane	NS	NS	0.68 U	0.014 U	1 U	1.2 U	1.9 U	0.01 U	0.0088 U	0.019 U	0.011 U	0.013 U	0.018 U	0.72 U	0.02 U	0.011 U	0.018 U	0.023 U	1.2 U	0.009 U	0.011 U	0.013 U	0.75 U	0.56 U	0.013 U	0.85 U
Ethylbenzene	1	390	0.18	0.00029 J	0.057 J	**1.3**	**2.6**	0.001 U	0.00088 U	0.0006 J	**1.1**	0.0013 U	0.0018 U	0.072 U	0.002 U	0.0011 U	0.0018 U	0.00093 J	0.14	0.002	0.0011 U	0.0013 U	0.039 J	0.056 U	0.00021 J	0.38
Isopropylbenzene	NS	NS	0.94	0.0014 U	0.052 J	1.5	2.6	0.001 U	0.00088 U	0.00048 J	0.31	0.0013 U	0.0018 U	0.2	0.002 U	0.0011 U	0.0018 U	0.00072 J	0.072 J	0.0091	0.0011 U	0.00017 J	0.064 J	1.4	0.0013 U	0.39
Methyl Acetate	NS	NS	0.27 U	0.0056 U	0.54	0.48 U	0.76 U	0.0041 U	0.0035 U	0.0077 U	0.0043 U	0.0052 U	0.0073 U	0.076 J	0.0082 U	0.0043 U	0.0074 U	0.0093 U	0.48 U	0.0036 U	0.0044 U	0.0051 U	0.21 J	0.22 U	0.0054 U	0.34 U
Methyl cyclohexane	NS	NS	8.4	0.0056 U	6.9	26	52	0.00087 J	0.0035 U	0.029	2.9	0.0052 U	0.0073 U	5	0.0082 U	0.0043 U	0.0074 U	0.0068 J	0.68	0.029	0.0044 U	0.049	2.2	26	0.0066	54
Methyl tertiary butyl ether (MTBE)	0.93	500	0.14 U	0.0028 U	0.21 U	0.24 U	0.38 U	0.0021 U	0.0018 U	0.0038 U	0.0022 U	0.0026 U	0.0036 U	0.14 U	0.0041 U	0.0021 U	0.0037 U	0.0047 U	0.24 U	0.0018 U	0.0022 U	0.0025 U	0.15 U	0.11 U	0.0027 U	0.17 U
Methylene chloride	0.05	500	0.34 U'	0.007 U	0.52 U'	0.6 U'	0.95 U'	0.0052 U	0.0044 U	0.0096 U	0.0054 U	0.0065 U	0.0091 U	0.36 U'	0.01 U	0.0053 U	0.0092 U	0.012 U	0.6 U'	0.0045 U	0.0054 U	0.0064 U	0.38 U'	0.28 U'	0.0067 U	0.43 U'
n-Butylbenzene	12	500	0.6	0.0014 U	0.053 J	2	3.5	0.001 U	0.00088 U	0.0019 U	0.15	0.0013 U	0.0018 U	0.12	0.002 U	0.0011 U	0.0018 U	0.0023 U	0.039 J	0.0042	0.0011 U	0.0013 U	0.17	2.2	0.0013 U	0.54
n-Propylbenzene	3.9	500	1.7	0.0014 U	0.083 J	3.1	**5.3**	0.001 U	0.00088 U	0.00041 J	0.41	0.0013 U	0.0018 U	0.47	0.002 U	0.0011 U	0.0018 U	0.0023 U	0.058 J	0.015	0.0011 U	0.0013 U	0.16	3.2	0.0013 U	0.73
sec-Butylbenzene	11	500	0.22	0.0014 U	0.026 J	0.75	1.2	0.001 U	0.00088 U	0.0019 U	0.069	0.0013 U	0.0018 U	0.26	0.002 U	0.0011 U	0.0018 U	0.00057 J	0.052 J	0.0017	0.0011 U	0.0013 U	0.058 J	0.71	0.0013 U	0.18
Styrene	NS	NS	0.068 U	0.0014 U	0.1 U	0.12 U	0.19 U	0.001 U	0.00088 U	0.0019 U	0.0011 U	0.0013 U	0.0018 U	0.072 U	0.002 U	0.0011 U	0.0018 U	0.0023 U	0.12 U	0.0006 J	0.0011 U	0.0013 U	0.075 U	0.056 U	0.0013 U	0.085 U
tert-Butylbenzene	5.9	500	0.022 J	0.0028 U	0.21 U	0.07 J	0.12 J	0.0021 U	0.0018 U	0.0038 U	0.0022 U	0.0026 U	0.0036 U	0.044 J	0.0041 U	0.0021 U	0.0037 U	0.0047 U	0.24 U	0.0018 U	0.0022 U	0.0025 U	0.15 U	0.11 U	0.0027 U	0.17 U
Tetrachloroethene	1.3	150	0.034 U	0.0007 U	0.052 U	0.06 U	0.095 U	0.00052 U	0.00044 U	0.00096 U	0.00054 U	0.00065 U	0.00091 U	0.036 U	0.001 U	0.00053 U	0.00092 U	0.0012 U	0.06 U	0.00045 U	0.00054 U	0.00064 U	0.038 U	0.028 U	0.00067 U	0.043 U
Toluene	0.7	500	0.13	0.0014 U	0.31	**3**	**4.6**	0.001 U	0.00088 U	0.0045	0.055	0.0013 U	0.0019	0.072 U	0.002 U	0.0011 U	0.0018 U	0.0072	**1.4**	0.0009	0.0011 U	0.0013 U	0.12	0.059	0.0013 U	**1.5**
trans-1,2-Dichloroethene	0.19	500	0.1 U	0.0021 U	0.16 U	0.18 U	0.29 U'	0.0015 U	0.0013 U	0.0029 U	0.0016 U	0.0019 U	0.0027 U	0.11 U	0.0031 U	0.0016 U	0.0028 U	0.0035 U	0.18 U	0.0014 U	0.0016 U	0.0019 U	0.11 U	0.083 U	0.002 U	0.13 U
trans-1,3-Dichloropropene	NS	NS	0.068 U	0.0014 U	0.1 U	0.12 U	0.19 U	0.001 U	0.00088 U	0.0019 U	0.0011 U	0.0013 U	0.0018 U	0.072 U	0.002 U	0.0011 U	0.0018 U	0.0023 U	0.12 U	0.0009 U	0.0011 U	0.0013 U	0.075 U	0.056 U	0.0013 U	0.085 U
Trichloroethene	0.47	200	0.034 U	0.0007 U	0.052 U	0.06 U	0.095 U	0.00052 U	0.00044 U	0.00096 U	0.00054 U	0.00065 U	0.00091 U	0.036 U	0.001 U	0.00053 U	0.00092 U	0.0012 U	0.06 U	0.00045 U	0.00054 U	0.00064 U	0.038 U	0.028 U	0.00067 U	0.043 U
Trichlorofluoromethane	NS	NS	0.27 U	0.0056 U	0.42 U	0.48 U	0.76 U	0.0041 U	0.0035 U	0.0077 U	0.0043 U	0.0052 U	0.0073 U	0.29 U	0.0082 U	0.0043 U	0.0074 U	0.0093 U	0.48 U	0.0036 U	0.0044 U	0.0051 U	0.3 U	0.22 U	0.0054 U	0.34 U
Vinyl chloride	0.02	13	0.068 U'	0.0014 U	0.1 U'	0.12 U'	0.19 U'	0.001 U	0.00088 U	0.0019 U	0.0011 U	0.0013 U	0.0018 U	0.072 U'	0.002 U	0.0011 U	0.0018 U	0.0023 U	0.12 U'	0.0009 U	0.0011 U	0.0013 U	0.075 U'	0.056 U'	0.0013 U	0.085 U'
Xylene (m&p)	NS	NS	0.21	0.0028 U	0.71	6.6	12	0.0021 U	0.0018 U	0.0036 J	0.16	0.0026 U	0.0036 U	0.14 U	0.0041 U	0.0021 U	0.0037 U	0.005	0.91	0.0049	0.0022 U	0.00085 J	0.15	0.21	0.00083 J	3
Xylene (o)	NS	NS	1.4	0.0014 U	0.3	0.9	1.5	0.001 U	0.00088 U	0.0013 J	2	0.0013 U	0.0018 U	0.072 U	0.002 U	0.0011 U	0.0018 U	0.0019 J	0.33	0.0022	0.0011 U	0.00041 J	0.063 J	0.14	0.0013 U	1.3
Xylenes (Total)	1.6	500	1.6	0.0014 U	1	**7.5**	**14**	0.001 U	0.00088 U	0.0049 J	**2.2**	0.0013 U	0.0018 U	0.072 U	0.002 U	0.0011 U	0.0018 U	0.0069 J	1.2	0.0071	0.0011 U	0.0013 J	0.21 J	0.35	0.00083 J	**4.3**
Total Volatile TICs	NS	NS	ND	0.0193 J	0.0193 J	0.0193 J	0.0193 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.0714 J	0.0714 J

Notes:

NYSDEC GW Protection SCO = New York State Department of Environmental Conservation Groundwater Protection Soil Cleanup Objectives, from Table 375-6.8 of 6 NYCRR Part 375.
NYSDEC Commercial SCO = New York State Department of Environmental Conservation Restricted Commercial Use Soil Cleanup Objectives, from Table 375-6.8 of 6 NYCRR Part 375.
ft bgs = Feet below ground surface.
mg/kg = Milligrams per kilogram.
Green concentrations exceed the NYSDEC GW Protection SCO.
Highlighted concentrations exceed the NYSDEC Commercial SCO.
— = Sample not analyzed.
NS = No standard currently established.
ND = Not Detected.
U = Not detected above laboratory detection limit.
U' = Laboratory reporting limit exceeds the applicable regulatory standard or criteria being utilized.
J = Result below the reporting limit (estimated value).
DUP = Duplicate sample was taken.
When the applicable state standard applies to mixed isomers and the laboratory reports individual isomers, the total standard is listed for each isomer.
* = Sample was analyzed twice by the laboratory. Higher detections were reported.

Table 5
Soil Reuse Characterization Sampling Results
Summary of Volatile Organic Compounds in Soil.
MJ Painting; Olean, New York.

Sample ID	NYSDEC GW Protection SCO	NYSDEC Commercial SCO	RX-431	RX-431	RX-432	RX-432	RX-432	RX-432	RX-432	RX-433	RX-433	RX-434	RX-434	RX-434	RX-434	RX-434	RX-435	RX-435	RX-435	RX-436	RX-436	RX-436	RX-436	RX-436 DUP	RX-436	RX-437
Sample Depth (ft bgs)			7-10	10-12	0-1	4	6	7-10	10-12	9	11	0-1	3	6	8	11	6	9	11	0-1	3	6	7.5	7.5	11	3
Sample Date			11/16/2021	11/16/2021	11/10/2021	11/16/2021	11/16/2021	11/16/2021	11/16/2021	11/17/2021	11/17/2021	11/17/2021	11/17/2021	11/17/2021	11/17/2021	11/17/2021	11/17/2021	11/17/2021	11/17/2021	11/17/2021	11/17/2021	11/17/2021	11/17/2021	11/17/2021	11/17/2021	11/17/2021
VOLATILE ORGANIC COMPOUNDS - 8260C (mg/kg)																										
1,1,1-Trichloroethane	0.68	500	0.00054 U	0.058 U	0.00051 U	0.042 U	0.00092 U	0.032 U	0.026 U	0.067 U	0.072 U	0.00052 U	0.00064 U	0.00041 U	0.00072 U	0.00066 U	0.00049 U	0.00072 U	0.0006 U	0.00076 U	0.00055 U	0.036 U	0.033 U	0.03 U	0.035 U	0.00088 U
1,1,2,2,-Tetrachloroethane	NS	NS	0.00054 U	0.058 U	0.00051 U	0.042 U	0.00092 U	0.032 U	0.026 U	0.067 U	0.072 U	0.00052 U	0.00064 U	0.00041 U	0.00072 U	0.00066 U	0.00049 U	0.00072 U	0.0006 U	0.00076 U	0.00055 U	0.036 U	0.033 U	0.03 U	0.035 U	0.00088 U
1,1,2-Trichloro-1,2,2-trifluoroethane	NS	NS	0.0043 U	0.47 U	0.0041 U	0.34 U	0.0073 U	0.26 U	0.21 U	0.54 U	0.58 U	0.0042 U	0.0052 U	0.0033 U	0.0057 U	0.0053 U	0.0039 U	0.0058 U	0.0048 U	0.006 U	0.0044 U	0.28 U	0.26 U	0.24 U	0.28 U	0.007 U
1,1,2-Trichloroethane	NS	NS	0.0011 U	0.12 U	0.001 U	0.084 U	0.0018 U	0.065 U	0.053 U	0.13 U	0.14 U	0.001 U	0.0013 U	0.00082 U	0.0014 U	0.0013 U	0.00098 U	0.0014 U	0.0012 U	0.0015 U	0.0011 U	0.071 U	0.065 U	0.06 U	0.07 U	0.0018 U
1,1,-Dichloroethene	0.33	500	0.0011 U	0.12 U	0.001 U	0.084 U	0.0018 U	0.065 U	0.053 U	0.13 U	0.14 U	0.001 U	0.0013 U	0.00082 U	0.0014 U	0.0013 U	0.00098 U	0.0014 U	0.0012 U	0.0015 U	0.0011 U	0.071 U	0.065 U	0.06 U	0.07 U	0.0018 U
1,1-Dichloroethane	0.27	240	0.0011 U	0.12 U	0.001 U	0.084 U	0.0018 U	0.065 U	0.053 U	0.13 U	0.14 U	0.001 U	0.0013 U	0.00082 U	0.0014 U	0.0013 U	0.00098 U	0.0014 U	0.0012 U	0.0015 U	0.0011 U	0.071 U	0.065 U	0.06 U	0.07 U	0.0018 U
1,2,3-Trichlorobenzene	NS	NS	0.0021 U	0.23 U	0.002 U	0.17 U	0.0037 U	0.13 U	0.11 U	0.27 U	0.29 U	0.0021 U	0.0026 U	0.0016 U	0.0029 U	0.0026 U	0.002 U	0.0029 U	0.0024 U	0.003 U	0.0022 U	0.14 U	0.13 U	0.12 U	0.14 U	0.0035 U
1,2,4-Trichlorobenzene	NS	NS	0.0021 U	0.23 U	0.002 U	0.17 U	0.0037 U	0.13 U	0.11 U	0.27 U	0.29 U	0.0021 U	0.0026 U	0.0016 U	0.0029 U	0.0026 U	0.002 U	0.0029 U	0.0024 U	0.003 U	0.0022 U	0.14 U	0.13 U	0.12 U	0.14 U	0.0035 U
1,2,4-Trimethylbenzene	3.6	190	2.4	**6.1**	0.002 U	0.18	0.025	0.82	**7.7**	0.82	0.29 U	0.0021 U	0.0026 U	0.0016 U	0.00056 J	0.0026 U	0.002 U	0.00093 J	0.0024 U	0.003 U	0.002 J	0.098 J	0.13 U	0.12 U	**10**	0.0035 U
1,2-Dibromo-3-chloropropane	NS	NS	0.0032 U	0.35 U	0.003 U	0.25 U	0.0055 U	0.19 U	0.16 U	0.4 U	0.43 U	0.0031 U	0.0039 U	0.0025 U	0.0043 U	0.004 U	0.0029 U	0.0043 U	0.0036 U	0.0045 U	0.0033 U	0.21 U	0.2 U	0.18 U	0.21 U	0.0052 U
1,2-Dibromoethane	NS	NS	0.0011 U	0.12 U	0.001 U	0.084 U	0.0018 U	0.065 U	0.053 U	0.13 U	0.14 U	0.001 U	0.0013 U	0.00082 U	0.0014 U	0.0013 U	0.00098 U	0.0014 U	0.0012 U	0.0015 U	0.0011 U	0.071 U	0.065 U	0.06 U	0.07 U	0.0018 U
1,2-Dichlorobenzene	1.1	500	0.0021 U	0.23 U	0.002 U	0.17 U	0.0037 U	0.13 U	0.11 U	0.27 U	0.29 U	0.0021 U	0.0026 U	0.0016 U	0.0029 U	0.0026 U	0.002 U	0.0029 U	0.0024 U	0.003 U	0.0022 U	0.14 U	0.13 U	0.12 U	0.14 U	0.0035 U
1,2-Dichloroethane	0.02	30	0.0011 U	0.12 U'	0.001 U	0.084 U'	0.0018 U	0.065 U'	0.053 U'	0.13 U'	0.14 U'	0.001 U	0.0013 U	0.00082 U	0.0014 U	0.0013 U	0.00098 U	0.0014 U	0.0012 U	0.0015 U	0.0011 U	0.071 U'	0.065 U'	0.06 U'	0.07 U'	0.0018 U
1,2-Dichloroethene, Total	NS	NS	0.0011 U	0.12 U	0.001 U	0.084 U	0.0018 U	0.065 U	0.053 U	0.13 U	0.14 U	0.001 U	0.0013 U	0.00082 U	0.0014 U	0.0013 U	0.00098 U	0.0014 U	0.0012 U	0.0015 U	0.0011 U	0.071 U	0.065 U	0.06 U	0.07 U	0.0018 U
1,2-Dichloropropane	NS	NS	0.0011 U	0.12 U	0.001 U	0.084 U	0.0018 U	0.065 U	0.053 U	0.13 U	0.14 U	0.001 U	0.0013 U	0.00082 U	0.0014 U	0.0013 U	0.00098 U	0.0014 U	0.0012 U	0.0015 U	0.0011 U	0.071 U	0.065 U	0.06 U	0.07 U	0.0018 U
1,3,5-Trimethylbenzene	8.4	190	0.054	0.76	0.002 U	0.14 J	0.0075	0.1 J	0.37	0.17 J	0.29 U	0.0021 U	0.0026 U	0.0016 U	0.0029 U	0.0026 U	0.002 U	0.00051 J	0.0024 U	0.003 U	0.00066 J	0.023 J	0.13 U	0.12 U	0.22	0.0035 U
1,3-Dichlorobenzene	2.4	280	0.0021 U	0.23 U	0.002 U	0.17 U	0.0037 U	0.13 U	0.11 U	0.27 U	0.29 U	0.0021 U	0.0026 U	0.0016 U	0.0029 U	0.0026 U	0.002 U	0.0029 U	0.0024 U	0.003 U	0.0022 U	0.14 U	0.13 U	0.12 U	0.14 U	0.0035 U
1,3-Dichloropropene, Total	NS	NS	0.00054 U	0.058 U	0.00051 U	0.042 U	0.00092 U	0.032 U	0.026 U	0.067 U	0.072 U	0.00052 U	0.00064 U	0.00041 U	0.00072 U	0.00066 U	0.00049 U	0.00072 U	0.0006 U	0.00076 U	0.00055 U	0.036 U	0.033 U	0.03 U	0.035 U	0.00088 U
1,4-Dichlorobenzene	1.8	130	0.0021 U	0.23 U	0.002 U	0.17 U	0.0037 U	0.13 U	0.11 U	0.27 U	0.29 U	0.0021 U	0.0026 U	0.0016 U	0.0029 U	0.0026 U	0.002 U	0.0029 U	0.0024 U	0.003 U	0.0022 U	0.14 U	0.13 U	0.12 U	0.14 U	0.0035 U
1,4-Dioxane	0.1	130	0.086 U	9.3 U'	0.081 U	6.8 U'	0.15 U'	5.2 U'	4.2 U'	11 U'	12 U'	0.084 U	0.1 U	0.066 U	0.11 U'	0.1 U	0.079 U	0.12 U'	0.095 U	0.12 U'	0.087 U	5.7 U'	5.2 U'	4.8 U'	5.6 U'	0.14 U'
2-Butanone	0.12	500	0.011 U	1.2 U'	0.01 U	0.84 U'	0.018 U	0.65 U'	0.53 U'	1.3 U'	1.4 U'	0.01 U	0.013 U	0.0082 U	0.014 U	0.013 U	0.0098 U	0.0059 J	0.012 U	0.015 U	0.011 U	0.71 U'	0.65 U'	0.6 U'	0.7 U'	0.018 U
2-Hexanone	NS	NS	0.011 U	1.2 U	0.01 U	0.84 U	0.018 U	0.65 U	0.53 U	1.3 U	1.4 U	0.01 U	0.013 U	0.0082 U	0.014 U	0.013 U	0.0098 U	0.014 U	0.012 U	0.015 U	0.011 U	0.71 U	0.65 U	0.6 U	0.7 U	0.018 U
4-Methyl-2-Pentanone	NS	NS	0.011 U	1.2 U	0.01 U	0.84 U	0.018 U	0.65 U	0.53 U	1.3 U	1.4 U	0.01 U	0.013 U	0.0082 U	0.014 U	0.013 U	0.0098 U	0.014 U	0.012 U	0.015 U	0.011 U	0.71 U	0.65 U	0.6 U	0.7 U	0.018 U
Acetone	0.05	500	0.011 U	1.2 U'	0.01 U	0.84 U'	**0.084**	0.65 U'	0.53 U'	1.3 U'	1.4 U'	0.01 U	0.013 U	0.0082 U	0.014 U	0.018	0.012	0.011 J	0.01 J	0.015 U	0.023	0.71 U'	0.65 U'	0.6 U'	0.7 U'	0.018 U
Benzene	0.06	44	0.0081	0.038 J	0.00051 U	**0.14**	0.0077	0.036	0.026 U	0.022 J	0.072 U'	0.00052 U	0.00064 U	0.00041 U	0.00072 U	0.00066 U	0.00049 U	0.00072 U	0.0006 U	0.00076 U	0.0032	0.015 J	0.033 U	0.03 U	0.035 U	0.00088 U
Bromochloromethane	NS	NS	0.0021 U	0.23 U	0.002 U	0.17 U	0.0037 U	0.13 U	0.11 U	0.27 U	0.29 U	0.0021 U	0.0026 U	0.0016 U	0.0029 U	0.0026 U	0.002 U	0.0029 U	0.0024 U	0.003 U	0.0022 U	0.14 U	0.13 U	0.12 U	0.14 U	0.0035 U
Bromodichloromethane	NS	NS	0.00054 U	0.058 U	0.00051 U	0.042 U	0.00092 U	0.032 U	0.026 U	0.067 U	0.072 U	0.00052 U	0.00064 U	0.00041 U	0.00072 U	0.00066 U	0.00049 U	0.00072 U	0.0006 U	0.00076 U	0.00055 U	0.036 U	0.033 U	0.03 U	0.035 U	0.00088 U
Bromoform	NS	NS	0.0043 U	0.47 U	0.0041 U	0.34 U	0.0073 U	0.26 U	0.21 U	0.54 U	0.58 U	0.0042 U	0.0052 U	0.0033 U	0.0057 U	0.0053 U	0.0039 U	0.0058 U	0.0048 U	0.006 U	0.0044 U	0.28 U	0.26 U	0.24 U	0.28 U	0.007 U
Bromomethane	NS	NS	0.0021 U	0.23 U	0.002 U	0.17 U	0.0037 U	0.13 U	0.11 U	0.27 U	0.29 U	0.0021 U	0.0026 U	0.0016 U	0.0029 U	0.0026 U	0.002 U	0.0029 U	0.0024 U	0.003 U	0.0022 U	0.14 U	0.13 U	0.12 U	0.14 U	0.0035 U
Carbon disulfide	NS	NS	0.011 U	1.2 U	0.01 U	0.84 U	0.018 U	0.65 U	0.53 U	1.3 U	1.4 U	0.01 U	0.013 U	0.0082 U	0.014 U	0.013 U	0.0098 U	0.014 U	0.0079 J	0.015 U	0.011 U	0.71 U	0.65 U	0.6 U	0.7 U	0.018 U
Carbon tetrachloride	0.76	22	0.0011 U	0.12 U	0.001 U	0.084 U	0.0018 U	0.065 U	0.053 U	0.13 U	0.14 U	0.001 U	0.0013 U	0.00082 U	0.0014 U	0.0013 U	0.00098 U	0.0014 U	0.0012 U	0.0015 U	0.0011 U	0.071 U	0.065 U	0.06 U	0.07 U	0.0018 U
Chlorobenzene	1.1	500	0.00054 U	0.058 U	0.00051 U	0.042 U	0.00092 U	0.032 U	0.026 U	0.067 U	0.072 U	0.00052 U	0.00064 U	0.00041 U	0.00072 U	0.00066 U	0.00049 U	0.00072 U	0.0006 U	0.00076 U	0.00055 U	0.036 U	0.033 U	0.03 U	0.035 U	0.00088 U
Chloroethane	NS	NS	0.0021 U	0.23 U	0.002 U	0.17 U	0.0037 U	0.13 U	0.11 U	0.27 U	0.29 U	0.0021 U	0.0026 U	0.0016 U	0.0029 U	0.0026 U	0.002 U	0.0029 U	0.0024 U	0.003 U	0.0022 U	0.14 U	0.13 U	0.12 U	0.14 U	0.0035 U
Chloroform	0.37	350	0.0016 U	0.17 U	0.0015 U	0.13 U	0.0027 U	0.097 U	0.08 U	0.2 U	0.22 U	0.0016 U	0.0019 U	0.0012 U	0.0021 U	0.002 U	0.0015 U	0.0022 U	0.0018 U	0.0023 U	0.0016 U	0.11 U	0.098 U	0.09 U	0.1 U	0.0026 U
Chloromethane	NS	NS	0.0043 U	0.47 U	0.0041 U	0.34 U	0.0073 U	0.26 U	0.21 U	0.54 U	0.58 U	0.0042 U	0.0052 U	0.0033 U	0.0057 U	0.0053 U	0.0039 U	0.0058 U	0.0048 U	0.006 U	0.0044 U	0.28 U	0.26 U	0.24 U	0.28 U	0.007 U
cis-1,2-Dichloroethene	0.25	500	0.0011 U	0.12 U	0.001 U	0.084 U	0.0018 U	0.065 U	0.053 U	0.13 U	0.14 U	0.001 U	0.0013 U	0.00082 U	0.0014 U	0.0013 U	0.00098 U	0.0014 U	0.0012 U	0.0015 U	0.0011 U	0.071 U	0.065 U	0.06 U	0.07 U	0.0018 U
cis-1,3-Dichloropropene	NS	NS	0.00054 U	0.058 U	0.00051 U	0.042 U	0.00092 U	0.032 U	0.026 U	0.067 U	0.072 U	0.00052 U	0.00064 U	0.00041 U	0.00072 U	0.00066 U	0.00049 U	0.00072 U	0.0006 U	0.00076 U	0.00055 U	0.036 U	0.033 U	0.03 U	0.035 U	0.00088 U
Cyclohexane	NS	NS	5.6	9.2	0.01 U	6.8	18	5.9	4.1	0.25 J	1.4 U	0.01 U	0.013 U	0.0082 U	0.014 U	0.013 U	0.0098 U	0.014 U	0.012 U	0.015 U	0.011 U	0.71 U	0.65 U	0.6 U	0.98	0.018 U
Dibromochloromethane	NS	NS	0.0011 U	0.12 U	0.001 U	0.084 U	0.0018 U	0.065 U	0.053 U	0.13 U	0.14 U	0.001 U	0.0013 U	0.00082 U	0.0014 U	0.0013 U	0.00098 U	0.0014 U	0.0012 U	0.0015 U	0.0011 U	0.071 U	0.065 U	0.06 U	0.07 U	0.0018 U
Dichlorodifluoromethane	NS	NS	0.011 U	1.2 U	0.01 U	0.84 U	0.018 U	0.65 U	0.53 U	1.3 U	1.4 U	0.01 U	0.013 U	0.0082 U	0.014 U	0.013 U	0.0098 U	0.014 U	0.012 U	0.015 U	0.011 U	0.71 U	0.65 U	0.6 U	0.7 U	0.018 U
Ethylbenzene	1	390	0.0069	0.033 J	0.001 U	0.07 J	0.0036	0.035 J	0.053 U	0.052 J	0.14 U	0.001 U	0.0013 U	0.00082 U	0.0014 U	0.0013 U	0.00098 U	0.0014 U	0.0012 U	0.0015 U	0.0012	0.029 J	0.065 U	0.06 U	0.07 U	0.0018 U
Isopropylbenzene	NS	NS	0.06	0.66	0.001 U	0.02 J	0.0063	0.12	0.36	0.073 J	0.14 U	0.001 U	0.0013 U	0.00082 U	0.0014 U	0.0013 U	0.00098 U	0.0014 U	0.0012 U	0.0015 U	0.0006 J	0.0094 J	0.065 U	0.06 U	0.0099 J	0.0018 U
Methyl Acetate	NS	NS	0.0043 U	0.47 U	0.007	0.42	0.0073 U	0.26	0.093 J	0.19 J	0.58 U	0.0042 U	0.0052 U	0.0033 U	0.0057 U	0.0053 U	0.0039 U	0.0058 U	0.0048 U	0.006 U	0.0044 U	0.72	0.072 J	0.062 J	0.28 U	0.007 U
Methyl cyclohexane	NS	NS	18	40	0.0041 U	35	62	21	20	6.1	6.7	0.0042 U	0.0052 U	0.0033 U	0.0057 U	0.0053 U	0.0061	0.0014 J	0.0078	0.006 U	0.13	1.3	2.6	2.9	5.8	0.007 U
Methyl tertiary butyl ether (MTBE)	0.93	500	0.0021 U	0.23 U	0.002 U	0.17 U	0.0037 U	0.13 U	0.11 U	0.27 U	0.29 U	0.0021 U	0.0026 U	0.0016 U	0.0029 U	0.0026 U	0.002 U	0.0029 U	0.0024 U	0.003 U	0.0022 U	0.14 U	0.13 U	0.12 U	0.14 U	0.0035 U
Methylene chloride	0.05	500	0.0054 U	0.58 U'	0.0051 U	0.42 U'	0.0092 U	0.32 U'	0.26 U'	0.67 U'	0.72 U'	0.0052 U	0.0064 U	0.0041 U	0.0072 U	0.0066 U	0.0049 U	0.0072 U	0.006 U	0.0076 U	0.0055 U	0.36 U'	0.33 U'	0.3 U'	0.35 U'	0.0088 U
n-Butylbenzene	12	500	0.053	1.1	0.001 U	0.084 U	0.00049 J	0.038 J	0.46	0.14	0.14 U	0.001 U	0.0013 U	0.00082 U	0.0014 U	0.0013 U	0.00098 U	0.0014 U	0.0012 U	0.0015 U	0.0011 U	0.071 U	0.065 U	0.06 U	0.14	0.0018 U
n-Propylbenzene	3.9	500	0.1	1.5	0.001 U	0.03 J	0.0051	0.17	0.67	0.15	0.14 U	0.001 U	0.0013 U	0.00082 U	0.0014 U	0.0013 U	0.00098 U	0.0014 U	0.0012 U	0.0015 U	0.0011 U	0.025 J	0.065 U	0.06 U	0.07 U	0.0018 U
sec-Butylbenzene	11	500	0.019	0.39	0.001 U	0.013 J	0.00094 J	0.056 J	0.3	0.51	0.4	0.001 U	0.0013 U	0.00082 U	0.0014 U	0.00034 J	0.00017 J	0.00021 J	0.0012 U	0.0015 U	0.011	0.044 J	0.062 J	0.063	0.25	0.0018 U
Styrene	NS	NS	0.0011 U	0.12 U	0.001 U	0.084 U	0.0018 U	0.065 U	0.053 U	0.13 U	0.14 U	0.001 U	0.0013 U	0.00082 U	0.0014 U	0.0013 U	0.00098 U	0.0014 U	0.0012 U	0.0015 U	0.0011 U	0.071 U	0.065 U	0.06 U	0.07 U	0.0018 U
tert-Butylbenzene	5.9	500	0.0021 U	0.04 J	0.002 U	0.17 U	0.00028 J	0.0096 J	0.033 J	0.14 J	0.2 J	0.0021 U	0.0026 U	0.0016 U	0.0029 U	0.0033	0.0002 J	0.0003 J	0.0057	0.003 U	0.0054	0.041 J	0.051 J	0.062 J	0.14	0.0035 U
Tetrachloroethene	1.3	150	0.00054 U	0.058 U	0.00051 U	0.042 U	0.00092 U	0.032 U	0.026 U	0.067 U	0.072 U	0.00052 U	0.00064 U	0.00041 U	0.00072 U	0.00066 U	0.00049 U	0.00072 U	0.0006 U	0.00076 U	0.00055 U	0.036 U	0.033 U	0.03 U	0.035 U	0.00088 U
Toluene	0.7	500	0.096	0.2	0.001 U	0.36	0.03	0.093	0.035 J	0.085 J	0.14 U	0.001 U	0.0013 U	0.00082 U	0.0014 U	0.0013 U	0.00098 U	0.0014 U	0.0012 U	0.0015 U	0.0035	0.071 U	0.065 U	0.06 U	0.07 U	0.0018 U
trans-1,2-Dichloroethene	0.19	500	0.0016 U	0.17 U	0.0015 U	0.13 U	0.0027 U	0.097 U	0.08 U	0.2 U'	0.22 U'	0.0016 U	0.0019 U	0.0012 U	0.0021 U	0.002 U	0.0015 U	0.0022 U	0.0018 U	0.0023 U	0.0016 U	0.11 U	0.098 U	0.09 U	0.1 U	0.0026 U
trans-1,3-Dichloropropene	NS	NS	0.0011 U	0.12 U	0.001 U	0.084 U	0.0018 U	0.065 U	0.053 U	0.13 U	0.14 U	0.001 U	0.0013 U	0.00082 U	0.0014 U	0.0013 U	0.00098 U	0.0014 U	0.0012 U	0.0015 U	0.0011 U	0.071 U	0.065 U	0.06 U	0.07 U	0.0018 U
Trichloroethene	0.47	200	0.00054 U	0.058 U	0.00051 U	0.042 U	0.00092 U	0.032 U	0.026 U	0.067 U	0.072 U	0.00052 U	0.00064 U	0.00041 U	0.00072 U	0.00066 U	0.00049 U	0.00025 J	0.0006 U	0.00076 U	0.00055 U	0.036 U	0.033 U	0.03 U	0.035 U	0.00088 U
Trichlorofluoromethane	NS	NS	0.0043 U	0.47 U	0.0041 U	0.34 U	0.0073 U	0.26 U	0.21 U	0.54 U	0.58 U	0.0042 U	0.0052 U	0.0033 U	0.0057 U	0.0053 U	0.0039 U	0.0058 U	0.0048 U	0.006 U	0.0044 U	0.28 U	0.26 U	0.24 U	0.28 U	0.007 U
Vinyl chloride	0.02	13	0.0011 U	0.12 U'	0.001 U	0.084 U'	0.0018 U	0.065 U'	0.053 U'	0.13 U'	0.14 U'	0.001 U	0.0013 U	0.00082 U	0.0014 U	0.0013 U	0.00098 U	0.0014 U	0.0012 U	0.0015 U	0.0011 U	0.071 U'	0.065 U'	0.06 U'	0.07 U'	0.0018 U
Xylene (m&p)	NS	NS	0.18	0.95	0.002 U	0.51	0.036	0.16	0.23	0.092 J	0.29 U	0.0021 U	0.0026 U	0.0016 U	0.0029 U	0.0026 U	0.002 U	0.0029 U	0.0024 U	0.003 U	0.0046	0.13 J	0.13 U	0.12 U	0.14 U	0.0035 U
Xylene (o)	NS	NS	0.051	0.18	0.001 U	0.15	0.013	0.06 J	0.074	0.086 J	0.14 U	0.001 U	0.0013 U	0.00082 U	0.0014 U	0.0013 U	0.00098 U	0.0014 U	0.0012 U	0.0015 U	0.0012	0.071 U	0.065 U	0.06 U	0.07 U	0.0018 U
Xylenes (Total)	1.6	500	0.23	1.1	0.001 U	0.66	0.049	0.22 J	0.3	0.18 J	0.14 U	0.001 U	0.0013 U	0.00082 U	0.0014 U	0.0013 U	0.00098 U	0.0014 U	0.0012 U	0.0015 U	0.0058	0.13 J	0.065 U	0.06 U	0.07 U	0.0018 U
Total Volatile TICs	NS	NS	0.0714 J	0.0714 J	0.016 J	0.016 J	0.016 J	0.016 J	0.016 J	95.6 J	95.6 J	ND	ND	ND	ND	ND	1.14 J	1.14 J	1.14 J	0.0347 J	0.0347 J	0.0347 J	0.0347 J	55.9 J	0.0347 J	ND

Notes:

NYSDEC GW Protection SCO = New York State Department of Environmental Conservation Groundwater Protection Soil Cleanup Objectives, from Table 375-6.8 of 6 NYCRR Part 375.

NYSDEC Commercial SCO = New York State Department of Environmental Conservation Restricted Commercial Use Soil Cleanup Objectives, from Table 375-6.8 of 6 NYCRR Part 375.

ft bgs = Feet below ground surface.

mg/kg = Milligrams per kilogram.

Green concentrations exceed the NYSDEC GW Protection SCO.

Highlighted concentrations exceed the NYSDEC Commercial SCO.

— = Sample not analyzed.

NS = No standard currently established.

ND = Not Detected.

U = Not detected above laboratory detection limit.

U' = Laboratory reporting limit exceeds the applicable regulatory standard or criteria being utilized.

J = Result below the reporting limit (estimated value).

DUP = Duplicate sample was taken.

When the applicable state standard applies to mixed isomers and the laboratory reports individual isomers, the total standard is listed for each isomer.

* = Sample was analyzed twice by the laboratory. Higher detections were reported.

Table 5
Soil Reuse Characterization Sampling Results
Summary of Volatile Organic Compounds in Soil.
MJ Painting; Olean, New York.

Sample ID	NYSDEC GW Protection SCO	NYSDEC Commercial SCO	RX-437	RX-437	RX-439	RX-439	RX-439 DUP	RX-439	RX-439	RX-439	RX-441	RX-442	RX-443	RX-443	RX-443	RX-443	RX-443	RX-444	RX-444	RX-444 DUP	RX-444	RX-444	RX-444	RX-446	RX-446	RX-446
Sample Depth (ft bgs)			6.5	11	0-1	3	3	6.5	8	11	9	3	0-1	3	6.5	8	11	0-1	3	3	6	8	11	3	5	8
Sample Date			11/17/2021	11/17/2021	11/17/2021	11/18/2021	11/18/2021	11/18/2021	11/18/2021	11/18/2021	11/16/2021	11/17/2021	11/16/2021	11/16/2021	11/16/2021	11/16/2021	11/16/2021	11/17/2021	11/17/2021	11/17/2021	11/17/2021	11/17/2021	11/17/2021	11/16/2021	11/16/2021	11/16/2021
VOLATILE ORGANIC COMPOUNDS - 8260C (mg/kg)																										
1,1,1-Trichloroethane	0.68	500	0.00058 U	0.00053 U	0.00063 U	0.00087 U	0.00065 U	0.039 U	0.064 U	0.00049 U	0.00051 U	0.00078 U	0.00062 U	0.039 U	0.027 U	0.045 U	0.00082 U	0.00076 U	0.00057 U	0.00066 U	0.00065 U	0.00058 U	0.034 U	0.05 U	0.00059 U	0.033 U
1,1,2,2,-Tetrachloroethane	NS	NS	0.00058 U	0.00053 U	0.00063 U	0.00087 U	0.00065 U	0.039 U	0.064 U	0.00049 U	0.00051 U	0.00078 U	0.00062 U	0.039 U	0.027 U	0.045 U	0.00082 U	0.00076 U	0.00057 U	0.00066 U	0.00065 U	0.00058 U	0.034 U	0.05 U	0.00059 U	0.033 U
1,1,2-Trichloro-1,2,2-trifluoroethane	NS	NS	0.0046 U	0.0042 U	0.005 U	0.0069 U	0.0052 U	0.31 U	0.52 U	0.0039 U	0.004 U	0.0062 U	0.005 U	0.31 U	0.22 U	0.36 U	0.0065 U	0.0061 U	0.0046 U	0.0052 U	0.0052 U	0.0046 U	0.27 U	0.4 U	0.0047 U	0.27 U
1,1,2-Trichloroethane	NS	NS	0.0012 U	0.0011 U	0.0012 U	0.0017 U	0.0013 U	0.078 U	0.13 U	0.00098 U	0.001 U	0.0016 U	0.0012 U	0.078 U	0.054 U	0.09 U	0.0016 U	0.0015 U	0.0011 U	0.0013 U	0.0013 U	0.0012 U	0.067 U	0.1 U	0.0012 U	0.067 U
1,1,-Dichloroethene	0.33	500	0.0012 U	0.0011 U	0.0012 U	0.0017 U	0.0013 U	0.078 U	0.13 U	0.00098 U	0.001 U	0.0016 U	0.0012 U	0.078 U	0.054 U	0.09 U	0.0016 U	0.0015 U	0.0011 U	0.0013 U	0.0013 U	0.0012 U	0.067 U	0.1 U	0.0012 U	0.067 U
1,1-Dichloroethane	0.27	240	0.0012 U	0.0011 U	0.0012 U	0.0017 U	0.0013 U	0.078 U	0.13 U	0.00098 U	0.001 U	0.0016 U	0.0012 U	0.078 U	0.054 U	0.09 U	0.0016 U	0.0015 U	0.0011 U	0.0013 U	0.0013 U	0.0012 U	0.067 U	0.1 U	0.0012 U	0.067 U
1,2,3-Trichlorobenzene	NS	NS	0.0023 U	0.0021 U	0.0025 U	0.0035 U	0.0026 U	0.16 U	0.26 U	0.002 U	0.002 U	0.0031 U	0.0025 U	0.16 U	0.11 U	0.18 U	0.0033 U	0.003 U	0.0023 U	0.0026 U	0.0026 U	0.0023 U	0.13 U	0.2 U	0.0024 U	0.13 U
1,2,4-Trichlorobenzene	NS	NS	0.0023 U	0.0021 U	0.0025 U	0.0035 U	0.0026 U	0.16 U	0.26 U	0.002 U	0.002 U	0.0031 U	0.0025 U	0.16 U	0.11 U	0.18 U	0.0033 U	0.003 U	0.0023 U	0.0026 U	0.0026 U	0.0023 U	0.13 U	0.2 U	0.0024 U	0.13 U
1,2,4-Trimethylbenzene	3.6	190	0.0023 U	0.0021 U	0.0025 U	0.0035 U	0.00058 J	0.11 J	0.096 J	0.002 U	0.0008 J	0.00055 J	0.0025 U	0.082 J	0.47	1.4	0.007	0.003 U	0.0023 U	0.00066 J	0.0026 U	0.0023 U	0.13 U	0.52	0.0011 J	0.81
1,2-Dibromo-3-chloropropane	NS	NS	0.0034 U	0.0032 U	0.0038 U	0.0052 U	0.0039 U	0.24 U	0.39 U	0.0029 U	0.003 U	0.0047 U	0.0037 U	0.23 U	0.16 U	0.27 U	0.0049 U	0.0046 U	0.0034 U	0.0039 U	0.0039 U	0.0034 U	0.2 U	0.3 U	0.0035 U	0.2 U
1,2-Dibromoethane	NS	NS	0.0012 U	0.0011 U	0.0012 U	0.0017 U	0.0013 U	0.078 U	0.13 U	0.00098 U	0.001 U	0.0016 U	0.0012 U	0.078 U	0.054 U	0.09 U	0.0016 U	0.0015 U	0.0011 U	0.0013 U	0.0013 U	0.0012 U	0.067 U	0.1 U	0.0012 U	0.067 U
1,2-Dichlorobenzene	1.1	500	0.0023 U	0.0021 U	0.0025 U	0.0035 U	0.0026 U	0.16 U	0.26 U	0.002 U	0.002 U	0.0031 U	0.0025 U	0.16 U	0.11 U	0.18 U	0.0033 U	0.003 U	0.0023 U	0.0026 U	0.0026 U	0.0023 U	0.13 U	0.2 U	0.0024 U	0.13 U
1,2-Dichloroethane	0.02	30	0.0012 U	0.0011 U	0.0012 U	0.0017 U	0.0013 U	0.078 U'	0.13 U'	0.00098 U	0.001 U	0.0016 U	0.0012 U	0.078 U'	0.054 U'	0.09 U'	0.0016 U	0.0015 U	0.0011 U	0.0013 U	0.0013 U	0.0012 U	0.067 U'	0.1 U'	0.0012 U	0.067 U'
1,2-Dichloroethene, Total	NS	NS	0.0012 U	0.0011 U	0.0012 U	0.0017 U	0.0013 U	0.078 U	0.00054 U	0.00098 U	0.001 U	0.0016 U	0.0012 U	0.0017 U	0.054 U	0.09 U	0.0016 U	0.0015 U	0.0011 U	0.0013 U	0.0013 U	0.0012 U	0.067 U	0.1 U	0.0012 U	0.067 U
1,2-Dichloropropane	NS	NS	0.0012 U	0.0011 U	0.0012 U	0.0017 U	0.0013 U	0.078 U	0.13 U	0.00098 U	0.001 U	0.0016 U	0.0012 U	0.078 U	0.054 U	0.09 U	0.0016 U	0.0015 U	0.0011 U	0.0013 U	0.0013 U	0.0012 U	0.067 U	0.1 U	0.0012 U	0.067 U
1,3,5-Trimethylbenzene	8.4	190	0.0023 U	0.0021 U	0.0025 U	0.0035 U	0.0026 U	0.063 J	0.034 J	0.002 U	0.00035 J	0.0031 U	0.0025 U	0.054 J	0.2	0.59	0.0018 J	0.003 U	0.0023 U	0.0005 J	0.0026 U	0.0023 U	0.13 U	0.26	0.00085 J	0.3
1,3-Dichlorobenzene	2.4	280	0.0023 U	0.0021 U	0.0025 U	0.0035 U	0.0026 U	0.16 U	0.26 U	0.002 U	0.002 U	0.0031 U	0.0025 U	0.16 U	0.11 U	0.18 U	0.0033 U	0.003 U	0.0023 U	0.0026 U	0.0026 U	0.0023 U	0.13 U	0.2 U	0.0024 U	0.13 U
1,3-Dichloropropene, Total	NS	NS	0.00058 U	0.00053 U	0.00063 U	0.00087 U	0.00065 U	0.039 U	0.00027 U	0.00049 U	0.00051 U	0.00078 U	0.00062 U	0.00086 U	0.027 U	0.045 U	0.00082 U	0.00076 U	0.00057 U	0.00066 U	0.00065 U	0.00058 U	0.034 U	0.05 U	0.00059 U	0.033 U
1,4-Dichlorobenzene	1.8	130	0.0023 U	0.0021 U	0.0025 U	0.0035 U	0.0026 U	0.16 U	0.26 U	0.002 U	0.00018 J	0.0031 U	0.0025 U	0.16 U	0.11 U	0.18 U	0.0033 U	0.003 U	0.0023 U	0.0026 U	0.0026 U	0.0023 U	0.13 U	0.2 U	0.0024 U	0.13 U
1,4-Dioxane	0.1	130	0.092 U	0.085 U	0.1 U	0.14 U'	0.1 U	6.3 U'	10 U'	0.078 U	0.081 U	0.12 U'	0.099 U	6.2 U'	4.3 U'	7.2 U'	0.13 U'	0.12 U'	0.092 U	0.1 U	0.1 U	0.092 U	5.4 U'	8 U'	0.095 U	5.3 U'
2-Butanone	0.12	500	0.012 U	0.011 U	0.012 U	0.017 U	0.013 U	0.78 U'	1.3 U'	0.0098 U	0.01 U	0.016 U	0.012 U	**0.23 J**	0.54 U'	0.9 U'	0.016 U	0.015 U	0.0079 J	0.013 U	0.013 U	0.012 U	0.67 U'	1 U'	0.012 U	0.67 U'
2-Hexanone	NS	NS	0.012 U	0.011 U	0.012 U	0.017 U	0.013 U	0.78 U	1.3 U	0.0098 U	0.01 U	0.016 U	0.012 U	0.78 U	0.54 U	0.9 U	0.016 U	0.015 U	0.011 U	0.013 U	0.013 U	0.012 U	0.67 U	1 U	0.012 U	0.67 U
4-Methyl-2-Pentanone	NS	NS	0.012 U	0.011 U	0.012 U	0.017 U	0.013 U	0.78 U	1.3 U	0.0098 U	0.01 U	0.016 U	0.012 U	0.78 U	0.54 U	0.9 U	0.016 U	0.015 U	0.011 U	0.013 U	0.013 U	0.012 U	0.67 U	1 U	0.012 U	0.67 U
Acetone	0.05	500	0.012 U	0.0052 J	0.012 U	0.017 U	0.013 U	0.78 U'	1.3 U'	0.0092 J	0.02	0.024	0.012 U	0.78 U'	0.54 U'	0.9 U'	0.03	0.015 U	0.032	0.021	0.039	0.035	0.67 U'	1 U'	0.033	**0.9**
Benzene	0.06	44	0.00058 U	0.00053 U	0.00063 U	0.00087 U	0.00065 U	0.039 U	0.064 U'	0.00049 U	0.00051 U	0.00078 U	0.00062 U	0.039 U	0.027 U	0.045 U	0.00082 U	0.00076 U	0.00057 U	0.00066 U	0.00065 U	0.00034 J	0.034 U	0.05 U	0.00059 U	0.033 U
Bromochloromethane	NS	NS	0.0023 U	0.0021 U	0.0025 U	0.0035 U	0.0026 U	0.16 U	0.26 U	0.002 U	0.002 U	0.0031 U	0.0025 U	0.16 U	0.11 U	0.18 U	0.0033 U	0.003 U	0.0023 U	0.0026 U	0.0026 U	0.0023 U	0.13 U	0.2 U	0.0024 U	0.13 U
Bromodichloromethane	NS	NS	0.00058 U	0.00053 U	0.00063 U	0.00087 U	0.00065 U	0.039 U	0.064 U	0.00049 U	0.00051 U	0.00078 U	0.00062 U	0.039 U	0.027 U	0.045 U	0.00082 U	0.00076 U	0.00057 U	0.00066 U	0.00065 U	0.00058 U	0.034 U	0.05 U	0.00059 U	0.033 U
Bromoform	NS	NS	0.0046 U	0.0042 U	0.005 U	0.0069 U	0.0052 U	0.31 U	0.52 U	0.0039 U	0.004 U	0.0062 U	0.005 U	0.31 U	0.22 U	0.36 U	0.0065 U	0.0061 U	0.0046 U	0.0052 U	0.0052 U	0.0046 U	0.27 U	0.4 U	0.0047 U	0.27 U
Bromomethane	NS	NS	0.0023 U	0.0021 U	0.0025 U	0.0035 U	0.0026 U	0.16 U	0.26 U	0.002 U	0.002 U	0.0017 J	0.0025 U	0.16 U	0.11 U	0.18 U	0.0033 U	0.003 U	0.0023 U	0.0026 U	0.0026 U	0.0023 U	0.13 U	0.2 U	0.0024 U	0.13 U
Carbon disulfide	NS	NS	0.012 U	0.011 U	0.012 U	0.017 U	0.013 U	0.78 U	1.3 U	0.0098 U	0.01 U	0.016 U	0.012 U	0.78 U	0.54 U	0.9 U	0.016 U	0.015 U	0.011 U	0.013 U	0.013 U	0.012 U	0.67 U	1 U	0.012 U	0.67 U
Carbon tetrachloride	0.76	22	0.0012 U	0.0011 U	0.0012 U	0.0017 U	0.0013 U	0.078 U	0.13 U	0.00098 U	0.001 U	0.0016 U	0.0012 U	0.078 U	0.054 U	0.09 U	0.0016 U	0.0015 U	0.0011 U	0.0013 U	0.0013 U	0.0012 U	0.067 U	0.1 U	0.0012 U	0.067 U
Chlorobenzene	1.1	500	0.00058 U	0.00053 U	0.00063 U	0.00087 U	0.00065 U	0.039 U	0.064 U	0.00049 U	0.00051 U	0.00027 J	0.00062 U	0.039 U	0.027 U	0.045 U	0.00082 U	0.00076 U	0.00057 U	0.00066 U	0.00065 U	0.00058 U	0.034 U	0.05 U	0.00059 U	0.033 U
Chloroethane	NS	NS	0.0023 U	0.0021 U	0.0025 U	0.0035 U	0.0026 U	0.16 U	0.26 U	0.002 U	0.002 U	0.0031 U	0.0025 U	0.16 U	0.11 U	0.18 U	0.0033 U	0.003 U	0.0023 U	0.0026 U	0.0026 U	0.0023 U	0.13 U	0.2 U	0.0024 U	0.13 U
Chloroform	0.37	350	0.0017 U	0.0016 U	0.0019 U	0.0026 U	0.002 U	0.12 U	0.19 U	0.0015 U	0.0015 U	0.0023 U	0.0019 U	0.12 U	0.081 U	0.14 U	0.0024 U	0.0023 U	0.0017 U	0.002 U	0.0019 U	0.0017 U	0.1 U	0.15 U	0.0018 U	0.1 U
Chloromethane	NS	NS	0.0046 U	0.0042 U	0.005 U	0.0069 U	0.0052 U	0.31 U	0.52 U	0.0039 U	0.004 U	0.0062 U	0.005 U	0.31 U	0.22 U	0.36 U	0.0065 U	0.0061 U	0.0046 U	0.0052 U	0.0052 U	0.0046 U	0.27 U	0.4 U	0.0047 U	0.27 U
cis-1,2-Dichloroethene	0.25	500	0.0012 U	0.0011 U	0.0012 U	0.0017 U	0.0013 U	0.078 U	0.13 U	0.00098 U	0.001 U	0.0016 U	0.0012 U	0.078 U	0.054 U	0.09 U	0.0016 U	0.0015 U	0.0011 U	0.0013 U	0.0013 U	0.0012 U	0.067 U	0.1 U	0.0012 U	0.067 U
cis-1,3-Dichloropropene	NS	NS	0.00058 U	0.00053 U	0.00063 U	0.00087 U	0.00065 U	0.039 U	0.064 U	0.00049 U	0.00051 U	0.00078 U	0.00062 U	0.039 U	0.027 U	0.045 U	0.00082 U	0.00076 U	0.00057 U	0.00066 U	0.00065 U	0.00058 U	0.034 U	0.05 U	0.00059 U	0.033 U
Cyclohexane	NS	NS	0.012 U	0.011 U	0.012 U	0.017 U	0.013 U	0.78 U	1.3 U	0.0098 U	0.0046 J	0.016 U	0.012 U	0.12 J	0.25 J	0.087 J	0.0017 J	0.015 U	0.011 U	0.058	0.007 J	0.0012 J	0.67 U	2.8	0.042	4.1
Dibromochloromethane	NS	NS	0.0012 U	0.0011 U	0.0012 U	0.0017 U	0.0013 U	0.078 U	0.13 U	0.00098 U	0.001 U	0.0016 U	0.0012 U	0.078 U	0.054 U	0.09 U	0.0016 U	0.0015 U	0.0011 U	0.0013 U	0.0013 U	0.0012 U	0.067 U	0.1 U	0.0012 U	0.067 U
Dichlorodifluoromethane	NS	NS	0.012 U	0.011 U	0.012 U	0.017 U	0.013 U	0.78 U	1.3 U	0.0098 U	0.01 U	0.016 U	0.012 U	0.78 U	0.54 U	0.9 U	0.016 U	0.015 U	0.011 U	0.013 U	0.013 U	0.012 U	0.67 U	1 U	0.012 U	0.67 U
Ethylbenzene	1	390	0.0012 U	0.0011 U	0.0012 U	0.0017 U	0.0013 U	0.015 J	0.13 U	0.00098 U	0.001 U	0.0016 U	0.0012 U	0.017 J	0.022 J	0.05 J	0.0016 U	0.0015 U	0.0011 U	0.0013 U	0.0013 U	0.0012 U	0.067 U	0.027 J	0.0012 U	0.016 J
Isopropylbenzene	NS	NS	0.0012 U	0.0011 U	0.0012 U	0.0017 U	0.0013 U	0.015 J	0.13 U	0.00098 U	0.00049 J	0.0016 U	0.0012 U	0.078 U	0.024 J	0.04 J	0.001 J	0.0015 U	0.0011 U	0.0019	0.00039 J	0.0012 U	0.067 U	0.037 J	0.0012 U	0.1
Methyl Acetate	NS	NS	0.0046 U	0.0042 U	0.005 U	0.0069 U	0.0052 U	0.43	0.52 U	0.0039 U	0.004 U	0.0062 U	0.02	0.29 J	0.077 J	0.56	0.0022 J	0.0061 U	0.0046 U	0.0052 U	0.0052 U	0.0046 U	0.27 U	0.43	0.0047 U	0.24 J
Methyl cyclohexane	NS	NS	0.0046 U	0.0042 U	0.005 U	0.0069 U	0.0052 U	0.31 U	2	0.0088	0.058	0.0062 U	0.005 U	0.36	4.4	0.6	0.02	0.0061 U	0.0012 J	0.38	0.043	0.011	1.5	5.5	0.04	23
Methyl tertiary butyl ether (MTBE)	0.93	500	0.0023 U	0.0021 U	0.0025 U	0.0035 U	0.0026 U	0.16 U	0.26 U	0.002 U	0.002 U	0.0031 U	0.0025 U	0.16 U	0.11 U	0.18 U	0.0033 U	0.003 U	0.0023 U	0.0026 U	0.0026 U	0.0023 U	0.13 U	0.2 U	0.0024 U	0.13 U
Methylene chloride	0.05	500	0.0058 U	0.0053 U	0.0063 U	0.0087 U	0.0065 U	0.39 U'	0.64 U'	0.0049 U	0.0051 U	0.0078 U	0.0062 U	0.39 U'	0.27 U'	0.45 U'	0.0082 U	0.0076 U	0.0057 U	0.0066 U	0.0065 U	0.0058 U	0.34 U'	0.5 U'	0.0059 U	0.33 U'
n-Butylbenzene	12	500	0.0012 U	0.0011 U	0.0012 U	0.0017 U	0.0013 U	0.078 U	0.13 U	0.00098 U	0.00082 J	0.0016 U	0.0012 U	0.078 U	0.044 J	0.1	0.0017	0.0015 U	0.0011 U	0.0006 J	0.0013 U	0.0012 U	0.067 U	0.026 J	0.0012 U	0.08
n-Propylbenzene	3.9	500	0.0012 U	0.0011 U	0.0012 U	0.0017 U	0.0013 U	0.078 U	0.13 U	0.00098 U	0.001 U	0.0016 U	0.0012 U	0.014 J	0.034 J	0.079 J	0.00087 J	0.0015 U	0.0011 U	0.0013	0.00028 J	0.0012 U	0.067 U	0.047 J	0.0012 U	0.14
sec-Butylbenzene	11	500	0.0012 U	0.00016 J	0.0012 U	0.0017 U	0.0013 U	0.087	0.084 J	0.00098 U	0.0017	0.0016 U	0.0012 U	0.078 U	0.052 J	0.044 J	0.004	0.0015 U	0.0011 U	0.0016	0.00025 J	0.0012 U	0.051 J	0.024 J	0.0012 U	0.19
Styrene	NS	NS	0.0012 U	0.0011 U	0.0012 U	0.0017 U	0.0013 U	0.078 U	0.13 U	0.00098 U	0.001 U	0.0016 U	0.0012 U	0.078 U	0.054 U	0.09 U	0.0016 U	0.0015 U	0.0011 U	0.0013 U	0.0013 U	0.0012 U	0.067 U	0.1 U	0.0012 U	0.067 U
tert-Butylbenzene	5.9	500	0.0023 U	0.0021 U	0.0025 U	0.0035 U	0.0026 U	0.63	0.42	0.029	0.00065 J	0.0031 U	0.0025 U	0.16 U	0.015 J	0.18 U	0.0018 J	0.003 U	0.0023 U	0.0013 J	0.00024 J	0.0023 U	0.036 J	0.2 U	0.0024 U	0.11 J
Tetrachloroethene	1.3	150	0.00058 U	0.00053 U	0.00063 U	0.00087 U	0.00038 J	0.039 U	0.064 U	0.00022 J	0.00051 U	0.00078 U	0.00062 U	0.039 U	0.027 U	0.045 U	0.00082 U	0.00076 U	0.00057 U	0.00066 U	0.00065 U	0.00058 U	0.034 U	0.05 U	0.00059 U	0.033 U
Toluene	0.7	500	0.0012 U	0.0011 U	0.0012 U	0.0017 U	0.0013 U	0.078 U	0.13 U	0.00098 U	0.001 U	0.0016 U	0.0012 U	0.078 U	0.054 U	0.09 U	0.0016 U	0.0015 U	0.0011 U	0.0013 U	0.0013 U	0.0012 U	0.067 U	0.1 U	0.0012 U	0.067 U
trans-1,2-Dichloroethene	0.19	500	0.0017 U	0.0016 U	0.0019 U	0.0026 U	0.002 U	0.12 U	0.19 U	0.0015 U	0.0015 U	0.0023 U	0.0019 U	0.12 U	0.081 U	0.14 U	0.0024 U	0.0023 U	0.0017 U	0.002 U	0.0019 U	0.0017 U	0.1 U	0.15 U	0.0018 U	0.1 U
trans-1,3-Dichloropropene	NS	NS	0.0012 U	0.0011 U	0.0012 U	0.0017 U	0.0013 U	0.078 U	0.13 U	0.00098 U	0.001 U	0.0016 U	0.0012 U	0.078 U	0.054 U	0.09 U	0.0016 U	0.0015 U	0.0011 U	0.0013 U	0.0013 U	0.0012 U	0.067 U	0.1 U	0.0012 U	0.067 U
Trichloroethene	0.47	200	0.00058 U	0.00053 U	0.00063 U	0.00087 U	0.00065 U	0.039 U	0.064 U	0.00049 U	0.00051 U	0.00078 U	0.00062 U	0.039 U	0.027 U	0.045 U	0.00082 U	0.00076 U	0.00057 U	0.00066 U	0.00065 U	0.00058 U	0.034 U	0.05 U	0.00059 U	0.033 U
Trichlorofluoromethane	NS	NS	0.0046 U	0.0042 U	0.005 U	0.0069 U	0.0052 U	0.31 U	0.52 U	0.0039 U	0.004 U	0.0062 U	0.005 U	0.31 U	0.22 U	0.36 U	0.0065 U	0.0061 U	0.0046 U	0.0052 U	0.0052 U	0.0046 U	0.27 U	0.4 U	0.0047 U	0.27 U
Vinyl chloride	0.02	13	0.0012 U	0.0011 U	0.0012 U	0.0017 U	0.0013 U	0.078 U'	0.13 U'	0.00098 U	0.001 U	0.0016 U	0.0012 U	0.078 U'	0.054 U'	0.09 U'	0.0016 U	0.0015 U	0.0011 U	0.0013 U	0.0013 U	0.0012 U	0.067 U'	0.1 U'	0.0012 U	0.067 U'
Xylene (m&p)	NS	NS	0.0023 U	0.0021 U	0.0025 U	0.0035 U	0.0026 U	0.078 J	0.26 U	0.002 U	0.002 U	0.0031 U	0.0025 U	0.082 J	0.075 J	0.28	0.0011 J	0.003 U	0.0023 U	0.0011 J	0.0026 U	0.0023 U	0.13 U	0.1 J	0.0024 U	0.14
Xylene (o)	NS	NS	0.0012 U	0.0011 U	0.0012 U	0.0017 U	0.0013 U	0.078 U	0.13 U	0.00098 U	0.0005 J	0.0016 U	0.0012 U	0.069 J	0.06	0.29	0.0011 J	0.0015 U	0.0011 U	0.0036	0.00098 J	0.0012 U	0.067 U	0.28	0.0015	0.091
Xylenes (Total)	1.6	500	0.0012 U	0.0011 U	0.0012 U	0.0017 U	0.0013 U	0.078 J	0.00054 U	0.00098 U	0.0005 J	0.0016 U	0.0012 U	0.15 J	0.14 J	0.57	0.0022 J	0.0015 U	0.0011 U	0.0047 J	0.00098 J	0.0012 U	0.067 U	0.38 J	0.0015	0.23
Total Volatile TICs	NS	NS	ND	ND	ND	ND	ND	ND	ND	ND	1.04 J	0.159 J	0.00443 J	0.00443 J	0.00443 J	0.00443 J	0.00443 J	0.00318 J	0.00318 J	0.802 J	0.00318 J	0.00318 J	0.00318 J	34.1 J	34.1 J	34.1 J

Notes:
NYSDEC GW Protection SCO = New York State Department of Environmental Conservation Groundwater Protection Soil Cleanup Objectives, from Table 375-6.8 of 6 NYCRR Part 375.
NYSDEC Commercial SCO = New York State Department of Environmental Conservation Restricted Commercial Use Soil Cleanup Objectives, from Table 375-6.8 of 6 NYCRR Part 375.
ft bgs = Feet below ground surface.
mg/kg = Milligrams per kilogram.
Green concentrations exceed the NYSDEC GW Protection SCO.
Highlighted concentrations exceed the NYSDEC Commercial SCO.
— = Sample not analyzed.
NS = No standard currently established.
ND = Not Detected.
U = Not detected above laboratory detection limit.
U' = Laboratory reporting limit exceeds the applicable regulatory standard or criteria being utilized.
J = Result below the reporting limit (estimated value).
DUP = Duplicate sample was taken.
When the applicable state standard applies to mixed isomers and the laboratory reports individual isomers, the total standard is listed for each isomer.
* = Sample was analyzed twice by the laboratory. Higher detections were reported.

Table 5
Soil Reuse Characterization Sampling Results
Summary of Volatile Organic Compounds in Soil.
MJ Painting; Olean, New York.

Sample ID	NYSDEC GW Protection SCO	NYSDEC Commercial SCO	RX-446	RX-447	RX-447	RX-447	RX-447	RX-448	RX-448	RX-448	RX-448	RXMW-106	RXMW-107	RXMW-108	RXMW-109	RXMW-110	RXMW-111	RXMW-112	RXMW-113	RXMW-113 DUP
Sample Depth (ft bgs)			11	3	5	7-10	10-12	3-4	7	9	11	26-28	26-27	18-20	20-22	20-24	8-10	28-32	20-25	20-25
Sample Date			11/16/2021	11/16/2021	11/16/2021	11/16/2021	11/16/2021	11/16/2021	11/18/2021	11/18/2021	11/18/2021	1/19/2022	1/5/2022	1/5/2022	1/6/2022	1/18/2022	1/19/2022	1/18/2022	1/18/2022	1/18/2022
VOLATILE ORGANIC COMPOUNDS - 8260C (mg/kg)																				
1,1,1-Trichloroethane	0.68	500	0.025 U	0.001 U	0.00064 U	0.00068 U	0.00073 U	0.00082 U	0.5 U	0.063 U	0.071 U	0.025 U	0.025 U	0.03 U	0.039 U	0.031 U	0.043 U	0.03 U	0.032 U	0.029 U
1,1,2,2,-Tetrachloroethane	NS	NS	0.025 U	0.001 U	0.00064 U	0.00068 U	0.00073 U	0.00082 U	0.5 U	0.063 U	0.071 U	0.025 U	0.025 U	0.03 U	0.039 U	0.031 U	0.043 U	0.03 U	0.032 U	0.029 U
1,1,2-Trichloro-1,2,2-trifluoroethane	NS	NS	0.2 U	0.0082 U	0.0051 U	0.0054 U	0.0058 U	0.0066 U	4 U	0.5 U	0.57 U	0.2 U	0.2 U	0.24 U	0.31 U	0.25 U	0.34 U	0.24 U	0.25 U	0.23 U
1,1,2-Trichloroethane	NS	NS	0.049 U	0.002 U	0.0013 U	0.0014 U	0.0014 U	0.0016 U	1 U	0.13 U	0.14 U	0.049 U	0.05 U	0.061 U	0.078 U	0.062 U	0.085 U	0.061 U	0.063 U	0.058 U
1,1,-Dichloroethene	0.33	500	0.049 U	0.002 U	0.0013 U	0.0014 U	0.0014 U	0.0016 U	1 U'	0.13 U	0.14 U	0.049 U	0.05 U	0.061 U	0.078 U	0.062 U	0.085 U	0.061 U	0.063 U	0.058 U
1,1-Dichloroethane	0.27	240	0.049 U	0.002 U	0.0013 U	0.0014 U	0.0014 U	0.0016 U	1 U'	0.13 U	0.14 U	0.049 U	0.05 U	0.061 U	0.078 U	0.062 U	0.085 U	0.061 U	0.063 U	0.058 U
1,2,3-Trichlorobenzene	NS	NS	0.099 U	0.0014 J	0.0026 U	0.0027 U	0.0029 U	0.0033 U	2 U	0.25 U	0.28 U	0.099 U	0.099 U	0.12 U	0.16 U	0.12 U	0.17 U	0.12 U	0.13 U	0.12 U
1,2,4-Trichlorobenzene	NS	NS	0.099 U	0.0041 U	0.0026 U	0.0027 U	0.0029 U	0.0033 U	2 U	0.25 U	0.28 U	0.099 U	0.099 U	0.12 U	0.16 U	0.12 U	0.17 U	0.12 U	0.13 U	0.12 U
1,2,4-Trimethylbenzene	3.6	190	0.41	0.0041 U	0.0026 U	0.0027 U	0.0029 U	0.0033 U	**170**	**19**	**130**	0.5	1	0.081 J	**20**	**6.4**	**33**	0.12 U	0.11 J	0.24
1,2-Dibromo-3-chloropropane	NS	NS	0.15 U	0.0061 U	0.0038 U	0.004 U	0.0044 U	0.0049 U	3 U	0.38 U	0.43 U	0.15 U	0.15 U	0.18 U	0.23 U	0.19 U	0.26 U	0.18 U	0.19 U	0.18 U
1,2-Dibromoethane	NS	NS	0.049 U	0.002 U	0.0013 U	0.0014 U	0.0014 U	0.0016 U	1 U	0.13 U	0.14 U	0.049 U	0.05 U	0.061 U	0.078 U	0.062 U	0.085 U	0.061 U	0.063 U	0.058 U
1,2-Dichlorobenzene	1.1	500	0.099 U	0.0041 U	0.0026 U	0.0027 U	0.0029 U	0.0033 U	2 U'	0.25 U	0.28 U	0.099 U	0.099 U	0.12 U	0.16 U	0.12 U	0.17 U	0.12 U	0.13 U	0.12 U
1,2-Dichloroethane	0.02	30	0.049 U'	0.002 U	0.0013 U	0.0014 U	0.0014 U	0.0016 U	1 U'	0.13 U'	0.14 U'	0.049 U'	0.05 U'	0.061 U'	0.078 U'	0.062 U'	0.085 U'	0.061 U'	0.063 U'	0.058 U'
1,2-Dichloroethene, Total	NS	NS	0.049 U	0.002 U	0.0013 U	0.0014 U	0.0014 U	0.0016 U	1 U	0.13 U	0.14 U	0.049 U	0.05 U	0.061 U	0.078 U	0.062 U	0.085 U	0.061 U	0.063 U	0.058 U
1,2-Dichloropropane	NS	NS	0.049 U	0.002 U	0.0013 U	0.0014 U	0.0014 U	0.0016 U	1 U	0.13 U	0.14 U	0.049 U	0.05 U	0.061 U	0.078 U	0.062 U	0.085 U	0.061 U	0.063 U	0.058 U
1,3,5-Trimethylbenzene	8.4	190	0.18	0.0041 U	0.0026 U	0.0027 U	0.0029 U	0.0033 U	**190**	**20**	**57**	0.031 J	0.025 J	0.12 U	0.36	0.028 J	**20**	0.12 U	0.018 J	0.092 J
1,3-Dichlorobenzene	2.4	280	0.099 U	0.0041 U	0.0026 U	0.0027 U	0.0029 U	0.0033 U	2 U	0.25 U	0.28 U	0.099 U	0.099 U	0.12 U	0.16 U	0.12 U	0.17 U	0.12 U	0.13 U	0.12 U
1,3-Dichloropropene, Total	NS	NS	0.025 U	0.001 U	0.00064 U	0.00068 U	0.00073 U	0.00082 U	0.5 U	0.063 U	0.071 U	0.025 U	0.025 U	0.03 U	0.039 U	0.031 U	0.043 U	0.03 U	0.032 U	0.029 U
1,4-Dichlorobenzene	1.8	130	0.099 U	0.0041 U	0.0026 U	0.0027 U	0.0029 U	0.0033 U	2 U'	0.25 U	0.28 U	0.099 U	0.026 J	0.12 U	0.16 U	0.12 U	0.17 U	0.12 U	0.13 U	0.12 U
1,4-Dioxane	0.1	130	3.9 U'	0.16 U'	0.1 U	0.11 U'	0.12 U'	0.13 U'	80 U'	10 U'	11 U'	4 U'	4 U'	4.8 U'	6.2 U'	5 U'	6.8 U'	4.8 U'	5 U'	4.7 U'
2-Butanone	0.12	500	0.49 U'	0.02 U	0.0046 J	0.014 U	0.0039 J	0.016 U	10 U'	1.3 U'	1.4 U'	0.49 U'	0.5 U'	0.61 U'	0.78 U'	0.62 U'	0.85 U'	0.61 U'	0.63 U'	0.58 U'
2-Hexanone	NS	NS	0.49 U	0.02 U	0.013 U	0.014 U	0.014 U	0.016 U	10 U	1.3 U	1.4 U	0.49 U	0.5 U	0.61 U	0.78 U	0.62 U	0.85 U	0.61 U	0.63 U	0.58 U
4-Methyl-2-Pentanone	NS	NS	0.49 U	0.02 U	0.013 U	0.014 U	0.014 U	0.016 U	10 U	1.3 U	1.4 U	0.49 U	0.5 U	0.61 U	0.78 U	0.62 U	0.85 U	0.61 U	0.63 U	0.58 U
Acetone	0.05	500	0.49 U'	0.02 U	0.041	0.041	0.028	0.015 J	**9.7 J**	**0.74 J**	1.4 U'	0.49 U'	0.5 U'	0.61 U'	0.78 U'	0.62 U'	0.85 U'	0.61 U'	0.63 U'	0.58 U'
Benzene	0.06	44	0.025 U	0.001 U	0.00064 U	0.00068 U	0.00073 U	0.00033 J	**11**	**1.1**	**4.2**	0.025 U	0.0087 J	0.03 U	0.022 J	**0.12**	**0.56**	0.03 U	0.012 J	0.012 J
Bromochloromethane	NS	NS	0.099 U	0.0041 U	0.0026 U	0.0027 U	0.0029 U	0.0033 U	2 U	0.25 U	0.28 U	0.099 U	0.099 U	0.12 U	0.16 U	0.12 U	0.17 U	0.12 U	0.13 U	0.12 U
Bromodichloromethane	NS	NS	0.025 U	0.001 U	0.00064 U	0.00068 U	0.00073 U	0.00082 U	0.5 U	0.063 U	0.071 U	0.025 U	0.025 U	0.03 U	0.039 U	0.031 U	0.043 U	0.03 U	0.032 U	0.029 U
Bromoform	NS	NS	0.2 U	0.0082 U	0.0051 U	0.0054 U	0.0058 U	0.0066 U	4 U	0.5 U	0.57 U	0.2 U	0.2 U	0.24 U	0.31 U	0.25 U	0.34 U	0.24 U	0.25 U	0.23 U
Bromomethane	NS	NS	0.099 U	0.0041 U	0.0026 U	0.0027 U	0.0029 U	0.0033 U	2 U	0.25 U	0.28 U	0.099 U	0.099 U	0.12 U	0.16 U	0.12 U	0.17 U	0.12 U	0.13 U	0.12 U
Carbon disulfide	NS	NS	0.49 U	0.02 U	0.013 U	0.014 U	0.014 U	0.016 U	10 U	1.3 U	1.4 U	0.49 U	0.5 U	0.61 U	0.78 U	0.62 U	0.85 U	0.61 U	0.63 U	0.58 U
Carbon tetrachloride	0.76	22	0.049 U	0.002 U	0.0013 U	0.0014 U	0.0014 U	0.0016 U	1 U'	0.13 U	0.14 U	0.049 U	0.05 U	0.061 U	0.078 U	0.062 U	0.085 U	0.061 U	0.063 U	0.058 U
Chlorobenzene	1.1	500	0.025 U	0.001 U	0.00064 U	0.00068 U	0.00073 U	0.00082 U	0.5 U	0.063 U	0.071 U	0.025 U	0.025 U	0.03 U	0.039 U	0.031 U	0.043 U	0.03 U	0.032 U	0.029 U
Chloroethane	NS	NS	0.099 U	0.0041 U	0.0026 U	0.0027 U	0.0029 U	0.0033 U	2 U	0.25 U	0.28 U	0.099 U	0.099 U	0.12 U	0.16 U	0.12 U	0.17 U	0.12 U	0.13 U	0.12 U
Chloroform	0.37	350	0.074 U	0.0031 U	0.0019 U	0.002 U	0.0022 U	0.0025 U	1.5 U'	0.19 U	0.21 U	0.074 U	0.074 U	0.091 U	0.12 U	0.094 U	0.13 U	0.091 U	0.095 U	0.088 U
Chloromethane	NS	NS	0.2 U	0.0082 U	0.0051 U	0.0054 U	0.0058 U	0.0066 U	4 U	0.5 U	0.57 U	0.2 U	0.2 U	0.24 U	0.31 U	0.25 U	0.34 U	0.24 U	0.25 U	0.23 U
cis-1,2-Dichloroethene	0.25	500	0.049 U	0.002 U	0.0013 U	0.0014 U	0.0014 U	0.0016 U	1 U'	0.13 U	0.14 U	0.049 U	0.05 U	0.061 U	0.078 U	0.062 U	0.085 U	0.061 U	0.063 U	0.058 U
cis-1,3-Dichloropropene	NS	NS	0.025 U	0.001 U	0.00064 U	0.00068 U	0.00073 U	0.00082 U	0.5 U	0.063 U	0.071 U	0.025 U	0.025 U	0.03 U	0.039 U	0.031 U	0.043 U	0.03 U	0.032 U	0.029 U
Cyclohexane	NS	NS	0.73	0.02 U	0.013 U	0.014 U	0.014 U	0.016 U	54	5.9	19	0.34 J	2.2	5.3	8.4	7.3	6.7	0.61 U	4.9	4.1
Dibromochloromethane	NS	NS	0.049 U	0.002 U	0.0013 U	0.0014 U	0.0014 U	0.0016 U	1 U	0.13 U	0.14 U	0.049 U	0.05 U	0.061 U	0.078 U	0.062 U	0.085 U	0.061 U	0.063 U	0.058 U
Dichlorodifluoromethane	NS	NS	0.49 U	0.02 U	0.013 U	0.014 U	0.014 U	0.016 U	10 U	1.3 U	1.4 U	0.49 U	0.5 U	0.61 U	0.78 U	0.62 U	0.85 U	0.61 U	0.63 U	0.58 U
Ethylbenzene	1	390	0.049 U	0.002 U	0.0013 U	0.0014 U	0.0014 U	0.0016 U	**68**	**6.5**	**18**	0.049 U	0.05 U	0.061 U	0.78	0.069	**3.4**	0.061 U	0.063 U	0.058 U
Isopropylbenzene	NS	NS	0.096	0.002 U	0.0013 U	0.0014 U	0.0014 U	0.0016 U	27	2.8	6.2	0.098	0.29	0.061 U	1.6	0.78	1.6	0.061 U	0.25	0.23
Methyl Acetate	NS	NS	0.2 U	0.0082 U	0.0051 U	0.0054 U	0.0058 U	0.0066 U	72	0.5 U	0.57 U	0.2 U	1	0.24 U	0.31 U	0.25 U	0.34 U	0.24 U	0.25 U	0.23 U
Methyl cyclohexane	NS	NS	16	0.0082 U	0.0051 U	0.0054 U	0.0058 U	0.0066 U	460	42	76	1.7	7	42	46	32	25	2.3	46	38
Methyl tertiary butyl ether (MTBE)	0.93	500	0.099 U	0.0041 U	0.0026 U	0.0027 U	0.0029 U	0.0033 U	2 U'	0.25 U	0.28 U	0.099 U	0.099 U	0.12 U	0.16 U	0.12 U	0.17 U	0.12 U	0.13 U	0.12 U
Methylene chloride	0.05	500	0.25 U'	0.01 U	0.0064 U	0.0068 U	0.0073 U	0.0082 U	5 U'	0.63 U'	0.71 U'	0.25 U'	0.25 U'	0.3 U'	0.39 U'	0.31 U'	0.43 U'	0.3 U'	0.32 U'	0.29 U'
n-Butylbenzene	12	500	0.033 J	0.002 U	0.0013 U	0.0014 U	0.0014 U	0.0016 U	**19**	1.5	5	0.12	0.3	0.061 U	1.8	0.37	1.6	0.061 U	0.31	0.29
n-Propylbenzene	3.9	500	0.086	0.002 U	0.0013 U	0.0014 U	0.0014 U	0.0016 U	**49**	**4.9**	**9.7**	0.13	0.43	0.061 U	2.4	1	3.1	0.061 U	0.063 U	0.058 U
sec-Butylbenzene	11	500	0.085	0.002 U	0.0013 U	0.0014 U	0.0014 U	0.0016 U	**22**	2.2	4.1	0.19	0.26	0.32	1.9	1	1.6	0.04 J	1.2	1
Styrene	NS	NS	0.049 U	0.002 U	0.0013 U	0.0014 U	0.0014 U	0.0016 U	1 U	0.13 U	0.14 U	0.049 U	0.05 U	0.061 U	0.054 J	0.062 U	0.085 U	0.061 U	0.063 U	0.058 U
tert-Butylbenzene	5.9	500	0.038 J	0.0041 U	0.0026 U	0.0027 U	0.0029 U	0.0033 U	**7.2**	0.76	1.3	0.034 J	0.064 J	0.23	0.48	0.5	0.73	0.29	0.52	0.45
Tetrachloroethene	1.3	150	0.025 U	0.001 U	0.00064 U	0.00068 U	0.00073 U	0.00082 U	0.5 U	0.063 U	0.071 U	0.025 U	0.025 U	0.03 U	0.039 U	0.031 U	0.043 U	0.03 U	0.032 U	0.029 U
Toluene	0.7	500	0.049 U	0.002 U	0.0013 U	0.0014 U	0.0014 U	0.0016 U	**93**	**7.7**	**11**	0.049 U	0.05 U	0.061 U	0.047 J	0.062 U	**3**	0.061 U	0.063 U	0.058 U
trans-1,2-Dichloroethene	0.19	500	0.074 U	0.0031 U	0.0019 U	0.002 U	0.0022 U	0.0025 U	1.5 U'	0.19 U	0.21 U'	0.074 U	0.074 U	0.091 U	0.12 U	0.094 U	0.13 U	0.091 U	0.095 U	0.088 U
trans-1,3-Dichloropropene	NS	NS	0.049 U	0.002 U	0.0013 U	0.0014 U	0.0014 U	0.0016 U	1 U	0.13 U	0.14 U	0.049 U	0.05 U	0.061 U	0.078 U	0.062 U	0.085 U	0.061 U	0.063 U	0.058 U
Trichloroethene	0.47	200	0.025 U	0.001 U	0.00064 U	0.00068 U	0.00073 U	0.00082 U	0.5 U'	0.063 U	0.071 U	0.025 U	0.025 U	0.03 U	0.039 U	0.031 U	0.043 U	0.03 U	0.032 U	0.029 U
Trichlorofluoromethane	NS	NS	0.2 U	0.0082 U	0.0051 U	0.0054 U	0.0058 U	0.0066 U	4 U	0.5 U	0.57 U	0.2 U	0.2 U	0.24 U	0.31 U	0.25 U	0.34 U	0.24 U	0.25 U	0.23 U
Vinyl chloride	0.02	13	0.049 U'	0.002 U	0.0013 U	0.0014 U	0.0014 U	0.0016 U	1 U'	0.13 U'	0.14 U'	0.049 U'	0.05 U'	0.061 U'	0.078 U'	0.062 U'	0.085 U'	0.061 U'	0.063 U'	0.058 U'
Xylene (m&p)	NS	NS	0.036 J	0.0041 U	0.0026 U	0.0027 U	0.0029 U	0.0033 U	200	20	27	0.099 U	0.054 J	0.12 U	0.052 J	0.12 U	13	0.12 U	0.13 U	0.051 J
Xylene (o)	NS	NS	0.018 J	0.002 U	0.0013 U	0.0014 U	0.0014 U	0.0016 U	84	8.6	35	0.049 U	0.031 J	0.061 U	2.2	0.42	7.6	0.061 U	0.061 J	0.082
Xylenes (Total)	1.6	500	0.054 J	0.002 U	0.0013 U	0.0014 U	0.0014 U	0.0016 U	**280**	**29**	**62**	0.049 U	0.085 J	0.061 U	**2.3 J**	0.42	**21**	0.061 U	0.061 J	0.13 J
Total Volatile TICs	NS	NS	34.1 J	0.221 J	0.221 J	0.221 J	0.221 J	ND	ND	ND	ND	21.1 J	21.1 J	64.8 J	22.1 J	90.3 J	125 J	55 J	79.8 J	72 J

Notes:

NYSDEC GW Protection SCO = New York State Department of Environmental Conservation Groundwater Protection Soil Cleanup Objectives, from Table 375-6.8 of 6 NYCRR Part 375.

NYSDEC Commercial SCO = New York State Department of Environmental Conservation Restricted Commercial Use Soil Cleanup Objectives, from Table 375-6.8 of 6 NYCRR Part 375.

ft bgs = Feet below ground surface.

mg/kg = Milligrams per kilogram.

Green concentrations exceed the NYSDEC GW Protection SCO.

Highlighted concentrations exceed the NYSDEC Commercial SCO.

— = Sample not analyzed.

NS = No standard currently established.

ND = Not Detected.

U = Not detected above laboratory detection limit.

U' = Laboratory reporting limit exceeds the applicable regulatory standard or criteria being utilized.

J = Result below the reporting limit (estimated value).

DUP = Duplicate sample was taken.

When the applicable state standard applies to mixed isomers and the laboratory reports individual isomers, the total standard is listed for each isomer.

* = Sample was analyzed twice by the laboratory. Higher detections were reported.

Table 5
Soil Reuse Characterization Sampling Results
Summary of Semi-Volatile Organic Compounds in Soil.
MJ Painting; Olean, New York.

Sample ID	NYSDEC GW Protection SCO	NYSDEC Commercial SCO	RX-301	RX-302	RX-303	RX-304	RX-305	RX-306	RX-307	RX-308	RX-309	RX-310	RX-311	RX-312	RX-313	RX-314	RX-315	RX-316	RX-317	RX-318	RX-319	RX-320	RX-321	RX-321 DUP	RX-401	RX-401	RX-401	RX-402	RX-403	RX-403
Sample Depth (ft bgs)			0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	1-4	7-10	7-10	0-1	4-7
Sample Date			11/15/2021	11/9/2021	11/15/2021	11/15/2021	11/15/2021	11/16/2021	11/17/2021	11/17/2021	11/17/2021	11/17/2021	11/18/2021	11/17/2021	1/5/2022	1/4/2022	1/7/2022	1/7/2022	1/7/2022	1/4/2022	1/7/2022	1/5/2022	1/7/2022	1/7/2022	11/12/2021	11/12/2021	11/12/2021	11/12/2021	11/12/2021	11/12/2021
SEMI-VOLATILE ORGANIC COMPOUNDS - 8270D (mg/kg)																														
1,2,4,5-Tetrachlorobenzene	NS	NS	0.19 U	1 U	0.21 U	0.19 U	0.21 U	0.19 U	0.18 U	0.19 U	0.18 U	0.19 U	0.2 U	0.2 U	0.65 U	1.1 U	0.66 U	0.72 U	0.62 U	0.22 U	0.21 U	0.22 U	0.21 U	0.21 U	0.19 U	1.9 U	2.1 U	2.1 U	0.21 U	2.1 U
2,3,4,6-Tetrachlorophenol	NS	NS	0.19 U	1 U	0.21 U	0.19 U	0.21 U	0.19 U	0.18 U	0.19 U	0.18 U	0.19 U	0.2 U	0.2 U	0.65 U	1.1 U	0.66 U	0.72 U	0.62 U	0.22 U	0.21 U	0.22 U	0.21 U	0.21 U	0.19 U	1.9 U	2.1 U	2.1 U	0.21 U	2.1 U
2,4,5-Trichlorophenol	NS	NS	0.19 U	1 U	0.21 U	0.19 U	0.21 U	0.19 U	0.18 U	0.19 U	0.18 U	0.19 U	0.2 U	0.2 U	0.65 U	1.1 U	0.66 U	0.72 U	0.62 U	0.22 U	0.21 U	0.22 U	0.21 U	0.21 U	0.19 U	1.9 U	2.1 U	2.1 U	0.21 U	2.1 U
2,4,6-Trichlorophenol	NS	NS	0.11 U	0.6 U	0.13 U	0.11 U	0.12 U	0.11 U	0.11 U	0.12 U	0.11 U	0.11 U	0.12 U	0.12 U	0.39 U	0.66 U	0.39 U	0.43 U	0.37 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.11 U	1.2 U	1.3 U	1.3 U	0.12 U	1.2 U
2,4-Dichlorophenol	NS	NS	0.17 U	0.9 U	0.19 U	0.17 U	0.19 U	0.17 U	0.16 U	0.17 U	0.16 U	0.17 U	0.18 U	0.18 U	0.59 U	0.99 U	0.59 U	0.65 U	0.56 U	0.19 U	0.19 U	0.2 U	0.19 U	0.19 U	0.17 U	1.7 U	1.9 U	1.9 U	0.18 U	1.9 U
2,4-Dimethylphenol	NS	NS	0.19 U	1 U	0.21 U	0.19 U	0.21 U	0.19 U	0.18 U	0.19 U	0.18 U	0.19 U	0.2 U	0.2 U	0.65 U	1.1 U	0.66 U	0.72 U	0.62 U	0.22 U	0.21 U	0.22 U	0.21 U	0.21 U	0.19 U	1.9 U	2.1 U	2.1 U	0.21 U	2.1 U
2,4-Dinitrophenol	NS	NS	0.91 U	4.8 U	1 U	0.9 U	1 U	0.9 U	0.86 U	0.93 U	0.88 U	0.91 U	0.98 U	0.95 U	3.1 U	5.3 U	3.2 U	3.4 U	3 U	1 U	1 U	1.1 U	1 U	1 U	0.92 U	9.3 U	10 U	10 U	0.99 U	10 U
2,4-Dinitrotoluene	NS	NS	0.19 U	1 U	0.21 U	0.19 U	0.21 U	0.19 U	0.18 U	0.19 U	0.18 U	0.19 U	0.2 U	0.2 U	0.65 U	1.1 U	0.66 U	0.72 U	0.62 U	0.22 U	0.21 U	0.22 U	0.21 U	0.21 U	0.19 U	1.9 U	2.1 U	2.1 U	0.21 U	2.1 U
2,6-Dinitrotoluene	NS	NS	0.19 U	1 U	0.21 U	0.19 U	0.21 U	0.19 U	0.18 U	0.19 U	0.18 U	0.19 U	0.2 U	0.2 U	0.65 U	1.1 U	0.66 U	0.72 U	0.62 U	0.22 U	0.21 U	0.22 U	0.21 U	0.21 U	0.19 U	1.9 U	2.1 U	2.1 U	0.21 U	2.1 U
2-Chloronaphthalene	NS	NS	0.19 U	1 U	0.21 U	0.19 U	0.21 U	0.19 U	0.18 U	0.19 U	0.18 U	0.19 U	0.2 U	0.2 U	0.65 U	1.1 U	0.66 U	0.72 U	0.62 U	0.22 U	0.21 U	0.22 U	0.21 U	0.21 U	0.19 U	1.9 U	2.1 U	2.1 U	0.21 U	2.1 U
2-Chlorophenol	NS	NS	0.19 U	1 U	0.21 U	0.19 U	0.21 U	0.19 U	0.18 U	0.19 U	0.18 U	0.19 U	0.2 U	0.2 U	0.65 U	1.1 U	0.66 U	0.72 U	0.62 U	0.22 U	0.21 U	0.22 U	0.21 U	0.21 U	0.19 U	1.9 U	2.1 U	2.1 U	0.21 U	2.1 U
2-Methylnapthalene	NS	NS	0.16 J	0.26 J	0.25 U	0.22 U	0.25 U	0.22 U	0.22 U	0.23 U	0.22 U	0.23 U	0.25 U	0.062 J	0.12 J	0.21 J	0.79 U	0.43 J	0.14 J	0.055 J	0.19 J	0.29	0.23 J	0.23 J	0.65	1 J	0.29 J	0.28 J	0.17 J	3.9
2-Methylphenol	0.33	500	0.19 U	1 U'	0.21 U	0.19 U	0.21 U	0.19 U	0.18 U	0.19 U	0.18 U	0.19 U	0.2 U	0.2 U	0.65 U'	1.1 U'	0.66 U'	0.72 U'	0.62 U'	0.22 U	0.21 U	0.22 U	0.21 U	0.21 U	0.091 J	1.9 U'	2.1 U'	2.1 U'	0.21 U	2.1 U'
2-Nitroaniline	NS	NS	0.19 U	1 U	0.21 U	0.19 U	0.21 U	0.19 U	0.18 U	0.19 U	0.18 U	0.19 U	0.2 U	0.2 U	0.65 U	1.1 U	0.66 U	0.72 U	0.62 U	0.22 U	0.21 U	0.22 U	0.21 U	0.21 U	0.19 U	1.9 U	2.1 U	2.1 U	0.21 U	2.1 U
2-Nitrophenol	NS	NS	0.41 U	2.2 U	0.45 U	0.41 U	0.45 U	0.4 U	0.39 U	0.42 U	0.4 U	0.41 U	0.44 U	0.43 U	1.4 U	2.4 U	1.4 U	1.6 U	1.3 U	0.46 U	0.46 U	0.48 U	0.46 U	0.46 U	0.41 U	4.2 U	4.5 U	4.6 U	0.44 U	4.5 U
3,3'-Dichlorobenzidine	NS	NS	0.19 U	1 U	0.21 U	0.19 U	0.21 U	0.19 U	0.18 U	0.19 U	0.18 U	0.19 U	0.2 U	0.2 U	0.65 U	1.1 U	0.66 U	0.72 U	0.62 U	0.22 U	0.21 U	0.22 U	0.21 U	0.21 U	0.19 U	1.9 U	2.1 U	2.1 U	0.21 U	2.1 U
3-Methylphenol/4-Methylphenol	NS	NS	0.27 U	1.4 U	0.3 U	0.27 U	0.3 U	0.27 U	0.26 U	0.28 U	0.26 U	0.27 U	0.3 U	0.28 U	0.94 U	1.6 U	0.94 U	1 U	0.9 U	0.31 U	0.31 U	0.32 U	0.31 U	0.3 U	0.084 J	2.8 U	3 U	3.1 U	0.3 U	3 U
3-Nitroaniline	NS	NS	0.19 U	1 U	0.21 U	0.19 U	0.21 U	0.19 U	0.18 U	0.19 U	0.18 U	0.19 U	0.2 U	0.2 U	0.65 U	1.1 U	0.66 U	0.72 U	0.62 U	0.22 U	0.21 U	0.22 U	0.21 U	0.21 U	0.19 U	1.9 U	2.1 U	2.1 U	0.21 U	2.1 U
4,6-Dinitro-o-cresol	NS	NS	0.49 U	2.6 U	0.55 U	0.49 U	0.54 U	0.49 U	0.47 U	0.5 U	0.48 U	0.49 U	0.53 U	0.51 U	1.7 U	2.8 U	1.7 U	1.9 U	1.6 U	0.56 U	0.55 U	0.58 U	0.56 U	0.55 U	0.5 U	5 U	5.5 U	5.6 U	0.54 U	5.4 U
4-Bromophenyl-phenylether	NS	NS	0.19 U	1 U	0.21 U	0.19 U	0.21 U	0.19 U	0.18 U	0.19 U	0.18 U	0.19 U	0.2 U	0.2 U	0.65 U	1.1 U	0.66 U	0.72 U	0.62 U	0.22 U	0.21 U	0.22 U	0.21 U	0.21 U	0.19 U	1.9 U	2.1 U	2.1 U	0.21 U	2.1 U
4-Chloroaniline	NS	NS	0.19 U	1 U	0.21 U	0.19 U	0.21 U	0.19 U	0.18 U	0.19 U	0.18 U	0.19 U	0.2 U	0.2 U	0.65 U	1.1 U	0.66 U	0.72 U	0.62 U	0.22 U	0.21 U	0.22 U	0.21 U	0.21 U	0.19 U	1.9 U	2.1 U	2.1 U	0.21 U	2.1 U
4-Chlorophenyl-phenylether	NS	NS	0.19 U	1 U	0.21 U	0.19 U	0.21 U	0.19 U	0.18 U	0.19 U	0.18 U	0.19 U	0.2 U	0.2 U	0.65 U	1.1 U	0.66 U	0.72 U	0.62 U	0.22 U	0.21 U	0.22 U	0.21 U	0.21 U	0.19 U	1.9 U	2.1 U	2.1 U	0.21 U	2.1 U
4-Nitroaniline	NS	NS	0.19 U	1 U	0.21 U	0.19 U	0.21 U	0.19 U	0.18 U	0.19 U	0.18 U	0.19 U	0.2 U	0.2 U	0.65 U	1.1 U	0.66 U	0.72 U	0.62 U	0.22 U	0.21 U	0.22 U	0.21 U	0.21 U	0.19 U	1.9 U	2.1 U	2.1 U	0.21 U	2.1 U
4-Nitrophenol	NS	NS	0.26 U	1.4 U	0.29 U	0.26 U	0.29 U	0.26 U	0.25 U	0.27 U	0.26 U	0.26 U	0.29 U	0.28 U	0.91 U	1.5 U	0.92 U	1 U	0.87 U	0.3 U	0.3 U	0.31 U	0.3 U	0.3 U	0.27 U	2.7 U	2.9 U	3 U	0.29 U	2.9 U
Acenaphthene	98	500	0.15 U	0.8 U	0.17 U	0.15 U	0.036 J	0.15 U	0.14 U	0.16 U	0.04 J	0.15 U	0.16 U	0.06 J	0.52 U	0.88 U	0.52 U	0.074 J	0.5 U	0.17 U	0.17 U	0.18 U	0.17 U	0.17 U	0.088 J	3.1	1.7 U	1.7 U	0.16 U	1.6
Acenaphthylene	107	500	0.15 U	0.8 U	0.17 U	0.15 U	0.17 U	0.15 U	0.14 U	0.16 U	0.15 U	0.15 U	0.16 U	0.16 U	0.52 U	0.88 U	0.52 U	0.57 U	0.5 U	0.17 U	0.17 U	0.054 J	0.041 J	0.17 U	0.33	1.6 U	1.7 U	1.7 U	0.16 U	1.6 U
Acetophenone	NS	NS	0.19 U	1 U	0.21 U	0.19 U	0.21 U	0.19 U	0.18 U	0.19 U	0.18 U	0.19 U	0.2 U	0.2 U	0.65 U	1.1 U	0.66 U	0.72 U	0.62 U	0.22 U	0.077 J	0.032 J	0.21 U	0.037 J	0.19 U	1.9 U	2.1 U	2.1 U	0.21 U	2.1 U
Anthracene	1000	500	0.046 J	0.6 U	0.13 U	0.11 U	0.12	0.11 U	0.11 U	0.12 U	0.081 J	0.11 U	0.12 U	0.058 J	0.15 J	0.66 U	0.39 U	0.27 J	0.37 U	0.046 J	0.13 U	0.098 J	0.074 J	0.13 U	0.44	5.2	1.3 U	1.3 U	0.051 J	2.6
Atrazine	NS	NS	0.15 U	0.8 U	0.17 U	0.15 U	0.17 U	0.15 U	0.14 U	0.16 U	0.15 U	0.15 U	0.16 U	0.16 U	0.52 U	0.88 U	0.52 U	0.57 U	0.5 U	0.17 U	0.17 U	0.18 U	0.17 U	0.17 U	0.15 U	1.6 U	1.7 U	1.7 U	0.16 U	1.6 U
Benzaldehyde	NS	NS	0.25 U	1.3 U	0.28 U	0.25 U	0.28 U	0.25 U	0.24 U	0.26 U	0.24 U	0.25 U	0.27 U	0.26 U	0.86 U	1.4 U	0.87 U	0.95 U	0.82 U	0.16 J	0.17 J	0.34	0.28 U	0.15 J	0.25 U	2.6 U	2.8 U	2.8 U	0.27 U	2.7 U
Benzo[a]anthracene	1	5.6	0.15	0.32 J	0.068 J	0.066 J	1	0.11 U	0.036 J	0.048 J	0.16	0.11 U	0.084 J	0.13	**1.4**	0.21 J	0.39 U	0.91	0.075 J	0.19	0.11 J	0.38	0.44	0.12 J	**1.4**	**7.1**	0.29 J	0.24 J	0.14	**1.6**
Benzo[a]pyrene	22	1	0.17	1	0.064 J	0.054 J	0.75	0.15 U	0.14 U	0.054 J	0.13 J	0.15 U	0.089 J	0.2	0.66	0.88 U	0.52 U	1.2	0.5 U	0.18	0.13 J	0.4	0.52	0.13 J	1.8	7.7	1.7 U'	1.7 U'	0.16	1.4 J
Benzo[b]fluoranthene	1.7	5.6	0.19	0.55 J	0.088 J	0.077 J	1.1	0.11 U	0.055 J	0.076 J	0.17	0.11 U	0.12	0.18	1.1	0.33 J	0.39 U	1.2	0.37 U	0.21	0.13	0.51	0.52	0.16	**1.9**	**8.7**	1.3 U'	1.3 U'	0.17	1.4
Benzo[g,h,i]perylene	1000	500	0.26	2.3	0.042 J	0.041 J	0.32	0.15 U	0.025 J	0.043 J	0.086 J	0.15 U	0.084 J	0.3	0.37 J	0.3 J	0.52 U	2.1	0.1 J	0.28	0.14 J	0.6	0.78	0.17	2.8	5.4	0.36 J	0.28 J	0.28	1.8
Benzo[k]fluoranthene	1.7	56	0.06 J	0.6 U	0.13 U	0.11 U	0.42	0.11 U	0.11 U	0.12 U	0.06 J	0.11 U	0.038 J	0.05 J	0.41	0.66 U	0.39 U	0.31 J	0.37 U	0.077 J	0.043 J	0.16	0.15	0.13 U	0.58	**2.3**	1.3 U'	1.3 U'	0.046 J	0.33 J
Biphenyl	NS	NS	0.43 U	2.3 U	0.48 U	0.43 U	0.48 U	0.43 U	0.41 U	0.44 U	0.42 U	0.43 U	0.47 U	0.45 U	1.5 U	2.5 U	1.5 U	0.12 J	1.4 U	0.49 U	0.029 J	0.037 J	0.04 J	0.04 J	0.099 J	4.4 U	4.8 U	4.9 U	0.47 U	4.7 U
Bis(2-Chloroethoxy)methane	NS	NS	0.2 U	1.1 U	0.23 U	0.2 U	0.22 U	0.2 U	0.19 U	0.21 U	0.2 U	0.2 U	0.22 U	0.21 U	0.7 U	1.2 U	0.71 U	0.78 U	0.67 U	0.23 U	0.23 U	0.24 U	0.23 U	0.23 U	0.21 U	2.1 U	2.3 U	2.3 U	0.22 U	2.2 U
Bis(2-Chloroethyl)ether	NS	NS	0.17 U	0.9 U	0.19 U	0.17 U	0.19 U	0.17 U	0.16 U	0.17 U	0.16 U	0.17 U	0.18 U	0.18 U	0.59 U	0.99 U	0.59 U	0.65 U	0.56 U	0.19 U	0.19 U	0.2 U	0.19 U	0.19 U	0.17 U	1.7 U	1.9 U	1.9 U	0.18 U	1.9 U
Bis(2-Chloroisopropyl)ether	NS	NS	0.23 U	1.2 U	0.25 U	0.22 U	0.25 U	0.22 U	0.22 U	0.23 U	0.22 U	0.23 U	0.25 U	0.24 U	0.78 U	1.3 U	0.79 U	0.86 U	0.75 U	0.26 U	0.26 U	0.26 U	0.26 U	0.25 U	0.23 U	2.3 U	2.5 U	2.6 U	0.25 U	2.5 U
Bis(2-Ethylhexyl)phthalate	NS	NS	0.19 U	1 U	0.21 U	0.19 U	0.21 U	0.19 U	0.18 U	0.19 U	0.18 U	0.19 U	0.2 U	0.2 U	0.65 U	1.1 U	0.66 U	0.72 U	0.62 U	0.22 U	0.21 U	0.22 U	0.21 U	0.21 U	0.19 U	1.9 U	2.1 U	2.1 U	0.21 U	2.1 U
Butyl benzyl phthalate	NS	NS	0.19 U	1 U	0.21 U	0.19 U	0.21 U	0.19 U	0.18 U	0.19 U	0.18 U	0.19 U	0.2 U	0.2 U	0.65 U	1.1 U	0.66 U	0.72 U	0.62 U	0.22 U	0.21 U	0.22 U	0.21 U	0.21 U	0.19 U	1.9 U	2.1 U	2.1 U	0.21 U	2.1 U
Caprolactam	NS	NS	0.19 U	1 U	0.21 U	0.19 U	0.21 U	0.19 U	0.18 U	0.19 U	0.18 U	0.19 U	0.2 U	0.2 U	0.65 U	1.1 U	0.66 U	0.72 U	0.62 U	0.22 U	0.21 U	0.22 U	0.21 U	0.21 U	0.19 U	1.9 U	2.1 U	2.1 U	0.21 U	2.1 U
Carbazole	NS	NS	0.023 J	1 U	0.21 U	0.19 U	0.051 J	0.19 U	0.18 U	0.19 U	0.036 J	0.19 U	0.2 U	0.2 U	0.65 U	1.1 U	0.66 U	0.094 J	0.62 U	0.22 U	0.21 U	0.037 J	0.023 J	0.21 U	0.26	2.2	2.1 U	2.1 U	0.02 J	2.1 U
Chrysene	1	56	0.19	0.66	0.063 J	0.068 J	1	0.11 U	0.038 J	0.053 J	0.14	0.11 U	0.088 J	0.15	**1.6**	0.27 J	0.39 U	0.98	0.076 J	0.21	0.2	0.47	0.39	0.29	**1.8**	**7**	0.51 J	0.45 J	0.17	**2**
Dibenzo(a,h)anthracene	1000	0.56	0.063 J	0.7	0.13 U	0.11 U	0.092 J	0.11 U	0.11 U	0.12 U	0.11 U	0.11 U	0.024 J	0.1 J	0.17 J	0.66 U'	0.39 U'	0.69	0.37 U'	0.081 J	0.05 J	0.17	0.2	0.05 J	0.37	1.3	1.3 U'	1.3 U'	0.054 J	0.38 J
Dibenzofuran	210	350	0.031 J	1 U	0.21 U	0.19 U	0.21 U	0.19 U	0.18 U	0.19 U	0.019 J	0.19 U	0.2 U	0.058 J	0.65 U	1.1 U	0.66 U	0.097 J	0.62 U	0.22 U	0.047 J	0.053 J	0.064 J	0.059 J	0.2	1.9	2.1 U	2.1 U	0.21 U	0.88 J
Diethyl phthalate	NS	NS	0.19 U	1 U	0.21 U	0.19 U	0.21 U	0.19 U	0.18 U	0.19 U	0.18 U	0.19 U	0.2 U	0.2 U	0.65 U	1.1 U	0.66 U	0.72 U	0.62 U	0.22 U	0.21 U	0.22 U	0.21 U	0.21 U	0.19 U	1.9 U	2.1 U	2.1 U	0.21 U	2.1 U
Dimethyl phthalate	NS	NS	0.19 U	1 U	0.21 U	0.19 U	0.21 U	0.19 U	0.18 U	0.19 U	0.18 U	0.19 U	0.2 U	0.2 U	0.65 U	1.1 U	0.66 U	0.72 U	0.62 U	0.22 U	0.21 U	0.22 U	0.21 U	0.21 U	0.19 U	1.9 U	2.1 U	2.1 U	0.21 U	2.1 U
Di-n-butylphthalate	NS	NS	0.19 U	1 U	0.21 U	0.19 U	0.21 U	0.19 U	0.18 U	0.19 U	0.18 U	0.19 U	0.2 U	0.2 U	0.65 U	1.1 U	0.66 U	0.72 U	0.62 U	0.22 U	0.21 U	0.22 U	0.21 U	0.21 U	0.19 U	1.9 U	2.1 U	2.1 U	0.21 U	2.1 U
Di-n-octylphthalate	NS	NS	0.19 U	1 U	0.21 U	0.19 U	0.21 U	0.19 U	0.18 U	0.19 U	0.18 U	0.19 U	0.2 U	0.2 U	0.65 U	1.1 U	0.66 U	0.72 U	0.62 U	0.22 U	0.21 U	0.22 U	0.21 U	0.21 U	0.19 U	1.9 U	2.1 U	2.1 U	0.21 U	2.1 U
Fluoranthene	1000	500	0.3	0.33 J	0.1 J	0.11	1.2	0.11 U	0.045 J	0.082 J	0.39	0.039 J	0.18	0.27	2	0.34 J	0.082 J	1.3	0.087 J	0.3	0.11 J	0.58	0.59	0.13	2.6	20	1.3 U	0.28 J	0.24	3
Fluorene	386	500	0.19 U	1 U	0.21 U	0.19 U	0.028 J	0.19 U	0.18 U	0.19 U	0.034 J	0.19 U	0.2 U	0.034 J	0.65 U	1.1 U	0.66 U	0.1 J	0.62 U	0.22 U	0.21 U	0.033 J	0.039 J	0.21 U	0.2	2.8	0.45 J	0.51 J	0.21 U	3.9
Hexachlorobenzene	3.2	6	0.11 U	0.6 U'	0.13 U	0.11 U	0.12 U	0.11 U	0.11 U	0.12 U	0.11 U	0.11 U	0.12 U	0.12 U	0.39 U'	0.66 U'	0.39 U'	0.43 U'	0.37 U'	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.11 U	1.2 U'	1.3 U'	1.3 U'	0.12 U	1.2 U'
Hexachlorobutadiene	NS	NS	0.19 U	1 U	0.21 U	0.19 U	0.21 U	0.19 U	0.18 U	0.19 U	0.18 U	0.19 U	0.2 U	0.2 U	0.65 U	1.1 U	0.66 U	0.72 U	0.62 U	0.22 U	0.21 U	0.22 U	0.21 U	0.21 U	0.19 U	1.9 U	2.1 U	2.1 U	0.21 U	2.1 U
Hexachlorocyclopentadiene	NS	NS	0.54 U	2.8 U	0.6 U	0.54 U	0.6 U	0.54 U	0.51 U	0.56 U	0.52 U	0.54 U	0.59 U	0.57 U	1.9 U	3.1 U	1.9 U	2 U	1.8 U	0.62 U	0.61 U	0.63 U	0.61 U	0.6 U	0.55 U	5.5 U	6 U	6.1 U	0.59 U	5.9 U
Hexachloroethane	NS	NS	0.15 U	0.8 U	0.17 U	0.15 U	0.17 U	0.15 U	0.14 U	0.16 U	0.15 U	0.15 U	0.16 U	0.16 U	0.52 U	0.88 U	0.52 U	0.57 U	0.5 U	0.17 U	0.17 U	0.18 U	0.17 U	0.17 U	0.15 U	1.6 U	1.7 U	1.7 U	0.16 U	1.6 U
Indeno[1,2,3-cd]pyrene	8.2	5.6	0.12 J	0.78 J	0.046 J	0.043 J	0.38	0.048 J	0.062 J	0.083 J	0.13 J	0.056 J	0.11 J	0.17	0.33 J	0.21 J	0.52 U'	0.93	0.5 U	0.12 J	0.061 J	0.3	0.25	0.061 J	1.3	5.1	1.7 U'	0.58 J	0.12 J	1.2 J
Isophorone	NS	NS	0.17 U	0.9 U	0.19 U	0.17 U	0.19 U	0.17 U	0.16 U	0.17 U	0.16 U	0.17 U	0.18 U	0.18 U	0.59 U	0.99 U	0.59 U	0.65 U	0.56 U	0.19 U	0.19 U	0.2 U	0.19 U	0.19 U	0.17 U	1.7 U	1.9 U	1.9 U	0.18 U	1.9 U
Naphthalene	12	500	0.1 J	1 U	0.21 U	0.19 U	0.21 U	0.19 U	0.18 U	0.19 U	0.18 U	0.19 U	0.2 U	0.09 J	0.65 U	1.1 U	0.66 U	0.22 J	0.083 J	0.037 J	0.11 J	0.13 J	0.11 J	0.13 J	0.43	2	2.1 U	2.1 U	0.061 J	2.2
Nitrobenzene	NS	NS	0.17 U	0.9 U	0.19 U	0.17 U	0.19 U	0.17 U	0.16 U	0.17 U	0.16 U	0.17 U	0.18 U	0.18 U	0.59 U	0.99 U	0.59 U	0.65 U	0.56 U	0.19 U	0.19 U	0.2 U	0.19 U	0.19 U	0.17 U	1.7 U	1.9 U	1.9 U	0.18 U	1.9 U
n-Nitrosodi-n-propylamine	NS	NS	0.19 U	1 U	0.21 U	0.19 U	0.21 U	0.19 U	0.18 U	0.19 U	0.18 U	0.19 U	0.2 U	0.2 U	0.65 U	1.1 U	0.66 U	0.72 U	0.62 U	0.22 U	0.21 U	0.22 U	0.21 U	0.21 U	0.19 U	1.9 U	2.1 U	2.1 U	0.21 U	2.1 U
N-Nitrosodiphenylamine	NS	NS	0.15 U	0.8 U	0.17 U	0.15 U	0.17 U	0.15 U	0.14 U	0.16 U	0.15 U	0.15 U	0.16 U	0.16 U	0.52 U	0.88 U	0.52 U	0.57 U	0.5 U	0.17 U	0.17 U	0.18 U	0.17 U	0.17 U	0.15 U	1.6 U	1.7 U	1.7 U	0.16 U	1.6 U
p-Chloro-m-cresol	NS	NS	0.19 U	1 U	0.21 U	0.19 U	0.21 U	0.19 U	0.18 U	0.19 U	0.18 U	0.19 U	0.2 U	0.2 U	0.65 U	1.1 U	0.66 U	0.72 U	0.62 U	0.22 U	0.21 U	0.22 U	0.21 U	0.21 U	0.19 U	1.9 U	2.1 U	2.1 U	0.21 U	2.1 U
Pentachlorophenol	0.8	6.7	0.15 U	0.8 U	0.17 U	0.15 U	0.17 U	0.15 U	0.14 U	0.16 U	0.15 U	0.15 U	0.16 U	0.16 U	0.52 U	0.88 U'	0.52 U	0.57 U	0.5 U	0.17 U	0.17 U	0.18 U	0.17 U	0.17 U	0.15 U	1.6 U'	1.7 U'	1.7 U'	0.16 U	1.6 U'
Phenanthrene	1000	500	0.3	0.44 J	0.037 J	0.05 J	0.4	0.11 U	0.11 U	0.031 J	0.33	0.11 U	0.075 J	0.24	0.43	0.37 J	0.39 U	1.3	0.15 J	0.2	0.24	0.51	0.41	0.33	2.6	20	1.6	1.1 J	0.28	12
Phenol	0.33	500	0.19 U	1 U'	0.21 U	0.19 U	0.21 U	0.19 U	0.18 U	0.19 U	0.18 U	0.19 U	0.2 U	0.2 U	0.65 U'	1.1 U'	0.66 U'	0.72 U'	0.62 U'	0.22 U	0.21 U	0.22 U	0.21 U	0.21 U	0.19 U	1.9 U'	2.1 U'	**0.62 J**	0.21 U	2.1 U'
Pyrene	1000	500	0.33	0.79	0.095 J	0.092 J	1.2	0.11 U	0.042 J	0.078 J	0.32	0.032 J	0.14	0.22	2	0.45 J	0.085 J	1.3	0.1 J	0.28	0.14	0.6	0.52	0.17	3	17	1 J	0.86 J	0.31	9.2
Total Semi-Volatile TICs	NS	NS	ND	ND	ND	ND	1.2 J	ND	0.147 J	0.608 J	ND	0.365 J	ND	0.159 J	ND	ND	ND	3.44 J	ND	ND	5.44 J	3.43 J	10 J	6.89 J	16.2 J	16.2 J	16.2 J	75.7 J	0.17 J	0.17 J

Notes:

NYSDEC GW Protection SCO = New York State Department of Environmental Conservation Groundwater Protection Soil Cleanup Objectives, from Table 375-6.8 of 6 NYCRR Part 375.
NYSDEC Commercial SCO = New York State Department of Environmental Conservation Restricted Commercial Use Soil Cleanup Objectives, from Table 375-6.8 of 6 NYCRR Part 375.
ft bgs = Feet below ground surface.
mg/kg = Milligrams per kilogram.
Green concentrations exceed the NYSDEC GW Protection SCO.
Highlighted concentrations exceed the NYSDEC Commercial SCO.
— = Sample not analyzed.
NS = No standard currently established.
ND = Not Detected.
U = Not detected above laboratory detection limit.
U' = Laboratory reporting limit exceeds the applicable regulatory standard or criteria being utilized.
J = Result below the reporting limit (estimated value).
DUP = Duplicate sample was taken.
When the applicable state standard applies to mixed isomers and the laboratory reports individual isomers, the total standard is listed for each isomer.

Table 5
Soil Reuse Characterization Sampling Results
Summary of Semi-Volatile Organic Compounds in Soil.
MJ Painting; Olean, New York.

Sample ID	NYSDEC GW Protection SCO	NYSDEC Commercial SCO	RX-403	RX-404	RX-405	RX-405	RX-405	RX-407	RX-407	RX-407	RX-409	RX-410	RX-411	RX-413	RX-414	RX-415	RX-416	RX-416	RX-417	RX-417	RX-417	RX-417	RX-418	RX-418	RX-419	RX-419	RX-419	RX-420	RX-420	RX-420
Sample Depth (ft bgs)			10-12	7-10	0-1	1-4	7-10	0-1	4-7	10-12	1-4	10-12	7-10	10-12	4-7	7-10	1-4	10-12	0-1	1-4	7-10	10-12	4-7	10-12	1-4	7-10	10-12	0-1	4-7	7-10
Sample Date			11/12/2021	11/12/2021	11/15/2021	11/15/2021	11/15/2021	11/15/2021	11/15/2021	11/15/2021	11/12/2021	11/12/2021	11/12/2021	11/15/2021	11/15/2021	11/16/2021	11/16/2021	11/16/2021	11/11/2021	11/11/2021	11/11/2021	11/11/2021	11/11/2021	11/11/2021	11/15/2021	11/15/2021	11/15/2021	11/15/2021	11/15/2021	11/15/2021
SEMI-VOLATILE ORGANIC COMPOUNDS - 8270D (mg/kg)																														
1,2,4,5-Tetrachlorobenzene	NS	NS	0.19 U	2 U	0.22 U	0.94 U	0.19 U	0.18 U	0.21 U	0.18 U	0.2 U	0.2 U	0.2 U	0.19 U	1 U	0.22 U	0.2 U	0.18 U	0.19 U	0.18 U	1 U	0.27 U	0.56 U	0.21 U	0.19 U	1.4 U	0.19 U	0.2 U	0.18 U	1.2 U
2,3,4,6-Tetrachlorophenol	NS	NS	0.19 U	2 U	0.22 U	0.94 U	0.19 U	0.18 U	0.21 U	0.18 U	0.2 U	0.2 U	0.2 U	0.19 U	1 U	0.22 U	0.2 U	0.18 U	0.19 U	0.18 U	1 U	0.27 U	0.56 U	0.21 U	0.19 U	1.4 U	0.19 U	0.2 U	0.18 U	1.2 U
2,4,5-Trichlorophenol	NS	NS	0.19 U	2 U	0.22 U	0.94 U	0.19 U	0.18 U	0.21 U	0.18 U	0.2 U	0.2 U	0.2 U	0.19 U	1 U	0.22 U	0.2 U	0.18 U	0.19 U	0.18 U	1 U	0.27 U	0.56 U	0.21 U	0.19 U	1.4 U	0.19 U	0.2 U	0.18 U	1.2 U
2,4,6-Trichlorophenol	NS	NS	0.12 U	1.2 U	0.13 U	0.56 U	0.12 U	0.11 U	0.12 U	0.11 U	0.12 U	0.12 U	0.12 U	0.12 U	0.61 U	0.13 U	0.12 U	0.11 U	0.11 U	0.1 U	0.63 U	0.16 U	0.33 U	0.13 U	0.11 U	0.86 U	0.12 U	0.12 U	0.11 U	0.7 U
2,4-Dichlorophenol	NS	NS	0.17 U	1.8 U	0.2 U	0.85 U	0.17 U	0.17 U	0.19 U	0.17 U	0.18 U	0.18 U	0.18 U	0.18 U	0.92 U	0.2 U	0.18 U	0.17 U	0.17 U	0.16 U	0.94 U	0.25 U	0.5 U	0.19 U	0.17 U	1.3 U	0.17 U	0.18 U	0.17 U	1 U
2,4-Dimethylphenol	NS	NS	0.19 U	2 U	0.22 U	0.94 U	0.19 U	0.18 U	0.21 U	0.18 U	0.2 U	0.2 U	0.2 U	0.19 U	1 U	0.22 U	0.2 U	0.18 U	0.19 U	0.18 U	1 U	0.27 U	0.56 U	0.21 U	0.19 U	1.4 U	0.19 U	0.2 U	0.18 U	1.2 U
2,4-Dinitrophenol	NS	NS	0.92 U	9.5 U	1 U	4.5 U	0.93 U	0.89 U	0.99 U	0.89 U	0.96 U	0.94 U	0.94 U	0.93 U	4.9 U	1 U	0.98 U	0.89 U	0.9 U	0.84 U	5 U	1.3 U	2.7 U	1 U	0.9 U	6.9 U	0.92 U	0.96 U	0.89 U	5.6 U
2,4-Dinitrotoluene	NS	NS	0.19 U	2 U	0.22 U	0.94 U	0.19 U	0.18 U	0.21 U	0.18 U	0.2 U	0.2 U	0.2 U	0.19 U	1 U	0.22 U	0.2 U	0.18 U	0.19 U	0.18 U	1 U	0.27 U	0.56 U	0.21 U	0.19 U	1.4 U	0.19 U	0.2 U	0.18 U	1.2 U
2,6-Dinitrotoluene	NS	NS	0.19 U	2 U	0.22 U	0.94 U	0.19 U	0.18 U	0.21 U	0.18 U	0.2 U	0.2 U	0.2 U	0.19 U	1 U	0.22 U	0.2 U	0.18 U	0.19 U	0.18 U	1 U	0.27 U	0.56 U	0.21 U	0.19 U	1.4 U	0.19 U	0.2 U	0.18 U	1.2 U
2-Chloronaphthalene	NS	NS	0.19 U	2 U	0.22 U	0.94 U	0.19 U	0.18 U	0.21 U	0.18 U	0.2 U	0.2 U	0.2 U	0.19 U	1 U	0.22 U	0.2 U	0.18 U	0.19 U	0.18 U	1 U	0.27 U	0.56 U	0.21 U	0.19 U	1.4 U	0.19 U	0.2 U	0.18 U	1.2 U
2-Chlorophenol	NS	NS	0.19 U	2 U	0.22 U	0.94 U	0.19 U	0.18 U	0.21 U	0.18 U	0.2 U	0.2 U	0.2 U	0.19 U	1 U	0.22 U	0.2 U	0.18 U	0.19 U	0.18 U	1 U	0.27 U	0.56 U	0.21 U	0.19 U	1.4 U	0.19 U	0.2 U	0.18 U	1.2 U
2-Methylnapthalene	NS	NS	0.23 U	16	0.69	6.7	0.16 J	0.067 J	1.8	0.22 U	0.12 J	0.23 U	0.11 J	0.055 J	3.4	0.26 U	0.074 J	0.22 U	0.22 U	0.21 U	0.48 J	0.56	0.52 J	0.26 U	0.22 U	25	0.03 J	0.24 U	0.19 J	11
2-Methylphenol	0.33	500	0.19 U	2 U'	0.22 U	0.17 J	0.19 U	0.18 U	0.21 U	0.18 U	0.2 U	0.2 U	0.2 U	0.19 U	1 U'	0.22 U	0.2 U	0.18 U	0.19 U	0.18 U	1 U'	0.27 U	0.56 U'	0.21 U	0.19 U	1.4 U'	0.19 U	0.2 U	0.18 U	1.2 U'
2-Nitroaniline	NS	NS	0.19 U	2 U	0.22 U	0.94 U	0.19 U	0.18 U	0.21 U	0.18 U	0.2 U	0.2 U	0.2 U	0.19 U	1 U	0.22 U	0.2 U	0.18 U	0.19 U	0.18 U	1 U	0.27 U	0.56 U	0.21 U	0.19 U	1.4 U	0.19 U	0.2 U	0.18 U	1.2 U
2-Nitrophenol	NS	NS	0.42 U	4.3 U	0.47 U	2 U	0.42 U	0.4 U	0.45 U	0.4 U	0.43 U	0.42 U	0.42 U	0.42 U	2.2 U	0.48 U	0.44 U	0.4 U	0.4 U	0.38 U	2.3 U	0.59 U	1.2 U	0.46 U	0.4 U	3.1 U	0.42 U	0.43 U	0.4 U	2.5 U
3,3'-Dichlorobenzidine	NS	NS	0.19 U	2 U	0.22 U	0.94 U	0.19 U	0.18 U	0.21 U	0.18 U	0.2 U	0.2 U	0.2 U	0.19 U	1 U	0.22 U	0.2 U	0.18 U	0.19 U	0.18 U	1 U	0.27 U	0.56 U	0.21 U	0.19 U	1.4 U	0.19 U	0.2 U	0.18 U	1.2 U
3-Methylphenol/4-Methylphenol	NS	NS	0.28 U	2.8 U	0.32 U	0.47 J	0.28 U	0.27 U	0.3 U	0.26 U	0.29 U	0.28 U	0.28 U	0.28 U	1.5 U	0.32 U	0.29 U	0.27 U	0.27 U	0.25 U	1.5 U	0.4 U	0.8 U	0.31 U	0.27 U	2.1 U	0.28 U	0.29 U	0.27 U	1.7 U
3-Nitroaniline	NS	NS	0.19 U	2 U	0.22 U	0.94 U	0.19 U	0.18 U	0.21 U	0.18 U	0.2 U	0.2 U	0.2 U	0.19 U	1 U	0.22 U	0.2 U	0.18 U	0.19 U	0.18 U	1 U	0.27 U	0.56 U	0.21 U	0.19 U	1.4 U	0.19 U	0.2 U	0.18 U	1.2 U
4,6-Dinitro-o-cresol	NS	NS	0.5 U	5.1 U	0.57 U	2.4 U	0.5 U	0.48 U	0.54 U	0.48 U	0.52 U	0.51 U	0.51 U	0.51 U	2.6 U	0.57 U	0.53 U	0.48 U	0.49 U	0.46 U	2.7 U	0.71 U	1.4 U	0.56 U	0.49 U	3.7 U	0.5 U	0.52 U	0.48 U	3 U
4-Bromophenyl-phenylether	NS	NS	0.19 U	2 U	0.22 U	0.94 U	0.19 U	0.18 U	0.21 U	0.18 U	0.2 U	0.2 U	0.2 U	0.19 U	1 U	0.22 U	0.2 U	0.18 U	0.19 U	0.18 U	1 U	0.27 U	0.56 U	0.21 U	0.19 U	1.4 U	0.19 U	0.2 U	0.18 U	1.2 U
4-Chloroaniline	NS	NS	0.19 U	2 U	0.22 U	0.94 U	0.19 U	0.18 U	0.21 U	0.18 U	0.2 U	0.2 U	0.2 U	0.19 U	1 U	0.22 U	0.2 U	0.18 U	0.19 U	0.18 U	1 U	0.27 U	0.56 U	0.21 U	0.19 U	1.4 U	0.19 U	0.2 U	0.18 U	1.2 U
4-Chlorophenyl-phenylether	NS	NS	0.19 U	2 U	0.22 U	0.94 U	0.19 U	0.18 U	0.21 U	0.18 U	0.2 U	0.2 U	0.2 U	0.19 U	1 U	0.22 U	0.2 U	0.18 U	0.19 U	0.18 U	1 U	0.27 U	0.56 U	0.21 U	0.19 U	1.4 U	0.19 U	0.2 U	0.18 U	1.2 U
4-Nitroaniline	NS	NS	0.19 U	2 U	0.22 U	0.94 U	0.19 U	0.18 U	0.21 U	0.18 U	0.2 U	0.2 U	0.2 U	0.19 U	1 U	0.22 U	0.2 U	0.18 U	0.19 U	0.18 U	1 U	0.27 U	0.56 U	0.21 U	0.19 U	1.4 U	0.19 U	0.2 U	0.18 U	1.2 U
4-Nitrophenol	NS	NS	0.27 U	2.8 U	0.31 U	1.3 U	0.27 U	0.26 U	0.29 U	0.26 U	0.28 U	0.27 U	0.28 U	0.27 U	1.4 U	0.31 U	0.28 U	0.26 U	0.26 U	0.25 U	1.5 U	0.38 U	0.78 U	0.3 U	0.26 U	2 U	0.27 U	0.28 U	0.26 U	1.6 U
Acenaphthene	98	500	0.15 U	0.59 J	0.092 J	6.5	0.092 J	0.15 U	0.043 J	0.022 J	0.16 U	0.16 U	0.16 U	0.12 J	0.8 J	0.18 U	0.022 J	0.081 J	0.15 U	0.14 U	0.84 U	0.29	0.44 U	0.17 U	0.15 U	1.6	0.15 U	0.16 U	0.15 U	0.53 J
Acenaphthylene	107	500	0.15 U	1.6 U	0.045 J	1	0.15 U	0.15 U	0.16 U	0.15 U	0.16 U	0.16 U	0.16 U	0.16 U	0.81 U	0.18 U	0.16 U	0.15 U	0.15 U	0.14 U	0.84 U	0.22 U	0.44 U	0.17 U	0.15 U	1.2 U	0.15 U	0.16 U	0.15 U	0.93 U
Acetophenone	NS	NS	0.19 U	2 U	0.22 U	0.94 U	0.19 U	0.18 U	0.21 U	0.18 U	0.2 U	0.2 U	0.2 U	0.19 U	0.3 J	0.22 U	0.2 U	0.18 U	0.19 U	0.18 U	1 U	0.27 U	0.56 U	0.21 U	0.19 U	1.4 U	0.19 U	0.2 U	0.18 U	1.2 U
Anthracene	1000	500	0.12 U	1.8	0.34	19	0.23	0.11 U	0.27	0.049 J	0.056 J	0.12 U	0.28	0.32	2.9	0.13 U	0.12 U	0.11	0.11 U	0.1 U	0.63 U	0.64	0.33 U	0.13 U	0.11 U	2.8	0.12 U	0.12 U	0.11	0.8
Atrazine	NS	NS	0.15 U	1.6 U	0.18 U	0.75 U	0.15 U	0.15 U	0.16 U	0.15 U	0.16 U	0.16 U	0.16 U	0.16 U	0.81 U	0.18 U	0.16 U	0.15 U	0.15 U	0.14 U	0.84 U	0.22 U	0.44 U	0.17 U	0.15 U	1.2 U	0.15 U	0.16 U	0.15 U	0.93 U
Benzaldehyde	NS	NS	0.25 U	2.6 U	0.29 U	1.2 U	0.26 U	0.24 U	0.27 U	0.24 U	0.26 U	0.26 U	0.26 U	0.26 U	1.3 U	0.29 U	0.27 U	0.24 U	0.25 U	0.23 U	1.4 U	0.36 U	0.73 U	0.28 U	0.25 U	1.9 U	0.25 U	0.26 U	0.24 U	1.5 U
Benzo[a]anthracene	1	5.6	0.12 U	0.69 J	0.6	**22**	0.13	0.052 J	0.34	0.03 J	0.13	0.12 U	0.098 J	0.12 U	**3.8**	0.13 U	0.067 J	0.048 J	0.11 U	0.1 U	0.18 J	0.2	0.18 J	0.13 U	0.11 U	0.95	0.12 U	0.12 U	0.046 J	0.64 J
Benzo[a]pyrene	22	1	0.15 U	0.61 J	0.47	16	0.12 J	0.15 U	0.31	0.15 U	0.19	0.16 U	0.078 J	0.16 U	2.5	0.18 U	0.12 J	0.15 U	0.15 U	0.14 U	0.84 U	0.13 J	0.2 J	0.17 U	0.15 U	0.7 J	0.15 U	0.16 U	0.046 J	0.4 J
Benzo[b]fluoranthene	1.7	5.6	0.12 U	1.2 U'	0.54	**19**	0.11 J	0.058 J	0.23	0.11 U	0.18	0.12 U	0.047 J	0.12 U	**3.1**	0.13 U	0.083 J	0.11 U	0.11 U	0.1 U	0.63 U	0.084 J	0.22 J	0.13 U	0.11 U	0.86 U	0.12 U	0.12 U	0.045 J	0.38 J
Benzo[g,h,i]perylene	1000	500	0.15 U	1.1 J	0.64	8.9	0.18	0.035 J	0.7	0.031 J	0.32	0.16 U	0.11 J	0.16 U	2.3	0.18 U	0.13 J	0.033 J	0.15 U	0.14 U	1.9	0.21 J	0.45	0.17 U	0.15 U	1.1 J	0.15 U	0.16 U	0.33	0.53 J
Benzo[k]fluoranthene	1.7	56	0.12 U	1.2 U'	0.19	**7.4**	0.037 J	0.11 U	0.046 J	0.11 U	0.053 J	0.12 U	0.12 U	0.12 U	0.84	0.13 U	0.12 U	0.11 U	0.11 U	0.1 U	0.63 U	0.16 U	0.33 U	0.13 U	0.11 U	0.86 U'	0.12 U	0.12 U	0.11 U	0.7 U
Biphenyl	NS	NS	0.44 U	4.5 U	0.055 J	1.3 J	0.44 U	0.42 U	0.17 J	0.42 U	0.46 U	0.44 U	0.45 U	0.44 U	0.37 J	0.5 U	0.46 U	0.42 U	0.43 U	0.4 U	2.4 U	0.62 U	1.3 U	0.49 U	0.43 U	2.1 J	0.44 U	0.45 U	0.42 U	0.66 J
Bis(2-Chloroethoxy)methane	NS	NS	0.21 U	2.1 U	0.24 U	1 U	0.21 U	0.2 U	0.22 U	0.2 U	0.22 U	0.21 U	0.21 U	0.21 U	1.1 U	0.24 U	0.22 U	0.2 U	0.2 U	0.19 U	1.1 U	0.3 U	0.6 U	0.23 U	0.2 U	1.6 U	0.21 U	0.22 U	0.2 U	1.2 U
Bis(2-Chloroethyl)ether	NS	NS	0.17 U	1.8 U	0.2 U	0.85 U	0.17 U	0.17 U	0.19 U	0.17 U	0.18 U	0.18 U	0.18 U	0.18 U	0.92 U	0.2 U	0.18 U	0.17 U	0.17 U	0.16 U	0.94 U	0.25 U	0.5 U	0.19 U	0.17 U	1.3 U	0.17 U	0.18 U	0.17 U	1 U
Bis(2-Chloroisopropyl)ether	NS	NS	0.23 U	2.4 U	0.26 U	1.1 U	0.23 U	0.22 U	0.25 U	0.22 U	0.24 U	0.23 U	0.24 U	0.23 U	1.2 U	0.26 U	0.24 U	0.22 U	0.22 U	0.21 U	1.3 U	0.33 U	0.67 U	0.26 U	0.22 U	1.7 U	0.23 U	0.24 U	0.22 U	1.4 U
Bis(2-Ethylhexyl)phthalate	NS	NS	0.19 U	2 U	0.22 U	0.94 U	0.19 U	0.18 U	0.21 U	0.18 U	0.2 U	0.2 U	0.2 U	0.19 U	1 U	0.22 U	0.2 U	0.18 U	0.19 U	0.18 U	1 U	0.27 U	0.56 U	0.21 U	0.19 U	1.4 U	0.19 U	0.2 U	0.18 U	1.2 U
Butyl benzyl phthalate	NS	NS	0.19 U	2 U	0.22 U	0.94 U	0.19 U	0.18 U	0.21 U	0.18 U	0.2 U	0.2 U	0.2 U	0.19 U	1 U	0.22 U	0.2 U	0.18 U	0.19 U	0.18 U	1 U	0.27 U	0.56 U	0.21 U	0.19 U	1.4 U	0.19 U	0.2 U	0.18 U	1.2 U
Caprolactam	NS	NS	0.19 U	2 U	0.22 U	0.94 U	0.19 U	0.18 U	0.21 U	0.18 U	0.2 U	0.2 U	0.2 U	0.19 U	1 U	0.22 U	0.2 U	0.18 U	0.19 U	0.18 U	1 U	0.27 U	0.56 U	0.21 U	0.19 U	1.4 U	0.19 U	0.2 U	0.18 U	1.2 U
Carbazole	NS	NS	0.19 U	2 U	0.14 J	8.6	0.06 J	0.18 U	0.043 J	0.18 U	0.2 U	0.2 U	0.2 U	0.19 U	0.98 J	0.22 U	0.2 U	0.18 U	0.19 U	0.18 U	1 U	0.27 U	0.56 U	0.21 U	0.19 U	1.4 U	0.19 U	0.2 U	0.18 U	1.2 U
Chrysene	1	56	0.12 U	0.94 J	0.6	**18**	0.18	0.054 J	0.53	0.034 J	0.23	0.12 U	0.12	0.12 U	**3.7**	0.13 U	0.13	0.074 J	0.11 U	0.1 U	0.33 J	0.23	0.27 J	0.13 U	0.11 U	**2.2**	0.031 J	0.12 U	0.079 J	**2.4**
Dibenzo(a,h)anthracene	1000	0.56	0.12 U	1.2 U'	0.12 J	2.5	0.029 J	0.11 U	0.14	0.11 U	0.066 J	0.12 U	0.12 U	0.12 U	0.57 J	0.13 U	0.04 J	0.11 U	0.11 U	0.1 U	0.63 U'	0.16 U	0.096 J	0.13 U	0.11 U	0.86 U'	0.12 U	0.12 U	0.11 U	0.19 J
Dibenzofuran	210	350	0.19 U	0.27 J	0.11 J	9.4	0.076 J	0.18 U	0.095 J	0.021 J	0.2 U	0.2 U	0.2 U	0.1 J	1.1	0.22 U	0.2 U	0.058 J	0.19 U	0.18 U	1 U	0.13 J	0.56 U	0.21 U	0.19 U	1.4 U	0.19 U	0.2 U	0.18 U	0.37 J
Diethyl phthalate	NS	NS	0.19 U	2 U	0.22 U	0.94 U	0.19 U	0.18 U	0.21 U	0.18 U	0.2 U	0.2 U	0.2 U	0.19 U	1 U	0.22 U	0.2 U	0.18 U	0.19 U	0.18 U	1 U	0.27 U	0.56 U	0.21 U	0.19 U	1.4 U	0.19 U	0.2 U	0.18 U	1.2 U
Dimethyl phthalate	NS	NS	0.19 U	2 U	0.22 U	0.94 U	0.19 U	0.18 U	0.21 U	0.18 U	0.2 U	0.2 U	0.2 U	0.19 U	1 U	0.22 U	0.2 U	0.18 U	0.19 U	0.18 U	1 U	0.27 U	0.56 U	0.21 U	0.19 U	1.4 U	0.19 U	0.2 U	0.18 U	1.2 U
Di-n-butylphthalate	NS	NS	0.19 U	2 U	0.22 U	0.94 U	0.19 U	0.18 U	0.21 U	0.18 U	0.2 U	0.2 U	0.2 U	0.19 U	1 U	0.22 U	0.2 U	0.18 U	0.19 U	0.18 U	1 U	0.27 U	0.56 U	0.21 U	0.19 U	1.4 U	0.19 U	0.2 U	0.18 U	1.2 U
Di-n-octylphthalate	NS	NS	0.19 U	2 U	0.22 U	0.94 U	0.19 U	0.18 U	0.21 U	0.18 U	0.2 U	0.2 U	0.2 U	0.19 U	1 U	0.22 U	0.2 U	0.18 U	0.19 U	0.18 U	1 U	0.27 U	0.56 U	0.21 U	0.19 U	1.4 U	0.19 U	0.2 U	0.18 U	1.2 U
Fluoranthene	1000	500	0.12 U	0.89 J	1.2	49	0.28	0.058 J	0.27	0.055 J	0.25	0.12 U	0.18	0.1 J	7	0.13 U	0.062 J	0.071 J	0.11 U	0.1 U	0.63 U	0.35	0.21 J	0.13 U	0.11 U	1.2	0.12 U	0.12 U	0.06 J	0.7 U
Fluorene	386	500	0.19 U	1.8 J	0.21 J	13	0.23	0.18 U	0.14 J	0.064 J	0.03 J	0.2 U	0.32	0.36	1.7	0.22 U	0.048 J	0.19	0.19 U	0.18 U	1 U	0.82	0.56 U	0.21 U	0.19 U	3.8	0.19 U	0.2 U	0.077 J	1.3
Hexachlorobenzene	3.2	6	0.12 U	1.2 U'	0.13 U	0.56 U'	0.12 U	0.11 U	0.12 U	0.11 U	0.12 U	0.12 U	0.12 U	0.12 U	0.61 U'	0.13 U	0.12 U	0.11 U	0.11 U	0.1 U	0.63 U'	0.16 U	0.33 U	0.13 U	0.11 U	0.86 U'	0.12 U	0.12 U	0.11 U	0.7 U'
Hexachlorobutadiene	NS	NS	0.19 U	2 U	0.22 U	0.94 U	0.19 U	0.18 U	0.21 U	0.18 U	0.2 U	0.2 U	0.2 U	0.19 U	1 U	0.22 U	0.2 U	0.18 U	0.19 U	0.18 U	1 U	0.27 U	0.56 U	0.21 U	0.19 U	1.4 U	0.19 U	0.2 U	0.18 U	1.2 U
Hexachlorocyclopentadiene	NS	NS	0.55 U	5.6 U	0.63 U	2.7 U	0.55 U	0.53 U	0.59 U	0.53 U	0.57 U	0.56 U	0.56 U	0.56 U	2.9 U	0.63 U	0.58 U	0.53 U	0.54 U	0.5 U	3 U	0.78 U	1.6 U	0.61 U	0.54 U	4.1 U	0.55 U	0.57 U	0.53 U	3.3 U
Hexachloroethane	NS	NS	0.15 U	1.6 U	0.18 U	0.75 U	0.15 U	0.15 U	0.16 U	0.15 U	0.16 U	0.16 U	0.16 U	0.16 U	0.81 U	0.18 U	0.16 U	0.15 U	0.15 U	0.14 U	0.84 U	0.22 U	0.44 U	0.17 U	0.15 U	1.2 U	0.15 U	0.16 U	0.15 U	0.93 U
Indeno[1,2,3-cd]pyrene	8.2	5.6	0.15 U	0.65 J	0.34	**10**	0.067 J	0.027 J	0.17	0.027 J	0.14 J	0.16 U	0.031 J	0.16 U	1.5	0.18 U	0.049 J	0.15 U	0.15 U	0.14 U	0.26 J	0.066 J	0.18 J	0.17 U	0.15 U	1.2 U'	0.15 U	0.16 U	0.06 J	0.93 U'
Isophorone	NS	NS	0.17 U	1.8 U	0.2 U	0.85 U	0.17 U	0.17 U	0.19 U	0.17 U	0.18 U	0.18 U	0.18 U	0.18 U	0.92 U	0.2 U	0.18 U	0.17 U	0.17 U	0.16 U	0.94 U	0.25 U	0.5 U	0.19 U	0.17 U	1.3 U	0.17 U	0.18 U	0.17 U	1 U
Naphthalene	12	500	0.19 U	1.1 J	0.34	**16**	0.15 J	0.18 U	0.93	0.18 U	0.055 J	0.2 U	0.2 U	0.061 J	1.8	0.22 U	0.05 J	0.18 U	0.19 U	0.18 U	0.2 J	0.48	0.23 J	0.21 U	0.19 U	5.4	0.19 U	0.2 U	0.11 J	5.5
Nitrobenzene	NS	NS	0.17 U	1.8 U	0.2 U	0.85 U	0.17 U	0.17 U	0.19 U	0.17 U	0.18 U	0.18 U	0.18 U	0.18 U	0.92 U	0.2 U	0.18 U	0.17 U	0.17 U	0.16 U	0.94 U	0.25 U	0.5 U	0.19 U	0.17 U	1.3 U	0.17 U	0.18 U	0.17 U	1 U
n-Nitrosodi-n-propylamine	NS	NS	0.19 U	2 U	0.22 U	0.94 U	0.19 U	0.18 U	0.21 U	0.18 U	0.2 U	0.2 U	0.2 U	0.19 U	1 U	0.22 U	0.2 U	0.18 U	0.19 U	0.18 U	1 U	0.27 U	0.56 U	0.21 U	0.19 U	1.4 U	0.19 U	0.2 U	0.18 U	1.2 U
N-Nitrosodiphenylamine	NS	NS	0.15 U	1.6 U	0.18 U	0.75 U	0.15 U	0.15 U	0.16 U	0.15 U	0.16 U	0.16 U	0.16 U	0.16 U	0.81 U	0.18 U	0.16 U	0.15 U	0.15 U	0.14 U	0.84 U	0.22 U	0.44 U	0.17 U	0.15 U	1.2 U	0.15 U	0.16 U	0.15 U	0.93 U
p-Chloro-m-cresol	NS	NS	0.19 U	2 U	0.22 U	0.94 U	0.19 U	0.18 U	0.21 U	0.18 U	0.2 U	0.2 U	0.2 U	0.19 U	1 U	0.22 U	0.2 U	0.18 U	0.19 U	0.18 U	1 U	0.27 U	0.56 U	0.21 U	0.19 U	1.4 U	0.19 U	0.2 U	0.18 U	1.2 U
Pentachlorophenol	0.8	6.7	0.15 U	1.6 U'	0.18 U	0.75 U	0.15 U	0.15 U	0.16 U	0.15 U	0.16 U	0.16 U	0.16 U	0.16 U	0.81 U'	0.18 U	0.16 U	0.15 U	0.15 U	0.14 U	0.84 U'	0.22 U	0.44 U	0.17 U	0.15 U	1.2 U'	0.15 U	0.16 U	0.15 U	0.93 U'
Phenanthrene	1000	500	0.091 J	8.7	1.8	63	1.2	0.074 J	1.9	0.28	0.2	0.024 J	1.5	1.7	11	0.065 J	0.14	0.72	0.11 U	0.026 J	0.89	3.6	0.39	0.13 U	0.11 U	18	0.08 J	0.12 U	0.47	7.4
Phenol	0.33	500	0.19 U	2 U'	0.22 U	0.16 J	0.19 U	0.18 U	0.21 U	0.18 U	0.2 U	0.2 U	0.2 U	0.19 U	1 U'	0.22 U	0.2 U	0.18 U	0.19 U	0.18 U	1 U'	0.27 U	0.56 U'	0.21 U	0.19 U	1.4 U'	0.19 U	0.2 U	0.18 U	1.2 U'
Pyrene	1000	500	0.053 J	7.1	1.3	35	0.64	0.074 J	1.1	0.12	0.38	0.12 U	0.99	0.62	7.8	0.13 U	0.15	0.3	0.11 U	0.022 J	1	1.8	0.45	0.13 U	0.11 U	11	0.12 U	0.022 J	0.32	4.4
Total Semi-Volatile TICs	NS	NS	0.17 J	98.5 J	4.71 J	4.71 J	4.71 J	ND	ND	ND	5.47 J	6.22 J	17.2 J	20 J	70 J	2.71 J	26.1 J	26.1 J	1.21 J	1.21 J	1.21 J	1.21 J	13.5 J	13.5 J	0.193 J	0.193 J	0.193 J	0.77 J	0.77 J	0.77 J

Notes:

NYSDEC GW Protection SCO = New York State Department of Environmental Conservation Groundwater Protection Soil Cleanup Objectives, from Table 375-6.8 of 6 NYCRR Part 375.
NYSDEC Commercial SCO = New York State Department of Environmental Conservation Restricted Commercial Use Soil Cleanup Objectives, from Table 375-6.8 of 6 NYCRR Part 375.
ft bgs = Feet below ground surface.
mg/kg = Milligrams per kilogram.
Green concentrations exceed the NYSDEC GW Protection SCO.
Highlighted concentrations exceed the NYSDEC Commercial SCO.
— = Sample not analyzed.
NS = No standard currently established.
ND = Not Detected.
U = Not detected above laboratory detection limit.
U' = Laboratory reporting limit exceeds the applicable regulatory standard or criteria being utilized.
J = Result below the reporting limit (estimated value).
DUP = Duplicate sample was taken.
When the applicable state standard applies to mixed isomers and the laboratory reports individual isomers, the total standard is listed for each isomer.

Table 5
Soil Reuse Characterization Sampling Results
Summary of Semi-Volatile Organic Compounds in Soil.
MJ Painting; Olean, New York.

Sample ID	NYSDEC GW Protection SCO	NYSDEC Commercial SCO	RX-420	RX-421	RX-422	RX-422	RX-422	RX-422 DUP	RX-422	RX-423	RX-423	RX-424	RX-424	RX-424	RX-425	RX-425	RX-425	RX-425	RX-426	RX-426	RX-426	RX-427	RX-427	RX-428	RX-428	RX-428	RX-429	RX-429	RX-429 DUP	RX-429
Sample Depth (ft bgs)			10-12	10-12	0-1	1-4	7-10	7-10	10-12	4-7	10-12	1-4	7-10	10-12	0-1	4-7	7-10	10-12	1-4	7-10	10-12	7-10	10-12	1-4	8-10	10-12	0-1	4-7	4-7	10-12
Sample Date			11/15/2021	11/11/2021	11/10/2021	11/10/2021	11/10/2021	11/10/2021	11/10/2021	11/11/2021	11/11/2021	11/11/2021	11/11/2021	11/11/2021	11/11/2021	11/11/2021	11/11/2021	11/11/2021	11/11/2021	11/11/2021	11/11/2021	11/16/2021	11/16/2021	11/10/2021	11/10/2021	11/10/2021	11/10/2021	11/10/2021	11/10/2021	11/10/2021
SEMI-VOLATILE ORGANIC COMPOUNDS - 8270D (mg/kg)																														
1,2,4,5-Tetrachlorobenzene	NS	NS	0.21 U	2.2 U	0.24 U	0.17 U	2.2 U	1 U	0.98 U	0.58 U	0.21 U	0.18 U	0.19 U	1.1 U	0.19 U	0.18 U	1.1 U	0.19 U	0.18 U	10 U	13 U	1 U	1 U	0.22 U	0.2 U	0.2 U	0.18 U	0.17 U	0.18 U	0.19 U
2,3,4,6-Tetrachlorophenol	NS	NS	0.21 U	2.2 U	0.24 U	0.17 U	2.2 U	1 U	0.98 U	0.58 U	0.21 U	0.18 U	0.19 U	1.1 U	0.19 U	0.18 U	1.1 U	0.19 U	0.18 U	10 U	13 U	1 U	1 U	0.22 U	0.2 U	0.2 U	0.18 U	0.17 U	0.18 U	0.19 U
2,4,5-Trichlorophenol	NS	NS	0.21 U	2.2 U	0.24 U	0.17 U	2.2 U	1 U	0.98 U	0.58 U	0.21 U	0.18 U	0.19 U	1.1 U	0.19 U	0.18 U	1.1 U	0.19 U	0.18 U	10 U	13 U	1 U	1 U	0.22 U	0.2 U	0.2 U	0.18 U	0.17 U	0.18 U	0.19 U
2,4,6-Trichlorophenol	NS	NS	0.13 U	1.4 U	0.15 U	0.1 U	1.3 U	0.61 U	0.59 U	0.35 U	0.12 U	0.11 U	0.11 U	0.67 U	0.11 U	0.11 U	0.68 U	0.12 U	0.11 U	6.2 U	7.7 U	0.62 U	0.6 U	0.13 U	0.12 U	0.12 U	0.11 U	0.1 U	0.11 U	0.11 U
2,4-Dichlorophenol	NS	NS	0.19 U	2 U	0.22 U	0.16 U	2 U	0.91 U	0.88 U	0.52 U	0.19 U	0.16 U	0.17 U	1 U	0.17 U	0.16 U	1 U	0.17 U	0.16 U	9.2 U	12 U	0.93 U	0.9 U	0.2 U	0.18 U	0.18 U	0.17 U	0.16 U	0.17 U	0.17 U
2,4-Dimethylphenol	NS	NS	0.21 U	2.2 U	0.24 U	0.17 U	2.2 U	1 U	0.98 U	0.58 U	0.21 U	0.18 U	0.19 U	1.1 U	0.19 U	0.18 U	1.1 U	0.19 U	0.18 U	10 U	13 U	1 U	1 U	0.22 U	0.2 U	0.2 U	0.18 U	0.17 U	0.18 U	0.19 U
2,4-Dinitrophenol	NS	NS	1 U	11 U	1.2 U	0.84 U	11 U	4.9 U	4.7 U	2.8 U	1 U	0.85 U	0.91 U	5.3 U	0.89 U	0.88 U	5.4 U	0.93 U	0.85 U	49 U	62 U	5 U	4.8 U	1 U	0.94 U	0.96 U	0.89 U	0.84 U	0.89 U	0.91 U
2,4-Dinitrotoluene	NS	NS	0.21 U	2.2 U	0.24 U	0.17 U	2.2 U	1 U	0.98 U	0.58 U	0.21 U	0.18 U	0.19 U	1.1 U	0.19 U	0.18 U	1.1 U	0.19 U	0.18 U	10 U	13 U	1 U	1 U	0.22 U	0.2 U	0.2 U	0.18 U	0.17 U	0.18 U	0.19 U
2,6-Dinitrotoluene	NS	NS	0.21 U	2.2 U	0.24 U	0.17 U	2.2 U	1 U	0.98 U	0.58 U	0.21 U	0.18 U	0.19 U	1.1 U	0.19 U	0.18 U	1.1 U	0.19 U	0.18 U	10 U	13 U	1 U	1 U	0.22 U	0.2 U	0.2 U	0.18 U	0.17 U	0.18 U	0.19 U
2-Chloronaphthalene	NS	NS	0.21 U	2.2 U	0.24 U	0.17 U	2.2 U	1 U	0.98 U	0.58 U	0.21 U	0.18 U	0.19 U	1.1 U	0.19 U	0.18 U	1.1 U	0.19 U	0.18 U	10 U	13 U	1 U	1 U	0.22 U	0.2 U	0.2 U	0.18 U	0.17 U	0.18 U	0.19 U
2-Chlorophenol	NS	NS	0.21 U	2.2 U	0.24 U	0.17 U	2.2 U	1 U	0.98 U	0.58 U	0.21 U	0.18 U	0.19 U	1.1 U	0.19 U	0.18 U	1.1 U	0.19 U	0.18 U	10 U	13 U	1 U	1 U	0.22 U	0.2 U	0.2 U	0.18 U	0.17 U	0.18 U	0.19 U
2-Methylnapthalene	NS	NS	0.025 J	0.44 J	0.29 U	0.045 J	6.8	1.9	1.2 U	0.25 J	0.056 J	0.21 U	4	5.6	0.025 J	0.19 J	0.84 J	0.073 J	0.21 U	10 J	49	3	0.8 J	0.26 U	0.24 U	0.078 J	0.22 U	0.17 J	0.045 J	0.98
2-Methylphenol	0.33	500	0.21 U	2.2 U'	0.24 U	0.17 U	2.2 U'	1 U'	0.98 U'	0.58 U'	0.21 U	0.18 U	0.034 J	1.1 U'	0.19 U	0.18 U	1.1 U'	0.19 U	0.18 U	10 U'	13 U'	1 U'	1 U'	0.22 U	0.2 U	0.2 U	0.18 U	0.17 U	0.18 U	0.19 U
2-Nitroaniline	NS	NS	0.21 U	2.2 U	0.24 U	0.17 U	2.2 U	1 U	0.98 U	0.58 U	0.21 U	0.18 U	0.19 U	1.1 U	0.19 U	0.18 U	1.1 U	0.19 U	0.18 U	10 U	13 U	1 U	1 U	0.22 U	0.2 U	0.2 U	0.18 U	0.17 U	0.18 U	0.19 U
2-Nitrophenol	NS	NS	0.46 U	4.9 U	0.53 U	0.38 U	4.8 U	2.2 U	2.1 U	1.2 U	0.45 U	0.38 U	0.41 U	2.4 U	0.4 U	0.39 U	2.4 U	0.42 U	0.38 U	22 U	28 U	2.2 U	2.2 U	0.47 U	0.42 U	0.43 U	0.4 U	0.38 U	0.4 U	0.41 U
3,3'-Dichlorobenzidine	NS	NS	0.21 U	2.2 U	0.24 U	0.17 U	2.2 U	1 U	0.98 U	0.58 U	0.21 U	0.18 U	0.19 U	1.1 U	0.19 U	0.18 U	1.1 U	0.19 U	0.18 U	10 U	13 U	1 U	1 U	0.22 U	0.2 U	0.2 U	0.18 U	0.17 U	0.18 U	0.19 U
3-Methylphenol/4-Methylphenol	NS	NS	0.3 U	3.2 U	0.35 U	0.25 U	3.2 U	1.5 U	1.4 U	0.83 U	0.3 U	0.26 U	0.096 J	1.6 U	0.27 U	0.26 U	1.6 U	0.28 U	0.25 U	15 U	18 U	1.5 U	1.4 U	0.32 U	0.28 U	0.29 U	0.27 U	0.25 U	0.27 U	0.27 U
3-Nitroaniline	NS	NS	0.21 U	2.2 U	0.24 U	0.17 U	2.2 U	1 U	0.98 U	0.58 U	0.21 U	0.18 U	0.19 U	1.1 U	0.19 U	0.18 U	1.1 U	0.19 U	0.18 U	10 U	13 U	1 U	1 U	0.22 U	0.2 U	0.2 U	0.18 U	0.17 U	0.18 U	0.19 U
4,6-Dinitro-o-cresol	NS	NS	0.55 U	5.8 U	0.64 U	0.45 U	5.8 U	2.6 U	2.5 U	1.5 U	0.54 U	0.46 U	0.49 U	2.9 U	0.48 U	0.47 U	3 U	0.5 U	0.46 U	27 U	33 U	2.7 U	2.6 U	0.57 U	0.51 U	0.52 U	0.48 U	0.45 U	0.48 U	0.49 U
4-Bromophenyl-phenylether	NS	NS	0.21 U	2.2 U	0.24 U	0.17 U	2.2 U	1 U	0.98 U	0.58 U	0.21 U	0.18 U	0.19 U	1.1 U	0.19 U	0.18 U	1.1 U	0.19 U	0.18 U	10 U	13 U	1 U	1 U	0.22 U	0.2 U	0.2 U	0.18 U	0.17 U	0.18 U	0.19 U
4-Chloroaniline	NS	NS	0.21 U	2.2 U	0.24 U	0.17 U	2.2 U	1 U	0.98 U	0.58 U	0.21 U	0.18 U	0.19 U	1.1 U	0.19 U	0.18 U	1.1 U	0.19 U	0.18 U	10 U	13 U	1 U	1 U	0.22 U	0.2 U	0.2 U	0.18 U	0.17 U	0.18 U	0.19 U
4-Chlorophenyl-phenylether	NS	NS	0.21 U	2.2 U	0.24 U	0.17 U	2.2 U	1 U	0.98 U	0.58 U	0.21 U	0.18 U	0.19 U	1.1 U	0.19 U	0.18 U	1.1 U	0.19 U	0.18 U	10 U	13 U	1 U	1 U	0.22 U	0.2 U	0.2 U	0.18 U	0.17 U	0.18 U	0.19 U
4-Nitroaniline	NS	NS	0.21 U	2.2 U	0.24 U	0.17 U	2.2 U	1 U	0.98 U	0.58 U	0.21 U	0.18 U	0.19 U	1.1 U	0.19 U	0.18 U	1.1 U	0.19 U	0.18 U	10 U	13 U	1 U	1 U	0.22 U	0.2 U	0.2 U	0.18 U	0.17 U	0.18 U	0.19 U
4-Nitrophenol	NS	NS	0.3 U	3.2 U	0.34 U	0.24 U	3.1 U	1.4 U	1.4 U	0.81 U	0.29 U	0.25 U	0.26 U	1.6 U	0.26 U	0.26 U	1.6 U	0.27 U	0.25 U	14 U	18 U	1.4 U	1.4 U	0.31 U	0.28 U	0.28 U	0.26 U	0.24 U	0.26 U	0.26 U
Acenaphthene	98	500	0.17 U	1.8 U	0.2 U	0.14 U	0.57 J	0.18 J	0.63 J	0.38 J	0.17	0.14 U	0.15 U	0.89 U	0.15 U	0.15 U	0.24 J	0.16 U	0.14 U	3.3 J	1.8 J	0.22 J	0.42 J	0.18 U	0.16 U	0.03 J	0.15 U	0.14 U	0.15 U	0.037 J
Acenaphthylene	107	500	0.17 U	1.8 U	0.2 U	0.14 U	1.8 U	0.81 U	0.78 U	0.46 U	0.17 U	0.14 U	0.052 J	0.89 U	0.15 U	0.15 U	0.91 U	0.16 U	0.14 U	8.2 U	10 U	0.83 U	0.8 U	0.18 U	0.16 U	0.16 U	0.15 U	0.14 U	0.15 U	0.15 U
Acetophenone	NS	NS	0.21 U	2.2 U	0.24 U	0.17 U	2.2 U	1 U	0.98 U	0.58 U	0.21 U	0.18 U	0.19 U	1.1 U	0.19 U	0.18 U	1.1 U	0.19 U	0.18 U	10 U	13 U	1 U	1 U	0.22 U	0.2 U	0.2 U	0.18 U	0.17 U	0.18 U	0.19 U
Anthracene	1000	500	0.13 U	1.4 U	0.15 U	0.1 U	1.1 J	0.28 J	2.1	0.35 U	0.18	0.11 U	0.16	1.5	0.11 U	0.057 J	0.43 J	0.12 U	0.11 U	15	4.2 J	1.1	1	0.13 U	0.12 U	0.078 J	0.11 U	0.036 J	0.11 U	0.091 J
Atrazine	NS	NS	0.17 U	1.8 U	0.2 U	0.14 U	1.8 U	0.81 U	0.78 U	0.46 U	0.17 U	0.14 U	0.15 U	0.89 U	0.15 U	0.15 U	0.91 U	0.16 U	0.14 U	8.2 U	10 U	0.83 U	0.8 U	0.18 U	0.16 U	0.16 U	0.15 U	0.14 U	0.15 U	0.15 U
Benzaldehyde	NS	NS	0.28 U	3 U	0.32 U	0.23 U	2.9 U	1.3 U	1.3 U	0.76 U	0.28 U	0.23 U	0.25 U	1.5 U	0.24 U	0.24 U	1.5 U	0.26 U	0.23 U	14 U	17 U	1.4 U	1.3 U	0.29 U	0.26 U	0.26 U	0.24 U	0.23 U	0.24 U	0.25 U
Benzo[a]anthracene	1	5.6	0.13 U	1.4 U'	0.15 U	0.026 J	0.52 J	0.15 J	0.32 J	0.12 J	0.12 U	0.11 U	0.067 J	0.52 J	0.11 U	0.14	0.22 J	0.12 U	0.11 U	**5.7 J**	**2.7 J**	0.53 J	0.28 J	0.13 U	0.022 J	0.32	0.11 U	0.14	0.044 J	0.021 J
Benzo[a]pyrene	22	1	0.17 U	1.8 U'	0.2 U	0.14 U	1.8 U'	0.81 U	0.78 U	0.14 J	0.17 U	0.14 U	0.15 U	0.31 J	0.15 U	0.13 J	0.91 U	0.16 U	0.14 U	4.2 J	10 U'	1	0.8 U	0.18 U	0.16 U	0.29	0.15 U	0.22	0.15 U	0.15 U
Benzo[b]fluoranthene	1.7	5.6	0.13 U	1.4 U'	0.15 U	0.032 J	1.3 U'	0.61 U	0.59 U	0.22 J	0.12 U	0.11 U	0.056 J	0.25 J	0.11 U	0.14	0.68 U	0.12 U	0.11 U	**1.8 J**	7.7 U'	0.54 J	0.6 U	0.13 U	0.12 U	0.39	0.11 U	0.22	0.039 J	0.11 U
Benzo[g,h,i]perylene	1000	500	0.17 U	1.8 U	0.037 J	0.11 J	0.31 J	0.81 U	0.14 J	0.26 J	0.17 U	0.14 U	0.052 J	0.72 J	0.15 U	0.19	0.19 J	0.16 U	0.14 U	5.1 J	2.4 J	2	0.2 J	0.18 U	0.16 U	0.21	0.15 U	0.38	0.15 U	0.15 U
Benzo[k]fluoranthene	1.7	56	0.13 U	1.4 U'	0.15 U	0.1 U	1.3 U'	0.61 U	0.59 U	0.35 U	0.12 U	0.11 U	0.11 U	0.67 U	0.11 U	0.043 J	0.68 U	0.12 U	0.11 U	6.2 U'	7.7 U'	0.62 U	0.6 U	0.13 U	0.12 U	0.12	0.11 U	0.033 J	0.11 U	0.11 U
Biphenyl	NS	NS	0.48 U	5.1 U	0.56 U	0.4 U	5 U	2.3 U	2.2 U	1.3 U	0.48 U	0.4 U	0.31 J	0.57 J	0.42 U	0.42 U	2.6 U	0.44 U	0.4 U	23 U	29 U	2.4 U	2.3 U	0.5 U	0.45 U	0.46 U	0.42 U	0.4 U	0.42 U	0.43 U
Bis(2-Chloroethoxy)methane	NS	NS	0.23 U	2.4 U	0.26 U	0.19 U	2.4 U	1.1 U	1 U	0.62 U	0.23 U	0.19 U	0.2 U	1.2 U	0.2 U	0.2 U	1.2 U	0.21 U	0.19 U	11 U	14 U	1.1 U	1.1 U	0.24 U	0.21 U	0.22 U	0.2 U	0.19 U	0.2 U	0.2 U
Bis(2-Chloroethyl)ether	NS	NS	0.19 U	2 U	0.22 U	0.16 U	2 U	0.91 U	0.88 U	0.52 U	0.19 U	0.16 U	0.17 U	1 U	0.17 U	0.16 U	1 U	0.17 U	0.16 U	9.2 U	12 U	0.93 U	0.9 U	0.2 U	0.18 U	0.18 U	0.17 U	0.16 U	0.17 U	0.17 U
Bis(2-Chloroisopropyl)ether	NS	NS	0.25 U	2.7 U	0.29 U	0.21 U	2.6 U	1.2 U	1.2 U	0.7 U	0.25 U	0.21 U	0.23 U	1.3 U	0.22 U	0.22 U	1.4 U	0.23 U	0.21 U	12 U	15 U	1.2 U	1.2 U	0.26 U	0.24 U	0.24 U	0.22 U	0.21 U	0.22 U	0.23 U
Bis(2-Ethylhexyl)phthalate	NS	NS	0.21 U	2.2 U	0.24 U	0.17 U	2.2 U	1 U	0.98 U	0.58 U	0.21 U	0.18 U	0.19 U	1.1 U	0.19 U	0.18 U	1.1 U	0.19 U	0.18 U	10 U	13 U	1 U	1 U	0.22 U	0.2 U	0.2 U	0.18 U	0.17 U	0.18 U	0.19 U
Butyl benzyl phthalate	NS	NS	0.21 U	2.2 U	0.24 U	0.17 U	2.2 U	1 U	0.98 U	0.58 U	0.21 U	0.18 U	0.19 U	1.1 U	0.19 U	0.18 U	1.1 U	0.19 U	0.18 U	10 U	13 U	1 U	1 U	0.22 U	0.2 U	0.2 U	0.18 U	0.17 U	0.18 U	0.19 U
Caprolactam	NS	NS	0.21 U	2.2 U	0.24 U	0.17 U	2.2 U	1 U	0.98 U	0.58 U	0.21 U	0.18 U	0.19 U	1.1 U	0.19 U	0.18 U	1.1 U	0.19 U	0.18 U	10 U	13 U	1 U	1 U	0.22 U	0.2 U	0.2 U	0.18 U	0.17 U	0.18 U	0.19 U
Carbazole	NS	NS	0.21 U	2.2 U	0.24 U	0.17 U	2.2 U	1 U	0.98 U	0.58 U	0.21 U	0.18 U	0.19 U	1.1 U	0.19 U	0.18 U	1.1 U	0.19 U	0.18 U	10 U	13 U	1 U	1 U	0.22 U	0.2 U	0.049 J	0.18 U	0.17 U	0.18 U	0.19 U
Chrysene	1	56	0.052 J	1.4 U'	0.15 U	0.048 J	0.78 J	0.24 J	0.47 J	0.26 J	0.04 J	0.11 U	0.14	0.72	0.11 U	0.17	0.32 J	0.038 J	0.11 U	**7.8**	**6.6 J**	**1.4**	0.62	0.13 U	0.022 J	0.33	0.11 U	0.3	0.091 J	0.025 J
Dibenzo(a,h)anthracene	1000	0.56	0.13 U	1.4 U'	0.15 U	0.1 U	1.3 U'	0.61 U'	0.59 U'	0.35 U'	0.12 U	0.11 U	0.11 U	0.67 U'	0.11 U	0.042 J	0.68 U'	0.12 U	0.11 U	6.2 U'	7.7 U'	0.18 J	0.6 U'	0.13 U	0.12 U	0.053 J	0.11 U	0.096 J	0.11 U	0.11 U
Dibenzofuran	210	350	0.21 U	2.2 U	0.24 U	0.17 U	0.54 J	0.18 J	0.98 U	0.58 U	0.081 J	0.18 U	0.078 J	1.1 U	0.19 U	0.03 J	1.1 U	0.19 U	0.18 U	2 J	1.2 J	1 U	0.28 J	0.22 U	0.2 U	0.032 J	0.18 U	0.033 J	0.18 U	0.02 J
Diethyl phthalate	NS	NS	0.21 U	2.2 U	0.24 U	0.17 U	2.2 U	1 U	0.98 U	0.58 U	0.21 U	0.18 U	0.19 U	1.1 U	0.19 U	0.18 U	1.1 U	0.19 U	0.18 U	10 U	13 U	1 U	1 U	0.22 U	0.2 U	0.2 U	0.18 U	0.17 U	0.18 U	0.19 U
Dimethyl phthalate	NS	NS	0.21 U	2.2 U	0.24 U	0.17 U	2.2 U	1 U	0.98 U	0.58 U	0.21 U	0.18 U	0.19 U	1.1 U	0.19 U	0.18 U	1.1 U	0.19 U	0.18 U	10 U	13 U	1 U	1 U	0.22 U	0.2 U	0.2 U	0.18 U	0.17 U	0.18 U	0.19 U
Di-n-butylphthalate	NS	NS	0.21 U	2.2 U	0.24 U	0.17 U	2.2 U	1 U	0.98 U	0.58 U	0.21 U	0.18 U	0.19 U	1.1 U	0.19 U	0.18 U	1.1 U	0.19 U	0.18 U	10 U	13 U	1 U	1 U	0.22 U	0.2 U	0.2 U	0.18 U	0.17 U	0.18 U	0.19 U
Di-n-octylphthalate	NS	NS	0.21 U	2.2 U	0.24 U	0.17 U	2.2 U	1 U	0.98 U	0.58 U	0.21 U	0.18 U	0.19 U	1.1 U	0.19 U	0.18 U	1.1 U	0.19 U	0.18 U	10 U	13 U	1 U	1 U	0.22 U	0.2 U	0.2 U	0.18 U	0.17 U	0.18 U	0.19 U
Fluoranthene	1000	500	0.13 U	1.4 U	0.032 J	0.024 J	0.47 J	0.61 U	0.88	0.26 J	0.091 J	0.11 U	0.1 J	0.67 U	0.11 U	0.25	0.23 J	0.12 U	0.11 U	8.1	2.1 J	0.41 J	0.3 J	0.13 U	0.035 J	0.61	0.11 U	0.21	0.043 J	0.043 J
Fluorene	386	500	0.21 U	0.59 J	0.24 U	0.17 U	2.2	0.66 J	1.8	0.58 U	0.35	0.18 U	0.11 J	1.1 U	0.19 U	0.044 J	0.65 J	0.024 J	0.18 U	8.5 J	4.7 J	0.63 J	1.2	0.22 U	0.026 J	0.054 J	0.18 U	0.019 J	0.18 U	0.098 J
Hexachlorobenzene	3.2	6	0.13 U	1.4 U'	0.15 U	0.1 U	1.3 U'	0.61 U'	0.59 U'	0.35 U'	0.12 U	0.11 U	0.11 U	0.67 U'	0.11 U	0.11 U	0.68 U'	0.12 U	0.11 U	6.2 U'	7.7 U'	0.62 U'	0.6 U'	0.13 U	0.12 U	0.12 U	0.11 U	0.1 U	0.11 U	0.11 U
Hexachlorobutadiene	NS	NS	0.21 U	2.2 U	0.24 U	0.17 U	2.2 U	1 U	0.98 U	0.58 U	0.21 U	0.18 U	0.19 U	1.1 U	0.19 U	0.18 U	1.1 U	0.19 U	0.18 U	10 U	13 U	1 U	1 U	0.22 U	0.2 U	0.2 U	0.18 U	0.17 U	0.18 U	0.19 U
Hexachlorocyclopentadiene	NS	NS	0.6 U	6.4 U	0.7 U	0.5 U	6.3 U	2.9 U	2.8 U	1.6 U	0.6 U	0.51 U	0.54 U	3.2 U	0.53 U	0.52 U	3.2 U	0.55 U	0.5 U	29 U	37 U	3 U	2.9 U	0.63 U	0.56 U	0.57 U	0.53 U	0.5 U	0.53 U	0.54 U
Hexachloroethane	NS	NS	0.17 U	1.8 U	0.2 U	0.14 U	1.8 U	0.81 U	0.78 U	0.46 U	0.17 U	0.14 U	0.15 U	0.89 U	0.15 U	0.15 U	0.91 U	0.16 U	0.14 U	8.2 U	10 U	0.83 U	0.8 U	0.18 U	0.16 U	0.16 U	0.15 U	0.14 U	0.15 U	0.15 U
Indeno[1,2,3-cd]pyrene	8.2	5.6	0.17 U	1.8 U'	0.2 U	0.029 J	1.8 U'	0.81 U'	0.78 U'	0.16 J	0.17 U	0.14 U	0.15 U	0.26 J	0.15 U	0.095 J	0.91 U'	0.16 U	0.14 U	1.4 J	10 U'	0.42 J	0.8 U'	0.18 U	0.16 U	0.22	0.15 U	0.14	0.15 U	0.15 U
Isophorone	NS	NS	0.19 U	2 U	0.22 U	0.16 U	2 U	0.91 U	0.88 U	0.52 U	0.19 U	0.16 U	0.17 U	1 U	0.17 U	0.16 U	1 U	0.17 U	0.16 U	9.2 U	12 U	0.93 U	0.9 U	0.2 U	0.18 U	0.18 U	0.17 U	0.16 U	0.17 U	0.17 U
Naphthalene	12	500	0.21 U	0.36 J	0.24 U	0.027 J	2.4	0.78 J	0.42 J	0.15 J	0.095 J	0.18 U	3	2.9	0.19 U	0.08 J	0.76 J	0.079 J	0.18 U	2.6 J	8.7 J	1.7	1 U	0.071 J	0.2 U	0.12 J	0.18 U	0.084 J	0.032 J	0.074 J
Nitrobenzene	NS	NS	0.19 U	2 U	0.22 U	0.16 U	2 U	0.91 U	0.88 U	0.52 U	0.19 U	0.16 U	0.17 U	1 U	0.17 U	0.16 U	1 U	0.17 U	0.16 U	9.2 U	12 U	0.93 U	0.9 U	0.2 U	0.18 U	0.18 U	0.17 U	0.16 U	0.17 U	0.17 U
n-Nitrosodi-n-propylamine	NS	NS	0.21 U	2.2 U	0.24 U	0.17 U	2.2 U	1 U	0.98 U	0.58 U	0.21 U	0.18 U	0.19 U	1.1 U	0.19 U	0.18 U	1.1 U	0.19 U	0.18 U	10 U	13 U	1 U	1 U	0.22 U	0.2 U	0.2 U	0.18 U	0.17 U	0.18 U	0.19 U
N-Nitrosodiphenylamine	NS	NS	0.17 U	1.8 U	0.2 U	0.14 U	1.8 U	0.81 U	0.78 U	0.46 U	0.17 U	0.14 U	0.15 U	0.89 U	0.15 U	0.15 U	0.91 U	0.16 U	0.14 U	8.2 U	10 U	0.83 U	0.8 U	0.18 U	0.16 U	0.16 U	0.15 U	0.14 U	0.15 U	0.15 U
p-Chloro-m-cresol	NS	NS	0.21 U	2.2 U	0.24 U	0.17 U	2.2 U	1 U	0.98 U	0.58 U	0.21 U	0.18 U	0.19 U	1.1 U	0.19 U	0.18 U	1.1 U	0.19 U	0.18 U	10 U	13 U	1 U	1 U	0.22 U	0.2 U	0.2 U	0.18 U	0.17 U	0.18 U	0.19 U
Pentachlorophenol	0.8	6.7	0.17 U	1.8 U'	0.2 U	0.14 U	1.8 U'	0.81 U'	0.78 U	0.46 U	0.17 U	0.14 U	0.15 U	0.89 U'	0.15 U	0.15 U	0.91 U'	0.16 U	0.14 U	8.2 U'	10 U'	0.83 U'	0.8 U	0.18 U	0.16 U	0.16 U	0.15 U	0.14 U	0.15 U	0.15 U
Phenanthrene	1000	500	0.12 J	2	0.15 U	0.059 J	7.8	2.2	11	0.35	0.94	0.11 U	0.96	6	0.025 J	0.39	2	0.084 J	0.11 U	69	24	3.3	4.7	0.13 U	0.062 J	0.39	0.11 U	0.26	0.17	0.56
Phenol	0.33	500	0.21 U	**0.46 J**	0.24 U	0.17 U	2.2 U'	1 U'	0.98 U'	0.58 U'	0.21 U	0.18 U	0.19 U	1.1 U'	0.19 U	0.18 U	1.1 U'	0.19 U	0.18 U	10 U'	13 U'	1 U'	1 U'	0.22 U	0.2 U	0.2 U	0.18 U	0.17 U	0.18 U	0.19 U
Pyrene	1000	500	0.073 J	0.63 J	0.036 J	0.069 J	2.4	0.63	5.4	0.4	0.25	0.11 U	0.51	4.7	0.026 J	0.3	2.1	0.081 J	0.11 U	64	19	4	2.4	0.13 U	0.052 J	0.56	0.11 U	0.3	0.054 J	0.22
Total Semi-Volatile TICs	NS	NS	9.57 J	84.8 J	3.11 J	3.11 J	3.11 J	329 J	3.11 J	109 J	109 J	0.484 J	0.484 J	0.484 J	4.01 J	4.01 J	4.01 J	4.01 J	0.547 J	0.547 J	0.547 J	151 J	151 J	0.507 J	0.507 J	0.507 J	ND	ND	13.8 J	ND

Notes:
NYSDEC GW Protection SCO = New York State Department of Environmental Conservation Groundwater Protection Soil Cleanup Objectives, from Table 375-6.8 of 6 NYCRR Part 375.
NYSDEC Commercial SCO = New York State Department of Environmental Conservation Restricted Commercial Use Soil Cleanup Objectives, from Table 375-6.8 of 6 NYCRR Part 375.
ft bgs = Feet below ground surface.
mg/kg = Milligrams per kilogram.
Green concentrations exceed the NYSDEC GW Protection SCO.
Highlighted concentrations exceed the NYSDEC Commercial SCO.
— = Sample not analyzed.
NS = No standard currently established.
ND = Not Detected.
U = Not detected above laboratory detection limit.
U' = Laboratory reporting limit exceeds the applicable regulatory standard or criteria being utilized.
J = Result below the reporting limit (estimated value).
DUP = Duplicate sample was taken.
When the applicable state standard applies to mixed isomers and the laboratory reports individual isomers, the total standard is listed for each isomer.

Table 5
Soil Reuse Characterization Sampling Results
Summary of Semi-Volatile Organic Compounds in Soil.
MJ Painting; Olean, New York.

Sample ID	NYSDEC GW Protection SCO	NYSDEC Commercial SCO	RX-430	RX-430	RX-430	RX-431	RX-431	RX-431	RX-432	RX-432	RX-432	RX-432	RX-433	RX-434	RX-434	RX-434	RX-435	RX-436	RX-436	RX-436	RX-437	RX-439	RX-439	RX-439	RX-440	RX-441	RX-442	RX-443	RX-443
Sample Depth (ft bgs)			1-4	7-10	10-12	3-7	7-10	10-12	0-1	1-4	7-10	10-12	7-10	0-1	4-7	10-12	7-10	0-1	4-7	10-12	1-4	0-1	4-7	10-12	4-7	7-10	1-4	0-1	4-7
Sample Date			11/10/2021	11/10/2021	11/10/2021	11/10/2021	11/16/2021	11/16/2021	11/10/2021	11/16/2021	11/16/2021	11/16/2021	11/17/2021	11/17/2021	11/17/2021	11/17/2021	11/17/2021	11/17/2021	11/17/2021	11/17/2021	11/17/2021	11/17/2021	11/18/2021	11/18/2021	11/17/2021	11/16/2021	11/17/2021	11/16/2021	11/16/2021
SEMI-VOLATILE ORGANIC COMPOUNDS - 8270D (mg/kg)																													
1,2,4,5-Tetrachlorobenzene	NS	NS	0.2 U	0.2 U	0.2 U	2.3 U	2.1 U	0.19 U	0.18 U	0.95 U	0.21 U	0.19 U	0.18 U	0.2 U	1 U	0.18 U	0.18 U	1 U	0.22 U	0.18 U	1 U	0.21 U	0.24 U	0.2 U	0.25 U	0.18 U	0.2 U	0.22 U	0.99 U
2,3,4,6-Tetrachlorophenol	NS	NS	0.2 U	0.2 U	0.2 U	2.3 U	2.1 U	0.19 U	0.18 U	0.95 U	0.21 U	0.19 U	0.18 U	0.2 U	1 U	0.18 U	0.18 U	1 U	0.22 U	0.18 U	1 U	0.21 U	0.24 U	0.2 U	0.25 U	0.18 U	0.2 U	0.22 U	0.99 U
2,4,5-Trichlorophenol	NS	NS	0.2 U	0.2 U	0.2 U	2.3 U	2.1 U	0.19 U	0.18 U	0.95 U	0.21 U	0.19 U	0.18 U	0.2 U	1 U	0.18 U	0.18 U	1 U	0.22 U	0.18 U	1 U	0.21 U	0.24 U	0.2 U	0.25 U	0.18 U	0.2 U	0.22 U	0.99 U
2,4,6-Trichlorophenol	NS	NS	0.12 U	0.12 U	0.12 U	1.4 U	1.3 U	0.11 U	0.11 U	0.57 U	0.13 U	0.12 U	0.11 U	0.12 U	0.6 U	0.1 U	0.1 U	0.6 U	0.13 U	0.11 U	0.6 U	0.12 U	0.14 U	0.12 U	0.15 U	0.11 U	0.12 U	0.13 U	0.59 U
2,4-Dichlorophenol	NS	NS	0.18 U	0.18 U	0.18 U	2 U	1.9 U	0.17 U	0.16 U	0.86 U	0.19 U	0.17 U	0.16 U	0.18 U	0.9 U	0.16 U	0.16 U	0.9 U	0.2 U	0.16 U	0.9 U	0.18 U	0.21 U	0.18 U	0.22 U	0.17 U	0.18 U	0.2 U	0.89 U
2,4-Dimethylphenol	NS	NS	0.2 U	0.2 U	0.2 U	2.3 U	2.1 U	0.19 U	0.18 U	0.95 U	0.21 U	0.19 U	0.18 U	0.2 U	1 U	0.18 U	0.18 U	1 U	0.22 U	0.18 U	1 U	0.21 U	0.24 U	0.2 U	0.25 U	0.18 U	0.2 U	0.22 U	0.99 U
2,4-Dinitrophenol	NS	NS	0.94 U	0.95 U	0.95 U	11 U	10 U	0.91 U	0.86 U	4.6 U	1 U	0.93 U	0.88 U	0.95 U	4.8 U	0.84 U	0.84 U	4.8 U	1.1 U	0.88 U	4.8 U	0.99 U	1.1 U	0.95 U	1.2 U	0.89 U	0.95 U	1.1 U	4.7 U
2,4-Dinitrotoluene	NS	NS	0.2 U	0.2 U	0.13 J	2.3 U	2.1 U	0.19 U	0.18 U	0.95 U	0.21 U	0.19 U	0.18 U	0.2 U	1 U	0.18 U	0.18 U	1 U	0.22 U	0.18 U	1 U	0.21 U	0.24 U	0.2 U	0.25 U	0.18 U	0.2 U	0.22 U	0.99 U
2,6-Dinitrotoluene	NS	NS	0.2 U	0.2 U	0.2 U	2.3 U	2.1 U	0.19 U	0.18 U	0.95 U	0.21 U	0.19 U	0.18 U	0.2 U	1 U	0.18 U	0.18 U	1 U	0.22 U	0.18 U	1 U	0.21 U	0.24 U	0.2 U	0.25 U	0.18 U	0.2 U	0.22 U	0.99 U
2-Chloronaphthalene	NS	NS	0.2 U	0.2 U	0.2 U	2.3 U	2.1 U	0.19 U	0.18 U	0.95 U	0.21 U	0.19 U	0.18 U	0.2 U	1 U	0.18 U	0.18 U	1 U	0.22 U	0.18 U	1 U	0.21 U	0.24 U	0.2 U	0.25 U	0.18 U	0.2 U	0.22 U	0.99 U
2-Chlorophenol	NS	NS	0.2 U	0.2 U	0.2 U	2.3 U	2.1 U	0.19 U	0.18 U	0.95 U	0.21 U	0.19 U	0.18 U	0.2 U	1 U	0.18 U	0.18 U	1 U	0.22 U	0.18 U	1 U	0.21 U	0.24 U	0.2 U	0.25 U	0.18 U	0.2 U	0.22 U	0.99 U
2-Methylnapthalene	NS	NS	0.24 U	0.54	0.24 U	3.8	5.4	0.33	0.22 U	0.36 J	0.028 J	0.038 J	0.14 J	0.061 J	0.22 J	0.03 J	0.21 U	0.73 J	0.17 J	0.11 J	0.33 J	0.25 U	0.16 J	0.24 U	0.3 U	0.22 U	0.094 J	0.24 J	22
2-Methylphenol	0.33	500	0.2 U	0.2 U	0.2 U	2.3 U'	2.1 U'	0.19 U	0.18 U	0.95 U'	0.21 U	0.19 U	0.18 U	0.2 U	1 U'	0.18 U	0.18 U	1 U'	0.22 U	0.18 U	1 U'	0.21 U	0.24 U	0.2 U	0.25 U	0.18 U	0.2 U	0.22 U	0.99 U'
2-Nitroaniline	NS	NS	0.2 U	0.2 U	0.2 U	2.3 U	2.1 U	0.19 U	0.18 U	0.95 U	0.21 U	0.19 U	0.18 U	0.2 U	1 U	0.18 U	0.18 U	1 U	0.22 U	0.18 U	1 U	0.21 U	0.24 U	0.2 U	0.25 U	0.18 U	0.2 U	0.22 U	0.99 U
2-Nitrophenol	NS	NS	0.42 U	0.43 U	0.43 U	4.9 U	4.6 U	0.41 U	0.39 U	2 U	0.45 U	0.42 U	0.4 U	0.43 U	2.2 U	0.38 U	0.38 U	2.2 U	0.48 U	0.4 U	2.2 U	0.45 U	0.52 U	0.43 U	0.53 U	0.4 U	0.43 U	0.48 U	2.1 U
3,3'-Dichlorobenzidine	NS	NS	0.2 U	0.2 U	0.2 U	2.3 U	2.1 U	0.19 U	0.18 U	0.95 U	0.21 U	0.19 U	0.18 U	0.2 U	1 U	0.18 U	0.18 U	1 U	0.22 U	0.18 U	1 U	0.21 U	0.24 U	0.2 U	0.25 U	0.18 U	0.2 U	0.22 U	0.99 U
3-Methylphenol/4-Methylphenol	NS	NS	0.28 U	0.28 U	0.29 U	3.3 U	3 U	0.27 U	0.26 U	1.4 U	0.3 U	0.28 U	0.26 U	0.29 U	1.4 U	0.25 U	0.25 U	1.4 U	0.32 U	0.26 U	1.4 U	0.3 U	0.34 U	0.29 U	0.36 U	0.26 U	0.28 U	0.32 U	1.4 U
3-Nitroaniline	NS	NS	0.2 U	0.2 U	0.2 U	2.3 U	2.1 U	0.19 U	0.18 U	0.95 U	0.21 U	0.19 U	0.18 U	0.2 U	1 U	0.18 U	0.18 U	1 U	0.22 U	0.18 U	1 U	0.21 U	0.24 U	0.2 U	0.25 U	0.18 U	0.2 U	0.22 U	0.99 U
4,6-Dinitro-o-cresol	NS	NS	0.51 U	0.52 U	0.52 U	5.9 U	5.5 U	0.49 U	0.47 U	2.5 U	0.55 U	0.5 U	0.48 U	0.52 U	2.6 U	0.46 U	0.46 U	2.6 U	0.58 U	0.48 U	2.6 U	0.54 U	0.62 U	0.52 U	0.64 U	0.48 U	0.51 U	0.58 U	2.6 U
4-Bromophenyl-phenylether	NS	NS	0.2 U	0.2 U	0.2 U	2.3 U	2.1 U	0.19 U	0.18 U	0.95 U	0.21 U	0.19 U	0.18 U	0.2 U	1 U	0.18 U	0.18 U	1 U	0.22 U	0.18 U	1 U	0.21 U	0.24 U	0.2 U	0.25 U	0.18 U	0.2 U	0.22 U	0.99 U
4-Chloroaniline	NS	NS	0.2 U	0.2 U	0.2 U	2.3 U	2.1 U	0.19 U	0.18 U	0.95 U	0.21 U	0.19 U	0.18 U	0.2 U	1 U	0.18 U	0.18 U	1 U	0.22 U	0.18 U	1 U	0.21 U	0.24 U	0.2 U	0.25 U	0.18 U	0.2 U	0.22 U	0.99 U
4-Chlorophenyl-phenylether	NS	NS	0.2 U	0.2 U	0.2 U	2.3 U	2.1 U	0.19 U	0.18 U	0.95 U	0.21 U	0.19 U	0.18 U	0.2 U	1 U	0.18 U	0.18 U	1 U	0.22 U	0.18 U	1 U	0.21 U	0.24 U	0.2 U	0.25 U	0.18 U	0.2 U	0.22 U	0.99 U
4-Nitroaniline	NS	NS	0.2 U	0.2 U	0.2 U	2.3 U	2.1 U	0.19 U	0.18 U	0.95 U	0.21 U	0.19 U	0.18 U	0.2 U	1 U	0.18 U	0.18 U	1 U	0.22 U	0.18 U	1 U	0.21 U	0.24 U	0.2 U	0.25 U	0.18 U	0.2 U	0.22 U	0.99 U
4-Nitrophenol	NS	NS	0.28 U	0.28 U	0.28 U	3.2 U	3 U	0.27 U	0.25 U	1.3 U	0.29 U	0.27 U	0.26 U	0.28 U	1.4 U	0.25 U	0.24 U	1.4 U	0.31 U	0.26 U	1.4 U	0.29 U	0.33 U	0.28 U	0.34 U	0.26 U	0.28 U	0.31 U	1.4 U
Acenaphthene	98	500	0.16 U	0.34	0.11 J	0.24 J	1.8	0.32	0.14 U	0.76 U	0.028 J	0.12 J	0.15 U	0.16	0.11 J	0.14 U	0.021 J	0.8 U	0.18 U	0.15 U	0.8 U	0.16 U	0.19 U	0.16 U	0.2 U	0.15 U	0.16 U	0.088 J	1.4
Acenaphthylene	107	500	0.16 U	0.13 J	0.075 J	1.8 U	1.7 U	0.15 U	0.14 U	0.76 U	0.17 U	0.16 U	0.15 U	0.057 J	0.8 U	0.14 U	0.14 U	0.8 U	0.18 U	0.15 U	0.8 U	0.16 U	0.19 U	0.16 U	0.2 U	0.15 U	0.16 U	0.047 J	0.79 U
Acetophenone	NS	NS	0.2 U	0.68	0.2 U	2.3 U	2.1 U	0.19 U	0.18 U	0.95 U	0.21 U	0.19 U	0.18 U	0.2 U	1 U	0.18 U	0.18 U	1 U	0.22 U	0.18 U	1 U	0.21 U	0.24 U	0.2 U	0.25 U	0.18 U	0.2 U	0.22 U	0.99 U
Anthracene	1000	500	0.12 U	1.2	0.4	1.2 J	7.5	1.2	0.11 U	0.57 U	0.089 J	0.25	0.045 J	0.36	0.28 J	0.1 U	0.046 J	0.6 U	0.13 U	0.053 J	0.28 J	0.12 U	0.14 U	0.12 U	0.15 U	0.11 U	0.12 U	0.27	2
Atrazine	NS	NS	0.16 U	0.16 U	0.16 U	1.8 U	1.7 U	0.15 U	0.14 U	0.76 U	0.17 U	0.16 U	0.15 U	0.16 U	0.8 U	0.14 U	0.14 U	0.8 U	0.18 U	0.15 U	0.8 U	0.16 U	0.19 U	0.16 U	0.2 U	0.15 U	0.16 U	0.18 U	0.79 U
Benzaldehyde	NS	NS	0.26 U	0.26 U	0.26 U	3 U	2.8 U	0.25 U	0.24 U	1.2 U	0.28 U	0.26 U	0.24 U	0.064 J	1.3 U	0.23 U	0.23 U	1.3 U	0.3 U	0.24 U	1.3 U	0.27 U	0.31 U	0.26 U	0.32 U	0.24 U	0.26 U	0.29 U	1.3 U
Benzo[a]anthracene	1	5.6	0.12 U	0.26	0.051 J	1.4 U'	**2.7**	0.3	0.11 U	0.18 J	0.13	0.11 J	0.11 U	0.79	0.47 J	0.029 J	0.074 J	0.11 J	0.13 U	0.038 J	0.99	0.081 J	0.066 J	0.12 U	0.15 U	0.11 U	0.11 J	**1.3**	**1.4**
Benzo[a]pyrene	22	1	0.16 U	0.18	0.16 U	1.7 J	2	0.19	0.14 U	0.24 J	0.1 J	0.067 J	0.15 U	0.78	0.46 J	0.14 U	0.069 J	0.8 U	0.18 U	0.15 U	1	0.081 J	0.19 U	0.16 U	0.2 U	0.15 U	0.14 J	0.9	1.4
Benzo[b]fluoranthene	1.7	5.6	0.12 U	0.085 J	0.12 U	1.4 U'	0.79 J	0.082 J	0.11 U	0.17 J	0.056 J	0.034 J	0.11 U	0.96	0.64	0.033 J	0.085 J	0.6 U	0.13 U	0.11 U	1.4	0.1 J	0.14 U	0.12 U	0.15 U	0.11 U	0.15	1.2	0.63
Benzo[g,h,i]perylene	1000	500	0.16 U	0.3	0.063 J	4.6	2.3	0.25	0.14 U	0.9	0.12 J	0.079 J	0.15 U	0.56	0.56 J	0.043 J	0.053 J	0.24 J	0.026 J	0.048 J	1.1	0.07 J	0.19 U	0.16 U	0.2 U	0.15 U	0.2	0.6	1.9
Benzo[k]fluoranthene	1.7	56	0.12 U	0.12 U	0.12 U	1.4 U'	1.3 U'	0.11 U	0.11 U	0.57 U	0.13 U	0.12 U	0.11 U	0.33	0.18 J	0.1 U	0.029 J	0.6 U	0.13 U	0.11 U	0.44 J	0.037 J	0.14 U	0.12 U	0.15 U	0.11 U	0.038 J	0.47	0.59 U
Biphenyl	NS	NS	0.45 U	0.11 J	0.45 U	5.2 U	4.8 U	0.43 U	0.41 U	2.2 U	0.48 U	0.44 U	0.42 U	0.45 U	2.3 U	0.4 U	0.4 U	2.3 U	0.51 U	0.42 U	2.3 U	0.47 U	0.54 U	0.45 U	0.56 U	0.42 U	0.45 U	0.5 U	1.4 J
Bis(2-Chloroethoxy)methane	NS	NS	0.21 U	0.21 U	0.21 U	2.5 U	2.3 U	0.2 U	0.19 U	1 U	0.23 U	0.21 U	0.2 U	0.21 U	1.1 U	0.19 U	0.19 U	1.1 U	0.24 U	0.2 U	1.1 U	0.22 U	0.26 U	0.21 U	0.27 U	0.2 U	0.21 U	0.24 U	1.1 U
Bis(2-Chloroethyl)ether	NS	NS	0.18 U	0.18 U	0.18 U	2 U	1.9 U	0.17 U	0.16 U	0.86 U	0.19 U	0.17 U	0.16 U	0.18 U	0.9 U	0.16 U	0.16 U	0.9 U	0.2 U	0.16 U	0.9 U	0.18 U	0.21 U	0.18 U	0.22 U	0.17 U	0.18 U	0.2 U	0.89 U
Bis(2-Chloroisopropyl)ether	NS	NS	0.24 U	0.24 U	0.24 U	2.7 U	2.5 U	0.23 U	0.22 U	1.1 U	0.25 U	0.23 U	0.22 U	0.24 U	1.2 U	0.21 U	0.21 U	1.2 U	0.27 U	0.22 U	1.2 U	0.25 U	0.29 U	0.24 U	0.3 U	0.22 U	0.24 U	0.27 U	1.2 U
Bis(2-Ethylhexyl)phthalate	NS	NS	0.2 U	0.2 U	0.2 U	2.3 U	2.1 U	0.19 U	0.18 U	0.95 U	0.21 U	0.19 U	0.18 U	0.2 U	1 U	0.18 U	0.18 U	1 U	0.22 U	0.18 U	1 U	0.21 U	0.24 U	0.2 U	0.25 U	0.18 U	0.2 U	0.22 U	0.99 U
Butyl benzyl phthalate	NS	NS	0.2 U	0.2 U	0.2 U	2.3 U	2.1 U	0.19 U	0.18 U	0.95 U	0.21 U	0.19 U	0.18 U	0.2 U	1 U	0.18 U	0.18 U	1 U	0.22 U	0.18 U	1 U	0.21 U	0.24 U	0.2 U	0.25 U	0.18 U	0.2 U	0.22 U	0.99 U
Caprolactam	NS	NS	0.2 U	0.2 U	0.2 U	2.3 U	2.1 U	0.19 U	0.18 U	0.95 U	0.21 U	0.19 U	0.18 U	0.2 U	1 U	0.18 U	0.18 U	1 U	0.22 U	0.18 U	1 U	0.21 U	0.24 U	0.2 U	0.25 U	0.18 U	0.2 U	0.22 U	0.99 U
Carbazole	NS	NS	0.2 U	0.2 U	0.2 U	2.3 U	2.1 U	0.19 U	0.18 U	0.95 U	0.21 U	0.19 U	0.18 U	0.16 J	1 U	0.18 U	0.02 J	1 U	0.22 U	0.18 U	0.16 J	0.21 U	0.24 U	0.2 U	0.25 U	0.18 U	0.2 U	0.11 J	0.99 U
Chrysene	1	56	0.12 U	0.37	0.082 J	**1.6**	**3.7**	0.42	0.11 U	0.37 J	0.2	0.16	0.11	0.74	0.49 J	0.048 J	0.07 J	0.16 J	0.073 J	0.084 J	**1.3**	0.076 J	0.18	0.12 U	0.036 J	0.11 U	0.14	**1.2**	**2.6**
Dibenzo(a,h)anthracene	1000	0.56	0.12 U	0.12 U	0.12 U	1.4 U'	1.3 U'	0.11 U	0.11 U	0.57 U'	0.13 U	0.12 U	0.11 U	0.18	0.12 J	0.1 U	0.1 U	0.6 U'	0.13 U	0.11 U	0.23 J	0.12 U	0.14 U	0.12 U	0.15 U	0.11 U	0.076 J	0.13	0.59 U'
Dibenzofuran	210	350	0.2 U	0.2 U	0.2 U	2.3 U	1.1 J	0.19 U	0.18 U	0.95 U	0.21 U	0.08 J	0.091 J	0.089 J	1 U	0.18 U	0.18 U	1 U	0.05 J	0.082 J	0.098 J	0.21 U	0.24 U	0.2 U	0.25 U	0.18 U	0.03 J	0.052 J	0.94 J
Diethyl phthalate	NS	NS	0.2 U	0.2 U	0.2 U	2.3 U	2.1 U	0.19 U	0.18 U	0.95 U	0.21 U	0.19 U	0.18 U	0.2 U	1 U	0.18 U	0.18 U	1 U	0.22 U	0.18 U	1 U	0.21 U	0.24 U	0.2 U	0.25 U	0.18 U	0.2 U	0.22 U	0.99 U
Dimethyl phthalate	NS	NS	0.2 U	0.2 U	0.2 U	2.3 U	2.1 U	0.19 U	0.18 U	0.95 U	0.21 U	0.19 U	0.18 U	0.2 U	1 U	0.18 U	0.18 U	1 U	0.22 U	0.18 U	1 U	0.21 U	0.24 U	0.2 U	0.25 U	0.18 U	0.2 U	0.22 U	0.99 U
Di-n-butylphthalate	NS	NS	0.2 U	0.2 U	0.2 U	2.3 U	2.1 U	0.19 U	0.18 U	0.95 U	0.21 U	0.19 U	0.18 U	0.2 U	1 U	0.18 U	0.18 U	1 U	0.22 U	0.18 U	1 U	0.21 U	0.24 U	0.2 U	0.25 U	0.18 U	0.2 U	0.22 U	0.99 U
Di-n-octylphthalate	NS	NS	0.2 U	0.2 U	0.2 U	2.3 U	2.1 U	0.19 U	0.18 U	0.95 U	0.21 U	0.19 U	0.18 U	0.2 U	1 U	0.18 U	0.18 U	1 U	0.22 U	0.18 U	1 U	0.21 U	0.24 U	0.2 U	0.25 U	0.18 U	0.2 U	0.22 U	0.99 U
Fluoranthene	1000	500	0.12 U	0.27	0.099 J	1.1 J	3.6	0.46	0.11 U	0.17 J	0.086 J	0.13	0.032 J	1.7	1	0.048 J	0.17	0.12 J	0.13 U	0.028 J	1.9	0.15	0.14 U	0.12 U	0.15 U	0.11 U	0.17	1.9	1.5
Fluorene	386	500	0.2 U	0.88	0.35	0.75 J	5.7	1.1	0.18 U	0.95 U	0.029 J	0.34	0.19	0.15 J	0.11 J	0.18 U	0.022 J	1 U	0.12 J	0.18	0.1 J	0.21 U	0.24 U	0.2 U	0.25 U	0.18 U	0.2 U	0.088 J	3
Hexachlorobenzene	3.2	6	0.12 U	0.12 U	0.12 U	1.4 U'	1.3 U'	0.11 U	0.11 U	0.57 U'	0.13 U	0.12 U	0.11 U	0.12 U	0.6 U'	0.1 U	0.1 U	0.6 U'	0.13 U	0.11 U	0.6 U'	0.12 U	0.14 U	0.12 U	0.15 U	0.11 U	0.12 U	0.13 U	0.59 U'
Hexachlorobutadiene	NS	NS	0.2 U	0.2 U	0.2 U	2.3 U	2.1 U	0.19 U	0.18 U	0.95 U	0.21 U	0.19 U	0.18 U	0.2 U	1 U	0.18 U	0.18 U	1 U	0.22 U	0.18 U	1 U	0.21 U	0.24 U	0.2 U	0.25 U	0.18 U	0.2 U	0.22 U	0.99 U
Hexachlorocyclopentadiene	NS	NS	0.56 U	0.57 U	0.57 U	6.5 U	6.1 U	0.54 U	0.51 U	2.7 U	0.6 U	0.55 U	0.53 U	0.57 U	2.8 U	0.5 U	0.5 U	2.9 U	0.64 U	0.52 U	2.9 U	0.59 U	0.68 U	0.57 U	0.7 U	0.53 U	0.56 U	0.63 U	2.8 U
Hexachloroethane	NS	NS	0.16 U	0.16 U	0.16 U	1.8 U	1.7 U	0.15 U	0.14 U	0.76 U	0.17 U	0.16 U	0.15 U	0.16 U	0.8 U	0.14 U	0.14 U	0.8 U	0.18 U	0.15 U	0.8 U	0.16 U	0.19 U	0.16 U	0.2 U	0.15 U	0.16 U	0.18 U	0.79 U
Indeno[1,2,3-cd]pyrene	8.2	5.6	0.16 U	0.1 J	0.057 J	0.9 J	0.64 J	0.066 J	0.14 U	0.21 J	0.037 J	0.16 U	0.15 U	0.53	0.53 J	0.026 J	0.083 J	0.36 J	0.18 U	0.063 J	0.94	0.1 J	0.19 U	0.16 U	0.064 J	0.15 U	0.15 J	0.51	0.69 J
Isophorone	NS	NS	0.18 U	0.18 U	0.18 U	2 U	1.9 U	0.17 U	0.16 U	0.86 U	0.19 U	0.17 U	0.16 U	0.18 U	0.9 U	0.16 U	0.16 U	0.9 U	0.2 U	0.16 U	0.9 U	0.18 U	0.21 U	0.18 U	0.22 U	0.17 U	0.18 U	0.2 U	0.89 U
Naphthalene	12	500	0.03 J	0.28	0.085 J	0.6 J	1.9 J	0.19 U	0.18 U	0.95 U	0.21 U	0.19 U	0.11 J	0.062 J	0.12 J	0.18 U	0.18 U	0.38 J	0.16 J	0.14 J	0.17 J	0.21 U	0.24 U	0.2 U	0.25 U	0.18 U	0.059 J	0.11 J	2.3
Nitrobenzene	NS	NS	0.18 U	0.18 U	0.18 U	2 U	1.9 U	0.17 U	0.16 U	0.86 U	0.19 U	0.17 U	0.16 U	0.18 U	0.9 U	0.16 U	0.16 U	0.9 U	0.2 U	0.16 U	0.9 U	0.18 U	0.21 U	0.18 U	0.22 U	0.17 U	0.18 U	0.2 U	0.89 U
n-Nitrosodi-n-propylamine	NS	NS	0.2 U	0.2 U	0.2 U	2.3 U	2.1 U	0.19 U	0.18 U	0.95 U	0.21 U	0.19 U	0.18 U	0.2 U	1 U	0.18 U	0.18 U	1 U	0.22 U	0.18 U	1 U	0.21 U	0.24 U	0.2 U	0.25 U	0.18 U	0.2 U	0.22 U	0.99 U
N-Nitrosodiphenylamine	NS	NS	0.16 U	0.16 U	0.16 U	1.8 U	1.7 U	0.15 U	0.14 U	0.76 U	0.17 U	0.16 U	0.15 U	0.16 U	0.8 U	0.066 J	0.14 U	0.8 U	0.18 U	0.15 U	0.8 U	0.16 U	0.19 U	0.16 U	0.2 U	0.15 U	0.16 U	0.18 U	0.79 U
p-Chloro-m-cresol	NS	NS	0.2 U	0.2 U	0.2 U	2.3 U	2.1 U	0.19 U	0.18 U	0.95 U	0.21 U	0.19 U	0.18 U	0.2 U	1 U	0.18 U	0.18 U	1 U	0.22 U	0.18 U	1 U	0.21 U	0.24 U	0.2 U	0.25 U	0.18 U	0.2 U	0.22 U	0.99 U
Pentachlorophenol	0.8	6.7	0.16 U	0.16 U	0.16 U	1.8 U'	1.7 U'	0.15 U	0.14 U	0.76 U	0.17 U	0.16 U	0.15 U	0.16 U	0.8 U	0.14 U	0.14 U	0.8 U	0.18 U	0.15 U	0.8 U	0.16 U	0.19 U	0.16 U	0.2 U	0.15 U	0.16 U	0.18 U	0.79 U
Phenanthrene	1000	500	0.12 U	3.5	1.6	5.6	40	5.2	0.11 U	0.46 J	0.24	1.5	0.24	1.4	1	0.06 J	0.15	0.28 J	0.081 J	0.38	1.4	0.097 J	0.14 U	0.12 U	0.03 J	0.11 U	0.18	1.2	13
Phenol	0.33	500	0.2 U	0.2 U	0.2 U	2.3 U'	2.1 U'	0.19 U	0.18 U	0.95 U'	0.21 U	0.19 U	0.18 U	0.2 U	1 U'	0.18 U	0.18 U	1 U'	0.22 U	0.18 U	1 U'	0.21 U	0.24 U	0.2 U	0.25 U	0.18 U	0.2 U	0.22 U	0.99 U'
Pyrene	1000	500	0.12 U	3.4	0.73	11	31	3.4	0.11 U	1	1.3	1.1	0.074 J	1.4	0.99	0.09 J	0.14	0.2 J	0.048 J	0.063 J	1.9	0.14	0.14 U	0.12 U	0.15 U	0.11 U	0.17	1.9	14
Total Semi-Volatile TICs	NS	NS	ND	ND	ND	64.1 J	64.1 J	64.1 J	0.448 J	0.448 J	0.448 J	0.448 J	47.9 J	1.31 J	1.31 J	1.31 J	4.81 J	ND	ND	ND	7.07 J	ND	ND	ND	12.3 J	0.658 J	0.651 J	4.02 J	4.02 J

Notes:

NYSDEC GW Protection SCO = New York State Department of Environmental Conservation Groundwater Protection Soil Cleanup Objectives, from Table 375-6.8 of 6 NYCRR Part 375.

NYSDEC Commercial SCO = New York State Department of Environmental Conservation Restricted Commercial Use Soil Cleanup Objectives, from Table 375-6.8 of 6 NYCRR Part 375.

ft bgs = Feet below ground surface.

mg/kg = Milligrams per kilogram.

Green concentrations exceed the NYSDEC GW Protection SCO.

Highlighted concentrations exceed the NYSDEC Commercial SCO.

— = Sample not analyzed.

NS = No standard currently established.

ND = Not Detected.

U = Not detected above laboratory detection limit.

U' = Laboratory reporting limit exceeds the applicable regulatory standard or criteria being utilized.

J = Result below the reporting limit (estimated value).

DUP = Duplicate sample was taken.

When the applicable state standard applies to mixed isomers and the laboratory reports individual isomers, the total standard is listed for each isomer.

Table 5
Soil Reuse Characterization Sampling Results
Summary of Semi-Volatile Organic Compounds in Soil.
MJ Painting; Olean, New York.

Sample ID	NYSDEC GW Protection SCO	NYSDEC Commercial SCO	RX-443	RX-444	RX-444	RX-444	RX-446	RX-446	RX-447	RX-447 DUP	RX-447	RX-447	RX-448	RX-448	RXMW-106	RXMW-107	RXMW-108	RXMW-109	RXMW-110	RXMW-111	RXMW-112	RXMW-113	RXMW-113 DUP
Sample Depth (ft bgs)			10-12	0-1	1-4	7-10	1-4	7-10	4-7	4-7	7-10	10-12	1-4	7-10	26-28	26-27	18-20	20-22	20-24	8-10	28-32	20-25	20-25
Sample Date			11/16/2021	11/17/2021	11/17/2021	11/17/2021	11/16/2021	11/16/2021	11/16/2021	11/16/2021	11/16/2021	11/16/2021	11/16/2021	11/18/2021	1/19/2022	1/5/2022	1/5/2022	1/6/2022	1/18/2022	1/19/2022	1/18/2022	1/18/2022	1/18/2022
SEMI-VOLATILE ORGANIC COMPOUNDS - 8270D (mg/kg)																							
1,2,4,5-Tetrachlorobenzene	NS	NS	0.19 U	1 U	1 U	0.19 U	2 U	0.96 U	0.2 U	0.2 U	0.21 U	0.2 U	0.27 U	2.5 U	0.18 U	0.18 U	0.19 U	0.2 U	0.52 U	3.6 U	0.52 U	0.56 U	0.54 U
2,3,4,6-Tetrachlorophenol	NS	NS	0.19 U	1 U	1 U	0.19 U	2 U	0.96 U	0.2 U	0.2 U	0.21 U	0.2 U	0.27 U	2.5 U	0.18 U	0.18 U	0.19 U	0.2 U	0.52 U	3.6 U	0.52 U	0.56 U	0.54 U
2,4,5-Trichlorophenol	NS	NS	0.19 U	1 U	1 U	0.19 U	2 U	0.96 U	0.2 U	0.2 U	0.21 U	0.2 U	0.27 U	2.5 U	0.18 U	0.18 U	0.19 U	0.2 U	0.52 U	3.6 U	0.52 U	0.56 U	0.54 U
2,4,6-Trichlorophenol	NS	NS	0.12 U	0.62 U	0.62 U	0.11 U	1.2 U	0.57 U	0.12 U	0.12 U	0.13 U	0.12 U	0.16 U	1.5 U	0.1 U	0.11 U	0.11 U	0.12 U	0.32 U	2.2 U	0.31 U	0.34 U	0.33 U
2,4-Dichlorophenol	NS	NS	0.17 U	0.93 U	0.94 U	0.17 U	1.8 U	0.86 U	0.18 U	0.18 U	0.19 U	0.18 U	0.24 U	2.2 U	0.16 U	0.16 U	0.17 U	0.18 U	0.47 U	3.2 U	0.47 U	0.5 U	0.49 U
2,4-Dimethylphenol	NS	NS	0.19 U	1 U	1 U	0.19 U	2 U	0.96 U	0.2 U	0.2 U	0.21 U	0.2 U	0.27 U	2.5 U	0.18 U	0.18 U	0.19 U	0.2 U	0.52 U	3.6 U	0.52 U	0.56 U	0.54 U
2,4-Dinitrophenol	NS	NS	0.92 U	4.9 U	5 U	0.9 U	9.4 U	4.6 U	0.96 U	0.95 U	1 U	0.94 U	1.3 U	12 U	0.85 U	0.85 U	0.9 U	0.97 U	2.5 U	17 U	2.5 U	2.7 U	2.6 U
2,4-Dinitrotoluene	NS	NS	0.19 U	1 U	1 U	0.19 U	2 U	0.96 U	0.2 U	0.2 U	0.21 U	0.2 U	0.27 U	2.5 U	0.18 U	0.18 U	0.19 U	0.2 U	0.52 U	3.6 U	0.52 U	0.56 U	0.54 U
2,6-Dinitrotoluene	NS	NS	0.19 U	1 U	1 U	0.19 U	2 U	0.96 U	0.2 U	0.2 U	0.21 U	0.2 U	0.27 U	2.5 U	0.18 U	0.18 U	0.19 U	0.2 U	0.52 U	3.6 U	0.52 U	0.56 U	0.54 U
2-Chloronaphthalene	NS	NS	0.19 U	1 U	1 U	0.19 U	2 U	0.96 U	0.2 U	0.2 U	0.21 U	0.2 U	0.27 U	2.5 U	0.18 U	0.18 U	0.19 U	0.2 U	0.52 U	3.6 U	0.52 U	0.56 U	0.54 U
2-Chlorophenol	NS	NS	0.19 U	1 U	1 U	0.19 U	2 U	0.96 U	0.2 U	0.2 U	0.21 U	0.2 U	0.27 U	2.5 U	0.18 U	0.18 U	0.19 U	0.2 U	0.52 U	3.6 U	0.52 U	0.56 U	0.54 U
2-Methylnapthalene	NS	NS	6.3	1.9	0.34 J	0.046 J	0.27 J	2.1	0.24 U	0.24 U	0.037 J	0.24 U	0.12 J	4.2	0.14 J	0.21 U	0.22 U	0.24 U	0.63 U	17	0.63 U	0.67 U	0.65 U
2-Methylphenol	0.33	500	0.19 U	1 U'	1 U'	0.19 U	2 U'	0.96 U'	0.2 U	0.2 U	0.21 U	0.2 U	0.27 U	2.5 U'	0.18 U	0.18 U	0.19 U	0.2 U	0.52 U'	3.6 U'	0.52 U'	0.56 U'	0.54 U'
2-Nitroaniline	NS	NS	0.19 U	1 U	1 U	0.19 U	2 U	0.96 U	0.2 U	0.2 U	0.21 U	0.2 U	0.27 U	2.5 U	0.18 U	0.18 U	0.19 U	0.2 U	0.52 U	3.6 U	0.52 U	0.56 U	0.54 U
2-Nitrophenol	NS	NS	0.41 U	2.2 U	2.2 U	0.4 U	4.2 U	2.1 U	0.43 U	0.43 U	0.46 U	0.42 U	0.59 U	5.4 U	0.38 U	0.38 U	0.4 U	0.44 U	1.1 U	7.8 U	1.1 U	1.2 U	1.2 U
3,3'-Dichlorobenzidine	NS	NS	0.19 U	1 U	1 U	0.19 U	2 U	0.96 U	0.2 U	0.2 U	0.21 U	0.2 U	0.27 U	2.5 U	0.18 U	0.18 U	0.19 U	0.2 U	0.52 U	3.6 U	0.52 U	0.56 U	0.54 U
3-Methylphenol/4-Methylphenol	NS	NS	0.28 U	1.5 U	1.5 U	0.27 U	2.8 U	1.4 U	0.29 U	0.28 U	0.31 U	0.28 U	0.39 U	3.6 U	0.25 U	0.26 U	0.27 U	0.29 U	0.76 U	5.2 U	0.75 U	0.81 U	0.78 U
3-Nitroaniline	NS	NS	0.19 U	1 U	1 U	0.19 U	2 U	0.96 U	0.2 U	0.2 U	0.21 U	0.2 U	0.27 U	2.5 U	0.18 U	0.18 U	0.19 U	0.2 U	0.52 U	3.6 U	0.52 U	0.56 U	0.54 U
4,6-Dinitro-o-cresol	NS	NS	0.5 U	2.7 U	2.7 U	0.49 U	5.1 U	2.5 U	0.52 U	0.51 U	0.55 U	0.51 U	0.71 U	6.5 U	0.46 U	0.46 U	0.49 U	0.53 U	1.4 U	9.4 U	1.4 U	1.4 U	1.4 U
4-Bromophenyl-phenylether	NS	NS	0.19 U	1 U	1 U	0.19 U	2 U	0.96 U	0.2 U	0.2 U	0.21 U	0.2 U	0.27 U	2.5 U	0.18 U	0.18 U	0.19 U	0.2 U	0.52 U	3.6 U	0.52 U	0.56 U	0.54 U
4-Chloroaniline	NS	NS	0.19 U	1 U	1 U	0.19 U	2 U	0.96 U	0.2 U	0.2 U	0.21 U	0.2 U	0.27 U	2.5 U	0.18 U	0.18 U	0.19 U	0.2 U	0.52 U	3.6 U	0.52 U	0.56 U	0.54 U
4-Chlorophenyl-phenylether	NS	NS	0.19 U	1 U	1 U	0.19 U	2 U	0.96 U	0.2 U	0.2 U	0.21 U	0.2 U	0.27 U	2.5 U	0.18 U	0.18 U	0.19 U	0.2 U	0.52 U	3.6 U	0.52 U	0.56 U	0.54 U
4-Nitroaniline	NS	NS	0.19 U	1 U	1 U	0.19 U	2 U	0.96 U	0.2 U	0.2 U	0.21 U	0.2 U	0.27 U	2.5 U	0.18 U	0.18 U	0.19 U	0.2 U	0.52 U	3.6 U	0.52 U	0.56 U	0.54 U
4-Nitrophenol	NS	NS	0.27 U	1.4 U	1.4 U	0.26 U	2.7 U	1.3 U	0.28 U	0.28 U	0.3 U	0.27 U	0.38 U	3.5 U	0.25 U	0.25 U	0.26 U	0.28 U	0.74 U	5 U	0.73 U	0.78 U	0.76 U
Acenaphthene	98	500	0.55	13	0.83 U	0.15 U	0.24 J	0.36 J	0.16 U	0.16 U	0.17 U	0.16 U	0.22 U	2 U	0.14 U	0.042 J	0.15 U	0.16 U	0.42 U	2.9 U	0.42 U	0.45 U	0.43 U
Acenaphthylene	107	500	0.15 U	0.82 U	0.83 U	0.15 U	1.6 U	0.76 U	0.16 U	0.16 U	0.17 U	0.16 U	0.22 U	2 U	0.14 U	0.03 J	0.15 U	0.16 U	0.42 U	2.9 U	0.42 U	0.45 U	0.43 U
Acetophenone	NS	NS	0.19 U	1 U	1 U	0.19 U	2 U	0.96 U	0.2 U	0.2 U	0.21 U	0.2 U	0.27 U	2.5 U	0.18 U	0.18 U	0.19 U	0.81	0.52 U	3.6 U	0.52 U	0.56 U	0.54 U
Anthracene	1000	500	0.88	21	0.27 J	0.062 J	1.1 J	0.35 J	0.12 U	0.12 U	0.13 U	0.12 U	0.16 U	1.5 U	0.092 J	0.065 J	0.26	0.089 J	0.32 U	2.2 U	0.31 U	0.34 U	0.33 U
Atrazine	NS	NS	0.15 U	0.82 U	0.83 U	0.15 U	1.6 U	0.76 U	0.16 U	0.16 U	0.17 U	0.16 U	0.22 U	2 U	0.14 U	0.14 U	0.15 U	0.16 U	0.42 U	2.9 U	0.42 U	0.45 U	0.43 U
Benzaldehyde	NS	NS	0.25 U	1.4 U	1.4 U	0.25 U	2.6 U	1.3 U	0.26 U	0.26 U	0.28 U	0.26 U	0.36 U	3.3 U	0.23 U	0.23 U	0.25 U	0.27 U	0.69 U	4.8 U	0.69 U	0.74 U	0.72 U
Benzo[a]anthracene	1	5.6	0.44	**26**	0.27 J	0.088 J	**2**	0.24 J	0.12 U	0.12 U	0.13 U	0.12 U	0.082 J	0.83 J	0.1 U	0.026 J	0.16	0.04 J	0.072 J	0.78 J	0.31 U	0.34 U	0.33 U
Benzo[a]pyrene	22	1	0.57	21	1	0.17	2.9	0.35 J	0.16 U	0.16 U	0.17 U	0.16 U	0.22 U	0.7 J	0.14 U	0.14 U	0.1 J	0.16 U	0.42 U	2.9 U'	0.42 U	0.45 U	0.43 U
Benzo[b]fluoranthene	1.7	5.6	0.24	**27**	0.42 J	0.069 J	1.3	0.26 J	0.12 U	0.12 U	0.13 U	0.12 U	0.068 J	0.89 J	0.1 U	0.11 U	0.059 J	0.12 U	0.32 U	0.7 J	0.31 U	0.34 U	0.33 U
Benzo[g,h,i]perylene	1000	500	0.86	12	2	0.28	4	0.54 J	0.16 U	0.16 U	0.034 J	0.16 U	0.053 J	0.7 J	0.14 U	0.14 U	0.14 J	0.16 U	0.42 U	0.49 J	0.42 U	0.45 U	0.43 U
Benzo[k]fluoranthene	1.7	56	0.057 J	**9**	0.62 U	0.11 U	1.2 U'	0.57 U	0.12 U	0.12 U	0.13 U	0.12 U	0.16 U	1.5 U'	0.1 U	0.11 U	0.11 U	0.12 U	0.32 U	2.2 U'	0.31 U	0.34 U	0.33 U
Biphenyl	NS	NS	0.4 J	0.57 J	2.4 U	0.43 U	4.4 U	2.2 U	0.45 U	0.45 U	0.49 U	0.45 U	0.62 U	0.9 J	0.4 U	0.4 U	0.43 U	0.15 J	0.14 J	3.5 J	1.2 U	1.3 U	1.2 U
Bis(2-Chloroethoxy)methane	NS	NS	0.21 U	1.1 U	1.1 U	0.2 U	2.1 U	1 U	0.21 U	0.21 U	0.23 U	0.21 U	0.29 U	2.7 U	0.19 U	0.19 U	0.2 U	0.22 U	0.57 U	3.9 U	0.56 U	0.6 U	0.59 U
Bis(2-Chloroethyl)ether	NS	NS	0.17 U	0.93 U	0.94 U	0.17 U	1.8 U	0.86 U	0.18 U	0.18 U	0.19 U	0.18 U	0.24 U	2.2 U	0.16 U	0.16 U	0.17 U	0.18 U	0.47 U	3.2 U	0.47 U	0.5 U	0.49 U
Bis(2-Chloroisopropyl)ether	NS	NS	0.23 U	1.2 U	1.2 U	0.22 U	2.3 U	1.1 U	0.24 U	0.24 U	0.26 U	0.24 U	0.33 U	3 U	0.21 U	0.21 U	0.22 U	0.24 U	0.63 U	4.3 U	0.63 U	0.67 U	0.65 U
Bis(2-Ethylhexyl)phthalate	NS	NS	0.19 U	1 U	1 U	0.19 U	2 U	0.96 U	0.2 U	0.2 U	0.21 U	0.2 U	0.27 U	2.5 U	0.18 U	0.17 J	0.32	0.2 U	0.52 U	3.6 U	0.52 U	0.56 U	0.54 U
Butyl benzyl phthalate	NS	NS	0.19 U	1 U	1 U	0.19 U	2 U	0.96 U	0.2 U	0.2 U	0.21 U	0.2 U	0.27 U	2.5 U	0.18 U	0.18 U	0.19 U	0.2 U	0.52 U	3.6 U	0.52 U	0.56 U	0.54 U
Caprolactam	NS	NS	0.19 U	1 U	1 U	0.19 U	2 U	0.96 U	0.2 U	0.2 U	0.21 U	0.2 U	0.27 U	2.5 U	0.18 U	0.18 U	0.19 U	0.2 U	0.52 U	3.6 U	0.52 U	0.56 U	0.54 U
Carbazole	NS	NS	0.19 U	8	1 U	0.19 U	2 U	0.96 U	0.2 U	0.2 U	0.21 U	0.2 U	0.27 U	0.38 J	0.18 U	0.18 U	0.19 U	0.2 U	0.52 U	3.6 U	0.52 U	0.56 U	0.54 U
Chrysene	1	56	**1.2**	**23**	**1.2**	0.22	**4.1**	0.64	0.12 U	0.12 U	0.052 J	0.12 U	0.13 J	**2**	0.03 J	0.047 J	0.28	0.14	0.18 J	**2.9**	0.31 U	0.34 U	0.097 J
Dibenzo(a,h)anthracene	1000	0.56	0.12 U	3	0.62 U'	0.11 U	0.3 J	0.57 U'	0.12 U	0.12 U	0.13 U	0.12 U	0.16 U	0.29 J	0.1 U	0.11 U	0.11 U	0.12 U	0.32 U	2.2 U'	0.31 U	0.34 U'	0.33 U
Dibenzofuran	210	350	0.33	6.8	1 U	0.19 U	2 U	0.33 J	0.2 U	0.2 U	0.21 U	0.2 U	0.27 U	0.34 J	0.18 U	0.039 J	0.19 U	0.2 U	0.12 J	0.99 J	0.52 U	0.068 J	0.54 U
Diethyl phthalate	NS	NS	0.19 U	1 U	1 U	0.19 U	2 U	0.96 U	0.2 U	0.2 U	0.21 U	0.2 U	0.27 U	2.5 U	0.18 U	0.18 U	0.19 U	0.2 U	0.52 U	3.6 U	0.52 U	0.56 U	0.54 U
Dimethyl phthalate	NS	NS	0.19 U	1 U	1 U	0.19 U	2 U	0.96 U	0.2 U	0.2 U	0.21 U	0.2 U	0.27 U	2.5 U	0.18 U	0.18 U	0.19 U	0.2 U	0.52 U	3.6 U	0.52 U	0.56 U	0.54 U
Di-n-butylphthalate	NS	NS	0.19 U	1 U	1 U	0.19 U	2 U	0.96 U	0.2 U	0.2 U	0.21 U	0.2 U	0.27 U	2.5 U	0.18 U	0.18 U	0.19 U	0.2 U	0.52 U	3.6 U	0.52 U	0.56 U	0.54 U
Di-n-octylphthalate	NS	NS	0.19 U	1 U	1 U	0.19 U	2 U	0.96 U	0.2 U	0.2 U	0.21 U	0.2 U	0.27 U	2.5 U	0.18 U	0.18 U	0.19 U	0.2 U	0.52 U	3.6 U	0.52 U	0.56 U	0.54 U
Fluoranthene	1000	500	0.59	67	0.24 J	0.072 J	2.1	0.29 J	0.12 U	0.12 U	0.13 U	0.12 U	0.078 J	1.3 J	0.028 J	0.11 U	0.079 J	0.12 U	0.32 U	1.1 J	0.31 U	0.34 U	0.33 U
Fluorene	386	500	1.1	11	1 U	0.033 J	0.29 J	0.76 J	0.2 U	0.2 U	0.21 U	0.2 U	0.27 U	0.45 J	0.13 J	0.12 J	0.44	0.2 U	0.21 J	1.2 J	0.52 U	0.12 J	0.27 J
Hexachlorobenzene	3.2	6	0.12 U	0.62 U'	0.62 U'	0.11 U	1.2 U'	0.57 U'	0.12 U	0.12 U	0.13 U	0.12 U	0.16 U	1.5 U'	0.1 U	0.11 U	0.11 U	0.12 U	0.32 U	2.2 U'	0.31 U	0.34 U'	0.33 U
Hexachlorobutadiene	NS	NS	0.19 U	1 U	1 U	0.19 U	2 U	0.96 U	0.2 U	0.2 U	0.21 U	0.2 U	0.27 U	2.5 U	0.18 U	0.18 U	0.19 U	0.2 U	0.52 U	3.6 U	0.52 U	0.56 U	0.54 U
Hexachlorocyclopentadiene	NS	NS	0.55 U	2.9 U	3 U	0.53 U	5.6 U	2.7 U	0.57 U	0.56 U	0.61 U	0.56 U	0.78 U	7.2 U	0.5 U	0.51 U	0.53 U	0.58 U	1.5 U	10 U	1.5 U	1.6 U	1.6 U
Hexachloroethane	NS	NS	0.15 U	0.82 U	0.83 U	0.15 U	1.6 U	0.76 U	0.16 U	0.16 U	0.17 U	0.16 U	0.22 U	2 U	0.14 U	0.14 U	0.15 U	0.16 U	0.42 U	2.9 U	0.42 U	0.45 U	0.43 U
Indeno[1,2,3-cd]pyrene	8.2	5.6	0.25	**12**	0.6 J	0.11 J	1.2 J	0.23 J	0.16 U	0.16 U	0.17 U	0.16 U	0.038 J	0.58 J	0.14 U	0.14 U	0.037 J	0.16 U	0.42 U	2.9 U'	0.42 U	0.45 U	0.43 U
Isophorone	NS	NS	0.17 U	0.93 U	0.94 U	0.17 U	1.8 U	0.86 U	0.18 U	0.18 U	0.19 U	0.18 U	0.24 U	2.2 U	0.16 U	0.16 U	0.17 U	0.18 U	0.47 U	3.2 U	0.47 U	0.5 U	0.49 U
Naphthalene	12	500	0.68	4.3	1 U	0.024 J	2 U	0.22 J	0.2 U	0.2 U	0.21 U	0.2 U	0.093 J	2 J	0.074 J	0.069 J	0.12 J	0.2 U	0.52 U	5.8	0.52 U	0.56 U	0.54 U
Nitrobenzene	NS	NS	0.17 U	0.93 U	0.94 U	0.17 U	1.8 U	0.86 U	0.18 U	0.18 U	0.19 U	0.18 U	0.24 U	2.2 U	0.16 U	0.16 U	0.17 U	0.18 U	0.47 U	3.2 U	0.47 U	0.5 U	0.49 U
n-Nitrosodi-n-propylamine	NS	NS	0.19 U	1 U	1 U	0.19 U	2 U	0.96 U	0.2 U	0.2 U	0.21 U	0.2 U	0.27 U	2.5 U	0.18 U	0.18 U	0.19 U	0.2 U	0.52 U	3.6 U	0.52 U	0.56 U	0.54 U
N-Nitrosodiphenylamine	NS	NS	0.15 U	0.82 U	0.83 U	0.15 U	1.6 U	0.76 U	0.16 U	0.16 U	0.17 U	0.16 U	0.22 U	2 U	0.14 U	0.14 U	0.15 U	0.16 U	0.42 U	2.9 U	0.42 U	0.45 U	0.43 U
p-Chloro-m-cresol	NS	NS	0.19 U	1 U	1 U	0.19 U	2 U	0.96 U	0.2 U	0.2 U	0.21 U	0.2 U	0.27 U	2.5 U	0.18 U	0.18 U	0.19 U	0.2 U	0.52 U	3.6 U	0.52 U	0.56 U	0.54 U
Pentachlorophenol	0.8	6.7	0.15 U	0.82 U'	0.83 U'	0.15 U	1.6 U'	0.76 U	0.16 U	0.16 U	0.17 U	0.16 U	0.22 U	2 U'	0.14 U	0.14 U	0.15 U	0.16 U	0.42 U	2.9 U'	0.42 U	0.45 U	0.43 U
Phenanthrene	1000	500	4.8	74	0.6 J	0.18	3.8	3.8	0.12 U	0.12 U	0.041 J	0.12 U	0.097 J	3.1	0.07 J	0.26	1.8	0.48	0.59	5.1	0.075 J	0.32 J	0.59
Phenol	0.33	500	0.19 U	1 U'	1 U'	0.19 U	2 U'	0.96 U'	0.2 U	0.2 U	0.21 U	0.2 U	0.27 U	2.5 U'	0.18 U	0.18 U	0.19 U	0.2 U	0.52 U'	3.6 U'	0.52 U'	0.56 U'	0.54 U'
Pyrene	1000	500	5.8	53	4.4	0.97	25	1.9	0.12 U	0.12 U	0.042 J	0.12 U	0.12 J	1.3 J	0.21	0.16	0.74	0.11 J	0.13 J	1.4 J	0.31 U	0.067 J	0.13 J
Total Semi-Volatile TICs	NS	NS	4.02 J	99.4 J	99.4 J	99.4 J	52.5 J	52.5 J	ND	ND	ND	ND	0.766 J	0.766 J	24.8 J	29.5 J	66.9 J	70.2 J	76.3 J	1020 J	42.9 J	57.8 J	80.3 J

Notes:

NYSDEC GW Protection SCO = New York State Department of Environmental Conservation Groundwater Protection Soil Cleanup Objectives, from Table 375-6.8 of 6 NYCRR Part 375.

NYSDEC Commercial SCO = New York State Department of Environmental Conservation Restricted Commercial Use Soil Cleanup Objectives, from Table 375-6.8 of 6 NYCRR Part 375.

ft bgs = Feet below ground surface.

mg/kg = Milligrams per kilogram.

Green concentrations exceed the NYSDEC GW Protection SCO.

Highlighted concentrations exceed the NYSDEC Commercial SCO.

— = Sample not analyzed.

NS = No standard currently established.

ND = Not Detected.

U = Not detected above laboratory detection limit.

U' = Laboratory reporting limit exceeds the applicable regulatory standard or criteria being utilized.

J = Result below the reporting limit (estimated value).

DUP = Duplicate sample was taken.

When the applicable state standard applies to mixed isomers and the laboratory reports individual isomers, the total standard is listed for each isomer.

Table 5
Soil Reuse Characterization Sampling Results
Summary of Metals in Soil.
MJ Painting; Olean, New York.

Sample ID	NYSDEC GW Protection SCO	NYSDEC Commercial SCO	RX-301	RX-302	RX-303	RX-304	RX-305	RX-306	RX-307	RX-308	RX-309	RX-310	RX-311	RX-312	RX-313	RX-314	RX-315
Sample Depth (ft bgs)			0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1
Sample Date			11/15/2021	11/9/2021	11/15/2021	11/15/2021	11/15/2021	11/16/2021	11/17/2021	11/17/2021	11/17/2021	11/17/2021	11/18/2021	11/17/2021	1/5/2022	1/4/2022	1/7/2022
METALS - 6010D (mg/kg)																	
Aluminum	NS	NS	11600	6410	10000	6160	5900	5380	4330	4730	6940	4240	8630	5490	9480	13800	13700
Antimony	NS	NS	4.51 U	10.6	4.81 U	4.49 U	0.784 J	0.511 J	0.628 J	0.913 J	0.728 J	4.48 U	0.754 J	1.03 J	2.38 J	2.56 J	5.47 U
Arsenic	16	16	**19**	**29.9**	11.8	7.32	6.9	10.7	6.71	5.7	10.6	5.25	8.2	**20.6**	10.3	**18.5**	12.6
Barium	820	400	74	80.8	86.5	39.8	64.7	360	70.1	45.3	81.6	57.9	101	60.6	86.1	114	97.3
Beryllium	47	590	0.64	0.5	0.538	0.26 J	0.321 J	0.272 J	0.209 J	0.242 J	0.33 J	0.197 J	0.358 J	0.27 J	0.524	0.567	0.657
Cadmium	7.5	9.3	0.902 U	1.41	0.961 U	0.899 U	0.562 J	0.852 U	0.468 J	0.606 J	0.744 J	0.448 J	0.698 J	0.744 J	2.08	1.05 U	1.09 U
Calcium	NS	NS	5770	8160	2920	6230	10500	1550	6080	1330	15000	22300	1520	3300	3480	3700	9790
Chromium	NS	1500	15.2	12	12.5	6.45	8.9	7.33	4.49	19	7.49	4.9	8.87	7.21	27.6	24.6	28.1
Cobalt	NS	NS	12	6.9	10.3	5.1	6.14	5.67	4.33	4.18	6.32	3.89	7.13	5.34	5.38	5.85	6.45
Copper	1720	270	40.8	72.1	37.5	108	21.1	13.6	10.7	22.8	15.5	12.3	28.2	28.6	65.5	75.2	39.1
Iron	NS	NS	29100	25100	25400	11900	16500	15200	13200	13000	19700	12100	16700	18100	41500	23900	17100
Lead	450	1000	60.9	298	33.3	12.4	21.4	11	10.5	74.2	16.6	9.96	41.6	32.4	167	**559**	202
Magnesium	NS	NS	4510	3010	3270	2000	2890	1610	1350	1280	2600	1310	1400	1380	5520	6430	9350
Manganese	2000	10000	476	602	649	551	531	**3520**	569	492	600	381	801	568	443	330	396
Mercury	0.73	2.8	0.146	0.71	0.081 U	0.074 U	0.085 U	0.08 U	0.079 U	0.086 U	0.078 U	0.073 U	0.086 U	0.076 U	0.301	0.435	0.267
Nickel	130	310	22.3	15.6	19.4	9.68	12.7	12	9.5	10.2	13.1	8.38	10.7	11.1	15.6	15	13.9
Potassium	NS	NS	848	581	743	307	377	387	259	264	342	205 J	267	343	1300	941	1380
Selenium	4	1500	0.334 J	0.99 J	0.375 J	1.8 U	2.01 U	1.92	1.67 U	0.307 J	1.69 U	1.79 U	0.726 J	0.418 J	0.86 J	2.1 U	0.394 J
Silver	8.3	1500	0.902 U	0.95 U	0.961 U	0.899 U	1 U	0.264 J	0.837 U	0.932 U	0.846 U	0.896 U	0.943 U	0.93 U	1.05 U	1.05 U	1.09 U
Sodium	NS	NS	44.8 J	81.9 J	60.4 J	8.11 J	30.6 J	25.5 J	21.7 J	16.1 J	41.9 J	32.4 J	47.6 J	26.5 J	170 J	249	187 J
Thallium	NS	NS	1.8 U	0.3 J	1.92 U	1.8 U	2.01 U	1.7 U	1.67 U	1.86 U	1.69 U	1.79 U	1.89 U	1.86 U	2.1 U	0.588 J	0.646 J
Vanadium	NS	NS	10.1	16.5	7.72	6.01	9.24	5.85	6.7	8.66	10.1	7.07	15.9	10.3	23	21.4	24
Zinc	2480	10000	78.4	158	66	40.9	53.3	37.4	31.7	53.6	50.8	31.5	59.9	66	82.5	120	68

Notes:

NYSDEC GW Protection SCO = New York State Department of Environmental Conservation Groundwater Protection Soil Cleanup Objectives, from Table 375-6.8 of 6 NYCRR Part 375.
NYSDEC Commercial SCO = New York State Department of Environmental Conservation Restricted Commercial Use Soil Cleanup Objectives, from Table 375-6.8 of 6 NYCRR Part 375.
ft bgs = Feet below ground surface.
mg/kg = Milligrams per kilogram.
Green concentrations exceed the NYSDEC GW Protection SCO.

Highlighted concentrations exceed the NYSDEC Commercial SCO.

— = Sample not analyzed.
NS = No standard currently established.
ND = Not Detected.
U = Not detected above laboratory detection limit.
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When the applicable state standard applies to mixed isomers and the laboratory reports individual isomers, the total standard is listed for each isomer.

Table 5
Soil Reuse Characterization Sampling Results
Summary of Metals in Soil.
MJ Painting; Olean, New York.

Sample ID	NYSDEC GW Protection SCO	NYSDEC Commercial SCO	RX-316	RX-317	RX-318	RX-319	RX-320	RX-321	RX-321 DUP	RX-401	RX-401	RX-401	RX-402	RX-403	RX-403	RX-403	RX-404
Sample Depth (ft bgs)			0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	1-4	7-10	7-10	0-1	4-7	10-12	7-10
Sample Date			1/7/2022	1/7/2022	1/4/2022	1/7/2022	1/5/2022	1/7/2022	1/7/2022	11/12/2021	11/12/2021	11/12/2021	11/12/2021	11/12/2021	11/12/2021	11/12/2021	11/12/2021
METALS - 6010D (mg/kg)																	
Aluminum	NS	NS	9390	11600	6530	6300	7240	9300	8780	7930	9290	8980	8610	7430	7820	9620	12700
Antimony	NS	NS	3.2 J	5.12 U	5.27 U	5.1 U	1.78 J	5 U	5.03 U	1.36 J	1.94 J	3.12 J	1.85 J	1.19 J	1.35 J	1.08 J	0.89 J
Arsenic	16	16	**18**	**18.8**	11.3	14.9	**17.6**	**17.4**	**17.9**	**19.9**	**119**	**21.5**	**20.6**	13.5	**29.2**	7.56	10
Barium	820	400	106	101	56.1	150	84.8	89.3	142	81.5	61.5	60.2	75.8	80.7	49.4	60.2	58.6
Beryllium	47	590	0.437 J	0.676	0.359 J	0.479 J	0.469 J	0.48 J	0.534	0.476	0.59	0.51	0.362 J	0.444 J	0.499	0.484	0.634
Cadmium	7.5	9.3	1.21 U	1.02 U	0.58 J	1.02 U	0.898 J	1 U	1.01 U	1.2	1.29	1.05	1.03	0.967 J	1.29	0.771 J	0.833 J
Calcium	NS	NS	4180	4540	115000	2540	3370	3570	3210	18500	5700	4300	2960	18100	21000	888	907
Chromium	NS	1500	18.5	24.7	11.9	13.7	12.6	13.5	17.8	14.3	14.4	13.8	12.3	11	11.6	11.7	14.7
Cobalt	NS	NS	4.85	6.47	3.55	4.57	5.11	5.98	5.12	7.14	12	5.95	5.92	6.95	9.34	7.8	13.1
Copper	1720	270	47.5	21.7	19.9	30.2	46.6	41.9	39	56	52.9	405	23	33.6	25.9	18.1	17.4
Iron	NS	NS	20400	20600	10700	15000	16100	18800	22500	25200	28800	22200	28400	22200	31400	22000	23100
Lead	450	1000	**734**	117	225	139	231	233	191	118	165	198	64	56.1	62.9	12.3	15.2
Magnesium	NS	NS	4550	8400	4850	3150	2900	2960	4630	3800	4070	3450	2500	3540	4950	2890	3080
Manganese	2000	10000	289	247	252	184	328	502	259	401	484	148	139	508	1080	162	192
Mercury	0.73	2.8	**0.75**	0.091	0.185	0.164	0.463	0.228	0.244	0.26	0.392	0.14	0.097 U	0.208	**0.829**	0.088 U	0.087
Nickel	130	310	11.6	13.9	9.01	11	12.7	13.4	12.3	17.3	22.8	12.1	17.6	16.3	18.7	19.7	20
Potassium	NS	NS	823	989	606	632	717	661	863	738	739	659	676	628	580	554	602
Selenium	4	1500	0.497 J	0.594 J	2.11 U	0.479 J	2.04 U	0.48 J	0.483 J	0.805 J	0.876 J	0.82 J	0.916 J	0.385 J	0.638 J	0.412 J	0.558 J
Silver	8.3	1500	1.21 U	1.02 U	1.05 U	1.02 U	1.02 U	1 U	1.01 U	0.914 U	0.922 U	0.999 U	1.01 U	0.987 U	0.998 U	0.896 U	0.946 U
Sodium	NS	NS	112 J	136 J	120 J	55.7 J	66.9 J	39.2 J	72.8 J	86.4 J	78.8 J	81 J	63.4 J	47.4 J	80.4 J	18.2 J	26.7 J
Thallium	NS	NS	0.461 J	0.44 J	2.11 U	0.326 J	2.04 U	0.59 J	0.493 J	1.83 U	1.84 U	2 U	2.01 U	1.97 U	2 U	1.79 U	0.312 J
Vanadium	NS	NS	17.9	27.7	17	15.3	16.9	14.2	17.7	17.3	18.9	21.2	19.9	14.2	15	14.8	18.3
Zinc	2480	10000	190	51.6	37.4	53.5	65.4	74.3	71.5	90.1	85.7	90.6	48.5	70.7	62.3	52.6	54.2

Notes:

NYSDEC GW Protection SCO = New York State Department of Environmental Conservation Groundwater Protection Soil Cleanup Objectives, from Table 375-6.8 of 6 NYCRR Part 375.
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ft bgs = Feet below ground surface.
mg/kg = Milligrams per kilogram.
Green concentrations exceed the NYSDEC GW Protection SCO.
Highlighted concentrations exceed the NYSDEC Commercial SCO.
— = Sample not analyzed.
NS = No standard currently established.
ND = Not Detected.
U = Not detected above laboratory detection limit.
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DUP = Duplicate sample was taken.
When the applicable state standard applies to mixed isomers and the laboratory reports individual isomers, the total standard is listed for each isomer.

Table 5
Soil Reuse Characterization Sampling Results
Summary of Metals in Soil.
MJ Painting; Olean, New York.

Sample ID Sample Depth (ft bgs) Sample Date	NYSDEC GW Protection SCO	NYSDEC Commercial SCO	RX-405 0-1 11/15/2021	RX-405 1-4 11/15/2021	RX-405 7-10 11/15/2021	RX-407 0-1 11/15/2021	RX-407 4-7 11/15/2021	RX-407 10-12 11/15/2021	RX-409 1-4 11/12/2021	RX-410 10-12 11/12/2021	RX-411 7-10 11/12/2021	RX-413 10-12 11/15/2021	RX-414 4-7 11/15/2021	RX-415 7-10 11/16/2021	RX-416 1-4 11/16/2021	RX-416 10-12 11/16/2021
METALS - 6010D (mg/kg)																
Aluminum	NS	NS	7740	9700	8770	9060	8490	7760	8830	10900	12200	8940	8740	11800	9740	8720
Antimony	NS	NS	5.24 U	4.58 U	4.6 U	4.4 U	0.369 J	4.3 U	0.942 J	0.786 J	0.799 J	4.66 U	4.76 U	0.793 J	0.795 J	0.652 J
Arsenic	16	16	12.8	16	6.24	9.41	**16.7**	8.45	12.9	9.55	5.88	9.37	**17.9**	11.8	13.4	11.6
Barium	820	400	60.7	69	38.9	70.5	104	45.6	71.4	59.6	64	70.9	79.3	38.9	82.7	57.7
Beryllium	47	590	0.398 J	0.558	0.414 J	0.404 J	0.486	0.378 J	0.476	0.484	0.483	0.512	0.458 J	0.562	0.533	0.443
Cadmium	7.5	9.3	0.22 J	0.247 J	0.92 U	0.141 J	0.292 J	0.095 J	0.96	0.868 J	0.799 J	0.931 U	0.324 J	1.22	0.767 J	0.574 J
Calcium	NS	NS	7700	6540	664	24700	4020	972	2620	540	1100	803	2700	766	8420	2810
Chromium	NS	1500	10.5	13.4	9.84	10.9	11.2	8.5	10.6	11.1	12.1	10.6	13.7	12.3	12.1	11.5
Cobalt	NS	NS	7.31	9.87	7.04	8.7	7.7	9.84	7.61	11.8	8.63	8.66	5.95	13.6	10.6	8.22
Copper	1720	270	28	138	13.5	18.5	51.4	21.2	45.6	16.8	12.2	39	56.8	29	25.3	22.6
Iron	NS	NS	18200	24300	16900	22000	23500	17500	22300	24100	22200	18800	20200	21600	24600	18400
Lead	450	1000	65.6	87.6	9.04	27.2	88	12.8	69.1	15.6	14	10.5	149	18.6	24.5	23.9
Magnesium	NS	NS	3370	4330	2350	14800	2550	2090	2570	2980	3040	2210	3340	2870	4090	2590
Manganese	2000	10000	397	500	164	541	253	376	594	722	316	140	241	182	720	414
Mercury	0.73	2.8	**0.808**	**3.03**	0.075 U	0.073 U	0.463	0.073 U	0.189	0.094 U	0.082 U	0.076 U	0.554	0.072 J	0.082 U	0.071 U
Nickel	130	310	16.4	21.3	14.7	17.7	19.2	14.7	16.8	19.4	19.3	15.1	13.4	18.6	21.4	16
Potassium	NS	NS	660	791	396	684	534	378	407	474	552	412	688	590	712	496
Selenium	4	1500	0.314 J	0.348 J	1.84 U	1.76 U	0.554 J	1.72 U	0.317 J	1.83 U	0.409 J	1.86 U	0.877 J	0.472 J	0.309 J	1.74 U
Silver	8.3	1500	1.05 U	0.916 U	0.92 U	0.879 U	0.972 U	0.859 U	0.932 U	0.914 U	0.929 U	0.931 U	0.953 U	1 U	0.935 U	0.87 U
Sodium	NS	NS	38.7 J	68.8 J	22.4 J	56.6 J	29.6 J	13.6 J	39.1 J	25.8 J	57.9 J	7.18 J	62 J	26.6 J	55.8 J	27.1 J
Thallium	NS	NS	2.09 U	1.83 U	1.84 U	1.76 U	1.94 U	1.72 U	1.86 U	1.83 U	1.86 U	1.86 U	1.91 U	2.01 U	1.87 U	1.74 U
Vanadium	NS	NS	7.42	10	7.73	8.12	9.7	6.5	16.4	16	16.1	9.02	14	15.3	14	13.5
Zinc	2480	10000	66.3	76	43	70.6	57.4	46.4	77.1	48.1	54.8	38.6	58.8	146	63.2	50.6

Notes:

NYSDEC GW Protection SCO = New York State Department of Environmental Conservation Groundwater Protection Soil Cleanup Objectives, from Table 375-6.8 of 6 NYCRR Part 375.

NYSDEC Commercial SCO = New York State Department of Environmental Conservation Restricted Commercial Use Soil Cleanup Objectives, from Table 375-6.8 of 6 NYCRR Part 375.

ft bgs = Feet below ground surface.

mg/kg = Milligrams per kilogram.

Green concentrations exceed the NYSDEC GW Protection SCO.

Highlighted concentrations exceed the NYSDEC Commercial SCO.

— = Sample not analyzed.

NS = No standard currently established.

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DUP = Duplicate sample was taken.

When the applicable state standard applies to mixed isomers and the laboratory reports individual isomers, the total standard is listed for each isomer.

Table 5
Soil Reuse Characterization Sampling Results
Summary of Metals in Soil.
MJ Painting; Olean, New York.

Sample ID	NYSDEC GW Protection SCO	NYSDEC Commercial SCO	RX-417	RX-417	RX-417	RX-417	RX-418	RX-418	RX-419	RX-419	RX-419	RX-420	RX-420	RX-420	RX-420	RX-421
Sample Depth (ft bgs)			0-1	1-4	7-10	10-12	4-7	10-12	1-4	7-10	10-12	0-1	4-7	7-10	10-12	10-12
Sample Date			11/11/2021	11/11/2021	11/11/2021	11/11/2021	11/11/2021	11/11/2021	11/15/2021	11/15/2021	11/15/2021	11/15/2021	11/15/2021	11/15/2021	11/15/2021	11/11/2021
METALS - 6010D (mg/kg)																
Aluminum	NS	NS	5020	9320	17900	11500	8060	4380	9050	5990	8840	5550	6540	2730	12700	8040
Antimony	NS	NS	0.452 J	0.884 J	0.399 J	7.24	4.51 J	62.6	4.4 U	1.58 J	4.45 U	4.72 U	4.25 U	5.39 U	5.07 U	0.746 J
Arsenic	16	16	6.06	12.5	27.3	18.8	18.8	45.8	10.9	28.5	7.33	5.79	13.5	5.51	32	13.2
Barium	820	400	48.2	85	79.3	74.5	90.7	82.8	69	191	68.5	55.3	103	89.6	61.6	39
Beryllium	47	590	0.296 J	0.523	1.11	0.589 J	0.658	0.773	0.458	0.554 J	0.223 J	0.217 J	0.399 J	0.172 J	0.284 J	0.368 J
Cadmium	7.5	9.3	0.87 U	0.858 U	0.489 J	0.656 J	1.14	1.9	0.106 J	0.249 J	0.89 U	0.378 J	0.849 U	1.08 U	1.01 U	0.767 J
Calcium	NS	NS	13300	4040	8640	14600	5010	4970	8410	4170	1040	59400	2770	1460	1030	12900
Chromium	NS	1500	6.73	11.6	40.1	14.4	12	6.55	10.9	10.4	9.73	6.52	8.76	4.27	17.5	10.9
Cobalt	NS	NS	5.09	10.4	9.1	13.2	7.22	5.59	9.16	8.2	3.89	3.94	7.92	5.24	7.13	6.29
Copper	1720	270	16.9	18.8	15.8	231	41	140	17.1	410	24.2	15.5	20.9	27.2	27.4	32.8
Iron	NS	NS	13600	24700	19100	36900	21200	26600	22000	27600	16800	11700	20900	14100	37100	20400
Lead	450	1000	11.4	12.7	24.3	202	561	4580	10.2	110	14.3	8.95	55.5	36.3	12.7	17.4
Magnesium	NS	NS	2890	3850	12300	4120	2790	1060	3750	1960	1850	4550	2630	848	3430	2500
Manganese	2000	10000	556	706	374	2070	187	92.8	721	238	95.3	409	673	100	139	229
Mercury	0.73	2.8	0.088 U	0.087 U	0.094 U	0.13 J	0.112	0.181	0.071 U	0.352	0.103	0.085 U	0.087	0.09 U	0.081 U	0.059 J
Nickel	130	310	10.9	20.5	25.6	22.1	19	16.6	19	18.9	10.5	9.18	15.3	9.65	18.4	16.1
Potassium	NS	NS	350	690	2190	636	530	316	776	516	425	248	564	340	763	535
Selenium	4	1500	0.252 J	1.72 U	2 U	1.11 J	1.1 J	1.34 J	1.76 U	1.44 J	0.338 J	1.89 U	0.399 J	0.55 J	0.496 J	0.714 J
Silver	8.3	1500	0.87 U	0.858 U	0.998 U	1.34 U	0.926 U	1.02 U	0.881 U	1.38 U	0.89 U	0.944 U	0.849 U	1.08 U	1.01 U	1.05 U
Sodium	NS	NS	41.8 J	54.3 J	311	49.3 J	134 J	85.5 J	30.1 J	73.4 J	15.4 J	48.1 J	39.3 J	17.5 J	54.4 J	91.5 J
Thallium	NS	NS	1.74 U	0.549 J	2 U	3.12	1.85 U	2.03 U	1.76 U	2.77 U	1.78 U	1.89 U	1.7 U	2.16 U	0.334 J	2.1 U
Vanadium	NS	NS	8.92	13.3	35.7	14.2	18.1	15.1	6.7	10.7	11.6	9.31	5.44	2.81	24.8	18.3
Zinc	2480	10000	49	63.8	70.2	148	103	226	55.3	51.9	37	37.5	40	14.4	48	41.1

Notes:

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Table 5
Soil Reuse Characterization Sampling Results
Summary of Metals in Soil.
MJ Painting; Olean, New York.

Sample ID	NYSDEC GW Protection SCO	NYSDEC Commercial SCO	RX-422	RX-422	RX-422	RX-422 DUP	RX-422	RX-423	RX-423	RX-424	RX-424	RX-424	RX-425	RX-425	RX-425	RX-425
Sample Depth (ft bgs)			0-1	1-4	7-10	7-10	10-12	4-7	10-12	1-4	7-10	10-12	0-1	4-7	7-10	10-12
Sample Date			11/10/2021	11/10/2021	11/10/2021	11/10/2021	11/10/2021	11/11/2021	11/11/2021	11/11/2021	11/11/2021	11/11/2021	11/11/2021	11/11/2021	11/11/2021	11/11/2021
METALS - 6010D (mg/kg)																
Aluminum	NS	NS	5380	8510	10100	7660	5450	8700	13900	9110	5200	1840	4000	7910	3430	6980
Antimony	NS	NS	0.637 J	0.698 J	1.62 J	2.59 J	0.571 J	1.28 J	0.646 J	1.01 J	0.878 J	0.973 J	4.55 U	1.14 J	0.769 J	0.406 J
Arsenic	16	16	6.2	14.2	9.13	**16.2**	5.77	**37**	**19.9**	12.4	**17.6**	13	4.57	12	12.7	6.97
Barium	820	400	51.3	46.2	89.6	60.4	22.7	85.5	110	61	106	40.6	42.1	68.4	89.5	53.7
Beryllium	47	590	0.272 J	0.446	0.457 J	0.5	0.243 J	0.872	0.832	0.54	0.788	0.299 J	0.209 J	0.478	0.326 J	0.199 J
Cadmium	7.5	9.3	0.118 J	0.841 U	0.135 J	0.173 J	0.936 U	0.186 J	0.352 J	0.806 U	0.905 U	1.07 U	0.109 J	0.869 U	1.05 U	0.903 U
Calcium	NS	NS	3010	1650	3000	6180	651	13300	6710	6470	1900	904	12300	2480	1110	951
Chromium	NS	1500	7.12	11.1	11.8	12.9	4.88	14.7	32	12.2	6.64	3.03	5.74	12.1	5.51	9.81
Cobalt	NS	NS	4.91	9.42	6.94	5.71	5.14	6.93	4.36	11	5.98	4.91	3.69	10	3.8	4.45
Copper	1720	270	20	11.5	40	91.7	12.2	43.5	27.1	18.2	482	229	15.6	29.9	67.6	36.3
Iron	NS	NS	13400	21000	15900	15200	12600	26600	18400	26200	19400	15200	11400	22800	18000	14000
Lead	450	1000	15.4	9.61	95	277	7.54	115	123	11.4	19.9	56.3	11.2	54.1	15.7	12.8
Magnesium	NS	NS	2440	3740	2390	3480	1500	3690	10100	3950	1120	323	2410	3270	574	1740
Manganese	2000	10000	559	508	626	608	766	221	85.2	730	255	36.7	433	269	77.9	79
Mercury	0.73	2.8	0.102 U	0.074 U	0.091 U	0.091 U	0.091 U	0.111	0.1	0.078 U	0.096 U	0.1 U	0.223	0.081 U	0.319	0.087 U
Nickel	130	310	11.4	18.5	10.2	11.6	11	13.5	11.6	21	13.7	9.06	8.91	20.4	6.68	10.6
Potassium	NS	NS	356	712	627	683	247	788	1610	729	493	211 J	336	655	219 J	421
Selenium	4	1500	2.36 U	1.68 U	2.08 U	1.92 U	0.505 J	0.705 J	1.96 U	0.282 J	0.362 J	0.278 J	1.82 U	0.252 J	0.59 J	1.81 U
Silver	8.3	1500	1.18 U	0.841 U	1.04 U	0.962 U	0.936 U	0.979 U	0.978 U	0.806 U	0.905 U	1.07 U	0.91 U	0.869 U	1.05 U	0.903 U
Sodium	NS	NS	32.2 J	55.4 J	52.3 J	81.9 J	14.4 J	171 J	272	41.9 J	65 J	32.7 J	21.4 J	46.7 J	12.7 J	14.3 J
Thallium	NS	NS	2.36 U	0.311 J	2.08 U	1.92 U	0.702 J	1.96 U	1.96 U	0.806 J	1.81 U	2.14 U	1.82 U	1.74 U	2.11 U	1.81 U
Vanadium	NS	NS	9.44	12.6	18	14.9	6.58	25.3	31.9	13.8	17.2	7.39	7.42	13.4	12.5	19.8
Zinc	2480	10000	56.3	51	77.8	123	37.2	63.3	52.8	59.5	22.8	15.8	46.6	62.6	17.3	35.9

Notes:

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Green concentrations exceed the NYSDEC GW Protection SCO.
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Table 5
Soil Reuse Characterization Sampling Results
Summary of Metals in Soil.
MJ Painting; Olean, New York.

Sample ID	NYSDEC GW Protection SCO	NYSDEC Commercial SCO	RX-426	RX-426	RX-426	RX-427	RX-427	RX-428	RX-428	RX-428	RX-429	RX-429	RX-429 DUP	RX-429	RX-430	RX-430
Sample Depth (ft bgs)			1-4	7-10	10-12	7-10	10-12	1-4	8-10	10-12	0-1	4-7	4-7	10-12	1-4	7-10
Sample Date			11/11/2021	11/11/2021	11/11/2021	11/16/2021	11/16/2021	11/10/2021	11/10/2021	11/10/2021	11/10/2021	11/10/2021	11/10/2021	11/10/2021	11/10/2021	11/10/2021
METALS - 6010D (mg/kg)																
Aluminum	NS	NS	8960	9900	13000	4500	9190	9820	8340	8420	3420	3470	1910	6710	10900	7790
Antimony	NS	NS	0.928 J	1.94 J	1.05 J	1.24 J	0.806 J	0.99 J	0.62 J	0.77 J	1.42 J	1.49 J	1.2 J	0.81 J	1.28 J	1.31 J
Arsenic	16	16	9.54	**59.2**	14	**20.8**	**23.4**	14.4	7.56	7.14	3.64	**28.4**	15.5	6.93	12.3	**19.7**
Barium	820	400	63.4	77.4	82.4	72	58.7	76	45.6	114	39.4	173	140	102	86.7	141
Beryllium	47	590	0.505	0.677	0.668	0.556	0.459 J	0.61	0.46 J	0.44 J	0.17 J	0.61	0.5	0.39 J	0.73	0.64
Cadmium	7.5	9.3	0.828 U	0.968 U	0.101 J	0.939 J	0.609 J	1.04	0.76 J	0.75 J	0.44 J	0.91	0.69 J	0.62 J	1.09	0.89 J
Calcium	NS	NS	6590	3610	1060	11800	1430	1530	847	3130	2720	923	1090	1080	2050	1260
Chromium	NS	1500	10.8	14.4	13.4	5.59	7.33	12.9	8.42	11.5	4.47	5.3	3.4	7.43	14	9.5
Cobalt	NS	NS	9.38	7.41	9.58	8.12	11	13.2	10.3	6.68	3.61	3.54	3.47	6.95	14.6	5.33
Copper	1720	270	15.6	97.2	49.5	491	328	18	17.9	36	14.3	457	172	29.5	20.3	56.7
Iron	NS	NS	26500	38400	25700	26800	18800	27600	18300	17100	9070	24700	19100	15500	29100	16600
Lead	450	1000	11.3	188	18.3	73.3	11.2	13.7	32.3	63.4	7.9	33	47.2	27.8	22	307
Magnesium	NS	NS	3660	1720	2470	1200	417	4180	2180	2740	1620	339	166	1490	4600	1030
Manganese	2000	10000	839	167	245	309	37.9	905	867	660	586	38.9	24.2	648	616	144
Mercury	0.73	2.8	0.097	0.226	0.096 U	0.117	0.078 U	0.1 U	0.05 J	0.09 U	0.05 J	0.12	0.37	0.17	0.09 U	0.07 J
Nickel	130	310	18.9	18.9	18.2	14.6	19.9	26.1	18.7	13.4	7.83	9.52	8.16	12.5	28	12.1
Potassium	NS	NS	675	440	576	444	1010	718	342	534	151 J	209	123 J	376	818	507
Selenium	4	1500	0.315 J	0.464 J	0.395 J	1.11 J	0.872 J	0.4 J	0.39 J	0.58 J	1.79 U	1.24 J	0.78 J	0.42 J	0.76 J	0.65 J
Silver	8.3	1500	0.828 U	0.968 U	1.01 U	0.958 U	0.937 U	1.04 U	0.94 U	0.94 U	0.9 U	0.8 U	0.87 U	0.88 U	0.94 U	0.94 U
Sodium	NS	NS	51.8 J	270	38 J	77.4 J	110 J	42.1 J	21 J	59.4 J	18.9 J	44.3 J	48.1 J	27.5 J	39.7 J	49.7 J
Thallium	NS	NS	0.82 J	0.445 J	2.02 U	1.92 U	0.403 J	2.09 U	1.88 U	1.88 U	1.79 U	1.59 U	1.75 U	0.35 J	1.87 U	0.53 J
Vanadium	NS	NS	12.8	24.8	23	17.6	12.6	15.1	12	16.9	6.1	22.3	14.1	12.4	16.2	19.1
Zinc	2480	10000	58.6	59.9	69.6	43	47.9	66.1	55.8	65.4	44.9	12.7	9.93	42.3	68.7	41.3

Notes:

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Table 5
Soil Reuse Characterization Sampling Results
Summary of Metals in Soil.
MJ Painting; Olean, New York.

Sample ID	NYSDEC GW Protection SCO	NYSDEC Commercial SCO	RX-430	RX-431	RX-431	RX-431	RX-432	RX-432	RX-432	RX-432	RX-433	RX-434	RX-434	RX-434	RX-435	RX-436
Sample Depth (ft bgs)			10-12	3-7	7-10	10-12	0-1	1-4	7-10	10-12	7-10	0-1	4-7	10-12	7-10	0-1
Sample Date			11/10/2021	11/10/2021	11/16/2021	11/16/2021	11/10/2021	11/16/2021	11/16/2021	11/16/2021	11/17/2021	11/17/2021	11/17/2021	11/17/2021	11/17/2021	11/17/2021
METALS - 6010D (mg/kg)																
Aluminum	NS	NS	9990	7450	5340	7200	6650	8320	5850	6490	5120	8540	6390	4340	5590	5250
Antimony	NS	NS	0.99 J	2.64 J	0.463 J	1.04 J	0.6 J	1.08 J	0.449 J	11.3 U	0.814 J	1.3 J	2.6 J	1.33 J	1.12 J	2.34 J
Arsenic	16	16	16.6	24.3	12.7	11.6	8.12	14.7	8.44	6.99	11.1	11.8	13.3	9.89	8.31	14.8
Barium	820	400	43.9	97.4	49.5	120	75	83.4	107	80.7	40.8	71.7	72.9	32.2	43.4	88.3
Beryllium	47	590	0.55	0.58	0.367 J	0.498	0.35 J	0.498	0.469 J	0.383 J	0.201 J	0.404 J	0.312 J	0.307 J	0.586	0.451 J
Cadmium	7.5	9.3	0.89 J	1.44	0.444 J	0.915	0.72 J	0.851 J	0.419 J	0.586 J	0.088 J	0.165 J	0.229 J	0.348 J	0.883	0.141 J
Calcium	NS	NS	858	3830	1810	1260	8980	5710	631	1010	2040	2350	14700	46100	1210	1130
Chromium	NS	1500	11	20	8.79	9	8.23	12	5.64	8.39	9.88	10	10	7.45	8.88	8.32
Cobalt	NS	NS	12.4	8.38	7	13.1	7.85	9.75	19.6	6.38	3.28	6.77	4.28	2.85 J	4.42	4.46
Copper	1720	270	19.8	63.1	113	29.8	15.8	41.8	293	65.9	25.7	38.1	46.3	22.4	14.8	66.8
Iron	NS	NS	22400	28800	14000	23100	18700	24900	12300	13500	21600	21600	14500	12000	15200	19200
Lead	450	1000	14	168	17.5	14.6	13.2	62.4	8.71	13.8	25.3	82.7	318	30.2	15	213
Magnesium	NS	NS	2260	4130	1210	1760	3410	3260	1070	1900	1440	1570	3430	5660	1870	925
Manganese	2000	10000	1100	332	332	1490	824	878	64	473	106	529	278	274	96.7	139
Mercury	0.73	2.8	0.08 U	0.93	0.088 U	0.08 U	0.08 U	0.067 J	0.084 U	0.084 U	0.077 U	0.101	0.561	0.081 U	0.073 U	0.131
Nickel	130	310	18.3	22	13.3	14	15.9	19.9	15.1	15.6	10.5	15.6	10.8	7.35	11.6	11.4
Potassium	NS	NS	410	622	301	312	439	607	365	281 J	512	488	482	276 J	294	308
Selenium	4	1500	0.69 J	1.62 J	0.627 J	1.78 U	1.65 U	0.48 J	0.379 J	4.51 U'	1.75 U	0.294 J	1.84 U	4.1 U'	0.71 J	1.88 U
Silver	8.3	1500	0.94 U	1.08 U	0.965 U	0.889 U	0.83 U	0.905 U	0.999 U	2.26 U'	0.875 U	0.918 U	0.918 U	2.05 U'	0.826 U	0.939 U
Sodium	NS	NS	19.5 J	67.5 J	22 J	17.7 J	33.9 J	44.2 J	19.1 J	23.4 J	22.4 J	28.5 J	191	67.7 J	38.3 J	45.9 J
Thallium	NS	NS	1.88 U	2.16 U	1.93 U	0.524 J	1.65 U	0.335 J	2 U	4.51 U	1.75 U	1.84 U	1.84 U	4.1 U	0.438 J	1.88 U
Vanadium	NS	NS	17	19.5	12.2	12.3	9.86	13.8	11.2	9.74	17.4	14.4	13.3	12.3	15.4	14.6
Zinc	2480	10000	57.2	102	37	75.6	48.8	58.9	47.8	73.2	81.2	66.7	61.1	46.8	37.6	40.3

Notes:

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Green concentrations exceed the NYSDEC GW Protection SCO.

Highlighted concentrations exceed the NYSDEC Commercial SCO.

— = Sample not analyzed.

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Table 5
Soil Reuse Characterization Sampling Results
Summary of Metals in Soil.
MJ Painting; Olean, New York.

Sample ID	NYSDEC GW Protection SCO	NYSDEC Commercial SCO	RX-436	RX-436	RX-437	RX-439	RX-439	RX-439	RX-440	RX-441	RX-442	RX-443	RX-443	RX-443	RX-444	RX-444
Sample Depth (ft bgs)			4-7	10-12	1-4	0-1	4-7	10-12	4-7	7-10	1-4	0-1	4-7	10-12	0-1	1-4
Sample Date			11/17/2021	11/17/2021	11/17/2021	11/17/2021	11/18/2021	11/18/2021	11/17/2021	11/16/2021	11/17/2021	11/16/2021	11/16/2021	11/16/2021	11/17/2021	11/17/2021
METALS - 6010D (mg/kg)																
Aluminum	NS	NS	11300	4990	7360	6450	5360	6220	5260	3220	4820	7170	7360	3860	9360	8540
Antimony	NS	NS	0.644 J	0.561 J	8.95	0.973 J	4.09 J	0.581 J	2.27 J	0.606 J	1.01 J	3.11 J	5.48	0.969 J	2.65 J	2.51 J
Arsenic	16	16	4.92	8.95	**18.6**	9.89	**18.8**	8.42	**26.8**	6.6	13.1	**25.1**	12.3	4.54	**20.4**	9.32
Barium	820	400	50.5	26.9	133	49.3	76.4	38.1	93.8	26.2	115	143	71.8	31.2	85.7	62.4
Beryllium	47	590	0.449 J	0.255 J	0.457 J	0.293 J	0.356 J	0.366 J	0.536 J	0.196 J	0.583	0.366 J	0.298 J	0.151 J	0.546	0.41 J
Cadmium	7.5	9.3	1.02 U	0.85 U	0.578 J	0.586 J	1.46	0.741 J	0.163 J	0.854 U	0.148 J	1.19	0.298 J	0.116 J	0.23 J	0.127 J
Calcium	NS	NS	1360	512	3590	1090	3440	682	1670	1310	1340	8790	55900	6720	3930	1940
Chromium	NS	1500	11	5.63	19.4	8.1	10.2	6.94	7.45	4.36	4.85	18.8	9.6	4.46	14.8	11.2
Cobalt	NS	NS	7.74	5.08	7.88	4.99	6.69	7.68	4.3	3.18	4.89	5.88	4.24	3.23	12	6.29
Copper	1720	270	15.1	25.7	162	22.7	229	21.6	35.8	14.8	77.5	112	485	54.1	63.4	79.2
Iron	NS	NS	22000	12600	29200	14300	34900	14800	16900	8920	18600	21200	14200	8770	28500	14400
Lead	450	1000	13.4	14.7	309	41.8	380	12.1	70.8	13.1	211	440	**488**	80	133	219
Magnesium	NS	NS	1820	1400	1870	1390	1230	1720	1080	939	632	2980	3170	1490	3220	1460
Manganese	2000	10000	451	208	429	586	202	140	75.4	746	55.5	428	592	423	641	123
Mercury	0.73	2.8	0.097 U	0.077 U	0.524	0.109	0.247	0.083 U	0.108 U	0.083 U	0.086 U	**1.02**	0.276	0.109	0.129	0.155
Nickel	130	310	12.8	11	25.9	11.4	15.2	13.8	12.9	7.2	11.9	19.5	11.2	8.17	22.3	12.8
Potassium	NS	NS	508	273	420	514	360	318	367	247	265	495	779	329	594	351
Selenium	4	1500	2.04 U	1.7 U	0.597 J	1.89 U	1.56 J	1.88 U	0.326 J	0.316 J	0.602 J	0.817 J	1.26 J	1.78 U	0.393 J	1.95 U
Silver	8.3	1500	1.02 U	0.85 U	0.933 U	0.945 U	1.11 U	0.938 U	1.17 U	0.854 U	0.926 U	1.08 U	0.931 U	0.889 U	0.958 U	0.975 U
Sodium	NS	NS	30.8 J	23.9 J	60.1 J	14.8 J	130 J	15.7 J	128 J	22.6 J	64.3 J	124 J	370	56 J	44.2 J	78.4 J
Thallium	NS	NS	2.04 U	1.7 U	1.87 U	1.89 U	2.23 U	1.88 U	2.33 U	1.71 U	1.85 U	2.15 U	1.86 U	1.78 U	1.92 U	1.95 U
Vanadium	NS	NS	17.8	7.99	18.8	11.2	16	12.2	15	5.98	12.5	15.6	13.4	6.52	15.1	14.5
Zinc	2480	10000	44.4	42.6	134	58.6	47.4	48.6	40.4	32.3	36.1	190	120	45	81.8	63.6

Notes:

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Table 5
Soil Reuse Characterization Sampling Results
Summary of Metals in Soil.
MJ Painting; Olean, New York.

Sample ID	**NYSDEC GW Protection SCO**	**NYSDEC Commercial SCO**	**RX-444**	**RX-446**	**RX-446**	**RX-447**	**RX-447 DUP**	**RX-447**	**RX-447**	**RX-448**	**RX-448**
Sample Depth (ft bgs)			**7-10**	**1-4**	**7-10**	**4-7**	**4-7**	**7-10**	**10-12**	**1-4**	**7-10**
Sample Date			**11/17/2021**	**11/16/2021**	**11/16/2021**	**11/16/2021**	**11/16/2021**	**11/16/2021**	**11/16/2021**	**11/16/2021**	**11/18/2021**
METALS - 6010D (mg/kg)											
Aluminum	NS	NS	10300	5100	7800	9360	9380	8940	7230	14300	7390
Antimony	NS	NS	0.678 J	2.55 J	2.09 J	0.883 J	1.11 J	0.791 J	0.645 J	6.38 U	8.76
Arsenic	16	16	11.5	13.9	**33.3**	10.9	13.2	10.8	10.3	12.4	**20.1**
Barium	820	400	33	54.7	53.2	38.2	39.2	65.5	58.5	112	76.3
Beryllium	47	590	0.487	0.261 J	0.451 J	0.385 J	0.328 J	0.456 J	0.452 J	0.842	0.472 J
Cadmium	7.5	9.3	0.869 U	1.04	1.53	0.686 J	0.757 J	0.831 J	0.553 J	0.931 J	1.24
Calcium	NS	NS	380	40300	4050	473	685	807	803	12100	4320
Chromium	NS	1500	10.6	6.71	7.15	14.6	14	12.9	7.23	33.8	18.6
Cobalt	NS	NS	6.2	4.4	7.62	5.92	5.69	5.88	5.15	4.28	3.56
Copper	1720	270	76.4	469	78.6	18.6	14.6	25.5	28	13	27.9
Iron	NS	NS	21500	14300	42200	23900	25600	22400	17900	14000	12500
Lead	450	1000	9.75	**884**	93.2	15.5	12.9	15.1	11.9	70.4	**1160**
Magnesium	NS	NS	2260	3920	1310	2410	2260	2220	1720	15000	6640
Manganese	2000	10000	265	304	159	154	139	181	172	190	106
Mercury	0.73	2.8	0.075 U	**1.21**	**1.34**	0.077 U	0.075 U	0.087 U	0.08 U	0.105 U	0.727
Nickel	130	310	15.7	10.7	16.4	15.8	14.9	17.9	14	11.6	12.4
Potassium	NS	NS	408	382	435	456	463	418	326	1680	848
Selenium	4	1500	1.74 U	0.675 J	1.3 J	0.704 J	0.766 J	0.355 J	0.489 J	0.332 J	1.25 J
Silver	8.3	1500	0.869 U	0.9 U	0.92 U	0.939 U	0.912 U	1.01 U	0.922 U	1.28 U	1.18 U
Sodium	NS	NS	21.4 J	204	336	85.4 J	112 J	178 J	223	543	564
Thallium	NS	NS	1.74 U	1.8 U	0.294 J	1.88 U	1.82 U	2.03 U	1.84 U	2.55 U	2.36 U
Vanadium	NS	NS	16.7	20.4	15.4	16.8	24.2	13.6	11.1	53.8	41.5
Zinc	2480	10000	43.3	234	53.4	43.1	40.7	61.5	59	62.6	59

Notes:

NYSDEC GW Protection SCO = New York State Department of Environmental Conservation Groundwater Protection Soil Cleanup Objectives, from Table 375-6.8 of 6 NYCRR Part 375.
NYSDEC Commercial SCO = New York State Department of Environmental Conservation Restricted Commercial Use Soil Cleanup Objectives, from Table 375-6.8 of 6 NYCRR Part 375.
ft bgs = Feet below ground surface.
mg/kg = Milligrams per kilogram.
Green concentrations exceed the NYSDEC GW Protection SCO.
Highlighted concentrations exceed the NYSDEC Commercial SCO.
— = Sample not analyzed.
NS = No standard currently established.
ND = Not Detected.
U = Not detected above laboratory detection limit.
U' = Laboratory reporting limit exceeds the applicable regulatory standard or criteria being utilized.
J = Result below the reporting limit (estimated value).
DUP = Duplicate sample was taken.
When the applicable state standard applies to mixed isomers and the laboratory reports individual isomers, the total standard is listed for each isomer.

Table 5
Soil Reuse Characterization Sampling Results
Summary of PCB Soil Analytical Data.
MJ Painting; Olean, New York.

Sample ID	NYSDEC GW Protection SCO	NYSDEC Commercial SCO	RX-301	RX-302	RX-303	RX-304	RX-305	RX-306	RX-307	RX-308	RX-309	RX-310	RX-311	RX-312	RX-313	RX-314	RX-315
Sample Depth (ft bgs)			0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1
Sample Date			11/15/2021	11/9/2021	11/15/2021	11/15/2021	11/15/2021	11/16/2021	11/17/2021	11/17/2021	11/17/2021	11/17/2021	11/18/2021	11/17/2021	1/5/2022	1/4/2022	1/7/2022
POLYCHLORINATED BIPHENYLS - 8082A (mg/kg)																	
Aroclor-1016	NS	NS	0.0388 U	0.0384 U	0.04 U	0.0365 U	0.0402 U	0.036 U	0.0356 U	0.0396 U	0.0364 U	0.0368 U	0.0407 U	0.038 U	0.0451 U	0.0435 U	0.0452 U
Aroclor-1221	NS	NS	0.0388 U	0.0384 U	0.04 U	0.0365 U	0.0402 U	0.036 U	0.0356 U	0.0396 U	0.0364 U	0.0368 U	0.0407 U	0.038 U	0.0451 U	0.0435 U	0.0452 U
Aroclor-1232	NS	NS	0.0388 U	0.0384 U	0.04 U	0.0365 U	0.0402 U	0.036 U	0.0356 U	0.0396 U	0.0364 U	0.0368 U	0.0407 U	0.038 U	0.0451 U	0.0435 U	0.0452 U
Aroclor-1242	NS	NS	0.0388 U	0.0384 U	0.04 U	0.0365 U	0.0402 U	0.036 U	0.0356 U	0.0396 U	0.0364 U	0.0368 U	0.0407 U	0.038 U	0.0451 U	0.0435 U	0.0452 U
Aroclor-1248	NS	NS	0.0388 U	0.0384 U	0.04 U	0.0365 U	0.0402 U	0.036 U	0.0356 U	0.0396 U	0.0364 U	0.0368 U	0.0407 U	0.038 U	0.0451 U	0.0435 U	0.0452 U
Aroclor-1254	NS	NS	0.0388 U	0.0384 U	0.04 U	0.0365 U	0.0402 U	0.036 U	0.0356 U	0.0396 U	0.0364 U	0.0368 U	0.0407 U	0.038 U	0.0451 U	0.0335 J	0.0452 U
Aroclor-1260	NS	NS	0.0388 U	0.0384 U	0.04 U	0.0365 U	0.0402 U	0.036 U	0.0356 U	0.0396 U	0.0364 U	0.0368 U	0.0407 U	0.038 U	0.0451 U	0.0184 J	0.0452 U
Aroclor-1262	NS	NS	0.0388 U	0.0384 U	0.04 U	0.0365 U	0.0402 U	0.036 U	0.0356 U	0.0396 U	0.0364 U	0.0368 U	0.0407 U	0.038 U	0.0451 U	0.0435 U	0.0452 U
Aroclor-1268	NS	NS	0.0388 U	0.0384 U	0.04 U	0.0365 U	0.0402 U	0.036 U	0.0356 U	0.0396 U	0.0364 U	0.0368 U	0.0407 U	0.038 U	0.00932 J	0.0132 J	0.00619 J
Total PCBs	NS	1	0.0388 U	0.0384 U	0.04 U	0.0365 U	0.0402 U	0.036 U	0.0356 U	0.0396 U	0.0364 U	0.0368 U	0.0407 U	0.038 U	0.00932 J	0.0651 J	0.00619 J
Total PCBs	NS	10	0.0388 U	0.0384 U	0.04 U	0.0365 U	0.0402 U	0.036 U	0.0356 U	0.0396 U	0.0364 U	0.0368 U	0.0407 U	0.038 U	0.00932 J	0.0651 J	0.00619 J
Total PCBs	3.2	1	0.0388 U	0.0384 U	0.04 U	0.0365 U	0.0402 U	0.036 U	0.0356 U	0.0396 U	0.0364 U	0.0368 U	0.0407 U	0.038 U	0.00932 J	0.0651 J	0.00619 J

Notes:
NYSDEC GW Protection SCO = New York State Department of Environmental Conservation Groundwater Protection Soil Cleanup Objectives, from Table 375-6.8 of 6 NYCRR Part 375.
NYSDEC Commercial SCO = New York State Department of Environmental Conservation Restricted Commercial Use Soil Cleanup Objectives, from Table 375-6.8 of 6 NYCRR Part 375.
ft bgs = Feet below ground surface.
mg/kg = Milligrams per kilogram.
No samples exceed the NYSDEC GW Protection SCO.
No samples exceed the NYSDEC Commercial SCO.
— = Sample not analyzed.
NS = No standard currently established.
ND = Not Detected.
U = Not detected above laboratory detection limit.
U' = Laboratory reporting limit exceeds the applicable regulatory standard or criteria being utilized.
J = Result below the reporting limit (estimated value).
DUP = Duplicate sample was taken.
When the applicable state standard applies to mixed isomers and the laboratory reports individual isomers, the total standard is listed for each isomer.

Table 5
Soil Reuse Characterization Sampling Results
Summary of PCB Soil Analytical Data.
MJ Painting; Olean, New York.

Sample ID	NYSDEC GW Protection SCO	NYSDEC Commercial SCO	RX-316	RX-317	RX-318	RX-319	RX-320	RX-321	RX-321 DUP	RX-401	RX-401	RX-401	RX-402	RX-403	RX-403	RX-403	RX-404
Sample Depth (ft bgs)			0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	1-4	7-10	7-10	0-1	4-7	10-12	7-10
Sample Date			1/7/2022	1/7/2022	1/4/2022	1/7/2022	1/5/2022	1/7/2022	1/7/2022	11/12/2021	11/12/2021	11/12/2021	11/12/2021	11/12/2021	11/12/2021	11/12/2021	11/12/2021
POLYCHLORINATED BIPHENYLS - 8082A (mg/kg)																	
Aroclor-1016	NS	NS	0.0513 U	0.0434 U	0.0422 U	0.0429 U	0.0434 U	0.0412 U	0.0422 U	0.0379 U	0.038 U	0.0408 U	0.0438 U	0.0417 U	0.0414 U	0.0377 U	0.0395 U
Aroclor-1221	NS	NS	0.0513 U	0.0434 U	0.0422 U	0.0429 U	0.0434 U	0.0412 U	0.0422 U	0.0379 U	0.038 U	0.0408 U	0.0438 U	0.0417 U	0.0414 U	0.0377 U	0.0395 U
Aroclor-1232	NS	NS	0.0513 U	0.0434 U	0.0422 U	0.0429 U	0.0434 U	0.0412 U	0.0422 U	0.0379 U	0.038 U	0.0408 U	0.0438 U	0.0417 U	0.0414 U	0.0377 U	0.0395 U
Aroclor-1242	NS	NS	0.0513 U	0.0434 U	0.0422 U	0.0429 U	0.0434 U	0.0412 U	0.0422 U	0.0379 U	0.038 U	0.0408 U	0.0438 U	0.0417 U	0.0414 U	0.0377 U	0.0395 U
Aroclor-1248	NS	NS	0.0513 U	0.0434 U	0.0422 U	0.0429 U	0.0434 U	0.0412 U	0.0422 U	0.0379 U	0.038 U	0.0408 U	0.0438 U	0.0417 U	0.0414 U	0.0377 U	0.0395 U
Aroclor-1254	NS	NS	0.0513 U	0.0434 U	0.0422 U	0.0429 U	0.00496 J	0.0412 U	0.0422 U	0.0379 U	0.038 U	0.0408 U	0.0438 U	0.0417 U	0.0414 U	0.0377 U	0.0395 U
Aroclor-1260	NS	NS	0.0133 J	0.0434 U	0.0422 U	0.0429 U	0.0434 U	0.0412 U	0.0422 U	0.0379 U	0.038 U	0.0408 U	0.0438 U	0.0417 U	0.0414 U	0.0377 U	0.0395 U
Aroclor-1262	NS	NS	0.0513 U	0.0434 U	0.0422 U	0.0429 U	0.0434 U	0.0412 U	0.0422 U	0.0379 U	0.038 U	0.0408 U	0.0438 U	0.0417 U	0.0414 U	0.0377 U	0.0395 U
Aroclor-1268	NS	NS	0.00707 J	0.0434 U	0.0422 U	0.00742 J	0.0434 U	0.0412 U	0.00626 J	0.0379 U	0.038 U	0.0408 U	0.0438 U	0.0417 U	0.0414 U	0.0377 U	0.0395 U
Total PCBs	NS	1	0.0204 J	0.0434 U	0.0422 U	0.00742 J	0.00496 J	0.0412 U	0.00626 J	0.0379 U	0.038 U	0.0408 U	0.0438 U	0.0417 U	0.0414 U	0.0377 U	0.0395 U
Total PCBs	NS	10	0.0204 J	0.0434 U	0.0422 U	0.00742 J	0.00496 J	0.0412 U	0.00626 J	0.0379 U	0.038 U	0.0408 U	0.0438 U	0.0417 U	0.0414 U	0.0377 U	0.0395 U
Total PCBs	3.2	1	0.0204 J	0.0434 U	0.0422 U	0.00742 J	0.00496 J	0.0412 U	0.00626 J	0.0379 U	0.038 U	0.0408 U	0.0438 U	0.0417 U	0.0414 U	0.0377 U	0.0395 U

Notes:
NYSDEC GW Protection SCO = New York State Department of Environmental Conservation Groundwater Protection Soil Cleanup Objectives, from Table 375-6.8 of 6 NYCRR Part 375.
NYSDEC Commercial SCO = New York State Department of Environmental Conservation Restricted Commercial Use Soil Cleanup Objectives, from Table 375-6.8 of 6 NYCRR Part 375.
ft bgs = Feet below ground surface.
mg/kg = Milligrams per kilogram.
No samples exceed the NYSDEC GW Protection SCO.
No samples exceed the NYSDEC Commercial SCO.
— = Sample not analyzed.
NS = No standard currently established.
ND = Not Detected.
U = Not detected above laboratory detection limit.
U' = Laboratory reporting limit exceeds the applicable regulatory standard or criteria being utilized.
J = Result below the reporting limit (estimated value).
DUP = Duplicate sample was taken.
When the applicable state standard applies to mixed isomers and the laboratory reports individual isomers, the total standard is listed for each isomer.

Table 5
Soil Reuse Characterization Sampling Results
Summary of PCB Soil Analytical Data.
MJ Painting; Olean, New York.

Sample ID	NYSDEC GW Protection SCO	NYSDEC Commercial SCO	RX-405	RX-405	RX-405	RX-407	RX-407	RX-407	RX-409	RX-410	RX-411	RX-413	RX-414	RX-415	RX-416	RX-416
Sample Depth (ft bgs)			0-1	1-4	7-10	0-1	4-7	10-12	1-4	10-12	7-10	10-12	4-7	7-10	1-4	10-12
Sample Date			11/15/2021	11/15/2021	11/15/2021	11/15/2021	11/15/2021	11/15/2021	11/12/2021	11/12/2021	11/12/2021	11/15/2021	11/15/2021	11/16/2021	11/16/2021	11/16/2021
POLYCHLORINATED BIPHENYLS - 8082A (mg/kg)																
Aroclor-1016	NS	NS	0.0436 U	0.0373 U	0.0392 U	0.0368 U	0.0415 U	0.037 U	0.0401 U	0.0381 U	0.0398 U	0.0392 U	0.0403 U	0.044 U	0.0403 U	0.0366 U
Aroclor-1221	NS	NS	0.0436 U	0.0373 U	0.0392 U	0.0368 U	0.0415 U	0.037 U	0.0401 U	0.0381 U	0.0398 U	0.0392 U	0.0403 U	0.044 U	0.0403 U	0.0366 U
Aroclor-1232	NS	NS	0.0436 U	0.0373 U	0.0392 U	0.0368 U	0.0415 U	0.037 U	0.0401 U	0.0381 U	0.0398 U	0.0392 U	0.0403 U	0.044 U	0.0403 U	0.0366 U
Aroclor-1242	NS	NS	0.0436 U	0.0373 U	0.0392 U	0.0368 U	0.0415 U	0.037 U	0.0401 U	0.0381 U	0.0398 U	0.0392 U	0.0403 U	0.044 U	0.0403 U	0.0366 U
Aroclor-1248	NS	NS	0.0436 U	0.0373 U	0.0392 U	0.0368 U	0.0415 U	0.037 U	0.0401 U	0.0381 U	0.0398 U	0.0392 U	0.0403 U	0.044 U	0.0403 U	0.0366 U
Aroclor-1254	NS	NS	0.0436 U	0.0373 U	0.0392 U	0.0368 U	0.0415 U	0.037 U	0.0401 U	0.0381 U	0.0398 U	0.0392 U	0.0403 U	0.044 U	0.0403 U	0.0366 U
Aroclor-1260	NS	NS	0.0436 U	0.0373 U	0.0392 U	0.0368 U	0.0415 U	0.037 U	0.0401 U	0.0381 U	0.0398 U	0.0392 U	0.0403 U	0.044 U	0.0403 U	0.0366 U
Aroclor-1262	NS	NS	0.0436 U	0.0373 U	0.0392 U	0.0368 U	0.0415 U	0.037 U	0.0401 U	0.0381 U	0.0398 U	0.0392 U	0.0403 U	0.044 U	0.0403 U	0.0366 U
Aroclor-1268	NS	NS	0.0436 U	0.0373 U	0.0392 U	0.0368 U	0.0415 U	0.037 U	0.0401 U	0.0381 U	0.0398 U	0.0392 U	0.0403 U	0.044 U	0.0403 U	0.0366 U
Total PCBs	NS	1	0.0436 U	0.0373 U	0.0392 U	0.0368 U	0.0415 U	0.037 U	0.0401 U	0.0381 U	0.0398 U	0.0392 U	0.0403 U	0.044 U	0.0403 U	0.0366 U
Total PCBs	NS	10	0.0436 U	0.0373 U	0.0392 U	0.0368 U	0.0415 U	0.037 U	0.0401 U	0.0381 U	0.0398 U	0.0392 U	0.0403 U	0.044 U	0.0403 U	0.0366 U
Total PCBs	3.2	1	0.0436 U	0.0373 U	0.0392 U	0.0368 U	0.0415 U	0.037 U	0.0401 U	0.0381 U	0.0398 U	0.0392 U	0.0403 U	0.044 U	0.0403 U	0.0366 U

Notes:
NYSDEC GW Protection SCO = New York State Department of Environmental Conservation Groundwater Protection Soil Cleanup Objectives, from Table 375-6.8 of 6 NYCRR Part 375.
NYSDEC Commercial SCO = New York State Department of Environmental Conservation Restricted Commercial Use Soil Cleanup Objectives, from Table 375-6.8 of 6 NYCRR Part 375.
ft bgs = Feet below ground surface.
mg/kg = Milligrams per kilogram.
No samples exceed the NYSDEC GW Protection SCO.
No samples exceed the NYSDEC Commercial SCO.
— = Sample not analyzed.
NS = No standard currently established.
ND = Not Detected.
U = Not detected above laboratory detection limit.
U' = Laboratory reporting limit exceeds the applicable regulatory standard or criteria being utilized.
J = Result below the reporting limit (estimated value).
DUP = Duplicate sample was taken.
When the applicable state standard applies to mixed isomers and the laboratory reports individual isomers, the total standard is listed for each isomer.

Table 5
Soil Reuse Characterization Sampling Results
Summary of PCB Soil Analytical Data.
MJ Painting; Olean, New York.

Sample ID	NYSDEC GW Protection SCO	NYSDEC Commercial SCO	RX-417	RX-417	RX-417	RX-417	RX-418	RX-418	RX-419	RX-419	RX-419	RX-420	RX-420	RX-420	RX-420	RX-421
Sample Depth (ft bgs)			0-1	1-4	7-10	10-12	4-7	10-12	1-4	7-10	10-12	0-1	4-7	7-10	10-12	10-12
Sample Date			11/11/2021	11/11/2021	11/11/2021	11/11/2021	11/11/2021	11/11/2021	11/15/2021	11/15/2021	11/15/2021	11/15/2021	11/15/2021	11/15/2021	11/15/2021	11/11/2021
POLYCHLORINATED BIPHENYLS - 8082A (mg/kg)																
Aroclor-1016	NS	NS	0.0363 U	0.0356 U	0.0412 U	0.0533 U	0.0377 U	0.0409 U	0.0372 U	0.0564 U	0.0375 U	0.0382 U	0.0371 U	0.046 U	0.0421 U	0.0441 U
Aroclor-1221	NS	NS	0.0363 U	0.0356 U	0.0412 U	0.0533 U	0.0377 U	0.0409 U	0.0372 U	0.0564 U	0.0375 U	0.0382 U	0.0371 U	0.046 U	0.0421 U	0.0441 U
Aroclor-1232	NS	NS	0.0363 U	0.0356 U	0.0412 U	0.0533 U	0.0377 U	0.0409 U	0.0372 U	0.0564 U	0.0375 U	0.0382 U	0.0371 U	0.046 U	0.0421 U	0.0441 U
Aroclor-1242	NS	NS	0.0363 U	0.0356 U	0.0412 U	0.0533 U	0.0377 U	0.0409 U	0.0372 U	0.0564 U	0.0375 U	0.0382 U	0.0371 U	0.046 U	0.0421 U	0.0441 U
Aroclor-1248	NS	NS	0.0363 U	0.0356 U	0.0412 U	0.0533 U	0.0377 U	0.0409 U	0.0372 U	0.0564 U	0.0375 U	0.0382 U	0.0371 U	0.046 U	0.0421 U	0.0441 U
Aroclor-1254	NS	NS	0.0363 U	0.0356 U	0.0412 U	0.0533 U	0.0377 U	0.0409 U	0.0372 U	0.0564 U	0.0375 U	0.0382 U	0.0371 U	0.046 U	0.0421 U	0.0441 U
Aroclor-1260	NS	NS	0.0363 U	0.0356 U	0.0412 U	0.0533 U	0.0377 U	0.0409 U	0.0372 U	0.0564 U	0.0375 U	0.0382 U	0.0371 U	0.046 U	0.0421 U	0.0441 U
Aroclor-1262	NS	NS	0.0363 U	0.0356 U	0.0412 U	0.0533 U	0.0377 U	0.0409 U	0.0372 U	0.0564 U	0.0375 U	0.0382 U	0.0371 U	0.046 U	0.0421 U	0.0441 U
Aroclor-1268	NS	NS	0.0363 U	0.0356 U	0.0412 U	0.0533 U	0.0377 U	0.0409 U	0.0372 U	0.0564 U	0.0375 U	0.0382 U	0.0371 U	0.046 U	0.0421 U	0.0441 U
Total PCBs	NS	1	0.0363 U	0.0356 U	0.0412 U	0.0533 U	0.0377 U	0.0409 U	0.0372 U	0.0564 U	0.0375 U	0.0382 U	0.0371 U	0.046 U	0.0421 U	0.0441 U
Total PCBs	NS	10	0.0363 U	0.0356 U	0.0412 U	0.0533 U	0.0377 U	0.0409 U	0.0372 U	0.0564 U	0.0375 U	0.0382 U	0.0371 U	0.046 U	0.0421 U	0.0441 U
Total PCBs	3.2	1	0.0363 U	0.0356 U	0.0412 U	0.0533 U	0.0377 U	0.0409 U	0.0372 U	0.0564 U	0.0375 U	0.0382 U	0.0371 U	0.046 U	0.0421 U	0.0441 U

Notes:
NYSDEC GW Protection SCO = New York State Department of Environmental Conservation Groundwater Protection Soil Cleanup Objectives, from Table 375-6.8 of 6 NYCRR Part 375.
NYSDEC Commercial SCO = New York State Department of Environmental Conservation Restricted Commercial Use Soil Cleanup Objectives, from Table 375-6.8 of 6 NYCRR Part 375.
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No samples exceed the NYSDEC Commercial SCO.
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When the applicable state standard applies to mixed isomers and the laboratory reports individual isomers, the total standard is listed for each isomer.

Table 5
Soil Reuse Characterization Sampling Results
Summary of PCB Soil Analytical Data.
MJ Painting; Olean, New York.

Sample ID	NYSDEC GW Protection SCO	NYSDEC Commercial SCO	RX-422	RX-422	RX-422	RX-422 DUP	RX-422	RX-423	RX-423	RX-424	RX-424	RX-424	RX-425	RX-425	RX-425	RX-425
Sample Depth (ft bgs)			0-1	1-4	7-10	7-10	10-12	4-7	10-12	1-4	7-10	10-12	0-1	4-7	7-10	10-12
Sample Date			11/10/2021	11/10/2021	11/10/2021	11/10/2021	11/10/2021	11/11/2021	11/11/2021	11/11/2021	11/11/2021	11/11/2021	11/11/2021	11/11/2021	11/11/2021	11/11/2021
POLYCHLORINATED BIPHENYLS - 8082A (mg/kg)																
Aroclor-1016	NS	NS	0.0492 U	0.0347 U	0.0421 U	0.0393 U	0.0389 U	0.106 U	0.0429 U	0.0345 U	0.0374 U	0.0448 U	0.0371 U	0.0358 U	0.0457 U	0.0391 U
Aroclor-1221	NS	NS	0.0492 U	0.0347 U	0.0421 U	0.0393 U	0.0389 U	0.106 U	0.0429 U	0.0345 U	0.0374 U	0.0448 U	0.0371 U	0.0358 U	0.0457 U	0.0391 U
Aroclor-1232	NS	NS	0.0492 U	0.0347 U	0.0421 U	0.0393 U	0.0389 U	0.106 U	0.0429 U	0.0345 U	0.0374 U	0.0448 U	0.0371 U	0.0358 U	0.0457 U	0.0391 U
Aroclor-1242	NS	NS	0.0492 U	0.0347 U	0.0421 U	0.0393 U	0.0389 U	0.106 U	0.0429 U	0.0345 U	0.0374 U	0.0448 U	0.0371 U	0.0358 U	0.0457 U	0.0391 U
Aroclor-1248	NS	NS	0.0492 U	0.0347 U	0.0421 U	0.0393 U	0.0389 U	0.106 U	0.0429 U	0.0345 U	0.0374 U	0.0448 U	0.0371 U	0.0358 U	0.0457 U	0.0391 U
Aroclor-1254	NS	NS	0.0492 U	0.0347 U	0.0421 U	0.0393 U	0.0389 U	0.106 U	0.0429 U	0.0345 U	0.0374 U	0.0448 U	0.0371 U	0.0358 U	0.0457 U	0.0391 U
Aroclor-1260	NS	NS	0.0492 U	0.0347 U	0.0421 U	0.0393 U	0.0389 U	0.106 U	0.0429 U	0.0345 U	0.0374 U	0.0448 U	0.0371 U	0.0358 U	0.0457 U	0.0391 U
Aroclor-1262	NS	NS	0.0492 U	0.0347 U	0.0421 U	0.0393 U	0.0389 U	0.106 U	0.0429 U	0.0345 U	0.0374 U	0.0448 U	0.0371 U	0.0358 U	0.0457 U	0.0391 U
Aroclor-1268	NS	NS	0.0492 U	0.0347 U	0.0421 U	0.0393 U	0.0389 U	0.106 U	0.0429 U	0.0345 U	0.0374 U	0.0448 U	0.0371 U	0.0358 U	0.033 J	0.0391 U
Total PCBs	NS	1	0.0492 U	0.0347 U	0.0421 U	0.0393 U	0.0389 U	0.106 U	0.0429 U	0.0345 U	0.0374 U	0.0448 U	0.0371 U	0.0358 U	0.033 J	0.0391 U
Total PCBs	NS	10	0.0492 U	0.0347 U	0.0421 U	0.0393 U	0.0389 U	0.106 U	0.0429 U	0.0345 U	0.0374 U	0.0448 U	0.0371 U	0.0358 U	0.033 J	0.0391 U
Total PCBs	3.2	1	0.0492 U	0.0347 U	0.0421 U	0.0393 U	0.0389 U	0.106 U'	0.0429 U	0.0345 U	0.0374 U	0.0448 U	0.0371 U	0.0358 U	0.033 J	0.0391 U

Notes:

NYSDEC GW Protection SCO = New York State Department of Environmental Conservation Groundwater Protection Soil Cleanup Objectives, from Table 375-6.8 of 6 NYCRR Part 375.
NYSDEC Commercial SCO = New York State Department of Environmental Conservation Restricted Commercial Use Soil Cleanup Objectives, from Table 375-6.8 of 6 NYCRR Part 375.
ft bgs = Feet below ground surface.
mg/kg = Milligrams per kilogram.
No samples exceed the NYSDEC GW Protection SCO.
No samples exceed the NYSDEC Commercial SCO.
— = Sample not analyzed.
NS = No standard currently established.
ND = Not Detected.
U = Not detected above laboratory detection limit.
U' = Laboratory reporting limit exceeds the applicable regulatory standard or criteria being utilized.
J = Result below the reporting limit (estimated value).
DUP = Duplicate sample was taken.
When the applicable state standard applies to mixed isomers and the laboratory reports individual isomers, the total standard is listed for each isomer.

Table 5
Soil Reuse Characterization Sampling Results
Summary of PCB Soil Analytical Data.
MJ Painting; Olean, New York.

Sample ID	NYSDEC GW Protection SCO	NYSDEC Commercial SCO	RX-426	RX-426	RX-426	RX-427	RX-427	RX-428	RX-428	RX-428	RX-429	RX-429	RX-429 DUP	RX-429	RX-430	RX-430
Sample Depth (ft bgs)			1-4	7-10	10-12	7-10	10-12	1-4	8-10	10-12	0-1	4-7	4-7	10-12	1-4	7-10
Sample Date			11/11/2021	11/11/2021	11/11/2021	11/16/2021	11/16/2021	11/10/2021	11/10/2021	11/10/2021	11/10/2021	11/10/2021	11/10/2021	11/10/2021	11/10/2021	11/10/2021
POLYCHLORINATED BIPHENYLS - 8082A (mg/kg)																
Aroclor-1016	NS	NS	0.0339 U	0.04 U	0.0429 U	0.0396 U	0.0396 U	0.0429 U	0.0386 U	0.0404 U	0.0372 U	0.0334 U	0.0372 U	0.0376 U	0.0394 U	0.0394 U
Aroclor-1221	NS	NS	0.0339 U	0.04 U	0.0429 U	0.0396 U	0.0396 U	0.0429 U	0.0386 U	0.0404 U	0.0372 U	0.0334 U	0.0372 U	0.0376 U	0.0394 U	0.0394 U
Aroclor-1232	NS	NS	0.0339 U	0.04 U	0.0429 U	0.0396 U	0.0396 U	0.0429 U	0.0386 U	0.0404 U	0.0372 U	0.0334 U	0.0372 U	0.0376 U	0.0394 U	0.0394 U
Aroclor-1242	NS	NS	0.0339 U	0.04 U	0.0429 U	0.0396 U	0.0396 U	0.0429 U	0.0386 U	0.0404 U	0.0372 U	0.0334 U	0.0372 U	0.0376 U	0.0394 U	0.0394 U
Aroclor-1248	NS	NS	0.0339 U	0.04 U	0.0429 U	0.0396 U	0.0396 U	0.0429 U	0.0386 U	0.0404 U	0.0372 U	0.0334 U	0.0372 U	0.0376 U	0.0394 U	0.0394 U
Aroclor-1254	NS	NS	0.0339 U	0.04 U	0.0429 U	0.0396 U	0.0396 U	0.0429 U	0.0386 U	0.0404 U	0.0372 U	0.00453 J	0.0372 U	0.0376 U	0.0394 U	0.0394 U
Aroclor-1260	NS	NS	0.0339 U	0.04 U	0.0429 U	0.0396 U	0.0396 U	0.0429 U	0.0386 U	0.0404 U	0.0372 U	0.0334 U	0.0372 U	0.0376 U	0.0394 U	0.0394 U
Aroclor-1262	NS	NS	0.0339 U	0.04 U	0.0429 U	0.0396 U	0.0396 U	0.0429 U	0.0386 U	0.0404 U	0.0372 U	0.0334 U	0.0372 U	0.0376 U	0.0394 U	0.0394 U
Aroclor-1268	NS	NS	0.0339 U	0.04 U	0.0429 U	0.0396 U	0.0396 U	0.0429 U	0.0386 U	0.0404 U	0.0372 U	0.0334 U	0.0372 U	0.0376 U	0.0394 U	0.0394 U
Total PCBs	NS	1	0.0339 U	0.04 U	0.0429 U	0.0396 U	0.0396 U	0.0429 U	0.0386 U	0.0404 U	0.0372 U	0.00453 J	0.0372 U	0.0376 U	0.0394 U	0.0394 U
Total PCBs	NS	10	0.0339 U	0.04 U	0.0429 U	0.0396 U	0.0396 U	0.0429 U	0.0386 U	0.0404 U	0.0372 U	0.00453 J	0.0372 U	0.0376 U	0.0394 U	0.0394 U
Total PCBs	3.2	1	0.0339 U	0.04 U	0.0429 U	0.0396 U	0.0396 U	0.0429 U	0.0386 U	0.0404 U	0.0372 U	0.00453 J	0.0372 U	0.0376 U	0.0394 U	0.0394 U

Notes:
NYSDEC GW Protection SCO = New York State Department of Environmental Conservation Groundwater Protection Soil Cleanup Objectives, from Table 375-6.8 of 6 NYCRR Part 375.
NYSDEC Commercial SCO = New York State Department of Environmental Conservation Restricted Commercial Use Soil Cleanup Objectives, from Table 375-6.8 of 6 NYCRR Part 375.
ft bgs = Feet below ground surface.
mg/kg = Milligrams per kilogram.
No samples exceed the NYSDEC GW Protection SCO.
No samples exceed the NYSDEC Commercial SCO.
— = Sample not analyzed.
NS = No standard currently established.
ND = Not Detected.
U = Not detected above laboratory detection limit.
U' = Laboratory reporting limit exceeds the applicable regulatory standard or criteria being utilized.
J = Result below the reporting limit (estimated value).
DUP = Duplicate sample was taken.
When the applicable state standard applies to mixed isomers and the laboratory reports individual isomers, the total standard is listed for each isomer.

Table 5
Soil Reuse Characterization Sampling Results
Summary of PCB Soil Analytical Data.
MJ Painting; Olean, New York.

Sample ID	NYSDEC GW Protection SCO	NYSDEC Commercial SCO	RX-430	RX-431	RX-431	RX-431	RX-432	RX-432	RX-432	RX-432	RX-433	RX-434	RX-434	RX-434	RX-435	RX-436
Sample Depth (ft bgs)			10-12	3-7	7-10	10-12	0-1	1-4	7-10	10-12	7-10	0-1	4-7	10-12	7-10	0-1
Sample Date			11/10/2021	11/10/2021	11/16/2021	11/16/2021	11/10/2021	11/16/2021	11/16/2021	11/16/2021	11/17/2021	11/17/2021	11/17/2021	11/17/2021	11/17/2021	11/17/2021
POLYCHLORINATED BIPHENYLS - 8082A (mg/kg)																
Aroclor-1016	NS	NS	0.0386 U	0.0446 U	0.0417 U	0.0372 U	0.0351 U	0.0367 U	0.0418 U	0.0383 U	0.0377 U	0.0396 U	0.0396 U	0.0351 U	0.0356 U	0.0395 U
Aroclor-1221	NS	NS	0.0386 U	0.0446 U	0.0417 U	0.0372 U	0.0351 U	0.0367 U	0.0418 U	0.0383 U	0.0377 U	0.0396 U	0.0396 U	0.0351 U	0.0356 U	0.0395 U
Aroclor-1232	NS	NS	0.0386 U	0.0446 U	0.0417 U	0.0372 U	0.0351 U	0.0367 U	0.0418 U	0.0383 U	0.0377 U	0.0396 U	0.0396 U	0.0351 U	0.0356 U	0.0395 U
Aroclor-1242	NS	NS	0.0386 U	0.0446 U	0.0417 U	0.0372 U	0.0351 U	0.0367 U	0.0418 U	0.0383 U	0.0377 U	0.0396 U	0.0396 U	0.0351 U	0.0356 U	0.0395 U
Aroclor-1248	NS	NS	0.0386 U	0.0446 U	0.0417 U	0.0372 U	0.0351 U	0.0367 U	0.0418 U	0.0383 U	0.0377 U	0.0396 U	0.0396 U	0.0351 U	0.0356 U	0.0395 U
Aroclor-1254	NS	NS	0.0386 U	0.0446 U	0.0417 U	0.0372 U	0.0351 U	0.0367 U	0.0418 U	0.0383 U	0.0377 U	0.0396 U	0.0148 J	0.0351 U	0.0188 J	0.00527 J
Aroclor-1260	NS	NS	0.0386 U	0.0446 U	0.0417 U	0.0372 U	0.0351 U	0.0367 U	0.0418 U	0.0383 U	0.0377 U	0.0396 U	0.00914 J	0.0351 U	0.0356 U	0.0395 U
Aroclor-1262	NS	NS	0.0386 U	0.0446 U	0.0417 U	0.0372 U	0.0351 U	0.0367 U	0.0418 U	0.0383 U	0.0377 U	0.0396 U	0.0396 U	0.0351 U	0.0356 U	0.0395 U
Aroclor-1268	NS	NS	0.0386 U	0.0446 U	0.0417 U	0.0372 U	0.0351 U	0.0367 U	0.0418 U	0.0383 U	0.0377 U	0.0396 U	0.00532 J	0.0351 U	0.0356 U	0.0395 U
Total PCBs	NS	1	0.0386 U	0.0446 U	0.0417 U	0.0372 U	0.0351 U	0.0367 U	0.0418 U	0.0383 U	0.0377 U	0.0396 U	0.0293 J	0.0351 U	0.0188 J	0.00527 J
Total PCBs	NS	10	0.0386 U	0.0446 U	0.0417 U	0.0372 U	0.0351 U	0.0367 U	0.0418 U	0.0383 U	0.0377 U	0.0396 U	0.0293 J	0.0351 U	0.0188 J	0.00527 J
Total PCBs	3.2	1	0.0386 U	0.0446 U	0.0417 U	0.0372 U	0.0351 U	0.0367 U	0.0418 U	0.0383 U	0.0377 U	0.0396 U	0.0293 J	0.0351 U	0.0188 J	0.00527 J

Notes:
NYSDEC GW Protection SCO = New York State Department of Environmental Conservation Groundwater Protection Soil Cleanup Objectives, from Table 375-6.8 of 6 NYCRR Part 375.
NYSDEC Commercial SCO = New York State Department of Environmental Conservation Restricted Commercial Use Soil Cleanup Objectives, from Table 375-6.8 of 6 NYCRR Part 375.
ft bgs = Feet below ground surface.
mg/kg = Milligrams per kilogram.
No samples exceed the NYSDEC GW Protection SCO.
No samples exceed the NYSDEC Commercial SCO.
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NS = No standard currently established.
ND = Not Detected.
U = Not detected above laboratory detection limit.
U' = Laboratory reporting limit exceeds the applicable regulatory standard or criteria being utilized.
J = Result below the reporting limit (estimated value).
DUP = Duplicate sample was taken.
When the applicable state standard applies to mixed isomers and the laboratory reports individual isomers, the total standard is listed for each isomer.

Table 5
Soil Reuse Characterization Sampling Results
Summary of PCB Soil Analytical Data.
MJ Painting; Olean, New York.

Sample ID	NYSDEC GW Protection SCO	NYSDEC Commercial SCO	RX-436	RX-436	RX-437	RX-439	RX-439	RX-439	RX-440	RX-441	RX-442	RX-443	RX-443	RX-443	RX-444	RX-444
Sample Depth (ft bgs)			4-7	10-12	1-4	0-1	4-7	10-12	4-7	7-10	1-4	0-1	4-7	10-12	0-1	1-4
Sample Date			11/17/2021	11/17/2021	11/17/2021	11/17/2021	11/18/2021	11/18/2021	11/17/2021	11/16/2021	11/17/2021	11/16/2021	11/16/2021	11/16/2021	11/17/2021	11/17/2021
POLYCHLORINATED BIPHENYLS - 8082A (mg/kg)																
Aroclor-1016	NS	NS	0.0444 U	0.0361 U	0.0388 U	0.0416 U	0.0474 U	0.0406 U	0.0502 U	0.0368 U	0.039 U	0.045 U	0.0392 U	0.0387 U	0.0404 U	0.0421 U
Aroclor-1221	NS	NS	0.0444 U	0.0361 U	0.0388 U	0.0416 U	0.0474 U	0.0406 U	0.0502 U	0.0368 U	0.039 U	0.045 U	0.0392 U	0.0387 U	0.0404 U	0.0421 U
Aroclor-1232	NS	NS	0.0444 U	0.0361 U	0.0388 U	0.0416 U	0.0474 U	0.0406 U	0.0502 U	0.0368 U	0.039 U	0.045 U	0.0392 U	0.0387 U	0.0404 U	0.0421 U
Aroclor-1242	NS	NS	0.0444 U	0.0361 U	0.0388 U	0.0416 U	0.0474 U	0.0406 U	0.0502 U	0.0368 U	0.039 U	0.045 U	0.0392 U	0.0387 U	0.0404 U	0.0421 U
Aroclor-1248	NS	NS	0.0444 U	0.0361 U	0.0388 U	0.0416 U	0.0474 U	0.0406 U	0.0502 U	0.0368 U	0.039 U	0.045 U	0.0392 U	0.0387 U	0.0404 U	0.0421 U
Aroclor-1254	NS	NS	0.0444 U	0.0361 U	0.324	0.0416 U	0.0474 U	0.0406 U	0.00652 J	0.0368 U	0.039 U	0.0445 J	0.0392 U	0.0387 U	0.00889 J	0.0421 U
Aroclor-1260	NS	NS	0.0444 U	0.0361 U	0.0388 U	0.0416 U	0.0474 U	0.0406 U	0.0502 U	0.0368 U	0.039 U	0.045 U	0.0392 U	0.0387 U	0.00789 J	0.0421 U
Aroclor-1262	NS	NS	0.0444 U	0.0361 U	0.0388 U	0.0416 U	0.0474 U	0.0406 U	0.0502 U	0.0368 U	0.039 U	0.045 U	0.0392 U	0.0387 U	0.0404 U	0.0421 U
Aroclor-1268	NS	NS	0.0444 U	0.0361 U	0.0388 U	0.0416 U	0.0474 U	0.0406 U	0.0502 U	0.0368 U	0.039 U	0.015 J	0.0392 U	0.0387 U	0.0404 U	0.0421 U
Total PCBs	NS	1	0.0444 U	0.0361 U	0.324	0.0416 U	0.0474 U	0.0406 U	0.00652 J	0.0368 U	0.039 U	0.0595 J	0.0392 U	0.0387 U	0.0168 J	0.0421 U
Total PCBs	NS	10	0.0444 U	0.0361 U	0.324	0.0416 U	0.0474 U	0.0406 U	0.00652 J	0.0368 U	0.039 U	0.0595 J	0.0392 U	0.0387 U	0.0168 J	0.0421 U
Total PCBs	3.2	1	0.0444 U	0.0361 U	0.324	0.0416 U	0.0474 U	0.0406 U	0.00652 J	0.0368 U	0.039 U	0.0595 J	0.0392 U	0.0387 U	0.0168 J	0.0421 U

Notes:
NYSDEC GW Protection SCO = New York State Department of Environmental Conservation Groundwater Protection Soil Cleanup Objectives, from Table 375-6.8 of 6 NYCRR Part 375.
NYSDEC Commercial SCO = New York State Department of Environmental Conservation Restricted Commercial Use Soil Cleanup Objectives, from Table 375-6.8 of 6 NYCRR Part 375.
ft bgs = Feet below ground surface.
mg/kg = Milligrams per kilogram.
No samples exceed the NYSDEC GW Protection SCO.
No samples exceed the NYSDEC Commercial SCO.
— = Sample not analyzed.
NS = No standard currently established.
ND = Not Detected.
U = Not detected above laboratory detection limit.
U' = Laboratory reporting limit exceeds the applicable regulatory standard or criteria being utilized.
J = Result below the reporting limit (estimated value).
DUP = Duplicate sample was taken.
When the applicable state standard applies to mixed isomers and the laboratory reports individual isomers, the total standard is listed for each isomer.

Table 5
Soil Reuse Characterization Sampling Results
Summary of PCB Soil Analytical Data.
MJ Painting; Olean, New York.

Sample ID	NYSDEC GW Protection SCO	NYSDEC Commercial SCO	RX-444	RX-446	RX-446	RX-447	RX-447 DUP	RX-447	RX-447	RX-448	RX-448
Sample Depth (ft bgs)			7-10	1-4	7-10	4-7	4-7	7-10	10-12	1-4	7-10
Sample Date			11/17/2021	11/16/2021	11/16/2021	11/16/2021	11/16/2021	11/16/2021	11/16/2021	11/16/2021	11/18/2021
POLYCHLORINATED BIPHENYLS - 8082A (mg/kg)											
Aroclor-1016	NS	NS	0.0369 U	0.0375 U	0.038 U	0.0399 U	0.0391 U	0.0415 U	0.0391 U	0.0541 U	0.0502 U
Aroclor-1221	NS	NS	0.0369 U	0.0375 U	0.038 U	0.0399 U	0.0391 U	0.0415 U	0.0391 U	0.0541 U	0.0502 U
Aroclor-1232	NS	NS	0.0369 U	0.0375 U	0.038 U	0.0399 U	0.0391 U	0.0415 U	0.0391 U	0.0541 U	0.0502 U
Aroclor-1242	NS	NS	0.0369 U	0.0375 U	0.038 U	0.0399 U	0.0391 U	0.0415 U	0.0391 U	0.0541 U	0.0502 U
Aroclor-1248	NS	NS	0.0369 U	0.0375 U	0.038 U	0.0399 U	0.0391 U	0.0415 U	0.0391 U	0.0541 U	0.0502 U
Aroclor-1254	NS	NS	0.0369 U	0.0375 U	0.038 U	0.0399 U	0.0391 U	0.0415 U	0.0391 U	0.0541 U	0.0502 U
Aroclor-1260	NS	NS	0.0369 U	0.0375 U	0.038 U	0.0399 U	0.0391 U	0.0415 U	0.0391 U	0.0541 U	0.0502 U
Aroclor-1262	NS	NS	0.0369 U	0.0375 U	0.038 U	0.0399 U	0.0391 U	0.0415 U	0.0391 U	0.0541 U	0.0502 U
Aroclor-1268	NS	NS	0.0369 U	0.0375 U	0.038 U	0.0399 U	0.0391 U	0.0415 U	0.0391 U	0.0541 U	0.0502 U
Total PCBs	NS	1	0.0369 U	0.0375 U	0.038 U	0.0399 U	0.0391 U	0.0415 U	0.0391 U	0.0541 U	0.0502 U
Total PCBs	NS	10	0.0369 U	0.0375 U	0.038 U	0.0399 U	0.0391 U	0.0415 U	0.0391 U	0.0541 U	0.0502 U
Total PCBs	3.2	1	0.0369 U	0.0375 U	0.038 U	0.0399 U	0.0391 U	0.0415 U	0.0391 U	0.0541 U	0.0502 U

Notes:
NYSDEC GW Protection SCO = New York State Department of Environmental Conservation Groundwater Protection Soil Cleanup Objectives, from Table 375-6.8 of 6 NYCRR Part 375.
NYSDEC Commercial SCO = New York State Department of Environmental Conservation Restricted Commercial Use Soil Cleanup Objectives, from Table 375-6.8 of 6 NYCRR Part 375.
ft bgs = Feet below ground surface.
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No samples exceed the NYSDEC GW Protection SCO.
No samples exceed the NYSDEC Commercial SCO.
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U = Not detected above laboratory detection limit.
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J = Result below the reporting limit (estimated value).
DUP = Duplicate sample was taken.
When the applicable state standard applies to mixed isomers and the laboratory reports individual isomers, the total standard is listed for each isomer.

Table 5
Soil Reuse Characterization Sampling Results
Summary of Cyanide, Herbicides, and Pesticides in Soil.
MJ Painting; Olean, New York.

Sample ID	NYSDEC GW Protection	NYSDEC Commercial SCO	RX-301	RX-302	RX-303	RX-304	RX-305	RX-306	RX-307	RX-308	RX-309	RX-310	RX-311	RX-312	RX-313	RX-314
Sample Depth (ft bgs)			0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1
Sample Date			11/15/2021	11/9/2021	11/15/2021	11/15/2021	11/15/2021	11/16/2021	11/17/2021	11/17/2021	11/17/2021	11/17/2021	11/18/2021	11/17/2021	1/5/2022	1/4/2022
CYANIDE - 9010C/9012B (mg/kg)																
Cyanide	40	27	—	—	—	—	—	—	—	—	—	—	—	—	—	—
HERBICIDES - 8151A (mg/kg)																
2,4,5-T	NS	NS	0.192 U	0.2 U	0.212 U	0.19 U	0.208 U	0.186 U	0.18 U	0.197 U	0.185 U	0.188 U	0.203 U	0.195 U	0.232 U	0.22 U
2,4,5-TP (Silvex)	3.8	500	0.192 U	0.2 U	0.212 U	0.19 U	0.208 U	0.186 U	0.18 U	0.197 U	0.185 U	0.188 U	0.203 U	0.195 U	0.232 U	0.22 U
2,4-D	NS	NS	0.192 U	0.2 U	0.212 U	0.19 U	0.208 U	0.186 U	0.18 U	0.197 U	0.185 U	0.188 U	0.203 U	0.195 U	0.232 U	0.22 U
PESTICIDES - 8081B (mg/kg)																
Aldrin	0.19	0.68	0.00187 U	0.019 U'	0.00198 U	0.0018 U	0.002 U	0.00174 U	0.0017 U	0.00188 U	0.00173 U	0.00184 U	0.00198 U	0.00184 U	0.0213 U'	0.0204 U'
alpha-BHC	0.02	3.4	0.000778 U	0.0079 U	0.000824 U	0.000752 U	0.000834 U	0.000727 U	0.00071 U	0.000783 U	0.000722 U	0.000766 U	0.000823 U	0.000769 U	0.00887 U	0.0085 U
beta-BHC	0.09	3	0.00187 U	0.019 U	0.00198 U	0.0018 U	0.002 U	0.00174 U	0.0017 U	0.00188 U	0.00173 U	0.00184 U	0.00198 U	0.00184 U	0.0213 U	0.0204 U
Chlordane	NS	NS	0.0156 U	0.158 U	0.0165 U	0.015 U	0.0167 U	0.0145 U	0.0142 U	0.0157 U	0.0144 U	0.0153 U	0.0165 U	0.0154 U	0.177 U	0.17 U
cis-Chlordane	2.9	24	0.00233 U	0.0237 U	0.00247 U	0.00225 U	0.0025 U	0.00218 U	0.00213 U	0.00235 U	0.00217 U	0.0023 U	0.00247 U	0.00231 U	0.0266 U	0.0255 U
delta-BHC	0.25	500	0.00187 U	0.019 U	0.00198 U	0.0018 U	0.002 U	0.00174 U	0.0017 U	0.00188 U	0.00173 U	0.00184 U	0.00198 U	0.00184 U	0.0213 U	0.0204 U
Dieldrin	0.1	1.4	0.00117 U	0.0118 U'	0.00124 U	0.00113 U	0.00125 U	0.00109 U	0.00106 U	0.00117 U	0.00108 U	0.00115 U	0.00124 U	0.00115 U	0.0133 U'	0.0127 U'
Endosulfan I	102	200	0.00187 U	0.019 U	0.00198 U	0.0018 U	0.002 U	0.00174 U	0.0017 U	0.00188 U	0.00173 U	0.00184 U	0.00198 U	0.00184 U	0.0213 U	0.0204 U
Endosulfan II	102	200	0.00187 U	0.019 U	0.00198 U	0.0018 U	0.002 U	0.00174 U	0.0017 U	0.00188 U	0.00173 U	0.00184 U	0.00198 U	0.00184 U	0.0213 U	0.0204 U
Endosulfan sulfate	1000	200	0.000778 U	0.0079 U	0.000824 U	0.000752 U	0.000834 U	0.000727 U	0.00071 U	0.000783 U	0.000722 U	0.000766 U	0.000823 U	0.000769 U	0.00887 U	0.0085 U
Endrin	0.06	89	0.000778 U	0.0079 U	0.000824 U	0.000752 U	0.000834 U	0.000727 U	0.00071 U	0.000783 U	0.000722 U	0.000766 U	0.000823 U	0.000769 U	0.00887 U	0.0085 U
Endrin Aldehyde	NS	NS	0.00233 U	0.0237 U	0.00247 U	0.00225 U	0.0025 U	0.00218 U	0.00213 U	0.00235 U	0.00217 U	0.0023 U	0.00247 U	0.00231 U	0.0266 U	0.0255 U
Endrin Ketone	NS	NS	0.00187 U	0.019 U	0.00198 U	0.0018 U	0.002 U	0.00174 U	0.0017 U	0.00188 U	0.00173 U	0.00184 U	0.00198 U	0.00184 U	0.0213 U	0.0204 U
Heptachlor	0.38	15	0.000933 U	0.00948 U	0.000989 U	0.000902 U	0.001 U	0.000872 U	0.000852 U	0.00094 U	0.000866 U	0.000919 U	0.000988 U	0.000923 U	0.0106 U	0.0102 U
Heptachlor Epoxide	NS	NS	0.0035 U	0.0356 U	0.00371 U	0.00338 U	0.00375 U	0.00327 U	0.0032 U	0.00352 U	0.00325 U	0.00345 U	0.0037 U	0.00346 U	0.0399 U	0.0382 U
Lindane	0.1	9.2	0.000778 U	0.0079 U	0.000824 U	0.000752 U	0.000834 U	0.000727 U	0.00071 U	0.000783 U	0.000722 U	0.000766 U	0.000823 U	0.000769 U	0.00887 U	0.0085 U
Methoxychlor	NS	NS	0.0035 U	0.0356 U	0.00371 U	0.00338 U	0.00375 U	0.00327 U	0.0032 U	0.00352 U	0.00325 U	0.00345 U	0.0037 U	0.00346 U	0.0399 U	0.0382 U
p,p'-DDD	14	92	0.00187 U	0.019 U'	0.000924 J	0.0018 U	0.002 U	0.00174 U	0.0017 U	0.00188 U	0.00173 U	0.00184 U	0.00198 U	0.00184 U	0.0213 U'	0.0102 J
p,p'-DDE	17	62	0.00187 U	0.019 U'	0.0033	0.0018 U	0.002 U	0.00174 U	0.0017 U	0.00188 U	0.00173 U	0.00184 U	0.00198 U	0.00184 U	0.0213 U'	0.00629 J
p,p'-DDT	136	47	0.0035 U'	0.0356 U'	0.00286 J	0.00338 U'	0.00375 U'	0.00327 U	0.0032 U	0.00352 U'	0.00325 U	0.00345 U'	0.0037 U'	0.00346 U'	0.0399 U'	0.0267 J
Toxaphene	NS	NS	0.035 U	0.356 U	0.0371 U	0.0338 U	0.0375 U	0.0327 U	0.032 U	0.0352 U	0.0325 U	0.0345 U	0.037 U	0.0346 U	0.399 U	0.382 U
trans-Chlordane	NS	NS	0.00233 U	0.0237 U	0.00247 U	0.00225 U	0.0025 U	0.00218 U	0.00213 U	0.00235 U	0.00217 U	0.0023 U	0.00247 U	0.00231 U	0.0266 U	0.0255 U

Notes:
NYSDEC GW Protection SCO = New York State Department of Environmental Conservation Groundwater Protection Soil Cleanup Objectives, from Table 375-6.8 of 6 NYCRR Part 375.
NYSDEC Commercial SCO = New York State Department of Environmental Conservation Restricted Commercial Use Soil Cleanup Objectives, from Table 375-6.8 of 6 NYCRR Part 375.
ft bgs = Feet below ground surface.
mg/kg = Milligrams per kilogram.
No samples exceed the NYSDEC GW Protection SCO.
No samples exceed the NYSDEC Commercial SCO.
— = Sample not analyzed.
NS = No standard currently established.
ND = Not Detected.
U = Not detected above laboratory detection limit.
U' = Laboratory reporting limit exceeds the applicable regulatory standard or criteria being utilized.
I = The lower value for the two columns has been reported due to obvious interference
P = The RPD between the results for the two columns exceeds the method-specified criteria.
J = Result below the reporting limit (estimated value).
DUP = Duplicate sample was taken.
When the applicable state standard applies to mixed isomers and the laboratory reports individual isomers, the total standard is listed for each isomer.

Table 5
Soil Reuse Characterization Sampling Results
Summary of Cyanide, Herbicides, and Pesticides in Soil.
MJ Painting; Olean, New York.

Sample ID	**NYSDEC**	**NYSDEC**	**RX-315**	**RX-316**	**RX-317**	**RX-318**	**RX-319**	**RX-320**	**RX-321**	**RX-321 DUP**	**RX-401**	**RX-401**	**RX-401**	**RX-402**	**RX-403**	**RX-403**	**RX-403**	**RX-404**
Sample Depth (ft bgs)	**GW**	**Commercial**	**0-1**	**0-1**	**0-1**	**0-1**	**0-1**	**0-1**	**0-1**	**0-1**	**0-1**	**1-4**	**7-10**	**7-10**	**0-1**	**4-7**	**10-12**	**7-10**
Sample Date	**Protection**	**SCO**	**1/7/2022**	**1/7/2022**	**1/7/2022**	**1/4/2022**	**1/7/2022**	**1/5/2022**	**1/7/2022**	**1/7/2022**	**11/12/2021**	**11/12/2021**	**11/12/2021**	**11/12/2021**	**11/12/2021**	**11/12/2021**	**11/12/2021**	**11/12/2021**
CYANIDE - 9010C/9012B (mg/kg)																		
Cyanide	40	27	—	—	—	—	—	—	—	—	10 U	—	10 U	—	10 U	—	—	10 U
HERBICIDES - 8151A (mg/kg)																		
2,4,5-T	NS	NS	0.228 U	0.257 U	0.225 U	0.221 U	0.216 U	0.22 U	0.214 U	0.211 U	0.193 U	0.968 U	0.213 U	0.214 U	0.207 U	0.209 U	0.192 U	0.198 U
2,4,5-TP (Silvex)	3.8	500	0.228 U	0.257 U	0.225 U	0.221 U	0.216 U	0.22 U	0.214 U	0.211 U	0.193 U	0.968 U	0.213 U	0.214 U	0.207 U	0.209 U	0.192 U	0.198 U
2,4-D	NS	NS	0.228 U	0.257 U	0.225 U	0.221 U	0.216 U	0.22 U	0.214 U	0.211 U	0.193 U	0.968 U	0.213 U	0.214 U	0.207 U	0.209 U	0.192 U	0.198 U
PESTICIDES - 8081B (mg/kg)																		
Aldrin	0.19	0.68	0.0111 U'	0.024 U'	0.0104 U'	0.0209 U'	0.0102 U'	0.0214 U'	0.0104 U'	0.00972 U'	0.0176 U'	0.0184 U'	0.00201 U	0.00201 U	0.00192 U	0.0195 U'	0.00186 U	0.00186 U
alpha-BHC	0.02	3.4	0.00461 U	0.00999 U	0.00436 U	0.00871 U	0.00425 U	0.00894 U	0.00432 U	0.00405 U	0.00735 U	0.00769 U	0.000837 U	0.000838 U	0.0008 U	0.00812 U	0.000777 U	0.000774 U
beta-BHC	0.09	3	0.0111 U	0.024 U	0.0104 U	0.0209 U	0.0102 U	0.0214 U	0.0104 U	0.00972 U	0.0176 U	0.0184 U	0.00201 U	0.00201 U	0.00192 U	0.0195 U	0.00186 U	0.00186 U
Chlordane	NS	NS	0.0922 U	0.2 U	0.0872 U	0.174 U	0.085 U	0.179 U	0.0863 U	0.081 U	0.147 U	0.154 U	0.0167 U	0.0168 U	0.016 U	0.162 U	0.0155 U	0.0155 U
cis-Chlordane	2.9	24	0.0138 U	0.03 U	0.0131 U	0.0261 U	0.0128 U	0.0268 U	0.013 U	0.0122 U	0.022 U	0.0231 U	0.00251 U	0.00251 U	0.0024 U	0.0244 U	0.00233 U	0.00232 U
delta-BHC	0.25	500	0.0111 U	0.024 U	0.0104 U	0.0209 U	0.0102 U	0.0214 U	0.0104 U	0.00972 U	0.0176 U	0.0184 U	0.00201 U	0.00201 U	0.00192 U	0.0195 U	0.00186 U	0.00186 U
Dieldrin	0.1	1.4	0.00692 U'	0.015 U'	0.00654 U'	0.0131 U'	0.00638 U'	0.0134 U'	0.00648 U'	0.00608 U'	0.011 U'	0.0115 U'	0.00126 U	0.00126 U	0.0012 U	0.0122 U'	0.00116 U	0.00116 U
Endosulfan I	102	200	0.0111 U	0.024 U	0.0104 U	0.0209 U	0.0102 U	0.0214 U	0.0104 U	0.00972 U	0.0176 U	0.0184 U	0.00201 U	0.00201 U	0.00192 U	0.0195 U	0.00186 U	0.00186 U
Endosulfan II	102	200	0.0111 U	0.024 U	0.0104 U	0.0209 U	0.0102 U	0.0214 U	0.0104 U	0.00972 U	0.0176 U	0.0184 U	0.00201 U	0.00201 U	0.00192 U	0.0195 U	0.00186 U	0.00186 U
Endosulfan sulfate	1000	200	0.00461 U	0.00999 U	0.00436 U	0.00871 U	0.00425 U	0.00894 U	0.00432 U	0.00405 U	0.00735 U	0.00769 U	0.000837 U	0.000838 U	0.0008 U	0.00812 U	0.000777 U	0.000774 U
Endrin	0.06	89	0.00461 U	0.00999 U	0.00436 U	0.00871 U	0.00425 U	0.00894 U	0.00432 U	0.00405 U	0.00735 U	0.00769 U	0.000837 U	0.000838 U	0.0008 U	0.00812 U	0.000777 U	0.000774 U
Endrin Aldehyde	NS	NS	0.0138 U	0.03 U	0.0131 U	0.0261 U	0.0128 U	0.0268 U	0.013 U	0.0122 U	0.022 U	0.0231 U	0.00251 U	0.00251 U	0.0024 U	0.0244 U	0.00233 U	0.00232 U
Endrin Ketone	NS	NS	0.0111 U	0.024 U	0.0104 U	0.0209 U	0.0102 U	0.0214 U	0.0104 U	0.00972 U	0.0176 U	0.0184 U	0.00201 U	0.00201 U	0.00192 U	0.0195 U	0.00186 U	0.00186 U
Heptachlor	0.38	15	0.00553 U	0.012 U	0.00523 U	0.0104 U	0.0051 U	0.0107 U	0.00518 U	0.00486 U	0.00882 U	0.00923 U	0.001 U	0.001 U	0.00096 U	0.00975 U	0.000932 U	0.000928 U
Heptachlor Epoxide	NS	NS	0.0207 U	0.045 U	0.0196 U	0.0392 U	0.0191 U	0.0402 U	0.0194 U	0.0182 U	0.0331 U	0.0346 U	0.00376 U	0.00377 U	0.0036 U	0.0366 U	0.0035 U	0.00348 U
Lindane	0.1	9.2	0.00461 U	0.00999 U	0.00436 U	0.00871 U	0.00425 U	0.00894 U	0.00432 U	0.00405 U	0.00735 U	0.00769 U	0.000837 U	0.000838 U	0.0008 U	0.00812 U	0.000777 U	0.000774 U
Methoxychlor	NS	NS	0.0207 U	0.045 U	0.0196 U	0.0392 U	0.0191 U	0.0402 U	0.0194 U	0.0182 U	0.0331 U	0.0346 U	0.00376 U	0.00377 U	0.0036 U	0.0366 U	0.0035 U	0.00348 U
p,p'-DDD	14	92	0.0111 U'	0.024 U'	0.0104 U'	0.0209 U'	0.0102 U'	0.0214 U'	0.0104 U'	0.00972 U'	0.0618	0.0184 U'	0.00201 U	0.00201 U	0.00192 U	0.0195 U'	0.00186 U	0.00186 U
p,p'-DDE	17	62	0.0111 U'	0.024 U'	0.0104 U'	0.0209 U'	0.0102 U'	0.0214 U'	0.0104 U'	0.00972 U'	0.0176 U'	0.0184 U'	0.00201 U	0.00201 U	0.00192 U	0.0195 U'	0.00186 U	0.00186 U
p,p'-DDT	136	47	0.0207 U'	0.045 U'	0.0196 U'	0.0392 U'	0.0191 U'	0.0402 U'	0.0194 U'	0.0182 U'	0.0331 U'	0.0346 U'	0.00376 U'	0.00377 U'	0.0036 U'	0.0366 U'	0.0035 U'	0.00348 U'
Toxaphene	NS	NS	0.207 U	0.45 U	0.196 U	0.392 U	0.191 U	0.402 U	0.194 U	0.182 U	0.331 U	0.346 U	0.0376 U	0.0377 U	0.036 U	0.366 U	0.035 U	0.0348 U
trans-Chlordane	NS	NS	0.0138 U	0.03 U	0.0131 U	0.0261 U	0.0128 U	0.0268 U	0.013 U	0.0122 U	0.022 U	0.0231 U	0.00251 U	0.00251 U	0.0024 U	0.0244 U	0.00233 U	0.00232 U

Notes:
NYSDEC GW Protection SCO = New York State Department of Environmental Conservation Groundwater Protection Soil Cleanup Objectives, from Table 375-6.8 of 6 NYCRR Part 375.
NYSDEC Commercial SCO = New York State Department of Environmental Conservation Restricted Commercial Use Soil Cleanup Objectives, from Table 375-6.8 of 6 NYCRR Part 375.
ft bgs = Feet below ground surface.
mg/kg = Milligrams per kilogram.
No samples exceed the NYSDEC GW Protection SCO.
No samples exceed the NYSDEC Commercial SCO.
— = Sample not analyzed.
NS = No standard currently established.
ND = Not Detected.
U = Not detected above laboratory detection limit.
U' = Laboratory reporting limit exceeds the applicable regulatory standard or criteria being utilized.
I = The lower value for the two columns has been reported due to obvious interference
P = The RPD between the results for the two columns exceeds the method-specified criteria.
J = Result below the reporting limit (estimated value).
DUP = Duplicate sample was taken.
When the applicable state standard applies to mixed isomers and the laboratory reports individual isomers, the total standard is listed for each isomer.

Table 5

Soil Reuse Characterization Sampling Results

Summary of Cyanide, Herbicides, and Pesticides in Soil.

MJ Painting; Olean, New York.

Sample ID	NYSDEC GW Protection	NYSDEC Commercial SCO	RX-405	RX-405	RX-405	RX-407	RX-407	RX-407	RX-409	RX-410	RX-411	RX-413	RX-414	RX-415	RX-416	RX-416	RX-417
Sample Depth (ft bgs)			0-1	1-4	7-10	0-1	4-7	10-12	1-4	10-12	7-10	10-12	4-7	7-10	1-4	10-12	0-1
Sample Date			11/15/2021	11/15/2021	11/15/2021	11/15/2021	11/15/2021	11/15/2021	11/12/2021	11/12/2021	11/12/2021	11/15/2021	11/15/2021	11/16/2021	11/16/2021	11/16/2021	11/11/2021
CYANIDE - 9010C/9012B (mg/kg)																	
Cyanide	40	27	10 U	—	—	10 U	—	—	—	10 U	10 U	—	—	—	—	10 U	10 U
HERBICIDES - 8151A (mg/kg)																	
2,4,5-T	NS	NS	0.221 U	0.19 U	0.198 U	0.186 U	0.209 U	0.189 U	0.2 U	0.191 U	0.201 U	0.194 U	0.201 U	0.217 U	0.203 U	0.186 U	0.185 U
2,4,5-TP (Silvex)	3.8	500	0.221 U	0.19 U	0.198 U	0.186 U	0.209 U	0.189 U	0.2 U	0.191 U	0.201 U	0.194 U	0.201 U	0.217 U	0.203 U	0.186 U	0.185 U
2,4-D	NS	NS	0.221 U	0.19 U	0.198 U	0.186 U	0.209 U	0.189 U	0.2 U	0.191 U	0.201 U	0.194 U	0.201 U	0.217 U	0.203 U	0.186 U	0.185 U
PESTICIDES - 8081B (mg/kg)																	
Aldrin	0.19	0.68	0.00207 U	0.0184 U'	0.00182 U	0.00182 U	0.002 U	0.00174 U	0.00921 U'	0.00903 U'	0.00187 U	0.00185 U	0.0198 U'	0.0021 U	0.00186 U	0.00178 U	0.00171 U
alpha-BHC	0.02	3.4	0.000861 U	0.00765 U	0.000756 U	0.000757 U	0.000835 U	0.000727 U	0.00384 U	0.00376 U	0.00078 U	0.000769 U	0.00824 U	0.000877 U	0.000775 U	0.000743 U	0.000714 U
beta-BHC	0.09	3	0.00207 U	0.0184 U	0.00182 U	0.00182 U	0.002 U	0.00174 U	0.00921 U	0.00903 U	0.00187 U	0.00185 U	0.0198 U	0.0021 U	0.00186 U	0.00178 U	0.00171 U
Chlordane	NS	NS	0.0172 U	0.153 U	0.0151 U	0.0151 U	0.0167 U	0.0145 U	0.0767 U	0.0752 U	0.0156 U	0.0154 U	0.165 U	0.0175 U	0.0155 U	0.0149 U	0.0143 U
cis-Chlordane	2.9	24	0.00258 U	0.0229 U	0.00227 U	0.00227 U	0.0025 U	0.00218 U	0.0115 U	0.0113 U	0.00234 U	0.00231 U	0.0247 U	0.00263 U	0.00232 U	0.00223 U	0.00214 U
delta-BHC	0.25	500	0.00207 U	0.0184 U	0.00182 U	0.00182 U	0.002 U	0.00174 U	0.00921 U	0.00903 U	0.00187 U	0.00185 U	0.0198 U	0.0021 U	0.00186 U	0.00178 U	0.00171 U
Dieldrin	0.1	1.4	0.00129 U	0.0115 U'	0.00113 U	0.00114 U	0.00125 U	0.00109 U	0.00576 U'	0.00564 U'	0.00117 U	0.00115 U	0.0124 U'	0.00132 U	0.00116 U	0.00111 U	0.00107 U
Endosulfan I	102	200	0.00207 U	0.0184 U	0.00182 U	0.00182 U	0.002 U	0.00174 U	0.00921 U	0.00903 U	0.00187 U	0.00185 U	0.0198 U	0.0021 U	0.00186 U	0.00178 U	0.00171 U
Endosulfan II	102	200	0.00207 U	0.0184 U	0.00182 U	0.00182 U	0.002 U	0.00174 U	0.00921 U	0.00903 U	0.00187 U	0.00185 U	0.0198 U	0.0021 U	0.00186 U	0.00178 U	0.00171 U
Endosulfan sulfate	1000	200	0.000861 U	0.00765 U	0.000756 U	0.000757 U	0.000835 U	0.000727 U	0.00384 U	0.00376 U	0.00078 U	0.000769 U	0.00824 U	0.000877 U	0.000775 U	0.000743 U	0.000714 U
Endrin	0.06	89	0.000861 U	0.00765 U	0.000756 U	0.000757 U	0.000835 U	0.000727 U	0.00384 U	0.00376 U	0.00078 U	0.000769 U	0.00824 U	0.000877 U	0.000775 U	0.000743 U	0.000714 U
Endrin Aldehyde	NS	NS	0.00258 U	0.0229 U	0.00227 U	0.00227 U	0.0025 U	0.00218 U	0.0115 U	0.0113 U	0.00234 U	0.00231 U	0.0247 U	0.00263 U	0.00232 U	0.00223 U	0.00214 U
Endrin Ketone	NS	NS	0.00207 U	0.0184 U	0.00182 U	0.00182 U	0.002 U	0.00174 U	0.00921 U	0.00903 U	0.00187 U	0.00185 U	0.0198 U	0.0021 U	0.00186 U	0.00178 U	0.00171 U
Heptachlor	0.38	15	0.00103 U	0.00918 U	0.000908 U	0.000908 U	0.001 U	0.000872 U	0.0046 U	0.00452 U	0.000936 U	0.000923 U	0.00989 U	0.00105 U	0.00093 U	0.000892 U	0.000857 U
Heptachlor Epoxide	NS	NS	0.00388 U	0.0344 U	0.0034 U	0.0034 U	0.00376 U	0.00327 U	0.0173 U	0.0169 U	0.00351 U	0.00346 U	0.0371 U	0.00395 U	0.00348 U	0.00334 U	0.00321 U
Lindane	0.1	9.2	0.000861 U	0.00765 U	0.000756 U	0.000757 U	0.000835 U	0.000727 U	0.00384 U	0.00376 U	0.00078 U	0.000769 U	0.00824 U	0.000877 U	0.000775 U	0.000743 U	0.000714 U
Methoxychlor	NS	NS	0.00388 U	0.0344 U	0.0034 U	0.0034 U	0.00376 U	0.00327 U	0.0173 U	0.0169 U	0.00351 U	0.00346 U	0.0371 U	0.00395 U	0.00348 U	0.00334 U	0.00321 U
p,p'-DDD	14	92	0.00207 U	0.0184 U'	0.00182 U	0.00182 U	0.002 U	0.00174 U	0.00921 U'	0.00903 U'	0.00187 U	0.00185 U	0.0198 U'	0.0021 U	0.00186 U	0.00178 U	0.00171 U
p,p'-DDE	17	62	0.00207 U	0.0184 U'	0.00182 U	0.00182 U	0.002 U	0.00174 U	0.00921 U'	0.00903 U'	0.00187 U	0.00185 U	0.0198 U'	0.0021 U	0.00186 U	0.00178 U	0.00171 U
p,p'-DDT	136	47	0.00388 U'	0.0344 U'	0.0034 U'	0.0034 U'	0.00376 U'	0.00327 U	0.0173 U'	0.0169 U'	0.00351 U'	0.00346 U'	0.0371 U'	0.00395 U'	0.00348 U'	0.00334 U'	0.00321 U
Toxaphene	NS	NS	0.0388 U	0.344 U	0.034 U	0.034 U	0.0376 U	0.0327 U	0.173 U	0.169 U	0.0351 U	0.0346 U	0.371 U	0.0395 U	0.0348 U	0.0334 U	0.0321 U
trans-Chlordane	NS	NS	0.00258 U	0.0229 U	0.00227 U	0.00227 U	0.0025 U	0.00218 U	0.0115 U	0.0113 U	0.00234 U	0.00231 U	0.0247 U	0.00263 U	0.00232 U	0.00223 U	0.00214 U

Notes:

NYSDEC GW Protection SCO = New York State Department of Environmental Conservation Groundwater Protection Soil Cleanup Objectives, from Table 375-6.8 of 6 NYCRR Part 375.

NYSDEC Commercial SCO = New York State Department of Environmental Conservation Restricted Commercial Use Soil Cleanup Objectives, from Table 375-6.8 of 6 NYCRR Part 375.

ft bgs = Feet below ground surface.

mg/kg = Milligrams per kilogram.

No samples exceed the NYSDEC GW Protection SCO.

No samples exceed the NYSDEC Commercial SCO.

— = Sample not analyzed.

NS = No standard currently established.

ND = Not Detected.

U = Not detected above laboratory detection limit.

U' = Laboratory reporting limit exceeds the applicable regulatory standard or criteria being utilized.

I = The lower value for the two columns has been reported due to obvious interference

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

J = Result below the reporting limit (estimated value).

DUP = Duplicate sample was taken.

When the applicable state standard applies to mixed isomers and the laboratory reports individual isomers, the total standard is listed for each isomer.

Table 5

Soil Reuse Characterization Sampling Results

Summary of Cyanide, Herbicides, and Pesticides in Soil.

MJ Painting; Olean, New York.

Sample ID	NYSDEC GW Protection	NYSDEC Commercial SCO	RX-417	RX-417	RX-417	RX-418	RX-418	RX-419	RX-419	RX-419	RX-420	RX-420	RX-420	RX-420	RX-421	RX-422	RX-422
Sample Depth (ft bgs)			1-4	7-10	10-12	4-7	10-12	1-4	7-10	10-12	0-1	4-7	7-10	10-12	10-12	0-1	1-4
Sample Date			11/11/2021	11/11/2021	11/11/2021	11/11/2021	11/11/2021	11/15/2021	11/15/2021	11/15/2021	11/15/2021	11/15/2021	11/15/2021	11/15/2021	11/11/2021	11/10/2021	11/10/2021
CYANIDE - 9010C/9012B (mg/kg)																	
Cyanide	40	27	—	—	10 U	—	10 U	—	—	10 U	10 U	—	10 U	10 U	—	10 U	—
HERBICIDES - 8151A (mg/kg)																	
2,4,5-T	NS	NS	0.177 U	0.211 U	0.277 U	0.193 U	0.211 U	0.189 U	0.283 U	0.196 U	0.195 U	0.186 U	0.233 U	0.209 U	0.223 U	0.249 U	0.177 U
2,4,5-TP (Silvex)	3.8	500	0.177 U	0.211 U	0.277 U	0.193 U	0.211 U	0.189 U	0.283 U	0.196 U	0.195 U	0.186 U	0.233 U	0.209 U	0.223 U	0.249 U	0.177 U
2,4-D	NS	NS	0.177 U	0.211 U	0.277 U	0.193 U	0.211 U	0.189 U	0.283 U	0.196 U	0.195 U	0.186 U	0.233 U	0.209 U	0.223 U	0.249 U	0.177 U
PESTICIDES - 8081B (mg/kg)																	
Aldrin	0.19	0.68	0.00164 U	0.00202 U	0.00259 U	0.0178 U'	0.00978 U'	0.00174 U	0.027 U'	0.00179 U	0.00187 U	0.0175 U'	0.0215 U'	0.00206 U	0.00208 U	0.00232 U	0.00164 U
alpha-BHC	0.02	3.4	0.000685 U	0.000842 U	0.00108 U	0.0074 U	0.00408 U	0.000724 U	0.0112 U	0.000747 U	0.000779 U	0.00731 U	0.00895 U	0.000858 U	0.000869 U	0.000969 U	0.000683 U
beta-BHC	0.09	3	0.00164 U	0.00202 U	0.00259 U	0.0178 U	0.00978 U	0.00174 U	0.027 U	0.00179 U	0.00187 U	0.0175 U	0.0215 U	0.00206 U	0.00208 U	0.00232 U	0.00164 U
Chlordane	NS	NS	0.0137 U	0.0168 U	0.0216 U	0.148 U	0.0815 U	0.0145 U	0.225 U	0.0149 U	0.0156 U	0.146 U	0.179 U	0.0172 U	0.0174 U	0.0194 U	0.0137 U
cis-Chlordane	2.9	24	0.00205 U	0.00253 U	0.00324 U	0.0222 U	0.0122 U	0.00217 U	0.0337 U	0.00224 U	0.00234 U	0.0219 U	0.0268 U	0.00257 U	0.00261 U	0.00291 U	0.00205 U
delta-BHC	0.25	500	0.00164 U	0.00202 U	0.00259 U	0.0178 U	0.00978 U	0.00174 U	0.027 U	0.00179 U	0.00187 U	0.0175 U	0.0215 U	0.00206 U	0.00208 U	0.00232 U	0.00164 U
Dieldrin	0.1	1.4	0.00103 U	0.00126 U	0.00162 U	0.0111 U'	0.00611 U'	0.00108 U	0.0169 U'	0.00112 U	0.00117 U	0.011 U'	0.0134 U'	0.00129 U	0.0013 U	0.00145 U	0.00102 U
Endosulfan I	102	200	0.00164 U	0.00202 U	0.00259 U	0.0178 U	0.00978 U	0.00174 U	0.027 U	0.00179 U	0.00187 U	0.0175 U	0.0215 U	0.00206 U	0.00208 U	0.00232 U	0.00164 U
Endosulfan II	102	200	0.00164 U	0.00202 U	0.00259 U	0.0178 U	0.00978 U	0.00174 U	0.027 U	0.00179 U	0.00187 U	0.0175 U	0.0215 U	0.00206 U	0.00208 U	0.00232 U	0.00164 U
Endosulfan sulfate	1000	200	0.000685 U	0.000842 U	0.00108 U	0.0074 U	0.00408 U	0.000724 U	0.0112 U	0.000747 U	0.000779 U	0.00731 U	0.00895 U	0.000858 U	0.000869 U	0.000969 U	0.000683 U
Endrin	0.06	89	0.000685 U	0.000842 U	0.00108 U	0.0074 U	0.00408 U	0.000724 U	0.0112 U	0.000747 U	0.000779 U	0.00731 U	0.00895 U	0.000858 U	0.000869 U	0.000969 U	0.000683 U
Endrin Aldehyde	NS	NS	0.00205 U	0.00253 U	0.00324 U	0.0222 U	0.0122 U	0.00217 U	0.0337 U	0.00224 U	0.00234 U	0.0219 U	0.0268 U	0.00257 U	0.00261 U	0.00291 U	0.00205 U
Endrin Ketone	NS	NS	0.00164 U	0.00202 U	0.00259 U	0.0178 U	0.00978 U	0.00174 U	0.027 U	0.00179 U	0.00187 U	0.0175 U	0.0215 U	0.00206 U	0.00208 U	0.00232 U	0.00164 U
Heptachlor	0.38	15	0.000822 U	0.00101 U	0.0013 U	0.00889 U	0.00489 U	0.000869 U	0.0135 U	0.000897 U	0.000935 U	0.00877 U	0.0107 U	0.00103 U	0.00104 U	0.00116 U	0.00082 U
Heptachlor Epoxide	NS	NS	0.00308 U	0.00379 U	0.00486 U	0.0333 U	0.0183 U	0.00326 U	0.0506 U	0.00336 U	0.00351 U	0.0329 U	0.0402 U	0.00386 U	0.00391 U	0.00436 U	0.00307 U
Lindane	0.1	9.2	0.000685 U	0.000842 U	0.00108 U	0.0074 U	0.00408 U	0.000724 U	0.0112 U	0.000747 U	0.000779 U	0.00731 U	0.00895 U	0.000858 U	0.000869 U	0.000969 U	0.000683 U
Methoxychlor	NS	NS	0.00308 U	0.00379 U	0.00486 U	0.0333 U	0.0183 U	0.00326 U	0.0506 U	0.00336 U	0.00351 U	0.0329 U	0.0402 U	0.00386 U	0.00391 U	0.00436 U	0.00307 U
p,p'-DDD	14	92	0.00164 U	0.00202 U	0.00259 U	0.0178 U'	0.00978 U'	0.00174 U	0.027 U'	0.00179 U	0.00187 U	0.0175 U'	0.0215 U'	0.00206 U	0.00208 U	0.00232 U	0.00164 U
p,p'-DDE	17	62	0.00164 U	0.00202 U	0.00259 U	0.0178 U'	0.00978 U'	0.00174 U	0.027 U'	0.00179 U	0.00187 U	0.0175 U'	0.0215 U'	0.00206 U	0.00208 U	0.00232 U	0.00164 U
p,p'-DDT	136	47	0.00308 U	0.00379 U'	0.00486 U'	0.0333 U'	0.0183 U'	0.00326 U	0.0506 U'	0.00336 U'	0.00351 U'	0.0329 U'	0.0402 U'	0.00386 U'	0.00391 U'	0.00436 U'	0.00307 U
Toxaphene	NS	NS	0.0308 U	0.0379 U	0.0486 U	0.333 U	0.183 U	0.0326 U	0.506 U	0.0336 U	0.0351 U	0.329 U	0.402 U	0.0386 U	0.0391 U	0.0436 U	0.0307 U
trans-Chlordane	NS	NS	0.00205 U	0.00253 U	0.00324 U	0.0222 U	0.0122 U	0.00217 U	0.0337 U	0.00224 U	0.00234 U	0.0219 U	0.0268 U	0.00257 U	0.00261 U	0.00291 U	0.00205 U

Notes:

NYSDEC GW Protection SCO = New York State Department of Environmental Conservation Groundwater Protection Soil Cleanup Objectives, from Table 375-6.8 of 6 NYCRR Part 375.

NYSDEC Commercial SCO = New York State Department of Environmental Conservation Restricted Commercial Use Soil Cleanup Objectives, from Table 375-6.8 of 6 NYCRR Part 375.

ft bgs = Feet below ground surface.

mg/kg = Milligrams per kilogram.

No samples exceed the NYSDEC GW Protection SCO.

No samples exceed the NYSDEC Commercial SCO.

— = Sample not analyzed.

NS = No standard currently established.

ND = Not Detected.

U = Not detected above laboratory detection limit.

U' = Laboratory reporting limit exceeds the applicable regulatory standard or criteria being utilized.

I = The lower value for the two columns has been reported due to obvious interference

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

J = Result below the reporting limit (estimated value).

DUP = Duplicate sample was taken.

When the applicable state standard applies to mixed isomers and the laboratory reports individual isomers, the total standard is listed for each isomer.

Table 5
Soil Reuse Characterization Sampling Results
Summary of Cyanide, Herbicides, and Pesticides in Soil.
MJ Painting; Olean, New York.

Sample ID	NYSDEC GW Protection	NYSDEC Commercial SCO	RX-422	RX-422 DUP	RX-422	RX-423	RX-423	RX-424	RX-424	RX-424	RX-425	RX-425	RX-425	RX-425	RX-426	RX-426
Sample Depth (ft bgs)			7-10	7-10	10-12	4-7	10-12	1-4	7-10	10-12	0-1	4-7	7-10	10-12	1-4	7-10
Sample Date			11/10/2021	11/10/2021	11/10/2021	11/11/2021	11/11/2021	11/11/2021	11/11/2021	11/11/2021	11/11/2021	11/11/2021	11/11/2021	11/11/2021	11/11/2021	11/11/2021
CYANIDE - 9010C/9012B (mg/kg)																
Cyanide	40	27	—	—	10 U	—	10 U	—	—	10 U	10 U	—	10 U	10 U	—	10 U
HERBICIDES - 8151A (mg/kg)																
2,4,5-T	NS	NS	0.219 U	0.203 U	0.196 U	0.204 U	0.214 U	0.175 U	0.19 U	0.227 U	0.187 U	0.183 U	0.228 U	0.197 U	0.176 U	0.595 U
2,4,5-TP (Silvex)	3.8	500	0.219 U	0.203 U	0.196 U	0.204 U	0.214 U	0.175 U	0.19 U	0.227 U	0.187 U	0.183 U	0.228 U	0.197 U	0.176 U	0.595 U
2,4-D	NS	NS	0.219 U	0.203 U	0.196 U	0.204 U	0.214 U	0.175 U	0.19 U	0.227 U	0.187 U	0.183 U	0.228 U	0.197 U	0.176 U	0.595 U
PESTICIDES - 8081B (mg/kg)																
Aldrin	0.19	0.68	0.00207 U	0.0019 U	0.00182 U	0.00196 U	0.00201 U	0.0017 U	0.00175 U	0.0104 U'	0.00178 U	0.00176 U	0.00215 U	0.00188 U	0.00164 U	0.0192 U'
alpha-BHC	0.02	3.4	0.000864 U	0.000792 U	0.000757 U	0.000816 U	0.000838 U	0.000709 U	0.00073 U	0.00431 U	0.00074 U	0.000732 U	0.000897 U	0.000783 U	0.000685 U	0.00801 U
beta-BHC	0.09	3	0.00207 U	0.0019 U	0.00182 U	0.00196 U	0.00201 U	0.0017 U	0.00175 U	0.0104 U	0.00178 U	0.00176 U	0.00215 U	0.00188 U	0.00164 U	0.0192 U
Chlordane	NS	NS	0.0173 U	0.0158 U	0.0151 U	0.0163 U	0.0168 U	0.0142 U	0.0146 U	0.0863 U	0.0148 U	0.0146 U	0.0179 U	0.0157 U	0.0137 U	0.16 U
cis-Chlordane	2.9	24	0.00259 U	0.00238 U	0.00227 U	0.00245 U	0.00252 U	0.00213 U	0.00219 U	0.0129 U	0.00222 U	0.0022 U	0.00269 U	0.00235 U	0.00206 U	0.024 U
delta-BHC	0.25	500	0.00207 U	0.0019 U	0.00182 U	0.00196 U	0.00201 U	0.0017 U	0.00175 U	0.0104 U	0.00178 U	0.00176 U	0.00215 U	0.00188 U	0.00164 U	0.0192 U
Dieldrin	0.1	1.4	0.0013 U	0.00119 U	0.00114 U	0.00122 U	0.00126 U	0.00106 U	0.00109 U	0.00647 U'	0.00111 U	0.0011 U	0.00134 U	0.00117 U	0.00103 U	0.012 U'
Endosulfan I	102	200	0.00207 U	0.0019 U	0.00182 U	0.00196 U	0.00201 U	0.0017 U	0.00175 U	0.0104 U	0.00178 U	0.00176 U	0.00215 U	0.00188 U	0.00164 U	0.0192 U
Endosulfan II	102	200	0.00207 U	0.0019 U	0.00182 U	0.00196 U	0.00201 U	0.0017 U	0.00175 U	0.0104 U	0.00178 U	0.00176 U	0.00215 U	0.00188 U	0.00164 U	0.0192 U
Endosulfan sulfate	1000	200	0.000864 U	0.000792 U	0.000757 U	0.000816 U	0.000838 U	0.000709 U	0.00073 U	0.00431 U	0.00074 U	0.000732 U	0.000897 U	0.000783 U	0.000685 U	0.00801 U
Endrin	0.06	89	0.000864 U	0.000792 U	0.000757 U	0.000816 U	0.000838 U	0.000709 U	0.00073 U	0.00431 U	0.00074 U	0.000732 U	0.000897 U	0.000783 U	0.000685 U	0.00801 U
Endrin Aldehyde	NS	NS	0.00259 U	0.00238 U	0.00227 U	0.00245 U	0.00252 U	0.00213 U	0.00219 U	0.0129 U	0.00222 U	0.0022 U	0.00269 U	0.00235 U	0.00206 U	0.024 U
Endrin Ketone	NS	NS	0.00207 U	0.0019 U	0.00182 U	0.00196 U	0.00201 U	0.0017 U	0.00175 U	0.0104 U	0.00178 U	0.00176 U	0.00215 U	0.00188 U	0.00164 U	0.0192 U
Heptachlor	0.38	15	0.00104 U	0.00095 U	0.000908 U	0.000979 U	0.00101 U	0.000851 U	0.000876 U	0.00518 U	0.000888 U	0.000878 U	0.00108 U	0.00094 U	0.000822 U	0.00962 U
Heptachlor Epoxide	NS	NS	0.00389 U	0.00356 U	0.00341 U	0.0161	0.00377 U	0.00319 U	0.00328 U	0.0194 U	0.00333 U	0.00329 U	0.00404 U	0.00352 U	0.00308 U	0.0361 U
Lindane	0.1	9.2	0.000864 U	0.000792 U	0.000757 U	0.000816 U	0.000838 U	0.000709 U	0.00073 U	0.00431 U	0.00074 U	0.000732 U	0.000897 U	0.000783 U	0.000685 U	0.00801 U
Methoxychlor	NS	NS	0.00389 U	0.00356 U	0.00341 U	0.00367 U	0.00377 U	0.00319 U	0.00328 U	0.0194 U	0.00333 U	0.00329 U	0.00404 U	0.00352 U	0.00308 U	0.0361 U
p,p'-DDD	14	92	0.00207 U	0.0019 U	0.00182 U	0.00196 U	0.00201 U	0.0017 U	0.00175 U	0.0104 U'	0.00178 U	0.00176 U	0.00215 U	0.00188 U	0.00164 U	0.0192 U'
p,p'-DDE	17	62	0.00207 U	0.0019 U	0.00182 U	0.00196 U	0.00201 U	0.0017 U	0.00175 U	0.0104 U'	0.00178 U	0.00176 U	0.00215 U	0.00188 U	0.00164 U	0.0192 U'
p,p'-DDT	136	47	0.00389 U'	0.00356 U'	0.00341 U'	0.00367 U'	0.00377 U'	0.00319 U	0.00328 U	0.0194 U'	0.00333 U'	0.00329 U	0.00404 U'	0.00352 U'	0.00308 U	0.0361 U'
Toxaphene	NS	NS	0.0389 U	0.0356 U	0.0341 U	0.0367 U	0.0377 U	0.0319 U	0.0328 U	0.194 U	0.0333 U	0.0329 U	0.0404 U	0.0352 U	0.0308 U	0.361 U
trans-Chlordane	NS	NS	0.00259 U	0.00238 U	0.00227 U	0.00245 U	0.00252 U	0.00213 U	0.00219 U	0.0129 U	0.00222 U	0.0022 U	0.00269 U	0.00235 U	0.00206 U	0.024 U

Notes:
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No samples exceed the NYSDEC GW Protection SCO.
No samples exceed the NYSDEC Commercial SCO.
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NS = No standard currently established.
ND = Not Detected.
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U' = Laboratory reporting limit exceeds the applicable regulatory standard or criteria being utilized.
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When the applicable state standard applies to mixed isomers and the laboratory reports individual isomers, the total standard is listed for each isomer.

Table 5
Soil Reuse Characterization Sampling Results
Summary of Cyanide, Herbicides, and Pesticides in Soil.
MJ Painting; Olean, New York.

Sample ID	NYSDEC GW Protection	NYSDEC Commercial SCO	RX-426	RX-427	RX-427	RX-428	RX-428	RX-428	RX-429	RX-429	RX-429 DUP	RX-429	RX-430	RX-430	RX-430	RX-431	RX-431
Sample Depth (ft bgs)			10-12	7-10	10-12	1-4	8-10	10-12	0-1	4-7	4-7	10-12	1-4	7-10	10-12	3-7	7-10
Sample Date			11/11/2021	11/16/2021	11/16/2021	11/10/2021	11/10/2021	11/10/2021	11/10/2021	11/10/2021	11/10/2021	11/10/2021	11/10/2021	11/10/2021	11/10/2021	11/10/2021	11/16/2021
CYANIDE - 9010C/9012B (mg/kg)																	
Cyanide	40	27	10 U	10 U	10 U	—	—	10 U	10 U	—	—	10 U	—	10 U	10 U	—	10 U
HERBICIDES - 8151A (mg/kg)																	
2,4,5-T	NS	NS	0.612 U	0.209 U	0.202 U	0.221 U	0.198 U	0.202 U	0.188 U	0.173 U	0.188 U	0.189 U	0.198 U	0.203 U	0.2 U	0.224 U	0.21 U
2,4,5-TP (Silvex)	3.8	500	0.612 U	0.209 U	0.202 U	0.221 U	0.198 U	0.202 U	0.188 U	0.173 U	0.188 U	0.189 U	0.198 U	0.203 U	0.2 U	0.224 U	0.21 U
2,4-D	NS	NS	0.612 U	0.209 U	0.202 U	0.221 U	0.198 U	0.202 U	0.188 U	0.173 U	0.188 U	0.189 U	0.198 U	0.203 U	0.2 U	0.224 U	0.21 U
PESTICIDES - 8081B (mg/kg)																	
Aldrin	0.19	0.68	0.02 U'	0.0192 U'	0.00194 U	0.00212 U	0.00183 U	0.00188 U	0.00175 U	0.00162 U	0.00175 U	0.00176 U	0.00185 U	0.00189 U	0.00183 U	0.0214 U'	0.0203 U'
alpha-BHC	0.02	3.4	0.00835 U	0.008 U	0.000808 U	0.00088 U	0.00076 U	0.00078 U	0.00073 U	0.00068 U	0.00073 U	0.00073 U	0.00077 U	0.00079 U	0.00076 U	0.0089 U	0.00846 U
beta-BHC	0.09	3	0.02 U	0.0192 U	0.00194 U	0.00212 U	0.00183 U	0.00188 U	0.00175 U	0.00162 U	0.00175 U	0.00176 U	0.00185 U	0.00189 U	0.00183 U	0.0214 U	0.0203 U
Chlordane	NS	NS	0.167 U	0.16 U	0.0162 U	0.0176 U	0.0152 U	0.0157 U	0.0146 U	0.0135 U	0.0146 U	0.0146 U	0.0154 U	0.0157 U	0.0152 U	0.178 U	0.169 U
cis-Chlordane	2.9	24	0.025 U	0.024 U	0.00242 U	0.00264 U	0.00228 U	0.00235 U	0.00219 U	0.00203 U	0.00219 U	0.0022 U	0.00231 U	0.00236 U	0.00228 U	0.0267 U	0.0254 U
delta-BHC	0.25	500	0.02 U	0.0192 U	0.00194 U	0.00212 U	0.00183 U	0.00188 U	0.00175 U	0.00162 U	0.00175 U	0.00176 U	0.00185 U	0.00189 U	0.00183 U	0.0214 U	0.0203 U
Dieldrin	0.1	1.4	0.0125 U'	0.012 U'	0.00121 U	0.00132 U	0.00114 U	0.00118 U	0.00109 U	0.00101 U	0.0011 U	0.0011 U	0.00116 U	0.00118 U	0.00114 U	0.0134 U'	0.0127 U'
Endosulfan I	102	200	0.02 U	0.0192 U	0.00194 U	0.00212 U	0.00183 U	0.00188 U	0.00175 U	0.00162 U	0.00175 U	0.00176 U	0.00185 U	0.00189 U	0.00183 U	0.0214 U	0.0203 U
Endosulfan II	102	200	0.02 U	0.0192 U	0.00194 U	0.00212 U	0.00183 U	0.00188 U	0.00175 U	0.00162 U	0.00175 U	0.00176 U	0.00185 U	0.00189 U	0.00183 U	0.0214 U	0.0203 U
Endosulfan sulfate	1000	200	0.00835 U	0.008 U	0.000808 U	0.00088 U	0.00076 U	0.00078 U	0.00073 U	0.00068 U	0.00073 U	0.00073 U	0.00077 U	0.00079 U	0.00076 U	0.0089 U	0.00846 U
Endrin	0.06	89	0.00835 U	0.008 U	0.000808 U	0.00088 U	0.00076 U	0.00078 U	0.00073 U	0.00068 U	0.00073 U	0.00073 U	0.00077 U	0.00079 U	0.00076 U	0.0089 U	0.00846 U
Endrin Aldehyde	NS	NS	0.025 U	0.024 U	0.00242 U	0.00264 U	0.00228 U	0.00235 U	0.00219 U	0.00203 U	0.00219 U	0.0022 U	0.00231 U	0.00236 U	0.00228 U	0.0267 U	0.0254 U
Endrin Ketone	NS	NS	0.02 U	0.0192 U	0.00194 U	0.00212 U	0.00183 U	0.00188 U	0.00175 U	0.00162 U	0.00175 U	0.00176 U	0.00185 U	0.00189 U	0.00183 U	0.0214 U	0.0203 U
Heptachlor	0.38	15	0.01 U	0.0096 U	0.00097 U	0.00106 U	0.00091 U	0.00094 U	0.00088 U	0.00081 U	0.00088 U	0.00088 U	0.00093 U	0.00094 U	0.00091 U	0.0107 U	0.0101 U
Heptachlor Epoxide	NS	NS	0.0376 U	0.036 U	0.00364 U	0.00397 U	0.00343 U	0.00353 U	0.00328 U	0.00304 U	0.00329 U	0.00329 U	0.00347 U	0.00354 U	0.00343 U	0.0401 U	0.0381 U
Lindane	0.1	9.2	0.00835 U	0.008 U	0.000808 U	0.00088 U	0.00076 U	0.00078 U	0.00073 U	0.00068 U	0.00073 U	0.00073 U	0.00077 U	0.00079 U	0.00076 U	0.0089 U	0.00846 U
Methoxychlor	NS	NS	0.0376 U	0.036 U	0.00364 U	0.00397 U	0.00343 U	0.00353 U	0.00328 U	0.00304 U	0.00329 U	0.00329 U	0.00347 U	0.00354 U	0.00343 U	0.0401 U	0.0381 U
p,p'-DDD	14	92	0.02 U'	0.0192 U'	0.00194 U	0.00212 U	0.00183 U	0.00188 U	0.00175 U	0.00162 U	0.00175 U	0.00176 U	0.00185 U	0.00189 U	0.00183 U	0.0214 U'	0.0203 U'
p,p'-DDE	17	62	0.02 U'	0.0192 U'	0.00194 U	0.00212 U	0.00183 U	0.00188 U	0.00175 U	0.00162 U	0.00175 U	0.00176 U	0.00185 U	0.00189 U	0.00183 U	0.0214 U'	0.0203 U'
p,p'-DDT	136	47	0.0376 U'	0.036 U'	0.00364 U'	0.00397 U'	0.00343 U'	0.00353 U'	0.00328 U	0.00304 U	0.00329 U	0.00329 U	0.00347 U'	0.00354 U'	0.00343 U'	0.0401 U'	0.0381 U'
Toxaphene	NS	NS	0.376 U	0.36 U	0.0364 U	0.0397 U	0.0343 U	0.0353 U	0.0328 U	0.0304 U	0.0329 U	0.0329 U	0.0347 U	0.0354 U	0.0343 U	0.401 U	0.381 U
trans-Chlordane	NS	NS	0.025 U	0.024 U	0.00242 U	0.00264 U	0.00228 U	0.00235 U	0.00219 U	0.00203 U	0.00219 U	0.0022 U	0.00231 U	0.00236 U	0.00228 U	0.0267 U	0.0254 U

Notes:
NYSDEC GW Protection SCO = New York State Department of Environmental Conservation Groundwater Protection Soil Cleanup Objectives, from Table 375-6.8 of 6 NYCRR Part 375.
NYSDEC Commercial SCO = New York State Department of Environmental Conservation Restricted Commercial Use Soil Cleanup Objectives, from Table 375-6.8 of 6 NYCRR Part 375.
ft bgs = Feet below ground surface.
mg/kg = Milligrams per kilogram.
No samples exceed the NYSDEC GW Protection SCO.
No samples exceed the NYSDEC Commercial SCO.
— = Sample not analyzed.
NS = No standard currently established.
ND = Not Detected.
U = Not detected above laboratory detection limit.
U' = Laboratory reporting limit exceeds the applicable regulatory standard or criteria being utilized.
I = The lower value for the two columns has been reported due to obvious interference
P = The RPD between the results for the two columns exceeds the method-specified criteria.
J = Result below the reporting limit (estimated value).
DUP = Duplicate sample was taken.
When the applicable state standard applies to mixed isomers and the laboratory reports individual isomers, the total standard is listed for each isomer.

Table 5
Soil Reuse Characterization Sampling Results
Summary of Cyanide, Herbicides, and Pesticides in Soil.
MJ Painting; Olean, New York.

Sample ID	NYSDEC GW Protection	NYSDEC Commercial SCO	RX-431	RX-432	RX-432	RX-432	RX-432	RX-433	RX-434	RX-434	RX-434	RX-435	RX-436	RX-436	RX-436	RX-437	RX-439
Sample Depth (ft bgs)			10-12	0-1	1-4	7-10	10-12	7-10	0-1	4-7	10-12	7-10	0-1	4-7	10-12	1-4	0-1
Sample Date			11/16/2021	11/10/2021	11/16/2021	11/16/2021	11/16/2021	11/17/2021	11/17/2021	11/17/2021	11/17/2021	11/17/2021	11/17/2021	11/17/2021	11/17/2021	11/17/2021	11/17/2021
CYANIDE - 9010C/9012B (mg/kg)																	
Cyanide	40	27	10 U	10 U	—	10 U	10 U	10 U	10 U	—	—	—	10 U	—	—	—	10 U
HERBICIDES - 8151A (mg/kg)																	
2,4,5-T	NS	NS	0.191 U	0.18 U	0.194 U	0.209 U	0.194 U	0.19 U	0.197 U	0.2 U	0.177 U	0.177 U	0.204 U	0.226 U	0.186 U	0.398 U	0.206 U
2,4,5-TP (Silvex)	3.8	500	0.191 U	0.18 U	0.194 U	0.209 U	0.194 U	0.19 U	0.197 U	0.2 U	0.177 U	0.177 U	0.204 U	0.226 U	0.186 U	0.398 U	0.206 U
2,4-D	NS	NS	0.191 U	0.18 U	0.194 U	0.209 U	0.194 U	0.19 U	0.197 U	0.2 U	0.177 U	0.177 U	0.204 U	0.226 U	0.186 U	0.398 U	0.206 U
PESTICIDES - 8081B (mg/kg)																	
Aldrin	0.19	0.68	0.018 U'	0.00166 U	0.00183 U	0.00196 U	0.00182 U	0.00174 U	0.00181 U	0.00187 U	0.0017 U	0.00163 U	0.0019 U	0.00212 U	0.00176 U	0.00189 U	0.00195 U
alpha-BHC	0.02	3.4	0.00749 U	0.00069 U	0.000764 U	0.000816 U	0.00076 U	0.000724 U	0.000754 U	0.000778 U	0.000707 U	0.000681 U	0.000792 U	0.000883 U	0.000732 U	0.000789 U	0.000812 U
beta-BHC	0.09	3	0.018 U	0.00166 U	0.00183 U	0.00196 U	0.00182 U	0.00174 U	0.00181 U	0.00187 U	0.0017 U	0.00163 U	0.0019 U	0.00212 U	0.00176 U	0.00189 U	0.00195 U
Chlordane	NS	NS	0.15 U	0.0138 U	0.0153 U	0.0163 U	0.0152 U	0.0145 U	0.0151 U	0.0156 U	0.0141 U	0.0136 U	0.0158 U	0.0177 U	0.0146 U	0.0158 U	0.0162 U
cis-Chlordane	2.9	24	0.0225 U	0.00208 U	0.00229 U	0.00245 U	0.00228 U	0.00217 U	0.00226 U	0.00233 U	0.00212 U	0.00204 U	0.00238 U	0.00265 U	0.0022 U	0.00237 U	0.00244 U
delta-BHC	0.25	500	0.018 U	0.00166 U	0.00183 U	0.00196 U	0.00182 U	0.00174 U	0.00181 U	0.00187 U	0.0017 U	0.00163 U	0.0019 U	0.00212 U	0.00176 U	0.00189 U	0.00195 U
Dieldrin	0.1	1.4	0.0112 U'	0.00104 U	0.00114 U	0.00122 U	0.00114 U	0.00109 U	0.00113 U	0.00117 U	0.00106 U	0.00102 U	0.00119 U	0.00132 U	0.0011 U	0.00118 U	0.00122 U
Endosulfan I	102	200	0.018 U	0.00166 U	0.00183 U	0.00196 U	0.00182 U	0.00174 U	0.00181 U	0.00187 U	0.0017 U	0.00163 U	0.0019 U	0.00212 U	0.00176 U	0.00189 U	0.00195 U
Endosulfan II	102	200	0.018 U	0.00166 U	0.00183 U	0.00196 U	0.00182 U	0.00174 U	0.00181 U	0.00187 U	0.0017 U	0.00163 U	0.0019 U	0.00212 U	0.00176 U	0.00189 U	0.00195 U
Endosulfan sulfate	1000	200	0.00749 U	0.00069 U	0.000764 U	0.000816 U	0.00076 U	0.000724 U	0.000754 U	0.000778 U	0.000707 U	0.000681 U	0.000792 U	0.000883 U	0.000732 U	0.000789 U	0.000812 U
Endrin	0.06	89	0.00749 U	0.00069 U	0.000764 U	0.000816 U	0.00076 U	0.000724 U	0.000754 U	0.000778 U	0.000707 U	0.000681 U	0.000792 U	0.000883 U	0.000732 U	0.000789 U	0.000812 U
Endrin Aldehyde	NS	NS	0.0225 U	0.00208 U	0.00229 U	0.00245 U	0.00228 U	0.00217 U	0.00226 U	0.00233 U	0.00212 U	0.00204 U	0.00238 U	0.00265 U	0.0022 U	0.00237 U	0.00244 U
Endrin Ketone	NS	NS	0.018 U	0.00166 U	0.00183 U	0.00196 U	0.00182 U	0.00174 U	0.00181 U	0.00187 U	0.0017 U	0.00163 U	0.0019 U	0.00212 U	0.00176 U	0.00189 U	0.00195 U
Heptachlor	0.38	15	0.00898 U	0.00083 U	0.000917 U	0.000979 U	0.000912 U	0.000869 U	0.000905 U	0.000934 U	0.000849 U	0.000817 U	0.00095 U	0.00106 U	0.000879 U	0.000946 U	0.000974 U
Heptachlor Epoxide	NS	NS	0.0337 U	0.00312 U	0.00344 U	0.00367 U	0.00342 U	0.00326 U	0.0034 U	0.0035 U	0.00318 U	0.00306 U	0.00356 U	0.00398 U	0.00329 U	0.00355 U	0.00365 U
Lindane	0.1	9.2	0.00749 U	0.00069 U	0.000764 U	0.000816 U	0.00076 U	0.000724 U	0.000754 U	0.000778 U	0.000707 U	0.000681 U	0.000792 U	0.000883 U	0.000732 U	0.000789 U	0.000812 U
Methoxychlor	NS	NS	0.0337 U	0.00312 U	0.00344 U	0.00367 U	0.00342 U	0.00326 U	0.0034 U	0.0035 U	0.00318 U	0.00306 U	0.00356 U	0.00398 U	0.00329 U	0.00355 U	0.00365 U
p,p'-DDD	14	92	0.018 U'	0.00166 U	0.00183 U	0.00196 U	0.00182 U	0.00174 U	0.0012 J	0.00227 P	0.0017 U	0.00163 U	0.0019 U	0.00212 U	0.00176 U	0.00189 U	0.00195 U
p,p'-DDE	17	62	0.018 U'	0.00166 U	0.00183 U	0.00196 U	0.00182 U	0.00174 U	0.00181 U	0.00187 U	0.0017 U	0.00163 U	0.0019 U	0.00212 U	0.00176 U	0.00189 U	0.00195 U
p,p'-DDT	136	47	0.0337 U'	0.00312 U	0.00344 U'	0.00367 U'	0.00342 U'	0.00468 P	0.00219 J	0.00462 IP	0.00318 U	0.00306 U	0.00356 U'	0.00398 U'	0.00166 JP	0.00355 U'	0.00365 U'
Toxaphene	NS	NS	0.337 U	0.0312 U	0.0344 U	0.0367 U	0.0342 U	0.0326 U	0.034 U	0.035 U	0.0318 U	0.0306 U	0.0356 U	0.0398 U	0.0329 U	0.0355 U	0.0365 U
trans-Chlordane	NS	NS	0.0225 U	0.00208 U	0.00229 U	0.00245 U	0.00228 U	0.00217 U	0.00226 U	0.00233 U	0.00212 U	0.00204 U	0.00238 U	0.00265 U	0.0022 U	0.00237 U	0.00244 U

Notes:
NYSDEC GW Protection SCO = New York State Department of Environmental Conservation Groundwater Protection Soil Cleanup Objectives, from Table 375-6.8 of 6 NYCRR Part 375.
NYSDEC Commercial SCO = New York State Department of Environmental Conservation Restricted Commercial Use Soil Cleanup Objectives, from Table 375-6.8 of 6 NYCRR Part 375.
ft bgs = Feet below ground surface.
mg/kg = Milligrams per kilogram.
No samples exceed the NYSDEC GW Protection SCO.
No samples exceed the NYSDEC Commercial SCO.
— = Sample not analyzed.
NS = No standard currently established.
ND = Not Detected.
U = Not detected above laboratory detection limit.
U' = Laboratory reporting limit exceeds the applicable regulatory standard or criteria being utilized.
I = The lower value for the two columns has been reported due to obvious interference
P = The RPD between the results for the two columns exceeds the method-specified criteria.
J = Result below the reporting limit (estimated value).
DUP = Duplicate sample was taken.
When the applicable state standard applies to mixed isomers and the laboratory reports individual isomers, the total standard is listed for each isomer.

Table 5
Soil Reuse Characterization Sampling Results
Summary of Cyanide, Herbicides, and Pesticides in Soil.
MJ Painting; Olean, New York.

Sample ID	**NYSDEC GW Protection**	**NYSDEC Commercial SCO**	**RX-439**	**RX-439**	**RX-440**	**RX-441**	**RX-442**	**RX-443**	**RX-443**	**RX-443**	**RX-444**	**RX-444**	**RX-444**	**RX-446**	**RX-446**	**RX-447**	**RX-447 DUP**
Sample Depth (ft bgs)			**4-7**	**10-12**	**4-7**	**7-10**	**1-4**	**0-1**	**4-7**	**10-12**	**0-1**	**1-4**	**7-10**	**1-4**	**7-10**	**4-7**	**4-7**
Sample Date			**11/18/2021**	**11/18/2021**	**11/17/2021**	**11/16/2021**	**11/17/2021**	**11/16/2021**	**11/16/2021**	**11/16/2021**	**11/17/2021**	**11/17/2021**	**11/17/2021**	**11/16/2021**	**11/16/2021**	**11/16/2021**	**11/16/2021**
CYANIDE - 9010C/9012B (mg/kg)																	
Cyanide	40	27	—	—	—	—	—	10 U	—	—	10 U	—	—	—	—	—	—
HERBICIDES - 8151A (mg/kg)																	
2,4,5-T	NS	NS	0.237 U	0.201 U	0.251 U	0.185 U	0.2 U	0.221 U	0.198 U	0.194 U	0.204 U	0.208 U	0.186 U	0.196 U	0.192 U	0.201 U	0.197 U
2,4,5-TP (Silvex)	3.8	500	0.237 U	0.201 U	0.251 U	0.185 U	0.2 U	0.221 U	0.198 U	0.194 U	0.204 U	0.208 U	0.186 U	0.196 U	0.192 U	0.201 U	0.197 U
2,4-D	NS	NS	0.237 U	0.201 U	0.251 U	0.185 U	0.2 U	0.221 U	0.198 U	0.194 U	0.204 U	0.208 U	0.186 U	0.196 U	0.192 U	0.201 U	0.197 U
PESTICIDES - 8081B (mg/kg)																	
Aldrin	0.19	0.68	0.00224 U	0.00192 U	0.00238 U	0.00174 U	0.00184 U	0.00208 U	0.0186 U'	0.0183 U'	0.00194 U	0.0197 U'	0.00175 U	0.0184 U'	0.00183 U	0.00194 U	0.00185 U
alpha-BHC	0.02	3.4	0.000934 U	0.000801 U	0.000994 U	0.000727 U	0.000766 U	0.000868 U	0.00776 U	0.00762 U	0.000807 U	0.0082 U	0.000728 U	0.00767 U	0.000762 U	0.000807 U	0.000772 U
beta-BHC	0.09	3	0.00224 U	0.00192 U	0.00238 U	0.00174 U	0.00184 U	0.00208 U	0.0186 U	0.0183 U	0.00194 U	0.0197 U	0.00175 U	0.0184 U	0.00183 U	0.00194 U	0.00185 U
Chlordane	NS	NS	0.0187 U	0.016 U	0.0199 U	0.0145 U	0.0153 U	0.0174 U	0.155 U	0.152 U	0.0161 U	0.164 U	0.0146 U	0.153 U	0.0152 U	0.0161 U	0.0154 U
cis-Chlordane	2.9	24	0.0028 U	0.0024 U	0.00298 U	0.00218 U	0.0023 U	0.0026 U	0.0233 U	0.0229 U	0.00242 U	0.0246 U	0.00218 U	0.023 U	0.00228 U	0.00242 U	0.00232 U
delta-BHC	0.25	500	0.00224 U	0.00192 U	0.00238 U	0.00174 U	0.00184 U	0.00208 U	0.0186 U	0.0183 U	0.00194 U	0.0197 U	0.00175 U	0.0184 U	0.00183 U	0.00194 U	0.00185 U
Dieldrin	0.1	1.4	0.0014 U	0.0012 U	0.00149 U	0.00109 U	0.00115 U	0.0013 U	0.0116 U'	0.0114 U'	0.00121 U	0.0123 U'	0.00109 U	0.0115 U'	0.00114 U	0.00121 U	0.00116 U
Endosulfan I	102	200	0.00224 U	0.00192 U	0.00238 U	0.00174 U	0.00184 U	0.00208 U	0.0186 U	0.0183 U	0.00194 U	0.0197 U	0.00175 U	0.0184 U	0.00183 U	0.00194 U	0.00185 U
Endosulfan II	102	200	0.00224 U	0.00192 U	0.00238 U	0.00174 U	0.00184 U	0.00208 U	0.0186 U	0.0183 U	0.00194 U	0.0197 U	0.00175 U	0.0184 U	0.00183 U	0.00194 U	0.00185 U
Endosulfan sulfate	1000	200	0.000934 U	0.000801 U	0.000994 U	0.000727 U	0.000766 U	0.000868 U	0.00776 U	0.00762 U	0.000807 U	0.0082 U	0.000728 U	0.00767 U	0.000762 U	0.000807 U	0.000772 U
Endrin	0.06	89	0.000934 U	0.000801 U	0.000994 U	0.000727 U	0.000766 U	0.000868 U	0.00776 U	0.00762 U	0.000807 U	0.0082 U	0.000728 U	0.00767 U	0.000762 U	0.000807 U	0.000772 U
Endrin Aldehyde	NS	NS	0.0028 U	0.0024 U	0.00298 U	0.00218 U	0.0023 U	0.0026 U	0.0233 U	0.0229 U	0.00242 U	0.0246 U	0.00218 U	0.023 U	0.00228 U	0.00242 U	0.00232 U
Endrin Ketone	NS	NS	0.00224 U	0.00192 U	0.00238 U	0.00174 U	0.00184 U	0.00208 U	0.0186 U	0.0183 U	0.00194 U	0.0197 U	0.00175 U	0.0184 U	0.00183 U	0.00194 U	0.00185 U
Heptachlor	0.38	15	0.00112 U	0.000961 U	0.00119 U	0.000873 U	0.000919 U	0.00104 U	0.00931 U	0.00915 U	0.000969 U	0.00984 U	0.000873 U	0.00921 U	0.000914 U	0.000969 U	0.000927 U
Heptachlor Epoxide	NS	NS	0.0042 U	0.0036 U	0.00447 U	0.00327 U	0.00345 U	0.0039 U	0.0349 U	0.0343 U	0.00363 U	0.0369 U	0.00327 U	0.0345 U	0.00343 U	0.00363 U	0.00348 U
Lindane	0.1	9.2	0.000934 U	0.000801 U	0.000994 U	0.000727 U	0.000766 U	0.000868 U	0.00776 U	0.00762 U	0.000807 U	0.0082 U	0.000728 U	0.00767 U	0.000762 U	0.000807 U	0.000772 U
Methoxychlor	NS	NS	0.0042 U	0.0036 U	0.00447 U	0.00327 U	0.00345 U	0.0039 U	0.0349 U	0.0343 U	0.00363 U	0.0369 U	0.00327 U	0.0345 U	0.00343 U	0.00363 U	0.00348 U
p,p'-DDD	14	92	0.00224 U	0.00192 U	0.00238 U	0.00174 U	0.00184 U	0.00208 U	0.0186 U'	0.0183 U'	0.00194 U	0.0197 U'	0.00175 U	0.0184 U'	0.00183 U	0.00194 U	0.00185 U
p,p'-DDE	17	62	0.00224 U	0.00192 U	0.00238 U	0.00174 U	0.00184 U	0.00208 U	0.0186 U'	0.0183 U'	0.00194 U	0.0197 U'	0.00175 U	0.0184 U'	0.00183 U	0.00194 U	0.00185 U
p,p'-DDT	136	47	0.0042 U'	0.0036 U'	0.00447 U'	0.00327 U	0.00345 U'	0.0039 U'	0.0349 U'	0.0343 U'	0.00363 U'	0.0369 U'	0.00327 U	0.0345 U'	0.00343 U'	0.00363 U'	0.00348 U'
Toxaphene	NS	NS	0.042 U	0.036 U	0.0447 U	0.0327 U	0.0345 U	0.039 U	0.349 U	0.343 U	0.0363 U	0.369 U	0.0327 U	0.345 U	0.0343 U	0.0363 U	0.0348 U
trans-Chlordane	NS	NS	0.0028 U	0.0024 U	0.00298 U	0.00218 U	0.0023 U	0.0026 U	0.0233 U	0.0229 U	0.00242 U	0.0246 U	0.00218 U	0.023 U	0.00228 U	0.00242 U	0.00232 U

Notes:
NYSDEC GW Protection SCO = New York State Department of Environmental Conservation Groundwater Protection Soil Cleanup Objectives, from Table 375-6.8 of 6 NYCRR Part 375.
NYSDEC Commercial SCO = New York State Department of Environmental Conservation Restricted Commercial Use Soil Cleanup Objectives, from Table 375-6.8 of 6 NYCRR Part 375.
ft bgs = Feet below ground surface.
mg/kg = Milligrams per kilogram.
No samples exceed the NYSDEC GW Protection SCO.
No samples exceed the NYSDEC Commercial SCO.
— = Sample not analyzed.
NS = No standard currently established.
ND = Not Detected.
U = Not detected above laboratory detection limit.
U' = Laboratory reporting limit exceeds the applicable regulatory standard or criteria being utilized.
I = The lower value for the two columns has been reported due to obvious interference
P = The RPD between the results for the two columns exceeds the method-specified criteria.
J = Result below the reporting limit (estimated value).
DUP = Duplicate sample was taken.
When the applicable state standard applies to mixed isomers and the laboratory reports individual isomers, the total standard is listed for each isomer.

Table 5
Soil Reuse Characterization Sampling Results
Summary of Cyanide, Herbicides, and Pesticides in Soil.
MJ Painting; Olean, New York.

Sample ID Sample Depth (ft bgs) Sample Date	NYSDEC GW Protection	NYSDEC Commercial SCO	RX-447 7-10 11/16/2021	RX-447 10-12 11/16/2021	RX-448 1-4 11/16/2021	RX-448 7-10 11/18/2021
CYANIDE - 9010C/9012B (mg/kg)						
Cyanide	40	27	10 U	10 U	—	10 U
HERBICIDES - 8151A (mg/kg)						
2,4,5-T	NS	NS	0.216 U	0.197 U	0.27 U	0.249 U
2,4,5-TP (Silvex)	3.8	500	0.216 U	0.197 U	0.27 U	0.249 U
2,4-D	NS	NS	0.216 U	0.197 U	0.27 U	0.249 U
PESTICIDES - 8081B (mg/kg)						
Aldrin	0.19	0.68	0.00203 U	0.00184 U	0.0259 U'	0.0244 U'
alpha-BHC	0.02	3.4	0.000848 U	0.000768 U	0.0108 U	0.0102 U
beta-BHC	0.09	3	0.00203 U	0.00184 U	0.0259 U	0.0244 U
Chlordane	NS	NS	0.017 U	0.0154 U	0.216 U	0.204 U
cis-Chlordane	2.9	24	0.00254 U	0.0023 U	0.0324 U	0.0306 U
delta-BHC	0.25	500	0.00203 U	0.00184 U	0.0259 U	0.0244 U
Dieldrin	0.1	1.4	0.00127 U	0.00115 U	0.0162 U'	0.0153 U'
Endosulfan I	102	200	0.00203 U	0.00184 U	0.0259 U	0.0244 U
Endosulfan II	102	200	0.00203 U	0.00184 U	0.0259 U	0.0244 U
Endosulfan sulfate	1000	200	0.000848 U	0.000768 U	0.0108 U	0.0102 U
Endrin	0.06	89	0.000848 U	0.000768 U	0.0108 U	0.0102 U
Endrin Aldehyde	NS	NS	0.00254 U	0.0023 U	0.0324 U	0.0306 U
Endrin Ketone	NS	NS	0.00203 U	0.00184 U	0.0259 U	0.0244 U
Heptachlor	0.38	15	0.00102 U	0.000922 U	0.013 U	0.0122 U
Heptachlor Epoxide	NS	NS	0.00382 U	0.00346 U	0.0486 U	0.0458 U
Lindane	0.1	9.2	0.000848 U	0.000768 U	0.0108 U	0.0102 U
Methoxychlor	NS	NS	0.00382 U	0.00346 U	0.0486 U	0.0458 U
p,p'-DDD	14	92	0.00203 U	0.00184 U	0.0259 U'	0.0244 U'
p,p'-DDE	17	62	0.00203 U	0.00184 U	0.0259 U'	0.0244 U'
p,p'-DDT	136	47	0.00382 U'	0.00346 U'	0.0486 U'	0.0458 U'
Toxaphene	NS	NS	0.0382 U	0.0346 U	0.486 U	0.458 U
trans-Chlordane	NS	NS	0.00254 U	0.0023 U	0.0324 U	0.0306 U

Notes:
NYSDEC GW Protection SCO = New York State Department of Environmental Conservation Groundwater Protection Soil Cleanup Objectives, from Table 375-6.8 of 6 NYCRR Part 375.
NYSDEC Commercial SCO = New York State Department of Environmental Conservation Restricted Commercial Use Soil Cleanup Objectives, from Table 375-6.8 of 6 NYCRR Part 375.
ft bgs = Feet below ground surface.
mg/kg = Milligrams per kilogram.
No samples exceed the NYSDEC GW Protection SCO.
No samples exceed the NYSDEC Commercial SCO.
— = Sample not analyzed.
NS = No standard currently established.
ND = Not Detected.
U = Not detected above laboratory detection limit.
U' = Laboratory reporting limit exceeds the applicable regulatory standard or criteria being utilized.
I = The lower value for the two columns has been reported due to obvious interference
P = The RPD between the results for the two columns exceeds the method-specified criteria.
J = Result below the reporting limit (estimated value).
DUP = Duplicate sample was taken.
When the applicable state standard applies to mixed isomers and the laboratory reports individual isomers, the total standard is listed for each isomer.

Table 5
Soil Reuse Characterization Sampling Results
Summary of Per- and Polyfluoroalkyl Substances Soil Analytical Data.
MJ Painting; Olean, New York.

Sample ID	NYSDEC GW Protection SCO	NYSDEC Commercial SCO	RX-301	RX-302	RX-303	RX-304	RX-305	RX-306	RX-307	RX-308	RX-309	RX-310	RX-311
Sample Depth (ft bgs)			0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1
Sample Date			11/15/2021	11/9/2021	11/15/2021	11/15/2021	11/15/2021	11/16/2021	11/17/2021	11/17/2021	11/17/2021	11/17/2021	11/18/2021
PFAS - LCMSMS-ID (mg/kg)													
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	NS	NS	0.000554 U	0.00053 U	0.000625 U	0.000513 U	0.000572 U	0.000515 U	0.00052 U	0.000555 U	0.000539 U	0.000517 U	0.000583 U
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	NS	NS	0.000554 U	0.00053 U	0.000625 U	0.000513 U	0.000572 U	0.000515 U	0.00052 U	0.000555 U	0.000539 U	0.000517 U	0.00134
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	NS	NS	0.000554 U	0.00053 U	0.000625 U	0.000513 U	0.000572 U	0.000515 U	0.00052 U	0.000555 U	0.000539 U	0.000517 U	0.000583 U
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	NS	NS	0.000554 U	0.00053 U	0.000625 U	0.000513 U	0.000572 U	0.000515 U	0.00052 U	0.000555 U	0.000539 U	0.000517 U	0.000583 U
Perfluorobutanesulfonic Acid (PFBS)	NS	NS	0.000277 U	0.00026 U	0.000313 U	0.000257 U	0.000286 U	0.000257 U	0.00026 U	0.000278 U	0.000269 U	0.000258 U	0.000292 U
Perfluorobutanoic Acid (PFBA)	NS	NS	0.000034 J	0.00012 J	0.000046 J	0.000032 J	0.000073 J	0.00004 J	0.00006 J	0.000555 U	0.000089 J	0.000042 J	0.000123 J
Perfluorodecanesulfonic Acid (PFDS)	NS	NS	0.000554 U	0.00053 U	0.000625 U	0.000513 U	0.000572 U	0.000515 U	0.00052 U	0.000555 U	0.000539 U	0.000517 U	0.000583 U
Perfluorodecanoic Acid (PFDA)	NS	NS	0.000277 U	0.00026 U	0.000313 U	0.000257 U	0.000286 U	0.000257 U	0.00026 U	0.000278 U	0.000269 U	0.000258 U	0.000292 U
Perfluorododecanoic Acid (PFDoA)	NS	NS	0.000554 U	0.00053 U	0.000625 U	0.000513 U	0.000572 U	0.000515 U	0.00052 U	0.000555 U	0.000539 U	0.000517 U	0.000583 U
Perfluoroheptanesulfonic Acid (PFHpS)	NS	NS	0.000554 U	0.00053 U	0.000625 U	0.000513 U	0.000572 U	0.000515 U	0.00052 U	0.000555 U	0.000539 U	0.000517 U	0.000583 U
Perfluoroheptanoic Acid (PFHpA)	NS	NS	0.000277 U	0.00005 J	0.000313 U	0.000257 U	0.000286 U	0.000257 U	0.00026 U	0.000278 U	0.000269 U	0.000258 U	0.000292 U
Perfluorohexanesulfonic Acid (PFHxS)	NS	NS	0.000277 U	0.00026 U	0.000313 U	0.000257 U	0.000286 U	0.000257 U	0.00026 U	0.000278 U	0.000269 U	0.000258 U	0.000292 U
Perfluorohexanoic Acid (PFHxA)	NS	NS	0.000554 U	0.00053 U	0.000625 U	0.000513 U	0.000572 U	0.000515 U	0.00052 U	0.000555 U	0.000539 U	0.000517 U	0.000583 U
Perfluorononanoic Acid (PFNA)	NS	NS	0.000277 U	0.00026 U	0.000313 U	0.000257 U	0.000129 J	0.000257 U	0.00026 U	0.000278 U	0.000269 U	0.000258 U	0.000292 U
Perfluorooctanesulfonamide (FOSA)	NS	NS	0.000554 U	0.00053 U	0.000625 U	0.000513 U	0.000572 U	0.000515 U	0.00052 U	0.000555 U	0.000539 U	0.000517 U	0.000583 U
Perfluorooctanesulfonic Acid (PFOS)	NS	NS	0.000254 J	0.00026 J	0.000196 J	0.000257 U	0.000389	0.000257 U	0.00026 U	0.000278 U	0.000269 U	0.000258 U	0.000292 U
Perfluorooctanoic Acid (PFOA)	NS	NS	0.000055 JF	0.00015 JF	0.000313 U	0.000257 U	0.000139 J	0.000079 J	0.000086 J	0.000278 U	0.000059 J	0.000075 J	0.000108 J
Perfluoropentanoic Acid (PFPeA)	NS	NS	0.000554 U	0.00005 J	0.000625 U	0.000513 U	0.000572 U	0.000515 U	0.00052 U	0.000555 U	0.000539 U	0.000517 U	0.000583 U
Perfluorotetradecanoic Acid (PFTA)	NS	NS	0.000554 U	0.00053 U	0.000625 U	0.000513 U	0.000572 U	0.000056 J	0.000064 J	0.000068 J	0.000071 JF	0.000517 U	0.000086 JF
Perfluorotridecanoic Acid (PFTrDA)	NS	NS	0.000554 U	0.00053 U	0.000625 U	0.000513 U	0.000572 U	0.000515 U	0.00052 U	0.000555 U	0.000539 U	0.000517 U	0.000583 U
Perfluoroundecanoic Acid (PFUnA)	NS	NS	0.000554 U	0.00053 U	0.000625 U	0.000513 U	0.000091 JF	0.000515 U	0.00052 U	0.000555 U	0.000539 U	0.000517 U	0.000583 U
PFOA/PFOS, Total	NS	NS	0.000343	0.00063	0.000242	0.000032	0.000821	0.000175	0.00021	0.000068	0.000219	0.000117	0.001657

Notes:

NYSDEC GW Protection SCO = New York State Department of Environmental Conservation Groundwater Protection Soil Cleanup Objectives, from Table 375-6.8 of 6 NYCRR Part 375.
NYSDEC Commercial SCO = New York State Department of Environmental Conservation Restricted Commercial Use Soil Cleanup Objectives, from Table 375-6.8 of 6 NYCRR Part 375.
New York State Department of Environmental Conservation (NYSDEC) Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances under NYSDEC's Part 375 Remedial Programs, January 2021.
ft bgs = Feet below ground surface.
mg/kg = Milligrams per kilogram.
— = Sample not analyzed.
NS = No standard currently established.
ND = Not Detected.
U = Not detected above laboratory detection limit.
U' = Laboratory reporting limit exceeds the applicable regulatory standard or criteria being utilized.
J = Result below the reporting limit (estimated value).
F = The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.
DUP = Duplicate sample was taken.
When the applicable state standard applies to mixed isomers and the laboratory reports individual isomers, the total standard is listed for each isomer.
PFOA/PFOS, Total includes J and F qualified results.

Table 5
Soil Reuse Characterization Sampling Results
Summary of Per- and Polyfluoroalkyl Substances Soil Analytical Data.
MJ Painting; Olean, New York.

Sample ID	NYSDEC GW Protection SCO	NYSDEC Commercial SCO	RX-312	RX-313	RX-314	RX-315	RX-316	RX-317	RX-318	RX-319	RX-320	RX-321	RX-321 DUP	RX-401
Sample Depth (ft bgs)			0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	1-4
Sample Date			11/17/2021	1/5/2022	1/4/2022	1/7/2022	1/7/2022	1/7/2022	1/4/2022	1/7/2022	1/5/2022	1/7/2022	1/7/2022	11/12/2021
PFAS - LCMSMS-ID (mg/kg)														
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	NS	NS	0.000544 U	0.000614 U	0.000624 U	0.000626 U	0.00074 U	0.000615 U	0.000632 U	0.000604 U	0.000597 U	0.000591 U	0.000609 U	0.000542 U
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	NS	NS	0.000544 U	0.000614 U	0.000624 U	0.000626 U	0.00074 U	0.000615 U	0.000632 U	0.000604 U	0.000597 U	0.000591 U	0.000609 U	0.000542 U
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	NS	NS	0.000544 U	0.000614 U	0.000624 U	0.000626 U	0.00074 U	0.000615 U	0.000632 U	0.000604 U	0.000597 U	0.000591 U	0.000609 U	0.000542 U
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	NS	NS	0.000544 U	0.000614 U	0.000624 U	0.000626 U	0.00074 U	0.000615 U	0.000632 U	0.000604 U	0.000597 U	0.000591 U	0.000609 U	0.000542 U
Perfluorobutanesulfonic Acid (PFBS)	NS	NS	0.000272 U	0.000307 U	0.000312 U	0.000313 U	0.00037 U	0.000308 U	0.000316 U	0.000302 U	0.000298 U	0.000296 U	0.000305 U	0.000271 U
Perfluorobutanoic Acid (PFBA)	NS	NS	0.000159 J	0.000198 J	0.000145 J	0.000191 J	0.000084 J	0.000175 J	0.000116 J	0.000167 J	0.000215 J	0.000158 J	0.000141 J	0.000031 J
Perfluorodecanesulfonic Acid (PFDS)	NS	NS	0.000544 U	0.000614 U	0.000624 U	0.000626 U	0.00074 U	0.000615 U	0.000632 U	0.000604 U	0.000597 U	0.000591 U	0.000609 U	0.000542 U
Perfluorodecanoic Acid (PFDA)	NS	NS	0.000272 U	0.000307 U	0.000312 U	0.000313 U	0.00037 U	0.000308 U	0.000316 U	0.000302 U	0.000298 U	0.000296 U	0.000305 U	0.000271 U
Perfluorododecanoic Acid (PFDoA)	NS	NS	0.000544 U	0.000614 U	0.000624 U	0.000626 U	0.00074 U	0.000615 U	0.000632 U	0.000604 U	0.000597 U	0.000591 U	0.000609 U	0.000542 U
Perfluoroheptanesulfonic Acid (PFHpS)	NS	NS	0.000544 U	0.000614 U	0.000624 U	0.000626 U	0.00074 U	0.000615 U	0.000632 U	0.000604 U	0.000597 U	0.000591 U	0.000609 U	0.000542 U
Perfluoroheptanoic Acid (PFHpA)	NS	NS	0.000062 J	0.00007 J	0.000312 U	0.000073 J	0.00037 U	0.000074 J	0.000316 U	0.000302 U	0.000061 J	0.000296 U	0.000305 U	0.000271 U
Perfluorohexanesulfonic Acid (PFHxS)	NS	NS	0.000272 U	0.000307 U	0.000312 U	0.000313 U	0.00037 U	0.000308 U	0.000316 U	0.000302 U	0.000298 U	0.000296 U	0.000305 U	0.000271 U
Perfluorohexanoic Acid (PFHxA)	NS	NS	0.000544 U	0.000614 U	0.000624 U	0.000075 J	0.00074 U	0.000084 J	0.000632 U	0.000604 U	0.000597 U	0.000591 U	0.000609 U	0.000542 U
Perfluorononanoic Acid (PFNA)	NS	NS	0.000114 J	0.000307 U	0.000312 U	0.000121 J	0.00037 U	0.000308 U	0.000316 U	0.000302 U	0.000112 JF	0.000296 U	0.000305 U	0.000271 U
Perfluorooctanesulfonamide (FOSA)	NS	NS	0.000544 U	0.000614 U	0.000624 U	0.000626 U	0.00074 U	0.000615 U	0.000632 U	0.000604 U	0.000597 U	0.000591 U	0.000609 U	0.000542 U
Perfluorooctanesulfonic Acid (PFOS)	NS	NS	0.000268 J	0.000272 J	0.000265 J	0.000264 J	0.000487	0.000308 U	0.000316 U	0.000201 J	0.000289 J	0.000197 J	0.000255 J	0.000271 U
Perfluorooctanoic Acid (PFOA)	NS	NS	0.000176 J	0.000128 JF	0.000166 JF	0.000228 J	0.000084 J	0.000227 J	0.000102 JF	0.000094 J	0.000211 JF	0.00015 J	0.00014 J	0.000061 JF
Perfluoropentanoic Acid (PFPeA)	NS	NS	0.000544 U	0.00006 J	0.000624 U	0.000068 J	0.00074 U	0.000088 J	0.000632 U	0.000604 U	0.000597 U	0.000591 U	0.000609 U	0.000542 U
Perfluorotetradecanoic Acid (PFTA)	NS	NS	0.000065 JF	0.000614 U	0.000624 U	0.000096 J	0.000135 J	0.000114 J	0.000632 U	0.000107 J	0.000597 U	0.000119 J	0.000092 JF	0.000542 U
Perfluorotridecanoic Acid (PFTrDA)	NS	NS	0.000544 U	0.000614 U	0.000624 U	0.000626 U	0.00074 U	0.000615 U	0.000632 U	0.000604 U	0.000597 U	0.000591 U	0.000609 U	0.000542 U
Perfluoroundecanoic Acid (PFUnA)	NS	NS	0.000544 U	0.000614 U	0.000624 U	0.000626 U	0.00074 U	0.000615 U	0.000632 U	0.000604 U	0.000597 U	0.000591 U	0.000609 U	0.000542 U
PFOA/PFOS, Total	NS	NS	0.000844	0.000728	0.000576	0.001116	0.00079	0.000762	0.000218	0.000569	0.000888	0.000624	0.000628	0.000092

Notes:
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New York State Department of Environmental Conservation (NYSDEC) Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances under NYSDEC's Part 375 Remedial Programs, January 2021.
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ND = Not Detected.
U = Not detected above laboratory detection limit.
U' = Laboratory reporting limit exceeds the applicable regulatory standard or criteria being utilized.
J = Result below the reporting limit (estimated value).
F = The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.
DUP = Duplicate sample was taken.
When the applicable state standard applies to mixed isomers and the laboratory reports individual isomers, the total standard is listed for each isomer.
PFOA/PFOS, Total includes J and F qualified results.

Table 5
Soil Reuse Characterization Sampling Results
Summary of Per- and Polyfluoroalkyl Substances Soil Analytical Data.
MJ Painting; Olean, New York.

Sample ID	NYSDEC GW Protection SCO	NYSDEC Commercial SCO	RX-402	RX-403	RX-403	RX-405	RX-405	RX-407	RX-407	RX-409	RX-413	RX-414	RX-415	RX-416
Sample Depth (ft bgs)			7-10	4-7	10-12	1-4	7-10	4-7	10-12	1-4	10-12	4-7	7-10	1-4
Sample Date			11/12/2021	11/12/2021	11/12/2021	11/15/2021	11/15/2021	11/15/2021	11/15/2021	11/12/2021	11/15/2021	11/15/2021	11/16/2021	11/16/2021
PFAS - LCMSMS-ID (mg/kg)														
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	NS	NS	0.000607 U	0.000597 U	0.000574 U	0.000526 U	0.000526 U	0.000564 U	0.000514 U	0.000534 U	0.000556 U	0.000553 U	0.000633 U	0.000572 U
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	NS	NS	0.000607 U	0.000597 U	0.000574 U	0.000526 U	0.000526 U	0.000564 U	0.000514 U	0.000534 U	0.000556 U	0.000553 U	0.000633 U	0.000572 U
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	NS	NS	0.000607 U	0.000597 U	0.000574 U	0.000526 U	0.000526 U	0.000564 U	0.000514 U	0.000534 U	0.000556 U	0.000553 U	0.000633 U	0.000572 U
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	NS	NS	0.000607 U	0.000597 U	0.000574 U	0.000526 U	0.000526 U	0.000564 U	0.000514 U	0.000534 U	0.000556 U	0.000553 U	0.000633 U	0.000572 U
Perfluorobutanesulfonic Acid (PFBS)	NS	NS	0.000304 U	0.000298 U	0.000287 U	0.000263 U	0.000263 U	0.000282 U	0.000257 U	0.000267 U	0.000278 U	0.000276 U	0.000316 U	0.000286 U
Perfluorobutanoic Acid (PFBA)	NS	NS	0.000607 U	0.000597 U	0.000574 U	0.000526 U	0.000526 U	0.000564 U	0.000514 U	0.000534 U	0.000556 U	0.000553 U	0.000633 U	0.000031 J
Perfluorodecanesulfonic Acid (PFDS)	NS	NS	0.000607 U	0.000597 U	0.000574 U	0.000526 U	0.000526 U	0.000564 U	0.000514 U	0.000534 U	0.000556 U	0.000553 U	0.000633 U	0.000572 U
Perfluorodecanoic Acid (PFDA)	NS	NS	0.000304 U	0.000298 U	0.000287 U	0.000263 U	0.000263 U	0.000282 U	0.000257 U	0.000267 U	0.000278 U	0.000276 U	0.000316 U	0.000286 U
Perfluorododecanoic Acid (PFDoA)	NS	NS	0.000607 U	0.000597 U	0.000574 U	0.000526 U	0.000526 U	0.000564 U	0.000514 U	0.000534 U	0.000556 U	0.000553 U	0.000633 U	0.000572 U
Perfluoroheptanesulfonic Acid (PFHpS)	NS	NS	0.000607 U	0.000597 U	0.000574 U	0.000526 U	0.000526 U	0.000564 U	0.000514 U	0.000534 U	0.000556 U	0.000553 U	0.000633 U	0.000572 U
Perfluoroheptanoic Acid (PFHpA)	NS	NS	0.000304 U	0.000298 U	0.000287 U	0.000263 U	0.000263 U	0.000282 U	0.000257 U	0.000267 U	0.000278 U	0.000276 U	0.000316 U	0.000286 U
Perfluorohexanesulfonic Acid (PFHxS)	NS	NS	0.000304 U	0.000298 U	0.000287 U	0.000263 U	0.000263 U	0.000282 U	0.000257 U	0.000267 U	0.000278 U	0.000276 U	0.000316 U	0.000286 U
Perfluorohexanoic Acid (PFHxA)	NS	NS	0.000607 U	0.000597 U	0.000574 U	0.000526 U	0.000526 U	0.000564 U	0.000514 U	0.000534 U	0.000556 U	0.000553 U	0.000633 U	0.000572 U
Perfluorononanoic Acid (PFNA)	NS	NS	0.000304 U	0.000298 U	0.000287 U	0.000263 U	0.000263 U	0.000282 U	0.000257 U	0.000267 U	0.000278 U	0.000276 U	0.000316 U	0.000139 J
Perfluorooctanesulfonamide (FOSA)	NS	NS	0.000607 U	0.000597 U	0.000574 U	0.000526 U	0.000526 U	0.000564 U	0.000514 U	0.000534 U	0.000556 U	0.000553 U	0.000633 U	0.000572 U
Perfluorooctanesulfonic Acid (PFOS)	NS	NS	0.000304 U	0.000298 U	0.000287 U	0.000263 U	0.000263 U	0.000282 U	0.000257 U	0.000267 U	0.000278 U	0.000276 U	0.000316 U	0.00036
Perfluorooctanoic Acid (PFOA)	NS	NS	0.000304 U	0.000298 U	0.000287 U	0.000263 U	0.000263 U	0.000282 U	0.000257 U	0.000267 U	0.000278 U	0.000066 JF	0.000316 U	0.00012 JF
Perfluoropentanoic Acid (PFPeA)	NS	NS	0.000607 U	0.000597 U	0.000574 U	0.000526 U	0.000526 U	0.000564 U	0.000514 U	0.000534 U	0.000556 U	0.000553 U	0.000633 U	0.000572 U
Perfluorotetradecanoic Acid (PFTA)	NS	NS	0.000607 U	0.000597 U	0.000574 U	0.000526 U	0.000526 U	0.000564 U	0.000514 U	0.000534 U	0.000556 U	0.000553 U	0.000633 U	0.000572 U
Perfluorotridecanoic Acid (PFTrDA)	NS	NS	0.000607 U	0.000597 U	0.000574 U	0.000526 U	0.000526 U	0.000564 U	0.000514 U	0.000534 U	0.000556 U	0.000553 U	0.000633 U	0.000572 U
Perfluoroundecanoic Acid (PFUnA)	NS	NS	0.000607 U	0.000597 U	0.000574 U	0.000526 U	0.000526 U	0.000564 U	0.000514 U	0.000534 U	0.000556 U	0.000553 U	0.000633 U	0.000073 JF
PFOA/PFOS, Total	NS	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.000066	ND	0.000723

Notes:
NYSDEC GW Protection SCO = New York State Department of Environmental Conservation Groundwater Protection Soil Cleanup Objectives, from Table 375-6.8 of 6 NYCRR Part 375.
NYSDEC Commercial SCO = New York State Department of Environmental Conservation Restricted Commercial Use Soil Cleanup Objectives, from Table 375-6.8 of 6 NYCRR Part 375.
New York State Department of Environmental Conservation (NYSDEC) Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances under NYSDEC's Part 375 Remedial Programs, January 2021.
ft bgs = Feet below ground surface.
mg/kg = Milligrams per kilogram.
— = Sample not analyzed.
NS = No standard currently established.
ND = Not Detected.
U = Not detected above laboratory detection limit.
U' = Laboratory reporting limit exceeds the applicable regulatory standard or criteria being utilized.
J = Result below the reporting limit (estimated value).
F = The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.
DUP = Duplicate sample was taken.
When the applicable state standard applies to mixed isomers and the laboratory reports individual isomers, the total standard is listed for each isomer.
PFOA/PFOS, Total includes J and F qualified results.

Table 5
Soil Reuse Characterization Sampling Results
Summary of Per- and Polyfluoroalkyl Substances Soil Analytical Data.
MJ Painting; Olean, New York.

Sample ID	NYSDEC GW Protection SCO	NYSDEC Commercial SCO	RX-417	RX-417	RX-418	RX-419	RX-419	RX-420	RX-421	RX-422	RX-422	RX-422 DUP	RX-423	RX-424
Sample Depth (ft bgs)			1-4	7-10	4-7	1-4	7-10	4-7	10-12	1-4	7-10	7-10	4-7	1-4
Sample Date			11/11/2021	11/11/2021	11/11/2021	11/15/2021	11/15/2021	11/15/2021	11/11/2021	11/10/2021	11/10/2021	11/10/2021	11/11/2021	11/11/2021
PFAS - LCMSMS-ID (mg/kg)														
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	NS	NS	0.000479 U	0.000597 U	0.00057 U	0.000499 U	0.000788 U	0.000525 U	0.000634 U	0.000471 U	0.000619 U	0.000569 U	0.000562 U	0.000484 U
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	NS	NS	0.000479 U	0.000597 U	0.00057 U	0.000499 U	0.000788 U	0.000525 U	0.000634 U	0.000471 U	0.000619 U	0.000569 U	0.000562 U	0.000484 U
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	NS	NS	0.000479 U	0.000597 U	0.00057 U	0.000499 U	0.000788 U	0.000525 U	0.000634 U	0.000471 U	0.000619 U	0.000569 U	0.000562 U	0.000484 U
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	NS	NS	0.000479 U	0.000597 U	0.00057 U	0.000499 U	0.000788 U	0.000525 U	0.000634 U	0.000471 U	0.000619 U	0.000569 U	0.000562 U	0.000484 U
Perfluorobutanesulfonic Acid (PFBS)	NS	NS	0.00024 U	0.000299 U	0.000285 U	0.00025 U	0.000394 U	0.000262 U	0.000317 U	0.000236 U	0.00031 U	0.000285 U	0.000281 U	0.000242 U
Perfluorobutanoic Acid (PFBA)	NS	NS	0.000479 U	0.000597 U	0.00057 U	0.000499 U	0.000788 U	0.000525 U	0.000634 U	0.000471 U	0.000619 U	0.000569 U	0.000147 J	0.000038 J
Perfluorodecanesulfonic Acid (PFDS)	NS	NS	0.000479 U	0.000597 U	0.00057 U	0.000499 U	0.000788 U	0.000525 U	0.000634 U	0.000471 U	0.000619 U	0.000569 U	0.000562 U	0.000484 U
Perfluorodecanoic Acid (PFDA)	NS	NS	0.00024 U	0.000299 U	0.000285 U	0.00025 U	0.000394 U	0.000262 U	0.000317 U	0.000236 U	0.00031 U	0.000285 U	0.000281 U	0.000242 U
Perfluorododecanoic Acid (PFDoA)	NS	NS	0.000479 U	0.000597 U	0.00057 U	0.000499 U	0.000788 U	0.000525 U	0.000634 U	0.000471 U	0.000619 U	0.000569 U	0.000562 U	0.000484 U
Perfluoroheptanesulfonic Acid (PFHpS)	NS	NS	0.000479 U	0.000597 U	0.00057 U	0.000499 U	0.000788 U	0.000525 U	0.000634 U	0.000471 U	0.000619 U	0.000569 U	0.000562 U	0.000484 U
Perfluoroheptanoic Acid (PFHpA)	NS	NS	0.00024 U	0.000299 U	0.000285 U	0.00025 U	0.000394 U	0.000262 U	0.000317 U	0.000236 U	0.00031 U	0.000285 U	0.000281 U	0.000242 U
Perfluorohexanesulfonic Acid (PFHxS)	NS	NS	0.00024 U	0.000299 U	0.000285 U	0.00025 U	0.000394 U	0.000262 U	0.000317 U	0.000236 U	0.00031 U	0.000285 U	0.000281 U	0.000242 U
Perfluorohexanoic Acid (PFHxA)	NS	NS	0.000479 U	0.000597 U	0.00057 U	0.000499 U	0.000788 U	0.000525 U	0.000634 U	0.000471 U	0.000619 U	0.000569 U	0.000562 U	0.000484 U
Perfluorononanoic Acid (PFNA)	NS	NS	0.00024 U	0.000299 U	0.000285 U	0.00025 U	0.000394 U	0.000262 U	0.000317 U	0.000236 U	0.00031 U	0.000285 U	0.000281 U	0.000242 U
Perfluorooctanesulfonamide (FOSA)	NS	NS	0.000479 U	0.000597 U	0.00057 U	0.000499 U	0.000788 U	0.000525 U	0.000634 U	0.000471 U	0.000619 U	0.000569 U	0.000562 U	0.000484 U
Perfluorooctanesulfonic Acid (PFOS)	NS	NS	0.00024 U	0.000299 U	0.000285 U	0.00025 U	0.000394 U	0.000262 U	0.000317 U	0.000236 U	0.00031 U	0.000285 U	0.000281 U	0.000242 U
Perfluorooctanoic Acid (PFOA)	NS	NS	0.00024 U	0.000299 U	0.000285 U	0.00025 U	0.000394 U	0.000262 U	0.000317 U	0.000236 U	0.00031 U	0.000285 U	0.000281 U	0.000051 J
Perfluoropentanoic Acid (PFPeA)	NS	NS	0.000479 U	0.000597 U	0.00057 U	0.000499 U	0.000788 U	0.000525 U	0.000634 U	0.000471 U	0.000619 U	0.000569 U	0.000061 J	0.000484 U
Perfluorotetradecanoic Acid (PFTA)	NS	NS	0.000479 U	0.000597 U	0.00057 U	0.000499 U	0.000788 U	0.000525 U	0.000634 U	0.000074 JF	0.000072 J	0.000077 J	0.000064 J	0.00007 JF
Perfluorotridecanoic Acid (PFTrDA)	NS	NS	0.000479 U	0.000597 U	0.00057 U	0.000499 U	0.000788 U	0.000525 U	0.000634 U	0.000471 U	0.000619 U	0.000569 U	0.000562 U	0.000484 U
Perfluoroundecanoic Acid (PFUnA)	NS	NS	0.000479 U	0.000597 U	0.00057 U	0.000499 U	0.000788 U	0.000525 U	0.000634 U	0.000471 U	0.000619 U	0.000569 U	0.000562 U	0.000484 U
PFOA/PFOS, Total	NS	NS	ND	ND	ND	ND	ND	ND	ND	0.000074	0.000072	0.000077	0.000272	0.000159

Notes:

NYSDEC GW Protection SCO = New York State Department of Environmental Conservation Groundwater Protection Soil Cleanup Objectives, from Table 375-6.8 of 6 NYCRR Part 375.
NYSDEC Commercial SCO = New York State Department of Environmental Conservation Restricted Commercial Use Soil Cleanup Objectives, from Table 375-6.8 of 6 NYCRR Part 375.
New York State Department of Environmental Conservation (NYSDEC) Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances under NYSDEC's Part 375 Remedial Programs, January 2021.
ft bgs = Feet below ground surface.
mg/kg = Milligrams per kilogram.
— = Sample not analyzed.
NS = No standard currently established.
ND = Not Detected.
U = Not detected above laboratory detection limit.
U' = Laboratory reporting limit exceeds the applicable regulatory standard or criteria being utilized.
J = Result below the reporting limit (estimated value).
F = The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.
DUP = Duplicate sample was taken.
When the applicable state standard applies to mixed isomers and the laboratory reports individual isomers, the total standard is listed for each isomer.
PFOA/PFOS, Total includes J and F qualified results.

Table 5
Soil Reuse Characterization Sampling Results
Summary of Per- and Polyfluoroalkyl Substances Soil Analytical Data.
MJ Painting; Olean, New York.

Sample ID	NYSDEC GW Protection SCO	NYSDEC Commercial SCO	RX-424	RX-425	RX-426	RX-428	RX-428	RX-429	RX-429 DUP	RX-430	RX-431	RX-432	RX-434	RX-434
Sample Depth (ft bgs)			7-10	4-7	1-4	1-4	8-10	4-7	4-7	1-4	4-7	1-4	4-7	10-12
Sample Date			11/11/2021	11/11/2021	11/11/2021	11/10/2021	11/10/2021	11/10/2021	11/10/2021	11/10/2021	11/16/2021	11/16/2021	11/17/2021	11/17/2021
PFAS - LCMSMS-ID (mg/kg)														
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	NS	NS	0.000532 U	0.000502 U	0.000513 U	0.00064 U	0.00053 U	0.0005 U	0.00052 U	0.00054 U	0.000889 U	0.000531 U	0.000556 U	0.000479 U
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	NS	NS	0.000532 U	0.000502 U	0.000513 U	0.00027 J	0.00053 U	0.00072	0.00052 U	0.00054 U	0.000889 U	0.000531 U	0.000556 U	0.000479 U
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	NS	NS	0.000532 U	0.000502 U	0.000513 U	0.00064 U	0.00053 U	0.0005 U	0.00052 U	0.00234 U	0.000889 U	0.000531 U	0.000556 U	0.000479 U
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	NS	NS	0.000532 U	0.000502 U	0.000513 U	0.00064 U	0.00053 U	0.0005 U	0.00052 U	0.00234 U	0.000889 U	0.000531 U	0.000556 U	0.000479 U
Perfluorobutanesulfonic Acid (PFBS)	NS	NS	0.000266 U	0.000251 U	0.000256 U	0.00032 U	0.00026 U	0.00025 U	0.00026 U	0.00027 U	0.000445 U	0.000266 U	0.000278 U	0.00024 U
Perfluorobutanoic Acid (PFBA)	NS	NS	0.000532 U	0.000502 U	0.000513 U	0.00064 U	0.00053 U	0.0005 U	0.0021 U	0.00054 U	0.000889 U	0.000531 U	0.000556 U	0.000479 U
Perfluorodecanesulfonic Acid (PFDS)	NS	NS	0.000532 U	0.000502 U	0.000513 U	0.00064 U	0.00053 U	0.0005 U	0.00052 U	0.00054 U	0.000889 U	0.000531 U	0.000556 U	0.000479 U
Perfluorodecanoic Acid (PFDA)	NS	NS	0.000266 U	0.000251 U	0.000256 U	0.00032 U	0.00026 U	0.00025 U	0.00026 U	0.00027 U	0.000445 U	0.000266 U	0.000278 U	0.00024 U
Perfluorododecanoic Acid (PFDoA)	NS	NS	0.000532 U	0.000502 U	0.000513 U	0.00064 U	0.00053 U	0.0005 U	0.00052 U	0.00054 U	0.000889 U	0.000531 U	0.000556 U	0.000479 U
Perfluoroheptanesulfonic Acid (PFHpS)	NS	NS	0.000532 U	0.000502 U	0.000513 U	0.00064 U	0.00053 U	0.0005 U	0.00052 U	0.00054 U	0.000889 U	0.000531 U	0.000556 U	0.000479 U
Perfluoroheptanoic Acid (PFHpA)	NS	NS	0.000266 U	0.000251 U	0.000256 U	0.00032 U	0.00026 U	0.00025 U	0.00026 U	0.00027 U	0.000445 U	0.000266 U	0.000278 U	0.00024 U
Perfluorohexanesulfonic Acid (PFHxS)	NS	NS	0.000266 U	0.000251 U	0.000256 U	0.00032 U	0.00026 U	0.00025 U	0.00026 U	0.00027 U	0.000445 U	0.000266 U	0.000278 U	0.00024 U
Perfluorohexanoic Acid (PFHxA)	NS	NS	0.000532 U	0.000502 U	0.000513 U	0.00064 U	0.00053 U	0.0005 U	0.0021 U	0.00054 U	0.000889 U	0.000531 U	0.000556 U	0.000479 U
Perfluorononanoic Acid (PFNA)	NS	NS	0.000266 U	0.000251 U	0.000256 U	0.00032 U	0.00026 U	0.00025 U	0.00026 U	0.00027 U	0.000445 U	0.000266 U	0.000278 U	0.00024 U
Perfluorooctanesulfonamide (FOSA)	NS	NS	0.000532 U	0.000502 U	0.000513 U	0.00064 U	0.00053 U	0.0005 U	0.0021 U	0.00054 U	0.000889 U	0.000531 U	0.000556 U	0.000479 U
Perfluorooctanesulfonic Acid (PFOS)	NS	NS	0.000266 U	0.000251 U	0.000256 U	0.00032 U	0.00026 U	0.00025 U	0.00026 U	0.00027 U	0.000445 U	0.000266 U	0.000278 U	0.00024 U
Perfluorooctanoic Acid (PFOA)	NS	NS	0.000266 U	0.000251 U	0.000256 U	0.00032 U	0.00026 U	0.00025 U	0.00026 U	0.00027 U	0.000445 U	0.000266 U	0.000107 J	0.00024 U
Perfluoropentanoic Acid (PFPeA)	NS	NS	0.000532 U	0.000502 U	0.000513 U	0.00064 U	0.00053 U	0.0005 U	0.0021 U	0.00054 U	0.000889 U	0.000531 U	0.000556 U	0.000479 U
Perfluorotetradecanoic Acid (PFTA)	NS	NS	0.000532 U	0.000066 JF	0.000074 J	0.00064 U	0.00053 U	0.0005 U	0.00052 U	0.00234 U	0.000889 U	0.000531 U	0.000071 J	0.000479 U
Perfluorotridecanoic Acid (PFTrDA)	NS	NS	0.000532 U	0.000502 U	0.000513 U	0.00064 U	0.00053 U	0.0005 U	0.00052 U	0.00234 U	0.000889 U	0.000531 U	0.000556 U	0.000479 U
Perfluoroundecanoic Acid (PFUnA)	NS	NS	0.000532 U	0.000502 U	0.000513 U	0.00064 U	0.00053 U	0.0005 U	0.00052 U	0.00054 U	0.000889 U	0.000531 U	0.000556 U	0.000479 U
PFOA/PFOS, Total	NS	NS	ND	0.000066	0.000074	0.00027	ND	0.00072	ND	ND	ND	ND	0.000178	ND

Notes:

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MJ Painting; Olean, New York.

Sample ID	**NYSDEC GW Protection SCO**	**NYSDEC Commercial SCO**	**RX-435**	**RX-436**	**RX-436**	**RX-437**	**RX-439**	**RX-439**	**RX-440**	**RX-441**	**RX-442**	**RX-443**	**RX-443**	**RX-444**
Sample Depth (ft bgs)			**7-10**	**4-7**	**10-12**	**1-4**	**4-7**	**10-12**	**4-7**	**7-10**	**1-4**	**4-7**	**10-12**	**1-4**
Sample Date			**11/17/2021**	**11/17/2021**	**11/17/2021**	**11/17/2021**	**11/18/2021**	**11/18/2021**	**11/17/2021**	**11/16/2021**	**11/17/2021**	**11/16/2021**	**11/16/2021**	**11/17/2021**
PFAS - LCMSMS-ID (mg/kg)														
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	NS	NS	0.000532 U	0.000642 U	0.000512 U	0.000585 U	0.000687 U	0.000575 U	0.000702 U	0.000528 U	0.000553 U	0.000541 U	0.000545 U	0.000585 U
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	NS	NS	0.000532 U	0.000642 U	0.000512 U	0.000585 U	0.000687 U	0.000364 JF	0.000702 U	0.000528 U	0.000553 U	0.000541 U	0.000545 U	0.000585 U
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	NS	NS	0.000532 U	0.000642 U	0.000512 U	0.000585 U	0.000687 U	0.000575 U	0.000702 U	0.000528 U	0.000553 U	0.000541 U	0.000545 U	0.000585 U
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	NS	NS	0.000532 U	0.000642 U	0.000512 U	0.000585 U	0.000687 U	0.000575 U	0.000702 U	0.000528 U	0.000553 U	0.000541 U	0.000545 U	0.000585 U
Perfluorobutanesulfonic Acid (PFBS)	NS	NS	0.000266 U	0.000321 U	0.000256 U	0.000292 U	0.000344 U	0.000288 U	0.000351 U	0.000264 U	0.000277 U	0.00027 U	0.000272 U	0.000292 U
Perfluorobutanoic Acid (PFBA)	NS	NS	0.000532 U	0.000642 U	0.000512 U	0.000585 U	0.000687 U	0.000575 U	0.000702 U	0.000528 U	0.000034 J	0.000541 U	0.000545 U	0.000585 U
Perfluorodecanesulfonic Acid (PFDS)	NS	NS	0.000532 U	0.000642 U	0.000512 U	0.000585 U	0.000687 U	0.000575 U	0.000702 U	0.000528 U	0.000553 U	0.000541 U	0.000545 U	0.000585 U
Perfluorodecanoic Acid (PFDA)	NS	NS	0.000266 U	0.000321 U	0.000256 U	0.000292 U	0.000344 U	0.000288 U	0.000351 U	0.000264 U	0.000277 U	0.00027 U	0.000272 U	0.000292 U
Perfluorododecanoic Acid (PFDoA)	NS	NS	0.000532 U	0.000642 U	0.000512 U	0.000585 U	0.000687 U	0.000575 U	0.000702 U	0.000528 U	0.000553 U	0.000541 U	0.000545 U	0.000585 U
Perfluoroheptanesulfonic Acid (PFHpS)	NS	NS	0.000532 U	0.000642 U	0.000512 U	0.000585 U	0.000687 U	0.000575 U	0.000702 U	0.000528 U	0.000553 U	0.000541 U	0.000545 U	0.000585 U
Perfluoroheptanoic Acid (PFHpA)	NS	NS	0.000266 U	0.000321 U	0.000256 U	0.000292 U	0.000344 U	0.000288 U	0.000351 U	0.000264 U	0.000277 U	0.00027 U	0.000272 U	0.000292 U
Perfluorohexanesulfonic Acid (PFHxS)	NS	NS	0.000266 U	0.000321 U	0.000256 U	0.000292 U	0.000344 U	0.000288 U	0.000351 U	0.000264 U	0.000277 U	0.00027 U	0.000272 U	0.000292 U
Perfluorohexanoic Acid (PFHxA)	NS	NS	0.000532 U	0.000642 U	0.000512 U	0.000585 U	0.000687 U	0.000575 U	0.000702 U	0.000528 U	0.000553 U	0.000541 U	0.000545 U	0.000585 U
Perfluorononanoic Acid (PFNA)	NS	NS	0.000266 U	0.000321 U	0.000256 U	0.000292 U	0.000344 U	0.000288 U	0.000351 U	0.000264 U	0.000277 U	0.00027 U	0.000272 U	0.000292 U
Perfluorooctanesulfonamide (FOSA)	NS	NS	0.000532 U	0.000642 U	0.000512 U	0.000585 U	0.000687 U	0.000575 U	0.000702 U	0.000528 U	0.000553 U	0.000541 U	0.000545 U	0.000585 U
Perfluorooctanesulfonic Acid (PFOS)	NS	NS	0.000266 U	0.000321 U	0.000256 U	0.000292 U	0.000344 U	0.000288 U	0.000351 U	0.000264 U	0.000277 U	0.00027 U	0.000272 U	0.000292 U
Perfluorooctanoic Acid (PFOA)	NS	NS	0.000266 U	0.000321 U	0.000256 U	0.000082 J	0.000344 U	0.000288 U	0.000351 U	0.000264 U	0.000277 U	0.00027 U	0.000272 U	0.000292 U
Perfluoropentanoic Acid (PFPeA)	NS	NS	0.000532 U	0.000642 U	0.000512 U	0.000585 U	0.000687 U	0.000575 U	0.000702 U	0.000528 U	0.000553 U	0.000541 U	0.000545 U	0.000585 U
Perfluorotetradecanoic Acid (PFTA)	NS	NS	0.000066 J	0.000073 J	0.00006 J	0.000066 J	0.000091 J	0.000575 U	0.000702 U	0.000528 U	0.000063 J	0.000065 J	0.000063 J	0.000585 U
Perfluorotridecanoic Acid (PFTrDA)	NS	NS	0.000532 U	0.000642 U	0.000512 U	0.000585 U	0.000687 U	0.000575 U	0.000702 U	0.000528 U	0.000553 U	0.000541 U	0.000545 U	0.000585 U
Perfluoroundecanoic Acid (PFUnA)	NS	NS	0.000532 U	0.000642 U	0.000512 U	0.000585 U	0.000687 U	0.000575 U	0.000702 U	0.000528 U	0.000553 U	0.000541 U	0.000545 U	0.000585 U
PFOA/PFOS, Total	NS	NS	0.000066	0.000073	0.00006	0.000148	0.000091	0.000364	ND	ND	0.000097	0.000065	0.000063	ND

Notes:
NYSDEC GW Protection SCO = New York State Department of Environmental Conservation Groundwater Protection Soil Cleanup Objectives, from Table 375-6.8 of 6 NYCRR Part 375.
NYSDEC Commercial SCO = New York State Department of Environmental Conservation Restricted Commercial Use Soil Cleanup Objectives, from Table 375-6.8 of 6 NYCRR Part 375.
New York State Department of Environmental Conservation (NYSDEC) Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances under NYSDEC's Part 375 Remedial Programs, January 2021.
ft bgs = Feet below ground surface.
mg/kg = Milligrams per kilogram.
— = Sample not analyzed.
NS = No standard currently established.
ND = Not Detected.
U = Not detected above laboratory detection limit.
U' = Laboratory reporting limit exceeds the applicable regulatory standard or criteria being utilized.
J = Result below the reporting limit (estimated value).
F = The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.
DUP = Duplicate sample was taken.
When the applicable state standard applies to mixed isomers and the laboratory reports individual isomers, the total standard is listed for each isomer.
PFOA/PFOS, Total includes J and F qualified results.

Table 5

Soil Reuse Characterization Sampling Results

Summary of Per- and Polyfluoroalkyl Substances Soil Analytical Data.

MJ Painting; Olean, New York.

Sample ID Sample Depth (ft bgs) Sample Date	NYSDEC GW Protection SCO	NYSDEC Commercial SCO	RX-444 7-10 11/17/2021	RX-446 1-4 11/16/2021	RX-446 7-10 11/16/2021	RX-447 4-7 11/16/2021	RX-447 DUP 4-7 11/16/2021	RX-448 1-4 11/16/2021
PFAS - LCMSMS-ID (mg/kg)								
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	NS	NS	0.000528 U	0.000564 U	0.00056 U	0.000554 U	0.000589 U	0.000784 U
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	NS	NS	0.000528 U	0.000564 U	0.00056 U	0.000554 U	0.000589 U	0.000784 U
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	NS	NS	0.000528 U	0.000564 U	0.00056 U	0.000554 U	0.000589 U	0.000784 U
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	NS	NS	0.000528 U	0.000564 U	0.00056 U	0.000554 U	0.000589 U	0.000784 U
Perfluorobutanesulfonic Acid (PFBS)	NS	NS	0.000264 U	0.000282 U	0.00028 U	0.000277 U	0.000295 U	0.000392 U
Perfluorobutanoic Acid (PFBA)	NS	NS	0.000528 U	0.000564 U	0.00056 U	0.000554 U	0.000589 U	0.00006 J
Perfluorodecanesulfonic Acid (PFDS)	NS	NS	0.000528 U	0.000564 U	0.00056 U	0.000554 U	0.000589 U	0.000784 U
Perfluorodecanoic Acid (PFDA)	NS	NS	0.000264 U	0.000282 U	0.00028 U	0.000277 U	0.000295 U	0.000392 U
Perfluorododecanoic Acid (PFDoA)	NS	NS	0.000528 U	0.000564 U	0.00056 U	0.000554 U	0.000589 U	0.000784 U
Perfluoroheptanesulfonic Acid (PFHpS)	NS	NS	0.000528 U	0.000564 U	0.00056 U	0.000554 U	0.000589 U	0.000784 U
Perfluoroheptanoic Acid (PFHpA)	NS	NS	0.000264 U	0.000282 U	0.00028 U	0.000277 U	0.000295 U	0.000392 U
Perfluorohexanesulfonic Acid (PFHxS)	NS	NS	0.000264 U	0.000282 U	0.00028 U	0.000277 U	0.000295 U	0.000392 U
Perfluorohexanoic Acid (PFHxA)	NS	NS	0.000528 U	0.000564 U	0.00056 U	0.000554 U	0.000589 U	0.000784 U
Perfluorononanoic Acid (PFNA)	NS	NS	0.000264 U	0.000282 U	0.00028 U	0.000277 U	0.000295 U	0.000392 U
Perfluorooctanesulfonamide (FOSA)	NS	NS	0.000528 U	0.000564 U	0.00056 U	0.000554 U	0.000589 U	0.000784 U
Perfluorooctanesulfonic Acid (PFOS)	NS	NS	0.000264 U	0.000282 U	0.00028 U	0.000277 U	0.000295 U	0.000392 U
Perfluorooctanoic Acid (PFOA)	NS	NS	0.000264 U	0.000282 U	0.00028 U	0.000277 U	0.000295 U	0.000146 JF
Perfluoropentanoic Acid (PFPeA)	NS	NS	0.000528 U	0.000564 U	0.00056 U	0.000554 U	0.000589 U	0.000784 U
Perfluorotetradecanoic Acid (PFTA)	NS	NS	0.000528 U	0.000564 U	0.00056 U	0.000554 U	0.000589 U	0.000784 U
Perfluorotridecanoic Acid (PFTrDA)	NS	NS	0.000528 U	0.000564 U	0.00056 U	0.000554 U	0.000589 U	0.000784 U
Perfluoroundecanoic Acid (PFUnA)	NS	NS	0.000528 U	0.000564 U	0.00056 U	0.000554 U	0.000589 U	0.000784 U
PFOA/PFOS, Total	NS	NS	ND	ND	ND	ND	ND	0.000206

Notes:

NYSDEC GW Protection SCO = New York State Department of Environmental Conservation Groundwater Protection Soil Cleanup Objectives, from Table 375-6.8 of 6 NYCRR Part 375.

NYSDEC Commercial SCO = New York State Department of Environmental Conservation Restricted Commercial Use Soil Cleanup Objectives, from Table 375-6.8 of 6 NYCRR Part 375.

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DUP = Duplicate sample was taken.

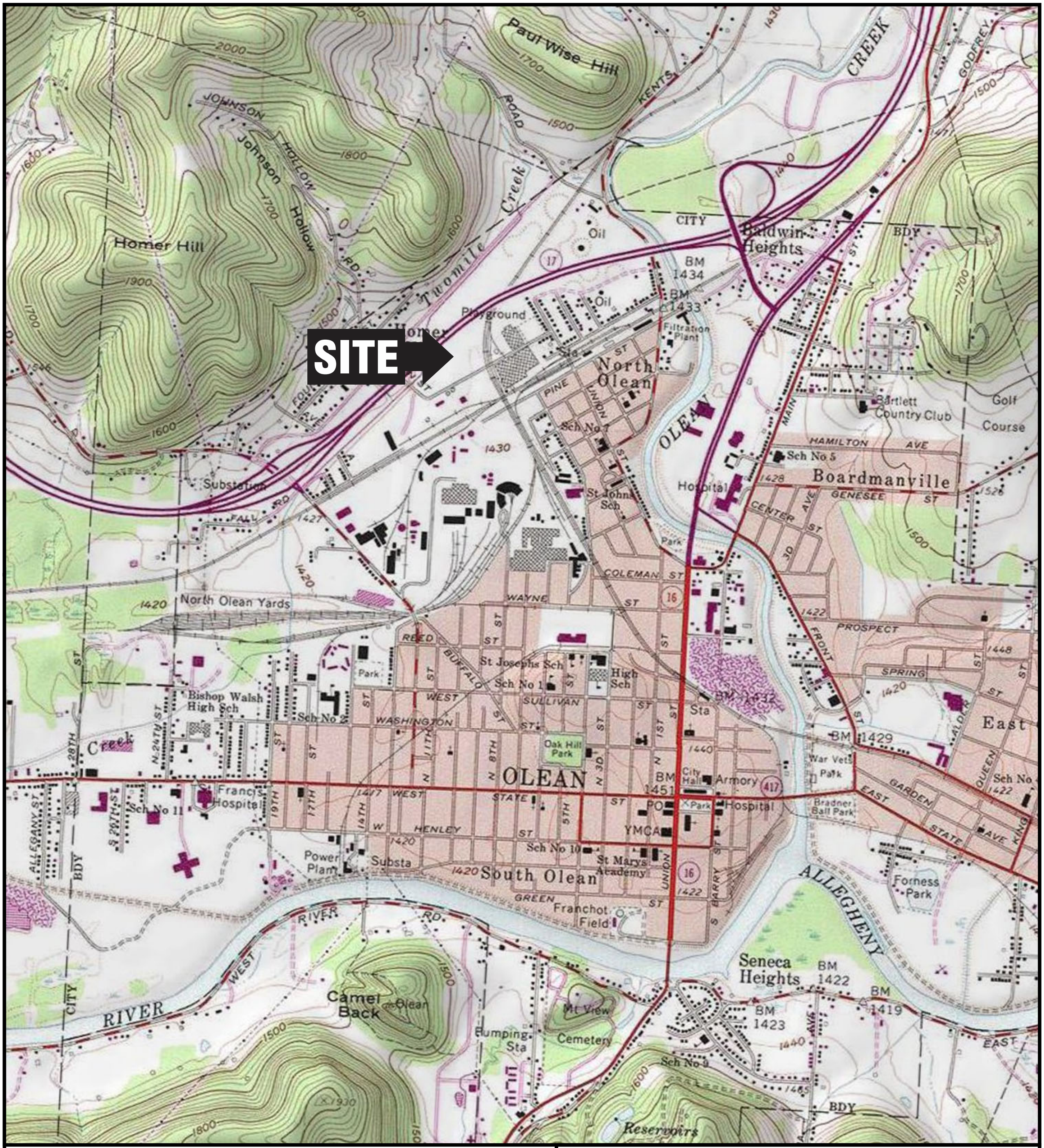
When the applicable state standard applies to mixed isomers and the laboratory reports individual isomers, the total standard is listed for each isomer.

PFOA/PFOS, Total includes J and F qualified results.

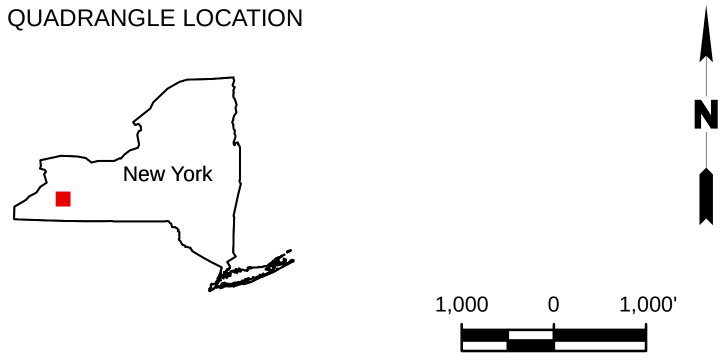
REMEDIAL ACTION WORK PLAN

MJ Painting Site
350 Franklin Street
Olean, New York

FIGURES



QUADRANGLE LOCATION



Title:

SITE LOCATION MAP

350 FRANKLIN STREET
OLEAN, NY

Prepared for:

MJ PAINTING CONTRACTOR CORP.

ROUX
Roux Environmental Engineering and Geology, D.P.C.
12 GILL STREET, SUITE 4700 WOBURN MA 01801
(781) 569-4000

Compiled by: CC	Date: 03/16/22	FIGURE
Prepared by: CC	Scale: AS SHOWN	1
Project Mgr: BR	Project: 2317.0002M000	
File: 2317.0002M000.132.01.mxd		

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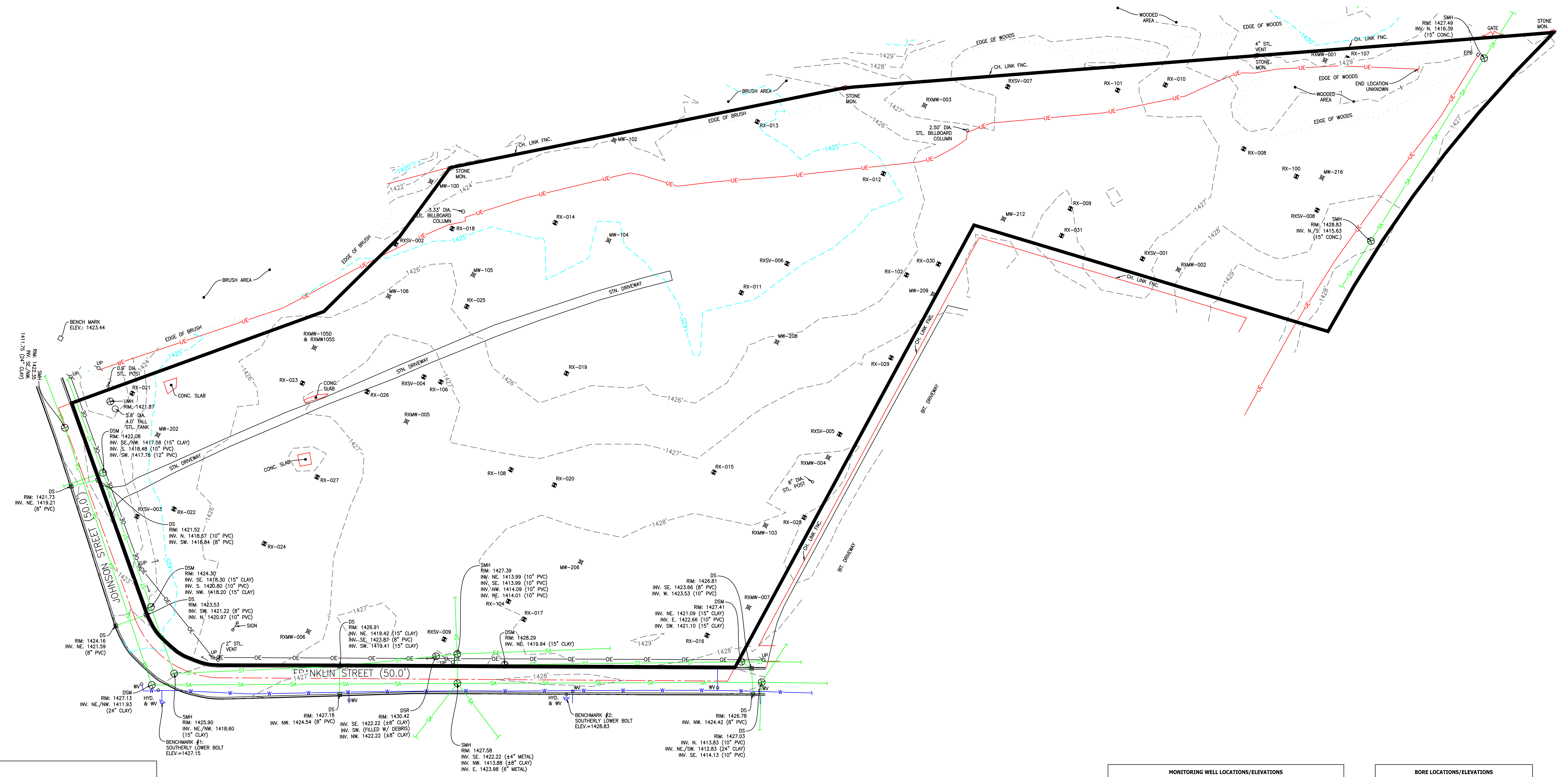

LEGEND:

DRAINAGE STRUCTURE	DS	⊞	SAMPLING/BORING POINT	RX-016	⊗
DRAINAGE STRUCTURE MANHOLE	DSM	⊕	SANITARY SEWER MANHOLE	SMH	⊕
DRAINAGE STRUCTURE ROUND	DSR	⊕	SIGN		⊸
END OF PIPE UNKNOWN		ʃ	UNKNOWN MANHOLE	UMH	⊕
ELECTRIC PULL BOX	EPB	□	UNKNOWN VENT	UVT	○
ELECTRIC MANHOLE	EMH	⊕	UTILITY POLE		-○-
GUY WIRE		←	WATER VALVE	WV	○
HYDRANT	HYD.	⊙	CURB CUT ELEVATION		× CC:785.00
IRON PIPE	IP.	⊙	BOTTOM OF CURB ELEVATION		× BC:785.00
REBAR		⊙	EDGE OF PAVEMENT ELEVATION		× PE:785.00
MONITORING WELL	MW-212	⊕	EXISTING SPOT ELEVATION		× 785.00
MONUMENT (TYPE NOTED)		⊡	TOP OF CURB ELEVATION		× TC:785.00

BIT.	BITUMINOUS	N.	NORTH
CH.	CHAIN	E.	EAST
CONC.	CONCRETE	S.	SOUTH
DIA.	DIAMETER	W.	WEST
FNC.	FENCE	MAJOR CONTOUR LINE	— — 575 — —
INV.	INVERT	MINOR CONTOUR LINE	— — 574 — —
MTL.	METAL	OVERHEAD ELECTRIC LINE	—OE—
PVC	POLYVINYL CHLORIDE PIPE	CENTERLINE OF ROAD	— - —
STL.	STEEL	SANITARY SEWER LINE	—SA—
STN.	STONE	STORM SEWER LINE	—ST—
W/	WITH	UNDERGROUND ELECTRIC LINE	—UE—
		WATER LINE	—W—
		SITE BOUNDARY	▬

GENERAL NOTES:

- HORIZONTAL CONTROL IS REFERENCED TO A MAP BY D. MICHAEL CANADA, DATED FEBRUARY 8, 2018, PROJECT NO. 2688-MJ.
- VERTICAL CONTROL IS REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88), WESTERN ZONE, AS ESTABLISHED WITH NEW YORK STATE REAL TIME NETWORK (NYSNET).
- TOPOGRAPHIC INFORMATION SHOWN HEREON WAS GATHERED BY WENDEL BETWEEN AUGUST 29, 2019 AND AUGUST 30, 2019.
- PROPERTY LINE SHOWN HEREON ARE SHOWN IN THEIR APPROXIMATE LOCATION FROM INFORMATION PROVIDED BY OTHERS.
- THIS MAP IS NOT INTENDED FOR THE TRANSFER OF TITLE
- ADDITIONAL SOIL BORES AND MONITORING WELLS LOCATED BY WENDEL IN DECEMBER 2020.
- BENCHMARK IS CHISELED SQUARE IN THE NORTH EAST CONCRETE HEADWALL OF A BRIDGE ON JOHNSON ROAD OVER TWO MILE CREEK. ELEV.: 1423.44

SOURCE:

WENDEL WD ARCHITECTURE, ENGINEERING, SURVEYING AND LANDSCAPE ARCHITECTURE, P.C., TOPOGRAPHIC SURVEY, DWG. NO. V100, DATED DECEMBER 17, 2020

50' 0 50'

MONITORING WELL LOCATIONS/ELEVATIONS

WELL DESIGNATION	NORTHING	EASTING	GROUND ELEVATION	ELEVATION OF STEEL CASING	ELEVATION OF PVC RISER
RXMW-001	763801.62	1186491.22	1429.25	1432.38	1432.09
RXMW-002	763557.85	1186481.29	1428.15	1431.45	1431.27
RXMW-003	763559.09	1186192.79	1427.98	1431.71	1431.56
RXMW-004	763226.57	1186296.80	1428.09	1431.17	1431.02
RXMW-005	763038.64	1185939.61	1427.71	1431.08	1430.84
RXMW-006	762819.01	1185968.74	1426.87	1429.85	1429.62
RXMW-007	763065.13	1186310.00	1428.52	1431.70	1431.54
RXMW-103	763139.86	1186280.82	1428.00	1430.76	1430.53
RXMW-105D	763050.75	1185828.01	1426.99	1430.43	1429.78
RXMW-105S	763050.75	1185828.01	1426.99	1430.43	1429.75
MW-212	763508.59	1186314.64	1427.00	1429.24	1429.03
MW-216	763705.77	1186549.20	1427.61	1430.10	1429.97
MW-209	763411.84	1186296.98	1426.39	1429.47	1429.23
MW-208	763292.92	1186196.00	1426.13	1428.58	1428.41
MW-102	763371.28	1185961.49	1424.22	1426.87	1426.71
MW-104	763287.94	1186008.60	1425.35	1428.25	1428.14
MW-106	763129.86	1185860.66	1426.34	1429.08	1428.97
MW-100	763243.82	1185835.53	1423.49	1426.51	1426.31
MW-105	763190.69	1185917.58	1425.24	1428.14	1427.83
MW-206	763015.21	1186151.81	1428.56	1431.19	1430.99
MW-202	762899.60	1185746.61	1425.60	1428.26	1428.12

BORE LOCATIONS/ELEVATIONS

BORE DESIGNATION	NORTHING	EASTING	GROUND ELEVATION
RX-100	763693.46	1186528.04	1427.26
RX-101	763670.79	1186340.01	1426.59
RX-102	763413.55	1186265.62	1425.86
RX-104	762946.28	1186114.02	1427.79
RX-106	763087.82	1185946.66	1427.14
RX-107	763814.78	1186507.88	1429.11
RX-108	763053.32	1186048.23	1427.30

NO.	DATE	REVISION DESCRIPTION	INT.

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DESIGNED BY: MV	CHECKED BY: BR
DRAWING SCALE: AS SHOWN	PLOT SCALE: 1:1
DRAWING DATE: 3/16/2022	PRINT TYPE: COLOR
OFFICE: MA	PAPER SIZE: ARCH D
PROJECT NO.: 2317.0002M000	
DRAWING FILE: 2317.0002M000.132.02.DWG	

ROUX
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Engineering and Geology, D.P.C.
12 GILL STREET, SUITE 4700 WOBURN MA 01801
(781) 569-4000

PROJECT NAME:
350 FRANKLIN STREET
OLEAN, NEW YORK

PROJECT FOR:
MJ PAINTING CONTRACTOR CORP.

TITLE:
SITE PLAN

DRAWING NO.
2

DRAWING
2 OF 11

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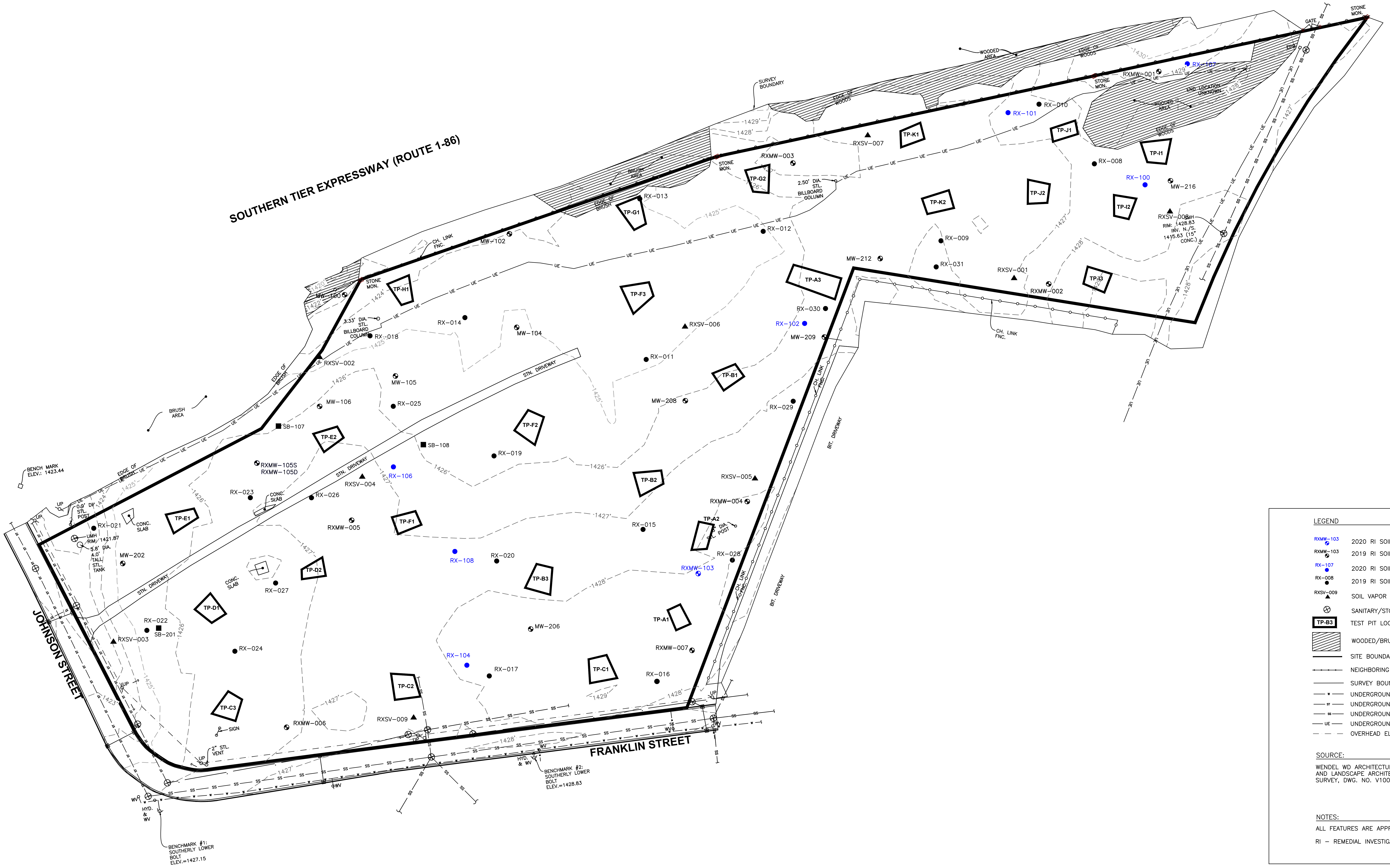

LEGEND

RXMW-103	2020 RI SOIL BORING COMPLETED AS MONITORING WELL
RXMW-103	2019 RI SOIL BORING COMPLETED AS MONITORING WELL
RX-107 ●	2020 RI SOIL BORING LOCATION
RX-008 ●	2019 RI SOIL BORING LOCATION
RXSV-009 ▲	SOIL VAPOR POINT LOCATION
⊗	SANITARY/STORM SEWER DRAINAGE STRUCTURE LOCATION
TP-B3	TEST PIT LOCATION
▨	WOODED/BRUSH AREA
━━━	SITE BOUNDARY
—o—o—o—	NEIGHBORING FENCE LINE
———	SURVEY BOUNDARY
—— W ——	UNDERGROUND WATER UTILITY
—— ST ——	UNDERGROUND STORM SEWER UTILITY
—— SS ——	UNDERGROUND SANITARY SEWER UTILITY
—— UE ——	UNDERGROUND ELECTRIC UTILITY
— · — · —	OVERHEAD ELECTRIC UTILITY

SOURCE:

WENDEL WD ARCHITECTURE, ENGINEERING, SURVEYING AND LANDSCAPE ARCHITECTURE, P.C., TOPOGRAPHIC SURVEY, DWG. NO. V100, DATED DECEMBER 17, 2020

N

NOTES:

ALL FEATURES ARE APPROXIMATE

RI – REMEDIAL INVESTIGATION

50' 0 50'

NO.	DATE	REVISION DESCRIPTION	INT.

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DESIGNED BY: MV	CHECKED BY: BR
DRAWING SCALE: AS SHOWN	PLOT SCALE: 1:1
DRAWING DATE: 3/16/2022	PRINT TYPE: COLOR
OFFICE: MA	PAPER SIZE: ARCH D
PROJECT NO.: 2317.0002M000	
DRAWING FILE: 2317.0002M000.132.03.DWG	

ROUX
Roux Environmental
Engineering and Geology, D.P.C.
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(781) 569-4000

PROJECT NAME:
350 FRANKLIN STREET
OLEAN, NEW YORK

PROJECT FOR:
MJ PAINTING CONTRACTOR CORP.

TITLE:
PREVIOUS INVESTIGATION LOCATIONS

DRAWING NO.
3
DRAWING
3 OF 11

N:\PROJECTS\MJ PAINTING CONTRACTOR CORP\2317.0002M000\132\2317.0002M000.132.03.DWG
]

LEGEND

DRAINAGE STRUCTURE (DS)	⊞
DRAINAGE STRUCTURE MANHOLE (DSM) / SEWER MANHOLE (SMH)	⊕
MONITORING WELL DESIGNATED FOR SEMI–ANNUAL POST–COC GROUNWATER MONTIORING AND/OR EVALUATION OF GROUNDWATER CONCENTRATION REDUCTION MEASURES	RXMW–003 ◕
PROPERTY BOUNDARY	▬
EXISTING CHAIN LINK FENCE	—○—
SECURITY FENCE TO BE INSTALLED BY CONTRACTOR	—○—
SOIL EROSION/SEDIMENT CONTROL FEATURE – SEE DETAIL CALLOUTS	—
REMEDY AREA	▭
STOCKPILE AREA (APPROX.)	▨
STABILIZED CONSTRUCTION ENTRANCE AND DECONTAMINATION PAD	🟦
GRAVEL HAUL ROAD PREVIOUSLY INSTALLED BY CONTRACTOR	▩

NOTES:

ALL FEATURES ARE APPROXIMATE

SOURCE:

WENDEL WD ARCHITECTURE, ENGINEERING, SURVEYING AND LANDSCAPE ARCHITECTURE, P.C., TOPOGRAPHIC SURVEY, DWG. NO. V100, DATED DECEMBER 17, 2020

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12 GILL STREET, SUITE 4700 WOBURN MA 01801
(781) 569-4000

PROJECT NAME:
350 FRANKLIN STREET
OLEAN, NEW YORK

PROJECT FOR:
MJ PAINTING CONTRACTOR CORP.

TITLE:
SITE PREPARATION PLAN

DRAWING NO.
4A
DRAWING
4 OF 11

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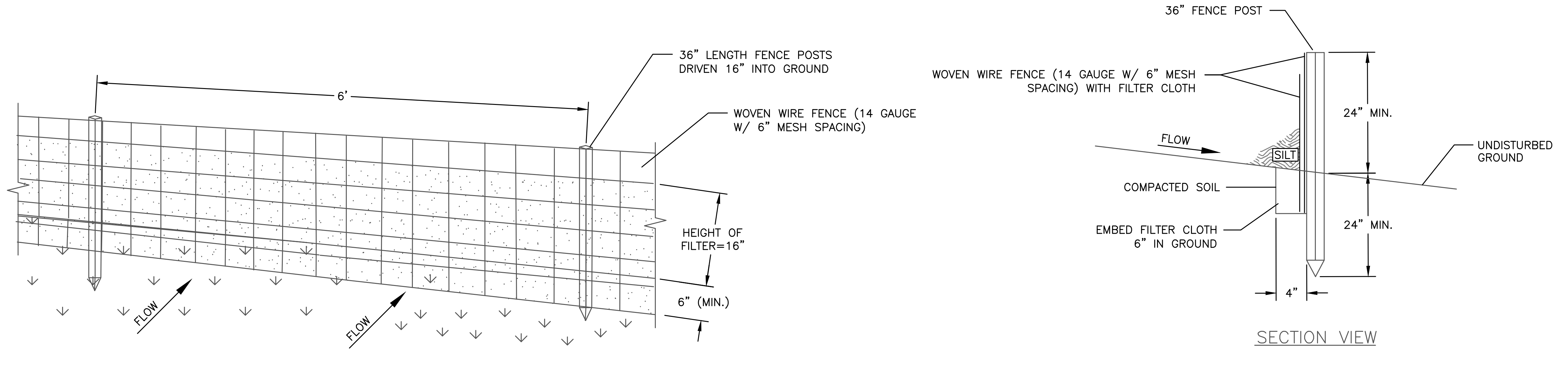


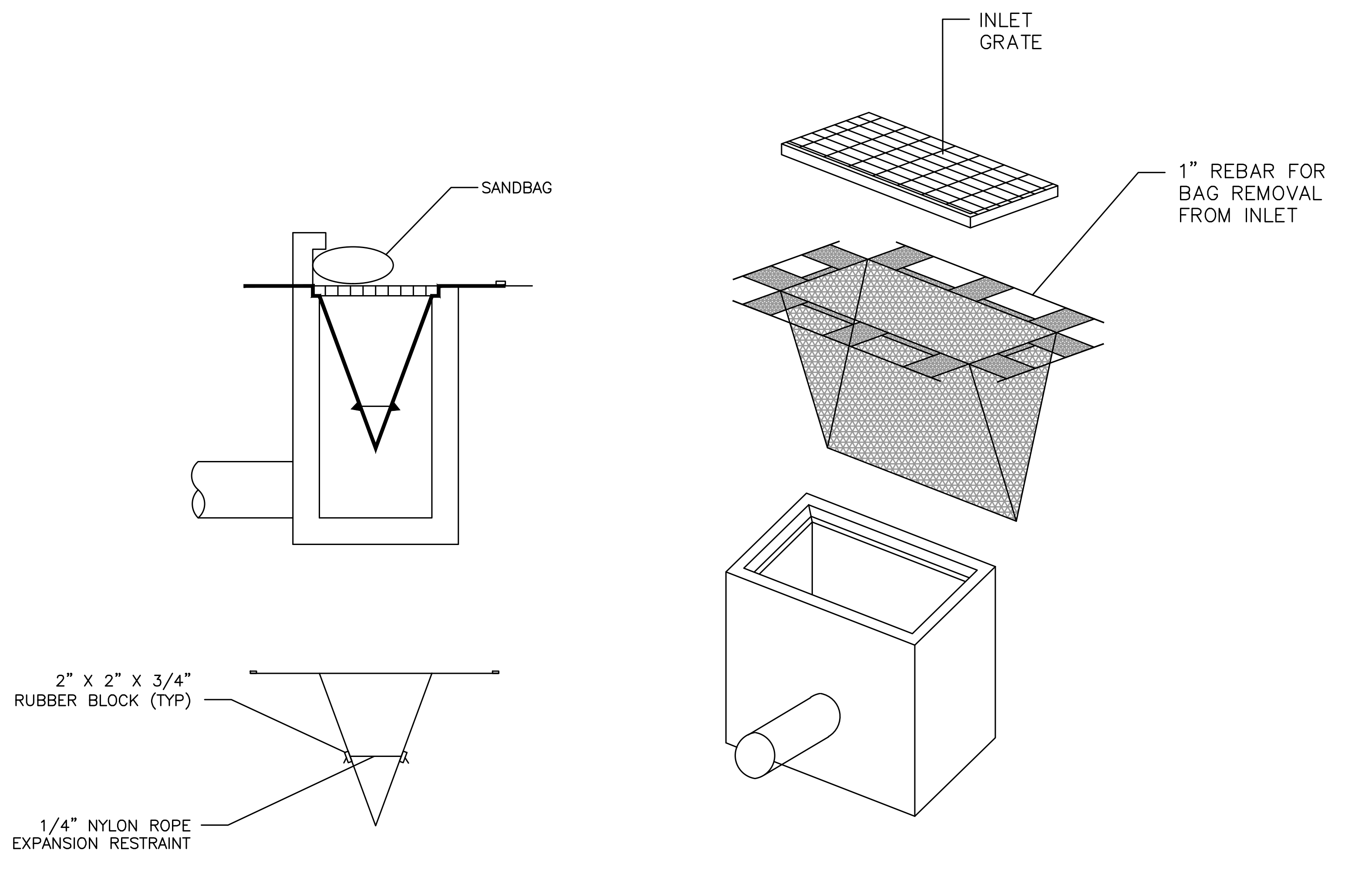
SECTION VIEW

PERSPECTIVE VIEW

CONSTRUCTION SPECIFICATIONS/NOTES

1. WOVEN WIRE FENCE TO BE FASTENED SECURELY TO FENCE POSTS WITH WIRE TIES OR STAPLES. POSTS SHALL BE STEEL EITHER "T" OR "U" TYPE OR HARDWOOD.
2. FILTER CLOTH TO BE FASTENED SECURELY TO WOVEN WIRE FENCE WITH TIES SPACED EVERY 24" AT TOP AND MID SECTION. FENCE SHALL BE WOVEN WIRE, 14 GAUGE, 6" MESH OPENING.
3. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHALL BE OVER–LAPPED BY SIX INCHES AND FOLDED. FILTER CLOTH SHALL BE EITHER TREVIRA SPUNBOND 1115, TYPAR 3401, OR APPROVED EQUIVALENT.
4. PREFABRICATED UNITS SHALL BE GEOFAB, ENVIROFENCE, OR APPROVED EQUIVALENT.
5. MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN "BULGES" DEVELOP IN THE SILT FENCE OR AT THE DIRECTION OF THE ENGINEER.

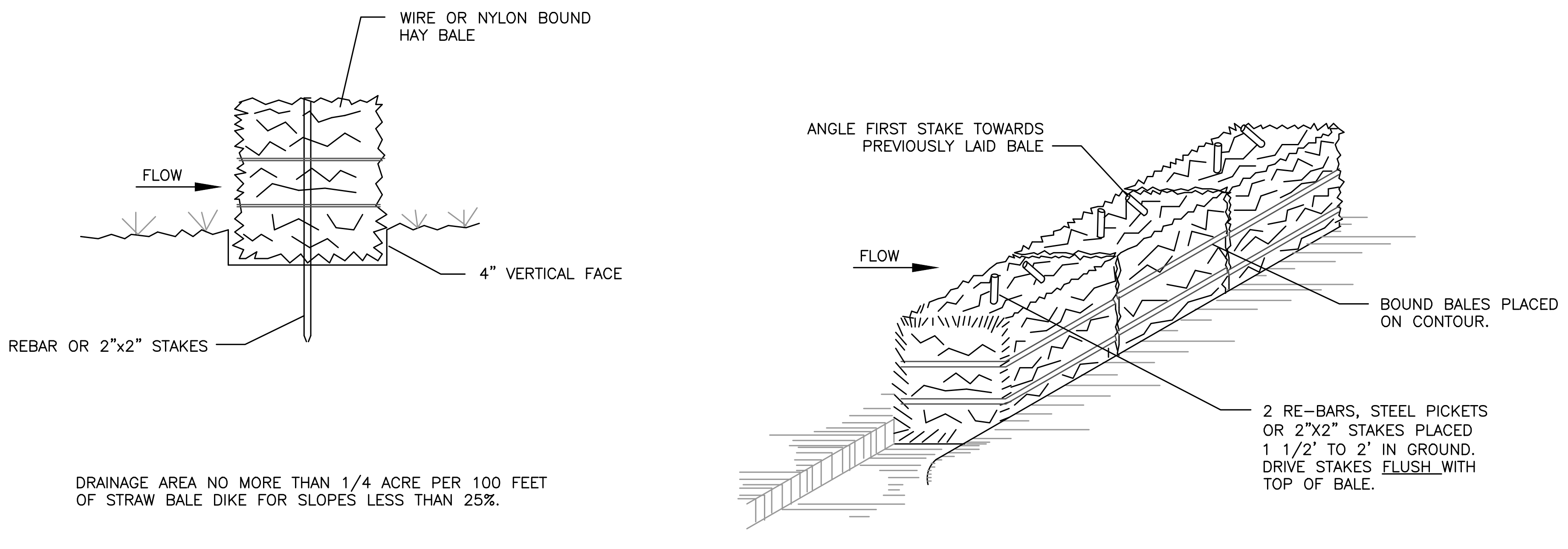
1
D–1
SILT FENCE DETAIL
SCALE: NOT TO SCALE



INSTALLATION DETAIL

ISOMETRIC VIEW

2
D–1
GRATING INLET PROECTION
NOT TO SCALE



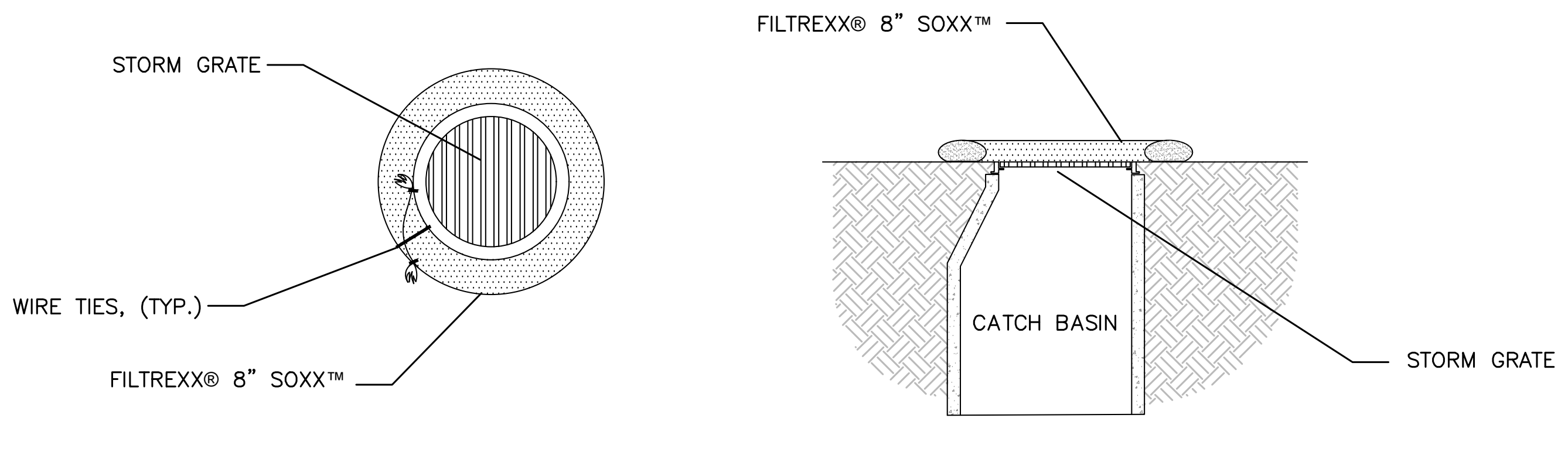
BEDDING DETAIL

ANCHORING DETAIL

CONSTRUCTION SPECIFICATIONS/NOTES

1. BALES SHALL BE PLACED AT THE TOE OF A SLOPE OR ON THE CONTOUR AND IN A ROW WITH ENDS TIGHTLY ABUTTING THE ADJACENT BALES.
2. EACH BALE SHALL BE EMBEDDED IN THE SOIL A MINIMUM OF (4) INCHES, AND PLACED SO THE BINDINGS ARE HORIZONTAL.
3. BALES SHALL BE SECURELY ANCHORED IN PLACE BY EITHER TWO STAKES OR RE–BARS DRIVEN THROUGH THE BALE. THE FIRST STAKE IN EACH BALE SHALL BE DRIVEN TOWARD THE PREVIOUSLY LAID BALE AT AN ANGLE TO FORCE THE BALES TOGETHER. STAKES SHALL BE DRIVEN FLUSH WITH THE BALE.
4. WHERE HAY BALES AND SILT FENCES ARE REQUIRED TOGETHER, THE HAY BALES SHALL BE LOCATED UPGRADIENT OF SILT FENCE.
5. INSPECTION SHALL BE CONDUCTED IN ACCORDANCE WITH TECHNICAL SPECIFICATIONS AND REPAIRS AND/OR REPLACEMENTS SHALL BE MADE PROMPTLY AS NEEDED.
6. BALES SHALL BE REMOVED WHEN THEY HAVE SERVED THEIR USEFULLNESS AS DETERMINED BY THE ENGINEER SO AS NOT TO BLOCK OR IMPEDE STORM FLOW OR DRAINAGE.
7. WHERE STAKING IS NOT PRACTICAL AND IN PAVED AREAS, HAY BALES SHALL BE TIED TOGETHER TO PREVENT MOVEMENT OR OPENINGS IN THE BARRIER.

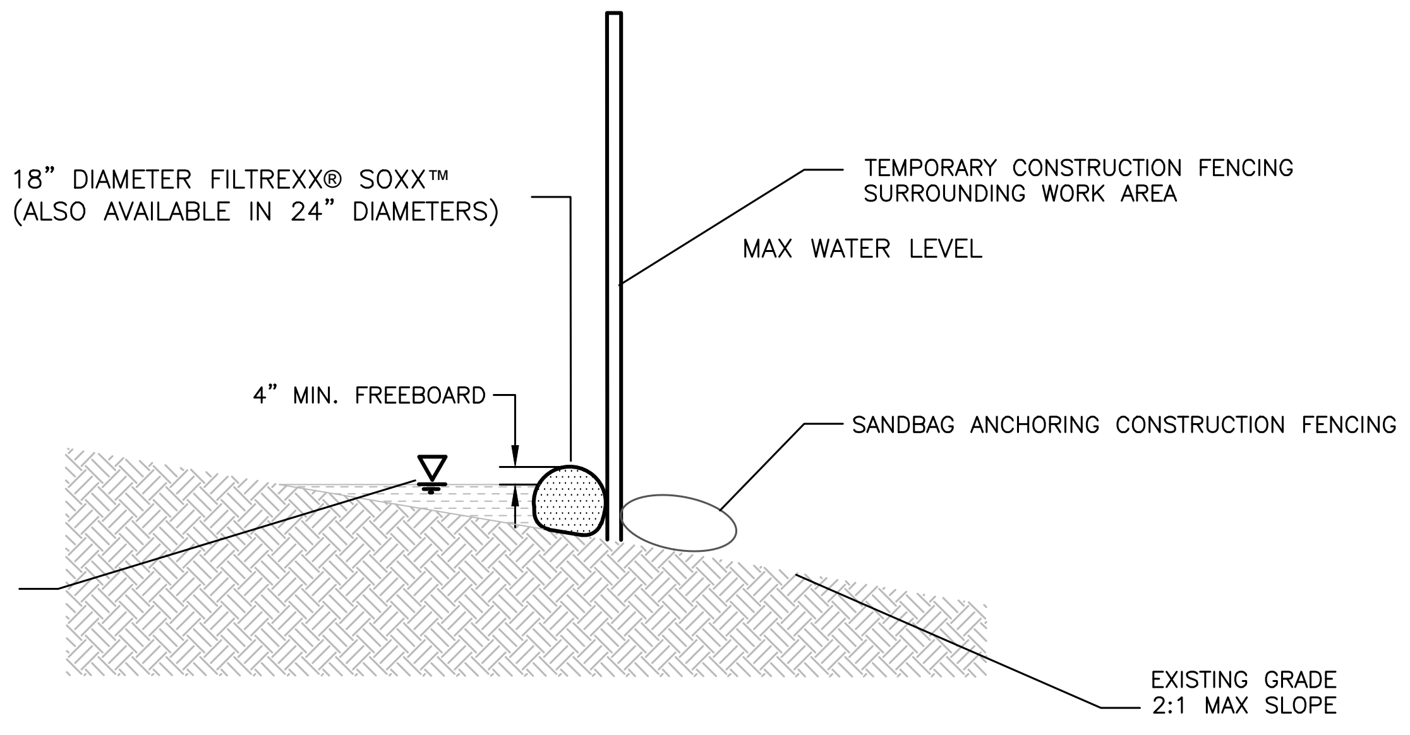
3
D–1
STRAW BALE DIKE
SCALE: NOT TO SCALE



PLAN VIEW

ELEVATION VIEW

4
D–1
CATCH BASIN INLET PROTECTION
NOT TO SCALE



SINGLE INSTALLATION SECTION

5
D–1
FILTREXX® SOXX™ SEDIMENT BARRIERS
NOT TO SCALE

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ROUX
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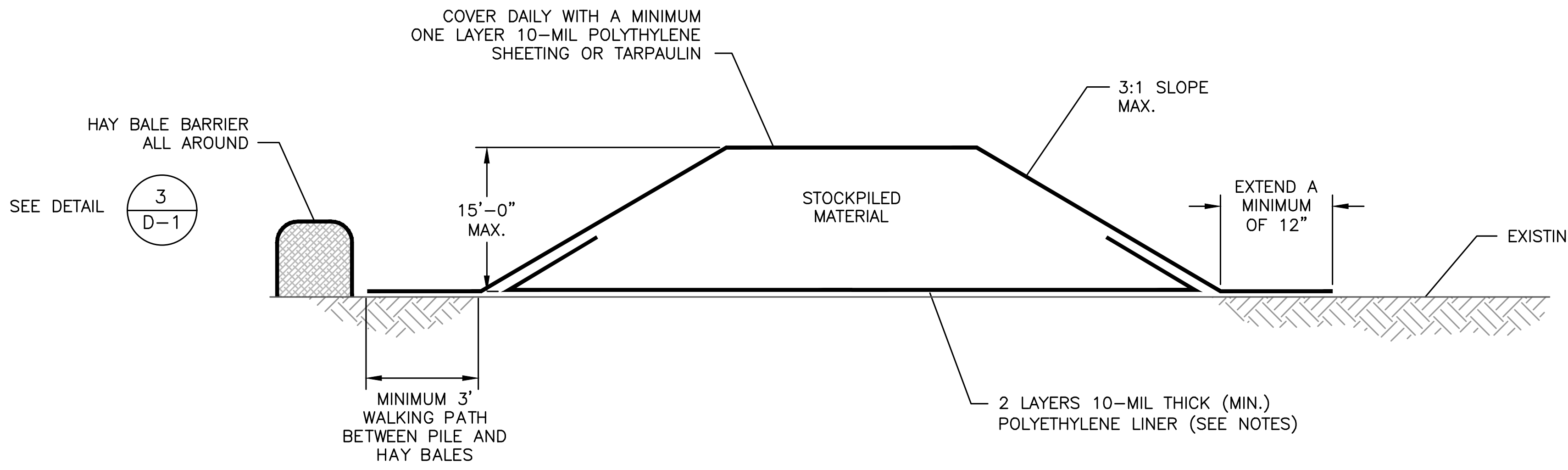
12 GILL STREET, SUITE 4700 WOBURN MA 01801
(781) 569-4000

PROJECT NAME:
350 FRANKLIN STREET
OLEAN, NEW YORK
PROJECT FOR:
MJ PAINTING CONTRACTOR CORP.

TITLE:
SITE PREPARATION DETAILS - 1

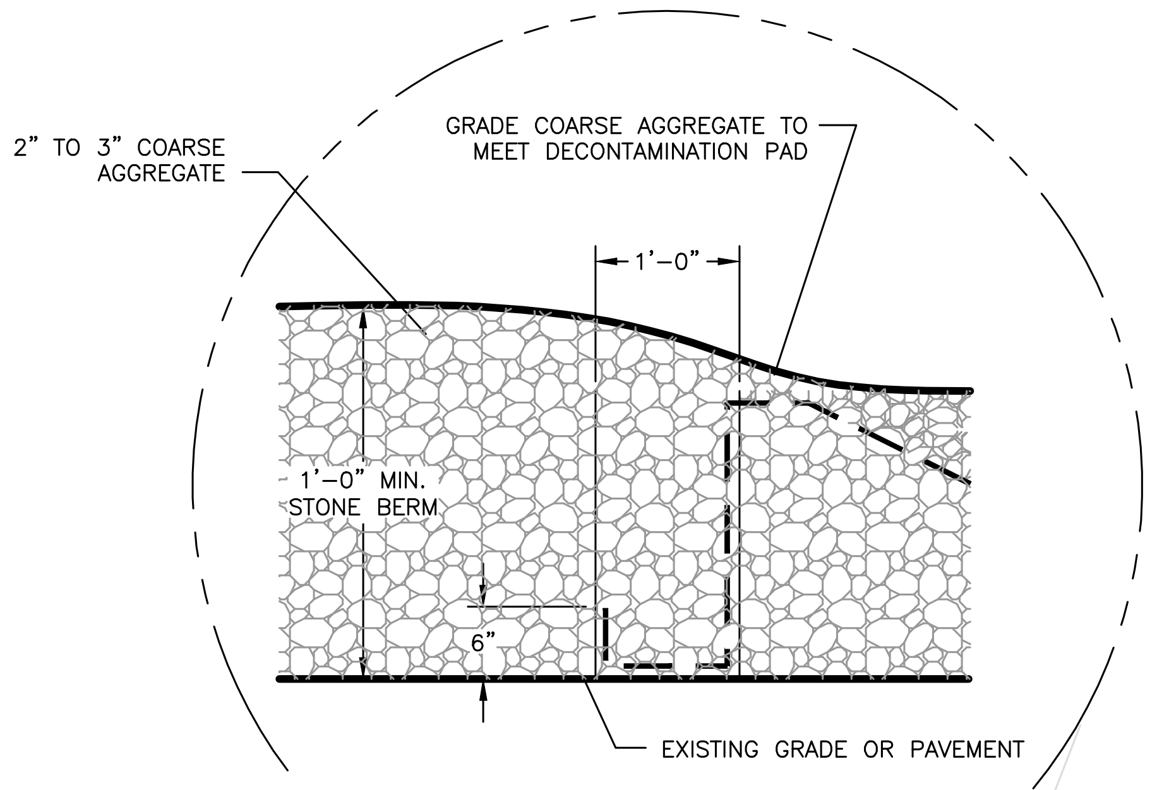
DRAWING NO.
4B
DRAWING
4 OF 11



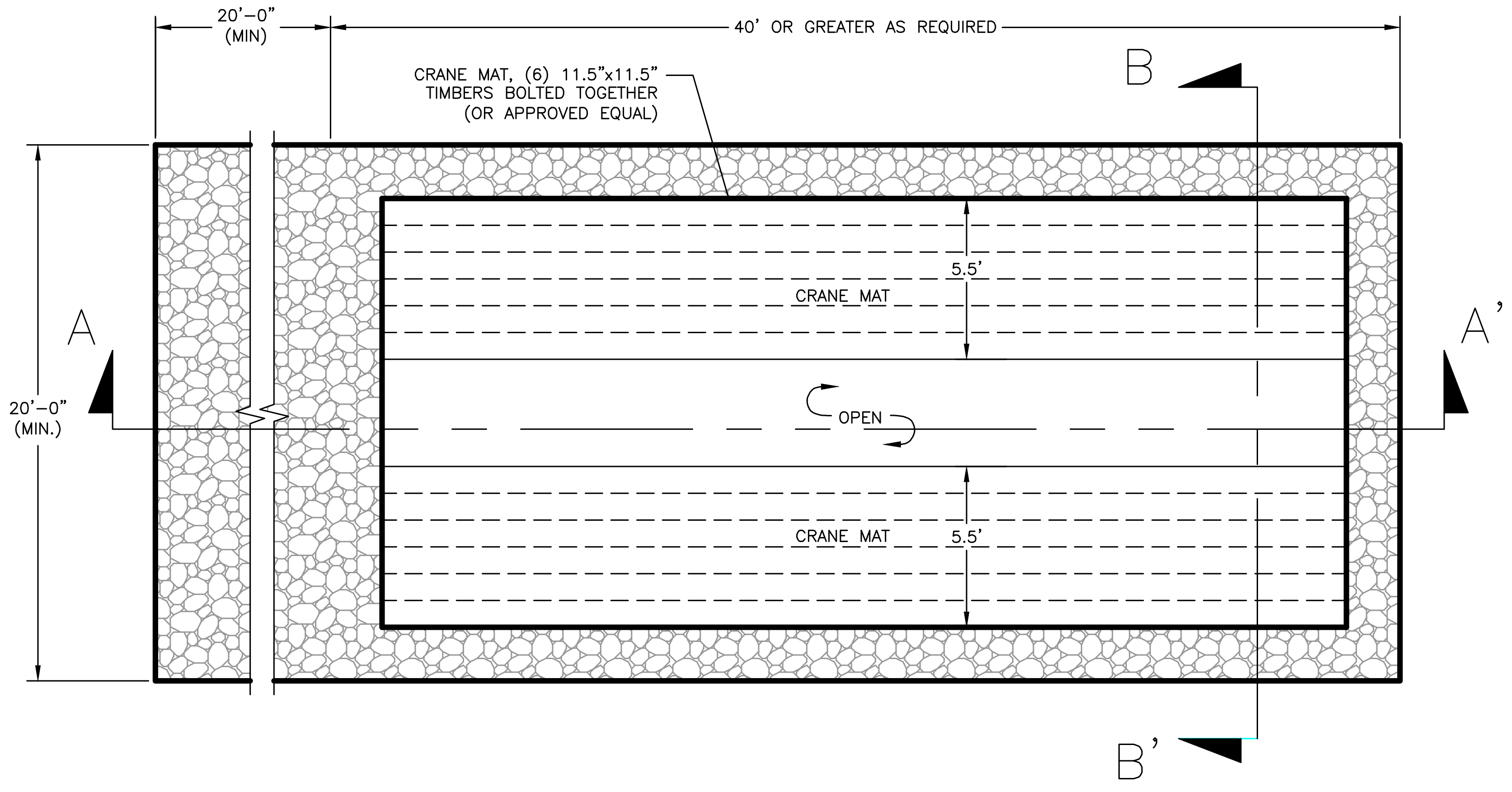
STOCKPILE NOTES

1. THE REQUIREMENTS SHOWN ARE MINIMUM REQUIREMENTS. REFER ALSO TO SPECIFICATION SECTION 01520 FOR SPECIFIC STAGING REQUIREMENTS.
2. POLYETHYLENE SHEETING SHALL OVERLAP BY A MINIMUM OF TWELVE (12) INCHES AND SHALL BE ANCHORED, USING HAY BALES OR EQUIVALENT WEIGHTS, AT 5 TO 10 FOOT CENTERS. USE ADDITIONAL WEIGHTS, AS NECESSARY, TO PROPERLY ANCHOR SHEETING DURING WINDY CONDITIONS.
3. PLACE TWO (2) LAYERS OF POLYETHYLENE SHEETING BELOW ALL STOCKPILED MATERIAL.
4. ALL STOCKPILES SHALL BE LABELED WITH SIGNS INDICATING THE STOCKPILE CONTENTS.
5. 10-MIL POLYETHYLENE SHEETING OR WEIGHTED TARPAULIN SHALL BE USED TO COVER THE STOCKPILE.
6. WHERE STAKING IS NOT PRACTICAL AND IN PAVED AREAS, HAY BALES SHALL BE TIED TOGETHER TO PREVENT MOVEMENT OR OPENINGS IN THE BARRIER.

1
D-2
CONTAMINATED MATERIAL STOCKPILE DETAIL
SCALE: NOT TO SCALE



2a
D-2
LINER ANCHOR TRENCH DETAIL
SCALE: NOT TO SCALE

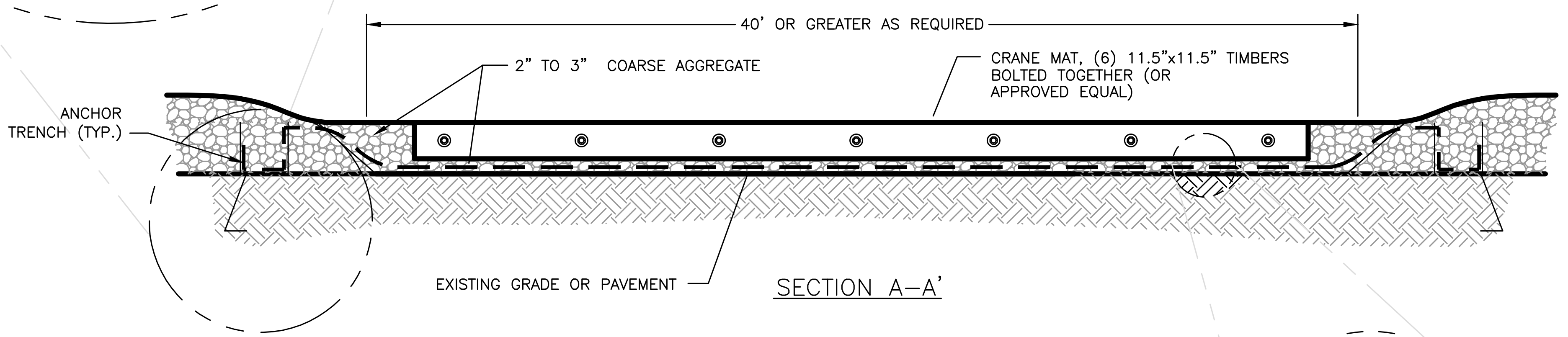


PLAN VIEW

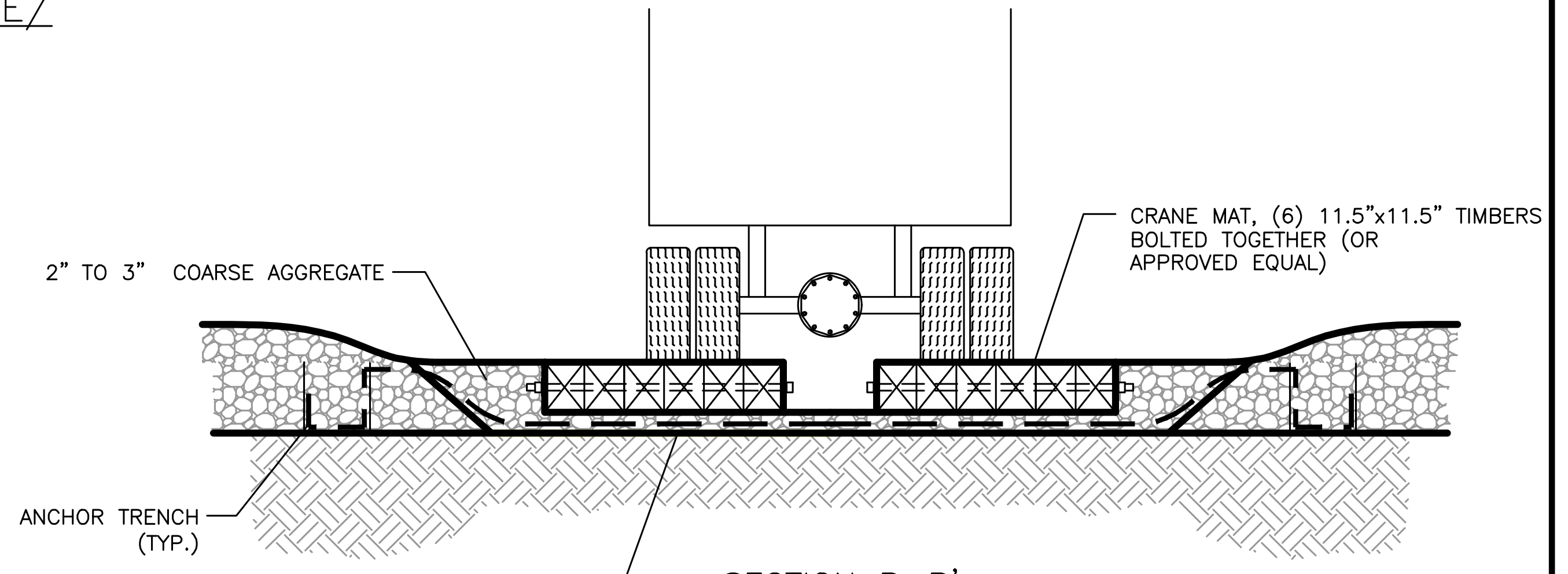
2
D-2
STABILIZED CONSTRUCTION ENTRANCE/ DECONTAMINATION PAD DETAIL
SCALE: NOT TO SCALE

STABILIZED CONSTRUCTION ENTRANCE/DECONTAMINATION PAD NOTES

1. CONTRACTOR SHALL INSTALL DECONTAMINATION PAD/STABILIZED CONSTRUCTION ENTRANCE AT EACH CONSTRUCTION VEHICLE ACESS POINT TO THE SITE OR NECESSARY FOR THE WORK.
2. STONE SIZE SHALL BE COARSE AGGREGATE (STONE SIZE 2" TO 3").
3. NON-WOVEN GEOTEXTILE – PLACE OVER ENTIRE AREA PRIOR TO PLACING OF STONE.
4. 12-OZ NON-WOVEN GEOTEXTILE SHALL BE MIRAFI 1120N OR APPROVED EQUUVALENT. REFER ALSO TO SPECIFICATION SECTION 02275 FOR SPECIFIC GEOTEXTILE REQUIREMENTS.
5. MAINTENANCE – THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SOIL ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SOIL. ALL SOIL SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHTS-OF-WAY MUST BE REMOVED IMMEDIATELY.
6. WASHING – WHEELS SHALL BE CLEANED TO REMOVE SOIL PRIOR TO ENTRANCE ONTO PUBLIC RIGHTS-OF-WAY. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH STONE.
7. PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED AFTER EACH RAIN EVENT AND AT ENGINEER'S REQUEST.
8. STABILIZED CONSTRUCTION ENTRANCE/DECONTAMINATION PAD SHALL BE COVERED WITH 10-MIL POLYETHYLENE WHEN NOT IN USE SPECIFICALLY DURING RAIN EVENTS.



SECTION A-A'



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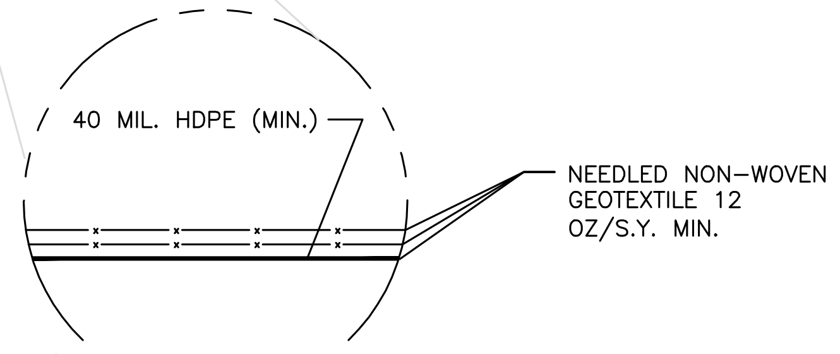
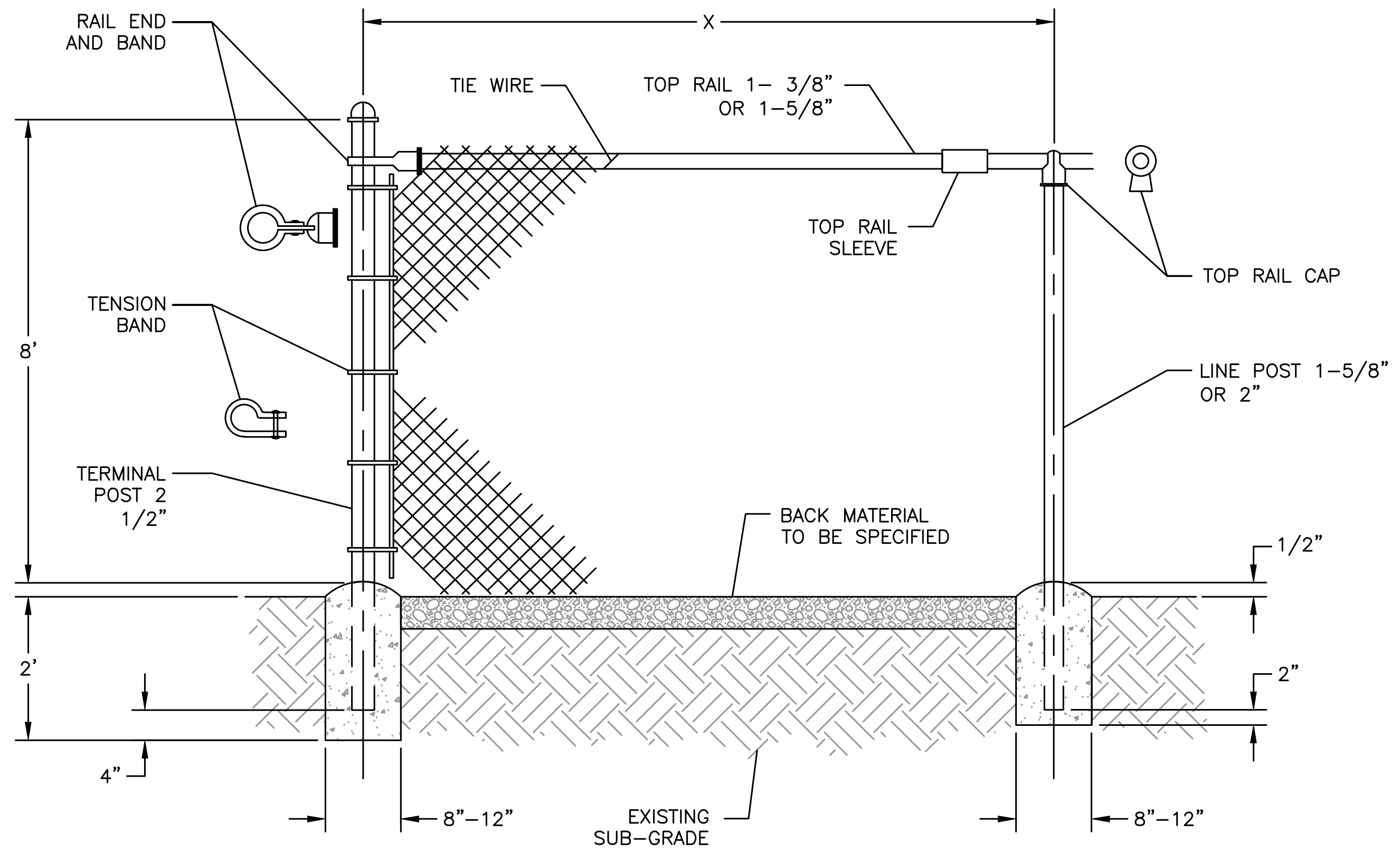


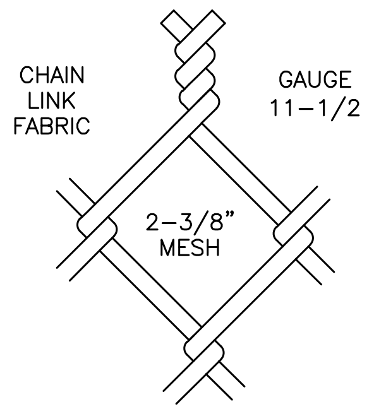
2b
D-2
LINER DETAIL
SCALE: NOT TO SCALE

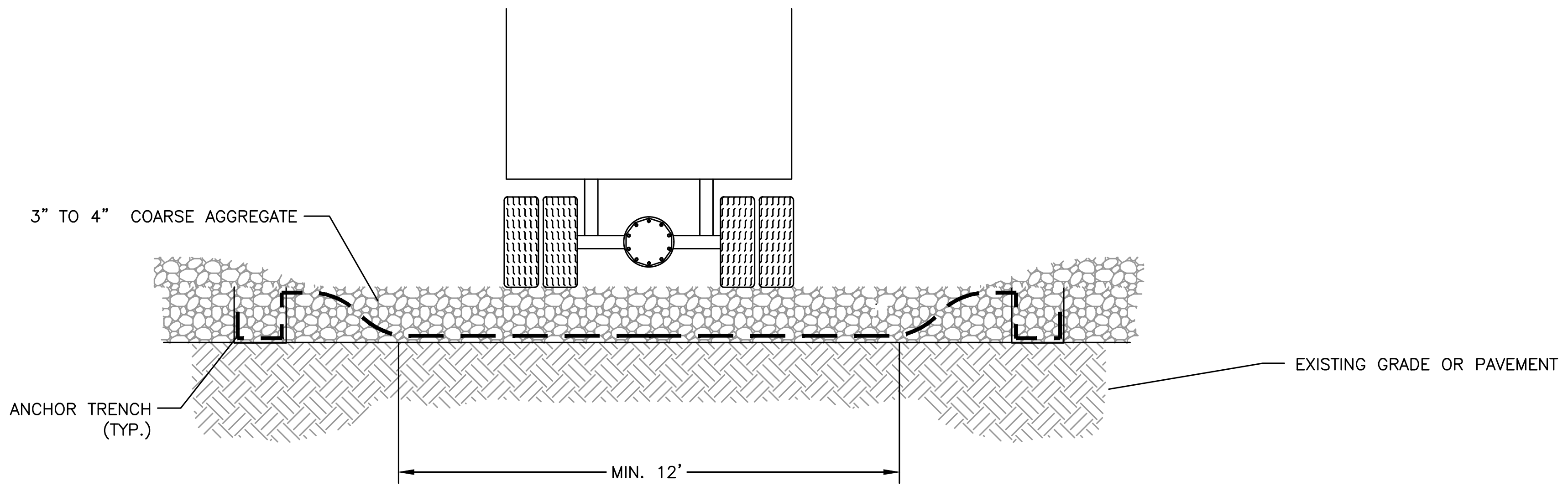


NOTE

POST HOLE DIAMETER IS FOUR TIMES THE DIAMETER OF THE POST.

3
D-2
CHAIN LINK FENCE DETAIL
SCALE: NOT TO SCALE





4
D-2
HAUL ROAD DETAIL
SCALE: NOT TO SCALE

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PROJECT NAME:
350 FRANKLIN STREET
OLEAN, NEW YORK
PROJECT FOR:
MJ PAINTING CONTRACTOR CORP.

TITLE:
SITE PREPARATION DETAILS - 2

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4C
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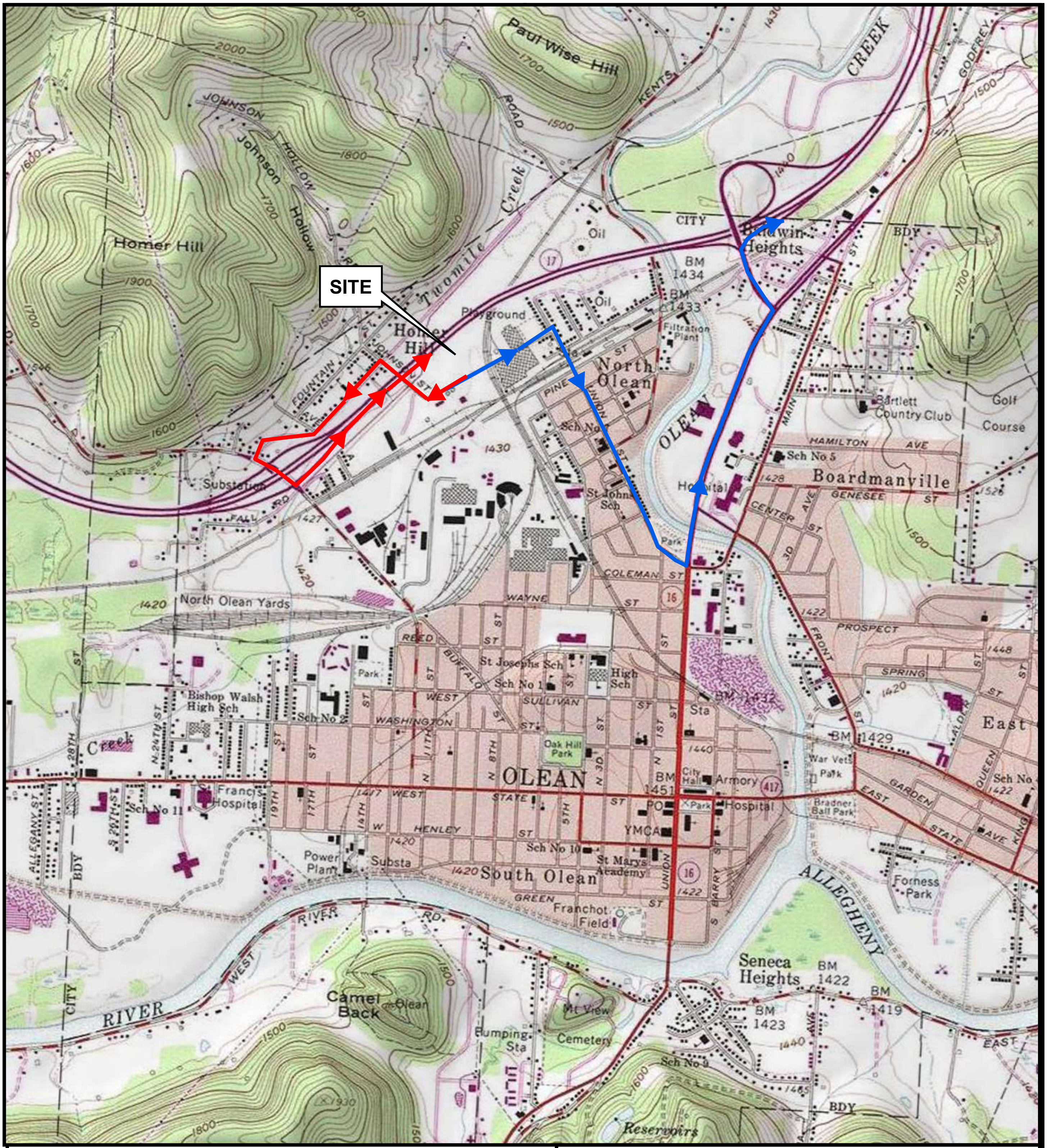
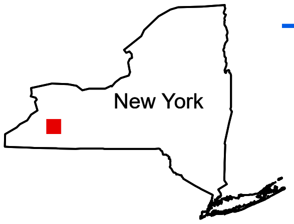
4 OF 11



QUADRANGLE LOCATION



🟥 POTENTIAL TRUCKING ROUTE 1

🟦 POTENTIAL TRUCKING ROUTE 2

1,000 0 1,000'

N

Title:

TRUCKING ROUTES

350 FRANKLIN STREET
OLEAN, NY

Prepared for:

MJ PAINTING CONTRACTOR CORP.

ROUX
Roux Environmental Engineering and Geology, D.P.C.
12 GILL STREET, SUITE 4700 WOBURN MA 01801
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LEGEND

🟩	AREAS OF SURFICIAL SOIL (0–1' BGS.) PROPOSED TO BE REUSED IN BCP COMPLIANT COVER
🟧	AREAS OF SURFICIAL SOIL (0–1' BGS.), PROPOSED TO BE REUSED BELOW 1' BGS DUE TO EXCEEDANCE NON–COC GROUNDWATER PROTECTION AND COMMERCIAL SCOS
🟨	AREAS OF SURFICIAL SOIL (0–1' BGS.), PROPOSED TO BE DISPOSED OF DUE TO EXCEEDANCE OF COC GROUNDWATER PROTECTION SCOS
▨	AREAS OF SURFICIAL GCM (0–1' BGS.), PROPOSED TO BE MITIGATED VIA SURFICIAL EXCAVATION AND COVER
—	SITE BOUNDARY
● RX–220	DESIGNATION AND APPROXIMATE LOCATION OF SURFICIAL SOIL SAMPLE
● RX–429	DESIGNATION AND APPROXIMATE LOCATION OF SURFICIAL SOIL SAMPLE AND SOIL BORING
● RX–024	DESIGNATION AND APPROXIMATE LOCATION OF SURIFICAL SOIL SAMPLE COLLECTED IN 2019

NOTES:

ALL FEATURES ARE APPROXIMATE

THE ENTIRE BCP SITE WILL HAVE A BCP COMPLIANT SITE COVER SYSTEM

ALL REMEDY AREAS ARE TRACK 4 EXCEPT WHERE NOTED

COC = CONTAMINANTS OF CONCERN:
BENZENE, TOLUENE, ETHYLBENZENE, XYLENE (O), XYLENE(M&P), TOTAL XYLENES, 1,3,5–TRIMETHYLBENZENE, 1,2,4–TRIMETHYLBENZENE

SOURCE:

AERIAL IMAGE OBTAINED FROM GOOGLE EARTH

45' 0 45'

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PROJECT NAME:
350 FRANKLIN STREET
OLEAN, NEW YORK

PROJECT FOR:
MJ PAINTING CONTRACTOR CORP.

TITLE:
SURFICIAL SOIL REUSE PLAN

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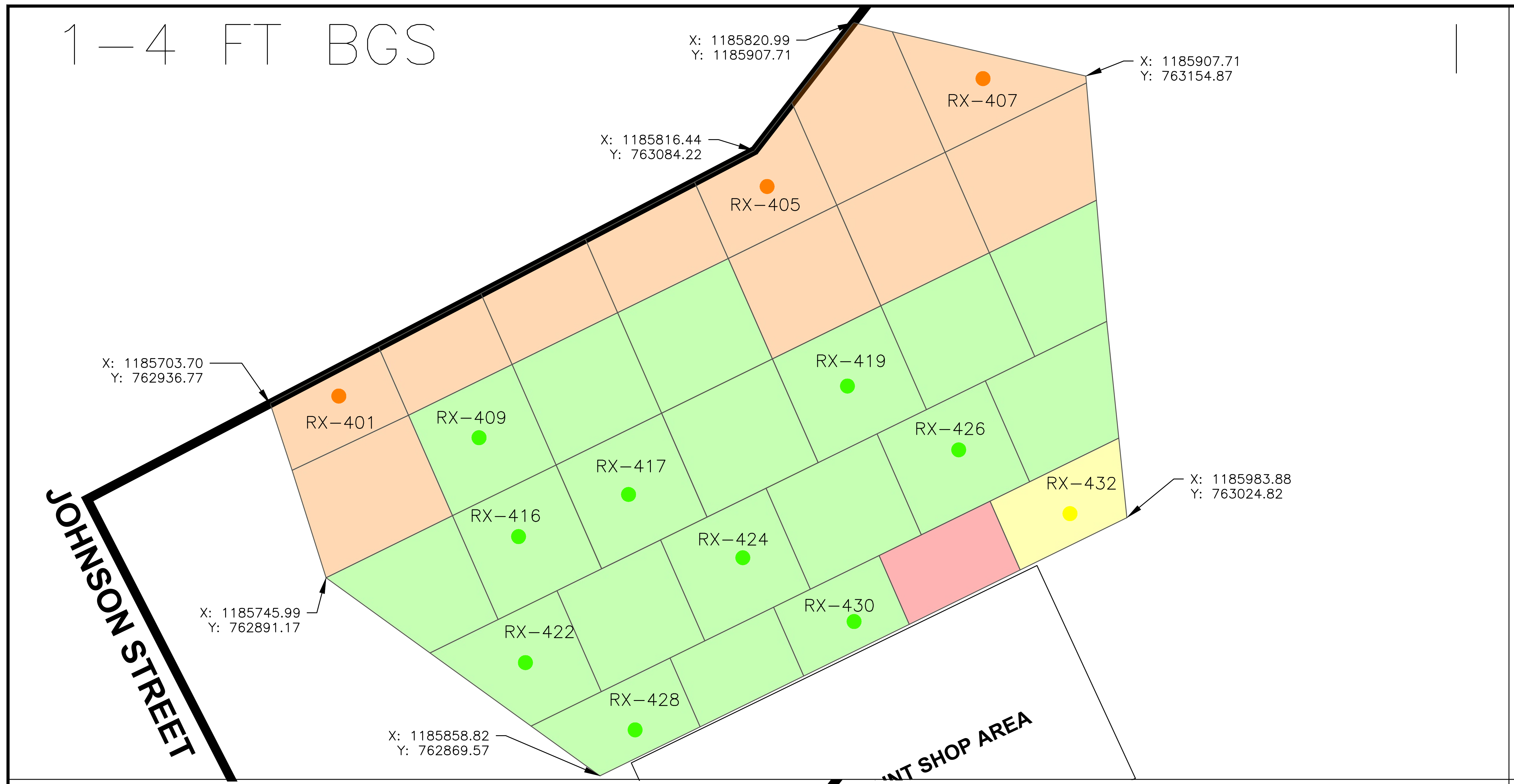

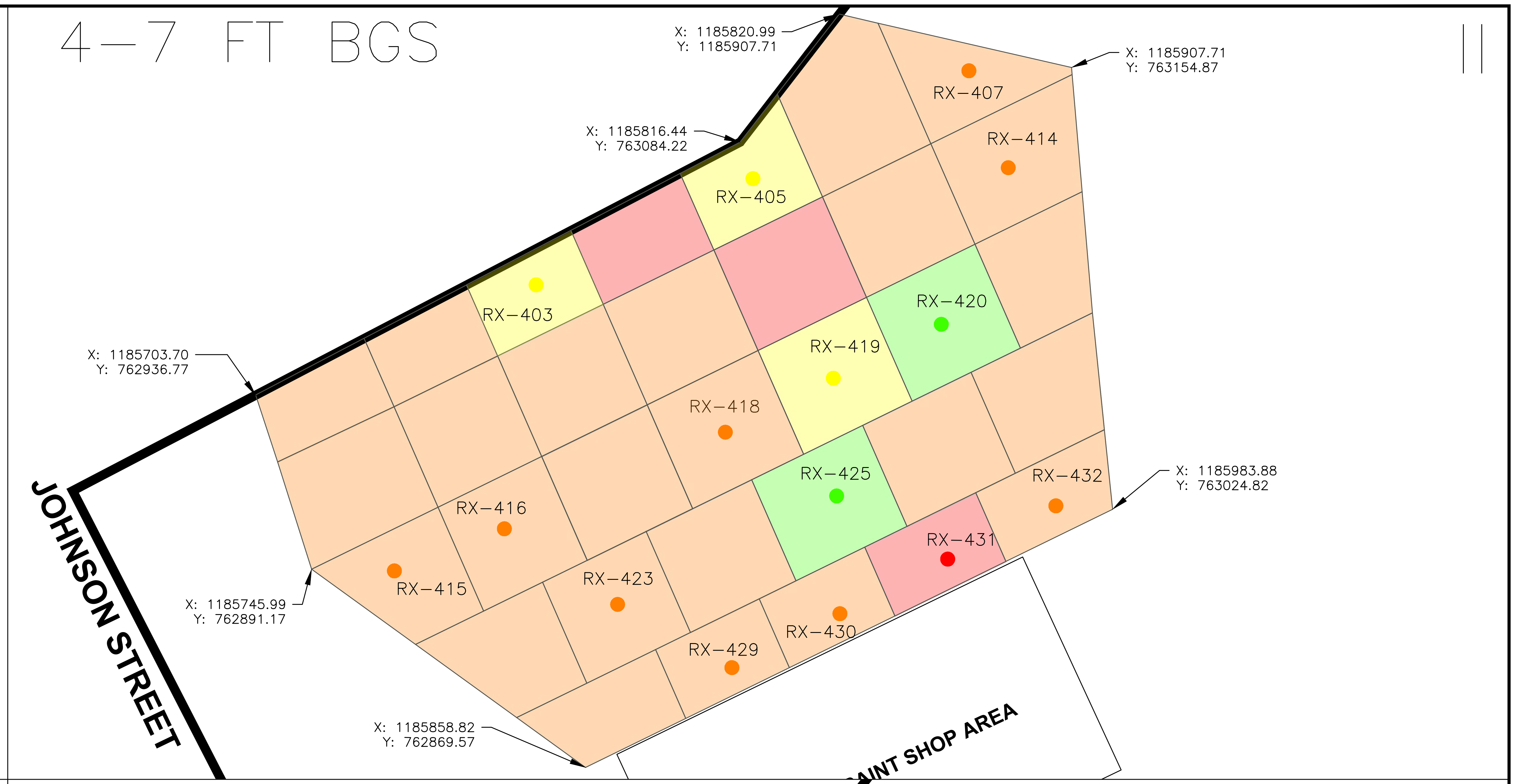

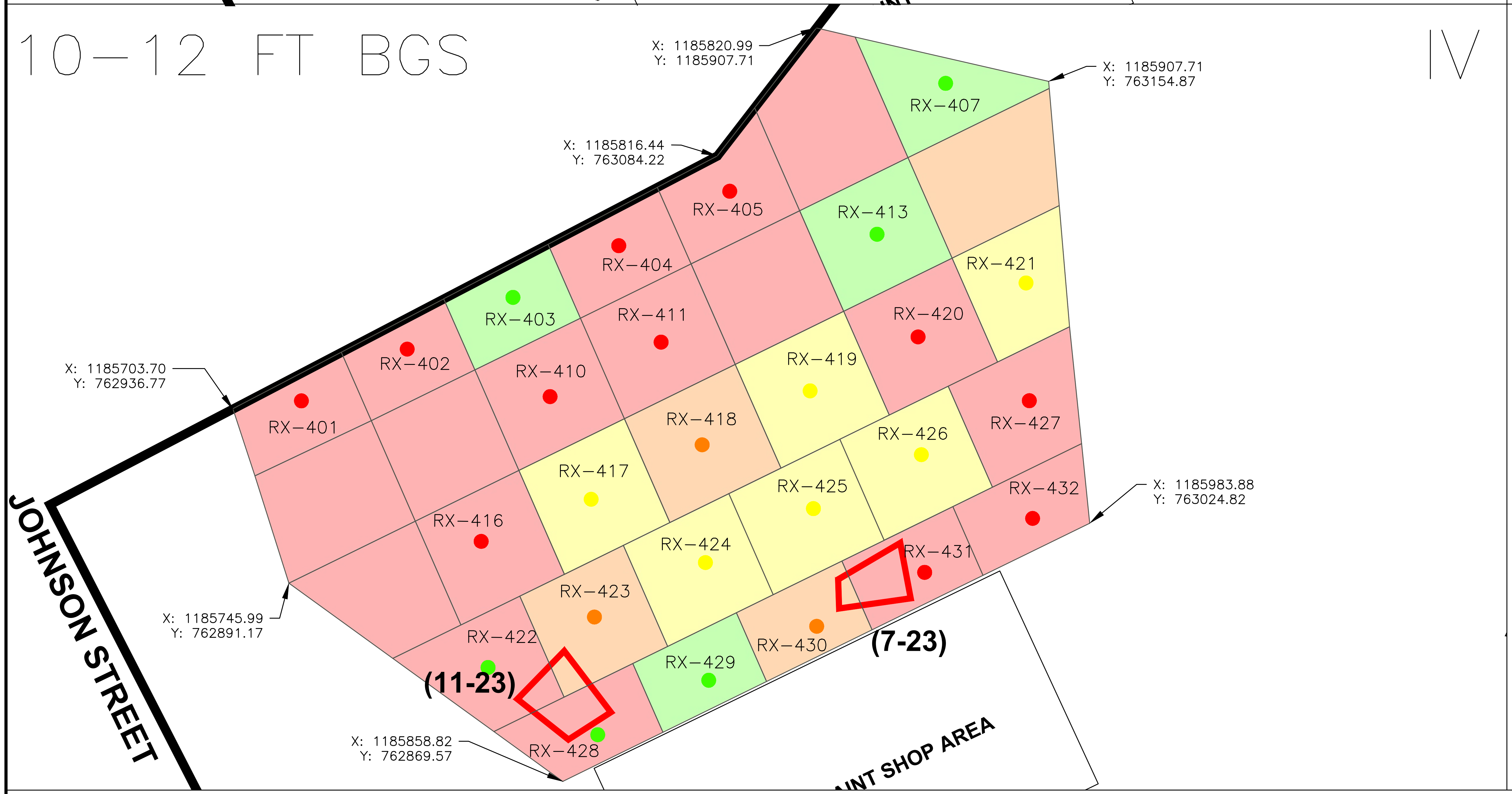

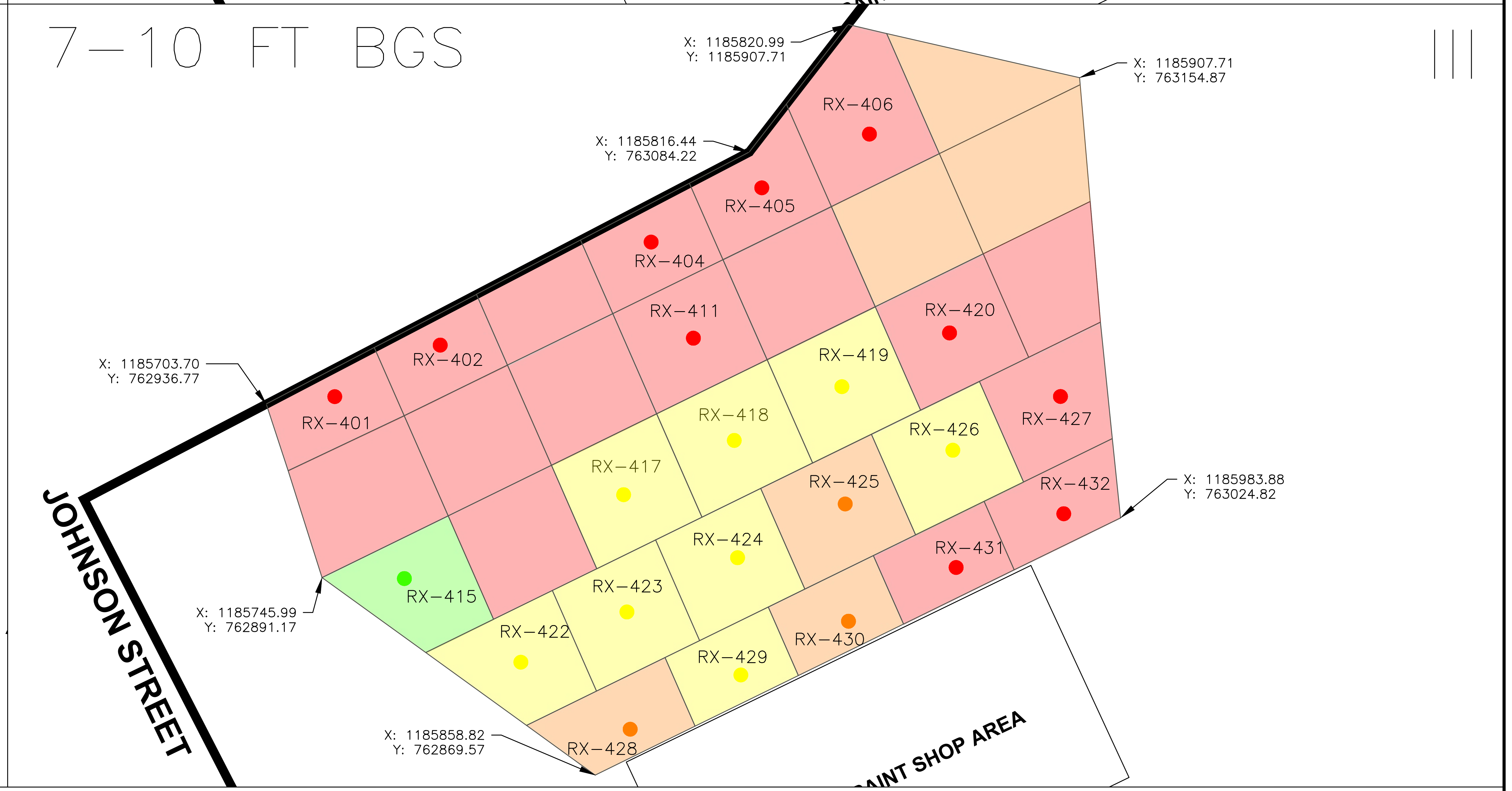

LEGEND

———	SITE BOUNDARY
▭	RI TEST PIT LOCATIONS WHERE GCM WAS IDENTIFIED
(16-26)	DEPTH INTERVAL OF IDENTIFIED GCM (FT. BGS)
● RX–420	DESIGNATION AND APPROXIMATE LOCATION OF SOIL SAMPLE WITH NO SCO EXCEEDANCES
● RX–420	DESIGNATION AND APPROXIMATE LOCATION OF SOIL SAMPLE WITH PROTECTION OF GROUNDWATER SCO EXCEEDANCES
● RX–420	DESIGNATION AND APPROXIMATE LOCATION OF SOIL SAMPLE WITH PROTECTION OF GROUNDWATER AND COMMERCIAL SCO EXCEEDANCES
● RX–420	DESIGNATION AND APPROXIMATE LOCATION OF SOIL SAMPLE WHERE GCM WAS IDENTIFIED
🟩	AREAS OF SOIL PROPOSED TO BE REUSED IN BCP COMPLIANT COVER
🟧	AREA OF SOIL PROPOSED TO BE REUSED BELOW 1' BGS DUE TO EXCEEDANCE OF NON–COC GROUNDWATER PROTECTION SCOS OR COMMERCIAL SCOS
🟨	AREA OF SOIL DESIGNATED FOR DISPOSAL DUE TO EXCEEDANCE OF COC GROUNDWATER PROTECTION SCOS
🟥	AREA OF SOIL DESIGNATED FOR DISPOSAL

NOTES:

ALL FEATURES ARE APPROXIMATE

THE ENTIRE BCP SITE WILL HAVE A BCP COMPLIANT SITE COVER SYSTEM

WHERE NO SOIL SAMPLE IS LOCATED WITHIN A POLYGON, DESIGNATION WAS DETERMINED BASED ON SURROUNDING SAMPLES

COC = CONTAMINANTS OF CONCERN:
BENZENE, TOLUENE, ETHYLBENZENE, XYLENE (O), XYLENE(M&P), TOTAL XYLENES, 1,3,5–TRIMETHYLBENZENE, 1,2,4–TRIMETHYLBENZENE

GRID SPACES RANGE IN SIZE FROM APPROXIMATELY 1,000 SF TO 1,900 SF AND REPRESENT SOIL VOLUMES OF APPROXIMATELY 100 TO 200 CY IN QUADRANTS I, II, AND III (3–FOOT THICK LAYERS) AND 75 TO 150 CY IN QUADRANT IV (2–FOOT THICK LAYER). GRID SPACES WITHOUT DIRECT REPRESENTATIVE SAMPLES WERE EVALUATED BASED ON HORIZONTALLY AND VERTICALLY ADJACENT SAMPLES AND IN ACCORDANCE WITH NYSDEC DER–10 TABLE 5.4(E)10.

30' 0 30'

N

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PROJECT NAME:
350 FRANKLIN STREET
OLEAN, NEW YORK

PROJECT FOR:
MJ PAINTING CONTRACTOR CORP.

TITLE:
SUBSURFACE SOIL REUSE PLAN
AREA 1

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6B
DRAWING
6 OF 11

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LEGEND

▬	SITE BOUNDARY
🟢 RX–420	DESIGNATION AND APPROXIMATE LOCATION OF SOIL SAMPLE WITH NO SCO EXCEEDANCES
🟡 RX–420	DESIGNATION AND APPROXIMATE LOCATION OF SOIL SAMPLE WITH PROTECTION OF GROUNDWATER SCO EXCEEDANCES
🟠 RX–420	DESIGNATION AND APPROXIMATE LOCATION OF SOIL SAMPLE WITH PROTECTION OF GROUNDWATER AND COMMERCIAL SCO EXCEEDANCES
🔴 RX–420	DESIGNATION AND APPROXIMATE LOCATION OF SOIL SAMPLE WHERE GCM WAS IDENTIFIED
🟩	AREAS OF SOIL PROPOSED TO BE REUSED IN BCP COMPLIANT COVER
🟧	AREA OF SOIL PROPOSED TO BE REUSED BELOW 1' BGS DUE TO EXCEEDANCE OF NON–COC GROUNDWATER PROTECTION OR COMMERICAL SCOS
🟨	AREA OF SOIL DESIGNATED FOR DISPOSAL DUE TO EXCEEDANCE OF COC GROUNDWATER PROTECTION SCOS
🟥	AREA OF SOIL DESIGNATED FOR DISPOSAL

NOTES:

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WHERE NO SOIL SAMPLE IS LOCATED WITHIN A POLYGON, DESIGNATION WAS DETERMINED BASED ON SURROUNDING SAMPLES

COC = CONTAMINANTS OF CONCERN:
BENZENE, TOLUENE, ETHYLBENZENE, XYLENE(O), XYLENE(M&P), TOTAL XYLENES, 1,3,5–TRIMETHYLBENZENE, 1,2,4–TRIMETHYLBENZENE

GRID SPACES RANGE IN SIZE FROM APPROXIMATELY 2,000 SF TO 3,200 SF AND REPRESENT SOIL VOLUMES OF APPROXIMATELY 225 TO 350 CY IN QUADRANTS I, II, AND III (3–FOOT THICK LAYERS) AND 150 TO 250 CY IN QUADRANT IV (2–FOOT THICK LAYER). GRID SPACES WITHOUT DIRECT REPRESENTATIVE SAMPLES WERE EVALUATED BASED ON HORIZONTALLY AND VERTICALLY ADJACENT SAMPLES AND IN ACCORDANCE WITH NYSDEC DER–10 TABLE 5.4(E)10.

30' 0 30'

N

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PROJECT NO.: 2317.0002M000	
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ROUX
Roux Environmental
Engineering and Geology, D.P.C.
12 GILL STREET, SUITE 4700 WOBURN MA 01801
(781) 569-4000

PROJECT NAME:
350 FRANKLIN STREET
OLEAN, NEW YORK

PROJECT FOR:
MJ PAINTING CONTRACTOR CORP.

TITLE:
SUBSURFACE SOIL REUSE PLAN
AREA 2

DRAWING NO.
6C
DRAWING
6 OF 11

LEGEND

RX-008 ⊕	REMEDIAL INVESTIGATION (2019–2020) MONITORING WELL LOCATION
RXMW-005 ●	REMEDIAL INVESTIGATION (2019–2020) SOIL BORING LOCATION
MW-104 ▚	MONITORING WELL INSTALLED PRIOR TO REMEDIAL INVESTIGATION
SB-108 ■	SOIL BORING INSTALLED PRIOR TO REMEDIAL INVESTIGATION
RXMW-107 ▼	MONITORING WELL INSTALLED DURING PRE-DESIGN INVESTIGATION
RXMW-003 ⊕	MONITORING WELL DESIGNATED FOR POST-COC GROUNDWATER MONITORING AND/OR EVALUATION OF GROUNDWATER CONCENTRATION REDUCTION MEASURES
☐	RI TEST PIT LOCATIONS
———	SITE BOUNDARY
—o—o—	NEIGHBORING FENCE LINE
(16-26)	DEPTH INTERVAL OF IDENTIFIED GCM (FT. BGS)
🟦	PETROLEUM-RELATED IMPACTS IDENTIFIED BOTH ABOVE AND BELOW 15 FEET BGS.
🟧	PETROLEUM-RELATED IMPACTS IDENTIFIED BELOW 15 FEET BGS. ONLY
●	MONITORING WELL WHERE LNAPL HAS BEEN MEASURED IN 2020
●	SUBSURFACE GCM (>1' BGS.) IDENTIFIED
— W —	UNDERGROUND WATER UTILITY
— ST —	UNDERGROUND STORM SEWER UTILITY
— SS —	UNDERGROUND SANITARY SEWER UTILITY
— UE —	UNDERGROUND ELECTRIC UTILITY
— · — · —	OVERHEAD ELECTRIC UTILITY
———	UTILITY LINE IDENTIFIED ON FELMONT OIL CORP SURVEY MAPS, NOT FIELD VERIFIED.
— —	UTILITY CORRIDOR IDENTIFIED ON FELMONT OIL CORP SURVEY MAPS, NOT FIELD VERIFIED.
▨	AREA TO BE COVERED WITH BCP COMPLIANT COVER
▼	PROPOSED PERIMETER RECOVERY WELL
▨	AREAS OF SURFICIAL GCM (0-1' BGS.), PROPOSED TO BE MITIGATED VIA SURFICIAL EXCAVATION AND COVER
🟩	AREAS OF GCM AND/OR LNAPL, PROPOSED TO BE MITIGATED VIA EXCAVATION, AND/OR SOLIDIFICATION, AND COVER

NOTES:

ALL FEATURES ARE APPROXIMATE

THE ENTIRE BCP SITE WILL HAVE A BCP COMPLIANT SITE COVER SYSTEM

ALL REMEDY AREAS ARE TRACK 4 EXCEPT WHERE NOTED

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PROJECT NAME:
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OLEAN, NEW YORK

PROJECT FOR:
MJ PAINTING CONTRACTOR CORP.

TITLE:
DEEP EXCAVATION
AND ISS PLAN

DRAWING NO.
7
DRAWING
7 OF 11

N:\PROJECTS\MJ PAINTING CONTRACTOR CORP\2317.0002M000\132 REV\2317.0002M000.132 REV.07.DWG

LEGEND

▬	SITE BOUNDARY
▬	REMEDY AREA
– – – –	EXISTING ELEVATION CONTOUR
—	PROPOSED POST RESTORATION ELEVATION CONTOUR
🟨	AREA WHERE FINAL GROUND SURFACE ELEVATION DIFFERS FROM EXISTING GROUND SURFACE ELEVATION – SEE FIGURE 8
▦	AREA OF SURFICIAL SOIL EXCEEDANCES – COVER SYSTEM REQUIRED. SOIL (0'–1' BGS.) MUST BE REPLACED WITH CLEAN SOIL, AND MAY NOT BE REUSED ELSEWHERE ON–SITE WITHIN THE TOP 1'.

SOURCE:

WENDEL WD ARCHITECTURE, ENGINEERING, SURVEYING AND LANDSCAPE ARCHITECTURE, P.C., TOPOGRAPHIC SURVEY, DWG. NO. V100, DATED DECEMBER 17, 2020

NOTES:

ALL FEATURES ARE APPROXIMATE

N:\PROJECTS\MJ PAINTING CONTRACTOR CORP\2317.0002M000\132 REV\2317.0002M000.132.08.DWG

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(781) 569-4000

PROJECT NAME:
350 FRANKLIN STREET
OLEAN, NEW YORK

PROJECT FOR:
MJ PAINTING CONTRACTOR CORP.

TITLE:
COVER SYSTEM PLAN

DRAWING NO.
8

DRAWING
8 OF 11

CHANGE IN ELEVATION		
CUT	−1' TO −0.2'	🟥
NO CHANGE	−0.2' TO +0.2'	⬜
FILL	+0.2' TO +0.5'	🟩
	+0.5' TO +1.0'	🟩
	+1.0' TO +1.5'	🟩
	+1.5' TO +2.0'	🟩
	+2.0' TO +2.5'	🟩
	+2.5' TO +3.0'	🟩
	+3.0' TO +3.5'	🟩

SOURCE:

WENDEL WD ARCHITECTURE, ENGINEERING, SURVEYING AND LANDSCAPE ARCHITECTURE, P.C., TOPOGRAPHIC SURVEY, DWG. NO. V100, DATED DECEMBER 17, 2020

NOTES:

ALL FEATURES ARE APPROXIMATE

2d Area (Sq. Ft.)	Cut (Cu. Yd.)	Fill (Cu. Yd.)	Net (Cu. Yd.)
416701.81	187.38	2542.54	2355.15<Fill>

50' 0 50'

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PROJECT NAME:
350 FRANKLIN STREET
OLEAN, NEW YORK

PROJECT FOR:
MJ PAINTING CONTRACTOR CORP.

TITLE:
RESTORATION PLAN

DRAWING NO.
9
DRAWING
9 OF 11

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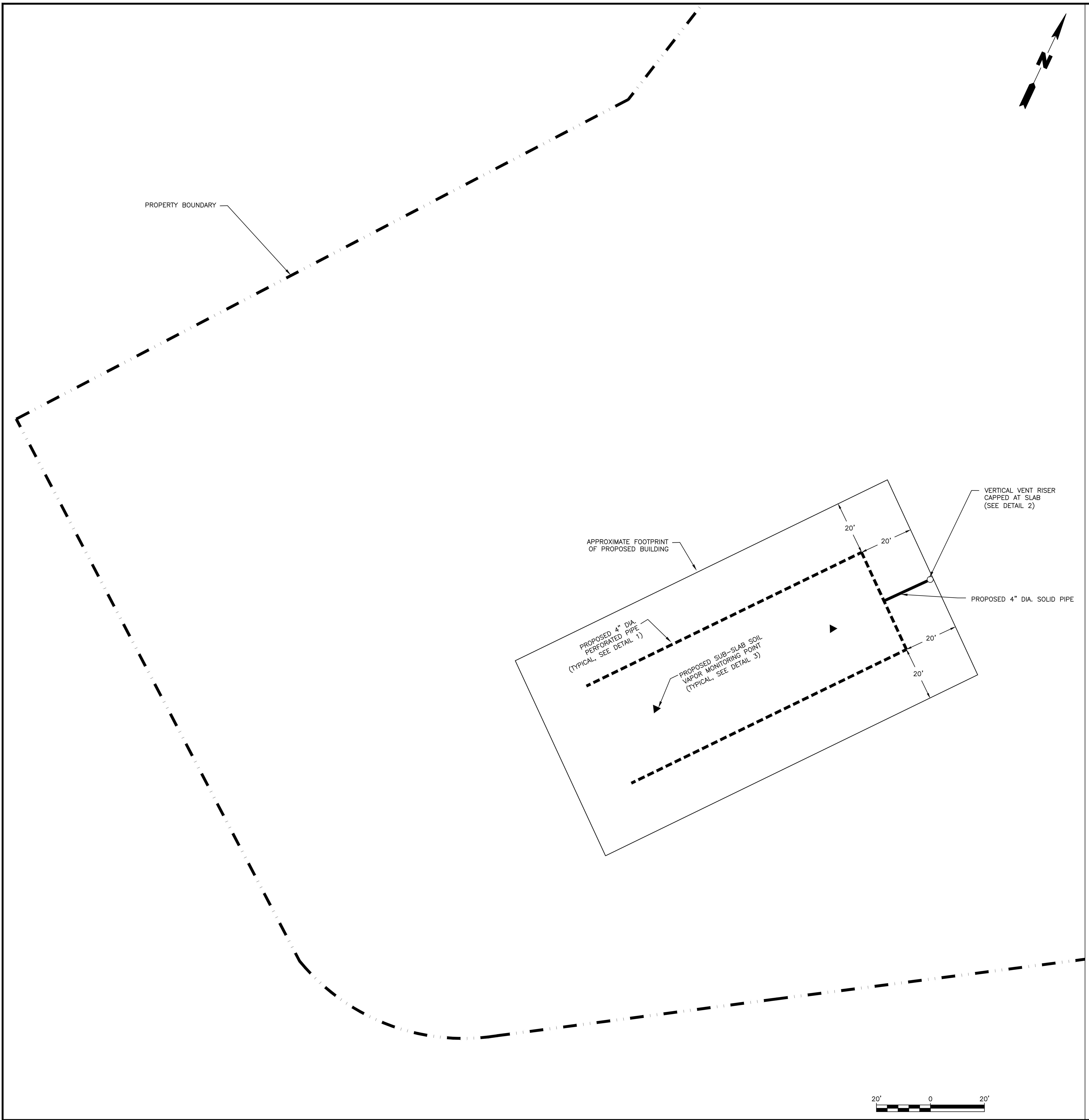
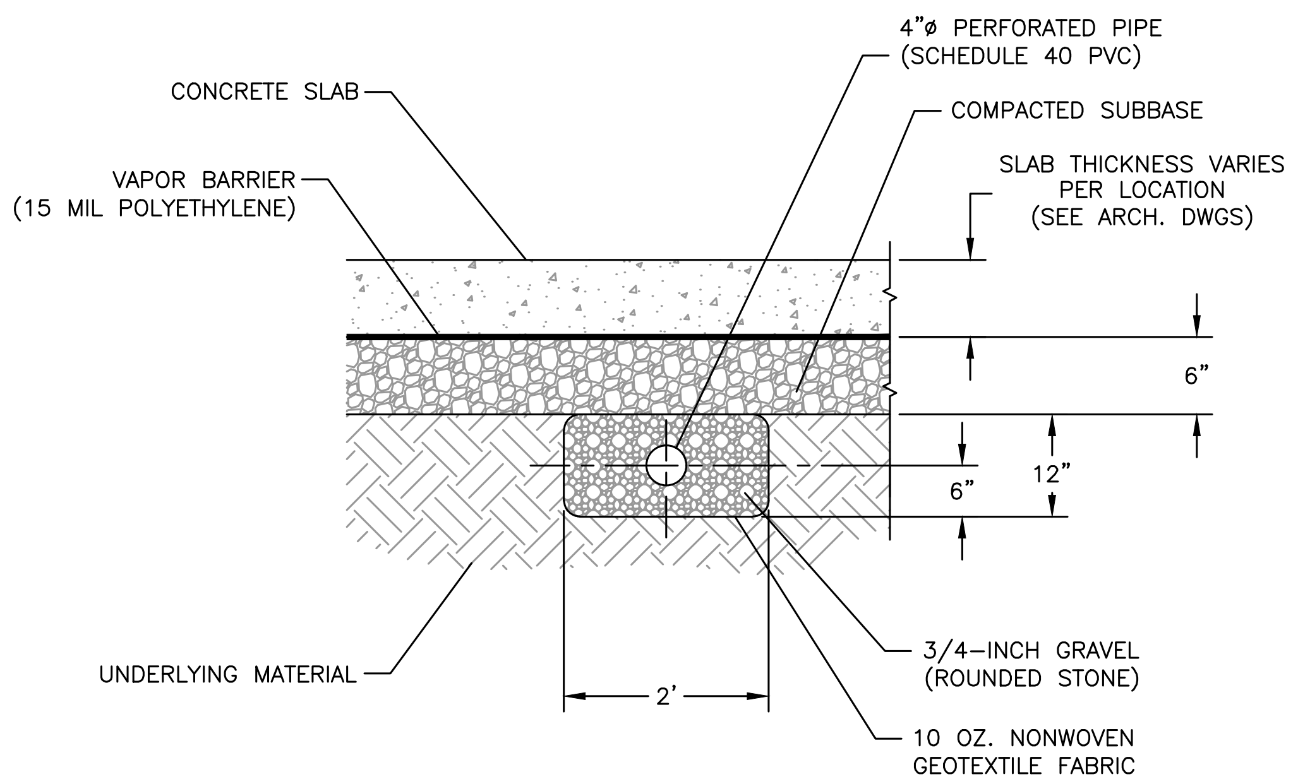


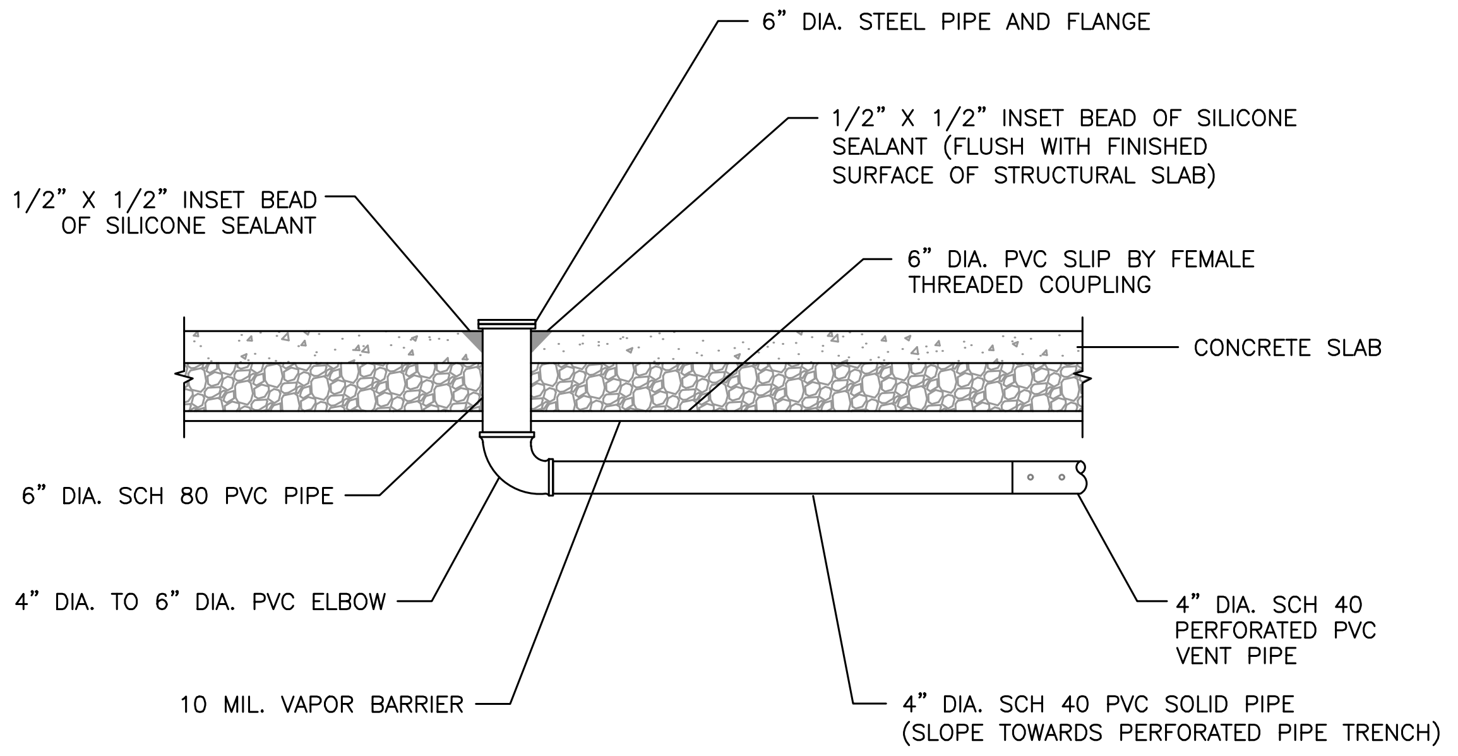


DETAIL 1 NOTES

1. CONTRACTOR SHALL COORDINATE WITH PLUMBING, MECHANICAL, CIVIL AND ELECTRICAL CONTRACTORS FOR ALL UTILITY CROSSINGS.
2. THE PERFORATED PIPE MAY BE ROUTED AROUND OR UNDERNEATH ANY UTILITY LINES (SEWER, WATER, GAS), AS APPROVED BY THE ENGINEER.
3. THE SURFACES TO BE LINED WITH GEOTEXTILE AND VAPOR BARRIER SHALL BE FREE OF ALL ROCKS, STONES, SHARP OBJECTS OR CONSTRUCTION DEBRIS OF ANY KIND.
4. INSTALL GEOTEXTILE NONWOVEN FABRIC DIRECTLY ON NATIVE SOIL. MATERIAL OVERLAPS SHALL BE A MINIMUM OF 12". THE OVERLAPPED SEAMS WILL BE SEALED WITH TAPE.
5. ALL PENETRATIONS THROUGH THE FLOOR SLAB SHALL BE SEALED USING A SILICONE BASED WATERPROOF SEALANT OR EQUIVALENT.
6. THE VAPOR BARRIER SHALL BE A MINIMUM OF 15 MIL. THICKNESS. REFER TO ARCHITECTURAL DRAWINGS FOR VAPOR BARRIER LOCATIONS.

1 SUB-SLAB DEPRESSURIZATION SYSTEM PIPE DETAIL

SCALE: NOT TO SCALE

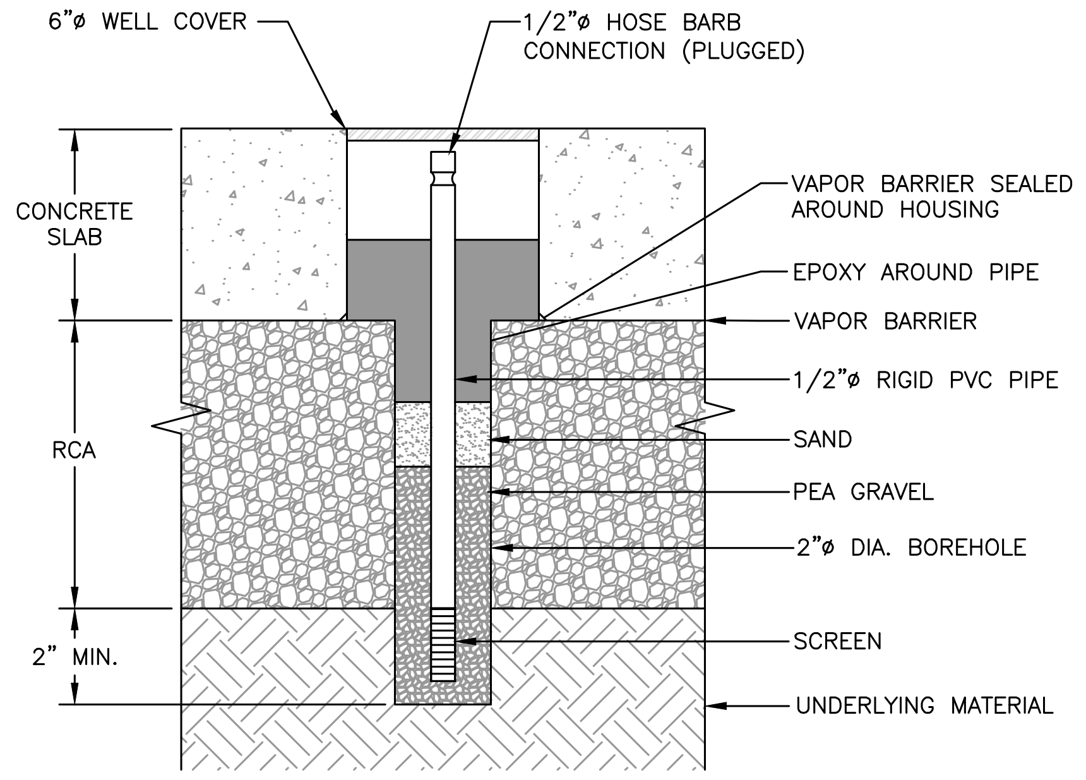


DETAIL 2 NOTES

1. PROPOSED VERTICAL RISER LOCATION IN STAIRWELL FOR POTENTIAL FUTURE CONNECTION TO ROOF.
2. IF NEEDED, THE VERTICAL RISER DISCHARGE SHALL BE LOCATED A MINIMUM OF 25 FEET FROM HVAC AIR INLETS.

2 VERTICAL RISER DETAIL

SCALE: NOT TO SCALE



DETAIL 3 NOTES

1. DEPICTED LOCATIONS OF SOIL VAPOR MONITORING POINTS ARE APPROXIMATE AND SHALL BE COORDINATED AND CONFIRMED WITH THE OWNER AND ENGINEER PRIOR TO CONSTRUCTION.

3 SOIL VAPOR MONITORING POINT DETAIL

SCALE: NOT TO SCALE

PLATE NOTES

1. SUB-SLUB DEPRESSURIZATION SYSTEM PIPING SHALL BE INSTALLED IN 2-FOOT WIDE BY 1-FOOT DEEP WASHED GRAVEL TRENCH SURROUNDED BY FILTER FABRIC ENVELOPE.
2. A MINIMUM 15-MIL THICK POLYETHYLENE VAPOR BARRIER WITH TAPED SEAMS AND 1-FOOT OVERLAP IS REQUIRED ABOVE SUB-SLAB VENTING SYSTEM PIPING AND BELOW CONCRETE FLOOR SLAB.
3. THE CONTRACTOR SHALL COORDINATE INSTALLATION OF THE SUB-SLAB DEPRESSURIZATION PIPING WITH THE FOUNDATION, MECHANICAL AND ELECTRICAL CONTRACTORS. THE SUBSLAB PIPING LAYOUT MAY REQUIRE FIELD CONDITION MODIFICATIONS TO AVOID UTILITIES, FOUNDATIONS, ETC. ALL MODIFICATIONS SHALL BE APPROVED BY THE ENGINEER.

NO.	DATE	REVISION DESCRIPTION	INT.

Noelle M. Clarke
No. 072491

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(781) 569-4000

PROJECT NAME:
350 FRANKLIN STREET
OLEAN, NEW YORK

PROJECT FOR:
MJ PAINTING CONTRACTOR CORP.

TITLE:
SOIL VAPOR MONITORING AND CONTINGENCY SUB-SLAB DEPRESSURIZATION PLAN

DRAWING NO.
10
DRAWING
10 OF 11

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REMEDIAL ACTION WORK PLAN

MJ Painting Site
350 Franklin Street
Olean, New York

APPENDICES

A. Health and Safety Plan
B. Citizen Participation Plan
C. Stormwater Pollution Prevention Plan
D. PDI Summary
E. Professional Profiles

REMEDIAL ACTION WORK PLAN

MJ Painting Site
350 Franklin Street
Olean, New York

APPENDIX A

Health and Safety Plan

HEALTH & SAFETY PLAN

MJ Painting Contractor Corp.
350 Franklin Street
Olean, NY 14760

Date: July 17, 2018
Date of Reissue: December 13, 2018
Date of Reissue: October 29, 2020
Date of Reissue: October 15, 2021
Date of Reissue: May 25, 2022

2317.0002M000.102.HASP.REV3

Environmental Consulting
& Management
+1.800.322.ROUX
rouxinc.com

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Tables

Figures

Appendices

SITE-SPECIFIC EMERGENCY INFORMATION

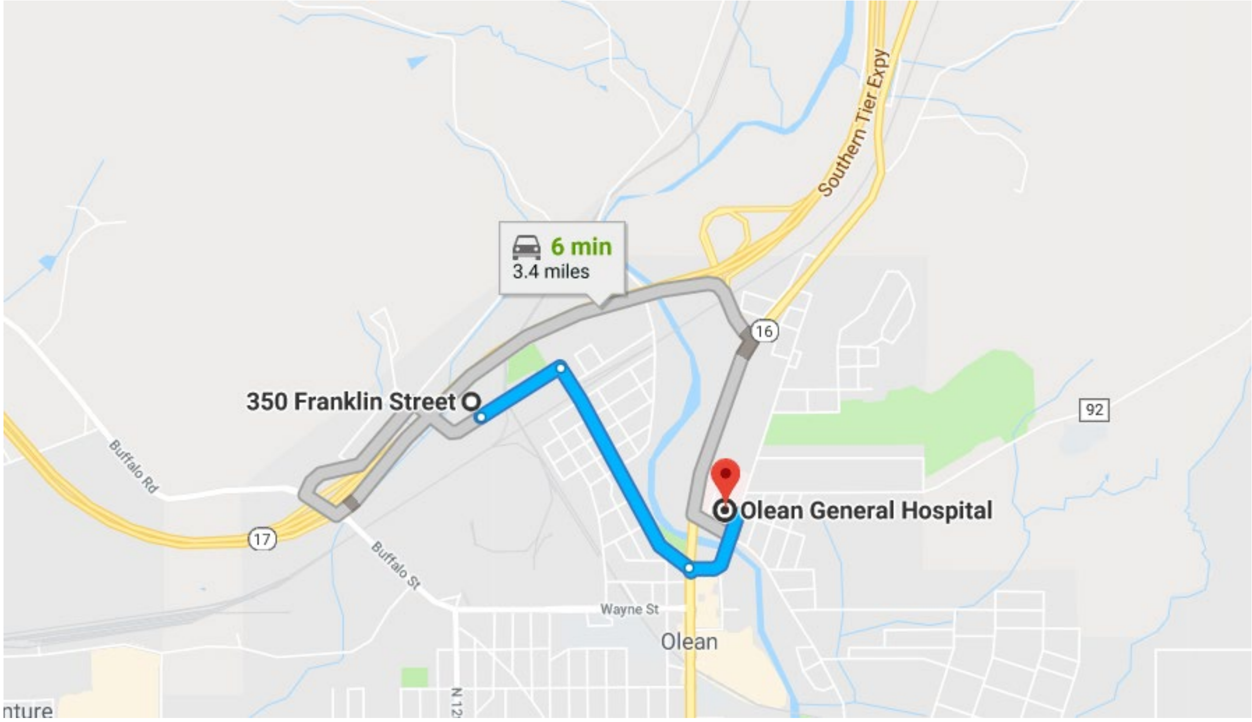
Emergency Phone Numbers

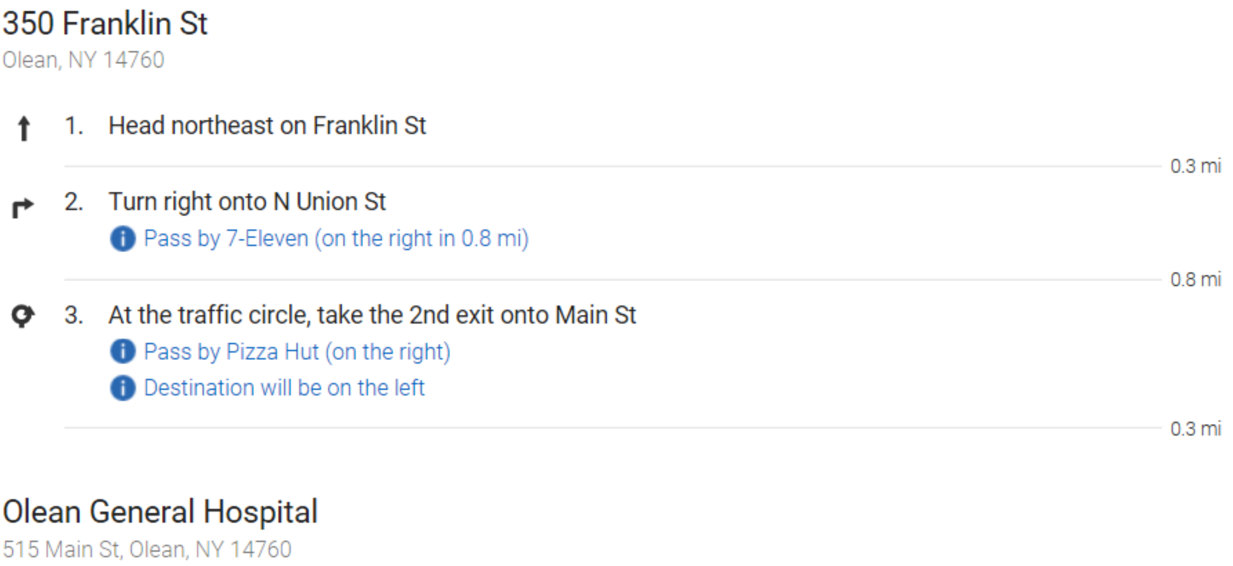
Most emergency services can be obtained by calling **911**. Where 911 service is not available, use the telephone numbers provided in the below table. The following is a master emergency phone list for use by the project management personnel. A more condensed version of the emergency numbers listed below will be posted throughout project work areas. Emergencies encountered on the Site will be responded to by a combination of off-Site emergency services and Site personnel.

<table>
<tr><th colspan="4">Emergency Contact Information</th></tr>
<tr><th colspan="4">Site Personnel</th></tr>
<tr><th>Title</th><th colspan="2">Contact</th><th>Telephone</th></tr>
<tr><td>Project Manager (PM)</td><td colspan="2">Brian Robinson</td><td>781-569-4047
203-233-7907 (Cell)</td></tr>
<tr><td>Project Principal</td><td colspan="2">Ian Reed</td><td>781-569-4030
617-875-9384</td></tr>
<tr><td>Office Health and Safety Manager (OHSM)</td><td colspan="2">Anthony Marsocci</td><td>781-569-4036
585-721-1196 (Cell)</td></tr>
<tr><td>Site Supervisor</td><td colspan="2">Michael Vanderperre</td><td>781-569-4058
914-462-8704 (Cell)</td></tr>
<tr><td>Site Health and Safety Officer (SHSO)</td><td colspan="2">Alexandra Bailey</td><td>781-569-4044
508-308-0078 (Cell)</td></tr>
<tr><td>Office Manager</td><td colspan="2">Nancy Nevins, P.G., LSP</td><td>781-569-4053
617-549-5351 (Cell)</td></tr>
<tr><td>Corporate Health and Safety Director (CHSD)</td><td colspan="2">Brian Hobbs, CIH, CSP</td><td>631-630-2419
631-807-0193 (Cell)</td></tr>
<tr><td>Client Emergency Contact</td><td colspan="2">Mike John</td><td>844-977-9700
716-572-9700</td></tr>
<tr><td>AllOne Health</td><td colspan="2">Occupational Health Care Management Provider</td><td>800-350-4511</td></tr>
<tr><th colspan="4">Outside Assistance</th></tr>
<tr><th>Agency</th><th>Contact</th><th>Telephone</th><th>Address/Location</th></tr>
<tr><td>Ambulance/EMS</td><td>Olean Fire Department</td><td>716-376-5609
911</td><td>542 North Union Street
Olean, NY 14760</td></tr>
<tr><td>Police</td><td>Olean Police Department</td><td>716-376-5677
911</td><td>101 E State Street
Olean, NY 14760</td></tr>
<tr><td>Fire</td><td>Olean Fire Department</td><td>716-376-5609
911</td><td>542 North Union Street
Olean, NY 14760</td></tr>
<tr><td>Hospital</td><td>Olean General Hospital</td><td>716-373-2600</td><td>515 Main Street
Olean, NY 14760</td></tr>
<tr><td>Occupational Health Clinic</td><td>Olean General Hospital Occupational Medicine</td><td>716-375-7495</td><td>901 Wayne Street
Olean, NY 14760</td></tr>
</table>

Directions to Hospital

The nearest hospital to the Site is Olean General Hospital located approximately 1.4 miles from the Site at 515 Main Street, Olean, NY. The Hospital contact number for Olean General Hospital is (716) 373-2600. The map and directions from the Site to Olean General Hospital are as follows:





350 Franklin St
Olean, NY 14760

1. Head northeast on Franklin St
0.3 mi

2. Turn right onto N Union St
Pass by 7-Eleven (on the right in 0.8 mi)
0.8 mi

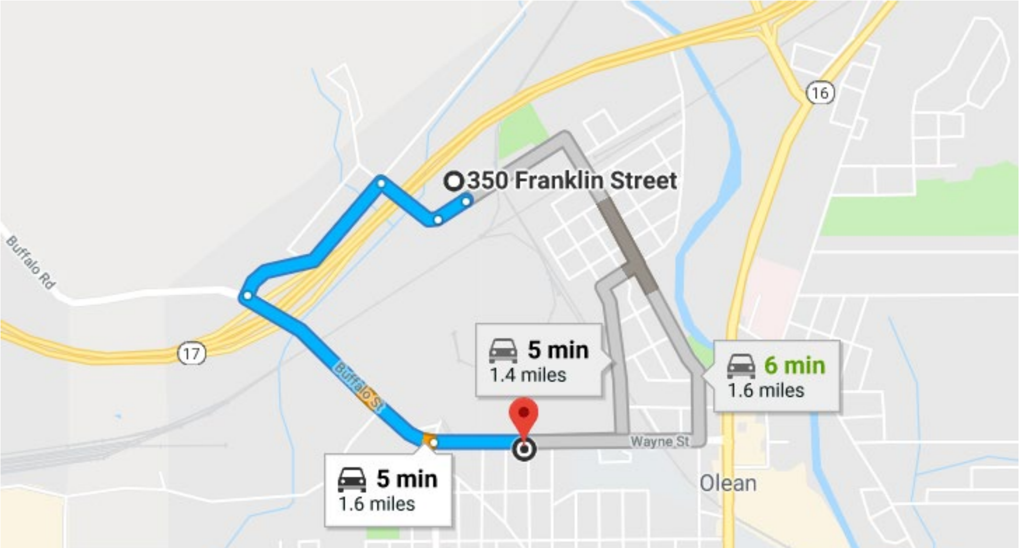
3. At the traffic circle, take the 2nd exit onto Main St
Pass by Pizza Hut (on the right)
Destination will be on the left
0.3 mi

Olean General Hospital
515 Main St, Olean, NY 14760

Directions to Occupational Health Clinic

An occupational health clinic (OHC) is to be used for non-emergency situations so that delays in treatment and unnecessary services and medications that typically occur as a result of emergency room visits can be avoided. A non-emergency situation is defined as a non-life-threatening occupational injury or illness where the proper use of first aid is the appropriate treatment as opposed to more extensive medical treatment unless it is subsequently determined that the more extensive medical treatment is necessary. Occupational health clinic professionals are more extensively trained in first aid protocols (as defined by OSHA at 29 CFR 1904). These protocols are designed to return of the injured or ill worker to his/her job as quickly as possible and avoid over treatment. Emergency room visits (i.e., 911 calls) are to be reserved for life-threatening situations and those requiring treatment beyond first aid including but not limited to: respiratory distress (i.e., not breathing), amputations, and severe bleeding.

The nearest occupational health clinic to the Site is Olean General Hospital Occupational Medicine, and is located approximately 1.3 miles from the Site at 901 Wayne Street, Olean, NY. The hours of the OHC are Monday - Friday 8 a.m. - 4 p.m. The telephone number for Olean General Hospital Occupational Medicine is (716) 375-7495. The map and directions from the Site are as follows:




350 Franklin St
Olean, NY 14760

1. Head southwest on Franklin St toward Johnson St
472 ft
2. Continue onto Johnson St
0.2 mi
3. Turn left onto Homer St
0.5 mi
4. Turn left onto Buffalo St
0.6 mi
5. Continue onto Wayne St
ⓘ Destination will be on the right
0.2 mi

901 Wayne St
Olean, NY 14760

1.0 INTRODUCTION

This Site-specific Health and Safety Plan (HASP) has been prepared by Roux Associates, Inc. (Roux) for use during the subsurface investigation and remedial activities at 350 Franklin Street in Olean, New York ("the Site"; see **Figure 1**). These activities fall within the scope of operations covered by the Occupational Safety and Health Administration (OSHA) standards promulgated at 29 CFR 1910.120 and 29 CFR 1926.65, both commonly referred to as the Hazardous Waste Operations and Emergency Response (HAZWOPER) Standard. In accordance with the HAZWOPER Standard, this Site-specific HASP was prepared to address the safety and health hazards associated with subsurface investigation and remedial activities being performed at the Site by Roux, and to provide requirements and procedures for the protection of Roux employees, subcontractor personnel, government oversight personnel, Site personnel, and the general public. It also addresses client- and Site-specific requirements for health and safety.

Implementation of this HASP is the joint responsibilities of the Project Manager (PM), the Site Health and Safety Officer (SHSO), and all field staff, with assistance from the Project Principal and the Office Health and Safety Manager (OHSM). The PM for this project is Michael Vanderperre. The SHSO and Site Supervisor is Alexandra Bailey.

This HASP will be introduced to, reviewed, and signed off on by all Roux personnel through a formal training session prior to commencing work. A copy of the HASP will be kept at the Site at all times. The Roux SHSO or PM will be responsible for posting any changes, amendments, memos, etc. to the HASP. Any revisions to this HASP will be signed by appropriate personnel, which can include Roux's PP, CHSM, and SS. Any changes will be announced to all workers at the next safety meeting.

1.1 Roles and Responsibilities

Overall Roles and Responsibilities (R&Rs) of Roux personnel are provided in Roux's Policies and Procedures Manual. Only those R&Rs specific to HASP requirements are listed below.

Project Manager (PM)

The PM has responsibility and authority to direct all work operations. The PM coordinates safety and health functions with the SHSO, has the authority to oversee and monitor the performance of the SHSO, and bears ultimate responsibility for the proper implementation of this HASP. The specific duties of the PM are:

- preparing and coordinating the Site work plan;
- providing Site Supervisor(s) with work assignments and overseeing their performance;
- coordinating safety and health efforts with the SHSO;
- ensuring effective emergency response through coordination with the Emergency Response Coordinator (ERC); and
- serving as primary Site liaison with public agencies and officials and Site contractors.

Site Health and Safety Officer (SHSO)

The SHSO has full responsibility and authority to develop and implement this HASP and to verify compliance. The SHSO reports to the PM. The SHSO 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 SHSO include:

- managing the safety and health functions on this Site;
- serving as the Site's point of contact for safety and health matters;
- ensuring Site monitoring, worker training, and effective selection and use of PPE;
- assessing Site conditions for unsafe acts and conditions and providing corrective action;
- assisting the preparation and review of this HASP;
- maintaining effective safety and health records as described in this HASP; and
- coordinating with the Site Supervisor(s) and others as necessary for safety and health efforts.

Site Supervisor

The Site Supervisor is responsible for field operations and reports to the PM. The Site Supervisor ensures the implementation of the HASP requirements and procedures in the field. The specific responsibilities of the Site Supervisor include:

- executing the work plan and schedule as detailed by the PM;
- coordination with the SHSO on safety and health; and
- ensuring Site work compliance with the requirements of this HASP.

Employees

All Roux employees are responsible for reading and following all provisions of the Corporate Health and Safety Manual, including this HASP. Employees report to the SS at the project Site. Each employee is also responsible for the following:

- Wearing all appropriate PPE as outlined within this HASP;
- Attending all safety meetings;
- Inspecting tools and equipment prior to use, and taking any defective tools or equipment out of service;
- Appropriately documenting field events as they occur within a logbook or equivalent;
- Properly operating machinery and/or equipment only if trained to do so;
- Stopping work operations if unsafe conditions exist;
- Identifying and mitigating hazards when observed;
- Reporting all incidents and near misses to the Roux SHSO and SS immediately; and
- Knowing where emergency equipment is located (e.g. first aid kit, fire extinguisher).

Subcontractors and Visitors

Subcontractors and visitors are responsible for complying with the same health and safety requirements. It is the responsibility of all to make sure subcontractors and visitors comply and uphold the HASP. Subcontractors and visitors have the following additional responsibilities:

- Designating a qualified safety representative for the project that can make the necessary changes in work practices, as necessary;
- Attending all safety meetings while participating in Roux Site work activities;
- Reporting all incidents and near misses to Roux SHSO and SS immediately;
- Conducting initial and periodic equipment inspections in accordance with manufacturer and regulatory guidelines; and
- Providing copies of all Safety Data Sheets (SDS) to Roux SHSO for materials brought to the Site.

2.0 BACKGROUND

MJ Painting Contractor Corp. (MJ Painting) owns the property of concern at 350 Franklin Street, Olean, Cattaraugus County, New York depicted in **Figure 1**. The current use of the parcel is an undeveloped grass field with the exception of large energized billboards adjacent to Interstate 86 located along the northwestern property line. The parcel is comprised of approximately 9.34 acres of land currently zoned for Commercial/Industrial use. A Site Map is included as **Figure 2**.

MJ Painting plans to expand its current operations from the 291 Homer Street parcel onto the 350 Franklin Street parcel which will include redevelopment plans for future growth on an as-need basis. All future use following redevelopment activities on 350 Franklin Street will remain consistent with the current zoning laws/maps (Commercial/Industrial).

Relevant background information is provided below, including a general description of the Site; a brief review of the Site's history with respect to hazardous material use, handling, and/or storage; and a review of known and potential releases of hazardous substances at the Site.

2.1 Site Description

The Site is located in the City of Olean, Cattaraugus County, New York, at 350 Franklin Street (Figure 1). According to the City of Olean Assessor's Office on-line property information database, 350 Franklin Street consists of a 9.34-acre parcel (S.B.L. #94.040-1-2.3). As stated above, 350 Franklin Street consists of an undeveloped grass field, with the exception of the two billboards located along the northwestern property boundary, adjacent to Interstate 86 (I-86).

According to the U.S. Fish and Wildlife National Wetlands Inventory (FWS Wetland Mapper), Two Mile Creek is the only wetland located in the vicinity of the Site. Two Mile Creek is located directly northwest of the Site (see Figure 1). Two Mile Creek flows southwest through Olean, New York and discharges to the Allegheny River. According to the NYSDEC Protection of Waters Program, Two Mile Creek is considered a Class D Stream. Class D is the lowest ranking used by NYSDEC to classify waterways in New York and consists of all waterways and/or waterway segments which cannot be used as a drinking water source, are not suitable for swimming or contact activities and are not suitable for fisheries support or non-contact activities.

The Site and surrounding areas are located within the Allegheny-Ohio-Mississippi River drainage basin and according to the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) for Olean, New York (Figure 3), the Site encompasses both "Zone B" and "Zone C" floodplain areas. Zone B areas are located between the limits of the base flood and the 500-year floodplain. Zone C areas are considered "areas of minimal flood hazard."

Properties in the vicinity (approximately a 0.5-mile radius) of the Site are primarily developed as mixed use and include residential, municipal, commercial, manufacturing and industrial properties. The Site is bordered to the north/northwest by I-86; to the east by "All Weather Self Storage" at 302 Franklin Street; to the southeast by "First Transit, Inc." at 351 Franklin Street and "Scotts Rotary Seals" at 301 Franklin Street; and to the southwest by "Napoleon Engineering Services" at 1601 Johnson Street.

2.2 Site History

The section of Olean, NY which surrounds the area of the Site, has historically been occupied with industrial operations including, but not limited to, petroleum storage and refining, leather tanneries, heavy and light manufacturing, chrome plating, fertilizer manufacturing, and railroad facilities. The Site and area immediately surrounding the Site were formally part of the Socony-Vacuum Oil Company, Inc. refinery, and used primarily as a petroleum refining facility between 1876 and 1954. From 1954 through 1964, Swan Finch Oil Company Olean Industries, Inc. stored grain and corn in approximately 60 tanks and buildings on the refinery property. From 1964 through 1981, Felmont Oil and Agway removed the old refinery tanks and buildings and constructed an anhydrous ammonia plant, jointly producing ammonia and other fertilizers on portions of the surrounding area. Following ownership by Felmont Oil Corporation, the Cattaraugus County Industrial Development Agency owned the parcel from 1981 through 1989 when Blue Bird Industrial Park, Inc. took over ownership in 1989. The parcel was subsequently purchased from Blue Bird Industrial Park, Inc by MJ Painting in March 2018.

2.3 Known and Potential Releases of Hazardous Substances at the Site

Several environmental investigations have been performed at the Site from 2005 through 2016. Previous environmental investigations at the Site include multiple subsurface investigations to evaluate the presence of petroleum impacted soil and/or groundwater associated with past uses of the land and various spills that have occurred on or near the property. Test pit investigations, coupled with geophysical surveys, and limited excavations were also conducted to assess and remove subsurface piping and petroleum-impacted soils.

Previous environmental investigations are summarized below by the applicable NYSDEC Spill Number:

Spill Number 0501100

According to the NYSDEC Spill Report Form for Spill Number 0501100, on April 27, 2005 at 5:06 am, a tractor-trailer owned and operated by Anthony Mast, Inc. was involved in a traffic accident on I-86 eastbound between exits 25 and 26 in Olean, New York. The accident involved the tractor-trailer overturning causing a release of approximately 30 gallons of diesel fuel from a saddle tank of the truck. The diesel fuel was released onto the unpaved, grassy medium. On April 29, 2005, NYSDEC received a report of a sheen on the surface of the water and banks of Two Mile Creek, which flows adjacent to 1-86. NYSDEC determined that the source of the sheen was a culvert that receives drainage from the bridge drains of I-86 in the area of the Anthony Mast, Inc. April 27, 2005 release.

On May 4, 2005, OP Tech excavated soil from the area around the storm water drainage culvert as part of release response actions associated with the Anthony Mast, Inc. diesel fuel release. While removing soils from ground surface to 6 inches (in) below ground surface (bgs), OP Tech personnel observed what they described to be a "sludge/oil material" directly below surficial soils. Under the direction of NYSDEC, OP Tech continued the excavation activities to an approximate depth of 4 to 5 feet (ft) bgs where they encountered groundwater with a "sludge/oil" material on the surface. NYSDEC determined that "a very old product was present just under the area that had been excavated for the spill" and assigned Spill Number 0550226. Spill Number 0501100 was subsequently closed by NYSDEC on February 23, 2006.

Spill Number 0550226

In a June 7, 2005 letter to ExxonMobil, NYSDEC identified ExxonMobil as a responsible party for Spill Number 0550226 and requested investigation and remedial work. Subsequently, several investigations including soil boring, well installation, soil sampling, and groundwater sampling were performed under Roux oversight, on behalf of ExxonMobil.

Spill Number 1300859

In a letter dated April 26, 2013 to ExxonMobil, NYSDEC issued Spill Number 1300859, indicating that *"This spill is associated with petroleum contained in, and potentially spilled from, abandoned dilapidated piping"*, potentially, *"…associated with the historic SOCONY Vacuum Refinery…"* located at 351 Franklin Street, Olean, New York (Parcel 94.040-1-29.1) and on the adjacent Southern Tier Railroad Authority (STRA) property (Parcels 94.048-1-3 and 94.040-1-26). Specifically, the *"petroleum contained within the piping"* was identified during remedial activities at the adjacent 301 Franklin Street property under the NYSDEC BCP (Scott Rotary Seals Site No. C905036). These remedial activities included *"the removal of abandoned refinery piping. Pipes extending off site were cut and capped at the property boundary"* and information pertaining to these pipes is provided in the *Final Engineering Report* prepared for the Scott Rotary Seals site. Further, in the April 26, 2013 letter, NYSDEC requested that ExxonMobil initiate cleanup and removal activities of the "spill" including submittal of a remedial investigation work plan.

Following the initial investigation/remedial efforts conducted under Spill Number 1300859, the Site was expanded to include the 350 Franklin Street parcel. Subsequently, several investigation and remedial activities including geophysical surveys, test pitting, and petroleum impacted soil removal activities were performed at the 350 Franklin Street parcel under Roux oversight, on behalf of ExxonMobil.

Investigation results and materials storage records indicate that benzene, toluene, ethylbenzene, xylenes (BTEX), total petroleum hydrocarbons (TPH), and other petroleum-related constituents are present at the Site including polyaromatic hydrocarbons (PAHs) and metals. The toxicological, physical, and chemical properties of these potential contaminants are presented in **Table 1**.

3.0 SCOPE OF WORK

Site activities planned at this time and covered by this HASP include activities associated with subsurface investigation and remediation activities. All subcontractors used for the completion of these activities will be vetted by Roux for compliance with respect to health and safety requirements and metrics as well as compliance with licensing and insurance requirements.

Proposed activities associated with the subsurface investigation and remediation activities include:

- Excavation of test pits;
- Advancement of soil borings for completion as monitoring wells and soil vapor points;
- Collection of soil (surface and subsurface);
- Groundwater and soil vapor sampling;
- Excavation of petroleum-impacted soil;
- Temporary soil stockpiling;
- Placement and compaction of backfill;
- Treatment of excavated soil;
- Loading of excavated soil into trucks for transport off-Site;
- In-situ soil stabilization using Portland cement; and
- Performing air monitoring in the work area throughout the subsurface investigation and remediation activities as detailed in the Community Air Monitoring Plan in accordance with the New York State Department of Health (NYSDOH).

If there are any changes with the scope a revision of the HASP will be required to address any new hazards.

4.0 SITE CONTROL

This Site control program is designed to reduce the spread of hazardous substances from contaminated areas to clean areas, to identify and isolate contaminated areas of the site, to facilitate emergency evacuation and medical care, to prevent unauthorized entry to the site, and to deter vandalism and theft.

4.1 Site Map

A map of this site, showing site boundaries is provided in **Figure 2**. Designated work zones and points of entry and exit will accompany this HASP in a separate document.

4.2 Site Access

During work, access to the Site will be restricted to reduce the potential for exposure to its safety and health hazards; work zones will be demarcated during heavy equipment operation and physical barriers (i.e., fencing) are planned to be installed for the heavy construction phase(s) at the Site.

Appendix A details Roux Associates' Traffic Control Management Program and shall be referenced when establishing Site access points.

4.3 Buddy System

Select field activities conducted in contaminated, hazardous, and remote areas of the Site may require the use of the buddy system. Prior to commencing with field tasks in a potentially hazardous area, the need for using the buddy system should be evaluated. The buddy system means that personnel work in pairs and stay in close visual contact to be able to observe one another and summon rapid assistance in case of an emergency. The responsibilities of workers using the buddy system include:

- Remaining in close visual contact with partner,
- Providing partner with assistance as needed or requested,
- Observing partner for signs of heat stress or other difficulties,
- Periodically checking the integrity of partner's PPE, and
- Notifying the SHSO or other site personnel if emergency assistance is needed.

4.4 Site Communications

The following communication equipment is used to support on-Site communication: Cell phones and visual hand signals.

Telephones are utilized for communication with emergency support services/facilities. Roux personnel will be equipped with a mobile telephone. The use of cell phones or other mobile communications devices (including but not limited to "smart" phones) while operating vehicles/ equipment/ tools or while working within defined work area exclusion zones is prohibited.

Hand signals will be used according to the following:

Hand Signals

SIGNAL	MEANING
Hand gripping throat	Out of air, can't breathe
Grip partner's wrist	Leave area immediately
Hands on top of head	Need assistance
Thumbs up	I'm alright, okay
Thumbs down	No, negative

A current list of emergency contact numbers is posted in the following locations: See SITE-SPECIFIC EMERGENCY INFORMATION section in this HASP.

4.5 Site Work Zones

This Site is divided into three (3) major zones, described below. These zones are characterized by presence or absence of biological and chemical hazards and the activities performed within them. Zone boundaries are clearly marked at all times and the flow of personnel among the zones is controlled. The Site is monitored for changing conditions that may warrant adjustment of zone boundaries. Zone boundaries are adjusted as necessary to protect personnel and clean areas. Whenever boundaries are adjusted, zone markings are also changed and workers are immediately notified of the change. Refer to the Heavy Equipment Exclusion Zone (HEEZ) Policy in **Appendix B** for guidance on implementing and adhering to work zone requirements when heavy equipment is in operation.

The establishment of work zones is developed to ensure: personnel are properly protected against the potential hazards in the area where they are working; work activities and potential contamination are limited to the specific areas; and personnel can be easily located and evacuated in an emergency. Only the people who are authorized to work and who have a need to be in the zone will be allowed in the designated zone.

The establishment of work zones and the levels of protection required within the zones will be determined on a case by case basis. The SHSO, Roux PM, and the ExxonMobil PM will determine the need for work zones, and based upon Site-specific knowledge and data, determine the levels of protection within the established zones.

Basic emergency and first aid equipment will be available at the Site, work vehicle, Support Zone (SZ), and/or the Contamination Reduction Zone (CRZ) as appropriate. This may include HASP-specified communications, first aid kit, emergency eyewash or emergency shower or drench system, fire extinguisher, and other safety-related equipment. Other safety equipment will be located at the Site of specific operations (e.g., drilling) as appropriate. Traffic cones and barricades will be used when work is required in roadways and high traffic areas, as per Roux's Traffic Control Plan (**Appendix A**).

Field personnel will be notified of the locations of emergency and first aid equipment prior to commencing with field activities. The following sections provide general specifications for the three work zones.

Exclusion Zone

The area where contamination exists is the Exclusion Zone (EZ). All areas where excavation and handling of contaminated materials take place are considered the EZ. This zone will be clearly delineated by orange high visibility fencing. Safety tape may be used as a secondary delineation within the EZ. The zone delineation markings may be opened in areas for varying lengths of time to accommodate equipment operation or specific construction activities. The SHSO may establish more than one EZ where different levels of protection may be employed or where different hazards exist. Personnel are not allowed in the EZ without:

- A buddy (co-worker)
- Required minimum level PPE
- Medical Authorization
- Training certification
- Requirement to be in the zone

During excavation, drilling, and sampling activities, the EZ is defined as the excavation and a minimum 10-foot radius around the excavation boundary or drilling or sampling locations. For the purposes of this project, the EZ will be delineated once the work sites have been determined.

Contamination Reduction Zone

A Contamination Reduction Zone (CRZ) is established between the Exclusion Zone and the Support Zone. The CRZ contains the Contamination Reduction Corridor (CRC) and provides an area for decontamination of personnel and equipment. The CRZ will be used for general Site entry and egress in addition to access for heavy equipment and emergency support services. Personnel are not allowed in the CRZ without:

- A buddy (co-worker)
- Appropriate PPE
- Medical authorization
- Training certification
- Requirement to be in the zone

Support Zone

The Support Zone (SZ) is an uncontaminated area that will be the field support area for the Site operations. The SZ will contain the HASP, sampling equipment, air monitoring equipment and provides for field team communications and staging for emergency response. Appropriate sanitary facilities and safety equipment will be located in this zone. Potentially contaminated personnel or materials are not allowed in this zone. The only exception will be appropriately packaged/decontaminated and labeled samples.

5.0 JOB HAZARD EVALUATION

Roux's work at the Site is expected to entail a variety of physical, chemical, and biological hazards, all of which must be sufficiently managed to allow the work to be performed safely. Some of the hazards are Site-specific (i.e., they are associated with the nature, physical characteristics, and/or routine operation of the Site itself), while others are activity-specific (i.e., they are associated with (or arise from) the particular activity being performed). The various hazards can be grouped into the following categories:

Caught/Crushed – the potential to become caught in, under, between, or by an object or parts of an object, such as equipment with parts that open and close or move up and down ("pinch points") or equipment that rotates, and the accompanying potential to have body parts cut, mangled, or crushed thereby.

Contact – the potential to be struck by or against moving or stationary objects that can cause physical injury, such as heavy machinery, overhead piping, moving vehicles, falling objects, and equipment (including tools and hand-held equipment) or infrastructure with the ability to cut or impale.

Energy Sources – the potential for bodily harm associated with energy sources, most notably electricity, but also including latent energy sources such as compressed air and equipment under tension (which when released could cause injurious contact or a fall).

Ergonomics – the potential for musculoskeletal injury associated with lifting/carrying, pushing/pulling, bending, reaching, and other physical activity attributable to poor body position/mechanics, repetitive motion, and/or vibration. A management plan to circumvent ergonomic issues during driving and field activities is included in **Appendix C**.

Exposure – the potential for injury/illness due to physical, chemical, or biological exposures in the work environment, including but not limited to temperature extremes, solar radiation, and noise (physical), chemical splashes and hazardous atmospheres (chemical), and animal/insect bites and poisonous plants (biological). Roux Associates' Hearing Conservation Management Program to evaluate noise exposure in the workplace is provided in **Appendix D**. A list of SDSs for potential contaminants that may be encountered during the work activities discussed in this HASP are included in **Appendix E**.

Falls – the potential to slip or trip and thus fall or drop a load, resulting in bodily injury to oneself or others.

The foregoing is intended to provide Roux employees with a <u>general</u> awareness of the hazards involved with Site work. A more detailed review of the potential hazards associated with each specific activity planned for the Site (or ongoing activity, as the case may be) is provided in the activity-specific Job Safety Analysis (JSA) forms in **Appendix F**. As can be seen in the JSA forms, the hazards are identified by category per the above, and specific measures designed to mitigate/manage those hazards are also identified. In preparing the JSA forms, all categories of hazards were considered, and all anticipated potential hazards were identified to the extent possible based on the experience of the personnel preparing and reviewing the JSA forms. However, there is always the possibility for an unanticipated hazard to arise, potentially as conditions change over the course of the workday. Roux personnel must maintain a continual awareness of potential hazards in the work zone, regardless of whether the hazard is identified in the JSA form. Particular attention should be paid to hazards associated with exposure to hazardous substances (see **Table 1** for a listing of the hazardous substances most likely to be encountered in environmental media at the Site) and to Site personnel being located "in the line of fire" with respect to moving equipment, pinch points, and latent energy, e.g., being located or having body parts located within the swing radius of an excavator, between two sections of pipe being connected, below a piece of suspended equipment, or adjacent to a compressed air line.

5.1 Employee Notification Hazards and Overall Site Information Program

The information in the JSAs and safety data sheets is made available to all employees and subcontractors who could be affected by it prior to the time they begin their work activities. Modifications to JSAs are communicated during routine pre-work briefings. SDSs will be maintained by the SHSO/SS for new chemicals brought on-site as needed.

The information in the JSAs and Safety Data Sheets (SDSs) is made available to all employees and subcontractors who could be affected by an exposure to the hazards covered in them prior to the time they begin their work activities. Modifications to JSAs are communicated during routine pre-work briefings, and periodically updated as needed in the HASP. SDSs will be maintained by the SHSO/SS for new chemicals brought on-site as needed. A list of site SDSs can be found in **Appendix E**.

5.2 Noise

Noise is associated with the operation of heavy equipment, power tools, pumps, and generators. Noise is also a potential hazard when working near operating equipment such as excavators, drill rigs or pole drivers. High noise (i.e., < 85 dBA) operations may be evaluated by the SHSO utilizing a type 2 handheld sound level meter (SLM) operating on the "A"-weighted scale with slow response because this scale most closely resembles human response to noise and complies with OSHA 29 CFR 1910.95. Hearing protection is required in areas with noise exposure greater than 85 dBA. Double hearing protection (ear plugs and earmuffs) are required in areas where the noise exposure is more than 95 dBA. Noise exposure will be controlled by hearing protection as described above or by maintaining set-backs from high-noise equipment, as warranted. Personnel handling heavy equipment and using power tools that produce noise levels exceeding those described levels above are required by OSHA 29 CFR 1910.95 to wear the appropriate Noise Reduction Rating (NRR) level of hearing protection. Appropriate hearing protection will be evaluated by the SHSO as necessary in consultation with the OHSM and CHSM.

5.3 Biological Hazards

Biological hazards include the possibility of animal bites by potentially rabid stray or wild animals, ticks or other insect bites, and bee and wasp stings. Ticks may carry Lyme disease and/or Rocky Mountain spotted fever. Personnel shall examine themselves for ticks. Insecticides containing DEET may be an effective tick repellent but should be used with caution to avoid contaminating samples. Personnel allergic to bee and/or wasp stings shall provide medicine and antidotes to treat allergic reactions, as prescribed by their personal physicians.

Some insects and animals are more active at certain times – for example, some mosquitoes are most active between dusk and dawn. Ticks may be active at any time of day. Some places are more likely to have higher activity too – mosquitoes generally live in brush and trees, and near stagnant water. Ticks prefer areas with tall grass, brush, and trees. Some areas have mosquitoes that carry viruses (e.g., West Nile virus or Eastern Equine Encephalitis).

Other biological hazards include poison ivy, poison oak, and poison sumac. If exposed to these plants, personnel will wash skin thoroughly with soap and water. Additional information regarding biological hazards can be found within the Roux Biological Hazard Awareness Management Program found in **Appendix G**.

5.4 Chemical Hazards

Investigation results and materials storage records indicate that BTEX, TPH, PCBs, PAHs, metals and other petroleum-related constituents are present at the Site. The toxicological, physical, and chemical properties of these potential contaminants are presented in **Table 1**. This table includes Occupational Exposure Limits (OELs), American Conference of Governmental Industrial Hygienists (ACGIH) Threshold Limit Values (TLVs®), National Institute of Occupational Safety & Health (NIOSH) Recommended Exposure Limits (RELs), and OSHA Permissible Exposure Limits (PELs) that will establish the level of protection. Permissible Exposure Limits (PELs) are located on each product's SDS. When evaluating exposure limits, OELs govern unless a lower TLV® or PEL has been established. For chemicals without an OEL, the most conservative value shall be considered. The potential for encountering these hazards exists during intrusive activities such as excavation/earth moving activities, or when exposed to untreated, recovered groundwater.

Due to the potential high frequency of heavy equipment use during site operations, the effect of carbon monoxide (CO) generation in breathing spaces can potentially be hazardous to Site personnel. As such, an assessment of health hazards associated with CO, routes of exposure, symptoms of exposure, effects on human physiology, air concentration Action Levels and corresponding measures to mitigate exposure, and CO have been included in the toxicological **Table 1**.

5.5 Physical Hazards

A variety of physical hazards may be present during Site activities. These hazards are like those associated with any operating facility. These physical hazards may include motor vehicles, heavy equipment operation, and hazardous working surfaces. A hard hat, safety glasses, long-sleeved clothing with high visibility or reflective vest (task and conditions dependent), Level 2 cut-resistant gloves, steel- or composite-toed safety boots including task-specific requirements as consistent with ASTM F2413-11, must be worn always while working at the site. Workers must also be aware of electrical hazards, such as overhead power lines, while performing their assigned tasks. These hazards are not unique and are generally familiar to most field personnel. Additional task-specific requirements may be covered during safety briefings and while reviewing JLAs that pertain to the specifics of the Work Permit that is issued for that day.

5.6 Flammability/Explosive Hazards

A variety of highly flammable/explosive materials may be potentially stored at the Site. Prior to performing activities near potentially flammable/explosive materials (i.e., within storage areas), all applicable sections of this HASP and any site specific procedures specific to these areas need to be thoroughly understood and adhered to. All field personnel and visitors will be required to wear fire-retardant coveralls while working in and around flammable/explosive areas as applicable. Any questions or concerns should be directed to the SHSO, Roux PM, or the OSHM.

5.7 General Safety Hazards

- Heavy equipment and motor vehicle traffic. Workers shall wear high visibility clothing or fluorescent vests in high traffic areas and utilize 42" high traffic cones, barricades, and rigid fencing as consistent with Roux's Heavy Equipment Exclusion Zone (HEEZ) Policy (**Appendix B**) and Traffic Control (**Appendix A**) to protect workers and work areas, as necessary.
- Slip, trip, fall hazards associated with uneven terrain, obstacles, and slippery or icy surfaces. General housekeeping will be performed to reduce and/or eliminate slip, trip, and fall hazards.
- Sharp edges, broken glass, exposed nails, rusty metal (wear gloves with a minimal ANSI 105-2000 cut resistant level II).

- Pinch points.
- Overhead hazards (wear hard hats, as required).
- Flying objects and airborne particulate hazards. Wear safety glasses, goggles, spoggles, or face shields, when appropriate.

5.8 Electrical Hazards

Portable pumps, generators, and other power tools require proper grounding and/or a ground fault circuit interrupter (GFCI) before operation. Personnel should never attempt to move equipment while in operation. Overhead and underground utilities will also be marked out and avoided as consistent with Roux's Subsurface Clearance Procedure (**Appendix H**) when drilling, earthmoving, or lifting are conducted additionally, Roux's Electrical Safe Work Practices and control of hazardous energy program (lock out / tag out) (**Appendix I**) shall be adhered to.

5.9 COVID-19

Due to ongoing community transmission of SARS-CoV-2, the virus that causes COVID-19. Prior to beginning work, on-Site protocols shall be established by the project team, including subcontractors, in accordance with federal, state, county, city, and/or other guidance, as applicable and consistent with Roux's Covid-19 Plan **Appendix J**. Government guidance/orders generally consist of implementation of the following protocols/procedures (or some variation thereof):

- Self-monitoring for symptoms;
- Fitness check for work each day;
- Limiting businesses to "essential" operations;
- Social distancing (generally 6 feet);
- Cloth face masks/coverings;
- Hand washing/disinfectant use; and
- Care/awareness of surroundings (public spaces, equipment, hotel rooms, rental cars).

Additional guidance on minimizing potential exposure to SARS-CoV-2, including a JLA, are included in **Appendix J**.

6.0 EMERGENCY RESPONSE PLAN

This emergency response plan details actions to be taken in the event of site emergencies. The PM and SHSO are responsible for the implementation of emergency response procedures onsite. The SHSO/PM provides specific direction for emergency action based upon information available regarding the incident and response capabilities and initiates emergency procedures and notification of appropriate authorities. In the event of an emergency, site personnel are evacuated and do not participate in emergency response activities, response is facilitated through external emergency services.

6.1 Emergency Response

The SHSO, after investigating the incident and relevant information, shall determine the level of response required for containment, rescue and medical care. Limited on-site emergency response activities could occur therefore the SHSO is responsible for notifying external emergency response agencies. The SHSO provides relevant information to the responding organizations, including but not limited to the hazards associated with the emergency incident, potential containment problems, and missing site personnel.

6.2 Emergency Alerting and Evacuation

If evacuation notice is given, site workers leave the worksite, if possible, by way of the nearest exit. Appropriate primary and alternate evacuation routes and assembly areas must be identified prior to initiating work activities. The 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 SHSO/PM. A Site-specific emergency response plan and evacuation routes including urgent care and emergency medical facilities is provided in **the beginning of this document**.

Personnel exiting the Site 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 so that appropriate action can be initiated. Subcontractors on this site have coordinated their emergency response plans to ensure that these plans are compatible and potential emergencies are recognized, alarm systems are clearly understood, and evacuation routes are accessible to all personnel relying upon them.

6.3 Emergency Medical Treatment and First Aid

In the event of a work-related injury or illness, employees are required to follow procedures outlined below. All work-place injury and illness situations require Roux's Project and Corporate Management Team to be notified when an injury / illness incident occurs, and communication with the contracted Occupational Health Care Management Provider, AllOne Health (AOH), is initiated. The Injury/Illness Notification Flowchart is provided below and within Roux's Incident Investigation and Reporting program included as **Appendix K**.

If onsite personnel require any medical treatment, the following steps will be taken:

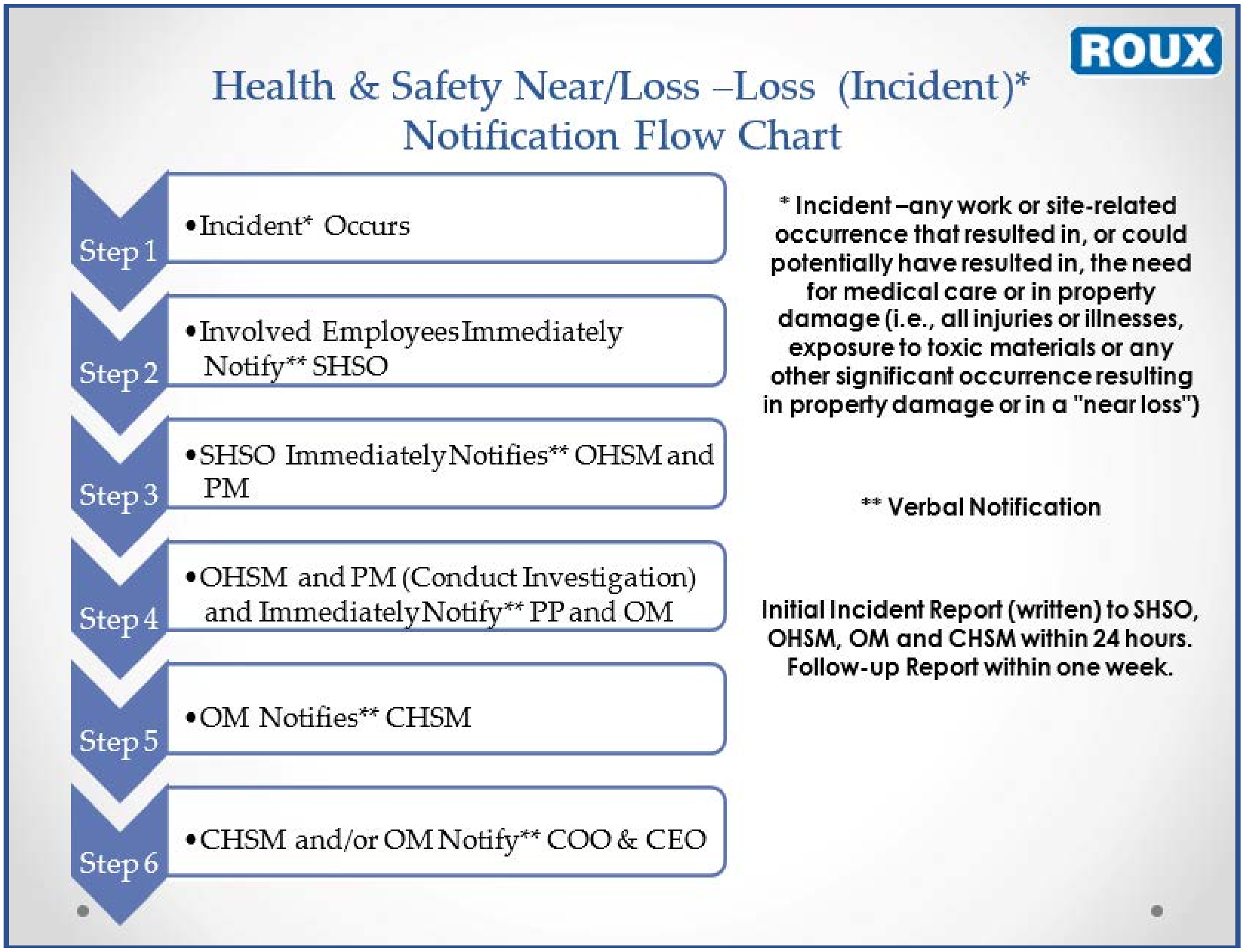
a. Notify Roux's Project and Corporate Management Team for any work-related injury and/or illness occurrence, and communicate with the contracted Occupational Health Care Management Provider, AOH, immediately following the notifications provided above.

b. Based on discussions with the Project Team, Corporate Management and the AOH evaluation, if medical attention beyond onsite First Aid is warranted, transport the injured / ill person (IP) to the Urgent Care Center, or notify the Fire Department or Ambulance Emergency service and request an ambulance or transport the victim to the hospital, and continue communications with Corporate Management Team. An Urgent Care/Hospital Route map with directions to Olean General Hospital and Olean General Hospital Occupational Medicine is provided at the beginning of this HASP.

c. Decontaminate to the extent possible prior to administration of first aid or movement to medical or emergency facilities.

d. First aid medical support will be provided by onsite personnel trained and certified in First Aid, Cardio Pulmonary Resuscitation (CPR), Automatic External Defibrillation (AED), and Blood-Borne Pathogens (BBP) Awareness, until relieved by emergency medical services (EMS).

e. The SHSO and PM will perform a Loss Investigation (LI) and the Project Team will complete the final LI Report. If a Roux employee is involved in a vehicular incident, the employee must also complete the Acord Automobile Loss Notice.



Health & Safety Near/Loss –Loss (Incident)* Notification Flow Chart

Step 1
- Incident* Occurs

Step 2
- Involved Employees Immediately Notify** SHSO

Step 3
- SHSO Immediately Notifies** OHSM and PM

Step 4
- OHSM and PM (Conduct Investigation) and Immediately Notify** PP and OM

Step 5
- OM Notifies** CHSM

Step 6
- CHSM and/or OM Notify** COO & CEO

*** Incident –any work or site-related occurrence that resulted in, or could potentially have resulted in, the need for medical care or in property damage (i.e., all injuries or illnesses, exposure to toxic materials or any other significant occurrence resulting in property damage or in a "near loss")**

**** Verbal Notification**

Initial Incident Report (written) to SHSO, OHSM, OM and CHSM within 24 hours. Follow-up Report within one week.

6.4 Adverse Weather Conditions

In the event of adverse weather conditions, the SHSO or project principal will determine if work can continue without jeopardizing the health and safety of all field workers. Some of the items to be considered prior to determining if work should continue are:

- Potential for heat stress and heat-related injuries.
- Potential for cold stress and cold-related injuries.
- Treacherous weather-related conditions.
- Limited visibility.
- Electrical storm potential.

Site activities will be limited to daylight hours and acceptable weather conditions. Inclement working conditions include heavy rain, fog, high winds, and lightning. Observe daily weather reports and evacuate if necessary in case of inclement weather conditions.

6.5 Electrical Storm Guidelines

In the event that lightning and/or thunder are observed while working on-Site, all onsite activities shall stop and personnel shall seek proper shelter (e.g., substantial building, enclosed vehicle, etc.). Work shall not resume until the threat of lighting has subsided and no lightning or thunder has been observed for 30 minutes. If the possibility of lightning is forecast for the day, advise the onsite personnel on the risks and proper procedure at the pre-work safety briefing. Continuously monitor for changing weather conditions and allow enough time to properly stop work if lightning is forecast.

7.0 SAFETY PROCEDURES

This section of the HASP presents the specific safety procedures to be implemented during Roux's activities at the Site in order to protect the health and safety of various on-site personnel. Minimum OSHA-mandated procedures are presented first, followed by client- and Site-specific procedures. Lastly, activity-specific procedures are discussed. These Site- and activity-specific procedures supplement the general safety procedures included in Roux's Corporate Health and Safety Manual, which also must be followed in their entirely.

7.1 Training

At a minimum, Site personnel who will perform work in areas where there exists the potential for toxic exposure will be health and safety-trained prior to performing work on site per OSHA 29 CFR 1910.120(e) and 29 CFR 1926.65(e). More specifically, all Roux, subcontractor, and other personnel engaged in sampling and remedial activities at the Site and who are exposed or potentially exposed to hazardous substances, health hazards, or safety hazards must have received at a minimum the 40 hour initial HAZWOPER training consistent with the requirements of 29CFR 1910.120(e)(3)(i) training and a minimum of 3 days' actual field experience under the direct supervision of a trained experienced supervisor, plus 8 hours of refresher training on an annual basis. Depending on tasks performed, less training may be permitted. Evidence of such training must be maintained at the Site at all times. Furthermore, all on-site management and supervisory personnel directly responsible for or who supervise the employees engaged in Site remedial operations, must have received an additional 8 hours of specialized training at the time of job assignment on topics including, but not limited to, the employer's safety and health program and the associated employee training program, personal protective equipment program, spill containment program, and health hazard monitoring procedure and techniques, plus 8 hours of refresher training on an annual basis. Moreover, all on-Site personnel who will perform work must meet the requirements of Roux Associates' Short Service Employee Management Program outlined in **Appendix L**.

Roux personnel training records are maintained in a corporate database with records available upon request from either the OHSM/SHSO/CHSM or Human Resources Department.

7.2 Site-Specific Safety Briefings for Visitors

A site-specific briefing is provided to all site visitors who enter this site beyond the site entry point. For visitors, the site-specific briefing provides information about site hazards, the site lay-out including work zones and places of refuge, the emergency alarm system and emergency evacuation procedures, and other pertinent safety and health requirements as appropriate.

7.3 HASP Information and Site-Specific Briefings for Workers

Site personnel review this HASP and are provided a site-specific tailgate briefing prior to the commencement of work to ensure that employees are familiar with this HASP and the information and requirements it contains as well as relevant JSAs included in **Appendix F**. Additional briefings are provided as necessary to notify employees of any changes to this HASP as a result of information gathered during ongoing site characterization and analysis. Conditions for which we schedule additional briefings include, but are not limited to: changes in site conditions, changes in the work schedule/plan, newly discovered hazards, and incidents occurring during Site work.

7.4 Medical Surveillance

The medical surveillance section of the HASP describes how worker health status is monitored at this site. Medical surveillance is used when there is the potential for worker exposure to hazardous substance at levels above OSHA permissible exposure limits or other published limits. The purpose of a medical surveillance program is to medically monitor worker health to ensure that personnel are not adversely affected by site hazards. The provisions for medical surveillance at this site are based on the site characterization and job safety analysis found in Section 4 of this HASP and are consistent with OSHA requirements in 29 CFR 1910.120(f) and the following substance-specific requirements found in **Table 1**:

- Benzene
- Toluene
- Ethylbenzene
- Xylenes
- Naphthalene
- Isopropylbenzene
- Pyrene
- Phenanthrene
- Arsenic
- Barium
- Chromium

7.4.1 Site Medical Surveillance Program

Medical surveillance requirements are based on a worker's potential for exposure as determined by the site characterization and job safety analysis documented in Section 4 and JSAs within **Appendix F** of this HASP and in compliance with the requirements of 29 CFR 1910.120(f)(2). Based on site information and use of direct reading instruments, limited use of respirators (less than 30 days per year), and the absence of an employee-staffed HAZMAT team, a limited medical surveillance program is required and implemented at this site. The medical surveillance program provides that:

1. Workers assigned to tasks requiring the use of respirators receive medical examinations in accordance with 29 CFR 1910.134(e) to ensure they are physically capable to perform the work and use the equipment, and
2. If a worker is injured, becomes ill, or develops signs or symptoms of possible over-exposure to hazardous substance or health hazards, medical examinations are provided to that worker as soon as possible after the occurrence and as required by the attending physician.

These medical examinations and procedures are performed by or under the supervision of a licensed physician and are provided to workers free of cost, without loss of pay, and at a reasonable time and place. In addition, the need to implement a more comprehensive medical surveillance program will be re-evaluated after any apparent over-exposure.

7.4.2 Medical Recordkeeping Procedures

Medical recordkeeping procedures are consistent with the requirements of 29 CFR 1910.1020 and are described in the company's overall safety and health program. A copy of that program is available at our Islandia, NY office.

The following items are maintained in worker medical records:

- Respirator fit test and selection
- Physician's medical opinion of fitness for duty (pre-placement, periodic, termination)
- Physician's medical opinion of fitness for respirator protection (pre-placement, periodic)
- Exposure monitoring results

7.4.3 Program Review

The medical program is reviewed to ensure its effectiveness. The Corporate Health and Safety Director (CHSD) in coordination with the Human Resources Director is responsible for this review. At minimum, this review consists of:

- Review of accident and injury records and medical records to determine whether the causes of accidents and illness were promptly investigated and whether corrective measures were taken wherever possible,
- Evaluation of the appropriateness of required medical tests based on site exposures,
- Review of emergency treatment procedures and emergency contacts list to ensure they were site-specific, effective, and current.

7.5 Personnel Protection

Site safety and health hazards are eliminated or reduced to the greatest extent possible through engineering controls and work practices. Where hazards are still present, a combination of engineering controls, work practices and personal protective equipment (PPE) are used to protect employees. Appropriate PPE shall be worn by Site personnel when there is a potential exposure to chemical hazards or physical hazards (e.g., falling objects, flying particles, sharp edges, electricity and noise), as determined by the SHSO. The level of personal protection, type and kind of equipment selected will depend on the hazardous conditions and in some cases cost, availability, compatibility with other equipment, and performance. An accurate assessment of all these factors will be made before work can be safely executed.

Roux maintains a comprehensive written PPE program that addresses proper PPE selection, use, maintenance, storage, fit and inspection (refer to **Appendix M**). PPE to be used at the Site will meet the appropriate American National Standards Institute (ANSI) standards and the following OSHA (General Industry) standards for minimum PPE requirements.

The minimum level of PPE for entry onto the Site is Level D. The following equipment shall be worn:

- Work uniform (long pants, sleeved shirt)
- Hard hat
- Steel or composite toe work boots
- Safety Glasses (must comply with one of the following ANSI/ISEA Z87.1-2010, ANSI Z87.1-2003, ANSI Z87.1-2003)
- Boot Covers (as needed)
- Hearing Protection (as needed)
- High visibility clothing (shirt/vest)
- Hand Protection (e.g., minimum cut resistance meeting ANSI 105-2000 Level 2)

Note that jewelry shall be removed or appropriately secured to prevent it from becoming caught in rotating equipment or unexpectedly snagged on a fixed object. (e.g., wrist watches bracelets, rings, chains and necklaces, open earrings). Do not wear loose clothing and all shoulder length hair should be tied back.

Site specific PPE ensembles and materials are identified within task specific JSAs located within **Appendix F**, and any upgrades or downgrades of the level of protection (i.e., not specified in the JSA) must be immediately communicated to all Roux personnel and subcontractors as applicable. PPE shall be used in accordance with manufacturer's recommendations.

7.5.1 Hearing Conservation

Hearing protection is made available when noise exposures equal or exceed an 8-hour time-weighted average sound level of 85 dBA. Hearing protection is required when the 8-hour time weighted average sound level $\geq$ 90 dBA. Where noise exposure meets or exceeds this level, noise is listed as a physical hazard in the JSA for the tasks/operation, and hearing protection is included as one of the control measures (PPE).

7.6 Monitoring

An air monitoring program is important to the safety of on- and off-Site personnel. A preliminary survey, to establish background conditions in the immediate sampling area, may be made prior to the initiation of Site work including, but not limited to, monitoring wind direction and approximate temperature during all invasive site activities. This survey will be conducted with the appropriate air monitoring instrument(s) as warranted by the field activity. Once this survey has been complete, any change in the type of PPE will be determined.

A Community Air Monitoring Plan (CAMP) will be implemented during Site excavation work to monitor dust and odor potentially emanating from the work area. CAMP implementation will include air monitoring and periodic odor inspections during excavation, backfill or soil management activities. Air monitoring and odor inspection results will be documented and reported in accordance with the CAMP.

If community air monitoring indicates the need for dust suppression or if dust is visually observed leaving the Site or impacting the residences adjacent to the Site, Roux will spray water across the excavation, surrounding areas, and on-Site haul roads as necessary to mitigate airborne dust formation and migration. Water will either be obtained from a public hydrant or provided by the on-Site water service, if available. Other dust suppression techniques that may be used to supplement the water spray include:

- Hauling materials in properly covered containers or vehicles;
- Restricting vehicle speeds on-Site; and
- Hydro-seeding of disturbed areas (as needed).

If community air monitoring indicates that VOC concentrations downwind of the excavation exceed the levels described in the CAMP, noxious odors are present in the vicinity of the residences adjacent to the Site, or noxious odors are migrating off-Site, BioSolve Pinkwater® (BioSolve), or other commercially available vapor suppression product, will be applied to: the active excavation areas; material contained in on-Site roll off containers or dump trailers; stockpiled material (if any); or other areas emitting VOCs or odors. Other techniques to control migration of fugitive organic vapors and/or odors may be employed, including:

- Limiting the excavation size;
- Backfilling portions of the excavation;
- Spraying water onto the excavation faces and equipment;

- Covering soil stockpiles (if any) with 6-mil polyethylene sheeting;
- Hauling waste materials off-Site in properly covered container;
- Odor masking; and/or
- Pausing operations until the wind conditions change such that fugitive organic vapors and/or odors are not migrating toward downwind receptors.

The CAMP has been prepared to ensure that investigation activities do not adversely affect nearby workers, residents or pedestrians on Site or in the area immediately surrounding the Site and to preclude or minimize airborne migration of VOCs and particulates to on and off-Site areas. The CAMP is included as **Appendix N** and will be available on-Site during the remediation activities.

Real-time community air monitoring will be performed during remedial activities at the Site. Roux will monitor for airborne particulates and VOCs along the downwind perimeter of the work area, including in the vicinity of the Site. Air monitoring will occur during excavation, grading, and soil/fill handling activities. Air monitoring data gathered in accordance with the CAMP will be provided to the NYSDOH project manager following the completion of remediation activities (anticipated duration of one week). Any monitoring results which exceed the action levels set by the CAMP will be reported:

1. When identified, when a NYSDEC representative is present at the Site; and
2. Within two days of any exceedance through an electronically submitted exceedance report to NYSDEC and NYSDOH project managers, which will also include the duration and corrective actions taken in response to any exceedance.

Any monitoring results which exceed the action levels set by the CAMP will also be summarized in a CAMP report provided to NYSDOH. The CAMP is consistent with the requirements for community air monitoring at remediation sites as established by the NYSDOH and NYSDEC. Accordingly, the CAMP follows procedures and practices outlined under NYSDEC DER-10, including NYSDOH's Generic Community Air Monitoring Plan, and Fugitive Dust and Particulate Monitoring.

Air monitoring may be performed to verify that the proper level of equipment is used and to determine if increased protection or work stoppage is required. The following equipment may be used to monitor conditions:

- A Photoionization Detector (PID) with a lamp energy of 10.6 eV will be used to provide direct readings of organic vapor concentrations during intrusive activities to determine that personnel protection is adequate. Concentrations shall be recorded during intrusive activities with the potential to encounter contaminant vapors.
- A pre-calibrated multi-gas meter with combustible Lower Explosive Limit (LEL), oxygen (O_2), carbon monoxide (CO), and hydrogen sulfide (H_2S) sensors shall be used to monitor the potential for oxygen-deficient atmospheres, explosive concentrations of organic vapors, and toxic gases during intrusive operations. Monitoring will be performed according to the action levels for oxygen and combustible gases provided in this section. The calibration for this device will be performed using a known gas composition calibration mixture.

Monitoring equipment will be calibrated in accordance with applicable regulatory requirements and manufacturer specifications.

Below are monitoring action levels for Site-specific chemicals of concern. In the event that PID readings above the thresholds identified below are sustained for 5 minutes in the breathing zone, worker protection will require upgrading - following notification to the OHSM and applicable parties (e.g., client, board of health, regulators, etc.).

7.6.1 Action Levels for Air Monitoring

PPE can remain at Level D if breathing zone VOC concentrations are less than 5 ppm and benzene is non-detect. Personnel are required to evacuate the Site when breathing zone VOC readings exceed 25 ppm.

The following tables include summaries of the air monitoring, work practices, and action levels for the expected contaminants. The action levels to initiate testing with colorimetric tubes for airborne volatiles is 1 ppm (PID reading) and is based on the Permissible Exposure Limit (PEL) for benzene (1 ppm). The colorimetric tubes are used to confirm the presence or absence of specific constituents, and they do not provide a measured concentration.

Air Monitoring Summary and Action Levels Organic Vapors	
PID Reading in Breathing Zone (ppm)[1]	**Action**
0-1 ppm above background[2]	Continue monitoring
1-5 ppm sustained 60 seconds	Continue monitoring, if applicable initiate additional collection of benzene using colorimetric tubes.
<5 ppm and no presence of benzene	Continue Monitoring, ventilate space
≥ 5 ppm - ≤ 25 ppm and no presence of benzene	Ventilate space until PID reads < 5 ppm. If < 5 ppm cannot be achieved, upgrade to Level C[3].
≥ 25 ppm	Ventilate space and evacuate area.

[1] Based on relative response/sensitivity of PID to benzene.

[2] Background concentrations should be established at the beginning of each work day. It may be necessary to re-establish background concentrations and ambient conditions vary through the day.

[3] Measured air concentrations of known organic vapors will be reduced by the respirator to one half of the PEL or lower, and the individual and combined compound concentrations shall be within the service limit of the respirator cartridge.

Air Monitoring Summary and Action Levels Oxygen	
O_2 Reading in Breathing Zone (%)[1]	**Action**
20.9% O_2	Oxygen level normal
< 19.5% O_2	Oxygen deficient Interrupt task/Evacuate area
>23.5% O_2	Oxygen enriched Interrupt task/Evacuate area

[1] Action levels based on USEPA Standard Operating Safety Guides; Table 5-1, Atmospheric Hazard Action Guidelines may be further restricted based on the CHSM's professional judgment and experience.

Air Monitoring Summary and Action Levels Carbon Monoxide	
CO Reading in Breathing Zone (ppm)[1]	**Action**
<25 ppm	Inspect exhaust system for leaks or other sources of CO. Monitor initially and every 15 minutes during use of CO-generating equipment.
25-50 ppm	Ventilate area. Monitor continuously and record measurements. Contact PM.
>50 ppm	Cease Field Operations. Ventilate area.

[1] Based upon the American Conference of Governmental Industrial Hygienists (ACGIH) Threshold Limit Value (TLV) of 25 ppm as an 8-hour time weighted average (TWA) and OSHA's Permissible Exposure Limit (PEL) of 50 ppm as an 8-hour TWA concentration.

Air Monitoring Summary and Action Levels Combustible Gases	
Lower Explosive Limit (LEL) Reading	**Action**
< 4% LEL (<2,000 ppm)	Site activities will continue with normal monitoring
4% – 20% LEL (2,000 – 10,000 ppm)	Stop work until levels dissipate to <4% LEL
> 20% LEL (>10,000 ppm)	Potential explosion hazard. Halt all site activities, research source of release, aerate work area, suppress source.

Air Monitoring Summary and Action Levels Hydrogen Sulfide	
Hydrogen Sulfide (H_2S) Reading	**Action**
<10 ppm	Site activities will continue with normal monitoring
>10 ppm	Stop work until levels dissipate to <10 ppm; use mechanical ventilation if possible
Cannot use air purifying respirators for H_2S because of olfactory fatigue	

7.6.2 Air Monitoring Equipment and Calibration

A PID calibrated to an appropriate calibration mixture will be used to detect organic vapors in and around the work areas. Monitoring will be conducted in and around all work areas and at the workers breathing zone before activities commence to establish a background level, then at 15-minute intervals throughout the day. All equipment will be calibrated according to the manufacturer's recommendation. A calibration log will be maintained and will include the name of the person who performed the calibration, the date and time calibrated, and the instrument reading at the time of calibration. A manual bellows pump or equivalent with colorimetric tubes for formaldehyde will be utilized to determine the course of action related to upgrading or downgrading the level of respiratory protection, as applicable.

If air monitoring data indicate safe levels of potentially harmful constituents at consistent intervals (5-minute intervals), then monitoring can be conducted less frequently (every 30 minutes). This determination will be made by the onsite SHSO. Monitoring data, including background readings and calibration records, will be documented. Work to be performed on-Site will conform to Roux's Standard Operating Procedures (SOPs). Conformance with these guidelines as well as the guidelines described in this HASP will aid in mitigating the physical and chemical hazards mentioned throughout this HASP.

OVM/Multi-gas Meter Action Levels

Action Levels for Respiratory Protection	
OVM Reading in Breathing Zone (ppm)	
< 5	No Action
≥ 5 - < 25	Level C
≥ 25	Cease Field Operations
Multi-gas Reading in Breathing Zone (%)	
LEL ≥ 2	Cease Field Operations
O_2 < 19.5 or > 21.5	Cease Field Operations

7.7 Tailgate Safety Meetings

A designated Site worker will provide daily safety briefings (e.g., tailgate meetings) including, but not limited to, the following scenarios:

- When new operations are to be conducted;
- Whenever changes in work practices must be implemented; and
- When new conditions are identified and/or information becomes available.

Daily safety briefings shall be recorded on the Roux Daily Tailgate Health and Safety Meeting Log/Daily Site Safety Checklist, and all completed forms will become a part of the project file.

7.8 Spill Containment

Spill containment equipment and procedures should, at a minimum, meet the requirements of the facility's Spill Prevention, Control and Countermeasure Plan, if applicable. Otherwise, spill containment equipment and procedures must be considered depending on the task including, but no limited to, chemical/product transfer points and handling.

7.8.1 Initial Spill Notification and Response

Any worker who discovers a hazardous substance spill will immediately notify Ian Reed, the Principal Hydrogeologist. The worker will, to his/her best ability, report the hazardous substance involved, the location of the spill, the estimated quantity of material spilled, the direction/flow of the spill material, related fire/explosion incidents, and any associated injuries without compromising their own safety.

7.8.2 Spill Evaluation and Response

Ian Reed, Principal Hydrogeologist, is responsible for evaluating spills and determining the appropriate response. When this evaluation is being made, the spill area will be isolated and demarcated to the extent possible. If necessary to protect nearby community members, notification of the appropriate authorities is made by the PM as appropriate. On-site response is limited to small spills (e.g., <10 gallons), large spills require external emergency responders who will be contacted by the SHSO.

7.9 Decontamination

The decontamination section of the HASP describes how personnel and equipment are decontaminated when they leave the Exclusion Zone. This section also describes how residual waste from decontamination processes is disposed. The site decontamination procedures are designed to achieve an orderly, controlled removal or neutralization of contaminants that may accumulate on personnel or equipment. These procedures minimize worker contact with contaminants and protect against the transfer of contaminants to clean areas of the site and off-site. They also extend the useful life of PPE by reducing the amount of time that contaminants contact and can permeate PPE surfaces. Decontamination is facilitated within the CRZ at this Site.

7.9.1 Decontamination Procedures for Personnel and PPE

The following are general decontamination procedures established and implemented at this site.

1. Decontamination is required for all workers exiting a contaminated area. Personnel may re-enter the Support Zone only after undergoing the decontamination procedures described below in the next section.
2. Protective clothing is decontaminated, cleaned, laundered, maintained and/or replaced as needed to ensure its effectiveness.
3. PPE used at this site that requires maintenance or parts replacement is decontaminated prior to repairs or
4. PPE used at this site is decontaminated or prepared for disposal on the premises. Personnel who handle contaminated equipment have been trained in the proper means to do so to avoid hazardous exposure.
5. The site requires and trains workers that if their permeable clothing is splashed or becomes wetted with a hazardous substance, they will immediately exit the work zone, perform applicable decontamination procedures, shower, and change into uncontaminated clothing.
6. Procedures for disposal of decontamination waste meet applicable local, State, and Federal regulations.

7.9.2 Decontamination Procedures for Equipment

All tools, equipment, and machinery from the Exclusion Zone or CRZ are decontaminated in the CRZ prior to removal to the Support Zone. Equipment decontamination procedures are designed to minimize the potential for hazardous skin or inhalation exposure and to avoid cross-contamination and chemical incompatibilities.

General Equipment Decontamination Procedures:

1. Decontamination is required for all equipment exiting a contaminated area. Equipment may re-enter the Support Zone only after undergoing the equipment decontamination procedures.
2. Vehicles that travel regularly between the contaminated and clean areas of the Site are carefully decontaminated each time they exit the Exclusion Zone and the effectiveness of that decontamination is monitored to reduce the likelihood that contamination will be spread to other parts of the Site.
3. Particular attention is given to decontaminating tires, scoops, and other parts of heavy equipment that are directly exposed to contaminants and contaminated soil.

The following items may be used to decontaminate equipment:

- Fresh water rinse;
- Non-phosphorus detergent wash;
- Distilled water rinse;
- Acetone rinse;
- Distilled water rinse; and
- A steam cleaner or pressure washer (heavy equipment only).

7.9.3 Monitoring the Effectiveness of Decontamination Procedures

Visual examination and sampling are used to evaluate the effectiveness of decontamination procedures. Visual examination is used to ensure that procedures are implemented as described and that they appear to control the spread of contaminants under changing site conditions. Visual examination is also used to inspect for signs of residual contamination or for contaminant permeation of PPE.

Personnel who work in contaminated areas of the site, either the CRZ or the Exclusion Zone, are trained in the principles and practices of decontamination described in this section of the HASP and in related SOPs. If Site procedures are changed as a result of inspection and monitoring, all affected employees are notified of these changes.

7.10 Confined Space Entry

Confined space entry will not be performed. However, should the need arise the following section outlines safety requirements for confined space entry at the Site.

- **ROUX PERSONNEL ARE NOT AUTHORIZED TO ENTER AN OSHA PERMIT REQUIRED CONFINED SPACE**;
- Currently the scope of work **DOES NOT** require personnel to enter permitted confined space for this project; and
- Any changes to the field activities that may necessitate confined space entry will be reported to the Project Principal and OHSM.

Confined space is defined as any space, depression, or enclosure that:

- Has limited opening for entry and egress;
- Is large enough for and employee to enter and perform assigned work; and
- Is not intended for continuous occupancy.

A permit required confined space is one that meets the definition of a confined space and has one or more of the following characteristics:

- May contain or produce life-threatening atmospheres due to oxygen deficiency the presence of toxic, flammable, or corrosive contaminants;
- Contains a material that has the potential for engulfment;
- Has an internal configuration that may cause an entrant to be trapped or asphyxiated by inwardly converging walls or by a floor that slopes downward and tapers to a smaller cross-section; and
- Contains any other serious safety or health hazards.

Although Roux personnel will not perform confined space entry, it is expected that subcontractors performing cleaning and mitigation and/or remedial measures activities may be required to enter structures that are considered to be a permit required confined space. Permitting of the confined space as well as hazard mitigation for entry will be completed by the subcontractor in accordance with 1910.146. Roux's Confined Space Entry guidance document can be found in **Appendix O**.

7.11 Client and Site-Specific

In addition to the OSHA-specific procedures discussed above, there may be client and site-specific safety procedures that must be adhered to during the performance of remedial activities at the Site.

7.12 Unusual or Significant Risks

Field activities that appear to have unusual or significant risks that cannot be adequately managed with existing risk tools such as SPSAs, HASPs, traffic safety plans, work permits, design and O&M practices, equipment HAZOPS or other safety tools must be referred to the CHSM to help with the assessment and management of the associated potential safety risks. Examples include the use of explosives for demolition, use of firearms to control wildlife, rappelling, demolition over water, etc.

7.13 Activity-Specific

In addition to the general hazards discussed above, there are activity-specific hazards associated with each work activity planned for the Site. For instance, **Appendix H** references a subsurface utility clearance management program that Roux has instituted to ensure, to the greatest extent possible, that utilities have been identified and other subsurface structures will be avoided during any drilling activities. Similarly, **Appendix G** details procedures to follow to mitigate worker exposure to biological hazards such as ticks. An activity-specific JSA has been completed for each of the activities planned for the Site. JSAs are provided in **Appendix F**. In the event that new work activities or tasks are planned, JSAs will be developed and implemented prior to performing the new activities. In the absence of a JSA, the personnel performing work must prepare a field JSA and receive clearance from a designated competent safety official prior to performing any task with significant risk. In emergency situations where time is critical SPSAs will be utilized to identify the task, associated hazards and mitigative actions to take. For lower risk activities (as deemed by the discretion of a Competent Person) where a JSA is determined to not be needed, the individual(s) conducting the activities must perform SPSAs prior to and during the work.

7.13.1 Electrical and Other Utility Assessment and Accommodations

Roux shall perform a site walk to identify any potential overhead electrical or utility lines. All applicable guidelines will be followed in the vicinity of overhead power and utility lines (see Section 7.13.3 below).

Roux has also reviewed all available Site maps showing buried utility lines to identify potential hazards, which revealed that one 4" gas line intersects a planned excavation area. Excavation activities around the identified utility will be performed with soft digging techniques as specified in Roux's Corporate Subsurface Utility Clearance Management program found within **Appendix H**.

7.13.2 Subsurface Work

Subsurface work activities will require adherence to Roux's Corporate Subsurface Utility Clearance Management program found within **Appendix H**.

7.13.2.1 Excavations and Trenching

All trenching and excavation work activities contracted by Roux shall comply with 29 CFR 1926.651-652 Subpart P. Additionally, for trenches greater than 4 feet deep, where employees will enter, the trench needs to have a stairway or ladder or other safe means of egress. Where employees will enter trenches greater than 4 feet deep, the trench must have some type of protective system or sloped appropriately to prevent cave-ins.

The SHSO will be present on-Site during all Roux contracted excavation and backfill operations and will supplement health and safety monitoring conducted by Subcontractor air quality screening to ensure that appropriate levels of protection and safety procedures are utilized. The proximity of chemical, water, sewer, and electrical lines will be identified by Roux and/or their subcontractor before any subsurface activity or sampling is attempted.

The following safe work practices will be implemented during this task.

- The proximity of chemical, water, sewer, and electrical lines will be identified by a facility representative prior to beginning any subsurface activity.
- While earthmoving, stay out of the excavator's delineated HEEZ and away from the excavation sides, where there is potential for cave in (within excavations that are 6 feet or more in depth, a delineated perimeter 6 feet away from the excavated edge is required).

Maximum Allowable Slopes

Soil or Rock Type	Maximum Allowable Slopes (H:V)[1] for Excavations Less Than 20 Feet Deep[3]
Stable Rock	Vertical (90°)
Type A[2]	$^3/_4$: 1 (53°)
Type B	1 : 1 (45°)
Type C	1 $^1/_2$: 1 (34°)

OSHA (29 CFR 1926.652, Subpart P, Appendices A and B)

Notes:

[1] Numbers shown in parentheses next to maximum allowable slopes are angles expressed in degrees from the horizontal. Angles have been rounded off.

[2] A short-term maximum allowable slope of $^1/_2$H : 1V (63°) is allowed in excavations in Type A soil that are 12 feet (3.67 meters) or less in depth. Short-term maximum allowable slopes for excavations greater than 12 feet (3.67 meters) in depth shall be $^3/_4$H : 1V (53°).

[3] Sloping or benching for excavations greater than 20 feet deep shall be designed and stamped by a registered professional engineer.

Proper stockpiling (i.e., 2 feet minimum distance from the excavation edge), containment, transport, storage, and disposal practices will be utilized and is dependent upon the potential type and amount of waste generated during operations. The location of safety equipment and evacuation procedures will be established prior to initiation of operations according to this HASP.

7.13.3 Heavy Equipment

Use of heavy equipment at the Site will require adherence to Roux's Corporate Heavy Equipment Exclusion Zone Management Program found within **Appendix B**. Additionally, operation of the drill rig/other heavy equipment will maintain clearances from overhead power lines in accordance with OSHA 29 CFR1926.1408 Table A Minimum Clearance Distances provided below.

Minimum Required Clearances for Energized Overhead Power Lines

Nominal System Voltage of Power Line (K V)	Minimum Required Clearance (feet)
0-50	10
51-100	12
101-200	15
201-300	20
301-500	25
501-750	35
751-1000	45

1 kilovolt (KV) = 1,000 volts

7.13.4 Heat Stress

The National Weather Service records average minimum/maximum temperatures of 25 to 85 degrees Fahrenheit during the year in Western New York. Heat stress is a significant potential hazard and can be associated with heavy physical activity and/or the use of personal protective equipment in hot weather environments.

Heat cramps are brought on by prolonged exposure to heat. As an individual sweats, water, and salts are lost by the body resulting in painful muscle cramps. The signs and symptoms of heat stress are as follows:

- Severe muscle cramps, usually in the legs and abdomen;
- Exhaustion, often to the point of collapse; and
- Dizziness or periods of faintness.

First aid treatment includes, but is not limited to, shade, rest, and fluid replacement. Typically, the individual should recover within one-half hour while being monitored constantly. If the individual has not improved substantially within 30 minutes and the body temperature has not decreased, the individual should be transported to a hospital for medical attention.

Heat exhaustion may occur in a healthy individual who has been exposed to excessive heat while working or exercising. The circulatory system of the individual fails as blood collects near the skin to rid the body of excess heat through transference. The signs and symptoms of heat exhaustion are as follows:

- Rapid and shallow breathing;
- Weak pulse;
- Cold and clammy skin with heavy perspiration;
- Skin appears pale;
- Fatigue and weakness;
- Dizziness; and/or
- Elevated body temperature.

First aid treatment includes, but is not limited to, cooling the victim, elevating the feet, and replacing fluids. If the individual is not substantially improved within 30 minutes and the body temperature has not decreased, the individual should be transported to the hospital for medical attention. Documentation showing AllOne Health Occupational Care Management contact information, depicting the locations of and routing to the local Occupational Health Urgent Care Center and local hospital are included at the beginning of this HASP.

Heat stroke occurs when an individual is exposed to excessive heat and stops sweating. This condition is classified as a **MEDICAL EMERGENCY** requiring immediate cooling of the victim and transport to a medical facility. The signs and symptoms of heat stroke are as follows:

- Dry, hot red skin;
- Body temperature approaching or above 105 degrees F;
- Confusion, altered mental state, slurred speech;
- Seizures;
- Large (dilated) pupils; and
- Loss of consciousness – the individual may go into a coma.

First aid treatment requires immediate cooling and transportation to a medical facility. Heat stress is a significant hazard if any type of protective equipment (semi-permeable or impermeable) that prevents evaporative cooling is worn in hot weather environments.

7.14.5 Cold Stress

The National Weather Service records average minimum/maximum temperatures of 25 to 85 degrees Fahrenheit during the year in Western New York. Cold stress is a danger at low temperatures and when the wind chill factor is low. Prevention of cold-related illnesses is a function of whole-body protection. Adequate insulated clothing must be used when the air temperature is below 60°F. A work/rest regimen will be initiated when ambient temperatures and protective clothing cause a stressful situation. In addition, reduced work periods followed by rest in a warm area may be necessary in extreme conditions. The signs and symptoms of cold stress include the following:

- Severe shivering;
- Abnormal behavior;
- Slowing;
- Weakness;
- Stumbling or repeated falling;
- Inability to walk;
- Collapse; and/or
- Unconsciousness.

First aid requires removing the victim from the cold environment and seeking medical attention immediately. Also, prevent further body heat loss by covering the victim lightly with blankets. Do not cover the victim's face. If the victim is still conscious, administer hot drinks and encourage activity such as walking, wrapped in a blanket.

8.0 FIELD TEAM REVIEW

Each person performing work at or visiting this site shall sign this section after site-specific training is completed and before being permitted to access the CRZ or Exclusion Zone.

I have read and understand this Site-specific HASP. I will comply with the provision contained therein.

Site/Project: MJ Painting Contractor Corp., 350 Franklin Street, Olean, New York

Name Printed	Signature	Date

9.0 APPROVALS

By their signature, the undersigned certify that this HASP is approved and will be utilized at the MJ Painting Contractor Corp. Site located at 350 Franklin Street, Olean, NY 14760.

5/25/2022

Alexandra Bailey – Site Health and Safety Officer
Date

5/25/2022

Anthony Marsocci - Office Health and Safety Manager
Date

5/25/2022

Brian Robinson – Project Manager
Date

5/25/2022

Ian Reed– Project Principal
Date

TABLE

Toxicological Properties of Hazardous Substances Present at the Site

Table 1. Toxicological, Physical, and Chemical Properties of Compounds Potentially Present at the Site

Compound	CAS #	TLV	IDLH	PEL	Routes of Exposure	Toxic Properties	Target Organs	Physical/Chemical Properties
Arsenic (As)	7440-38-2	0.01	(ND)	0.5 mg/m^3 organic 0.10 mg/m^3 - inorganic	Dermal; inhalation; ingestion	Sensory irritant Lung & Skin Cancer Aplastic anemia Numbness	skin eyes lungs blood peripheral nervous system	Silver gray - tin white BP: sublimes
Asphalt (fume)	8052-42-4	0.5 (fumes)	(ND)	None	Dermal; inhalation ingestion	Severe burns Dermatitis Photosensitization Pyloric obstruction	skin eyes stomach	Black or dark brown mass BP = <470° F1.Pt = 464°F LEL = 0.7% UEL = 6.0%
Barium (soluble)	7440-39-3	0.5 mg/m^3	250 mg/m^3	0.5 mg/m^3	Inhalation; ingestion	Sensory irritant Increase muscle contractility Slows heart rate	skin eyes smooth muscle heart	Silver white BP: 1640°
Barium (insoluble) (as barium sulfate)	7727-43-7	10 mg/m^3	(ND)	10 mg/m^3 5 mg/m^3 resp.	Inhalation; ingestion	Baritosis	lungs	White or yellow odorless
Benzene	71-43-2	1.6 mg/m^3 0.5 ppm	Ca (ND)	1 ppm	Dermal; inhalation ingestion	CNS depression Hematopoietic depression Dermatitis	CNS blood skin eyes resp system bone marrow	Liquid (solid below 42°F BP: 80.093°C flammable LEL: 1.4% UEL: 8.0%
Butane	106-97-8	1,000 mg/m^3 800 ppm	(ND)	1,900 mg/m^3 800 ppm	Dermal; inhalation	Frostbite Narcotic	eyes, skin CNS	Colorless gas; petroleum odor BP = 0.5° FP = 138° LEL = 1.9% UEL = 8.5% F1.Pt = -76°F

Table 1. Toxicological, Physical, and Chemical Properties of Compounds Potentially Present at the Site

Compound	CAS #	TLV	IDLH	PEL	Routes of Exposure	Toxic Properties	Target Organs	Physical/Chemical Properties
Cadmium (dust)	7440-43-9	0.01 mg/m^3	9 mg/m^3	0.005 mg/m^3	Inhalation; ingestion	Sensory irritant Lung injury Kidney disease Cancer	skin eyes kidneys bone	Silver-white/blue tinged BP: 1409°F Noncombustible
Chromium	7440-47-3	0.5	250 mg/m3	OSHA: 1	Inhalation; Skin; eye contact; ingestion	Irritation to eyes, skin; lung fibrosis.	Eyes, Skin, Respiratory system.	Blue-White to steel-gray, lustrous, brittle, hard, odorless solid
Chromium (III)	7440-47-3	0.5 mg/m^3	25	0.5 mg/m^3	Dermal; inhalation ingestion	Decreased pulmonary function Sensory irritant	lung skin eyes	Steel gray metal
Chromium (VI)	7440-47-3	0.05 mg/m^3	(ND)	None	Dermal; inhalation; ingestion	Nasal and lung tumors Sensory irritant	lungs eyes skin	Red, rhombic crystals
Chromic Acid and Chromates	133-82-0	0.1 as CrO3	Ca [15 mg/m3] as Cr(VI)	0.1	Inhalation; Skin and/or eye contact; ingestion	Respiratory system irritant, nasal septum perforation, liver, kidney damage, leukocytosis, leukopenia, monocytosis, eosinophillia, skin ulcers [Potential Carcinogen].	Eyes, Skin, Respiratory system, Blood, Liver, Kidneys [Lung Cancer].	CRo3: Dark-red, odorless flakes or powder. [Note: often used in aqueous solutions (H2CrO4)]
Coal Tar (Petroleum Naptha)	8030-30-6	0.2 mg/m^3	Ca 80 ppm	0.2 mg/m^3	Dermal; inhalation	Acne, folliculitis Lung cancer	resp system bladder kidney skin	Black, dark brown amorphous residue
Copper (dusts and mists as Cu)	7440-50-8	1 mg/m^3	100 mg/m^3	1 mg/m^3	Dermal; inhalation; ingestion	Sensory irritant GI irritation CNS depressant	skin eyes GI tract CNS	Reddish metal BP: 4730°F Powdered form may ignite

Table 1. Toxicological, Physical, and Chemical Properties of Compounds Potentially Present at the Site

Compound	CAS #	TLV	IDLH	PEL	Routes of Exposure	Toxic Properties	Target Organs	Physical/Chemical Properties
1,1-Dichloroethane	75-34-3	405 mg/m^3 100 ppm	3,000 ppm	400 mg/m^3 100 ppm	Dermal; ingestion; inhalation	CNS depression Liver damage Sensory irritant	CNS liver eyes	Liquid; Chloroform odor BP: 57.3°C flammable LEL: 5.6% UEL: 11.4%
1,2-Dichloroethane (Ethylene dichloride)	107-06-2	40 mg/m^3 10 ppm	Ca (ND)	4.0 mg/m^3 1 ppm	Dermal; ingestion; inhalation	CNS depressant Liver neurosis Kidney damage Dermatitis	CNS liver kidneys skin	Colorless liquid BP: 83.5° LEL: 6.2% UEL: 15.9%
1,2-Dichloroethene	540-59-0	793 200 ppm	1,000 ppm	790 200 ppm	Dermal; ingestion; inhalation	CNS depressant Epigastric cramps Sensory irritant Dermatitis	CNS stomach skin	Colorless liquid BP: 59° LEL: 9.7% UEL: 12.8%
Diesel Fuel	68334-30-5	10 ppm	NA	NA	Dermal; inhalation	Resp irritation Dizziness, nausea Skin disorders Liver disorders	lungs CNS skin liver	Light amber liquid F1.Pt = >100°F LEL = 0.6% UEL = 7.0%
Ethylbenzene	100-41-4	434 mg/m^3 20 ppm	800 ppm (10% LEL)	435 mg/m^3 100 ppm	Dermal; inhalation; ingestion	Sensory irritant CNS depressant Narcosis Hematological disorders	eyes skin CNS respiratory system blood	Liquid aromatic odor BP: 277°F Fl.P: 59°F LEL: 1.2% UEL: 7.0%
No. 2 Fuel Oil	8008-20-6	200 ppm	None	NL	Dermal; inhalation	Sensory Irritant Pulmonary Edema	Skin, eyes, respiratory tract	Liquid Aromatic odor BP = 347-617°F Fl Pt. = 100-162°F UEL = 5.0% LEL = 0.7%
Fuel Oil	68476-33-5	200 ppm	(ND)	NA	Dermal; inhalation ingestion	Skin cancer Liver damage Blood disorders	skin liver bone marrow	Dark liquid LEL = 1.0% UEL = 3.0% F1.Pt = >140°F

Table 1. Toxicological, Physical, and Chemical Properties of Compounds Potentially Present at the Site

Compound	CAS #	TLV	IDLH	PEL	Routes of Exposure	Toxic Properties	Target Organs	Physical/Chemical Properties
Jet A Fuel	8008-20-6	200 ppm	None	NL	Dermal; inhalation	Sensory Irritant Pulmonary Edema	Skin, eyes, respiratory tract	Liquid Aromatic odor BP = 347-617°F Fl Pt. = 100-162°F UEL = 5.0% LEL = 0.7%
Jet Fuel JP-4	8008-20-6	200 ppm	None	NL	Dermal; inhalation	Sensory Irritant Pulmonary Edema	Skin, eyes, respiratory tract	Liquid Aromatic odor BP = 347-617°F Fl Pt. = 100-162°F UEL = 5.0% LEL = 0.7%
Jet Fuel JP-5	8008-20-6	200 ppm	None	NL	Dermal; inhalation	Sensory Irritant Pulmonary Edema	Skin, eyes, respiratory tract	Liquid Aromatic odor BP = 347-617°F Fl Pt. = 100-162°F UEL = 5.0% LEL = 0.7%
Jet Fuel JP-8 (Kerosene)	8008-20-6	200 ppm	None	NL	Dermal; inhalation	Sensory Irritant Pulmonary Edema	Skin, eyes, respiratory tract	Liquid Aromatic odor BP = 347-617°F Fl Pt. = 100-162°F UEL = 5.0% LEL = 0.7%
Jet Oil II	8008-20-6	200 ppm	None	NL	Dermal; inhalation	Sensory Irritant Pulmonary Edema	Skin, eyes, respiratory tract	Liquid Aromatic odor BP = 347-617°F Fl Pt. = 100-162°F UEL = 5.0% LEL = 0.7%
Jet Oil 291	8008-20-6	200 ppm	None	NL	Dermal; inhalation	Sensory Irritant Pulmonary Edema	Skin, eyes, respiratory tract	Liquid Aromatic odor BP = 347-617°F Fl Pt. = 100-162°F UEL = 5.0% LEL = 0.7%

Table 1. Toxicological, Physical, and Chemical Properties of Compounds Potentially Present at the Site

Compound	CAS #	TLV	IDLH	PEL	Routes of Exposure	Toxic Properties	Target Organs	Physical/Chemical Properties
Jet Oil 254	8008-20-6	200 ppm	None	NL	Dermal; inhalation	Sensory Irritant Pulmonary Edema	Skin, eyes, respiratory tract	Liquid Aromatic odor BP = 347-617°F Fl Pt. = 100-162°F UEL = 5.0% LEL = 0.7%
Lube Oil	NL	NL	None	NL	Dermal; inhalation	Sensory Irritant Pulmonary Edema	Skin, eyes, respiratory tract	Liquid BP = °F Fl Pt. = °F UEL = % LEL = %
Furfural	98-01-1	7.9 mg/m^3 2 ppm	100 ppm	20 mg/m^3 5 ppm	Dermal; inhalation; ingestion	Eye, skin irritation Resp. irritation Dizziness, nausea	eyes respiratory system skin CNS	Brown liquid F1.Pt = 142°F LEL = 2.1% UEL = 16.3%
Gasoline	8006-61-9	896 mg/m^3 300 ppm	Ca (ND)	None	Dermal; inhalation; ingestion	CNS depression Sensory irritant Dermatitis Pelmonary Edema	CNS eyes skin resp system	Liquid, aromatic F1.Pt = -50°F
Hydrogen Sulfide	7783-06-4	TWA 5 ppm STEL 10 ppm (adopted by EM, Sep. 2010)	100 ppm	20 ppm	Dermal; inhalation; ingestion	CNS depression Resp distress Conjunctivitis	resp system eyes CNS	Colorless gas, rotten egg odor BP - -76°F UEL = 46% LEL = 4.3%
Kerosene	8008-20-6	200 ppm	NA	NA	Dermal; inhalation	Eye/skin irritation Resp. irritation Dizziness, nausea	eyes skin resp. system CNS	yellow to white oily liquid F1.Pt = >115°F LEL = 0.7% UEL = 5.0%
Lead (as Pb)	7439-92-1	0.05 mg/m^3	100 mg/m^3	<0.1 mg/m^3	Dermal; inhalation ingestion	Abdominal pain CNS depressant Anemia Nephropathy Reproductive effects	GI tract CNS blood kidneys	Metal - soft gray BP: 3164°F

Table 1. Toxicological, Physical, and Chemical Properties of Compounds Potentially Present at the Site

Compound	CAS #	TLV	IDLH	PEL	Routes of Exposure	Toxic Properties	Target Organs	Physical/Chemical Properties
Naphtha	8032-32-4	1,590 mg/m^3 400 ppm	1000 ppm	400 mg/m^3 100 ppm	Inhalation; ingestion	Resp irritant Eye irritation	eye resp tract	Clear, flammable
Nickel	7440-02-0	1.5 mg/m^3	Ca 10 mg/m^3	0.015 mg/m^3	Dermal; inhalation; ingestion	Pulmonary fibrosis Lung cancer Sinus cancer Sensory irritant GI irritation	lungs skin eyes GI tract	Silver-white metal BP: 2730°
Petroleum hydrocarbons (Petroleum distillates) (Red Dye Liquid)	8002-05-9	1,600 400 ppm	10,000	1,600 400 ppm	Dermal; inhalation; ingestion	CNS depressant Respiratory irritant Dried/cracked skin	CNS respiratory tract skin	Colorless liquid BP = 86-460□F UEL = 5.9% LEL = 1.1% Flammable
Selenium (Se)	7782-49-2	0.2 mg/m^3	1 mg/m^3	0.2 mg/m^3	Dermal; inhalation; ingestion	Sensory irritant Bronchial irritation GI distress	respiratory system skin eyes liver kidneys blood	Steel grey, non-metallic BP: 690°F
Silver (Ag)	7440-22-4	0.1 mg/m^3	10 mg/m^3	0.01 mg/m^3	Dermal; inhalation; ingestion	Sensory irritant Bronchitis	skin eyes lungs	Lustrous white metal BP: 2212°
Tetrachloroethene (perchloroethylene PCE)	127-18-4	170 mg/m^3 25 ppm	Ca 150 ppm	100 ppm	Dermal; inhalation; ingestion	CNS depression Liver damage Sensory irritant	CNS liver skin eyes kidneys	Liquid ether-like odor BP: 121.20°C
Toluene	108-88-3	188 mg/m^3 200 ppm	500 ppm	200 ppm	Dermal; inhalation; ingestion	CNS depression Liver damage Kidney damage Defatting of skin	CNS liver kidney skin	Liquid benzene odor BP: 110.4°C flammable LEL: 1.2% UEL: 7.1%

Table 1. Toxicological, Physical, and Chemical Properties of Compounds Potentially Present at the Site

Compound	CAS #	TLV	IDLH	PEL	Routes of Exposure	Toxic Properties	Target Organs	Physical/Chemical Properties
Trichloroethene (TCE)	79-01-6	269 mg/m^3 10 ppm	Ca 1000 ppm	50 ppm	Dermal; inhalation; ingestion	CNS depression Sensory irritant Kidney damage Liver damage Heart damage	CNS skin eyes kidney liver CVS	Liquid BP: 86.7°flammable LEL: 12.5% UEL: 90%
1,1,1-Trichloroethane (methyl chloroform)	71-55-6	1,910 mg/m^3 350 ppm	700 ppm	1,900 mg/m^3 350 ppm	Dermal; ingestion; inhalation	Sensory irritant CNS depression Cardiac arrhythmia	skin CNS CVS eyes	Liquid; BP: 74.1° Fl.P: = 32.5°
Vinyl chloride (chloroethylene)	75-01-4	2.6 mg/m^3 1 ppm	Ca (ND)	1 ppm	Inhalation; ingestion	Liver tumors Blood tumors Sensory irritant CNS depressant	liver blood eyes skin CNS	Colorless gas Highly flammable BP: 13° FP: -159.7° LEL: 4% UEL: 22%
Xylene(s)	1330-20-7	434 mg/m^3 100 ppm	900 ppm	435 mg/m^3 100 ppm	Dermal; inhalation; ingestion	Sensory irritant Blood dyscrasia Bronchitis CNS depression	CNS eyes skin GI tract blood liver kidneys	Liquid Aromatic odor BP: 138.5° flammable LEL: 1.1% UEL: 7.0%
Zinc Oxide (dust)	7440-66-6	2 mg/m^3	None	10 5 resp.	Dermal; inhalation; ingestion	Skin irritant Cough	skin lungs	Bluish-white metallic element BP: 908°

<u>Notes:</u>

Ca – Carcinogen
TLV – Threshold Limit Value (ACGIH)
IDLH – Immediately Dangerous to Life and Health (OSHA)
PEL – Permissive Exposure Level (OSHA)
PPM – Parts per million
mg/m^3 – milligrams per cubic meter
Fl. Pt. – Flash point
LEL – Lower Explosive Level
UEL – Upper Explosive Level
BP – Boiling Point
NA – Not Available
ND – Not Determined

References

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Proctor, N.H., J.P. Hughes and M.L. Fischman, 1989. Chemical Hazards of the Workplace. Van Nostrand Reinhold. New York.
Sax, N.I. and R.J. Lewis, 1989. Dangerous Properties of Industrial Materials. 7th Edition. Van Nostrand Reinhold. New York.
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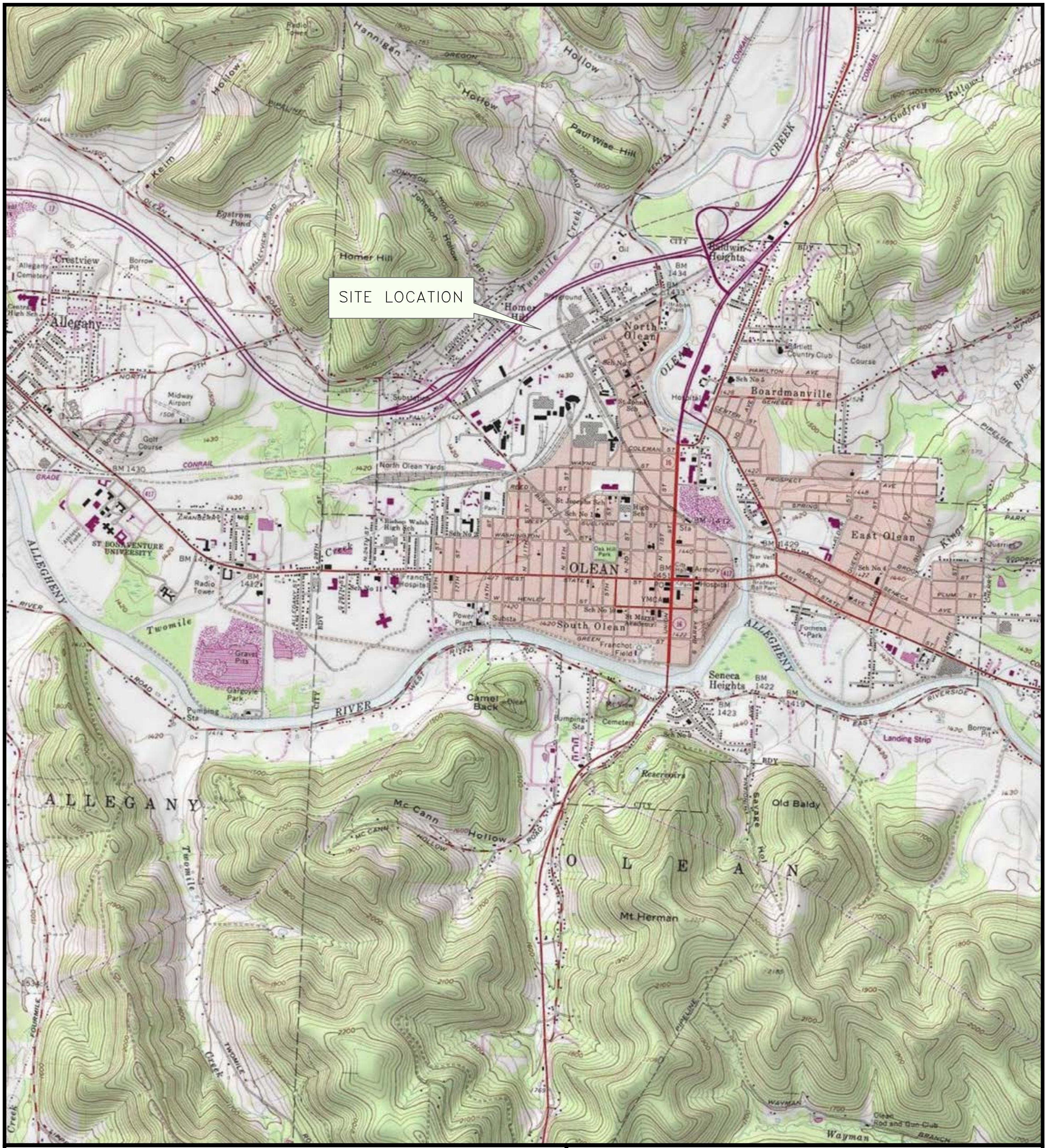
FIGURES



Title:

SITE LOCATION MAP

350 FRANKLIN STREET

Prepared For: MJ PAINTING CONTRACTOR CORP.

🟥 QUADRANGLE LOCATION

USGS, 1980, Olean, New York 7.5 Minute Topographic Quadrangle. Contour Interval 3 Meters

Service Layer Credits: Copyright:© 2013 National Geographic Society, i-cubed

1,800 0 1,800 3,600
Feet

Compiled by: SB	Date: 28JUN18	FIGURE
Prepared by: SB	Scale: AS SHOWN	1
Project Mgr: AH	Project: 2317.0002M02000	
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LEGEND

MW-212 ●	MONITORING WELL LOCATION
⊗	STORM/SANITARY SEWER DRAINAGE STRUCTURE LOCATION
——	SITE BOUNDARY
—·—·—	NEIGHBORING FENCE LINE
━━	SURVEY BOUNDARY
— W —	UNDERGROUND WATER UTILITY
— ST —	UNDERGROUND STORM SEWER UTILITY
— SS —	UNDERGROUND SANITARY SEWER UTILITY
— UE —	UNDERGROUND ELECTRIC UTILITY
— · — · —	OVERHEAD ELECTRIC UTILITY
▨	WOODED/BRUSH AREA

SOURCE:

WENDEL WD ARCHITECTURE, ENGINEERING, SURVEYING AND LANDSCAPE ARCHITECTURE, P.C., TOPOGRAPHIC SURVEY, DWG. NO. V100, DATED DECEMBER 17, 2020

AERIAL IMAGE OBTAINED FROM GOOGLE EARTH

NOTES:

ALL FEATURES ARE APPROXIMATE

THE ENTIRE BCP SITE WILL HAVE A BCP COMPLIANT SITE COVER SYSTEM

50' 0 50'

Title:

SITE PLAN
ACCESS AND MUSTER LOCATIONS

350 FRANKLIN STREET
OLEAN, NEW YORK

Prepared for:

MJ PAINTING CONTRACTOR CORP.

ROUX

Compiled by: MV	Date: 2/23/2021	FIGURE
Prepared by: CC	Scale: AS SHOWN	2
Project Mgr: BR	Project: 2317.0002M000	
File: 2317.0002M000.102.02.DWG		

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HEALTH AND SAFETY PLAN

MJ Painting Contractor Corp.
350 Franklin Street
Olean, NY 14760

APPENDICES

A. Traffic Control Program
B. Heavy Equipment Exclusion Zone Policy
C. Field and Office Ergonomics Program
D. Hearing Conservation Program
E. List of Site Safety Data Sheets (SDSs)
F. Job Safety Analysis (JSA) Management Program
G. Biological Hazard Awareness Management Program
H. Subsurface Clearance Program
I. Electrical Safety Program
J. COVID-19 Interim Health and Safety Guidance Document
K. Incident Management Program
L. Short Service Employee Program
M. Personal Protective Equipment (PPE) Program
N. Community Air Monitoring Program
O. Confined Space Entry Program

HEALTH AND SAFETY PLAN

MJ Painting Contractor Corp.
350 Franklin Street
Olean, NY 14760

APPENDIX A

Traffic Control Program

TRAFFIC CONTROL GUIDANCE
MANAGEMENT PROGRAM

CORPORATE HEALTH AND SAFETY MANAGER : **Brian Hobbs, CIH, CSP**

EFFECTIVE DATE : **01/19**

REVISION NUMBER : **1**

TABLE OF CONTENTS

1. PURPOSE

Roux Associates, Inc. and its affiliated companies, Roux Environmental Engineering and Geology, D.P.C, and Remedial Engineering (collectively, "Roux") has established this Traffic Control Guidance Management Program to assure its employees and contractors work safely in situations where they are exposed to traffic hazards. This document provides guidance for assessing traffic hazards, mitigating traffic hazards and developing a traffic control plan for Roux projects to maintain a safe and secure work environment, provide a safe and efficient means of travel through a work area, and ensuring egress points are not obstructed in case of an emergency. (Note: Use of the word traffic is to be inclusive of vehicles and pedestrians.)

2. SCOPE AND APPLICABILITY

This guidance document shall be used when conducting work on Roux projects with actual or potential traffic hazards from external or internal traffic including:

- Active sites or facilities (e.g. parking lots, terminals, third party sites)
- Inactive and vacant sites
- Roadways, rights-of-ways

Nothing specified in this guidance document should be construed to suggest conducting work or traffic control in a manner contrary to strict compliance with national, regional and local regulations and/or more stringent contractor or site requirements. This document provides guidance for traffic control and may not contain all the information necessary to develop and implement a traffic control plan for public roadways. If necessary, a traffic control professional and/or licensed traffic control company should be contacted.

3. REQUIREMENTS AND MINIMUM SAFETY EXPECTATIONS

A Traffic Control Plan is used for the safe movement of vehicle and pedestrian traffic through a work zone/site and must be developed for each site with actual or potential traffic hazards.

The plan must include:

- Site map* that shows the location of work, flaggers, appropriate buffer areas, traffic flow, parking areas, existing structures and any required traffic control devices; and
- Established maximum speed limits for the site.

* For sites where work zones and/or traffic plans are changing frequently, consider using laminated site maps to allow for updates.

Safety Expectations

- Vehicles and heavy equipment must have an audible reverse signal or a horn will be used to signal backing.
- If backing a work vehicle is required, use a spotter and sound the horn twice before backing. If a spotter is not available, sound the horn twice before backing.
- Individuals who are not familiar with the work site are not permitted to drive on site without an escort.
- Identify a safe entrance and exit path for personnel, vehicles, trucks and heavy equipment that is clear of obstructions, requires no or minimal backing and allows maximum visibility for drivers and

others in the area. If visibility is obstructed when entering or exiting the site, mirrors must be installed to enhance visibility or a spotter must be used.

- Establish check-in / check-out procedures for heavy equipment onsite.
- Traffic control must be in place before any work that exposes individuals to a traffic hazard is conducted. All work should be completed before traffic control devices are removed.
- Traffic control devices must be secured to prevent movement in windy conditions.
- The Site Health and Safety Officer (SHSO) is responsible for communicating the traffic control plan including traffic communication methods to all site personnel prior to the start of any activities and periodically assessing site conditions and revising the traffic control plan as needed.

3.1 Buffer Areas

- Buffer area is a lateral and longitudinal area that separates traffic from the work. The minimum buffer area must be established between traffic and personnel, vehicles, and equipment.
- Buffer areas must be sized to provide separation between workers and internal and external traffic including vehicular, heavy equipment and pedestrian.
- The size of buffer zone depends on speed of traffic, volume, type of work, duration of work, visibility of work zone (curves, corners, rises and dips), access and egress and proximity to public facilities.
- If an unauthorized vehicle or pedestrian enters the work zone or buffer area, work must stop immediately and the traffic control plan reevaluated for effectiveness.

3.2 Levels of Traffic Control

Site factors and work factors are used to help determine the level of traffic control needed for safe operations. All work areas should keep in mind pedestrian and small motorized traffic as well as vehicle and heavy equipment traffic. Levels of traffic control are defined as follows:

Factor	Level 1	Level 2	Level 3
Speed in or next to Work Area	Low / <30km/h or 20 mph	High / >30 km/h 20 mph	NA
Use of Heavy Equipment	No	Yes	NA
Work in Public Roadway / Sidewalk/ Footpath	No	Yes	Yes
Lane Closure	No	No	Yes

The highest traffic control level based on the single highest ranking factor in the above table should be implemented. Site-specific factors or hazards not presented in the above table may justify selection of a higher traffic control level and/or additional control devices.

3.2.1 Level 1 Traffic Control

- Use delineators (cones with flags, stacker cones, looper tubes, grabber tubes, etc.) to surround work zone.
  - 1.1 meter (42-inches) in total height.

  - 1.2 meter (4 feet) distance between delineators.
- Use caution tape or barricade boards between delineators.
- Use work vehicle parked between workers and on-coming traffic to provide visual warning to and physical protection from traffic.
- If working close to site entrance, use a second line of delineators to create an additional buffer or utilize a spotter.
- Use the buddy system or a watchperson when traffic conditions warrant.

Examples of Level 1 Traffic Control

Figures A1.2.2(a)(b)(c) - Examples of Level 2 Traffic Control

3.2.2 Level 2 Traffic Control

- Plastic security fencing and/or barricades:
  - meter (42-inches) in total height (1.8 meters/6 feet high in areas where drivers have poor visibility or other higher risk factors present).
  - meter (4 feet) distance between delineators.
- Use cautionary signs (e.g., “Men Working”, “Work Zone”) in all directions from which vehicles can approach (recommended 0.8 meter or 32 inches high) and any additional signage/protection required by local, regional or national regulations.
- Use work vehicle parked between workers and on-coming traffic to provide visual warning to and physical protection from traffic.
- If working close to site entrance, use second line of delineators to create an additional buffer or utilize a spotter.

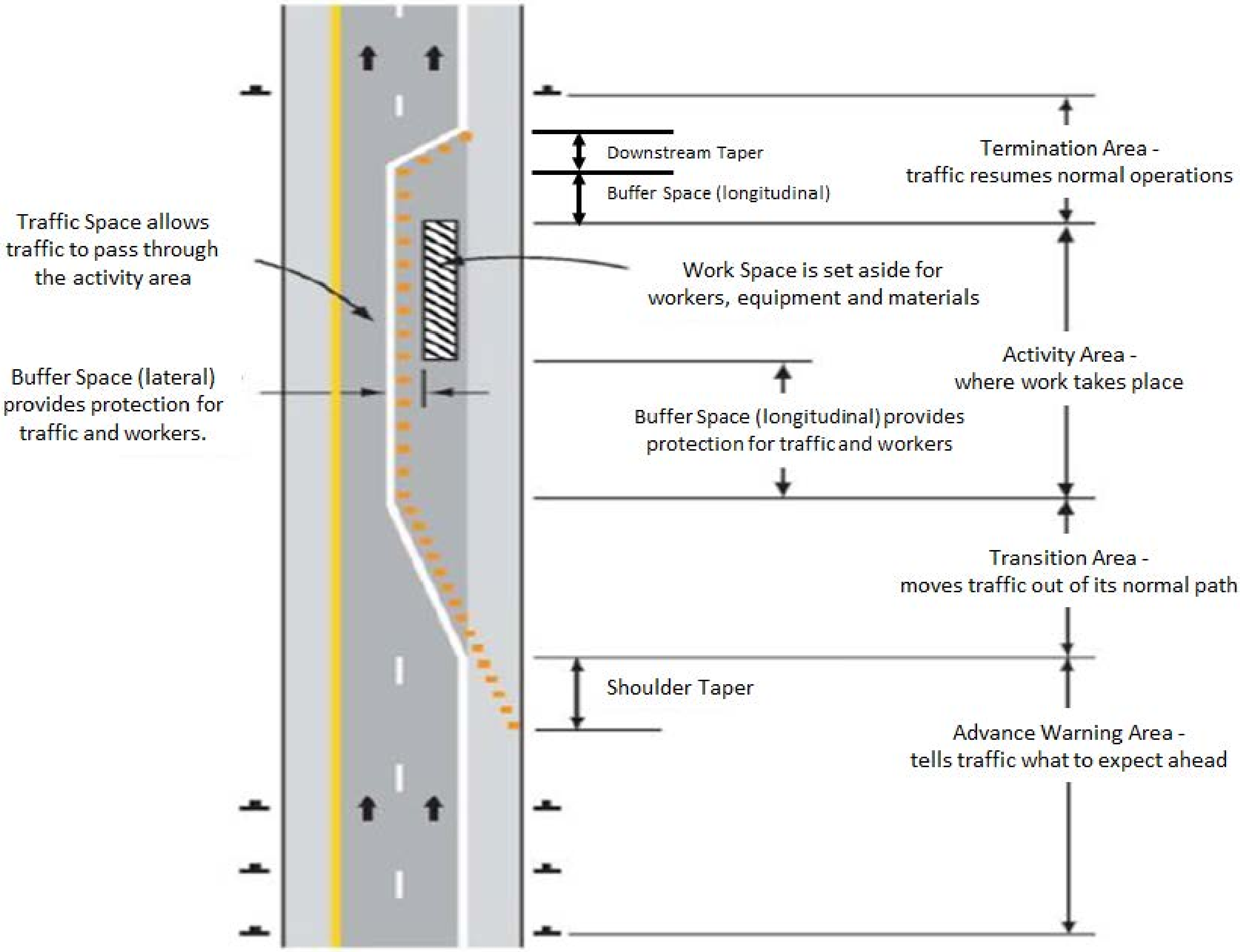
- Use the buddy system or a watchperson when traffic conditions warrant.
- Provide oversight by persons dedicated to traffic control.
- Coordinate work with appropriate authorities which may require a police detail.

Examples of Level 2 Traffic Control

3.2.3 Level 3 Normal Traffic Flow Interruption (Temporary Traffic Control Zone)

A temporary traffic control zone consists of four areas and may be needed when normal traffic flow is interrupted. A temporary control zone is the entire section of roadway between the first warning sign through the last traffic control device, where traffic returns to its normal path. Most temporary traffic control zones are divided into four areas:

1. Advance warning area – drivers are informed what to expect
2. Transition area – redirection of the driver's normal path
3. Activity area – area where the work is taking place
4. Termination area – traffic returns to normal path



Example of a temporary traffic control zone layout

3.3 Flagging

- Flagging is used when all other methods of traffic control are inadequate to direct or control traffic.
- Flagger locations must be documented on the Traffic Control Plan.
- Minimum standard flagging paddle size allowed is 18 inches (.45 m). It is recommended that a 24-inch (.6 m) paddle be used to improve visibility or for high speed operations.

3.4 Parking

Any vehicle not active in site operations should be parked either in a designated parking area or out of the way and/or used as a barrier to oncoming traffic to protect personnel in the work zone.

All parked vehicles (except light-duty pick-up trucks), trailers and heavy equipment; including those needing to idle while in use, must be secured as follows:

- Emergency brake set
- Manual transmission in gear (if not idling) or automatic transmission in "Park", AND

- One of the following methods:
  - Lowered hydraulic rams
  - Connection of trailer to vehicle that is secured
  - Two properly sized chocks set on either side of a wheel

Please refer to the Wheel Chocking Management Program 2.16 for additional information.

4. TRAFFIC CONTROL PLANNING

4.1 Components of a Traffic Control Plan

A traffic control plan will be part of the site Health and Safety Plan (HASP) and in addition to the items listed in the Minimum Safety Expectations section, should include, but is not limited to the following:

- Traffic control design.
- Traffic control devices.
- Traffic control operations.
- Method for communicating any Traffic Control Plan changes.

4.2 Assessing Traffic Hazards

Before developing the plan, conduct a site/project assessment to identify internal and external traffic hazards including:

- Traffic flow patterns around and within the work zone.
- Vehicle/heavy equipment operations within work zone.
- Entry and exit routes for project-related and third-party vehicles/heavy equipment (e.g., congested roadways, limited visibility).
- High traffic areas (e.g., active roadways, parking lots and garages).
- Terrain conditions (e.g., hills, loose gravel, steep slopes).
- Survey of adjacent sites activities that may change traffic patterns (e.g., school drop-off, pick-up times).
- Weather and lighting conditions.
- Visibility of work area in relation to traffic flow.
- Areas of previous traffic accidents.
- Traffic hazards that may be encountered when traveling to and from site (including heavy equipment impacts on local streets, turning radius restrictions, etc.).

Movements of motor vehicles, bicycles, and pedestrians around the work zone should be considered, as well as the movements of personnel, vehicles and heavy equipment within the work zone. A work zone is an unexpected obstacle for those not involved in the work and may cause them to respond in unpredictable ways.

Any work in public roadways, right-of-ways, lanes, alleys, or sidewalks may require approval of appropriate jurisdiction, such as a municipality, county, state, or highway authority. This may require an application for a permit and a permit fee. Work schedules should take into account the time needed to obtain required permits.

In addition, when transporting oversized equipment to a site over public roadways or right-of-ways coordinate with local jurisdictions for needed traffic control and permits.

4.3 Buddy System or Watchperson

If there are any questions regarding number of personnel required to safely perform project tasks on a site, a two-person crew should be dispatched for the first site visit for potential use of one person as a traffic watch. Subsequent review will determine if site activity remains a two-person job.

A two-person crew should also be scheduled if:

- Location requires traffic to be redirected into another lane or detoured.
- Traffic lane will be temporarily closed.
- Work is conducted alongside heavily-traveled roadway.
- Pedestrian or cyclists require direction or assistance for temporary crossing/diversion.
- Areas where hybrid or electric vehicles are prevalent since they may not be heard at slow speeds.

4.4 Project Specific Hazards

When working at active sites:

- Determine safest travel routes into and out of work areas for project-related vehicles and heavy equipment.
- If possible, minimize work-related impacts on existing site operations.
- Discuss TCP with site operator/manager and others who may be impacted.

When work involves excavation, consider the following:

- Space for support of the sidewalls (sloping, benching, shoring, and/or trench boxing)
- Space for the safe movement of workers and heavy equipment around the excavation.
- Should controls, such as physical barriers or visual indicators, be applied to limit access to utilities?
- When working near aboveground or underground utilities, consider the following:
  - Can equipment be operated in a way to maintain safe distances from overhead utilities?
  - Could equipment displace or crush underground utilities?

When laying out work zones, consider the following in allowing space for work activities:

- Can equipment and materials be delivered, stored, and handled readily?
- Can workers perform their tasks safely and efficiently?
- Is there space to walk so as to minimize slip, trip, and fall hazards?
- Are two-way roads three-times as wide as the widest piece of equipment using the road or does traffic need to be controlled?

On-Site Workers should take the following actions:

- Check surroundings often for potential changing traffic hazards.
- Listen for and respond to warnings such as horns, whistles, and sirens.
- Position yourself facing traffic. Where this is not practical, a “second set of eyes” should be considered such as a buddy or watchperson.
- If walking on/near a road or access way, walk in single file (not in a group) towards/facing oncoming traffic.
- Remove hearing protection when not needed.
- Look out for the safety of other workers in area.
- Turn off cell phones and do not use while operating or being in the vicinity of operating vehicles / heavy equipment.

4.5 Deploying/Removing Traffic Control Devices

- Begin placing devices in upstream (traffic advance warning area) locations.
- Flag person used to warn incoming traffic should be placed far enough in front of work zone to allow vehicles to maneuver.
- Delineate transition zone with cones and barricades.
- Establish work zone.
- Delineate downstream taper.
- Place signs for end of work zone.
- Remove devices in reverse order of deployment (remove devices at beginning of set-up last).

4.6 Traffic Control Devices

The work zone should be highly visible so that drivers can see and avoid the area. Geometry, color and reflectivity of devices affect how people see them. Location of devices relative to terrain and other objects also affects visibility. Visibility may be enhanced by increasing the height and number of traffic control devices.

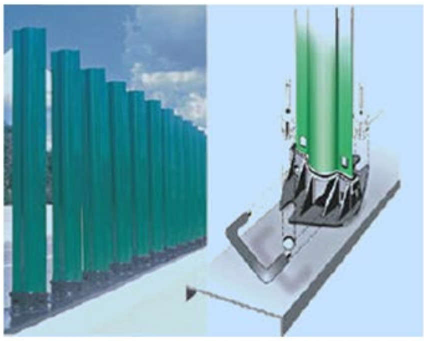
Traffic Control devices provide visibility and can include the following:

- Traffic cones with flags, looper tubes, grabber tubes and stacker cones (recommended height 1.1 meter/ 42 inches)
- High visibility security / temporary fencing (may require addition of reflective tape or lights)
- Warning tape
- Reflective tape
- Automated Flagger Assistance Device
- Warning and speed limit signs (e.g., "Caution Work Area")
- Traffic flow arrows (e.g., posted or painted on ground)
- Molded plastic barricades (sawhorses)

- Type I and II barricades
- Plastic channelizers (orange barrels)
- Concrete barriers (Jersey barriers or K-rails)
- Water-filled barricades
- Vehicles used as barricade (with hazard lights activated if possible)
- Light bars and reflective lights on vehicles
- Portable gates
- Glare screens
- Buddy system / Watchperson
- Temporary speed bumps or rumble strips

Commonly used traffic control devices

Extender bars used in place of tape



Glare screens can make a highly visible barrier

Barrier constructed of PVC pipe and orange fencing

Traffic control devices should be routinely inspected to ensure continued integrity and visibility.

Many traffic control devices only provide visual clues to drivers. Physical barriers, such as parked vehicles, concrete barriers, or water filled barriers can provide more protection if a driver has lost control or is not paying attention.

4.7 Night/Low Visibility

As much as practical, work should be conducted during daylight. Night operations may result in poor visibility for drivers and workers.

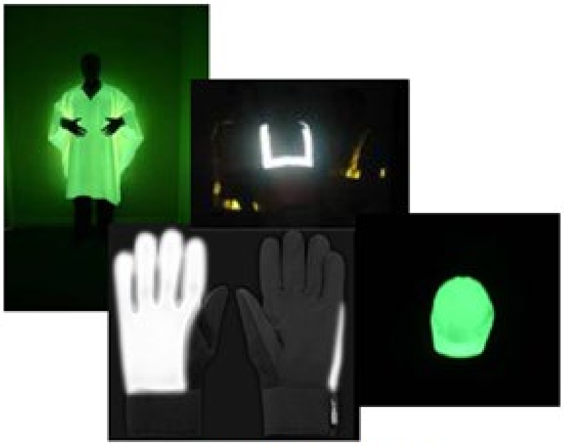
If work must be done at night, additional lighting/traffic control measures should be provided to warn vehicles and pedestrians. Glare from lighting should be controlled so as not to interfere with the vision of workers or drivers.

Nighttime visibility can be increased by:

- Lighted delineators
- Flood lights/Work area lights
- Higher class of high-visibility apparel
- Flashing lights on clothing/vehicles/hard hat
- Glow sticks attached to traffic vests
- Reflective tape on equipment

Glow stick

Lighted traffic control devices



Highly reflective safety gear

Rev 1.0	**Traffic Control Minimum Safety Expectations**	**May 2016**

Revision History	Comment	Date
Rev 0	Initial Issue	April 2010
Rev 1.0	Combined Traffic Control Plan, On-Site Traffic Safety Plan and Traffic Control Guidelines into one document.	May 2016

1 Contents

1. SCOPE AND OBJECTIVES

This document provides minimum safety expectations and guidelines for assessing traffic hazards, controlling traffic hazards and developing a traffic control plan for EMES project teams to maintain a safe and secure work environment, provide a safe and efficient means of travel through a work area, and ensuring egress points are not obstructed in case of an emergency. (Note: Use of the word traffic is to be inclusive of vehicles and pedestrians.)

This document will be used when conducting work at EMES sites with actual or potential traffic hazards from external or internal traffic including:

- active sites or facilities (service stations, parking lots, terminals, refineries, third party sites)
- inactive and vacant sites
- roadways, rights-of-ways

Nothing specified in this guidance document should be construed to suggest conducting work or traffic control in a manner contrary to strict compliance with national, regional and local regulations and/or more stringent contractor or site requirements. This document provides guidance for traffic control and may not contain all the information necessary to develop and implement a traffic control plan for public roadways. If necessary, a traffic control professional and/or licensed traffic control company should be contacted.

Refer to **the Heavy Equipment Exclusion Zone** for the minimum requirements in establishing heavy equipment exclusion zones during demolition and construction activities

Refer to **Excavation Guidelines** for establishing exclusions zones for excavation activities.

Refer to **Drilling Guidelines** for minimum requirements when establishing exclusion zones during drilling activities.

The primary consultant/contractor (CC) is responsible for ensuring that these safety expectations are implemented for all project work involving heavy equipment on construction and demolition sites. Any deviations from the requirements should be documented using OIMS Procedure 7.1.1 Management of Change (MOC) – Non-Personnel.

1.1 Statement of Corporate Separateness

EMES is a global functional organization established as a part of the Global Real Estate and Facilities (GREF) functional organization to provide functional guidance regarding soil and groundwater remediation activities, as well as non-operating surplus site stewardship activities, for Exxon Mobil Corporation and its affiliates.

EMES has developed considerable expertise in the stewardship of soil and groundwater remediation activities and non-operated surplus sites. Exxon Mobil Corporation and its affiliates have concluded that a greater centralization of remediation services will increase efficiency and effectiveness by promoting a greater sharing of best practices and expertise and standardizing of processes and procedures across ExxonMobil affiliates worldwide.

EMES performs these activities as a service to Exxon Mobil Corporation and its affiliates pursuant to the provisions of a Master Services Agreement and/or other interaffiliate agreements. In the United States, EMES operates through ExxonMobil Environmental Services Company, a Delaware corporation established on January 1, 2008 as a wholly owned subsidiary of ExxonMobil Global Services Company. Outside the United States, those ExxonMobil affiliate employees who are part of the EMES functional organization perform these activities.

EMES has concluded that the implementation of consistent processes and procedures will facilitate the protection of human health and the environment and mitigate potential liability of Exxon Mobil Corporation and its affiliates.

It is expected that these processes and procedures will be considered for adoption by each EM affiliate conducting activities stewarded by the EMES functional organization, and that following affiliate approval and adoption, these processes and procedures will be implemented by members of the EMES functional organization insofar as possible. Decisions not to adopt these process and procedures in whole or in part and any deviations should be referred to EMES management for endorsement as appropriate, consistent with corporate separateness considerations. Nothing in this Guide or the associated materials is intended to override the corporate separateness of local entities.

Compliance with all applicable laws and regulations and ExxonMobil policies and the timing of such compliance are independent of the requirements expressed here. Notwithstanding anything to the contrary expressed or implied in these materials, applicable legal and policy requirements must be met. This includes, among other things, GREF MPI Guidelines, Data Privacy laws, and applicable local record retention guidelines.

2 REQUIREMENTS AND MINIMUM SAFETY EXPECTATIONS

A Traffic Control Plan is used for the safe movement of vehicle and pedestrian traffic through a work zone/site and must be developed for each site with actual or potential traffic hazards.

The plan must include:

- a site map* that shows the location of work, flaggers, appropriate buffer areas, traffic flow, parking areas, existing structures and any required traffic control devices
- established maximum speed limits for the site

*For sites where work zones and/or traffic plans are changing frequently, consider using laminated site maps to allow for updates.

Vehicles and heavy equipment must have an audible reverse signal or a horn will be used to signal backing.

If backing a work vehicle is required, use a spotter and sound the horn twice before backing. If a spotter is not available, sound the horn twice before backing.

Individuals who are not familiar with the work site are not permitted to drive on site without an escort.

Identify a safe entrance and exit path for personnel, vehicles, trucks and heavy equipment that is clear of obstructions, requires no or minimal backing and allows maximum visibility for drivers and others in the area. If visibility is obstructed when entering or exiting the site, mirrors must be installed to enhance visibility or a spotter must be used.

Establish check-in / check-out procedures for heavy equipment onsite.

Traffic control must be in place before any work that exposes individuals to a traffic hazard is conducted. All work should be completed before traffic control devices are removed.

Traffic control devices must be secured to prevent movement in windy conditions.

The EMES CC is responsible for communicating the traffic control plan including traffic communication methods to all site personnel prior to the start of any activities and periodically assessing site conditions and revising the traffic control plan as needed.

2.1 Buffer Areas

Buffer area is a lateral and longitudinal area that separates traffic from the work. The minimum buffer area must be established between traffic and personnel, vehicles, and equipment.

Buffer areas must be sized to provide separation between workers and internal and external traffic including vehicular, heavy equipment and pedestrian.

The size of buffer zone depends on speed of traffic, volume, type of work, duration of work, visibility of work zone (curves, corners, rises and dips), access and egress and proximity to public facilities.

If an unauthorized vehicle or pedestrian enters the work zone or buffer area, work must stop immediately and the traffic control plan reevaluated for effectiveness.

2.2 Levels of Traffic Control

Site factors and work factors are used to help determine the level of traffic control needed for safe operations. All work areas should keep in mind pedestrian and small motorized traffic as well as vehicle and heavy equipment traffic. Levels of traffic control are defined as follows:

Factor	Level 1	Level 2	Level 3
Speed in or next to Work Area	Low / <30km/h or 20 mph	High / >30 km/h 20 mph	NA
Use of Heavy Equipment	No	Yes	NA
Work in Public Roadway / Sidewalk/Footpath	No	Yes	Yes
Lane Closure	No	No	Yes

The highest traffic control level based on the single highest ranking factor in the above table should be implemented. Site-specific factors or hazards not presented in the above table may justify selection of a higher traffic control level and/or additional control devices.

2.2.1 Level 1 Traffic Control

- Use delineators (cones with flags, stacker cones, looper tubes, grabber tubes, etc.) to surround work zone
    - 1.1 meter (42-inches) in total height
    - 1.2 meter (4 feet) distance between delineators
- Use caution tape or barricade boards between delineators
- Use work vehicle parked between workers and on-coming traffic to provide visual warning to and physical protection from traffic
- If working close to site entrance, use a second line of delineators to create an additional buffer or utilize a spotter
- Use the buddy system or a watchperson when traffic conditions warrant.

Example of Level 1 Traffic Control

2.2.2 Level 2 Traffic Control

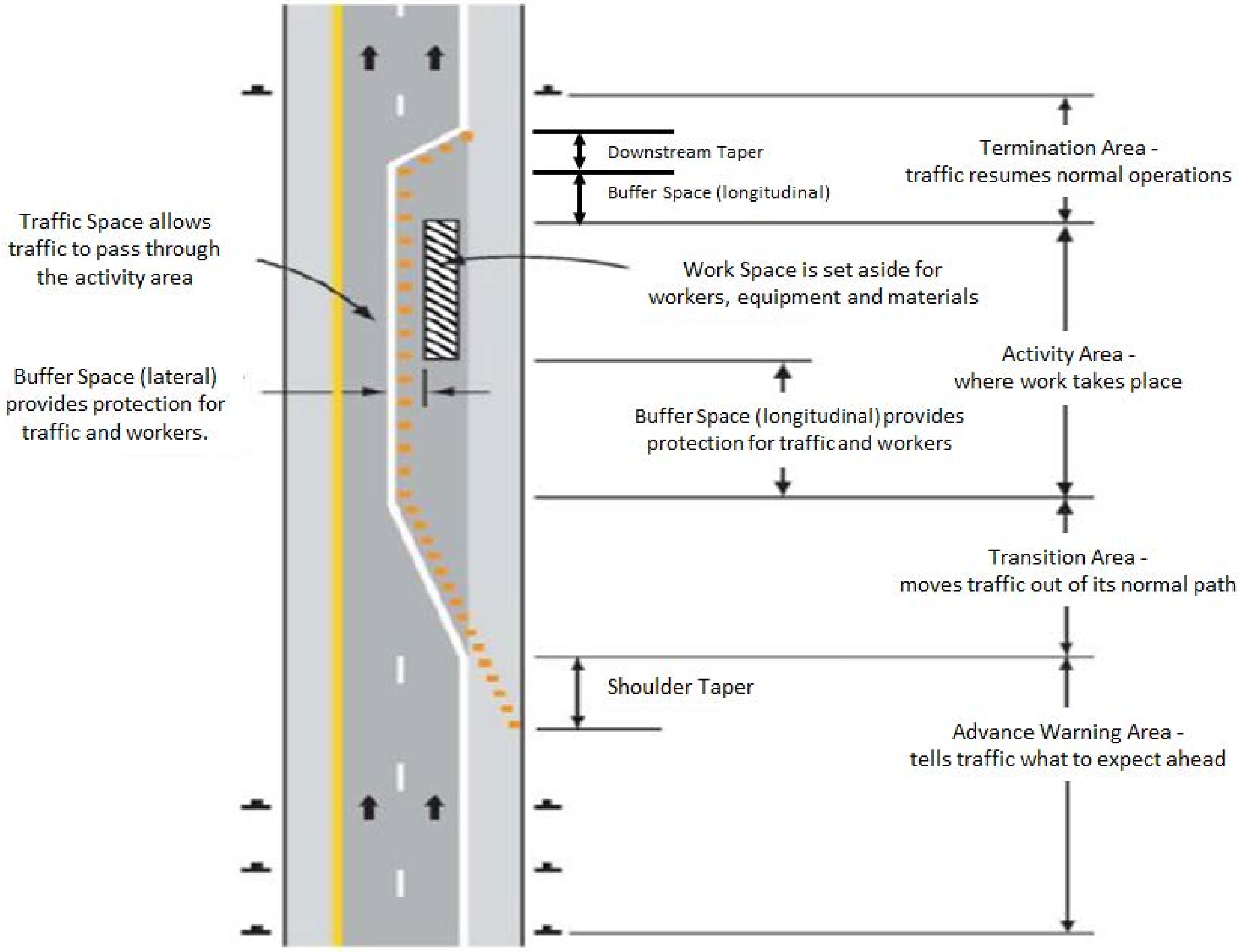
- Plastic security fencing and/or barricades
    - 1.1 meter (42-inches) in total height (1.8 meters/6 feet high in areas where drivers have poor visibility or other higher risk factors present)
    - 1.2 meter (4 feet) distance between delineators
- Use cautionary signs (e.g., “Men Working”, “Work Zone”) in all directions from which vehicles can approach (recommended 0.8 meter or 32 inches high) and any additional signage/protection required by local, regional or national regulations.
- Use work vehicle parked between workers and on-coming traffic to provide visual warning to and physical protection from traffic.
- If working close to site entrance, use second line of delineators to create an additional buffer or utilize a spotter
- Use the buddy system or a watchperson when traffic conditions warrant.
- Provide oversight by persons dedicated to traffic control
- Coordinate work with appropriate authorities which may require a police detail

Example of Level 2 Traffic Control

2.2.3 Level 3 Normal Traffic Flow Interruption (Temporary Traffic Control Zone)

A temporary traffic control zone consists of four areas and may be needed when normal traffic flow is interrupted. A temporary control zone is the entire section of roadway between the first warning sign through the last traffic control device, where traffic returns to its normal path. Most temporary traffic control zones are divided into four areas:

1. Advance warning area – drivers are informed what to expect
2. Transition area – redirection of the driver's normal path
3. Activity area – area where the work is taking place
4. Termination area – traffic returns to normal path



Example of a temporary traffic control zone layout

2.3 Flagging

Flagging is used when all other methods of traffic control are inadequate to direct or control traffic.

Flagger locations must be documented on the Traffic Control Plan.

Minimum standard flagging paddle size allowed is 18 inches (.45 m). It is recommended that a 24-inch (.6 m) paddle be used to improve visibility or for high speed operations.

2.4 Parking

Any vehicle not active in site operations should be parked either in a designated parking area or out of the way and/or used as a barrier to oncoming traffic to protect personnel in the work zone.

All parked vehicles (except light-duty pick-up trucks), trailers and heavy equipment; including those needing to idle while in use, must be secured as follows:

- emergency brake set
- manual transmission in gear (if not idling) or automatic transmission in “Park”, AND
- one of the following methods:
    - lowered hydraulic rams
    - connection of trailer to vehicle that is secured
    - two properly sized chocks set on either side of a wheel

3 APPENDIX A

This appendix includes reference material that may be used to provide additional guidance during Traffic Control Planning.

3.1 Components of a Traffic Control Plan

A traffic control plan will be part of the site Health and Safety Plan (HASP) and in addition to the items listed in the Minimum Safety Expectations section, should include, but is not limited to the following:

- Traffic control design
- Traffic control devices
- Traffic control operations
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3.5 Deploying/Removing Traffic Control Devices

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- Vehicles used as barricade (with hazard lights activated if possible)
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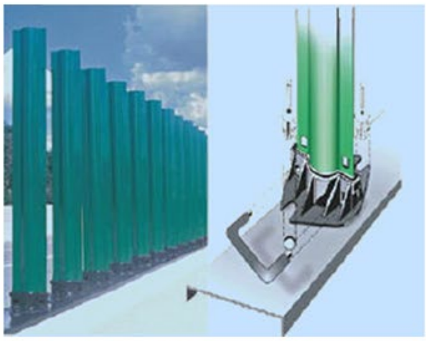
Commonly used traffic control devices

Extender bars used in place of tape



Glare screens can make a highly visible barrier

Barrier constructed of PVC pipe and orange fencing

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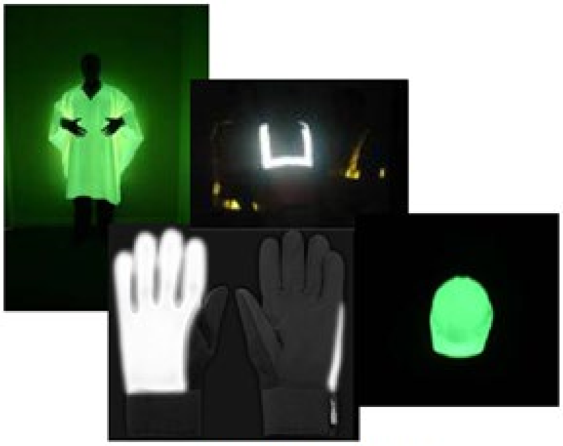
As much as practical, work should be conducted during daylight. Night operations may result in poor visibility for drivers and workers.

If work must be done at night, additional lighting/traffic control measures should be provided to warn vehicles and pedestrians. Glare from lighting should be controlled so as not to interfere with the vision of workers or drivers. Nighttime visibility can be increased by:

- Lighted delineators
- Flood lights/Work area lights
- Higher class of high-visibility apparel
- Flashing lights on clothing/vehicles/hard hat
- Glow sticks attached to traffic vests
- Reflective tape on equipment

Glow stick

Lighted traffic control devices



Highly reflective safety gear

STANDARD OPERATING PROCEDURE 1.11

MOTORIZED VEHICLES AND MOBILE EQUIPMENT WHEEL CHOCKING POLICY

CORPORATE HEALTH AND SAFETY MANAGER : Joseph W. Gentile

EFFECTIVE DATE : October 2007

REVISION NUMBER : 0

Motorized Vehicles and Mobile Equipment Wheel Chocking Policy

TABLE OF CONTENTS

Motorized Vehicles and Mobile Equipment Wheel Chocking Policy

1.0 INTRODUCTION

Construction accident studies continue to reveal “rollaway” vehicle accidents as a common occurrence. These most often occur when the driver leaves the vehicle believing the vehicle transmission is in either Neutral or Park position and that the brakes have been set. The vehicle then rolls away and, in most instances, stops only after encountering some obstacle. Vehicular and other property damage are the result with the potential to include serious personal injuries and death.

2.0 SCOPE

This policy applies to the following:

A. All company owned, operated, leased, or contracted motorized vehicles and mobile equipment.

B. All projects managed or supervised by Roux.

C. All Roux company and subsidiary company employees and personnel operating motorized vehicles and mobile equipment.

D. All contractor and sub-contractor personnel performing work for and/or on behalf of Roux.

E. Leased equipment and lessor's operating personnel.

F. Personally owned vehicles.

Motorized Vehicles and Mobile Equipment Wheel Chocking Policy

3.0 PURPOSE

The purpose of this policy is to establish a uniform approach to address hazards associated with the unintended movement of cars, trucks, construction vehicles, and/or vehicle trailers while stopped, during loading, unloading, or other related activities. This policy is intended to provide protection to vehicle/mobile equipment operators, their passengers, pedestrians, forklift operators, and dockworkers through good parking practices and the effective use of wheel chocks.

4.0 PROCEDURAL GUIDELINES

This policy is applicable to Subcontractors as well as Roux employees.

A. Cars, SUVs, Pickups and Light Trucks

Park on level ground. Before exiting the vehicle, make sure the automatic transmission is in PARK with the emergency brake set. Check the brake twice.

B. All Other Motor Vehicles and Loading Dock Applications

Park on level ground. Before exiting the vehicle, make sure the automatic transmission is in PARK with the emergency brake set. Check the brake twice.

Do not leave a vehicle running without an operator seated in the driver's seat.

When stopped or parked on slopes/inclines, chock your wheels. When chocking, use specially designed wheel chocks of the appropriate size and material to securely hold the vehicle. Don't use lumber, cinder blocks, rocks, or other makeshift items to chock. Where applicable, lower hydraulic rams and check the security of the connection between the trailer and the vehicle.

Ensure chocks are easy to find. Store chocks inside trucks, other mobile equipment, and trailers.

Place "Chock Your Wheels" stickers above the wheels as reminders.

Keep chocks available at loading docks. Chain the chocks to the dock to prevent them from being misplaced.

To properly chock a freestanding vehicle, place chocks on the left and right rear axle wheels. It is safest to chock both the front and back wheels on both sides of a vehicle. Some vehicle wheels may also need to be chocked at the front and back of each tire.

Where trailers are loaded or unloaded at docks, ensure that trailers are firmly placed against the loading dock edges and prevent rollaways by using chocks. Positioning of chocks is important. Place chocks on the left and right wheels that are closest to the loading dock. This placement allows a forklift to push down on the trailer wheels and seat them more firmly against the chock. If only the front axle is chocked, a forklift could push the trailer forward and loosen the chock or cause the wheel to jump the chock. The driver, dock workers, and forklift drivers share the responsibility to ensure that the truck and trailer wheels are properly chocked.

Use extra caution when driving a forklift into a trailer from the dock edge. If the trailer rolls away from the dock edge, the forklift could fall into the gap, resulting in the potential for severe injuries or death. Never drive a forklift into a trailer until you make sure that the wheels are properly chocked. Ensure that the trailer floor is in good condition and that it can support the weight of the forklift and its load.

Include wheel chocking in hazards assessments and other procedures. Project and job site hazards assessments shall consider energy releases from motorized vehicles and mobile equipment on all Roux projects and work sites. Site-specific health and safety plans (HASP's) and standard operating procedures shall address wheel chocking requirements. Lockout/Tagout programs and procedures shall include applications for wheel chocking.

5.0 TYPICAL WHEEL CHOCKING APPLICATIONS

1. When performing maintenance on passenger cars, pickups, and light duty trucks, including the changing of flat tires.
2. While performing maintenance on wheeled earth-moving equipment, such as dump trucks, front end loaders, backhoes and other excavating equipment.
3. Parked auxiliary wheeled equipment whether performing maintenance or in stationary position, to include:
   a. Portable air compressors that have been disconnected from the vehicle.
   b. Portable water pumps.
   c. Portable air-moving equipment.
   d. Soil screening equipment.
   e. Wheeled drilling equipment including Geoprobes.
   f. Truck-mounted welding and cutting equipment.
   g. Truck-mounted masts and cranes.
4. Chock truck/trailer while loading/unloading pipe onto a pipe trailer or to a truck-attached bed.
5. Chock truck/trailer while loading/unloading wheeled heavy equipment (i.e., backhoe, track hoe, dozer, and forklift) from a lowboy truck trailer onto ground or when loading onto trailer.
6. Chock and secure wheel and truck mobile equipment while such equipment is being transported by trailer.
7. Chock trailer when being disconnected from truck.
8. NON-VEHICULAR APPLICATIONS: Ensure pipe is properly chocked on pipe rack; ensure 55-gallon drums on horizontal drum racks are chocked; ensure loads are blocked to prevent shifting and falling.

6.0 SPECIAL NOTE ABOUT HYBRID VEHICLES

What is critical to be aware of with hybrid vehicles is that with the engine shut off, there is no sound coming from the engine compartment or the electric motor, just silence. With a hybrid vehicle, a silent car is no guarantee of a safe car. Consider that it is in a sort of "sleep mode." Make sure you are aware of this before the vehicle "wakes up" and catches you by surprise!

Chocking the wheels is critical for safety around a hybrid vehicle. Fortunately, Toyota and Honda engineers have designed an indicator light to show the status of the vehicle and its potential to drive away. Under certain conditions, when the Honda Insight stops, such as in traffic or as a result of a vehicle crash, it goes into the Auto Idle-Stop mode. A small green Auto Stop LED light at the base of the tachometer in the instrument panel illuminates. This indicates that the engine is not moving at all, and reminds the driver and others, such as emergency responders, that the car is still in the "on" mode.

APPENDIX B

Heavy Equipment Exclusion Zone Policy

HEAVY EQUIPMENT EXCLUSION ZONE MANAGEMENT PROGRAM

CORPORATE HEALTH AND SAFETY MANAGER	**:**	**Brian Hobbs, CIH, CSP**
EFFECTIVE DATE	**:**	**01/2019**
REVISION NUMBER	**:**	**1**

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1. PURPOSE

The purpose of the Exclusion Zone Management Program is to establish the minimum clearance distance that must be maintained between workers and heavy equipment while equipment is in operation (i.e., engaged or moving). The intent is to have no personnel or equipment entering the Exclusion Zone while the equipment is in operation or moving to ensure that Roux and Subcontractor employees are not unnecessarily exposed to the hazards of the equipment.

2. SCOPE AND APPLICABILITY

This Management Program applies to all Roux Associates, Inc. and its affiliated companies, Roux Environmental Engineering and Geology, D.P.C, and Remedial Engineering (collectively, "Roux") employees and their subcontractors who are performing field work and are potentially exposed to heavy equipment. For the purpose of this program, heavy equipment includes, but is not necessarily limited to: excavation equipment, drill rigs, vacuum trucks, forklifts, lull telehandlers, man lifts, bobcats, delivery trucks, etc.

3. PROCEDURES

As specified in the following sections of this Program, an Exclusion Zones must be established and maintained during activities involving the movement/operation of heavy equipment. The Exclusion Zone requirements apply to all personnel on the site but are primarily focused on those personnel who are required to be working in the vicinity of the equipment. The exclusion zone is in effect when heavy equipment is moving or engaged (ex. movement of an arm or bucket of an excavator, rotation of an auger, lifting of a load with a forklift, raising/lowering of a man lift, etc.).

1. The Exclusion Zone must meet the following minimum requirements:
   - A minimum distance of 10 feet from all heavy equipment and loads being moved by the equipment;
   - Greater than the swing/reach radius of any moving part on the heavy equipment (i.e., for large equipment this may mean an exclusion zone distance larger than 20 feet);
   - Greater than the tip-over distance of the heavy equipment; and
   - Greater than the radius of blind spots.

   > The size of the Exclusion Zone will need to be determined on a task-specific basis considering the size of the heavy equipment in use and the task being performed. Prior to all heavy equipment operations, the Exclusion Zone(s) distance must be specifically identified in the Job Safety Analysis (JSA).

2. The spotter (or another individual) should be assigned responsibility for enforcing the Exclusion Zone. The spotter should be positioned immediately outside of the Exclusion Zone within a clear line of sight of the equipment operator. The spotter must signal the operator to stop work if anyone or anything has the potential to enter or compromise the Exclusion Zone. The operator should stop work if the spotter is not within his/her line of sight. If multiple pieces of equipment are being used, each piece of equipment must have its own Exclusion Zone and spotter. For large excavation and demolition projects the spotter should be in constant radio contact (not cell phone) with the machine driver.
3. If an individual must enter the Exclusion Zone, the designated Spotter must signal the Equipment Operator to stop the equipment. Once the equipment is no longer moving (ex. movement of an arm of an excavator is STOPPED, lifting of a load with a forklift STOPPED, raising/lowering of a man lift is

STOPPED, etc.), the operator must DISENGAGE THE CONTROLS and STOP and SIGNAL BY "SHOWING HIS HANDS". This signal will indicate that it is safe for the personnel to enter the limits of the Exclusion Zone to perform the required activity. The equipment must remain completely stopped/disengaged until all personnel have exited the limits of the Exclusion Zone and the designated Spotter has signaled by "SHOWING HIS HANDS" to the Equipment Operator that it is safe to resume operations.

4. When entering the limits of the Exclusion Zone, personnel must at a minimum:
    - Establish eye contact with the operator and approach the heavy equipment in a manner that is in direct line of sight to the Equipment Operator;
    - Never walk under any suspended loads or raised booms/arms of the heavy equipment; and
    - Identify a travel path that is free of Slip/Trip/Fall hazards.
5. The Exclusion Zone should be delineated using cones with orange snow fence or solid poles between the cones, barrels, tape or other measures. For work in rights-of-way rigid barriers, such as Jersey barriers or temporary chain link fence should be used. For certain types of wide-spread or moving/mobile equipment operations, such delineation may not be practicable around pieces of equipment or individual work areas. In such instances, it is expected that the entire operation will be within a larger secure work area or that additional means will be utilized to ensure security of the work zone.

All subcontractors who provide heavy equipment operations to field projects must implement a program that meets or exceeds the expectations described above as well as any additional requirements that may be required on a client or site-specific basis.

3.1 Exceptions

It is recognized that certain heavy equipment activities may require personnel to work within the limits of the Exclusion Zone as specified in this program. Such activities may include certain excavation clearance tasks, drill crew activities or construction tasks. However, any such activity must be pre-planned with emphasis on limiting the amount and potential exposure of any activity required within the zone. The critical safety steps to mitigate the hazards associated with working within the Exclusion Zone must be defined in the JSA and potentially other project-specific plans (i.e., critical lift plans, etc.), and approved by the Roux Project Principal and client representative, if required, prior to implementation.

4. TRAINING

Many Roux projects have different requirements that are client-specific or site-specific in nature. It is the responsibility of the Project Principal (or Project Manager if delegated this responsibility by the Project Principal) to ensure that the workers assigned to his/her projects are provided orientation and training with respect to these client and/or site-specific requirements.

HEALTH AND SAFETY PLAN

MJ Painting Contractor Corp.
350 Franklin Street
Olean, NY 14760

APPENDIX C

Field and Office Ergonomics Program

ERGONOMICS MANAGEMENT PROGRAM

CORPORATE HEALTH AND SAFETY MANAGER	:	**Brian Hobbs, CIH, CSP**
EFFECTIVE DATE	:	**01/19**
REVISION NUMBER	:	**0**

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APPENDIX

1. PURPOSE AND BACKGROUND

Roux Associates, Inc. and its affiliated companies, Roux Environmental Engineering and Geology, D.P.C, and Remedial Engineering (collectively, “Roux”) has instituted the following program to aide in preventing back injuries and other work-related musculoskeletal disorders (WMSDs) or cumulative trauma injuries to personnel. Ergonomic issues involving WMSDs can arise not only in the office but also in the field and when driving. WMSDs are disorders of the muscles, nerves, tendons, ligaments, joints, cartilage, blood vessels, or spinal discs. WMSDs may include muscle strains and tears, ligament sprains, joint and tendon inflammation, pinched nerves, and spinal disc degeneration.

2. SCOPE AND APPLICABILITY

This program applies to all tasks where Roux personnel and contractors perform manual lifting and have the potential for material handling and ergonomic stresses. It is the responsibility of the Corporate Health and Safety Manager (CHSM) to aide in developing and training Office Health and Safety Managers (OHSM) and Site Health and Safety Officers (SHSO) to implement this program.

3. PROCEDURES

3.1 Safe Lifting Practices Management

A. Evaluate all assignments to assess if they can be completed without risk of back injury e.g., moving boxes, computers, equipment, etc.).

B. Require that heavier items are stored on lower shelving units; ideally between knee and shoulder height.

C. Recognize lifting-intensive tasks (poor lift design, high frequency, and/or excessive weight) and provide the means by which personnel can perform lifting duties without risk of injury e.g., carts, dollies, trucks with lift gates).

D. Secure outside assistance if personnel cannot safely accomplish the job e.g., additional staff, contract movers).

E. Contact the OHSM or SHSO when assistance is necessary to evaluate a lifting task that may pose a back-injury/WMSD risk to assigned personnel.

F. Ensure that personnel receive the required training outlined below.

3.2 Training Management

A. Personnel who may have lifting or other ergonomic issues receive training that includes the following topics:

B.

1. Recognizing potential hazards and how to correct and prevent them.
2. Proper workstation set up and maintenance.
3. How to avoid unnecessary physical stress and strain.
4. How to comfortably handle lifting jobs without undue strain.
5. Proper use of equipment.
6. Stretching and strengthening exercises to minimize risk of injury.

3.3 Office Moves and Relocations

A. Utilize professional movers for moving office furniture for both offsite moves and interoffice moves.

   1. Desks, file cabinets, bookcases, etc.
   2. Intensive moving of file boxes
   3. Any other heavy equipment or materials.

B. Ensure that the moving contractor is appropriately evaluated and insured.

C. Assure as applicable that all unstable items (e.g., bookcases) are secured to prevent tip over in transit, and when placed.

3.4 Workplace Evaluations

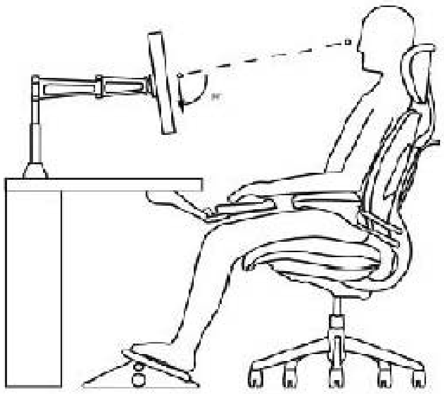
At the request of personnel, workstation evaluations of office workstations are available through the OHSM. As it relates to site-specific activities, guidelines will be specified within site-specific Job Safety Analyses (JSA) that are covered prior to any work activity. JSAs include information on the procedural steps, hazards and how to control specific hazards as it relates to specific tasks. Ergonomic hazards are identified and controls are recommended depending upon the specific activity.

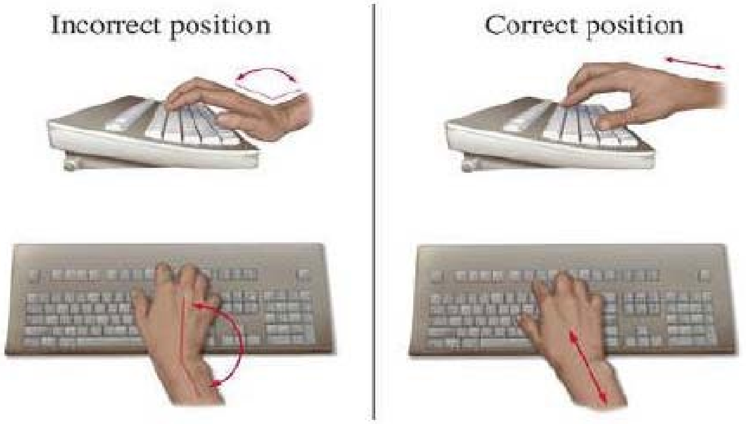
4. OFFICE ERGONOMICS

There is no single “correct” posture that will fit everyone. An ergonomic injury or illness can be easily avoided however through ergonomic education and following basic design goals of an office desk.

Repetitive motions are one of the key causes for ergonomic injuries/illnesses and working at an office desk for a prolonged time significantly increases the potential for an ergonomic injury or illness. Highly repetitive tasks that involve long periods of static posture may require several short rest breaks called “micro breaks”. During these breaks, employees are encouraged to stand, stretch, and move around. This provides rest and allows muscles time to recover. Alternately the employee can try to vary their work tasks throughout the day to breakup highly repetitive tasks.

4.1 Office Ergonomic Set-up Recommendations





- Top of the monitor should be at, or just below eye level to avoid awkward neck posture, and positioned directly in front of you.
- Head and neck should be balanced and in-line with torso.
- Elbows should be close to the body and supported by arm rests.
- Hips and knees should be approximately at a 90-degree angle. The back of the knee should be slightly higher than the seat pan to allow blood to circulate freely.
- The lumbar curve of the back should be supported.
- Keep your wrist and hands in-line with forearms.
- Avoid crossing legs. Feet should be firmly on the ground or on a footrest.
- Keep monitor and keyboard as close as possible, this will keep you in a sound posture.
- The mouse should be located on the same level as the keyboard.
- Take advantage of how your chair can be adjusted to your body.
- Vary work task to cut down on repetitive motion.
- Take short breaks to stretch muscles and to rest the eyes.
- Keep items most frequently used close to you.

5. DRIVING ERGONOMIC GUIDANCE

5.1 Typical Problems from Frequent Driving

- Neck, Back and shoulder pain;
- Cramps, pressure points and poor circulation in the legs and buttocks;
- Immediately after driving, there is an increased chance of low back injury from lifting; and
- Long-term potential for degeneration of spinal discs and disc herniation.

5.2 Chronic Back and Neck Injuries from Driving are Caused by Two Main Risk Factors

- Sitting for long periods of time; and
- Whole-body vibration.

5.3 Long Term Sitting

When you sit, your pelvis rolls backward and the small of your back flattens out. This increases the pressure in the discs of the spine. (In this position, the discs are less prepared to handle the vibrations from your car.)

Ligaments in your back help to hold the spine together as you move. These ligaments will stretch and slacken if you sit down for a long time. After standing up, they remain slack for a while and cannot support the spine as they normally do.

If your seat is not correctly adjusted, you could develop pressure points in the buttocks and back of the legs and muscle strain in the low back.

Continuous upper back and neck muscle work is often required to hold the head in position, especially if vibration is present. Continuous muscle activity can lead to muscle strain.

Holding a foot pedal down over a long period may cause stiffness and spasm in the legs and low back.

5.4 Whole-body Vibration

Whole-body vibration stimulates bursts of back muscle activity. This causes neck and back muscles to tire more quickly and decreases the support these muscles can give to the spine. Even if the muscles are working very lightly, activity for an extended time without rest will lead to fatigue and increase the risk of back injury.

Long-term exposure to whole-body vibration is a common way to develop a herniated disc in your back. The increased disc pressure from sitting speeds up this process.

5.5 Ergonomic Driving Tips

1) Before you even get into your car, remove everything from your pocket - anything that can add pressure points to your body while you drive.
2) Move your car seat all the way to the back, get in and begin adjusting until you feel comfortable. Have the seat adjusted to approximately a 100° angle which decreases pressure on your lower back.

3) If your seatbelt is too tight or uncomfortable, pick up some soft, thick fabric and wrap it around your seatbelt.
4) If the back of the seat is uncomfortable, a lumbar support pillow can be used.
5) Adjust all mirrors to fit your body and line of sight. You shouldn't have to crane your neck to see what's going on around you. For blind spots, small mirrors can be purchased and placed on the side-view mirrors or dashboard to help you see.
6) Keep items you may need while driving in the front seat, such as tissue paper and sunglasses. Twisting and reaching in the car are awkward postures, not to mention the danger it leads to while operating a vehicle.
7) If you are on a long driving trip, take frequent breaks; get out of the car and stretch. Take a quick walk if possible. It's also a good idea to rest your eyes for a bit.
8) The best posture for gripping the steering wheel is keeping two hands on the wheel except when shifting gears. Change your hand postures frequently to improve circulation and reduce fatigue.
    a. **Common Postures to be avoided:**
        i. **Death Grip** – Your grip should be light. If your knuckles are white, you are gripping too hard.
        ii. **The one arm cool dude** – One wrist at the 12 o'clock position on the wheel with the fingers over the top. This causes compression of the soft tissues of the wrist, as well as reducing circulation of the neck and shoulder (and also will result in bone-to-bone contact with your face in the event the air bag were to deploy).
        iii. **Arms straight out** – You should be able to drive with your shoulders relaxed and your arms close to the sides of your body.
        iv. **One arm propped on your window** – This posture decreases circulation at the neck and shoulder and may compress soft tissue on the arm/wrist.

Appendix A- Symptom Solver

Symptom Solver

Discomfort Associated with Hands or Wrists

Possible Cause of Symptoms	Suggested Solutions
• Resting heavily on the hand, forearm or elbow that hurts. • Heavy use of a calculator. • High force when using the space bar. • Mouse size is too big or too small. • Heavy use of the mouse with one hand. • Heavy use of the number pad on the keyboard. • “Planting” your palms or wrists in a fixed position when typing or using the mouse. • Dropping your wrists to the work surface when typing • Resting wrists when typing. • Working surface or keyboard is too high or too low. • The wrist rest is too high or the edges are square and hard. • Typing or mousing on hard work surfaces with blunt edges. • The keyboard is sloping towards you.	• Do not rest heavily on either hand. • Use a wrist rest for your calculator. • Avoid high force when using the space bar. • Change mouse to one that fits you correctly. • Alternate hands using the mouse and switch to keyboard shortcuts (page 5). • Use proper keyboard and mouse techniques (page 5). • Use auto-text entries to minimize typing (page 5). • Use the wrist rest correctly (page 6). • Adjust the keyboard, keyboard platform or desk surface to just below your elbow height with the upper arm in line and comfortable against the body. • Adjust the keyboard so the keyboard lies flat.

Discomfort Associated with Headaches or Blurry Vision

Possible Cause of Symptoms	Suggested Solutions
• Image on the screen is not clear. • Staring or concentrating on your monitor for long periods of time. • Dry eyes.	• Position your monitor to reduce reflection. • Adjust the brightness and contrast settings to fit you. • Rest your eyes occasionally by switching tasks or looking away from the monitor. • The distance between your eyes and your monitor should be one arm’s length away from you. • Blink frequently to keep your eyes lubricated when doing computer work.

Discomfort Associated with Head or Neck

Possible Cause of Symptoms	**Suggested Solutions**
• Holding your head at an awkward angle. • Monitor is too high and/or is not centered with your keyboard. • Looking up and down between the keyboard and screen as you type. • Leaning forward to view the monitor. • Tilting your head back to accommodate your eye glasses. • Cradling the telephone between your head and shoulder. • Twisting your neck to look at a copy on your desk.	• Adjust the monitor correctly. (Pg. 6) • Take a touch-typing course. • Enlarge the font size. • Center the monitor with your keyboard. • Do not cradle the telephone. Hold the phone, use a headset or use your speaker phone. • Use a copy holder to avoid twisting your neck as you type.

Discomfort Associated with the Forearms or Elbows

Possible Cause of Symptoms	**Suggested Solutions**
• The position of your mouse or keyboard is causing you to extend your reach. • Leaning on your work surface while typing or using the mouse. • Resting your forearms heavily on the arms of your chair. • Extended reach of the mouse.	• Position the mouse close to and on the same level as your keyboard. • Sit up straight and allow your hands to “float” above the keyboard without resting your wrists. • Adjust the arm rests of the chair so your forearms are just barely touching them. • Do not lean heavily on arm rests.

Discomfort Associated with the Shoulders

Possible Cause of Symptoms	**Suggested Solutions**
• The position of your mouse is causing you to extend your reach. • Leaning to one side while you are using the keyboard or mouse. • Cradling the telephone between your head and shoulder. • Extended reaching ether side or behind you for the telephone.	• Position the mouse to and on the same level as the keyboard. • Sit up straight with your back against the back of your chair with your feet on the ground. • Center the keyboard with your monitor. • Hold the telephone, use a headset or use speaker phone. • Reposition frequently used items closer to you.

Discomfort Associated with Upper and Lower Back

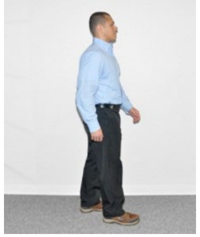
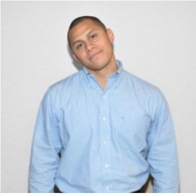
Possible Causes of Symptoms	Suggested Solutions
• Leaning forward to type or write. • Improperly supported back. • Cradling the phone between your head and shoulder.	• Adjust the monitor correctly. • Adjust the chair so that your lumber back is supported by the chair. • Position your keyboard and mouse close to the body. • Do not cradle the telephone. Hold the phone, use a headset, or use speaker phone. • Sit with your shoulders and hips directly in front of the keyboard and monitor. • Sit up straight with your back against the back of your chair with your feet on the ground or on a footrest.

Discomfort Associated with Legs/Feet

Possible Causes of Symptoms	Suggested Solutions
• Awkward posture of your feet or legs. • Tucking your feet under your legs or chair. • Feet not touching the floor or your legs are extended out in front of you.	• Sit up straight and do not lean to one side or the other. • Adjust the chair seat pan so there is space between your knees and the seat. • Place feet flat on the floor. • Use a footrest if your feet do not reach. • Clear the area below your desk so there is room for your legs and feet.

Stretching Guide ▪ Environmental Services

Warm-up Description

Warm-up	Description	Repetition or Length	Comments
Walking on the Spot 	Walking in place for a better part of the 5 minutes warm-up period	3 minutes total, including the time required to walk to the site	Walking on the spot should be performed in conjunction with the “Fist-to-Fan” warm-up exercise Walking to the jobsite should be included in total walking time
Neck Circles 	Rotate the head about the neck 5 times in each direction. Repeat the circling once for a total of 10 rotations in each direction	5 rotations in one direction followed by 5 rotations in the opposite direction Repeat once	This exercise is not designed to require maximal effort and the neck range of motion should not be taken to extremes
Arm Circles 	With arms raised out to the side, rotate them about the shoulder 10 times in each direction	5 rotations in one direction followed by 5 rotations in the opposite direction Repeat once	The diameter of the circling should be approximately 2 feet and can be varied if preferred by the individual
Fist-to-Fan 	Make a fist with each hand with nearly maximal force After 2 seconds, open (i.e. fan) each hand maximally for 2 seconds then shake out each hand.	Perform a total of 10 hand fist-to-fan movements, 2 seconds for opening, 2 seconds for closing	The employee should perform the fist-to-fan sequence with both hands simultaneously and repeat 5 times

Stretching Guide ▪ Environmental Services

Stretching Description

Stretch Type	Description	Repetition or Length	Comments
Wrist Flexor/Extensors 	With the palm facing upwards (flexors) or downwards (extensors), use the opposite hand to pull down or up on the fingers	Hold for 20 seconds Perform once per arm	Employees who input data into a computer using a keyboard should not perform the wrist flexor stretch
Palm 	With arms at one's side, bend the elbows so that the forearms are parallel with the ground. Fan the fingers away from each other as far as manually possible	Hold for 10 seconds Perform once per hand simultaneously	The palm of the hand can be facing any direction during this stretch
Posterior Shoulder 	Raise both arms out to the side and with palms facing forward bring both arms backward so that a stretch is felt across the front of the chest	Hold for 20 seconds. Perform once	Perform this stretch without assistance of a wall If a stretch is not felt, bending the elbows will allow for the arms to be positioned further backwards
Chest Stretch 	Raise both arms out to the side and with palms facing forward bring both arms backward so that a stretch is felt across the front of the chest	Hold for 20 seconds. Perform once	Perform this stretch without assistance of a wall . If a stretch is not felt, bending the elbows will allow for the arms to be positioned further backwards
Side Neck Flexors 	Starting with the head and neck positioned normally, slowly bend the neck to the side A mild stretch should be felt along the side of the neck in the opposite direction of the stretch	Hold for 20 seconds Perform once.	Ensure that the neck and head are the only body segments moving and that the shoulders stay stationary

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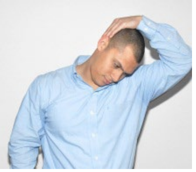
Stretching Guide ▪ Environmental Services

Stretching Description

Stretch Type	Description	Repetition or Length	Comments
Neck Flexors 	Starting with the head and neck positioned normally, extend the head backwards so that the chin moves upward	Hold for 20 seconds Perform once	This stretch should be performed in sequence with the Side Neck Flexor Stretch If no stretch is felt, protrude the chin outward
Neck Rotators 	Start with the head and neck positioned normally, gently pull the head towards the opposite armpit. A stretch should be felt along the back of one side of the neck	Hold for 20 seconds Perform once per side	If no stretch is felt, position the arm that is not pulling the head behind the back
Lumbar Extension 	Place the hands over the buttocks next to the hips and push the hips forward until a mild pressure is felt in the lower back	Hold for 20 seconds Perform twice	This posture should be started standing upright and tall
Standing Lunge 	Take a step forward with hands on hips. Bend the front knee and keep the back foot flat on the ground. A stretch should be felt behind the back lower leg and front of hip	Hold for 20 seconds Perform once	If a stretch is not felt, straighten the back knee; ensure that that the low back stays neutral as the motion should be accomplished by the hips and legs

Ergonomics Guide ▪ Environmental Services

What is Ergonomics?

Ergonomics is a continuous improvement process to set up the work environment for what people do well and against what people don't do well.

What is the Impact?

If job task demands and work environment are designed to meet human performance capabilities, the results are:

- Reductions in musculoskeletal disorders (MSDs)
- Fewer injury costs
- Increased productivity
- Enhanced process stability and product quality

What are MSDs?

Musculoskeletal disorders affect the muscles, nerves, tendons, ligaments, or spinal discs that are the result of months and years of exposure to ergonomic risk factors. MSDs are not instantaneous injuries like slips and falls; they are injuries that occur over time.

How do MSDs Occur?

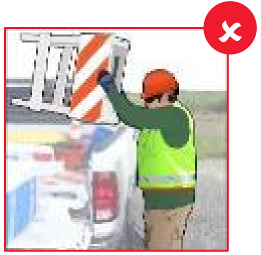
MSDs occur when there is more incoming trauma on the body than the natural healing process can absorb.

The Primary Ergonomic Risk Factors

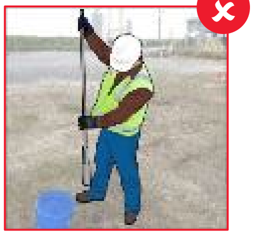
- Awkward postures
- High forces
- Extreme frequencies

Hit List – The Hit List is a simple observational tool used to quickly identify ergonomic issues.

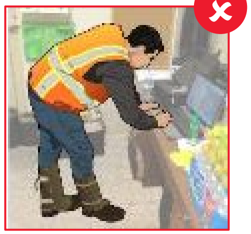
Elbows Out



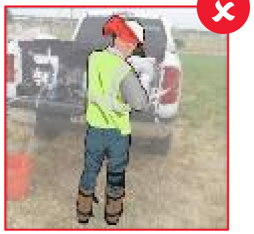
Shoulders Too High/Too Low



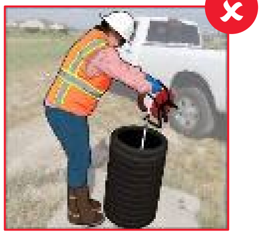
Butts Up



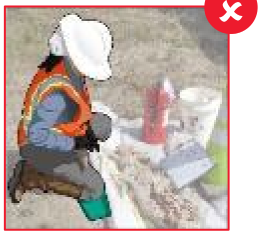
Twist and Shout



Overreaching



Awkward Legs



AVOID

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Ergonomics Guide ▪ Environmental Services

Ergonomics Guide

Lifting Techniques – Follow these basic guidelines when lifting.

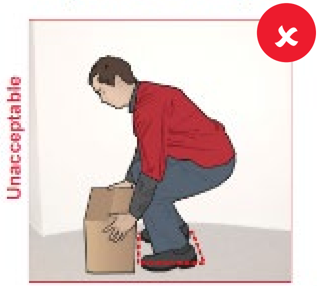
Straddle the load.
Keep a wide base of support.

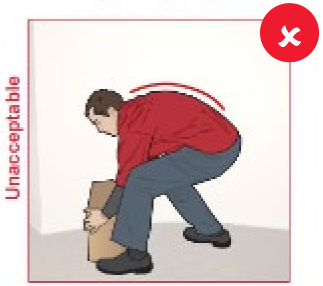
Bend at knees and hips.
Keep a straight spine.

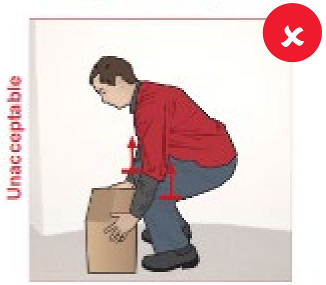
Use all joints to lift.

Transfer momentum.
Don't jerk the load upwards

Move your feet.
Don't twist







Lifting Best Practices – Behavior or work practices that positively impact ergonomic risk, efficiency, and/or productivity.

- Use a two-person lift whenever objects weigh > 45lb
- Grab handles to improve coupling, when available
- Avoid back twisting, especially while bending
- Remove anything that does not belong in the lifting area or that is not needed
- Do not push objects away from nearby storage locations unless necessary
- Always handle equipment with two hands
- Label shelves and product boxes, always placing items where they belong
- Keep origin of heavy and frequently used items within the comfort zone, 38" to 49" above the standing surface
- Keep the item close to the body during the entire lift to prevent overreaching
- Test the weight before lifting it

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Ergonomics Guide

Push/Pull Techniques

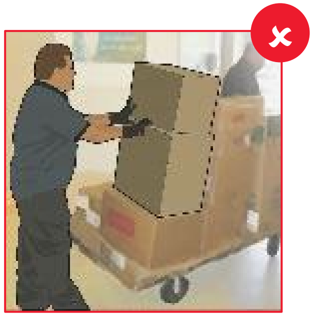
Preferred

Center the load on the cart

Preferred

Push, don't pull the cart

Unacceptable



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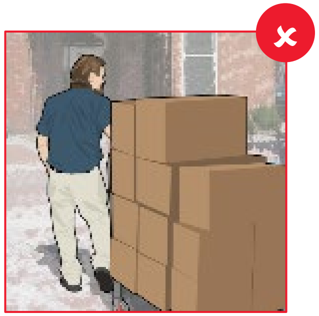

Push/Pull Best Practices

- When possible, push carts with the swiveled casters at the end that is pushed
- Make multiple trips with lighter loads when possible
- Load heavier products on larger casters whenever possible or evenly distribute heavier products
- Perform scheduled caster maintenance on carts
- Casters should be pneumatic or rubber, 8" in diameter, and at least 2.5" wide

Carrying Techniques

Preferred

Keep the load close

Preferred

Stay in-line with the spine

Unacceptable

Unacceptable

Carrying Best Practices

- Keep the object as close to your body as possible
- Use a two-person carry when objects weigh > 45lb
- Constantly maintain three (3) points of contact on the object: one hand on either side and making contact with the midsection
- Keep the load in-line with the spine and do not twist
- Make sure a clear path to your destination is provided before carrying any load

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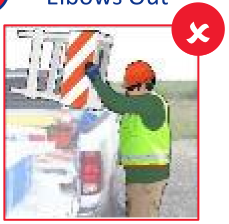
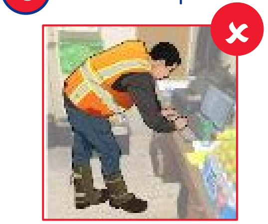
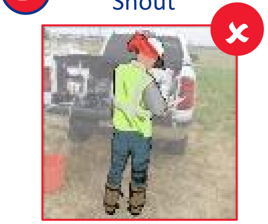
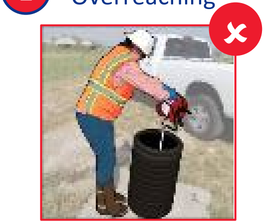
Ergonomics Guide

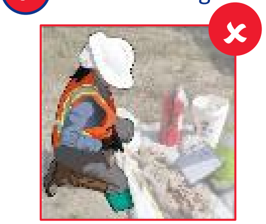

A Elbows Out


B Shoulders Too High / Too Low


C Butts Up

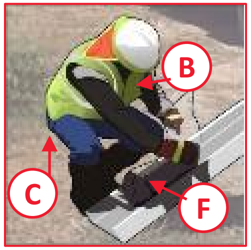

D Twist and Shout


E Overreaching


F Awkward Legs

Sonic Drilling

Common Situations



Potential Issues

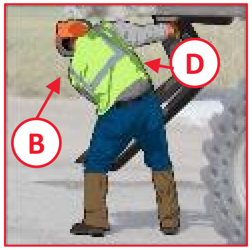
- 40-lb grout bags are carried too far
- 80-lb grout and cement bags are carried too far
- Heaviest casing storage height is too low, 18”
- Reach when aligning casing in drill is too high, 89”
- 40-lb grout bag pouring heights are too low
- Heavy cement is mixed by hand using a tarp and carried too far

Good Work Practices

- Park truck closer to destinations to reduce carry distances
- Raise grout retrieval height with empty pallets
- Deliver grout pallet to platform with forklift
- Place heaviest casings with 38” and 49” above standing surface
- Limit casing reaching heights to below shoulder
- Utilize a taller funnel and rest bag on its edge
- Utilize a portable cement mixer
- Mix cement closer to the well to reduce carry distances

Well Soil Sampling

Common Situations



Potential Issues

- Core sample bagging and retrieval heights are too low
- Tarp folding and cleaning heights are too low on the ground
- 39-lb soil samples lowered to low

Good Work Practices

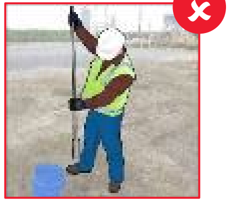
- Elevate the bottom of the chute or install a stop to raise bag retrieval
- Raise casing height to allow bags to be filled between 38” and 49”
- Locate tarp atop of collapsible tables to raise working heights
- Sweep off debris from tarp on table with a push broom

Ergonomics Guide ▪ Environmental Services

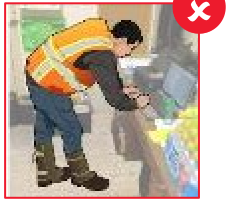
Ergonomics Guide

A Elbows Out

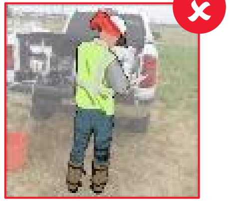
B Shoulders Too High / Too Low



C Butts Up

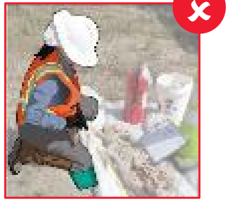


D Twist and Shout



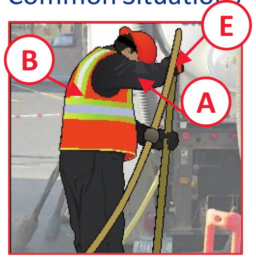
E Overreaching

F Awkward Legs



Soft Digging

Common Situations



Potential Issues

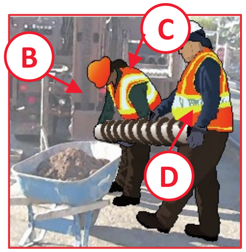
- Air Lance handling height is too low, often at ground level
- 25-lb vacuum hose lacks handles
- 50-lb pavement replacement bags are carried too far
- Jackhammer exposes operator to whole body vibration
- Beating hoses requires repetitive force
- Sample testing height is too low and too far away

Good Work Practices

- Store pavement replacement bags in Vac Truck to reduce carry distance
- Attach 3’ head on air lance during digging to increase hand working heights
- Replace hose material to prevent soil from clogging
- Utilize vibration dampening materials to reduce impact of jackhammer
- Provide a small stool to sit on
- Utilize sawhorse to support vacuum hose weight
- Provide a small collapsible table for testing samples
- Utilize movable handles to provide stronger grips

Auger Drilling

Common Situations



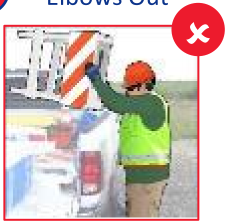
Potential Issues

- 72-lb auger stems are frequently lifted and carried long distances
- 38-lb drill heads result in awkward pinch grips
- Auger sample tubes require high force to open
- Drill control panel is too high, 79"

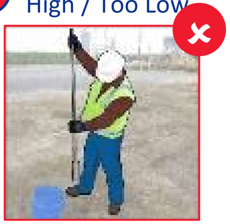
Good Work Practices

- Investigate utilizing hoist on drill truck to move Auger stems
- Provide removable handles to carry drill head
- Lower height of control panel
- Provide handles for shovel and wheelbarrow

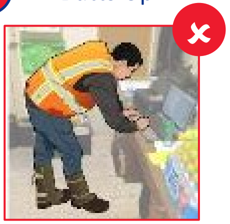
A Elbows Out



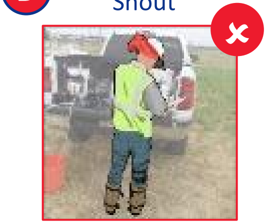
B Shoulders Too High / Too Low



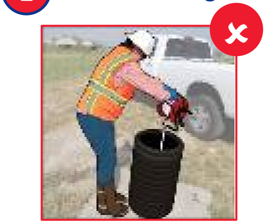
C Butts Up



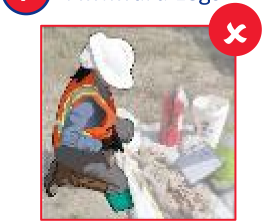
D Twist and Shout



E Overreaching

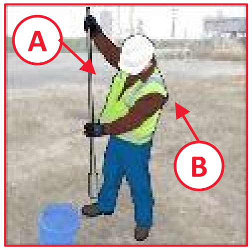


F Awkward Legs



Hand Augering

Common Situations



Potential Issues

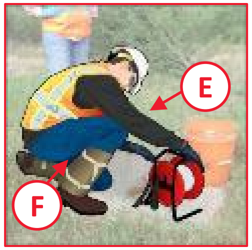
- Excessive auger turning and lift forces, 20 lb to 90 lb
- High hand auger handling heights
- Low auger sanitizing heights
- Buckets are located too low
- Low depth measuring heights

Good Work Practices

- Provide a hand auger with interchangeable heads that match the soil type, or provide a powered auger
- Limit auger handling heights to below the shoulder when lifting out samples
- Provide a stool to sit on or a kneel pad
- Provide a small collapsible table to store sample bucket on
- Indicate depth on auger to eliminate depth measurement rod use

Well Gauging

Common Situations



Potential Issues

- Low gauging hand working heights, 3” above the ground
- Low well lid opening heights, 4” above the ground
- Far reach distance to depth probe, 20” forward
- Well interior is dark with limited lighting
- Far reach distance into truck, 35”

Good Work Practices

- Stand when gauging as much as possible
- Provide screwdriver with a longer handle to open lid
- Keep all reaches to the reel within 16” from the worker
- Provide all workers with flashlights
- Store frequently accessed items in the trunk within a 16” reach; less frequent items within a 22” reach

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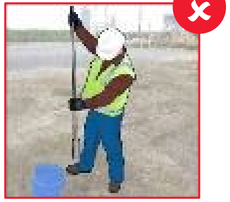
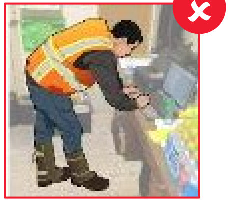
A Elbows Out

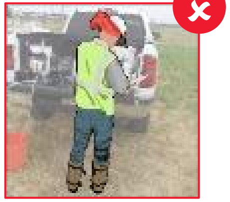
B Shoulders Too High / Too Low



C Butts Up

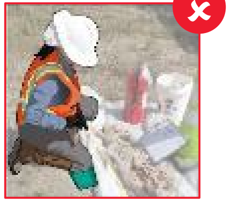


D Twist and Shout



E Overreaching

F Awkward Legs



Ground Water Sampling

Common Situations

Potential Issues

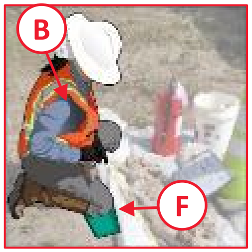
- Low flush mount well hand working heights
- Low well lid opening height, 4”
- >25-lb sampling equipment is double handled when sorted and stored on the ground
- Far equipment carrying distance
- Low sample bottle filling heights
- High material retrieval height from truck wall
- Keyboard is used while standing
- No writing surface in truck

Good Work Practices

- Park truck closer to destinations to reduce carry distances
- Pull out sleeve while standing
- Provide a stool to sit on or a kneel pad
- Provide longer-handled screwdriver
- Request vendor to ship equipment in kits
- Request vendor to label boxes of equipment to reduce equipment search time
- Park truck closer to equipment trailer to reduce carry distances
- Provide a shallower pail and locate it on tail gate during sampling
- Fill sample bottles while standing
- Provide an office chair
- Perform as much paper work in the trailer as possible

Soil Analysis

Common Situations



Potential Issues

- Low soil sample hand working heights on the ground
- Far reach distance into truck, 38”
- Laptop located on lap when typing in truck

Good Work Practices

- Provide collapsible tables to raise soil hand working heights to between 38” and 47” above the ground
- Provide a stool to sit on or a kneel pad
- Store frequently accessed items within a 16” reach, less frequent items within a 22” reach
- Provide a steering wheel laptop holder

HEALTH AND SAFETY PLAN

MJ Painting Contractor Corp.
350 Franklin Street
Olean, NY 14760

APPENDIX D

Hearing Conservation Program

HEARING CONSERVATION MANAGEMENT PROGRAM

CORPORATE HEALTH AND SAFETY MANAGER	:	**Brian Hobbs, CIH, CSP**
EFFECTIVE DATE	:	**01/2019**
REVISION NUMBER	:	**4**

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1. PURPOSE

The Hearing Conservation Management Program (HCMP) has been established to evaluate noise exposures in the work place and to implement measures to prevent exposures equal to or in excess of the Occupational Safety and Health Administration (OSHA) standard of 90 decibels on the A-weighted scale (dBA) and monitor exposures equal to or greater than 85 dBA. Although noise on a project site is not usually considered to be the primary hazard, it still represents a danger to persons on the site, particularly those working around vehicles and machinery. There is also the danger of an explosion that can lead to serious hearing damage for those in close proximity. Testing for noise levels should be done periodically if there are any doubts that noise levels are lower than OSHA standards.

Work involving heavy equipment and vehicles often creates excessive noise. The effects of noise can include:

- Workers being startled annoyed or distracted;
- Physical damage to the ear, pain, and temporary and/or permanent hearing loss; and
- Communication interference that may increase potential hazards due to the inability to warn of danger and the proper safety precautions to be taken.

There are three main techniques employed to protect workers' hearing:

- Engineering Controls: Those physical means to lower the impact of sound damage, such as mufflers, enclosures and design innovations.
- Administrative Controls: Limiting the amount of exposure by decreasing the exposure time or positioning oneself at greater distance from the noise source.
- Hearing Protection Devices (HPDs): Devices that either fit in the ear, both disposable and reusable, or on the head covering the ears (See Appendix B).

The best approach is provided by engineering controls which eliminates the problem so that administrative controls or hearing protection are not needed.

2. SCOPE AND APPLICABILITY

The practices and procedures described here constitute the program by which employees will be made aware of the hazards associated with occupational noise exposure.

The OSHA Occupational Noise Exposure standards at 29 CFR 1910.95, 1926.52 and 1926.101 apply to all employees exposed to occupational noise. Employees subjected to noise levels exceeding an 8-hour time-weighted-average sound level of 90 dBA trigger the requirement to implement feasible engineering or administrative controls. If these controls fail to reduce the noise exposure to below the 90 dBA threshold, HPDs must be supplied to reduce the exposure to below the 90 dBA threshold. In addition, whenever employee noise exposures equal or exceed an 8-hour time-weighted-average sound level of 85 dBA (not including attenuation provided by the HPD), a continuing effective HCMP must be administered as described in the OSHA standards at 29 CFR 1910.95 and 1926.52.

3. CAUSES OF HEARING LOSS

3.1 Types

There are two types of hearing loss: conductive and sensory. Conductive loss involves the outer and middle ear while sensory loss involves the inner ear, auditory nerve, or brain. A conductive loss results in a decrease in loudness but not clarity. This would be similar to turning down the volume on a radio. Sensory losses are associated with a loss in clarity. Using our radio example, this would be similar to static on a radio station making it more difficult to understand speech.

3.2 Causes of Loss

There are many causes of conductive hearing loss. Many of these disorders can be medically or surgically treated and should be evaluated by an ear specialist. Some of the disorders include: middle ear infections, perforation of the ear drum, fixation of the ossicular chain, and osteosclerosis. Sensory hearing loss also has many causes and they are often more difficult to treat medically. Causes of sensorineural impairment include: Congenital: hereditary and damage to fetus and Acquired: aging, noise, disease, injury, and drugs.

3.3 Effects of Noise on Hearing

The effect of noise is subtle and we do not always know when noise may be damaging our hearing. Most noise induced hearing loss is a slow, gradual process and it may take years before hearing difficulties are recognized. Excessive noise can affect the inner ear (which sends the impulse to the brain) by destroying some of the hair (cilia) cells. Once the hair cells cannot regenerate and are therefore destroyed, they never function again. Initial exposure to high noise levels will cause fatigue of certain hair cells and a temporary loss in the higher frequency range. Hearing usually returns to normal after a period away from the noise (about 14 hours). This type of noise-induced hearing loss is referred to as a temporary threshold shift (TTS) in hearing. Most of us have experienced this after being in a noisy environment such as a rock concert. You may even have noticed ringing in the ears -- another sign of temporary threshold shift.

If you are repeatedly exposed to high noise levels for a prolonged period of time, changes may result in a permanent threshold shift (PTS). Permanent noise-induced hearing loss is irreversible. As exposures to high noise levels continue, the permanent loss also continues across more frequencies, eventually making it difficult to understand speech.

The effect of noise on hearing depends upon the following factors: intensity (loudness) of the noise, frequency of the noise, length of exposure, characteristics of the noise (continuous, impulse or intermittent), time intervals between exposures, and individual susceptibilities.

4. HEARING PROTECTION

At many sites, different activities may result in appreciable noise levels. It is required that a noise hazard assessment be conducted prior to initiating investigation, remediation, O&M, or other on-site activities. Types of activities that may produce excessive noise levels include but are not limited to: drilling; operation of heavy machinery; use of generators, pumps, and power tools; use of blowers; use of drop and vibration hammers; and field activities in or near noisy areas such as railroads and airports.

If these activities or other activities or conditions result in excessive noise exposure, hearing protection requirements will be included in the site-specific HASP. If a PM or SHSO is unsure as to whether or not hearing protection is needed, the most conservative approach (i.e., use of HPDs) will be used. If a person's exposure exceeds an 8-hour time weighted average (TWA) sound level of 85 dBA, personnel must be included in a hearing conservation management program in accordance with 29 CFR 1910.95. High noise operations will be evaluated by the SHSO and noise exposure will be controlled through the use of hearing protection such as ear plugs or ear muffs or by maintaining set-backs from high noise-producing equipment as warranted. A rule-of thumb that can be applied in the field is if you must raise your voice to be understood at arm's length, your noise level is approximately 85 dBA.

Hearing protectors will be made available to all employees exposed to an 8-hour time-weighted average of 85 decibels or greater at no cost to the employees. Hearing protectors will be replaced as necessary. Employees will be given the opportunity to select their hearing protectors from a variety of suitable hearing protectors and training in the use and care of hearing protectors.

Hearing protector attenuation will be evaluated for the specific noise environment in which the protector will be used and the hearing protectors must attenuate employee exposure at least to an 8-hour time-weighted-average of 90 decibels. For employees who have experienced a standard threshold shift, hearing protectors must attenuate employee exposure to an 8-hour time-weighted average of 85 decibels or below.

5. MONITORING

Roux's policy is to implement administrative controls or the use of HPDs whenever personnel will be exposed to noise levels greater than 85 dBA. Where situations arise that indicate the need for a monitoring program to be developed and implemented, the following factors should be considered:

- All continuous, intermittent and impulsive sound levels from 80 decibels to 130 decibels must be integrated into the noise measurements.
- Monitoring shall be repeated whenever a change in production, process, equipment or controls increases noise exposures.
- Each employee exposed at or above the 8-hour time-weighted-average sound level of 85 dBA shall be notified of the results of the monitoring.

6. AUDIOMETRIC TESTING

An audiometric testing program is in effect for all personnel involved in field activities. Audiometric testing is included as part of each employee's pre-employment and annual physical examinations. The program is provided at no cost to employees and the audiometric tests are performed by a licensed or certified audiologist, otolaryngologist or physician, or by a technician who is certified by the Council of Accreditation in Occupational Hearing Conservation, or who has satisfactorily demonstrated competence in administering audiometric examinations, obtaining valid audiograms, and properly using, maintaining and checking calibration and proper functioning of the audiometers being used. A technician who operates microprocessor audiometers does not need to be certified. A technician who performs audiometric tests must be responsible to an audiologist, otolaryngologist or physician.

Audiometric testing is the best and most accurate method for determining early hearing loss. The test determines the ability to hear pure tones at 500, 1,000, 2,000, 3,000, 4,000 and 6,000 Hertz. The poorer the ability to hear, the louder the pure tones will need to be. Each person scheduled to be tested is informed of the requirement not to be exposed to workplace noise for at least 14 hours prior to testing. After obtaining a valid baseline audiogram from affected employees, annual audiograms will be taken and compared to the baseline. If a comparison of the annual audiogram to the baseline audiogram determines a standard threshold shift, the employee will be informed of this fact in writing within 21 days of the determination. As defined in the OSHA regulations, a standard threshold shift is a change in hearing threshold relative to the baseline audiogram of an average of 10 decibels or more at 2,000, 3,000, and 4,000 Hertz in either ear. Unless a physician determines that the standard threshold shift is not work related or aggravated by occupational noise exposure, the following steps are taken when a standard threshold shift occurs:

- Employees not using hearing protectors shall be fitted with hearing protectors, trained in their use and care, and required to use them.
- Employees already using hearing protectors shall be refitted and retrained in the use of hearing protectors and provided with hearing protectors offering greater attenuation if necessary.
- The employee will be referred for a clinical audiological evaluation or an otological examination, as appropriate, if additional testing is necessary or if there is a suspicion that a medical pathology of the ear is caused or aggravated by the wearing of hearing protectors.
- The employee is informed of the need for an otological examination if a medical pathology of the ear that is unrelated to the use of hearing protection is suspected.

7. TRAINING

All employees exposed to noise levels at or above an 8-hour time-weighted-average of 85 decibels are required to participate in a training program. The training program will be repeated annually for each employee included in the hearing conservation management program. Each employee will be informed of the following:

- the effects of noise on hearing;
- the purpose of hearing protectors, the advantages, disadvantages and attenuation of various types, and instructions on selection, fitting, use and care; and
- the purpose of audiometric testing, and an explanation of the test procedures.

8. RECORDKEEPING

An accurate record of all employee exposure measurements will be retained and maintained by the CHSM. All employee audiometric test records will be retained and maintained by the HR Department. Noise exposure measurement must be retained for two years but should be maintained with the project records. Audiometric test records must be retained for the duration of the affected employee's employment. Audiometric tests taken as part of the medical surveillance program under 29 CFR 1910.120 will be maintained for length of employment plus 30 years. All records will be provided to employees, former employees, representatives designated by individual employees and the Assistant Secretary of Labor for OSHA upon request.

HEALTH AND SAFETY PLAN
MJ Painting Contractor Corp.
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Olean, NY 14760

APPENDIX E

List of Site Safety Data Sheets (SDSs)

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CLEANING SUPPLIES

FIELD EQUIPMENT

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FUELS AND LUBRICANTS

LAB PRESERVATIVES

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RENTAL EQUIPMENT

HEALTH AND SAFETY PLAN

MJ Painting Contractor Corp.
350 Franklin Street
Olean, NY 14760

APPENDIX F

Job Safety Analysis (JSA) Management Program

JOB SAFETY ANALYSIS (JSA) MANAGEMENT PROGRAM

CORPORATE HEALTH AND SAFETY MANAGER : **Brian Hobbs, CIH, CSP**

EFFECTIVE DATE : **01/19**

REVISION NUMBER : **2**

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APPENDICES

Appendix A – Job Safety Analysis Process Flow Chart
Appendix B – Standard Job Safety Analysis Form
Appendix C – Job Safety Analysis Quality Review

1. PURPOSE

Roux Associates, Inc. and its affiliated companies, Roux Environmental Engineering and Geology, D.P.C, and Remedial Engineering (collectively, "Roux") has established this Job Safety Analysis (JSA) Program to provide practices and procedures to evaluate potential hazards associated with work tasks and develop preventive measures to eliminate and/or reduce the risk of injury/illness to personnel, property damage and/or environmental releases. A hazard is defined as a condition or activity that, if left uncontrolled, can result in an undesired consequence. This program utilizes a proactive and versatile tool, the JSA, which identifies hazards associated with a specific work task and applies mitigative actions to eliminate and/or reduce the hazards to an acceptable risk level. Moreover, the practices and procedures, herein, employ a stewardship approach to ensure that JSA updates are communicated throughout the company and represent best management practices.

2. SCOPE AND APPLICABILITY

The JSA Program applies to all Roux Associates, Inc. and its affiliated companies, Roux Environmental Engineering and Geology, D.P.C, and Remedial Engineering (collectively, "Roux") employees and their subcontractors. At a minimum, tasks for which a JSA is required include:

- Field work and processes;
- Non-routine activities;
- Activities that present higher potential for injury or illness;
- Where there has been a history of prior incidents; and/or
- New or modified activities, equipment usage or procedures.

The program is intended, in part, to meet Occupational Safety and Health Administration OSHA's Voluntary Protection Programs Policies and Procedures and their Job Hazard Analysis manual (Publication 3071, Revised 2002).

3. PROCEDURE

For many tasks, a generic or site-specific JSA may already exist. Generic JSAs can be found in the JSA Library (Clarity→Health and Safety→JSA Library). Site-specific JSAs can be found in the project files. However, prior to use of a generic JSA the following must be verified by the project Manager (PM):

1. The JSA includes all the site-specific (if applicable) job steps for the task;
2. The JSA cannot be combined with job steps from other JSA tasks to be considered as one working document; and
3. There are no equipment/tools changes since the last revision/review.

If the above conditions are met the generic JSA may be used. If the above conditions cannot be satisfied, then a new or revised JSA must be developed for the work task. The development process of a JSA is outlined below and is included as a flow chart as **Appendix A**.

3.1 JSA Process

Development Team

JSAs are developed by an individual or team of people who have conducted the task, are familiar with the JSA process, and have experience in general safety practices. Typically, one of these personnel includes a member of the project management team (e.g., PM, Site H&S Manager (SHSM) and/or the Project Principal). Based on the complexity of the operation, additional team members may be utilized in the development process.

JSA Form

To assist in the development process, a standard JSA form is provided as **Appendix B** of this program. Generic JSAs (available in the JSA Library) may be used as a starting point for similar tasks. In addition to documenting the job steps, potential hazards and mitigative actions (discussed below), the form documents the individuals who developed it, the reviewers and the date of the JSA. JSAs are to be limited to one or two pages. For complex operations where more than two pages may be needed, the job should be broken down into multiple tasks, each task having its own JSA. The steps are described below:

Step 1 – List Job Steps

The first step in developing a JSA is to identify each job step in order of occurrence. Job steps should be concise and clearly describe the individual safety critical tasks for the collective operation. *For example, a monitoring well gauging and sampling task may include the following job steps: 1) access well with hand tools, 2) gauge well using interface* probe, *3) purge well with bailer, etc. Whereas, an example of a job step that is too generalized is "gauge and sample well."*

Step 2 – Identify Potential Hazards

Next, for each job step, determine potential hazards that may exist or occur while performing the associated job step. In helping determine safety critical job steps, the following questions should be assessed:

- "What could go wrong?"
- "What's the Worst that Can Happen?"
- "What are the consequences?"

Potential hazards should be identified by the following categories:

- Contact – struck by or against an object.
- Caught – caught on, in or between objects.
- Falls – slips, trips or falls to the ground or a lower level.
- Exertion – repetitive motion, excessive strain/stress, ergonomics, lifting/bending.
- Exposure – inhalation/ingestion/injection, cold/heat stress, noise/vibration.
- Energy Sources – electric lines or mechanical energy, including stored energy.

For each hazard category, the potential hazard should be further described. Refer to the JSA Quality Review Guidance Document provided as **Appendix C** for examples of potential hazards. *For instance, with the example described in Step 1 above, a potential hazard associated with the monitoring well gauging and sampling task – specifically, the job step to "access well with hand tools" – may include CAUGHT – pinch points when handling well cover.*

Step 3 – Determine Mitigative Actions

After the potential hazard(s) have been identified, evaluate if the job step can be performed in a manner where the hazard is eliminated, reduced or controlled. Common methods to eliminate, reduce or control potential hazards which follow the hierarchy of controls may include, but are not limited to, one or a combination of the following:

- Eliminating or substituting a job step with a less hazardous operation.
- Combining job steps or changing the sequence.
- Instituting engineering controls.
- Obtaining other tools or redesigning equipment.
- Performing ambient monitoring or screening.
- Obtaining additional safety equipment including personal protective equipment (PPE).
- Adding warning devices.

Mitigative actions should be specific and avoid using generalizations such as, "be careful" or "use caution." There must be at least one mitigative action for each potential hazard. PPE should never be the only mitigative action. It is the last line of defense. *Taking the example illustrated in Steps 1 & 2 above, mitigative actions for the potential hazard "CAUGHT – pinch points when handling well cover" may include 1) wear leather gloves, 2) use pry bar when accessing well cover, 3) keep hands/fingers clear between cover and collar, … etc.*

3.2 Review Process

Once a site-specific JSA has been developed, it is then submitted to the PM for review and approval prior to the start of a task. If the PM was involved in the development of the JSA then it will be provided to the OHSM for review and approval. When a quality review of JSAs are conducted by a member of management (e.g., Project Principals, CHSM) the review ensures that, at a minimum, the below "five rules" have been met:

1) JSA never more than 2 pages.

2) JSA authors listed should be people / titles who perform that type of work. Management should be reviewers / approvers.
3) Critical actions are always specific, observable actions – never “proper” or “appropriate” or “careful.”
4) PPE is considered a last line of defense and should be included in the critical actions. However, it cannot be the only critical action listed to mitigate a hazard; you must always identify other actions in addition to the applicable PPE (e.g., keep fingers clear of pinch points while closing cover; and wear cut resistant gloves).

In addition, at least annually, the PM and JSA Steward(s) are responsible for reviewing and updating (if necessary) the site-specific and generic JSAs, respectively, for which they are responsible. The review is carried out utilizing the JSA Quality Review Checklist which is provided in **Appendix C**. The JSA Stewards are assigned by the OM/CHSM for specific generic JSAs and are identified within the JSA Steward list posted within the JSA Library. These Stewards are appointed based on their knowledge and experience with specific work tasks. The JSA Library is updated routinely (min quarterly) by the CHSM to ensure that it contains only the most current version of each generic JSA.

3.3 JSA Library

JSA Stewards submit updated generic JSAs to the CHSM for filing in the JSA Library. As part of the annual review process, JSA Stewards must audit the JSA Library to ensure that it contains only the most current version of the JSA for which they are responsible. Approved site-specific JSAs are filed in the project files.

3.4 JSA Updates

JSAs can be updated based on a variety of factors or reasons, such as the examples provided below:

- Identification of inadequate procedures during a safety tailgate meeting.
- A Safe Performance Self-Assessment (SPSA) determining that the task should have a JSA or that procedures within the existing JSA are not adequate to address identified hazards.
- Change in site or environmental conditions.
- New or modified equipment or procedures.
- Observations or incident investigations that identify tasks requiring new or updated JSAs.

Changes to a generic JSA requires submittal and review by the JSA Steward appointed for that task to determine if the genetic JSA change is necessary. If changes are warranted, the JSA Steward forwards the updated generic JSA to the CHSM for review and uploading into the JSA Library.

Changes to Site-specific revisions need only approval from the PM.

3.5 Emergency Situations

In the absence of an existing JSA during an emergency situations, personnel should discuss with both the PM and SHSM the job steps, potential hazards and associated mitigative actions for tasks anticipated to be performed. As conditions, may change during the task(s), the personnel must reassess the job step(s) and potential hazards, and discuss any additional changes with the PM and SHSM prior to resuming the activity. For unplanned activities, it is critical that personnel do not proceed with performing task(s) without prior health and safety consideration and planning.

3.6 Subcontractors

Roux subcontractors are required to submit their JSAs for review in advance of the work. This allows time for Roux's PM to provide comments and suggestions to the subcontractors JSA's. Roux subcontractors should understand that no work may occur unless the JSAs for the work being performed have been reviewed by Roux. JSAs provided by subcontractors are maintained in the project files. For common tasks and to maintain consistency, the project management team may provide a similar or generic approved JSA to a subcontractor for use as a starting point for development of the subcontractors JSA.

Subcontractor JSAs are reviewed in the field daily prior to performing work. Roux oversight personnel and the project management team will assist subcontractors with updating JSAs as described in Section 3.4.

4. TRAINING

Every employee who may perform field work will be trained in this program and the proper use of the JSA. The training includes:

- A review of this Program.
- Development of a JSA.

This training is repeated as necessary to ensure that employees receive reinforcement of the value of the JSA Program as well as feedback on the health of the JSA Program. Office workers may receive training if an anticipated task will be performed that requires development of and training in a JSA.

5. RECORDS

The following records are maintained by the CHSM:

- A library of generic JSAs.
- Copies of all site field audits performed that assist with the evaluation of the effectiveness of the JSA program will be uploaded Quarterly and are located and stored at Clarity→Health & Safety→[Office Specific]→Field Audit Checklist (FAC). Key findings from these field audits will be communicated by the CHSM to OHSM for further communication to the office staff (typically during monthly lunch and learns).

The following record is to be maintained by each PM:

- Each site-specific JSA developed for their project. All JSAs are expected to be included in Appendix A in the project HASP.

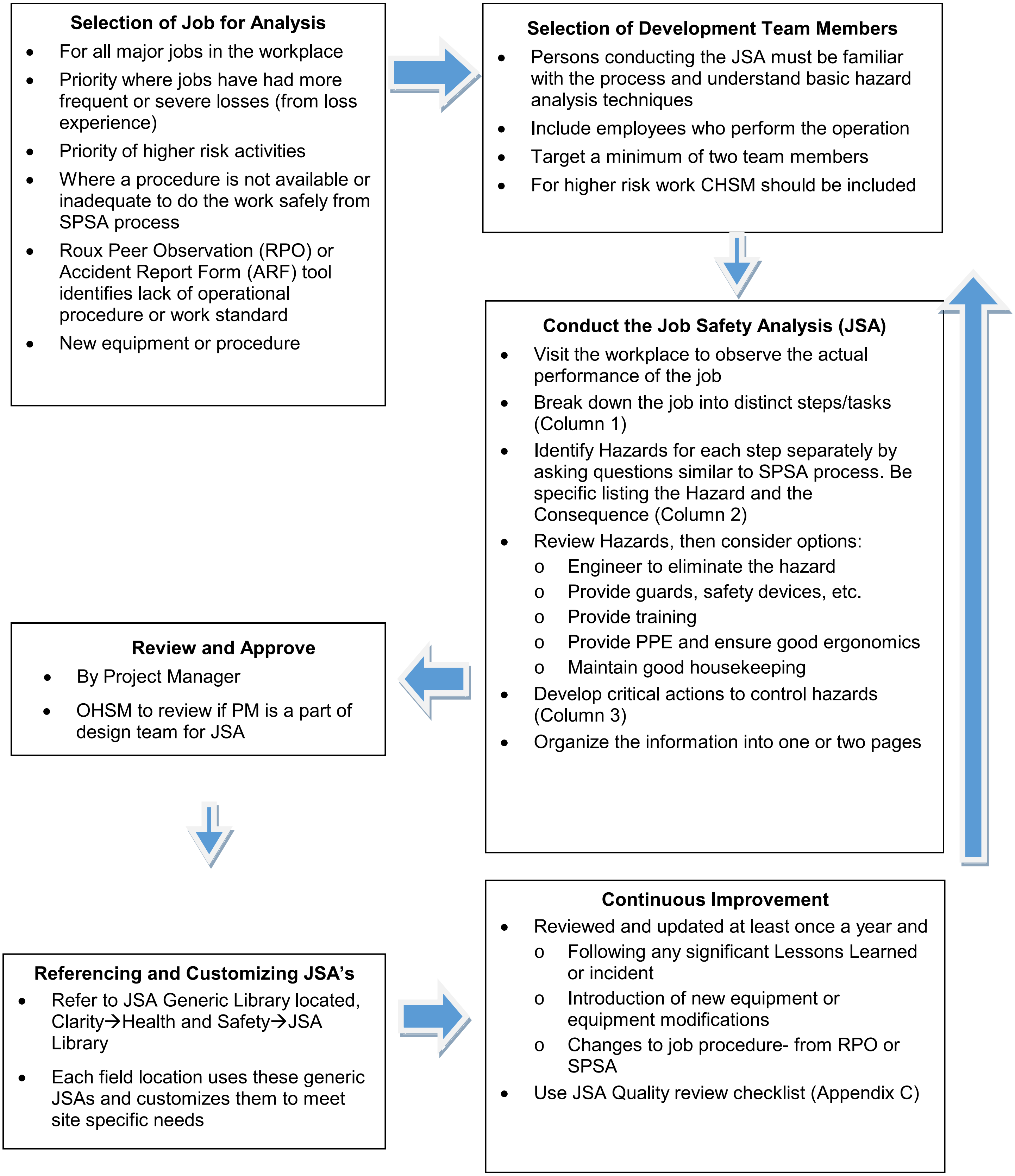
The following record is to be maintained by each JSA Steward:

- The latest version of each generic JSA for which they have been assigned and stored in the JSA Library.

6. PROGRAM EVALUATION

The CHSM will evaluate the program’s effectiveness during field audit(s). The CHSM should, at a minimum assess the overall effectiveness of the JSA Program quarterly. Records shall be maintained within the JSA Library. The assessment will include the adequacy of applicable JSAs and consistency in their use. Program adjustments will be made as necessary to reflect the evaluation results.

Appendix A – Job Safety Analysis Process Flowchart



Selection of Job for Analysis

- For all major jobs in the workplace
- Priority where jobs have had more frequent or severe losses (from loss experience)
- Priority of higher risk activities
- Where a procedure is not available or inadequate to do the work safely from SPSA process
- Roux Peer Observation (RPO) or Accident Report Form (ARF) tool identifies lack of operational procedure or work standard
- New equipment or procedure

Selection of Development Team Members

- Persons conducting the JSA must be familiar with the process and understand basic hazard analysis techniques
- Include employees who perform the operation
- Target a minimum of two team members
- For higher risk work CHSM should be included

Conduct the Job Safety Analysis (JSA)

- Visit the workplace to observe the actual performance of the job
- Break down the job into distinct steps/tasks (Column 1)
- Identify Hazards for each step separately by asking questions similar to SPSA process. Be specific listing the Hazard and the Consequence (Column 2)
- Review Hazards, then consider options:
  - o Engineer to eliminate the hazard
  - o Provide guards, safety devices, etc.
  - o Provide training
  - o Provide PPE and ensure good ergonomics
  - o Maintain good housekeeping
- Develop critical actions to control hazards (Column 3)
- Organize the information into one or two pages

Review and Approve

- By Project Manager
- OHSM to review if PM is a part of design team for JSA

Referencing and Customizing JSA's

- Refer to JSA Generic Library located, Clarity→Health and Safety→JSA Library
- Each field location uses these generic JSAs and customizes them to meet site specific needs

Continuous Improvement

- Reviewed and updated at least once a year and
  - o Following any significant Lessons Learned or incident
  - o Introduction of new equipment or equipment modifications
  - o Changes to job procedure- from RPO or SPSA
- Use JSA Quality review checklist (Appendix C)

Appendix B - Job Safety Analysis Form

JOB SAFETY ANALYSIS **Cntrl. No.**	DATE:	☒ NEW ☐ REVISED	PAGE 8 of 2

JSA TYPE CATEGORY **GENERIC**		WORK TYPE	WORK ACTIVITY (Description)	
DEVELOPMENT TEAM		**POSITION / TITLE**	**REVIEWED BY:**	**POSITION / TITLE**
	REQUIRED AND / OR RECOMMENDED PERSONAL PROTECTIVE EQUIPMENT			
☐ LIFE VEST ☐ HARD HAT ☐ LIFELINE / BODY HARNESS ☐ SAFETY GLASSES		☐ GOGGLES ☐ FACE SHIELD ☐ HEARING PROTECTION ☐ SAFETY SHOES	☐ AIR PURIFYING RESPIRATOR ☐ SUPPLIED RESPIRATOR ☐ PPE CLOTHING:	☐ GLOVES: ☐ OTHER
	REQUIRED AND / OR RECOMMENDED EQUIPMENT			
	Required Equipment:			
	Commitment to LPS – All personnel onsite will actively participate in SPSA performance by verbalizing SPSAs throughout the day.			
	EXCLUSION ZONE: A _ foot exclusion zone will be maintained around (indicate equipment).			
Assess **[1]JOB STEPS**		**Analyze** **[2]POTENTIAL HAZARDS**	**Act** **[3]CRITICAL ACTIONS**	
1. [INSERT JOB STEP]		**1a. CONTACT:** [INSERT HAZARD]	1a.	
		1b. CAUGHT: [INSERT HAZARD]	1b.	
		1c. FALL: [INSERT HAZARD]	1c.	
		1d. EXPOSURE: [INSERT HAZARD]	1d.	

		1e. EXERTION: [INSERT HAZARD]	1e.
		1f. ENERGY SOURCE: [INSERT HAZARD]	1f.
2. [INSERT JOB STEP]		**2a. CONTACT:** [INSERT HAZARD]	2a.
		2b. CAUGHT: [INSERT HAZARD]	2b.
		2c. FALL: [INSERT HAZARD]	2c.
		2d. EXPOSURE: [INSERT HAZARD]	2d.
		2e. EXERTION: [INSERT HAZARD]	2e.
		2f. ENERGY SOURCE: [INSERT HAZARD]	2f.

Appendix C - Job Safety Analysis Quality Review

GUIDANCE DOCUMENT

JOB SAFETY ANALYSIS (JSA) QUALITY REVIEW

A Job Safety Analysis (JSA) is both a technique and a tool used to carefully study and record each step of a job or task, identify existing or potential hazards associated with each step and determine the best actions to follow in order to avoid those hazards. The JSA provides a standard for conducting work and Roux Peer Observations (RPOs) and also serves as an excellent safety training and daily site safety meeting reference tool. A JSA is applicable for routine and higher risk activities.

The following guidance provides items a Quality Reviewer should ask about or look for when reviewing and commenting on a JSA. Quality Review feedback should be specific and may be in writing or verbal. Written feedback ensures clear communication and better tracking. Verbal feedback allows discussion and can be conducted at group safety meetings, by telephone, etc. for sharing of learnings as well. Safety stewardship focuses on quality use of the tools and other activities that personnel can control. This guidance applies to all Quality Reviewers from the front-line supervisor to senior management. Feedback on the quality of a JSA should include several items that are done well in addition to areas to improve.

Administrative and Header Information

- Are all sections completed?
- Does header include appropriate information such as name of company who developed JSA, location and work activity JSA applies to, names/titles of development team and quality reviewer(s), and date?
- Does development team include job experts (field personnel who perform the task) along with personnel familiar with hazard analysis techniques, specifically the worker actually completing the task?
- Does PPE section include minimum required specific PPE for task and is it consistent with PPE requirements listed in Column 3?
- Was the JSA reviewed by Roux personnel?
- Is the JSA limited to two pages?
- Is the JSA written in terms that field personnel can follow rather than as a "reference document" written by office staff?

Column 1 Job Steps

- Does the JSA cover one main task and not multiple tasks that should be divided into separate JSAs? Designate job task steps not overall work flow process to complete job.
- Are the job steps clearly defined and in a logical sequence that aligns with how the work is performed in the field?
- Do the job steps only include those with associated SH&E hazards?

Column 2 Potential Hazards

- Are hazards listed to correspond with each job step in Column 1?

- Do the hazards listed consider all potential hazards (e.g. environmental conditions, injurious contact, overexertion, slips/trips/falls, exposure to hazardous materials, traffic, property/environmental impacts, etc.)?
- Are the hazards specifically stated (e.g. instead of stating hazard as "chemical exposure", state "exposure to sulfuric acid from leaking battery")?
- Are there "extra" hazards that do not apply indicating that the JSA may have been developed for another site and not revised to address site-specific hazards?

Column 3 Critical Actions to Mitigate Hazards

- Do the critical actions align horizontally with the job steps and hazards from Columns 1 and 2?
- Are the actions clear and specific? (e.g. "wear a reflective vest and place traffic cones around work area" rather than "watch out for traffic").
- Are the actions quantifiable when possible? (e.g. "use two people to lift objects over 40 pounds" rather than "get help with heavy objects").
- Are the actions observable and objective so that an RPO Observer who is unfamiliar with task can determine if it is being done correctly? (e.g. "maintain three points of contact when climbing ladder" rather than "use safe climbing techniques").
- Do the actions avoid ambiguous phrases such as "use caution", "be careful", "stay alert", "and watch out"?
- Do the actions avoid subjective phrases such as "use proper", "as needed", "as required", "as necessary" that leave it open to individual worker's interpretation of what is required to perform work safely?
- Do not list minimum required PPE without including in the mitigation for this task, think why the PPE is required.
- PPE cannot be the only line of defense, PPE always the last line of defense, so think through what other actions could mitigate hazards.

JSA QUALITY REVIEW CHECKLIST

Reviewer Name / Company / Title:		**Desktop Review?**		**Field Review?**		**Date:**	

Administrative and Header Information	**Yes**	**No**	**Comments**
Is the JSA limited to two pages?			
Are all sections completed?			
Does development team include job experts and personnel familiar with JSA development process?			
Was the JSA reviewed by a supervisor/manager?			
Does PPE section include PPE required for entire task with additional PPE listed in Column 3?			
Is the JSA written in terms that field personnel can follow?			
Column 1 - Job Steps	**Yes**	**No**	**Comments**
Does JSA cover one main job task and not overall work flow process or multiple tasks that should be in standalone JSAs?			
Are job steps clearly defined and in sequence that aligns with how the work is performed?			
Column 2 - Potential Hazards	**Yes**	**No**	**Comments**
Do hazards listed clearly correspond with each job step in Column 1?			
Are the hazards specifically stated (e.g. exposure from (what?), cut from (what?), slip from (what?)?)			
Do the hazards listed include all potential hazards?			
Does JSA avoid "extra" hazards that do not apply (may indicate generic JSA use without site revision)?			
Column 3 - Actions to Mitigate Hazards	**Yes**	**No**	**Comments**
Do the critical actions clearly match each listed hazard and job step from Columns 1 and 2?			
Are the actions clear and specific?			
Are the actions quantifiable when possible (e.g. include number, limit, amount or distance)?			
Are the actions observable and objective (e.g. explain "how to")?			
Do the actions avoid ambiguous phrases (e.g. "be careful", "watch out")?			
Do the actions avoid subjective phrases (e.g. "proper", "appropriate")?			
Additional Comments:			

Quality Review Feedback provided to (name/company):			
Quality Review Feedback Action Item(s)	**Responsible Person**	**Target Completion Date**	**Actual Completion Date**

JOB SAFETY ANALYSIS	**Ctrl. No. CVD-19**	DATE: 04/16/2020	☒ NEW ☐ REVISED	PAGE 1 of 2

JSA TYPE CATEGORY **Generic**	WORK TYPE **Fieldwork**	WORK ACTIVITY (Description) **Working in Areas Affected by Coronavirus**

DEVELOPMENT TEAM	**POSITION / TITLE**	**REVIEWED BY:**	**POSITION / TITLE**
Kristina DeLuca	Health and Safety Specialist	Brian Hobbs	CHSM

REQUIRED AND / OR RECOMMENDED PERSONAL PROTECTIVE EQUIPMENT

☐ LIFE VEST ☒ HARD HAT – In field ☐ LIFELINE / BODY HARNESS ☒ SAFETY GLASSES – In field	☐ GOGGLES ☐ FACE SHIELD ☐ HEARING PROTECTION ☒ SAFETY SHOES – Steel/composite toe in fie	☐ AIR PURIFYING RESPIRATOR ☐ SUPPLIED RESPIRATOR ☒ PPE CLOTHING – High visibility vest in field	☒ GLOVES – Leather/cut-resistant in field and nitrile as needed ☐ OTHER

REQUIRED AND / OR RECOMMENDED EQUIPMENT

Cloth face covering, nitrile gloves, hand soap, water source, hand sanitizer, disinfectant spray and disinfectant wipes.

Commitment to Safety – All personnel onsite will actively participate in SPSA performance by verbalizing SPSAs throughout the day.

SOCIAL DISTANCING: Maintain 6' of distance between yourself and all other people at all times. If you do not believe the scope of work can be conducted while maintaining this distance, contact your Project Manager immediately.

Assess **[1]JOB STEPS**	**Analyze** **[2]POTENTIAL HAZARDS**	**Act** **[3]CRITICAL ACTIONS**
1. Project Preplanning	N/A	• Review and follow COVID-19 CDC, Roux, Client and local orders/protocols. • Ensure all workers are fit for duty - anyone feeling sick should remain at home even if symptoms do not align with COVID-19. If a worker has been in contact with someone potentially positive or positive for COVID-19, contact your Office Manager. • Determine PPE needs and ensure adequate supply of disinfectant wipes/spray, soap and water or hand sanitizer at Site. Due to high demands and limited supply, plan ahead. • Use the minimum number of employees necessary to safely complete the work.
2. Mobilization	**Exposure:** Becoming infected or infecting co-workers	**Personal/Rental/Roux Owned Vehicle** • Do not carpool. • Use the same vehicle every day and do not share with co-workers. • Verify workers/other people are not approaching vehicle prior to exiting the vehicle. Maintain 6' of distance from others. • DO not valet your car or allow others to use your car. If necessary, don nitrile gloves and safety glasses and clean/disinfect all high touch surfaces (steering wheel, knobs, door handles, turn signals, radio, etc.) by wiping thoroughly with approved disinfectants (follow manufacturer's instructions). This cleaning and disinfection shall occur before and after each use of the vehicle. Aseptically remove gloves and dispose of them along with rags/wipes, appropriately. Wash hands or use hand sanitizer immediately after each episode of cleaning. **Public Transportation** • Public transit should not be used unless absolutely necessary. Consider renting a car rather than taking public transit. If public transit is required, wear appropriate PPE and apply social distancing (6 ft). Use proper donning and doffing procedures for nitrile gloves. Wash hands or use hand sanitizer immediately after. **Hotel Stay (Refer to COVID-19 H&S Guidance for more info)** • If a hotel stay is deemed necessary for the given field work, ensure that you disinfect your room upon initial arrival and returning each day. Disinfect all surfaces of your room with an appropriate disinfectant using nitrile gloves. Use proper donning and doffing procedures for nitrile gloves. • Place the "Do Not Disturb" placard on the room while away and limit housekeeping services to the extent feasible during your stay to minimize the reintroduction and spread of the virus from others. Minimize, or avoid entirely, time spent in hotel common areas (i.e., the lobby, dining areas, gyms, etc.). Wash hands or use hand sanitizer often.

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[1] Each Job or Operation consists of a set of tasks / steps. Be sure to list all the steps needed to perform job.

[2] A hazard is a potential danger. Break hazards into six types: Contact - victim is struck by or strikes an object; Caught - victim is caught on, caught in or caught between objects; Fall - victim falls to ground or lower level (includes slips and trips); Exertion - excessive strain or stress / ergonomics / lifting techniques; Exposure - inhalation/skin hazards, energy source; Energy Source – electricity, pressure, compression/tension.

[3] Using the first two columns as a guide, decide what actions or procedures are necessary to eliminate or minimize the risk. List the recommended safe operating procedures. Say exactly what needs to be done - such as "use two persons to lift". Avoid general statements such as, "be careful".

3. Tailgate Meeting	**Exposure:** Becoming infected or infecting co-workers	• Must occur outside or remotely (i.e. video or conference call). • Maintain at least a 6+ ft distance between you and others. • Discuss primary infection prevention measures listed below. • Do not require employees or subcontractors to sign in, the Site Supervisor shall record names on the attendance form. • If the Site has more than 10 workers, separate tailgate meetings should be performed. • Discuss COVID-19 symptoms with coworkers and subcontractors to ensure fitness for duty. Anyone exhibiting signs or symptoms should be instructed to leave the Site, contact your Project Manager.
4. Site Activities	**Exposure:** Becoming infected or infecting co-workers	• Coordinate field activities at the beginning of the day (i.e. Tailgate meeting) to minimize time spent in crowded spaces or overlap while completing job tasks. • Don cloth face coverings as appropriate. • Apply social distancing (6+ ft) when interacting with others. If anyone comes within 6 ft of you while conducting work and your work prevents you from moving away, politely ask them to move back. If others are unable to move from your space, stop work and leave area. • Do not shake hands or touch others. • Do not share equipment or other items with co-workers and subcontractors unless wearing appropriate PPE (e.g. nitrile gloves). Assume equipment and other surfaces are potentially contaminated and remove gloves aseptically (See Appendix A of Roux Interim H&S Guidance for proper glove removal). • If anyone is coughing or sneezing in your vicinity, stop work and leave the area. • Do not work in areas with limited ventilation with others. • Cover your mouth and nose with tissue or paper towel or with your elbow when coughing or sneezing and wash hands or use hand sanitizer immediately after. If sick contact SHSO/PM and leave Site immediately. • Disinfect work surfaces/areas with approved disinfectant you're responsible for (ex: desk, office doorknob, computer, etc.) at least once at the beginning of your shift and at least once at the end of your shift with either sanitizing wipes or disinfectant spray. • Phones should be operated hands free to extent feasible. Sanitize your phone on a regular basis. Disinfection should also take place whenever suspected contaminated material comes in contact with any work surfaces/areas. Wash hands or use hand sanitizer immediately after. • Avoid public spaces and going out to eat by bringing your own lunch to the Site. If performing work in high density urban areas, it is recommended all food must be consumed at or in your vehicle. Wash hands or use hand sanitizer before eating and immediately after.

Primary Infection Prevention Measures

- Wash your hands often with soap and water for at least 20 seconds.
    - If soap and water are not available, use an alcohol-based sanitizer that contains at least 60% ethanol or 70% isopropanol. Key times to wash hands include after blowing your nose, coughing or sneezing, after using the restroom, and before eating or preparing food.
- Do not touch your eyes, face, nose and mouth with unwashed hands.
- Cover your mouth and nose with a tissue when you cough or sneeze or use the inside of your elbow. Throw potentially contaminated items (e.g. used tissues) in the trash.
- Avoid close contact/secondary contact with people and potentially contaminated surfaces.
    - Apply appropriate social distance (6+ feet).
    - Stop handshaking/touching others and use caution when accessing public spaces.
- Clean and disinfect frequently touched surfaces daily. Commonly touched items can include but are not limited to tables, doorknobs, light switches, countertops, handles, desks, phones, keyboard, toilets, sinks and field equipment. If surfaces are dirty, they should be cleaned with soap and water prior to disinfection. If surface cannot be cleaned/disinfected, then wash hands or use sanitizer as soon as possible.

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[1] Each Job or Operation consists of a set of tasks / steps. Be sure to list all the steps needed to perform job.

[2] A hazard is a potential danger. Break hazards into six types: Contact - victim is struck by or strikes an object; Caught - victim is caught on, caught in or caught between objects; Fall - victim falls to ground or lower level (includes slips and trips); Exertion - excessive strain or stress / ergonomics / lifting techniques; Exposure - inhalation/skin hazards; Energy source – electricity, pressure, compression/tension.

[3] Using the first two columns as a guide, decide what actions or procedures are necessary to eliminate or minimize the risk. List the recommended safe operating procedures. Say exactly what needs to be done - such as "use two persons to lift". Avoid general statements such as, "be careful".

JOB SAFETY ANALYSIS	**Ctrl. No. GEN-003**	DATE 7/10/2020	☐ NEW ☒ REVISED	PAGE 1 of 2

JSA TYPE CATEGORY **GENERIC**	WORK TYPE **Construction - Excavation**	WORK ACTIVITY (Description) **Backfilling Excavation & Compaction**

DEVELOPMENT TEAM	POSITION / TITLE	REVIEWED BY:	POSITION / TITLE
David Kaiser	Project Engineer	Brian Hobbs	Corporate Health & Safety Manager
Edward Lacina	Senior Construction Manager		

REQUIRED AND / OR RECOMMENDED PERSONAL PROTECTIVE EQUIPMENT

☐ LIFE VEST
☒ HARD HAT
☐ LIFELINE / BODY HARNESS
☒ SAFETY GLASSES
☐ GOGGLES
☐ FACE SHIELD
☒ HEARING PROTECTION
☒ SAFETY TOE BOOTS
☐ AIR PURIFYING RESPIRATOR
☐ SUPPLIED RESPIRATOR
☒ PPE CLOTHING: reflective DOT approved safety
☒ GLOVES: Leather/ cut-resistant level 2
☐ OTHER _____

REQUIRED AND / OR RECOMMENDED EQUIPMENT

Payloader, Backhoe, Dump Trucks, Mechanical gas powered tampers, Excavator with hydraulic tamper. APR when tamping if dust present. Two-way radios.

COMMITMENT TO SAFETY- All personnel onsite will actively participate in hazard recognition and mitigation throughout the day by verbalizing SPSAs.

EXCLUSION ZONE (EZ): Maintain Minimum Heavy Equipment Exclusion Zone (HEEZ) around equipment and loads while it is in motion. The HEEZ must be greater than the swing zone of any moving part of the equipment, tip zone of the equipment, fall zone of the equipment and contents, distance that debris may travel during demolition activities and/or foot print of a structure to be demolished.

Assess [1]JOB STEPS	Analyze [2]POTENTIAL HAZARDS	Act [3]CRITICAL ACTIONS
1. Pre-construction meeting: Review proposed excavation locations	**1a. CONTACT:** Potential for contact with subsurface utilities and above ground utilities	1a. Call state 811 for mark out service and one call ticket. 1a. Obtain private utility mark out service as necessary. 1a. Review and mark proposed excavations w/white paint. 1a. Identify all “Critical” zones. A Critical zone is any area within 10 feet of any operating utility. 1a. **Complete subsurface clearance checklist.** 1a. Soft dig must be conducted within 2 lateral feet of any suspected underground utility. 1a. Protection of aboveground utilities identified as being located within the work zone must be coordinated w/ client and utility owner.
2. Secure Work Area	**2a. CONTACT:** Potential for personnel to enter the work area. Potential for equipment to contact, or crush personnel. **2b. EXERTION:** Potential for muscle strain or tear while installing traffic cones and barrel	2a. Ensure work area is secure and inform others of work activity. Establish a HEEZ using 42” traffic cones, barrels & snow fencing or telescoping poles. Use of flag persons to maintain clear traffic and to minimize motorist confusion during set-up of new traffic pattern. HEEZ to include tip/swing radius of equipment. 2a. Dump Truck/Excavator/Payloader/Backhoe equipment to be set-up by personnel who are familiar with machinery. Spotters shall be in place for all equipment. and to control access to the HEEZ 2a. Truck wheels are chocked when driver is not in truck and engine shut off. 2a. Personnel shall stay out of the exclusion zone (10’ minimum or greater than the equipment boom) while equipment is maneuvering. 2b. Keep back straight, keep load close to the body and bend knees while lifting and working. If over 50 lbs., use 2 or more laborers for lifting or use of equipment.

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3. Backfilling excavation, and compaction	**3a. CONTACT:** Traffic and live equipment. .	3a. Equipment and trucks shall be isolated from other workers, subcontractors and third party traffic with 42" traffic cones, barricades, snow fencing or telescoping poles, and/or Jersey barriers. Spotters shall direct dump truck for placement of fill near excavation. Pay loader/ Excavator, as directed by spotter, shall move fill into trench where it shall be placed in layers and compacted by mechanical means. 3a. Spotters will wear florescent vests at all times. 3a. Spotters will remain out of the exclusion zone, line of fire from equipment and third-party vehicles. 3a. Spotters and operators will have radios for communication, when other visual and/or hand signals are insufficient. 3a. Locate all overhead utilities. All personnel and machinery should maintain a 10' distance from overhead electric lines. Refer to OSHA chart for distances and voltage. 3a. For excavations engineered (shored, sloped, benched} all personnel, equipment, and materials must remain a minimum of 2 feet from edge of excavation.
	3b. EXPOSURE: Fumes from gas powered tamper	3b. Fueling of all equipment will be done outside of work area in a well-ventilated area. Refueling will be done only after a 2-5-minute cool down.
	3c. FALL: Slips, trips, fall hazards.	3c. Work area will be clean and free of any debris to remove slip, trip and fall hazards. All tools will be kept in designated areas. Insure work area is well illuminated. 3c. Workers should only be working in areas that have been leveled with a machine. 3c. All persons working at elevations over 6' shall use a guardrail system or personal fall arrest system while around excavation.
	3d. OVEREXERTION: Muscle strain, or tear.	3d. Keep knees bent and back straight while transferring/ lifting/lowering tamper from elevated areas. Utilize a co-worker to avoid staining muscles. 3d. Keep knees bent and back straight while maneuvering tamper. Utilize a co-worker to avoid staining muscles.
	3e. EXPOSURE: Noise from tamper. Dust inhalation.	3e. Workers will wear hearing protection during compaction tamper activities. 3e. Wear NIOSH approved dust mask for personal comfort. If dust is visible for extended time, limit by wetting down area. 3e. If dust continues stop work and evaluate if APR is needed with approval and clearance.
4. Secure/leave site.	**4a. FALL:** Slip, trip, fall	4a. Clear work area of all debris and store all equipment in designated areas/containers before opening to traffic. 4a. Replace fencing and barricades as needed to secure path before opening roadway or area up to traffic(vehicle, pedestrian and/or bicycle).

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JOB SAFETY ANALYSIS	**Ctrl. No. GEN-007**	DATE 7/10/2020	☐ NEW ☒ REVISED	PAGE 1 of 2

JSA TYPE CATEGORY **GENERIC**	WORK TYPE **General Site Activity**	WORK ACTIVITY (Description) **Driving**

DEVELOPMENT TEAM	POSITION / TITLE	REVIEWED BY:	POSITION / TITLE
Valerie Sabatasso	Staff Scientist	Brian Hobbs	Corporate Health & Safety Manager

REQUIRED AND / OR RECOMMENDED PERSONAL PROTECTIVE EQUIPMENT

☐ LIFE VEST ☒ HARD HAT: when outside vehicle ☐ LIFELINE / BODY HARNESS ☒ SAFETY GLASSES: when outside vehicle	☐ GOGGLES ☐ FACE SHIELD ☒ HEARING PROTECTION ☒ SAFETY TOE BOOTS: when outside vehicle	☐ AIR PURIFYING RESPIRATOR ☐ SUPPLIED RESPIRATOR ☒ PPE CLOTHING: high visibility vest, when outside vehicle	☒ GLOVES: Leather/ cut-resistant level 2 ☐ OTHER _____

REQUIRED AND / OR RECOMMENDED EQUIPMENT

Motor Vehicle (i.e. car, truck, SUV)

COMMITMENT TO SAFETY- All personnel onsite will actively participate in hazard recognition and mitigation throughout the day by verbalizing SPSAs

EXCLUSION ZONE (EZ): Maintain Minimum Heavy Equipment Exclusion Zone around equipment and loads while it is in motion. The HEEZ must be greater than the swing zone of any moving part of the equipment, tip zone of the equipment, fall zone of the equipment and contents, distance that debris may travel during demolition activities and/or foot print of a structure to be demolished.

Assess [1]JOB STEPS	Analyze [2]POTENTIAL HAZARDS	Act [3]CRITICAL ACTIONS
1. Driving to/leaving Site	**1a. CONTACT:** Severe injury/disability, property damage, monetary loss (insurance premiums, deductibles, loss of license/job) caused by collision with or struck by other vehicles, obstructions, pedestrians, animals, etc. *Common factors that may lead to CONTACT incident, but not limited to: • distracted driving (cell phone, GPS, radio, billboards, "rubber necking") • lack of situational awareness • unfamiliarity with traffic patterns/road layout • weather conditions (wet/icy roads, hydroplaning, black ice) • weariness • high speeds • obstructed vision (solar glare, debris on windshield, blind spots) • changes in travel pathway (construction, snow banks, non-operational signals, potholes, detours, special events) • improper vehicle maintenance (non-operational signal light, worn tires, cracked windshield, ineffective wipers) • loose or unsecure objects	1a. PLAN AHEAD – review/make yourself familiar with maps and driving directions before beginning the drive to the Site. Do not attempt to drive and review maps/directions at the same time. Pull over and stop your vehicle before looking at maps/directions. 1a. Complete a basic vehicle inspection before driving. Verify Inspection and Registration are current, tires and wipers are in good condition, all lights are functional, all glass/mirrors are undamaged, the horn is functional, roof/hood/trunk are free from accumulated snow and visibility is not impaired due to snow/ice/frost/fog on windows. 1a. Do not hang items in car that can obstruct your view or become projectiles in a collision. 1a. Do not get distracted using touch screen radios or GPS units built into newer models. Keep your eyes on the road and stay alert. 1a. Follow posted speed limits and obey traffic signals and roadway signs. 1a. Always wear your seat belt and shoulder harness when driving. 1a. When driving around large vehicles and trucks, maintain extra space as these vehicles may not be able to see a smaller car too close. 1a. Follow the "Rules of the Road" including: using your turn signals, coming to a complete stop, and allowing vehicles the right of way (yield) when they are when traffic laws require. 1a. Apply the Smith Five Keys® of safe driving • Aim High in Steering® - Expand eye lead time to a minimum of 15 seconds • Get the Big Picture® - Maintain proper a 4 second minimum following distance at all times - Scan mirrors every 5-8 seconds to achieve a circle of awareness - Position your vehicle so you can see relevant/non-relevant objects • Keep Your Eyes Moving® - Try to maintain about 180 degrees of visibility - Avoid blank and fixed stares. Avoid focusing on one object for more than 2 seconds • Leave Yourself an Out® - Avoid traveling in traffic clusters - Surround yourself with space - Anticipate the actions of others

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Assess [1]JOB STEPS	Analyze [2]POTENTIAL HAZARDS	Act [3]CRITICAL ACTIONS
1. Driving to/leaving Site (cont'd)	**1a. CONTACT:** Severe injury/disability, property damage, monetary loss (insurance premiums, deductibles, loss of license/job) caused by collision with or struck by other vehicles, obstructions, pedestrians, animals, etc.	• Make Sure They See You® - Maintain eye contact with on-coming vehicles/pedestrians - Use warning devices (e.g., hand signals, high-lights, horns etc.) - Proper timing is essential 1a. Do not perform reconnaissance or inspections while driving. Your vehicle should be parked in a safe location when viewing or surveying the Site and vicinity 1a. Avoid sudden turns and stops. Don't drive recklessly – be in control of vehicle at all times. 1a. In inclement weather, first determine if work can be POSTPONED. Otherwise, plan according to weather conditions including checking forecast along entirety of travel route (especially, for long distances). Reduce speed as road conditions warrant. Travelling with winter car equipment, in the winter, is strongly recommended (i.e., shovel, scraper, brush, blanket, extra clothing, flashlight, bag of sand). If your vehicle has 4-wheel drive, review to operators manual and understand operating procedure prior to engaging 4-wheel drive. If at any point on your drive weather becomes too severe to proceed safely pull over if safe to do so or seek nearest cover (e.g., overpass) 1a. If feeling drowsy or sleepy, do not drive. Pull over in a safe place to rest if you experience any signs of drowsiness. Make sure to get adequate sleep the night before an early drive. 1a. Never operate a vehicle under the influence of alcohol or illegal substances or medications affecting your performance. 1a. Keep your eyes on the road. Do not call or talk on cellular phones. Pull over to a safe location if you must answer or make a call. 1a. When parking, pull-through when possible. If backing is required visually inspect area to ensure it is free from obstructions prior to backing in and relying solely on mirrors; use spotters when available.
2. Entering/Exiting Vehicle.	**2a. CAUGHT:** Personal injury (broken fingers/hand) while entering or exiting vehicles **2b. FALL:** Personal injury (twisted ankle, deep contusion, concussion, broken wrist/arm, etc.) from slip/fall on uneven or unstable or slippery surface while exiting/entering vehicle **2c. CONTACT:** Severe injury/disability, property damage, monetary loss (insurance premiums, deductibles, loss of license/job) caused by collision with or struck by other vehicles, obstructions, pedestrians, animals, etc.	2a. Open and close doors slowly. Never put hands or feet in between door and vehicle to avoid pinch points. 2b. When exiting the vehicle make sure your feet are on firm footing and weight is evenly distributed before exiting/standing. In inclement weather use hands to support yourself, by holding the car door and/or steering wheel, when exiting the vehicle. 2c. Check both directions for traffic before opening door. Do not exit vehicle if traffic does not permit you to exit safely 2c. Check anticipated path of door prior to opening, do not open door into any obstructions (e.g., bollards, high curbing)

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JOB SAFETY ANALYSIS **Ctrl. No. GEN-010**	DATE 7/10/2020	☐ NEW ☒ REVISED	PAGE 1 of 2

JSA TYPE CATEGORY **Generic**	WORK TYPE **Surveying**	WORK ACTIVITY (Description) **Elevation Surveying**

DEVELOPMENT TEAM	POSITION / TITLE	REVIEWED BY:	POSITION / TITLE
Mark M Emmons	Project Engineer	Brian Hobbs	Corporate Health & Safety Manager
Bjorn Wespestad	Senior Engineer		
William Hansen	Senior Engineer		

REQUIRED AND / OR RECOMMENDED PERSONAL PROTECTIVE EQUIPMENT

☐ LIFE VEST ☒ HARD HAT ☐ LIFELINE / BODY HARNESS ☒ SAFETY GLASSES	☐ GOGGLES ☐ FACE SHIELD ☐ HEARING PROTECTION ☒ SAFETY SHOES: Steel-toe boots	☐ AIR PURIFYING RESPIRATOR ☐ SUPPLIED RESPIRATOR ☒ PPE CLOTHING: Fluorescent reflective vest or high visibility clothing	☒ GLOVES: Cut-resistant or leather ☒ OTHER: Long sleeve Shirt

REQUIRED AND / OR RECOMMENDED EQUIPMENT

Surveying equipment (i.e., leveling rod/measuring ruler, tripod and autolevel).

COMMITMENT TO SAFETY- All personnel onsite will actively participate in hazard recognition and mitigation throughout the day by verbalizing SPSAs.

Assess [1]JOB STEPS	Analyze [2]POTENTIAL HAZARDS	Act [3]CRITICAL ACTIONS
1. Check in with Site manager/ property owner.	**1a. CONTACT/EXPOSURE/FALL:** Lack of communication could result in H&S incident.	1a. Inform Site personnel of work scope, timeline and location(s). 1a. Inquire about other activities taking place at the Site. 1a. If applicable, obtain General Work permit for the day.
2. Locate surveying position for instrument and rod and set-up work area	**2a. FALL:** Slip/trip hazards	2a. Inspect area for uneven terrain, weather-related hazards (i.e., ice, puddles, snow, etc.) and obstructions prior to setting up at the survey location. Keep eyes engaged with walking surface while in movement. Remember “Walking is Working.” 2a. Conduct housekeeping and maintain clear paths to walk in and remove debris as required.
	2b. CONTACT: Traffic (surveying locations could potentially be in parking areas and sidewalks)	2b. Be aware of oncoming traffic. Utilize a flagman / spotter for locations in streets or high-traffic areas. 2b. Place 42 inch cones around the work area and delineate work zone with caution tape, snow fencing or safety bars, if necessary. 2b. Wear appropriate PPE including long sleeve high visibility clothing and or reflective safety vest. 2b. Face traffic, maintain eye contact with oncoming vehicles and establish a safe exit route.
	2c. OVEREXERTION: Hazard due to carrying, lifting, and bending while transporting equipment	2c. Use proper body positioning and lifting techniques; keep back straight, lift with legs, keep load close to body, and never reach with a load. 2c. Avoid carrying too much equipment at one time and team-lift equipment that is more than 50 lb.
	2d. CAUGHT/CONTACT: Pinch Points / sharp edges associated with setting up the tripod	2d. Wear cut resistant gloves when handling the tripod and keep fingers away from pinch points located near moving parts of the tripod. Don’t carry tripod by the pointed ends.
	2e. OVEREXERTION: Hazard due to bending awkwardly to look through the autolevel	2e. When practical, set the height of the autolevel optic as to minimize bending at the waist.

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Assess [1]JOB STEPS	Analyze [2]POTENTIAL HAZARDS	Act [3]CRITICAL ACTIONS
3. Open / close manhole cover to well that is being surveyed (if necessary).	**3a. OVEREXERTION:** Muscle strain **3b. CAUGHT:** Pinch points associated with removing / replacing manholes and working with hand tools **3c. EXPOSURE:** To potentially hazardous vapors To biological hazards **3d. CONTACT:** With traffic	3a. See 1c. Bend knees when reaching to open well. Use manhole lifting hook or pry bar to avoid bending. 3b. Wear leather gloves or cut resistant gloves when working with well cover and hand tools. 3b. Use proper tools (ratchet and crowbar or pry bar for well cover) and inspect before use. 3b. Do not put fingers under well cover. 3c. No open flames/heat sources. 3c. To minimize exposure to vapors, allow well to vent after opening it and before survey activities begin. 3c. Work on the upwind side of manhole/well. 3.c Use caution while opening lids to inspect work area for bees and insects inside of covers. 3c. Use insect/tick repellent as necessary. 3d. See 2b.
4. Perform survey.	**4a. FALL:** Slip/trip hazards **4b. CONTACT:** Traffic (surveying locations could be potentially located in parking areas and sidewalks) **4c. ENERGY SOURCES:** Electrical shock from survey rod striking overhead electric lines or lights	4a. See 2a. 4b. See 2b. 4b. Personnel using the scope will be devoting most of their attention to the surveying activity and shall be aware of vehicular and pedestrian traffic. Personnel holding the measuring stick should be extra vigilant of survey personnel and communicate any potential hazards to the instrument person via handheld radio or similar means. Ensure reflective safety vest is worn. 4c. Prior to raising and extending the survey rod, personnel should thoroughly inspect the area above the measuring point. If overhead electrical lines are encountered within 20 feet of the measuring point; stop work and consult with the office health and safety officer.
5. Break down work area.	**5a. CONTACT:** Traffic (surveying locations can potentially be in parking areas and sidewalks) **5b. EXERTION:** Hazard due to carrying, lifting, and bending while transporting equipment **5c. CONTACT:** Personal injury or equipment damage by striking surroundings with an extended rod or unsecured tripod leg	5a. See 2b. 5b. See 2c. 5c. Ensure rod is entirely collapsed prior to mobilization / demobilization between survey points. 5c. Ensure tripod legs are fully collapsed and secured with strap prior to mobilization / demobilization between set-ups.

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JOB SAFETY ANALYSIS	**Ctrl. No. GEN-011**	DATE: 7/10/2020	☐ NEW ☒ REVISED	PAGE 1 of 2

JSA TYPE CATEGORY **Generic**	WORK TYPE **Construction - Excavation**	WORK ACTIVITY (Description) **Excavation / Trenching**

DEVELOPMENT TEAM	POSITION / TITLE	REVIEWED BY:	POSITION / TITLE
David Kaiser	Senior Engineer	Brian Hobbs	Corporate Health & Safety Manager
Ian Holst	Senior Engineer		

REQUIRED AND / OR RECOMMENDED PERSONAL PROTECTIVE EQUIPMENT

☐ LIFE VEST
☒ HARD HAT
☒ LONG SLEEVED SHIRT
☐ LIFELINE / BODY HARNESS
☒ SAFETY GLASSES
☐ GOGGLES
☐ FACE SHIELD
☒ HEARING PROTECTION
☒ SAFETY SHOES: Steel-toe boots
☐ AIR PURIFYING RESPIRATOR
☐ SUPPLIED RESPIRATOR
☒ PPE CLOTHING: Fluorescent reflective vest or high visibility long sleeved clothing
☒ GLOVES: Leather or cut resistant
☐ OTHER

REQUIRED AND / OR RECOMMENDED EQUIPMENT

Jackhammer, Excavator, Backhoe, Hand Tools, Photoionization Detector, barrels, 42” traffic cones, snow fencing, telescoping poles, temporary chain link fence, ladders, shovels, digging bars, power tools (cut-off saw), Two-way radios, Sheeting, Trench box, Retractable lanyard, Harness

COMMITMENT TO SAFETY- All personnel onsite will actively participate in hazard recognition and mitigation throughout the day by verbalizing SPSAs

EXCLUSION ZONE (EZ): Maintain Minimum Heavy Equipment Exclusion Zone around equipment and loads while it is in motion. The HEEZ must be greater than the swing zone of any moving part of the equipment, tip zone of the equipment, fall zone of the equipment and contents, distance that debris may travel during demolition activities and/or footprint of a structure to be demolished.

Assess [1]JOB STEPS	Analyze [2]POTENTIAL HAZARDS	Act [3]CRITICAL ACTIONS
1. Pre-Clearance Protocol.	**1a. CONTACT:** Damage to underground utility. **1b. ENERGY SOURCE/CONTACT:** Property damage; Pressurized water mains may cause lacerations or broken bones. Pressurized gas mains may explode causing serious injury, or death. Underground electric may cause severe burns, shock, or death. **1c. FALL:** Slip, Trip or Fall may cause muscle strains or tears, abrasions, lacerations, or broken bones.	1a. Confirm that (if applicable) “Call Before You Dig” and local utility companies were contacted prior to trenching in order to confirm utility mark outs. Must have a case # before digging. 1b. Pre-clearing of the trenching location must be conducted to a minimum of 5 vertical feet below the ground surface (10 feet minimum for Critical Zone) using hand tools (shovel and non-metallic dig bar) prior to trenching. Supervisor should be contacted to discuss appropriate pre-clearing depth. **1b. Complete subsurface clearance checklist**. 1c. Be aware of the conditions when walking or loading equipment and working. Walk within established pathway avoiding uneven surfaces. Remove potential slip/trip/fall hazards.
2. Set up work zone.	**2a. CONTACT/CAUGHT:** Cuts/lacerations from equipment. Broken bones from contact by vehicle. **2b. FALL:** Slip, Trip or Fall may cause muscle strains or tears, abrasions, lacerations, or broken bones.	2a. Isolate work area from hazards with cones, barricades, and snow fencing, telescoping poles or temporary chain link fence. Utilize a flag person when necessary (i.e., third party traffic in area). Install traffic signs in roadways and for detours. Spotters will maintain and enforce exclusion zone. 2b. See 1c.

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Assess [1]JOB STEPS	Analyze [2]POTENTIAL HAZARDS	Act [3]CRITICAL ACTIONS
3. Trenching Activity.	**3a. CONTACT:** Serious injury including broken bones, muscle strains or tears, and possibly death due to contact with machine. **3b. FALL:** Slip, Trip or Fall may cause muscle strains or tears, abrasions, lacerations, or broken bones **3c. EXPOSURE:** Noise, Dust, Concrete- Asphalt, petroleum hydrocarbon vapors may cause damage to ears and lungs	3a. Spotter(s) required for all heavy equipment operation. No worker shall be allowed inside the exclusion zone or along the trench/excavation area while any equipment is in operation. A minimum exclusion zone greater than the length of the equipment boom must be established. Workers only allowed in exclusion zone if the operator is in "Hands Off "mode. Operator will not operate equipment until worker is out of exclusion zone. Spotters and operators will have radios for communication, when either loses sight of one another, and/or in case of emergency. 3b. Any trench/excavation deeper than 3' must have a ladder within 25' of any worker in the excavation. At least 3'(rungs) of the ladder shall be above the top of the excavation. All spoil piles shall be maintained 2' minimum from edge of excavation. 3b. Any trench/excavation deeper than 6' must have fall protection, retractable lanyard for ladder use, and 42" high guardrails along the edge of the trench/excavation. 3c. Air monitoring using a calibrated photoionization detector (PID) will be used to monitor the breathing zone of the work area. If a reading of >5ppm is recorded, the oversight personnel must temporarily cease work and instruct all Site personnel to step away from the area of elevated readings.
4. Setting Trench protections if necessary.	**4a. CAUGHT:** Injury due to contact with failed trench, may include muscle strains or tears, abrasions or lacerations, broken bones and possibly death. **4b. CONTACT/CAUGHT:** Injury due to rigging activities and entering exclusion zone during lifting and/or transport of shoring/trench box/material may include muscle strains or tears, abrasions or lacerations, broken bones and possibly death. **4c. FALL:** Possible injury due to fall into excavation may include muscle strains or tears, abrasions or lacerations, or broken bones.	4a. To prevent cave-ins and avoid caught by/between, excavations over 4' in depth, unless working in stable rock, shall have engineer approved shoring, sheeting or trench box. Top of protection shall be at least 2' above top of excavation. 4b. Use only inspected rigging with 2, 3 or 4 lift points; wear cut-resistant gloves. Rigging to be hooked up to factory installed hook up points on equipment. Control load with non-conductive tag lines with workers out of exclusion zone. Don't stand underneath suspended load; wear steel toed boots and hard hat. 4c. Shoring to be set and sides will be backfilled to avoid fall hazards before workers are allowed to enter area. Operator will be in "HANDS OFF" mode before workers enter work area to unhook rigging. An inspected ladder extending 3' above top of the shoring will be used to enter and exit the shoring. Workers will use three points of contact when using the ladder.
5. Secure/Leave Site. If backfilling, see excavation backfilling and compaction JSA for potential hazards and critical actions.	**5a. FALL:** Potential Slip, Trip or Fall - may cause muscle strains or tears, abrasions or lacerations, or broken bones.	5a. See 1c. 5a. All open excavations must be backfilled or secured prior to departure with steel plates, orange construction fence or temporary chain link fencing.

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JOB SAFETY ANALYSIS	**Ctrl. No. GEN-015**	DATE: 7/10/2020	☐NEW ☒REVISED	PAGE 1 of 2

JSA TYPE CATEGORY	WORK TYPE	WORK ACTIVITY (Description)	
GENERIC	**Site Recon**	**Mobilization/Demobilization**	
DEVELOPMENT TEAM	**POSITION / TITLE**	**REVIEWED BY:**	**POSITION / TITLE**
Rebecca Lowy	Staff Assistant Geologist	Brian Hobbs	Corporate Health & Safety Manager
Tally Sodre	OHSM		

REQUIRED AND / OR RECOMMENDED PERSONAL PROTECTIVE EQUIPMENT

☐ LIFE VEST ☒ HARD HAT ☐ LIFELINE / BODY HARNESS ☒ SAFETY GLASSES	☐ GOGGLES ☐ FACE SHIELD ☒ HEARING PROTECTION (as needed) ☒ SAFETY SHOES: Steel Toe or composite toe	☐ AIR PURIFYING RESPIRATOR ☐ SUPPLIED RESPIRATOR ☒ PPE CLOTHING: Fluorescent reflective vest of high-visibility clothing; long sleeve shirt; long pants	☒ GLOVES: Leather, nitrile, and cut resistant (as needed) ☐ OTHER

REQUIRED AND / OR RECOMMENDED EQUIPMENT

Required Equipment: Varies

COMMITMENT TO SAFETY- All personnel onsite will actively participate in hazard recognition and mitigation throughout the day by verbalizing SPSAs

EXCLUSION ZONE (EZ): Maintain Minimum Heavy Equipment Exclusion Zone around equipment and loads while it is in motion. The HEEZ must be greater than the swing zone of any moving part of the equipment, tip zone of the equipment, fall zone of the equipment and contents, distance that debris may travel during demolition activities and/or foot print of a structure to be demolished.

Assess [1]JOB STEPS	Analyze [2]POTENTIAL HAZARDS	Act [3]CRITICAL ACTIONS
1. Mobilize/demobilize and establish work area	**1a. FALL:** Slip/trips/falls from obstructions, uneven terrain, weather conditions, heavy loads, and/or poor housekeeping.	1a. Use 3 points-of-contact/ensure secure footing when entering and exiting vehicle. 1a. Inspect walking path for uneven terrain, steep hills, obstructions, and/or weather-related hazards (i.e., ice, snow, and puddles) prior to mobilizing equipment. Use established pathways. Walk on stable/secure ground. 1a. Do not climb over stored materials/equipment; walk around. Practice good housekeeping; organize and store equipment neatly in one area at its lowest potential energy. 1a. Wear boots with adequate treads. 1a. Delineate unsafe areas with 42” cones, caution tape and/or flagging.
	1b. CONTACT: Personal injury and/or property damage caused by being struck by Site traffic or equipment used in Site activities.	1b. Observe and maintain the posted speed limits. 1b. When first arriving onsite, park vehicles in designated parking space and/or out of the way locations. Use parking brake on all vehicles and tire chocks on work trucks and trailers. 1b. Check in with Site Manager/Supervisor to ensure coordination with other Site activities and to discuss any special hazards. Ensure that short-service employees (SSE) are identified. 1b. Identify potential traffic sources. 1b. Wear PPE including high visibility clothing or reflective vest. 1b. Use a spotter while moving work vehicles; plan ahead to avoid backing whenever possible. 1b. Maintain a minimum exclusion zone when vehicles are in motion (i.e. greater than swing/tip radius of equipment). When backing up truck rig with an attached trailer use a second spotter if there is tight clearance simultaneously on multiple sides of the equipment or if turning angles limit driver-to-spotter visibility. 1b. Delineate work area with 42” cones, flags, caution tape, and/or other barriers. 1b. Position “Work Area” signs at Site entrances, if possible, or at either side of work area.

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[2] A hazard is a potential danger. Break hazards into six types: Contact - victim is struck by or strikes an object; Caught - victim is caught on, caught in or caught between objects; Fall - victim falls to ground or lower level (includes slips and trips); Exertion - excessive strain or stress / ergonomics / lifting techniques; Exposure - inhalation/skin hazards; Energy Source – electricity, pressure, compression/tension.

[3] Using the first two columns as a guide, decide what actions or procedures are necessary to eliminate or minimize the risk. List the recommended safe operating procedures. Say exactly what needs to be done - such as "use two persons to lift." Avoid general statements such as, "be careful."

Assess [1]JOB STEPS	Analyze [2]POTENTIAL HAZARDS	Act [3]CRITICAL ACTIONS
		1b. Position largest vehicle to protect against oncoming traffic. 1b. Face traffic, maintain eye contact with oncoming vehicles, use a spotter, and establish a safe exit route. 1b. Observe potential overhead and ground surface features that may interfere with moving equipment. Clear the path of physical hazards prior to initiating mobilization.
	1c. CAUGHT: Personal injury from pinch points and being in line-of-fire of vehicle and/or equipment.	1c. Make sure driver has engaged parking brake and placed wheel chocks in a position to prevent movement. Be sure that vehicle is parked in front/down gradient (positioned to best block oncoming traffic) of work area. 1c. Wear leather gloves when handling any tools or equipment. Wear cut-resistant gloves (Kevlar or similar) when handling sharp objects/cutting tools/glass. 1c. Keep body parts away from line-of-fire of equipment. 1c. Always carry tools by the handles and/or designated carrier. Ensure sharp-edged tools are sheathed/secure. 1c. Remove any loose jewelry. Avoid wearing loose clothing and/or ensure loose clothing is secure. 1c. Secure all items on the equipment, tighten up any items or features that have potential to shift or break during mobilization.
	1d. OVEREXERTION: Muscle strains while lifting/carrying equipment.	1d. Use body positioning and lifting techniques that avoid muscle strain; keep back straight, lift with legs, turn with whole body, keep load close to body, and never reach with a load. 1d. Ensure that loads are balanced. Use assistance (mechanical or additional person) to carry equipment that is either unwieldy or over 50 lbs.
	1e. EXPOSURE: Personal injury from exposure to biological and environmental hazards.	1e. Inspect area to avoid contact with biological hazards (i.e. poisonous plants, stinging insects, ticks, etc.). 1e. Wear long sleeved clothes treated with Permethrin, apply insect repellant containing DEET to exposed skin, and inspect clothes and skin for ticks during and after work. 1e. Apply sunscreen (SPF 15+) if exposure to sun for 30 minutes or more is expected.
	1f. EXPOSURE: Weather related injuries.	1f. Watch for heat stress symptoms (muscle cramping, exhaustion, dizziness, nausea, rapid and shallow breathing). Take breaks in cool places and hydrate as needed. 1f. Watch for cold stress symptoms (severe shivering, slowing of body movement, weakness, stumbling or inability to walk, collapse). Take breaks in warm areas as needed. 1f. Wear clothing appropriate for weather and temperature conditions (e.g., rain jackets, snow pants, multiple layers). 1f. If lightning is observed, wait 30 minutes in a sheltered location (car is acceptable) before resuming work.
	1g. EXPOSURE: Personal injury from noise hazards.	1g. Wear hearing protection if sound levels exceed 85 dBA (if you must raise your voice for normal conversation).

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JOB SAFETY ANALYSIS	**Ctrl. No. GEN-019**	DATE: 7/10/2020	☐NEW ☒REVISED	PAGE 1 of 2

JSA TYPE CATEGORY	WORK TYPE	WORK ACTIVITY (Description)
GENERIC	**Site Recon**	**Site Walk and Inspection**

DEVELOPMENT TEAM	**POSITION / TITLE**	**REVIEWED BY:**	**POSITION / TITLE**
Sara Barrientos	Staff Geologist	Brian Hobbs	Corporate Health and Safety Manager
		Joe Duminuco	Vice President

REQUIRED AND / OR RECOMMENDED PERSONAL PROTECTIVE EQUIPMENT

☐ LIFE VEST ☒ HARD HAT ☐ LIFELINE / BODY HARNESS ☒ SAFETY GLASSES	☐ GOGGLES ☐ FACE SHIELD ☒ HEARING PROTECTION: ear plugs as necessary ☒ SAFETY SHOES: Steel or composite toed	☐ AIR PURIFYING RESPIRATOR ☐ SUPPLIED RESPIRATOR ☒ PPE CLOTHING: High-visibility vest or high-vis outerwear	☒ GLOVES: Leather/cut-resistant/chemical resistant ☒ OTHER: Tyvek and rubber boots as necessary, dust mask as necessary

REQUIRED AND / OR RECOMMENDED EQUIPMENT

Required Equipment: Site map, emergency contact list, documentation of urgent care/hospital routes and / or guide familiar with Site, operating cell phone or walkie-talkie if Site allows.

Commitment to Safety – All personnel onsite will actively participate in SPSA performance by verbalizing SPSAs throughout the day.

EXCLUSION ZONE (EZ): Maintain Minimum Heavy Equipment Exclusion Zone around equipment and loads while it is in motion. The HEEZ must be greater than the swing zone of any moving part of the equipment, tip zone of the equipment, fall zone of the equipment and contents, distance that debris may travel during demolition activities and/or foot print of a structure to be demolished.

SITE SECURITY: Prior to site inspection verify appropriate method to address Site Security concerns as it relates to potential criminal activity, homeless population, and/or isolation concerns. Work with the Project Principal and/or Project Manager to address appropriately.

Assess [1]JOB STEPS	Analyze [2]POTENTIAL HAZARDS	Act [3]CRITICAL ACTIONS
1. Check in with Site contact.	1a. **CONTACT/EXPOSURE/FALL:** Personal injury caused by lack of site specific hazards.	1a. Inquire about hazards and other activities taking place at the Site. 1a. Inform Site contact of work scope, timeline and location(s). 1a. Discuss emergency evacuation procedures and muster points with Site contact.
2. Traversing the Site	2a. **CONTACT:** Property damage and personal injury caused by obstructions/vehicles or unauthorized personnel at remote Sites.	2a. All equipment must be stowed and secured prior to moving. 2a. Maintain speed limit as posted on-site. 2a. When possible drive on established roadways. 2a. Yield to all pedestrians. 2a. Use pull-through spots or back into parking spots. 2a. Don high visibility clothing/safety vest. If working at remote Site, add orange accessories during hunting season.
	2b. **FALL:** Uneven terrain and weather conditions. Overgrown shrubs and vines. Equipment in the work zone.	2b. Inspect walking path for uneven terrain, weather-related hazards (i.e., ice, puddles, snow, etc.), and obstructions prior to mobilizing equipment. 2b. When possible, use established pathways and walk on stable, secure ground. 2b. Communicate traversing hazards with others.
	2c. **OVEREXERTION:** Muscle strain while carrying equipment.	2c. When carrying equipment to/from work area, use proper lifting techniques; keep back straight, lift with legs, keep load close to body, never reach with a load. Ensure that loads are balanced to reduce the potential for muscle strain. Use mechanical assistance or make multiple trips to carry equipment.
	2d. **EXPOSURE:** Biological hazards – ticks; bees/wasps; poison ivy; insects; (Ticks are most active any time the temperature is above freezing, typically from March to November.)	2d. Inspect area to avoid contact with biological hazards. 2d. Ticks: • Treat outer clothing including pants, shirts, socks, boots and hats the evening before with Permethrin (allowing at least two hours before use). • Apply DEET to exposed skin before travelling to the Site and reapply after two hours. • Check for ticks during and after work. 2d. Bees: • Use bee spray as appropriate to deter/eliminate bees. • Protect exposed skin with insect repellent.

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	2e. EXPOSURE: Heat Stress & Cold Stress. Personal injury from working in inclement weather conditions.	2d. Poison Ivy: • Identify areas of poison ivy and spray with weed killer. Don Tyvek and rubber boots while traversing poison ivy areas. • If skin contacts poison ivy, wash skin thoroughly with soap and water. 2e. Wear sunscreen with SPF 15 or greater on exposed skin whenever 30 minutes or more of sun exposure is expected. 2e. Watch for heat stress symptoms (muscle cramping, exhaustion, dizziness, rapid and shallow breathing). Take breaks as needed. 2e. Watch for cold stress symptoms (severe shivering, slowing of body movement, weakness, stumbling or inability to walk, collapse). Take breaks as needed. 2e. Wear appropriate rain gear as needed. 2e. Take frequent breaks if tired, wet, or cold/hot. Drink water. 2e. If lightning is observed, wait 30 minutes after last thunder boom/lightning bolt in a sheltered location (car acceptable) before starting work again.
3. Walking near heavy equipment and machinery.	**3a. CONTACT:** Personal injury from Site and roadway traffic. Personal injury from flying debris **3b. OVEREXERTION:** Personal injury from lifting/moving/rotating equipment. **3c. EXPOSURE:** Hearing damage from noise generating equipment/processes. Inhalation/exposure to hazardous vapors and or dust. **3d. EXPOSURE:** Working in a remote area.	3a. See 2a. 3a. Maintain an exclusion zone of at least 10'-25' feet from all engaged equipment. 3a. Keep body parts out of the line of fire of pinch points. 3a. Wear appropriate PPE always. 3b. See 2c. 3c. Wear hearing protection if >85 dBA. (i.e. noise levels which require you to raise your voice to communicate) 3c. Always wear leather gloves when handling any tools or equipment. 3c. Always wear appropriate PPE based off chemicals present. 3d. Use the "buddy system" whenever possible. If working alone, contact PM upon arrival/departure, as well as during work activities prior to commencing work if applicable. 3d. Always carry a communication (i.e., cell phone, walkie-talkie) or directional (i.e., map, compass, etc.) device when traversing remote areas.
4. Working in adverse weather conditions.	**4a. EXPOSURE:** Heat Stress & Cold Stress. Personal injury from working in inclement weather conditions.	4a. Watch for heat stress symptoms (muscle cramping, exhaustion, dizziness, rapid and shallow breathing). Take breaks as needed. 4a. Watch for cold stress symptoms (severe shivering, slowing of body movement, weakness, stumbling or inability to walk, collapse). Take breaks as needed. 4a. Wear appropriate rain gear as needed. 4a. Take frequent breaks if tired, wet, or cold/hot. Drink water. 4a. If lightning is observed, wait 30 minutes after last thunder boom/lightning bolt in a sheltered location (car acceptable) before starting work again.
5. Departing Site.	**5a. EXPOSURE:** Exposure to unnecessary hazards should personnel believe Roux is on-Site during an emergency and conduct a search.	5a. Sign out or notify Site contact and Roux Project Manager of your departure.

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JOB SAFETYANALYSIS **Ctrl. No. GEN-020**	DATE: 7/10/2020	☐NEW ☒REVISED	PAGE 1 of 2

JSA TYPE CATEGORY: **GENERIC**	WORK TYPE: **Gauging & Sampling**	WORK ACTIVITY (Description): **Soil Sampling**

DEVELOPMENT TEAM	**POSITION / TITLE**	**REVIEWED BY:**	**POSITION / TITLE**
MaryBeth Lyons	Project Scientist	Brian Hobbs	Corporate Health and Safety Manager

REQUIRED AND / OR RECOMMENDED PERSONAL PROTECTIVE EQUIPMENT

☐ LIFE VEST
☒ HARD HAT
☐ LIFELINE / BODY HARNESS
☒ SAFETY GLASSES
☒ FLAME RESISTANT CLOTHING (as needed)

☐ GOGGLES
☐ FACE SHIELD:
☒ HEARING PROTECTION: (as needed)
☒ SAFETY SHOES: Composite-toe or steel toe boots

☐ AIR PURIFYING RESPIRATOR
☐ SUPPLIED RESPIRATOR
☒ PPE CLOTHING: Fluorescent reflective vest or high visibility clothing

☒ GLOVES: Leather, Nitrile and cut resistant
☒ OTHER: Insect repellant, sunscreen (as needed)

REQUIRED AND / OR RECOMMENDED EQUIPMENT

Recommended Equipment: 42” traffic cones, caution tape, trowel

COMMITMENT TO SAFETY- All personnel onsite will actively participate in hazard recognition and mitigation throughout the day by verbalizing SPSAs.

EXCLUSION ZONE (EZ): Maintain Minimum Heavy Equipment Exclusion Zone around equipment and loads while it is in motion. The HEEZ must be greater than the swing zone of any moving part of the equipment, tip zone of the equipment, fall zone of the equipment and contents, distance that debris may travel during demolition activities and/or foot print of a structure to be demolished.

Assess [1]JOB STEPS	Analyze [2]POTENTIAL HAZARDS	Act [3]CRITICAL ACTIONS
1. Secure location	**1a. CONTACT:** Personnel and vehicular traffic may enter the work area.	1a. If in an area with foot or vehicle traffic, delineate the work area with 42” traffic cones and/or caution tape to prevent exposure to traffic and inform others of work activity. 1a. Wear reflective vest and/or high visibility clothing. 1a. Face the direction of any vehicular traffic. Position vehicle to protect worker from traffic. 1a. Communicate work activity with adjacent work areas.
	1b. FALL: Tripping/falling due to uneven terrain or entry/exit from excavations.	1b. Inspect pathways and work area for uneven terrain, weather-related hazards (i.e., ice, puddles, snow, etc.), and obstructions. 1b. Use established pathways and walk on stable, secure ground. 1b. Stage equipment and tools in a convenient, stable, and orderly manner. Store equipment at lowest potential energy. 1b. Roux employees should stay 5 feet from in-progress excavations and trenches. Should entry to an excavation be required (when stabilization is complete), ladders must be employed for steep embankments, excavations, pits, and trenches.
	1c. EXPOSURE: Exposure to sun and excessive heat, possibly causing sunburn, heat exhaustion or heat stroke. Exposure to cold temperatures possibly causing cold stress. Skin burn as a result of fire, if applicable. Exposure to explosive vapors due to tank farm operations. Exposure to airborne dust due to high wind speeds. Biological hazards - ticks, bees/wasps, poison ivy, thorns, insects, etc.	1c. Wear sunscreen with an SPF 15 or greater whenever 30 minutes or more of exposure is expected. 1c. Use a tent to shade the work area from direct sunlight particularly when warm temperatures are expected. 1c. Be aware of the location of all Site personnel. 1c. Watch for heat stress symptoms (muscle cramping, exhaustion, dizziness, rapid and shallow breathing). 1c. Watch for cold stress symptoms (severe shivering, slowing of body movement, weakness, stumbling or inability to walk, collapse). 1c. Take breaks for rest and water as necessary. Move to an area that is well shaded or a climate controlled area (i.e., car, site trailer, etc.). 1c. No open flames/heat sources. 1c. Flame retardant clothing must be worn when specified by Site policy. 1c. Cell phones should be disabled when specified by Site policy. 1c. Pre-treat field clothing with Permethrin prior to site visit to kill ticks and insects. 1c. Wear long sleeved shirts and tuck in (or tape) pant legs into socks or boots to prevent ticks from reaching skin. 1c. Spray insect repellant containing DEET on exposed skin when working in overgrown areas of the Site. 1c. Inspect area to avoid contact with biological hazards. 1c. Wear cut-resistant gloves when handling branches, shrubs, etc. that may lie within the walking path. 1c. Wear spoggles if the average wind speeds are above 15 mph. 1c. Personnel shall examine themselves and co-worker’s outer clothing for ticks periodically when onsite. 1c. If skin comes in contact with poison ivy, wash skin thoroughly with soap and water. If rash persists after washing, immediately notify your supervisor, the OM and OHSM for possible consultation with a physician at an approved Occupational Health Clinic.

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Assess [1]JOB STEPS	Analyze [2]POTENTIAL HAZARDS	Act [3]CRITICAL ACTIONS
2. Collect Soil Sample	**2a.** **CONTACT:** Personal injury from pinch points, cuts, and abrasions from sampling equipment tools, and material within soil sample. Personal injury from contact with moving equipment while sampling. Personal injury from contact with glass sample jars.	2a. Wear cut-resistant (i.e., Kevlar) gloves under chemical-resistant (nitrile) disposable gloves when handling soil samples and sampling jars. 2a. Where possible, use trowel or equivalent tool to avoid contact with soil. 2a. If sampling from bucket of heavy equipment, ensure all equipment is off and operator utilizes the “show me your hands” policy. 2a. See 1a.
	2b. **EXPOSURE:** Exposure to contamination (impacted soil) and/or lab preservatives.	2b. Wear chemical-resistant (nitrile) disposable gloves over cut resistant gloves to protect hands when handling samples; use containment material or plastic sheeting to protect surrounding areas. 2b. Wear safety glasses to protect eyes from dust or air-borne contaminants that may results from disturbing the soil. 2b. Where possible, remain upgradient from sample location if collecting soil sample from stockpile, drill rig, etc. to avoid breathing contaminant vapors, if they are present. 2b. When collecting soil sample from hand auger, put large zip lock bag over entire auger to prevent spillage of soil on to the ground. 2b. Open sample jars slowly and fill carefully to avoid contact with preservatives.
	2c. **EXERTION:** Exertion due to repetitive motion and ergonomics.	2c. Utilize a table or raised surface for soil sampling if multiple soil samples are going to be taken to minimize repetitive bending motion.
3. Decontaminate equipment	**3a.** **EXPOSURE/CONTACT:** Contamination (e.g., Separate Phase Hydrocarbons (SPH), contaminated vapors and/or soil).	3a. Wear chemical-resistant (nitrile) disposable gloves and safety glasses. 3a. Use an absorbent pad to clean spills. 3a. Properly dispose of used materials/PPE in provided drums in designated drum storage area. 3a. Remain upwind of sample and avoid breathing contaminant vapors, if they are present.
	3b. **EXPOSURE:** Chemicals in cleaning solution including ammonia.	3b. Wear chemical-resistant (nitrile) disposable gloves and safety glasses. 3b. Work on the upwind side of decontamination area. 3b. Use an absorbent pad to clean spills. 3b. Properly dispose of used materials/PPE in provided drums in designated drum storage area. Ensure that all drums are properly labeled and secured.

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JOB SAFETY ANALYSIS	**Ctrl. No. GEN-023**	DATE: 7/10/2020	☐ NEW ☒ REVISED	PAGE 1 of 2

JSA TYPE CATEGORY **Generic**	WORK TYPE **Construction**	WORK ACTIVITY (Description) **Spotting Heavy Machinery**

DEVELOPMENT TEAM	POSITION / TITLE	REVIEWED BY:	POSITION / TITLE
Levi Curnutte	Project Scientist	Brian Hobbs	Corporate Health & Safety Manager

REQUIRED AND / OR RECOMMENDED PERSONAL PROTECTIVE EQUIPMENT

☐ LIFE VEST
☒ HARD HAT
☒ LONG SLEEVED SHIRT
☐ LIFELINE / BODY HARNESS
☒ SAFETY GLASSES

☐ GOGGLES
☐ FACE SHIELD
☐ HEARING PROTECTION
☒ SAFETY SHOES: Steel-/Composite-toe boots/shoes

☐ Particulate Respirator
☐ SUPPLIED RESPIRATOR
☒ PPE CLOTHING: Fluorescent reflective clothing

☒ GLOVES: Cut resistant / leather
☐ OTHER:

REQUIRED AND / OR RECOMMENDED EQUIPMENT

Heavy Machinery (i.e. excavator, payloader, truck, forklift, etc.)

COMMITMENT TO SAFETY- All personnel onsite will actively participate in hazard recognition and mitigation throughout the day by verbalizing SPSAs

EXCLUSION ZONE (EZ): Maintain Minimum Heavy Equipment Exclusion Zone around equipment and loads while it is in motion. The HEEZ must be greater than the swing zone of any moving part of the equipment, tip zone of the equipment, fall zone of the equipment and contents, distance that debris may travel during demolition activities and/or foot print of a structure to be demolished.

Assess [1]JOB STEPS	Analyze [2]POTENTIAL HAZARDS	Act [3]CRITICAL ACTIONS
1. Prepare for machine activity.	**1a. CONTACT:** Obstructions in the work area may create contact hazards from machinery. **1b. Fall :** Slip/Trip/Fall	1a. Cordon off the work area with safety barrels/cones and a rigid barrier (snow fence, traffic bar, etc.). Communicate that only necessary personnel should be in the work area. Spotter and equipment operator shall enforce the **EZ.** Operator will not operate but shall remain in the hands-off mode while personnel are within the exclusion zone. 1b. Ensure that work area is flat, level and clear of any obstructions or debris before setting up work zone.
2. Spotting.	**2a. CONTACT:** Machine or load contact with personnel, property, or machinery.	2a. Discuss the specifics of the work with the operator and be clear about any hand signals that will be used. Clearly discuss the limits of the assigned work area and the machine's Exclusion Zone. Maintain Exclusion Zone. The Exclusion Zone shall be delineated by using 42-inch traffic cones/barrels and a fixed rigid barrier. 2a. The Minimum Heavy Equipment Exclusion zone is greater than the swing/tip radius of equipment. 2a. Both the spotter and equipment operators shall have 2-way radios/cellular devices on their persons to ensure audible communication in the event any changes or new hazards may arise. 2a. All workers should stay outside of the Exclusion Zone of all equipment unless operator is stopped and in "Hands Off" mode. **(This includes the spotter unless an exception has been established in the Site-specific JSA).** If the Exclusion Zone must be reduced due to work area restrictions then the spotter and operator shall enforce the reduced Exclusion Zone. 2a. Spotters must make eye contact with the machine operator or all movement ceases until visual contact can be reestablished. 2a. Spotter shall keep an eye out for any issues with the machine the operator may not see and communicate with other work crews and spotters on behalf of the operator. 2a. If the spotter needs to take a break, he must find a replacement before leaving or have the machine stop operations. **No heavy equipment shall operate without a spotter under any circumstances.** 2a. Wear fluorescent clothing/safety vest.

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Assess [1]JOB STEPS	Analyze [2]POTENTIAL HAZARDS	Act [3]CRITICAL ACTIONS
	2b. FALL: Slip/Trip/Fall	2b. Look where walking to identify and avoid slip/trip/fall hazards. Avoid icy and/or wet surfaces. Remove obstacles if possible. 2b. Use designated walkways during spotting whenever possible.
	2c. CAUGHT: Caught between machinery and nearby objects.	2c. **Maintain Exclusion Zone.** Do not stand between large, loose or fixed objects or structures and the machinery while it is in motion. Keep in sight of operator at all times while being aware of surrounding structures.
	2d. EXPOSURE: Inhalation of exhaust from machinery.	2d. The spotter will position him/herself upwind of the working machinery, when possible. Spotter will also inform others working within the vicinity of the EZ of proper positioning, if applicable.

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JOB SAFETY ANALYSIS **Ctrl. No. GEN-025**

DATE: 7/10/2020

☐ NEW
☒ REVISED

PAGE 1 of 1

JSA TYPE CATEGORY	WORK TYPE	WORK ACTIVITY (Description)
Generic	**General**	**Trucking**

DEVELOPMENT TEAM	POSITION / TITLE	REVIEWED BY:	POSITION / TITLE
Lauren Dolginko	Project Geologist	Brian Hobbs	Corporate Health & Safety Manager

REQUIRED AND / OR RECOMMENDED PERSONAL PROTECTIVE EQUIPMENT

☐ LIFE VEST
☒ HARD HAT
☐ LONG SLEEVED SHIRT
☐ LIFELINE / BODY HARNESS
☒ SAFETY GLASSES

☐ GOGGLES
☐ FACE SHIELD
☐ HEARING PROTECTION
☒ SAFETY SHOES: Steel-toe boots

☐ AIR PURIFYING RESPIRATOR
☐ SUPPLIED RESPIRATOR
☒ PPE CLOTHING: Fluorescent reflective vest or high visibility long sleeved clothing

☒ GLOVES: Leather or cut resistant
☐ OTHER

REQUIRED AND / OR RECOMMENDED EQUIPMENT

Heavy equipment (i.e. trucks)

COMMITMENT TO SAFETY- All personnel onsite will actively participate in Hazard recognition and mitigation throughout the day by verbalizing SPSAs.

EXCLUSION ZONE (EZ): Maintain Minimum Heavy Equipment Exclusion Zone around equipment and loads while it is in motion. The HEEZ must be greater than the swing zone of any moving part of the equipment, tip zone of the equipment, fall zone of the equipment and contents, distance that debris may travel during demolition activities and/or foot print of a structure to be demolished.

Assess **¹JOB STEPS**	**Analyze** **²POTENTIAL HAZARDS**	**Act** **³CRITICAL ACTIONS**
1. Set up work zone.	**1a. CONTACT:** Personal injury/property damage caused by obstruction/vehicle.	1a. Establish work zone for manifesting/paperwork by communicating with workers before task begins. Maintain a minimum **Exclusion Zone (EZ)** around all heavy equipment.
2. Loading of truck.	**2a. CONTACT:** Rolling Vehicle could cause bodily harm. **2b. CONTACT:** Machine or load may crush personnel, property or machinery. **2c. CONTACT:** Load shifting during travel.	2a. All commercial vehicles without an operator must have their engines off and wheels chocked. Truck and loading area should be on level ground. 2b. All machines (Excavator, Lull, Backhoe) must have a spotter. Spotter must communicate contact hazards such as other personnel in the work area, objects in the machine's blind spot, and overhead lines to the operator. Spotter and operator should have 2-way radios or established hand signals to communicate when needed. 2b. Loads must not be swung over other vehicles or personnel. 2b. Maintain **EZ** around all equipment. 2c. Secure all loads prior to moving the truck with chains or straps or cribbing. 2c. Any loose soil or debris should be cleaned off truck sides prior to truck mobilization. 2c. All truck beds must be secured prior to traveling.
3. Dumping loads.	**3a. CONTACT:** Truck may flip sideways or backwards.	3a. All workers must stay behind and away from the side of trucks that are dumping to avoid contact with the truck potentially tipping sideways or backwards. EZ must be maintained equal to the height of bed while lifted.
4. Exchanging paperwork with truck driver.	**4a. CONTACT/CAUGHT:** Broken bones from contact by vehicle. **4b. FALL:** Slip, Trip or Fall may cause muscle strains or tears, abrasions or lacerations, or broken bones.	4a. Truck driver should exit truck with proper PPE and enter the established work zone to complete paperwork. If Site-specific safety prohibits drivers from exiting the truck, wait until truck is finished loading, with engine turned off, before approaching truck. 4a. Always establish eye contact with driver prior to approaching truck. 4a. Confirm sides of truck have been cleaned/brushed off prior to approaching truck. 4b. Survey walking route to identify slip/trip/fall hazards. Avoid icy/wet surfaces. Remove slip/trip/fall hazards if present. 4b. Communicate with driver and spotter prior to approaching truck. Maintain **EZ** around all heavy equipment.

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[1] Each Job or Operation consists of a set of tasks / steps. Be sure to list all the steps needed to perform job.

[2] A hazard is a potential danger. Break hazards into six types: Contact - victim is struck by or strikes an object; Caught - victim is caught on, caught in or caught between objects; Fall - victim falls to ground or lower level (includes slips and trips); Exertion - excessive strain or stress / ergonomics / lifting techniques; Exposure - inhalation/skin hazards, energy source; Energy Source – electricity, pressure, compression/tension.

[3] Using the first two columns as a guide, decide what actions or procedures are necessary to eliminate or minimize the risk. List the recommended safe operating procedures. Say exactly what needs to be done - such as "use two persons to lift". Avoid general statements such as, "be careful".

BIOLOGICAL HAZARD AWARENESS MANAGEMENT PROGRAM

CORPORATE HEALTH AND SAFETY MANAGER	**:**	**Brian Hobbs, CIH, CSP**
EFFECTIVE DATE	**:**	**01/2019**
REVISION NUMBER	**:**	**3**

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APPENDICES

1. PURPOSE AND APPLICABILITY

Roux Associates, Inc. and its affiliated companies, Roux Environmental Engineering and Geology, D.P.C., and Remedial Engineering (collectively, “Roux”) has established a Biological Hazard Awareness Management Program to properly identify and minimize associated risks, utilizing best management practices to provide the appropriate guidance for the protection of all employees from exposure to biological hazards during work activities. This Program focuses on the management of more common biological hazards encountered by Roux staff such as vector borne diseases, venomous wildlife/insects, poisonous plants but also identifies other dangerous wildlife which may be encountered by Roux in various work environments (i.e. wild dogs, bears, and alligators).

The program is applicable to Roux employees and their subcontractors who will be performing activities and/or work in areas which could result in potential contact with biological hazards. The potential contact with biological hazards varies based on geographic location and climatic conditions. Therefore, it is imperative that during the pre-planning of work activities all potential biological hazards and risks are identified, and proper mitigation programs are established for each within the project specific Health and Safety Plan (HASP).

Biological hazards are commonly encountered by Roux employees when conducting routine work activates. The most common and widely expected forms of exposure have historically been associated with TICKS, SPIDERS AND POISIONOUS PLANTS. This management program describes best management practices for these risk scenarios as well as other potential hazards encountered in our work environment. This program is intended to provide general awareness and guidance for management of these other biological hazards which you may encountered including reptiles and mammals. The site-specific HASP should incorporate procedures and project specific hazards mitigation procedures in a greater detail than provide in this Management Program.

Questions pertaining to this program can be addressed by your Office Health & Safety Manager (OHSM) or the Corporate Health & Safety Manager (CHSM). Key definitions pertaining to this program are provided in Appendix A.

2. PROGRAM PROCEDURES

The following sub-sections outline commonly found biological hazards potentially present during typical field activities. Such biological hazards include ticks, mosquitos, venomous spiders, venomous snake’s poisonous plants, dogs, alligators, bears and mountain lions. For each hazard a detailed breakdown of identification, project pre-planning and avoidance, proper use of PPE and responses to suspected or known biological exposures are provided. It is understood that there are and will be other potential biological hazards present in the work environment which are not included within this Program. The program is intended to provide examples of biological risk and not intended to cover all potential risks.

2.1 Tick-Borne Disease

This section outlines management practices to reduce potential exposure situations along with the use of personal protective equipment (PPE), insect repellents usage, procedures for inspections of personnel, recommendations for personal showering and the washing and drying of work clothing that has been potentially exposed to a tick environment and the required response to a known or suspected tick bite.

The following diseases are of concern as it relates to ticks and include: Anaplasmosis, Babesiosis, Ehrlichiosis, Lyme Disease, Rocky Mountain Spotted Fever, Southern Tick-Associated Rash Illness, Tick-Borne Relapsing Fever, Tularemia, Colorado tick fever, Alpha-Gal Allergy and Powassan virus.

2.1.1 Project Pre-Planning and Tick Avoidance

Avoidance is the preferred management approach with respect to tick(s). Pre-planning at the beginning of a project is the first step in tick avoidance. Where possible, plan the work to avoid tick-infested areas as described below:

- Avoid brushy, overgrown grassy and wooded habitats, particularly in spring and through fall when ticks are most active.
- Remove leaves, tall grass and brush from areas surrounding work areas (to include residential sites), thereby potentially reducing tick, deer and rodent habitat.
- Consider having a licensed applicator apply tick-toxic chemicals (e.g., Damminix, Dursban, Sevin, etc.) to surrounding work or residential areas to suppress the tick population.
- Consider performing work during dormant seasons or not during active seasons (spring through fall) unless it is not practical or rescheduling may introduce other hazards.

2.1.2 Use of Personal Protective Equipment (PPE)

Where avoidance of tick habitat or clearing of the area is not possible, employees need to wear appropriate PPE and take measures to avoid tick bites. There are two defined PPE approaches which are discussed below, that when properly implemented will provide the required protection from tick bites.

2.1.3 Preferred PPE Method

The preferred approach is the use of permethrin treated clothing and an insect repellent containing n,n-diethyl m-toluamide (DEET) on exposed skin. With the use of permethrin there are critical and time sensitive steps which are required in advance of its proper use. Additional guidelines on permethrin are provided in Appendix B and should be reviewed at least 2 days prior to the scheduled work. The use of permethrin and DEET are further discussed below:

- Using permethrin on outer clothing (including a hat) and shoes to kill ticks on contact as per manufacturer's instructions (requires pre-treatment of clothing 24 hours in advance of the scheduled work).
- Spraying the insect repellents containing DEET on exposed skin just prior to initiation of the work, in accordance with United States Environmental Protection Agency (EPA) guidelines and supplemental information which is provided in Appendix C. DEET should be used on exposed skin only as it may melt or dissolve synthetic fabrics such as polyester or rayon.
- Be sure to tuck your pant legs into your socks and your shirt into your pants.

Should you have any questions or concerns regarding the use of permethrin or DEET please contact the CHSM/OHSM. If you require assistance with obtaining approved repellents contact your OHSM.

2.1.3.1 Alternative PPE Method

An alternative approach to the use of permethrin would be the use of other PPE in conjunction with the application of DEET as discussed above in section 2.1.3 and as discussed below:

- Wearing non-coated Tyvek coveralls over light-colored long-sleeved shirts and pants. Tape ankle openings of coveralls and wrist if wearing gloves.

- Wear a light colored long sleeved shirt and pants and tuck your pant legs into your socks and your shirt into your pants. Socks should be a tight weave fabric to prevent exposure through the material.
- Spraying the insect repellents containing DEET just prior to initiation of the work on exposed skin, in accordance with manufacturer's instructions.

2.1.3.2 Proper Donning and Removal of PPE

The donning of the PPE is to occur prior to entering a potentially tick-infested area. This usually means that the PPE needs to be in place and properly worn before stepping off a paved or concrete area onto a grassy or wooded area.

The PPE needs to remain on with the tucking or taping of pant legs, all closures fastened, etc., until leaving the potentially tick-infested area. Again, this usually means upon return to the previously paved or concrete area. Upon leaving the area, remove the PPE appropriately and bag it (plastic bag) to prevent ticks from traveling and subsequently attaching themselves to your skin.

Workers are to inspect themselves and co-workers frequently during the work and again after exiting the work area.

It is also important to do another thorough examination upon arrival home prior to and during showering to further check for ticks. Areas of the body would include under arms, in/around ears, inside belly button, back of knees, around ankles, in and around your hair, between legs and around your waist. Also, it is recommended that any work clothes be immediately washed and dried at high temperatures.

2.1.4 Responding to Known or Suspected Tick Bites

If an embedded tick is discovered it should be promptly removed with tweezers. Please follow the following steps:

- Grasp the tick by the head or mouthparts where they enter the skin, utilizing a pair of pointed precision tweezers (provided in the on-site first aid kit). Do NOT grasp the tick by the body.
- Pull firmly and in a steady motion directly outward. Don't twist or jerk the tick as this can cause the mouth parts to break off and remain in the skin. If this occurs, remove the mouth-parts with tweezers. If you are unable to remove the mouth easily with clean tweezers leave alone and let skin heal.
- Do NOT apply petroleum jelly, a hot match, alcohol, or any other irritant to the tick to get it to back out of skin.
- Clean the bite area and your hands with antiseptic.

Preserve the tick for analysis (i.e., by placing in a zip lock bag, envelope or jar). Provide the tick to the OHSM; further testing may be required. If testing is warranted based on the circumstances the tick will be sent to an accredited laboratory (e.g. EMSL Analytical, Inc.) to be analyzed to determine if it contains the bacteria capable of causing Lyme disease.

The discovery of a tick embedded in the skin where the tick contact occurred at work will require adherence to the Incident Investigation and Reporting Program with all internal contacts being made through the standard notification protocol of the H&S Injury/Illness Notification Flowchart.

If you suspect you have been bitten by a tick while on the job and exhibit the following symptoms; circular rash, aches/pains and/or fever/chills contact your OHSM for additional guidance.

2.2 Mosquito-Borne Diseases

Mosquito-borne diseases are spread through the bite of an infected mosquito, such diseases include Zika virus, West Nile Virus, Chikungunya virus, dengue and malaria. In most cases individuals exposed to such diseases will only exhibit mild, short term illness however there is the possibility for severe or long-term illness which can be fatal.

2.2.1 Project Pre-Planning and Mosquito Avoidance

Avoidance is the preferred management approach with respect to mosquitos. Pre-planning at the beginning of a project is the first step. Since mosquitos breed in standing water the preferred method is to avoid such areas with standing water however if unavoidable and possible the following should be done as described below:

- Remove, turn over and/or cover equipment which may harbor standing water.
- Remove tires, buckets, bottles, and barrels that collect water.
- Place drain holes in containers that collect water and cannot be discarded.
- Consider having a licensed applicator apply tick-toxic chemicals (e.g., Damminix, Dursban, Sevin, etc.) to surrounding work or residential areas to suppress the mosquito population.
- Consider performing work during dormant seasons or not during active times (i.e. avoid dusk or dawn) unless it is not practical or rescheduling may introduce other hazards.

2.2.2 Use of Personal Protective Equipment (PPE)

Where avoidance of mosquito habitat or clearing of the area of standing water is not possible, employees must wear appropriate PPE to further mitigate potential mosquito bites. Please reference sections 2.1.3, 2.1.4 and 2.1.5 as PPE requirements outlined in these sections will provide the level of protection necessary to prevent potential mosquito bites.

2.2.3 Responding to Known or Suspected Mosquito Bites

The discovery of a mosquito bite on the skin where it likely occurred at work will require adherence to the Incident Investigation and Reporting Program with all internal contacts being made through the standard notification protocol of the H&S Injury/Illness Notification Flowchart.

If you suspect you have been bitten by a mosquito while on the job and exhibit the following symptoms; rash, aches/pains and/or fever/chills contact your OHSM for additional guidance.

2.3 Venomous Spiders

Venomous spiders can be found in various regions of North America, of specific concern are black widow and brown recluse spiders. Black widows can be found throughout North America, however are common in the southern and western areas of the United States. While the brown recluse is more commonly found in the midwestern and southern states. Both pose significant hazards due to their bites potency. Black widow spider venom is neurotoxic, which results in pain at the bite area and then spreads to the chest, abdomen, and potentially the entire body. The brown recluse produces severe lesions as the result of skin necrosis. These spiders can be found in and around wells, brush, outdoor toilets and areas where debris has accumulated. Spiders are typically by nature not aggressive however if trapped or unintentionally contacted they will bite.

- Black widow spiders can be identified by their red/orange/yellow hourglass marking on the underside of their abdomen, which can also present as dot. The body of an adult black widow female is about ½ inch long.
- Brown recluse spiders can be identified as golden brown with a dark violin/fiddle shape located on the top of the leg attachment region of the neck pointing backward toward the abdomen and are approximately ¼ to ¾ inches long.

2.3.1 Project Pre-Planning and Spider Avoidance

Avoidance is the preferred management approach with respect to potential spider contact. Since spiders are commonly found outdoors underneath stones, hollow stumps, rodent burrows, sheds, wells, within undisturbed cluttered areas (even indoors) care needs to be made to encountering areas that cannot be easily seen. If workers are unable to completely avoid potential contact then the following should be done to limit potential exposure:

- Remove well casings with tools, do not place hands in hidden areas that could harbor spider webs.
- Minimize empty spaces between stacked materials in the field.
- Remove leaves, tall grass and brush from areas surrounding work areas (to include residential sites), thereby potentially reducing spider habitat.
- Store apparel and outdoor equipment in tightly closed plastic bags.

2.3.2 Use of Personal Protective Equipment (PPE)

Where avoidance of spider habitats is not possible, employees must wear appropriate PPE to further prevent potential spider bites. Please reference sections 2.1.3, 2.1.4 and 2.1.5 as PPE requirements outlined in these sections will provide the level of protection necessary to minimize potential spider bites. Attention must be made to ensuring proper gloves are worn during intrusive work activities which would place hands in areas that cannot be visually inspected prior to hand placement (i.e. accessing wells).

2.3.3 Responding to Known or Suspected Spider Bites

The discovery of a spider bite on the skin where it likely occurred at work will require adherence to the Incident Investigation and Reporting Program with all internal contacts being made through the standard notification protocol of the H&S Injury/Illness Notification Flowchart. Immediate notification to professional emergency services is essential to obtaining prompt medical care.

If you suspect you have been bitten by a spider while on the job and exhibit the following symptoms listed below contact must be made immediately as urgent professional medical care may be required.

- Black widow bites can be extremely painful or go unnoticed, displaying one/two bite marks with localized swelling, pain eventually progresses to the abdomen and back.
- Brown recluse bites can vary in severity from no pain to very severe, the bite will progress to become reddened within several hours resulting in a systemic reaction with 24-36 hours. Symptoms include restlessness, fever, chills nausea, weakness and joint pain. Tissue at the site of the bite will die due to necrosis over time.

2.3.3.1 First Aid

In addition to contacting the necessary personnel the following first aid measures should be carried out if bitten by a spider.

- Identify the type of spider if able to do so safely preserve the spider (i.e., by placing in a zip lock bag, envelope or jar) as this will be able to be used during identification as this will assist in medical treatment.
- Wash the area immediately with soap and water.
- Apply a cloth dampened with cold water or fill bag with ice and apply to the bite area to reduce swelling.
- Elevate the bite area if possible.
- Do NOT attempt to remove venom from the bite area.

2.4 Venomous Snakes

Venomous snakes can be found throughout the United States and include coral snakes, copperheads, cottonmouths/water moccasins and rattlesnakes. Below please find a table indicating the type of snake, visual description, geographic region and image to assist with identification of snakes in the field.

Type of Snake	Visual Description	U.S. Geographic Region	Visual
Coral Snake	Red, black and yellow. Red bands touch yellow bands. Adults 24 inches long.	Wooded, sandy, or marshy areas of the Southern U.S.	
Copperheads	Vary in color from reddish to golden tan. Colored bands are typically hourglass-shaped. Generally, 18-36 inches long.	Forests, rocky areas, swamps, or near sources of water in eastern states, extending west to Texas	

Type of Snake	Visual Description	U.S. Geographic Region	Visual
Cottonmouths/ Water Moccasins	Adult skin is dark tan, brown, or nearly dark black, with vague black or dark brown crossbands. Juveniles have a bold crossbanded pattern of brown or orange with a yellow tail. Adults 26-35 inches long.	Wetland areas, rivers, lakes, etc., in southeastern states	
Rattle Snake	There are many species, distinct identifier is use of their rattle/tail as a warning when they feel threatened. Size dependent on species can get up to 8 feet long.	Mountains, prairies, deserts, and beaches across U.S.	

2.4.1 Project Pre-Planning and Snake Avoidance

Avoidance is the preferred management approach with respect to snakes. Since snakes are commonly found outdoors underneath stones, hollow stumps, along rivers, swamps, marches, burrows, wells, within undisturbed cluttered areas (even indoors) care needs to be taken when encountering areas that cannot be easily seen. Additional guidance is listed below to assist with mitigating potential contact with snakes:

- Remove well casings with tools, do not place hands in hidden areas that could harbor snakes.
- Minimize empty spaces between stacked materials in the field.
- Remove leaves, tall grass and brush from areas surrounding work areas (to include residential sites), thereby potentially reducing snake habitat.
- Store apparel and outdoor equipment in tightly closed plastic bags.
- Never attempt to handle a snake directly.
- Avoid climbing on rocks or piles of wood and stay away from tall grass and piles of leaves where a snake may be hiding.

2.4.2 Use of Personal Protective Equipment (PPE)

Where avoidance of snake habitat is not possible, employees must wear appropriate PPE and take measures to prevent potential snake bites. Please reference section 2.1.4 as PPE requirements (excluding insecticides) to minimize potential snake bites. Heavy duty boots and pants must be worn as this area of the body will be more prone to potential snake bite. In addition, proper tools and gloves should be used during intrusive work activities which could place hands in areas that cannot be visually inspected prior to hand placement (i.e. accessing wells).

2.4.3 Responding to Known or Suspected Snake Bites

A snake bite will require adherence to the Incident Investigation and Reporting Program with all internal contacts being made through the standard notification protocol of the H&S Injury/Illness Notification Flowchart. Immediate notification to professional emergency services is essential to obtaining prompt medical care. Signs and symptoms of a snake bite can vary considerably based on the type of snake, therefore a general list is provided below:

- A pair of puncture marks at the wound which are swollen and red.
- Severe pain at the site of the bite.
- Nausea and vomiting.
- Labored breathing (potential for breathing to stop).
- Disturbed vision.
- Increase in salivation and sweating.
- Numbness or tingling around the face and/or limbs.

2.4.3.1 First Aid

In addition to contacting the necessary personnel the following first aid measures should be carried out if bitten by a snake.

- Remain still and calm, additional movement and increased heart rate can spread venom throughout the body. Lay or sit down with the bite below the level of the heart.
- Wash the area immediately with soap and water.
- Cover the bite with a clean, dry dressing.

Do NOT do the following:

- Do not try to pick up or entrap the snake for identification purposes.
- Do not wait for symptoms to appear, seek medical attention immediately and notify Roux personnel immediately.
- Do not open the wound further or suck out venom.
- Do not apply ice or immerse the wound in water.
- Do not drink alcohol or caffeinated beverages.

2.5 Bees, Wasps, and Hornets

Bees, wasps, and hornets (stinging insects) can be found throughout the United States and include many difference species. These insects are most abundant and threatening during the warmer months. Stinging insects inflict harm by injecting venom through a stinger. The chemical makeups of their venom differ greatly between species, so a human's reaction to a sting can be variable. In general, wasps and hornets tend to be more aggressive than most bee species, and wasps can sting multiple times, while bees can only sting once.

2.5.1 Project Pre-Planning and Bee, Wasp, and Hornet Avoidance

Avoidance is the preferred management approach with respect to potential bee, wasp, and hornet contact. Stinging insects typical build nests and hives outdoors around sheds, wooden decks, flower beds, within stick-up and flush mount monitoring well casings, roof eaves, and trash cans, so care needs to be taken prior to entering certain work areas. Employees with a history of severe allergic reactions to insect bites or stings should consider carrying an epinephrine auto injector (EpiPen) and communicate their allergy with the OHSM and project teams prior to conducting field work.

If a work area cannot not be moved away from trigger locations, then the following should be done to limit attraction and potential exposure:

- Avoid excessive smelling perfumes, after shave, and deodorants.
- Property dispose of food waste and trash; excessive food waste can attract bees and wasps.
- Communicate with project team and OHSM any known sting allergies.
- Avoid bright colored clothing and floral patterns (when applicable).
- Remove well casings with tools, and allow adequate time to evaluate the presence of stinging insects prior to reaching into areas that could harbor hives or nests.
- Store apparel and outdoor equipment in tightly closed bins.
- Whenever possible, move work areas away from observed nests and hives.
- If a stinging insect lands on you, keep still or move slowly away. DO NOT SWAT at the insect, this will instigate aggression.

2.5.2 Use of Personal Protective Equipment (PPE)

Where avoidance of bees, wasps, and hornets is not possible, employees must wear appropriate PPE and take measures to prevent stings when encounters cannot be avoided. Gloves, long-sleeved shirts, and pants shall be worn to limit body areas susceptible to stings. Bee and wasp repellent sprays should be kept onsite if significant populations of nests and hives warrant treatment. Be sure to wear proper PPE (eye protection, nitrile gloves) when deploying such repellent sprays.

2.5.3 Responding to Known or Suspected Bee, Wasp, or Hornet Sting

A sting from any bee, wasp, or hornet requires adherence to the Incident Investigation and Reporting Program with all internal contacts being made through the standard notification protocol of the H&S Injury/Illness Notification Flowchart. In the case of an employee with known bee or wasp sting allergies, immediate notification to professional emergency is required to ensure proper care. As mentioned in section 2.5, the venom associated with bees, wasps, and hornets can vary between species, as such, human reactions to stings can also vary. This fact can lead to instances with surprising allergic reactions.

Take immediate medical action if any of the following symptoms are observed:

- Severe swelling of the face, lips, or throat.
- Hives or inching in area of the body not affected by the sting.
- Breathing difficulties, such as wheezing or gasping.
- Dizziness.

- Sudden drop in blood pressure.
- Lightheadedness.
- Nausea or vomiting.

2.5.3.1 First Aid

If no severe allergic reactions are observed after a stinging encounter, and immediate professional medical treatment is deemed not warranted, the following personal medical treatment shall be conducted:

1. Remove the stinger by scraping a straight edge object across the wound.
2. Wash area thoroughly with soap.
3. Place ice wrap or washcloth or other suitable covering on the area of the sting for 10 minutes.
4. If needed, apply antihistamine to the affected area.

2.6 Scorpions

Scorpions are typically found in dry, arid desert regions of the southern and south western portions of the United States; however, some species can be found in grasslands, forests, and inside caves. Scorpions are nocturnal, and usually hide during the day and are active at night. During normal work hours, humans will typical encounter scorpions in their docile state often hidden away in dark enclosed features. They typically hide under rocks, wood, or anything else lying on the ground. Some species may also burrow into the ground. When threatened, a scorpion can choose to use either its pincers, or its venomous stinger to defend itself. The performance of either the pincers (pinchforce) or the stinger (venom strength) \ can depend on scorpion physical characteristics, like species, size and shape.

2.6.1 Project Pre-Planning and Scorpion Avoidance

General good housekeeping practices are the best way to avoid scorpion contact. When working and living in regions indigenous to scorpions, be sure to update the HASP and JSAs reflecting special conditions, and perform these general control measures to limit scorpion exposure:

- Shake out all clothing, boots, and hats prior to putting them on.
- Visually inspect vehicles prior to entry.
- Keep all equipment storage boxes and vehicles closed overnight.
- Employees with a history of severe allergic reactions to insect bites or stings should consider carrying an epinephrine auto injector (EpiPen) and communicate their allergy with the OHSM and project teams prior to conducting field work.
- Take caution prior to reaching hands into dark enclosed structures (monitoring well casings, drums, etc.).

2.6.2 Use of Personal Protective Equipment (PPE)

While avoidance is the best practice for dealing with scorpions, PPE is the last line of defense when scorpion encounters do occur. Gloves, long-sleeved shirts and pants shall be worn to limit body areas susceptible to stings. Care shall be taken to ensure all PPE is inspected prior to wear.

2.6.3 Responding to Known or Suspected Scorpion Sting

A scorpion sting requires adherence to the Incident Investigation and Reporting Program with all internal contacts being made through the standard notification protocol of the H&S Injury/Illness Notification Flowchart. Immediate notification to professional emergency services is essential for proper medical care. Employees with a history of severe allergic reactions to insect bites or stings should consider carrying an epinephrine auto injector (EpiPen), and know how to administer the pen in case of emergency. Typical symptoms of a scorpion sting are as follows:

- A burning at the injection site, with very little swelling or inflammation.
- A positive “tap” test – Extreme pain when the sting site is tapped with a finger.
- Restlessness and convulsions.
- Inability to focus eyes.
- Staggering gait.
- Thick tongue sensation, with slurred speech and drooling.
- Muscle twitches.
- Abdominal pain and cramps.
- Respiratory depression.

2.6.3.1 First Aid

Scorpion stings can potentially be life threatening dependent on the scorpion species and/or personal human allergies. Immediately contact professional emergencies services and a poison control center following a scorpion pinch or sting. Prior to receiving professional medical advice to determine the next response action, the following actions should be taken:

- Apply ice to the sting site.
- DO NOT take any sedative antihistamines, as they can react negatively with the venom.
- Try to remain relaxed and calm.
- If possible, safely capture the scorpion for identification, this way proper anti-venom can be issued.

2.7 Poisonous Plants

The potential for contact with poisonous plants exists when performing fieldwork in a variety of areas although commonly found in undeveloped/wooded areas it can be present in urban environments. Poisonous plants come in a variety of shapes and sizes and have different modes of exposure (i.e. contact, ingestion, inhalation). For our purposes the major area of concern is contact with the sap oil of native poisonous plants which induces an allergic skin reaction. The major categories of native poisonous plants include poison ivy, poison oak and poison sumac.

2.7.1 Poison Ivy

Poison ivy is found across the United States, except California, Alaska and Hawaii. Poison ivy can be classified as eastern or western. Eastern poison ivy is typically a hairy, ropelike vine with three shiny green (red in fall) leaves budding from one small stem, whereas western poison ivy is a low shrub with three leaves that does not form a climbing vine.

2.7.2 Poison Oak

Poison Oak is classified into two categories based on geographic location as either Pacific or Atlantic. Pacific poison oak can be found in California, Nevada, Oregon, Washington and western Canada while Atlantic poison oak can be found in southeast states and as far west as Texas. Poison oak is typically a shrub with leaves of three (like poison ivy) and may have yellow or green flowers and clusters of green-yellow or white berries and pacific poison icy may be vine-like.

2.7.3 Poison Sumac

Poison sumac is present in eastern states and as far west as Texas. Poison sumac comes in the form of a woody shrub that has stems that contains 7-13 leaves arranged in pairs and may have a glossy, pale yellow, or cream-colored berries.

2.7.4 Exposure Types

Poisonous plants such as poison ivy/oak/sumac release oil (urushiol) when the leaf or parts of the plants are bruised, damaged and/or burned. The oil induces an allergic reaction when contact with skin, this exposure generally results in itchy red rash with bumps and/or blisters. Personnel need to take extra care with recognizing poisonous plants to avoid direct contact. There is also the possibility for indirect contact such as contaminating tools, or clothing and touching the contaminated site. Lastly, there is the potential for inhalation of particles containing oil from burning plants; however, this is less likely due to the nature of work performed.

2.7.5 Project Pre-Planning and Poisonous Plant Avoidance

Avoidance is the preferred management approach with respect to poisonous plants. Since poisonous plants are commonly found outdoors and in a variety of geographic locations (i.e. rural, suburban, urban) care needs to be taken when encountering areas which are overgrown especially if unable to clearly identify poisonous plants amongst other vegetation. Additional guidance is listed below to assist with avoidance of potential contact with poisonous plants:

- Avoid overgrown areas in which plants cannot be easily identified.
- After use, clean tools with rubbing alcohol or soap with lots of water. Wear appropriate PPE (i.e. nitrile gloves).
    - Urushiol can remain active on surfaces of objects for up to 5 years.
- Do not burn plants that may be poisonous.

2.7.6 Use of Personal Protective Equipment (PPE)

Where avoidance of poisonous plants is not possible, employees must wear appropriate PPE and take additional measures to prevent contact with poisonous plants. Please reference section 2.1.4 for PPE requirements (excluding insecticides) to minimize potential exposure to poisonous plants. In addition, barrier skin creams, such as lotion containing bentoquatum, can offer additional protection. Application of barrier creams should be administered as per manufacturers recommendations. Additionally, ensure tools and equipment are properly decontaminated in the case of potential contact with poisonous plants. Exposed clothing should be handled with appropriate gloves (i.e. nitrile gloves) and washed separately in hot water with detergent.

2.7.7 Responding to Known or Suspected Poisonous Plant Exposure

Exposure to poisonous plants will require adherence to the Incident Investigation and Reporting Program with all internal contacts being made through the standard notification protocol of the H&S Injury/Illness Notification Flowchart. Signs and symptoms of exposure to poisonous plants can vary considerably based on the individual's sensitivity. Below please find general signs and symptoms associated with exposure to poisonous plants:

- Red rash within a few days of contact.
- Possible bumps, patches, streaks, or weeping blisters.
- Swelling and itching at the site.

2.7.7.1 First Aid

In addition to contacting the necessary personnel the following first aid measures should be carried out if exposed to poisonous plants:

- Immediately rinse affected area with rubbing alcohol, specialized poison plant washes and/or degreasing soap/detergent with copious amounts of water. Scrub underneath nails with a brush.
- Apply wet compress, calamine lotion, or over the counter (OTC) hydrocortisone. Follow directions of manufacturer, avoid applying to broken skin or open blisters.
- Take an OTC antihistamine such as diphenhydramine (Benadryl) to alleviate itching. Follow directions of manufacturer.
- Summon professional medical care immediately should someone suffer a severe allergic reaction such as swelling and/or difficulty breathing or has past medical issues surrounding exposure to poisonous plants.

2.8 Other Zoonotic Disease

Zoonotic diseases are caused by infections that shared between animals and people. These can be caused by a range of disease pathogens which include viruses, bacteria, fungi, and parasites. There is a wide list of zoonotic diseases which are prevalent however within this section we will be discussing primarily histoplasmosis and psittacosis.

2.8.1 Histoplasmosis

Histoplasmosis is an infectious disease which is caused by inhalation of Histoplasma capsulatum fungus spores. Instances of potential exposure can include encountering soils enriched with bat or bird excrement containing spores, which could include barnyards, chicken/turkey houses, construction sites and abandoned buildings. This disease is not contagious and cannot be transmitted from an infected to person or animal to someone else. Histoplasmosis primarily affects the lungs and symptoms can vary greatly. This fungus grows in soils throughout the world. The proportion of people infected is higher in central and eastern states. The fungus seems to grow best in soils which have elevated levels of nitrogen.

2.8.2 Psittacosis

Psittacosis is an infectious disease which is caused by inhalation of Chlamydia psittaci bacteria shed through bird excrement. Typically, these secretions dry and small dust particles which includes the bacteria can become airborne. Similar to histoplasmosis, typical areas of potential exposure could include barnyards, chicken/turkey houses, construction sites and abandoned buildings. This disease is not contagious and cannot be transmitted from an infected to person or animal to someone else. Histoplasmosis primarily affects the lungs and symptoms can vary which include fever and chills, headache, muscle aches and dry cough.

2.8.3 Project Pre-Planning

Avoidance is the preferred management approach with respect to exposure to bird and bat excrement. Since birds and bats are commonly found in a variety of geographic locations (i.e. rural, suburban, urban) care needs to be taken when encountering areas which have large populations of bats or birds. During the project planning phase make sure to take into account potential for colonies of bats or flocks of birds to be present. Should a colony of bats or flock of birds be discovered roosting in a building, immediate action should be taken to exclude the intruders by sealing entry points.

2.8.4 Controlling Aerosolized Dust

Next to avoidance the next best way to prevent potential exposure is to implement work practices and dust control methods that eliminate or reduce dust generation during work activities which may come into contact with impacted soil. For example, instead of dry sweeping or shoveling dusty material, wetting the area with a water spray can significantly reduce the amount of dust aerosolized. Dust mitigation plans shall be specified in the site-specific health and safety plan and/or job safety analysis.

2.8.5 Use of Personal Protective Equipment (PPE)

Where avoidance of soils impacted with bird and bat excrement is not possible, employees must wear appropriate PPE and take additional measures to prevent contact with impacted soils and dusts. Level D personal protective equipment along with disposable clothing and shoe coverings may be appropriate, however refer to your site-specific health and safety plan for further guidance. Additionally, the requirement for a NIOSH approved respirator may be necessary if identified consult with the Corporate Health and Safety Manager for further guidance.

2.8.6 Responding to Known or Suspected Zoonotic Exposure (Bird/Bat Excrement)

Exposure to impacted soil will require adherence to the Incident Investigation and Reporting Program with all internal contacts being made through the standard notification protocol of the H&S Injury/Illness Notification Flowchart. Signs and symptoms of exposure to Histoplasma capsulatum fungus spores and Chlamydia psittaci bacteria can vary considerably based on the individual’s sensitivity. Below please find general signs and symptoms associated with their exposures.

Histoplasmosis symptoms may appear 3 to 17 days after fungal spores are inhaled. Symptoms can include fever, cough, fatigue, chills, headache, chest pain and body aches. In immune-compromised individuals, histoplasmosis can develop into a long-term lung infection, or spread to other parts of the body such as the brain and spinal cord.

Psittacosis symptoms may appear within 5 to 14 days after exposure to the bacteria. In general, Psittacosis causes mild illnesses with the most common symptoms of headache, muscle aches, dry cough and fever and chills. In extreme cases it may result in pneumonia.

2.9 Additional Wildlife

The following subsections includes information on additional wildlife not previously covered that can be encountered by Roux staff during work activities. The following list is not meant to be all inclusive however provides general guidance and direction on how to avoid and what to do if encountered. These include dogs, alligators, bears and mountain lions. Based on the complexity standard PPE outlined within your project specific HASP shall be worn unless directed otherwise by this program.

2.9.1 Dogs

Wild and domestic dogs can be encountered at many of our worksites; they may express a variety of emotions (i.e. aggressive, playful or frightened). It is important to not approach these animals and keep a safe distance as dogs can be unpredictable.

2.9.1.1 Project Pre-Planning and Dog Avoidance

Avoidance is the preferred management approach with respect to dogs. Since dogs are commonly found in outdoor settings and can cover large territories careful pre-planning is essential to understanding inherent risks of outdoor work areas. Additional guidance is listed below to assist with mitigating potential contact with dogs and ensure not to get bitten:

- Don’t run past a dog as it is the dog’s instinct to chase and catch you.
- If a dog exhibits aggressive behavior, don’t scream. Avoid eye contact and attempt to remain motionless until the dog leaves, and then back away slowly until the dog is out of sight.
- Don’t approach a strange dog, especially one that is tethered or confined.
- Always have an out, understand your environment and utilize high ground or place material between yourself and the dog should a dog attack you.

2.9.1.2 Responding to a Dog Bite

Exposure to dog bites will require adherence to the Incident Investigation and Reporting Program with all internal contacts being made through the standard notification protocol of the H&S Injury/Illness Notification Flowchart. Immediate notification to professional emergency services is essential to obtaining prompt medical care.

2.9.2 Alligators

Alligators and crocodiles can be found in various regions of North America. More specifically alligators can be found throughout the southeastern United States while crocodiles inhabit coastal areas such as southern Florida.

2.9.2.1 Project Pre-Planning and Crocodilian Avoidance

Avoidance is the preferred management approach with respect to alligators and crocodiles. Since these reptiles are commonly found in outdoor settings in southeastern United States careful pre-planning is essential to understanding inherent risks of performing work in such locations. Additional guidance is listed below to assist with mitigating potential contact with these reptiles and ensure not to get bitten:

- If seen do not provoke an alligator or crocodile.
- Avoid waters known to be home to alligators or crocodiles.

- Keep at least 30 feet away from an alligator or crocodile.

2.9.2.2 Responding to Alligator Bite

Exposure to bites will require adherence to the Incident Investigation and Reporting Program with all internal contacts being made through the standard notification protocol of the H&S Injury/Illness Notification Flowchart. Immediate notification to professional emergency services is essential to obtaining prompt medical care.

2.9.3 Bears

Bears can be found in various regions of North America. For the purposes of this program the following bears will be addressed which are the American Black Bear and Grizzly/Brown Bear.

American Black Bear

The American Black Bear can be found in the east, along the west coast, Rocky Mountain region and in parts of Alaska. Black bears can also be found in a few small areas in the southwest and southeast.

Grizzly/Brown Bear

The Grizzly/Brown Bear can be found within northwestern portions of the United States, specifically Alaska, Idaho, Montana, Washington, Wyoming, and extending as far south as Yellowstone.

2.9.3.1 Project Pre-Planning and Bear Avoidance

Avoidance is the preferred management approach with respect to bears. Since bears are commonly found in various regions of United States. Careful pre-planning is essential to understanding inherent risks of performing work in such locations. Additional guidance is listed below to assist with mitigating potential bear attacks:

- Keep food storage organized and sealed.
- Never approach a bear or bear cub.
- Wear a bell or other noisemaker.
- Stay away from a bear’s food supply.
- Carry bear pepper spray on you.

If encountered by a bear:

- Stay calm, speak in low tones as a scream or fast movement may trigger an attack.
- Travel in groups and make yourself look as large as possible (i.e. move to higher ground).
- Do NOT allow a bear to access food.
- Do NOT drop your pack if carrying.
- If the bear is stationary, move away slowly and sideways.
- Do NOT run, but if bear follows, stop and hold your ground.
- Leave the area or take a detour, or wait until the bear moves away. Always provide the bear an escape route.

If you are attacked by a bear:

- Use bear pepper spray to stop an aggressive, charging or attacking bear. If the bear does not concede use the following steps for each type of bear.
- **Brown/Grizzly Bears:** If you are attacked by a brown/grizzly bear, leave your pack on and **PLAY DEAD**. Lay flat on your stomach with your hands clasped behind your neck. Spread your legs to make it harder for the bear to turn you over. Remain still until the bear leaves the area. Fighting back usually increases the intensity of such attacks. However, if the attack persists, fight back vigorously. Use whatever you have at hand to hit the bear in the face.
- **Black Bears:** If you are attacked by a black bear, **DO NOT PLAY DEAD**. Try to escape to a secure place such as a car or building. If escape is not possible, try to fight back using any object available. Concentrate your kicks and blows on the bear's face and muzzle.

2.9.3.2 Responding to Bear Attacks

Attacks by a bear will require adherence to the Incident Investigation and Reporting Program with all internal contacts being made through the standard notification protocol of the H&S Injury/Illness Notification Flowchart. Immediate notification to professional emergency services is essential to obtaining prompt medical care.

2.9.4 Mountain Lions

Mountain Lions can be found in various regions of North America, more specifically within the United States they are found predominately in Wyoming, California, parts of Texas and the Florida Everglades.

2.9.4.1 Project Pre-Planning and Mountain Lion Avoidance

Avoidance is the preferred management approach with respect to mountain lions. Since mountain lions are found in specific regions of United States careful pre-planning is essential to understanding inherent risks of performing work in such locations. Additional guidance is listed below to assist with mitigating potential mountain lion attacks:

- Do not corner a mountain lion.
- Make yourself look larger (i.e. seek higher ground, place arms overhead).
- Use a loud voice.
- Throw sticks or rocks.
- Carry pepper spray.

If you are attacked by a mountain lion:

- Use pepper spray to stop an aggressive, charging or attacking mountain lion.
- Do NOT run.
- Fight back.
- Protect your neck and head.
- Don’t play dead.

2.9.4.2 Responding to Mountain Lion Attacks

Attacks by a mountain lion will require adherence to the Incident Investigation and Reporting Program with all internal contacts being made through the standard notification protocol of the H&S Injury/Illness Notification Flowchart. Immediate notification to professional emergency services is essential to obtaining prompt medical care.

Appendix A - Definitions

Medical Treatment	Treatment for an injury or illness related to Roux work activities that requires professional medical treatment beyond first aid. In the case of a work-related tick bite this includes any prescription including the use of antibiotics in response to the bite. This medical treatment classification will occur even if the antibiotics were prescribed merely for preventative treatment of a work-related tick bite (i.e., a suspected tick bite with no evidence or symptoms of disease).
Work-related Tick Bite	A tick bite that occurs while working in a tick-infested work site containing a tick infected area. Any such tick bite would be identified within one day of working in the tick-infested area. There may be additional exceptions to this simple definition; therefore, it is imperative that the OHSM and CHSM be consulted immediately upon discovery of a potential tick bite. (Note: Any tick bite, or condition that develops due to a suspected tick bite, that may be attributable to contact with a tick outside of the work environment which would not be considered a work-related tick bite.)
Vectors	Living organisms that can transmit infectious diseases between humans or from animals to humans. Many of these vectors are bloodsucking insects, which ingest disease-producing microorganisms during a blood meal from an infected host (human or animal) and later inject it into a new host during their subsequent blood meal. Ticks are considered a vector.

Appendix B - Permethrin Application Guidance [1]

Permethrin is registered with the EPA for use as an insecticide and repellent. Permethrin-treated clothing repels and kills ticks, chiggers, mosquitoes, and other biting and nuisance arthropods.

Clothing, hats, shoes, bed nets, jackets, and camping gear can be treated with permethrin for added protection. Permethrin should **NOT** be applied directly to the skin. Do **NOT** apply in a way that will allow for product to contact adults, children or pets either through direct contact or through drift. Remove pets and birds and cover fish aquariums before surface applications if using spray.

Ensure application of clothing occurs in a well-ventilated outdoor area protected from wind and lay out entire outfit to be treated. Gloves and safety glasses should be worn during the application process. Apply permethrin to clothing following manufacturer instructions. Once outfit is completely treated hang clothing to air-dry. The manufacturer will specify dry times however to ensure clothing is dried completely, Roux recommends all clothing and other items be treated 24–48 hours in advance of work to allow them to fully dry before handling and wearing.

Permethrin-treated materials retain repellency or insecticidal activity after repeated laundering but should be retreated, as described on the product label, to provide continued protection. Clothing that is pretreated prior to purchase has efficacy through 70 launderings.

Products such as Permanone and Sawyer, Permethrin, Repel, and Ultrathon Permethrin Clothing Treatment are registered with EPA specifically for use by consumers to treat clothing and gear. Alternatively, clothing pretreated with permethrin is commercially available, marketed to consumers in the United States as Insect Shield, BugsAway, or Insect Blocker.

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[1] U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, "CDC Health information for International Travel 2018 (Yellow Book)."

Appendix C - Insect Repellent Guidance [2]

Always follow label directions and precautions when using insect repellent. When used as directed, products containing DEET are proven safe and effective. To avoid reaction to DEET or other ingredients in insect repellents, always read and follow the directions before use.

Choose a repellent that provides enough protection for time that you will be outdoors. The more active ingredient a repellent contains, the longer time it can protect you from potential bites. For example, 5% DEET will provide mosquito bite protection for one hour in comparison with 24% DEET for up to 5 hours. Studies suggest that concentrations of DEET above approximately 50% do not offer a marked increase in protection time against mosquitoes; DEET efficacy tends to plateau at a concentration of approximately 50%.

Do NOT spray insect repellent on skin that is under clothing. Do NOT apply insect repellent to skin that is already irritated, or to cuts/lacerations. Do NOT spray aerosol or pump products in enclosed areas. Do NOT spray a pump or aerosol product directly on the face. Do NOT apply DEET to clothing.

After returning indoors and before eating, drinking, or smoking, use soap and water to wash skin that has been treated with insect repellent. Reapply repellent when returning outdoors or after eating.

Outdoor workers may need to use sunscreen in conjunction with insect repellent. Repellents that are applied per label instructions may be used with sunscreen with no reduction in repellent activity. However, limited data show a one-third decrease in the sun protection factor (SPF) of sunscreens when DEET containing insect repellents are used after a sunscreen is applied. Products that combine sunscreen and repellent are not recommended, because sunscreen may need to be reapplied more often and in larger amounts than needed for the repellent component to provide protection from biting insects. The best option is to use separate products, applying sunscreen first and then applying the repellent.

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[2] U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, “CDC Health information for International Travel 2018 (Yellow Book).”

HEALTH AND SAFETY PLAN

MJ Painting Contractor Corp.
350 Franklin Street
Olean, NY 14760

APPENDIX H

Subsurface Clearance Program

SUBSURFACE UTILITY CLEARANCE MANAGEMENT PROGRAM

CORPORATE HEALTH AND SAFETY MANAGER	**:**	**Brian Hobbs, CIH, CSP**
EFFECTIVE DATE	**:**	**01/19**
REVISION NUMBER	**:**	**2**

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APPENDICES

1. PURPOSE

Roux Associates, Inc. and its affiliated companies, Roux Environmental Engineering and Geology, D.P.C, and Remedial Engineering (collectively, "Roux") has instituted the following program for completing proper utility mark-outs and for conducting subsurface clearance activities. This establishes a method to ensure, to the greatest extent possible, that utilities have been identified and contact and/or damage to underground utilities and other subsurface structures will be avoided.

2. SCOPE AND APPLICABILITY

The Subsurface Utility Clearance Management Program applies to all Roux employees, its contractors and subcontractors. Employees are expected to follow this program for all intrusive work involving Roux or other personnel (e.g., contractors/subcontractors) working for Roux unless the client's requirements are more stringent. Deviation from the program regardless of the specific work activity or work location must be pre-approved based on client's site knowledge, site experience and client's willingness for the use of this program. Any and all exceptions shall be documented and pre-approved by the Project Principal and the Office Manager.

3. PROCEDURES

3.1 Before Intrusive Activities

During the project kick-off meeting for intrusive activities the PM will review the Roux Subsurface Utility Clearance Checklist and Utility Verification (Appendix C) / Site Walkthrough Record (Appendix D) and the below bullet points with the project field team:

(Please note that these are intended as general reminders only and should not be solely relied upon.)

- Ensure the Mark-out / Stake-out Request Information Sheet (or one-call report) is complete and accurate for the site including address and cross streets and review for missing utilities. (Note: utility mark-out organizations do not have contracts with all utilities and it is often necessary to contact certain utilities separately such as the local water and sewer authorities).
- Have written confirmation prior to mobilizing to the site that the firm or Roux personnel performing the intrusive activity has correctly completed the mark-out notification process including requesting mark-outs, waiting for mark-outs to be applied to ground surfaces at the site, and receiving written confirmation of findings (via fax or email) from utility operators for all known or suspected utilities in the proposed area of intrusive activity, and provided utility owner written confirmation to Roux personnel for review and project files documentation.
- Do not begin any intrusive activity until all utilities mark-out has been completed (i.e., did all utilities mark-out the site?) and any unresolved mark-out issues are finalized. Perform a site walk to review the existing utilities and determine if said utilities have been located by the utility locators.

  (Note: The Tolerance Zone is defined as two feet plus half of the diameter or half of the greatest dimension (for elliptical sewers, duct banks and other non-cylindrical utilities) of a utility and two feet from the outside edge of any subsurface structure.)
- Install Pre-Clearance exploratory test holes (e.g., hand-dug test holes or other soft digging techniques) for the first 5-ft below land surface (BLS) at each location prior to conducting mechanized intrusive activities. The size of the pre-clearance exploratory test hole should be at a minimum twice the diameter of any downhole tool or boring device. (Note: Pre-Clearance exploratory test holes should be defined in the SOW/proposal provided to the client to prevent project delays and to allow adequate time for PM and PP to evaluate alternative approaches for the project. Alternative approaches will need to be pre-approved by the OM.

- For excavations, all utilities need to be marked and then exposed by hand following the protocols in this program. Pre-clearing for excavations may be performed by the “moat” technique (i.e., soft digging around the perimeter). In these cases, dig in small lifts (<12” for first 5 feet) using a dedicated spotter.) For Tolerance Zone work, unless otherwise agreed upon with the Utility Operator, work within the tolerance zone requires verification by means of hand-dug test holes performed to expose the utility. Once structures have been verified a minimum clearance of two feet must be maintained between the utility and any powered equipment.
- In addition, the following activities should be conducted:
  - Review the work scope to be performed with the site owner/tenant to determine if it may impact any utilities;
  - Attempt to procure any utility maps or historic drawings of subsurface conditions of the site;
  - **Determine the need for utility owner companies to be contacted or to have their representatives on site**;
  - Where mark-outs terminate at the property boundary, consider the use of private utility locating / GPR / geophysical-type services which may be helpful in locating utilities. Use of private utility locating firms, however, does not eliminate the legal requirement for the Excavator firm to submit a request for Public Utility Mark-outs. Also, the information provided by the service may be inaccurate and unable to locate subsurface utilities and structures in urban areas, landfills, urban fill areas and below reinforced slabs, etc. They should not be relied upon as the only means of performing utility clearance;
  - Documented description of the dig site which is included in the projects Health and Safety Plan (HASP) and one call report will be maintained in the field and distributed amongst Roux personnel its contractors and subcontractors; and
  - Documentation of the actual placement of mark outs in the field shall be collected using dated pictures, videos and/or sketches with distance from markings to fixed objects. All documentation shall be maintained within the project file.

3.2 During Intrusive Activities

The PM, field team lead or personnel performing oversight is to:

- Ensure the mark-out remains valid. (In certain states there are limits regarding the duration of time after the mark-out was applied to the ground surface work can be started or interrupted.) Additionally, the mark-outs must be maintained, documented, and in many cases refreshed periodically to be considered valid, this will be accomplished through calls to the one call center.
- Ensure intrusive activities are only performed within the safe boundaries of the mark-out as detailed in the One-Call Report.
- Halt all work if intrusive activities have resulted in discovery of an unmarked utility. Roux personnel shall notify the facility owner/operator and the one call center. All incidents such as this will be reported as per Roux Incident Investigation and Reporting Management Program.
- Halt all work if intrusive activities must take place outside of the safe boundaries of a mark-out and only proceed after new mark-outs are performed.
- Halt the intrusive activities and immediately consult with the PP if an unmarked utility is encountered.
- Completing any subsurface utility clearance incident reports that are necessary.

- If a utility cannot be found as marked Roux personnel shall notify the facility owner/operator directly or through the one call center. Following notification, the excavation may continue, unless otherwise specified in state law.
- Contractors/subcontractors must contact the one-call center to refresh the ticket when the excavation continues past the life of the ticket. Ticket life shall be dictated by state law however at a maximum ticket life shall not exceed 20 working days.

3.3 Stop Work Authority

Each Roux employee has Stop Work Authority which he or she will execute upon determination of any imminent safety hazard, emergency situation, or other potentially dangerous situation, such as hazardous weather conditions. This Stop Work Authority includes subsurface clearance issues such as the adequacy of a mark-out or identification during intrusive operations of an unexpected underground utility. Authorization to proceed with work will be issued by the PM/PP after such action is reviewed and resolved. The PM will initiate and execute all management notifications and contact with emergency facilities and personnel when this action is appropriate.

Appendix A - Definitions

Intrusive Work Activities	All activities such as digging or scraping the surface, including but not limited to, excavation, test pitting or trenching, soil vapor sampling or the installation of soil borings, soil vapor monitoring points and wells, or monitoring wells, and drilling within the basement slab of a recently demolished building.
Mark-out / Stake Out	The process of contracting with a competent and qualified company to confirm the presence or absence of underground utilities and structures. This process will clearly mark-out and delineate utilities that are identified so that intrusive work activities can be performed without causing disturbance or damage to the subsurface utilities and structures. After utility mark-outs are completed the soft digging will be completed prior to intrusive work.
Tolerance Zone	Defined as two feet on either side of the designated centerline of an identified utility, plus half of the diameter or half of the greatest dimension (for elliptical sewers, duct backs and other non-cylindrical utilities) of that utility and two feet from the outside edge of any subsurface structure.
Structure	For the purpose of this program a structure is defined as any underground feature that may a present potential source(s) of energy such as, but not limited to, utility vaults, bunkers, piping, electrical boxes, wires, conduits, culverts, utility lines, underground tanks and ducts.
Soft Digging	The safest way to remove material from unknown obstructions or services is by using tools such as a vactor or air knife, non-mechanical tools, or hand tools. The methods are clean and non-evasive and used for uncovering and exposing buried services, excavating and for providing a quick method of soil removal from sensitive areas.
Verification	Exploratory test-hole dug with hand tools within the Tolerance Zone to expose and verify the location, type, size, direction-of-run and depth of a utility or subsurface structure. Vacuum excavation (soft dig) methods can further facilitate exposure of a subsurface utility and accurately provide its location and identification prior to intrusive work approaching the Tolerance Zone.

Appendix B - Example of Completed One Call Report

Example Completed One-Call Report

New York 811

Send To: C_EMAIL Seq No: 744

Ticket No: 133451007 ROUTINE

Start Date: 12/16/13 Time: 7:00 AM Lead Time: 20

State: NY County: QUEENS Place: QUEENS
Dig Street: 46TH AVE Address:
Nearest Intersecting Street: VERNON BLVD
Second Intersecting Street: 11TH ST

Type of Work: SOIL BORINGS
Type of Equipment: GEOPROBE
Work Being Done For: ROUX

In Street: X On Sidewalk: X Private Property: Other:
On Property Location if Private: Front: Rear: Side:

Location of Work: MARK THE ENTIRE NORTH SIDE OF THE STREET AND SIDEWALK OF: 46TH AVE BETWEEN VERNON BLVD AND 11TH STREET

Remarks:

Nad: Lat: Lon: Zone:
ExCoord NW Lat: 40.7475399 Lon: -73.9534811 SE Lat: 40.7457406 Lon: -73.9493680

Company : ZEBRA ENVIROMENTAL Best Time: 6AM-5PM
Contact Name: DAVID VINES Phone: (516)596-6300
Field Contact: DAVID VINES Phone: (516)596-6300
Caller Address: 30 N PROSPECT AVE Fax Phone: (516)596-4422
LYNBROOK, NY 11563
Email Address: david@zebraenv.com

Additional Operators Notified:

ATTNY01	AT&T CORPORATION	(903)753-3145
CEQ	CONSOLIDATED EDISON CO. OF N.Y	(800)778-9140
MCINY01	MCI	(800)289-3427
PANYNJ01	PORT AUTHORITY OF NY & NJ	(201)595-4841
VZQ	VERIZON COMMUNICATIONS	(516)297-1602

Link to Map for C_EMAIL: http://ny.itic.occinc.com/XGMZ-DF2-L23-YAY

Original Call Date: 12/11/13 Time: 1:15 PM Op: webusr
IMPORTANT NOTE: YOU MUST CONTACT ANY OTHER UTILITIES DIRECTLY

Appendix C - Roux Subsurface Utility Clearance Checklist

Roux Subsurface Utility Clearance Checklist ***Date of Revision – 12/3/14***

Work site set-up and work execution

ACTIVITY	Yes	No	N/A	COMMENTS INCLUDING JUSTIFICATION IF RESPONSE IS NO OR NOT APPLICABLE
Daily site safety meeting conducted, SPSAs performed, JSAs reviewed, appropriate work permits obtained.				
HASP is available and reviewed by site workers / visitors.				
Subsurface Utility Clearance Procedure has been reviewed with all site workers.				
Work area secured; traffic control established as needed. Emergency shut-off switch located. Fire extinguishers / other safety equipment available as needed.				
Utility mark-outs (public / private) clear and visible. Provide Excavator's Stake-Out Reference Number / Request Date / Time.				
Tolerance zone work identified.				
Work execution plan reviewed and adhered to (ground disturbance methods, clearance depths, any special utility protection requirements, or any other execution requirements; especially for Tolerance Zone work).				
Verbal endorsement received from Roux PM for any required field deviations to work execution plan.				

Key reminders for execution:

The Subsurface Utility Clearance Protocol should be referenced to determine all requirements while executing subsurface work. The bullet points below are intended as general reminders only and should not be solely relied upon.

- Tolerance zone is defined as two feet plus half of the diameter or half of the greatest dimension (for elliptical sewers, duct banks and other non-cylindrical utilities) of a utility and two feet from the outside of any subsurface structure.
- Install Pre-Clearance exploratory test holes (e.g., hand-dug test holes or vacuum excavation) must be performed for the first five feet below land surface (BLS) at each location prior to conducting mechanized intrusive activities. The size of the pre-clearance exploratory test hole should be at a minimum twice the diameter of any downhole tool or boring device. (Note: Pre-clearance exploratory test holes should be defined in the SOW/proposal provided to the client to prevent project delays and to allow adequate time for PM and PP to evaluate alternative approaches for the project. Alternate approaches will need to be pre-approved by the OM.
- For excavations, all utilities need to be marked and then exposed by hand following the protocols in this program. Pre-clearing for excavations may be performed by the "moat" technique (i.e., soft

digging around the perimeter). In these cases, dig in small lifts (<12” for first five feet) using a dedicated spotter.) For Tolerance Zone work, unless otherwise agreed upon with the Utility Operator, work within the tolerance zone requires verification by means of hand-dug test holes to expose the utility. Once structures have been verified a minimum clearance of two feet must be maintained between the utility and any powered equipment.

Appendix D - Utility Verification/Site Walkthrough Record

Employee Name:____

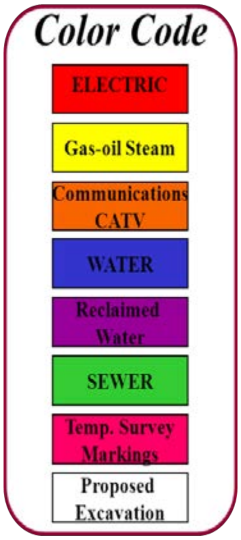
Date: ____

Instructions: For each utility suspected at the job site, indicate location on the job site, approximate burial depth, and means of detecting the utility. Leave blank if that utility is not believed to be present.

Utility	Description of Utility Location Identified Onsite	Approx. Depth (bls)	Method / Instrumentation used to determine Utility Location	Utility Owner Response (Date/Time)	Mark Out Indicates (Clear / Conflict)
Electrical Lines					
Gas Lines					
Pipelines					
Steam Lines					
Water Lines					
Sanitary and Stormwater Sewer lines					
Pressured Air-Lines					
Tank Vent Lines					
Fiber Optic Lines					
Underground Storage Tanks					
Phone Lines/ Other					

* bls - below land surface

Site Sketch Showing Utilities:



Other Comments / Findings:

Completed by: ______________________________

Signature: ______________________________ Date: ____________

Subsurface Utility Clearance Checklist

Date of Revision – 07/10/2020

Work site set-up and work execution

ACTIVITY	Yes	No	N/A	COMMENTS INCLUDING JUSTIFICATION IF RESPONSE IS NO OR NOT APPLICABLE
Daily site safety meeting conducted, SPSAs performed, JSAs reviewed, appropriate work permits obtained.				
HASP is available and reviewed by site workers / visitors.				
Subsurface Utility Clearance Procedure has been reviewed with all site workers.				
Work area secured; traffic control established as needed. Emergency shut-off switch located. Fire extinguishers / other safety equipment available as needed.				
Utility mark-outs (public / private) clear and visible. Provide Excavator's Stake-Out Reference Number / Request Date / Time.				
Tolerance zone work identified.				
Work execution plan reviewed and adhered to (ground disturbance methods, clearance depths, any special utility protection requirements, or any other execution requirements; especially for Tolerance Zone work).				
Verbal endorsement received from Roux PM for any required field deviations to work execution plan.				

Key Reminders for Execution:

The Subsurface Utility Clearance Protocol should be referenced to determine all requirements while executing subsurface work. The bullet points below are intended as general reminders only and should not be solely relied upon.

- Tolerance zone is defined as two feet plus half of the diameter or half of the greatest dimension (for elliptical sewers, duct banks and other non-cylindrical utilities) of a utility and two feet from the outside of any subsurface structure.
- Install Pre-Clearance exploratory test holes (e.g., hand-dug test holes or vacuum excavation) must be performed for the first five feet below land surface (BLS) at each location prior to conducting mechanized intrusive activities. The size of the pre-clearance exploratory test hole should be at a minimum twice the diameter of any downhole tool or boring device. (Note: Pre-clearance exploratory test holes should be defined in the SOW/proposal provided to the client to prevent project delays and to allow adequate time for PM and PP to evaluate alternative approaches for the project. Alternate approaches will need to be pre-approved by the OM.
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Tank Vent Lines					
Fiber Optic Lines					
Underground Storage Tanks					
Phone Lines/ Other					

* bls - below land surface

APPENDIX I

Electrical Safety Program

Electrical Safety

WORKING ON ENERGIZED EQUIPMENT

If electrical equipment cannot be worked on in a de-energized state:

- You must be qualified and trained to work on these energized systems
- You need special permission from management
- Wear the appropriate PPE (e.g. appropriate voltage rated gloves, leather gloves, appropriate work shoes, appropriate apparel (e.g. fire resistant shirt and pants), safety glasses, face shield or arc hood)
- The equipment needs to have a warning label on the panel, board, socket, or control as well as a permit and electrical safety program

Injuries include:
- Arc flash
- Shock injuries

Hazards:
- Electrical shock
- Electrical burns
- Fire

PREVENTING HAZARDS

General Prevention:

- Always use caution when working with electricity (and use PPE)
- Consider implementing a LOTO program
- Post signs in all areas where electrical hazards are present
- Do not use metal ladders (use fiberglass ladders)
- Use insulated tools approved for working around energized sources
- Make sure that connections are tight and that the grounding prong is in place
- Only skilled electricians are allowed to perform any kind of electrical work

Inspection Tests and Preventing Damage:

- Keep electrical equipment/cables out of doors, window edges, fasteners, and wet conditions
  - ◊ If necessary, protect them to prevent tripping hazards or from being crushed
- Check cables and electrical equipment for damage
- Do not put tension/strain on the cords
- Remove cords by pulling on the plugs and not on the cords
- Always unplug tools and equipment not in use or before making adjustments or repairs
- **Continuity test**: ensures no electrical current escaping the circuit (use continuity tester)
- **Terminal connection test:** ensures equipment is properly grounded (use Digital Multi-meter)

Continuity tester

Hazard Prevention:

- Perform hazard assessments
- Use factory-assembled cords properly rated for the application
- Use only heavy/extra heavy usage and 3-prong type extension cords
- Only use extension cords for temporary applications
- Discard damaged, unmarked, or modified equipment and cords
- Use GFCIs at all times
- Avoid overhead wires

Digital Multi-meter

Overloading Circuits Prevention:

- Do not connect multiple power strips together
- Do not use extension cords in place of permanent wiring
- Assure that all circuits have circuit breakers installed
- Assure that all circuits are properly grounded

Lockout/Tagout (LOTO)

FACTS

- **PURPOSE:** Prevent the unexpected startup or release of energy from machines and equipment during service or maintenance
- **INJURIES FROM FAILURE OF LOTO IMPLEMENTATION:**
    - ◊ Burns
    - ◊ Shocks
    - ◊ Crushing
    - ◊ Cutting
    - ◊ Lacerations
    - ◊ Amputations
    - ◊ Fractures
    - ◊ Death
- **EXAMPLES OF COMMON FAILURES:**
    - ◊ A steam valve turns on and burns workers who are repairing a connection in the piping
    - ◊ A jammed conveyor system releases and crushes a worker who is trying to clear the jam
    - ◊ Internal wiring on a equipment being repaired electrically shorts and shocks the worker

TYPE OF ENERGY SOURCES NEEDING CONTROL

- Electrical energy (most common)
- Mechanical energy
- Chemical energy
- Hydraulic energy
- Pneumatic energy (stored pressure)
- Potential energy

PRACTICES AND PROCEDURES

- Develop a LOTO Program that includes authorized and affected/other working employees
- Affected employees who operate or use machines or equipment that are in the LOTO program and other employees who work in the area need to:
    - ◊ Recognize and understand when energy control procedures are in use
    - ◊ Not start up or use equipment that has been locked out/tagged out
- Authorized employees performing LOTO need to
    - ◊ Recognize type and magnitude hazardous energy sources
    - ◊ Know the means and methods of isolating and/or controlling the energy
- Follow procedures to de-energize equipment
- Know the location of circuit breakers and disconnects for emergency access/ shut off and label them in accordance with the equipment they service
- Missing circuit breakers in panel boxes must have “blanks” installed
- Keep areas around electrical disconnects clear to allow access
- Keep at least 3 ft (more for higher voltages) of clearance in front/on the side of equipment
- Tags
    - ◊ Are essentially warning devices to be used with the physical restraint of a lock
    - ◊ Must be legible and understandable by all employees
    - ◊ Must be made of materials that will withstand the environmental conditions encountered
    - ◊ Are only one part of an overall energy control program
    - ◊ Must be securely attached to the energy control devices
    - ◊ Is only to be removed by the person who applied it when attached to an isolating means

COVID-19 INTERIM HEALTH AND SAFETY GUIDANCE

CORPORATE HEALTH AND SAFETY MANAGER	**:**	**Brian Hobbs, CIH, CSP**
EFFECTIVE DATE	**:**	**03/2020**
REVISION DATE	**:**	**10/08/2020**
REVISION NUMBER	**:**	**5**

TABLE OF CONTENTS

1. PURPOSE

This guidance has been implemented to establish work practices, administrative procedures, and engineering controls to minimize potential exposure to SARS-CoV-2, the virus that causes COVID-19. The following guidance has been developed based on local, state and federal recommendations/requirements regarding COVID-19. The purpose of this document is to supplement existing site-specific Health and Safety Plans (HASPs) and provide interim health and safety guidance to minimize potential exposure to SARS-CoV-2. Should additional scientific information or regulatory information change, this document shall be updated accordingly.

2. SCOPE AND APPLICABILITY

This guidance covers all Roux employees and the subcontractors that Roux oversees. Site specific HASPs shall be developed to incorporate elements of mitigative measures against COVID-19 exposure. If work cannot be carried out in compliance with this guidance, the project shall be further evaluated by the Project Principal (PP), Office Manager (OM), and Corporate Health and Safety Manager (CHSM) prior to work authorization.

Roux subcontractors are required to review, comply with, and implement Roux's COVID-19 Interim Health and Safety Guidance while on site. Subcontractors may implement additional preventative measures as they see fit. All work shall be conducted in a manner consistent with the federal, state, and local guidance as it relates to COVID-19.

3. BACKGROUND

What is COVID-19?

COVID-19 is a respiratory illness that can spread from person to person. The virus that causes COVID-19 is a novel coronavirus that was first identified during an investigation into an outbreak in Wuhan, China. This virus continues to spread internationally and within the United States. There is currently no vaccine to prevent COVID-19.

What are the symptoms of COVID-19?

Reported illnesses have ranged from mild symptoms to severe illness and death for confirmed COVID-19 cases. Symptoms may appear 2 to 14 days following exposure to the virus. People with these symptoms or combinations of symptoms may have COVID-19:

- Fever or chills
- Cough
- Shortness of breath or difficulty breathing
- Fatigue
- Muscle or body aches
- Headache
- New loss of taste or smell
- Sore throat
- Congestion or runny nose
- Nausea or vomiting
- Diarrhea

This list is not all possible symptoms. The CDC will continue to update this list as they learn more about the virus. For an updated symptom list please reference the following link for CDC Symptoms of Coronavirus.

If someone develops emergency warning signs for COVID-19, they should be instructed to get medical attention immediately. Emergency warning signs can include those listed below; however, this list is not all inclusive. Please consult your medical provider for any other symptoms that are severe or concerning.

- Trouble breathing
- Persistent pain or pressure in the chest
- New confusion
- Inability to wake or stay awake
- Bluish lips or face

How does COVID-19 spread?[1]

SARS-COV-2 spreads very easily from person to person during close contact.

Individuals who are within close contact (within 6 feet) of a person with COVID-19 or have direct contact with that person are at greatest risk of infection.

- When people with COVID-19 cough, sneeze, sing, talk, or breathe they produce respiratory droplets. These droplets can range in size from larger droplets (some of which are visible) to smaller droplets. Small droplets can also form particles when they dry very quickly in the airstream.
- Infections occur mainly through exposure to respiratory droplets when a person is in close contact with someone who has COVID-19.
- Respiratory droplets cause infection when they are inhaled or deposited on mucous membranes, such as those that line the inside of the nose and mouth.
- As the respiratory droplets travel further from the person with COVID-19, the concentration of these droplets decreases. Larger droplets fall out of the air due to gravity. Smaller droplets and particles spread apart in the air.
- With passing time, the amount of infectious virus in respiratory droplets also decreases.

SARS-CoV-2 can sometimes spread by airborne transmission under certain circumstances.

Some infections can be spread by exposure to virus in small droplets and particles that can linger in the air for minutes to hours. These viruses may be able to infect people who are further than 6 feet away from the person who is infected or after that person has left the space. This kind of spread is referred to as **airborne transmission** and is an important way that infections like tuberculosis, measles, and chicken pox are spread.

- There is evidence that under certain conditions, people with COVID-19 seem to have infected others who were more than 6 feet away. These transmissions occurred within enclosed spaces that had inadequate ventilation. Sometimes the infected person was breathing heavily, for example while singing or exercising.
  - Under these circumstances, scientists believe the amount of infectious smaller droplet and particles produced by the people with COVID-19 became concentrated enough to spread the virus to other people. The people who were infected were in the same space during the same time or shortly after the person with COVID-19 had left.
- Available data indicate it is much more common for the virus that causes COVID-19 to spread through close contact with a person who has COVID-19 than through airborne transmission.[2]

Spread from contact with contaminated surfaces or objects is less common.

Respiratory droplets can also land on surfaces and objects. It is possible that a person could get COVID-19 by touching a surface or object that has the virus on it and then touching their own mouth, nose, or eyes. Spread from touching surfaces is not thought to be a common way that COVID-19 spreads.

4. TRAINING REQUIREMENTS

All employees with potential exposure to COVID-19 shall be provided training that incorporates COVID-19 exposure mitigation strategies, such as implementation of proper social distancing, personal hygiene (e.g., handwashing), as well as disinfection procedures, as outlined by CDC guidelines.

5. EXPOSURE RISK POTENTIAL

Worker risk of occupational exposure to COVID-19 can vary from very high, high, medium, or lower (caution) risk. This level of exposure is dependent on several factors, which can include industry type; need for contact within

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[1] How COVID-19 Spreads https://www.cdc.gov/coronavirus/2019-ncov/prevent-getting-sick/how-covid-spreads.html#edn1

[2] Scientific Brief: SARS-CoV-2 and Potential Airborne Transmission | CDC https://www.cdc.gov/coronavirus/2019-ncov/more/scientific-brief-sars-cov-2.html

6 feet of people known to be or suspected of being infected with COVID-19; density of work environment; and industrial setting (i.e., healthcare building, occupied interior work area, minimal ventilation).

Provided below is background risk level information taken from the U.S. Department of Labor Occupational Safety and Health Administration Guidance on preparing workplaces for COVID-19. Risk evaluations for each project shall be conducted by the PP and OM in consultation with the CHSM to ensure Roux employees and subcontractors remain within the lower exposure (caution) category. If it is identified there is a medium exposure risk or higher, further evaluation and mitigative measures shall be evaluated to reduce overall exposure risk prior to work authorization.

Very High Exposure Risk (Activities not conducted by Roux)

Very high exposure risk includes occupations/work activities with high potential for exposure to known or suspected sources of COVID-19 during specific medical, postmortem, or laboratory procedures. This can include but is not limited to:

- Healthcare workers (e.g., doctors, nurses, dentists, paramedics, emergency medical technicians) performing aerosol-generating procedures (e.g., intubation, cough induction procedures, bronchoscopies, some dental procedures and exams, or invasive specimen collection) on known or suspected COVID-19 patients.
- Healthcare or laboratory personnel collecting or handling specimens from known or suspected COVID-19 patients (e.g., manipulating cultures from known or suspected COVID-19 patients).
- Morgue workers performing autopsies, which generally involve aerosol-generating procedures on the bodies of people who are known to have, or suspected of having, COVID-19 at the time of their death.

High Exposure Risk (Activities not conducted by Roux)

High exposure risk occupations/work activities include exposure to known or suspected COVID-19 positive individuals. This can include but not limited to:

- Healthcare delivery and support staff (e.g., doctors, nurses, and other hospital staff who must enter patients' rooms) exposed to known or suspected COVID-19 patients. (Note: when such workers perform aerosol-generating procedures, their exposure risk level becomes very high.)
- Medical transport workers (e.g., ambulance vehicle operators) moving known or suspected COVID-19 patients in enclosed vehicles.
- Mortuary workers involved in preparing (e.g., for burial or cremation) the bodies of people who are known to have, or suspected of having, COVID-19 at the time of their death.

Medium Exposure Risk

Medium exposure risk occupations/work activities include those that require frequent and/or close contact with (i.e., within 6 feet of) people who may be infected with COVID-19, but who are not known or suspected to be COVID-19 positive. For most of our worksites, it is assumed there is on-going community transmission for COVID-19. Therefore, workers who work at sites and may have contact with the general public, other contractors, high-population-density work environments (i.e., greater than 10 people) fall within medium exposure risk group category. This can include, but is not limited to, sampling events that require two or more workers to collect and log samples in close contact or work occurring in an interior space with limited ventilation and several workers present.

Lower Exposure Risk (Caution)

Lower exposure risk (caution) occupations/work activities are those that do not require contact with people known to be or suspected of being COVID-19 positive. During these activities, there is limited contact (i.e., within 6 feet of) the general public or other workers. Workers in this category have minimal occupational contact with the public and other coworkers. This can include construction oversight that does not require close contact as well as sampling or gauging events performed by one worker.

6. COVID-19 HEALTH SCREENING

6.1 Roux Employees

All Roux employees are required to self-attest to a COVID-19 Daily Health Questionnaire which is to be completed at home through a mobile application on scheduled workdays. The purpose of this program is to ensure business continuity as well as mitigate any potential exposure to our employees and others if it is determined employees are at-risk for contracting COVID-19. As part of this self-attestation, all employees are required to take their temperatures daily at home to confirm they do not have a fever (≥ 100.4). Employees who answer yes to any of these questions are instructed to contact their Office Manager and/or Department Head immediately and should not enter the office or go to a field site. Information shall be used to determine appropriate internal response in consultation with the Human Resources Director and Corporate Health and Safety Manager.

Below, you will find our COVID-19 Daily Health Questionnaire that all Roux employees are required to self-attest to **every scheduled workday by 9:30 am.** If employees do not promptly fill out the questionnaire by the time listed above, there will be additional follow up by HR, H&S, and/or OMs.

According to the U.S. Centers for Disease Control and Prevention & the World Health Organization, COVID-19 Symptoms include:

- *Fever (≥100. 4°F) or chills*
- *Cough*
- *Shortness of breath or difficulty breathing*
- *Fatigue*
- *Muscle or body aches*
- *Headache*
- *New loss of taste or smell*
- *Sore throat*
- *Congestion or runny nose*
- *Nausea or vomiting*
- *Diarrhea*

Have you experienced any of the COVID-19 related symptoms noted above in the last 14 days? Please Note: We do not expect employees to answer "yes" to the symptoms question if these are symptoms you normally experience due to another condition or medication.

- *Yes*
- *No*

Have you been in close contact with someone who is suspected or confirmed to have COVID-19 or who is under investigation for COVID-19 within the last 14 days? *Close contact is defined as someone who was within 6 feet of an infected person for at least 15 minutes or coming into direct contact with secretions (e.g., sharing utensils, being coughed on) from an infected person.*

- *Yes*
- *No*

Have you traveled outside of the country, been on a cruise ship and/or traveled to areas within the United States which have state mandated travel restrictions in the last 14 days?

- *Yes*
- *No*

Have you tested positive for COVID-19 within the last 14 days?

- *Yes*
- *No*

6.2 Subcontractors

In an effort to mitigate the risk of transmission of COVID-19, Subcontractors who shall perform work on-site are required to attest to the fitness of their work crew on a daily basis. This requires each worker to self-assess by asking themselves the four questions listed in the section above and also contained within the Roux Subcontractor Work Crew COVID-19 Daily Health Attestation. If any crew member answers "yes" to any of the questions, that worker is not to report to the field site and should seek proper medical advice, in accordance with local, state and federal guidelines.

On a daily basis, the subcontractor supervisor must provide the Subcontractor Work Crew COVID-19 Daily Health Attestation complete with the names of all work crew fit to be on the site for that day (i.e., who have answered "no" to all questions on the self-assessment) to Roux's Project Manager. The Subcontractor must notify Roux if there have been any "yes" responses daily. Subcontractors shall not be required to provide the name or any other personal information of any employee who has answered "yes" to any of the self-assessment questions, however, the subcontractor should provide the date and times that employee has been onsite in the prior 14 days. Records shall be maintained within the project files indicating health screening has been performed, records shall be retained for not less than 14 days following the date of submission. The Roux Subcontractor Work Crew COVID-19 Daily Health Check Attestation can be found within Appendix A.

7. SELF-ISOLATION & QUARANTINE

7.1 Self-Isolation

What if I am asked to self-isolate at home and when can I return from home isolation?

Depending on the situation, if you are COVID-19 positive or suspected to have COVID-19, employees may be required to self-isolate in their homes as per CDC or local health department guidelines. As per CDC guidance, return from isolation has been broken out into two categories. The first includes confirmed or suspected COVID-19 individuals exhibiting symptoms and the second includes those who have not had COVID-19 symptoms (i.e., asymptomatic) but tested positive and are under self-isolation. Both categories, along with strategies to return from home isolation, are outlined below.

People with COVID-19 under home isolation:

Accumulating evidence supports ending isolation and precautions for persons with COVID-19 using a symptom-based strategy. Specifically, researchers have reported that people with mild to moderate COVID-19 remain infectious no longer than 10 days after their symptoms began, and those with more severe illness or those who are severely immunocompromised remain infectious no longer than 20 days after their symptoms began. Therefore, CDC has updated the recommendations for discontinuing home isolation as follows:

1. **Persons with COVID-19 who have symptoms** and were directed to care for themselves at home may discontinue isolation under the following conditions:
   a. At least 10 days* have passed since symptom onset;
   b. at least 24 hours have passed since resolution of fever without the use of fever-reducing medications; and
   c. other symptoms have improved.

* *A limited number of persons with severe illness may produce replication-competent virus beyond 10 days, which may warrant extending the duration of isolation for up to 20 days after symptom onset. Consultation with your healthcare provider will be warranted in such cases of severe illness.*

2. **Persons infected with SARS-CoV-2 who never develop COVID-19 symptoms** may discontinue isolation and other precautions 10 days after the date of their first positive RT-PCR test for SARS-CoV-2 RNA.

7.2 Quarantine

Employees may be required to self-quarantine due to potential exposure with a suspected and/or confirmed COVID-19 positive individual as well as recent travel as per local/state guidelines. People in quarantine should stay home, separate themselves from others, monitor their health, and follow directions from their state or local health department. If Roux employees meet the criteria to self-quarantine based on potential exposure/travel, they are required to self-quarantine for 14 days regardless of local/state exemptions. Even if you test negative for COVID-19 or feel healthy, symptoms may still appear 2 to 14 days after exposure to the virus.

7.2.1 Close Contact Quarantine

Employees who have come into close contact with someone who has COVID-19 are required to self-quarantine for 14 days following their last contact with the COVID-19 positive person. Close contact can be defined as being within 6 feet of someone who has COVID-19 for a total of 15 minutes or more, providing care at home to someone who is sick with COVID-19, having direct physical contact with COVID-19 individual, sharing utensils with COVID-19 individual, and being sneezed/coughed on by someone with COVID-19.

7.2.2 Travel Related Quarantine

All travel out of state must be communicated with the OM and/or Department Head prior to departure. Please note, some state/local entities require submissions of traveler health forms. It is expected all Roux employees will comply with such state/local travel requirements. All employees returning from international and/or cruise ship travel must quarantine for 14 days from the time they have returned home.

Personal Travel

Employees who will be traveling out of state are responsible for checking the local/state quarantine guidance for the regions they are traveling from and to in advance of travel and notifying their OM prior to traveling in order to evaluate the impact on the business. Based on state/local guidelines you may be required to quarantine for 14 days from the time you have returned home.

Work-Related Travel

The Project Team (i.e., PM & PP) and field staff who will be traveling are responsible for checking the local/state quarantine guidance for the regions they are traveling from and to in advance of travel and notifying their OM prior to traveling in order to evaluate the impact to the business. Additionally, health and safety considerations shall be reviewed by the OM in consultation with the CHSM regarding logistics and overnight accommodations. Based on state/local guidelines, you may be required to quarantine for 14 days from the time you have returned home.

8. WORKPLACE CONTROLS

During the project planning phase, worksite evaluations shall be carried out by the PP and OM in consultation with the CHSM to determine risk exposure levels for work activities. If it is determined there is a medium exposure risk level or higher, additional workplace controls shall be evaluated and implemented as required in addition to the basic infection prevention measures outlined below in Section 8. Additional workplace controls can include engineering controls (i.e., ventilation, physical barriers), administrative controls (i.e., minimizing contact between workers, rotating shifts, site specific training), and additional personal protective equipment (i.e., respiratory protection). If exposure risk cannot be mitigated, potential project postponement may be necessary at the discretion of the OM in consultation with the CHSM.

A Job Safety Analysis (JSA) has been developed and is provided in Appendix B, which summarizes and applies concepts within this guidance including the infection prevention measures listed below. This JSA shall be required for all field work in areas where there is community-based transmission of COVID-19.

9. INFECTION PREVENTION MEASURES

The following is basic infection prevention and personal hygiene practices which shall be implemented for all Roux field activities as well as in the office setting.

- ***Personal Hygiene***
  - Wash your hands often with soap and water for at least 20 seconds.
    - If soap and water are not available, use an alcohol-based sanitizer that contains at least 60% ethanol or 70% isopropanol.
    - Key times to wash your hands include after blowing your nose, coughing or sneezing, after using the restroom, and before eating or preparing food.
  - Do not touch your eyes, face, nose and mouth with unwashed hands.
  - Cover your mouth and nose with a tissue when you cough or sneeze or use the inside of your elbow.
  - Throw potentially contaminated items (e.g., used tissues) in the trash.
- ***Avoid Close Contact/Secondary Contact with People and Potentially Contaminated Surfaces***
  - Apply appropriate social distance (6+ feet).
  - Stop handshaking—use and utilize other noncontact methods for greeting.
  - Do not work in areas with limited ventilation with other Site workers (e.g., small work trailer which lacks HVAC system). If working in a trailer, the following conditions must be met: limited to 4 workers, large enough to have the ability to apply social distance and has open windows and/or operational HVAC to ensure proper ventilation of the workspace.
  - Morning tailgate/safety meetings shall occur outside and not within work trailers.
    - Do not require employees or subcontractors to sign in using the same tailgate form. The Site Supervisor/SHSO should record names of those in attendance on the form.
    - If the Site has more than 10 workers, separate tailgate meetings should be performed in smaller groups.
  - Do not share equipment or other items with co-workers and subcontractors unless wearing appropriate PPE (e.g., nitrile gloves). Assume equipment and other surfaces are potentially contaminated and remove gloves aseptically.
  - If receiving labware or other equipment disinfect to the extent feasible. If there are concerns for contaminating labware please wear appropriate PPE (e.g., gloves) to minimize contact.
  - Contact your lab/equipment vendor to confirm equipment is properly disinfected prior to being shipped.
  - Do not carpool with others (e.g., clients, coworkers).
  - For company owned vehicles limit sharing of vehicles with coworkers. If unable to limit sharing of company owned vehicles, properly disinfect vehicle before driving with a focus on commonly touched surfaces (e.g., steering wheels, shifters, buttons, etc.).
  - Use caution when using public restrooms, portable toilets. Use paper towel as a barrier when touching door handles and faucets.
- ***Cleaning and Disinfecting***
  - Clean and disinfect frequently touched surfaces daily. Commonly touched items can include but are not limited to tables, doorknobs, light switches, countertops, handles, desks, phones, keyboards, toilets, faucets, sinks, and field equipment (i.e., photo-ionization detector, field equipment).
  - **Hard (Non-porous) Surfaces**
    - If surfaces are dirty, they should be cleaned with a detergent/soap and water prior to disinfection.

  - Refer to the manufacturer’s instructions to ensure safe and effective use of the product and wear appropriate personal protective equipment (e.g., gloves, safety glasses, face shield).
  - Many products require:
    - Keeping surface wet for a period of time (i.e., contact time)
      - Refer to manufacturer’s instructions outlining adequate contact time.
    - Precautions such as wearing gloves and making sure you have good ventilation during use of the product.
  - Disposable gloves should be removed aseptically and discarded after cleaning. Wash hands immediately following removal of gloves. Refer to Appendix C for how to remove gloves aseptically.
  - For disinfection, diluted household bleach solutions, alcohol solutions with at least 70% alcohol, and most common EPA-registered household disinfectants should be effective.
    - Diluted household bleach solutions can be used if appropriate for the surface. Follow manufacturer’s instructions for application and proper ventilation. Check to ensure the product is not past its expiration date. Never mix household bleach with ammonia or any other cleanser. Unexpired household bleach will be effective against coronaviruses when properly diluted. Leave the solution on the surface for at least 1 minute.
      - Prepare a bleach solution by mixing:
        - 5 tablespoons (1/3 cup) bleach per gallon of water or
        - 4 teaspoons bleach per quart of water
  - Products with EPA-approved emerging viral pathogen claims are expected to be effective against COVID-19. Follow the manufacturer’s instructions for all cleaning and disinfecting products (e.g., concentration, application method and contact time, etc.).

- **Soft (Porous) Surfaces**
  - For soft (porous) surfaces, remove visible contamination if present and clean with appropriate cleaners indicated for use on the surfaces. After cleaning:
    - Launder items as appropriate in accordance with the manufacturer’s instructions. If possible, launder using the warmest appropriate water setting for the item and dry items completely; or
    - Use products with the EPA-approved emerging viral pathogens that claim they are suitable for porous surfaces.
- **Electronics**
  - For electronics such as tablets, touch screens, keyboards, remote controls, etc. remove visible contamination if present.
    - Follow the manufacturer’s instructions for all cleaning and disinfection products.
    - Consider use of wipeable covers for electronics.
    - If no manufacturer guidance is available, consider the use of alcohol-based wipes or sprays containing at least 70% alcohol to disinfect touch screens. Dry surfaces thoroughly to avoid pooling of liquids.
- ***Linens, Clothing, and Other Items that Go in the Laundry***
  - Although it is unlikely field clothing would become potentially contaminated with COVID-19, it is recommended that field staff regularly launder field clothing following any field event upon returning home.
  - In order to minimize the possibility of dispersing the virus from potentially contaminated clothing, do not shake dirty laundry.
  - Wash items as appropriate in accordance with the manufacturer’s instructions. If possible, launder items using the warmest appropriate water setting for the items and dry items completely.
  - Clean and disinfect hampers or other containers used for transporting laundry according to guidance listed above.

10. CLOTH FACE COVERINGS

The CDC recommends the use of cloth face coverings in public settings where other social distancing measures are difficult to maintain, such as grocery stores and pharmacies, and especially in areas of significant community-based transmission. This recommendation is based on recent studies and an understanding that a significant portion of asymptomatic, as well as pre-symptomatic, individuals can shed the virus to others before showing symptoms. Studies indicate that COVID-19 can spread among people interacting in close proximity through speaking, coughing, or sneezing. The purpose of the cloth covering is NOT to provide protection to the wearer, but to protect the wearer from unknowingly infecting others if they are asymptomatic/pre-symptomatic. The use of cloth face coverings is to supplement and NOT replace the existing practices outlined above.

Based on existing studies and on-going recommendations and/or requirements from federal, state, and local entities, Roux is recommending the use of cloth face coverings, when appropriate. Appropriate use is defined when local authorities or clients require the use of cloth face coverings in conjunction with established social distancing, or if an employee elects to use a cloth covering on their own accord. Roux will provide cloth face coverings that shall meet the basic requirements outlined by the CDC guidance.

Cloth Face Coverings should:

- Fit snugly but comfortably against the side of the face;
- Be secured with ties or ear loops, when possible;
- May include multiple layers of fabric;
- Allow for breathing without restriction; and
- Be able to be laundered and machine dried with no damage or change to shape.

When donning and doffing the cloth face covering, individuals should avoid touching their eyes, nose, and mouth. Following removal of the cloth face covering, employees should wash their hands immediately using the guidelines described in Section 8 above. Cloth face coverings should be routinely washed depending on the frequency of use.

The use of existing cloth covering products/materials, such as a scarf, neck gaiter, or bandana, is deemed acceptable by the CDC. Note, the cloth face coverings recommended are not surgical masks or N-95 respirators. Those are critical supplies that must continue to be reserved for healthcare workers and other medical first responders, as recommended by current CDC guidance. Should there be a requirement for workers to be in respiratory protection (e.g., full-face respirator w/cartridges, P100, N95 respirators), it shall be addressed during the project pre-planning phase, which includes discussions with the PP and OM in consultation with CHSM.

11. HOTEL SELECTION PROCESS AND OVERNIGHT/REMOTE WORK

Hotel Selection

Due to the current COVID-19 situation, Roux is recommending overnight travel be limited to the extent possible. If there is a project requiring the overnight stay at a hotel, accommodations shall be made only after the hotel and hotel's location have been vetted in accordance with Roux's established guidance as defined below. The Project Team, which includes the Project Manager (PM) and PP along with the OM, in consultation with the CHSM, shall verify the hotel has appropriate protocols in place to limit the potential exposure and spread of COVID- 19 through proper cleaning and disinfection practices. Discussions with the hotel shall include, but are not limited to, measures taken to keep guests safe during their stay, guest room sanitization schedule, training of staff regarding disinfecting protocols using EPA-approved disinfectants, hotel staff fitness for duty requirements, etc. Some example questions are listed below. Following the initial hotel assessment by the Project Team, the OM and the CHSM shall review the hotel assessment findings prior to the CHSM's authorization that the hotel may be used by any Roux employees.

Sample Questions for Evaluating Hotels

1. Is there an established COVID-19 guidance/policy your location is following?
2. What additional measures are being implemented to keep workers and customers safe?; (e.g. signs/placards, social-distancing/mask reminders)
3. Is there a guest room sanitization schedule?
4. Have staff been trained on properly cleaning/disinfecting areas?
5. What types of disinfectants are in use at your location?
6. How are you evaluating staff fitness for duty? (e.g., temperature checks, not reporting to work when sick, etc.)

Employees staying overnight should abide by the following guidance:

- Ensure you properly disinfect your room upon arrival. This should include a wipe down of all commonly touched surfaces with an approved disinfectant. Use appropriate PPE (e.g., nitrile gloves) when disinfecting surfaces.
- Place the “Do Not Disturb” placard on the room while away and consider limiting hotel housekeeping service to the extent feasible (e.g., not having the room cleaned each day) to minimize potential secondary contact with others.
- Do not spend any more time in hotel common areas (i.e., lobby, hallways, etc.) than is necessary.
- Follow proper Infection Prevention Measures found within Section 8 above.
- Have meals in your hotel room after disinfecting outer package surfaces, as outlined in Section 8 above. Do not eat in public spaces or restaurants.
- If the hotel has a restaurant or café, do not have your meal in a common area; instead order food to be picked up or delivered to your room. If delivered, opt for contactless delivery (left outside the door, delivery person knocks and leaves). Always use your own pen if you need to sign something.
- Employees may also pick up food from takeout locations, order groceries or food for delivery to the hotel. Call local restaurants to order food for delivery (call the hotel lobby for recommendations) or use food ordering apps. Some apps have options for contactless delivery.

12. TRANSPORTATION-RENTAL CARS AND ROUX-OWNED VEHICLES

Rental Cars

Due to the current COVID-19 situation, Roux recommends rental car usage be limited to the extent possible. If there is a project requiring the use of a rental car (e.g. truck/van), accommodations shall be made only after the rental car company and their store’s location have been vetted in accordance with Roux’s established guidance, as defined below. The Project Team (PM and PP) and OM in consultation with the CHSM shall verify the rental company where you are picking up your vehicle has appropriate protocols in place to limit the potential exposure and spread of COVID- 19 through proper cleaning and disinfection practices. Discussions with the rental car company shall include, but are not limited to, measures to be taken to keep customers safe during pickup/drop-off, rental car disinfection protocols, training of staff regarding disinfecting protocols using EPA-approved disinfectants, rental car company staff fitness for duty requirements, etc. Some example questions are listed below. Following the initial rental car company store assessment by the Project Team, the OM and the CHSM shall review the rental car company assessment findings prior to the CHSM’s authorization that the rental car company store may be used by any Roux employees.

Sample Questions for Evaluating Rental Car Companies

1. Is there an established COVID-19 guidance your location is following?
2. What additional measures are being implemented to keep workers and customers safe?
3. Is there a car sanitization schedule?

4. Have staff been trained on properly cleaning/disinfecting vehicles?
5. What types of disinfections are in use at your location?
6. How are you evaluating staff fitness for duty? (e.g., temperature checks, not reporting to work when sick, etc.)

Upon vehicle pickup, employees shall don nitrile gloves and safety glasses and clean/disinfect all high-touch surfaces (steering wheel, knobs, door handles, turn signals, radio, etc.) by wiping thoroughly with approved disinfectants (following manufacturer’s instructions). Aseptically remove gloves and dispose of them along with rags/wipes, appropriately. Wash hands or use hand sanitizer immediately after each episode of cleaning. Due to social distancing requirements, personnel shall not carpool to destinations.

Roux-Owned Vehicles

Due to the current COVID-19 situation, Roux-owned vehicles should be dedicated to individual employees to the extent feasible, and if authorized by the OM. In the case this cannot be accommodated, employees shall don nitrile gloves and safety glasses, and clean/disinfect all high-touch surfaces (steering wheel, knobs, door handles, turn signals, radio, etc.) by wiping thoroughly with approved disinfectants (following manufacturer’s instructions). This cleaning and disinfection shall occur before and after each use of the vehicle. Aseptically remove gloves and dispose of them along with rags/wipes, appropriately. Wash hands or use hand sanitizer immediately after each episode of cleaning. Due to social distancing requirements, personnel shall not carpool to destinations.

APPENDIX A

Roux Subcontractor Work Crew

COVID-19 Daily Health Screening Questionnaire

Subcontractor Work Crew
COVID-19 Daily Health Attestation

Date:

Company Name:

Supervisor Name: Signature:

Project Name:

Site Address:

Number of Workers on site:

Prior to entry onto a field site, the following questions shall be asked by the Subcontractor Supervisor to their work crew.

It is preferred this questionnaire is completed for each individual prior to their arrival at the field site. If the answer to any of these questions is YES, the worker is not to report to the field site and seek proper medical advice, in accordance with CDC Guidelines.

The Subcontractor Supervisor must provide this form on a daily basis to the Roux primary contact for the project and notify Roux of any YES responses.

1. Have you experienced any signs/symptoms of COVID-19 such as fever (≥100.4°F), cough, shortness of breath, chills, fatigue, muscle/body aches, headache, new loss of taste or smell, sore throat, congestion or runny nose, nausea/vomiting or diarrhea in the last 14 days?

2. Have you been in close contact* with someone who is suspected or confirmed to have COVID-19 or who is under investigation for COVID-19 within the last 14 days?

*Close contact is defined as someone who was within 6 feet of an infected person for at least 15 minutes or coming into direct contact with secretions (e.g. sharing utensils, being coughed on) from an infected person.

3. Have you traveled outside of the country, been on a cruise ship and/or traveled to areas within the United States which have state mandated travel restrictions in the last 14 days?

4. Have you tested positive for COVID-19 within the last 14 days?

Please list the crew member’s names on site for the day.

1.	9.
2.	10.
3.	11.
4.	12.
5.	13.
6.	14.
7.	15.
8.	16.

APPENDIX B

Job Safety Analysis-Working in Areas Affected by COVID-19

JOB SAFETY ANALYSIS Ctrl. No. CVD-19	DATE: 04/16/2020	☒ NEW ☐ REVISED	PAGE 1 of 2

JSA TYPE CATEGORY **Generic**	WORK TYPE **Fieldwork**	WORK ACTIVITY (Description) **Working in Areas Affected by Coronavirus**

DEVELOPMENT TEAM	**POSITION / TITLE**	**REVIEWED BY:**	**POSITION / TITLE**
Kristina DeLuca	Health and Safety Specialist	Brian Hobbs	CHSM

REQUIRED AND / OR RECOMMENDED PERSONAL PROTECTIVE EQUIPMENT

☐ LIFE VEST	☐ GOGGLES	☐ AIR PURIFYING RESPIRATOR	☒ GLOVES – Leather/cut-resistant in field and nitrile as needed
☒ HARD HAT – In field	☐ FACE SHIELD	☐ SUPPLIED RESPIRATOR	
☐ LIFELINE / BODY HARNESS	☐ HEARING PROTECTION	☒ PPE CLOTHING – High visibility vest in field	
☒ SAFETY GLASSES – In field	☒ SAFETY SHOES – Steel/composite toe in fie		☐ OTHER

REQUIRED AND / OR RECOMMENDED EQUIPMENT

Cloth face covering, nitrile gloves, hand soap, water source, hand sanitizer, disinfectant spray and disinfectant wipes.

Commitment to Safety – All personnel onsite will actively participate in SPSA performance by verbalizing SPSAs throughout the day.

SOCIAL DISTANCING: Maintain 6' of distance between yourself and all other people at all times. If you do not believe the scope of work can be conducted while maintaining this distance, contact your Project Manager immediately.

Assess **[1]JOB STEPS**	**Analyze** **[2]POTENTIAL HAZARDS**	**Act** **[3]CRITICAL ACTIONS**
1. Project Preplanning	N/A	• Review and follow COVID-19 CDC, Roux, Client and local orders/protocols. • Ensure all workers are fit for duty - anyone feeling sick should remain at home even if symptoms do not align with COVID-19. If a worker has been in contact with someone potentially positive or positive for COVID-19, contact your Office Manager. • Determine PPE needs and ensure adequate supply of disinfectant wipes/spray, soap and water or hand sanitizer at Site. Due to high demands and limited supply, plan ahead. • Use the minimum number of employees necessary to safely complete the work.
2. Mobilization	**Exposure:** Becoming infected or infecting co-workers	**Personal/Rental/Roux Owned Vehicle** • Do not carpool. • Use the same vehicle every day and do not share with co-workers. • Verify workers/other people are not approaching vehicle prior to exiting the vehicle. Maintain 6' of distance from others. • DO not valet your car or allow others to use your car. If necessary, don nitrile gloves and safety glasses and clean/disinfect all high touch surfaces (steering wheel, knobs, door handles, turn signals, radio, etc.) by wiping thoroughly with approved disinfectants (follow manufacturer's instructions). This cleaning and disinfection shall occur before and after each use of the vehicle. Aseptically remove gloves and dispose of them along with rags/wipes, appropriately. Wash hands or use hand sanitizer immediately after each episode of cleaning. **Public Transportation** • Public transit should not be used unless absolutely necessary. Consider renting a car rather than taking public transit. If public transit is required, wear appropriate PPE and apply social distancing (6 ft). Use proper donning and doffing procedures for nitrile gloves. Wash hands or use hand sanitizer immediately after. **Hotel Stay (Refer to COVID-19 H&S Guidance for more info)** • If a hotel stay is deemed necessary for the given field work, ensure that you disinfect your room upon initial arrival and returning each day. Disinfect all surfaces of your room with an appropriate disinfectant using nitrile gloves. Use proper donning and doffing procedures for nitrile gloves. • Place the "Do Not Disturb" placard on the room while away and limit housekeeping services to the extent feasible during your stay to minimize the reintroduction and spread of the virus from others. Minimize, or avoid entirely, time spent in hotel common areas (i.e., the lobby, dining areas, gyms, etc.). Wash hands or use hand sanitizer often.

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[1] Each Job or Operation consists of a set of tasks / steps. Be sure to list all the steps needed to perform job.

[2] A hazard is a potential danger. Break hazards into six types: Contact - victim is struck by or strikes an object; Caught - victim is caught on, caught in or caught between objects; Fall - victim falls to ground or lower level (includes slips and trips); Exertion - excessive strain or stress / ergonomics / lifting techniques; Exposure - inhalation/skin hazards, energy source; Energy Source – electricity, pressure, compression/tension.

[3] Using the first two columns as a guide, decide what actions or procedures are necessary to eliminate or minimize the risk. List the recommended safe operating procedures. Say exactly what needs to be done - such as "use two persons to lift". Avoid general statements such as, "be careful".

3. Tailgate Meeting	**Exposure:** Becoming infected or infecting co-workers	• Must occur outside or remotely (i.e. video or conference call). • Maintain at least a 6+ ft distance between you and others. • Discuss primary infection prevention measures listed below. • Do not require employees or subcontractors to sign in, the Site Supervisor shall record names on the attendance form. • If the Site has more than 10 workers, separate tailgate meetings should be performed. • Discuss COVID-19 symptoms with coworkers and subcontractors to ensure fitness for duty. Anyone exhibiting signs or symptoms should be instructed to leave the Site, contact your Project Manager.
4. Site Activities	**Exposure:** Becoming infected or infecting co-workers	• Coordinate field activities at the beginning of the day (i.e. Tailgate meeting) to minimize time spent in crowded spaces or overlap while completing job tasks. • Don cloth face coverings as appropriate. • Apply social distancing (6+ ft) when interacting with others. If anyone comes within 6 ft of you while conducting work and your work prevents you from moving away, politely ask them to move back. If others are unable to move from your space, stop work and leave area. • Do not shake hands or touch others. • Do not share equipment or other items with co-workers and subcontractors unless wearing appropriate PPE (e.g. nitrile gloves). Assume equipment and other surfaces are potentially contaminated and remove gloves aseptically. • If anyone is coughing or sneezing in your vicinity, stop work and leave the area. • Do not work in areas with limited ventilation with others. • Cover your mouth and nose with tissue or paper towel or with your elbow when coughing or sneezing and wash hands or use hand sanitizer immediately after. If sick contact SHSO/PM and leave Site immediately. • Disinfect work surfaces/areas with approved disinfectant you’re responsible for (ex: desk, office doorknob, computer, etc.) at least once at the beginning of your shift and at least once at the end of your shift with either sanitizing wipes or disinfectant spray. • Phones should be operated hands free to extent feasible. Sanitize your phone on a regular basis. Disinfection should also take place whenever suspected contaminated material comes in contact with any work surfaces/areas. Wash hands or use hand sanitizer immediately after. • Avoid public spaces and going out to eat by bringing your own lunch to the Site. If performing work in high density urban areas, it is recommended all food must be consumed at or in your vehicle. Wash hands or use hand sanitizer before eating and immediately after.

Primary Infection Prevention Measures

- Wash your hands often with soap and water for at least 20 seconds.
    - If soap and water are not available, use an alcohol-based sanitizer that contains at least 60% ethanol or 70% isopropanol. Key times to wash hands include after blowing your nose, coughing or sneezing, after using the restroom, and before eating or preparing food.
- Do not touch your eyes, face, nose and mouth with unwashed hands.
- Cover your mouth and nose with a tissue when you cough or sneeze or use the inside of your elbow. Throw potentially contaminated items (e.g. used tissues) in the trash.
- Avoid close contact/secondary contact with people and potentially contaminated surfaces.
    - Apply appropriate social distance (6+ feet).
    - Stop handshaking/touching others and use caution when accessing public spaces.
- Clean and disinfect frequently touched surfaces daily. Commonly touched items can include but are not limited to tables, doorknobs, light switches, countertops, handles, desks, phones, keyboard, toilets, sinks and field equipment. If surfaces are dirty, they should be cleaned with soap and water prior to disinfection. If surface cannot be cleaned/disinfected, then wash hands or use sanitizer as soon as possible.

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[1] Each Job or Operation consists of a set of tasks / steps. Be sure to list all the steps needed to perform job.

[2] A hazard is a potential danger. Break hazards into six types: Contact - victim is struck by or strikes an object; Caught - victim is caught on, caught in or caught between objects; Fall - victim falls to ground or lower level (includes slips and trips); Exertion - excessive strain or stress / ergonomics / lifting techniques; Exposure - inhalation/skin hazards; Energy source – electricity, pressure, compression/tension.

[3] Using the first two columns as a guide, decide what actions or procedures are necessary to eliminate or minimize the risk. List the recommended safe operating procedures. Say exactly what needs to be done - such as "use two persons to lift". Avoid general statements such as, "be careful".

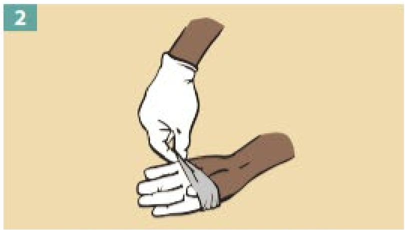
APPENDIX C

How to Remove Gloves

How to Remove Gloves

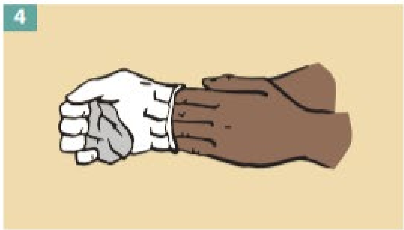
To protect yourself, use the following steps to take off gloves

Grasp the outside of one glove at the wrist.
Do not touch your bare skin.



Peel the glove away from your body,
pulling it inside out.

Hold the glove you just removed in
your gloved hand.



Peel off the second glove by putting your fingers
inside the glove at the top of your wrist.

Turn the second glove inside out while pulling
it away from your body, leaving the first glove
inside the second.

Dispose of the gloves safely. Do not reuse the gloves.

Clean your hands immediately after removing gloves.

INCIDENT INVESTIGATION AND REPORTING MANAGEMENT PROGRAM

CORPORATE HEALTH AND SAFETY MANAGER : Brian Hobbs, CIH, CSP

EFFECTIVE DATE : 01/19

REVISION NUMBER : 4

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APPENDICES

Appendix A – Accident Report and Investigation Form

Appendix B – Near Loss Form

Appendix C – Injury Illness Reporting Flow Chart

1. PURPOSE

Roux Associates, Inc. and its affiliated companies, Roux Environmental Engineering and Geology, D.P.C, and Remedial Engineering (collectively, “Roux”) has instituted the following management program for reporting Environmental Health and Safety (EHS) incidents and near losses, investigation and correcting the causes of incidents, tracking incidents and corrective actions taken, and sharing the cause and corrective actions with Roux personnel. These practices and procedures establish a method to track progress and improvements to the company EHS performance.

2. SCOPE AND APPLICABILITY

These procedures apply to all Roux employees. Employees are required to follow these procedures for all incidents involving Roux personnel, or other personnel (e.g., subcontractors) working for Roux, regardless of the specific work activity or work location.

This program is intended, in part, to fulfill the Occupational Safety and Health Administration (OSHA) occupational injury and illness reporting and recording requirements cited in the Code of Federal Regulations (CFR) at 29 CFR 1904.

3. RESPONSIBILITIES

It shall be the responsibility of all Roux employees to report all incidents as soon as possible to the PM (or Administrative Manager for office-related incidents), SHSO, OHSM and OM, regardless of severity. Additionally, the following positions have specific responsibilities for implementing this specific SOP.

3.1 Corporate Health and Safety Manager (CHSM)

- The CHSM has the responsibility of ensuring that a system is in place for reporting, investigation, correction, and communicating of EHS incidents and near losses.
- The CHSM has the overall responsibility of implementing and communicating the contents of this program to Office Health and Safety Managers (OHSMs).
- The CHSM will review all incidents and corrective actions taken. The CHSM will provide a summary of serious incidents to the Board of Directors.
- The CHSM will communicate learnings from incidents and corrective actions taken to all personnel, through quarterly communications.
- The CHSM will periodically review and evaluate the effectiveness of this procedure.

3.2 Office Manager (OM)

- The OM will designate the individual to serve as the OHSM responsibility for ensuring that requirements in this procedure are met.
- The OM will ensure that sufficient resources are allocated to fulfill the requirements of this procedure.
- The OM will conduct final review of all incident reports prepared under this procedure.

3.3 Office Health and Safety Manager (OHSM)

- It is the responsibility of the OHSM to review draft incident reports and assist the OM in finalizing reports of all accidents, illnesses and incidents related to work activity, and to assist the SHSO when necessary.

- The OHSM may not approve a site-specific HASP unless the HASP includes incident reporting procedures and forms.
- The OHSM will suggest and implement corrective actions to prevent the same type of incident from re-occurring.
- The OHSM will keep all incident reports, corrective action taken, and follow-up forms on file. The OHSM will provide copies of all final reports and forms to the CHSM within one week of the incident. If a serious incident occurs, the CHSM will be notified as soon as possible.
- The occurrence of a serious incident will trigger an EHS audit by the OHSM.

3.4 Project Manager (PM)

- It shall be the PM's responsibility to promptly correct any deficiencies that were determined to cause or contribute to the incident investigated.
- If a site-specific HASP is not utilized, the PM must ensure that field personnel have copies of the Roux Accident Reporting and Investigation Forms.
- The PM has the responsibility of ensuring that the SHSO and other field personnel understand the need for timely incident reporting.
- In the event of an incident, the PM will determine the root cause of the incident with the assistance of the SHSO and/or OHSM. The PM should provide input as to corrective preventative measures.

3.5 Site Health and Safety Officer (SHSO)

- The SHSO shall provide the details of the incident to the OHSM, PM and OM. The OM or his delegate will provide additional notifications, such as, in the event of a work-related motor vehicle accident, to include Roux Legal.
- It is the SHSO's responsibility to immediately notify the OHSM and the PM when any incident occurs. Such notification should take place immediately following the completion of any emergency actions required by the HASP.
- The SHSO should provide input as to corrective preventative measures.
- The SHSO must ensure that corrective actions proposed by the OHSM or OM are carried out.

3.6 All Personnel

- All personnel are responsible for reporting and describing the details of any incident in which they are involved to the SHSO and PM. Such notification should take place immediately following the completion of any emergency actions required by the HASP and after the loss and before the scene is disturbed or vehicles moved.

4. PROCEDURE

4.1 Incident Investigation

On receiving a report of incident or near loss occurrence from a Roux employee, the SHSO or OHSM shall immediately investigate the circumstances and shall make appropriate recommendations to prevent recurrence. The Incident Report form can be found in **Appendix A**, and Near Loss form can be found in **Appendix B**. The OHSM may participate in the investigation of more serious accidents and incidents that occur on-site. The Corporate Health and Safety Manager (CHSM) shall also be immediately notified by telephone on occurrence of a serious accident or incident. At the CHSM's discretion, he may also participate in the investigation.

4.2 Incident Report

Details of the incident shall be documented using the Accident Report and Investigation Forms (Appendix A) within twenty-four (24) hours of the incident and shall be distributed to the SHSO, the OHSM, PM, OM and the CHSM. The CHSM will update OSHA Forms 301 and the 300 log when necessary.

Appendix A – Accident Report and Investigation Form

☐ **Roux Environmental Engineering and Geology, D.P.C.**
☐ **Roux Associates, Inc.** ☐ **Remedial Engineering, P.C.**

ACCIDENT REPORT

Brian Hobbs, Corporate Health and Safety Manager
Cell: (631) 807-0193; Office: (631) 630-2416

PART 1: ADMINISTRATIVE INFORMATION

Project #: ______________________________
Project Name: ___________________________
Project Location (street address/city/state):
____
____

Client Corporate Name / Contact / Address / Phone #:
____
____
____
____
____

Immediate Verbal Notifications Given To:

Corporate Health & Safety	☐Yes	☐No
Office Health & Safety	☐Yes	☐No
Office Manager	☐Yes	☐No
Project Principal	☐Yes	☐No
Project Manager	☐Yes	☐No
Client Contact	☐Yes	☐No

REPORT STATUS (time due):
☐ Initial (24 hr) ☐ Final (5-10 days)
Date: ___________ Date: ___________

Accident Report Delivered To:

Corporate Health & Safety	☐Yes	☐No
Office Health & Safety	☐Yes	☐No
Office Manager	☐Yes	☐No
Project Principal	☐Yes	☐No
Project Manager	☐Yes	☐No

REPORT TYPE: ☐ Loss ☐ Near Loss Estimated Costs: $ _____
____

OSHA CASE # Assigned by Corporate Health & Safety if Applicable:

Corporate Health & Safety Confirmed Final Accident Report
☐Yes ☐No

DATE OF INCIDENT:
____

TIME INCIDENT OCCURRED:
_____________ ☐AM ☐PM

INCIDENT LOCATION – City, State, and Country (If outside U.S.A.)
____

INCIDENT TYPES: (Select most appropriate if Loss occurred.)
From lists below, please select the option that best categories the incident. When selecting an injury or illness, also indicate the severity level.

☐**INJURY** ☐**ILLNESS**
------------------------**Severity Level**---------------------------
☐Fatality ☐First Aid ☐Medical Treatment
☐Restricted Work ☐Lost Time

OTHER INCIDENT TYPES
☐Spill / Release
Material involved:_______________
Quantity (U.S. Gallons): ___________
☐Misdirected Waste ☐Consent Order ☐NOV
☐Property Damage ☐Exceedance
☐Motor Vehicle ☐Fine / Penalty

ACTIVITY TYPE (Check most appropriate one.)
☐CAMP
☐Construction
☐Drilling
☐Driving
☐Excavation / Trenching
☐Gauging
☐O&M
☐Other Soil Work (e.g. Compaction)
☐Sampling
☐Site Walk/Inspection
☐Subsurface Clearance
☐Trucking
☐Waste Mgmt.
☐Work Area Prep.
☐Other

INJURY TYPE (Check all applicable.)
☐Abrasion
☐Amputation
☐Burn
☐Cold/Heat Stress
☐Inflammation
☐Laceration
☐Occupational Illness
☐Puncture
☐Rash
☐Repetitive Motion
☐Sprain/Strain
☐Other__________

BODY PART AFFECTED (Check all applicable.)
☐Respiratory
☐Neck
☐Chest
☐Abdomen
☐Groin
☐Back
☐Shoulder
☐Arm
☐Wrist
☐Hand/Fingers
☐Eye
☐Head
☐Face
☐Leg
☐Knee
☐Ankle
☐Foot/Toes
☐Other______

I. PERSON(S) DIRECTLY / INDIRECTLY INVOLVED IN INCIDENT (Attach additional information as necessary/applicable.)

Name/Phone # of Each Person Directly/Indirectly Involved in Incident:	Designate: Roux/Remedial Employee Roux/Remedial Subcontractor Client Employee Client Contractor Third Party	As applicable, Current Occupation; Yrs in Current Occupation; Current Position; and Yrs in Current Position:	As applicable, Employer Name; Address; and Phone #:	As applicable, Supervisor Name; and Phone #:
1)				
2)				

II. PERSONS INJURED IN INCIDENT (Attach additional information as necessary/applicable.)

Name/Phone # of Each Person Injured in Incident:	Designate: Roux/Remedial Employee Roux/Remedial Subcontractor Client Employee Client Contractor Third Party	As applicable, Current Occupation; Yrs in Current Occupation; Current Position; and Yrs in Current Position:	As applicable, Employer Name; Address; and Phone #:	As applicable, Supervisor Name; and Phone #:	Description of Injury:
1)					
2)					

III. PROPERTY DAMAGED IN INCIDENT (Attach additional information as necessary/applicable.)

Property Damaged:	Property Location:	Owner Name, Address & Phone #:	Description of Damage:	Estimated Cost:
1)				
2)				$

IV. WITNESSES TO INCIDENT (Attach additional information as necessary/applicable.)

Witness Name:	Address:	Phone #:
1)		
2)		

PART 2: WHAT HAPPENED AND INCIDENT DETAILS

PROVIDE FACTUAL DESCRIPTION OF INCIDENT (e.g., describe loss/near loss, injury, response / treatment).

I. AUTHORITIES/GOVERNMENTAL AGENCIES NOTIFIED (Attach additional information as necessary/applicable.)

Authority/Agency Notified:	Name/Phone #/Fax # of Person Notified:	Address of Person Notified:	Date & Time of Notification:	Exact Information Reported/Provided:

II. PUBLIC RESPONSES TO INCIDENT (if applicable)

Response/Inquiry By: (check one)	Entity Name:	Name/Phone # of Respondent/ Inquirer:	Address of Entity/Person:	Date & Time of Response/Inquiry:
☐Newspaper ☐Television ☐Community Group ☐Neighbors ☐Other ________________				

Describe Response/Inquiry:

Roux/Remedial Response:

(Check all that apply.) (Attach photos, drawings, etc. to help illustrate the incident.)
ATTACHED INFORMATION: ☐Photo ☐Sketches ☐Vehicle Acord Form ☐Police Report ☐Other

Name(s) of person(s) who prepared Initial and Final Report:	**Title(s):**	**Phone number(s):**

PART 3: INVESTIGATION TEAM ANALYSIS

Date Investigation Started (MM/DD/YYYY):

Factors, Root Causes, and Solution (FRCS): Complete FRCS form and answer all 7 factor questions. If answering NO to Factors 1 – 4 identify root cause(s) and explain why QIs) occurred. If answering YES to Factors 5 – 7 circle the root cause(s). Transfer the solutions guidance that addresses each root cause from the FRCS form to this form. Attach your completed FRCS Worksheet. If Factors 1-7 do not apply to the incident, write "External Cause" in the Factor column below and leave the remaining fields blank.

DESCRIPTION OF UNDESIRABLE BEHAVIOR/CONDITION

1.

2.

FACTOR(S) AND SOLUTION(S): HOW TO REDUCE POSSIBILITY OF INCIDENT RECURRING

Selection of factors and solutions reflects the analysis of investigation team and is not meant to be a legally binding conclusion as to the Root Cause and/or solution.

CAUSAL FACTOR/ BEHAVIOR/ CONDITION	ROOT CAUSE	SOLUTION(S) [Must Match Root Cause(s)]	PERSON RESPONSIBLE	AGREED DUE DATE	ACTUAL COMPLETION DATE

INVESTIGATION TEAM:

PRINT NAME	JOB POSITION	DATE	SIGNATURE

QUALITY REVIEW Correct root cause(s) identified? Do root cause(s) and solution(s) match? Are solution(s) feasible / maintainable?

Name:

Job Title:

PART 4: Date Solutions were Implemented & Validated (Were Solutions Effective?)

Date	Solution	Verifier / Validator Name and Job Title	**Details** (of I & V performed)

Appendix B – Near Loss Form

HEALTH & SAFETY NEAR LOSS
ROUX REPORT FORM

☐ **Roux Environmental Engineering and Geology, D.P.C.**
☐ **Roux Associates, Inc.** ☐ **Remedial Engineering, P.C.**

(Check applicable company name)

PART 1: ADMINISTRATIVE INFORMATION

Office: ☐ New York ☐ Massachusetts ☐ New Jersey ☐ Illinois ☐ CA - Los Angeles ☐ CA - Oakland

Project Manager:	**Project Principal:**
Project Name:	**Project Location:**

PART 2: NEAR LOSS INCIDENT DETAILS

Date\Time Occurred (MM/DD/YYYY HH:MM):	**Date\Time Submitted** (MM/DD/YYYY HH:MM):

NEAR LOSS INCIDENT TYPE - What could have happened? - Select all that apply (1-7)

1. ☐ Fire / Explosion
2. ☐ Injury / Illness
3. ☐ Security (e.g., theft, trespassing, vandalism)
4. ☐ Environmental (Spill, permit exceedance, etc.)
5. ☐ Transportation of personnel (vehicle accident)
6. ☐ Property/Equipment Damage
7. ☐ Business Interruption

Event Leading to Potential Injury/Illness:

Job Task*:	**Equipment Involved*:**

WHAT HAPPENED? Do not include individuals' names. Ensure photos, sketches, etc. are not personally identifiable unless written consent has been obtained.

Summary (1-2 sentences. Provide brief description of the incident. Provide facts only, no speculation or opinion)**:**

Incident Details (Brief factual details of what, where, when; include photos, sketches, etc. as attachments)**:**

Immediate Corrective Actions Taken:

SERIOUS INJURY OR FATALITY (SIF): **IF AN ACTUAL SIF, USE EXISTING ROUX ACCIDENT REPORTING FORM**

Could this have resulted in a SIF? ☐ **Yes** ☐**No**

A potential SIF is defined as likely to have caused an injury resulting in significant physical body damage with probable long term and/or life altering complications.

INCIDENT INVOLVED:

Roux Employee: ☐ **Yes** ☐ **No** **Subcontractor Company Name:**

INVESTIGATION TEAM

NAME	**JOB TITLE**	**NAME**	**JOB TITLE**

PART 3: INCIDENT INVESTIGATION FINDINGS AND REPORT QUALITY REVIEW

Date Investigation Started (mm/dd/yyyy):

Factors, Root Causes, and Solution (FRCS): Complete FRCS form and answer all 7 factor questions. If answering NO to Factors 1 – 4 identify root cause(s) and explain why QIs) occurred. If answering YES to Factors 5 – 7 circle the root cause(s). Transfer the solutions guidance that addresses each root cause from the FRCS form to this form. Attach your completed FRCS Worksheet. If Factors 1-7 do not apply to the incident, write "External Cause" in the Factor column below and leave the remaining fields blank. Do not include individuals' names.

DESCRIPTION OF UNDESIRABLE BEHAVIOR/CONDITION

1.

2.

FACTOR(S) AND SOLUTION(S): HOW TO REDUCE POSSIBILITY OF INCIDENT RECURRING
Selection of factors and solutions reflects the analysis of investigation team and is not meant to be a legally binding conclusion as to the Root Cause and/or solution.

Behavior / Condition	Root Cause	Solution(s) (Must Match Root Cause)	Person Responsible for Completion	Completion Target Date	Completion Actual Date

QUALITY REVIEW Correct root cause(s) identified? Do root cause(s) and solution(s) match? Are solution(s) feasible / maintainable?

Name:

Job Title:

PART 4: Date Solutions were Implemented & Validated (Were Solutions Effective?)

Date	Solution	Verifier / Validator Name and Job Title	**Details** (of I & V performed)

***JOB TASK - Select the most appropriate one** (primary job associated with incident-related work activity, avoid "Other" if possible)

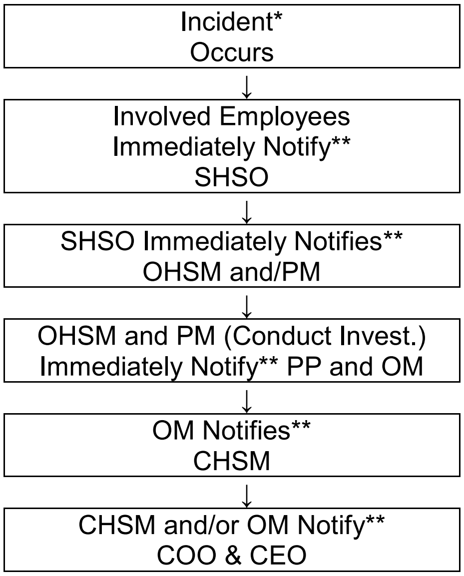
1. CAMP
2. Construction
3. Drilling
4. Driving
5. Excavation/Trenching
6. Gauging
7. O&M
8. Other Soil Work (e.g. Compaction)
9. Sampling
10. Site Walk/ Inspection
11. Subsurface Clearance
12. Trucking
13. Waste Management
14. Work Area Preparation
15. Other

*EQUIPMENT INVOLVED THAT CONTRIBUTED TO H&S NEAR LOSS - Select all that apply

1. Air Stripper
2. API Separator
3. Automobile
4. Boom Material
5. Bulldozer
6. Cable
7. Carbon Drum / Vessel
8. Chain Block
9. Compressor, Air
10. Control Panel (local)
11. Crane (mobile)
12. Drill Rig
13. Drilling Equipment, Vacuum
14. Drum, Vertical
15. Dump Truck
16. Electric Heater
17. Electrical Power Supply
18. Engine, Combustion
19. Equipment Safety Grounding
20. Excavator / Power Shovel
21. Exclusion Zone Equipment
22 Fan / Blower
23 Fencing
24 Filter
25. Fire Extinguisher
26. Forklift
27. Front End Loader
28. Grader
29. Hammer
30. Knife
31. Non-Powered Equipment
32. Powered Equipment
33. Drill
34. Grinder
35. Hydraulic Torque Wrench
36. Powered Saw
37. Impact Wrench
38. Saw
39. Screwdriver
40. Shears
41. Shovel
42. Snip
43. Wrench
44. Hoist
45, Hook/Clamp/Buckle, etc.
46. Jack
47. Ladder, Extension
48. Ladder, Platform
49. Ladder, Step
50. Lock Out / Tag Out
51. Maintenance Tool, General
52. Manifold
53, Manlift/Basket/Cherry Picker
54. Motor, Electric
55. Oxidizer
56. Pallet
57. Piping
58. Piping, Hose
59. Piping, Injection/Mixing Point
60. Hydrojet
61. Centrifugal Pump
62. Diaphragm Pump
63. Reciprocating Pump
64. Regenerative Pump
65. Rotary Pump
66. Transfer Pump
67. Submersible Pump
68. Face Shield
69. Fall Protection
70. Gloves
71. Hard Hat / Helmet
72. Hearing Protection
73. Respiratory PPE (Chemical)
74. Respiratory PPE (Particulate)
75. Safety Glasses
76. Safety Goggles
77. Safety Shoes / Boots
78. Safety Vest / Clothing
79. Rope
80. Bailer
81. Geoprobe
82. Hand Auger
83. PID
84. Multi-Gas Meter
85. Sample Container
86. Split-Spoon Sampler
87. Sling
88. Snow Blower
89. Snow Plow
90. Space Heater
91. Air Sparging System
92. Carbon Treatment Sys
93. Chemical Oxidation S
94. Dual Phase Product Recovery System
95. Groundwater Pump and Treat System
96. POET System
97. Shed or Trailer
98. Vapor Extraction System
99. Vapor-Phase Treatment System
100. Other System, Type:____
101. Surge Tank
102. Underground Tank
103. Telemetry System
104. Testing Devices
105. Tractor Trailer
106. Truck, Flatbed
107. Truck, Pickup
108. Truck, Tank Truck
109. Truck, Vacuum
110. Safety Valve
111. Block Valve
112. Extraction Well
113. Monitoring Well
114. Recovery Well
115. Winch
116. Wire Rope
117. No Equipment Involved
118. MPT – Traffic Control Devices
118. Not in List (describe):____

Appendix C – Injury Illness Reporting Flow Chart

Health & Safety Near/Loss – Loss (Incident)*
Notification Flow Chart



* Incident – any work or site-related occurrence that resulted in, or could potentially have resulted in, the need for medical care or in property damage (i.e., all injuries or illnesses, exposure to toxic materials or any other significant occurrence resulting in property damage or in a "near loss")

** Verbal Notification

Initial Incident Report (written) to SHSO, OHSM, OM and CHSM within 24 hours
Follow-up Report within one week.

SHORT SERVICE EMPLOYEE MANAGEMENT PROGRAM

CORPORATE HEALTH AND SAFETY MANAGER : **Brian Hobbs, CIH, CSP**

EFFECTIVE DATE : **01/19**

REVISION NUMBER : **5**

TABLE OF CONTENTS

APPENDICES

1. PURPOSE

This program has been implemented to ensure that Roux and Subcontractor short service employees are identified, appropriately supervised, trained, and managed in order to prevent accidents such as personal injury, injury to others, environmental damage, and/or property damage. This is a requirement for all employees and subcontractors throughout the firm. In addition, there are other requirements specific to ExxonMobil policies for all their projects, which are identified where applicable below.

2. ROLES AND BACKGROUND

Short Service Employee (SSE)

A Roux employee or a Roux subcontractor employee with less than six (6) months continuous service in the same job type or less than six (6) months continuous service with his/her current employer is a Short Service Employee (SSE).

The Roux SSE process was developed and periodically updated to satisfy all expectations included in ExxonMobil's Environmental Services Short Service Worker Guidance. Roux senior management will, at a minimum, perform an annual assessment of the Short Service Employee Management Program to determine its effectiveness and identify improvement opportunities. It should be noted that ExxonMobil refers to SSE as Short Service Workers or SSWs. For all ExxonMobil projects, a SSE is defined as a Roux employee or a Roux subcontractor employee with less than six (6) months of ExxonMobil worksite experience or has not worked on an ExxonMobil worksite in the last two (2) years.

SSEs shall not exceed 50% of Roux's workforce at any job site without prior written approval from the Office Manager (OM) and, when required by client contract or program, approval from the designated client representative.

The SSE process excludes workers not performing physical work onsite, visitors, regulatory agency staff, client employees or affiliates, and members of contractor management staff. In addition, certain elements of this SSE process may not be appropriate for short-duration workers (i.e., specialized workers onsite for a short period of time to perform a very specific task and unlikely to return). If the SSE process is deemed not appropriate, the individual Project Manager will develop a case-specific risk mitigation plan to address these short duration workers or consider subcontracting the task through a long-duration contractor who has an effective SSE program.

Site Safety Mature Person (SSMP)

An SSMP is a worker who is working on an ExxonMobil site that has demonstrated knowledge and skills with regard to site hazards, hazard management, and safe working practices, and is qualified to act as an SSMP. Our "graduation" process includes administration of an LPS® written test followed by a one-on-one interview with a senior safety or project manager of the project team to ensure competence. Graduation to a SSMP typically takes (6) total months of applicable work at ExxonMobil sites. Graduation in less than (6) months requires approval by the ExxonMobil PM.

Mentor

A Mentor is a designated person(s) who is responsible and accountable for guiding and monitoring performance of SSEs in the field. The Mentor cannot be another SSE. The Mentor can be a member of the same working team, but should not be an employee of ExxonMobil or any of its affiliates. The Mentor is a SSMP and has demonstrated knowledge and skills with regard to site and task-related hazards, hazard management, and safe working practices and is able to communicate with the SSE. The Mentor is trained and knowledgeable of Loss Prevention System (LPS) tools such as LPSAs, LPOs (RPOs) and JLAs (JSAs). The Mentor should have a positive safety attitude and understanding of both ExxonMobil's and Roux's corporate safety cultures. The Mentor should be capable of practicing Safety Leadership skills, but does not necessarily have to be the SSE's Supervisor. The Mentor should have received appropriate training and be qualified for the role by Roux management. The Mentor is expected to either be onsite with the SSE or assign a SSMP to be onsite with the SSE until the SSE graduates and becomes a SSMP. Deviation from a Mentor or SSMP being onsite with the SSE while conducting field operations requires approval by the Project Principal or the Client PM (in the case of ExxonMobil work).

Supervisor

A Supervisor is the designated person(s) who is responsible and accountable for the overall stewardship of the SSE Management Program for each project or office. The Supervisor shall be a senior member of the Roux management team.

3. ORIENTATION, TRAINING, AND CLEARANCE

Pre-Assignment Orientation, Training, and Clearance

An initial First Day employee orientation is required before the SSE can perform any fieldwork. Orientation must be conducted by the OM or the designated Supervisor of the SSE. The initial orientation shall, at a minimum, communicate the following information:

- Even though risks do exist, accidents and injuries are preventable;
- Each worker has a personal responsibility for his or her safety and the safety of others both on and off the job;
- No business objective is so important that it will be pursued at the sacrifice of safety;
- Safe conduct is a condition of employment;
- Work is done well only if it is done safely;
- Roux employees are expected to have the best safety performance;
- Review of Roux's Safety Procedures and Practices;
- General requirements for Personal Protective Equipment;
- Injury reporting and medical follow-up procedures;
- Requirements regarding participation in safety meetings, Safe Performance Self Assessments (SPSAs), pre-job Job Safety Analyses (JSAs), and the Loss Prevention Observation (LPO) / Roux Peer Observation process; and
- Requirements of this SSE Management Program.

Other pre-assignment training (or verification of prior training) is also typically required and will be determined by the OM and Supervisor of the SSE. Examples of this additional training include OSHA Hazardous Waste Operations and Emergency Response (HAZWOPER) training, one-one-one Safety and Procedures Review with the Office Health and Safety Manager (OHSM), client-specific training program requirements (i.e., LPS®, railroad worker safety, etc.), and job skills training requirements specific to immediate job tasks (i.e., various field procedures training, equipment usage, etc.).

Medical clearance and drug testing clearance are also required prior to the performance of field work on some sites.

Project and Site-Specific Orientation and Training

Many Roux projects have different requirements that are client-specific or site-specific in nature. It is the responsibility of the Project Principal (PP) (or Project Manager [PM] if delegated this responsibility by the PP) to ensure the SSE assigned to his/her projects is provided orientation and training with respect to these client and/or site-specific requirements. Minimum site-specific orientation shall include operations overview, review of the site-specific HASP, emergency action plan, facility sign-in and sign-out, hazard identification and reporting, MSDS information and H_2S if applicable. In addition, any restrictions on communications with non-Roux personnel, site access, or operation of site equipment (both Roux and Client owned) should be reviewed.

Client-specific and site-specific orientation topics shall also include work permit training, reporting incidents and hazards, emergency response procedures, appropriate PPE requirements, and general importance and use of LPS® tools (including a client's Core Safety Expectations and consequences).

Additional SSE Training

While classified as an SSE, it is the employee's responsibility to actively seek out and participate in available training opportunities. The SSE will utilize the attached SSE Form to track the completion of training and other experience gained while an SSE. Specific training that is recommended to be completed within the first six (6) months of employment in order for the employee to graduate from SSE status is listed on the SSE Form. Individuals completing the training are required to sign-off on each type of training.

4. NOTIFICATIONS AND RESPONSIBILITIES

The following individuals have responsibilities for notification under this program.

Office Manager (OM) and SSE Supervisor: Have the responsibility of notifying the PP when a SSE employee is assigned to his/her project. They also have the responsibility of confirming field assessments are conducted to verify the effectiveness of the SSE's performance.

SSE: Roux employees who are SSEs are required to identify themselves as such to the Roux PM prior to reporting to the job Site and to provide the PM with an up-to-date copy of his/her Roux SSE Training and Assignments Documentation Form. SSEs are required to wear company- supplied fluorescent green hard hats (or other project-specific distinct identification) when in the field in order to be easily identifiable.

Project Principals (PPs) and Project Managers (PMs): PPs are responsible for notifying the PM when a SSE is assigned to his/her project and for ensuring the requirements of this SSE Management Program are adhered to on their projects. When required by Client contract or program, the Roux PP (or PM if delegated this authority by the PP) shall provide applicable notice to the client's designated representative regarding SSE's being assigned to fieldwork. The notice should be completed in advance using any applicable client SSE notification forms and shall be acknowledged / approved by the client representative prior to the SSE commencing work.

The Roux PM shall notify the Field Manager/Supervisor who will be responsible for field mentoring/training of the SSE on their project and for making sure everyone on the job Site is aware that SSEs are present. All personnel are expected to help the SSE and to explain potential hazards before each job. The Roux PM shall maintain a list of SSE workers, their entry date and date that they complete the SSE process.

The PP and PM shall ensure the requirements of this SSE Program are implemented for all subcontractor employees performing field work on the Firm's projects.

Mentor: The PP (or PM if delegated this authority by the PP) must designate an on-Site Supervisor for the SSE. A Mentor shall be capable of demonstrating safety leadership, will not currently be a SSE, have a positive safety attitude, will be capable of providing effective training / coaching, and will have good communication skills. The Mentor will have a positive safety attitude, will be motivated and is to have good knowledge of client-specific and site-specific safety programs/culture and requirements (e.g., ExxonMobil LPS® program). An SSE may only work under the direct on-Site supervision of the designated Supervisor who, as one of his or her duties, serves as a mentor/trainer in safety for the SSE. The on-Site Supervisor or Mentor must provide close supervision and not allow the SSE to perform any task in which the SSE has not been properly trained. The on-Site Supervisor will review with the SSE any hazards associated with the task and review all emergency equipment and response procedures. The Mentor must actively work with and engage the SSE on a daily basis to provide mentoring and monitoring of the SSE with respect to safe work practices and identification of hazards.

Site-specific Mentor responsibilities shall also include applicable work permit training, reporting of incidents and hazards, emergency response procedures, appropriate PPE requirements, and general importance and use of LPS® tools. At the completion of each field assignment, the on-Site Supervisor/Mentor will complete the applicable section of the employee's SSE form to document the work experience and provide feedback to the Project Manager as well as the OM and Project Principal regarding the SSE's performance and capabilities.

5. SHORT SERVICE EMPLOYEE MANAGEMENT PROGRAM EXCEPTIONS

Any exception to this Short Service Employee Management Program must be approved in writing by the OM and PP and, when required by client contract or program, by the designated client representative. An exception to the on-Site Supervisor / Mentor requirement and 50 percent SSE limitation may be granted for activities typically performed by one Roux employee (e.g., fieldwork oversight, field inspections, etc.). To be eligible for an exception, the employee must have had training and demonstrated prior experience in the specific work area. Furthermore, the PM shall provide additional communications during the course of each day to review safety requirements and work progress to ensure work is being performed safely and in accordance with expectations.

An exception to the 50% SSE limitation may be granted for work that requires increased staffing levels by Roux or Roux subcontractors (e.g., construction projects). The exception request must be submitted in writing, using a form similar to the attached Roux SSE Exception Form, by the contractor, outlining SSE expectations limitations, types of work to be performed, and mitigative measures that will be taken to minimize risks associated with the increased utilization of SSEs. The exception request must be approved by the OM and, when required by client contract or program, approval from the designated client representative.

Exceptions to the Short Service Employee Management Program at ExxonMobil sites must be approved in writing by the ExxonMobil Project Manager.

6. PROGRAM COMPLETION

To be removed from SSE status, the OM and the SSE's Supervisor must be convinced the SSE has a working knowledge of both Roux and any applicable client Safety Policies and has demonstrated safe work practices and behavior. In addition, the SSE must have completed all required initial SSE training (as documented in his/her SSE Form) and have performed all activities without a serious loss incident (i.e., property damage, OSHA-Recordable injury). At that time, if the OM and Supervisor are convinced of the SSE's capabilities, the OM may remove the employee from the Roux SSE process by completing and signing the applicable section of the employee's SSE Form. The signed form will then be forwarded to Human Resources to be included in the employee's personnel file. If the SSE has been actively working on a client site under client-specific SSE requirements, the PM may need to obtain approval from the client representative as well.

If within six (6) months, the SSE is not capable of demonstrating the appropriate level of task, project, or safety knowledge, they shall be restricted from performing field activities until a point in time when they qualify to do so or are to be removed from the site.

For those SSE workers performing work at ExxonMobil worksites, they will have to successfully complete an LPS® assessment and demonstrate sufficient knowledge to complete the SSE requirements and be removed from the SSE process. Prior to being removed from SSE status workers performing work at ExxonMobil worksites will at a minimum complete the following:

- SSE shall participate in creating a minimum of one JSA;
- SSE shall identify and prepare two near loss reports, including participation in the root cause analyses;
- SSE shall perform and communicate a minimum of twenty SPSAs to a peer or manager;
- SSE shall lead a minimum of two toolbox safety meetings; and
- SSE shall participate in two LPOs as observee or observer.

SSEs will also complete a one-on-one interview with their associated Supervisor to confirm that they are ready to complete the program. At ExxonMobil sites, completion of the SSE program in less than six months needs to be approved by the ExxonMobil Project Manager.

7. SUBCONTRACTORS

All subcontractors who supply field personnel to Roux job sites must implement a program that meets or exceeds the expectations described above as well as any additional requirements that may be required on a client or site-specific basis.

Appendix A – Short Service Employee Training and Assignments Documentation Form

I. SSE Information

SSE Name:______________________________ Current Job Title:______________________________

Date of Employment:__________ Experience:_____Years Current Position Experience:_____Years _____Mos.

SSE On-site Mentor(s):______________________________Designated SSE Supervisor:______________________________

II. Orientation, Training and Clearance

----------First Day ----------

Requirement	Date Completed	SSE Initial	Mentor Initials	Supervisor Initials
Drug and Alcohol Screening				
OHSA Medical Surveillance Physical Exam				
OSHA 40-Hour HAZWOPER Training				
Roux Corporate Health and Safety Manual Review				
Safety, Policies, and Procedures Orientation with OM or SSE Supervisor (including required PPE)				
LPS® Initial Training				
Emergency Response Procedures Review				
Completion of 20 LPSAs/Safety Assessments				
Completion of 2 LPOs/RPOs (Roux Peer Observations)				
Completion of 2 LI/NLI				
Client Work Permit Procedures				
Client-Specific Training (LPS, LIRR, Amtrak, NJ Transit)				
Defensive Driving (i.e., Smith System)				
Field Notebook				
Subcontractor Oversight				
Field Manager / SHSO				
Lead 2 Toolbox Safety Meetings				
Job Safety Analysis (create 1 new JSA/Modify Site JSA)				

III. Field Assignments (Attach additional sheets for each additional assignment while SSE)

Site	From:	To:	Onsite Mentor	Supervisor

IV. Release from SSE Status

Based upon the SSE's successful completion of the above training and assignments, the SSE's Mentor(s), Supervisor, and OM indicated below have been convinced that the SSE has a working knowledge of both Roux and any applicable Client Safety Policies, and has demonstrated safe work practices and behavior. Additionally, the SSE has completed all applicable SSE training (as documented above) and performed all activities without a serious loss incident (i.e., property damage, OSHA recordable injury). The individual is thereby removed from status as an SSE.

____
(SSE Mentor(s))

____
(SSE Supervisor)

____
(Office Manager)

____
(Date)

Appendix B – Roux SSE Exception Form

This form is to be filled out and approved by the Roux Office Manager and Project Principal whenever the on-Site Supervisor requirement and/or 50% SSE limitation will not be met on the project.

IV. Variance Information

Variance Justification: (What are the current circumstances and what will be done to ensure an acceptable level of risk?)	
Alternatives to Variance: (If the variance is denied, what are the alternatives to completing the scope of the work? Briefly detail the cost and operational impact of the alternatives.)	

List the steps to be taken to manage the SSE risk to an acceptable level:

1. ______________________________
2. ______________________________
3. ______________________________
4. ______________________________
5. ______________________________
6. ______________________________
7. ______________________________
8. ______________________________
9. ______________________________

10 ______________________________

V. Variance Review and Approvals

Variance Expiration Date:______________________

Project Principal ☐ Approves ☐ Denies

Signed: ______________________ Date:______________________

Office Manager ☐ Approves ☐ Denies

Signed: ______________________ Date:______________________

Appendix C – Short Service Employee Mentor Documentation Form

I. Mentor Information

Mentor Name: ___________________________________ Current Job Title: ____________________________

Date of Employment: __________ Experience: _____ Years Current Position Experience: _____Years _____ Mos.

II. Demonstrated Experience

The mentor of any SSE will have demonstrated the following as endorsed by their supervisor or Office Manager.

Requirement

- Is not a Short Service Employee
- Is LPS® trained and is capable of providing quality review of LPS® tools effectively
- Demonstrates proper usage of SPSAs and actively coaches others
- Has developed multiple JSAs
- Understands emergency response procedures and can explain them to others
- Is proficient in preparing and reviewing work permits
- Understands injury reporting and case management responsibilities and is capable of explaining them to employees and subcontractors
- Has working knowledge of hazard identification, near loss, and loss reporting and has participated in multiple near loss investigations
- Demonstrates the ability to intervene when required during project execution
- Leads Toolbox Safety Meetings as part of project execution

III. Approval of Employee to Participate in SSE Program as a Mentor

Based upon the employee's demonstration of the above attributes, the employee's Supervisor / OM indicated below has been convinced that the employee is capable of being an effective Mentor as part of the SSE Program.

_____________________________________ (Supervisor / Office Manager)

_____________________________________ (Date)

PERSONAL PROTECTIVE EQUIPMENT MANAGEMENT PROGRAM

CORPORATE HEALTH AND SAFETY MANAGER	:	**Brian Hobbs, CIH, CSP**
EFFECTIVE DATE	:	**01/19**
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1. PURPOSE

Roux Associates, Inc. and its affiliated companies, Roux Environmental Engineering and Geology, D.P.C, and Remedial Engineering (collectively, “Roux”) has instituted the following program to establish guidelines for the selection of personal protective equipment (PPE) for use by Roux personnel performing field activities in hazardous environments. PPE is not meant to be a substitute for engineering, work practice, and/or administrative controls, but PPE should be used in conjunction with these controls to protect the employees in the work place. Clothing, body coverings, and other accessories designed to prevent worker exposure to workplace hazards are all types of PPE. To ensure adequate PPE employee-owned PPE is evaluated on a case-by-case basis to insure its adequacy, maintenance and sanitation.

2. SCOPE AND APPLICABILITY

These guidelines apply to all PPE selection decisions to be made in implementing the Roux program. The foundations for this program are the numerous Occupational Health and Safety Administration (OSHA) standards related to PPE cited in 29 CFR 1910 Subpart I, 29 CFR 1926 Subpart E, and the hazardous environment work employee protection requirements under the OSHA Hazardous Waste Operations and Emergency Response (HAZWOPER) standard at 29 CFR 1910.120 and 1926.65. To ensure hazard assessments are documented the levels of protection, types of protection and tasks requiring protection are covered in site-specific Health and Safety Plans (HASPs) and Job Safety Analyses (JSAs).

3. PROCEDURES

Due to the varied nature of site activities and the different potential hazards associated with different sites, several aspects must be considered when selecting PPE. The following text describes PPE selection logic and provides guidelines and requirements for the appropriate selection and use of PPE.

3.1 Introduction

To harm the body, chemicals must first gain entrance. The intact skin and the respiratory tract are usually the first body tissues attacked by chemical contaminants. These tissues provide barriers to some chemicals but in many cases, are damaged themselves or are highly permeable by certain chemical compounds. Personal protective equipment therefore is used to minimize or eliminate chemical compounds coming into contact with these first barrier tissues.

The proper selection of equipment is important in preventing exposures. The PM making the selection will have to take several factors into consideration. The level of protection, type and kind of equipment selected depends on the hazardous conditions and in some cases cost, availability, compatibility with other equipment, and performance. An accurate assessment of all these factors must be made before work can be safely carried out.

3.2 Types of PPE

The type and selection of PPE must meet certain general criteria and requirements as required under OSHA 29 CFR 1910.132 and 1926.95. In addition to these general requirements, specific requirements and specifications exist for some types of PPE that form the basis of the protective clothing scheme. Following is a list of the common types of specific PPE and the specific requirements for the PPE type, where applicable:

1. Hard Hats - Regulated by 29 CFR 1910.135 and 1926.100; and, specified in ANSI Z89.1.

2. Face Shields and Safety Glasses - Regulated by 29 CFR 1910.133 and 1926.102; and, specified in ANSI Z87.1.
3. Respiratory Protection - Regulated by 29 CFR 1910.134 and 1926.103.
4. Hand Protection - Not specifically regulated.
5. Foot Protection - Regulated by 29 CFR 1910.136 and 1926.96; and, specified in ANSI Z41.1.
6. Protective Clothing (e.g., fully encapsulated suits, aprons) - Not specifically regulated.

3.3 Protective Clothing Selection Criteria

3.3.1 Chemicals Present

The most important factor in selecting PPE is the determination of what chemicals the employee may be exposed to. On field investigations, the number of chemicals may range from a few to several hundred. The exact chemicals or group of chemicals present at the site (certain groups tend to require similar protection) can be determined by collecting and analyzing samples of the air, soil, water, or other site media. When data are lacking, research into the materials used or stored at the site can be used to infer chemicals possibly on the site.

Once the known or suspected chemicals have been identified, and taking into consideration the type of work to be performed, the most appropriate clothing shall be selected.

Protective garments are made of several different substances for protection against specific chemicals. There is no universal protective material. All will decompose, be permeated by, or otherwise fail to protect under given circumstances. Fortunately, most manufacturers make guides to the use of their products (i.e., Dupont’s Tyvek™ Permeation Guide). These guides are usually for gloves and coveralls and typically provide information regarding chemical degradation rates (failure of the material to maintain structural integrity when in contact with the chemical), and may provide information on the permeation rate (whether or not the material allows the chemical to pass through). When permeation tables are available, they shall be used in conjunction with degradation tables to determine the most appropriate protective material.

During most site work, chemicals are usually in mixed combinations and the protective materials are not in continuous contact with pure chemicals for long periods of time; therefore, the selected material may be adequate for the particular chemical and type of work being performed, yet not the "best" protecting material for all site chemicals and activities. Selection shall depend upon the most hazardous chemicals based on their hazards and concentrations. Sometimes layering, using several different layers of protective materials, affords the best protection.

3.3.2 Concentration of the Chemical(s)

One of the major criteria for selecting protective material is the concentration of the chemical(s) in air, liquid, and/or solid state. Airborne and liquid chemical concentrations should be compared to the OSHA standards and/or American Conference of Governmental Industrial Hygienists (ACGIH) and National Institute for Occupational Safety and Health (NIOSH) guidelines to determine the level of skin or other absorptive surface (e.g., eyes) protection needed. While these standards are not designed specifically for skin exposed directly to the liquid, they may provide skin designations indicative of chemicals known to have significant skin or dermal absorption effects. For example, airborne levels of PCB on-site may be low because it is not very volatile, so the inhalation hazard may be minimal; however, PCB-containing liquid coming in direct contact with the skin may cause overexposure. Thus, PCB has been assigned a skin designation in both the OSHA and ACGIH exposure limit tables.

3.3.3 Physical State

The characteristics of a chemical may range from nontoxic to extremely toxic depending on its physical state. Inorganic lead in soil would not be considered toxic to site personnel, unless it became airborne, since it is generally not absorbed through the intact skin. Organic lead in a liquid could be readily absorbed. Soil is frequently contaminated with hazardous materials. Concentrations will vary from a few parts per million to nearly one hundred percent. The degree of hazard is dependent on the type of soil and concentration of the chemical. Generally speaking, "dry" soils do not cause a hazard to site personnel if they take minimal precautions such as wearing some type of lightweight gloves.

3.3.4 Length of Exposure

The length of time a material is exposed to a chemical increases the probability of breakthrough. Determinations of actual breakthrough times for short-term exposures indicate that several different materials can be used which would be considered inadequate under long-term exposures. It should be kept in mind that during testing, a pure (100% composition) liquid is usually placed in direct contact with the material producing a worst-case situation.

3.3.5 Abrasion

When selecting protective clothing, the job the employee is engaged in must be taken into consideration. Persons moving drums or performing other manual tasks may require added protection for their hands, lower chest and thighs. The use of leather gloves and a heavy apron over the other normal protective clothing will help prevent damage to the normal PPE and thus reduce worker exposures.

3.3.6 Dexterity

Although protection from skin and inhalation hazards is the primary concern when selecting PPE, the ability to perform the assigned task must be maintained. For example, personnel cannot be expected to perform work that requires fine dexterity if they must wear a thick glove. Therefore, the PPE selection process must consider the task being performed and provide PPE alternatives or techniques that allow dexterity to be maintained while still protecting the worker (e.g., wearing tight latex gloves over more bulky hand protection to increase dexterity).

3.3.7 Ability to Decontaminate

If disposable clothing cannot be used, the ability to decontaminate the materials selected must be taken into consideration. Once a chemical contacts the material, it must be cleaned before it can be reused. If the chemical has completely permeated the material, it is unlikely that the clothing can be adequately decontaminated and the material should be discarded.

3.3.8 Climactic Conditions

The human body works best with few restraints from clothing. Protective clothing adds a burden by adding weight and restricting movement as well as preventing the natural cooling process. In severe situations, a modified work program must be used.

Some materials act differently when they are very hot and very cold. For example, PVC becomes almost brittle in very cold temperatures. If there are any questions about the stability of the protective materials under different conditions, the manufacturer should be contacted.

3.3.9 Work Load

Like climactic conditions, the type of work activity may affect work duration and the ability or personnel to perform certain tasks. Similarly, the amount of protective materials a person wears will affect their ability to perform certain tasks. For example, a person in a total encapsulating suit, even at 72 °F, cannot work for more than a short period of time without requiring a break.

The work schedule should be adjusted to maintain the health of the employees. Special consideration should be given to the selection of clothing that both protects and adds the least burden when personnel are required to perform strenuous tasks. Excessive bodily stress frequently represents the most significant hazard encountered during field work.

3.4 Types of Protective Materials

1. Cellulose or Paper
2. Natural and Synthetic Fibers
    a. Tyvek™
    b. Nomex™
3. Elastomers
    a. Polyethylene
    b. Saran
    c. Polyvinyl Chloride (PVC)
    d. Neoprene
    e. Butyl Rubber
    f. Viton

3.5 Protection Levels

3.5.1 Level A Protection

Level A protection (a fully encapsulated suit) is used when skin hazards exist or when there is no known data that positively rule out skin and other absorption hazards. Since Level A protection is extremely physiologically and psychologically stressful, the decision to use this protection must be carefully considered. At no time will Level A work be performed without the consent of the OM. The following conditions suggest a need for Level A protection:

- confined facilities where probability of skin contact is high;
- sites containing known skin hazards;
- sites with no established history to rule out skin and other absorption hazards;
- atmosphere immediately dangerous to life and health (IDLH) through the skin absorption route;
- site exhibiting signs of acute mammalian toxicity (e.g., dead animals, illnesses associated with past entry into site by humans);

- sites at which sealed drums of unknown materials must be opened;
- total atmospheric readings on the Photoionization Detector (PID), Flame Ionization Detector (FID), and similar instruments indicate 500 to 1,000 ppm of unidentified substances; and
- extremely hazardous substances (e.g., cyanide compounds, concentrated pesticides, Department of Transportation Poison "A" materials, suspected carcinogens and infectious substances) are known or suspected to be present and skin contact is possible.

The following items constitute Level A protection:

- open circuit, pressure-demand self-contained breathing apparatus (SCBA);
- totally encapsulated suit;
- gloves, inner (surgical type);
- gloves, outer;
- chemical protective;
- boots, chemical protective, steel toe and shank;
- radiation detector (if applicable); and
- communications.

3.5.2 Level B Protection

Level B protection is utilized when the highest level of respiratory protection is needed but hazardous material exposure to the few unprotected areas of the body is unlikely.

The following conditions suggest a need for Level B protection:

- the type and atmospheric concentration of toxic substances have been identified and they require the highest level of respiratory protection;
- IDLH atmospheres where the substance or concentration in the air does not present a severe skin hazard;
- the type and concentrations of toxic substances do not meet the selection criteria permitting the use of air purifying respirators; and
- it is highly unlikely that the work being done will generate high concentrations of vapors, gases or particulates, or splashes of materials that will affect the skin of personnel.

Personal protective equipment for Level B includes:

- open circuit, pressure-demand SCBA;
- chemical protective clothing:
- overalls and long-sleeve jacket; or
- coveralls;
- gloves, inner (surgical type); gloves, outer, chemical protective;
- boots, chemical protective, steel toe and shank; and
- communications optional.

3.5.3 Level C Protection

Level C protection is utilized when both skin and respiratory hazards are well defined and the criteria for the use of negative pressure respirators have been fulfilled (i.e., known contaminants and contaminant concentrations, acceptable oxygen levels, approved filter/cartridge available, known cartridge service life, etc.). Level C protection may require carrying an emergency escape respirator during certain initial entry and site reconnaissance situations, or when applicable thereafter.

Personal protective equipment for Level C typically includes:

- full facepiece air-purifying respirator;
- emergency escape respirator (optional);
- chemical protective clothing:
  - overalls and long-sleeved jacket; or
  - coveralls;
- gloves, inner (surgical type);
- gloves, outer, chemical protective; and
- boots, chemical protective, steel toe and shank.

3.5.4 Level D Protection

Level D is the basic work uniform. Personal protective equipment for Level D includes:

- coveralls;
- safety boots/shoes;
- eye protection;
- hand protection;
- reflective traffic safety vest (mandatory for traffic areas or railyard);
- hard hat (with face shield is optional); and
- emergency escape respirator is optional.

3.5.5 Level E Protection

Level E protection is used when radioactivity above 10 mr/hr is detected at the site. Personal protective equipment for Level E includes:

- coveralls;
- air purifying respirator;
- time limits on exposure;
- appropriate dermal protection for the type of radiation present; and
- radiation dosage monitoring.

3.5.6 Additional Considerations

Field work will contain a variety of situations due to chemicals in various concentrations and combinations. These situations may be partially ameliorated by following the work practices listed below:

1. Some sort of foot protection is needed on a site. If the ground to be worked on is contaminated with liquid and it is necessary to walk in the chemicals, some sort of protective "booties" can be worn over the boots. This cuts down on decontamination requirements. They are designed with soles to help prevent them from slipping around. If non-liquids are to be encountered, a Tyvek™ bootie could be used. If the ground contains any sharp objects, the advantage of booties is questionable. Boots should be worn with either cotton or wool socks to help absorb the perspiration.
2. If the site situation requires the use of hard hats, chin straps should be used if a person will be stooping over where his/her hat may fall off. Respirator straps should not be placed over the hard hats. This will affect the fit of the respirator.

   Some types of protective materials conduct heat and cold readily. In cold conditions, natural material clothing should be worn under the protective clothing. Protective clothing should be removed prior to allowing a person "to get warm". Applying heat, such as a space heater, to the outside of the protective clothing may drive the contaminants through. In hot weather, under clothing will absorb sweat. It is recommended that workers use all cotton undergarments.
3. Body protection should be worn and taped to prevent anything from running into the top of the boot. Gloves should be worn and taped to prevent substances from entering the top of the glove. Duct tape is preferred, but masking tape can be used. When aprons are used, they should be taped across the back for added protection. However, this should be done in such a way that the person has mobility.
4. Atmospheric conditions such as precipitation, temperature, wind direction, wind velocity, and pressure determine the behavior of contaminants in air or the potential for volatile material getting into the air. These parameters should be considered in determining the need for and the level of protection.
5. A program must be established for periodic monitoring of the air during site operations. Without an air monitoring program, any changes would go undetected and might jeopardize response personnel. Monitoring can be done with various types of air pumps and filtering devices followed by analysis of the filtration media; personnel dosimeters; and periodic walk-throughs by personnel carrying real-time survey instruments.
6. For operations in the exclusion zone, different levels of protection may be selected, and various types of chemical-resistant clothing may be worn. This selection should be based on the job function, reason for being in the area, and the potential for skin contact with, or inhalation of, the chemicals present.
7. Escape masks must be readily available when levels of respiratory protection do not include a SCBA and the possibility of an IDLH atmosphere exists. Their use can be made on a case-by-case basis. Escape masks could be strategically located at the site in areas that have higher possibilities of vapors, gases or particulates.

APPENDIX N

Community Air Monitoring Program

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Appendices

1.0 INTRODUCTION

Roux Associates, Inc. (Roux) on behalf of MJ Painting Contractor Corp. (MJ Painting), has prepared the following Community Air Monitoring Plan (CAMP) to ensure the soil sampling and remediation (i.e., excavation and in-situ stabilization) activities (collectively, hereafter referred to as “intrusive activities”) to be performed at 350 Franklin Street, Olean, NY (hereafter referred to as the “Site”) do not adversely affect the Site residents and downwind community, and to preclude or minimize airborne migration of Site contaminants. The proposed remediation activities include excavation, soil transport, soil waste characterization sampling, and in-situ soil stabilization.

Compliance with this CAMP is required during all intrusive activities that have the potential to generate airborne particulate matter and volatile organic compounds (VOCs). Intrusive activities include both excavation and in-situ soil stabilization. This CAMP has been prepared to ensure that intrusive activities do not adversely affect residents, bystanders or workers at the Site and in the area immediately surrounding the Site and to preclude or minimize airborne migration of particulate matter and VOCs.

This CAMP is consistent with the New York State Department of Health (NYSDOH) Generic Community Air Monitoring Plan, which is included as Appendix 1A of the New York State Department of Environmental Conservation (NYSDEC) “DER-10 Technical Guidance of Site Investigation and Remediation” (DER-10), dated May 3, 2010.

2.0 Air Monitoring Procedures During Intrusive Activities

Semi-volatile organic compounds (SVOCs), metals and VOCs all may be constituents of concern at the Site. The appropriate method to monitor air for these constituents during intrusive activities is through real-time VOC and air particulate (dust) monitoring. As discussed, the intrusive activities planned at the Site all require continuous monitoring for VOC and dust concentrations. Specific air monitoring procedures required during intrusive activities are described below.

Ground Intrusive Activities

Continuous VOC and particulate monitoring will be required for all ground intrusive activities conducted at the Site including excavation and in-situ soil stabilization. Note that ground intrusive work areas are not expected to be within 20 feet of potentially exposed populations or occupied structures and therefore special requirements CAMP procedures will not be required.

2.1 Wind Direction

Wind direction will be evaluated, at a minimum, at the start of each workday, noon of each workday, and the end of each workday. These readings will be utilized to determine the positioning of the monitoring equipment in appropriate upwind and downwind locations. A Site figure will be marked daily to record the wind direction and monitoring equipment locations.

2.2 Volatile Organic Compound Monitoring

During all ground intrusive activities, VOCs will be monitored periodically at the upwind perimeter and continuously at the downwind perimeter of the designated work areas. A portable handheld Photoionization Detector (PID) will be used to periodically monitor conditions at upwind locations. Monitoring equipment capable of measuring total VOC concentrations (PID) and capable of integrating (averaging) over periods of 15 minutes or less will be set up at the downwind location, at a height of approximately 4-5 feet above land surface (i.e., the breathing zone). The audible alarm on the PID will be set at 5 parts per million (ppm). Monitoring equipment will be a MiniRAE 2000 portable VOC monitor or similar.

VOC concentrations will be measured at monitoring stations located along the upwind and downwind perimeters of all ground intrusive work areas. Locations of both upwind and downwind monitoring stations will be determined based upon the meteorological data collected throughout the workday and are subject to change in response to changes in wind direction and speed.

The following summarizes VOC action levels and the appropriate responses:

- If the ambient air concentration of total organic vapors at the downwind perimeter of the work area exceeds 5 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 persist at levels in excess of 5 ppm above background but less than 25 ppm, work activities must be halted. While continuing to monitor, the source of vapors must be identified, and corrective actions must be taken to abate vapor emissions. After these steps are performed, work activities can resume, provided the total

organic vapor level 200 feet downwind of the work area 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 shut down, the source of vapors identified, and corrective measures taken to abate emissions, as described below in **Section 2.2.1**.

All readings will be recorded and made available for NYSDEC and NYSDOH personnel to review upon request. If an exceedance of the Action Limits occurs, an Action Limit Report, as shown in **Appendix A**, will be completed.

2.2.1 Potential Corrective Measures and VOC Suppression Techniques

If the 15-minute integrated VOC level at the downwind location persists at a concentration that exceeds the upwind level by more than 5 ppm but less than 25 ppm during ground intrusive activities, then vapor suppression techniques will be employed. The following techniques, or others, may be employed to mitigate the generation and migration of fugitive organic vapors:

- Limiting the excavation size;
- Backfilling portions of the excavation;
- Covering soil stockpiles (if any) with 6-mil polyethylene sheeting;
- Hauling waste materials off-Site in properly covered container;
- Odor masking; and/or
- Pausing operations until the wind conditions change such that VOCs and/or odors due to the work are not migrating toward downwind receptors.

All air monitoring readings will be recorded in the field logbook and will be available for the NYSDEC and NYSDOH personnel to review upon request.

2.3 Particulate Monitoring

Air monitoring for particulates (i.e., dust) will be performed continuously during intrusive activities using both air monitoring equipment and visual observation at upwind and downwind locations. Monitoring equipment capable of measuring particulate matter smaller than 10 microns (PM_{10}) and capable of integrating (averaging) over periods of 15 minutes or less will be set up at upwind (i.e., background) and downwind locations, at heights approximately 4-5 feet above land surface (i.e., the breathing zone). Monitoring equipment will be MEI Data Ram monitors, or equivalent. The audible alarm on the particulate monitoring device will be set at 90 micrograms per cubic meter ($\mu g/m^3$). This setting will allow proactive evaluation of worksite conditions prior to reaching the action level of 100 $\mu g/m^3$ above background. The monitors will be calibrated at least once per day prior to work activities and recalibrated as needed thereafter. In addition, fugitive dust migration will be visually assessed during all intrusive activities.

The following summarizes particulate action levels and the appropriate responses:

- If the downwind PM_{10} particulate level is 100 $\mu g/m^3$ above 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 µg/m^3 above the upwind level and provided that no visible dust is migrating from the work area.

- If, after implementation of dust suppression techniques, downwind PM_{10} particulate levels are greater than 150 µg/m^3 above the upwind level, work must be stopped, and an evaluation of activities initiated. Work can resume provided that dust suppression measures (as described in **Section 2.3.1** below) and other controls are successful in reducing the downwind PM_{10} particulate concentrations to within 150 µg/m^3 of the upwind level and in preventing visible dust migration.

All readings will be recorded and available for NYSDEC and NYSDOH personnel to review upon request. If an exceedance of the Action Limits occurs, an Action Limit Report (**Appendix A**), will be completed.

2.3.1 Potential Particulate Suppression Techniques

If the integrated particulate level at the downwind location exceeds the upwind level by more than 100 µg/m^3 at any time during intrusive activities, then dust suppression techniques will be employed. The following techniques, or others, may be employed to mitigate the generation and migration of fugitive dusts:

- Spraying water on the equipment;
- Placing/hauling materials in properly tarped containers or vehicles;
- Limiting vehicle/equipment activity and speeds on Site; and/or
- Hydro-seeding of disturbed areas (as needed).

Work may continue with dust suppression techniques provided that downwind PM_{10} levels are not more than 150 µg/m^3 greater than the upwind levels.

There may also be situations where the dust generated by intrusive activities migrates to downwind locations and is not detected by the monitoring equipment at or above the action level. Therefore, if dust is observed leaving the work area, dust suppression techniques such as those listed above will be employed.

If dust suppression techniques do not lower particulates to below 150 µg/m^3, or visible dust persists, work will be suspended until appropriate corrective measures are identified and implemented to remedy the situation.

All air monitoring readings will be recorded in the field logbook and will be available for the NYSDEC and NYSDOH personnel to review upon request.

3.0 References

NYSDOH, 2010. New York State Department of Health Generic Community Air Monitoring Protocol, May 3, 2010 (also included as Appendix 1A to the Draft Technical Guidance for Site Investigation and Remediation, NYSDEC, May 2010).

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MEMORANDUM

TO: New York Technical Staff
FROM: Drew Baris and Brian Morrissey
CC: Office Managers
DATE: September 8, 2005
RE: Safety Considerations for Work at Remediation System Vaults and Manholes

We have conducted a safety review of activities performed at several remediation sites managed by Roux Associates with regards to working in and around potential confined spaces such as vaults and manholes. The attached document provides recommended procedures for evaluating potential hazards for spaces that will be entered by Roux Associates personnel or subcontractors. The objectives of preparing and distributing this document are to assist project managers and field staff in:

- Performing all work activities in accordance with OSHA standards and guidance documents;
- Identifying potential hazards;
- Properly classifying and labeling permit-required confined spaces; and
- Implementing proper procedures to temporarily reclassify the confined space as "Non-Permit Required Confined Space" if the hazards are eliminated for each entry event

All technical staff should review the attached document, especially with regards to potential hazardous atmospheres. Project managers should implement the recommended procedures and practices when appropriate based on site-specific conditions, required field tasks, and potential hazards. If changes to current operations and maintenance activities are warranted, the site-specific HASP should be updated to reflect these changes.

If you have any questions or wish to discuss these issues, please contact Drew or Brian.

SAFETY CONSIDERATIONS FOR SITE-SPECIFIC WORK ACTIVITIES AT REMEDIATION SYSTEM VAULTS AND MANHOLES

I. INTRODUCTION

Roux Associates, Inc. has reviewed applicable Occupational Safety & Health Administration (OSHA) Standards and Interpretive Guidance regarding confined spaces and associated hazards. This document presents a summary of OSHA requirements for, and definitions relative to, confined spaces. These guidelines have been developed to implement an approach for determining if a vault or manhole needs to be classified and labeled as "Permit-Required Confined Space". In addition, a review of critical safety considerations for work at vaults and manholes is presented.

II. OSHA STANDARDS AND DEFINITIONS

OSHA Standard 29 CFR 1910.146 includes requirements for practices and procedures to protect employees in general industry from the hazards of entry into permit-required confined spaces. Some key definitions provided in this standard are included below:

- A **confined space** has limited or restricted means of entry or exit, is large enough for an employee to enter and perform assigned work, and is not designed for continuous occupancy by the employee. These spaces may include, but are not limited to, underground vaults, tanks, storage bins, pits and diked areas, vessels, and silos.

- A **permit-required confined space** is one that meets the definition of a confined space and has one or more of these characteristics: (1) contains or has the potential to contain a hazardous atmosphere, (2) contains a material that has the potential for engulfing an entrant, (3) has an internal configuration that might cause an entrant to be trapped or asphyxiated by inwardly converging walls or by a floor that slopes downward and tapers to a smaller cross section, and/or (4) contains any other recognized serious safety or health hazards.

- **Hazardous atmosphere** means an atmosphere that may expose employees to the risk of death, incapacitation, impairment of ability to self-rescue (that is, escape unaided from a permit space), injury, or acute illness. Hazardous atmospheres encountered in confined spaces can be divided into four distinct categories: Flammable, Toxic, Irritant and/or Corrosive, and Asphyxiating.

- **Immediately dangerous to life or health (IDLH)** means any condition that poses an immediate or delayed threat to life or that would cause irreversible adverse health effects or that would interfere with an individual's ability to escape unaided from a permit space.

OSHA guidance indicates that the definition of “Hazardous atmosphere” is not based on the Permissible Exposure Limit (PEL); OSHA PELs are based on an 8-hour time weighted average exposure. OSHA’s guidance on “Hazardous atmosphere” is based on the conditions that contain elevated or depleted oxygen levels, approach explosive conditions (i.e., low explosive limit – LEL) or other conditions that are approaching IDLH air concentration values used by the National Institute for Occupational Safety and Health (NIOSH), or other concentrations which causes acute, short-term incapacitation, which would prevent self rescue (i.e., a concentration which could result in loss of consciousness or disorientation in a short period of time).

A discussion on confined space hazards can be found at:
http://www.osha.gov/SLTC/smallbusiness/sec12.html

III. CLASSIFICATION OF VAULTS

Determination if the vault is a confined space

Initially, the vault or manhole needs to be evaluated to determine if it meets the three criteria to be defined as “confined space” as defined by CFR 1910.146(b) which are:

1. Large enough to be bodily entered,
2. limited means of entry or exit, and
3. is not designed for continuous employee occupancy.

The typical remediation vault found at sites managed by Roux Associates personnel are large enough for a person to enter. The design normally does not include heating, lights, or ventilation (except for natural ventilation when the cover is open) as would be required for continuous occupancy. Available guidance indicates that a small space in which an entrant cannot be trapped (e.g., chest freezer 30 inches high) is not a confined space because the entrant could easily step out; however, a roll-off container (4 to 5 feet high) without internal stairs is a confined space. A parallel regulation, 1926.21(b)(6)(ii), which regulates confined spaces for construction work, states that confined spaces include open top vaults more than 4-feet deep. This regulation is consistent with OSHA's published interpretations of 1910.146. Based on these OSHA guidelines, Roux Associates personnel should use the following criteria to determine if an open-top vault or manhole is a confined space:

- If the depth of the vault in question exceeds 42 inches and can be bodily entered, it is appropriate to conservatively determine that it meets criteria 1 and is, therefore, considered a confined space.
- Shallow vaults (i.e., depth ≤ 42 inches) where personnel can easily step out are not considered confined spaces.

Does the confined space have a known or potential hazard?

At numerous sites, remediation system vaults are used for the removal and pumping of separate phase petroleum product, which contains toxic volatile and semi-volatile compounds. Vapors from the recovery wells could result in the accumulation of vapors above IDLH-based exposure limits in the vaults. Flammable petroleum (i.e., with a flash point lower than 100°F, such as gasoline) could result in the accumulation of flammable vapors in the vault. The biological degradation of separate phase petroleum product is known to also consume oxygen and can lead to a low oxygen concentration in the subsurface, which could result in an oxygen deficient atmosphere in the vaults.

Methane is commonly found in the subsurface at petroleum-contaminated sites. It is generated by biological methanogenic decomposition in anaerobic zones rich in organic matter (such as NAPL source areas) and can be trapped by low permeability soil layers and structures (vaults, slabs, paving, etc.), and accumulate in the top of capped well casings. Methane presents an acute hazard potential due to asphyxiation in highly confined situations where it displaces oxygen. It is not a chronic or toxic concern at low levels like benzene and other hydrocarbon compounds. Methane degrades aerobically and dissipates in unconfined conditions very rapidly.

Therefore, confined spaces such as a recovery wellhead vault, which are connected to sources of flammable separate phase petroleum product, are considered to have a potential to contain a hazardous atmosphere. Such vaults should be classified as permit-required confined spaces.

Remediation system vaults that are only associated with combustible separate phase petroleum (i.e., with a flash point above 100°F, such as diesel fuel or heating oil) or dissolved phase groundwater contamination (i.e., no free-phase product is present) need to be evaluated on a case-by-case basis for potential hazards. In addition to petroleum related hazards, the accumulation of other organic material in the vault or subsurface may also result in the depletion of oxygen and a buildup of methane or hydrogen sulfide gas. Until the evaluation has been completed and documented, these vaults should be treated as permit-required confined spaces. The evaluation to de-list a vault should include three elements:

1. evaluation of groundwater and separate phase petroleum analytical data for the vault to assess for the potential to generate a hazardous atmosphere;
2. evaluation of the physical characteristics of the vault and the site features in the vicinity of the vault that could cause or eliminate the potential for a hazardous atmosphere (e.g., size, depth, and condition of vault, piping seals on vault penetrations, nearby sewer or utility lines, product tanks, etc.)
3. atmospheric testing for at least four successive entry events to assess for oxygen content, flammable gases or vapors, and potential toxic air contaminants.

If the results of the evaluation indicate there is no potential for the vault to contain a hazardous atmosphere per the 1910.146 definition, the vault can be considered for delisting.

IV. LABELING AND SIGNAGE FOR PERMIT-REQUIRED CONFINED SPACES

Appropriate labels or signs are required for vaults or manholes that have been determined to be permit-required confined spaces. OSHA requires the employer to inform exposed employees of the existence, location, and danger posed by the spaces. This can be accomplished by posting danger signs. The following language would satisfy the requirements for such a sign:

DANGER--PERMIT REQUIRED-CONFINED SPACE--
AUTHORIZED ENTRANTS ONLY

If workers are not to enter and work in permit spaces, effective measures must be implemented to prevent entrance to the permit spaces.

V. TEMPORARY RECLASSIFICATION OF A VAULT AS A NON-PERMIT REQUIRED CONFINED SPACE

Under 29 CFR 1910.146 (c) (7), a permit-required confined space may be temporarily reclassified if the hazards are eliminated for each entry event. Elimination of the hazards through ventilation must be verified and documented with use of a multi-gas detector. The internal atmosphere of the space must be tested first for oxygen content, second for flammable gases and vapors, and third for potential toxic air contaminants before any worker enters.

The procedures for temporary reclassification should be described in the site's Health and Safety Plan (HASP) and Job Safety Analysis (JSA) and must be followed by the entrant for each entry event. A checklist form should be filled out prior to entering the vault to document the reclassification of the area prior to each entry and to guide the personnel through the process. Copies of the checklist form must be maintained in an appropriate and readily accessible location.

Once an area has been reclassified, it may be entered using normal operating procedures. Each time a vault is entered, it must be reclassified to allow access. If the hazard cannot be removed, the vault continues to be classified as a permit-required confined space and will not be entered by Roux Associates' field personnel without prior notification of the project manager and Roux Associates' Corporate Health and Safety Director, and not without following full confined space entry procedures. Note that this would be an unusual event since our experience at operating remedial sites has typically shown that we have been able to achieve a non-hazardous atmosphere prior to performing work in well vaults under most conditions.

The determination of the vault's status and entry permitting exemption should be conducted using the Permit-Required Confined Space Decision Flow Chart (29 CFR 1910.146 Appendix A, attached) and the following as guidance:

- 29 CFR 1910.146, Occupational Safety and Health Standards, General Environmental Controls "Permit-Required Confined Spaces"
- 29 CFR 1926.21, Safety and Health Regulations for Construction "Safety Training and Education"

- OSHA Interpretive guidance regarding 1910.146 and 1926.21, as available on the OSHA web site: www.OSHA.gov.

Major steps in the decision flow chart are described below.

Can the hazard be eliminated?

Since the hazard in typical remediation vaults is a potential atmospheric hazard, it may not be possible to eliminate the potential hazard. An accumulation of site-specific information, either existing or to be collected during future vault work, could be used to demonstrate that this potentially hazardous atmosphere does not exist and subsequently change the vault's classification to a Non-Permit Confined Space.

Can the hazards be made safe through ventilation?

Since the potential hazards are limited to atmospheric hazards, sufficient ventilation could eliminate the hazard (oxygen concentrations can be brought to normal, flammable gases and petroleum vapors can be reduced to acceptable levels). Therefore, in accordance with 1910.146(c)(5), permit procedures do not need to be followed if the entry is conducted following the procedures described in that section (continuous ventilation and air monitoring). The procedures described in 1910.146(c)(5) should be included in the JSA for vault entry. Compliance requires complete adherence with the JSA and completion of the tasks described in the order that they are described in the JSA. See Appendix B for Roux Associates' recommended procedure for vault entry utilizing temporary re-classification as a non-permit required confined space.

Note: If the hazards cannot be eliminated, personnel should not enter the space until approval is received from the project manager and Roux Associates' Corporate Health and Safety Director. Authorized entrants who plan to work in permit-required confined spaces must comply with all OSHA requirements. This includes, but is not limited to, receiving proper training, obtaining an entry permit signed by a supervisor, utilizing appropriate respiratory protection and safety equipment, communicating with the standby person (attendant) who must remain outside the permit space during entry operations unless relieved by another authorized attendant, and have ready access to rescue and emergency equipment.

VI. SUMMARY

All vaults and manholes at remediation sites that will be entered by Roux Associates personnel or subcontractors should be evaluated for potential hazards and classified in accordance with OSHA standards and guidance documents. Confined spaces such as a recovery wellhead vault, which are connected to sources of flammable separate phase petroleum product are presumed to have a potential to contain a hazardous atmosphere. Such vaults should be classified as permit-required confined spaces and labeled accordingly. Vaults and manholes that are not connected to sources of flammable separate phase petroleum product need to be further evaluated on a case-by-case basis to determine if they have a potential hazardous atmosphere. Until such evaluation is completed and documented, any remediation vault that needs to be entered by Roux Associates or subcontractor personnel should be considered to be a permit-required confined space.

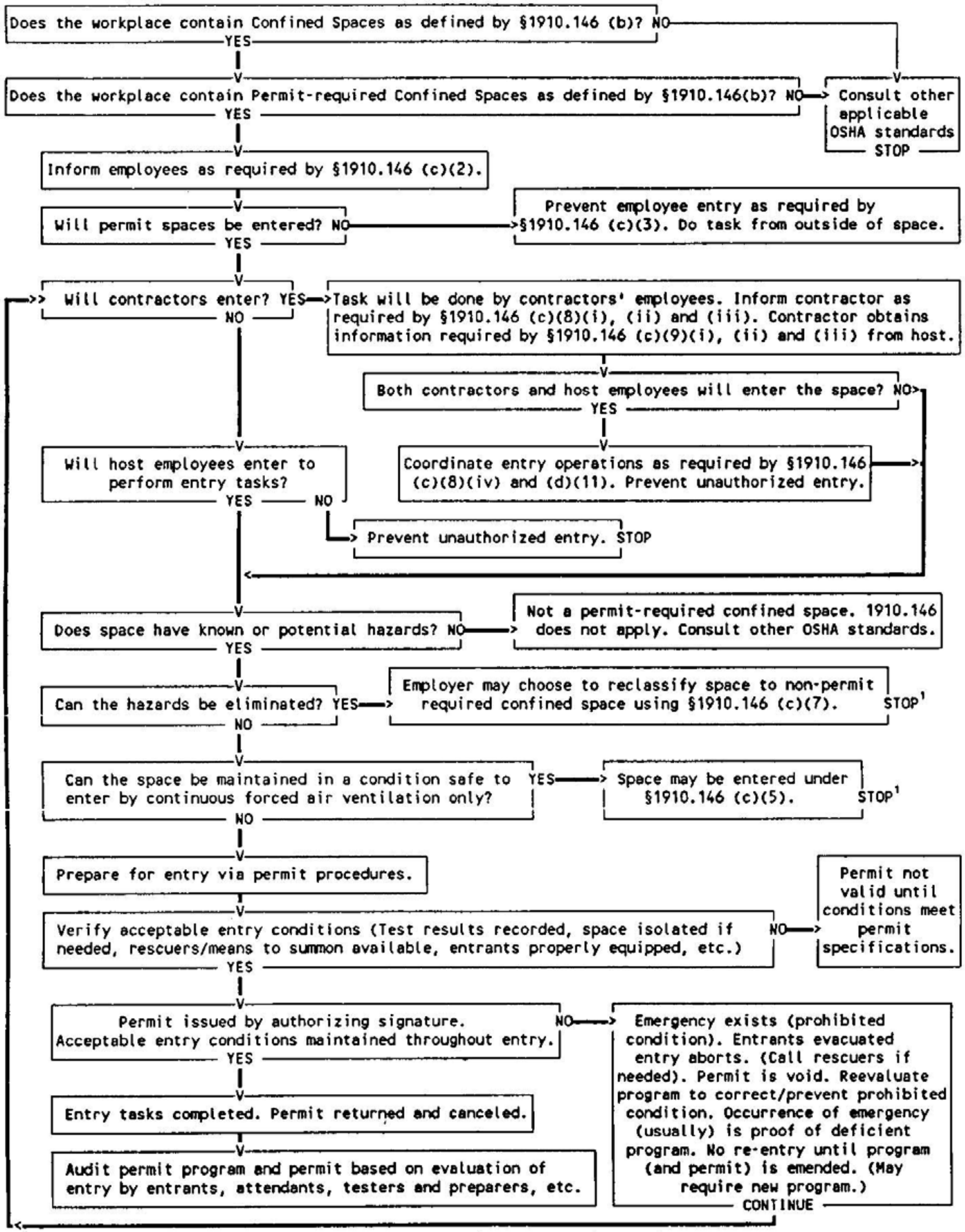
A permit-required confined space may be temporarily reclassified if the hazards are eliminated for each entry event. When hazards cannot be eliminated, only trained and authorized personnel should enter permit-required confined spaces and only after receiving specific approval of the project manager and Roux Associates' Corporate Health and Safety Director.

Prior to worker entry into confined spaces with a potential to contain a hazardous atmosphere, the internal atmosphere of the space must be tested sequentially with appropriate monitoring equipment for the following parameters:

1. Oxygen content
2. Flammable gases and vapors
3. Potential toxic air contaminants

The results of all internal atmosphere monitoring must be fully documented. The records should be kept in a readily accessible location at the work site. Records should not be stored in the vaults.

PERMIT-REQUIRED CONFINED SPACE DECISION FLOW CHART



[1] Spaces may have to be evacuated and re-evaluated if hazards arise during entry

ROUX ASSOCIATES' RECOMMENDED PROCEDURE FOR VAULT ENTRY UTILIZING TEMPORARY RE-CLASSIFICATION AS A NON-PERMIT REQUIRED CONFINED SPACE

Work in vaults designated as "permit-required confined spaces" shall be performed in accordance with the following steps:

1. Document the date and time of vault entry, as well as the personnel entering the vault and the planned activity.
2. Review the appropriate JSA and review the confined space decision-making flow chart, which should be available in a nearby accessible location such as a recovery well house.
3. Verify that the vault is properly labeled, the work area is secured with 48-inch safety cones, and all personnel are wearing the proper PPE.
4. If electrical work is being performed within the vault, proper lock-out, tag-out procedures must be followed.
5. Screen the vault with a multi-gas meter ensuring that atmosphere within the vault is within the acceptable ranges:
    a. O_2 % is between 19.5 and 23.5%
    b. VOCs are less than 5 ppm or alternate level as provided in the Site-Specific Health and Safety Plan that is based on the specific chemicals of concern.
    c. LEL is less than 5%
6. If the vault atmosphere conditions are not within these ranges, the area is considered a permit-required confined space area and cannot be entered until the hazards have been eliminated.
    a. The vault will be ventilated using natural ventilation or a portable ventilator until the acceptable atmosphere conditions have been reached and all hazards are eliminated.
    b. If it is not possible to eliminate the hazardous conditions within the vault, the vault will not be entered until the matter is discussed with the project manager and Roux Associates' Corporate Health and Safety Director.
7. If the vault atmosphere conditions are within the safe ranges, the area can be temporarily reclassified as a non-permit required confined space area. Work can be conducted within the vault following normal operational procedures.
    a. If working within the vault for an extended period of time, the atmosphere should be screened frequently.
    b. If at any time hazardous conditions are present with the vault, the vault is classified once again as a permit-required confined space area, and will not be entered without prior notification of the project manager and Roux Associates' Corporate Health and Safety Director.
8. Roux Associates personnel will complete the checklist, stored near the work area, which documents these requirements; each time they enter a vault.

REMEDIAL ACTION WORK PLAN

MJ Painting Site
350 Franklin Street
Olean, New York

APPENDIX B

Citizen Participation Plan

New York State Department of Environmental Conservation

Brownfield Cleanup Program

Citizen Participation Plan

for

MJ Painting Contractor Corp.

350 Franklin Street
City of Olean
Cattaraugus County, New York

March 2021

Contents

* * * * *

Note: The information presented in this Citizen Participation Plan was current as of the date of its approval by the New York State Department of Environmental Conservation. Portions of this Citizen Participation Plan may be revised during the site's investigation and cleanup process.

Applicant: **MJ Painting Contractor Corp**.
Site Name: **350 Franklin Street**
Site Address: **350 Franklin Street, Olean, New York**
Site County: **Cattaraugus County**
Site Number: **Site ID #C905046**

1. What is New York’s Brownfield Cleanup Program?

New York’s Brownfield Cleanup Program (BCP) works with private developers to encourage the voluntary cleanup of contaminated properties known as “brownfields” so that they can be reused and developed. These uses include recreation, housing, and business.

A brownfield is any real property that is difficult to reuse or redevelop because of the presence or potential presence of contamination. A brownfield typically is a former industrial or commercial property where operations may have resulted in environmental contamination. A brownfield can pose environmental, legal, and financial burdens on a community. If a brownfield is not addressed, it can reduce property values in the area and affect economic development of nearby properties.

The BCP is administered by the New York State Department of Environmental Conservation (DEC) which oversees Applicants that conduct brownfield site investigation and cleanup activities. An Applicant is a person who has requested to participate in the BCP and has been accepted by DEC. The BCP contains investigation and cleanup requirements, ensuring that cleanups protect public health and the environment. When DEC certifies that these requirements have been met, the property can be reused or redeveloped for the intended use.

For more information about the BCP, go online at: http://www.dec.ny.gov/chemical/8450.html.

2. Citizen Participation Activities

Why DEC Involves the Public and Why It Is Important?

DEC involves the public to improve the process of investigating and cleaning up contaminated sites, and to enable citizens to participate more fully in decisions that affect their health, environment, and social well-being. DEC provides opportunities for citizen involvement and encourages early two-way communication with citizens before decision makers form or adopt final positions.

Involving citizens affected and interested in site investigation and cleanup programs is important for many reasons, including:

- Promoting the development of timely, effective site investigation and cleanup programs that protect public health and the environment;
- Improving public access to, and understanding of, issues and information related to a particular site and that site's investigation and cleanup process;
- Providing citizens with early and continuing opportunities to participate in DEC's site investigation and cleanup process; and
- Ensuring that DEC makes site investigation and cleanup decisions that benefit from input that reflects the interests and perspectives found within the affected community.

This Citizen Participation (CP) Plan provides information about how DEC will inform and involve the public during the investigation and cleanup of the site identified above. The public information and involvement program will be carried out with assistance, as appropriate, from the Applicant.

Project Contacts

Appendix A identifies DEC project contacts to whom the public should address questions or request information about the site's investigation and cleanup program. The public's suggestions about this CP Plan and the CP program for the site are always welcome. Interested citizens are encouraged to share their ideas and suggestions with the project contacts at any time.

Location of Reports and Information

The location of the reports and information related to the site's remedial program is also identified in Appendix A. This location provides convenient access to important project documents for public review and comment. Major documents pertaining to this site will be placed on the DEC web site located at http://www.dec.ny.gov/chemical/37554.html. DEC will inform the public in fact sheets distributed about the site and by other means, as appropriate.

Site Contact List

Appendix B contains the site contact list. This list has been developed to keep the community informed about, and involved in, the site's investigation and cleanup process. The site contact list will be used periodically to distribute fact sheets that provide updates about the status of the project. These will include notifications of upcoming activities at the site (such as fieldwork), as well as availability of project documents and announcements about public comment periods.

The site contact list includes, at a minimum:

- Chief executive officer and planning board chairperson of each county, city, town and village in which the site is located;
- Residents, owners, and occupants of the site and properties adjacent to the site;
- The public water supplier which services the area in which the site is located;
- Any person who has requested to be placed on the site contact list;
- The administrator of any school or day care facility located on or near the site for purposes of posting and/or dissemination of information at the facility;
- Location of reports and information.

The site contact list will be reviewed periodically and updated as appropriate. Individuals and organizations will be added to the site contact list upon request. Such requests should be submitted to the DEC project contact(s) identified in Appendix A. Other additions to the site contact list may be made at the discretion of the DEC project manager, in consultation with other DEC staff as appropriate.

CP Activities

The table at the end of this section identifies the CP activities, at a minimum, that have been and will be conducted during the site's investigation and cleanup program. The public is informed about these CP activities through fact sheets and notices distributed at significant points during the program. Elements of the investigation and cleanup process that match up with the CP activities are explained briefly in Section 5.

- **Notices and fact sheets** help the interested and affected public to understand contamination issues related to a site, and the nature and progress of efforts to investigate and clean up a site.

- **Public forums, comment periods and contact with project managers** provide opportunities for the public to contribute information, opinions and perspectives that have potential to influence decisions about a site's investigation and cleanup.

The public is encouraged to contact project staff at any time during the site's investigation and cleanup process with questions, comments, or requests for information.

This CP Plan may be revised due to changes in key issues of public concern identified in Section 3 or in the nature and scope of remedial activities. Modifications may include additions to the site contact list and changes in planned citizen participation activities.

Technical Assistance Grant

DEC must determine if the site poses a significant threat to public health or the environment. This determination is generally made using information developed during the investigation of the site, as described in Section 5.

If the site is determined to be a significant threat, a qualifying community group may apply for a Technical Assistance Grant (TAG). The purpose of a TAG is to provide funds to the qualifying group to obtain independent technical assistance. This assistance helps the TAG recipient to interpret and understand existing environmental information about the nature and extent of contamination related to the site and the development/implementation of a remedy.

An eligible community group must certify that its membership represents the interests of the community affected by the site, and that its members' health, economic well-being or enjoyment of the environment may be affected by a release or threatened release of contamination at the site.

For more information about TAGs, go online at http://www.dec.ny.gov/regulations/2590.html

Citizen Participation Requirements (Activities)	Timing of CP Activity(ies)
Application Process:	
• Prepare Site Contact List • Establish document repositories	At time of preparation of application to participate in the BCP.
• Publish notice in Environmental Notice Bulletin (ENB) announcing receipt of application and 30-day public comment period • Publish above ENB content in local newspaper • Mail above ENB content to site contact list • Conduct 30-day public comment period	When DEC determines that BCP application is complete. The 30-day public comment period begins on date of publication of notice in ENB. End date of public comment period is as stated in ENB notice. Therefore, ENB notice, newspaper notice, and notice to the site contact list should be provided to the public at the same time.
After Execution of Brownfield Site Cleanup Agreement:	
• Prepare Citizen Participation (CP) Plan	Before start of Remedial Investigation
Before DEC Approves Remedial Investigation (RI) Work Plan:	
• Distribute fact sheet to site contact list about proposed RI activities and announcing 30-day public comment period about draft RI Work Plan • Conduct 30-day public comment period	Before DEC approves RI Work Plan. If RI Work Plan is submitted with application, public comment periods will be combined and public notice will include fact sheet. Thirty-day public comment period begins/ends as per dates identified in fact sheet.
After Applicant Completes Remedial Investigation:	
• Distribute fact sheet to site contact list that describes RI results	Before DEC approves RI Report
Before DEC Approves Remedial Work Plan (RWP):	
• Distribute fact sheet to site contact list about proposed RWP and announcing 45-day public comment period • Public meeting by DEC about proposed RWP (if requested by affected community or at discretion of DEC project manager) • Conduct 45-day public comment period	Before DEC approves RWP. Forty-five day public comment period begins/ends as per dates identified in fact sheet. Public meeting would be held within the 45-day public comment period.
Before Applicant Starts Cleanup Action:	
• Distribute fact sheet to site contact list that describes upcoming cleanup action	Before the start of cleanup action.
After Applicant Completes Cleanup Action:	
• Distribute fact sheet to site contact list that announces that cleanup action has been completed and that summarizes the Final Engineering Report • Distribute fact sheet to site contact list announcing issuance of Certificate of Completion (COC)	At the time DEC approves Final Engineering Report. These two fact sheets are combined if possible if there is not a delay in issuing the COC.

Note: The table identifying the citizen participation activities related to the site's investigation and cleanup program follows on the next page:

3. Major Issues of Public Concern

This section of the CP Plan identifies major issues of public concern that relate to the site. Additional major issues of public concern may be identified during the course of the site's investigation and cleanup process.

Based on the information currently available, this site does not currently contain any major environmental issues of public concern. If major issues arise, the stakeholders in the attached Brownfield site contact list (Appendix B) will be immediately contacted.

4. Site Information

Appendix C contains the following maps identifying the location of the site:

- Figure C-1: Site Location Map;
- Figure C-2: Site Vicinity; and
- Figure C-3: Site Plan.

Site Description

The 350 Franklin Street Site (the Site) is a vacant industrial parcel located in the City of Olean, Cattaraugus County, New York. The parcel is adjacent to New York Interstate I-86, (northeast of the Johnson Street overpass). The parcel is bounded by Johnson Street to the west and Franklin Street to the south. A USGS 7.5-minute quad map (Site Location Map) is included as Figure C-1.

The Site consists of a vegetated (grass covered) undeveloped area adjacent to New York State highway I-86. Located between the highway and the northwestern portion of the Site is Two Mile Creek, which is considered a Class D Stream in the area of the Site. Class D2 is the lowest ranking used by NYSDEC to classify waterways in New York and consists of all waterways and or waterway segments which cannot be used as a drinking water source, are not suitable for swimming or contact activities and are not suitable for fisheries support or non-contact activities. No buildings or other structures exist at the Site except for a highway billboard (see Figure C-3).

According to the City of Olean Assessor's Office online property information database, the Site, identified as tax map parcel 94.040-1-2.3, compromises 9.35 acres. The Site is categorized as industrial vacant and is zoned for commercial and industrial use. Properties in the vicinity (approximately a 0.5-mile radius) of the Site are primarily developed as mixed use and include residential, municipal, commercial, manufacturing and or industrial properties.

A Site Vicinity Map, included as Figure C-2 of the application, shows adjacent streets, proposed Site boundary lines, adjacent property owners and adjacent property land uses within 1,000 feet around the Site with adjacent streets, proposed brownfield property boundary lines.

History of Site Use, Investigation, and Cleanup

The Site consists of a vegetated (grass covered) undeveloped area adjacent to New York State highway I-86. No buildings or other structures exist at the Site except for two highway billboards.

According to the April 2006 Historic and Current Site Conditions Report prepared by AMEC Earth and Environmental (AMEC), the Site and section of Olean, NY which surrounds the Site has historically been occupied with industrial operations including, but not limited to, petroleum storage and refining, leather tanneries, heavy and light manufacturing, chrome plating, fertilizer manufacturing, and railroad facilities. The Site and the properties immediately surrounding the area of the Site were primarily used as a petroleum refining facility between 1876 and approximately 1954. During this time, seepage pools were known to have been encountered and became a targeted location for oil production well installation. Given the presence of naturally occurring oil in surrounding areas, it is possible that naturally occurring oil is also present at this Site.

From 1954 through 1964, Swan Finch Oil Company Olean Industries, Inc. stored grain and corn in approximately 60 tanks and buildings on the refinery property. From 1964 through 1981, Felmont Oil and Agway removed the old refinery tanks and buildings and constructed an anhydrous ammonia plant.

In May 2005 soil was excavated from the area around the storm water drainage culvert as part of release response actions. While removing soils from ground surface to 6 inches (in) below ground surface (bgs), personnel observed what they described to be a "sludge/oil material" directly below surficial soils.

From 2007 to 2013 additional investigation activities were completed which included the installation of soil borings and monitoring wells to facilitate the collection of soil samples and ground water samples to further evaluate the presence of petroleum impact.

From 2014 to 2015 geophysical surveys were performed at a portion of the 350 Franklin Street parcel to assist in further identifying abandoned piping and to better understand any additional potential subsurface features.

From November 2015 to December 2015 test pitting to investigate subsurface features and identify areas of GCM was performed at 350 Franklin Street. Test pits revealed grossly contaminated material (GCM). Additional test pitting and subsurface investigations were performed from November 2016 to December 2016, which included piping/GCM removal activities.

From 2019 to 2020 the Applicant conducted an investigation of the site officially called a “remedial investigation” (RI). This investigation was performed with DEC oversight. The Applicant developed and submitted a remedial investigation work plan, which was subject to public comment.

The RI had several goals:

1) Define the nature and extent of contamination in soil, surface water, groundwater and any other parts of the environment that may be affected;

2) Identify the source(s) of the contamination;

3) Assess the impact of the contamination on public health and the environment; and

4) Provide information to support the development of a proposed remedy to address the contamination or the determination that cleanup is not necessary.

When the investigation was completed, the Applicant prepared and submitted a report that summarizes the results. This report also recommended cleanup action to address site-related contamination. The investigation report was subject to review and approval by DEC.

Additional subsurface investigations and groundwater monitoring has been completed at the Site through January of 2022 to further delineate the extent of subsurface contamination on-Site..

5. Cleanup Process

Application

The Applicant has applied for and been accepted into New York's Brownfield Cleanup Program as a **Volunteer**. This means **that the Applicant was not responsible for the disposal or discharge of the contaminants or whose ownership or operation of the site took place after the discharge or disposal of contaminants. The Volunteer must fully characterize the nature and extent of contamination onsite, and must conduct a qualitative exposure assessment, a process that characterizes the actual or potential exposures of people, fish and wildlife to contaminants on the site and to contamination that has migrated from the site.**

The Applicant in its Application proposes that the site will be used for **restricted** purposes. To achieve this goal, the Applicant will conduct **cleanup** activities at the site with oversight provided by DEC. The Brownfield Cleanup Agreement executed by DEC and the Applicant sets forth the responsibilities of each party in conducting these activities at the site.

Cleanup Action

DEC will consider public comments, and revise the draft cleanup plan if necessary, before approving the proposed remedy. The New York State Department of Health (DOH) must concur with the proposed remedy. After approval, the proposed remedy becomes the selected remedy.

The Applicant may then design and perform the cleanup action to address the site contamination. DEC and DOH oversee the activities. When the Applicant completes cleanup activities, it will prepare a final engineering report that certifies that cleanup requirements have been achieved or will be achieved within a specific time frame. DEC will review the report to be certain that the cleanup is protective of public health and the environment for the intended use of the site.

Certificate of Completion

When DEC is satisfied that cleanup requirements have been achieved or will be achieved for the site, it will approve the final engineering report. DEC then will issue a Certificate of Completion (COC) to the Applicant. The COC states that cleanup goals have been achieved, and relieves the Applicant from future liability for site-related contamination, subject to certain conditions. The Applicant would be eligible to redevelop the site after it receives a COC.

Site Management

Site management is the last phase of the site cleanup program. This phase begins when the COC is issued. Site management may be conducted by the Applicant under DEC oversight, if contamination will remain in place. Site management incorporates any institutional and engineering controls required to ensure that the remedy implemented for the site remains protective of public health and the environment. All significant activities are detailed in a Site Management Plan.

An institutional control is a non-physical restriction on use of the site, such as a deed restriction that would prevent or restrict certain uses of the property. An institutional control may be used when the cleanup action leaves some contamination that makes the site suitable for some, but not all uses.

An engineering control is a physical barrier or method to manage contamination. Examples include: caps, covers, barriers, fences, and treatment of water supplies.

Site management also may include the operation and maintenance of a component of the remedy, such as a system that is pumping and treating groundwater. Site management continues until DEC determines that it is no longer needed.

Appendix A – Project Contacts and Location of Reports and Information

Project Contacts

For information about the site's investigation and cleanup program, the public may contact any of the following project staff:

New York State Department of Environmental Conservation (DEC):

Benjamin McPherson, PE
Project Manager
DEC Region 9
Division of Environmental Remediation
270 Michigan Avenue
Buffalo, New York 14203-2915
(716) 851-7220
chad.staniszewski@dec.ny.gov

Kristen Davidson
Citizen Participation Specialist
DEC Region 9
270 Michigan Avenue
Buffalo, New York 14203
(716) 851-7220
kristen.davidson@dec.ny.gov

Patrick Foster, Esq.
DEC
Office of General Counsel
270 Michigan Avenue
Buffalo, New York 14203-2915
pefoster@gw.dec.state.ny.us

New York State Department of Health (DOH):

Nathan Freeman
Public Health Specialist
DOH – Bureau of Env. Exposure Investigation
Empire State Plaza
Corning Tower Room 1787
Albany, New York 12237
nathan.freeman@health.ny.gov
(518) 402-7860

Location of Reports and Information

The facility identified below is being used to provide the public with convenient access to important project documents:

Olean Public Library
134 North 2nd Street
Olean, New York 14760-2583
Attn: Mr. Lance Chaffee
Library Director
Phone: (716) 372-0200

Appendix B – Site Contact List

Provided below is a list of key personnel involved in the work, contact information and their responsibilities:

Project Contacts		
Name	Title	Address / Phone / E-Mail
Mike John, Sr.	Property Owner- MJ Painting Contractor Corp.	291 Homer Street Olean, New York (716) 373-3033 E-Mail: mikejohn@mjpaintingcontractor.com
Brian Robinson	Project Manager – Senior Engineer	Roux Associates, Inc. 12 Gill Street, Suite 4700 Woburn, Massachusetts (781) 569-4000 E-Mail: brobinson@rouxinc.com
Brian Klaus	Task Manager - Senior Geologist	Roux Associates, Inc. 12 Gill Street, Suite 4700 Woburn, Massachusetts (781) 569-4000 E-Mail: bklaus@rouxinc.com
City Government Contacts		
Name	Title	Address / Phone / E-Mail
William J. Aiello	Mayor, City of Olean, NY	City Hall 101 East State Street Olean, NY 14760 Phone: (716) 376-5615 E-Mail: waiello@cityofolean.org
Thomas Barnes	Planning Board Chairperson, City of Olean, NY	City Hall 101 East State Street Olean, NY 14760 Phone: (716) 945-5301 Ext. 209 (716) 376-5647 E-Mail: tbarnes@southerntierwest.org

Cattaraugus County Government Contacts

Name	Title	Address / Phone / E-Mail
Gerard Fitzpatrick	Chair, County Legislature, Cattaraugus County, NY	121 First Street Little Valley, NY 14755 Phone: (716) 938-6620 E-Mail: gfitzpatrick@cattco.org
Charles W. Couture	Chair, County Planning Board, Cattaraugus County, NY	Care of Catt. Co. Planning Department 303 Court Street Little Valley, NY 14755 Phone: (716) 942-3710 E-Mail: cpcouture@hotmail.com
Local News Media Contact		
Jim Eckstrom	Managing Editor, Olean Times Herald	639 Norton Drive Olean, NY 14760 Phone: (716) 372-3121 Ext. 223 E-Mail: jeckstrom@oleantimesherald.com
Public Water Supplier		
Brad Camp	Water Superintendent, City of Olean, NY – Department of Public Works: Water Division	1332 River Street Olean, NY 14760 Phone: (716) 376-5699 E-Mail: bcamp@cityofolean.org
Nearby Schools and Daycare Facilities Contact		
No nearby schools or daycare facilities		
Document Repository Contact		
Name	Title	Address
Michelle La Voie	Library Director, Olean Public Library	134 N 2nd Street Olean, NY 17460-2583 Phone: (716) 372-0200 E-Mail: mlavoie@oleanlibrary.org

Appendix C – Site Location Maps

🟥 QUADRANGLE LOCATION

USGS, 1980, Olean, New York 7.5 Minute Topographic Quadrangle. Contour Interval 3 Meters

Service Layer Credits: Copyright:© 2013 National Geographic Society, i-cubed

1,800 0 1,800 3,600 Feet

Title:

SITE LOCATION MAP

350 FRANKLIN STREET
OLEAN, NEW YORK

Prepared For:
MJ PAINTING CONTRACTOR CORP.

ROUX

Compiled by: CC	Date: 01MAR22	FIGURE
Prepared by: CC	Scale: AS SHOWN	C-1
Project Mgr: BR	Project: 2317.0002M02000	
File: 2317.0002M000.144.C-1.mxd		

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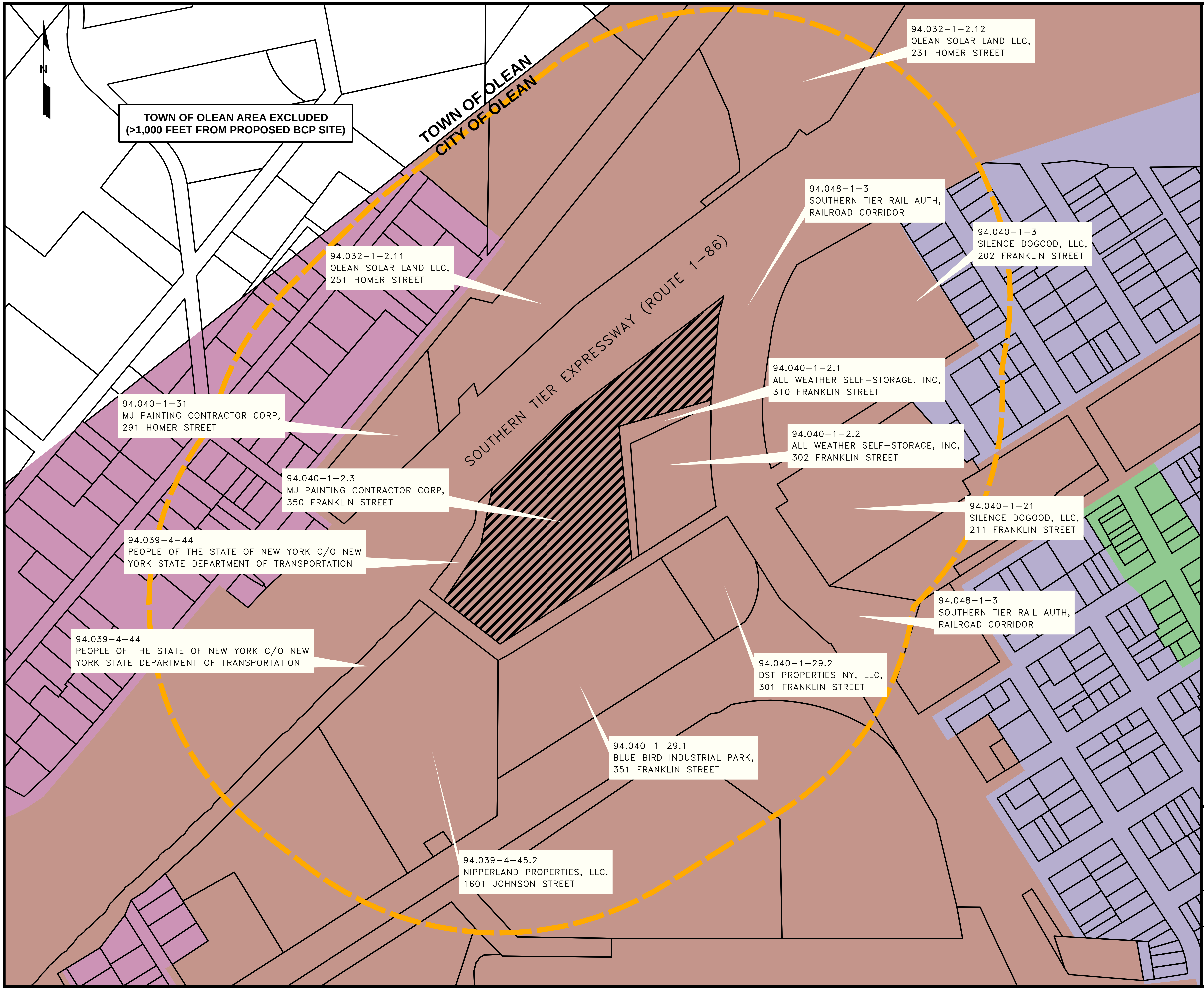

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LEGEND

☐ APPROXIMATE PROPERTY BOUNDARY

▨ PROPOSED BCP SITE

⬚ 1000ft BUFFER AROUND PROPOSED BCP SITE PROPERTY BOUNDARY

CURRENT ZONING USE DISTRICT

INDUSTRIAL

🟫 I - INDUSTRIAL USE

COMMERCIAL

🟩 GC - GENERAL COMMERCIAL USE

RESIDENTIAL

🟪 R2 - SINGLE-FAMILY/GENERAL RESIDENTIAL USE

🟪 R3 - GENERAL RESIDENTIAL USE

94.040-1-2.2	TAX MAP NUMBER
ALL WEATHER SELF-STORAGE, INC,	PROPERTY OWNER
302 FRANKLIN STREET	PROPERTY ADDRESS OR LOCATION

NOTES:

1. ZONING USE DISTRICT DEFINITIONS FROM CITY OF OLEAN, NY CATTARAUGUS COUNTY Local Law No. 1-00, §§ 1.0—17.2, and arts.18—20, adopted Jan. 10, 2000, amended chapter 28 (28-4.0 to 28.4.15) https://ecode360.com/15427862

2. 2006 AERIAL PHOTOGRAPH AND PARCEL BOUNDARY OBTAINED FROM THE CATTARAUGUS COUNTY GIS WEBSITE http://maps.cattco.org/website/parcel/viewer.htm

180 0 180 360
Feet

Title:

SITE INFORMATION MAP

350 FRANKLIN STREET
OLEAN, NEW YORK

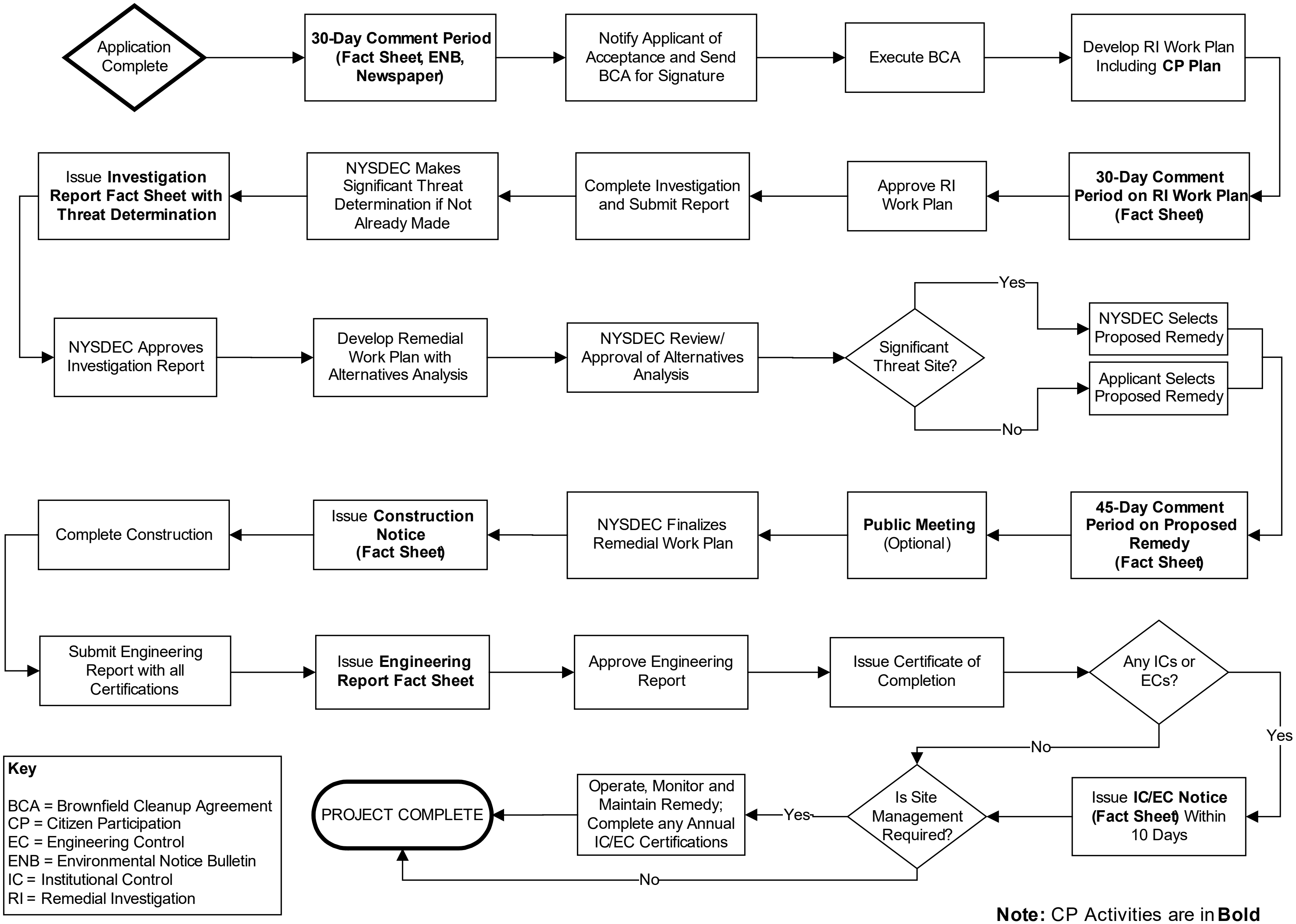
Prepared For:

MJ PAINTING CONTRACTOR CORP.

ROUX

Compiled by: CC	Date: 01MAR22	FIGURE
Prepared by: CC	Scale: AS SHOWN	C-2
Project Mgr: BR	Project: 2317.0002M000	
File: 2317.0002M000.144.C-2.mxd		

Appendix D– Brownfield Cleanup Program Process



Key

BCA = Brownfield Cleanup Agreement
CP = Citizen Participation
EC = Engineering Control
ENB = Environmental Notice Bulletin
IC = Institutional Control
RI = Remedial Investigation

Note: CP Activities are in **Bold**

REMEDIAL ACTION WORK PLAN

MJ Painting Site
350 Franklin Street
Olean, New York

APPENDIX C

Stormwater Pollution Prevention Plan

STORMWATER POLLUTION PREVENTION PLAN

MJ Painting Site
350 Franklin Street
Olean, New York

March 1, 2022

Prepared for:

MJ Painting Contractor Corp.
291 Homer Street
Olean, New York 14760

Prepared by:

Roux Environmental Engineering and Geology, D.P.C.
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Islandia, New York 11749

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1.0 INTRODUCTION

Roux Associates, Inc. and Roux Environmental Engineering and Geology, D.P.C. (collectively referred to as Roux) has prepared this Stormwater Pollution Prevention Plan (SWPPP) on behalf of MJ Painting Contractor Corp. (MJ Painting). The SWPPP will support the proposed cleanup and redevelopment of the property located at 350 Franklin Street, Olean, New York (the Site, see **Figure 1**), under the New York State Department of Environmental Conservation (NYSDEC) Brownfield Cleanup Program (BCP). MJ Painting entered into the Brownfield Cleanup Agreement (BCA) with the NYSDEC and was accepted into the BCP as a volunteer on January 14, 2019. The Site is identified as BCP Site No. C905046 and consists of one 9.35-acre parcel, identified as City of Olean tax map parcel 94.040-1.2.3.

As the planned construction activities at the Site involve soil disturbance activities greater than one acre and impacted storm water from the subject area may runoff to adjacent surface waters, a New York State Department of Environmental Conservation (NYSDEC) State Pollutant Discharge Elimination System (SPDES) General Permit for Stormwater Discharges from Construction Activity (GP-0-20-001) (General Permit) is required. In accordance with the General Permit, Notice of Intent documentation will be submitted to the NYSDEC with all other required supplemental information. Stormwater at the Site is not currently managed under an existing New York State Department of Environmental Conservation (NYSDEC) State Pollutant Discharge Elimination System (SPDES) Permit.

The following sections provide project specific SWPPP details. SWPPP inspection results will be recorded on Construction Duration Inspection forms (**Appendix A**). Modifications to the SWPPP will be described and recorded on Modification Report form (**Appendix B**).

1.1 Site Location and Description

The Site is located in the City of Olean, Cattaraugus County, New York, at 350 Franklin Street (see **Figure 1**). The Site consists of a vegetated (grass covered) undeveloped area adjacent to New York State highway I-86. No buildings or other structures exist at the Site except for two highway billboards. According to the City of Olean Assessor's Office on-line property information database, the Site, identified as tax map parcel 94.040-1.2.3, comprises 9.35 acres. The Site is categorized as industrial vacant and is zoned for commercial and industrial use. Commercial uses as defined in 6 New York Codes, Rules, and Regulations (NYCRR) Part 375-6 Environmental Remediation Programs are proposed for the Site. Although the redevelopment plan for the Site is not finalized, it is anticipated that when the development is completed, the Site will be used for future growth of the MJ Painting operations currently located at 291 Homer Street (BCP Site #C905042). The proposed development plan is compatible with the current GC – General Commercial Use; or I – Industrial Use zoning of the Site.

Properties in the vicinity (approximately a 0.5-mile radius) of the Site are primarily developed as mixed use and include residential, municipal, commercial, manufacturing and or industrial properties. Commercial oil recovery has historically occurred in the surrounding areas; according to the NYSDEC Oil & Gas Searchable Database, 289 active oil production wells exist within the Town of Olean, though there are no remaining active oil production wells within the City of Olean[1].

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[1] The City of Olean is located within the Town of Olean.

According to the U.S. Fish and Wildlife National Wetlands Inventory (FWS Wetland Mapper), Two Mile Creek is the only wetland located in the vicinity of the Site. Two Mile Creek is located directly northwest of the Site, abutting the northwest property boundary. According to the NYSDEC Protection of Waters Program, Two Mile Creek is considered a Class C Stream, which is the second lowest ranking used by the NYSDEC to classify waterways in New York. Class C Streams consist of waterways and or waterway segments which cannot be used as a drinking water source and are not suitable for swimming or contact activities but are suitable for fisheries support or non-contact activities.[2] As discussed in previous Site submittals, the Site and surrounding areas are located within the Allegheny-Ohio-Mississippi River drainage basin and according to the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) for Olean, New York, the Site is within a Zone B floodplain area. Zone B areas are of moderate flood hazard, located between the limits of the 100-year and 500-year floods.

1.2 Project Description

Roux's proposed work at the Site on behalf of MJ Painting includes cleanup and redevelopment of the Site. The remedial work activities include the following:

- Clearing and grubbing in preparation for further remedial work;
- Removal or otherwise mitigation of the environmental risk related to subsurface structures (e.g., abandoned piping) to prevent potential discharge of contaminants to surrounding soil/fill;
- Excavation and off-Site disposal and/or in-situ solidification (ISS) of soil containing grossly contaminated media (GCM) (i.e., containing substantial quantities of mobile contamination in the form of light non-aqueous phase liquids [LNAPL]);
- Removal of sources to groundwater contamination, such as GCM, by both GCM excavation/fixation and LNAPL removal/recovery and disposal;
- Installation of additional monitoring wells throughout the Site to monitor for GCM;
- Installation of a Site Cover System to prevent direct contact with contaminated soil remaining at the Site, if necessary;
- Replacement of select groundwater monitoring wells if decommissioned/destroyed during Site excavation activities in areas not subject to ISS; and
- Implementation of institutional controls including an environmental easement and Site Management Plan (SMP) to restrict the Site to commercial or industrial use, to prevent disturbance of contaminated soil remaining at the Site, provide for assessment and characterization to confirm the absence of GCM prior to future disturbance, to restrict use of groundwater at the Site, to maintain the Site Cover System, conduct LNAPL removal (as necessary) and to monitor groundwater to confirm that groundwater source removal mitigates off-Site migration of contaminated groundwater.

The selected remedial approach removes or controls (by virtue of reducing mobility, or other characteristics of GCM) source areas (i.e., GCM and/or LNAPL) to the greatest extent feasible, reduces exposure of any remaining petroleum-related impacts, and reduces the potential for off-Site migration of contaminated groundwater. The proposed extent of the work area is provided in **Drawing 1**.

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[2] Higher classifications of waterways include Class A or AA (drinking water source) and Class B (suitable for swimming or contact activities).

1.3 Soil Description

Roux conducted previous remedial investigations to characterize the nature and extent of contamination at the Site. Remedial Investigation (RI) activities were performed in accordance with the NYSDEC approved December 19, 2018 Remedial Investigation Work Plan (RIWP) and the November 2, 2020 Supplemental Subsurface Investigation Work Plan (SSIWP). The initial RI was completed in 2019 and, at DEC's request, the SSI was completed in December 2020 to further investigate targeted areas for the presence of GCM (i.e., containing substantial quantities of mobile contamination in the form of LNAPL). Collectively, results of the RIWP and SSIWP and other RI activities are summarized in Remedial Investigation / Alternatives Analysis Report that were previously provided to NYSDEC.

The conclusions of the RI are:

- Approximately 3,400 linear feet of subsurface former refinery piping is present at the Site;
- Soil containing GCM is present at the Site;
- Surface and subsurface soil contamination exceeding Commercial Use Site Cleanup Objectives (SCOs) is present at the Site;
- Groundwater contamination exceeding Ambient Water Quality Standards and Guidance Values (AWQSGV) is present at the Site; and
- Light Non-Aqueous Phase Liquid (LNAPL) is present in portions of the Site.

The Site is typically underlain by fill material characterized generally as brown sand and gravel. This fill material, containing brick, wood, ash, tar-like material, concrete, metal fragments, and glass, is present throughout the Site. Fill material extends from ground surface to as deep as 12 ft bgs. Native material present beneath the layer of fill is typically gray, but also tan or brown, silt, sand and gravel. Intermittent layers of silt and clay were observed throughout the Site ranging from ground surface to a maximum depth of approximately 17 ft bgs. A generally continuous and non-impacted layer of clay and silt was observed throughout the Site with the depth of the top of the layer generally ranging from 25 ft bgs to 35 ft bgs. The bottom of the layer was not encountered and therefore a layer thickness could not be determined. Site soil boring/monitoring well and test pit logs are presented in **Appendix C** and **D.**

Bedrock was not encountered during the investigation; refusals were encountered at varying depths across the Site during soil boring advancement, indicating that glacial till may be present at the Site. According to The New York State Department of Transportation (NYSDOT) Geology of New York State Geotechnical Design Manual, the Site, which is located on the Allegheny Plateau, is underlain by interbedded shales, siltstones and mostly weak and soft sandstones. The bedrock generally dips to the southwest at a low angle.

The Natural Conservation Service (NRCS), United States Department of Agriculture (USDA) soil survey for the Cattaraugus County shows 66% of the soils at the Site are of the Castile series (Hydrologic Soil Group (HSG) A/D), 26% are of the Chenango series (Hydrologic Soil Group A), 6% are of the Red Hook series (Hydrologic Soil Group B/D), and the remaining 2% are of the Olean series (HSG B/D).[3] The Castille and Chenango series consist of Gravelly loamy glaciofluvial deposits over sandy and gravelly glaciofluvial deposits, derived mainly from sandstone, shale, and siltstone. Group A soils have low runoff potential and high infiltration rates even when thoroughly wetted. They consist chiefly of deep, well to excessively drained sands or gravels and have a

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[3] Estimates are based on observations and descriptions of the soils. Series established by the Tioga County, Pennsylvania, 1929. Soil Survey Staff, Natural Resources Conservation Service, United States Department of Agriculture. Web Soil Survey. Available online at https://websoilsurvey.sc.egov.usda.gov/.

high rate of water transmission. Group B soils have a moderate infiltration rate when thoroughly wetted and consists chiefly or moderately deep to deep, moderately well to well drained soils with moderately fine to moderately coarse textures. Group D soils have the highest runoff potential. They have very low infiltration rates when thoroughly wetted and consist chiefly of clay soils with a high swelling potential, soils with a permanent high water table, soils with a claypan or clay layer at or near the surface and shallow soils over nearly impervious material.

A total of 116 soil samples and associated quality assurance samples, as outlined in the RIWP and SSIWP, were collected from 40 soil boring locations and submitted for laboratory analysis as part of RI activities. Residual petroleum contamination has been observed throughout the Site, with the primary compounds of concern being:

- **Surface, near surface and subsurface soil/fill:** GCM, arsenic, and SVOCs;
- **Groundwater:** VOCs and SVOCs; and
- **LNAPL.**

2.0 SOIL EROSION AND SEDIMENT CONTROL

The purpose of this section is to identify and address pollutants and activities that could impact stormwater during remediation activities. Remediation activities that could impact stormwater include earthwork, in-situ soil stabilization activities, vehicle maintenance, and solid waste management. This section also serves to identify the types of temporary soil erosion and sediment controls (SESCs) that will be used during remediation activities. These SESCs will provide soil stabilization for disturbed areas and structural controls to divert runoff and remove sediment. The key elements of this SESC plan that the remediation contractor shall follow are detailed in the following sections of this SWPPP and generally address all pertinent components in Parts I.B, III.B, and IV of the NYSDEC SPDES General Permit 0-20-001.

2.1 Identification and Control of Potential Stormwater Contaminants

The purpose of this subsection is to identify and address pollutants that could impact stormwater during the proposed remediation activities. Pollutants from clearing, grading, excavation, ISS, and restoration activities that have the potential to be present in stormwater runoff are listed in **Table 1**. This table includes information regarding material type, chemical and physical description, and the specific regulated chemicals associated with each stormwater pollutant.

Table 1. Potential Remediation Activities Site Stormwater Pollutants

Trade Name Material	Chemical/Physical Description	Stormwater Pollutants
Antifreeze/coolant	Clear green/yellow liquid	Ethylene glycol, propylene glycol, heavy metals (copper, lead, zinc)
Diesel Fuel	Clear, blue-green to yellow liquid	Petroleum distillate, oil & grease, naphthalene, xylenes
Erosion	Solid particles	Soil, sediment
Fertilizer	Liquid or solid grains	Nitrogen, phosphorous
Gasoline	Colorless, pale brown or pink petroleum hydrocarbon	Benzene, ethylbenzene, toluene, xylenes
Hydraulic oil/fluids	Brown oily petroleum hydrocarbon	Mineral oil
Solidification agents	White solid	Portland cement, fly ash, ground granulated blast slag
Wastewater from construction equipment	Water	Soil, oil & grease, solids

2.1.1 Potential Areas for Stormwater Contamination

The following potential source areas of stormwater contamination were identified and evaluated:

- Cleared and graded areas;
- Construction Site entrances and construction equipment;
- Material and equipment laydown areas;
- Waste material storage areas; and
- Stockpiled soils.

Table 2 presents Site-specific information regarding stormwater pollution potential from each of these areas.

Table 2. Locations of Potential Sources of Stormwater Contamination

Potential Stormwater Contamination Point	Potential Pollutants	Potential Problem
Cleared areas and graded areas with exposed soils	Soil erosion (soil COCs as listed in **Section 1.3**), fertilizer.	Erosion of soils from cleared and graded areas, including fertilizer from the proposed planting areas, have the potential to discharge to surface waters.
Construction Site entrance, construction equipment, waste material storage areas, and stockpiled soils.	Hydraulic oil, gasoline, diesel, antifreeze, soil erosion (soil COCs as listed in **Section 1.3**), wastewater from construction equipment.	Leaking hydraulic oil and antifreeze from clearing, grading, excavation, and in-situ soil stabilization construction equipment. Gasoline and diesel fuel spills while fueling construction equipment, and erosion of exposed and stockpiled soils. Tracking of soil into the road through the construction Site entrance(s). Wastewater runoff from construction equipment cleaning.
Material and equipment laydown areas	Solidification agents	Improperly stored solidification agents have the potential to discharge to surface water via runoff.

2.1.2 Construction Practices to Minimize Stormwater Contamination

Good housekeeping and spill control practices will be followed during remediation activities to minimize stormwater contamination from concrete, petroleum products, waste materials, and other potential pollutants listed in **Table 1**. Good housekeeping practices include the following:

- Any petroleum-based substances used at the Site will be stored in properly sealed containers and applied according to the manufacturer’s recommendations;
- Materials and equipment necessary for spill cleanup will be maintained at the Site in a designated equipment and waste material storage area, covered and secured. Equipment will include, but is not limited to, brooms, dust pans, mops, rags, gloves, goggles, kitty litter, sand, saw dust, and plastic and metal trash containers;
- Vehicles used for construction activities will be monitored for leaks and will receive regular preventive maintenance to reduce the chance of leakage;
- Spills will be cleaned up when discovered. Spills large enough to reach the combined sewer system will be reported to the National Response Center at 1-800-424-8802;
- Dump trucks hauling material from the Site will be covered with a tarpaulin;
- Excess mud, dirt, or rock tracked from the Site to adjacent paved streets will be swept as needed for removal;
- Ruts caused by construction equipment will be graded;
- Equipment or vehicle washing, when required, will be performed on designated decontamination pad areas stabilized with stone;
- Sanitary waste will be collected from portable units by a licensed sanitary waste management contractor to avoid overfilling; and

- Waste materials will be collected and stored in a securely covered metal dumpster rented from a licensed solid waste management company. Trash and construction debris from the Site will be deposited in the dumpster. The dumpster will be emptied at least weekly and the trash will be hauled to a solid waste landfill. The dumpster will be located in the designated on-Site equipment and waste material storage area. Construction materials will not be buried on-Site.

2.2 Temporary Erosion Control Practices

The purpose of this subsection is to identify the types of temporary SESCs that will be used during remediation activities. The locations of each of the practices described below are identified in the attached Erosion and Sediment Control Plan and Details as shown in **Drawings 1**, **D-1, and D-2**.

2.2.1 Pre-Construction Actions

Prior to the start of subsurface excavation and ISS activities, the sediment control measures depicted on **Drawings 2 and 3** will be installed at the Site. The pre-construction SESCs are shown below:

- Stabilized construction entrance;
- Perimeter sediment controls; and
- Inlet protection.

Stabilized Construction Entrance

Stabilized construction entrances will be installed where shown in **Drawing 1**. Materials for stabilized construction entrances will consist of a six-inch layer of 2-inch stone or recycled concrete aggregate (RCA) equivalent atop filter cloth. The stabilized construction entrance will be a minimum of 50 feet in length and 12 feet in width. New layers of stone will be placed on the construction entrances as work progresses. The stabilized entrance will capture mud and debris from vehicles before entering public roads to reduce tracking of sediments and will minimize dust as well. All sediment spilled, dropped, washed, or tracked onto the public rights-of-way must be removed immediately. When washing is required, it will be done on an area stabilized with stone, which drains into an approved sediment trapping device.

Perimeter Sediment Controls

Reinforced silt fencing (fabric with woven wire fence) will be installed along the perimeter of the appropriate work area before the start of work. The locations of perimeter sediment controls are shown on **Drawing 1** and details for installation are shown in **Drawing D-1**. Should conflicts arise due to the location of the fencing, perimeter sediment controls will be amended in a manner that maintains their effectiveness.

Wattles will be straw- or compost-filled tubes at least 6-inches in diameter and will be anchored to the ground surface. The silt fence geotextile (i.e., filter cloth) may be unsupported and shall have maximum 6-foot outer circumference fence post spacing when approved by the Roux Associates/Remedial Engineering or on-Site representative. When two sections of filter cloth adjoin each other, they shall be overlapped by a minimum 6 inches and folded. When two sections of wattle adjoin each other, they shall be overlapped by a minimum of two feet.

Maintenance, in accordance with the manufacturer’s recommendations and when inspections identify that maintenance is needed, shall be performed as needed and material removed when “bulges” develop in the silt fence or wattles, and to ensure that sediment does not overtop the barriers. It will be requested that the grass in the work area will not be mowed to enhance the erosion control provided by the silt fence and wattles.

Inlet Protection

The existing grates, manholes, and stormwater catch basins (inlets) at the Site will be protected prior to the start of remediation activities. A silt sack, Dandy Bags®, or equivalent will be installed within all stormwater inlets at the Site or in the immediate street area potentially impacted by the work. The location of the protected grates, manholes, and stormwater inlets are shown on **Drawing 1** and details for installation are shown in **Drawing D-1**.

2.2.2 Decontamination Area

A decontamination pad will be installed before the start of the work in the general support area. All equipment used for excavation and other earthwork activities which may come in contact with potentially contaminated materials shall be decontaminated, before:

1. Crossing areas of the Site which do not require remediation or have already been remediated;
2. Handling clean fill materials; and
3. Leaving the Site.

Equipment shall be inspected prior to leaving the Site. Subcontractor shall not allow equipment to leave the Site with water leaking or mud dripping or caked to the equipment. Dry brushes shall be used to decontaminate excavators, trucks, trailers, and drill rigs, to the extent practicable. Any dry decontamination must be performed in accordance with the activity cessation thresholds for dust, as specified in the Subcontractor's Health and Safety Plan. Prior to equipment leaving the Site, the final decontamination of heavy equipment that came in contact with potentially contaminated material shall consist of using a pressure washer capable of effectively removing all soil, residues, and other debris adhering to equipment, if required. Additives to the wash water shall be used when necessary and approved by Roux Associates/Remedial Engineering's on-Site representative to adhere to decontamination acceptable levels. Decontamination water will be collected and stored in a frac tank for later disposal at an approved facility.

2.2.3 Grading

Erosion control will be provided in those areas where the existing land surface is to be disturbed.

Land Grading

Cleared and graded soils will be sloped to the installed erosion and sediment control measures. Stockpiles will be used to store excavated soils and fill from off-Site sources temporarily. Stockpiles will be lined with polyethylene sheeting to prevent migration of solids or liquids from the stockpile to other areas within the Site or off-Site. Where necessary, stockpiles will also be covered with polyethylene sheeting and/or sprayed with approved, non-hazardous, biodegradable odor suppressing agent. Stockpiles will be constructed with perimeter berms, silt fences, or hay bales to limit runoff and run-on. The liner and cover will be anchored securely with sandbags or other appropriate weights, as needed.

2.2.4 Erosion Control (Stabilization)

Erosion control measures will be implemented and maintained during remediation activities to retain soil in its place.

Seeding, Mulching, Soil Stabilizers

Stabilization (i.e., covering or maintaining cover over disturbed soil) will be achieved with either vegetative or non-vegetative measures. Vegetative measures include seed and mulch. Non-vegetative measures include maintaining cover over disturbed soil using geotextiles, gravel, and soil stabilizers. There are no critical areas (i.e., steep excavated cut or fill slopes, disturbed natural slopes subject to erosion) associated with this project.

In areas where soil disturbance activity has temporarily or permanently ceased, temporary and/or permanent soil stabilization measures will be installed and/or implemented within fourteen days from the date during which the soil disturbance ceased. Permanent soil stabilization includes covering the majority of the Site with vegetative cover.

This requirement does not apply in the following instances:

- Where the initiation of stabilization measures by the 14th day after construction activity temporarily or permanently ceased is precluded by snow cover or frozen ground conditions, stabilization measures will be initiated as soon as practicable; or
- Where construction activity on a portion of the Site is temporarily suspended, and earth-disturbing activities will be resumed within twenty-one (21) days, temporary stabilization measures will not need to be initiated on that portion of the Site.

2.2.5 Sediment Control

Remediation activities that could generate sediment in runoff from disturbed areas and subsequent discharge to a surface water body will be controlled where appropriate. Several sediment controls were discussed in **Section 2.2.1.** and will be installed prior to the start of subsurface remediation activities (stabilized construction entrance, perimeter sediment controls, and inlet protection).

Inlet Protection

Stormwater inlet protection will be installed on catch basins and drop inlet protection will remain in place until remediation activities in the area are complete. Storm drain inlet protection devices will be installed for drains that could potentially receive sediment laden stormwater from disturbed areas due to the construction. Gravel bags will be used to form a minimum 12-inch-high berm around the inlet structure for storm drains located within paved areas.

Dust Control

Dust (particulate matter) control measures will be employed throughout remediation activities. Additionally, air monitoring for particulates (i.e., dust) will be performed continuously during intrusive activities using both air monitoring equipment and visual observation at upwind and downwind locations. Monitoring equipment capable of measuring particulate matter smaller than 10 microns (PM10) and capable of integrating (averaging) over periods of 15 minutes or less will be set up at upwind (i.e., background) and downwind locations, at heights approximately 4-5 feet above land surface (i.e., the breathing zone).

The following summarizes particulate action levels and the appropriate responses:

- If the downwind PM_{10} particulate level is 100 $\mu g/m^3$ above 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 $\mu g/m^3$ above the upwind level and provided that no visible dust is migrating from the work area.

- If, after implementation of dust suppression techniques, downwind PM_{10} particulate levels are greater than 150 µg/m^3 above the upwind level, work must be stopped, and an evaluation of activities initiated. Work can resume provided that dust suppression measures (as described in below) and other controls are successful in reducing the downwind PM_{10} particulate concentrations to within 150 µg/m^3 of the upwind level and in preventing visible dust migration.

The following measures will be implemented to control particulates in driving areas:

- Limiting on-Site vehicle speeds to five miles per hour. This limit will be implemented in part by posting signage of this limit at all entrances to and along routes within the Site;
- Spraying water on any dry material being loaded on trucks that may release dust;
- Sweeping paved areas to remove sediment tracking; and
- Covering all trucks carrying loose material such as debris, excavated soil or fill, and verifying that such covers are properly sealed. Outgoing trucks will be inspected at the gate and not permitted to exit if covers are not secure.

The following measures will be applied to soil stockpiles to control particulates in non-driving areas:

- Sprinkling water: An adequate supply of water with appropriate distribution equipment will be available on Site at all times; or
- Spraying with a non-hazardous, biodegradable suppressing agent;
- Seeding of disturbed areas; and
- Covering stockpiles when not in active use.

2.2.6 Transportation and Disposal of Remediation Derived Waste

Any remediation-derived waste will be transported and disposed of in accordance with all applicable federal, state, and local regulations at an approved facility. The anticipated remediation-derived waste that will likely be generated for off-Site disposal during the construction activities primarily include:

- PPE;
- dewatering and decontamination pad;
- construction materials; and,
- Water generated and removed from sediment stockpiles and decontamination.

PPE generated during the implementation of the remedy will be consolidated and stored in appropriate bulk containers and temporarily staged within the general support area. Any full or partially filled containers will be appropriately labeled.

2.3 Plan Amendments

The SWPPP will be amended when any of the following conditions occur:

- There is a significant change in design, redevelopment, operation, or maintenance that may have a substantive effect on the potential for the discharge of pollutants to surface waters of New York State and that has not otherwise been addressed in the SWPPP;
- When the SWPPP proves to be ineffective in eliminating or significantly minimizing pollutants from sources identified in this plan;
- The SWPPP proves to be ineffective in achieving the general objectives of controlling pollutants in stormwater discharges; or
- To identify any new contractor or subcontractor that will implement any measure of the SWPPP.

Modifications to the SWPPP will be described and recorded on a Construction Duration Inspections form (**Appendix A**).

2.4 Final Grading and Landscaping

Final grading will be performed by implementation of a Brownfields Cleanup Program compliant Site-wide cover system comprised of one of the following (where necessary): analytically confirmed Commercial Use SCO compliant surface soil (top one foot) and/or a one foot thick imported soil cover system placed above a demarcation layer. Temporary erosion controls other than perimeter silt fencing and inlet protection will be removed during final grading. Silt fencing and inlet protection will be removed after permanent soil stabilization is completed where specified.

3.0 POST-CONSTRUCTION STORMWATER MANAGEMENT PRACTICE REQUIREMENTS

The proposed remediation activities for the Site generally includes clearing, grubbing, excavation, in-situ soil stabilization, backfilling, grading, and restoration.

In accordance with the requirements of the NYSDEC SPDES General Permit for Stormwater Discharges from Construction Activities (GP-0-20-001), the only required SWPPP component of this project is the erosion and sediment control component. As defined in Part III.C. of GP-0-20-001, "*owners or operators of construction activities identified in Table 1 of Appendix B are required to prepare a SWPPP that only includes erosion and sediment control practices designed in conformance with Part III.B.1 of this permit*."[4] The proposed remediation activities for the Site meet the construction activity identified in Table 1 of Appendix B as follows:[5]

- Environmental enhancement projects, such as wetland mitigation projects, stormwater retrofits and stream restoration projects.
- Slope flattening that changes the grade of the site, but does not significantly change the runoff characteristics.

The proposed remediation activities will not include major modifications to the existing stormwater runoff characteristics or existing stormwater management practices. Water quantity controls depend upon the increased discharge rate of stormwater from the Site as a result of the increased impervious area from construction, and water quality controls depend upon the final on-Site impervious area relative to the pre-construction impervious area. The impervious area of the project Site will be relatively the same pre- and post-remedial construction; therefore, the impervious area will not be affected.

Therefore, because there is no major modification of the quantity of runoff from the project Site and the existing stormwater management practices (SMPs) comply with the applicable standards, this SWPPP is not required to include a plan for post-construction water quantity or water quality controls.[6]

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[4] New York State Department of Environmental Conservation, January 29, 2020. SPDES General Permit for Stormwater Discharges from Construction Activity Permit No. GP-0-20-001. Part III.C. - Page 24.

[5] New York State Department of Environmental Conservation, January 29, 2020. SPDES General Permit for Stormwater Discharges from Construction Activity Permit No. GP-0-20-001. Appendix B. - Table 1.

[6] New York State Department of Environmental Conservation, January 2015. Stormwater Management Design Manual. Page 9-3.

4.0 CONSTRUCTION PHASING AND SEQUENCING

The schedule and phasing plan for construction activities is presented within the following subsections. The project generally includes excavation, in-situ soil stabilization, backfilling, and grading activities.

The estimated start date is currently the second or third quarter of 2021, and the construction is estimated to take no more than 6 months. A brief summary of the construction activity schedule and SESC sequencing is provided below:

4.1 Construction Schedule

The estimated durations for the proposed remediation activities are provided below:

- Mobilization – 1 week;
    - Clear and grub;
    - Construct construction stabilized entrances;
    - Construct equipment decontamination pad;
    - Install erosion and sediment control measures; and
    - Survey and mark out work areas.
- Excavation, ISS, backfilling, and grading activities – no more than 8 months; and
    - Excavation and off-Site disposal and/or ISS of soil containing GCM;
    - Removal or otherwise mitigation of the environmental risk related to subsurface structures (e.g., abandoned piping);
    - Installation of additional monitoring wells throughout the Site to monitor for GCM;
    - Installation of a Site Cover System to prevent direct contact with contaminated soil remaining at the Site (if necessary);
    - Final grading activities; and
    - Implement restoration measures.
- Completion Inspections – 1 week.
    - Removal and disposal of erosion and sediment control measures.

The sequences for implementing the SESCs at the Site is described below.

4.2 Soil Erosion and Sediment Control Implementation Schedule

The estimated durations for the proposed SESCs and major construction activities are as follows:

- Pre-construction Erosion and Sediment Controls:
    - Stabilized construction entrances:
        - Installation: up to 8-month duration following mobilization.
        - Remove as final grading is completed.
    - Perimeter Sediment Controls:
        - Installation: up to 8-month duration concurrent with stabilized construction entrance installation.

- Inlet Protection
    - Installation: up to 8-month duration following mobilization.
    - Remove as final stabilization is completed.
- Dust Control – up to 8-month duration throughout construction activities.

4.3 Inspection and Maintenance Procedures

The following subsections describe inspection and maintenance activities that will be performed during the work.

4.3.1 Inspections

Visual inspections of disturbed, unstabilized soil at the Site, as well as installed erosion control measures at and adjoining the Site, will be performed weekly (every seven calendar days). Erosion control measures include perimeter sediment controls, temporary seeding, stabilized construction entrances, and inlet protection. The visual inspections will be conducted under the supervision of a qualified professional. A qualified professional is one who is knowledgeable in the principles and practice of SESCs. Qualified professionals include a licensed Professional Engineer, a Certified Professional in Erosion and Sediment Control (CPESC), Registered Landscape Architect, New York State Erosion and Sediment Control Certificate Program holder, or a NYSDEC endorsed individual. Within 24 hours after rainfalls of at least 0.5 inches, inspections will be performed of inlet protection measures, stabilized construction entrances, and perimeter sediment controls. These inspections may be performed by the contractor's personnel. Inspections will verify that the erosion control measures are in good condition and are minimizing erosion. The inspection will also verify that the procedures used to prevent stormwater contamination from construction materials are effective. The owner or operator shall make sure that at least one trained individual is on-Site on a daily basis when soil disturbance activities are being performed.

In addition, the following inspection practices will be focused on maintaining SESCs:

- Inlet protection measures and perimeter sediment controls will be inspected for depth of sediment, tears, integrity of the fabric to fence post connections, and to determine whether the fence posts are secured in the ground.

Inspectors will complete a Construction Duration Inspections form after each inspection. The inspection forms should be signed by qualified inspector and completed forms will be maintained on-Site throughout remediation activities. A copy of a blank form is included in **Appendix A**.

Within one business day of the completion of an inspection, the qualified inspector shall notify the owner or operator and appropriate contractor (or subcontractor), identified in Part III.A.6 of the SPDES General Permit (GP-0-20-001), of any corrective actions that need to be undertaken. The contractor (or subcontractor) shall begin implementing the corrective actions within one business day of this notification and shall complete the corrective actions in a reasonable time frame.

4.3.2 Maintenance

The following maintenance practices will be used to maintain SESCs:

- Built-up sediment will be removed from silt fencing when it has reached one-third the height of the barrier/fence and fabric will be replaced when bulges develop;
- Sediment will be removed from inlet protection measures after the designated storm events and disposed of on Site. Inlet protection products will be checked for proper anchorage and secured, as necessary;
- Straw bales will be repaired or replaced promptly as needed;
- Temporarily seeded areas will be reseeded when needed;
- Stabilized construction entrances and construction road stabilization will be stabilized by topping with aggregate as necessary and as remediation activities proceed; and
- Sediment that is washed or tracked to public rights-of-way will be removed daily.

The Contractor/Subcontractor contact information for the parties that are responsible for maintenance during construction will be provided on the certification forms provided in **Section 5.2**.

5.0 CERTIFICATIONS

5.1 Corporate Certification

"I hereby certify that I understand and agree to comply with the terms and conditions of the SWPPP and agree to implement any corrective actions identified by the qualified inspector during a Site inspection. I also understand that the owner or operator must comply with the terms and conditions of the New York State Pollutant Discharge Elimination System ("SPDES") General Permit for Stormwater Discharges from Construction Activities and that it is unlawful for any person to cause or contribute to a violation of water quality standards. Furthermore, I understand that certifying false, incorrect, or inaccurate information is a violation of the referenced permit and the laws of the State of New York and could subject me to criminal, civil and/or administrative proceedings."

Name

Signature

Title

Firm Name

Firm Address

Firm Telephone Number

350 Franklin Street, Olean, New York 14760

Site Address

5.2 Contractors Certifications

General Contractor (Excavating, Filling, Grading):

"I certify under penalty of law that I understand and agree to comply with the terms and conditions of the SWPPP for the Site identified in such SWPPP as a condition of authorization to discharge stormwater. I also understand that the operator must comply with the terms and conditions of the New York State Pollutant Discharge Elimination System ("SPDES") General Permit for Stormwater Discharges from Construction Activities and that it is unlawful for any person to cause or contribute to a violation of water quality standards."

Name

Signature

Title

Firm Name

Firm Address

Firm Telephone Number

350 Franklin Street, Olean, NY 15760

Site Address

Certification Date

5.2.1 Contractors/ Subcontractors' Certification

Contractor/ Subcontractor (In-Situ Solidification):

"I certify under penalty of law that I understand and agree to comply with the terms and conditions of the SWPPP for the Site identified in such SWPPP as a condition of authorization to discharge stormwater. I also understand that the operator must comply with the terms and conditions of the New York State Pollutant Discharge Elimination System ("SPDES") general permit for stormwater discharges from construction activities and that it is unlawful for any person to cause or contribute to a violation of water quality standards."

Name

SWPPP Elements that Contractor / Subcontractor is responsible for: In-Situ Solidification

Title

Firm Name

Firm Address

Firm Telephone Number

350 Franklin Street, Olean, NY 15760

Site Address

Certification Date

Signature

5.3 Licensed/Professional Certification

"I certify that this SWPPP has been developed in a manner which will assure compliance with the State's water quality standards and with the substantive intent of the NYSDEC SPDES Permit No. GP-0-20-."

Name	**Signature**

Title

Roux Environmental Engineering and Geology, D.P.C.

209 Shafter Street
Islandia, New York 11749

Firm Address

(631) 232-2600

Firm Telephone Number

350 Franklin Street, Olean, NY 15760

Site Address

Certification Date

5.4 Notice of Termination

Once final stabilization is achieved at the Site, the owner of operator of a stormwater discharge who obtained cover under the SPDES General Permit for Storm Water Discharges from Construction Activity (Permit No. GP-0-20-001) must submit a Notice of Termination (NOT) form to cancel coverage under the permit. Once the form is completed, it should be sent to:

New York State Department of Environmental Conservation
Division of Water
625 Broadway, 4th Floor,
Albany, New York 12233-3505

A blank copy of the NOT form is attached as Appendix E.

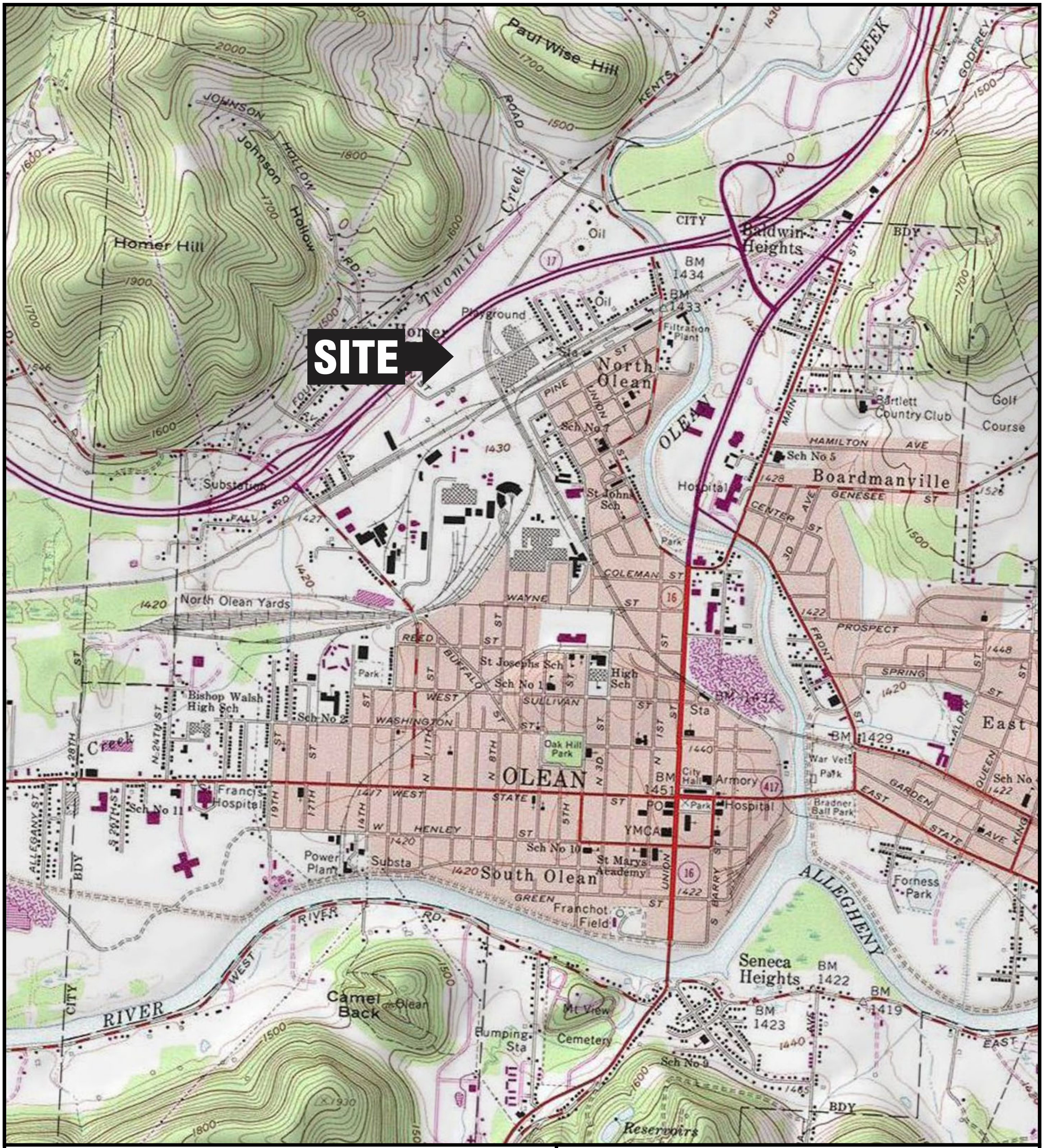
Respectfully submitted,

ROUX ENVIRONEMENTAL ENGINEERING AND GEOLOGY, D.P.C.

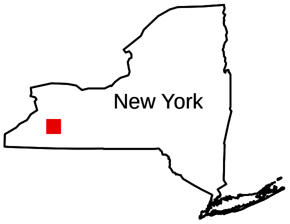
STORMWATER POLLUTION PREVENTION PLAN

MJ Painting Site
350 Franklin Street
Olean, New York

FIGURES



QUADRANGLE LOCATION



1,000 0 1,000'

N

Title:

SITE LOCATION MAP

350 FRANKLIN STREET
OLEAN, NY

Prepared for:

MJ PAINTING CONTRACTOR CORP.

ROUX

Compiled by: CC	Date: 04/19/21	FIGURE
Prepared by: CC	Scale: AS SHOWN	1
Project Mgr: BR	Project: 2317.0002M000	
File: 2317.0002M000.131.01.mxd		

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STORMWATER POLLUTION PREVENTION PLAN

MJ Painting Site
350 Franklin Street
Olean, New York

DRAWINGS

1. Erosion and Sediment Control Plan
D-1. Erosion and Sediment Control Details I
D-2. Erosion and Sediment Control Details II

LEGEND

DRAINAGE STRUCTURE (DS)	⊞
DRAINAGE STRUCTURE MANHOLE (DSM) / SEWER MANHOLE (SMH)	⊕
PROPERTY BOUNDARY	━
EXISTING CHAIN LINK FENCE	─○─
SECURITY FENCE TO BE INSTALLED BY CONTRACTOR	─○─
SOIL EROSION/SEDIMENT CONTROL FEATURE – SEE DETAIL CALLOUTS	─
REMEDY AREA	■
STOCKPILE AREA (APPROX.)	▨
STABILIZED CONSTRUCTION ENTRANCE AND DECONTAMINATION PAD	■
GRAVEL HAUL ROAD TO BE INSTALLED BY CONTRACTOR	▩

NOTES:

ALL FEATURES ARE APPROXIMATE

SOURCE:

WENDEL WD ARCHITECTURE, ENGINEERING, SURVEYING AND LANDSCAPE ARCHITECTURE, P.C., TOPOGRAPHIC SURVEY, DWG. NO. V100, DATED DECEMBER 17, 2020

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12 GILL STREET, SUITE 4700 WOBURN MA 01801
(781) 569-4000

PROJECT NAME:
MJ PAINTING 350 FRANKLIN STREET

PROJECT FOR:
MJ PAINTING CONTRACTOR CORP.

TITLE:

EROSION AND SEDIMENT CONTROL PLAN

DRAWING NO.
1
DRAWING
1 OF 3

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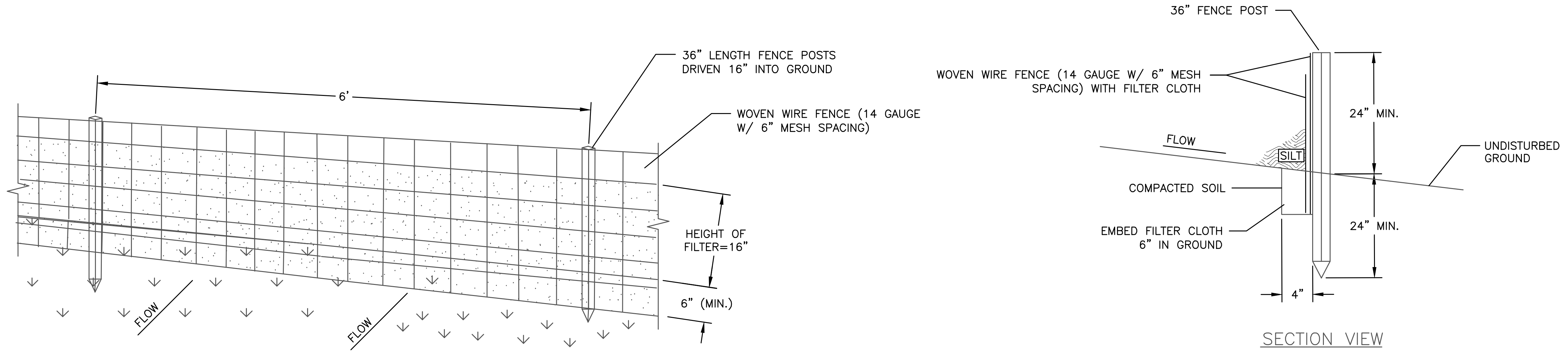


PERSPECTIVE VIEW

SECTION VIEW

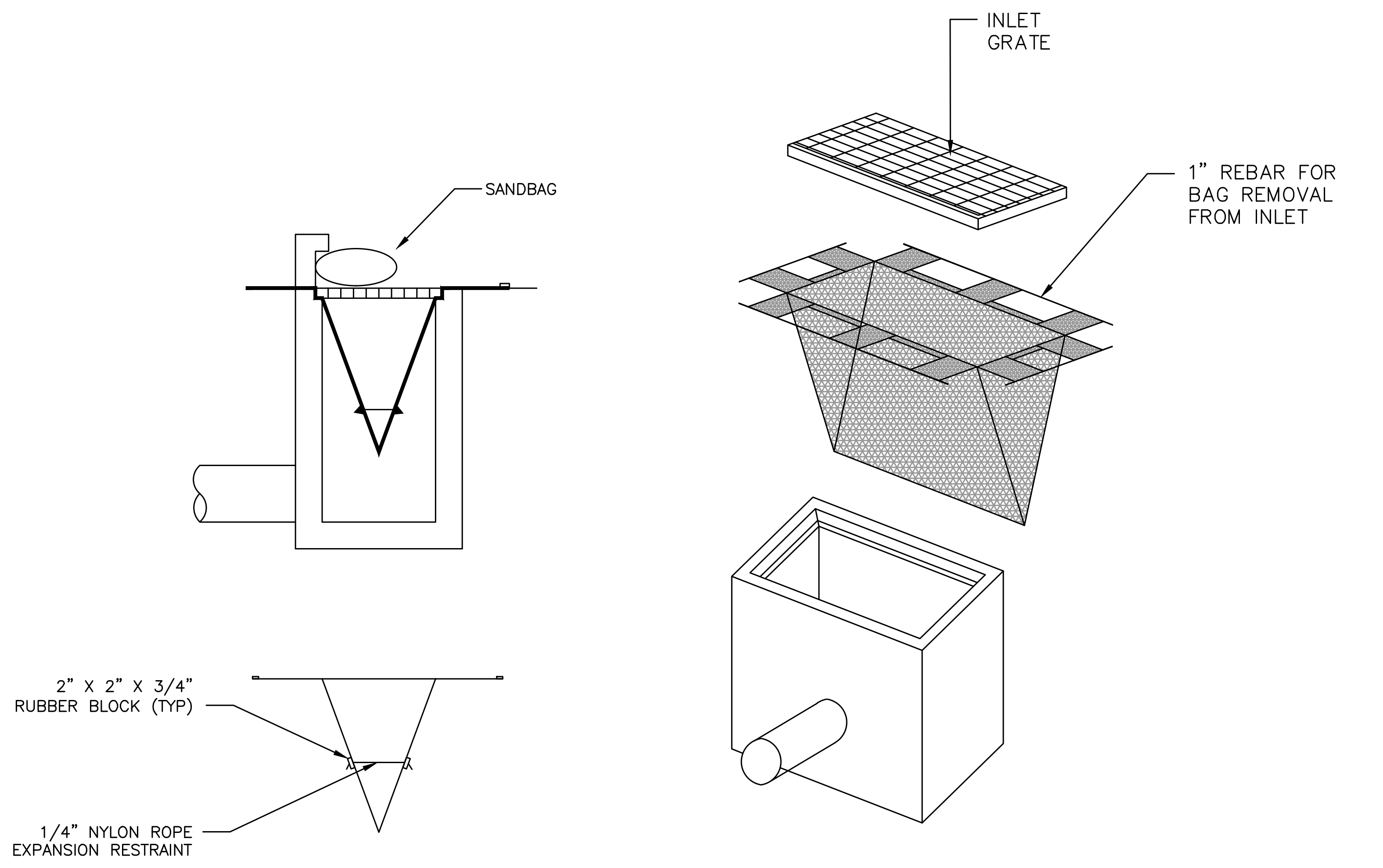
CONSTRUCTION SPECIFICATIONS/NOTES

1. WOVEN WIRE FENCE TO BE FASTENED SECURELY TO FENCE POSTS WITH WIRE TIES OR STAPLES. POSTS SHALL BE STEEL EITHER "T" OR "U" TYPE OR HARDWOOD.
2. FILTER CLOTH TO BE FASTENED SECURELY TO WOVEN WIRE FENCE WITH TIES SPACED EVERY 24" AT TOP AND MID SECTION. FENCE SHALL BE WOVEN WIRE, 14 GAUGE, 6" MESH OPENING.
3. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHALL BE OVER–LAPPED BY SIX INCHES AND FOLDED. FILTER CLOTH SHALL BE EITHER TREVIRA SPUNBOND 1115, TYPAR 3401, OR APPROVED EQUIVALENT.
4. PREFABRICATED UNITS SHALL BE GEOFAB, ENVIROFENCE, OR APPROVED EQUIVALENT.
5. MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN "BULGES" DEVELOP IN THE SILT FENCE.

1
D–1

SILT FENCE DETAIL

SCALE: NOT TO SCALE



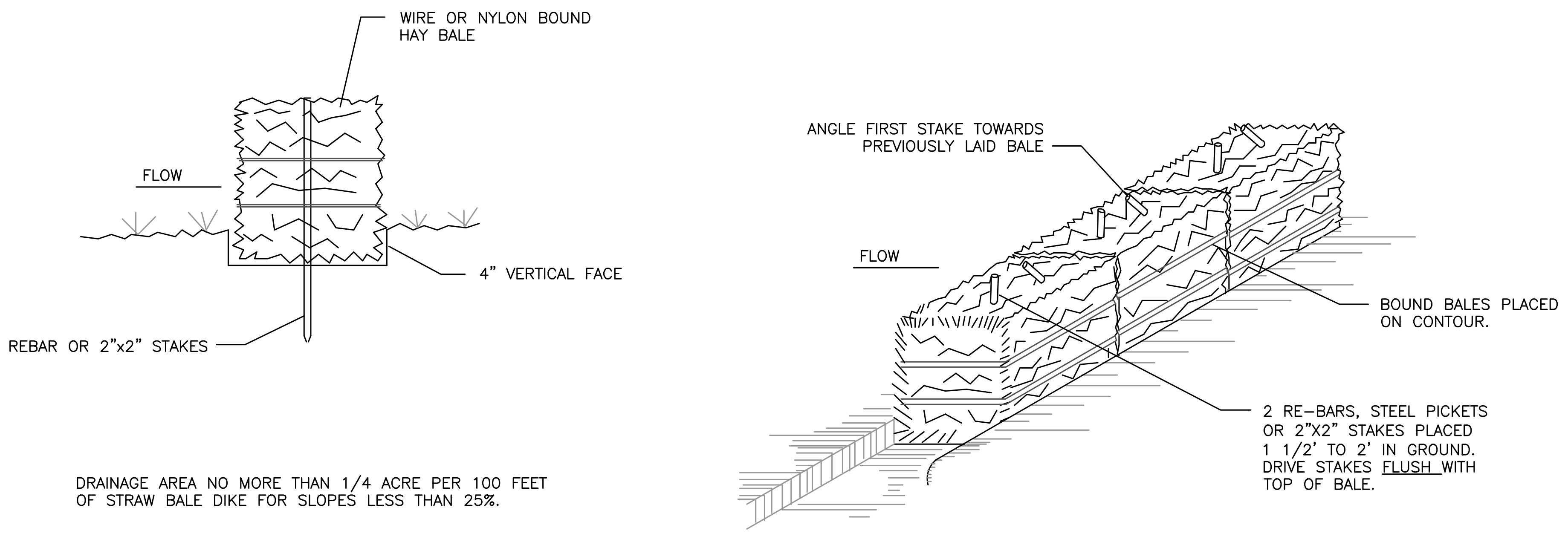
INSTALLATION DETAIL

ISOMETRIC VIEW

2
D–1

GRATING INLET PROECTION

NOT TO SCALE



DRAINAGE AREA NO MORE THAN 1/4 ACRE PER 100 FEET OF STRAW BALE DIKE FOR SLOPES LESS THAN 25%.

BEDDING DETAIL

ANCHORING DETAIL

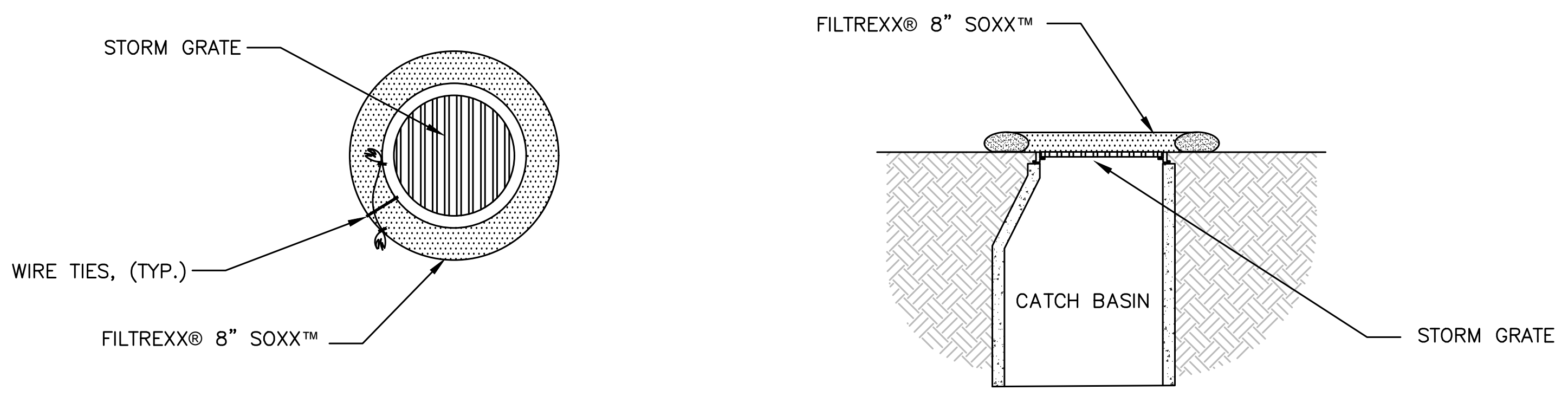
CONSTRUCTION SPECIFICATIONS/NOTES

1. BALES SHALL BE PLACED AT THE TOE OF A SLOPE OR ON THE CONTOUR AND IN A ROW WITH ENDS TIGHTLY ABUTTING THE ADJACENT BALES.
2. EACH BALE SHALL BE EMBEDDED IN THE SOIL A MINIMUM OF (4) INCHES, AND PLACED SO THE BINDINGS ARE HORIZONTAL.
3. BALES SHALL BE SECURELY ANCHORED IN PLACE BY EITHER TWO STAKES OR RE–BARS DRIVEN THROUGH THE BALE. THE FIRST STAKE IN EACH BALE SHALL BE DRIVEN TOWARD THE PREVIOUSLY LAID BALE AT AN ANGLE TO FORCE THE BALES TOGETHER. STAKES SHALL BE DRIVEN FLUSH WITH THE BALE.
4. WHERE HAY BALES AND SILT FENCES ARE REQUIRED TOGETHER, THE HAY BALES SHALL BE LOCATED UPGRADIENT OF SILT FENCE.
5. INSPECTION SHALL BE FREQUENT AND REPAIR REPLACEMENT SHALL BE MADE PROMTLY AS NEEDED.
6. BALES SHALL BE REMOVED WHEN THEY HAVE SERVED THEIR USEFULLNESS SO AS NOT TO BLOCK OR IMPEDE STORM FLOW OR DRAINAGE.
7. WHERE STAKING IS NOT PRACTICAL AND IN PAVED AREAS, HAY BALES SHALL BE TIED TOGETHER TO PREVENT MOVEMENT OR OPENINGS IN THE BARRIER.

3
D–1

STRAW BALE DIKE

SCALE: NOT TO SCALE



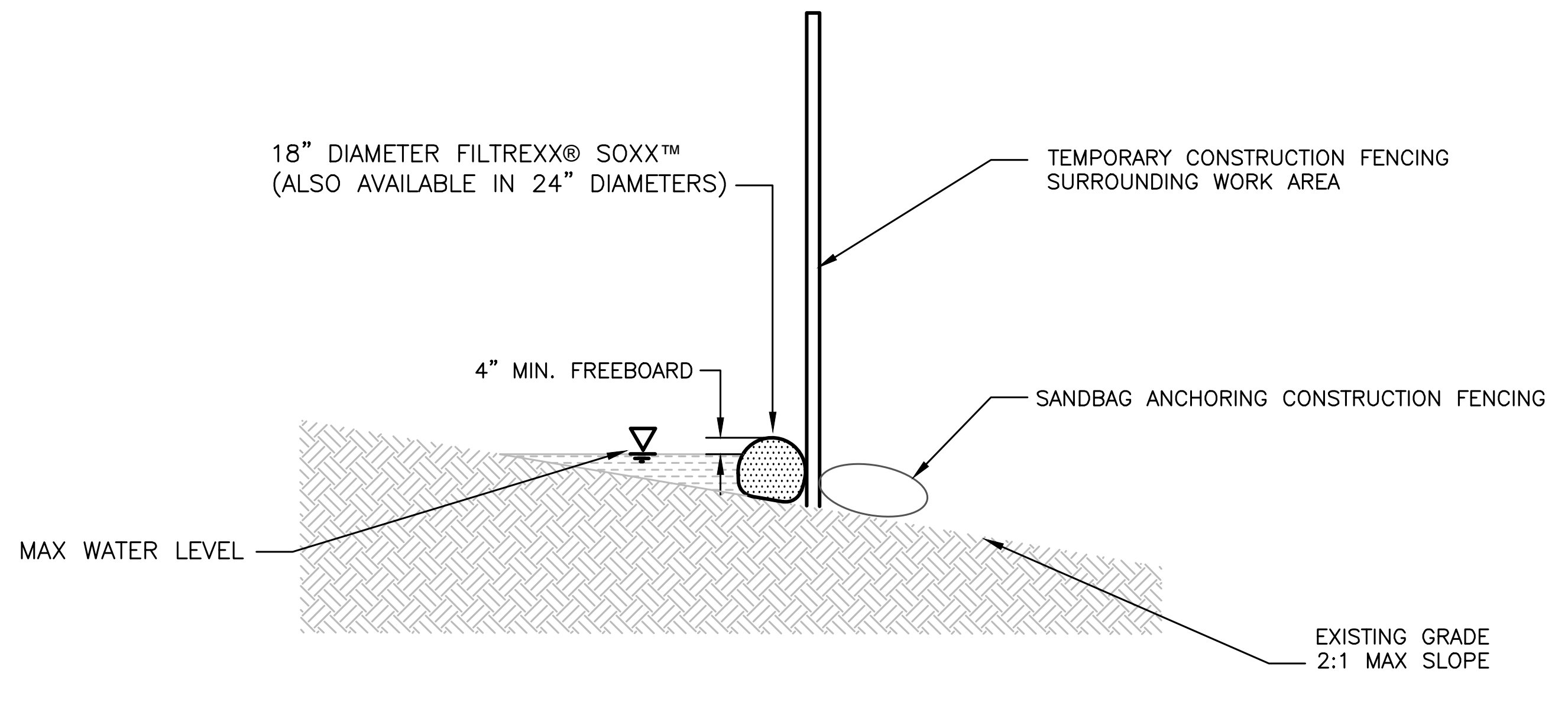
PLAN VIEW

ELEVATION VIEW

4
D–1

CATCH BASIN INLET PROTECTION

NOT TO SCALE



SINGLE INSTALLATION SECTION

5
D–1

FILTREXX® SOXX™ SEDIMENT BARRIERS

NOT TO SCALE

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(781) 569-4000

PROJECT NAME:
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PROJECT FOR:
MJ PAINTING CONTRACTOR CORP.

TITLE:
EROSION AND SEDIMENT CONTROLS - DETAILS

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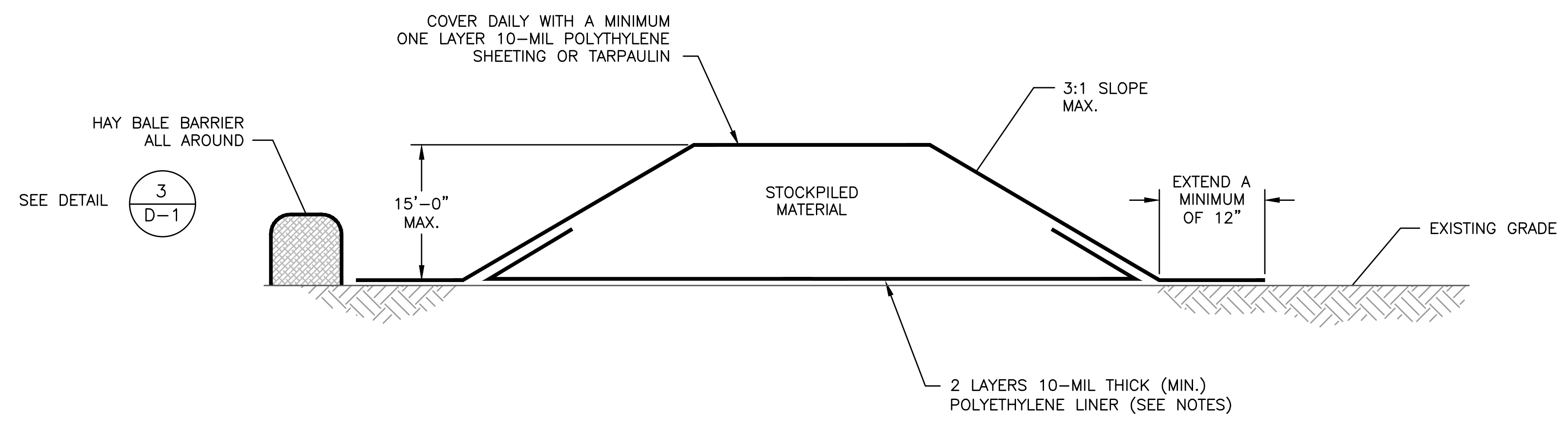
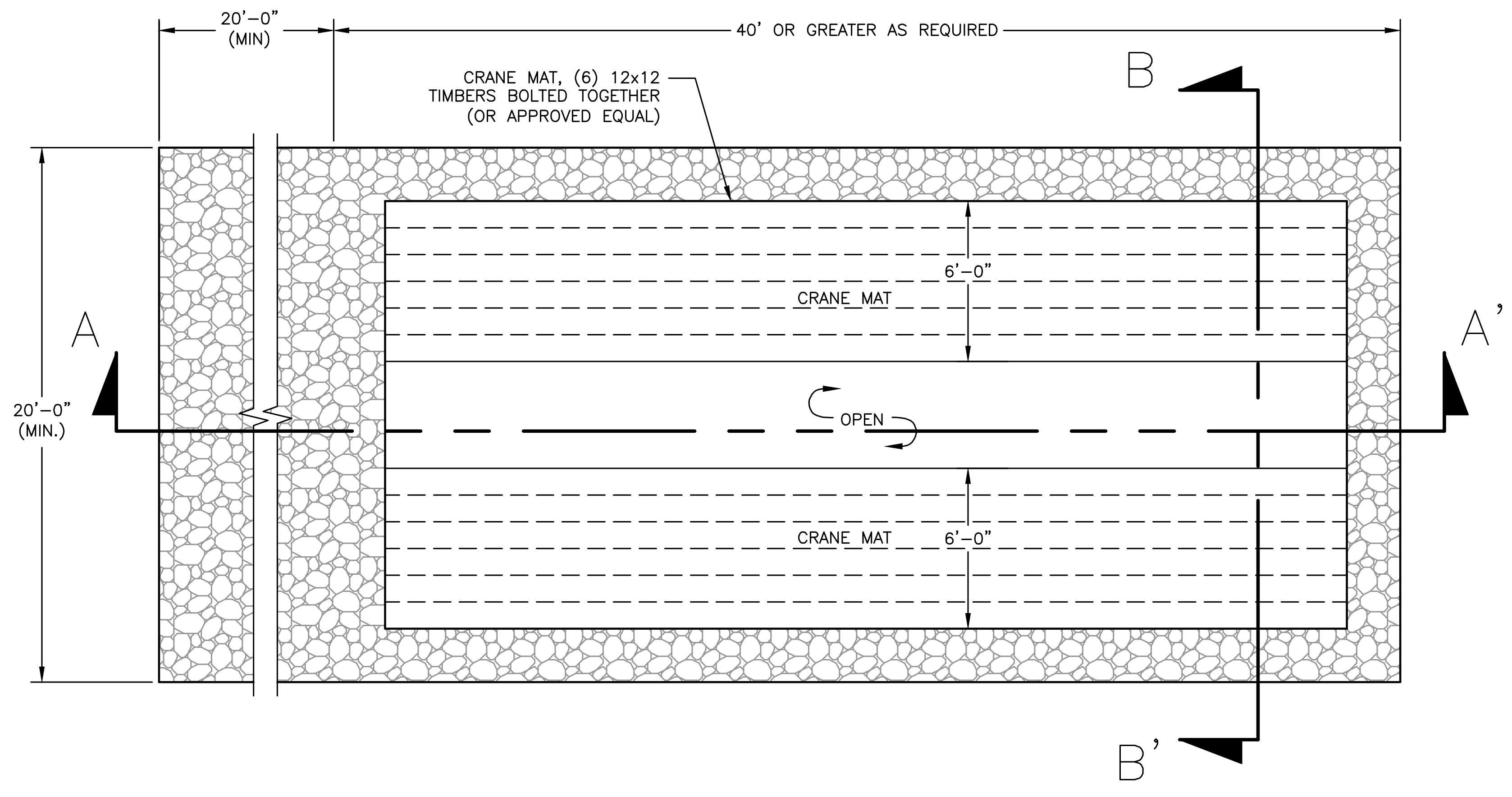


STOCKPILE NOTES

1. THE REQUIREMENTS SHOWN ARE MINIMUM REQUIREMENTS. REFER ALSO TO SPECIFICATION SECTION 01520 FOR SPECIFIC STAGING REQUIREMENTS.
2. POLYETHYLENE SHEETING SHALL OVERLAP BY A MINIMUM OF TWELVE (12) INCHES AND SHALL BE ANCHORED, USING HAY BALES OR EQUIVALENT WEIGHTS, AT 5 TO 10 FOOT CENTERS. USE ADDITIONAL WEIGHTS, AS NECESSARY, TO PROPERLY ANCHOR SHEETING DURING WINDY CONDITIONS.
3. PLACE TWO (2) LAYERS OF POLYETHYLENE SHEETING BELOW ALL STOCKPILED MATERIAL.
4. ALL STOCKPILES SHALL BE LABELED WITH SIGNS INDICATING THE STOCKPILE CONTENTS.
5. 10–MIL POLYETHYLENE SHEETING OR WEIGHTED TARPAULIN SHALL BE USED TO COVER THE STOCKPILE.
6. WHERE STAKING IS NOT PRACTICAL AND IN PAVED AREAS, HAY BALES SHALL BE TIED TOGETHER TO PREVENT MOVEMENT OR OPENINGS IN THE BARRIER.

1 D–2 CONTAMINATED MATERIAL STOCKPILE DETAIL

SCALE: NOT TO SCALE



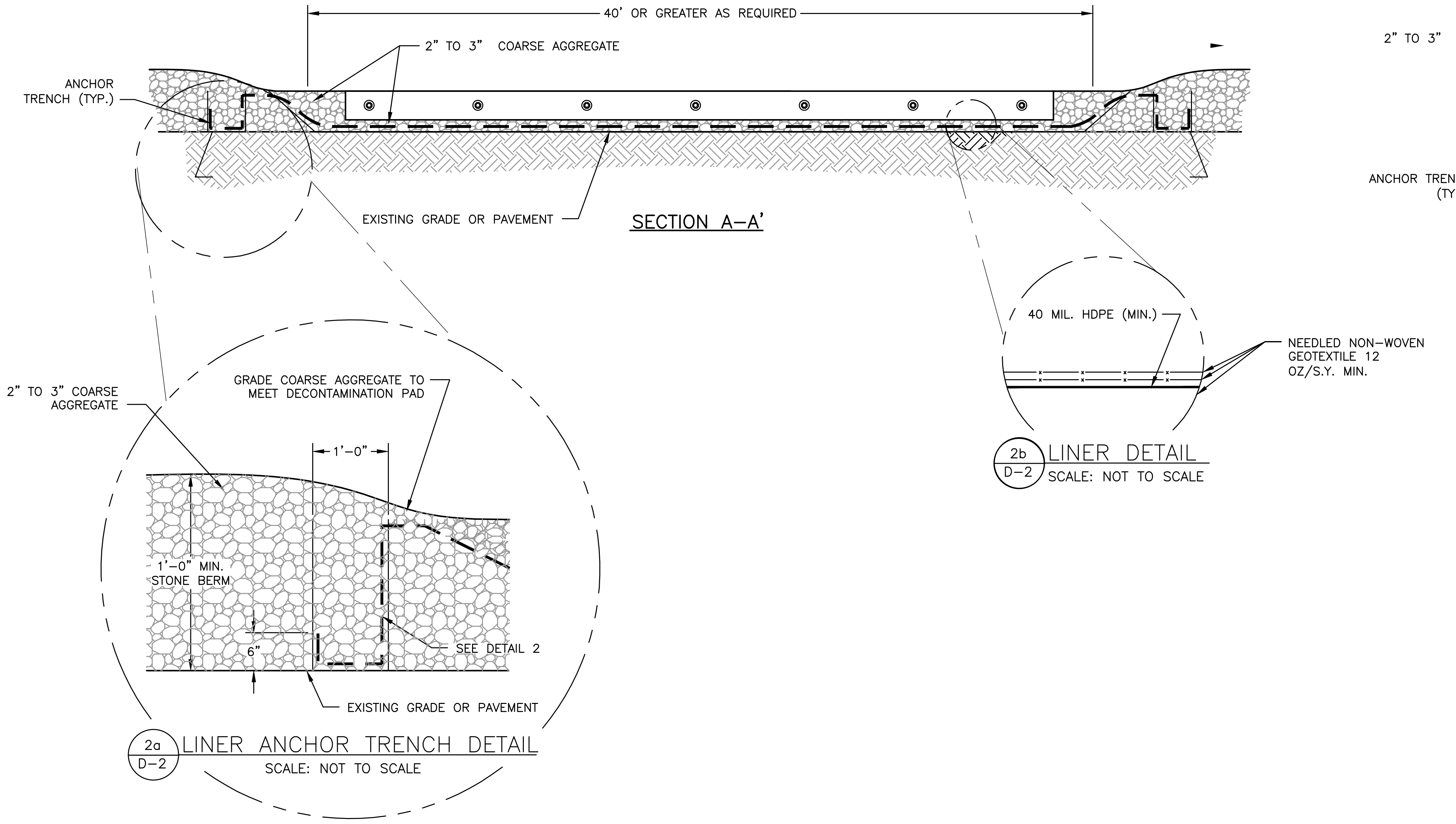
PLAN VIEW

STABILIZED CONSTRUCTION ENTRANCE/DECONTAMINATION PAD NOTES

1. CONTRACTOR SHALL INSTALL DECONTAMINATION PAD/STABILIZED CONSTRUCTION ENTRANCE AT EACH CONSTRUCTION VEHICLE ACESS POINT TO THE SITE OR NECESSARY FOR THE WORK.
2. STONE SIZE SHALL BE COARSE AGGREGATE (STONE SIZE 2" TO 3").
3. NON–WOVEN GEOTEXTILE – PLACE OVER ENTIRE AREA PRIOR TO PLACING OF STONE.
4. 12–OZ NON–WOVEN GEOTEXTILE SHALL BE MIRAFI 1120N OR APPROVED EQUUVALENT. REFER ALSO TO SPECIFICATION SECTION 02275 FOR SPECIFIC GEOTEXTILE REQUIREMENTS.
5. MAINTENANCE – THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SOIL ONTO PUBLIC RIGHTS–OF–WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SOIL. ALL SOIL SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHTS–OF–WAY MUST BE REMOVED IMMEDIATELY.
6. WASHING – WHEELS SHALL BE CLEANED TO REMOVE SOIL PRIOR TO ENTRANCE ONTO PUBLIC RIGHTS–OF–WAY. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH STONE.
7. PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED AFTER EACH RAIN EVENT.
8. STABILIZED CONSTRUCTION ENTRANCE/DECONTAMINATION PAD SHALL BE COVERED WITH 10–MIL POLYETHYLENE WHEN NOT IN USE SPECIFICALLY DURING RAIN EVENTS.

2 D–2 STABILIZED CONSTRUCTION ENTRANCE/ DECONTAMINATION PAD DETAIL

SCALE: NOT TO SCALE



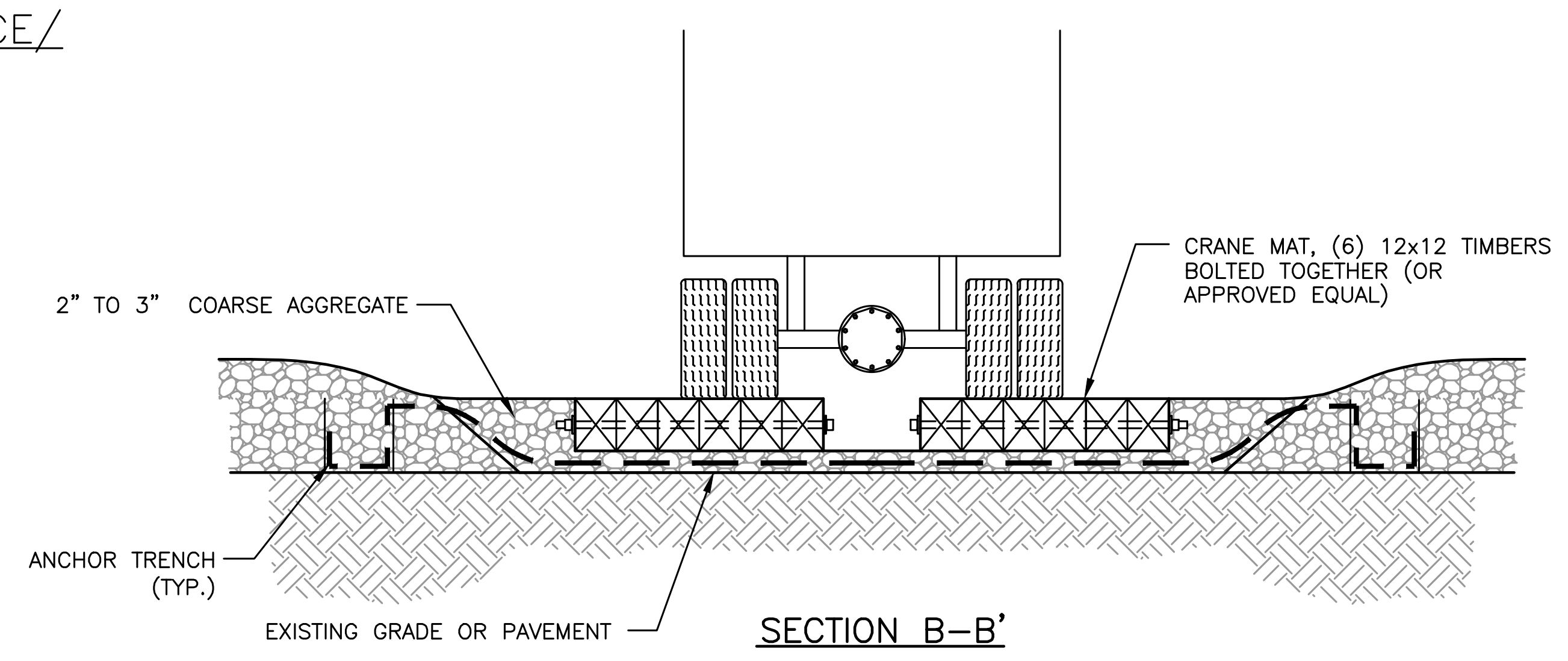
SECTION A–A'

2a D–2 LINER ANCHOR TRENCH DETAIL

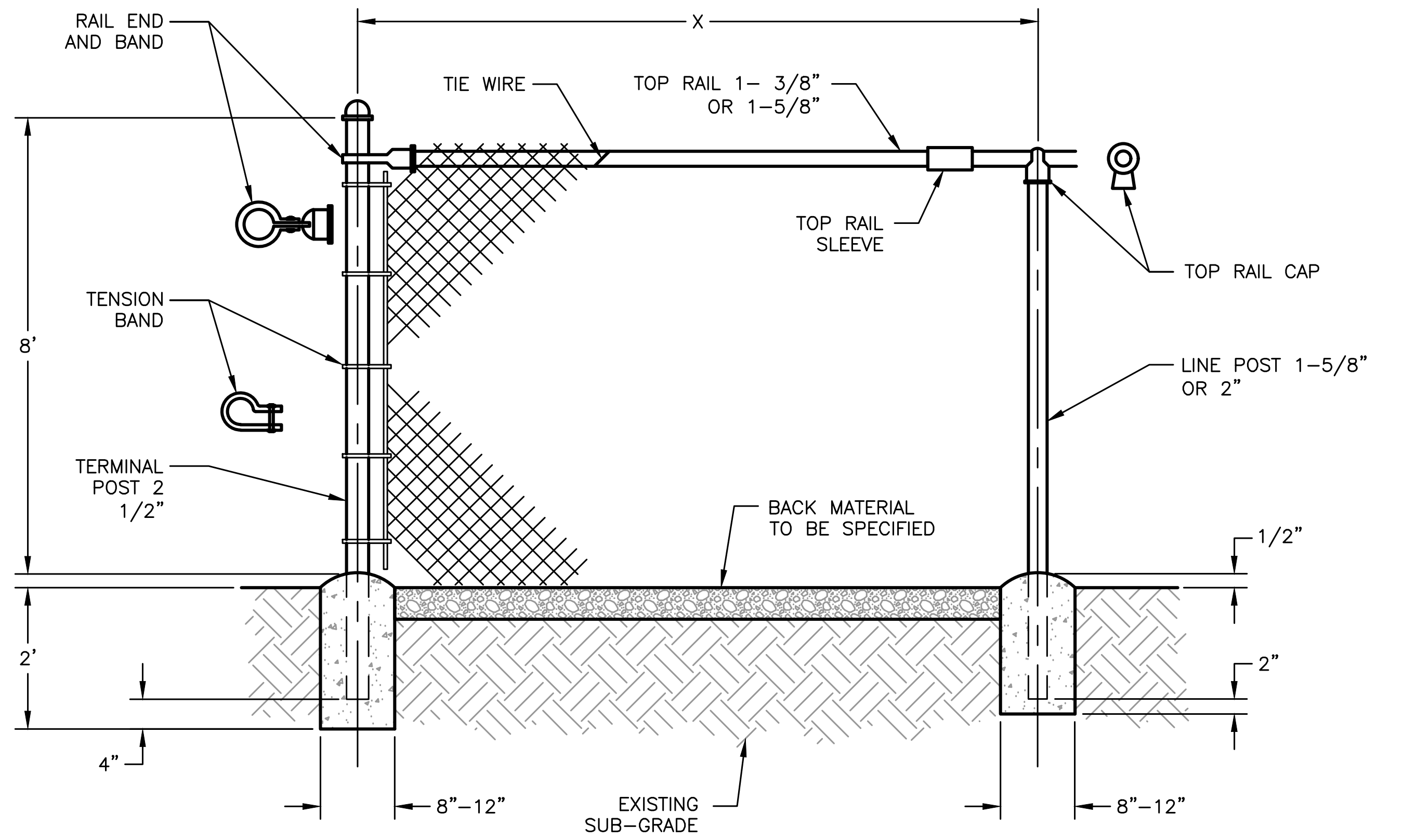
SCALE: NOT TO SCALE

2b D–2 LINER DETAIL

SCALE: NOT TO SCALE



SECTION B–B'

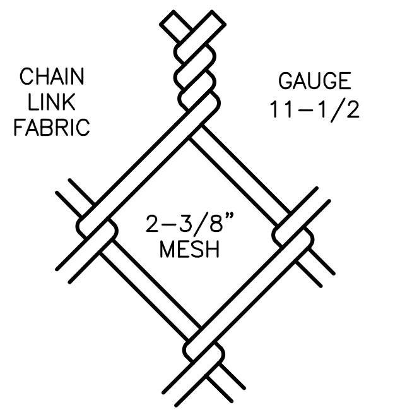


NOTE

POST HOLE DIAMETER IS FOUR TIMES THE DIAMETER OF THE POST.

3 D–2 CHAIN LINK FENCE DETAIL

SCALE: NOT TO SCALE



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PROJECT FOR:
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TITLE:
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DRAWING
3 OF 3

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STORMWATER POLLUTION PREVENTION PLAN

MJ Painting Site
350 Franklin Street
Olean, New York

APPENDICES

A. Construction Duration Inspections Form
B. Modification Report Form
C. Soil Boring and Monitoring Well Logs
D. Test Pit Logs
E. Notice of Termination Form

STORMWATER POLLUTION PREVENTION PLAN

MJ Painting Site
350 Franklin Street
Olean, New York

APPENDIX A

Construction Duration Inspections Form

CONSTRUCTION DURATION INSPECTIONS

These Inspection Forms will be filled out during the entire construction phase of the project.

Inspector (print name)	**Date of Inspection**
Qualified Professional (print name)	**Qualified Professional Signature**

The above signed acknowledges that, to the best of his/her knowledge, all information provided on the forms is accurate and complete.

Check one of the following:

☐ **Weekly Inspection or**, ☐ **Rain Event Inspection** (greater than 0.5 inches in 24 hour period)

Date of Rain Event _____ **Amount of Rain** ___ inches

Stage of Construction (% complete) ____**%**

On the attached site plan (Drawing 1 from the SWPPP):

1. Indicate the extent of all disturbed site areas and drainage pathways;
2. Indicate all areas of the site that have undergone temporary or permanent stabilization;
3. Indicate the extent of all disturbed site areas and drainage pathways expected to undergo initial disturbance or significant site work within the next 14-day period;

General Housekeeping

Yes No NA

[ ] [ ] [ ] Increase in turbidity that will cause a substantial visible contrast to natural conditions.

[ ] [ ] [ ] Residue from oil and floating substances, visible oil film, or globules or grease.

[ ] [ ] [ ] Facilities and equipment necessary for implementation of erosion and sediment control are in working order and/or properly maintained.

[ ] [ ] [ ] Is construction is impacting the adjacent property?

[ ] [ ] [ ] Dust is adequately controlled.

Comments: ____

____

Dewatering Pad

Yes No NA

[ ] [ ] [ ] Stone bedding is rutted / liner exposed.

[ ] [ ] [ ] Perimeter berm provides minimum 12-inches freeboard.

[ ] [ ] [ ] Covered when not in use.
[ ] [ ] [ ] Perimeter liner anchors (e.g. sand bags) are in place and operational.
Comments: ____

____

Decontamination Area

Yes No NA
[ ] [ ] [ ] Equipment used for excavation and other earthwork activities which come in contact with potentially contaminated materials is being decontaminated in Decontamination Area.
[ ] [ ] [ ] Is the Contractor allowing equipment to leave the Site with water leaking or mud dripping or caked to the equipment?
[ ] [ ] [ ] Are dry brushes being used to decontaminate excavators, paving equipment, trucks, trailers, and drill rigs, to the extent practicable?

Comments: ____

____

Stockpiles

Yes No NA
[ ] [ ] [ ] Covered due to dust / when not in use.
[ ] [ ] [ ] Perimeter hay bales, berms, or silt fences are in place and operational.
[ ] [ ] [ ] Stockpiles are stabilized and contained.

Comments: ____

____

Sediment Control

Yes No NA
[ ] [ ] [ ] Sediment control practices are located and installed correctly.
[ ] [ ] [ ] BMPs are maintained per specifications
Comments: ____

____

Adverse Impacts or Off-Site Degradation

Yes No NA
[ ] [ ] [ ] Work is within the limits of the approved plans.
[ ] [ ] [ ] Adverse impacts – ponds, streams, wetlands, and sinkholes are free of sediment from site.
[ ] [ ] [ ] Off-site degradation – sediment is kept out of roadways, adjacent property, storm sewers, or air (dust).

Comments: ____

____

Stabilized Construction Entrance

Yes No NA
[ ] [ ] [ ] Stone is clean enough to effectively remove mud from vehicles.
[ ] [ ] [ ] The stabilized construction entrance is installed per standards and specifications.
[ ] [ ] [ ] All traffic uses the stabilized entrances to enter and leave site.
[ ] [ ] [ ] Adequate drainage is provided to prevent ponding at entrance.

Comments: ____

____

Silt Fence

Yes No NA
[ ] [ ] [ ] Joints constructed by wrapping the two ends together for continuous support.
[ ] [ ] [ ] Fabric buried 6 inches minimum.
[ ] [ ] [ ] Posts are stable, fabric is tight and without rips or frayed areas.
[ ] [ ] [ ] Sediment accumulation is 1/3 of fence height of design capacity.

Comments: ____

____

Hay Bales

Yes No NA
[ ] [ ] [ ] Hay bales are installed around the active section of the stockpile perimeter.
[ ] [ ] [ ] Hay bales are installed 6” from the edge of drainage structures located within non-paved areas.
[ ] [ ] [ ] Hay bales are installed in a row with ends tightly abutting the adjacent bale.
[ ] [ ] [ ] Stakes are driven flush with the bale.
[ ] [ ] [ ] Hay bales are in good condition.

Comments: ____

____

Storm Drain Inlet Protection

Yes No NA

☐ ☐ ☐ Storm drain inlet protection devices are installed from the downstream end of the system to the upstream for drains that could potentially receive sediment laden stormwater from disturbed areas due to the construction.

☐ ☐ ☐ Gravel bags are being used to form berm around inlet structure for storm drain located within paved areas.

☐ ☐ ☐ Gravel bags berm are minimum 12” high.

☐ ☐ ☐ Sediment accumulation is less than 1/3 of berm height.

Comments: ____

____

Excavation Dewatering

Yes No NA

☐ ☐ ☐ Upstream and downstream berms (sandbags, inflatable dams, etc.) are installed per plan.

☐ ☐ ☐ Clean water from upstream pool is being pumped to the downstream pool.

☐ ☐ ☐ Sediment laden water from work area is being discharged to a silt-trapping device.

☐ ☐ ☐ Constructed upstream berm with one-foot minimum freeboard.

Comments: ____

____

MODIFICATIONS TO THE SESC

Modification and Reason:

APPENDIX B

Modification Report Form

ROUX ENVIRONMENTAL ENGINEERING AND GEOLOGY D.P.C.
MODIFICATION REPORT

STORMWATER POLLUTION PREVENTION PROGRAM (SWPPP) DATED:
MODIFICATIONS REQUIRED FOR SWPPP

The Operator shall amend the SWPPP whenever:

1. There is a significant change in design, construction, operation, or maintenance which may have a significant effect on the potential for the discharge of pollutants to the waters of the United States and which has not otherwise been addressed in the SWPPP; or
2. The SWPPP proves to be ineffective in"
   a. Eliminating or significantly minimizing pollutants from sources identified in the SWPPP and as required by this permit; or
   b. Achieving the general objectives of controlling pollutants in stormwater discharges from permitted construction activity; and
3. Additionally, the SWPPP shall be amended to identify any new contractor or subcontractor that will implement any measure of the SWPPP.

Revisions must be completed within seven (7) calendar days following inspection.

To:		**Date:**	
Address:			
		[corporate] of:	
Telephone:			
Facsimile:			
Sent Via:	[ ] **Facsimile**	[ ] **Courier**	[ ] **US Mail**

INSPECTOR____________________ DATE: ____________________

(Print)

____

(Signature)

QUALIFICATIONS OF INSPECTOR: ____________________

MODIFICATIONS REQUIRED TO THE STORMWATER POLLUTION PREVENTION PROGRAM: ____________________

REASONS FOR MODIFICATIONS: ____________________

QUALIFICATIONS OF INSPECTOR: ____________________

TO BE PERFORMED BY:____________________ ON OR BEFORE: ____________________

PROJECT MANAGER: ____________________

This form must be signed by a responsible corporate office or other pary meeting the "Signatory Requirements" stated in Part VII.H of the New York State Deparment of Environmental Conservation SPDES Permit GP-0-20-001

STORMWATER POLLUTION PREVENTION PLAN

MJ Painting Site
350 Franklin Street
Olean, New York

APPENDIX C

Soil Boring and Monitoring Well Logs

ROUX
12 Gill Street
Suite 4700
Woburn, MA 01801
Telephone: (781) 569-4000
Fax: (781) 569-4001

WELL ID: RX-008

PAGE 1 OF 1

CLIENT NAME: MJ Painting

DATE(S): 6/27/2019 , 6/27/2019

WELL DEPTH: NA

SITE NAME/ADDRESS: 350 Franklin Street

LOGGED BY: Jacob Lyon

SLOT SIZE: NA

CITY/STATE: Olean, New York

SAMPLER TYPE: MACRO CORE

SAND PACK: NA

DRILLING CONTRACTOR: TREC Environmental

BOREHOLE DIAMETER: 2 1/4 "

DIVIDER SEAL: NA

DRILLING METHOD: Geoprobe

WELL DIAM & MAT'L: NA

ANNULAR SEAL: NA

DEPTH (ft)	SAMPLE INTERVAL	BLOW COUNTS	RECOVERY (ft)	PID (ppm)	MATERIAL DESCRIPTION	U.S.C.S.	WELL DIAGRAM	Notes
			1.5	455	Light brown SILT and fine Sand, trace Gravel; organic matter; dry.	SM		
					Black fine to coarse SAND, trace Gravel; brick; moist.	SW		
5			1	604	Black fine SAND; petroleum-like odor; wet.	SP		Wet at 4 ft.
10			1	229	Black fine to coarse SAND, trace Gravel; brick; petroleum-like odor; wet.	SW		
				369	Light gray SILT, some fine Sand, trace Gravel; wet.	ML		
15			1.25	347	Black fine to coarse SAND and Gravel; petroleum-like odor; wet.	SW		
			1.75	503	Same as above.	SW		
				1557	Brown to black fine SAND, trace Gravel, trace Silt; petroleum-like odor and petroleum staining from 17-17.5; wet.	SP		RX-008 (16-18) collected for Herb., Pest., PCBs, VOCs, SVOCs, TAL Metals, Total Cyanide, 1,4-dioxane and PFAS. Refusal at 18 ft.
20								

Additional Notes:
Mention of odor, staining, and/or sheen is based on observations by person(s) logging the soil samples collected from the borehole and indicates odor, staining, and/or sheen related to the apparent presence of petroleum/chemical impacts. Where not noted, petroleum/chemical odor, staining, and/or sheen were not observed. In addition, where noted, soil has been characterized as fill based on observations. No mention of fill or other features in the soil descriptions does not indicate lack of the same.

Photoionization detector (PID) readings are affected by multiple factors, including sample consistency, moisture, relative humidity, and dust. Therefore, PID readings are just one of the factors considered when making a determination of the absence or presence of SPH in a given sample. Additionally, the accuracy of PID readings decreases as concentrations increase, particularly over the 2,000 ppm threshold, due to the non-linearity of the measurement.

12 Gill Street
Suite 4700
Woburn, MA 01801
Telephone: (781) 569-4000
Fax: (781) 569-4001

WELL ID: RX-009

PAGE 1 OF 2

CLIENT NAME: MJ Painting

DATE(S): 6/27/2019 , 6/27/2019

WELL DEPTH: NA

SITE NAME/ADDRESS: 350 Franklin Street

LOGGED BY: Jacob Lyon

SLOT SIZE: NA

CITY/STATE: Olean, New York

SAMPLER TYPE: MACRO CORE

SAND PACK: NA

DRILLING CONTRACTOR: TREC Environmental

BOREHOLE DIAMETER: 2 1/4 "

DIVIDER SEAL: NA

DRILLING METHOD: Geoprobe

WELL DIAM & MAT'L: NA

ANNULAR SEAL: NA

DEPTH (ft)	SAMPLE INTERVAL	BLOW COUNTS	RECOVERY (ft)	PID (ppm)	MATERIAL DESCRIPTION	U.S.C.S.	Notes
			1.5		Brown-tan fine SAND, trace Silt, trace Gravel; organics; asphalt pieces; dry.	SW	
				20	Dark brown fine SAND, trace Silt; brick and fill material; wet.	SW	
5			1.5	87	Black and tan SILT, some Sand; wet.	ML	Wet at 4 ft.
				313	Tan SILT; wet.	ML	
10			2	128	Same as above.	ML	
				266	Light brown to gray fine to coarse SAND and Gravel; slight petroleum-like odor; wet.	SW	
15			1	477	Same as above.	SW	
					Light brown to gray fine to coarse SAND, trace Silt, trace Gravel; wet.	SW	
20			2.5	84 397	Gray fine to coarse SAND and Gravel, trace Silt; wet.	SW	

Additional Notes:
Mention of odor, staining, and/or sheen is based on observations by person(s) logging the soil samples collected from the borehole and indicates odor, staining, and/or sheen related to the apparent presence of petroleum/chemical impacts. Where not noted, petroleum/chemical odor, staining, and/or sheen were not observed. In addition, where noted, soil has been characterized as fill based on observations. No mention of fill or other features in the soil descriptions does not indicate lack of the same.

Photoionization detector (PID) readings are affected by multiple factors, including sample consistency, moisture, relative humidity, and dust. Therefore, PID readings are just one of the factors considered when making a determination of the absence or presence of SPH in a given sample. Additionally, the accuracy of PID readings decreases as concentrations increase, particularly over the 2,000 ppm threshold, due to the non-linearity of the measurement.

(Continued Next Page)

DEPTH (ft)	SAMPLE INTERVAL	BLOW COUNTS	RECOVERY (ft)	PID (ppm)	MATERIAL DESCRIPTION	U.S.C.S.	Notes
			2.5	987	Gray fine to coarse SAND and Gravel, trace Silt; petroleum-like odor; wet.	SW	RX-009 (22-24) collected for Herb., Pest., PCBs, VOCs, SVOCs, TAL Metals, Total Cyanide, 1,4-Dioxane and PFAS.
				1121	Gray fine SAND; coarsening downward; petroleum-like odor; wet.	SP	
			2.5		Same as above.	SP	
25				95	Gray fine to coarse SAND and Gravel; petroleum-like odor; wet.	SW	
				167	Brownish gray SILT, some fine Sand, some Gravel; petroleum-like odor; wet.	ML	Boring terminated at 28 ft.
30							
35							
40							

Additional Notes:
Mention of odor, staining, and/or sheen is based on observations by person(s) logging the soil samples collected from the borehole and indicates odor, staining, and/or sheen related to the apparent presence of petroleum/chemical impacts. Where not noted, petroleum/chemical odor, staining, and/or sheen were not observed. In addition, where noted, soil has been characterized as fill based on observations. No mention of fill or other features in the soil descriptions does not indicate lack of the same.

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12 Gill Street
Suite 4700
Woburn, MA 01801
Telephone: (781) 569-4000
Fax: (781) 569-4001

WELL ID: RX-010

PAGE 1 OF 2

CLIENT NAME: MJ Painting

DATE(S): 6/24/2019 , 6/27/2019

WELL DEPTH: NA

SITE NAME/ADDRESS: 350 Franklin Street

LOGGED BY: Jacob Lyon

SLOT SIZE: NA

CITY/STATE: Olean, New York

SAMPLER TYPE: MACRO CORE

SAND PACK: NA

DRILLING CONTRACTOR: TREC Environmental

BOREHOLE DIAMETER: 2 1/4 "

DIVIDER SEAL: NA

DRILLING METHOD: Geoprobe

WELL DIAM & MAT'L: NA

ANNULAR SEAL: NA

DEPTH (ft)	SAMPLE INTERVAL	BLOW COUNTS	RECOVERY (ft)	PID (ppm)	MATERIAL DESCRIPTION	U.S.C.S.	Notes
				3.2	Brown fine to coarse SAND, some Silt, trace fine Gravel; organics, dry.		Top 5 ft precleared utilizing hand auger.
				4.3		SW-SM	RX-010 (0-2") and RX-010 (0-1) collected for VOCs, SVOCs, and TAL Metals.
				7.9			
				8.8			
5				7	Brown fine to medim SAND, some Silt; wet.	SP-SM	
			1.6				
				5	Brown fine to coarse SAND, some Gravel, trace Silt, moist.	SW	
				8	Brown fine to coarse SAND and Gravel; wet at top moist at bottom.		
10			2.5			SW	
				9			
					Same as above.	SW	
				12	Gray fine(+) to coarse(-) SAND, some Gravel; slight petroleum-like odor; moist.		
			2.75				
15				331		SW	
					Gray fine(+) to coarse(-) SAND, some Gravel; strong petroleum-like odor and SPH visible; moist.		
			1.5	1127		SW	RX-010 (16-20) collected for VOCs, SVOCs, and TAL Metals.
20							

Additional Notes:
Mention of odor, staining, and/or sheen is based on observations by person(s) logging the soil samples collected from the borehole and indicates odor, staining, and/or sheen related to the apparent presence of petroleum/chemical impacts. Where not noted, petroleum/chemical odor, staining, and/or sheen were not observed. In addition, where noted, soil has been characterized as fill based on observations. No mention of fill or other features in the soil descriptions does not indicate lack of the same.

Photoionization detector (PID) readings are affected by multiple factors, including sample consistency, moisture, relative humidity, and dust. Therefore, PID readings are just one of the factors considered when making a determination of the absence or presence of SPH in a given sample. Additionally, the accuracy of PID readings decreases as concentrations increase, particularly over the 2,000 ppm threshold, due to the non-linearity of the measurement.

(Continued Next Page)

DEPTH (ft)	SAMPLE INTERVAL	BLOW COUNTS	RECOVERY (ft)	PID (ppm)	MATERIAL DESCRIPTION	U.S.C.S.	Notes
			2	670	Same as above.	SW	
				330	Gray GRAVEL, some fine to coarse Sand; petroleum-like odor and visible SPH; wet.	GW	
25				117	Gray GRAVEL, some fine to coarse Sand; petroleum-like odor and visible SPH; wet.	GW	RX-010 (26-28) collected for VOCs, SVOCs, and TAL Metals.
				1800	Gray fine SAND; petroleum-like odor and petroleum staining; wet.	SP	Boring terminated at 28 ft.
30							
35							
40							

Additional Notes:
Mention of odor, staining, and/or sheen is based on observations by person(s) logging the soil samples collected from the borehole and indicates odor, staining, and/or sheen related to the apparent presence of petroleum/chemical impacts. Where not noted, petroleum/chemical odor, staining, and/or sheen were not observed. In addition, where noted, soil has been characterized as fill based on observations. No mention of fill or other features in the soil descriptions does not indicate lack of the same.

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ROUX
12 Gill Street
Suite 4700
Woburn, MA 01801
Telephone: (781) 569-4000
Fax: (781) 569-4001

WELL ID: RX-011

CLIENT NAME: MJ Painting
DATE(S): 6/27/2019 , 6/27/2019
WELL DEPTH: NA

SITE NAME/ADDRESS: 350 Franklin Street
LOGGED BY: Jacob Lyon
SLOT SIZE: NA

CITY/STATE: Olean, New York
SAMPLER TYPE: MACRO CORE
SAND PACK: NA

DRILLING CONTRACTOR: TREC Environmental
BOREHOLE DIAMETER: 2 1/4 "
DIVIDER SEAL: NA

DRILLING METHOD: Geoprobe
WELL DIAM & MAT'L: NA
ANNULAR SEAL: NA

DEPTH (ft)	SAMPLE INTERVAL	BLOW COUNTS	RECOVERY (ft)	PID (ppm)	MATERIAL DESCRIPTION	U.S.C.S.	Notes
	☒		1.7	10	Light brown fine SAND, some Silt; organics; moist.	SP-SM	
5	☒		1.7		Same as above.	SP-SM	
				10	Brown fine to coarse SAND, some Gravel; moist.	SW	
10	☒		2		Same as above.	SW	
				178	Gray fine to coarse SAND and Gravel, trace Silt; petroleum-like odor; wet from 12-13.	SW	
	☒		2	103	Same as above.	SW	Wet at 12 ft.
				388	Gray GRAVEL and Sand; petroleum-like odor; moist.	GW	RX-011 (11-14) collected for Herb., Pest., PCBs, VOCs, SVOCs, TAL Metals, Total Cyanide, 1,4-Dioxane and PFAS. Refusal at 14.3 ft.
15							
20							

Additional Notes:
Mention of odor, staining, and/or sheen is based on observations by person(s) logging the soil samples collected from the borehole and indicates odor, staining, and/or sheen related to the apparent presence of petroleum/chemical impacts. Where not noted, petroleum/chemical odor, staining, and/or sheen were not observed. In addition, where noted, soil has been characterized as fill based on observations. No mention of fill or other features in the soil descriptions does not indicate lack of the same.

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ROUX
12 Gill Street
Suite 4700
Woburn, MA 01801
Telephone: (781) 569-4000
Fax: (781) 569-4001

WELL ID: RX-012

PAGE 1 OF 1

CLIENT NAME: MJ Painting
DATE(S): 6/25/2019 , 6/27/2019
WELL DEPTH: NA
SITE NAME/ADDRESS: 350 Franklin Street
LOGGED BY: Jacob Lyon
SLOT SIZE: NA
CITY/STATE: Olean, New York
SAMPLER TYPE: MACRO CORE
SAND PACK: NA
DRILLING CONTRACTOR: TREC Environmental
BOREHOLE DIAMETER: 2 1/4 "
DIVIDER SEAL: NA
DRILLING METHOD: Geoprobe
WELL DIAM & MAT'L: NA
ANNULAR SEAL: NA

DEPTH (ft)	SAMPLE INTERVAL	BLOW COUNTS	RECOVERY (ft)	PID (ppm)	MATERIAL DESCRIPTION	U.S.C.S.	Notes
	☒			13.6	Brown fine to coarse SAND, some fine Gravel, some Silt; dry.	SW	Top 3 ft precleared utilizing hand auger.
	☒			155.4	Black to gray fine to coarse SAND, some fine Gravel, trace Silt; dry.	SW	RX-012 (0-2") collected for Herb., Pest., PCBs, VOCs, SVOCs, TAL Metals, Total Cyanide, 1-4-Dioxane, and PFAS. RX-012 (0-1) collected for Herb., Pest., PCBs, VOCs, SVOCs, TAL Metals, and Total Cyanide.
	☒			139.8			
	☒			10.7	Light brown to black fine to coarse SAND and Silt, some fine to coarse Gravel; petroleum-like odor; wet.	SW	Wet at 4 ft.
5	☒			55	Brown to gray SILT, some Sand, trace Gravel; wet.	ML	
			1.8				
				393	Black fine to coarse SAND and fine Gravel; petroleum-like odor; wet.	SW	
	☒			235	Same as above.	SW	
10			2.75				
				646	Light to dark brown fine to coarse SAND, some Gravel; petroleum-like odor; moist.	SW	RX-012 (10-13) collected for Herb., Pest., PCBs, VOCs, SVOCs, TAL Metals, Total Cyanide, 1,4-Dioxane and PFAS.
	☒		1	616	Tan fine(+) to coarse(-) SAND, some Silt, trace Gravel; petroleum-like odor; moist.	SW	Refusal at 13.2 ft.
15							
20							

Additional Notes:

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ROUX

12 Gill Street
Suite 4700
Woburn, MA 01801
Telephone: (781) 569-4000
Fax: (781) 569-4001

WELL ID: RX-013

PAGE 1 OF 1

CLIENT NAME: MJ Painting

DATE(S): 6/27/2019 , 6/27/2019

WELL DEPTH: NA

SITE NAME/ADDRESS: 350 Franklin Street

LOGGED BY: Jacob Lyon

SLOT SIZE: NA

CITY/STATE: Olean, New York

SAMPLER TYPE: MACRO CORE

SAND PACK: NA

DRILLING CONTRACTOR: TREC Environmental

BOREHOLE DIAMETER: 2 1/4 "

DIVIDER SEAL: NA

DRILLING METHOD: Geoprobe

WELL DIAM & MAT'L: NA

ANNULAR SEAL: NA

DEPTH (ft)	SAMPLE INTERVAL	BLOW COUNTS	RECOVERY (ft)	PID (ppm)	MATERIAL DESCRIPTION	U.S.C.S.	Notes
					Brown fine to medium SAND, trace Silt, trace fine Gravel; organics; dry.	SP	
			1.4	10	Black fine(+) to coarse(-) SAND, trace Gravel; crushed asphalt; dry.	SW	
5				17	Same as above.	SW	
			1.5	22	Light brown SILT, some Sand, trace Gravel; dry.	ML	
					Light brown SILT, some Sand, trace Gravel; dry.	ML	
10			1.5	28	Brown fine to coarse SAND, some Gravel, little Silt; moist.	SW	
				170	Gray fine to coarse SAND, some Gravel, little Silt; petroleum-like odor; moist.	SW	
			2	149	Gray fine(-) to coarse(+) SAND and fine Gravel; petroleum-like odor; wet.	SW	
15				1048	Gray fine to coarse SAND and Gravel, trace Silt; petroleum-like odor; wet.	SW	RX-013 (14-16) collected for VOCs, SVOCs, and TAL Metals.
				496	Light brown to black fine to medium SAND, little Silt, trace Gravel; wet.	SP	Refusal at 17 ft.
20							

Additional Notes:

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12 Gill Street
Suite 4700
Woburn, MA 01801
Telephone: (781) 569-4000
Fax: (781) 569-4001

WELL ID: RX-014

PAGE 1 OF 1

CLIENT NAME: MJ Painting

DATE(S): 6/24/2019 , 6/28/2019

WELL DEPTH: NA

SITE NAME/ADDRESS: 350 Franklin Street

LOGGED BY: Jacob Lyon

SLOT SIZE: NA

CITY/STATE: Olean, New York

SAMPLER TYPE: MACRO CORE

SAND PACK: NA

DRILLING CONTRACTOR: TREC Environmental

BOREHOLE DIAMETER: 2 1/4 "

DIVIDER SEAL: NA

DRILLING METHOD: Geoprobe

WELL DIAM & MAT'L: NA

ANNULAR SEAL: NA

DEPTH (ft)	SAMPLE INTERVAL	BLOW COUNTS	RECOVERY (ft)	PID (ppm)	MATERIAL DESCRIPTION	U.S.C.S.	Notes
	☒			4.2	Brown fine to coarse SAND and fine to coarse Gravel, some Silt; dry.	SW	Top 5 ft precleared utilizing hand auger.
	☒			13.1	Brown fine to coarse SAND and Silt, some fine Gravel; moist.	SM	
	☒			5.3			
	☒			4.1			
5	☒		1	3.4 92.4	Brown fine+ to coarse SAND, some Gravel; moist.	SW	
10	☒		1.5	704.9	Brown fine to coarse SAND and fine to coarse Gravel; wet at top and moist at bottom.	SW	RX-014 (8-12) collected for VOCs, SVOCs, and TAL Metals.
15	☒		0.5	124.4	Very dark brown fine(+) to coarse(-) SAND and Gravel; wet.	SW	
	☒		1.5	208.1	Black fine to coarse SAND, trace fine Gravel; petroleum-like odor and petroleum staining; wet.	SW	Refusal at 18.1 ft.
20							

Additional Notes:

Mention of odor, staining, and/or sheen is based on observations by person(s) logging the soil samples collected from the borehole and indicates odor, staining, and/or sheen related to the apparent presence of petroleum/chemical impacts. Where not noted, petroleum/chemical odor, staining, and/or sheen were not observed. In addition, where noted, soil has been characterized as fill based on observations. No mention of fill or other features in the soil descriptions does not indicate lack of the same.

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ROUX
12 Gill Street
Suite 4700
Woburn, MA 01801
Telephone: (781) 569-4000
Fax: (781) 569-4001

WELL ID: RX-015

CLIENT NAME: MJ Painting
DATE(S): 6/24/2019 , 6/28/2019
WELL DEPTH: NA

SITE NAME/ADDRESS: 350 Franklin Street
LOGGED BY: Jacob Lyon
SLOT SIZE: NA

CITY/STATE: Olean, New York
SAMPLER TYPE: MACRO CORE
SAND PACK: NA

DRILLING CONTRACTOR: TREC Environmental
BOREHOLE DIAMETER: 2 1/4 "
DIVIDER SEAL: NA

DRILLING METHOD: Geoprobe
WELL DIAM & MAT'L: NA
ANNULAR SEAL: NA

DEPTH (ft)	SAMPLE INTERVAL	BLOW COUNTS	RECOVERY (ft)	PID (ppm)	MATERIAL DESCRIPTION	U.S.C.S.	Notes
				18.4 10.1 6.6 3.3	Brown fine(+) to coarse(-) SAND, trace Gravel, trace Silt; organics; moist.	SW	Top 5 ft precleard utilizing hand auger.
5			1.3	6.1 29	Brown fine to coarse SAND, some Gravel; moist.	SW	
10			2	28	Brown fine to coarse SAND, and Gravel; moist.	SW	
					Same as above.	SW	
15			1.6	39	Brown fine to medium SAND, trace Gravel; moist.	SP	
				162	Gray fine to medium SAND, trace Gravel; petroleum-like odor; moist.	SP	Wet at 16 ft.
20			1.5	398	Gray fine to coarse SAND and Gravel; petroleum-like odor; wet.	SW	

Additional Notes:
Mention of odor, staining, and/or sheen is based on observations by person(s) logging the soil samples collected from the borehole and indicates odor, staining, and/or sheen related to the apparent presence of petroleum/chemical impacts. Where not noted, petroleum/chemical odor, staining, and/or sheen were not observed. In addition, where noted, soil has been characterized as fill based on observations. No mention of fill or other features in the soil descriptions does not indicate lack of the same.

Photoionization detector (PID) readings are affected by multiple factors, including sample consistency, moisture, relative humidity, and dust. Therefore, PID readings are just one of the factors considered when making a determination of the absence or presence of SPH in a given sample. Additionally, the accuracy of PID readings decreases as concentrations increase, particularly over the 2,000 ppm threshold, due to the non-linearity of the measurement.

(Continued Next Page)

WELL ID: RX-015

DEPTH (ft)	SAMPLE INTERVAL	BLOW COUNTS	RECOVERY (ft)	PID (ppm)	MATERIAL DESCRIPTION	U.S.C.S.	Notes
	☒			135	Gray fine GRAVEL and coarse Sand; petroleum-like odor; wet.	GP	
			2.5				
				685	Gray fine to coarse SAND and Gravel; petroleum-like odor; wet.	SW	RX-015 (23-26) collected for VOCs, SVOCs, and TAL Metals.
	☒				Same as above.		
25				307		SW	
			4		Gray fine SAND, trace Gravel; fining downward; petroleum staining; wet.		
				2569		SP	
							Boring terminated at 28 ft.
30							
35							
40							

Additional Notes:
Mention of odor, staining, and/or sheen is based on observations by person(s) logging the soil samples collected from the borehole and indicates odor, staining, and/or sheen related to the apparent presence of petroleum/chemical impacts. Where not noted, petroleum/chemical odor, staining, and/or sheen were not observed. In addition, where noted, soil has been characterized as fill based on observations. No mention of fill or other features in the soil descriptions does not indicate lack of the same.

Photoionization detector (PID) readings are affected by multiple factors, including sample consistency, moisture, relative humidity, and dust. Therefore, PID readings are just one of the factors considered when making a determination of the absence or presence of SPH in a given sample. Additionally, the accuracy of PID readings decreases as concentrations increase, particularly over the 2,000 ppm threshold, due to the non-linearity of the measurement.

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WELL ID: RX-016

PAGE 1 OF 2

CLIENT NAME: MJ Painting
DATE(S): 6/28/2019 , 7/2/2019
WELL DEPTH: NA
SITE NAME/ADDRESS: 350 Franklin Street
LOGGED BY: Jacob Lyon
SLOT SIZE: NA
CITY/STATE: Olean, New York
SAMPLER TYPE: MACRO CORE
SAND PACK: NA
DRILLING CONTRACTOR: TREC Environmental
BOREHOLE DIAMETER: 2 1/4 "
DIVIDER SEAL: NA
DRILLING METHOD: Geoprobe
WELL DIAM & MAT'L: NA
ANNULAR SEAL: NA

DEPTH (ft)	SAMPLE INTERVAL	BLOW COUNTS	RECOVERY (ft)	PID (ppm)	MATERIAL DESCRIPTION	U.S.C.S.	Notes
			2.75		Light brown SILT, some Sand; organics in the first foot; moist.	ML	
				12	Light brown SILT and Sand, some Gravel; moist.	ML	
5			2	8	Light brown fine to coarse SAND and Gravel; moist.	SW	
10			0.6	9	Light brown fine to coarse SAND and Gravel; dry.	SW	
15			1	8 10	Light brown fine to coarse SAND and Gravel; moist.	SW	
			2.75	15	Brown fine(-) to coarse(+) SAND and Gravel; moist.	SW	Wet at 16 ft.
20				218	Gray fine(-) to coarse(+) SAND and Gravel; petroleum-like odor; moist.	SW	

Additional Notes:
Mention of odor, staining, and/or sheen is based on observations by person(s) logging the soil samples collected from the borehole and indicates odor, staining, and/or sheen related to the apparent presence of petroleum/chemical impacts. Where not noted, petroleum/chemical odor, staining, and/or sheen were not observed. In addition, where noted, soil has been characterized as fill based on observations. No mention of fill or other features in the soil descriptions does not indicate lack of the same.

Photoionization detector (PID) readings are affected by multiple factors, including sample consistency, moisture, relative humidity, and dust. Therefore, PID readings are just one of the factors considered when making a determination of the absence or presence of SPH in a given sample. Additionally, the accuracy of PID readings decreases as concentrations increase, particularly over the 2,000 ppm threshold, due to the non-linearity of the measurement.

(Continued Next Page)

WELL ID: RX-016

DEPTH (ft)	SAMPLE INTERVAL	BLOW COUNTS	RECOVERY (ft)	PID (ppm)	MATERIAL DESCRIPTION	U.S.C.S.	Notes
			0.5	190	Gray fine(-) to coarse(+) SAND and Gravel; petroleum-like odor; moist.	SW	
25			3.6	74	Gray coarse SAND and fine Gravel; petroleum-like odor; moist.	GP	RX-016 (26-28) collected for Herb., Pest., PCBs, VOCs, SVOCs, TAL Metals, Total Cyanide, 1,4-Dioxane, and PFAS.
				2269	Gray fine SAND; petroleum-like odor; moist.	SP	
30			2.75	1742 47	Gray-brown fine SAND; petroleum-like odor, moist.	SP	Boring terminated at 32 ft.
35							
40							

Additional Notes:

Mention of odor, staining, and/or sheen is based on observations by person(s) logging the soil samples collected from the borehole and indicates odor, staining, and/or sheen related to the apparent presence of petroleum/chemical impacts. Where not noted, petroleum/chemical odor, staining, and/or sheen were not observed. In addition, where noted, soil has been characterized as fill based on observations. No mention of fill or other features in the soil descriptions does not indicate lack of the same.

Photoionization detector (PID) readings are affected by multiple factors, including sample consistency, moisture, relative humidity, and dust. Therefore, PID readings are just one of the factors considered when making a determination of the absence or presence of SPH in a given sample. Additionally, the accuracy of PID readings decreases as concentrations increase, particularly over the 2,000 ppm threshold, due to the non-linearity of the measurement.

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WELL ID: RX-017

CLIENT NAME: MJ Painting

DATE(S): 6/28/2019 , 6/28/2019

WELL DEPTH: NA

SITE NAME/ADDRESS: 350 Franklin Street

LOGGED BY: Jacob Lyon

SLOT SIZE: NA

CITY/STATE: Olean, New York

SAMPLER TYPE: MACRO CORE

SAND PACK: NA

DRILLING CONTRACTOR: TREC Environmental

BOREHOLE DIAMETER: 2 1/4 "

DIVIDER SEAL: NA

DRILLING METHOD: Geoprobe

WELL DIAM & MAT'L: NA

ANNULAR SEAL: NA

DEPTH (ft)	SAMPLE INTERVAL	BLOW COUNTS	RECOVERY (ft)	PID (ppm)	MATERIAL DESCRIPTION	U.S.C.S.	Notes
					Brown fine to medium SAND, trace Gravel; organics; moist.	SP	
			1		Dark brown fine(+) to coarse(-) SAND; trace Gravel; brick; moist.	SW	
				35	Brown fine to coarse SAND and Gravel; moist.	SW	
					Same as above.		
5							
			1			SW	
				25			
					Same as above.		
				17			
10			2			SW	
				20			
					Brown-gray fine to coarse SAND and Gravel; petroleum-like odor at 16 ft.; moist to wet at 16 ft.		
			1				
15				331		SW	
							Wet at 16 ft.
				140			
			1.5		Black fine to coarse SAND, trace Gravel; petroleum-like odor; wet.		RX-017 (18-22) and DUP06282019 collected for Herb., Pest., PCBs, VOCs, SVOCs, TAL Metals, Total Cyanide, 1,4-Dioxane and PFAS.
				975		SW	
20							

Additional Notes:

Mention of odor, staining, and/or sheen is based on observations by person(s) logging the soil samples collected from the borehole and indicates odor, staining, and/or sheen related to the apparent presence of petroleum/chemical impacts. Where not noted, petroleum/chemical odor, staining, and/or sheen were not observed. In addition, where noted, soil has been characterized as fill based on observations. No mention of fill or other features in the soil descriptions does not indicate lack of the same.

Photoionization detector (PID) readings are affected by multiple factors, including sample consistency, moisture, relative humidity, and dust. Therefore, PID readings are just one of the factors considered when making a determination of the absence or presence of SPH in a given sample. Additionally, the accuracy of PID readings decreases as concentrations increase, particularly over the 2,000 ppm threshold, due to the non-linearity of the measurement.

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DEPTH (ft)	SAMPLE INTERVAL	BLOW COUNTS	RECOVERY (ft)	PID (ppm)	MATERIAL DESCRIPTION	U.S.C.S.	Notes
	☒		2	453 967	Gray fine to coarse SAND, some Gravel; petroleum-like odor; wet.	SW	
25	☒		4	550	Same as above.	SW	
				1470	Gray fine SAND; trace Gravel; SPH visible on surface of soil; wet.	SP	Boring terminated at 28 ft.
30							
35							
40							

Additional Notes:
Mention of odor, staining, and/or sheen is based on observations by person(s) logging the soil samples collected from the borehole and indicates odor, staining, and/or sheen related to the apparent presence of petroleum/chemical impacts. Where not noted, petroleum/chemical odor, staining, and/or sheen were not observed. In addition, where noted, soil has been characterized as fill based on observations. No mention of fill or other features in the soil descriptions does not indicate lack of the same.

Photoionization detector (PID) readings are affected by multiple factors, including sample consistency, moisture, relative humidity, and dust. Therefore, PID readings are just one of the factors considered when making a determination of the absence or presence of SPH in a given sample. Additionally, the accuracy of PID readings decreases as concentrations increase, particularly over the 2,000 ppm threshold, due to the non-linearity of the measurement.

ROUX

12 Gill Street
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Telephone: (781) 569-4000
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WELL ID: RX-018

CLIENT NAME: MJ Painting

DATE(S): 6/25/2019 , 7/1/2019

WELL DEPTH: NA

SITE NAME/ADDRESS: 350 Franklin Street

LOGGED BY: Jacob Lyon

SLOT SIZE: NA

CITY/STATE: Olean, New York

SAMPLER TYPE: MACRO CORE

SAND PACK: NA

DRILLING CONTRACTOR: TREC Environmental

BOREHOLE DIAMETER: 2 1/4 "

DIVIDER SEAL: NA

DRILLING METHOD: Geoprobe

WELL DIAM & MAT'L: NA

ANNULAR SEAL: NA

DEPTH (ft)	SAMPLE INTERVAL	BLOW COUNTS	RECOVERY (ft)	PID (ppm)	MATERIAL DESCRIPTION	U.S.C.S.	Notes
				4.1	Brown SILT, some fine to medium Sand; organics; dry.	ML	Top 5 ft precleared utilizing hand auger. RX-018 (0-2") collected for VOCs, SVOCs, TAL Metals, and TS. RX-018 (0-1) collected for VOCs, SVOCs, TAL Metals, 1,4-Dioxane, and PFAS.
				7.6	Brown fine to coarse SAND, some fine to coarse Gravel, trace Silt; dry.	SW	
				5.3 6.4	Brown fine to coarse SAND and Silt, some fine to coarse Gravel; dry.	SW	
5			0.5	8.3	Brown fine(+) to coarse(-) SAND, trace Gravel, trace Silt; dry.	SW	
10			2	2 3	Brown SILT, some fine Sand, trace Gravel; moist.	ML	
15			1	61	Gray fine to coarse SAND and Gravel; petroleum-like odor; wet 12-17; moist 17-20.	SW	RX-018 (17-20) collected for Herb., Pest., PCBs, VOCs, SVOCs, TAL Metals, Total Cyanide, 1,4-Dioxane and PFAS.
20			1.5	142 758	Same as above.	SW	

Additional Notes:
Mention of odor, staining, and/or sheen is based on observations by person(s) logging the soil samples collected from the borehole and indicates odor, staining, and/or sheen related to the apparent presence of petroleum/chemical impacts. Where not noted, petroleum/chemical odor, staining, and/or sheen were not observed. In addition, where noted, soil has been characterized as fill based on observations. No mention of fill or other features in the soil descriptions does not indicate lack of the same.

Photoionization detector (PID) readings are affected by multiple factors, including sample consistency, moisture, relative humidity, and dust. Therefore, PID readings are just one of the factors considered when making a determination of the absence or presence of SPH in a given sample. Additionally, the accuracy of PID readings decreases as concentrations increase, particularly over the 2,000 ppm threshold, due to the non-linearity of the measurement.

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WELL ID: RX-018

DEPTH (ft)	SAMPLE INTERVAL	BLOW COUNTS	RECOVERY (ft)	PID (ppm)	MATERIAL DESCRIPTION	U.S.C.S.	Notes
			1	35	Gray fine(-) to medium(+) SAND; petroleum-like odor; wet.	SP	
				245	Gray fine to coarse SAND and Gravel; petroleum staining; wet.	SW	
25			3	170	Gray fine to coarse SAND and Gravel; petroleum-like odor; wet.	SW	
				13	Gray fine to coarse GRAVEL, some fine to coarse Sand; petroleum-like odor; wet.	GW	
					Gray CLAY; wet.	CH	Boring terminated at 28 ft.
30							
35							
40							

Additional Notes:
Mention of odor, staining, and/or sheen is based on observations by person(s) logging the soil samples collected from the borehole and indicates odor, staining, and/or sheen related to the apparent presence of petroleum/chemical impacts. Where not noted, petroleum/chemical odor, staining, and/or sheen were not observed. In addition, where noted, soil has been characterized as fill based on observations. No mention of fill or other features in the soil descriptions does not indicate lack of the same.

Photoionization detector (PID) readings are affected by multiple factors, including sample consistency, moisture, relative humidity, and dust. Therefore, PID readings are just one of the factors considered when making a determination of the absence or presence of SPH in a given sample. Additionally, the accuracy of PID readings decreases as concentrations increase, particularly over the 2,000 ppm threshold, due to the non-linearity of the measurement.

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WELL ID: RX-019

CLIENT NAME: MJ Painting

DATE(S): 6/28/2019 , 6/28/2019

WELL DEPTH: NA

SITE NAME/ADDRESS: 350 Franklin Street

LOGGED BY: Grace van der Ven

SLOT SIZE: NA

CITY/STATE: Olean, New York

SAMPLER TYPE: MACRO CORE

SAND PACK: NA

DRILLING CONTRACTOR: TREC Environmental

BOREHOLE DIAMETER: 2 1/4 "

DIVIDER SEAL: NA

DRILLING METHOD: Geoprobe

WELL DIAM & MAT'L: NA

ANNULAR SEAL: NA

DEPTH (ft)	SAMPLE INTERVAL	BLOW COUNTS	RECOVERY (ft)	PID (ppm)	MATERIAL DESCRIPTION	U.S.C.S.	Notes
			3		Brown fine SAND, some fine Gravel; dry.	SP	
5			1.5	267.1	Brown fine SAND, some fine Gravel; moist.	SP	
				135.2	Gray CLAY, trace fine Gravel; moist.	CH	
10			2	112.1	Brown SILT; moist to wet.	ML	
			2	76.4	Same as above.	ML	
15				1143	Gray fine to coarse SAND and fine to coarse Gravel; moist.	SW	RX-019 (14-18) collected for Herb., Pest., PCBs, VOCs, SVOCs, TAL Metals, Total Cyanide, 1,4-Dioxane and PFAS.
20			2.5	672.4	Gray fine to coarse SAND and fine to coarse Gravel; wet.	SW	

Additional Notes:
Mention of odor, staining, and/or sheen is based on observations by person(s) logging the soil samples collected from the borehole and indicates odor, staining, and/or sheen related to the apparent presence of petroleum/chemical impacts. Where not noted, petroleum/chemical odor, staining, and/or sheen were not observed. In addition, where noted, soil has been characterized as fill based on observations. No mention of fill or other features in the soil descriptions does not indicate lack of the same.

Photoionization detector (PID) readings are affected by multiple factors, including sample consistency, moisture, relative humidity, and dust. Therefore, PID readings are just one of the factors considered when making a determination of the absence or presence of SPH in a given sample. Additionally, the accuracy of PID readings decreases as concentrations increase, particularly over the 2,000 ppm threshold, due to the non-linearity of the measurement.

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WELL ID: RX-019

DEPTH (ft)	SAMPLE INTERVAL	BLOW COUNTS	RECOVERY (ft)	PID (ppm)	MATERIAL DESCRIPTION	U.S.C.S.	Notes
	☒		3.75	567.1	Gray fine to coarse SAND, trace fine Gravel.	SW	
25	☒		1	439.2	Same as above.	SW	Boring terminated at 28 ft.
30							
35							
40							

Additional Notes:
Mention of odor, staining, and/or sheen is based on observations by person(s) logging the soil samples collected from the borehole and indicates odor, staining, and/or sheen related to the apparent presence of petroleum/chemical impacts. Where not noted, petroleum/chemical odor, staining, and/or sheen were not observed. In addition, where noted, soil has been characterized as fill based on observations. No mention of fill or other features in the soil descriptions does not indicate lack of the same.

Photoionization detector (PID) readings are affected by multiple factors, including sample consistency, moisture, relative humidity, and dust. Therefore, PID readings are just one of the factors considered when making a determination of the absence or presence of SPH in a given sample. Additionally, the accuracy of PID readings decreases as concentrations increase, particularly over the 2,000 ppm threshold, due to the non-linearity of the measurement.

ROUX
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Woburn, MA 01801
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WELL ID: RX-020

CLIENT NAME: MJ Painting
DATE(S): 6/28/2019 , 6/28/2019
WELL DEPTH: NA

SITE NAME/ADDRESS: 350 Franklin Street
LOGGED BY: Jacob Lyon
SLOT SIZE: NA

CITY/STATE: Olean, New York
SAMPLER TYPE: MACRO CORE
SAND PACK: NA

DRILLING CONTRACTOR: TREC Environmental
BOREHOLE DIAMETER: 2 1/4 "
DIVIDER SEAL: NA

DRILLING METHOD: Geoprobe
WELL DIAM & MAT'L: NA
ANNULAR SEAL: NA

DEPTH (ft)	SAMPLE INTERVAL	BLOW COUNTS	RECOVERY (ft)	PID (ppm)	MATERIAL DESCRIPTION	U.S.C.S.	Notes
			2.6	26	Light brown fine to coarse SAND, some Gravel; dry to moist.	SW	
5			2	68	Dark brown SILT, some Sand, trace Gravel; wet.	ML	
				2226	Light brown fine to coarse SAND, some Gravel; moist.	SW	RX-020 (6-8) collected for VOCs, SVOCs, and TAL Metals. Wet at 8 ft.
			1.2	114	Brown fine to coarse SAND and Gravel; wet.	SW	
10				135	Black fine to coarse SAND and Gravel; wet.	SW	
15			1.25	175	Brown to gray GRAVEL, some fine(-) to coarse(+) Sand; wet.	GW	
			3.2	110	Brown to gray GRAVEL, some fine(-) to coarse(+) Sand; wet.	GW	
20				1702	Gray fine SAND, trace fine Gravel; petroleum-like odor; wet.	SP	

Additional Notes:
Mention of odor, staining, and/or sheen is based on observations by person(s) logging the soil samples collected from the borehole and indicates odor, staining, and/or sheen related to the apparent presence of petroleum/chemical impacts. Where not noted, petroleum/chemical odor, staining, and/or sheen were not observed. In addition, where noted, soil has been characterized as fill based on observations. No mention of fill or other features in the soil descriptions does not indicate lack of the same.

Photoionization detector (PID) readings are affected by multiple factors, including sample consistency, moisture, relative humidity, and dust. Therefore, PID readings are just one of the factors considered when making a determination of the absence or presence of SPH in a given sample. Additionally, the accuracy of PID readings decreases as concentrations increase, particularly over the 2,000 ppm threshold, due to the non-linearity of the measurement.

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DEPTH (ft)	SAMPLE INTERVAL	BLOW COUNTS	RECOVERY (ft)	PID (ppm)	MATERIAL DESCRIPTION	U.S.C.S.	Notes
			1.6	400	Gray GRAVEL, some fine to coarse Sand; petroleum-like odor; wet.	GW	
25				400	Same as above.	GW	
			2.2				
				1382	Gray fine SAND; petroleum-like odor; petroleum staining; wet.	SP	
							Boring terminated at 28 ft.
30							
35							
40							

Additional Notes:
Mention of odor, staining, and/or sheen is based on observations by person(s) logging the soil samples collected from the borehole and indicates odor, staining, and/or sheen related to the apparent presence of petroleum/chemical impacts. Where not noted, petroleum/chemical odor, staining, and/or sheen were not observed. In addition, where noted, soil has been characterized as fill based on observations. No mention of fill or other features in the soil descriptions does not indicate lack of the same.

Photoionization detector (PID) readings are affected by multiple factors, including sample consistency, moisture, relative humidity, and dust. Therefore, PID readings are just one of the factors considered when making a determination of the absence or presence of SPH in a given sample. Additionally, the accuracy of PID readings decreases as concentrations increase, particularly over the 2,000 ppm threshold, due to the non-linearity of the measurement.

12 Gill Street
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WELL ID: RX-021

CLIENT NAME: MJ Painting
DATE(S): 7/1/2019 , 7/1/2019
WELL DEPTH: NA

SITE NAME/ADDRESS: 350 Franklin Street
LOGGED BY: Jacob Lyon
SLOT SIZE: NA

CITY/STATE: Olean, New York
SAMPLER TYPE: MACRO CORE
SAND PACK: NA

DRILLING CONTRACTOR: TREC Environmental
BOREHOLE DIAMETER: 2 1/4 "
DIVIDER SEAL: NA

DRILLING METHOD: Geoprobe
WELL DIAM & MAT'L: NA
ANNULAR SEAL: NA

DEPTH (ft)	SAMPLE INTERVAL	BLOW COUNTS	RECOVERY (ft)	PID (ppm)	MATERIAL DESCRIPTION	U.S.C.S.	Notes
			2.8	7 88	Dark brown fine SAND, trace Silt, trace fine Gravel; bricks and organics; 2" piece of wood in core at 3'; dry.	SP	Driller's comment: wood fragments "smell like turpentine".
				125	Black fine to medium SAND, trace Gravel; petroleum-like odor; moist.	SP	
5			2.5	150	Tan SILT, some Clay; moist.	ML	
			1.5	116	Tan SILT, some Clay; wet.	ML	Wet around 8 ft.
10				165	Gray fine to coarse SAND and Gravel; petroleum staining; wet.	SW	
15			0.5	388	Same as above.	SW	
			2	540	Same as above.	SW	
20				482	Gray GRAVEL and fine to coarse Sand, little Silt; petroleum staining; wet.	GW	RX-021 (15-18) collected for VOCs, SVOCs, and TAL Metals.

Additional Notes:
Mention of odor, staining, and/or sheen is based on observations by person(s) logging the soil samples collected from the borehole and indicates odor, staining, and/or sheen related to the apparent presence of petroleum/chemical impacts. Where not noted, petroleum/chemical odor, staining, and/or sheen were not observed. In addition, where noted, soil has been characterized as fill based on observations. No mention of fill or other features in the soil descriptions does not indicate lack of the same.

Photoionization detector (PID) readings are affected by multiple factors, including sample consistency, moisture, relative humidity, and dust. Therefore, PID readings are just one of the factors considered when making a determination of the absence or presence of SPH in a given sample. Additionally, the accuracy of PID readings decreases as concentrations increase, particularly over the 2,000 ppm threshold, due to the non-linearity of the measurement.

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DEPTH (ft)	SAMPLE INTERVAL	BLOW COUNTS	RECOVERY (ft)	PID (ppm)	MATERIAL DESCRIPTION	U.S.C.S.	Notes
				153	Gray fine to coarse GRAVEL; petroleum-like odor; wet.	GW	
			4	450	Gray fine to coarse GRAVEL, some fine(-) to coarse(+) Sand; petroleum-like odor; wet.	GW	
				35	Gray fine SAND; wet.	SP	
					Same as above.		
25							
			0.5			SP	
				165			
							Boring terminated at 28 ft.
30							
35							
40							

Additional Notes:
Mention of odor, staining, and/or sheen is based on observations by person(s) logging the soil samples collected from the borehole and indicates odor, staining, and/or sheen related to the apparent presence of petroleum/chemical impacts. Where not noted, petroleum/chemical odor, staining, and/or sheen were not observed. In addition, where noted, soil has been characterized as fill based on observations. No mention of fill or other features in the soil descriptions does not indicate lack of the same.

Photoionization detector (PID) readings are affected by multiple factors, including sample consistency, moisture, relative humidity, and dust. Therefore, PID readings are just one of the factors considered when making a determination of the absence or presence of SPH in a given sample. Additionally, the accuracy of PID readings decreases as concentrations increase, particularly over the 2,000 ppm threshold, due to the non-linearity of the measurement.

12 Gill Street
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WELL ID: RX-022

PAGE 1 OF 2

CLIENT NAME: MJ Painting

DATE(S): 6/25/2019 , 7/2/2019

WELL DEPTH: NA

SITE NAME/ADDRESS: 350 Franklin Street

LOGGED BY: Jacob Lyon

SLOT SIZE: NA

CITY/STATE: Olean, New York

SAMPLER TYPE: MACRO CORE

SAND PACK: NA

DRILLING CONTRACTOR: TREC Environmental

BOREHOLE DIAMETER: 2 1/4 "

DIVIDER SEAL: NA

DRILLING METHOD: Geoprobe

WELL DIAM & MAT'L: NA

ANNULAR SEAL: NA

DEPTH (ft)	SAMPLE INTERVAL	BLOW COUNTS	RECOVERY (ft)	PID (ppm)	MATERIAL DESCRIPTION	U.S.C.S.	Notes
	☒			5.1	Brown to black fine to medium SAND and Silt, trace fine Gravel; organics; wet to moist.	SP	Top 5 ft precleared utilizing hand auger. RX-022 (0-2") collected for VOCs, SVOCs, TAL Metals, and TS. RX-022 (0-1) collected for VOCs, SVOCs, TAL Metals, 1,4-Dioxane and PFAS.
	☒			3.3			
	☒			7.5			
	☒			2.3			
5	☒		2.8	12	Brown fine(+) to coarse(-) SAND, some Silt, trace fine Gravel; slight petroleum-like odor; moist at 5 ft.	SW	
				16	Tan to gray SILT, trace Clay; black streaking; slight petroleum-like odor; moist.	ML	
10	☒		2	58 76	Grayish brown to gray fine to coarse SAND and Gravel; petroleum-like odor; moist.	SW	
15	☒		1	518	Same as above.	SW	
20	☒		0.3	650	Gray GRAVEL and Sand; petroleum-like odor; wet.	GW	Poor recovery and Wet at 16 ft.

Additional Notes:
Mention of odor, staining, and/or sheen is based on observations by person(s) logging the soil samples collected from the borehole and indicates odor, staining, and/or sheen related to the apparent presence of petroleum/chemical impacts. Where not noted, petroleum/chemical odor, staining, and/or sheen were not observed. In addition, where noted, soil has been characterized as fill based on observations. No mention of fill or other features in the soil descriptions does not indicate lack of the same.

Photoionization detector (PID) readings are affected by multiple factors, including sample consistency, moisture, relative humidity, and dust. Therefore, PID readings are just one of the factors considered when making a determination of the absence or presence of SPH in a given sample. Additionally, the accuracy of PID readings decreases as concentrations increase, particularly over the 2,000 ppm threshold, due to the non-linearity of the measurement.

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ROUX
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Telephone: (781) 569-4000
Fax: (781) 569-4001

WELL ID: RX-022

DEPTH (ft)	SAMPLE INTERVAL	BLOW COUNTS	RECOVERY (ft)	PID (ppm)	MATERIAL DESCRIPTION	U.S.C.S.	Notes
	☒		1	331	Gray fine to medium SAND; petroleum staining; petroleum-likeodor; wet.	SP	
				212	Gray GRAVEL, some fine(-) to coarse(+) Sand; petroleum-like odor and petroleum staining; wet.	GW	
25	☒				Same as above.	GW	
				398 49	Gray fine to medium SAND; wet.	SP	Boring terminated at 28 ft.
30							
35							
40							

Additional Notes:
Mention of odor, staining, and/or sheen is based on observations by person(s) logging the soil samples collected from the borehole and indicates odor, staining, and/or sheen related to the apparent presence of petroleum/chemical impacts. Where not noted, petroleum/chemical odor, staining, and/or sheen were not observed. In addition, where noted, soil has been characterized as fill based on observations. No mention of fill or other features in the soil descriptions does not indicate lack of the same.

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ROUX
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Telephone: (781) 569-4000
Fax: (781) 569-4001

WELL ID: RX-023

CLIENT NAME: MJ Painting
DATE(S): 7/1/2019 , 7/1/2019
WELL DEPTH: NA
SITE NAME/ADDRESS: 350 Franklin Street
LOGGED BY: Jacob Lyon
SLOT SIZE: NA
CITY/STATE: Olean, New York
SAMPLER TYPE: MACRO CORE
SAND PACK: NA
DRILLING CONTRACTOR: TREC Environmental
BOREHOLE DIAMETER: 2 1/4 "
DIVIDER SEAL: NA
DRILLING METHOD: Geoprobe
WELL DIAM & MAT'L: NA
ANNULAR SEAL: NA

DEPTH (ft)	SAMPLE INTERVAL	BLOW COUNTS	RECOVERY (ft)	PID (ppm)	MATERIAL DESCRIPTION	U.S.C.S.	Notes
			2	0	Tan SILT and fine Sand, some Gravel; dry.	ML	
5			2	104 468	Black fine SAND. some Silt, trace Gravel; brick; slight petroleum-like odor; moist at 8 ft.	SP-SM	
				143	Same as above.	SP-SM	Wet at 8.5 ft.
10			3.1	142	Light brown SILT, trace Clay; wet.	ML	
				57	Same as above.	ML	
15			3	175	Gray fine to medium SAND, some Gravel; light petroleum-like odor and petroleum staining; wet.	SP	RX-023 (16-19) collected for Herb., Pest., PCBs, VOCs, SVOCs, TAL Metals, Total Cyanide, 1,4-Dioxane and PFAS.
			1.25		Same as above.	SP	
20				672 417	Gray GRAVEL; some fine to coarse Sand; brick fragments; petroleum-like odor; wet.	GW	

Additional Notes:
Mention of odor, staining, and/or sheen is based on observations by person(s) logging the soil samples collected from the borehole and indicates odor, staining, and/or sheen related to the apparent presence of petroleum/chemical impacts. Where not noted, petroleum/chemical odor, staining, and/or sheen were not observed. In addition, where noted, soil has been characterized as fill based on observations. No mention of fill or other features in the soil descriptions does not indicate lack of the same.

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DEPTH (ft)	SAMPLE INTERVAL	BLOW COUNTS	RECOVERY (ft)	PID (ppm)	MATERIAL DESCRIPTION	U.S.C.S.	Notes
	☒		1	427	Gray GRAVEL; some fine to coarse Sand; petroleum-like odor; wet.	GW	
25	☒			415	Gray GRAVEL; some fine to coarse Sand; petroleum-like odor and petroleum staining, wet;	GW	Boring terminated at 28 ft.
30							
35							
40							

Additional Notes:
Mention of odor, staining, and/or sheen is based on observations by person(s) logging the soil samples collected from the borehole and indicates odor, staining, and/or sheen related to the apparent presence of petroleum/chemical impacts. Where not noted, petroleum/chemical odor, staining, and/or sheen were not observed. In addition, where noted, soil has been characterized as fill based on observations. No mention of fill or other features in the soil descriptions does not indicate lack of the same.

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12 Gill Street
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WELL ID: RX-024

CLIENT NAME: MJ Painting

DATE(S): 7/2/2019 , 7/2/2019

WELL DEPTH: NA

SITE NAME/ADDRESS: 350 Franklin Street

LOGGED BY: Jacob Lyon

SLOT SIZE: NA

CITY/STATE: Olean, New York

SAMPLER TYPE: MACRO CORE

SAND PACK: NA

DRILLING CONTRACTOR: TREC Environmental

BOREHOLE DIAMETER: 2 1/4 "

DIVIDER SEAL: NA

DRILLING METHOD: Geoprobe

WELL DIAM & MAT'L: NA

ANNULAR SEAL: NA

DEPTH (ft)	SAMPLE INTERVAL	BLOW COUNTS	RECOVERY (ft)	PID (ppm)	MATERIAL DESCRIPTION	U.S.C.S.	Notes
	☒		2.3	12	Brown fine SAND, some Gravel, trace Silt; dry.	SP	
5	☒		1.6	10	Tan SILT, trace Clay, trace Gravel; moist.	ML	
	☒		1	7	Same as above.	ML	
10					Brown fine(+) to coarse(-) SAND, little Gravel; moist.	SW	
	☒		1.6	165	Same as above.	SW	
15					Gray fine to coarse GRAVEL and fine to coarse SAND, trace Silt; petroleum-like odor; wet.	GW	Wet at 14 ft.
	☒		1.6	80 1120	Same as above.	GW	RX-024 (17-20) collected for VOCs, SVOCs, and TAL Metals.
20							

Additional Notes:
Mention of odor, staining, and/or sheen is based on observations by person(s) logging the soil samples collected from the borehole and indicates odor, staining, and/or sheen related to the apparent presence of petroleum/chemical impacts. Where not noted, petroleum/chemical odor, staining, and/or sheen were not observed. In addition, where noted, soil has been characterized as fill based on observations. No mention of fill or other features in the soil descriptions does not indicate lack of the same.

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WELL ID: RX-024

DEPTH (ft)	SAMPLE INTERVAL	BLOW COUNTS	RECOVERY (ft)	PID (ppm)	MATERIAL DESCRIPTION	U.S.C.S.	Notes
	☒		1.5	810	Gray fine(+) to coarse(-) SAND, some Gravel; petroleum-like odor; wet.	SW	
25	☒		1.5	290	Gray fine(+) to coarse(-) SAND, some Gravel; petroleum-like odor and petroleum staining; wet.	SW	
30							Boring terminated at 28 ft.
35							
40							

Additional Notes:
Mention of odor, staining, and/or sheen is based on observations by person(s) logging the soil samples collected from the borehole and indicates odor, staining, and/or sheen related to the apparent presence of petroleum/chemical impacts. Where not noted, petroleum/chemical odor, staining, and/or sheen were not observed. In addition, where noted, soil has been characterized as fill based on observations. No mention of fill or other features in the soil descriptions does not indicate lack of the same.

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12 Gill Street
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WELL ID: RX-025

PAGE 1 OF 2

CLIENT NAME: MJ Painting
DATE(S): 6/24/2019 , 7/1/2019
WELL DEPTH: NA
SITE NAME/ADDRESS: 350 Franklin Street
LOGGED BY: Jacob Lyon
SLOT SIZE: NA
CITY/STATE: Olean, New York
SAMPLER TYPE: MACRO CORE
SAND PACK: NA
DRILLING CONTRACTOR: TREC Environmental
BOREHOLE DIAMETER: 2 1/4 "
DIVIDER SEAL: NA
DRILLING METHOD: Geoprobe
WELL DIAM & MAT'L: NA
ANNULAR SEAL: NA

DEPTH (ft)	SAMPLE INTERVAL	BLOW COUNTS	RECOVERY (ft)	PID (ppm)	MATERIAL DESCRIPTION	U.S.C.S.	Notes
				1.3	Brown fine(+) to coarse(-) GRAVEL, some fine(-) to coarse(+) Sand, trace Silt; organics; dry.		Top 5 ft precleared utilizing hand auger.
				1.4		GW	RX-025 (0-2") and RX-025 (0-1) collected for VOCs, SVOCs, and TAL Metals.
				10.7			
				41.2	Black fine to coarse SAND, some Silt, trace fine Gravel; slight petroleum-like odor; dry.	SW-SM	
5				15	Brown fine to coarse SAND and Gravel; brick fragments; moist.	SW	
			1.6				
				15	Dark brown to black fine to coarse SAND, some fine Gravel; wet.	SW	Wet at 7 ft.
					Brown SILT; black partings throughout; wet.		
				50			
10			2.4			ML	
				29			
					Same as above.	ML	
				40			
			2		Black fine(+) to coarse(-) SAND, some Gravel; coarsens downward; petroleum-like odor; wet.	SW	RX-025 (13-16) collected for VOCs, SVOCs, and TAL metals.
15				526			
					Black fine to coarse SAND and Gravel; petroleum-like odor; wet.		
			1.5	514		SW	
20							

Additional Notes:
Mention of odor, staining, and/or sheen is based on observations by person(s) logging the soil samples collected from the borehole and indicates odor, staining, and/or sheen related to the apparent presence of petroleum/chemical impacts. Where not noted, petroleum/chemical odor, staining, and/or sheen were not observed. In addition, where noted, soil has been characterized as fill based on observations. No mention of fill or other features in the soil descriptions does not indicate lack of the same.

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WELL ID: RX-025

DEPTH (ft)	SAMPLE INTERVAL	BLOW COUNTS	RECOVERY (ft)	PID (ppm)	MATERIAL DESCRIPTION	U.S.C.S.	Notes
			1.75	250	Same as above.	SW	
				428	Brown and black fine to coarse SAND and Gravel, trace Silt; petroleum-like odor; wet.	SW	
25			1.6		Same as above.	SW	
				76	Gray fine to medium SAND, trace Gravel; petroleum-like odor; wet.	SP	
							Boring terminated at 28 ft.
30							
35							
40							

Additional Notes:
Mention of odor, staining, and/or sheen is based on observations by person(s) logging the soil samples collected from the borehole and indicates odor, staining, and/or sheen related to the apparent presence of petroleum/chemical impacts. Where not noted, petroleum/chemical odor, staining, and/or sheen were not observed. In addition, where noted, soil has been characterized as fill based on observations. No mention of fill or other features in the soil descriptions does not indicate lack of the same.

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WELL ID: RX-026

PAGE 1 OF 2

CLIENT NAME: MJ Painting

DATE(S): 7/1/2019 , 7/1/2019

WELL DEPTH: NA

SITE NAME/ADDRESS: 350 Franklin Street

LOGGED BY: Jacob Lyon

SLOT SIZE: NA

CITY/STATE: Olean, New York

SAMPLER TYPE: MACRO CORE

SAND PACK: NA

DRILLING CONTRACTOR: TREC Environmental

BOREHOLE DIAMETER: 2 1/4 "

DIVIDER SEAL: NA

DRILLING METHOD: Geoprobe

WELL DIAM & MAT'L: NA

ANNULAR SEAL: NA

DEPTH (ft)	SAMPLE INTERVAL	BLOW COUNTS	RECOVERY (ft)	PID (ppm)	MATERIAL DESCRIPTION	U.S.C.S.	Notes
	☒		3	8	Light brown fine SAND, some Gravel; dry.	SP	
				15	Gray GRAVEL, some fine SAND, trace Silt; dry.	GP	
5	☒		1	21	Dark brown fine SAND, trace Gravel; dry.	SP	
10	☒		0.5	145	Dark brown fine SAND, trace Gravel; brick fragments; petroleum-like odor; dry.	SP	
15	☒		2.75	57 20 26	Light brown to gray SILT, trace Clay; wet.	ML	Wet at 12 ft.
					Gray GRAVEL and fine to coarse Sand; petroleum-like odor; wet.	GW	
20	☒		1.5	592	Gray fine to medium SAND, some Gravel; petroleum-like odor; wet.	SP	

Additional Notes:

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DEPTH (ft)	SAMPLE INTERVAL	BLOW COUNTS	RECOVERY (ft)	PID (ppm)	MATERIAL DESCRIPTION	U.S.C.S.	Notes
			1.5	540	Gray GRAVEL, some fine to coarse Sand, trace Silt; petroleum-like odor; wet.	GW	
				217	Gray GRAVEL, some fine to coarse Sand; petroleum-like odor; moist.	GW	
25			2	342 880	Gray GRAVEL, some fine to coarse Sand; petroleum-like odor and petroleum staining; wet.	GW	
30			2	536	Same as above.	GW	RX-026 (27-30) collected for VOCs, SVOCs, and TAL Metals.
			2.5	286 164	Gray fine to coarse SAND, some Gravel; petroleum-like odor; wet.	SW	
35				296	Gray fine to coarse SAND, trace Gravel, trace Silt; petroleum-like odor; wet.	SW	Boring terminated at 36 ft.
40							

Additional Notes:
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WELL ID: RX-027

PAGE 1 OF 2

CLIENT NAME: MJ Painting

DATE(S): 7/2/2019 , 7/2/2019

WELL DEPTH: NA

SITE NAME/ADDRESS: 350 Franklin Street

LOGGED BY: Jacob Lyon

SLOT SIZE: NA

CITY/STATE: Olean, New York

SAMPLER TYPE: MACRO CORE

SAND PACK: NA

DRILLING CONTRACTOR: TREC Environmental

BOREHOLE DIAMETER: 2 1/4 "

DIVIDER SEAL: NA

DRILLING METHOD: Geoprobe

WELL DIAM & MAT'L: NA

ANNULAR SEAL: NA

DEPTH (ft)	SAMPLE INTERVAL	BLOW COUNTS	RECOVERY (ft)	PID (ppm)	MATERIAL DESCRIPTION	U.S.C.S.	Notes
	☒		1.25	8	Light brown GRAVEL, some Silt, trace Sand; dry.	GM	
5	☒		1.5	25	Dark brown fine to coarse SAND; moist.	SW	
	☒			65	Dark brown fine to coarse SAND, trace Gravel; wet.	SW	Wet at 8 ft.
10			1.25				
				53	Grayish brown SILT, some Clay; wet.	ML	
	☒			60			
			2		Gray GRAVEL, some fine to coarse SAND, trace Silt; petroleum-like odor; wet.		
15				313		GW	
	☒				Same as above.		
				51		GW	
			2.1		Gray GRAVEL, fine(-) to coarse(+) Sand; petroleum-like odor; moist.		
				475		GW	
20							

Additional Notes:
Mention of odor, staining, and/or sheen is based on observations by person(s) logging the soil samples collected from the borehole and indicates odor, staining, and/or sheen related to the apparent presence of petroleum/chemical impacts. Where not noted, petroleum/chemical odor, staining, and/or sheen were not observed. In addition, where noted, soil has been characterized as fill based on observations. No mention of fill or other features in the soil descriptions does not indicate lack of the same.

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DEPTH (ft)	SAMPLE INTERVAL	BLOW COUNTS	RECOVERY (ft)	PID (ppm)	MATERIAL DESCRIPTION	U.S.C.S.	Notes
	☒		1.5	1772	Gray GRAVEL, fine(-) to coarse(+) Sand; petroleum-like odor and petroleum staining; moist.	GW	
25	☒		3.6	290	Gray fine to coarse GRAVEL, trace coarse Sand; petroleum-like odor; moist.	GW	
					Gray fine to medium SAND; petroleum-like odor; moist.	SP	
				634	Gray fine to coarse SAND and Gravel; petroleum staining at 28 ft; moist.	SW	
30	☒		1	131	Gray fine to coarse SAND and Gravel; petroleum-like odor; moist.	SW	
							Boring terminated at 32 ft.
35							
40							

Additional Notes:
Mention of odor, staining, and/or sheen is based on observations by person(s) logging the soil samples collected from the borehole and indicates odor, staining, and/or sheen related to the apparent presence of petroleum/chemical impacts. Where not noted, petroleum/chemical odor, staining, and/or sheen were not observed. In addition, where noted, soil has been characterized as fill based on observations. No mention of fill or other features in the soil descriptions does not indicate lack of the same.

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ROUX
12 Gill Street
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Telephone: (781) 569-4000
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WELL ID: RX-028

CLIENT NAME: MJ Painting
DATE(S): 6/28/2019 , 7/2/2019
WELL DEPTH: NA
SITE NAME/ADDRESS: 350 Franklin Street
LOGGED BY: Jacob Lyon
SLOT SIZE: NA
CITY/STATE: Olean, New York
SAMPLER TYPE: MACRO CORE
SAND PACK: NA
DRILLING CONTRACTOR: TREC Environmental
BOREHOLE DIAMETER: 2 1/4 "
DIVIDER SEAL: NA
DRILLING METHOD: Geoprobe
WELL DIAM & MAT'L: NA
ANNULAR SEAL: NA

DEPTH (ft)	SAMPLE INTERVAL	BLOW COUNTS	RECOVERY (ft)	PID (ppm)	MATERIAL DESCRIPTION	U.S.C.S.	Notes
			0.75	NM	Brown fine(+) to coarse(-) SAND, little Silt, trace Gravel; top soil; dry.	SW	
5			1.5	17	Brown fine(+) to coarse(-) SAND, little Silt, trace Gravel; moist.	SW	
					Light brown fine to coarse SAND, some Gravel; moist.	SW	
			2.1	16	Same as above.	SW	
10				435	Gray fine to coarse SAND, some Gravel; petroleum-like odor, moist.	SW	
15			2	511	Fine to coarse SAND and Gravel; petroleum-like odor; moist.	SW	
20			1.6	851	Fine(+) to coarse(-) GRAVEL and coarse Sand; petroleum-like odor; wet.	GW	Wet at 16 ft. RX-028 (16-19) collected for VOCs, SVOCs, and TAL Metals. MS/MSD Collected.

Additional Notes:
Mention of odor, staining, and/or sheen is based on observations by person(s) logging the soil samples collected from the borehole and indicates odor, staining, and/or sheen related to the apparent presence of petroleum/chemical impacts. Where not noted, petroleum/chemical odor, staining, and/or sheen were not observed. In addition, where noted, soil has been characterized as fill based on observations. No mention of fill or other features in the soil descriptions does not indicate lack of the same.

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WELL ID: RX-028

DEPTH (ft)	SAMPLE INTERVAL	BLOW COUNTS	RECOVERY (ft)	PID (ppm)	MATERIAL DESCRIPTION	U.S.C.S.	Notes
					Gray fine(-) to coarse(+) SAND, some fine to coarse Gravel; fining downward; wet.		
			2.3	376		SW	
					Same as above.		
25				160		SW	
					Gray fine(+) to coarse(-) SAND; petroleum-like odor and petroleum staining; wet.		
				2176			
						SW	26-28 not sampled because similar interval has been sampled in nearby borings. See RX-016 (26-28).
				1500			
30			1.5		Gray fine(+) to coarse(-) SAND, trace Gravel; petroleum staining; wet.		
				1503		SW	
					No Recovery		
			0	NM			
35							
							Boring terminated at 36 ft
40							

Additional Notes:

Mention of odor, staining, and/or sheen is based on observations by person(s) logging the soil samples collected from the borehole and indicates odor, staining, and/or sheen related to the apparent presence of petroleum/chemical impacts. Where not noted, petroleum/chemical odor, staining, and/or sheen were not observed. In addition, where noted, soil has been characterized as fill based on observations. No mention of fill or other features in the soil descriptions does not indicate lack of the same.

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ROUX

12 Gill Street
Suite 4700
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Telephone: (781) 569-4000
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WELL ID: RX-029

CLIENT NAME: MJ Painting

DATE(S): 6/28/2019 , 6/28/2019

WELL DEPTH: NA

SITE NAME/ADDRESS: 350 Franklin Street

LOGGED BY: Jacob Lyon

SLOT SIZE: NA

CITY/STATE: Olean, New York

SAMPLER TYPE: MACRO CORE

SAND PACK: NA

DRILLING CONTRACTOR: TREC Environmental

BOREHOLE DIAMETER: 2 1/4 "

DIVIDER SEAL: NA

DRILLING METHOD: Geoprobe

WELL DIAM & MAT'L: NA

ANNULAR SEAL: NA

DEPTH (ft)	SAMPLE INTERVAL	BLOW COUNTS	RECOVERY (ft)	PID (ppm)	MATERIAL DESCRIPTION	U.S.C.S.	Notes
					Light brown fine SAND, little Silt; brick fragments; organics; dry.	SP	
			2.5	55	Dark brown to black fine SAND, trace Silt; crushed asphalt; moist.	SP	
5			1.5	9 11	Gray CLAY, some Silt, trace fine Sand; seam of fine to coarse SAND; moist.	CH	
					Gray CLAY, some Silt, trace fine Sand, trace Gravel; moist.	CH	
10			2	12	Gray fine to coarse SAND and Gravel; light to heavy petroleum-like odor; moist.	SW	Wet at 15 ft. RX-029 (15-18) collected for Herb., Pest., PCBs, VOCs, SVOCs, TAL Metals, Total Cyanide, 1,4-Dioxane and PFAS.
15			2	498 2871	Same as above.	SW	
			2.3	3136	Gray fine to coarse SAND and Gravel; light to heavy petroleum-like odor; SPH visible on macrocore sleeve; moist.	SW	
20				2415	White and brown fine SAND, trace Silt, trace Gravel; moist.	SP	

Additional Notes:
Mention of odor, staining, and/or sheen is based on observations by person(s) logging the soil samples collected from the borehole and indicates odor, staining, and/or sheen related to the apparent presence of petroleum/chemical impacts. Where not noted, petroleum/chemical odor, staining, and/or sheen were not observed. In addition, where noted, soil has been characterized as fill based on observations. No mention of fill or other features in the soil descriptions does not indicate lack of the same.

Photoionization detector (PID) readings are affected by multiple factors, including sample consistency, moisture, relative humidity, and dust. Therefore, PID readings are just one of the factors considered when making a determination of the absence or presence of SPH in a given sample. Additionally, the accuracy of PID readings decreases as concentrations increase, particularly over the 2,000 ppm threshold, due to the non-linearity of the measurement.

(Continued Next Page)

DEPTH (ft)	SAMPLE INTERVAL	BLOW COUNTS	RECOVERY (ft)	PID (ppm)	MATERIAL DESCRIPTION	U.S.C.S.	Notes
				327	Gray fine to coarse SAND; petroleum-like odor; moist.	SW	
			2.1	290	Gray fine GRAVEL, trace coarse Sand; petroleum staining; moist.	GP	
				855	Gray fine to coarse SAND and Gravel; petroleum-like odor; petroleum staining at 24-28 ft.; moist.	SW	
25			1.5	355	Same as above.	SW	
							Boring terminated at 28 ft.
30							
35							
40							

Additional Notes:
Mention of odor, staining, and/or sheen is based on observations by person(s) logging the soil samples collected from the borehole and indicates odor, staining, and/or sheen related to the apparent presence of petroleum/chemical impacts. Where not noted, petroleum/chemical odor, staining, and/or sheen were not observed. In addition, where noted, soil has been characterized as fill based on observations. No mention of fill or other features in the soil descriptions does not indicate lack of the same.

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ROUX

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WELL ID: RX-030

PAGE 1 OF 1

CLIENT NAME: MJ Painting
DATE(S): 6/27/2019 , 6/27/2019
WELL DEPTH: NA
SITE NAME/ADDRESS: 350 Franklin Street
LOGGED BY: Jacob Lyon
SLOT SIZE: NA
CITY/STATE: Olean, New York
SAMPLER TYPE: MACRO CORE
SAND PACK: NA
DRILLING CONTRACTOR: TREC Environmental
BOREHOLE DIAMETER: 2 1/4 "
DIVIDER SEAL: NA
DRILLING METHOD: Geoprobe
WELL DIAM & MAT'L: NA
ANNULAR SEAL: NA

DEPTH (ft)	SAMPLE INTERVAL	BLOW COUNTS	RECOVERY (ft)	PID (ppm)	MATERIAL DESCRIPTION	U.S.C.S.	Notes
			1.5	23	Brown fine SAND, little Silt, trace Gravel; organics; dry.	SP	
					Brown fine SAND, some Silt; crushed brick; dry.	SP-SM	
5			0.75	92	Brownish gray fine to medium SAND, some Silt, trace Gravel; petroleum-like odor at 9 ft.; moist.	SP	
				77	Same as above.	SP	
10			1	31	Brownish gray fine to coarse SAND, some Gravel; moist.	SW	
			1.25	135 76	Gray fine to coarse SAND and Gravel; light petroleum-likeodor; wet.	SW	Wet at 15 ft.
15							
			1.25	77	Gray fine(+) to coarse(-) GRAVEL, trace fine to coarse Sand; wet.	GW	RX-030 (16-18) collected for VOCs, SVOCs, and TAL Metals.
				969	Gray fine to coarse SAND and Gravel, trace Silt; wet.	SW	Refusal at 18.3 ft.
20							

Additional Notes:
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WELL ID: RX-031

PAGE 1 OF 2

CLIENT NAME: MJ Painting
DATE(S): 6/27/2019 , 6/27/2019
WELL DEPTH: NA
SITE NAME/ADDRESS: 350 Franklin Street
LOGGED BY: Jacob Lyon
SLOT SIZE: NA
CITY/STATE: Olean, New York
SAMPLER TYPE: MACRO CORE
SAND PACK: NA
DRILLING CONTRACTOR: TREC Environmental
BOREHOLE DIAMETER: 2 1/4 "
DIVIDER SEAL: NA
DRILLING METHOD: Geoprobe
WELL DIAM & MAT'L: NA
ANNULAR SEAL: NA

DEPTH (ft)	SAMPLE INTERVAL	BLOW COUNTS	RECOVERY (ft)	PID (ppm)	MATERIAL DESCRIPTION	U.S.C.S.	Notes
					Light brown fine to medium SAND, trace Silt, trace Gravel; brick and concrete fill material; dry.	SP	
			2	18	Dark brown fine to medium SAND, some Silt, dry.	SP-SM	
					Dark brown fine to medium SAND, some Silt, moist.	SP-SM	
5				74	Brown fine to coarse SAND, some Gravel; large brick fragments; wet.	SW	
			1.75		Gray to tan SILT; wet.		
				192		ML	
					Same as above.		
				440		ML	
10			1.25		Light brown to gray fine(+) to coarse(-) SAND, some Gravel; wet.		
				520			
						SW	
			0.75	265			
15							
					Gray fine to coarse SAND and Gravel, trace silt; light petroleum-like odor; petroleum staining on macrocore; brick fragments; wet.		
				154			
			2			SW	
				588			
20							

Additional Notes:
Mention of odor, staining, and/or sheen is based on observations by person(s) logging the soil samples collected from the borehole and indicates odor, staining, and/or sheen related to the apparent presence of petroleum/chemical impacts. Where not noted, petroleum/chemical odor, staining, and/or sheen were not observed. In addition, where noted, soil has been characterized as fill based on observations. No mention of fill or other features in the soil descriptions does not indicate lack of the same.

Photoionization detector (PID) readings are affected by multiple factors, including sample consistency, moisture, relative humidity, and dust. Therefore, PID readings are just one of the factors considered when making a determination of the absence or presence of SPH in a given sample. Additionally, the accuracy of PID readings decreases as concentrations increase, particularly over the 2,000 ppm threshold, due to the non-linearity of the measurement.

(Continued Next Page)

DEPTH (ft)	SAMPLE INTERVAL	BLOW COUNTS	RECOVERY (ft)	PID (ppm)	MATERIAL DESCRIPTION	U.S.C.S.	Notes
			1.5	695	Gray GRAVEL, some fine to coarse Sand; brick fragments; petroleum staining on macrocore; wet.	GW	
25			2.5	153	Same as above.	GW	
				857	Gray fine SAND; petroleum-like odor; wet.	SP	RX-031 (27-28) collected for VOCs, SVOCs, and TAL Metals. End boring at 28 ft.
30							
35							
40							

Additional Notes:
Mention of odor, staining, and/or sheen is based on observations by person(s) logging the soil samples collected from the borehole and indicates odor, staining, and/or sheen related to the apparent presence of petroleum/chemical impacts. Where not noted, petroleum/chemical odor, staining, and/or sheen were not observed. In addition, where noted, soil has been characterized as fill based on observations. No mention of fill or other features in the soil descriptions does not indicate lack of the same.

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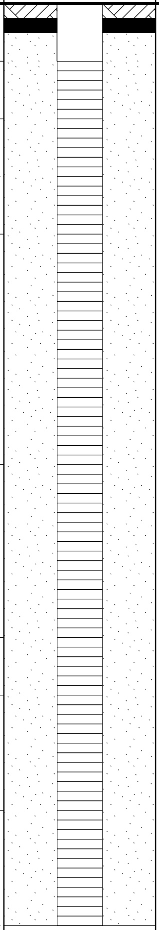
WELL ID: RXMW-001

PAGE 1 OF 1

CLIENT NAME: MJ Painting
DATE(S): 6/24/2019 , 6/24/2019
WELL DEPTH: 16
SITE NAME/ADDRESS: 350 Franklin Street
LOGGED BY: Jacob Lyon
SLOT SIZE: 10
CITY/STATE: Olean, New York
SAMPLER TYPE: MACRO CORE
SAND PACK: #00
DRILLING CONTRACTOR: TREC Environmental
BOREHOLE DIAMETER: 2 1/4 "
DIVIDER SEAL: Bentonite
DRILLING METHOD: Geoprobe
WELL DIAM & MAT'L: 2" PVC
ANNULAR SEAL: NA

DEPTH (ft)	SAMPLE INTERVAL	BLOW COUNTS	RECOVERY (ft)	PID (ppm)	MATERIAL DESCRIPTION	U.S.C.S.	WELL DIAGRAM Stick-up	Notes
				11.0	Black fine to medium SAND and Silt, trace fine Gravel; organics; dry.	SP-SM		Moved location east 5-10 ft.
				4.6	Black medium(-) to coarse(+) SAND, some fine to coarse Gravel; moist.	SP		
				1212	Black fine to coarse GRAVEL; moist.	GW		
				1138	Black fine to coarse GRAVEL, some fine to coarse Sand; petroleum-like odor; wet.	GW		Water encountered at 3 ft.
5			1.5	1590	Black fine to coarse SAND, some Silt, little Gravel; petroleum-like odor; wet.	SW-SM		
10			2	795	Same as above.	SW-SM		
				830	Black fine SAND; some Silt; wet.	SP-SM		
			1.25	384	Brown fine to coarse SAND and Gravel; wet.	SW		
15				1208	Dark gray SILT, little Clay, little Gravel; moist.	ML		RXMW-001 (14-16) and DUP062419 collected for VOCs, SVOCs, and TAL Metals.
			1.25	1075	Brown and gray SILT, some Clay; moist.	ML		
					Gray GRAVEL; moist.	GW		Refusal at 18.5 ft.
20								

Additional Notes:
Mention of odor, staining, and/or sheen is based on observations by person(s) logging the soil samples collected from the borehole and indicates odor, staining, and/or sheen related to the apparent presence of petroleum/chemical impacts. Where not noted, petroleum/chemical odor, staining, and/or sheen were not observed. In addition, where noted, soil has been characterized as fill based on observations. No mention of fill or other features in the soil descriptions does not indicate lack of the same.

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ROUX

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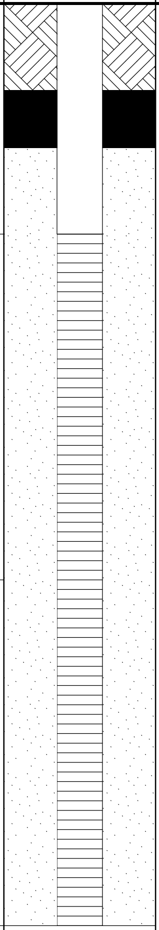
WELL ID: RXMW-002

PAGE 1 OF 1

CLIENT NAME: MJ Painting
DATE(S): 6/24/2019 , 6/24/2019
WELL DEPTH: 16
SITE NAME/ADDRESS: 350 Franklin Street
LOGGED BY: Jacob Lyon
SLOT SIZE: 10
CITY/STATE: Olean, New York
SAMPLER TYPE: MACRO CORE
SAND PACK: #00
DRILLING CONTRACTOR: TREC Environmental
BOREHOLE DIAMETER: 2 1/4 "
DIVIDER SEAL: Bentonite
DRILLING METHOD: Geoprobe
WELL DIAM & MAT'L: 2" PVC
ANNULAR SEAL: NA

DEPTH (ft)	SAMPLE INTERVAL	BLOW COUNTS	RECOVERY (ft)	PID (ppm)	MATERIAL DESCRIPTION	U.S.C.S.	WELL DIAGRAM Stick-up	Notes
			2	122	Brown to black fine SAND; organics; topsoil; brick; concrete; dry.	SP		RXMW-002 (0-1) collected for VOCs, SVOCs, and TAL metals.
5			3	419 297	Light brown with gray streaking SILT, some Clay; light petroleum-like odor; dry.	ML		
			1.5		Same as above.	ML		
10				244 587	Dark gray fine to medium SAND, some fine(+) to coarse(-) Gravel; slight petroleum-like odor; moist to wet.	SP		
15			2.5	660 830	Same as above.	SP		RXMW-002 (12-16) collected for VOCs, SVOCs, and TAL metals.
			2.5	150	Gray SILT, some Clay, little Gravel and Sand; petroleum-like odor, wet.	ML		
				1180	Gray fine to coarse SAND, some Gravel; petroleum-like odor; dry.	SW		RXMW-002 (17-18) collected for VOCs, SVOCs, and TAL metals. Refusal at 18 ft.
20								

Additional Notes:
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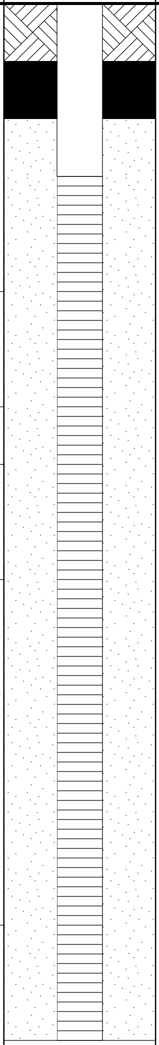
WELL ID: RXMW-003

PAGE 1 OF 2

CLIENT NAME: MJ Painting
DATE(S): 6/24/2019 , 6/24/2019
WELL DEPTH: 18
SITE NAME/ADDRESS: 350 Franklin Street
LOGGED BY: Jacob Lyon
SLOT SIZE: 10
CITY/STATE: Olean, New York
SAMPLER TYPE: MACRO CORE
SAND PACK: #00
DRILLING CONTRACTOR: TREC Environmental
BOREHOLE DIAMETER: 2 1/4 "
DIVIDER SEAL: Bentonite
DRILLING METHOD: Geoprobe
WELL DIAM & MAT'L: 2" PVC
ANNULAR SEAL: NA



DEPTH (ft)	SAMPLE INTERVAL	BLOW COUNTS	RECOVERY (ft)	PID (ppm)	MATERIAL DESCRIPTION	U.S.C.S.	WELL DIAGRAM Stick-up	Notes
					Light brown to dark brown fine to medium SAND, some fine Gravel, trace Silt; crushed brick and wood fragments; dry.			RXMW-003 (0-2") and RXMW-003 (0-1) collected for VOCs, SVOCs, and TAL Metals.
			2	60		SP		
5				109	Gray SILT, some Clay, little fine Gravel, little coarse Sand; asphalt fragments; SPH odor; wet.			
			2.5			ML		
				265	Black fine SAND, some Gravel; petroleum-like odor; wet.	SP		
					Gray SILT, some fine Sand, petroleum-like odor; wet.			
				394		ML		
10			2		Fine to coarse SAND, some Gravel; crushed brick; dry.			
				354		SW		
					Light to dark gray fine to coarse SAND and Gravel; petroleum-like odor; suspected concrete; dry.			
			1.5	460		SW		RXMW-003 (12-16) collected at 0845 for VOCs, SVOCs, and TAL metals.
15								
					Same as above.			
				462				
			2.25			SW		
				272				
20								

Additional Notes:
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(Continued Next Page)

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WELL ID: RXMW-003

DEPTH (ft)	SAMPLE INTERVAL	BLOW COUNTS	RECOVERY (ft)	PID (ppm)	MATERIAL DESCRIPTION	U.S.C.S.	WELL DIAGRAM	Notes
	☒		2	397	Dark gray coarse SAND and Gravel, wet.	SP		
								Refusal at 22 ft.
25								
30								
35								
40								

Additional Notes:
Mention of odor, staining, and/or sheen is based on observations by person(s) logging the soil samples collected from the borehole and indicates odor, staining, and/or sheen related to the apparent presence of petroleum/chemical impacts. Where not noted, petroleum/chemical odor, staining, and/or sheen were not observed. In addition, where noted, soil has been characterized as fill based on observations. No mention of fill or other features in the soil descriptions does not indicate lack of the same.

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WELL ID: RXMW-004

CLIENT NAME: MJ Painting

DATE(S): 6/25/2019 , 6/25/2019

WELL DEPTH: 21

SITE NAME/ADDRESS: 350 Franklin Street

LOGGED BY: Jacob Lyon

SLOT SIZE: 10

CITY/STATE: Olean, New York

SAMPLER TYPE: MACRO CORE

SAND PACK: #00

DRILLING CONTRACTOR: TREC Environmental

BOREHOLE DIAMETER: 2 1/4 "

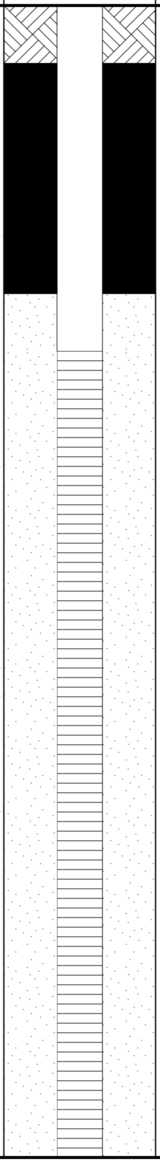
DIVIDER SEAL: Bentonite

DRILLING METHOD: Geoprobe

WELL DIAM & MAT'L: 2" PVC

ANNULAR SEAL: NA

DEPTH (ft)	SAMPLE INTERVAL	BLOW COUNTS	RECOVERY (ft)	PID (ppm)	MATERIAL DESCRIPTION	U.S.C.S.	WELL DIAGRAM Stick-up	Notes
					Dark brown SAND, trace Gravel; organics; top soil; dry.	SW		RXMW-004 (0-2") and RXMW-004 (0-1) collected for VOCs, SVOCs, and TAL Metals.
			1.25	6.6	Light brown fine(+) to coarse(-) SAND, trace Gravel, trace Silt; dry.	SW		
5			2.25	3 6.6	Brown fine to coarse SAND, some Gravel; brick; crushed concrete; dry.	SW		
10			2.5	4 6.2	Light brown to gray fine to coarse SAND, some Gravel; dry.	SW		
					Light brown to gray fine to coarse SAND, some Gravel; moist.	SW		
			2.6	7.1	Light brown fine(+) to coarse(-) SAND, trace Gravel; dry.	SW		
15				160	Gray fine to coarse SAND and Gravel; brick; petroleum-like odor; wet.	SW		Wet at 15 ft.
20			1.5	117	Same as above.	SW		



Additional Notes:
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(Continued Next Page)

DEPTH (ft)	SAMPLE INTERVAL	BLOW COUNTS	RECOVERY (ft)	PID (ppm)	MATERIAL DESCRIPTION	U.S.C.S.	WELL DIAGRAM	Notes
			2	320	Same as above.	SW		
				810	Gray SILT, some fine Gravel, trace fine to coarse Sand; petroleum-like odor and petroleum staining.	ML		
25			1	974	Gray SILT, some Gravel, some fine Sand; petroleum-like odor and petroleum staining.	ML		RXMW-004 (24-28) collected for VOCs, SVOCs, and TAL Metals. Boring terminated at 28 ft.
30								
35								
40								

Additional Notes:
Mention of odor, staining, and/or sheen is based on observations by person(s) logging the soil samples collected from the borehole and indicates odor, staining, and/or sheen related to the apparent presence of petroleum/chemical impacts. Where not noted, petroleum/chemical odor, staining, and/or sheen were not observed. In addition, where noted, soil has been characterized as fill based on observations. No mention of fill or other features in the soil descriptions does not indicate lack of the same.

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WELL ID: RXMW-005

PAGE 1 OF 1

CLIENT NAME: MJ Painting

DATE(S): 6/25/2019 , 6/26/2019

WELL DEPTH: 12

SITE NAME/ADDRESS: 350 Franklin Street

LOGGED BY: Jacob Lyon

SLOT SIZE: 10

CITY/STATE: Olean, New York

SAMPLER TYPE: MACRO CORE

SAND PACK: #00

DRILLING CONTRACTOR: TREC Environmental

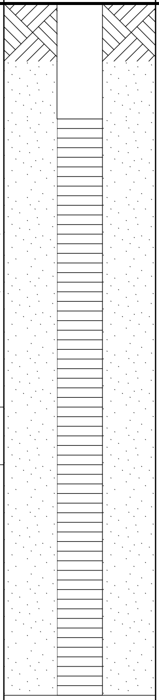
BOREHOLE DIAMETER: 2 1/4 "

DIVIDER SEAL: Bentonite

DRILLING METHOD: Geoprobe

WELL DIAM & MAT'L: 2" PVC

ANNULAR SEAL: NA

DEPTH (ft)	SAMPLE INTERVAL	BLOW COUNTS	RECOVERY (ft)	PID (ppm)	MATERIAL DESCRIPTION	U.S.C.S.	WELL DIAGRAM Stick-up	Notes
				7.5	Brown to gray fine to coarse SAND and Gravel, some Silt; dry.	SW		Top 5 ft. precleared utilizing hand auger. RXMW-005 (0-2") collected for Herb., Pest., VOCs, SVOCs, TAL Metals, Total Cyanide, 1,4-Dioxane, and PFAS. RXMW-005 (0-1) collected for Herb., Pest., PCBs, VOCs, SVOCs, TAL Metals, and Total Cyanides.
				0.4				
				6.1				
				15.4				
5				115	Brown fine(+) to coarse(-) SAND, little Gravel; moist.	SW		
			2		Light gray fine to coarse SAND and Gravel; moist.	SW		
				4115	Black fine to medium SAND; crushed brick and asphalt; light petroleum-like odor; wet.	SP		Wet at 8 ft.
10			0.75	15000	Black fine to coarse SAND, some fine Gravel, petroleum-like odor; wet.	SW		
				14200	Same as above.	SW		RXMW-005 (11-13) collected for Herb., Pest., VOCs, SVOCs, TAL Metals, Total Cyanide, 1,4-Dioxane, and PFAS.
			3.5	268	Black to light gray SILT, some fine Sand; petroleum-like odor; wet.	ML		
15				140	Light brown to gray SILT, some Clay; orange mottling; wet.	ML		Boring terminated at 16 ft.
20								

Additional Notes:
Mention of odor, staining, and/or sheen is based on observations by person(s) logging the soil samples collected from the borehole and indicates odor, staining, and/or sheen related to the apparent presence of petroleum/chemical impacts. Where not noted, petroleum/chemical odor, staining, and/or sheen were not observed. In addition, where noted, soil has been characterized as fill based on observations. No mention of fill or other features in the soil descriptions does not indicate lack of the same.

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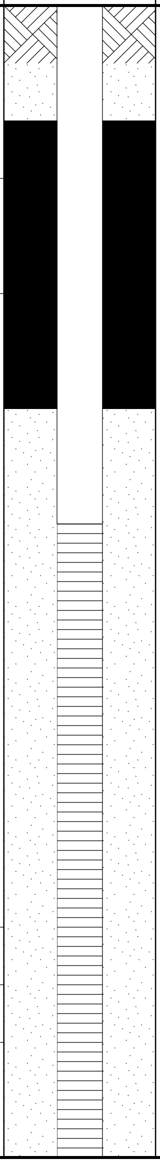
WELL ID: RXMW-006

CLIENT NAME: MJ Painting
DATE(S): 6/26/2019 , 6/26/2019
WELL DEPTH: 24
SITE NAME/ADDRESS: 350 Franklin Street
LOGGED BY: Jacob Lyon
SLOT SIZE: 10
CITY/STATE: Olean, New York
SAMPLER TYPE: MACRO CORE
SAND PACK: #00
DRILLING CONTRACTOR: TREC Environmental
BOREHOLE DIAMETER: 2 1/4 "
DIVIDER SEAL: Bentonite
DRILLING METHOD: Geoprobe
WELL DIAM & MAT'L: 2" PVC
ANNULAR SEAL: NA

DEPTH (ft)	SAMPLE INTERVAL	BLOW COUNTS	RECOVERY (ft)	PID (ppm)	MATERIAL DESCRIPTION	U.S.C.S.	WELL DIAGRAM Stick-up	Notes
			2	30	Dark brown fine SAND, some Silt; organics; dry.	SP-SM		RXMW-006 (0-2") and RXMW-006 (0-1) collected for VOCs, SVOCs, and TAL Metals.
					Light brown SILT, trace fine Sand; moist.	ML		
5			2	36 39	Brown fine to coarse SAND, some Gravel, coarsening downward, moist, wet at 15.5 ft.	SW		
10			1.75	36 44	Same as above.	SW		
15			1	47	Same as above.	SW		Water at 15.5
			2	993	Gray fine SAND, trace fine Gravel; petroleum-like odor, wet.	SP		
					Gray fine to coarse GRAVEL, petroleum-like odor; wet.	GW		
20				15000	Gray fine SAND, petroleum-like odor; petroleum staining; wet.	SP		RXMW-006 (18-20) collected for VOCs, SVOCs, and TAL Metals.

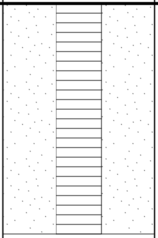


Additional Notes:
Mention of odor, staining, and/or sheen is based on observations by person(s) logging the soil samples collected from the borehole and indicates odor, staining, and/or sheen related to the apparent presence of petroleum/chemical impacts. Where not noted, petroleum/chemical odor, staining, and/or sheen were not observed. In addition, where noted, soil has been characterized as fill based on observations. No mention of fill or other features in the soil descriptions does not indicate lack of the same.

Photoionization detector (PID) readings are affected by multiple factors, including sample consistency, moisture, relative humidity, and dust. Therefore, PID readings are just one of the factors considered when making a determination of the absence or presence of SPH in a given sample. Additionally, the accuracy of PID readings decreases as concentrations increase, particularly over the 2,000 ppm threshold, due to the non-linearity of the measurement.

(Continued Next Page)

WELL ID: RXMW-006

DEPTH (ft)	SAMPLE INTERVAL	BLOW COUNTS	RECOVERY (ft)	PID (ppm)	MATERIAL DESCRIPTION	U.S.C.S.	WELL DIAGRAM	Notes
	☒		1	13020	Gray fine SAND, petroleum-like odor; wet.	SP		
25	☒			15000	Same as above.	SP		
				406	Tan Clay; wet.	CH		
								Boring terminated at 28 ft.
30								
35								
40								

Additional Notes:
Mention of odor, staining, and/or sheen is based on observations by person(s) logging the soil samples collected from the borehole and indicates odor, staining, and/or sheen related to the apparent presence of petroleum/chemical impacts. Where not noted, petroleum/chemical odor, staining, and/or sheen were not observed. In addition, where noted, soil has been characterized as fill based on observations. No mention of fill or other features in the soil descriptions does not indicate lack of the same.

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WELL ID: RXMW-007

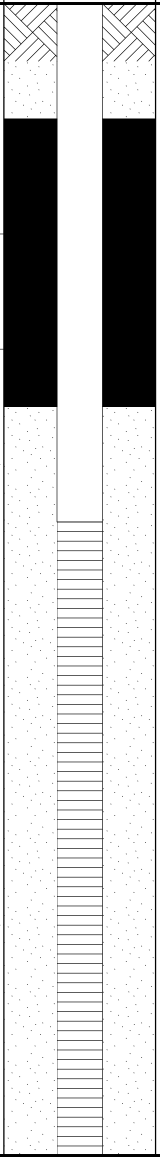
CLIENT NAME: MJ Painting
DATE(S): 6/25/2019 , 6/25/2019
WELL DEPTH: 24

SITE NAME/ADDRESS: 350 Franklin Street
LOGGED BY: Jacob Lyon
SLOT SIZE: 10

CITY/STATE: Olean, New York
SAMPLER TYPE: MACRO CORE
SAND PACK: #00

DRILLING CONTRACTOR: TREC Environmental
BOREHOLE DIAMETER: 2 1/4 "
DIVIDER SEAL: Bentonite

DRILLING METHOD: Geoprobe
WELL DIAM & MAT'L: 2" PVC
ANNULAR SEAL: NA

DEPTH (ft)	SAMPLE INTERVAL	BLOW COUNTS	RECOVERY (ft)	PID (ppm)	MATERIAL DESCRIPTION	U.S.C.S.	WELL DIAGRAM Stick-up	Notes
			1.25	16	Light brown SILT, some fine Sand, trace fine Gravel; moist.	ML		RXMW-007 (0-2") and RXMW-007 (0-1) collected for VOCs, SVOCs, and TAL Metals.
5				12	Light brown fine SAND, trace Gravel; moist.	SP		
			1.75	4	Light brown fine to coarse SAND, some Gravel; moist.	SW		
10			2.25	11	Light brown fine to coarse SAND, some Gravel; some crushed stone; moist.	SW		
15			2.75	11 103	Same as above.	SW		
20			1.25	400	Gray fine to coarse SAND and Gravel; petroleum-like odor; wet.	SW		RXMW-007 (16-20) collected for VOCs, SVOCs, and TAL Metals.

Additional Notes:
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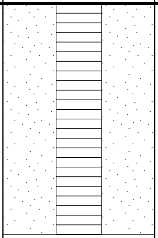
(Continued Next Page)

WELL ID: RXMW-007

DEPTH (ft)	SAMPLE INTERVAL	BLOW COUNTS	RECOVERY (ft)	PID (ppm)	MATERIAL DESCRIPTION	U.S.C.S.	WELL DIAGRAM	Notes
	☒		1.75	130 396	Same as above.	SW		
25	☒		0.75	88	Brown fine to coarse SAND and Gravel; petroleum-like odor; wet.	SW		Boring terminated at 28 ft.
30								
35								
40								

Additional Notes:
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STORMWATER POLLUTION PREVENTION PLAN

MJ Painting Site
350 Franklin Street
Olean, New York

APPENDIX D

Test Pit Logs

ROUX
12 Gill Street
Suite 4700
Woburn MA 01801
Telephone: (781)-569-4000
Fax: (781)-569-4001

TEST PIT ID TP-A1

PAGE 1 OF 2

CLIENT MJ Painting Contractor Corp.
PROJECT DATE(S) 9/3/2019 - 9/3/2019
PIT DIAMETER NA
PROJECT NUMBER 2317.0002M000
SUBCONTRACTOR TREC
TOTAL DEPTH OF PIT 21
PROJECT NAME MJ Painting 350
EXCAVATION METHOD Excavator
PROJECT LOCATION Olean, New York
SAMPLER TYPE Excavator Bucket

DEPTH (ft)	Sample Interval	PID (ppm)	U.S.C.S.	MATERIAL DESCRIPTION	Notes
0.0				Brown fine to coarse SAND, and fine to coarse Gravel; dry.	
		0.8	SW		
		0.6		Brown-gray medium to coarse SAND, and fine to coarse GRAVEL; moist.	Valve box encountered on NW edge of pit.
2.5					
		3.7	SP		
5.0					
		4.8		Brown-gray fine to coarse GRAVEL, and fine to coarse SAND; moist.	
			GW		
7.5					
		1.1		Brown-gray medium to coarse SAND, and fine to coarse GRAVEL; moist.	Pipe running NW-SE along south side of pit. Top of pipe at 8.2 ft bgs.
10.0					
			SP		
		3.1			
12.5					
		88.5		Brown-gray medium to coarse SAND, and fine to coarse Gravel; wet.	
			SP		
15.0					

Additional Notes:

Mention of odor, staining, and/or sheen is based on observations by person(s) logging the soil samples collected from the test pit and indicates odor, staining, and/or sheen related to the apparent presence of petroleum/chemical impacts. Where not noted, petroleum/chemical odor, staining, and/or sheen were not observed. In addition, where noted, soil has been characterized as fill based on observations. No mention of fill or other features in the soil descriptions does not indicate lack of the same.

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(Continued Next Page)

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Fax: (781)-569-4001

TEST PIT ID TP-A1

PAGE 2 OF 2

CLIENT MJ Painting Contractor Corp.
PROJECT DATE(S) 9/3/2019 - 9/3/2019
PIT DIAMETER NA
PROJECT NUMBER 2317.0002M000
SUBCONTRACTOR TREC
TOTAL DEPTH OF PIT 21
PROJECT NAME MJ Painting 350
EXCAVATION METHOD Excavator
PROJECT LOCATION Olean, New York
SAMPLER TYPE Excavator Bucket

DEPTH (ft)	Sample Interval	PID (ppm)	U.S.C.S.	MATERIAL DESCRIPTION	Notes
15.0			SP	Brown-gray medium to coarse SAND, and fine to coarse Gravel; wet. *(continued)*	
		629.9			
			SP	Gray medium to coarse SAND, and fine to coarse GRAVEL, little Cobble; petroleum odor; wet.	
17.5					
		694.5			
			GW	Gray fine to coarse GRAVEL, some medium to coarse Sand; petroleum odor, sheen; wet.	
20.0					Water pooling at 20 ft bgs.

Bottom of test pit at 21.0 feet.

Additional Notes:

Mention of odor, staining, and/or sheen is based on observations by person(s) logging the soil samples collected from the test pit and indicates odor, staining, and/or sheen related to the apparent presence of petroleum/chemical impacts. Where not noted, petroleum/chemical odor, staining, and/or sheen were not observed. In addition, where noted, soil has been characterized as fill based on observations. No mention of fill or other features in the soil descriptions does not indicate lack of the same.

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GENERAL BH / TP / WELL - GINT STD US.GDT - 1/9/20 16:44 - T:\GINTPROJECTS\MJ PAINTING\2317.0002M000\2019.09.03-06 TP LOGS.GPJ

ROUX
12 Gill Street
Suite 4700
Woburn MA 01801
Telephone: (781)-569-4000
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TEST PIT ID TP-A2

PAGE 1 OF 2

CLIENT MJ Painting Contractor Corp.
PROJECT DATE(S) 9/3/2019 - 9/3/2019
PIT DIAMETER NA
PROJECT NUMBER 2317.0002M000
SUBCONTRACTOR TREC
TOTAL DEPTH OF PIT 24
PROJECT NAME MJ Painting 350
EXCAVATION METHOD Excavator
PROJECT LOCATION Olean, New York
SAMPLER TYPE Excavator Bucket

DEPTH (ft)	Sample Interval	PID (ppm)	U.S.C.S.	MATERIAL DESCRIPTION	Notes
0.0				Brown fine to medium SAND, trace fine Gravel; dry.	
		1.3	SP		
		0.8		Brown fine to coarse SAND, trace fine to coarse Gravel; dry.	
2.5			SW		
		1.5		Brown gray medium to coarse SAND, trace fine to coarse Gravel; dry.	
5.0					
		2.2			
7.5			SP		
		1.3			Moist soil between 8 and 11 ft bgs.
10.0					
		3.2		Brown gray medium to coarse SAND, some fine to coarse Gravel; moist.	
12.5			SP		
		79.2		Gray coarse SAND, some fine to coarse Gravel; moist.	
			SP		
15.0					

Additional Notes:

Mention of odor, staining, and/or sheen is based on observations by person(s) logging the soil samples collected from the test pit and indicates odor, staining, and/or sheen related to the apparent presence of petroleum/chemical impacts. Where not noted, petroleum/chemical odor, staining, and/or sheen were not observed. In addition, where noted, soil has been characterized as fill based on observations. No mention of fill or other features in the soil descriptions does not indicate lack of the same.

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(Continued Next Page)

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TEST PIT ID TP-A2

PAGE 2 OF 2

CLIENT MJ Painting Contractor Corp.
PROJECT DATE(S) 9/3/2019 - 9/3/2019
PIT DIAMETER NA
PROJECT NUMBER 2317.0002M000
SUBCONTRACTOR TREC
TOTAL DEPTH OF PIT 24
PROJECT NAME MJ Painting 350
EXCAVATION METHOD Excavator
PROJECT LOCATION Olean, New York
SAMPLER TYPE Excavator Bucket

DEPTH (ft)	Sample Interval	PID (ppm)	U.S.C.S.	MATERIAL DESCRIPTION	Notes
15.0			SP	Gray coarse SAND, some fine to coarse Gravel; moist. *(continued)*	
17.5		894.1	SP	Gray medium to coarse SAND; sheen, petroleum odor; wet.	
20.0		1309	SW	Gray fine to coarse SAND, trace fine to coarse Gravel; petroleum odor; wet.	
22.5		1210	SP	Gray medium to coarse SAND, some fine to coarse Gravel; petroleum odor; wet.	Water pooling at approximately 23 ft bgs.

Bottom of test pit at 24.0 feet.

Additional Notes:

Mention of odor, staining, and/or sheen is based on observations by person(s) logging the soil samples collected from the test pit and indicates odor, staining, and/or sheen related to the apparent presence of petroleum/chemical impacts. Where not noted, petroleum/chemical odor, staining, and/or sheen were not observed. In addition, where noted, soil has been characterized as fill based on observations. No mention of fill or other features in the soil descriptions does not indicate lack of the same.

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TEST PIT ID TP-A3

PAGE 1 OF 2

CLIENT MJ Painting Contractor Corp.
PROJECT DATE(S) 9/3/2019 - 9/3/2019
PIT DIAMETER NA
PROJECT NUMBER 2317.0002M000
SUBCONTRACTOR TREC
TOTAL DEPTH OF PIT 24
PROJECT NAME MJ Painting 350
EXCAVATION METHOD Excavator
PROJECT LOCATION Olean, New York
SAMPLER TYPE Excavator Bucket

DEPTH (ft)	Sample Interval	PID (ppm)	U.S.C.S.	MATERIAL DESCRIPTION	Notes
0.0		1	SP	Brown fine to medium SAND, trace Silt; dry.	Suspected former above ground tank structure exposed (concrete and brick curved structure on SE wall of test pit.
2.5		2	CH	Gray CLAY, some Silt; moist.	
5.0		3.2	SP-SM	Gray fine to medium SAND, and Silt, trace fine Gravel; moist.	
7.5		433	SP	Gray medium to coarse SAND, trace fine Gravel; slight petroleum odor; moist.	
10.0 12.5		1.3	SP	Gray medium to coarse SAND, some Gravel, trace Silt; moist.	
15.0		629.2	SW	Gray fine to coarse SAND, some fine to coarse Gravel; slight petroleum odor; moist.	

Additional Notes:

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(Continued Next Page)

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TEST PIT ID TP-A3

PAGE 2 OF 2

CLIENT MJ Painting Contractor Corp.

PROJECT DATE(S) 9/3/2019 - 9/3/2019

PIT DIAMETER NA

PROJECT NUMBER 2317.0002M000

SUBCONTRACTOR TREC

TOTAL DEPTH OF PIT 24

PROJECT NAME MJ Painting 350

EXCAVATION METHOD Excavator

PROJECT LOCATION Olean, New York

SAMPLER TYPE Excavator Bucket

DEPTH (ft)	Sample Interval	PID (ppm)	U.S.C.S.	MATERIAL DESCRIPTION	Notes
15.0			SW	Gray fine to coarse SAND, some fine to coarse Gravel; slight petroleum odor; moist. *(continued)*	
17.5		958.5	GW	Gray fine to coarse Gravel, trace medium to coarse Sand; SPH present; brown/black staining; wet.	
20.0		1025	SP	Gray medium to coarse SAND, some fine to coarse Gravel; SPH present, brown/black staining, petroleum odor; wet.	
22.5					

Bottom of test pit at 24.0 feet.

Additional Notes:

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TEST PIT ID TP-B1

PAGE 1 OF 2

CLIENT MJ Painting Contractor Corp.
PROJECT DATE(S) 9/4/2019 - 9/4/2019
PIT DIAMETER NA
PROJECT NUMBER 2317.0002M000
SUBCONTRACTOR TREC
TOTAL DEPTH OF PIT 24
PROJECT NAME MJ Painting 350
EXCAVATION METHOD Excavator
PROJECT LOCATION Olean, New York
SAMPLER TYPE Excavator Bucket

DEPTH (ft)	Sample Interval	PID (ppm)	U.S.C.S.	MATERIAL DESCRIPTION	Notes
0.0					
			SW-SM	Dark brown fine to coarse SAND, some Silt; brick fragments (fill); moist.	
		14.2			
		14.4			
2.5					
		62	SP-SM	Dark brown fine to medium SAND, some Silt; slight mothball odor; brick and timber fragments (fill); moist.	
5.0					
		17.3	GW-GM	Light gray fine to medium rounded GRAVEL, some Silt; moist.	
7.5					
		5.4	SW	Grayish brown fine to coarse SAND, some rounded fine to medium Gravel, little Silt; moist.	
10.0				Slight petroleum odor.	
		606.5			
12.5					
		1173	SW	Brownish gray fine to coarse SAND, little fine to coarse Gravel; petroleum odor; wet.	
15.0					

Additional Notes:

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(Continued Next Page)

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TEST PIT ID TP-B1

PAGE 2 OF 2

CLIENT MJ Painting Contractor Corp.
PROJECT NUMBER 2317.0002M000
PROJECT NAME MJ Painting 350
PROJECT LOCATION Olean, New York
PROJECT DATE(S) 9/4/2019 - 9/4/2019
SUBCONTRACTOR TREC
EXCAVATION METHOD Excavator
SAMPLER TYPE Excavator Bucket
PIT DIAMETER NA
TOTAL DEPTH OF PIT 24

DEPTH (ft)	Sample Interval	PID (ppm)	U.S.C.S.	MATERIAL DESCRIPTION	Notes
15.0			SW	Brownish gray fine to coarse SAND, little fine to coarse Gravel; petroleum odor; wet. *(continued)*	
17.5					
		1203	SP	Dark gray fine to medium SAND, some fine to medium Gravel, little Silt; petroleum odor; sheen present; wet.	
20.0					
22.5		825.8			

Bottom of test pit at 24.0 feet.

Additional Notes:

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TEST PIT ID TP-B2

PAGE 1 OF 2

CLIENT MJ Painting Contractor Corp.
PROJECT NUMBER 2317.0002M000
PROJECT NAME MJ Painting 350
PROJECT LOCATION Olean, New York

PROJECT DATE(S) 9/4/2019 - 9/4/2019
SUBCONTRACTOR TREC
EXCAVATION METHOD Excavator
SAMPLER TYPE Excavator Bucket

PIT DIAMETER NA
TOTAL DEPTH OF PIT 25

DEPTH (ft)	Sample Interval	PID (ppm)	U.S.C.S.	MATERIAL DESCRIPTION	Notes
0.0				Light brown fine to medium SAND, some Silt, some fine to medium Gravel; moist.	
		1.1			
2.5					
		1.1			
5.0		0.8	SP-SM		
7.5					
10.0				Brown fine to coarse SAND, some fine to coarse Gravel; slight petroleum odor; moist.	
		3.4			
12.5			SW		
		5.2			
15.0					

Additional Notes:

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(Continued Next Page)

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TEST PIT ID TP-B2

PAGE 2 OF 2

CLIENT MJ Painting Contractor Corp.

PROJECT NUMBER 2317.0002M000

PROJECT NAME MJ Painting 350

PROJECT LOCATION Olean, New York

PROJECT DATE(S) 9/4/2019 - 9/4/2019

SUBCONTRACTOR TREC

EXCAVATION METHOD Excavator

SAMPLER TYPE Excavator Bucket

PIT DIAMETER NA

TOTAL DEPTH OF PIT 25

DEPTH (ft)	Sample Interval	PID (ppm)	U.S.C.S.	MATERIAL DESCRIPTION	Notes
15.0			SP	Gray medium SAND; slight petroleum odor; wet towards the bottom.	
		692			
17.5					
20.0					
22.5			GW	Visually observed Gravel layer	
		810.4	ML	Gray-tan SILT, and Clay; moist.	
25.0					

Bottom of test pit at 25.0 feet.

Additional Notes:

Mention of odor, staining, and/or sheen is based on observations by person(s) logging the soil samples collected from the test pit and indicates odor, staining, and/or sheen related to the apparent presence of petroleum/chemical impacts. Where not noted, petroleum/chemical odor, staining, and/or sheen were not observed. In addition, where noted, soil has been characterized as fill based on observations. No mention of fill or other features in the soil descriptions does not indicate lack of the same.

Photoionization detector (PID) readings are affected by multiple factors, including sample consistency, moisture, relative humidity, and dust. Therefore, PID readings are just one of the factors considered when making a determination of the absence or presence of SPH in a given sample. Additionally, the accuracy of PID readings decreases as concentrations increase, particularly over the 2,000 ppm threshold, due to the non-linearity of the measurement.

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TEST PIT ID TP-B3

PAGE 1 OF 2

CLIENT MJ Painting Contractor Corp.
PROJECT DATE(S) 9/4/2019 - 9/4/2019
PIT DIAMETER NA
PROJECT NUMBER 2317.0002M000
SUBCONTRACTOR TREC
TOTAL DEPTH OF PIT 24
PROJECT NAME MJ Painting 350
EXCAVATION METHOD Excavator
PROJECT LOCATION Olean, New York
SAMPLER TYPE Excavator Bucket

DEPTH (ft)	Sample Interval	PID (ppm)	U.S.C.S.	MATERIAL DESCRIPTION	Notes
0.0		13.5	SW-SM	Brown fine to coarse SAND, some Silt, some fine to coarse poorly sorted Gravel; moist.	
2.5		69	SW	Gray fine to coarse SAND, some fine to coarse rounded Gravel; petroleum odor; moist	
5.0					
7.5		278			
10.0		25.3			
12.5		756.2			
15.0					

Additional Notes:

Mention of odor, staining, and/or sheen is based on observations by person(s) logging the soil samples collected from the test pit and indicates odor, staining, and/or sheen related to the apparent presence of petroleum/chemical impacts. Where not noted, petroleum/chemical odor, staining, and/or sheen were not observed. In addition, where noted, soil has been characterized as fill based on observations. No mention of fill or other features in the soil descriptions does not indicate lack of the same.

Photoionization detector (PID) readings are affected by multiple factors, including sample consistency, moisture, relative humidity, and dust. Therefore, PID readings are just one of the factors considered when making a determination of the absence or presence of SPH in a given sample. Additionally, the accuracy of PID readings decreases as concentrations increase, particularly over the 2,000 ppm threshold, due to the non-linearity of the measurement.

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TEST PIT ID TP-B3

CLIENT MJ Painting Contractor Corp.

PROJECT DATE(S) 9/4/2019 - 9/4/2019

PIT DIAMETER NA

PROJECT NUMBER 2317.0002M000

SUBCONTRACTOR TREC

TOTAL DEPTH OF PIT 24

PROJECT NAME MJ Painting 350

EXCAVATION METHOD Excavator

PROJECT LOCATION Olean, New York

SAMPLER TYPE Excavator Bucket

DEPTH (ft)	Sample Interval	PID (ppm)	U.S.C.S.	MATERIAL DESCRIPTION	Notes
15.0			SW	Gray fine to coarse SAND, some fine to coarse rounded Gravel; petroleum odor; moist *(continued)*	
				Gray fine to coarse SAND thinning towards the bottom, some fine to coarse Gravel; wet.	
		392.7			
17.5			SW		
20.0				Light gray fine to coarse SAND, some fine to coarse Gravel; light petroleum odor; wet.	
			SW		
22.5					
		381.4			

Bottom of test pit at 24.0 feet.

Additional Notes:

Mention of odor, staining, and/or sheen is based on observations by person(s) logging the soil samples collected from the test pit and indicates odor, staining, and/or sheen related to the apparent presence of petroleum/chemical impacts. Where not noted, petroleum/chemical odor, staining, and/or sheen were not observed. In addition, where noted, soil has been characterized as fill based on observations. No mention of fill or other features in the soil descriptions does not indicate lack of the same.

Photoionization detector (PID) readings are affected by multiple factors, including sample consistency, moisture, relative humidity, and dust. Therefore, PID readings are just one of the factors considered when making a determination of the absence or presence of SPH in a given sample. Additionally, the accuracy of PID readings decreases as concentrations increase, particularly over the 2,000 ppm threshold, due to the non-linearity of the measurement.

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TEST PIT ID TP-C1

CLIENT MJ Painting Contractor Corp.
PROJECT NUMBER 2317.0002M000
PROJECT NAME MJ Painting 350
PROJECT LOCATION Olean, New York

PROJECT DATE(S) 9/4/2019 - 9/4/2019
SUBCONTRACTOR TREC
EXCAVATION METHOD Excavator
SAMPLER TYPE Excavator Bucket

PIT DIAMETER NA
TOTAL DEPTH OF PIT 24

DEPTH (ft)	Sample Interval	PID (ppm)	U.S.C.S.	MATERIAL DESCRIPTION	Notes
0.0			SW	Brown fine to coarse SAND, some fine to coarse Gravel, trace Silt; dry, moist between 2ft and 4ft.	
		6.0			
2.5					
		10.8			
			SP	Brown gray medium to coarse SAND, and fine to coarse Gravel; moist.	
5.0					
		10.5			
7.5					
		8.0			
10.0					
		8.1			
12.5					
			GP	Brown gray GRAVEL, and medium to coarse SAND; moist.	
		11.7			
15.0					

Additional Notes:

Mention of odor, staining, and/or sheen is based on observations by person(s) logging the soil samples collected from the test pit and indicates odor, staining, and/or sheen related to the apparent presence of petroleum/chemical impacts. Where not noted, petroleum/chemical odor, staining, and/or sheen were not observed. In addition, where noted, soil has been characterized as fill based on observations. No mention of fill or other features in the soil descriptions does not indicate lack of the same.

Photoionization detector (PID) readings are affected by multiple factors, including sample consistency, moisture, relative humidity, and dust. Therefore, PID readings are just one of the factors considered when making a determination of the absence or presence of SPH in a given sample. Additionally, the accuracy of PID readings decreases as concentrations increase, particularly over the 2,000 ppm threshold, due to the non-linearity of the measurement.

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TEST PIT ID TP-C1

CLIENT MJ Painting Contractor Corp.
PROJECT DATE(S) 9/4/2019 - 9/4/2019
PIT DIAMETER NA
PROJECT NUMBER 2317.0002M000
SUBCONTRACTOR TREC
TOTAL DEPTH OF PIT 24
PROJECT NAME MJ Painting 350
EXCAVATION METHOD Excavator
PROJECT LOCATION Olean, New York
SAMPLER TYPE Excavator Bucket

DEPTH (ft)	Sample Interval	PID (ppm)	U.S.C.S.	MATERIAL DESCRIPTION	Notes
15.0			GP	Brown gray GRAVEL, and medium to coarse SAND; moist. *(continued)*	
				Gray medium to coarse SAND, some fine to coarse Gravel; petroleum odor; wet.	
17.5		925.1	SP		
				Gray medium(+) to coarse(-) SAND, trace fine Gravel; petroleum odor; wet.	
		967.3			
20.0					
			SP		
22.5					

Bottom of test pit at 24.0 feet.

Additional Notes:

Mention of odor, staining, and/or sheen is based on observations by person(s) logging the soil samples collected from the test pit and indicates odor, staining, and/or sheen related to the apparent presence of petroleum/chemical impacts. Where not noted, petroleum/chemical odor, staining, and/or sheen were not observed. In addition, where noted, soil has been characterized as fill based on observations. No mention of fill or other features in the soil descriptions does not indicate lack of the same.

Photoionization detector (PID) readings are affected by multiple factors, including sample consistency, moisture, relative humidity, and dust. Therefore, PID readings are just one of the factors considered when making a determination of the absence or presence of SPH in a given sample. Additionally, the accuracy of PID readings decreases as concentrations increase, particularly over the 2,000 ppm threshold, due to the non-linearity of the measurement.

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TEST PIT ID TP-C2

CLIENT MJ Painting Contractor Corp.
PROJECT DATE(S) 9/4/2019 - 9/4/2019
PIT DIAMETER NA
PROJECT NUMBER 2317.0002M000
SUBCONTRACTOR TREC
TOTAL DEPTH OF PIT 25
PROJECT NAME MJ Painting 350
EXCAVATION METHOD Excavator
PROJECT LOCATION Olean, New York
SAMPLER TYPE Excavator Bucket

DEPTH (ft)	Sample Interval	PID (ppm)	U.S.C.S.	MATERIAL DESCRIPTION	Notes
0.0		18	SW	Dark brown fine to coarse SAND, some fine to coarse Gravel, trace Silt; dry.	
2.5		4.4	SW-SM	Brown fine to coarse SAND, some Silt, some fine to coarse Gravel, moist.	
5.0 7.5		10.2	SP	Brown medium to coarse SAND, and fine to coarse GRAVEL; moist.	
10.0 12.5		47.2	SP	Gray medium to coarse SAND, and fine to coarse GRAVEL; moist.	
15.0		753.8	SP	Dark gray medium to coarse SAND, and fine to coarse GRAVEL; petroleum odor; moist, wet towards the bottom.	

Additional Notes:

Mention of odor, staining, and/or sheen is based on observations by person(s) logging the soil samples collected from the test pit and indicates odor, staining, and/or sheen related to the apparent presence of petroleum/chemical impacts. Where not noted, petroleum/chemical odor, staining, and/or sheen were not observed. In addition, where noted, soil has been characterized as fill based on observations. No mention of fill or other features in the soil descriptions does not indicate lack of the same.

Photoionization detector (PID) readings are affected by multiple factors, including sample consistency, moisture, relative humidity, and dust. Therefore, PID readings are just one of the factors considered when making a determination of the absence or presence of SPH in a given sample. Additionally, the accuracy of PID readings decreases as concentrations increase, particularly over the 2,000 ppm threshold, due to the non-linearity of the measurement.

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TEST PIT ID TP-C2

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CLIENT MJ Painting Contractor Corp.

PROJECT DATE(S) 9/4/2019 - 9/4/2019

PIT DIAMETER NA

PROJECT NUMBER 2317.0002M000

SUBCONTRACTOR TREC

TOTAL DEPTH OF PIT 25

PROJECT NAME MJ Painting 350

EXCAVATION METHOD Excavator

PROJECT LOCATION Olean, New York

SAMPLER TYPE Excavator Bucket

DEPTH (ft)	Sample Interval	PID (ppm)	U.S.C.S.	MATERIAL DESCRIPTION	Notes
15.0				Dark gray medium to coarse SAND, and fine to coarse GRAVEL; petroleum odor; moist, wet towards the bottom. *(continued)*	
17.5					
		826.3			
			SP		
20.0					
		888			
22.5					
				Gray medium to coarse SAND, some fine to coarse GRAVEL; petroleum odor; wet.	Water pooling at 23 ft bgs.
		1271	SP		
25.0					

Bottom of test pit at 25.0 feet.

Additional Notes:

Mention of odor, staining, and/or sheen is based on observations by person(s) logging the soil samples collected from the test pit and indicates odor, staining, and/or sheen related to the apparent presence of petroleum/chemical impacts. Where not noted, petroleum/chemical odor, staining, and/or sheen were not observed. In addition, where noted, soil has been characterized as fill based on observations. No mention of fill or other features in the soil descriptions does not indicate lack of the same.

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TEST PIT ID TP-C3

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CLIENT MJ Painting Contractor Corp.	**PROJECT DATE(S)** 9/4/2019 - 9/4/2019	**PIT DIAMETER** NA
PROJECT NUMBER 2317.0002M000	**SUBCONTRACTOR** TREC	**TOTAL DEPTH OF PIT** 23
PROJECT NAME MJ Painting 350	**EXCAVATION METHOD** Excavator	
PROJECT LOCATION Olean, New York	**SAMPLER TYPE** Excavator Bucket	

DEPTH (ft)	Sample Interval	PID (ppm)	U.S.C.S.	MATERIAL DESCRIPTION	Notes
0.0		15.4	SW	Dark fine to coarse SAND, trace fine GRAVEL; dry.	
			CH	Light brown CLAY; dry.	
2.5		81	SW-SM	Orange brown fine to coarse SAND, and fine to coarse Gravel, some silt; dry.	
			CH	Light brown CLAY; dry.	
5.0 7.5		8.4	SW-SM	Brown fine to coarse SAND, and fine to coarse Gravel, some Silt; moist.	
10.0 12.5		61.9	SP	Brown-gray medium to coarse SAND, some coarse Gravel; moist.	
15.0			SW	Gray fine to coarse SAND, some fine to coarse Gravel; petroleum odor; moist.	

Additional Notes:

Mention of odor, staining, and/or sheen is based on observations by person(s) logging the soil samples collected from the test pit and indicates odor, staining, and/or sheen related to the apparent presence of petroleum/chemical impacts. Where not noted, petroleum/chemical odor, staining, and/or sheen were not observed. In addition, where noted, soil has been characterized as fill based on observations. No mention of fill or other features in the soil descriptions does not indicate lack of the same.

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TEST PIT ID TP-C3

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CLIENT MJ Painting Contractor Corp.
PROJECT DATE(S) 9/4/2019 - 9/4/2019
PIT DIAMETER NA
PROJECT NUMBER 2317.0002M000
SUBCONTRACTOR TREC
TOTAL DEPTH OF PIT 23
PROJECT NAME MJ Painting 350
EXCAVATION METHOD Excavator
PROJECT LOCATION Olean, New York
SAMPLER TYPE Excavator Bucket

DEPTH (ft)	Sample Interval	PID (ppm)	U.S.C.S.	MATERIAL DESCRIPTION	Notes
15.0		849	SW	Gray fine to coarse SAND, some fine to coarse Gravel; petroleum odor; moist. *(continued)*	
17.5					
20.0			SP	Black medium to coarse SAND, some fine to coarse Gravel; petroleum odor; wet.	
		1368			Water pooled at 22 ft bgs.
22.5					

Bottom of test pit at 23.0 feet.

Additional Notes:

Mention of odor, staining, and/or sheen is based on observations by person(s) logging the soil samples collected from the test pit and indicates odor, staining, and/or sheen related to the apparent presence of petroleum/chemical impacts. Where not noted, petroleum/chemical odor, staining, and/or sheen were not observed. In addition, where noted, soil has been characterized as fill based on observations. No mention of fill or other features in the soil descriptions does not indicate lack of the same.

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TEST PIT ID TP-D1

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CLIENT MJ Painting Contractor Corp.
PROJECT DATE(S) 9/4/2019 - 9/4/2019
PIT DIAMETER NA
PROJECT NUMBER 2317.0002M000
SUBCONTRACTOR TREC
TOTAL DEPTH OF PIT 23
PROJECT NAME MJ Painting 350
EXCAVATION METHOD Excavator
PROJECT LOCATION Olean, New York
SAMPLER TYPE Excavator Bucket

DEPTH (ft)	Sample Interval	PID (ppm)	U.S.C.S.	MATERIAL DESCRIPTION	Notes
0.0			SP	Gray fine to coarse GRAVEL, some medium to coarse Sand; dry.	
2.5		2.9		Gray weathered rock (Slate), Cobble size clasts; petroleum odor; dry.	
5.0		113.5	SP	Dark brown medium SAND, trace fine Gravel; petroleum odor; dry.	
7.5		1362	ML	Dark gray SILT, some fine to coarse Sand, some fine Gravel; petroleum odor; moist.	
10.0		637	ML	Dark brown SILT, some fine to coarse Sand, trace fine Gravel; petroleum odor; moist.	Walls of test pit wet at 10.2 ft bgs.
12.5 15.0		947.9	SP	Dark gray medium to coarse SAND, and fine to coarse Gravel; petroleum odor, SPH present; wet.	

Additional Notes:

Mention of odor, staining, and/or sheen is based on observations by person(s) logging the soil samples collected from the test pit and indicates odor, staining, and/or sheen related to the apparent presence of petroleum/chemical impacts. Where not noted, petroleum/chemical odor, staining, and/or sheen were not observed. In addition, where noted, soil has been characterized as fill based on observations. No mention of fill or other features in the soil descriptions does not indicate lack of the same.

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TEST PIT ID TP-D1

CLIENT MJ Painting Contractor Corp.
PROJECT DATE(S) 9/4/2019 - 9/4/2019
PIT DIAMETER NA
PROJECT NUMBER 2317.0002M000
SUBCONTRACTOR TREC
TOTAL DEPTH OF PIT 23
PROJECT NAME MJ Painting 350
EXCAVATION METHOD Excavator
PROJECT LOCATION Olean, New York
SAMPLER TYPE Excavator Bucket

DEPTH (ft)	Sample Interval	PID (ppm)	U.S.C.S.	MATERIAL DESCRIPTION	Notes
15.0			SP	Dark gray medium to coarse SAND, and fine to coarse Gravel; petroleum odor, SPH present; wet. *(continued)*	
				Gray medium to coarse SAND, and fine to coarse Gravel; seams of red Silt; petroleum odor, SPH present; wet.	
17.5		1133	SP		
20.0					
				Gray medium to coarse SAND, and fine to coarse Gravel; SPH present; petroleum odor; wet.	
22.5		929	SP		

Bottom of test pit at 23.0 feet.

Additional Notes:

Mention of odor, staining, and/or sheen is based on observations by person(s) logging the soil samples collected from the test pit and indicates odor, staining, and/or sheen related to the apparent presence of petroleum/chemical impacts. Where not noted, petroleum/chemical odor, staining, and/or sheen were not observed. In addition, where noted, soil has been characterized as fill based on observations. No mention of fill or other features in the soil descriptions does not indicate lack of the same.

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TEST PIT ID TP-D2

CLIENT MJ Painting Contractor Corp.
PROJECT DATE(S) 9/4/2019 - 9/4/2019
PIT DIAMETER NA
PROJECT NUMBER 2317.0002M000
SUBCONTRACTOR TREC
TOTAL DEPTH OF PIT 23
PROJECT NAME MJ Painting 350
EXCAVATION METHOD Excavator
PROJECT LOCATION Olean, New York
SAMPLER TYPE Excavator Bucket

DEPTH (ft)	Sample Interval	PID (ppm)	U.S.C.S.	MATERIAL DESCRIPTION	Notes
0.0					
				Gray fine to coarse GRAVEL, some fine to coarse Sand; fragmented weathered rock (fill); dry.	
		11.3	GW		
				Dark gray fine to coarse SAND, some Silt, trace fine Gravel; brick fragments (fill); petroleum odor; moist.	
2.5					
5.0		32			
			SW-SM		
				SPH present from 7-10ft bgs.	
7.5					
		533.4			
10.0					
				Dark gray CLAY, and Silt, some fine to coarse Sand, trace fine to coarse Gravel; brown staining; SPH present; petroleum odor; moist.	
		637.6	CH		
12.5					
			CH	Dark gray CLAY, and Silt, some fine to coarse Sand, some fine to coarse Gravel; brown staining, SPH present, petroleum odor; moist.	
15.0					

Additional Notes:

Mention of odor, staining, and/or sheen is based on observations by person(s) logging the soil samples collected from the test pit and indicates odor, staining, and/or sheen related to the apparent presence of petroleum/chemical impacts. Where not noted, petroleum/chemical odor, staining, and/or sheen were not observed. In addition, where noted, soil has been characterized as fill based on observations. No mention of fill or other features in the soil descriptions does not indicate lack of the same.

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TEST PIT ID TP-D2

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CLIENT MJ Painting Contractor Corp.
PROJECT NUMBER 2317.0002M000
PROJECT NAME MJ Painting 350
PROJECT LOCATION Olean, New York
PROJECT DATE(S) 9/4/2019 - 9/4/2019
SUBCONTRACTOR TREC
EXCAVATION METHOD Excavator
SAMPLER TYPE Excavator Bucket
PIT DIAMETER NA
TOTAL DEPTH OF PIT 23

DEPTH (ft)	Sample Interval	PID (ppm)	U.S.C.S.	MATERIAL DESCRIPTION	Notes
15.0		748.1	CH	Dark gray CLAY, and Silt, some fine to coarse Sand, some fine to coarse Gravel; brown staining, SPH present, petroleum odor; moist. *(continued)*	
			SP-SM	Dark gray medium to coarse SAND, some fine to coarse Gravel, some Silt; brown staining, SPH present, petroleum odor; wet.	
		1032			
17.5					
20.0					
		836.8			
22.5					

Bottom of test pit at 23.0 feet.

Additional Notes:

Mention of odor, staining, and/or sheen is based on observations by person(s) logging the soil samples collected from the test pit and indicates odor, staining, and/or sheen related to the apparent presence of petroleum/chemical impacts. Where not noted, petroleum/chemical odor, staining, and/or sheen were not observed. In addition, where noted, soil has been characterized as fill based on observations. No mention of fill or other features in the soil descriptions does not indicate lack of the same.

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TEST PIT ID TP-E1

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CLIENT MJ Painting Contractor Corp.
PROJECT DATE(S) 9/5/2019 - 9/5/2019
PIT DIAMETER NA
PROJECT NUMBER 2317.0002M000
SUBCONTRACTOR TREC
TOTAL DEPTH OF PIT 28
PROJECT NAME MJ Painting 350
EXCAVATION METHOD Excavator
PROJECT LOCATION Olean, New York
SAMPLER TYPE Excavator Bucket

DEPTH (ft)	Sample Interval	PID (ppm)	U.S.C.S.	MATERIAL DESCRIPTION	Notes
0.0		0.4	SP-SM	Brown fine to medium SAND, and Silt, some fine Gravel; breaks into large chunks; dry.	
2.5		5.1	ML	Dark gray SILT, and fine to coarse Sand, trace fine to coarse Gravel; brick and wood fragments (fill); slight petroleum odor; moist.	Large stone / concrete pillar structure
5.0 7.5		3375 881.6	SP	Black medium to coarse SAND, some fine to coarse Gravel; brick and wood fragments (fill); petroleum odor; moist.	Metal pipe encountered at approximately 4 ft bgs. Metal collar encountered between 5 - 6 ft bgs.
			CH	Dark gray CLAY, trace fine to medium sand; petroleum odor; moist.	
10.0 12.5		922.1 3750	ML	Gray SILT; breaks off in large chunks; petroleum odor; moist.	
15.0			SW	Gray fine to coarse SAND, and fine to coarse Gravel; petroleum odor; moist to wet towards the bottom two feet.	

Additional Notes:

Mention of odor, staining, and/or sheen is based on observations by person(s) logging the soil samples collected from the test pit and indicates odor, staining, and/or sheen related to the apparent presence of petroleum/chemical impacts. Where not noted, petroleum/chemical odor, staining, and/or sheen were not observed. In addition, where noted, soil has been characterized as fill based on observations. No mention of fill or other features in the soil descriptions does not indicate lack of the same.

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TEST PIT ID TP-E1

CLIENT MJ Painting Contractor Corp.
PROJECT DATE(S) 9/5/2019 - 9/5/2019
PIT DIAMETER NA
PROJECT NUMBER 2317.0002M000
SUBCONTRACTOR TREC
TOTAL DEPTH OF PIT 28
PROJECT NAME MJ Painting 350
EXCAVATION METHOD Excavator
PROJECT LOCATION Olean, New York
SAMPLER TYPE Excavator Bucket

DEPTH (ft)	Sample Interval	PID (ppm)	U.S.C.S.	MATERIAL DESCRIPTION	Notes
15.0				Gray fine to coarse SAND, and fine to coarse Gravel; petroleum odor; moist to wet towards the bottom two feet. *(continued)*	
		2796	SW		
17.5					
				Gray medium to coarse SAND, some fine to coarse Gravel; brown staining, SPH present, petroleum odor; wet.	
		2320			
20.0					
					Water pooling at 21 ft bgs; SPH present.
22.5					
			SP		
25.0		3168			
27.5					

Bottom of test pit at 28.0 feet.

Additional Notes:

Mention of odor, staining, and/or sheen is based on observations by person(s) logging the soil samples collected from the test pit and indicates odor, staining, and/or sheen related to the apparent presence of petroleum/chemical impacts. Where not noted, petroleum/chemical odor, staining, and/or sheen were not observed. In addition, where noted, soil has been characterized as fill based on observations. No mention of fill or other features in the soil descriptions does not indicate lack of the same.

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TEST PIT ID TP-E2

CLIENT MJ Painting Contractor Corp.
PROJECT DATE(S) 9/5/2019 - 9/5/2019
PIT DIAMETER NA
PROJECT NUMBER 2317.0002M000
SUBCONTRACTOR TREC
TOTAL DEPTH OF PIT 25
PROJECT NAME MJ Painting 350
EXCAVATION METHOD Excavator
PROJECT LOCATION Olean, New York
SAMPLER TYPE Excavator Bucket

DEPTH (ft)	Sample Interval	PID (ppm)	U.S.C.S.	MATERIAL DESCRIPTION	Notes
0.0					
		1.7	SW	Brown-gray fine to coarse SAND, and fine to coarse Gravel; gray weathered angular rock fragments; dry.	
2.5		40	SW	Dark brown fine to coarse SAND, trace Silt, trace fine Gravel; brick and wood fragments (fill), some organics; slight petroleum odor;	Rebar, concrete, and 4" metal pipes encountered between 3.5 - 4 ft bgs.
5.0		30.6			
7.5					
10.0		680.7	CH	Dark gray CLAY; petroleum odor; moist.	
12.5		4755			
			SW	Gray fine to coarse SAND, some fine to coarse Gravel; petroleum odor; moist.	
15.0					

Additional Notes:

Mention of odor, staining, and/or sheen is based on observations by person(s) logging the soil samples collected from the test pit and indicates odor, staining, and/or sheen related to the apparent presence of petroleum/chemical impacts. Where not noted, petroleum/chemical odor, staining, and/or sheen were not observed. In addition, where noted, soil has been characterized as fill based on observations. No mention of fill or other features in the soil descriptions does not indicate lack of the same.

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(Continued Next Page)

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TEST PIT ID TP-E2

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CLIENT MJ Painting Contractor Corp.
PROJECT DATE(S) 9/5/2019 - 9/5/2019
PIT DIAMETER NA
PROJECT NUMBER 2317.0002M000
SUBCONTRACTOR TREC
TOTAL DEPTH OF PIT 25
PROJECT NAME MJ Painting 350
EXCAVATION METHOD Excavator
PROJECT LOCATION Olean, New York
SAMPLER TYPE Excavator Bucket

DEPTH (ft)	Sample Interval	PID (ppm)	U.S.C.S.	MATERIAL DESCRIPTION	Notes
15.0			SW	Gray fine to coarse SAND, some fine to coarse Gravel; petroleum odor; moist. *(continued)*	
17.5					
		6694	SP	Gray medium to coarse SAND, and fine to coarse Gravel; petroleum odor, SPH present; wet.	
20.0					Water entering pit at approximately 21 ft bgs.
22.5					
		3730			
25.0					

Bottom of test pit at 25.0 feet.

Additional Notes:

Mention of odor, staining, and/or sheen is based on observations by person(s) logging the soil samples collected from the test pit and indicates odor, staining, and/or sheen related to the apparent presence of petroleum/chemical impacts. Where not noted, petroleum/chemical odor, staining, and/or sheen were not observed. In addition, where noted, soil has been characterized as fill based on observations. No mention of fill or other features in the soil descriptions does not indicate lack of the same.

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TEST PIT ID TP-F1

CLIENT MJ Painting Contractor Corp.
PROJECT DATE(S) 9/5/2019 - 9/5/2019
PIT DIAMETER NA
PROJECT NUMBER 2317.0002M000
SUBCONTRACTOR TREC
TOTAL DEPTH OF PIT 25
PROJECT NAME MJ Painting 350
EXCAVATION METHOD Excavator
PROJECT LOCATION Olean, New York
SAMPLER TYPE Excavator Bucket

DEPTH (ft)	Sample Interval	PID (ppm)	U.S.C.S.	MATERIAL DESCRIPTION	Notes
0.0		2.2	SW-SM	Brown gray fine to coarse SAND, some Silt, some fine to coarse Gravel; compacted; dry.	Encountered concrete foundation block between 4 - 6 ft bgs.
2.5		7.9	SW-SM	Gray fine (+) to coarse (-) SAND, and Silt, some fine to coarse Gravel; gray weathered rock fragments; dry.	
5.0		94.5	SW-SM	Black fine to coarse SAND, some Silt, some fine to coarse Gravel; brick and wood fragments (fill); slight petroleum odor; moist.	
7.5		1037	CH	Dark gray CLAY, some Silt, some fine Sand, trace fine Gravel; petroleum odor; moist.	
10.0 12.5 15.0		1794	SW-SM	Dark gray fine to coarse SAND, and fine to coarse Gravel, some Silt; petroleum odor; moist.	

Additional Notes:

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TEST PIT ID TP-F1

PAGE 2 OF 2

CLIENT MJ Painting Contractor Corp.
PROJECT DATE(S) 9/5/2019 - 9/5/2019
PIT DIAMETER NA
PROJECT NUMBER 2317.0002M000
SUBCONTRACTOR TREC
TOTAL DEPTH OF PIT 25
PROJECT NAME MJ Painting 350
EXCAVATION METHOD Excavator
PROJECT LOCATION Olean, New York
SAMPLER TYPE Excavator Bucket

DEPTH (ft)	Sample Interval	PID (ppm)	U.S.C.S.	MATERIAL DESCRIPTION	Notes
15.0			SW-SM	Dark gray fine to coarse SAND, and fine to coarse Gravel, some Silt; petroleum odor; moist. *(continued)*	
17.5					
		2150	SP	Black medium to coarse SAND, and fine to coarse Gravel; petroleum odor; wet.	
20.0				Gray medium to coarse SAND, and fine to coarse Gravel; petroleum odor, SPH present; wet.	
22.5			SP		Water entering the pit at 22 ft bgs.
		1821			
25.0					

Bottom of test pit at 25.0 feet.

Additional Notes:

Mention of odor, staining, and/or sheen is based on observations by person(s) logging the soil samples collected from the test pit and indicates odor, staining, and/or sheen related to the apparent presence of petroleum/chemical impacts. Where not noted, petroleum/chemical odor, staining, and/or sheen were not observed. In addition, where noted, soil has been characterized as fill based on observations. No mention of fill or other features in the soil descriptions does not indicate lack of the same.

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TEST PIT ID TP-F2

PAGE 1 OF 2

CLIENT MJ Painting Contractor Corp.
PROJECT NUMBER 2317.0002M000
PROJECT NAME MJ Painting 350
PROJECT LOCATION Olean, New York

PROJECT DATE(S) 9/5/2019 - 9/5/2019
SUBCONTRACTOR TREC
EXCAVATION METHOD Excavator
SAMPLER TYPE Excavator Bucket

PIT DIAMETER NA
TOTAL DEPTH OF PIT 25

DEPTH (ft)	Sample Interval	PID (ppm)	U.S.C.S.	MATERIAL DESCRIPTION	Notes
0.0		11.5	SW	Brown gray fine to coarse SAND, some fine to coarse Gravel; weathered rock fragments; dry.	
2.5		16.5	SW-SM	Dark brown fine to coarse SAND, some fine to coarse Gravel, some Silt; brick fragments; dry.	
5.0 7.5		20.3 962.6	ML	Dark gray SILT; slight petroleum odor; moist.	2" metal pipe encountered along south-west wall of test pit at 4 ft bgs.
10.0		1225	SW	Black fine to coarse SAND, and fine to coarse Gravel; petroleum odor; moist.	
12.5		877.7	SP	Gray medium to coarse SAND, and fine to coarse Gravel; petroleum odor; moist.	
15.0			SP	Gray medium to coarse SAND, and fine to coarse Gravel; petroleum odor; wet.	

Additional Notes:

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TEST PIT ID TP-F2

CLIENT MJ Painting Contractor Corp.
PROJECT DATE(S) 9/5/2019 - 9/5/2019
PIT DIAMETER NA
PROJECT NUMBER 2317.0002M000
SUBCONTRACTOR TREC
TOTAL DEPTH OF PIT 25
PROJECT NAME MJ Painting 350
EXCAVATION METHOD Excavator
PROJECT LOCATION Olean, New York
SAMPLER TYPE Excavator Bucket

DEPTH (ft)	Sample Interval	PID (ppm)	U.S.C.S.	MATERIAL DESCRIPTION	Notes
15.0				Gray medium to coarse SAND, and fine to coarse Gravel; petroleum odor; wet. *(continued)*	
		1138	SP		
17.5					
				Gray medium to coarse SAND, and fine to coarse Gravel; petroleum odor, SPH present; wet.	SPH present at 19 ft bgs.
20.0					
		975			Water entering test pit at 21 ft bgs. SPH present on water.
			SP		
22.5					
		919.2			
25.0					

Bottom of test pit at 25.0 feet.

Additional Notes:

Mention of odor, staining, and/or sheen is based on observations by person(s) logging the soil samples collected from the test pit and indicates odor, staining, and/or sheen related to the apparent presence of petroleum/chemical impacts. Where not noted, petroleum/chemical odor, staining, and/or sheen were not observed. In addition, where noted, soil has been characterized as fill based on observations. No mention of fill or other features in the soil descriptions does not indicate lack of the same.

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TEST PIT ID TP-F3

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CLIENT MJ Painting Contractor Corp.
PROJECT DATE(S) 9/5/2019 - 9/5/2019
PIT DIAMETER NA
PROJECT NUMBER 2317.0002M000
SUBCONTRACTOR TREC
TOTAL DEPTH OF PIT 23
PROJECT NAME MJ Painting 350
EXCAVATION METHOD Excavator
PROJECT LOCATION Olean, New York
SAMPLER TYPE Excavator Bucket

DEPTH (ft)	Sample Interval	PID (ppm)	U.S.C.S.	MATERIAL DESCRIPTION	Notes
0.0		3.3	SW	Brown fine to coarse SAND, some fine to coarse Gravel, trace Silt; gray weathered rock fragments; dry.	Metal piping encountered between 1.5 - 2 ft bgs.
2.5		1.7	SW-SM	Brown-gray fine to coarse SAND, and Silt, some fine Gravel; moist.	
5.0		2.1	SW-SM	Dark brown-gray fine to coarse SAND, and Silt, some fine to coarse Gravel; moist.	
7.5		154.5	SP	Gray medium to coarse SAND, and fine to coarse Gravel; petroleum odor; wet.	
10.0					
12.5		537.9	SP	Gray coarse GRAVEL, and medium to coarse Sand, petroleum odor, SPH present; wet.	
15.0					

Additional Notes:

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(Continued Next Page)

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TEST PIT ID TP-F3

CLIENT MJ Painting Contractor Corp.
PROJECT DATE(S) 9/5/2019 - 9/5/2019
PIT DIAMETER NA
PROJECT NUMBER 2317.0002M000
SUBCONTRACTOR TREC
TOTAL DEPTH OF PIT 23
PROJECT NAME MJ Painting 350
EXCAVATION METHOD Excavator
PROJECT LOCATION Olean, New York
SAMPLER TYPE Excavator Bucket

DEPTH (ft)	Sample Interval	PID (ppm)	U.S.C.S.	MATERIAL DESCRIPTION	Notes
15.0				Gray coarse GRAVEL, and medium to coarse Sand, petroleum odor, SPH present; wet. *(continued)*	
					Water entering test pit at 17 ft bgs.
17.5					
			SP		
20.0		1424			
22.5					

Bottom of test pit at 23.0 feet.

Additional Notes:

Mention of odor, staining, and/or sheen is based on observations by person(s) logging the soil samples collected from the test pit and indicates odor, staining, and/or sheen related to the apparent presence of petroleum/chemical impacts. Where not noted, petroleum/chemical odor, staining, and/or sheen were not observed. In addition, where noted, soil has been characterized as fill based on observations. No mention of fill or other features in the soil descriptions does not indicate lack of the same.

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TEST PIT ID TP-G1

CLIENT MJ Painting Contractor Corp.
PROJECT DATE(S) 9/5/2019 - 9/5/2019
PIT DIAMETER NA
PROJECT NUMBER 2317.0002M000
SUBCONTRACTOR TREC
TOTAL DEPTH OF PIT 24
PROJECT NAME MJ Painting 350
EXCAVATION METHOD Excavator
PROJECT LOCATION Olean, New York
SAMPLER TYPE Excavator Bucket

DEPTH (ft)	Sample Interval	PID (ppm)	U.S.C.S.	MATERIAL DESCRIPTION	Notes
0.0 2.5		2.2 1.8	SW	Brown fine to coarse SAND, some fine Gravel; brick fragments (fill); dry.	Suspected metal valve handle encountered at 1.5 ft bgs. Concrete structures encountered at approximately 4 ft bgs.
5.0		1.8	CH	Light brown CLAY; dry.	
7.5		12.2	GW-GM	Dark gray fine to coarse GRAVEL, some fine to coarse Sand, some Silt; dry.	
10.0		358	SW	Gray fine to coarse SAND, and fine to coarse Gravel; petroleum odor, SPH present; moist.	
12.5 15.0		803.3	SP	Gray medium to coarse SAND, and fine to coarse GRAVEL; petroleum odor, SPH present; wet.	

Additional Notes:

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(Continued Next Page)

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TEST PIT ID TP-G1

CLIENT MJ Painting Contractor Corp.
PROJECT DATE(S) 9/5/2019 - 9/5/2019
PIT DIAMETER NA
PROJECT NUMBER 2317.0002M000
SUBCONTRACTOR TREC
TOTAL DEPTH OF PIT 24
PROJECT NAME MJ Painting 350
EXCAVATION METHOD Excavator
PROJECT LOCATION Olean, New York
SAMPLER TYPE Excavator Bucket

DEPTH (ft)	Sample Interval	PID (ppm)	U.S.C.S.	MATERIAL DESCRIPTION	Notes
15.0				Gray medium to coarse SAND, and fine to coarse GRAVEL; petroleum odor, SPH present; wet. *(continued)*	
		940.8			
17.5					
					Water entering test pit at 19 ft bgs.
			SP		
20.0					
		897.4			
22.5					

Bottom of test pit at 24.0 feet.

Additional Notes:

Mention of odor, staining, and/or sheen is based on observations by person(s) logging the soil samples collected from the test pit and indicates odor, staining, and/or sheen related to the apparent presence of petroleum/chemical impacts. Where not noted, petroleum/chemical odor, staining, and/or sheen were not observed. In addition, where noted, soil has been characterized as fill based on observations. No mention of fill or other features in the soil descriptions does not indicate lack of the same.

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TEST PIT ID TP-G2

CLIENT MJ Painting Contractor Corp.
PROJECT DATE(S) 9/5/2019 - 9/5/2019
PIT DIAMETER NA
PROJECT NUMBER 2317.0002M000
SUBCONTRACTOR TREC
TOTAL DEPTH OF PIT 18
PROJECT NAME MJ Painting 350
EXCAVATION METHOD Excavator
PROJECT LOCATION Olean, New York
SAMPLER TYPE Excavator Bucket

DEPTH (ft)	Sample Interval	PID (ppm)	U.S.C.S.	MATERIAL DESCRIPTION	Notes
0.0		18.7	SW-SM	Dark brown fine to coarse SAND, some Silt, some fine Gravel; brick fragments (fill), organics; dry.	
2.5		139.4	SW-SM	Brown fine to coarse SAND, some Silt, some fine to coarse Gravel; petroleum odor; moist.	
5.0		12.3	SP-SM	Brown fine to medium SAND, some Silt, some fine Gravel; petroleum odor; moist.	
7.5		160.1	SW	Dark gray fine to coarse SAND, and fine to coarse Gravel; slight petroleum odor; moist.	
10.0 12.5 15.0		897.9 1092	GW	Black fine to coarse GRAVEL, and medium to coarse SAND; petroleum odor; wet.	

Additional Notes:

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TEST PIT ID TP-G2

PAGE 2 OF 2

CLIENT MJ Painting Contractor Corp.
PROJECT DATE(S) 9/5/2019 - 9/5/2019
PIT DIAMETER NA
PROJECT NUMBER 2317.0002M000
SUBCONTRACTOR TREC
TOTAL DEPTH OF PIT 18
PROJECT NAME MJ Painting 350
EXCAVATION METHOD Excavator
PROJECT LOCATION Olean, New York
SAMPLER TYPE Excavator Bucket

DEPTH (ft)	Sample Interval	PID (ppm)	U.S.C.S.	MATERIAL DESCRIPTION	Notes
15.0				Black fine to coarse GRAVEL, and medium to coarse SAND; petroleum odor; wet. *(continued)*	
		864.5	GW		
17.5					Encountered refusal at 18 ft bgs. "V" shaped concrete structure present.

Bottom of test pit at 18.0 feet.

Additional Notes:

Mention of odor, staining, and/or sheen is based on observations by person(s) logging the soil samples collected from the test pit and indicates odor, staining, and/or sheen related to the apparent presence of petroleum/chemical impacts. Where not noted, petroleum/chemical odor, staining, and/or sheen were not observed. In addition, where noted, soil has been characterized as fill based on observations. No mention of fill or other features in the soil descriptions does not indicate lack of the same.

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TEST PIT ID TP-H1

PAGE 1 OF 2

CLIENT MJ Painting Contractor Corp.
PROJECT DATE(S) 9/5/2019 - 9/5/2019
PIT DIAMETER NA
PROJECT NUMBER 2317.0002M000
SUBCONTRACTOR TREC
TOTAL DEPTH OF PIT 24
PROJECT NAME MJ Painting 350
EXCAVATION METHOD Excavator
PROJECT LOCATION Olean, New York
SAMPLER TYPE Excavator Bucket

DEPTH (ft)	Sample Interval	PID (ppm)	U.S.C.S.	MATERIAL DESCRIPTION	Notes
0.0				Brown fine to medium SAND, some Silt, trace fine Gravel; dry.	
		3.3	SP-SM		Metal piping and brick at 1.5 fbgs.
2.5					
		2.9		Light brown CLAY; moist.	
5.0			CH		
		5.5			
				Gray fine to coarse GRAVEL, and medium to coarse Sand; petroleum odor and staining; wet.	
7.5					
10.0					
			GW		
		485.4			
12.5					
15.0					

Additional Notes:

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(Continued Next Page)

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TEST PIT ID TP-H1

CLIENT MJ Painting Contractor Corp.
PROJECT DATE(S) 9/5/2019 - 9/5/2019
PIT DIAMETER NA
PROJECT NUMBER 2317.0002M000
SUBCONTRACTOR TREC
TOTAL DEPTH OF PIT 24
PROJECT NAME MJ Painting 350
EXCAVATION METHOD Excavator
PROJECT LOCATION Olean, New York
SAMPLER TYPE Excavator Bucket

DEPTH (ft)	Sample Interval	PID (ppm)	U.S.C.S.	MATERIAL DESCRIPTION	Notes
15.0				Gray fine to coarse GRAVEL, and medium to coarse Sand; petroleum odor and staining; wet. *(continued)*	
		945.1			
17.5					
		699.0	GW		
20.0					Water entering test pit at 21 fbgs.
22.5					

Bottom of test pit at 24.0 feet.

Additional Notes:

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TEST PIT ID TP-I1

PAGE 1 OF 2

CLIENT MJ Painting Contractor Corp.
PROJECT DATE(S) 9/6/2019 - 9/6/2019
PIT DIAMETER NA
PROJECT NUMBER 2317.0002M000
SUBCONTRACTOR TREC
TOTAL DEPTH OF PIT 24.5
PROJECT NAME MJ Painting 350
EXCAVATION METHOD Excavator
PROJECT LOCATION Olean, New York
SAMPLER TYPE Excavator Bucket

DEPTH (ft)	Sample Interval	PID (ppm)	U.S.C.S.	MATERIAL DESCRIPTION	Notes
0.0			SW	Dark brown fine to coarse SAND; asphalt fragments (fill); petroleum odor; dry.	
		707.4			
2.5					
		1232			
5.0					Water entering the test pit at 5 ft bgs.
		384.4	CH	Dark gray CLAY; petroleum odor; wet.	
7.5					
		1163	GW	Dark gray fine to coarse Gravel, and medium to coarse SAND; petroleum odor; moist.	
10.0					
12.5		1402			
15.0					

Additional Notes:

Mention of odor, staining, and/or sheen is based on observations by person(s) logging the soil samples collected from the test pit and indicates odor, staining, and/or sheen related to the apparent presence of petroleum/chemical impacts. Where not noted, petroleum/chemical odor, staining, and/or sheen were not observed. In addition, where noted, soil has been characterized as fill based on observations. No mention of fill or other features in the soil descriptions does not indicate lack of the same.

Photoionization detector (PID) readings are affected by multiple factors, including sample consistency, moisture, relative humidity, and dust. Therefore, PID readings are just one of the factors considered when making a determination of the absence or presence of SPH in a given sample. Additionally, the accuracy of PID readings decreases as concentrations increase, particularly over the 2,000 ppm threshold, due to the non-linearity of the measurement.

(Continued Next Page)

TEST PIT ID TP-I1

CLIENT MJ Painting Contractor Corp.
PROJECT DATE(S) 9/6/2019 - 9/6/2019
PIT DIAMETER NA
PROJECT NUMBER 2317.0002M000
SUBCONTRACTOR TREC
TOTAL DEPTH OF PIT 24.5
PROJECT NAME MJ Painting 350
EXCAVATION METHOD Excavator
PROJECT LOCATION Olean, New York
SAMPLER TYPE Excavator Bucket

DEPTH (ft)	Sample Interval	PID (ppm)	U.S.C.S.	MATERIAL DESCRIPTION	Notes
15.0				Gray fine to medium SAND, some fine to coarse Gravel; petroleum odor; moist.	
		2412			
17.5			SP		
20.0				Gray fine to coarse GRAVEL, and fine to medium Sand; petroleum odor; moist.	
		2327			
22.5			GW		
		1094	GW	Black fine to coarse GRAVEL, and medium to corse Sand; petroleum odor; wet.	

Bottom of test pit at 24.5 feet.

Additional Notes:

Mention of odor, staining, and/or sheen is based on observations by person(s) logging the soil samples collected from the test pit and indicates odor, staining, and/or sheen related to the apparent presence of petroleum/chemical impacts. Where not noted, petroleum/chemical odor, staining, and/or sheen were not observed. In addition, where noted, soil has been characterized as fill based on observations. No mention of fill or other features in the soil descriptions does not indicate lack of the same.

Photoionization detector (PID) readings are affected by multiple factors, including sample consistency, moisture, relative humidity, and dust. Therefore, PID readings are just one of the factors considered when making a determination of the absence or presence of SPH in a given sample. Additionally, the accuracy of PID readings decreases as concentrations increase, particularly over the 2,000 ppm threshold, due to the non-linearity of the measurement.

ROUX

12 Gill Street
Suite 4700
Woburn MA 01801
Telephone: (781)-569-4000
Fax: (781)-569-4001

TEST PIT ID TP-I2

PAGE 1 OF 2

CLIENT MJ Painting Contractor Corp.

PROJECT DATE(S) 9/6/2019 - 9/6/2019

PIT DIAMETER NA

PROJECT NUMBER 2317.0002M000

SUBCONTRACTOR TREC

TOTAL DEPTH OF PIT 22

PROJECT NAME MJ Painting 350

EXCAVATION METHOD Excavator

PROJECT LOCATION Olean, New York

SAMPLER TYPE Excavator Bucket

DEPTH (ft)	Sample Interval	PID (ppm)	U.S.C.S.	MATERIAL DESCRIPTION	Notes
0.0			SP-SM	Dark brown fine to medium SAND, and Silt; broken-up asphalt (fill); petroleum odor; moist.	
		2679			
2.5					
		1718	ML	Light brown SILT, and fine Sand.	
5.0		1777	SP-SM	Light brown fine SAND, and Silt, trace fine to coarse Gravel; petroleum odor; moist.	
			SP	Brown medium to coarse SAND, and fine to coarse Gravel; petroleum odor; moist.	
7.5					
		1520			
10.0					
12.5					
15.0					Compact slag material from 15 - 17 ft

Additional Notes:

Mention of odor, staining, and/or sheen is based on observations by person(s) logging the soil samples collected from the test pit and indicates odor, staining, and/or sheen related to the apparent presence of petroleum/chemical impacts. Where not noted, petroleum/chemical odor, staining, and/or sheen were not observed. In addition, where noted, soil has been characterized as fill based on observations. No mention of fill or other features in the soil descriptions does not indicate lack of the same.

Photoionization detector (PID) readings are affected by multiple factors, including sample consistency, moisture, relative humidity, and dust. Therefore, PID readings are just one of the factors considered when making a determination of the absence or presence of SPH in a given sample. Additionally, the accuracy of PID readings decreases as concentrations increase, particularly over the 2,000 ppm threshold, due to the non-linearity of the measurement.

(Continued Next Page)

TEST PIT ID TP-I2

CLIENT MJ Painting Contractor Corp.
PROJECT DATE(S) 9/6/2019 - 9/6/2019
PIT DIAMETER NA
PROJECT NUMBER 2317.0002M000
SUBCONTRACTOR TREC
TOTAL DEPTH OF PIT 22
PROJECT NAME MJ Painting 350
EXCAVATION METHOD Excavator
PROJECT LOCATION Olean, New York
SAMPLER TYPE Excavator Bucket

DEPTH (ft)	Sample Interval	PID (ppm)	U.S.C.S.	MATERIAL DESCRIPTION	Notes
15.0		1164	SP	Dark gray medium to coarse SAND, and fine to coarse Gravel; petroleum odor; moist.	bgs.
17.5					
		2165	GW	Black fine to coarse GRAVEL, and medium to coarse Sand; petroleum odor, SPH present; wet.	
20.0					
		1848	SP	Dark gray medium to coarse SAND, and fine to coarse Gravel; petroleum odor, SPH present; wet.	Water entering test pit at 21 ft bgs.

Bottom of test pit at 22.0 feet.

Additional Notes:

Mention of odor, staining, and/or sheen is based on observations by person(s) logging the soil samples collected from the test pit and indicates odor, staining, and/or sheen related to the apparent presence of petroleum/chemical impacts. Where not noted, petroleum/chemical odor, staining, and/or sheen were not observed. In addition, where noted, soil has been characterized as fill based on observations. No mention of fill or other features in the soil descriptions does not indicate lack of the same.

Photoionization detector (PID) readings are affected by multiple factors, including sample consistency, moisture, relative humidity, and dust. Therefore, PID readings are just one of the factors considered when making a determination of the absence or presence of SPH in a given sample. Additionally, the accuracy of PID readings decreases as concentrations increase, particularly over the 2,000 ppm threshold, due to the non-linearity of the measurement.

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TEST PIT ID TP-I3

PAGE 1 OF 2

CLIENT MJ Painting Contractor Corp.
PROJECT DATE(S) 9/6/2019 - 9/6/2019
PIT DIAMETER NA
PROJECT NUMBER 2317.0002M000
SUBCONTRACTOR TREC
TOTAL DEPTH OF PIT 21
PROJECT NAME MJ Painting 350
EXCAVATION METHOD Excavator
PROJECT LOCATION Olean, New York
SAMPLER TYPE Excavator Bucket

DEPTH (ft)	Sample Interval	PID (ppm)	U.S.C.S.	MATERIAL DESCRIPTION	Notes
0.0		10.7	SP-SM	Brown fine to medium SAND, some Silt, trace fine Gravel; organics; dry.	
2.5		15	SP	Brown medium to coarse SAND, and fine Gravel; brick fragments (fill); dry.	
5.0		127.7	CH	Dark gray CLAY, some fine to medium Sand; petroleum odor; moist.	
7.5 10.0 12.5 15.0		347.7 615.4	SW	Gray-brown fine to coarse SAND, some fine Gravel; petroleum odor; moist.	

Additional Notes:

Mention of odor, staining, and/or sheen is based on observations by person(s) logging the soil samples collected from the test pit and indicates odor, staining, and/or sheen related to the apparent presence of petroleum/chemical impacts. Where not noted, petroleum/chemical odor, staining, and/or sheen were not observed. In addition, where noted, soil has been characterized as fill based on observations. No mention of fill or other features in the soil descriptions does not indicate lack of the same.

Photoionization detector (PID) readings are affected by multiple factors, including sample consistency, moisture, relative humidity, and dust. Therefore, PID readings are just one of the factors considered when making a determination of the absence or presence of SPH in a given sample. Additionally, the accuracy of PID readings decreases as concentrations increase, particularly over the 2,000 ppm threshold, due to the non-linearity of the measurement.

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TEST PIT ID TP-I3

CLIENT MJ Painting Contractor Corp.
PROJECT DATE(S) 9/6/2019 - 9/6/2019
PIT DIAMETER NA
PROJECT NUMBER 2317.0002M000
SUBCONTRACTOR TREC
TOTAL DEPTH OF PIT 21
PROJECT NAME MJ Painting 350
EXCAVATION METHOD Excavator
PROJECT LOCATION Olean, New York
SAMPLER TYPE Excavator Bucket

DEPTH (ft)	Sample Interval	PID (ppm)	U.S.C.S.	MATERIAL DESCRIPTION	Notes
15.0		254.6	SW	Black fine to coarse SAND, and fine to coarse Gravel; some slag; slight petroleum odor; moist.	
				Black medium to coarse SAND, and fine to coarse Gravel; petroleum odor, sheen; moist.	
17.5		216.4	SP		
20.0					

Bottom of test pit at 21.0 feet.

Additional Notes:

Mention of odor, staining, and/or sheen is based on observations by person(s) logging the soil samples collected from the test pit and indicates odor, staining, and/or sheen related to the apparent presence of petroleum/chemical impacts. Where not noted, petroleum/chemical odor, staining, and/or sheen were not observed. In addition, where noted, soil has been characterized as fill based on observations. No mention of fill or other features in the soil descriptions does not indicate lack of the same.

Photoionization detector (PID) readings are affected by multiple factors, including sample consistency, moisture, relative humidity, and dust. Therefore, PID readings are just one of the factors considered when making a determination of the absence or presence of SPH in a given sample. Additionally, the accuracy of PID readings decreases as concentrations increase, particularly over the 2,000 ppm threshold, due to the non-linearity of the measurement.

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TEST PIT ID TP-J1

CLIENT MJ Painting Contractor Corp.
PROJECT DATE(S) 9/6/2019 - 9/6/2019
PIT DIAMETER NA
PROJECT NUMBER 2317.0002M000
SUBCONTRACTOR TREC
TOTAL DEPTH OF PIT 24
PROJECT NAME MJ Painting 350
EXCAVATION METHOD Excavator
PROJECT LOCATION Olean, New York
SAMPLER TYPE Excavator Bucket

DEPTH (ft)	Sample Interval	PID (ppm)	U.S.C.S.	MATERIAL DESCRIPTION	Notes
0.0		296.1	SP	Black medium to coarse SAND, trace fine to coarse Gravel; petroleum odor; dry.	Low density, shiny black blocks.
2.5		246.2	SW	Black fine to coarse SAND, some fine to coarse Gravel; brick and wood fragments (fill); petroleum odor and sheen; moist.	
5.0		528.8	CH	Gray-black CLAY, some fine to coarse Sand; petroleum odor; moist.	Water entering test pit at approximately 4 ft bgs.
7.5		347.8	SP	Gray-black medium to coarse SAND, some fine to coarse Gravel; petroleum odor; moist.	
10.0 12.5 15.0		902.4	GW	Gray-black fine to coarse GRAVEL, some medium to coarse Sand; petroleum odor and staining; moist.	Water entering test pit from 15 - 24 ft

Additional Notes:

Mention of odor, staining, and/or sheen is based on observations by person(s) logging the soil samples collected from the test pit and indicates odor, staining, and/or sheen related to the apparent presence of petroleum/chemical impacts. Where not noted, petroleum/chemical odor, staining, and/or sheen were not observed. In addition, where noted, soil has been characterized as fill based on observations. No mention of fill or other features in the soil descriptions does not indicate lack of the same.

Photoionization detector (PID) readings are affected by multiple factors, including sample consistency, moisture, relative humidity, and dust. Therefore, PID readings are just one of the factors considered when making a determination of the absence or presence of SPH in a given sample. Additionally, the accuracy of PID readings decreases as concentrations increase, particularly over the 2,000 ppm threshold, due to the non-linearity of the measurement.

(Continued Next Page)

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TEST PIT ID TP-J1

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CLIENT MJ Painting Contractor Corp.
PROJECT DATE(S) 9/6/2019 - 9/6/2019
PIT DIAMETER NA
PROJECT NUMBER 2317.0002M000
SUBCONTRACTOR TREC
TOTAL DEPTH OF PIT 24
PROJECT NAME MJ Painting 350
EXCAVATION METHOD Excavator
PROJECT LOCATION Olean, New York
SAMPLER TYPE Excavator Bucket

DEPTH (ft)	Sample Interval	PID (ppm)	U.S.C.S.	MATERIAL DESCRIPTION	Notes
15.0				Black medium to coarse SAND and fine to coarse Gravel; petroleum odor and staining; wet.	bgs.
		884.2			
17.5					
		936.5			
			SP		
20.0					
22.5					
		390.0			

Bottom of test pit at 24.0 feet.

Additional Notes:

Mention of odor, staining, and/or sheen is based on observations by person(s) logging the soil samples collected from the test pit and indicates odor, staining, and/or sheen related to the apparent presence of petroleum/chemical impacts. Where not noted, petroleum/chemical odor, staining, and/or sheen were not observed. In addition, where noted, soil has been characterized as fill based on observations. No mention of fill or other features in the soil descriptions does not indicate lack of the same.

Photoionization detector (PID) readings are affected by multiple factors, including sample consistency, moisture, relative humidity, and dust. Therefore, PID readings are just one of the factors considered when making a determination of the absence or presence of SPH in a given sample. Additionally, the accuracy of PID readings decreases as concentrations increase, particularly over the 2,000 ppm threshold, due to the non-linearity of the measurement.

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TEST PIT ID TP-J2

PAGE 1 OF 2

CLIENT MJ Painting Contractor Corp.
PROJECT DATE(S) 9/6/2019 - 9/6/2019
PIT DIAMETER NA
PROJECT NUMBER 2317.0002M000
SUBCONTRACTOR TREC
TOTAL DEPTH OF PIT 24
PROJECT NAME MJ Painting 350
EXCAVATION METHOD Excavator
PROJECT LOCATION Olean, New York
SAMPLER TYPE Excavator Bucket

DEPTH (ft)	Sample Interval	PID (ppm)	U.S.C.S.	MATERIAL DESCRIPTION	Notes
0.0			SP-SM	Brown fine to medium SAND, some Silt, trace fine Gravel; organics; dry.	
2.5		1010	CH	Dark gray CLAY, and Silt; petroleum odor; dry.	
		988.5	SP	Dark gray medium to coarse SAND, and fine to coarse GRAVEL; petroleum odor; moist.	
5.0					
7.5		1226	SP	Black medium to coarse SAND, and fine to coarse GRAVEL; petroleum odor; moist.	
10.0					
12.5		962.8			
		845.7			
15.0					

Additional Notes:

Mention of odor, staining, and/or sheen is based on observations by person(s) logging the soil samples collected from the test pit and indicates odor, staining, and/or sheen related to the apparent presence of petroleum/chemical impacts. Where not noted, petroleum/chemical odor, staining, and/or sheen were not observed. In addition, where noted, soil has been characterized as fill based on observations. No mention of fill or other features in the soil descriptions does not indicate lack of the same.

Photoionization detector (PID) readings are affected by multiple factors, including sample consistency, moisture, relative humidity, and dust. Therefore, PID readings are just one of the factors considered when making a determination of the absence or presence of SPH in a given sample. Additionally, the accuracy of PID readings decreases as concentrations increase, particularly over the 2,000 ppm threshold, due to the non-linearity of the measurement.

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TEST PIT ID TP-J2

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CLIENT MJ Painting Contractor Corp.
PROJECT DATE(S) 9/6/2019 - 9/6/2019
PIT DIAMETER NA
PROJECT NUMBER 2317.0002M000
SUBCONTRACTOR TREC
TOTAL DEPTH OF PIT 24
PROJECT NAME MJ Painting 350
EXCAVATION METHOD Excavator
PROJECT LOCATION Olean, New York
SAMPLER TYPE Excavator Bucket

DEPTH (ft)	Sample Interval	PID (ppm)	U.S.C.S.	MATERIAL DESCRIPTION	Notes
15.0			SP	Black medium to coarse SAND, and fine to coarse GRAVEL; petroleum odor; moist. *(continued)*	
		1466	GW	Gray fine to coarse GRAVEL, and medium to coarse SAND; petroleum odor, SPH present; wet.	
17.5					
20.0		1464			
22.5		1285			

Bottom of test pit at 24.0 feet.

Additional Notes:

Mention of odor, staining, and/or sheen is based on observations by person(s) logging the soil samples collected from the test pit and indicates odor, staining, and/or sheen related to the apparent presence of petroleum/chemical impacts. Where not noted, petroleum/chemical odor, staining, and/or sheen were not observed. In addition, where noted, soil has been characterized as fill based on observations. No mention of fill or other features in the soil descriptions does not indicate lack of the same.

Photoionization detector (PID) readings are affected by multiple factors, including sample consistency, moisture, relative humidity, and dust. Therefore, PID readings are just one of the factors considered when making a determination of the absence or presence of SPH in a given sample. Additionally, the accuracy of PID readings decreases as concentrations increase, particularly over the 2,000 ppm threshold, due to the non-linearity of the measurement.

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TEST PIT ID TP-K1

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CLIENT MJ Painting Contractor Corp.
PROJECT DATE(S) 9/6/2019 - 9/6/2019
PIT DIAMETER NA
PROJECT NUMBER 2317.0002M000
SUBCONTRACTOR TREC
TOTAL DEPTH OF PIT 15
PROJECT NAME MJ Painting 350
EXCAVATION METHOD Excavator
PROJECT LOCATION Olean, New York
SAMPLER TYPE Excavator Bucket

DEPTH (ft)	Sample Interval	PID (ppm)	U.S.C.S.	MATERIAL DESCRIPTION	Notes
0.0 2.5		865.9 984.6	SW	Brown-black fine to coarse SAND, some fine to coarse Gravel; non-petroleum chemical odor; dry.	Slag with gravel clasts present between 2 - 4 ft bgs.
5.0 7.5		1579	GW	Black fine to coarse GRAVEL, some medium to coarse Sand; petroleum staining and odor; moist.	
		3083	GW	Brown fine to coarse GRAVEL, some medium to coarse Sand; petroleum staining; moist.	
10.0 12.5 15.0		2950	GW	Gray and black fine to coarse GRAVEL, some medium to coarse Sand; petroleum staining and odor; moist.	

Bottom of test pit at 15.0 feet.

Additional Notes:

Mention of odor, staining, and/or sheen is based on observations by person(s) logging the soil samples collected from the test pit and indicates odor, staining, and/or sheen related to the apparent presence of petroleum/chemical impacts. Where not noted, petroleum/chemical odor, staining, and/or sheen were not observed. In addition, where noted, soil has been characterized as fill based on observations. No mention of fill or other features in the soil descriptions does not indicate lack of the same.

Photoionization detector (PID) readings are affected by multiple factors, including sample consistency, moisture, relative humidity, and dust. Therefore, PID readings are just one of the factors considered when making a determination of the absence or presence of SPH in a given sample. Additionally, the accuracy of PID readings decreases as concentrations increase, particularly over the 2,000 ppm threshold, due to the non-linearity of the measurement.

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TEST PIT ID TP-K2

CLIENT MJ Painting Contractor Corp.
PROJECT DATE(S) 9/6/2019 - 9/6/2019
PIT DIAMETER NA
PROJECT NUMBER 2317.0002M000
SUBCONTRACTOR TREC
TOTAL DEPTH OF PIT 20
PROJECT NAME MJ Painting 350
EXCAVATION METHOD Excavator
PROJECT LOCATION Olean, New York
SAMPLER TYPE Excavator Bucket

DEPTH (ft)	Sample Interval	PID (ppm)	U.S.C.S.	MATERIAL DESCRIPTION	Notes
0.0		3.2	SW	Dark brown fine to coarse SAND, some fine Gravel, trace Silt; dry.	Metal pipes, concrete blocks, and brick fragments at 1.5 ft bgs.
2.5		4.2	SP	Light brown medium to coarse SAND, some fine to coarse Gravel; dry.	
5.0 7.5		3.2	SP	Light brown-gray medium to coarse SAND, some fine to coarse Gravel, some silt; moist.	
10.0		2.5	SP	Light brown-gray medium to coarse SAND, and fine to coarse Gravel; slight petroleum odor; moist.	
12.5 15.0		253.5	SW	Gray fine to coarse SAND, and fine to coarse Gravel; petroleum odor; moist.	

Additional Notes:

Mention of odor, staining, and/or sheen is based on observations by person(s) logging the soil samples collected from the test pit and indicates odor, staining, and/or sheen related to the apparent presence of petroleum/chemical impacts. Where not noted, petroleum/chemical odor, staining, and/or sheen were not observed. In addition, where noted, soil has been characterized as fill based on observations. No mention of fill or other features in the soil descriptions does not indicate lack of the same.

Photoionization detector (PID) readings are affected by multiple factors, including sample consistency, moisture, relative humidity, and dust. Therefore, PID readings are just one of the factors considered when making a determination of the absence or presence of SPH in a given sample. Additionally, the accuracy of PID readings decreases as concentrations increase, particularly over the 2,000 ppm threshold, due to the non-linearity of the measurement.

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TEST PIT ID TP-K2

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CLIENT MJ Painting Contractor Corp.
PROJECT DATE(S) 9/6/2019 - 9/6/2019
PIT DIAMETER NA
PROJECT NUMBER 2317.0002M000
SUBCONTRACTOR TREC
TOTAL DEPTH OF PIT 20
PROJECT NAME MJ Painting 350
EXCAVATION METHOD Excavator
PROJECT LOCATION Olean, New York
SAMPLER TYPE Excavator Bucket

DEPTH (ft)	Sample Interval	PID (ppm)	U.S.C.S.	MATERIAL DESCRIPTION	Notes
15.0					
			SW	Gray fine to coarse SAND, and fine to coarse Gravel; petroleum odor; moist. *(continued)*	
17.5			SP	Gray medium to coarse SAND, and fine to coarse Gravel; petroleum odor and staining.	
		918.5			
20.0					Water entering test pit at ~20 ft bgs. SPH visible on water.

Bottom of test pit at 20.0 feet.

Additional Notes:

Mention of odor, staining, and/or sheen is based on observations by person(s) logging the soil samples collected from the test pit and indicates odor, staining, and/or sheen related to the apparent presence of petroleum/chemical impacts. Where not noted, petroleum/chemical odor, staining, and/or sheen were not observed. In addition, where noted, soil has been characterized as fill based on observations. No mention of fill or other features in the soil descriptions does not indicate lack of the same.

Photoionization detector (PID) readings are affected by multiple factors, including sample consistency, moisture, relative humidity, and dust. Therefore, PID readings are just one of the factors considered when making a determination of the absence or presence of SPH in a given sample. Additionally, the accuracy of PID readings decreases as concentrations increase, particularly over the 2,000 ppm threshold, due to the non-linearity of the measurement.

STORMWATER POLLUTION PREVENTION PLAN

MJ Painting Site
350 Franklin Street
Olean, New York

APPENDIX E

Notice of Termination Form

New York State Department of Environmental Conservation
Division of Water
625 Broadway, 4th Floor
Albany, New York 12233-3505
(NOTE: Submit completed form to address above)

NOTICE OF TERMINATION for Storm Water Discharges Authorized under the SPDES General Permit for Construction Activity

Please indicate your permit identification number: NYR ___ ___ ___ ___ ___ ___

I. Owner or Operator Information

1. Owner/Operator Name:

2. Street Address:

3. City/State/Zip:

4. Contact Person: | 4a.Telephone:

4b. Contact Person E-Mail:

II. Project Site Information

5. Project/Site Name:

6. Street Address:

7. City/Zip:

8. County:

III. Reason for Termination

9a. ☐ All disturbed areas have achieved final stabilization in accordance with the general permit and SWPPP. ***Date final stabilization completed** (month/year): ______________________________

9b. ☐ Permit coverage has been transferred to new owner/operator. Indicate new owner/operator's permit identification number: NYR ____ ____ ____ ____ ____ ____
(Note: Permit coverage can not be terminated by owner identified in I.1. above until new owner/operator obtains coverage under the general permit)

9c. ☐ Other (Explain on Page 2)

IV. Final Site Information:

10a. Did this construction activity require the development of a SWPPP that includes post-construction stormwater management practices? ☐ yes ☐ no (If no, go to question 10f.)

10b. Have all post-construction stormwater management practices included in the final SWPPP been constructed? ☐ yes ☐ no (If no, explain on Page 2)

10c. Identify the entity responsible for long-term operation and maintenance of practice(s)?

____

NOTICE OF TERMINATION for Storm Water Discharges Authorized under the SPDES General Permit for Construction Activity - continued

10d. Has the entity responsible for long-term operation and maintenance been given a copy of the operation and maintenance plan required by the general permit? ☐ yes ☐ no

10e. Indicate the method used to ensure long-term operation and maintenance of the post-construction stormwater management practice(s):

☐ Post-construction stormwater management practice(s) and any right-of-way(s) needed to maintain practice(s) have been deeded to the municipality.

☐ Executed maintenance agreement is in place with the municipality that will maintain the post-construction stormwater management practice(s).

☐ For post-construction stormwater management practices that are privately owned, a mechanism is in place that requires operation and maintenance of the practice(s) in accordance with the operation and maintenance plan, such as a deed covenant in the owner or operator's deed of record.

☐ For post-construction stormwater management practices that are owned by a public or private institution (e.g. school, university or hospital), government agency or authority, or public utility; policy and procedures are in place that ensures operation and maintenance of the practice(s) in accordance with the operation and maintenance plan.

10f. Provide the total area of impervious surface (i.e. roof, pavement, concrete, gravel, etc.) constructed within the disturbance area? ______________________________ (acres)

11. Is this project subject to the requirements of a regulated, traditional land use control MS4? ☐ yes ☐ no

(If Yes, complete section VI - "MS4 Acceptance" statement

V. Additional Information/Explanation:

(Use this section to answer questions 9c. and 10b., if applicable)

VI. MS4 Acceptance - MS4 Official (principal executive officer or ranking elected official) or Duly Authorized Representative (Note: Not required when 9b. is checked -transfer of coverage)

I have determined that it is acceptable for the owner or operator of the construction project identified in question 5 to submit the Notice of Termination at this time.

Printed Name:

Title/Position:

Signature:

Date:

NOTICE OF TERMINATION for Storm Water Discharges Authorized under the SPDES General Permit for Construction Activity - continued

VII. Qualified Inspector Certification - Final Stabilization:

I hereby certify that all disturbed areas have achieved final stabilization as defined in the current version of the general permit, and that all temporary, structural erosion and sediment control measures have been removed. Furthermore, I understand that certifying false, incorrect or inaccurate information is a violation of the referenced permit and the laws of the State of New York and could subject me to criminal, civil and/or administrative proceedings.

Printed Name:

Title/Position:

Signature: Date:

VIII. Qualified Inspector Certification - Post-construction Stormwater Management Practice(s):

I hereby certify that all post-construction stormwater management practices have been constructed in conformance with the SWPPP. Furthermore, I understand that certifying false, incorrect or inaccurate information is a violation of the referenced permit and the laws of the State of New York and could subject me to criminal, civil and/or administrative proceedings.

Printed Name:

Title/Position:

Signature: Date:

IX. Owner or Operator Certification

I hereby certify that this document was prepared by me or under my direction or supervision. My determination, based upon my inquiry of the person(s) who managed the construction activity, or those persons directly responsible for gathering the information, is that the information provided in this document is true, accurate and complete. Furthermore, I understand that certifying false, incorrect or inaccurate information is a violation of the referenced permit and the laws of the State of New York and could subject me to criminal, civil and/or administrative proceedings.

Printed Name:

Title/Position:

Signature: Date:

REMEDIAL ACTION WORK PLAN

MJ Painting Site
350 Franklin Street
Olean, New York

APPENDIX D

PDI Summary

MEMORANDUM

Date: April 5, 2022

To: Ben MacPherson, NYSDEC

From: Brian Robinson, Roux Associates, Inc.

Subject: **PDI Summary**
350 Franklin St
Olean, New York

The summary for Roux's pre-design investigation at 350 Franklin St, Olean NY is as follows:

The Pre-Design Investigation (PDI) was completed over four mobilizations from November 10th, 2021 through February 9th, 2022. As described in the October 26, 2021 Pre-Design Investigation Work Plan, sampling was conducted to identify grossly contaminated media (GCM)/source material in areas where petroleum-related impacts have been observed but there was insufficient local monitoring well coverage to accurately evaluate, to pre-characterize waste for disposal, and to pre-characterize soils for reuse on-site. Analytical tables, sample location plans, MW location plans, and boring and well construction logs are attached.

48 soil boring locations and 56 surficial soil locations (Figures attached) were sampled for analyses including VOCs, SVOCs, metals, herbicides/pesticides, PCBs, emerging contaminants, and a suite of general chemistry for waste characterization. An additional eight soil borings were completed as monitoring wells (RXMW-106 through RXMW-113), developed, and sampled for VOCs and SVOCs. During all sub-surface soil sampling activities, two community air monitoring plan (CAMP) setups (one upwind and one downwind of the work location) were monitored.

In the first mobilization from November 11 through November 18, 2021, the 48 soil borings were completed to 12 ft bgs using a Geoprobe operated by TREC Environmental Inc. (TREC). Samples were collected with 4-foot acetate sample cores, logged continuously in accordance with the Unified Soil Classification System (USCS), and screened using a PID.

27 of the 56 discrete surficial soil samples along with 11 corresponding composite samples were collected during the first mobilization. At each location, the surficial vegetation was removed with a shovel, and an approximately 1 ft deep hole was dug. The discrete VOC sample was collected directly from the ground. Soil from 0-1 ft bgs was composited from 3 or more discrete samples in a Ziploc bag for the composite surficial re-use sample.

The second mobilization occurred from January 4th through January 9th, 2022. Three wells were installed (RXMW-107, RXMW-108, and RXMW-109) and RXMW-107 was developed. Parratt-Wolf, subcontracted by TREC, used a hollow-stem auger rig and split spoon sampler to advance each boring 32 to 36 ft bgs. 4-inch outer diameter PVC well casings with 20 ft screens were installed to just above the clay layer (28 ft bgs) and finished with a stick-up well casing. At each well installation location, one sample of VOCs and SVOCs was collected at the most impacted interval according to visual, olfactory, and PID screening results.

RXMW-107 was developed using a whale pump and surge block. 80 gallons of water were removed from the well, and several pump/surge cycles were completed. The development water was drummed in 50-gal steel drums for off-Site disposal.

The remaining 29 discrete surficial soil samples and corresponding composite samples were collected using the same methods as in the first mobilization.

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During the third mobilization, from January 17th to January 21st, 2022, the remaining five wells were installed (RXMW-106, RXMW-110, RXMW-111, RXMW-112, and RXMW-113) and all undeveloped wells were developed. As with the first three wells that were installed, 20-foot 4-inch screens were installed just above the impermeable clay layer, and wells were finished with stick-up well casings. Development water and soil cuttings were drummed in 50-gal steel drums for disposal. Following well development, a synoptic gauge of the Site wells was performed (Table 3).

The fourth mobilization was a groundwater sampling event and took place on February 8th to 9th, 2022. Six of the eight newly installed monitoring wells were sampled for VOCs and SVOCs in accordance with low-flow groundwater sampling guidelines (Tables 1 and 2).

48 samples were analyzed for waste characterization. The quantities of samples analyzed were sufficient to characterize up to 48,000 tons of material for disposal. Waste characterization data is presented in Table 4.

In total, 73 composite samples for re-use criteria were collected, 43 of which meet the soil cleanup objectives (SCOs) (no exceedances of NYSDEC Commercial or Protection of Groundwater SCOs). There were 171 discrete VOC samples collected for re-use characterization, of which 86 meet the soil cleanup objectives. According to DER-10 Table 5.4(e)10, 2 composite re-use samples and 7 discrete VOC samples are required to characterize the first 1000 cubic yards (CY) of soil for re-use, and two discrete VOC and one composite sample are required for each subsequent 1000 CY. The quantities of SCO-compliant samples obtained during the PDI were sufficient to characterize up to 39,000 CY of soil for re-use. Soil re-use characterization data is presented in Table 5.

Attachments:

PDI Figures

PDI Tables

PDI Logs

Table 1
Summary of Volatile Organic Compounds in Groundwater
MJ Painting 350 Franklin Street, Olean, New York

Sample ID	NYSDEC GA Ambient Water Quality Standards & Guidance Values	RXMW-106	RXMW-107	RXMW-108	RXMW-110	RXMW-111	RXMW-112
Lab Sample ID		L2206919-1	L2206919-2	L2206522-4	L2206522-1	L2206522-2	L2206522-3
Sample Date		02/09/22	02/09/22	02/08/22	02/08/22	02/08/22	02/08/22
VOLATILE ORGANIC COMPOUNDS - 8260C (µg/l)							
1,1,1-Trichloroethane	5	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,1,2,2,-Tetrachloroethane	5	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1,2-Trichloroethane	1	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U
1,1,-Dichloroethene	5	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1-Dichloroethane	5	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,2,3-Trichlorobenzene	5	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,2,4-Trichlorobenzene	5	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,2-Dibromo-3-chloropropane	0.04	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,2-Dibromoethane	NS	2 U	2 U	2 U	2 U	2 U	2 U
1,2-Dichlorobenzene	3	2 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,2-Dichloroethane	0.6	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichloroethene, Total	5	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,2-Dichloropropane	1	1 U	1 U	1 U	1 U	1 U	1 U
1,3-Dichlorobenzene	3	2 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,3-Dichloropropene, Total	0.4	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,4-Dichlorobenzene	3	2 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,4-Dioxane	NS	250 U	250 U	250 U	250 U	250 U	250 U
2-Butanone	50	5 U	5 U	5 U	5 U	5 U	5 U
2-Hexanone	50	5 U	5 U	5 U	5 U	5 U	5 U
4-Methyl-2-Pentanone	NS	5 U	5 U	5 U	5 U	5 U	5 U
Acetone	50	5 U	5 U	5 U	5 U	13	2.2 J
Benzene	1	0.3 J	0.97	0.5 U	3.7	38	0.27 J
Bromochloromethane	5	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Bromodichloromethane	50	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Bromoform	50	2 U	2 U	2 U	2 U	2 U	2 U
Bromomethane	5	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Carbon disulfide	60	5 U	5 U	5 U	5 U	5 U	5 U
Carbon tetrachloride	5	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chlorobenzene	5	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Chloroethane	5	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Chloroform	7	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Chloromethane	NS	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
cis-1,2-Dichloroethene	5	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
cis-1,3-Dichloropropene	5	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Dibromochloromethane	50	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Dichlorodifluoromethane	5	5 U	5 U	5 U	5 U	5 U	5 U
Ethylbenzene	5	2.5 U	2.5 U	2.5 U	1.3 J	14	2.5 U
Isopropylbenzene	5	3.8	4.1	2.5 U	2.7	16	2.5 U
Methyl tertiary butyl ether (MTBE)	10	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Methylene chloride	5	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Styrene	5	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Tetrachloroethene	5	0.5 U	0.49 J	0.5 U	0.5 U	0.5 U	0.5 U
Toluene	5	2.5 U	0.94 J	2.5 U	2.5 U	5.9	2.5 U
trans-1,2-Dichloroethene	5	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
trans-1,3-Dichloropropene	NS	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Trichloroethene	5	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Trichlorofluoromethane	5	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Vinyl chloride	2	1 U	1 U	1 U	1 U	1 U	1 U
Xylene (m&p)	5	2.5 U	1 J	2.5 U	2.5 U	3	2.5 U
Xylene (o)	5	2.5 U	1.1 J	2.5 U	2.4 J	30	2.5 U
Xylenes (Total)	5	2.5 U	2.1 J	2.5 U	2.4 J	33	2.5 U

Notes:
NYSDEC GA Ambient Water Quality Standards & Guidance Values = New York State Department of Environmental Conservation Class GA Ambient Water Quality Standards and Guidance Values taken from June 1998 Memorandum, Part 1, Table 1 and April 2000 Addendum to June 1998 Division of
µg/l = Micrograms per liter.
Shaded concentrations exceed the NYSDEC GA Ambient Water Quality Standards & Guidance Values
— = Sample not analyzed.
NS = No standard currently established.
U = Not detected above laboratory detection limit.
J = Result below the reporting limit (estimated value).
When the applicable state standard applies to mixed isomers and the laboratory reports individual isomers, the total standard is listed for each isomer.

Table 2.
Summary of Semivolatile Organic Compounds in Groundwater
MJ Painting 350 Franklin Street, Olean, New York

Sample ID	NYSDEC GA Ambient Water Quality Standards & Guidance Values	RXMW-106	RXMW-107	RXMW-108	RXMW-110	RXMW-111	RXMW-112
Lab Sample ID		L2206919-1	L2206919-2	L2206522-4	L2206522-1	L2206522-2	L2206522-3
Sample Date		02/09/22	02/09/22	02/08/22	02/08/22	02/08/22	02/08/22
SEMI-VOLATILE ORGANIC COMPOUNDS SIMS - 8270D-SIM (µg/l)							
2-Chloronaphthalene	10	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
2-Methylnapthalene	NS	0.07 J	0.1 U	0.03 J	0.04 J	0.82	0.07 J
Acenaphthene	20	0.36	0.3	0.29	0.77	0.31	0.15
Acenaphthylene	20	0.1 U	0.09 J	0.1 J	0.16	0.1 U	0.05 J
Anthracene	50	0.13	0.09 J	0.11	0.05 J	0.11	0.05 J
Benzo[a]anthracene	0.002	0.1 U	0.1 U	0.03 J	0.03 J	0.03 J	0.1 U
Benzo[a]pyrene	0	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Benzo[b]fluoranthene	0.002	0.1 U	0.03 J	0.1 U	0.02 J	0.02 J	0.1 U
Benzo[g,h,i]perylene	NS	0.1 U	0.02 J	0.1 U	0.1 U	0.1 U	0.1 U
Benzo[k]fluoranthene	0.002	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Chrysene	0.002	0.1 U	0.01 J	0.01 J	0.02 J	0.03 J	0.1 U
Dibenzo(a,h)anthracene	NS	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Fluoranthene	50	0.03 J	0.1 U	0.03 J	0.03 J	0.05 J	0.1 U
Fluorene	50	1	0.77	0.9	1	0.67	0.29
Hexachlorobenzene	0.04	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U
Hexachlorobutadiene	0.5	0.5 U	0.5 U	0.5 U	2.5 U	2.5 U	2.5 U
Hexachloroethane	5	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U
Indeno[1,2,3-cd]pyrene	0.002	0.1 U	0.02 J	0.1 U	0.1 U	0.1 U	0.1 U
Naphthalene	10	0.27	0.33	0.23	0.14	3.4	2.5 U
Pentachlorophenol	1	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U
Phenanthrene	50	0.16	0.42	1.2	0.29	0.31	0.17
Pyrene	50	0.12	0.06 J	0.11	0.03 J	0.06 J	0.03 J
1,2,4,5-Tetrachlorobenzene	NS	10 U	10 U	10 U	10 U	10 U	10 U
1,2,4-Trichlorobenzene	5	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,2-Dichlorobenzene	3	2 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,3-Dichlorobenzene	3	2 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
1,4-Dichlorobenzene	3	2 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
2,4,5-Trichlorophenol	NS	5 U	5 U	5 U	5 U	5 U	5 U
2,4,6-Trichlorophenol	NS	5 U	5 U	5 U	5 U	5 U	5 U
2,4-Dichlorophenol	5	5 U	5 U	5 U	5 U	5 U	5 U
2,4-Dimethylphenol	50	5 U	5 U	5 U	5 U	5 U	5 U
2,4-Dinitrophenol	10	20 U	20 U	20 U	20 U	20 U	20 U
2,4-Dinitrotoluene	5	5 U	5 U	5 U	5 U	5 U	5 U
2,6-Dinitrotoluene	5	5 U	5 U	5 U	5 U	5 U	5 U
2-Chlorophenol	NS	2 U	2 U	2 U	2 U	2 U	2 U
2-Methylphenol	NS	5 U	5 U	5 U	5 U	5 U	5 U
2-Nitroaniline	5	5 U	5 U	5 U	5 U	5 U	5 U
2-Nitrophenol	NS	10 U	10 U	10 U	10 U	10 U	10 U
3,3'-Dichlorobenzidine	5	5 U	5 U	5 U	5 U	5 U	5 U
3-Methylphenol/4-Methylphenol	NS	5 U	5 U	5 U	5 U	5 U	5 U
3-Nitroaniline	5	5 U	5 U	5 U	5 U	5 U	5 U
4,6-Dinitro-o-cresol	NS	10 U	10 U	10 U	10 U	10 U	10 U
4-Bromophenyl-phenylether	NS	2 U	2 U	2 U	2 U	2 U	2 U
4-Chloroaniline	5	5 U	5 U	5 U	5 U	5 U	5 U
4-Chlorophenyl-phenylether	NS	2 U	2 U	2 U	2 U	2 U	2 U
4-Nitroaniline	5	5 U	5 U	5 U	5 U	5 U	5 U
4-Nitrophenol	NS	10 U	10 U	10 U	10 U	10 U	10 U
Acetophenone	NS	5 U	5 U	5 U	5 U	5 U	5 U
Benzoic Acid	NS	7.2 J	50 U	50 U	50 U	50 U	2.7 J
Benzyl Alcohol	NS	2 U	2 U	2 U	2 U	2 U	2 U
Biphenyl	NS	2 U	2 U	2 U	2 U	2 U	2 U
Bis(2-Chloroethoxy)methane	5	5 U	5 U	5 U	5 U	5 U	5 U
Bis(2-Chloroethyl)ether	1	2 U	0.74 J	1.4 J	2 U	2 U	2 U
Bis(2-Chloroisopropyl)ether	5	2 U	2 U	2 U	2 U	2 U	2 U
Bis(2-Ethylhexyl)phthalate	5	3 U	3 U	3 U	3 U	3 U	3 U
Butyl benzyl phthalate	50	5 U	5 U	5 U	5 U	5 U	5 U
Carbazole	NS	2 U	2 U	2 U	2 U	2 U	2 U
Dibenzofuran	NS	2 U	2 U	2 U	2 U	2 U	2 U
Diethyl phthalate	50	5 U	5 U	5 U	5 U	5 U	5 U
Dimethyl phthalate	50	5 U	5 U	5 U	5 U	5 U	5 U
Di-n-butylphthalate	50	5 U	5 U	5 U	5 U	5 U	5 U
Di-n-octylphthalate	NS	5 U	5 U	5 U	5 U	5 U	5 U
Hexachlorocyclopentadiene	5	20 U	20 U	20 U	20 U	20 U	20 U
Isophorone	50	5 U	5 U	5 U	5 U	5 U	5 U
Nitrobenzene	0.4	2 U	2 U	2 U	2 U	2 U	2 U
n-Nitrosodi-n-propylamine	NS	5 U	5 U	5 U	5 U	5 U	5 U
N-Nitrosodiphenylamine	50	2 U	2 U	2 U	2 U	2 U	2 U
p-Chloro-m-cresol	NS	2 U	2 U	2 U	2 U	2 U	2 U
Phenol	1	5 U	5 U	5 U	5 U	1.5 J	5 U

Notes:

NYSDEC GA Ambient Water Quality Standards & Guidance Values = New York State Department of Environmental Conservation Class GA Ambient Water Quality Standards and Guidance Values taken from June 1998 Memorandum, Part 1, Table 1 and April 2000 Addendum to June 1998 Division of Water Technical and Operational Guidance Series (TOGS) No. 1.1.1.

µg/l = Micrograms per liter.

Shaded concentrations exceed the NYSDEC GA Ambient Water Quality Standards & Guidance Values

— = Sample not analyzed.

NS = No standard currently established.

U = Not detected above laboratory detection limit.

J = Result below the reporting limit (estimated value).

When the applicable state standard applies to mixed isomers and the laboratory reports individual isomers, the total standard is listed for each isomer.

Table 3
Synoptic Gauging Table, February 9, 2022
MJ Painting 350 Franklin Street, Olean, New York

Well Identification	Gauging Date	Depth to LNAPL (feet bmp)	Depth to Water (feet bmp)	Depth to Bottom (feet bmp)	LNAPL Thickness (feet)	Comments
MW-100	2/9/2022	--	10.42	--	--	Globules on probe, sock in well
RXMW-006	2/9/2022	--	17.86	26.16	--	
RXMW-109	2/9/2022	13.4	13.41	--	0.01	Product on probe
MW-209	2/9/2022	17.1	17.11	--	0.01	Product on sock, probe
MW-212	2/9/2022	16.85	17.4	--	0.55	Product on sock, probe
RXMW-113	2/9/2022	16.96	17.2	--	0.24	Product on probe
RXMW-002	2/9/2022	--	18.72	19.2	--	
RXMW-001	2/9/2022	--	8.58	--	--	Globules on probe, sock; iron sludge
RXMW-111	2/9/2022	--	17.54	30.82	--	
MW-216	2/9/2022	--	17.69	29.38	--	
RXMW-112	2/9/2022	--	17.69	35.15	--	
RXMW-110	2/9/2022	--	16.75	26.4	--	
RXMW-003	2/9/2022	--	18.74	21.5	--	
MW-202	2/9/2022	--	13.95	26.7	--	
RXMW-105S	2/9/2022	--	17.7	23.02	--	
RXMW-105D	2/9/2022	--	17.7	33.2	--	
RXMW-005	2/9/2022	--	12.55	15.31	--	
RXMW-106	2/9/2022	--	17.05	30.35	--	
MW-106	2/9/2022	--	16.8	28.31	--	
MW-105	2/9/2022	--	15.32	24.8	--	
RXMW-107	2/9/2022	--	15.67	29.36	--	
MW-206	2/9/2022	--	18.94	35.85	--	
MW-104	2/9/2022	--	11.31	30.91	--	
MW-102	2/9/2022	--	13.9	27.25	--	
RXMW-108	2/9/2022	--	13.8	28.61	--	
RXMW-007	2/9/2022	--	19.35	27.35	--	
RXMW-103	2/9/2022	--	18.35	32.4	--	
RXMW-004	2/9/2022	--	18.8	24.31	--	
MW-208	2/9/2022	--	16.18	26.41	--	

Table 4.
Summary of Soil Waste Characterization Data.
MJ Painting; Olean, New York

Sample ID	**RX-401**	**RX-401**	**RX-403**	**RX-404**	**RX-405**	**RX-407**	**RX-410**	**RX-411**	**RX-416**	**RX-417**	**RX-417**	**RX-418**	**RX-419**	**RX-420**	**RX-420**	**RX-420**	**RX-422**	**RX-422**	**RX-423**	**RX-424**	**RX-425**	**RX-425**	**RX-425**	**RX-426**
Sample Depth (ft bgs)	**0-1**	**7-10**	**0-1**	**7-10**	**0-1**	**0-1**	**10-12**	**7-10**	**10-12**	**0-1**	**10-12**	**10-12**	**10-12**	**0-1**	**7-10**	**10-12**	**0-1**	**10-12**	**10-12**	**10-12**	**0-1**	**7-10**	**10-12**	**7-10**
Lab Sample ID	**L2162627**	**L2162627**	**L2162627**	**L2162627**	**L2162848**	**L2162848**	**L2162627**	**L2162627**	**L2163207**	**L2162298**	**L2162298**	**L2162627**	**L2162848**	**L2163207**	**L2162848**	**L2162848**	**L2162298**	**L2162298**	**L2162298**	**L2162298**	**L2162298**	**L2162298**	**L2162298**	**L2162298**
Sample Date	**11/12/2021**	**11/12/2021**	**11/12/2021**	**11/12/2021**	**11/15/2021**	**11/15/2021**	**11/12/2021**	**11/12/2021**	**11/16/2021**	**11/11/2021**	**11/11/2021**	**11/11/2021**	**11/15/2021**	**11/15/2021**	**11/15/2021**	**11/15/2021**	**11/10/2021**	**11/10/2021**	**11/11/2021**	**11/11/2021**	**11/11/2021**	**11/11/2021**	**11/11/2021**	**11/11/2021**
GENERAL CHEMISTRY - 1030 (none)																								
Ignitability	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	—	ND	ND	ND	ND	ND	ND	ND	ND
GENERAL CHEMISTRY - 2540G (%)																								
Solids, Total	85.7	77.5	79.8	82.6	73.8	87.5	84.8	82.3	88.4	88	59.2	77	84.3	83.5	70.3	—	66.7	83.7	77.5	73	87.1	72.2	83.8	80.3
GENERAL CHEMISTRY - 7.3 (mg/kg)																								
Cyanide	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Sulfide, Reactive	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	100	10 U	10 U	10 U	10 U	92	10 U
GENERAL CHEMISTRY - 9045D (SU)																								
pH (H)	7.8	7.1	7.7	7.1	7.6	7.9	6.8	7.2	7.4	7.8	6.9	7.6	6.6	7.6	6.9	—	7.4	7.3	6.9	6.9	7.6	7.3	7.4	6.9
GENERAL CHEMISTRY - 9071B (mg/kg)																								
TPH, HEM-SGT	2890	5600	576	4010	284	228 U	4420	1860	3240	227 U	12500	3730	1710	240 U	10500	1830	300 U	2580	4060	16900	230 U	4200	1750	38900
HERBICIDES - 8151A (mg/kg)																								
2,4,5-T	0.193 U	0.213 U	0.207 U	0.198 U	0.221 U	0.186 U	0.191 U	0.201 U	0.186 U	0.185 U	0.277 U	0.211 U	0.196 U	0.195 U	0.233 U	0.209 U	0.249 U	0.196 U	0.214 U	0.227 U	0.187 U	0.228 U	0.197 U	0.595 U
2,4,5-TP (Silvex)	0.193 U	0.213 U	0.207 U	0.198 U	0.221 U	0.186 U	0.191 U	0.201 U	0.186 U	0.185 U	0.277 U	0.211 U	0.196 U	0.195 U	0.233 U	0.209 U	0.249 U	0.196 U	0.214 U	0.227 U	0.187 U	0.228 U	0.197 U	0.595 U
2,4-D	0.193 U	0.213 U	0.207 U	0.198 U	0.221 U	0.186 U	0.191 U	0.201 U	0.186 U	0.185 U	0.277 U	0.211 U	0.196 U	0.195 U	0.233 U	0.209 U	0.249 U	0.196 U	0.214 U	0.227 U	0.187 U	0.228 U	0.197 U	0.595 U
METALS - 6010D & 7471B (mg/kg)																								
Aluminum	7930	8980	7430	12700	7740	9060	10900	12200	8720	5020	11500	4380	8840	5550	2730	12700	5380	5450	13900	1840	4000	3430	6980	9900
Antimony	1.36 J	3.12 J	1.19 J	0.89 J	5.24 U	4.4 U	0.786 J	0.799 J	0.652 J	0.452 J	7.24	62.6	4.45 U	4.72 U	5.39 U	5.07 U	0.637 J	0.571 J	0.646 J	0.973 J	4.55 U	0.769 J	0.406 J	1.94 J
Arsenic	19.9	21.5	13.5	10	12.8	9.41	9.55	5.88	11.6	6.06	18.8	45.8	7.33	5.79	5.51	32	6.2	5.77	19.9	13	4.57	12.7	6.97	59.2
Barium	81.5	60.2	80.7	58.6	60.7	70.5	59.6	64	57.7	48.2	74.5	82.8	68.5	55.3	89.6	61.6	51.3	22.7	110	40.6	42.1	89.5	53.7	77.4
Beryllium	0.476	0.51	0.444 J	0.634	0.398 J	0.404 J	0.484	0.483	0.443	0.296 J	0.589 J	0.773	0.223 J	0.217 J	0.172 J	0.284 J	0.272 J	0.243 J	0.832	0.299 J	0.209 J	0.326 J	0.199 J	0.677
Cadmium	1.2	1.05	0.967 J	0.833 J	0.22 J	0.141 J	0.868 J	0.799 J	0.574 J	0.87 U	0.656 J	1.9	0.89 U	0.378 J	1.08 U	1.01 U	0.118 J	0.936 U	0.352 J	1.07 U	0.109 J	1.05 U	0.903 U	0.968 U
Calcium	18500	4300	18100	907	7700	24700	540	1100	2810	13300	14600	4970	1040	59400	1460	1030	3010	651	6710	904	12300	1110	951	3610
Chromium	14.3	13.8	11	14.7	10.5	10.9	11.1	12.1	11.5	6.73	14.4	6.55	9.73	6.52	4.27	17.5	7.12	4.88	32	3.03	5.74	5.51	9.81	14.4
Cobalt	7.14	5.95	6.95	13.1	7.31	8.7	11.8	8.63	8.22	5.09	13.2	5.59	3.89	3.94	5.24	7.13	4.91	5.14	4.36	4.91	3.69	3.8	4.45	7.41
Copper	56	405	33.6	17.4	28	18.5	16.8	12.2	22.6	16.9	231	140	24.2	15.5	27.2	27.4	20	12.2	27.1	229	15.6	67.6	36.3	97.2
Iron	25200	22200	22200	23100	18200	22000	24100	22200	18400	13600	36900	26600	16800	11700	14100	37100	13400	12600	18400	15200	11400	18000	14000	38400
Lead	118	198	56.1	15.2	65.6	27.2	15.6	14	23.9	11.4	202	4580	14.3	8.95	36.3	12.7	15.4	7.54	123	56.3	11.2	15.7	12.8	188
Magnesium	3800	3450	3540	3080	3370	14800	2980	3040	2590	2890	4120	1060	1850	4550	848	3430	2440	1500	10100	323	2410	574	1740	1720
Manganese	401	148	508	192	397	541	722	316	414	556	2070	92.8	95.3	409	100	139	559	766	85.2	36.7	433	77.9	79	167
Mercury	0.26	0.14	0.208	0.087	0.808	0.073 U	0.094 U	0.082 U	0.071 U	0.088 U	0.13 J	0.181	0.103	0.085 U	0.09 U	0.081 U	0.102 U	0.091 U	0.1	0.1 U	0.223	0.319	0.087 U	0.226
Nickel	17.3	12.1	16.3	20	16.4	17.7	19.4	19.3	16	10.9	22.1	16.6	10.5	9.18	9.65	18.4	11.4	11	11.6	9.06	8.91	6.68	10.6	18.9
Potassium	738	659	628	602	660	684	474	552	496	350	636	316	425	248	340	763	356	247	1610	211 J	336	219 J	421	440
Selenium	0.805 J	0.82 J	0.385 J	0.558 J	0.314 J	1.76 U	1.83 U	0.409 J	1.74 U	0.252 J	1.11 J	1.34 J	0.338 J	1.89 U	0.55 J	0.496 J	2.36 U	0.505 J	1.96 U	0.278 J	1.82 U	0.59 J	1.81 U	0.464 J
Silver	0.914 U	0.999 U	0.987 U	0.946 U	1.05 U	0.879 U	0.914 U	0.929 U	0.87 U	0.87 U	1.34 U	1.02 U	0.89 U	0.944 U	1.08 U	1.01 U	1.18 U	0.936 U	0.978 U	1.07 U	0.91 U	1.05 U	0.903 U	0.968 U
Sodium	86.4 J	81 J	47.4 J	26.7 J	38.7 J	56.6 J	25.8 J	57.9 J	27.1 J	41.8 J	49.3 J	85.5 J	15.4 J	48.1 J	17.5 J	54.4 J	32.2 J	14.4 J	272	32.7 J	21.4 J	12.7 J	14.3 J	270
Thallium	1.83 U	2 U	1.97 U	0.312 J	2.09 U	1.76 U	1.83 U	1.86 U	1.74 U	1.74 U	3.12	2.03 U	1.78 U	1.89 U	2.16 U	0.334 J	2.36 U	0.702 J	1.96 U	2.14 U	1.82 U	2.11 U	1.81 U	0.445 J
Vanadium	17.3	21.2	14.2	18.3	7.42	8.12	16	16.1	13.5	8.92	14.2	15.1	11.6	9.31	2.81	24.8	9.44	6.58	31.9	7.39	7.42	12.5	19.8	24.8
Zinc	90.1	90.6	70.7	54.2	66.3	70.6	48.1	54.8	50.6	49	148	226	37	37.5	14.4	48	56.3	37.2	52.8	15.8	46.6	17.3	35.9	59.9

Table 4.
Summary of Soil Waste Characterization Data.
MJ Painting; Olean, New York

Sample ID	RX-401	RX-401	RX-403	RX-404	RX-405	RX-407	RX-410	RX-411	RX-416	RX-417	RX-417	RX-418	RX-419	RX-420	RX-420	RX-420	RX-422	RX-422	RX-423	RX-424	RX-425	RX-425	RX-425	RX-426
Sample Depth (ft bgs)	0-1	7-10	0-1	7-10	0-1	0-1	10-12	7-10	10-12	0-1	10-12	10-12	10-12	0-1	7-10	10-12	0-1	10-12	10-12	10-12	0-1	7-10	10-12	7-10
Lab Sample ID	L2162627	L2162627	L2162627	L2162627	L2162848	L2162848	L2162627	L2162627	L2163207	L2162298	L2162298	L2162627	L2162848	L2163207	L2162848	L2162848	L2162298	L2162298	L2162298	L2162298	L2162298	L2162298	L2162298	L2162298
Sample Date	11/12/2021	11/12/2021	11/12/2021	11/12/2021	11/15/2021	11/15/2021	11/12/2021	11/12/2021	11/16/2021	11/11/2021	11/11/2021	11/11/2021	11/15/2021	11/15/2021	11/15/2021	11/15/2021	11/10/2021	11/10/2021	11/11/2021	11/11/2021	11/11/2021	11/11/2021	11/11/2021	11/11/2021
PAINT FILTER LIQUID - 9095B (none)																								
Paint Filter Liquid	Positive	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	Positive	ND	—	ND	ND	ND	ND	ND	ND	ND	ND
POLYCHLORINATED BIPHENYLS - 8082A (mg/kg)																								
Aroclor-1016	0.0379 U	0.0408 U	0.0417 U	0.0395 U	0.0436 U	0.0368 U	0.0381 U	0.0398 U	0.0366 U	0.0363 U	0.0533 U	0.0409 U	0.0375 U	0.0382 U	0.046 U	0.0421 U	0.0492 U	0.0389 U	0.0429 U	0.0448 U	0.0371 U	0.0457 U	0.0391 U	0.04 U
Aroclor-1221	0.0379 U	0.0408 U	0.0417 U	0.0395 U	0.0436 U	0.0368 U	0.0381 U	0.0398 U	0.0366 U	0.0363 U	0.0533 U	0.0409 U	0.0375 U	0.0382 U	0.046 U	0.0421 U	0.0492 U	0.0389 U	0.0429 U	0.0448 U	0.0371 U	0.0457 U	0.0391 U	0.04 U
Aroclor-1232	0.0379 U	0.0408 U	0.0417 U	0.0395 U	0.0436 U	0.0368 U	0.0381 U	0.0398 U	0.0366 U	0.0363 U	0.0533 U	0.0409 U	0.0375 U	0.0382 U	0.046 U	0.0421 U	0.0492 U	0.0389 U	0.0429 U	0.0448 U	0.0371 U	0.0457 U	0.0391 U	0.04 U
Aroclor-1242	0.0379 U	0.0408 U	0.0417 U	0.0395 U	0.0436 U	0.0368 U	0.0381 U	0.0398 U	0.0366 U	0.0363 U	0.0533 U	0.0409 U	0.0375 U	0.0382 U	0.046 U	0.0421 U	0.0492 U	0.0389 U	0.0429 U	0.0448 U	0.0371 U	0.0457 U	0.0391 U	0.04 U
Aroclor-1248	0.0379 U	0.0408 U	0.0417 U	0.0395 U	0.0436 U	0.0368 U	0.0381 U	0.0398 U	0.0366 U	0.0363 U	0.0533 U	0.0409 U	0.0375 U	0.0382 U	0.046 U	0.0421 U	0.0492 U	0.0389 U	0.0429 U	0.0448 U	0.0371 U	0.0457 U	0.0391 U	0.04 U
Aroclor-1254	0.0379 U	0.0408 U	0.0417 U	0.0395 U	0.0436 U	0.0368 U	0.0381 U	0.0398 U	0.0366 U	0.0363 U	0.0533 U	0.0409 U	0.0375 U	0.0382 U	0.046 U	0.0421 U	0.0492 U	0.0389 U	0.0429 U	0.0448 U	0.0371 U	0.0457 U	0.0391 U	0.04 U
Aroclor-1260	0.0379 U	0.0408 U	0.0417 U	0.0395 U	0.0436 U	0.0368 U	0.0381 U	0.0398 U	0.0366 U	0.0363 U	0.0533 U	0.0409 U	0.0375 U	0.0382 U	0.046 U	0.0421 U	0.0492 U	0.0389 U	0.0429 U	0.0448 U	0.0371 U	0.0457 U	0.0391 U	0.04 U
Aroclor-1262	0.0379 U	0.0408 U	0.0417 U	0.0395 U	0.0436 U	0.0368 U	0.0381 U	0.0398 U	0.0366 U	0.0363 U	0.0533 U	0.0409 U	0.0375 U	0.0382 U	0.046 U	0.0421 U	0.0492 U	0.0389 U	0.0429 U	0.0448 U	0.0371 U	0.0457 U	0.0391 U	0.04 U
Aroclor-1268	0.0379 U	0.0408 U	0.0417 U	0.0395 U	0.0436 U	0.0368 U	0.0381 U	0.0398 U	0.0366 U	0.0363 U	0.0533 U	0.0409 U	0.0375 U	0.0382 U	0.046 U	0.0421 U	0.0492 U	0.0389 U	0.0429 U	0.0448 U	0.0371 U	0.033 J	0.0391 U	0.04 U
Total PCBs	0.0379 U	0.0408 U	0.0417 U	0.0395 U	0.0436 U	0.0368 U	0.0381 U	0.0398 U	0.0366 U	0.0363 U	0.0533 U	0.0409 U	0.0375 U	0.0382 U	0.046 U	0.0421 U	0.0492 U	0.0389 U	0.0429 U	0.0448 U	0.0371 U	0.033 J	0.0391 U	0.04 U
Total PCBs	0.0379 U	0.0408 U	0.0417 U	0.0395 U	0.0436 U	0.0368 U	0.0381 U	0.0398 U	0.0366 U	0.0363 U	0.0533 U	0.0409 U	0.0375 U	0.0382 U	0.046 U	0.0421 U	0.0492 U	0.0389 U	0.0429 U	0.0448 U	0.0371 U	0.033 J	0.0391 U	0.04 U
Total PCBs	0.0379 U	0.0408 U	0.0417 U	0.0395 U	0.0436 U	0.0368 U	0.0381 U	0.0398 U	0.0366 U	0.0363 U	0.0533 U	0.0409 U	0.0375 U	0.0382 U	0.046 U	0.0421 U	0.0492 U	0.0389 U	0.0429 U	0.0448 U	0.0371 U	0.033 J	0.0391 U	0.04 U
PESTICIDES - 8081B (mg/kg)																								
Aldrin	0.0176 U	0.00201 U	0.00192 U	0.00186 U	0.00207 U	0.00182 U	0.00903 U	0.00187 U	0.00178 U	0.00171 U	0.00259 U	0.00978 U	0.00179 U	0.00187 U	0.0215 U	0.00206 U	0.00232 U	0.00182 U	0.00201 U	0.0104 U	0.00178 U	0.00215 U	0.00188 U	0.0192 U
alpha-BHC	0.00735 U	0.000837 U	0.0008 U	0.000774 U	0.000861 U	0.000757 U	0.00376 U	0.00078 U	0.000743 U	0.000714 U	0.00108 U	0.00408 U	0.000747 U	0.000779 U	0.00895 U	0.000858 U	0.000969 U	0.000757 U	0.000838 U	0.00431 U	0.00074 U	0.000897 U	0.000783 U	0.00801 U
beta-BHC	0.0176 U	0.00201 U	0.00192 U	0.00186 U	0.00207 U	0.00182 U	0.00903 U	0.00187 U	0.00178 U	0.00171 U	0.00259 U	0.00978 U	0.00179 U	0.00187 U	0.0215 U	0.00206 U	0.00232 U	0.00182 U	0.00201 U	0.0104 U	0.00178 U	0.00215 U	0.00188 U	0.0192 U
Chlordane	0.147 U	0.0167 U	0.016 U	0.0155 U	0.0172 U	0.0151 U	0.0752 U	0.0156 U	0.0149 U	0.0143 U	0.0216 U	0.0815 U	0.0149 U	0.0156 U	0.179 U	0.0172 U	0.0194 U	0.0151 U	0.0168 U	0.0863 U	0.0148 U	0.0179 U	0.0157 U	0.16 U
cis-Chlordane	0.022 U	0.00251 U	0.0024 U	0.00232 U	0.00258 U	0.00227 U	0.0113 U	0.00234 U	0.00223 U	0.00214 U	0.00324 U	0.0122 U	0.00224 U	0.00234 U	0.0268 U	0.00257 U	0.00291 U	0.00227 U	0.00252 U	0.0129 U	0.00222 U	0.00269 U	0.00235 U	0.024 U
delta-BHC	0.0176 U	0.00201 U	0.00192 U	0.00186 U	0.00207 U	0.00182 U	0.00903 U	0.00187 U	0.00178 U	0.00171 U	0.00259 U	0.00978 U	0.00179 U	0.00187 U	0.0215 U	0.00206 U	0.00232 U	0.00182 U	0.00201 U	0.0104 U	0.00178 U	0.00215 U	0.00188 U	0.0192 U
Dieldrin	0.011 U	0.00126 U	0.0012 U	0.00116 U	0.00129 U	0.00114 U	0.00564 U	0.00117 U	0.00111 U	0.00107 U	0.00162 U	0.00611 U	0.00112 U	0.00117 U	0.0134 U	0.00129 U	0.00145 U	0.00114 U	0.00126 U	0.00647 U	0.00111 U	0.00134 U	0.00117 U	0.012 U
Endosulfan I	0.0176 U	0.00201 U	0.00192 U	0.00186 U	0.00207 U	0.00182 U	0.00903 U	0.00187 U	0.00178 U	0.00171 U	0.00259 U	0.00978 U	0.00179 U	0.00187 U	0.0215 U	0.00206 U	0.00232 U	0.00182 U	0.00201 U	0.0104 U	0.00178 U	0.00215 U	0.00188 U	0.0192 U
Endosulfan II	0.0176 U	0.00201 U	0.00192 U	0.00186 U	0.00207 U	0.00182 U	0.00903 U	0.00187 U	0.00178 U	0.00171 U	0.00259 U	0.00978 U	0.00179 U	0.00187 U	0.0215 U	0.00206 U	0.00232 U	0.00182 U	0.00201 U	0.0104 U	0.00178 U	0.00215 U	0.00188 U	0.0192 U
Endosulfan sulfate	0.00735 U	0.000837 U	0.0008 U	0.000774 U	0.000861 U	0.000757 U	0.00376 U	0.00078 U	0.000743 U	0.000714 U	0.00108 U	0.00408 U	0.000747 U	0.000779 U	0.00895 U	0.000858 U	0.000969 U	0.000757 U	0.000838 U	0.00431 U	0.00074 U	0.000897 U	0.000783 U	0.00801 U
Endrin	0.00735 U	0.000837 U	0.0008 U	0.000774 U	0.000861 U	0.000757 U	0.00376 U	0.00078 U	0.000743 U	0.000714 U	0.00108 U	0.00408 U	0.000747 U	0.000779 U	0.00895 U	0.000858 U	0.000969 U	0.000757 U	0.000838 U	0.00431 U	0.00074 U	0.000897 U	0.000783 U	0.00801 U
Endrin Aldehyde	0.022 U	0.00251 U	0.0024 U	0.00232 U	0.00258 U	0.00227 U	0.0113 U	0.00234 U	0.00223 U	0.00214 U	0.00324 U	0.0122 U	0.00224 U	0.00234 U	0.0268 U	0.00257 U	0.00291 U	0.00227 U	0.00252 U	0.0129 U	0.00222 U	0.00269 U	0.00235 U	0.024 U
Endrin Ketone	0.0176 U	0.00201 U	0.00192 U	0.00186 U	0.00207 U	0.00182 U	0.00903 U	0.00187 U	0.00178 U	0.00171 U	0.00259 U	0.00978 U	0.00179 U	0.00187 U	0.0215 U	0.00206 U	0.00232 U	0.00182 U	0.00201 U	0.0104 U	0.00178 U	0.00215 U	0.00188 U	0.0192 U
Heptachlor	0.00882 U	0.001 U	0.00096 U	0.000928 U	0.00103 U	0.000908 U	0.00452 U	0.000936 U	0.000892 U	0.000857 U	0.0013 U	0.00489 U	0.000897 U	0.000935 U	0.0107 U	0.00103 U	0.00116 U	0.000908 U	0.00101 U	0.00518 U	0.000888 U	0.00108 U	0.00094 U	0.00962 U
Heptachlor Epoxide	0.0331 U	0.00376 U	0.0036 U	0.00348 U	0.00388 U	0.0034 U	0.0169 U	0.00351 U	0.00334 U	0.00321 U	0.00486 U	0.0183 U	0.00336 U	0.00351 U	0.0402 U	0.00386 U	0.00436 U	0.00341 U	0.00377 U	0.0194 U	0.00333 U	0.00404 U	0.00352 U	0.0361 U
Lindane	0.00735 U	0.000837 U	0.0008 U	0.000774 U	0.000861 U	0.000757 U	0.00376 U	0.00078 U	0.000743 U	0.000714 U	0.00108 U	0.00408 U	0.000747 U	0.000779 U	0.00895 U	0.000858 U	0.000969 U	0.000757 U	0.000838 U	0.00431 U	0.00074 U	0.000897 U	0.000783 U	0.00801 U
Methoxychlor	0.0331 U	0.00376 U	0.0036 U	0.00348 U	0.00388 U	0.0034 U	0.0169 U	0.00351 U	0.00334 U	0.00321 U	0.00486 U	0.0183 U	0.00336 U	0.00351 U	0.0402 U	0.00386 U	0.00436 U	0.00341 U	0.00377 U	0.0194 U	0.00333 U	0.00404 U	0.00352 U	0.0361 U
p,p'-DDD	0.0618	0.00201 U	0.00192 U	0.00186 U	0.00207 U	0.00182 U	0.00903 U	0.00187 U	0.00178 U	0.00171 U	0.00259 U	0.00978 U	0.00179 U	0.00187 U	0.0215 U	0.00206 U	0.00232 U	0.00182 U	0.00201 U	0.0104 U	0.00178 U	0.00215 U	0.00188 U	0.0192 U
p,p'-DDE	0.0176 U	0.00201 U	0.00192 U	0.00186 U	0.00207 U	0.00182 U	0.00903 U	0.00187 U	0.00178 U	0.00171 U	0.00259 U	0.00978 U	0.00179 U	0.00187 U	0.0215 U	0.00206 U	0.00232 U	0.00182 U	0.00201 U	0.0104 U	0.00178 U	0.00215 U	0.00188 U	0.0192 U
p,p'-DDT	0.0331 U	0.00376 U	0.0036 U	0.00348 U	0.00388 U	0.0034 U	0.0169 U	0.00351 U	0.00334 U	0.00321 U	0.00486 U	0.0183 U	0.00336 U	0.00351 U	0.0402 U	0.00386 U	0.00436 U	0.00341 U	0.00377 U	0.0194 U	0.00333 U	0.00404 U	0.00352 U	0.0361 U
Toxaphene	0.331 U	0.0376 U	0.036 U	0.0348 U	0.0388 U	0.034 U	0.169 U	0.0351 U	0.0334 U	0.0321 U	0.0486 U	0.183 U	0.0336 U	0.0351 U	0.402 U	0.0386 U	0.0436 U	0.0341 U	0.0377 U	0.194 U	0.0333 U	0.0404 U	0.0352 U	0.361 U
trans-Chlordane	0.022 U	0.00251 U	0.0024 U	0.00232 U	0.00258 U	0.00227 U	0.0113 U	0.00234 U	0.00223 U	0.00214 U	0.00324 U	0.0122 U	0.00224 U	0.00234 U	0.0268 U	0.00257 U	0.00291 U	0.00227 U	0.00252 U	0.0129 U	0.00222 U	0.00269 U	0.00235 U	0.024 U

Table 4.
Summary of Soil Waste Characterization Data.
MJ Painting; Olean, New York

Sample ID	RX-401	RX-401	RX-403	RX-404	RX-405	RX-407	RX-410	RX-411	RX-416	RX-417	RX-417	RX-418	RX-419	RX-420	RX-420	RX-420	RX-422	RX-422	RX-423	RX-424	RX-425	RX-425	RX-425	RX-426
Sample Depth (ft bgs)	0-1	7-10	0-1	7-10	0-1	0-1	10-12	7-10	10-12	0-1	10-12	10-12	10-12	0-1	7-10	10-12	0-1	10-12	10-12	10-12	0-1	7-10	10-12	7-10
Lab Sample ID	L2162627	L2162627	L2162627	L2162627	L2162848	L2162848	L2162627	L2162627	L2163207	L2162298	L2162298	L2162627	L2162848	L2163207	L2162848	L2162848	L2162298	L2162298	L2162298	L2162298	L2162298	L2162298	L2162298	L2162298
Sample Date	11/12/2021	11/12/2021	11/12/2021	11/12/2021	11/15/2021	11/15/2021	11/12/2021	11/12/2021	11/16/2021	11/11/2021	11/11/2021	11/11/2021	11/15/2021	11/15/2021	11/15/2021	11/15/2021	11/10/2021	11/10/2021	11/11/2021	11/11/2021	11/11/2021	11/11/2021	11/11/2021	11/11/2021
SEMI-VOLATILE ORGANIC COMPOUNDS - 8270D (mg/kg)																								
1,2,4,5-Tetrachlorobenzene	0.19 U	2.1 U	0.21 U	2 U	0.22 U	0.18 U	0.2 U	0.2 U	0.18 U	0.19 U	0.27 U	0.21 U	0.19 U	0.2 U	1.2 U	0.21 U	0.24 U	0.98 U	0.21 U	1.1 U	0.19 U	1.1 U	0.19 U	10 U
2,3,4,6-Tetrachlorophenol	0.19 U	2.1 U	0.21 U	2 U	0.22 U	0.18 U	0.2 U	0.2 U	0.18 U	0.19 U	0.27 U	0.21 U	0.19 U	0.2 U	1.2 U	0.21 U	0.24 U	0.98 U	0.21 U	1.1 U	0.19 U	1.1 U	0.19 U	10 U
2,4,5-Trichlorophenol	0.19 U	2.1 U	0.21 U	2 U	0.22 U	0.18 U	0.2 U	0.2 U	0.18 U	0.19 U	0.27 U	0.21 U	0.19 U	0.2 U	1.2 U	0.21 U	0.24 U	0.98 U	0.21 U	1.1 U	0.19 U	1.1 U	0.19 U	10 U
2,4,6-Trichlorophenol	0.11 U	1.3 U	0.12 U	1.2 U	0.13 U	0.11 U	0.12 U	0.12 U	0.11 U	0.11 U	0.16 U	0.13 U	0.12 U	0.12 U	0.7 U	0.13 U	0.15 U	0.59 U	0.12 U	0.67 U	0.11 U	0.68 U	0.12 U	6.2 U
2,4-Dichlorophenol	0.17 U	1.9 U	0.18 U	1.8 U	0.2 U	0.17 U	0.18 U	0.18 U	0.17 U	0.17 U	0.25 U	0.19 U	0.17 U	0.18 U	1 U	0.19 U	0.22 U	0.88 U	0.19 U	1 U	0.17 U	1 U	0.17 U	9.2 U
2,4-Dimethylphenol	0.19 U	2.1 U	0.21 U	2 U	0.22 U	0.18 U	0.2 U	0.2 U	0.18 U	0.19 U	0.27 U	0.21 U	0.19 U	0.2 U	1.2 U	0.21 U	0.24 U	0.98 U	0.21 U	1.1 U	0.19 U	1.1 U	0.19 U	10 U
2,4-Dinitrophenol	0.92 U	10 U	0.99 U	9.5 U	1 U	0.89 U	0.94 U	0.94 U	0.89 U	0.9 U	1.3 U	1 U	0.92 U	0.96 U	5.6 U	1 U	1.2 U	4.7 U	1 U	5.3 U	0.89 U	5.4 U	0.93 U	49 U
2,4-Dinitrotoluene	0.19 U	2.1 U	0.21 U	2 U	0.22 U	0.18 U	0.2 U	0.2 U	0.18 U	0.19 U	0.27 U	0.21 U	0.19 U	0.2 U	1.2 U	0.21 U	0.24 U	0.98 U	0.21 U	1.1 U	0.19 U	1.1 U	0.19 U	10 U
2,6-Dinitrotoluene	0.19 U	2.1 U	0.21 U	2 U	0.22 U	0.18 U	0.2 U	0.2 U	0.18 U	0.19 U	0.27 U	0.21 U	0.19 U	0.2 U	1.2 U	0.21 U	0.24 U	0.98 U	0.21 U	1.1 U	0.19 U	1.1 U	0.19 U	10 U
2-Chloronaphthalene	0.19 U	2.1 U	0.21 U	2 U	0.22 U	0.18 U	0.2 U	0.2 U	0.18 U	0.19 U	0.27 U	0.21 U	0.19 U	0.2 U	1.2 U	0.21 U	0.24 U	0.98 U	0.21 U	1.1 U	0.19 U	1.1 U	0.19 U	10 U
2-Chlorophenol	0.19 U	2.1 U	0.21 U	2 U	0.22 U	0.18 U	0.2 U	0.2 U	0.18 U	0.19 U	0.27 U	0.21 U	0.19 U	0.2 U	1.2 U	0.21 U	0.24 U	0.98 U	0.21 U	1.1 U	0.19 U	1.1 U	0.19 U	10 U
2-Methylnapthalene	0.65	0.29 J	0.17 J	16	0.69	0.067 J	0.23 U	0.11 J	0.22 U	0.22 U	0.56	0.26 U	0.03 J	0.24 U	11	0.025 J	0.29 U	1.2 U	0.056 J	5.6	0.025 J	0.84 J	0.073 J	10 J
2-Methylphenol	0.091 J	2.1 U'	0.21 U	2 U'	0.22 U	0.18 U	0.2 U	0.2 U	0.18 U	0.19 U	0.27 U	0.21 U	0.19 U	0.2 U	1.2 U'	0.21 U	0.24 U	0.98 U'	0.21 U	1.1 U'	0.19 U	1.1 U'	0.19 U	10 U'
2-Nitroaniline	0.19 U	2.1 U	0.21 U	2 U	0.22 U	0.18 U	0.2 U	0.2 U	0.18 U	0.19 U	0.27 U	0.21 U	0.19 U	0.2 U	1.2 U	0.21 U	0.24 U	0.98 U	0.21 U	1.1 U	0.19 U	1.1 U	0.19 U	10 U
2-Nitrophenol	0.41 U	4.5 U	0.44 U	4.3 U	0.47 U	0.4 U	0.42 U	0.42 U	0.4 U	0.4 U	0.59 U	0.46 U	0.42 U	0.43 U	2.5 U	0.46 U	0.53 U	2.1 U	0.45 U	2.4 U	0.4 U	2.4 U	0.42 U	22 U
3,3'-Dichlorobenzidine	0.19 U	2.1 U	0.21 U	2 U	0.22 U	0.18 U	0.2 U	0.2 U	0.18 U	0.19 U	0.27 U	0.21 U	0.19 U	0.2 U	1.2 U	0.21 U	0.24 U	0.98 U	0.21 U	1.1 U	0.19 U	1.1 U	0.19 U	10 U
3-Methylphenol/4-Methylphenol	0.084 J	3 U	0.3 U	2.8 U	0.32 U	0.27 U	0.28 U	0.28 U	0.27 U	0.27 U	0.4 U	0.31 U	0.28 U	0.29 U	1.7 U	0.3 U	0.35 U	1.4 U	0.3 U	1.6 U	0.27 U	1.6 U	0.28 U	15 U
3-Nitroaniline	0.19 U	2.1 U	0.21 U	2 U	0.22 U	0.18 U	0.2 U	0.2 U	0.18 U	0.19 U	0.27 U	0.21 U	0.19 U	0.2 U	1.2 U	0.21 U	0.24 U	0.98 U	0.21 U	1.1 U	0.19 U	1.1 U	0.19 U	10 U
4,6-Dinitro-o-cresol	0.5 U	5.5 U	0.54 U	5.1 U	0.57 U	0.48 U	0.51 U	0.51 U	0.48 U	0.49 U	0.71 U	0.56 U	0.5 U	0.52 U	3 U	0.55 U	0.64 U	2.5 U	0.54 U	2.9 U	0.48 U	3 U	0.5 U	27 U
4-Bromophenyl-phenylether	0.19 U	2.1 U	0.21 U	2 U	0.22 U	0.18 U	0.2 U	0.2 U	0.18 U	0.19 U	0.27 U	0.21 U	0.19 U	0.2 U	1.2 U	0.21 U	0.24 U	0.98 U	0.21 U	1.1 U	0.19 U	1.1 U	0.19 U	10 U
4-Chloroaniline	0.19 U	2.1 U	0.21 U	2 U	0.22 U	0.18 U	0.2 U	0.2 U	0.18 U	0.19 U	0.27 U	0.21 U	0.19 U	0.2 U	1.2 U	0.21 U	0.24 U	0.98 U	0.21 U	1.1 U	0.19 U	1.1 U	0.19 U	10 U
4-Chlorophenyl-phenylether	0.19 U	2.1 U	0.21 U	2 U	0.22 U	0.18 U	0.2 U	0.2 U	0.18 U	0.19 U	0.27 U	0.21 U	0.19 U	0.2 U	1.2 U	0.21 U	0.24 U	0.98 U	0.21 U	1.1 U	0.19 U	1.1 U	0.19 U	10 U
4-Nitroaniline	0.19 U	2.1 U	0.21 U	2 U	0.22 U	0.18 U	0.2 U	0.2 U	0.18 U	0.19 U	0.27 U	0.21 U	0.19 U	0.2 U	1.2 U	0.21 U	0.24 U	0.98 U	0.21 U	1.1 U	0.19 U	1.1 U	0.19 U	10 U
4-Nitrophenol	0.27 U	2.9 U	0.29 U	2.8 U	0.31 U	0.26 U	0.27 U	0.28 U	0.26 U	0.26 U	0.38 U	0.3 U	0.27 U	0.28 U	1.6 U	0.3 U	0.34 U	1.4 U	0.29 U	1.6 U	0.26 U	1.6 U	0.27 U	14 U
Acenaphthene	0.088 J	1.7 U	0.16 U	0.59 J	0.092 J	0.15 U	0.16 U	0.16 U	0.081 J	0.15 U	0.29	0.17 U	0.15 U	0.16 U	0.53 J	0.17 U	0.2 U	0.63 J	0.17	0.89 U	0.15 U	0.24 J	0.16 U	3.3 J
Acenaphthylene	0.33	1.7 U	0.16 U	1.6 U	0.045 J	0.15 U	0.16 U	0.16 U	0.15 U	0.15 U	0.22 U	0.17 U	0.15 U	0.16 U	0.93 U	0.17 U	0.2 U	0.78 U	0.17 U	0.89 U	0.15 U	0.91 U	0.16 U	8.2 U
Acetophenone	0.19 U	2.1 U	0.21 U	2 U	0.22 U	0.18 U	0.2 U	0.2 U	0.18 U	0.19 U	0.27 U	0.21 U	0.19 U	0.2 U	1.2 U	0.21 U	0.24 U	0.98 U	0.21 U	1.1 U	0.19 U	1.1 U	0.19 U	10 U
Anthracene	0.44	1.3 U	0.051 J	1.8	0.34	0.11 U	0.12 U	0.28	0.11	0.11 U	0.64	0.13 U	0.12 U	0.12 U	0.8	0.13 U	0.15 U	2.1	0.18	1.5	0.11 U	0.43 J	0.12 U	15
Atrazine	0.15 U	1.7 U	0.16 U	1.6 U	0.18 U	0.15 U	0.16 U	0.16 U	0.15 U	0.15 U	0.22 U	0.17 U	0.15 U	0.16 U	0.93 U	0.17 U	0.2 U	0.78 U	0.17 U	0.89 U	0.15 U	0.91 U	0.16 U	8.2 U
Benzaldehyde	0.25 U	2.8 U	0.27 U	2.6 U	0.29 U	0.24 U	0.26 U	0.26 U	0.24 U	0.25 U	0.36 U	0.28 U	0.25 U	0.26 U	1.5 U	0.28 U	0.32 U	1.3 U	0.28 U	1.5 U	0.24 U	1.5 U	0.26 U	14 U
Benzo[a]anthracene	1.4	0.29 J	0.14	0.69 J	0.6	0.052 J	0.12 U	0.098 J	0.048 J	0.11 U	0.2	0.13 U	0.12 U	0.12 U	0.64 J	0.13 U	0.15 U	0.32 J	0.12 U	0.52 J	0.11 U	0.22 J	0.12 U	5.7 J
Benzo[a]pyrene	1.8	1.7 U'	0.16	0.61 J	0.47	0.15 U	0.16 U	0.078 J	0.15 U	0.15 U	0.13 J	0.17 U	0.15 U	0.16 U	0.4 J	0.17 U	0.2 U	0.78 U	0.17 U	0.31 J	0.15 U	0.91 U	0.16 U	4.2 J
Benzo[b]fluoranthene	1.9	1.3 U	0.17	1.2 U	0.54	0.058 J	0.12 U	0.047 J	0.11 U	0.11 U	0.084 J	0.13 U	0.12 U	0.12 U	0.38 J	0.13 U	0.15 U	0.59 U	0.12 U	0.25 J	0.11 U	0.68 U	0.12 U	1.8 J
Benzo[g,h,i]perylene	2.8	0.36 J	0.28	1.1 J	0.64	0.035 J	0.16 U	0.11 J	0.033 J	0.15 U	0.21 J	0.17 U	0.15 U	0.16 U	0.53 J	0.17 U	0.037 J	0.14 J	0.17 U	0.72 J	0.15 U	0.19 J	0.16 U	5.1 J
Benzo[k]fluoranthene	0.58	1.3 U	0.046 J	1.2 U	0.19	0.11 U	0.12 U	0.12 U	0.11 U	0.11 U	0.16 U	0.13 U	0.12 U	0.12 U	0.7 U	0.13 U	0.15 U	0.59 U	0.12 U	0.67 U	0.11 U	0.68 U	0.12 U	6.2 U'
Biphenyl	0.099 J	4.8 U	0.47 U	4.5 U	0.055 J	0.42 U	0.44 U	0.45 U	0.42 U	0.43 U	0.62 U	0.49 U	0.44 U	0.45 U	0.66 J	0.48 U	0.56 U	2.2 U	0.48 U	0.57 J	0.42 U	2.6 U	0.44 U	23 U
Bis(2-Chloroethoxy)methane	0.21 U	2.3 U	0.22 U	2.1 U	0.24 U	0.2 U	0.21 U	0.21 U	0.2 U	0.2 U	0.3 U	0.23 U	0.21 U	0.22 U	1.2 U	0.23 U	0.26 U	1 U	0.23 U	1.2 U	0.2 U	1.2 U	0.21 U	11 U
Bis(2-Chloroethyl)ether	0.17 U	1.9 U	0.18 U	1.8 U	0.2 U	0.17 U	0.18 U	0.18 U	0.17 U	0.17 U	0.25 U	0.19 U	0.17 U	0.18 U	1 U	0.19 U	0.22 U	0.88 U	0.19 U	1 U	0.17 U	1 U	0.17 U	9.2 U
Bis(2-Chloroisopropyl)ether	0.23 U	2.5 U	0.25 U	2.4 U	0.26 U	0.22 U	0.23 U	0.24 U	0.22 U	0.22 U	0.33 U	0.26 U	0.23 U	0.24 U	1.4 U	0.25 U	0.29 U	1.2 U	0.25 U	1.3 U	0.22 U	1.4 U	0.23 U	12 U
Bis(2-Ethylhexyl)phthalate	0.19 U	2.1 U	0.21 U	2 U	0.22 U	0.18 U	0.2 U	0.2 U	0.18 U	0.19 U	0.27 U	0.21 U	0.19 U	0.2 U	1.2 U	0.21 U	0.24 U	0.98 U	0.21 U	1.1 U	0.19 U	1.1 U	0.19 U	10 U
Butyl benzyl phthalate	0.19 U	2.1 U	0.21 U	2 U	0.22 U	0.18 U	0.2 U	0.2 U	0.18 U	0.19 U	0.27 U	0.21 U	0.19 U	0.2 U	1.2 U	0.21 U	0.24 U	0.98 U	0.21 U	1.1 U	0.19 U	1.1 U	0.19 U	10 U
Caprolactam	0.19 U	2.1 U	0.21 U	2 U	0.22 U	0.18 U	0.2 U	0.2 U	0.18 U	0.19 U	0.27 U	0.21 U	0.19 U	0.2 U	1.2 U	0.21 U	0.24 U	0.98 U	0.21 U	1.1 U	0.19 U	1.1 U	0.19 U	10 U
Carbazole	0.26	2.1 U	0.02 J	2 U	0.14 J	0.18 U	0.2 U	0.2 U	0.18 U	0.19 U	0.27 U	0.21 U	0.19 U	0.2 U	1.2 U	0.21 U	0.24 U	0.98 U	0.21 U	1.1 U	0.19 U	1.1 U	0.19 U	10 U
Chrysene	1.8	0.51 J	0.17	0.94 J	0.6	0.054 J	0.12 U	0.12	0.074 J	0.11 U	0.23	0.13 U	0.031 J	0.12 U	2.4	0.052 J	0.15 U	0.47 J	0.04 J	0.72	0.11 U	0.32 J	0.038 J	7.8
Dibenzo(a,h)anthracene	0.37	1.3 U'	0.054 J	1.2 U'	0.12 J	0.11 U	0.12 U	0.12 U	0.11 U	0.11 U	0.16 U	0.13 U	0.12 U	0.12 U	0.19 J	0.13 U	0.15 U	0.59 U'	0.12 U	0.67 U'	0.11 U	0.68 U'	0.12 U	6.2 U'
Dibenzofuran	0.2	2.1 U	0.21 U	0.27 J	0.11 J	0.18 U	0.2 U	0.2 U	0.058 J	0.19 U	0.13 J	0.21 U	0.19 U	0.2 U	0.37 J	0.21 U	0.24 U	0.98 U	0.081 J	1.1 U	0.19 U	1.1 U	0.19 U	2 J
Diethyl phthalate	0.19 U	2.1 U	0.21 U	2 U	0.22 U	0.18 U	0.2 U	0.2 U	0.18 U	0.19 U	0.27 U	0.21 U	0.19 U	0.2 U	1.2 U	0.21 U	0.24 U	0.98 U	0.21 U	1.1 U	0.19 U	1.1 U	0.19 U	10 U
Dimethyl phthalate	0.19 U	2.1 U	0.21 U	2 U	0.22 U	0.18 U	0.2 U	0.2 U	0.18 U	0.19 U	0.27 U	0.21 U	0.19 U	0.2 U	1.2 U	0.21 U	0.24 U	0.98 U	0.21 U	1.1 U	0.19 U	1.1 U	0.19 U	10 U
Di-n-butylphthalate	0.19 U	2.1 U	0.21 U	2 U	0.22 U	0.18 U	0.2 U	0.2 U	0.18 U	0.19 U	0.27 U	0.21 U	0.19 U	0.2 U	1.2 U	0.21 U	0.24 U	0.98 U	0.21 U	1.1 U	0.19 U	1.1 U	0.19 U	10 U
Di-n-octylphthalate	0.19 U	2.1 U	0.21 U	2 U	0.22 U	0.18 U	0.2 U	0.2 U	0.18 U	0.19 U	0.27 U	0.21 U	0.19 U	0.2 U	1.2 U	0.21 U	0.24 U	0.98 U	0.21 U	1.1 U	0.19 U	1.1 U	0.19 U	10 U
Fluoranthene	2.6	1.3 U	0.24	0.89 J	1.2	0.058 J	0.12 U	0.18	0.071 J	0.11 U	0.35	0.13 U	0.12 U	0.12 U	0.7 U	0.13 U	0.032 J	0.88	0.091 J	0.67 U	0.11 U	0.23 J	0.12 U	8.1
Fluorene	0.2	0.45 J	0.21 U	1.8 J	0.21 J	0.18 U	0.2 U	0.32	0.19	0.19 U	0.82	0.21 U	0.19 U	0.2 U	1.3	0.21 U	0.24 U	1.8	0.35	1.1 U	0.19 U	0.65 J	0.024 J	8.5 J
Hexachlorobenzene	0.11 U	1.3 U	0.12 U	1.2 U	0.13 U	0.11 U	0.12 U	0.12 U	0.11 U	0.11 U	0.16 U	0.13 U	0.12 U	0.12 U	0.7 U	0.13 U	0.15 U	0.59 U	0.12 U	0.67 U	0.11 U	0.68 U	0.12 U	6.2 U'
Hexachlorobutadiene	0.19 U	2.1 U	0.21 U	2 U	0.22 U	0.18 U	0.2 U	0.2 U	0.18 U	0.19 U	0.27 U	0.21 U	0.19 U	0.2 U	1.2 U	0.21 U	0.24 U	0.98 U	0.21 U	1.1 U	0.19 U	1.1 U	0.19 U	10 U
Hexachlorocyclopentadiene	0.55 U	6 U	0.59 U	5.6 U	0.63 U	0.53 U	0.56 U	0.56 U	0.53 U	0.54 U	0.78 U	0.61 U	0.55 U	0.57 U	3.3 U	0.6 U	0.7 U	2.8 U	0.6 U	3.2 U	0.53 U	3.2 U	0.55 U	29 U
Hexachloroethane	0.15 U	1.7 U	0.16 U	1.6 U	0.18 U	0.15 U	0.16 U	0.16 U	0.15 U	0.15 U	0.22 U	0.17 U	0.15 U	0.16 U	0.93 U	0.17 U	0.2 U	0.78 U	0.17 U	0.89 U	0.15 U	0.91 U	0.16 U	8.2 U
Indeno[1,2,3-cd]pyrene	1.3	1.7 U	0.12 J	0.65 J	0.34	0.027 J	0.16 U	0.031 J	0.15 U	0.15 U	0.066 J	0.17 U	0.15 U	0.16 U	0.93 U	0.17 U	0.2 U	0.78 U	0.17 U	0.26 J	0.15 U	0.91 U	0.16 U	1.4 J
Isophorone	0.17 U	1.9 U	0.18 U	1.8 U	0.2 U	0.17 U	0.18 U	0.18 U	0.17 U	0.17 U	0.25 U	0.19 U	0.17 U	0.18 U	1 U	0.19 U	0.22 U	0.88 U	0.19 U	1 U	0.17 U	1 U	0.17 U	9.2 U
Naphthalene	0.43	2.1 U	0.061 J	1.1 J	0.34	0.18 U	0.2 U	0.2 U	0.18 U	0.19 U	0.48	0.21 U	0.19 U	0.2 U	5.5	0.21 U	0.24 U	0.42 J	0.095 J	2.9	0.19 U	0.76 J	0.079 J	2.6 J
Nitrobenzene	0.17 U	1.9 U	0.18 U	1.8 U	0.2 U	0.17 U	0.18 U	0.18 U	0.17 U	0.17 U	0.25 U	0.19 U	0.17 U	0.18 U	1 U	0.19 U	0.22 U	0.88 U	0.19 U	1 U	0.17 U	1 U	0.17 U	9.2 U
n-Nitrosodi-n-propylamine	0.19 U	2.1 U	0.21 U	2 U	0.22 U	0.18 U	0.2 U	0.2 U	0.18 U	0.19 U	0.27 U	0.21 U	0.19 U	0.2 U	1.2 U	0.21 U	0.24 U	0.98 U	0.21 U	1.1 U	0.19 U	1.1 U	0.19 U	10 U
N-Nitrosodiphenylamine	0.15 U	1.7 U	0.16 U	1.6 U	0.18 U	0.15 U	0.16 U	0.16 U	0.15 U	0.15 U	0.22 U	0.17 U	0.15 U	0.16 U	0.93 U	0.17 U	0.2 U	0.78 U	0.17 U	0.89 U	0.15 U	0.91 U	0.16 U	8.2 U
p-Chloro-m-cresol	0.19 U	2.1 U	0.21 U	2 U	0.22 U	0.18 U	0.2 U	0.2 U	0.18 U	0.19 U	0.27 U	0.21 U	0.19 U	0.2 U	1.2 U	0.21 U	0.24 U	0.98 U	0.21 U	1.1 U	0.19 U	1.1 U	0.19 U	10 U
Pentachlorophenol	0.15 U	1.7 U'	0.16 U	1.6 U'	0.18 U	0.15 U	0.16 U	0.16 U	0.15 U	0.15 U	0.22 U	0.17 U	0.15 U	0.16 U	0.93 U'	0.17 U	0.2 U	0.78 U	0.17 U	0.89 U'	0.15 U	0.91 U'	0.16 U	8.2 U'
Phenanthrene	2.6	1.6	0.28	8.7	1.8	0.074 J	0.024 J	1.5	0.72	0.11 U	3.6	0.13 U	0.08 J	0.12 U	7.4	0.12 J	0.15 U	11	0.94	6	0.025 J	2	0.084 J	69
Phenol	0.19 U	2.1 U'	0.21 U	2 U'	0.22 U	0.18 U	0.2 U	0.2 U	0.18 U	0.19 U	0.27 U	0.21 U	0.19 U	0.2 U	1.2 U'	0.21 U	0.24 U	0.98 U'	0.21 U	1.1 U'	0.19 U	1.1 U'	0.19 U	10 U'
Pyrene	3	1 J	0.31	7.1	1.3	0.074 J	0.12 U	0.99	0.3	0.11 U	1.8	0.13 U	0.12 U	0.022 J	4.4	0.073 J	0.036 J	5.4	0.25	4.7	0.026 J	2.1	0.081 J	64

Table 4.
Summary of Soil Waste Characterization Data.
MJ Painting; Olean, New York

Sample ID	RX-401	RX-401	RX-403	RX-404	RX-405	RX-407	RX-410	RX-411	RX-416	RX-417	RX-417	RX-418	RX-419	RX-420	RX-420	RX-420	RX-422	RX-422	RX-423	RX-424	RX-425	RX-425	RX-425	RX-426
Sample Depth (ft bgs)	0-1	7-10	0-1	7-10	0-1	0-1	10-12	7-10	10-12	0-1	10-12	10-12	10-12	0-1	7-10	10-12	0-1	10-12	10-12	10-12	0-1	7-10	10-12	7-10
Lab Sample ID	L2162627	L2162627	L2162627	L2162627	L2162848	L2162848	L2162627	L2162627	L2163207	L2162298	L2162298	L2162627	L2162848	L2163207	L2162848	L2162848	L2162298	L2162298	L2162298	L2162298	L2162298	L2162298	L2162298	L2162298
Sample Date	11/12/2021	11/12/2021	11/12/2021	11/12/2021	11/15/2021	11/15/2021	11/12/2021	11/12/2021	11/16/2021	11/11/2021	11/11/2021	11/11/2021	11/15/2021	11/15/2021	11/15/2021	11/15/2021	11/10/2021	11/10/2021	11/11/2021	11/11/2021	11/11/2021	11/11/2021	11/11/2021	11/11/2021
VOLATILE ORGANIC COMPOUNDS - 8260C (mg/kg)																								
1,1,1-Trichloroethane	0.00072 U	0.037 U	0.0014 U	0.034 U	0.00092 U	0.0007 U	0.00055 U	0.032 U	0.00031 J	0.00063 U	0.052 U	0.00044 U	0.00067 U	0.00047 U	0.045 U	0.037 U	0.00062 U	0.029 U	0.00025 U	0.065 U	0.00061 U	0.0011 U	0.034 U	0.06 U
1,1,2,2,-Tetrachloroethane	0.00072 U	0.037 U	0.0014 U	0.034 U	0.00092 U	0.0007 U	0.00055 U	0.032 U	0.00056 U	0.00063 U	0.052 U	0.00044 U	0.00067 U	0.00047 U	0.045 U	0.037 U	0.00062 U	0.029 U	0.00025 U	0.065 U	0.00061 U	0.0011 U	0.034 U	0.06 U
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0057 U	0.3 U	0.011 U	0.27 U	0.0074 U	0.0056 U	0.0044 U	0.26 U	0.0045 U	0.005 U	0.42 U	0.0035 U	0.0053 U	0.0038 U	0.36 U	0.3 U	0.005 U	0.23 U	0.002 U	0.52 U	0.0049 U	0.0089 U	0.27 U	0.48 U
1,1,2-Trichloroethane	0.0014 U	0.074 U	0.0027 U	0.068 U	0.0018 U	0.0014 U	0.0011 U	0.065 U	0.0011 U	0.0012 U	0.1 U	0.00087 U	0.0013 U	0.00094 U	0.09 U	0.074 U	0.0012 U	0.058 U	0.00049 U	0.13 U	0.0012 U	0.0022 U	0.068 U	0.12 U
1,1,-Dichloroethene	0.0014 U	0.074 U	0.0027 U	0.068 U	0.0018 U	0.0014 U	0.0011 U	0.065 U	0.0011 U	0.0012 U	0.1 U	0.00087 U	0.0013 U	0.00094 U	0.09 U	0.074 U	0.0012 U	0.058 U	0.00049 U	0.13 U	0.0012 U	0.0022 U	0.068 U	0.12 U
1,1-Dichloroethane	0.0014 U	0.074 U	0.0027 U	0.068 U	0.0018 U	0.0014 U	0.0011 U	0.065 U	0.0011 U	0.0012 U	0.1 U	0.00087 U	0.0013 U	0.00094 U	0.09 U	0.074 U	0.0012 U	0.058 U	0.00049 U	0.13 U	0.0012 U	0.0022 U	0.068 U	0.12 U
1,2,3-Trichlorobenzene	0.0029 U	0.15 U	0.0054 U	0.14 U	0.0037 U	0.0028 U	0.0022 U	0.13 U	0.0022 U	0.0025 U	0.21 U	0.0017 U	0.0027 U	0.0019 U	0.18 U	0.15 U	0.0025 U	0.12 U	0.00099 U	0.26 U	0.0024 U	0.0045 U	0.14 U	0.24 U
1,2,4-Trichlorobenzene	0.0029 U	0.15 U	0.0054 U	0.14 U	0.0037 U	0.0028 U	0.0022 U	0.13 U	0.0022 U	0.0025 U	0.21 U	0.0017 U	0.0027 U	0.0019 U	0.18 U	0.15 U	0.0025 U	0.12 U	0.00099 U	0.26 U	0.0024 U	0.0045 U	0.14 U	0.24 U
1,2,4-Trimethylbenzene	0.0029 U	0.081 J	0.0054 U	0.82	0.0037 U	0.0028 U	0.055	0.62	0.039	0.0025 U	0.61	0.0017 U	0.52	0.002	21	3.2	0.0025 U	0.087 J	0.0012	2.8	0.0024 U	0.17	14	6.8
1,2-Dibromo-3-chloropropane	0.0043 U	0.22 U	0.0082 U	0.2 U	0.0055 U	0.0042 U	0.0033 U	0.19 U	0.0034 U	0.0038 U	0.31 U	0.0026 U	0.004 U	0.0028 U	0.27 U	0.22 U	0.0037 U	0.17 U	0.0015 U	0.39 U	0.0037 U	0.0067 U	0.2 U	0.36 U
1,2-Dibromoethane	0.0014 U	0.074 U	0.0027 U	0.068 U	0.0018 U	0.0014 U	0.0011 U	0.065 U	0.0011 U	0.0012 U	0.1 U	0.00087 U	0.0013 U	0.00094 U	0.09 U	0.074 U	0.0012 U	0.058 U	0.00049 U	0.13 U	0.0012 U	0.0022 U	0.068 U	0.12 U
1,2-Dichlorobenzene	0.0029 U	0.15 U	0.0054 U	0.14 U	0.0037 U	0.0028 U	0.0022 U	0.13 U	0.0022 U	0.0025 U	0.21 U	0.0017 U	0.0027 U	0.0019 U	0.18 U	0.15 U	0.0025 U	0.12 U	0.00099 U	0.26 U	0.0024 U	0.0045 U	0.14 U	0.24 U
1,2-Dichloroethane	0.0014 U	0.074 U'	0.0027 U	0.068 U'	0.0018 U	0.0014 U	0.0011 U	0.065 U'	0.0011 U	0.0012 U	0.1 U'	0.00087 U	0.0013 U	0.00094 U	0.09 U'	0.074 U'	0.0012 U	0.058 U'	0.00049 U	0.13 U'	0.0012 U	0.00098 J	0.068 U'	0.12 U'
1,2-Dichloroethene, Total	0.0014 U	0.074 U	0.0027 U	0.068 U	0.0018 U	0.0014 U	0.0011 U	0.065 U	0.0011 U	0.0012 U	0.1 U	0.00087 U	0.0013 U	0.00094 U	0.09 U	0.074 U	0.0012 U	0.058 U	0.00049 U	0.0021 U	0.0012 U	0.0022 U	0.068 U	0.12 U
1,2-Dichloropropane	0.0014 U	0.074 U	0.0027 U	0.068 U	0.0018 U	0.0014 U	0.0011 U	0.065 U	0.0011 U	0.0012 U	0.1 U	0.00087 U	0.0013 U	0.00094 U	0.09 U	0.074 U	0.0012 U	0.058 U	0.00049 U	0.13 U	0.0012 U	0.0022 U	0.068 U	0.12 U
1,3,5-Trimethylbenzene	0.0029 U	0.025 J	0.0054 U	0.44	0.0037 U	0.0028 U	0.023	0.18	0.0022 U	0.0025 U	0.3	0.0017 U	0.044	0.0019 U	7.9	0.13 J	0.0025 U	0.028 J	0.00099 U	0.29	0.0024 U	0.013	1.5	3.6
1,3-Dichlorobenzene	0.0029 U	0.15 U	0.0054 U	0.14 U	0.0037 U	0.0028 U	0.0022 U	0.13 U	0.0022 U	0.0025 U	0.21 U	0.0017 U	0.0027 U	0.0019 U	0.18 U	0.15 U	0.0025 U	0.12 U	0.00099 U	0.26 U	0.0024 U	0.0045 U	0.14 U	0.037 J
1,3-Dichloropropene, Total	0.00072 U	0.037 U	0.0014 U	0.034 U	0.00092 U	0.0007 U	0.00055 U	0.032 U	0.00056 U	0.00063 U	0.052 U	0.00044 U	0.00067 U	0.00047 U	0.045 U	0.037 U	0.00062 U	0.029 U	0.00025 U	0.001 U	0.00061 U	0.0011 U	0.034 U	0.06 U
1,4-Dichlorobenzene	0.0029 U	0.15 U	0.0054 U	0.14 U	0.0037 U	0.0028 U	0.0022 U	0.13 U	0.0022 U	0.0025 U	0.21 U	0.0017 U	0.0027 U	0.0019 U	0.18 U	0.15 U	0.0025 U	0.12 U	0.00099 U	0.26 U	0.0024 U	0.0045 U	0.14 U	0.24 U
1,4-Dioxane	0.11 U'	5.9 U'	0.22 U'	5.4 U'	0.15 U'	0.11 U'	0.088 U	5.2 U'	0.09 U	0.1 U	8.3 U'	0.07 U	0.11 U'	0.075 U	7.2 U'	6 U'	0.1 U	4.6 U'	0.039 U	10 U'	0.098 U	0.18 U'	5.4 U'	9.6 U'
2-Butanone	0.014 U	0.74 U'	0.027 U	0.68 U'	0.018 U	0.014 U	0.011 U	0.65 U'	0.011 U	0.012 U	1 U'	0.0087 U	0.013 U	0.0094 U	0.9 U'	0.74 U'	0.012 U	0.58 U'	0.0049 U	1.3 U'	0.012 U	0.022 U	0.68 U'	1.2 U'
2-Hexanone	0.014 U	0.74 U	0.027 U	0.68 U	0.018 U	0.014 U	0.011 U	0.65 U	0.011 U	0.012 U	1 U	0.0087 U	0.013 U	0.0094 U	0.9 U	0.74 U	0.012 U	0.58 U	0.0049 U	1.3 U	0.012 U	0.022 U	0.68 U	1.2 U
4-Methyl-2-Pentanone	0.014 U	0.74 U	0.027 U	0.68 U	0.018 U	0.014 U	0.011 U	0.65 U	0.011 U	0.012 U	1 U	0.0087 U	0.013 U	0.0094 U	0.9 U	0.74 U	0.012 U	0.58 U	0.0049 U	1.3 U	0.012 U	0.022 U	0.68 U	1.2 U
Acetone	0.014 U	0.53 J	0.027 U	0.68 U'	0.018 U	0.014 U	0.011 U	0.65 U'	0.011 U	0.012 U	1 U'	0.022	0.079	0.0094 U	0.9 U'	0.74 U'	0.012 U	0.58 U'	0.0049 U	1.3 U'	0.012 U	0.092	0.68 U'	1.2 U'
Benzene	0.00072 U	0.037 U	0.0014 U	0.032 J	0.00092 U	0.0007 U	0.011	0.056	0.00056 U	0.00063 U	0.28	0.00044 U	0.018	0.00047 U	0.4	0.13	0.00062 U	0.013 J	0.00025 U	0.3	0.00061 U	0.0079	0.027 J	0.79
Bromochloromethane	0.0029 U	0.15 U	0.0054 U	0.14 U	0.0037 U	0.0028 U	0.0022 U	0.13 U	0.0022 U	0.0025 U	0.21 U	0.0017 U	0.0027 U	0.0019 U	0.18 U	0.15 U	0.0025 U	0.12 U	0.00099 U	0.26 U	0.0024 U	0.0045 U	0.14 U	0.24 U
Bromodichloromethane	0.00072 U	0.037 U	0.0014 U	0.034 U	0.00092 U	0.0007 U	0.00055 U	0.032 U	0.00056 U	0.00063 U	0.052 U	0.00044 U	0.00067 U	0.00047 U	0.045 U	0.037 U	0.00062 U	0.029 U	0.00025 U	0.065 U	0.00061 U	0.0011 U	0.034 U	0.06 U
Bromoform	0.0057 U	0.3 U	0.011 U	0.27 U	0.0074 U	0.0056 U	0.0044 U	0.26 U	0.0045 U	0.005 U	0.42 U	0.0035 U	0.0053 U	0.0038 U	0.36 U	0.3 U	0.005 U	0.23 U	0.002 U	0.52 U	0.0049 U	0.0089 U	0.27 U	0.48 U
Bromomethane	0.0029 U	0.15 U	0.0054 U	0.14 U	0.0037 U	0.0028 U	0.0022 U	0.13 U	0.0022 U	0.0025 U	0.21 U	0.0017 U	0.0027 U	0.0019 U	0.18 U	0.15 U	0.0025 U	0.12 U	0.00099 U	0.26 U	0.0024 U	0.0045 U	0.14 U	0.24 U
Carbon disulfide	0.014 U	0.74 U	0.027 U	0.68 U	0.018 U	0.014 U	0.011 U	0.65 U	0.011 U	0.012 U	1 U	0.0087 U	0.013 U	0.0094 U	0.9 U	0.74 U	0.012 U	0.58 U	0.0049 U	1.3 U	0.012 U	0.022 U	0.68 U	1.2 U
Carbon tetrachloride	0.0014 U	0.074 U	0.0027 U	0.068 U	0.0018 U	0.0014 U	0.0011 U	0.065 U	0.0011 U	0.0012 U	0.1 U	0.00087 U	0.0013 U	0.00094 U	0.09 U	0.074 U	0.0012 U	0.058 U	0.00049 U	0.13 U	0.0012 U	0.0022 U	0.068 U	0.12 U
Chlorobenzene	0.00072 U	0.037 U	0.0014 U	0.034 U	0.00092 U	0.0007 U	0.00055 U	0.032 U	0.00056 U	0.00063 U	0.052 U	0.00044 U	0.00067 U	0.00047 U	0.045 U	0.037 U	0.00062 U	0.029 U	0.00025 U	0.065 U	0.00061 U	0.0011 U	0.034 U	0.06 U
Chloroethane	0.0029 U	0.15 U	0.0054 U	0.14 U	0.0037 U	0.0028 U	0.0022 U	0.13 U	0.0022 U	0.0025 U	0.21 U	0.0017 U	0.0027 U	0.0019 U	0.18 U	0.15 U	0.0025 U	0.12 U	0.00099 U	0.26 U	0.0024 U	0.0045 U	0.14 U	0.24 U
Chloroform	0.0022 U	0.11 U	0.0041 U	0.1 U	0.0028 U	0.0021 U	0.0016 U	0.097 U	0.0017 U	0.0019 U	0.16 U	0.0013 U	0.002 U	0.0014 U	0.14 U	0.11 U	0.0019 U	0.086 U	0.00074 U	0.19 U	0.0018 U	0.0034 U	0.1 U	0.18 U
Chloromethane	0.0057 U	0.3 U	0.011 U	0.27 U	0.0074 U	0.0056 U	0.0044 U	0.26 U	0.0045 U	0.005 U	0.42 U	0.0035 U	0.0053 U	0.0038 U	0.36 U	0.3 U	0.005 U	0.23 U	0.002 U	0.52 U	0.0049 U	0.0089 U	0.27 U	0.48 U
cis-1,2-Dichloroethene	0.0014 U	0.074 U	0.0027 U	0.068 U	0.0018 U	0.0014 U	0.0011 U	0.065 U	0.0011 U	0.0012 U	0.1 U	0.00087 U	0.0013 U	0.00094 U	0.09 U	0.074 U	0.0012 U	0.058 U	0.00049 U	0.13 U	0.0012 U	0.0022 U	0.068 U	0.12 U
cis-1,3-Dichloropropene	0.00072 U	0.037 U	0.0014 U	0.034 U	0.00092 U	0.0007 U	0.00055 U	0.032 U	0.00056 U	0.00063 U	0.052 U	0.00044 U	0.00067 U	0.00047 U	0.045 U	0.037 U	0.00062 U	0.029 U	0.00025 U	0.065 U	0.00061 U	0.0011 U	0.034 U	0.06 U
Cyclohexane	0.014 U	0.37 J	0.027 U	1	0.018 U	0.014 U	0.33	3.5	9.5	0.012 U	4.2	0.0087 U	0.23	0.0094 U	6.5	0.91	0.012 U	3.8	0.017	0.21 J	0.012 U	0.25	4.1	8.1
Dibromochloromethane	0.0014 U	0.074 U	0.0027 U	0.068 U	0.0018 U	0.0014 U	0.0011 U	0.065 U	0.0011 U	0.0012 U	0.1 U	0.00087 U	0.0013 U	0.00094 U	0.09 U	0.074 U	0.0012 U	0.058 U	0.00049 U	0.13 U	0.0012 U	0.0022 U	0.068 U	0.12 U
Dichlorodifluoromethane	0.014 U	0.74 U	0.027 U	0.68 U	0.018 U	0.014 U	0.011 U	0.65 U	0.011 U	0.012 U	1 U	0.0087 U	0.013 U	0.0094 U	0.9 U	0.74 U	0.012 U	0.58 U	0.0049 U	1.3 U	0.012 U	0.022 U	0.68 U	1.2 U
Ethylbenzene	0.0014 U	0.022 J	0.0027 U	0.081	0.0018 U	0.0014 U	0.0084	0.23	0.0011 U	0.0012 U	0.09 J	0.00016 J	0.049	0.00022 J	9	2.4	0.0012 U	0.058 U	0.00049 U	0.63	0.0012 U	0.0013 J	0.18	1.3
Isopropylbenzene	0.0014 U	0.047 J	0.0027 U	0.21	0.0018 U	0.0014 U	0.03	1.6	1	0.0012 U	0.57	0.00068 J	0.04	0.00094 U	1.6	0.25	0.0012 U	0.4	0.0021	0.28	0.0012 U	0.013	0.94	1.5
Methyl Acetate	0.0057 U	0.3 U	0.011 U	0.11 J	0.0074 U	0.0056 U	0.0044 U	0.26 U	0.0045 U	0.005 U	0.19 J	0.0035 U	0.0053 U	0.0038 U	0.36 U	0.3 U	0.005 U	0.23 U	0.002 U	0.31 J	0.0049 U	0.0089 U	0.27 U	0.48 U
Methyl cyclohexane	0.0057 U	1.7	0.011 U	4.3	0.0074 U	0.0056 U	8.1	17	57	0.005 U	16	0.002 J	0.12	0.0038 U	10	2.4	0.005 U	16	0.094	2.8	0.0049 U	0.59	8.4	26
Methyl tertiary butyl ether (MTBE)	0.0029 U	0.15 U	0.0054 U	0.14 U	0.0037 U	0.0028 U	0.0022 U	0.13 U	0.0022 U	0.0025 U	0.21 U	0.0017 U	0.0027 U	0.0019 U	0.18 U	0.15 U	0.0025 U	0.12 U	0.00099 U	0.26 U	0.0024 U	0.0045 U	0.14 U	0.24 U
Methylene chloride	0.0072 U	0.37 U'	0.014 U	0.34 U'	0.0092 U	0.007 U	0.0055 U	0.32 U'	0.0056 U	0.0063 U	0.52 U'	0.0044 U	0.0067 U	0.0047 U	0.45 U'	0.37 U'	0.0062 U	0.29 U'	0.0025 U	0.65 U'	0.0061 U	0.011 U	0.34 U'	0.6 U'
n-Butylbenzene	0.0014 U	0.23	0.0027 U	0.28	0.0018 U	0.0014 U	0.012	1.6	0.11	0.0012 U	0.84	0.0017	0.012	0.00094 U	1	0.18	0.0012 U	0.35	0.0061	0.72	0.0012 U	0.014	0.6	2
n-Propylbenzene	0.0014 U	0.045 J	0.0027 U	0.38	0.0018 U	0.0014 U	0.05	3.4	1.4	0.0012 U	0.31	0.00054 J	0.042	0.00094 U	2.7	0.39	0.0012 U	0.59	0.00049 U	0.47	0.0012 U	0.018	1.7	3.1
sec-Butylbenzene	0.0014 U	0.23	0.0027 U	0.12	0.0018 U	0.0014 U	0.0076	0.72	1.6	0.0012 U	1.2	0.00081 J	0.0045	0.00094 U	0.65	0.12	0.0012 U	0.38	0.019	0.28	0.0012 U	0.0071	0.22	0.75
Styrene	0.0014 U	0.074 U	0.0027 U	0.068 U	0.0018 U	0.0014 U	0.0011 U	0.065 U	0.0011 U	0.0012 U	0.1 U	0.00087 U	0.0013 U	0.00094 U	0.09 U	0.074 U	0.0012 U	0.058 U	0.00049 U	0.031 J	0.0012 U	0.0022 U	0.068 U	0.12 U
tert-Butylbenzene	0.0029 U	0.15	0.0054 U	0.014 J	0.0037 U	0.0028 U	0.0011 J	0.12 J	0.84	0.0025 U	0.66	0.00026 J	0.0027 U	0.0019 U	0.043 J	0.15 U	0.0025 U	0.14	0.014	0.049 J	0.0024 U	0.0011 J	0.022 J	0.07 J
Tetrachloroethene	0.00072 U	0.037 U	0.0014 U	0.034 U	0.00092 U	0.0007 U	0.00055 U	0.032 U	0.00056 U	0.00063 U	0.052 U	0.00044 U	0.00067 U	0.00047 U	0.045 U	0.037 U	0.00062 U	0.029 U	0.00025 U	0.065 U	0.00061 U	0.0011 U	0.034 U	0.06 U
Toluene	0.0014 U	0.074 U	0.0027 U	0.054 J	0.0018 U	0.0014 U	0.051	0.16	0.015	0.0012 U	0.45	0.00087 U	0.049	0.00094 U	1.3	0.16	0.0012 U	0.053 J	0.0019	1.4	0.0012 U	0.014	0.13	3
trans-1,2-Dichloroethene	0.0022 U	0.11 U	0.0041 U	0.1 U	0.0028 U	0.0021 U	0.0016 U	0.097 U	0.0017 U	0.0019 U	0.16 U	0.0013 U	0.002 U	0.0014 U	0.14 U	0.11 U	0.0019 U	0.086 U	0.00074 U	0.19 U	0.0018 U	0.0034 U	0.1 U	0.18 U
trans-1,3-Dichloropropene	0.0014 U	0.074 U	0.0027 U	0.068 U	0.0018 U	0.0014 U	0.0011 U	0.065 U	0.0011 U	0.0012 U	0.1 U	0.00087 U	0.0013 U	0.00094 U	0.09 U	0.074 U	0.0012 U	0.058 U	0.00049 U	0.13 U	0.0012 U	0.0022 U	0.068 U	0.12 U
Trichloroethene	0.00072 U	0.037 U	0.0014 U	0.034 U	0.00092 U	0.0007 U	0.00055 U	0.032 U	0.00056 U	0.00063 U	0.052 U	0.00044 U	0.00067 U	0.00047 U	0.045 U	0.037 U	0.00062 U	0.029 U	0.00025 U	0.065 U	0.00061 U	0.0011 U	0.034 U	0.06 U
Trichlorofluoromethane	0.0057 U	0.3 U	0.011 U	0.27 U	0.0074 U	0.0056 U	0.0044 U	0.26 U	0.0045 U	0.005 U	0.42 U	0.0035 U	0.0053 U	0.0038 U	0.36 U	0.3 U	0.005 U	0.23 U	0.002 U	0.52 U	0.0049 U	0.0089 U	0.27 U	0.48 U
Vinyl chloride	0.0014 U	0.074 U'	0.0027 U	0.068 U'	0.0018 U	0.0014 U	0.0011 U	0.065 U'	0.0011 U	0.0012 U	0.1 U'	0.00087 U	0.0013 U	0.00094 U	0.09 U'	0.074 U'	0.0012 U	0.058 U'	0.00049 U	0.13 U'	0.0012 U	0.0022 U	0.068 U'	0.12 U'
Xylene (m&p)	0.0029 U	0.098 J	0.0054 U	0.35	0.0037 U	0.0028 U	0.092	0.66	0.079	0.0025 U	0.58	0.0017 U	0.036	0.0019 U	5.5	0.23	0.0025 U	0.11 J	0.00099 U	1.9	0.0024 U	0.018	0.21	6.6
Xylene (o)	0.0014 U	0.042 J	0.0027 U	0.094	0.0018 U	0.0014 U	0.017	0.19	0.023	0.0012 U	0.22	0.00087 U	0.62	0.00053 J	16	4.2	0.0012 U	0.055 J	0.0026	0.4	0.0012 U	0.0084	1.4	0.9
Xylenes (Total)	0.0014 U	0.14 J	0.0027 U	0.44	0.0018 U	0.0014 U	0.11	0.85	0.1	0.0012 U	0.8	0.00087 U	0.66	0.00053 J	22	4.4	0.0012 U	0.17 J	0.0026	2.3	0.0012 U	0.026	1.6	7.5

Notes:

When the applicable state standard applies to mixed isomers and the laboratory reports individual isomers, the total standard is listed for each isomer.
mg/kg = Milligrams per kilogram.
SU = Standard units
— = Sample not analyzed.
NS = No standard currently established.
ND = Not Detected.
U = Not detected above laboratory detection limit.
U' = Laboratory reporting limit exceeds the applicable regulatory standard or criteria being utilized.
J = Result below the reporting limit (estimated value).

Table 4.
Summary of Soil Waste Characterization Data.
MJ Painting; Olean, New York

Sample ID	**RX-426**	**RX-427**	**RX-427**	**RX-428**	**RX-429**	**RX-429**	**RX-430**	**RX-430**	**RX-431**	**RX-431**	**RX-432**	**RX-432**	**RX-432**	**RX-433**	**RX-433**	**RX-434**	**RX-436**	**RX-439**	**RX-443**	**RX-444**	**RX-447**	**RX-447**	**RX-448**	**RX-448**
Sample Depth (ft bgs)	**10-12**	**7-10**	**10-12**	**10-12**	**0-1**	**10-12**	**7-10**	**10-12**	**7-10**	**10-12**	**0-1**	**7-10**	**10-12**	**7-10**	**9**	**0-1**	**0-1**	**0-1**	**0-1**	**0-1**	**7-10**	**10-12**	**7-10**	**9**
Lab Sample ID	**L2162298**	**L2163207**	**L2163207**	**L2162035**	**L2162035**	**L2162035**	**L2162035**	**L2162035**	**L2163207**	**L2163207**	**L2162035**	**L2163207**	**L2163207**	**L2163563**	**L2163563**	**L2163563**	**L2163563**	**L2163987**	**L2163207**	**L2163563**	**L2163207**	**L2163207**	**L2163987**	**L2163987**
Sample Date	**11/11/2021**	**11/16/2021**	**11/16/2021**	**11/10/2021**	**11/10/2021**	**11/10/2021**	**11/10/2021**	**11/10/2021**	**11/16/2021**	**11/16/2021**	**11/10/2021**	**11/16/2021**	**11/16/2021**	**11/17/2021**	**11/17/2021**	**11/17/2021**	**11/17/2021**	**11/17/2021**	**11/16/2021**	**11/17/2021**	**11/16/2021**	**11/16/2021**	**11/18/2021**	**11/18/2021**
GENERAL CHEMISTRY - 1030 (none)																								
Ignitability	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	—	ND	ND	ND	ND	ND	ND	ND	ND	—
GENERAL CHEMISTRY - 2540G (%)																								
Solids, Total	76.6	79.3	80.4	81.3	88.3	87.2	81.8	82.8	78.4	86.5	92.4	78.6	85	87.6	85	83.3	81	79.8	72.9	79.1	76.1	84.6	65.2	60
GENERAL CHEMISTRY - 7.3 (mg/kg)																								
Cyanide	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	—	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	—
Sulfide, Reactive	10 U	10 U	18	10 U	10 U	10 U	10 U	10	10 U	10 U	10 U	35	12	10 U	—	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	—
GENERAL CHEMISTRY - 9045D (SU)																								
pH (H)	7.3	7.6	6.9	7.2	7.6	6.9	6.6	6.7	7.3	6.9	7.8	6.7	6.4	7.2	—	6.8	6.1	7.1	7.6	7.3	5.8	7.1	3.3	—
GENERAL CHEMISTRY - 9071B (mg/kg)																								
TPH, HEM-SGT	9960	9770	7420	2450	226 U	—	1810	1820	10900	231 U	216 U	—	—	4360	—	300	889	251 U	658	354	263 U	236 U	21800	—
HERBICIDES - 8151A (mg/kg)																								
2,4,5-T	0.612 U	0.209 U	0.202 U	0.202 U	0.188 U	0.189 U	0.203 U	0.2 U	0.21 U	0.191 U	0.18 U	0.209 U	0.194 U	0.19 U	—	0.197 U	0.204 U	0.206 U	0.221 U	0.204 U	0.216 U	0.197 U	0.249 U	—
2,4,5-TP (Silvex)	0.612 U	0.209 U	0.202 U	0.202 U	0.188 U	0.189 U	0.203 U	0.2 U	0.21 U	0.191 U	0.18 U	0.209 U	0.194 U	0.19 U	—	0.197 U	0.204 U	0.206 U	0.221 U	0.204 U	0.216 U	0.197 U	0.249 U	—
2,4-D	0.612 U	0.209 U	0.202 U	0.202 U	0.188 U	0.189 U	0.203 U	0.2 U	0.21 U	0.191 U	0.18 U	0.209 U	0.194 U	0.19 U	—	0.197 U	0.204 U	0.206 U	0.221 U	0.204 U	0.216 U	0.197 U	0.249 U	—
METALS - 6010D & 7471B (mg/kg)																								
Aluminum	13000	4500	9190	8420	3420	6710	7790	9990	5340	7200	6650	5850	6490	5120	—	8540	5250	6450	7170	9360	8940	7230	7390	—
Antimony	1.05 J	1.24 J	0.806 J	0.77 J	1.42 J	0.81 J	1.31 J	0.99 J	0.463 J	1.04 J	0.6 J	0.449 J	11.3 U	0.814 J	—	1.3 J	2.34 J	0.973 J	3.11 J	2.65 J	0.791 J	0.645 J	8.76	—
Arsenic	14	20.8	23.4	7.14	3.64	6.93	19.7	16.6	12.7	11.6	8.12	8.44	6.99	11.1	—	11.8	14.8	9.89	25.1	20.4	10.8	10.3	20.1	—
Barium	82.4	72	58.7	114	39.4	102	141	43.9	49.5	120	75	107	80.7	40.8	—	71.7	88.3	49.3	143	85.7	65.5	58.5	76.3	—
Beryllium	0.668	0.556	0.459 J	0.44 J	0.17 J	0.39 J	0.64	0.55	0.367 J	0.498	0.35 J	0.469 J	0.383 J	0.201 J	—	0.404 J	0.451 J	0.293 J	0.366 J	0.546	0.456 J	0.452 J	0.472 J	—
Cadmium	0.101 J	0.939 J	0.609 J	0.75 J	0.44 J	0.62 J	0.89 J	0.89 J	0.444 J	0.915	0.72 J	0.419 J	0.586 J	0.088 J	—	0.165 J	0.141 J	0.586 J	1.19	0.23 J	0.831 J	0.553 J	1.24	—
Calcium	1060	11800	1430	3130	2720	1080	1260	858	1810	1260	8980	631	1010	2040	—	2350	1130	1090	8790	3930	807	803	4320	—
Chromium	13.4	5.59	7.33	11.5	4.47	7.43	9.5	11	8.79	9	8.23	5.64	8.39	9.88	—	10	8.32	8.1	18.8	14.8	12.9	7.23	18.6	—
Cobalt	9.58	8.12	11	6.68	3.61	6.95	5.33	12.4	7	13.1	7.85	19.6	6.38	3.28	—	6.77	4.46	4.99	5.88	12	5.88	5.15	3.56	—
Copper	49.5	491	328	36	14.3	29.5	56.7	19.8	113	29.8	15.8	293	65.9	25.7	—	38.1	66.8	22.7	112	63.4	25.5	28	27.9	—
Iron	25700	26800	18800	17100	9070	15500	16600	22400	14000	23100	18700	12300	13500	21600	—	21600	19200	14300	21200	28500	22400	17900	12500	—
Lead	18.3	73.3	11.2	63.4	7.9	27.8	307	14	17.5	14.6	13.2	8.71	13.8	25.3	—	82.7	213	41.8	440	133	15.1	11.9	1160	—
Magnesium	2470	1200	417	2740	1620	1490	1030	2260	1210	1760	3410	1070	1900	1440	—	1570	925	1390	2980	3220	2220	1720	6640	—
Manganese	245	309	37.9	660	586	648	144	1100	332	1490	824	64	473	106	—	529	139	586	428	641	181	172	106	—
Mercury	0.096 U	0.117	0.078 U	0.09 U	0.05 J	0.17	0.07 J	0.08 U	0.088 U	0.08 U	0.08 U	0.084 U	0.084 U	0.077 U	—	0.101	0.131	0.109	1.02	0.129	0.087 U	0.08 U	0.727	—
Nickel	18.2	14.6	19.9	13.4	7.83	12.5	12.1	18.3	13.3	14	15.9	15.1	15.6	10.5	—	15.6	11.4	11.4	19.5	22.3	17.9	14	12.4	—
Potassium	576	444	1010	534	151 J	376	507	410	301	312	439	365	281 J	512	—	488	308	514	495	594	418	326	848	—
Selenium	0.395 J	1.11 J	0.872 J	0.58 J	1.79 U	0.42 J	0.65 J	0.69 J	0.627 J	1.78 U	1.65 U	0.379 J	4.51 U'	1.75 U	—	0.294 J	1.88 U	1.89 U	0.817 J	0.393 J	0.355 J	0.489 J	1.25 J	—
Silver	1.01 U	0.958 U	0.937 U	0.94 U	0.9 U	0.88 U	0.94 U	0.94 U	0.965 U	0.889 U	0.83 U	0.999 U	2.26 U	0.875 U	—	0.918 U	0.939 U	0.945 U	1.08 U	0.958 U	1.01 U	0.922 U	1.18 U	—
Sodium	38 J	77.4 J	110 J	59.4 J	18.9 J	27.5 J	49.7 J	19.5 J	22 J	17.7 J	33.9 J	19.1 J	23.4 J	22.4 J	—	28.5 J	45.9 J	14.8 J	124 J	44.2 J	178 J	223	564	—
Thallium	2.02 U	1.92 U	0.403 J	1.88 U	1.79 U	0.35 J	0.53 J	1.88 U	1.93 U	0.524 J	1.65 U	2 U	4.51 U	1.75 U	—	1.84 U	1.88 U	1.89 U	2.15 U	1.92 U	2.03 U	1.84 U	2.36 U	—
Vanadium	23	17.6	12.6	16.9	6.1	12.4	19.1	17	12.2	12.3	9.86	11.2	9.74	17.4	—	14.4	14.6	11.2	15.6	15.1	13.6	11.1	41.5	—
Zinc	69.6	43	47.9	65.4	44.9	42.3	41.3	57.2	37	75.6	48.8	47.8	73.2	81.2	—	66.7	40.3	58.6	190	81.8	61.5	59	59	—

Table 4.
Summary of Soil Waste Characterization Data.
MJ Painting; Olean, New York

Sample ID	RX-426	RX-427	RX-427	RX-428	RX-429	RX-429	RX-430	RX-430	RX-431	RX-431	RX-432	RX-432	RX-432	RX-433	RX-433	RX-434	RX-436	RX-439	RX-443	RX-444	RX-447	RX-447	RX-448	RX-448
Sample Depth (ft bgs)	10-12	7-10	10-12	10-12	0-1	10-12	7-10	10-12	7-10	10-12	0-1	7-10	10-12	7-10	9	0-1	0-1	0-1	0-1	0-1	7-10	10-12	7-10	9
Lab Sample ID	L2162298	L2163207	L2163207	L2162035	L2162035	L2162035	L2162035	L2162035	L2163207	L2163207	L2162035	L2163207	L2163207	L2163563	L2163563	L2163563	L2163563	L2163987	L2163207	L2163563	L2163207	L2163207	L2163987	L2163987
Sample Date	11/11/2021	11/16/2021	11/16/2021	11/10/2021	11/10/2021	11/10/2021	11/10/2021	11/10/2021	11/16/2021	11/16/2021	11/10/2021	11/16/2021	11/16/2021	11/17/2021	11/17/2021	11/17/2021	11/17/2021	11/17/2021	11/16/2021	11/17/2021	11/16/2021	11/16/2021	11/18/2021	11/18/2021
PAINT FILTER LIQUID - 9095B (none)																								
Paint Filter Liquid	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	—	ND	ND	ND	ND	ND	ND	ND	ND	—
POLYCHLORINATED BIPHENYLS - 8082																								
Aroclor-1016	0.0429 U	0.0396 U	0.0396 U	0.0404 U	0.0372 U	0.0376 U	0.0394 U	0.0386 U	0.0417 U	0.0372 U	0.0351 U	0.0418 U	0.0383 U	0.0377 U	—	0.0396 U	0.0395 U	0.0416 U	0.045 U	0.0404 U	0.0415 U	0.0391 U	0.0502 U	—
Aroclor-1221	0.0429 U	0.0396 U	0.0396 U	0.0404 U	0.0372 U	0.0376 U	0.0394 U	0.0386 U	0.0417 U	0.0372 U	0.0351 U	0.0418 U	0.0383 U	0.0377 U	—	0.0396 U	0.0395 U	0.0416 U	0.045 U	0.0404 U	0.0415 U	0.0391 U	0.0502 U	—
Aroclor-1232	0.0429 U	0.0396 U	0.0396 U	0.0404 U	0.0372 U	0.0376 U	0.0394 U	0.0386 U	0.0417 U	0.0372 U	0.0351 U	0.0418 U	0.0383 U	0.0377 U	—	0.0396 U	0.0395 U	0.0416 U	0.045 U	0.0404 U	0.0415 U	0.0391 U	0.0502 U	—
Aroclor-1242	0.0429 U	0.0396 U	0.0396 U	0.0404 U	0.0372 U	0.0376 U	0.0394 U	0.0386 U	0.0417 U	0.0372 U	0.0351 U	0.0418 U	0.0383 U	0.0377 U	—	0.0396 U	0.0395 U	0.0416 U	0.045 U	0.0404 U	0.0415 U	0.0391 U	0.0502 U	—
Aroclor-1248	0.0429 U	0.0396 U	0.0396 U	0.0404 U	0.0372 U	0.0376 U	0.0394 U	0.0386 U	0.0417 U	0.0372 U	0.0351 U	0.0418 U	0.0383 U	0.0377 U	—	0.0396 U	0.0395 U	0.0416 U	0.045 U	0.0404 U	0.0415 U	0.0391 U	0.0502 U	—
Aroclor-1254	0.0429 U	0.0396 U	0.0396 U	0.0404 U	0.0372 U	0.0376 U	0.0394 U	0.0386 U	0.0417 U	0.0372 U	0.0351 U	0.0418 U	0.0383 U	0.0377 U	—	0.0396 U	0.00527 J	0.0416 U	0.0445 J	0.00889 J	0.0415 U	0.0391 U	0.0502 U	—
Aroclor-1260	0.0429 U	0.0396 U	0.0396 U	0.0404 U	0.0372 U	0.0376 U	0.0394 U	0.0386 U	0.0417 U	0.0372 U	0.0351 U	0.0418 U	0.0383 U	0.0377 U	—	0.0396 U	0.0395 U	0.0416 U	0.045 U	0.00789 J	0.0415 U	0.0391 U	0.0502 U	—
Aroclor-1262	0.0429 U	0.0396 U	0.0396 U	0.0404 U	0.0372 U	0.0376 U	0.0394 U	0.0386 U	0.0417 U	0.0372 U	0.0351 U	0.0418 U	0.0383 U	0.0377 U	—	0.0396 U	0.0395 U	0.0416 U	0.045 U	0.0404 U	0.0415 U	0.0391 U	0.0502 U	—
Aroclor-1268	0.0429 U	0.0396 U	0.0396 U	0.0404 U	0.0372 U	0.0376 U	0.0394 U	0.0386 U	0.0417 U	0.0372 U	0.0351 U	0.0418 U	0.0383 U	0.0377 U	—	0.0396 U	0.0395 U	0.0416 U	0.015 J	0.0404 U	0.0415 U	0.0391 U	0.0502 U	—
Total PCBs	0.0429 U	0.0396 U	0.0396 U	0.0404 U	0.0372 U	0.0376 U	0.0394 U	0.0386 U	0.0417 U	0.0372 U	0.0351 U	0.0418 U	0.0383 U	0.0377 U	—	0.0396 U	0.00527 J	0.0416 U	0.0595 J	0.0168 J	0.0415 U	0.0391 U	0.0502 U	—
Total PCBs	0.0429 U	0.0396 U	0.0396 U	0.0404 U	0.0372 U	0.0376 U	0.0394 U	0.0386 U	0.0417 U	0.0372 U	0.0351 U	0.0418 U	0.0383 U	0.0377 U	—	0.0396 U	0.00527 J	0.0416 U	0.0595 J	0.0168 J	0.0415 U	0.0391 U	0.0502 U	—
Total PCBs	0.0429 U	0.0396 U	0.0396 U	0.0404 U	0.0372 U	0.0376 U	0.0394 U	0.0386 U	0.0417 U	0.0372 U	0.0351 U	0.0418 U	0.0383 U	0.0377 U	—	0.0396 U	0.00527 J	0.0416 U	0.0595 J	0.0168 J	0.0415 U	0.0391 U	0.0502 U	—
PESTICIDES - 8081B (mg/kg)																								
Aldrin	0.02 U	0.0192 U	0.00194 U	0.00188 U	0.00175 U	0.00176 U	0.00189 U	0.00183 U	0.0203 U	0.018 U	0.00166 U	0.00196 U	0.00182 U	0.00174 U	—	0.00181 U	0.0019 U	0.00195 U	0.00208 U	0.00194 U	0.00203 U	0.00184 U	0.0244 U	—
alpha-BHC	0.00835 U	0.008 U	0.000808 U	0.00078 U	0.00073 U	0.00073 U	0.00079 U	0.00076 U	0.00846 U	0.00749 U	0.00069 U	0.000816 U	0.00076 U	0.000724 U	—	0.000754 U	0.000792 U	0.000812 U	0.000868 U	0.000807 U	0.000848 U	0.000768 U	0.0102 U	—
beta-BHC	0.02 U	0.0192 U	0.00194 U	0.00188 U	0.00175 U	0.00176 U	0.00189 U	0.00183 U	0.0203 U	0.018 U	0.00166 U	0.00196 U	0.00182 U	0.00174 U	—	0.00181 U	0.0019 U	0.00195 U	0.00208 U	0.00194 U	0.00203 U	0.00184 U	0.0244 U	—
Chlordane	0.167 U	0.16 U	0.0162 U	0.0157 U	0.0146 U	0.0146 U	0.0157 U	0.0152 U	0.169 U	0.15 U	0.0138 U	0.0163 U	0.0152 U	0.0145 U	—	0.0151 U	0.0158 U	0.0162 U	0.0174 U	0.0161 U	0.017 U	0.0154 U	0.204 U	—
cis-Chlordane	0.025 U	0.024 U	0.00242 U	0.00235 U	0.00219 U	0.0022 U	0.00236 U	0.00228 U	0.0254 U	0.0225 U	0.00208 U	0.00245 U	0.00228 U	0.00217 U	—	0.00226 U	0.00238 U	0.00244 U	0.0026 U	0.00242 U	0.00254 U	0.0023 U	0.0306 U	—
delta-BHC	0.02 U	0.0192 U	0.00194 U	0.00188 U	0.00175 U	0.00176 U	0.00189 U	0.00183 U	0.0203 U	0.018 U	0.00166 U	0.00196 U	0.00182 U	0.00174 U	—	0.00181 U	0.0019 U	0.00195 U	0.00208 U	0.00194 U	0.00203 U	0.00184 U	0.0244 U	—
Dieldrin	0.0125 U	0.012 U	0.00121 U	0.00118 U	0.00109 U	0.0011 U	0.00118 U	0.00114 U	0.0127 U	0.0112 U	0.00104 U	0.00122 U	0.00114 U	0.00109 U	—	0.00113 U	0.00119 U	0.00122 U	0.0013 U	0.00121 U	0.00127 U	0.00115 U	0.0153 U	—
Endosulfan I	0.02 U	0.0192 U	0.00194 U	0.00188 U	0.00175 U	0.00176 U	0.00189 U	0.00183 U	0.0203 U	0.018 U	0.00166 U	0.00196 U	0.00182 U	0.00174 U	—	0.00181 U	0.0019 U	0.00195 U	0.00208 U	0.00194 U	0.00203 U	0.00184 U	0.0244 U	—
Endosulfan II	0.02 U	0.0192 U	0.00194 U	0.00188 U	0.00175 U	0.00176 U	0.00189 U	0.00183 U	0.0203 U	0.018 U	0.00166 U	0.00196 U	0.00182 U	0.00174 U	—	0.00181 U	0.0019 U	0.00195 U	0.00208 U	0.00194 U	0.00203 U	0.00184 U	0.0244 U	—
Endosulfan sulfate	0.00835 U	0.008 U	0.000808 U	0.00078 U	0.00073 U	0.00073 U	0.00079 U	0.00076 U	0.00846 U	0.00749 U	0.00069 U	0.000816 U	0.00076 U	0.000724 U	—	0.000754 U	0.000792 U	0.000812 U	0.000868 U	0.000807 U	0.000848 U	0.000768 U	0.0102 U	—
Endrin	0.00835 U	0.008 U	0.000808 U	0.00078 U	0.00073 U	0.00073 U	0.00079 U	0.00076 U	0.00846 U	0.00749 U	0.00069 U	0.000816 U	0.00076 U	0.000724 U	—	0.000754 U	0.000792 U	0.000812 U	0.000868 U	0.000807 U	0.000848 U	0.000768 U	0.0102 U	—
Endrin Aldehyde	0.025 U	0.024 U	0.00242 U	0.00235 U	0.00219 U	0.0022 U	0.00236 U	0.00228 U	0.0254 U	0.0225 U	0.00208 U	0.00245 U	0.00228 U	0.00217 U	—	0.00226 U	0.00238 U	0.00244 U	0.0026 U	0.00242 U	0.00254 U	0.0023 U	0.0306 U	—
Endrin Ketone	0.02 U	0.0192 U	0.00194 U	0.00188 U	0.00175 U	0.00176 U	0.00189 U	0.00183 U	0.0203 U	0.018 U	0.00166 U	0.00196 U	0.00182 U	0.00174 U	—	0.00181 U	0.0019 U	0.00195 U	0.00208 U	0.00194 U	0.00203 U	0.00184 U	0.0244 U	—
Heptachlor	0.01 U	0.0096 U	0.00097 U	0.00094 U	0.00088 U	0.00088 U	0.00094 U	0.00091 U	0.0101 U	0.00898 U	0.00083 U	0.000979 U	0.000912 U	0.000869 U	—	0.000905 U	0.00095 U	0.000974 U	0.00104 U	0.000969 U	0.00102 U	0.000922 U	0.0122 U	—
Heptachlor Epoxide	0.0376 U	0.036 U	0.00364 U	0.00353 U	0.00328 U	0.00329 U	0.00354 U	0.00343 U	0.0381 U	0.0337 U	0.00312 U	0.00367 U	0.00342 U	0.00326 U	—	0.0034 U	0.00356 U	0.00365 U	0.0039 U	0.00363 U	0.00382 U	0.00346 U	0.0458 U	—
Lindane	0.00835 U	0.008 U	0.000808 U	0.00078 U	0.00073 U	0.00073 U	0.00079 U	0.00076 U	0.00846 U	0.00749 U	0.00069 U	0.000816 U	0.00076 U	0.000724 U	—	0.000754 U	0.000792 U	0.000812 U	0.000868 U	0.000807 U	0.000848 U	0.000768 U	0.0102 U	—
Methoxychlor	0.0376 U	0.036 U	0.00364 U	0.00353 U	0.00328 U	0.00329 U	0.00354 U	0.00343 U	0.0381 U	0.0337 U	0.00312 U	0.00367 U	0.00342 U	0.00326 U	—	0.0034 U	0.00356 U	0.00365 U	0.0039 U	0.00363 U	0.00382 U	0.00346 U	0.0458 U	—
p,p'-DDD	0.02 U	0.0192 U	0.00194 U	0.00188 U	0.00175 U	0.00176 U	0.00189 U	0.00183 U	0.0203 U	0.018 U	0.00166 U	0.00196 U	0.00182 U	0.00174 U	—	0.0012 J	0.0019 U	0.00195 U	0.00208 U	0.00194 U	0.00203 U	0.00184 U	0.0244 U	—
p,p'-DDE	0.02 U	0.0192 U	0.00194 U	0.00188 U	0.00175 U	0.00176 U	0.00189 U	0.00183 U	0.0203 U	0.018 U	0.00166 U	0.00196 U	0.00182 U	0.00174 U	—	0.00181 U	0.0019 U	0.00195 U	0.00208 U	0.00194 U	0.00203 U	0.00184 U	0.0244 U	—
p,p'-DDT	0.0376 U	0.036 U	0.00364 U	0.00353 U	0.00328 U	0.00329 U	0.00354 U	0.00343 U	0.0381 U	0.0337 U	0.00312 U	0.00367 U	0.00342 U	0.00468 P	—	0.00219 J	0.00356 U	0.00365 U	0.0039 U	0.00363 U	0.00382 U	0.00346 U	0.0458 U	—
Toxaphene	0.376 U	0.36 U	0.0364 U	0.0353 U	0.0328 U	0.0329 U	0.0354 U	0.0343 U	0.381 U	0.337 U	0.0312 U	0.0367 U	0.0342 U	0.0326 U	—	0.034 U	0.0356 U	0.0365 U	0.039 U	0.0363 U	0.0382 U	0.0346 U	0.458 U	—
trans-Chlordane	0.025 U	0.024 U	0.00242 U	0.00235 U	0.00219 U	0.0022 U	0.00236 U	0.00228 U	0.0254 U	0.0225 U	0.00208 U	0.00245 U	0.00228 U	0.00217 U	—	0.00226 U	0.00238 U	0.00244 U	0.0026 U	0.00242 U	0.00254 U	0.0023 U	0.0306 U	—

Table 4.
Summary of Soil Waste Characterization Data.
MJ Painting; Olean, New York

Sample ID	RX-426	RX-427	RX-427	RX-428	RX-429	RX-429	RX-430	RX-430	RX-431	RX-431	RX-432	RX-432	RX-432	RX-433	RX-433	RX-434	RX-436	RX-439	RX-443	RX-444	RX-447	RX-447	RX-448	RX-448
Sample Depth (ft bgs)	10-12	7-10	10-12	10-12	0-1	10-12	7-10	10-12	7-10	10-12	0-1	7-10	10-12	7-10	9	0-1	0-1	0-1	0-1	0-1	7-10	10-12	7-10	9
Lab Sample ID	L2162298	L2163207	L2163207	L2162035	L2162035	L2162035	L2162035	L2162035	L2163207	L2163207	L2162035	L2163207	L2163207	L2163563	L2163563	L2163563	L2163563	L2163987	L2163207	L2163563	L2163207	L2163207	L2163987	L2163987
Sample Date	11/11/2021	11/16/2021	11/16/2021	11/10/2021	11/10/2021	11/10/2021	11/10/2021	11/10/2021	11/16/2021	11/16/2021	11/10/2021	11/16/2021	11/16/2021	11/17/2021	11/17/2021	11/17/2021	11/17/2021	11/17/2021	11/16/2021	11/17/2021	11/16/2021	11/16/2021	11/18/2021	11/18/2021
SEMI-VOLATILE ORGANIC COMPOUND																								
1,2,4,5-Tetrachlorobenzene	13 U	1 U	1 U	0.2 U	0.18 U	0.19 U	0.2 U	0.2 U	2.1 U	0.19 U	0.18 U	0.21 U	0.19 U	0.18 U	—	0.2 U	1 U	0.21 U	0.22 U	1 U	0.21 U	0.2 U	2.5 U	—
2,3,4,6-Tetrachlorophenol	13 U	1 U	1 U	0.2 U	0.18 U	0.19 U	0.2 U	0.2 U	2.1 U	0.19 U	0.18 U	0.21 U	0.19 U	0.18 U	—	0.2 U	1 U	0.21 U	0.22 U	1 U	0.21 U	0.2 U	2.5 U	—
2,4,5-Trichlorophenol	13 U	1 U	1 U	0.2 U	0.18 U	0.19 U	0.2 U	0.2 U	2.1 U	0.19 U	0.18 U	0.21 U	0.19 U	0.18 U	—	0.2 U	1 U	0.21 U	0.22 U	1 U	0.21 U	0.2 U	2.5 U	—
2,4,6-Trichlorophenol	7.7 U	0.62 U	0.6 U	0.12 U	0.11 U	0.11 U	0.12 U	0.12 U	1.3 U	0.11 U	0.11 U	0.13 U	0.12 U	0.11 U	—	0.12 U	0.6 U	0.12 U	0.13 U	0.62 U	0.13 U	0.12 U	1.5 U	—
2,4-Dichlorophenol	12 U	0.93 U	0.9 U	0.18 U	0.17 U	0.17 U	0.18 U	0.18 U	1.9 U	0.17 U	0.16 U	0.19 U	0.17 U	0.16 U	—	0.18 U	0.9 U	0.18 U	0.2 U	0.93 U	0.19 U	0.18 U	2.2 U	—
2,4-Dimethylphenol	13 U	1 U	1 U	0.2 U	0.18 U	0.19 U	0.2 U	0.2 U	2.1 U	0.19 U	0.18 U	0.21 U	0.19 U	0.18 U	—	0.2 U	1 U	0.21 U	0.22 U	1 U	0.21 U	0.2 U	2.5 U	—
2,4-Dinitrophenol	62 U	5 U	4.8 U	0.96 U	0.89 U	0.91 U	0.95 U	0.95 U	10 U	0.91 U	0.86 U	1 U	0.93 U	0.88 U	—	0.95 U	4.8 U	0.99 U	1.1 U	4.9 U	1 U	0.94 U	12 U	—
2,4-Dinitrotoluene	13 U	1 U	1 U	0.2 U	0.18 U	0.19 U	0.2 U	0.13 J	2.1 U	0.19 U	0.18 U	0.21 U	0.19 U	0.18 U	—	0.2 U	1 U	0.21 U	0.22 U	1 U	0.21 U	0.2 U	2.5 U	—
2,6-Dinitrotoluene	13 U	1 U	1 U	0.2 U	0.18 U	0.19 U	0.2 U	0.2 U	2.1 U	0.19 U	0.18 U	0.21 U	0.19 U	0.18 U	—	0.2 U	1 U	0.21 U	0.22 U	1 U	0.21 U	0.2 U	2.5 U	—
2-Chloronaphthalene	13 U	1 U	1 U	0.2 U	0.18 U	0.19 U	0.2 U	0.2 U	2.1 U	0.19 U	0.18 U	0.21 U	0.19 U	0.18 U	—	0.2 U	1 U	0.21 U	0.22 U	1 U	0.21 U	0.2 U	2.5 U	—
2-Chlorophenol	13 U	1 U	1 U	0.2 U	0.18 U	0.19 U	0.2 U	0.2 U	2.1 U	0.19 U	0.18 U	0.21 U	0.19 U	0.18 U	—	0.2 U	1 U	0.21 U	0.22 U	1 U	0.21 U	0.2 U	2.5 U	—
2-Methylnapthalene	49	3	0.8 J	0.078 J	0.22 U	0.98	0.54	0.24 U	5.4	0.33	0.22 U	0.028 J	0.038 J	0.14 J	—	0.061 J	0.73 J	0.25 U	0.24 J	1.9	0.037 J	0.24 U	4.2	—
2-Methylphenol	13 U'	1 U'	1 U'	0.2 U	0.18 U	0.19 U	0.2 U	0.2 U	2.1 U'	0.19 U	0.18 U	0.21 U	0.19 U	0.18 U	—	0.2 U	1 U'	0.21 U	0.22 U	1 U'	0.21 U	0.2 U	2.5 U'	—
2-Nitroaniline	13 U	1 U	1 U	0.2 U	0.18 U	0.19 U	0.2 U	0.2 U	2.1 U	0.19 U	0.18 U	0.21 U	0.19 U	0.18 U	—	0.2 U	1 U	0.21 U	0.22 U	1 U	0.21 U	0.2 U	2.5 U	—
2-Nitrophenol	28 U	2.2 U	2.2 U	0.43 U	0.4 U	0.41 U	0.43 U	0.43 U	4.6 U	0.41 U	0.39 U	0.45 U	0.42 U	0.4 U	—	0.43 U	2.2 U	0.45 U	0.48 U	2.2 U	0.46 U	0.42 U	5.4 U	—
3,3'-Dichlorobenzidine	13 U	1 U	1 U	0.2 U	0.18 U	0.19 U	0.2 U	0.2 U	2.1 U	0.19 U	0.18 U	0.21 U	0.19 U	0.18 U	—	0.2 U	1 U	0.21 U	0.22 U	1 U	0.21 U	0.2 U	2.5 U	—
3-Methylphenol/4-Methylphenol	18 U	1.5 U	1.4 U	0.29 U	0.27 U	0.27 U	0.28 U	0.29 U	3 U	0.27 U	0.26 U	0.3 U	0.28 U	0.26 U	—	0.29 U	1.4 U	0.3 U	0.32 U	1.5 U	0.31 U	0.28 U	3.6 U	—
3-Nitroaniline	13 U	1 U	1 U	0.2 U	0.18 U	0.19 U	0.2 U	0.2 U	2.1 U	0.19 U	0.18 U	0.21 U	0.19 U	0.18 U	—	0.2 U	1 U	0.21 U	0.22 U	1 U	0.21 U	0.2 U	2.5 U	—
4,6-Dinitro-o-cresol	33 U	2.7 U	2.6 U	0.52 U	0.48 U	0.49 U	0.52 U	0.52 U	5.5 U	0.49 U	0.47 U	0.55 U	0.5 U	0.48 U	—	0.52 U	2.6 U	0.54 U	0.58 U	2.7 U	0.55 U	0.51 U	6.5 U	—
4-Bromophenyl-phenylether	13 U	1 U	1 U	0.2 U	0.18 U	0.19 U	0.2 U	0.2 U	2.1 U	0.19 U	0.18 U	0.21 U	0.19 U	0.18 U	—	0.2 U	1 U	0.21 U	0.22 U	1 U	0.21 U	0.2 U	2.5 U	—
4-Chloroaniline	13 U	1 U	1 U	0.2 U	0.18 U	0.19 U	0.2 U	0.2 U	2.1 U	0.19 U	0.18 U	0.21 U	0.19 U	0.18 U	—	0.2 U	1 U	0.21 U	0.22 U	1 U	0.21 U	0.2 U	2.5 U	—
4-Chlorophenyl-phenylether	13 U	1 U	1 U	0.2 U	0.18 U	0.19 U	0.2 U	0.2 U	2.1 U	0.19 U	0.18 U	0.21 U	0.19 U	0.18 U	—	0.2 U	1 U	0.21 U	0.22 U	1 U	0.21 U	0.2 U	2.5 U	—
4-Nitroaniline	13 U	1 U	1 U	0.2 U	0.18 U	0.19 U	0.2 U	0.2 U	2.1 U	0.19 U	0.18 U	0.21 U	0.19 U	0.18 U	—	0.2 U	1 U	0.21 U	0.22 U	1 U	0.21 U	0.2 U	2.5 U	—
4-Nitrophenol	18 U	1.4 U	1.4 U	0.28 U	0.26 U	0.26 U	0.28 U	0.28 U	3 U	0.27 U	0.25 U	0.29 U	0.27 U	0.26 U	—	0.28 U	1.4 U	0.29 U	0.31 U	1.4 U	0.3 U	0.27 U	3.5 U	—
Acenaphthene	1.8 J	0.22 J	0.42 J	0.03 J	0.15 U	0.037 J	0.34	0.11 J	1.8	0.32	0.14 U	0.028 J	0.12 J	0.15 U	—	0.16	0.8 U	0.16 U	0.088 J	13	0.17 U	0.16 U	2 U	—
Acenaphthylene	10 U	0.83 U	0.8 U	0.16 U	0.15 U	0.15 U	0.13 J	0.075 J	1.7 U	0.15 U	0.14 U	0.17 U	0.16 U	0.15 U	—	0.057 J	0.8 U	0.16 U	0.047 J	0.82 U	0.17 U	0.16 U	2 U	—
Acetophenone	13 U	1 U	1 U	0.2 U	0.18 U	0.19 U	0.68	0.2 U	2.1 U	0.19 U	0.18 U	0.21 U	0.19 U	0.18 U	—	0.2 U	1 U	0.21 U	0.22 U	1 U	0.21 U	0.2 U	2.5 U	—
Anthracene	4.2 J	1.1	1	0.078 J	0.11 U	0.091 J	1.2	0.4	7.5	1.2	0.11 U	0.089 J	0.25	0.045 J	—	0.36	0.6 U	0.12 U	0.27	21	0.13 U	0.12 U	1.5 U	—
Atrazine	10 U	0.83 U	0.8 U	0.16 U	0.15 U	0.15 U	0.16 U	0.16 U	1.7 U	0.15 U	0.14 U	0.17 U	0.16 U	0.15 U	—	0.16 U	0.8 U	0.16 U	0.18 U	0.82 U	0.17 U	0.16 U	2 U	—
Benzaldehyde	17 U	1.4 U	1.3 U	0.26 U	0.24 U	0.25 U	0.26 U	0.26 U	2.8 U	0.25 U	0.24 U	0.28 U	0.26 U	0.24 U	—	0.064 J	1.3 U	0.27 U	0.29 U	1.4 U	0.28 U	0.26 U	3.3 U	—
Benzo[a]anthracene	2.7 J	0.53 J	0.28 J	0.32	0.11 U	0.021 J	0.26	0.051 J	2.7	0.3	0.11 U	0.13	0.11 J	0.11 U	—	0.79	0.11 J	0.081 J	1.3	26	0.13 U	0.12 U	0.83 J	—
Benzo[a]pyrene	10 U'	1	0.8 U	0.29	0.15 U	0.15 U	0.18	0.16 U	2	0.19	0.14 U	0.1 J	0.067 J	0.15 U	—	0.78	0.8 U	0.081 J	0.9	21	0.17 U	0.16 U	0.7 J	—
Benzo[b]fluoranthene	7.7 U'	0.54 J	0.6 U	0.39	0.11 U	0.11 U	0.085 J	0.12 U	0.79 J	0.082 J	0.11 U	0.056 J	0.034 J	0.11 U	—	0.96	0.6 U	0.1 J	1.2	27	0.13 U	0.12 U	0.89 J	—
Benzo[g,h,i]perylene	2.4 J	2	0.2 J	0.21	0.15 U	0.15 U	0.3	0.063 J	2.3	0.25	0.14 U	0.12 J	0.079 J	0.15 U	—	0.56	0.24 J	0.07 J	0.6	12	0.034 J	0.16 U	0.7 J	—
Benzo[k]fluoranthene	7.7 U'	0.62 U	0.6 U	0.12	0.11 U	0.11 U	0.12 U	0.12 U	1.3 U	0.11 U	0.11 U	0.13 U	0.12 U	0.11 U	—	0.33	0.6 U	0.037 J	0.47	9	0.13 U	0.12 U	1.5 U	—
Biphenyl	29 U	2.4 U	2.3 U	0.46 U	0.42 U	0.43 U	0.11 J	0.45 U	4.8 U	0.43 U	0.41 U	0.48 U	0.44 U	0.42 U	—	0.45 U	2.3 U	0.47 U	0.5 U	0.57 J	0.49 U	0.45 U	0.9 J	—
Bis(2-Chloroethoxy)methane	14 U	1.1 U	1.1 U	0.22 U	0.2 U	0.2 U	0.21 U	0.21 U	2.3 U	0.2 U	0.19 U	0.23 U	0.21 U	0.2 U	—	0.21 U	1.1 U	0.22 U	0.24 U	1.1 U	0.23 U	0.21 U	2.7 U	—
Bis(2-Chloroethyl)ether	12 U	0.93 U	0.9 U	0.18 U	0.17 U	0.17 U	0.18 U	0.18 U	1.9 U	0.17 U	0.16 U	0.19 U	0.17 U	0.16 U	—	0.18 U	0.9 U	0.18 U	0.2 U	0.93 U	0.19 U	0.18 U	2.2 U	—
Bis(2-Chloroisopropyl)ether	15 U	1.2 U	1.2 U	0.24 U	0.22 U	0.23 U	0.24 U	0.24 U	2.5 U	0.23 U	0.22 U	0.25 U	0.23 U	0.22 U	—	0.24 U	1.2 U	0.25 U	0.27 U	1.2 U	0.26 U	0.24 U	3 U	—
Bis(2-Ethylhexyl)phthalate	13 U	1 U	1 U	0.2 U	0.18 U	0.19 U	0.2 U	0.2 U	2.1 U	0.19 U	0.18 U	0.21 U	0.19 U	0.18 U	—	0.2 U	1 U	0.21 U	0.22 U	1 U	0.21 U	0.2 U	2.5 U	—
Butyl benzyl phthalate	13 U	1 U	1 U	0.2 U	0.18 U	0.19 U	0.2 U	0.2 U	2.1 U	0.19 U	0.18 U	0.21 U	0.19 U	0.18 U	—	0.2 U	1 U	0.21 U	0.22 U	1 U	0.21 U	0.2 U	2.5 U	—
Caprolactam	13 U	1 U	1 U	0.2 U	0.18 U	0.19 U	0.2 U	0.2 U	2.1 U	0.19 U	0.18 U	0.21 U	0.19 U	0.18 U	—	0.2 U	1 U	0.21 U	0.22 U	1 U	0.21 U	0.2 U	2.5 U	—
Carbazole	13 U	1 U	1 U	0.049 J	0.18 U	0.19 U	0.2 U	0.2 U	2.1 U	0.19 U	0.18 U	0.21 U	0.19 U	0.18 U	—	0.16 J	1 U	0.21 U	0.11 J	8	0.21 U	0.2 U	0.38 J	—
Chrysene	6.6 J	1.4	0.62	0.33	0.11 U	0.025 J	0.37	0.082 J	3.7	0.42	0.11 U	0.2	0.16	0.11	—	0.74	0.16 J	0.076 J	1.2	23	0.052 J	0.12 U	2	—
Dibenzo(a,h)anthracene	7.7 U'	0.18 J	0.6 U'	0.053 J	0.11 U	0.11 U	0.12 U	0.12 U	1.3 U'	0.11 U	0.11 U	0.13 U	0.12 U	0.11 U	—	0.18	0.6 U'	0.12 U	0.13	3	0.13 U	0.12 U	0.29 J	—
Dibenzofuran	1.2 J	1 U	0.28 J	0.032 J	0.18 U	0.02 J	0.2 U	0.2 U	1.1 J	0.19 U	0.18 U	0.21 U	0.08 J	0.091 J	—	0.089 J	1 U	0.21 U	0.052 J	6.8	0.21 U	0.2 U	0.34 J	—
Diethyl phthalate	13 U	1 U	1 U	0.2 U	0.18 U	0.19 U	0.2 U	0.2 U	2.1 U	0.19 U	0.18 U	0.21 U	0.19 U	0.18 U	—	0.2 U	1 U	0.21 U	0.22 U	1 U	0.21 U	0.2 U	2.5 U	—
Dimethyl phthalate	13 U	1 U	1 U	0.2 U	0.18 U	0.19 U	0.2 U	0.2 U	2.1 U	0.19 U	0.18 U	0.21 U	0.19 U	0.18 U	—	0.2 U	1 U	0.21 U	0.22 U	1 U	0.21 U	0.2 U	2.5 U	—
Di-n-butylphthalate	13 U	1 U	1 U	0.2 U	0.18 U	0.19 U	0.2 U	0.2 U	2.1 U	0.19 U	0.18 U	0.21 U	0.19 U	0.18 U	—	0.2 U	1 U	0.21 U	0.22 U	1 U	0.21 U	0.2 U	2.5 U	—
Di-n-octylphthalate	13 U	1 U	1 U	0.2 U	0.18 U	0.19 U	0.2 U	0.2 U	2.1 U	0.19 U	0.18 U	0.21 U	0.19 U	0.18 U	—	0.2 U	1 U	0.21 U	0.22 U	1 U	0.21 U	0.2 U	2.5 U	—
Fluoranthene	2.1 J	0.41 J	0.3 J	0.61	0.11 U	0.043 J	0.27	0.099 J	3.6	0.46	0.11 U	0.086 J	0.13	0.032 J	—	1.7	0.12 J	0.15	1.9	67	0.13 U	0.12 U	1.3 J	—
Fluorene	4.7 J	0.63 J	1.2	0.054 J	0.18 U	0.098 J	0.88	0.35	5.7	1.1	0.18 U	0.029 J	0.34	0.19	—	0.15 J	1 U	0.21 U	0.088 J	11	0.21 U	0.2 U	0.45 J	—
Hexachlorobenzene	7.7 U'	0.62 U	0.6 U	0.12 U	0.11 U	0.11 U	0.12 U	0.12 U	1.3 U	0.11 U	0.11 U	0.13 U	0.12 U	0.11 U	—	0.12 U	0.6 U	0.12 U	0.13 U	0.62 U	0.13 U	0.12 U	1.5 U	—
Hexachlorobutadiene	13 U	1 U	1 U	0.2 U	0.18 U	0.19 U	0.2 U	0.2 U	2.1 U	0.19 U	0.18 U	0.21 U	0.19 U	0.18 U	—	0.2 U	1 U	0.21 U	0.22 U	1 U	0.21 U	0.2 U	2.5 U	—
Hexachlorocyclopentadiene	37 U	3 U	2.9 U	0.57 U	0.53 U	0.54 U	0.57 U	0.57 U	6.1 U	0.54 U	0.51 U	0.6 U	0.55 U	0.53 U	—	0.57 U	2.9 U	0.59 U	0.63 U	2.9 U	0.61 U	0.56 U	7.2 U	—
Hexachloroethane	10 U	0.83 U	0.8 U	0.16 U	0.15 U	0.15 U	0.16 U	0.16 U	1.7 U	0.15 U	0.14 U	0.17 U	0.16 U	0.15 U	—	0.16 U	0.8 U	0.16 U	0.18 U	0.82 U	0.17 U	0.16 U	2 U	—
Indeno[1,2,3-cd]pyrene	10 U'	0.42 J	0.8 U	0.22	0.15 U	0.15 U	0.1 J	0.057 J	0.64 J	0.066 J	0.14 U	0.037 J	0.16 U	0.15 U	—	0.53	0.36 J	0.1 J	0.51	12	0.17 U	0.16 U	0.58 J	—
Isophorone	12 U	0.93 U	0.9 U	0.18 U	0.17 U	0.17 U	0.18 U	0.18 U	1.9 U	0.17 U	0.16 U	0.19 U	0.17 U	0.16 U	—	0.18 U	0.9 U	0.18 U	0.2 U	0.93 U	0.19 U	0.18 U	2.2 U	—
Naphthalene	8.7 J	1.7	1 U	0.12 J	0.18 U	0.074 J	0.28	0.085 J	1.9 J	0.19 U	0.18 U	0.21 U	0.19 U	0.11 J	—	0.062 J	0.38 J	0.21 U	0.11 J	4.3	0.21 U	0.2 U	2 J	—
Nitrobenzene	12 U	0.93 U	0.9 U	0.18 U	0.17 U	0.17 U	0.18 U	0.18 U	1.9 U	0.17 U	0.16 U	0.19 U	0.17 U	0.16 U	—	0.18 U	0.9 U	0.18 U	0.2 U	0.93 U	0.19 U	0.18 U	2.2 U	—
n-Nitrosodi-n-propylamine	13 U	1 U	1 U	0.2 U	0.18 U	0.19 U	0.2 U	0.2 U	2.1 U	0.19 U	0.18 U	0.21 U	0.19 U	0.18 U	—	0.2 U	1 U	0.21 U	0.22 U	1 U	0.21 U	0.2 U	2.5 U	—
N-Nitrosodiphenylamine	10 U	0.83 U	0.8 U	0.16 U	0.15 U	0.15 U	0.16 U	0.16 U	1.7 U	0.15 U	0.14 U	0.17 U	0.16 U	0.15 U	—	0.16 U	0.8 U	0.16 U	0.18 U	0.82 U	0.17 U	0.16 U	2 U	—
p-Chloro-m-cresol	13 U	1 U	1 U	0.2 U	0.18 U	0.19 U	0.2 U	0.2 U	2.1 U	0.19 U	0.18 U	0.21 U	0.19 U	0.18 U	—	0.2 U	1 U	0.21 U	0.22 U	1 U	0.21 U	0.2 U	2.5 U	—
Pentachlorophenol	10 U'	0.83 U'	0.8 U	0.16 U	0.15 U	0.15 U	0.16 U	0.16 U	1.7 U'	0.15 U	0.14 U	0.17 U	0.16 U	0.15 U	—	0.16 U	0.8 U	0.16 U	0.18 U	0.82 U'	0.17 U	0.16 U	2 U'	—
Phenanthrene	24	3.3	4.7	0.39	0.11 U	0.56	3.5	1.6	40	5.2	0.11 U	0.24	1.5	0.24	—	1.4	0.28 J	0.097 J	1.2	74	0.041 J	0.12 U	3.1	—
Phenol	13 U'	1 U'	1 U'	0.2 U	0.18 U	0.19 U	0.2 U	0.2 U	2.1 U'	0.19 U	0.18 U	0.21 U	0.19 U	0.18 U	—	0.2 U	1 U'	0.21 U	0.22 U	1 U'	0.21 U	0.2 U	2.5 U'	—
Pyrene	19	4	2.4	0.56	0.11 U	0.22	3.4	0.73	31	3.4	0.11 U	1.3	1.1	0.074 J	—	1.4	0.2 J	0.14	1.9	53	0.042 J	0.12 U	1.3 J	—

Table 4.
Summary of Soil Waste Characterization Data.
MJ Painting; Olean, New York

Sample ID	RX-426	RX-427	RX-427	RX-428	RX-429	RX-429	RX-430	RX-430	RX-431	RX-431	RX-432	RX-432	RX-432	RX-433	RX-433	RX-434	RX-436	RX-439	RX-443	RX-444	RX-447	RX-447	RX-448	RX-448
Sample Depth (ft bgs)	10-12	7-10	10-12	10-12	0-1	10-12	7-10	10-12	7-10	10-12	0-1	7-10	10-12	7-10	9	0-1	0-1	0-1	0-1	0-1	7-10	10-12	7-10	9
Lab Sample ID	L2162298	L2163207	L2163207	L2162035	L2162035	L2162035	L2162035	L2162035	L2163207	L2163207	L2162035	L2163207	L2163207	L2163563	L2163563	L2163563	L2163563	L2163987	L2163207	L2163563	L2163207	L2163207	L2163987	L2163987
Sample Date	11/11/2021	11/16/2021	11/16/2021	11/10/2021	11/10/2021	11/10/2021	11/10/2021	11/10/2021	11/16/2021	11/16/2021	11/10/2021	11/16/2021	11/16/2021	11/17/2021	11/17/2021	11/17/2021	11/17/2021	11/17/2021	11/16/2021	11/17/2021	11/16/2021	11/16/2021	11/18/2021	11/18/2021
VOLATILE ORGANIC COMPOUNDS - 82																								
1,1,1-Trichloroethane	0.095 U	0.00096 U	0.00054 U	0.001 U	0.00053 U	0.00045 U	0.038 U	0.028 U	0.00054 U	0.058 U	0.00051 U	0.032 U	0.026 U	—	0.067 U	0.00052 U	0.00076 U	0.00063 U	0.00062 U	0.00076 U	0.00068 U	0.00073 U	—	0.063 U
1,1,2,2,-Tetrachloroethane	0.095 U	0.00096 U	0.00054 U	0.001 U	0.00053 U	0.00045 U	0.038 U	0.028 U	0.00054 U	0.058 U	0.00051 U	0.032 U	0.026 U	—	0.067 U	0.00052 U	0.00076 U	0.00063 U	0.00062 U	0.00076 U	0.00068 U	0.00073 U	—	0.063 U
1,1,2-Trichloro-1,2,2-trifluoroethane	0.76 U	0.0077 U	0.0043 U	0.0082 U	0.0043 U	0.0036 U	0.3 U	0.22 U	0.0043 U	0.47 U	0.0041 U	0.26 U	0.21 U	—	0.54 U	0.0042 U	0.006 U	0.005 U	0.005 U	0.0061 U	0.0054 U	0.0058 U	—	0.5 U
1,1,2-Trichloroethane	0.19 U	0.0019 U	0.0011 U	0.002 U	0.0011 U	0.0009 U	0.075 U	0.056 U	0.0011 U	0.12 U	0.001 U	0.065 U	0.053 U	—	0.13 U	0.001 U	0.0015 U	0.0012 U	0.0012 U	0.0015 U	0.0014 U	0.0014 U	—	0.13 U
1,1,-Dichloroethene	0.19 U	0.0019 U	0.0011 U	0.002 U	0.0011 U	0.0009 U	0.075 U	0.056 U	0.0011 U	0.12 U	0.001 U	0.065 U	0.053 U	—	0.13 U	0.001 U	0.0015 U	0.0012 U	0.0012 U	0.0015 U	0.0014 U	0.0014 U	—	0.13 U
1,1-Dichloroethane	0.19 U	0.0019 U	0.0011 U	0.002 U	0.0011 U	0.0009 U	0.075 U	0.056 U	0.0011 U	0.12 U	0.001 U	0.065 U	0.053 U	—	0.13 U	0.001 U	0.0015 U	0.0012 U	0.0012 U	0.0015 U	0.0014 U	0.0014 U	—	0.13 U
1,2,3-Trichlorobenzene	0.38 U	0.0038 U	0.0022 U	0.0041 U	0.0021 U	0.0018 U	0.15 U	0.11 U	0.0021 U	0.23 U	0.002 U	0.13 U	0.11 U	—	0.27 U	0.0021 U	0.003 U	0.0025 U	0.0025 U	0.003 U	0.0027 U	0.0029 U	—	0.25 U
1,2,4-Trichlorobenzene	0.38 U	0.0038 U	0.0022 U	0.0041 U	0.0021 U	0.0018 U	0.15 U	0.11 U	0.0021 U	0.23 U	0.002 U	0.13 U	0.11 U	—	0.27 U	0.0021 U	0.003 U	0.0025 U	0.0025 U	0.003 U	0.0027 U	0.0029 U	—	0.25 U
1,2,4-Trimethylbenzene	21	0.0022 J	4	0.0041 U	0.0021 U	0.06	0.19	12	2.4	6.1	0.002 U	0.82	7.7	—	0.82	0.0021 U	0.003 U	0.0025 U	0.0025 U	0.003 U	0.0027 U	0.0029 U	—	19
1,2-Dibromo-3-chloropropane	0.57 U	0.0058 U	0.0032 U	0.0062 U	0.0032 U	0.0027 U	0.22 U	0.17 U	0.0032 U	0.35 U	0.003 U	0.19 U	0.16 U	—	0.4 U	0.0031 U	0.0045 U	0.0038 U	0.0037 U	0.0046 U	0.004 U	0.0044 U	—	0.38 U
1,2-Dibromoethane	0.19 U	0.0019 U	0.0011 U	0.002 U	0.0011 U	0.0009 U	0.075 U	0.056 U	0.0011 U	0.12 U	0.001 U	0.065 U	0.053 U	—	0.13 U	0.001 U	0.0015 U	0.0012 U	0.0012 U	0.0015 U	0.0014 U	0.0014 U	—	0.13 U
1,2-Dichlorobenzene	0.38 U	0.0038 U	0.0022 U	0.0041 U	0.0021 U	0.0018 U	0.15 U	0.11 U	0.0021 U	0.23 U	0.002 U	0.13 U	0.11 U	—	0.27 U	0.0021 U	0.003 U	0.0025 U	0.0025 U	0.003 U	0.0027 U	0.0029 U	—	0.25 U
1,2-Dichloroethane	0.19 U'	0.0019 U	0.0011 U	0.002 U	0.0011 U	0.0009 U	0.075 U'	0.056 U'	0.0011 U	0.12 U'	0.001 U	0.065 U'	0.053 U'	—	0.13 U'	0.001 U	0.0015 U	0.0012 U	0.0012 U	0.0015 U	0.0014 U	0.0014 U	—	0.13 U'
1,2-Dichloroethene, Total	0.19 U	0.0019 U	0.0011 U	0.002 U	0.0011 U	0.0009 U	0.075 U	0.056 U	0.0011 U	0.12 U	0.001 U	0.065 U	0.053 U	—	0.13 U	0.001 U	0.0015 U	0.0012 U	0.0012 U	0.0015 U	0.0014 U	0.0014 U	—	0.13 U
1,2-Dichloropropane	0.19 U	0.0019 U	0.0011 U	0.002 U	0.0011 U	0.0009 U	0.075 U	0.056 U	0.0011 U	0.12 U	0.001 U	0.065 U	0.053 U	—	0.13 U	0.001 U	0.0015 U	0.0012 U	0.0012 U	0.0015 U	0.0014 U	0.0014 U	—	0.13 U
1,3,5-Trimethylbenzene	6.2	0.0038 U	0.58	0.0041 U	0.0021 U	0.0036	0.056 J	0.74	0.054	0.76	0.002 U	0.1 J	0.37	—	0.17 J	0.0021 U	0.003 U	0.0025 U	0.0025 U	0.003 U	0.0027 U	0.0029 U	—	20
1,3-Dichlorobenzene	0.38 U	0.0038 U	0.0022 U	0.0041 U	0.0021 U	0.0018 U	0.15 U	0.11 U	0.0021 U	0.23 U	0.002 U	0.13 U	0.11 U	—	0.27 U	0.0021 U	0.003 U	0.0025 U	0.0025 U	0.003 U	0.0027 U	0.0029 U	—	0.25 U
1,3-Dichloropropene, Total	0.095 U	0.00096 U	0.00054 U	0.001 U	0.00053 U	0.00045 U	0.038 U	0.028 U	0.00054 U	0.058 U	0.00051 U	0.032 U	0.026 U	—	0.067 U	0.00052 U	0.00076 U	0.00063 U	0.00062 U	0.00076 U	0.00068 U	0.00073 U	—	0.063 U
1,4-Dichlorobenzene	0.38 U	0.0038 U	0.0022 U	0.0041 U	0.0021 U	0.0018 U	0.15 U	0.11 U	0.0021 U	0.23 U	0.002 U	0.13 U	0.11 U	—	0.27 U	0.0021 U	0.003 U	0.0025 U	0.0025 U	0.003 U	0.0027 U	0.0029 U	—	0.25 U
1,4-Dioxane	15 U'	0.15 U'	0.086 U	0.16 U'	0.085 U	0.072 U	6 U'	4.4 U'	0.086 U	9.3 U'	0.081 U	5.2 U'	4.2 U'	—	11 U'	0.084 U	0.12 U'	0.1 U	0.099 U	0.12 U'	0.11 U'	0.12 U'	—	10 U'
2-Butanone	1.9 U'	0.019 U	0.011 U	0.02 U	0.011 U	0.009 U	0.75 U'	0.56 U'	0.011 U	1.2 U'	0.01 U	0.65 U'	0.53 U'	—	1.3 U'	0.01 U	0.015 U	0.012 U	0.012 U	0.015 U	0.014 U	0.0039 J	—	1.3 U'
2-Hexanone	1.9 U	0.019 U	0.011 U	0.02 U	0.011 U	0.009 U	0.75 U	0.56 U	0.011 U	1.2 U	0.01 U	0.65 U	0.53 U	—	1.3 U	0.01 U	0.015 U	0.012 U	0.012 U	0.015 U	0.014 U	0.014 U	—	1.3 U
4-Methyl-2-Pentanone	1.9 U	0.019 U	0.011 U	0.02 U	0.011 U	0.009 U	0.75 U	0.56 U	0.011 U	1.2 U	0.01 U	0.65 U	0.53 U	—	1.3 U	0.01 U	0.015 U	0.012 U	0.012 U	0.015 U	0.014 U	0.014 U	—	1.3 U
Acetone	1.9 U'	0.019 U	0.011 U	0.02 U	0.011 U	0.045	0.75 U'	0.56 U'	0.011 U	1.2 U'	0.01 U	0.65 U'	0.53 U'	—	1.3 U'	0.01 U	0.015 U	0.012 U	0.012 U	0.015 U	0.041	0.028	—	0.74 J
Benzene	1.1	0.003	0.0015	0.001 U	0.00053 U	0.00077	0.024 J	0.028 U	0.0081	0.038 J	0.00051 U	0.036	0.026 U	—	0.022 J	0.00052 U	0.00076 U	0.00063 U	0.00062 U	0.00076 U	0.00068 U	0.00073 U	—	1.1
Bromochloromethane	0.38 U	0.0038 U	0.0022 U	0.0041 U	0.0021 U	0.0018 U	0.15 U	0.11 U	0.0021 U	0.23 U	0.002 U	0.13 U	0.11 U	—	0.27 U	0.0021 U	0.003 U	0.0025 U	0.0025 U	0.003 U	0.0027 U	0.0029 U	—	0.25 U
Bromodichloromethane	0.095 U	0.00096 U	0.00054 U	0.001 U	0.00053 U	0.00045 U	0.038 U	0.028 U	0.00054 U	0.058 U	0.00051 U	0.032 U	0.026 U	—	0.067 U	0.00052 U	0.00076 U	0.00063 U	0.00062 U	0.00076 U	0.00068 U	0.00073 U	—	0.063 U
Bromoform	0.76 U	0.0077 U	0.0043 U	0.0082 U	0.0043 U	0.0036 U	0.3 U	0.22 U	0.0043 U	0.47 U	0.0041 U	0.26 U	0.21 U	—	0.54 U	0.0042 U	0.006 U	0.005 U	0.005 U	0.0061 U	0.0054 U	0.0058 U	—	0.5 U
Bromomethane	0.38 U	0.0038 U	0.0022 U	0.0041 U	0.0021 U	0.0018 U	0.15 U	0.11 U	0.0021 U	0.23 U	0.002 U	0.13 U	0.11 U	—	0.27 U	0.0021 U	0.003 U	0.0025 U	0.0025 U	0.003 U	0.0027 U	0.0029 U	—	0.25 U
Carbon disulfide	1.9 U	0.019 U	0.011 U	0.02 U	0.011 U	0.009 U	0.75 U	0.56 U	0.011 U	1.2 U	0.01 U	0.65 U	0.53 U	—	1.3 U	0.01 U	0.015 U	0.012 U	0.012 U	0.015 U	0.014 U	0.014 U	—	1.3 U
Carbon tetrachloride	0.19 U	0.0019 U	0.0011 U	0.002 U	0.0011 U	0.0009 U	0.075 U	0.056 U	0.0011 U	0.12 U	0.001 U	0.065 U	0.053 U	—	0.13 U	0.001 U	0.0015 U	0.0012 U	0.0012 U	0.0015 U	0.0014 U	0.0014 U	—	0.13 U
Chlorobenzene	0.095 U	0.00096 U	0.00054 U	0.001 U	0.00053 U	0.00045 U	0.038 U	0.028 U	0.00054 U	0.058 U	0.00051 U	0.032 U	0.026 U	—	0.067 U	0.00052 U	0.00076 U	0.00063 U	0.00062 U	0.00076 U	0.00068 U	0.00073 U	—	0.063 U
Chloroethane	0.38 U	0.0038 U	0.0022 U	0.0041 U	0.0021 U	0.0018 U	0.15 U	0.11 U	0.0021 U	0.23 U	0.002 U	0.13 U	0.11 U	—	0.27 U	0.0021 U	0.003 U	0.0025 U	0.0025 U	0.003 U	0.0027 U	0.0029 U	—	0.25 U
Chloroform	0.29 U	0.0029 U	0.0016 U	0.0031 U	0.0016 U	0.0014 U	0.11 U	0.083 U	0.0016 U	0.17 U	0.0015 U	0.097 U	0.08 U	—	0.2 U	0.0016 U	0.0023 U	0.0019 U	0.0019 U	0.0023 U	0.002 U	0.0022 U	—	0.19 U
Chloromethane	0.76 U	0.0077 U	0.0043 U	0.0082 U	0.0043 U	0.0036 U	0.3 U	0.22 U	0.0043 U	0.47 U	0.0041 U	0.26 U	0.21 U	—	0.54 U	0.0042 U	0.006 U	0.005 U	0.005 U	0.0061 U	0.0054 U	0.0058 U	—	0.5 U
cis-1,2-Dichloroethene	0.19 U	0.0019 U	0.0011 U	0.002 U	0.0011 U	0.0009 U	0.075 U	0.056 U	0.0011 U	0.12 U	0.001 U	0.065 U	0.053 U	—	0.13 U	0.001 U	0.0015 U	0.0012 U	0.0012 U	0.0015 U	0.0014 U	0.0014 U	—	0.13 U
cis-1,3-Dichloropropene	0.095 U	0.00096 U	0.00054 U	0.001 U	0.00053 U	0.00045 U	0.038 U	0.028 U	0.00054 U	0.058 U	0.00051 U	0.032 U	0.026 U	—	0.067 U	0.00052 U	0.00076 U	0.00063 U	0.00062 U	0.00076 U	0.00068 U	0.00073 U	—	0.063 U
Cyclohexane	18	0.012 J	0.26	0.02 U	0.011 U	0.0055 J	0.55 J	3.8	5.6	9.2	0.01 U	5.9	4.1	—	0.25 J	0.01 U	0.015 U	0.012 U	0.012 U	0.015 U	0.014 U	0.014 U	—	5.9
Dibromochloromethane	0.19 U	0.0019 U	0.0011 U	0.002 U	0.0011 U	0.0009 U	0.075 U	0.056 U	0.0011 U	0.12 U	0.001 U	0.065 U	0.053 U	—	0.13 U	0.001 U	0.0015 U	0.0012 U	0.0012 U	0.0015 U	0.0014 U	0.0014 U	—	0.13 U
Dichlorodifluoromethane	1.9 U	0.019 U	0.011 U	0.02 U	0.011 U	0.009 U	0.75 U	0.56 U	0.011 U	1.2 U	0.01 U	0.65 U	0.53 U	—	1.3 U	0.01 U	0.015 U	0.012 U	0.012 U	0.015 U	0.014 U	0.014 U	—	1.3 U
Ethylbenzene	2.6	0.0006 J	1.1	0.002 U	0.0011 U	0.002	0.039 J	0.056 U	0.0069	0.033 J	0.001 U	0.035 J	0.053 U	—	0.052 J	0.001 U	0.0015 U	0.0012 U	0.0012 U	0.0015 U	0.0014 U	0.0014 U	—	6.5
Isopropylbenzene	2.6	0.00048 J	0.31	0.002 U	0.0011 U	0.0091	0.064 J	1.4	0.06	0.66	0.001 U	0.12	0.36	—	0.073 J	0.001 U	0.0015 U	0.0012 U	0.0012 U	0.0015 U	0.0014 U	0.0014 U	—	2.8
Methyl Acetate	0.76 U	0.0077 U	0.0043 U	0.0082 U	0.0043 U	0.0036 U	0.21 J	0.22 U	0.0043 U	0.47 U	0.007	0.26	0.093 J	—	0.19 J	0.0042 U	0.006 U	0.005 U	0.02	0.0061 U	0.0054 U	0.0058 U	—	0.5 U
Methyl cyclohexane	52	0.029	2.9	0.0082 U	0.0043 U	0.029	2.2	26	18	40	0.0041 U	21	20	—	6.1	0.0042 U	0.006 U	0.005 U	0.005 U	0.0061 U	0.0054 U	0.0058 U	—	42
Methyl tertiary butyl ether (MTBE)	0.38 U	0.0038 U	0.0022 U	0.0041 U	0.0021 U	0.0018 U	0.15 U	0.11 U	0.0021 U	0.23 U	0.002 U	0.13 U	0.11 U	—	0.27 U	0.0021 U	0.003 U	0.0025 U	0.0025 U	0.003 U	0.0027 U	0.0029 U	—	0.25 U
Methylene chloride	0.95 U'	0.0096 U	0.0054 U	0.01 U	0.0053 U	0.0045 U	0.38 U'	0.28 U'	0.0054 U	0.58 U'	0.0051 U	0.32 U'	0.26 U'	—	0.67 U'	0.0052 U	0.0076 U	0.0063 U	0.0062 U	0.0076 U	0.0068 U	0.0073 U	—	0.63 U'
n-Butylbenzene	3.5	0.0019 U	0.15	0.002 U	0.0011 U	0.0042	0.17	2.2	0.053	1.1	0.001 U	0.038 J	0.46	—	0.14	0.001 U	0.0015 U	0.0012 U	0.0012 U	0.0015 U	0.0014 U	0.0014 U	—	1.5
n-Propylbenzene	5.3	0.00041 J	0.41	0.002 U	0.0011 U	0.015	0.16	3.2	0.1	1.5	0.001 U	0.17	0.67	—	0.15	0.001 U	0.0015 U	0.0012 U	0.0012 U	0.0015 U	0.0014 U	0.0014 U	—	4.9
sec-Butylbenzene	1.2	0.0019 U	0.069	0.002 U	0.0011 U	0.0017	0.058 J	0.71	0.019	0.39	0.001 U	0.056 J	0.3	—	0.51	0.001 U	0.0015 U	0.0012 U	0.0012 U	0.0015 U	0.0014 U	0.0014 U	—	2.2
Styrene	0.19 U	0.0019 U	0.0011 U	0.002 U	0.0011 U	0.0006 J	0.075 U	0.056 U	0.0011 U	0.12 U	0.001 U	0.065 U	0.053 U	—	0.13 U	0.001 U	0.0015 U	0.0012 U	0.0012 U	0.0015 U	0.0014 U	0.0014 U	—	0.13 U
tert-Butylbenzene	0.12 J	0.0038 U	0.0022 U	0.0041 U	0.0021 U	0.0018 U	0.15 U	0.11 U	0.0021 U	0.04 J	0.002 U	0.0096 J	0.033 J	—	0.14 J	0.0021 U	0.003 U	0.0025 U	0.0025 U	0.003 U	0.0027 U	0.0029 U	—	0.76
Tetrachloroethene	0.095 U	0.00096 U	0.00054 U	0.001 U	0.00053 U	0.00045 U	0.038 U	0.028 U	0.00054 U	0.058 U	0.00051 U	0.032 U	0.026 U	—	0.067 U	0.00052 U	0.00076 U	0.00063 U	0.00062 U	0.00076 U	0.00068 U	0.00073 U	—	0.063 U
Toluene	4.6	0.0045	0.055	0.002 U	0.0011 U	0.0009	0.12	0.059	0.096	0.2	0.001 U	0.093	0.035 J	—	0.085 J	0.001 U	0.0015 U	0.0012 U	0.0012 U	0.0015 U	0.0014 U	0.0014 U	—	7.7
trans-1,2-Dichloroethene	0.29 U'	0.0029 U	0.0016 U	0.0031 U	0.0016 U	0.0014 U	0.11 U	0.083 U	0.0016 U	0.17 U	0.0015 U	0.097 U	0.08 U	—	0.2 U'	0.0016 U	0.0023 U	0.0019 U	0.0019 U	0.0023 U	0.002 U	0.0022 U	—	0.19 U
trans-1,3-Dichloropropene	0.19 U	0.0019 U	0.0011 U	0.002 U	0.0011 U	0.0009 U	0.075 U	0.056 U	0.0011 U	0.12 U	0.001 U	0.065 U	0.053 U	—	0.13 U	0.001 U	0.0015 U	0.0012 U	0.0012 U	0.0015 U	0.0014 U	0.0014 U	—	0.13 U
Trichloroethene	0.095 U	0.00096 U	0.00054 U	0.001 U	0.00053 U	0.00045 U	0.038 U	0.028 U	0.00054 U	0.058 U	0.00051 U	0.032 U	0.026 U	—	0.067 U	0.00052 U	0.00076 U	0.00063 U	0.00062 U	0.00076 U	0.00068 U	0.00073 U	—	0.063 U
Trichlorofluoromethane	0.76 U	0.0077 U	0.0043 U	0.0082 U	0.0043 U	0.0036 U	0.3 U	0.22 U	0.0043 U	0.47 U	0.0041 U	0.26 U	0.21 U	—	0.54 U	0.0042 U	0.006 U	0.005 U	0.005 U	0.0061 U	0.0054 U	0.0058 U	—	0.5 U
Vinyl chloride	0.19 U'	0.0019 U	0.0011 U	0.002 U	0.0011 U	0.0009 U	0.075 U'	0.056 U'	0.0011 U	0.12 U'	0.001 U	0.065 U'	0.053 U'	—	0.13 U'	0.001 U	0.0015 U	0.0012 U	0.0012 U	0.0015 U	0.0014 U	0.0014 U	—	0.13 U'
Xylene (m&p)	12	0.0036 J	0.16	0.0041 U	0.0021 U	0.0049	0.15	0.21	0.18	0.95	0.002 U	0.16	0.23	—	0.092 J	0.0021 U	0.003 U	0.0025 U	0.0025 U	0.003 U	0.0027 U	0.0029 U	—	20
Xylene (o)	1.5	0.0013 J	2	0.002 U	0.0011 U	0.0022	0.063 J	0.14	0.051	0.18	0.001 U	0.06 J	0.074	—	0.086 J	0.001 U	0.0015 U	0.0012 U	0.0012 U	0.0015 U	0.0014 U	0.0014 U	—	8.6
Xylenes (Total)	14	0.0049 J	2.2	0.002 U	0.0011 U	0.0071	0.21 J	0.35	0.23	1.1	0.001 U	0.22 J	0.3	—	0.18 J	0.001 U	0.0015 U	0.0012 U	0.0012 U	0.0015 U	0.0014 U	0.0014 U	—	29

Notes:

When the applicable state standard ap

mg/kg = Milligrams per kilogram.

SU = Standard units

— = Sample not analyzed.

NS = No standard currently establishec

ND = Not Detected.

U = Not detected above laboratory dete

Table 5
Soil Reuse Characterization Sampling Results
Summary of Volatile Organic Compounds in Soil.
MJ Painting; Olean, New York.

Sample ID	NYSDEC GW Protection SCO	NYSDEC Commercial SCO	RX-201	RX-202	RX-203	RX-204	RX-205	RX-206	RX-207	RX-208	RX-209	RX-210	RX-211	RX-212	RX-213	RX-214	RX-215	RX-216	RX-217	RX-218	RX-219	RX-220	RX-221	RX-222
Sample Depth (ft bgs)			0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1
Sample Date			11/15/2021	11/15/2021	11/15/2021	11/15/2021	11/9/2021	11/9/2021	11/9/2021	11/15/2021	11/15/2021	11/15/2021	11/15/2021	11/15/2021	11/15/2021	11/15/2021	11/15/2021	11/16/2021	11/16/2021	11/17/2021	11/17/2021	11/17/2021	11/17/2021	11/17/2021
VOLATILE ORGANIC COMPOUNDS - 8260C (mg/kg)																								
1,1,1-Trichloroethane	0.68	500	0.00058 U	0.00064 U	0.00044 U	0.00046 U	0.00053 U	0.00097 U	0.00069 U	0.00067 U	0.00063 U	0.00051 U	0.00062 U	0.00061 U	0.00061 U	0.00053 U	0.00051 U	0.00044 U	0.00034 U	0.00047 U	0.00054 U	0.00056 U	0.00079 U	0.00058 U
1,1,2,2,-Tetrachloroethane	NS	NS	0.00058 U	0.00064 U	0.00044 U	0.00046 U	0.00053 U	0.00097 U	0.00069 U	0.00067 U	0.00063 U	0.00051 U	0.00062 U	0.00061 U	0.00061 U	0.00053 U	0.00051 U	0.00044 U	0.00034 U	0.00047 U	0.00054 U	0.00056 U	0.00079 U	0.00058 U
1,1,2-Trichloro-1,2,2-trifluoroethane	NS	NS	0.0046 U	0.0051 U	0.0035 U	0.0037 U	0.0042 U	0.0077 U	0.0055 U	0.0054 U	0.005 U	0.0041 U	0.005 U	0.0048 U	0.0049 U	0.0042 U	0.0041 U	0.0036 U	0.0028 U	0.0038 U	0.0043 U	0.0044 U	0.0063 U	0.0046 U
1,1,2-Trichloroethane	NS	NS	0.0012 U	0.0013 U	0.00088 U	0.00093 U	0.0011 U	0.0019 U	0.0014 U	0.0013 U	0.0012 U	0.001 U	0.0012 U	0.0012 U	0.0012 U	0.001 U	0.001 U	0.00089 U	0.00069 U	0.00094 U	0.0011 U	0.0011 U	0.0016 U	0.0012 U
1,1,-Dichloroethene	0.33	500	0.0012 U	0.0013 U	0.00088 U	0.00093 U	0.0011 U	0.0019 U	0.0014 U	0.0013 U	0.0012 U	0.001 U	0.0012 U	0.0012 U	0.0012 U	0.001 U	0.001 U	0.00089 U	0.00069 U	0.00094 U	0.0011 U	0.0011 U	0.0016 U	0.0012 U
1,1-Dichloroethane	0.27	240	0.0012 U	0.0013 U	0.00088 U	0.00093 U	0.0011 U	0.0019 U	0.0014 U	0.0013 U	0.0012 U	0.001 U	0.0012 U	0.0012 U	0.0012 U	0.001 U	0.001 U	0.00089 U	0.00069 U	0.00094 U	0.0011 U	0.0011 U	0.0016 U	0.0012 U
1,2,3-Trichlorobenzene	NS	NS	0.0023 U	0.0026 U	0.0018 U	0.0018 U	0.0021 U	0.0039 U	0.0028 U	0.0027 U	0.0025 U	0.002 U	0.0025 U	0.0024 U	0.0024 U	0.0021 U	0.002 U	0.0018 U	0.0014 U	0.0019 U	0.0021 U	0.0022 U	0.0032 U	0.0023 U
1,2,4-Trichlorobenzene	NS	NS	0.0023 U	0.0026 U	0.0018 U	0.0018 U	0.0021 U	0.0039 U	0.0028 U	0.0027 U	0.0025 U	0.002 U	0.0025 U	0.0024 U	0.0024 U	0.0021 U	0.002 U	0.0018 U	0.0014 U	0.0019 U	0.0021 U	0.0022 U	0.0032 U	0.0023 U
1,2,4-Trimethylbenzene	3.6	190	0.0023 U	0.0026 U	0.0018 U	0.0018 U	0.0021 U	0.0039 U	0.0028 U	0.0027 U	0.0025 U	0.002 U	0.0025 U	0.0024 U	0.0024 U	0.0021 U	0.002 U	0.0018 U	0.0014 U	0.0019 U	0.0021 U	0.0022 U	0.0032 U	0.0023 U
1,2-Dibromo-3-chloropropane	NS	NS	0.0035 U	0.0038 U	0.0026 U	0.0028 U	0.0032 U	0.0058 U	0.0042 U	0.004 U	0.0038 U	0.003 U	0.0038 U	0.0036 U	0.0037 U	0.0032 U	0.003 U	0.0027 U	0.0021 U	0.0028 U	0.0032 U	0.0033 U	0.0047 U	0.0035 U
1,2-Dibromoethane	NS	NS	0.0012 U	0.0013 U	0.00088 U	0.00093 U	0.0011 U	0.0019 U	0.0014 U	0.0013 U	0.0012 U	0.001 U	0.0012 U	0.0012 U	0.0012 U	0.001 U	0.001 U	0.00089 U	0.00069 U	0.00094 U	0.0011 U	0.0011 U	0.0016 U	0.0012 U
1,2-Dichlorobenzene	1.1	500	0.0023 U	0.0026 U	0.0018 U	0.0018 U	0.0021 U	0.0039 U	0.0028 U	0.0027 U	0.0025 U	0.002 U	0.0025 U	0.0024 U	0.0024 U	0.0021 U	0.002 U	0.0018 U	0.0014 U	0.0019 U	0.0021 U	0.0022 U	0.0032 U	0.0023 U
1,2-Dichloroethane	0.02	30	0.0012 U	0.0013 U	0.00088 U	0.00093 U	0.0011 U	0.0019 U	0.0014 U	0.0013 U	0.0012 U	0.001 U	0.0012 U	0.0012 U	0.0012 U	0.001 U	0.001 U	0.00089 U	0.00069 U	0.00094 U	0.0011 U	0.0011 U	0.0016 U	0.0012 U
1,2-Dichloroethene, Total	NS	NS	0.0012 U	0.0013 U	0.00088 U	0.00093 U	0.0011 U	0.0019 U	0.0014 U	0.0013 U	0.0012 U	0.001 U	0.0012 U	0.0012 U	0.0012 U	0.001 U	0.001 U	0.00089 U	0.00069 U	0.00094 U	0.0011 U	0.0011 U	0.0016 U	0.0012 U
1,2-Dichloropropane	NS	NS	0.0012 U	0.0013 U	0.00088 U	0.00093 U	0.0011 U	0.0019 U	0.0014 U	0.0013 U	0.0012 U	0.001 U	0.0012 U	0.0012 U	0.0012 U	0.001 U	0.001 U	0.00089 U	0.00069 U	0.00094 U	0.0011 U	0.0011 U	0.0016 U	0.0012 U
1,3,5-Trimethylbenzene	8.4	190	0.0023 U	0.0026 U	0.0018 U	0.0018 U	0.0021 U	0.0039 U	0.0028 U	0.0027 U	0.0025 U	0.002 U	0.0025 U	0.0024 U	0.0024 U	0.0021 U	0.002 U	0.0018 U	0.0014 U	0.0019 U	0.0021 U	0.0022 U	0.0032 U	0.0023 U
1,3-Dichlorobenzene	2.4	280	0.0023 U	0.0026 U	0.0018 U	0.0018 U	0.0021 U	0.0039 U	0.0028 U	0.0027 U	0.0025 U	0.002 U	0.0025 U	0.0024 U	0.0024 U	0.0021 U	0.002 U	0.0018 U	0.0014 U	0.0019 U	0.0021 U	0.0022 U	0.0032 U	0.0023 U
1,3-Dichloropropene, Total	NS	NS	0.00058 U	0.00064 U	0.00059 J	0.0006 J	0.00053 U	0.00097 U	0.00069 U	0.00067 U	0.00063 U	0.00051 U	0.00062 U	0.00061 U	0.00061 U	0.00053 U	0.00051 U	0.00044 U	0.00034 U	0.00047 U	0.00054 U	0.00056 U	0.00079 U	0.00058 U
1,4-Dichlorobenzene	1.8	130	0.0023 U	0.00033 J	0.0018 U	0.0018 U	0.0021 U	0.0039 U	0.0028 U	0.0027 U	0.0025 U	0.002 U	0.0025 U	0.0024 U	0.0024 U	0.0021 U	0.002 U	0.0018 U	0.0014 U	0.0019 U	0.0021 U	0.0022 U	0.0032 U	0.0023 U
1,4-Dioxane	0.1	130	0.093 U	0.1 U	0.07 U	0.074 U	0.085 U	0.15 U'	0.11 U'	0.11 U'	0.1 U	0.081 U	0.1 U	0.097 U	0.098 U	0.085 U	0.081 U	0.071 U	0.055 U	0.075 U	0.086 U	0.089 U	0.13 U'	0.093 U
2-Butanone	0.12	500	0.012 U	0.013 U	0.0088 U	0.0093 U	0.011 U	0.019 U	0.014 U	0.013 U	0.012 U	0.01 U	0.012 U	0.012 U	0.012 U	0.01 U	0.01 U	0.0089 U	0.0069 U	0.0094 U	0.011 U	0.011 U	0.016 U	0.012 U
2-Hexanone	NS	NS	0.012 U	0.013 U	0.0088 U	0.0093 U	0.011 U	0.019 U	0.014 U	0.013 U	0.012 U	0.01 U	0.012 U	0.012 U	0.012 U	0.01 U	0.01 U	0.0089 U	0.0069 U	0.0094 U	0.011 U	0.011 U	0.016 U	0.012 U
4-Methyl-2-Pentanone	NS	NS	0.012 U	0.013 U	0.0088 U	0.0093 U	0.011 U	0.019 U	0.014 U	0.013 U	0.012 U	0.01 U	0.012 U	0.012 U	0.012 U	0.01 U	0.01 U	0.0089 U	0.0069 U	0.0094 U	0.011 U	0.011 U	0.016 U	0.012 U
Acetone	0.05	500	0.012 U	0.013 U	0.0088 U	0.0093 U	0.011 U	0.019 U	0.014 U	0.013 U	0.012 U	0.01 U	0.012 U	0.012 U	0.012 U	0.01 U	0.01 U	0.0089 U	0.0069 U	0.0094 U	0.011 U	0.011 U	0.016 U	0.012 U
Benzene	0.06	44	0.00058 U	0.00064 U	0.00044 U	0.00046 U	0.00053 U	0.00097 U	0.00069 U	0.00067 U	0.00063 U	0.00051 U	0.00062 U	0.00061 U	0.00061 U	0.00053 U	0.00051 U	0.00044 U	0.00034 U	0.00047 U	0.00054 U	0.00056 U	0.00079 U	0.00058 U
Bromochloromethane	NS	NS	0.0023 U	0.0026 U	0.0018 U	0.0018 U	0.0021 U	0.0039 U	0.0028 U	0.0027 U	0.0025 U	0.002 U	0.0025 U	0.0024 U	0.0024 U	0.0021 U	0.002 U	0.0018 U	0.0014 U	0.0019 U	0.0021 U	0.0022 U	0.0032 U	0.0023 U
Bromodichloromethane	NS	NS	0.00058 U	0.00064 U	0.00044 U	0.00046 U	0.00053 U	0.00097 U	0.00069 U	0.00067 U	0.00063 U	0.00051 U	0.00062 U	0.00061 U	0.00061 U	0.00053 U	0.00051 U	0.00044 U	0.00034 U	0.00047 U	0.00054 U	0.00056 U	0.00079 U	0.00058 U
Bromoform	NS	NS	0.0046 U	0.0051 U	0.0035 U	0.0037 U	0.0042 U	0.0077 U	0.0055 U	0.0054 U	0.005 U	0.0041 U	0.005 U	0.0048 U	0.0049 U	0.0042 U	0.0041 U	0.0036 U	0.0028 U	0.0038 U	0.0043 U	0.0044 U	0.0063 U	0.0046 U
Bromomethane	NS	NS	0.0023 U	0.0026 U	0.0018 U	0.0018 U	0.0021 U	0.0039 U	0.0028 U	0.0027 U	0.0025 U	0.002 U	0.0025 U	0.0024 U	0.0024 U	0.0021 U	0.002 U	0.0018 U	0.0014 U	0.0019 U	0.0021 U	0.0022 U	0.0032 U	0.0023 U
Carbon disulfide	NS	NS	0.012 U	0.013 U	0.0088 U	0.0093 U	0.011 U	0.019 U	0.014 U	0.013 U	0.012 U	0.01 U	0.012 U	0.012 U	0.012 U	0.01 U	0.01 U	0.0089 U	0.0069 U	0.0094 U	0.011 U	0.011 U	0.016 U	0.012 U
Carbon tetrachloride	0.76	22	0.0012 U	0.0013 U	0.00088 U	0.00093 U	0.0011 U	0.0019 U	0.0014 U	0.0013 U	0.0012 U	0.001 U	0.0012 U	0.0012 U	0.0012 U	0.001 U	0.001 U	0.00089 U	0.00069 U	0.00094 U	0.0011 U	0.0011 U	0.0016 U	0.0012 U
Chlorobenzene	1.1	500	0.00058 U	0.00064 U	0.00044 U	0.00046 U	0.00053 U	0.00097 U	0.00069 U	0.00067 U	0.00063 U	0.00051 U	0.00062 U	0.00061 U	0.00061 U	0.00053 U	0.00051 U	0.00044 U	0.00034 U	0.00047 U	0.00054 U	0.00056 U	0.00079 U	0.00058 U
Chloroethane	NS	NS	0.0023 U	0.0026 U	0.0018 U	0.0018 U	0.0021 U	0.0039 U	0.0028 U	0.0027 U	0.0025 U	0.002 U	0.0025 U	0.0024 U	0.0024 U	0.0021 U	0.002 U	0.0018 U	0.0014 U	0.0019 U	0.0021 U	0.0022 U	0.0032 U	0.0023 U
Chloroform	0.37	350	0.0017 U	0.0019 U	0.0013 U	0.0014 U	0.0016 U	0.0029 U	0.0021 U	0.002 U	0.0019 U	0.0015 U	0.0019 U	0.0018 U	0.0018 U	0.0016 U	0.0015 U	0.0013 U	0.001 U	0.0014 U	0.0016 U	0.0017 U	0.0024 U	0.0017 U
Chloromethane	NS	NS	0.0046 U	0.0051 U	0.0035 U	0.0037 U	0.0042 U	0.0077 U	0.0055 U	0.0054 U	0.005 U	0.0041 U	0.005 U	0.0048 U	0.0049 U	0.0042 U	0.0041 U	0.0036 U	0.0028 U	0.0038 U	0.0043 U	0.0044 U	0.0063 U	0.0046 U
cis-1,2-Dichloroethene	0.25	500	0.0012 U	0.0013 U	0.00088 U	0.00093 U	0.0011 U	0.0019 U	0.0014 U	0.0013 U	0.0012 U	0.001 U	0.0012 U	0.0012 U	0.0012 U	0.001 U	0.001 U	0.00089 U	0.00069 U	0.00094 U	0.0011 U	0.0011 U	0.0016 U	0.0012 U
cis-1,3-Dichloropropene	NS	NS	0.00058 U	0.00064 U	0.00044 U	0.00046 U	0.00053 U	0.00097 U	0.00069 U	0.00067 U	0.00063 U	0.00051 U	0.00062 U	0.00061 U	0.00061 U	0.00053 U	0.00051 U	0.00044 U	0.00034 U	0.00047 U	0.00054 U	0.00056 U	0.00079 U	0.00058 U
Cyclohexane	NS	NS	0.012 U	0.013 U	0.0088 U	0.0093 U	0.011 U	0.019 U	0.014 U	0.013 U	0.012 U	0.01 U	0.012 U	0.012 U	0.012 U	0.01 U	0.01 U	0.0089 U	0.0069 U	0.0094 U	0.011 U	0.011 U	0.016 U	0.012 U
Dibromochloromethane	NS	NS	0.0012 U	0.0013 U	0.00088 U	0.00093 U	0.0011 U	0.0019 U	0.0014 U	0.0013 U	0.0012 U	0.001 U	0.0012 U	0.0012 U	0.0012 U	0.001 U	0.001 U	0.00089 U	0.00069 U	0.00094 U	0.0011 U	0.0011 U	0.0016 U	0.0012 U
Dichlorodifluoromethane	NS	NS	0.012 U	0.013 U	0.0088 U	0.0093 U	0.011 U	0.019 U	0.014 U	0.013 U	0.012 U	0.01 U	0.012 U	0.012 U	0.012 U	0.01 U	0.01 U	0.0089 U	0.0069 U	0.0094 U	0.011 U	0.011 U	0.016 U	0.012 U
Ethylbenzene	1	390	0.0012 U	0.0013 U	0.00088 U	0.00093 U	0.0011 U	0.0019 U	0.0014 U	0.0013 U	0.0012 U	0.001 U	0.0012 U	0.0012 U	0.0012 U	0.001 U	0.001 U	0.00089 U	0.00069 U	0.00094 U	0.0011 U	0.0011 U	0.0016 U	0.0012 U
Isopropylbenzene	NS	NS	0.0012 U	0.0013 U	0.00088 U	0.00093 U	0.0011 U	0.0019 U	0.0014 U	0.0013 U	0.0012 U	0.001 U	0.0012 U	0.0012 U	0.0012 U	0.001 U	0.001 U	0.00089 U	0.00069 U	0.00094 U	0.0011 U	0.0011 U	0.0016 U	0.0012 U
Methyl Acetate	NS	NS	0.0046 U	0.0051 U	0.0035 U	0.0037 U	0.0042 U	0.0077 U	0.0055 U	0.0054 U	0.005 U	0.0041 U	0.005 U	0.0048 U	0.0049 U	0.0042 U	0.0041 U	0.0036 U	0.0028 U	0.0038 U	0.0043 U	0.0044 U	0.0063 U	0.0046 U
Methyl cyclohexane	NS	NS	0.0046 U	0.0051 U	0.0035 U	0.0037 U	0.0042 U	0.0077 U	0.0055 U	0.0054 U	0.005 U	0.0041 U	0.005 U	0.0048 U	0.0049 U	0.0042 U	0.0041 U	0.0036 U	0.0028 U	0.0038 U	0.0043 U	0.0044 U	0.0063 U	0.0046 U
Methyl tertiary butyl ether (MTBE)	0.93	500	0.0023 U	0.0026 U	0.0018 U	0.0018 U	0.0021 U	0.0039 U	0.0028 U	0.0027 U	0.0025 U	0.002 U	0.0025 U	0.0024 U	0.0024 U	0.0021 U	0.002 U	0.0018 U	0.0014 U	0.0019 U	0.0021 U	0.0022 U	0.0032 U	0.0023 U
Methylene chloride	0.05	500	0.0058 U	0.0064 U	0.0044 U	0.0046 U	0.0053 U	0.0097 U	0.0069 U	0.0067 U	0.0063 U	0.0051 U	0.0062 U	0.0061 U	0.0061 U	0.0053 U	0.0051 U	0.0044 U	0.0034 U	0.0047 U	0.0054 U	0.0056 U	0.0079 U	0.0058 U
n-Butylbenzene	12	500	0.0012 U	0.0013 U	0.00088 U	0.00093 U	0.0011 U	0.0019 U	0.0014 U	0.0013 U	0.0012 U	0.001 U	0.0012 U	0.0012 U	0.0012 U	0.001 U	0.001 U	0.00089 U	0.00069 U	0.00094 U	0.0011 U	0.0011 U	0.0016 U	0.0012 U
n-Propylbenzene	3.9	500	0.0012 U	0.0013 U	0.00088 U	0.00093 U	0.0011 U	0.0019 U	0.0014 U	0.0013 U	0.0012 U	0.001 U	0.0012 U	0.0012 U	0.0012 U	0.001 U	0.001 U	0.00089 U	0.00069 U	0.00094 U	0.0011 U	0.0011 U	0.0016 U	0.0012 U
sec-Butylbenzene	11	500	0.0012 U	0.0013 U	0.00088 U	0.00093 U	0.0011 U	0.0019 U	0.0014 U	0.0013 U	0.0012 U	0.001 U	0.0012 U	0.0012 U	0.0012 U	0.001 U	0.001 U	0.00089 U	0.00069 U	0.00094 U	0.0011 U	0.0011 U	0.0016 U	0.0012 U
Styrene	NS	NS	0.0012 U	0.0013 U	0.00088 U	0.00093 U	0.0011 U	0.0019 U	0.0014 U	0.0013 U	0.0012 U	0.001 U	0.0012 U	0.0012 U	0.0012 U	0.001 U	0.001 U	0.00089 U	0.00069 U	0.00094 U	0.0011 U	0.0011 U	0.0016 U	0.0012 U
tert-Butylbenzene	5.9	500	0.0023 U	0.0026 U	0.0018 U	0.0018 U	0.0021 U	0.0039 U	0.0028 U	0.0027 U	0.0025 U	0.002 U	0.0025 U	0.0024 U	0.0024 U	0.0021 U	0.002 U	0.0018 U	0.0014 U	0.0019 U	0.0021 U	0.0022 U	0.0032 U	0.0023 U
Tetrachloroethene	1.3	150	0.00058 U	0.00064 U	0.00044 U	0.00046 U	0.00053 U	0.00097 U	0.00069 U	0.00067 U	0.00063 U	0.00051 U	0.00062 U	0.00061 U	0.00061 U	0.00053 U	0.00051 U	0.00044 U	0.00034 U	0.00047 U	0.00054 U	0.00056 U	0.00079 U	0.00058 U
Toluene	0.7	500	0.0012 U	0.0013 U	0.00088 U	0.00093 U	0.0011 U	0.0019 U	0.0014 U	0.0013 U	0.0012 U	0.001 U	0.0012 U	0.0012 U	0.0012 U	0.001 U	0.001 U	0.00089 U	0.00069 U	0.00094 U	0.0011 U	0.0011 U	0.0016 U	0.0012 U
trans-1,2-Dichloroethene	0.19	500	0.0017 U	0.0019 U	0.0013 U	0.0014 U	0.0016 U	0.0029 U	0.0021 U	0.002 U	0.0019 U	0.0015 U	0.0019 U	0.0018 U	0.0018 U	0.0016 U	0.0015 U	0.0013 U	0.001 U	0.0014 U	0.0016 U	0.0017 U	0.0024 U	0.0017 U
trans-1,3-Dichloropropene	NS	NS	0.0012 U	0.0013 U	0.00059 J	0.0006 J	0.0011 U	0.0019 U	0.0014 U	0.0013 U	0.0012 U	0.001 U	0.0012 U	0.0012 U	0.0012 U	0.001 U	0.001 U	0.00089 U	0.00069 U	0.00094 U	0.0011 U	0.0011 U	0.0016 U	0.0012 U
Trichloroethene	0.47	200	0.00058 U	0.00064 U	0.00044 U	0.00046 U	0.00053 U	0.00097 U	0.00069 U	0.00067 U	0.00063 U	0.00051 U	0.00062 U	0.00061 U	0.00061 U	0.00053 U	0.00051 U	0.00044 U	0.00034 U	0.00047 U	0.00054 U	0.00056 U	0.00079 U	0.00058 U
Trichlorofluoromethane	NS	NS	0.0046 U	0.0051 U	0.0035 U	0.0037 U	0.0042 U	0.0077 U	0.0055 U	0.0054 U	0.005 U	0.0041 U	0.005 U	0.0048 U	0.0049 U	0.0042 U	0.0041 U	0.0036 U	0.0028 U	0.0038 U	0.0043 U	0.0044 U	0.0063 U	0.0046 U
Vinyl chloride	0.02	13	0.0012 U	0.0013 U	0.00088 U	0.00093 U	0.0011 U	0.0019 U	0.0014 U	0.0013 U	0.0012 U	0.001 U	0.0012 U	0.0012 U	0.0012 U	0.001 U	0.001 U	0.00089 U	0.00069 U	0.00094 U	0.0011 U	0.0011 U	0.0016 U	0.0012 U
Xylene (m&p)	NS	NS	0.0023 U	0.0026 U	0.0018 U	0.0018 U	0.0021 U	0.0039 U	0.0028 U	0.0027 U	0.0025 U	0.002 U	0.0025 U	0.0024 U	0.0024 U	0.0021 U	0.002 U	0.0018 U	0.0014 U	0.0019 U	0.0021 U	0.0022 U	0.0032 U	0.0023 U
Xylene (o)	NS	NS	0.0012 U	0.0013 U	0.00088 U	0.00093 U	0.0011 U	0.0019 U	0.0014 U	0.0013 U	0.0012 U	0.001 U	0.0012 U	0.0012 U	0.0012 U	0.001 U	0.001 U	0.00089 U	0.00069 U	0.00094 U	0.0011 U	0.0011 U	0.0016 U	0.0012 U
Xylenes (Total)	1.6	500	0.0012 U	0.0013 U	0.00088 U	0.00093 U	0.0011 U	0.0019 U	0.0014 U	0.0013 U	0.0012 U	0.001 U	0.0012 U	0.0012 U	0.0012 U	0.001 U	0.001 U	0.00089 U	0.00069 U	0.00094 U	0.0011 U	0.0011 U	0.0016 U	0.0012 U
Total Volatile TICs	NS	NS	ND	ND	0.00652 J	0.00462 J	0.0414 J	0.0105 J	0.00764 J	0.00726 J	0.00651 J	0.00544 J	0.00667 J	0.00706 J	ND	ND	0.0225 J	ND	ND	ND	ND	ND	ND	ND

Notes:

NYSDEC GW Protection SCO = New York State Department of Environmental Conservation Groundwater Protection Soil Cleanup Objectives, from Table 375-6.8 of 6 NYCRR Part 375.

NYSDEC Commercial SCO = New York State Department of Environmental Conservation Restricted Commercial Use Soil Cleanup Objectives, from Table 375-6.8 of 6 NYCRR Part 375.

ft bgs = Feet below ground surface.

mg/kg = Milligrams per kilogram.

Green concentrations exceed the NYSDEC GW Protection SCO.

Highlighted concentrations exceed the NYSDEC Commercial SCO.

— = Sample not analyzed.

NS = No standard currently established.

ND = Not Detected.

U = Not detected above laboratory detection limit.

U' = Laboratory reporting limit exceeds the applicable regulatory standard or criteria being utilized.

J = Result below the reporting limit (estimated value).

DUP = Duplicate sample was taken.

When the applicable state standard applies to mixed isomers and the laboratory reports individual isomers, the total standard is listed for each isomer.

* = Sample was analyzed twice by the laboratory. Higher detections were reported.

Table 5
Soil Reuse Characterization Sampling Results
Summary of Volatile Organic Compounds in Soil.
MJ Painting; Olean, New York.

Sample ID	NYSDEC GW Protection SCO	NYSDEC Commercial SCO	RX-223	RX-224	RX-225	RX-226	RX-227	RX-228	RX-229	RX-230	RX-231	RX-232	RX-233	RX-234	RX-235	RX-236	RX-237	RX-238	RX-239	RX-240	RX-241	RX-242	RX-243	RX-244	RX-245	RX-246
Sample Depth (ft bgs)			0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1
Sample Date			11/17/2021	11/17/2021	11/17/2021	11/17/2021	11/18/2021	11/17/2021	11/17/2021	11/18/2021	1/5/2022	1/5/2022	1/4/2022	1/4/2022	1/7/2022	1/7/2022	1/7/2022	1/7/2022	1/7/2022	1/7/2022	1/5/2022	1/5/2022	1/7/2022	1/7/2022	1/5/2022	1/5/2022
VOLATILE ORGANIC COMPOUNDS - 8260C (mg/kg)																										
1,1,1-Trichloroethane	0.68	500	0.00071 U	0.00057 U	0.0005 U	0.00051 U	0.00068 U	0.00074 U	0.00058 U	0.00066 U	0.00075 U	0.00071 U	0.00057 U	0.0008 U	0.00086 U	0.0011 U	0.00072 U	0.0007 U	0.00094 U	0.0012 U	0.00048 U	0.00083 U	0.0011 U	0.0008 U	0.00054 U	0.00062 U
1,1,2,2,-Tetrachloroethane	NS	NS	0.00071 U	0.00057 U	0.0005 U	0.00051 U	0.00068 U	0.00074 U	0.00058 U	0.00066 U	0.00075 U	0.00071 U	0.00057 U	0.0008 U	0.00086 U	0.0011 U	0.00072 U	0.0007 U	0.00094 U	0.0012 U	0.00048 U	0.00083 U	0.0011 U	0.0008 U	0.00054 U	0.00062 U
1,1,2-Trichloro-1,2,2-trifluoroethane	NS	NS	0.0057 U	0.0045 U	0.004 U	0.0041 U	0.0054 U	0.0059 U	0.0046 U	0.0053 U	0.006 U	0.0057 U	0.0046 U	0.0064 U	0.0069 U	0.0092 U	0.0058 U	0.0056 U	0.0075 U	0.0094 U	0.0038 U	0.0067 U	0.0086 U	0.0064 U	0.0043 U	0.0049 U
1,1,2-Trichloroethane	NS	NS	0.0014 U	0.0011 U	0.001 U	0.001 U	0.0014 U	0.0015 U	0.0012 U	0.0013 U	0.0015 U	0.0014 U	0.0011 U	0.0016 U	0.0017 U	0.0023 U	0.0014 U	0.0014 U	0.0019 U	0.0024 U	0.00096 U	0.0017 U	0.0021 U	0.0016 U	0.0011 U	0.0012 U
1,1,-Dichloroethene	0.33	500	0.0014 U	0.0011 U	0.001 U	0.001 U	0.0014 U	0.0015 U	0.0012 U	0.0013 U	0.0015 U	0.0014 U	0.0011 U	0.0016 U	0.0017 U	0.0023 U	0.0014 U	0.0014 U	0.0019 U	0.0024 U	0.00096 U	0.0017 U	0.0021 U	0.0016 U	0.0011 U	0.0012 U
1,1-Dichloroethane	0.27	240	0.0014 U	0.0011 U	0.001 U	0.001 U	0.0014 U	0.0015 U	0.0012 U	0.0013 U	0.0015 U	0.0014 U	0.0011 U	0.0016 U	0.0017 U	0.0023 U	0.0014 U	0.0014 U	0.0019 U	0.0024 U	0.00096 U	0.0017 U	0.0021 U	0.0016 U	0.0011 U	0.0012 U
1,2,3-Trichlorobenzene	NS	NS	0.0028 U	0.0023 U	0.002 U	0.002 U	0.0027 U	0.003 U	0.0023 U	0.0026 U	0.003 U	0.0028 U	0.0023 U	0.0032 U	0.0034 U	0.0046 U	0.0029 U	0.0028 U	0.0038 U	0.0047 U	0.0019 U	0.0033 U	0.0043 U	0.0032 U	0.0022 U	0.0025 U
1,2,4-Trichlorobenzene	NS	NS	0.0028 U	0.0023 U	0.002 U	0.002 U	0.0027 U	0.003 U	0.0023 U	0.0026 U	0.003 U	0.0028 U	0.0023 U	0.0032 U	0.0034 U	0.0046 U	0.0029 U	0.0028 U	0.0038 U	0.0047 U	0.0019 U	0.0033 U	0.0043 U	0.0032 U	0.0022 U	0.0025 U
1,2,4-Trimethylbenzene	3.6	190	0.0028 U	0.0023 U	0.002 U	0.002 U	0.0027 U	0.003 U	0.0023 U	0.0026 U	0.003 U	0.0028 U	0.0023 U	0.0032 U	0.0034 U	0.0046 U	0.0029 U	0.0028 U	0.0038 U	0.0047 U	0.0019 U	0.0033 U	0.0043 U	0.0032 U	0.0022 U	0.0025 U
1,2-Dibromo-3-chloropropane	NS	NS	0.0043 U	0.0034 U	0.003 U	0.0031 U	0.0041 U	0.0044 U	0.0035 U	0.004 U	0.0045 U	0.0043 U	0.0034 U	0.0048 U	0.0052 U	0.0069 U	0.0043 U	0.0042 U	0.0056 U	0.0071 U	0.0029 U	0.005 U	0.0064 U	0.0048 U	0.0032 U	0.0037 U
1,2-Dibromoethane	NS	NS	0.0014 U	0.0011 U	0.001 U	0.001 U	0.0014 U	0.0015 U	0.0012 U	0.0013 U	0.0015 U	0.0014 U	0.0011 U	0.0016 U	0.0017 U	0.0023 U	0.0014 U	0.0014 U	0.0019 U	0.0024 U	0.00096 U	0.0017 U	0.0021 U	0.0016 U	0.0011 U	0.0012 U
1,2-Dichlorobenzene	1.1	500	0.0028 U	0.0023 U	0.002 U	0.002 U	0.0027 U	0.003 U	0.0023 U	0.0026 U	0.003 U	0.0028 U	0.0023 U	0.0032 U	0.0034 U	0.0046 U	0.0029 U	0.0028 U	0.0038 U	0.0047 U	0.0019 U	0.0033 U	0.0043 U	0.0032 U	0.0022 U	0.0025 U
1,2-Dichloroethane	0.02	30	0.0014 U	0.0011 U	0.001 U	0.001 U	0.0014 U	0.0015 U	0.0012 U	0.0013 U	0.0015 U	0.0014 U	0.0011 U	0.0016 U	0.0017 U	0.0023 U	0.0014 U	0.0014 U	0.0019 U	0.0024 U	0.00096 U	0.0017 U	0.0021 U	0.0016 U	0.0011 U	0.0012 U
1,2-Dichloroethene, Total	NS	NS	0.0014 U	0.0011 U	0.001 U	0.001 U	0.0014 U	0.0015 U	0.0012 U	0.0013 U	0.0015 U	0.0014 U	0.0011 U	0.0016 U	0.0017 U	0.0023 U	0.0014 U	0.0014 U	0.0019 U	0.0024 U	0.00096 U	0.0017 U	0.0021 U	0.0016 U	0.0011 U	0.0012 U
1,2-Dichloropropane	NS	NS	0.0014 U	0.0011 U	0.001 U	0.001 U	0.0014 U	0.0015 U	0.0012 U	0.0013 U	0.0015 U	0.0014 U	0.0011 U	0.0016 U	0.0017 U	0.0023 U	0.0014 U	0.0014 U	0.0019 U	0.0024 U	0.00096 U	0.0017 U	0.0021 U	0.0016 U	0.0011 U	0.0012 U
1,3,5-Trimethylbenzene	8.4	190	0.0028 U	0.0023 U	0.002 U	0.002 U	0.0027 U	0.003 U	0.0023 U	0.0026 U	0.003 U	0.0028 U	0.0023 U	0.0032 U	0.0034 U	0.0046 U	0.0029 U	0.0028 U	0.0038 U	0.0047 U	0.0019 U	0.0033 U	0.0043 U	0.0032 U	0.0022 U	0.0025 U
1,3-Dichlorobenzene	2.4	280	0.0028 U	0.0023 U	0.002 U	0.002 U	0.0027 U	0.003 U	0.0023 U	0.0026 U	0.003 U	0.0028 U	0.0023 U	0.0032 U	0.0034 U	0.0046 U	0.0029 U	0.0028 U	0.0038 U	0.0047 U	0.0019 U	0.0033 U	0.0043 U	0.0032 U	0.0022 U	0.0025 U
1,3-Dichloropropene, Total	NS	NS	0.00071 U	0.00057 U	0.0005 U	0.00051 U	0.00068 U	0.00074 U	0.00058 U	0.00066 U	0.00075 U	0.00071 U	0.00057 U	0.0008 U	0.00086 U	0.0011 U	0.00072 U	0.0007 U	0.00094 U	0.0012 U	0.00048 U	0.00083 U	0.0011 U	0.0008 U	0.00054 U	0.00062 U
1,4-Dichlorobenzene	1.8	130	0.0028 U	0.0023 U	0.002 U	0.002 U	0.0027 U	0.003 U	0.0023 U	0.0026 U	0.003 U	0.0028 U	0.0023 U	0.0032 U	0.0034 U	0.0046 U	0.0029 U	0.0028 U	0.0038 U	0.0047 U	0.0019 U	0.0033 U	0.0043 U	0.0032 U	0.0022 U	0.0025 U
1,4-Dioxane	0.1	130	0.11 U'	0.091 U	0.081 U	0.082 U	0.11 U'	0.12 U'	0.093 U	0.11 U'	0.12 U'	0.11 U'	0.091 U	0.13 U'	0.14 U'	0.18 U'	0.12 U'	0.11 U'	0.15 U'	0.19 U'	0.076 U	0.13 U'	0.17 U'	0.13 U'	0.087 U	0.099 U
2-Butanone	0.12	500	0.014 U	0.011 U	0.01 U	0.01 U	0.014 U	0.015 U	0.012 U	0.013 U	0.015 U	0.014 U	0.011 U	0.016 U	0.017 U	0.023 U	0.014 U	0.014 U	0.019 U	0.024 U	0.0096 U	0.017 U	0.021 U	0.016 U	0.011 U	0.012 U
2-Hexanone	NS	NS	0.014 U	0.011 U	0.01 U	0.01 U	0.014 U	0.015 U	0.012 U	0.013 U	0.015 U	0.014 U	0.011 U	0.016 U	0.017 U	0.023 U	0.014 U	0.014 U	0.019 U	0.024 U	0.0096 U	0.017 U	0.021 U	0.016 U	0.011 U	0.012 U
4-Methyl-2-Pentanone	NS	NS	0.014 U	0.011 U	0.01 U	0.01 U	0.014 U	0.015 U	0.012 U	0.013 U	0.015 U	0.014 U	0.011 U	0.016 U	0.017 U	0.023 U	0.014 U	0.014 U	0.019 U	0.024 U	0.0096 U	0.017 U	0.021 U	0.016 U	0.011 U	0.012 U
Acetone	0.05	500	0.019	0.011 U	0.01 U	0.01 U	0.014 U	0.015 U	0.012 U	0.013 U	0.015 U	0.014 U	0.011 U	0.016 U	0.017 U	0.042	0.014 U	0.014 U	0.019 U	0.024 U	0.0096 U	0.017 U	0.021 U	0.016 U	0.011 U	0.012 U
Benzene	0.06	44	0.00071 U	0.00057 U	0.0005 U	0.00051 U	0.00068 U	0.00074 U	0.00058 U	0.00066 U	0.00075 U	0.00071 U	0.00057 U	0.0008 U	0.00086 U	0.0011 U	0.00072 U	0.0007 U	0.00094 U	0.0012 U	0.00048 U	0.00083 U	0.0011 U	0.0008 U	0.00054 U	0.00062 U
Bromochloromethane	NS	NS	0.0028 U	0.0023 U	0.002 U	0.002 U	0.0027 U	0.003 U	0.0023 U	0.0026 U	0.003 U	0.0028 U	0.0023 U	0.0032 U	0.0034 U	0.0046 U	0.0029 U	0.0028 U	0.0038 U	0.0047 U	0.0019 U	0.0033 U	0.0043 U	0.0032 U	0.0022 U	0.0025 U
Bromodichloromethane	NS	NS	0.00071 U	0.00057 U	0.0005 U	0.00051 U	0.00068 U	0.00074 U	0.00058 U	0.00066 U	0.00075 U	0.00071 U	0.00057 U	0.0008 U	0.00086 U	0.0011 U	0.00072 U	0.0007 U	0.00094 U	0.0012 U	0.00048 U	0.00083 U	0.0011 U	0.0008 U	0.00054 U	0.00062 U
Bromoform	NS	NS	0.0057 U	0.0045 U	0.004 U	0.0041 U	0.0054 U	0.0059 U	0.0046 U	0.0053 U	0.006 U	0.0057 U	0.0046 U	0.0064 U	0.0069 U	0.0092 U	0.0058 U	0.0056 U	0.0075 U	0.0094 U	0.0038 U	0.0067 U	0.0086 U	0.0064 U	0.0043 U	0.0049 U
Bromomethane	NS	NS	0.0028 U	0.0023 U	0.002 U	0.002 U	0.0027 U	0.003 U	0.0023 U	0.0026 U	0.003 U	0.0028 U	0.0023 U	0.0032 U	0.0034 U	0.0046 U	0.0029 U	0.0028 U	0.0038 U	0.0047 U	0.0019 U	0.0033 U	0.0043 U	0.0032 U	0.0022 U	0.0025 U
Carbon disulfide	NS	NS	0.014 U	0.011 U	0.01 U	0.01 U	0.014 U	0.015 U	0.012 U	0.013 U	0.015 U	0.014 U	0.011 U	0.016 U	0.017 U	0.023 U	0.014 U	0.014 U	0.019 U	0.024 U	0.0096 U	0.017 U	0.021 U	0.016 U	0.011 U	0.012 U
Carbon tetrachloride	0.76	22	0.0014 U	0.0011 U	0.001 U	0.001 U	0.0014 U	0.0015 U	0.0012 U	0.0013 U	0.0015 U	0.0014 U	0.0011 U	0.0016 U	0.0017 U	0.0023 U	0.0014 U	0.0014 U	0.0019 U	0.0024 U	0.00096 U	0.0017 U	0.0021 U	0.0016 U	0.0011 U	0.0012 U
Chlorobenzene	1.1	500	0.00071 U	0.00057 U	0.0005 U	0.00051 U	0.00068 U	0.00074 U	0.00058 U	0.00066 U	0.00075 U	0.00071 U	0.00057 U	0.0008 U	0.00086 U	0.0011 U	0.00072 U	0.0007 U	0.00094 U	0.0012 U	0.00048 U	0.00083 U	0.0011 U	0.0008 U	0.00054 U	0.00062 U
Chloroethane	NS	NS	0.0028 U	0.0023 U	0.002 U	0.002 U	0.0027 U	0.003 U	0.0023 U	0.0026 U	0.003 U	0.0028 U	0.0023 U	0.0032 U	0.0034 U	0.0046 U	0.0029 U	0.0028 U	0.0038 U	0.0047 U	0.0019 U	0.0033 U	0.0043 U	0.0032 U	0.0022 U	0.0025 U
Chloroform	0.37	350	0.0021 U	0.0017 U	0.0015 U	0.0015 U	0.002 U	0.0022 U	0.0017 U	0.002 U	0.0022 U	0.0021 U	0.0017 U	0.0024 U	0.0026 U	0.0034 U	0.0022 U	0.0021 U	0.0028 U	0.0035 U	0.0014 U	0.0025 U	0.0032 U	0.0024 U	0.0016 U	0.0018 U
Chloromethane	NS	NS	0.0057 U	0.0045 U	0.004 U	0.0041 U	0.0054 U	0.0059 U	0.0046 U	0.0053 U	0.006 U	0.0057 U	0.0046 U	0.0064 U	0.0069 U	0.0092 U	0.0058 U	0.0056 U	0.0075 U	0.0094 U	0.0038 U	0.0067 U	0.0086 U	0.0064 U	0.0043 U	0.0049 U
cis-1,2-Dichloroethene	0.25	500	0.0014 U	0.0011 U	0.001 U	0.001 U	0.0014 U	0.0015 U	0.0012 U	0.0013 U	0.0015 U	0.0014 U	0.0011 U	0.0016 U	0.0017 U	0.0023 U	0.0014 U	0.0014 U	0.0019 U	0.0024 U	0.00096 U	0.0017 U	0.0021 U	0.0016 U	0.0011 U	0.0012 U
cis-1,3-Dichloropropene	NS	NS	0.00071 U	0.00057 U	0.0005 U	0.00051 U	0.00068 U	0.00074 U	0.00058 U	0.00066 U	0.00075 U	0.00071 U	0.00057 U	0.0008 U	0.00086 U	0.0011 U	0.00072 U	0.0007 U	0.00094 U	0.0012 U	0.00048 U	0.00083 U	0.0011 U	0.0008 U	0.00054 U	0.00062 U
Cyclohexane	NS	NS	0.014 U	0.011 U	0.01 U	0.01 U	0.014 U	0.015 U	0.012 U	0.013 U	0.015 U	0.014 U	0.011 U	0.016 U	0.017 U	0.023 U	0.014 U	0.014 U	0.019 U	0.024 U	0.0096 U	0.017 U	0.021 U	0.016 U	0.011 U	0.012 U
Dibromochloromethane	NS	NS	0.0014 U	0.0011 U	0.001 U	0.001 U	0.0014 U	0.0015 U	0.0012 U	0.0013 U	0.0015 U	0.0014 U	0.0011 U	0.0016 U	0.0017 U	0.0023 U	0.0014 U	0.0014 U	0.0019 U	0.0024 U	0.00096 U	0.0017 U	0.0021 U	0.0016 U	0.0011 U	0.0012 U
Dichlorodifluoromethane	NS	NS	0.014 U	0.011 U	0.01 U	0.01 U	0.014 U	0.015 U	0.012 U	0.013 U	0.015 U	0.014 U	0.011 U	0.016 U	0.017 U	0.023 U	0.014 U	0.014 U	0.019 U	0.024 U	0.0096 U	0.017 U	0.021 U	0.016 U	0.011 U	0.012 U
Ethylbenzene	1	390	0.0014 U	0.0011 U	0.001 U	0.001 U	0.0014 U	0.0015 U	0.0012 U	0.0013 U	0.0015 U	0.0014 U	0.0011 U	0.0016 U	0.0017 U	0.0023 U	0.0014 U	0.0014 U	0.0019 U	0.0024 U	0.00096 U	0.0017 U	0.0021 U	0.0016 U	0.0011 U	0.0012 U
Isopropylbenzene	NS	NS	0.0014 U	0.0011 U	0.001 U	0.001 U	0.0014 U	0.0015 U	0.0012 U	0.0013 U	0.0015 U	0.0014 U	0.0011 U	0.0016 U	0.0017 U	0.0023 U	0.0014 U	0.0014 U	0.0019 U	0.0024 U	0.00096 U	0.0017 U	0.0021 U	0.0016 U	0.0011 U	0.0012 U
Methyl Acetate	NS	NS	0.0057 U	0.0045 U	0.004 U	0.0041 U	0.0054 U	0.0059 U	0.0046 U	0.0053 U	0.006 U	0.0057 U	0.0046 U	0.0064 U	0.0069 U	0.0092 U	0.0058 U	0.0056 U	0.0075 U	0.0094 U	0.0038 U	0.0058 J	0.0086 U	0.0064 U	0.0043 U	0.0049 U
Methyl cyclohexane	NS	NS	0.0057 U	0.0045 U	0.004 U	0.0041 U	0.0054 U	0.0059 U	0.0046 U	0.0053 U	0.006 U	0.0057 U	0.0046 U	0.0064 U	0.0069 U	0.0092 U	0.0058 U	0.0056 U	0.0075 U	0.0094 U	0.0038 U	0.0067 U	0.0086 U	0.0064 U	0.0043 U	0.0049 U
Methyl tertiary butyl ether (MTBE)	0.93	500	0.0028 U	0.0023 U	0.002 U	0.002 U	0.0027 U	0.003 U	0.0023 U	0.0026 U	0.003 U	0.0028 U	0.0023 U	0.0032 U	0.0034 U	0.0046 U	0.0029 U	0.0028 U	0.0038 U	0.0047 U	0.0019 U	0.0033 U	0.0043 U	0.0032 U	0.0022 U	0.0025 U
Methylene chloride	0.05	500	0.0071 U	0.0057 U	0.005 U	0.0051 U	0.0068 U	0.0074 U	0.0058 U	0.0066 U	0.0075 U	0.0071 U	0.0057 U	0.008 U	0.0086 U	0.011 U	0.0072 U	0.007 U	0.0094 U	0.012 U	0.0048 U	0.0083 U	0.011 U	0.008 U	0.0054 U	0.0062 U
n-Butylbenzene	12	500	0.0014 U	0.0011 U	0.001 U	0.001 U	0.0014 U	0.0015 U	0.0012 U	0.0013 U	0.0015 U	0.0014 U	0.0011 U	0.0016 U	0.0017 U	0.0023 U	0.0014 U	0.0014 U	0.0019 U	0.0024 U	0.00096 U	0.0017 U	0.0021 U	0.0016 U	0.0011 U	0.0012 U
n-Propylbenzene	3.9	500	0.0014 U	0.0011 U	0.001 U	0.001 U	0.0014 U	0.0015 U	0.0012 U	0.0013 U	0.0015 U	0.0014 U	0.0011 U	0.0016 U	0.0017 U	0.0023 U	0.0014 U	0.0014 U	0.0019 U	0.0024 U	0.00096 U	0.0017 U	0.0021 U	0.0016 U	0.0011 U	0.0012 U
sec-Butylbenzene	11	500	0.0014 U	0.0011 U	0.001 U	0.001 U	0.0014 U	0.0015 U	0.0012 U	0.0013 U	0.0015 U	0.0014 U	0.0011 U	0.0016 U	0.0017 U	0.0023 U	0.0014 U	0.0014 U	0.0019 U	0.0024 U	0.00096 U	0.0017 U	0.0021 U	0.0016 U	0.0011 U	0.0012 U
Styrene	NS	NS	0.0014 U	0.0011 U	0.001 U	0.001 U	0.0014 U	0.0015 U	0.0012 U	0.0013 U	0.0015 U	0.0014 U	0.0011 U	0.0016 U	0.0017 U	0.0023 U	0.0014 U	0.0014 U	0.0019 U	0.0024 U	0.00096 U	0.0017 U	0.0021 U	0.0016 U	0.0011 U	0.0012 U
tert-Butylbenzene	5.9	500	0.0028 U	0.0023 U	0.002 U	0.002 U	0.0027 U	0.003 U	0.0023 U	0.0026 U	0.003 U	0.0028 U	0.0023 U	0.0032 U	0.0034 U	0.0046 U	0.0029 U	0.0028 U	0.0038 U	0.0047 U	0.0019 U	0.0033 U	0.0043 U	0.0032 U	0.0022 U	0.0025 U
Tetrachloroethene	1.3	150	0.00071 U	0.00057 U	0.0005 U	0.00051 U	0.00068 U	0.00074 U	0.00058 U	0.00066 U	0.00075 U	0.00071 U	0.00057 U	0.0008 U	0.00086 U	0.0011 U	0.00072 U	0.0007 U	0.00094 U	0.0012 U	0.00048 U	0.00083 U	0.0011 U	0.0008 U	0.00054 U	0.00062 U
Toluene	0.7	500	0.0014 U	0.0011 U	0.001 U	0.001 U	0.0014 U	0.0015 U	0.0012 U	0.0013 U	0.0015 U	0.0014 U	0.0011 U	0.0016 U	0.0017 U	0.0023 U	0.0014 U	0.0014 U	0.0019 U	0.0024 U	0.00096 U	0.0017 U	0.0021 U	0.0016 U	0.0011 U	0.0012 U
trans-1,2-Dichloroethene	0.19	500	0.0021 U	0.0017 U	0.0015 U	0.0015 U	0.002 U	0.0022 U	0.0017 U	0.002 U	0.0022 U	0.0021 U	0.0017 U	0.0024 U	0.0026 U	0.0034 U	0.0022 U	0.0021 U	0.0028 U	0.0035 U	0.0014 U	0.0025 U	0.0032 U	0.0024 U	0.0016 U	0.0018 U
trans-1,3-Dichloropropene	NS	NS	0.0014 U	0.0011 U	0.001 U	0.001 U	0.0014 U	0.0015 U	0.0012 U	0.0013 U	0.0015 U	0.0014 U	0.0011 U	0.0016 U	0.0017 U	0.0023 U	0.0014 U	0.0014 U	0.0019 U	0.0024 U	0.00096 U	0.0017 U	0.0021 U	0.0016 U	0.0011 U	0.0012 U
Trichloroethene	0.47	200	0.00071 U	0.00057 U	0.0005 U	0.00051 U	0.00068 U	0.00074 U	0.00058 U	0.00066 U	0.00075 U	0.00071 U	0.00057 U	0.0008 U	0.00086 U	0.0011 U	0.00072 U	0.0007 U	0.00094 U	0.0012 U	0.00048 U	0.00083 U	0.0011 U	0.0008 U	0.00054 U	0.00062 U
Trichlorofluoromethane	NS	NS	0.0057 U	0.0045 U	0.004 U	0.0041 U	0.0054 U	0.0059 U	0.0046 U	0.0053 U	0.006 U	0.0057 U	0.0046 U	0.0064 U	0.0069 U	0.0092 U	0.0058 U	0.0056 U	0.0075 U	0.0094 U	0.0038 U	0.0067 U	0.0086 U	0.0064 U	0.0043 U	0.0049 U
Vinyl chloride	0.02	13	0.0014 U	0.0011 U	0.001 U	0.001 U	0.0014 U	0.0015 U	0.0012 U	0.0013 U	0.0015 U	0.0014 U	0.0011 U	0.0016 U	0.0017 U	0.0023 U	0.0014 U	0.0014 U	0.0019 U	0.0024 U	0.00096 U	0.0017 U	0.0021 U	0.0016 U	0.0011 U	0.0012 U
Xylene (m&p)	NS	NS	0.0028 U	0.0023 U	0.002 U	0.002 U	0.0027 U	0.003 U	0.0023 U	0.0026 U	0.003 U	0.0028 U	0.0023 U	0.0032 U	0.0034 U	0.0046 U	0.0029 U	0.0028 U	0.0038 U	0.0047 U	0.0019 U	0.0033 U	0.0043 U	0.0032 U	0.0022 U	0.0025 U
Xylene (o)	NS	NS	0.0014 U	0.0011 U	0.001 U	0.001 U	0.0014 U	0.0015 U	0.0012 U	0.0013 U	0.0015 U	0.0014 U	0.0011 U	0.0016 U	0.0017 U	0.0023 U	0.0014 U	0.0014 U	0.0019 U	0.0024 U	0.00096 U	0.0017 U	0.0021 U	0.0016 U	0.0011 U	0.0012 U
Xylenes (Total)	1.6	500	0.0014 U	0.0011 U	0.001 U	0.001 U	0.0014 U	0.0015 U	0.0012 U	0.0013 U	0.0015 U	0.0014 U	0.0011 U	0.0016 U	0.0017 U	0.0023 U	0.0014 U	0.0014 U	0.0019 U	0.0024 U	0.00096 U	0.0017 U	0.0021 U	0.0016 U	0.0011 U	0.0012 U
Total Volatile TICs	NS	NS	0.00368 J	ND	0.00399 J	0.0338 J	0.00889 J	0.00617 J	0.0239 J	0.00586 J	ND	0.00474 J	ND	ND	ND	0.00497 J	ND	ND	ND	ND	ND	ND	0.0792 J	ND	ND	ND

Notes:

NYSDEC GW Protection SCO = New York State Department of Environmental Conservation Groundwater Protection Soil Cleanup Objectives, from Table 375-6.8 of 6 NYCRR Part 375.

NYSDEC Commercial SCO = New York State Department of Environmental Conservation Restricted Commercial Use Soil Cleanup Objectives, from Table 375-6.8 of 6 NYCRR Part 375.

ft bgs = Feet below ground surface.

mg/kg = Milligrams per kilogram.

Green concentrations exceed the NYSDEC GW Protection SCO.

Highlighted concentrations exceed the NYSDEC Commercial SCO.

— = Sample not analyzed.

NS = No standard currently established.

ND = Not Detected.

U = Not detected above laboratory detection limit.

U' = Laboratory reporting limit exceeds the applicable regulatory standard or criteria being utilized.

J = Result below the reporting limit (estimated value).

DUP = Duplicate sample was taken.

When the applicable state standard applies to mixed isomers and the laboratory reports individual isomers, the total standard is listed for each isomer.

* = Sample was analyzed twice by the laboratory. Higher detections were reported.

Table 5
Soil Reuse Characterization Sampling Results
Summary of Volatile Organic Compounds in Soil.
MJ Painting; Olean, New York.

Sample ID	NYSDEC GW Protection SCO	NYSDEC Commercial SCO	RX-247	RX-247 DUP	RX-248	RX-401	RX-401	RX-401	RX-401	RX-401	RX-401	RX-402	RX-403	RX-403	RX-403	RX-403	RX-403	RX-404	RX-404	RX-404	RX-405	RX-405	RX-405	RX-405	RX-405	RX-405 DUP
Sample Depth (ft bgs)			0-1	0-1	0-1	0-1	4	6	7-10	7.5*	11.5	8	0-1	4	6*	9	11	7-10	8	11	0-1	3	6	7	11	11
Sample Date			1/7/2022	1/7/2022	1/7/2022	11/12/2021	11/12/2021	11/12/2021	11/12/2021	11/12/2021	11/12/2021	11/12/2021	11/12/2021	11/12/2021	11/12/2021	11/12/2021	11/12/2021	11/12/2021	11/12/2021	11/12/2021	11/15/2021	11/15/2021	11/15/2021	11/15/2021	11/15/2021	11/15/2021
VOLATILE ORGANIC COMPOUNDS - 8260C (mg/kg)																										
1,1,1-Trichloroethane	0.68	500	0.00057 U	0.00054 U	0.0006 U	0.00072 U	0.00076 U	0.0011 U	0.037 U	0.0006 U	0.033 U	0.033 U	0.0014 U	0.13 U	0.0014 U	0.035 U	0.028 U	0.034 U	0.036 U	0.029 U	0.00092 U	0.001 U	0.039 U	0.028 U	0.028 U	0.065 U
1,1,2,2,-Tetrachloroethane	NS	NS	0.00057 U	0.00054 U	0.0006 U	0.00072 U	0.00076 U	0.0011 U	0.037 U	0.0006 U	0.033 U	0.033 U	0.0014 U	0.13 U	0.0014 U	0.035 U	0.028 U	0.034 U	0.036 U	0.029 U	0.00092 U	0.001 U	0.039 U	0.028 U	0.028 U	0.065 U
1,1,2-Trichloro-1,2,2-trifluoroethane	NS	NS	0.0046 U	0.0043 U	0.0048 U	0.0057 U	0.006 U	0.0085 U	0.3 U	0.0048 U	0.26 U	0.26 U	0.011 U	1 U	0.011 U	0.28 U	0.22 U	0.27 U	0.29 U	0.23 U	0.0074 U	0.0081 U	0.31 U	0.22 U	0.23 U	0.52 U
1,1,2-Trichloroethane	NS	NS	0.0011 U	0.0011 U	0.0012 U	0.0014 U	0.0015 U	0.0021 U	0.074 U	0.0012 U	0.065 U	0.066 U	0.0027 U	0.26 U	0.0027 U	0.07 U	0.055 U	0.068 U	0.072 U	0.058 U	0.0018 U	0.002 U	0.078 U	0.056 U	0.057 U	0.13 U
1,1,-Dichloroethene	0.33	500	0.0011 U	0.0011 U	0.0012 U	0.0014 U	0.0015 U	0.0021 U	0.074 U	0.0012 U	0.065 U	0.066 U	0.0027 U	0.26 U	0.0027 U	0.07 U	0.055 U	0.068 U	0.072 U	0.058 U	0.0018 U	0.002 U	0.078 U	0.056 U	0.057 U	0.13 U
1,1-Dichloroethane	0.27	240	0.0011 U	0.0011 U	0.0012 U	0.0014 U	0.0015 U	0.0021 U	0.074 U	0.0012 U	0.065 U	0.066 U	0.0027 U	0.26 U	0.0027 U	0.07 U	0.055 U	0.068 U	0.072 U	0.058 U	0.0018 U	0.002 U	0.078 U	0.056 U	0.057 U	0.13 U
1,2,3-Trichlorobenzene	NS	NS	0.0023 U	0.0022 U	0.0024 U	0.0029 U	0.003 U	0.0042 U	0.15 U	0.0024 U	0.13 U	0.13 U	0.0054 U	0.52 U	0.0054 U	0.14 U	0.11 U	0.14 U	0.05 J	0.12 U	0.0037 U	0.0041 U	0.16 U	0.11 U	0.11 U	0.26 U
1,2,4-Trichlorobenzene	NS	NS	0.0023 U	0.0022 U	0.0024 U	0.0029 U	0.003 U	0.0042 U	0.15 U	0.0024 U	0.13 U	0.13 U	0.0054 U	0.52 U	0.0054 U	0.14 U	0.11 U	0.14 U	0.14 U	0.12 U	0.0037 U	0.0041 U	0.16 U	0.11 U	0.11 U	0.26 U
1,2,4-Trimethylbenzene	3.6	190	0.0023 U	0.0022 U	0.0024 U	0.0029 U	0.003 U	0.0042 U	0.081 J	0.13 J	0.43	0.069 J	0.0054 U	**7.6**	0.68	0.14 U	0.11 U	0.82	0.49	0.08 J	0.0037 U	0.0041 U	0.26	0.11 U	0.11 U	0.3
1,2-Dibromo-3-chloropropane	NS	NS	0.0034 U	0.0032 U	0.0036 U	0.0043 U	0.0045 U	0.0064 U	0.22 U	0.0036 U	0.2 U	0.2 U	0.0082 U	0.78 U	0.0081 U	0.21 U	0.16 U	0.2 U	0.22 U	0.18 U	0.0055 U	0.0061 U	0.23 U	0.17 U	0.17 U	0.39 U
1,2-Dibromoethane	NS	NS	0.0011 U	0.0011 U	0.0012 U	0.0014 U	0.0015 U	0.0021 U	0.074 U	0.0012 U	0.065 U	0.066 U	0.0027 U	0.26 U	0.0027 U	0.07 U	0.055 U	0.068 U	0.072 U	0.058 U	0.0018 U	0.002 U	0.078 U	0.056 U	0.057 U	0.13 U
1,2-Dichlorobenzene	1.1	500	0.0023 U	0.0022 U	0.0024 U	0.0029 U	0.003 U	0.0042 U	0.15 U	0.0024 U	0.13 U	0.13 U	0.0054 U	0.52 U	0.0054 U	0.14 U	0.11 U	0.14 U	0.14 U	0.12 U	0.0037 U	0.0041 U	0.16 U	0.11 U	0.11 U	0.26 U
1,2-Dichloroethane	0.02	30	0.0011 U	0.0011 U	0.0012 U	0.0014 U	0.0015 U	0.0021 U	0.074 U'	0.0012 U	0.065 U'	0.066 U'	0.0027 U	0.26 U'	0.0027 U	0.07 U'	0.055 U'	0.068 U'	0.072 U'	0.058 U'	0.0018 U	0.002 U	0.078 U'	0.056 U'	0.057 U'	0.13 U'
1,2-Dichloroethene, Total	NS	NS	0.0011 U	0.0011 U	0.0012 U	0.0014 U	0.0015 U	0.0021 U	0.074 U	0.0012 U	0.065 U	0.066 U	0.0027 U	0.26 U	0.0027 U	0.07 U	0.055 U	0.068 U	0.072 U	0.058 U	0.0018 U	0.002 U	0.078 U	0.056 U	0.057 U	0.13 U
1,2-Dichloropropane	NS	NS	0.0011 U	0.0011 U	0.0012 U	0.0014 U	0.0015 U	0.0021 U	0.074 U	0.0012 U	0.065 U	0.066 U	0.0027 U	0.26 U	0.0027 U	0.07 U	0.055 U	0.068 U	0.072 U	0.058 U	0.0018 U	0.002 U	0.078 U	0.056 U	0.057 U	0.13 U
1,3,5-Trimethylbenzene	8.4	190	0.0023 U	0.0022 U	0.0024 U	0.0029 U	0.003 U	0.0042 U	0.025 J	0.042 J	0.07 J	0.13 U	0.0054 U	1.2	0.18 J	0.14 U	0.11 U	0.44	0.57	0.12	0.0037 U	0.0041 U	0.083 J	0.015 J	0.034 J	0.67
1,3-Dichlorobenzene	2.4	280	0.0023 U	0.0022 U	0.0024 U	0.0029 U	0.003 U	0.0042 U	0.15 U	0.0024 U	0.13 U	0.13 U	0.0054 U	0.52 U	0.0054 U	0.14 U	0.11 U	0.14 U	0.14 U	0.12 U	0.0037 U	0.0041 U	0.16 U	0.11 U	0.11 U	0.26 U
1,3-Dichloropropene, Total	NS	NS	0.00057 U	0.00054 U	0.0006 U	0.00072 U	0.00076 U	0.0011 U	0.037 U	0.0006 U	0.033 U	0.033 U	0.0014 U	0.13 U	0.0014 U	0.035 U	0.028 U	0.034 U	0.036 U	0.029 U	0.00092 U	0.001 U	0.039 U	0.028 U	0.028 U	0.065 U
1,4-Dichlorobenzene	1.8	130	0.0023 U	0.0022 U	0.0024 U	0.0029 U	0.003 U	0.0042 U	0.15 U	0.0024 U	0.13 U	0.13 U	0.0054 U	0.052 J	0.0054 U	0.14 U	0.11 U	0.14 U	0.14 U	0.12 U	0.0037 U	0.0041 U	0.16 U	0.11 U	0.11 U	0.26 U
1,4-Dioxane	0.1	130	0.091 U	0.086 U	0.097 U	0.11 U'	0.12 U'	0.17 U'	5.9 U'	0.096 U	5.2 U'	5.3 U'	0.22 U'	21 U'	0.22 U'	5.6 U'	4.4 U'	5.4 U'	5.8 U'	4.7 U'	0.15 U'	0.16 U'	6.2 U'	4.4 U'	4.6 U'	10 U'
2-Butanone	0.12	500	0.011 U	0.011 U	0.012 U	0.014 U	0.015 U	0.046	0.74 U'	0.012 U	0.65 U'	0.66 U'	0.027 U	2.6 U'	0.027 U	0.7 U'	0.55 U'	0.68 U'	0.72 U'	0.58 U'	0.018 U	0.02 U	0.78 U'	0.56 U'	0.57 U'	1.3 U'
2-Hexanone	NS	NS	0.011 U	0.011 U	0.012 U	0.014 U	0.015 U	0.021 U	0.74 U	0.012 U	0.65 U	0.66 U	0.027 U	2.6 U	0.027 U	0.7 U	0.55 U	0.68 U	0.72 U	0.58 U	0.018 U	0.02 U	0.78 U	0.56 U	0.57 U	1.3 U
4-Methyl-2-Pentanone	NS	NS	0.011 U	0.011 U	0.012 U	0.014 U	0.015 U	0.021 U	0.74 U	0.012 U	0.65 U	0.66 U	0.027 U	2.6 U	0.027 U	0.7 U	0.55 U	0.68 U	0.72 U	0.58 U	0.018 U	0.02 U	0.78 U	0.56 U	0.57 U	1.3 U
Acetone	0.05	500	0.011 U	0.011 U	0.012 U	0.014 U	**0.055**	**0.16**	**0.53 J**	0.26	0.65 U'	0.66 U'	0.027 U	2.6 U'	**0.16**	0.7 U'	0.55 U'	0.68 U'	0.72 U'	0.58 U'	0.018 U	0.02 U	0.78 U'	0.56 U'	0.57 U'	1.3 U'
Benzene	0.06	44	0.00057 U	0.00054 U	0.0006 U	0.00072 U	0.00076 U	0.0011 U	0.037 U	0.0006 U	0.033 U	0.033 U	0.0014 U	**0.95**	**0.33**	0.035 U	0.028 U	0.032 J	0.057	0.028 J	0.00092 U	0.0011	**0.12**	0.024 J	0.024 J	**0.19**
Bromochloromethane	NS	NS	0.0023 U	0.0022 U	0.0024 U	0.0029 U	0.003 U	0.0042 U	0.15 U	0.0024 U	0.13 U	0.13 U	0.0054 U	0.52 U	0.0054 U	0.14 U	0.11 U	0.14 U	0.14 U	0.12 U	0.0037 U	0.0041 U	0.16 U	0.11 U	0.11 U	0.26 U
Bromodichloromethane	NS	NS	0.00057 U	0.00054 U	0.0006 U	0.00072 U	0.00076 U	0.0011 U	0.037 U	0.0006 U	0.033 U	0.033 U	0.0014 U	0.13 U	0.0014 U	0.035 U	0.028 U	0.034 U	0.036 U	0.029 U	0.00092 U	0.001 U	0.039 U	0.028 U	0.028 U	0.065 U
Bromoform	NS	NS	0.0046 U	0.0043 U	0.0048 U	0.0057 U	0.006 U	0.0085 U	0.3 U	0.0048 U	0.26 U	0.26 U	0.011 U	1 U	0.011 U	0.28 U	0.22 U	0.27 U	0.29 U	0.23 U	0.0074 U	0.0081 U	0.31 U	0.22 U	0.23 U	0.52 U
Bromomethane	NS	NS	0.0023 U	0.0022 U	0.0024 U	0.0029 U	0.003 U	0.0042 U	0.15 U	0.0024 U	0.13 U	0.13 U	0.0054 U	0.52 U	0.0054 U	0.14 U	0.11 U	0.14 U	0.14 U	0.12 U	0.0037 U	0.0041 U	0.16 U	0.11 U	0.11 U	0.26 U
Carbon disulfide	NS	NS	0.011 U	0.011 U	0.012 U	0.014 U	0.015 U	0.021 U	0.74 U	0.012 U	0.65 U	0.66 U	0.027 U	2.6 U	0.027 U	0.7 U	0.55 U	0.68 U	0.72 U	0.58 U	0.018 U	0.02 U	0.78 U	0.56 U	0.57 U	1.3 U
Carbon tetrachloride	0.76	22	0.0011 U	0.0011 U	0.0012 U	0.0014 U	0.0015 U	0.0021 U	0.074 U	0.0012 U	0.065 U	0.066 U	0.0027 U	0.26 U	0.0027 U	0.07 U	0.055 U	0.068 U	0.072 U	0.058 U	0.0018 U	0.002 U	0.078 U	0.056 U	0.057 U	0.13 U
Chlorobenzene	1.1	500	0.00057 U	0.00054 U	0.0006 U	0.00072 U	0.00076 U	0.0011 U	0.037 U	0.0006 U	0.033 U	0.033 U	0.0014 U	0.13 U	0.0014 U	0.035 U	0.028 U	0.034 U	0.036 U	0.029 U	0.00092 U	0.001 U	0.039 U	0.028 U	0.028 U	0.065 U
Chloroethane	NS	NS	0.0023 U	0.0022 U	0.0024 U	0.0029 U	0.003 U	0.0042 U	0.15 U	0.0024 U	0.13 U	0.13 U	0.0054 U	0.52 U	0.0054 U	0.14 U	0.11 U	0.14 U	0.14 U	0.12 U	0.0037 U	0.0041 U	0.16 U	0.11 U	0.11 U	0.26 U
Chloroform	0.37	350	0.0017 U	0.0016 U	0.0018 U	0.0022 U	0.0023 U	0.0032 U	0.11 U	0.0018 U	0.098 U	0.099 U	0.0041 U	0.39 U'	0.004 U	0.1 U	0.083 U	0.1 U	0.11 U	0.088 U	0.0028 U	0.003 U	0.12 U	0.083 U	0.086 U	0.19 U
Chloromethane	NS	NS	0.0046 U	0.0043 U	0.0048 U	0.0057 U	0.006 U	0.0085 U	0.3 U	0.0048 U	0.26 U	0.26 U	0.011 U	1 U	0.011 U	0.28 U	0.22 U	0.27 U	0.29 U	0.23 U	0.0074 U	0.0081 U	0.31 U	0.22 U	0.23 U	0.52 U
cis-1,2-Dichloroethene	0.25	500	0.0011 U	0.0011 U	0.0012 U	0.0014 U	0.0015 U	0.0021 U	0.074 U	0.0012 U	0.065 U	0.066 U	0.0027 U	0.26 U'	0.0027 U	0.07 U	0.055 U	0.068 U	0.072 U	0.058 U	0.0018 U	0.002 U	0.078 U	0.056 U	0.057 U	0.13 U
cis-1,3-Dichloropropene	NS	NS	0.00057 U	0.00054 U	0.0006 U	0.00072 U	0.00076 U	0.0011 U	0.037 U	0.0006 U	0.033 U	0.033 U	0.0014 U	0.13 U	0.0014 U	0.035 U	0.028 U	0.034 U	0.036 U	0.029 U	0.00092 U	0.001 U	0.039 U	0.028 U	0.028 U	0.065 U
Cyclohexane	NS	NS	0.011 U	0.011 U	0.012 U	0.014 U	0.0016 J	0.0014 J	0.37 J	0.44 J	1.2	0.66	0.027 U	8.6	1.3 J	1	1.4	1	3.4	0.98	0.018 U	0.0013 J	6	1.1	0.92	11
Dibromochloromethane	NS	NS	0.0011 U	0.0011 U	0.0012 U	0.0014 U	0.0015 U	0.0021 U	0.074 U	0.0012 U	0.065 U	0.066 U	0.0027 U	0.26 U	0.0027 U	0.07 U	0.055 U	0.068 U	0.072 U	0.058 U	0.0018 U	0.002 U	0.078 U	0.056 U	0.057 U	0.13 U
Dichlorodifluoromethane	NS	NS	0.011 U	0.011 U	0.012 U	0.014 U	0.015 U	0.021 U	0.74 U	0.012 U	0.65 U	0.66 U	0.027 U	2.6 U	0.027 U	0.7 U	0.55 U	0.68 U	0.72 U	0.58 U	0.018 U	0.02 U	0.78 U	0.56 U	0.57 U	1.3 U
Ethylbenzene	1	390	0.0011 U	0.0011 U	0.0012 U	0.0014 U	0.0015 U	0.0021 U	0.022 J	0.036 J	0.065 U	0.066 U	0.0027 U	**1.1**	0.22	0.07 U	0.055 U	0.081	0.067 J	0.034 J	0.0018 U	0.002 U	0.031 J	0.056 U	0.057 U	0.099 J
Isopropylbenzene	NS	NS	0.0011 U	0.0011 U	0.0012 U	0.0014 U	0.00084 J	0.0021 U	0.047 J	0.038 J	1.2	0.16	0.0027 U	1.6	0.2	0.26	0.33	0.21	0.7	0.13	0.0018 U	0.002 U	0.42	0.088	0.084	1.4
Methyl Acetate	NS	NS	0.0046 U	0.0043 U	0.0048 U	0.0057 U	0.006 U	0.0085 U	0.3 U	0.45	0.26 U	0.26 U	0.011 U	0.83 J	0.011 U	0.28 U	0.22 U	0.11 J	0.29 U	0.23 U	0.0074 U	0.0081 U	0.31 U	0.22 U	0.23 U	0.52 U
Methyl cyclohexane	NS	NS	0.0046 U	0.0043 U	0.0048 U	0.0057 U	0.0058 J	0.0036 J	1.7	1.8	24	3	0.011 U	98	5.7	2.5	4	4.3	14	3.8	0.0074 U	0.0081 U	18	2.9	2.4	36
Methyl tertiary butyl ether (MTBE)	0.93	500	0.0023 U	0.0022 U	0.0024 U	0.0029 U	0.003 U	0.0042 U	0.15 U	0.0024 U	0.13 U	0.13 U	0.0054 U	0.52 U	0.0054 U	0.14 U	0.11 U	0.14 U	0.14 U	0.12 U	0.0037 U	0.0041 U	0.16 U	0.11 U	0.11 U	0.26 U
Methylene chloride	0.05	500	0.0057 U	0.0054 U	0.006 U	0.0072 U	0.0076 U	0.011 U	0.37 U'	0.006 U	0.33 U'	0.33 U'	0.014 U	1.3 U'	0.014 U	0.35 U'	0.28 U'	0.34 U'	0.36 U'	0.29 U'	0.0092 U	0.01 U	0.39 U'	0.28 U'	0.28 U'	0.65 U'
n-Butylbenzene	12	500	0.0011 U	0.0011 U	0.0012 U	0.0014 U	0.0015 U	0.0021 U	0.23	0.15	1.2	0.19	0.0027 U	3.7	0.11 J	0.2	0.32	0.28	0.87	0.12	0.0018 U	0.002 U	0.18	0.026 J	0.048 J	0.93
n-Propylbenzene	3.9	500	0.0011 U	0.0011 U	0.0012 U	0.0014 U	0.0015 U	0.0021 U	0.045 J	0.093	2.4	0.26	0.0027 U	2.9	0.26	0.5	0.58	0.38	1.3	0.23	0.0018 U	0.002 U	0.67	0.16	0.15	2.5
sec-Butylbenzene	11	500	0.0011 U	0.0011 U	0.0012 U	0.0014 U	0.00054 J	0.0021 U	0.23	0.12	0.91	0.13	0.0027 U	1.8	0.12 J	0.24	0.26	0.12	0.34	0.054 J	0.0018 U	0.002 U	0.28	0.049 J	0.04 J	0.63
Styrene	NS	NS	0.0011 U	0.0011 U	0.0012 U	0.0014 U	0.0015 U	0.0021 U	0.074 U	0.0012 U	0.015 J	0.066 U	0.0027 U	0.067 J	0.0027 U	0.07 U	0.055 U	0.068 U	0.015 J	0.058 U	0.0018 U	0.002 U	0.078 U	0.039 J	0.043 J	0.082 J
tert-Butylbenzene	5.9	500	0.0023 U	0.0022 U	0.0024 U	0.0029 U	0.00032 J	0.0042 U	0.15	0.079 J	0.25	0.055 J	0.0054 U	0.7	0.031 J	0.045 J	0.052 J	0.014 J	0.041 J	0.12 U	0.0037 U	0.0041 U	0.04 J	0.11 U	0.11 U	0.066 J
Tetrachloroethene	1.3	150	0.00057 U	0.00054 U	0.0006 U	0.00072 U	0.00076 U	0.0011 U	0.037 U	0.0006 U	0.033 U	0.033 U	0.0014 U	0.13 U	0.0014 U	0.035 U	0.028 U	0.034 U	0.036 U	0.029 U	0.00092 U	0.001 U	0.039 U	0.028 U	0.028 U	0.065 U
Toluene	0.7	500	0.0011 U	0.0011 U	0.0012 U	0.0014 U	0.0015 U	0.0021 U	0.074 U	0.0012 U	0.036 J	0.066 U	0.0027 U	**1.2**	**1.7**	0.07 U	0.03 J	0.054 J	0.12	0.034 J	0.0018 U	0.002 U	0.28	0.036 J	0.031 J	0.31
trans-1,2-Dichloroethene	0.19	500	0.0017 U	0.0016 U	0.0018 U	0.0022 U	0.0023 U	0.0032 U	0.11 U	0.0018 U	0.098 U	0.099 U	0.0041 U	0.39 U'	0.004 U	0.1 U	0.083 U	0.1 U	0.11 U	0.088 U	0.0028 U	0.003 U	0.12 U	0.083 U	0.086 U	0.19 U
trans-1,3-Dichloropropene	NS	NS	0.0011 U	0.0011 U	0.0012 U	0.0014 U	0.0015 U	0.0021 U	0.074 U	0.0012 U	0.065 U	0.066 U	0.0027 U	0.26 U	0.0027 U	0.07 U	0.055 U	0.068 U	0.072 U	0.058 U	0.0018 U	0.002 U	0.078 U	0.056 U	0.057 U	0.13 U
Trichloroethene	0.47	200	0.00057 U	0.00054 U	0.0006 U	0.00072 U	0.00076 U	0.0011 U	0.037 U	0.0006 U	0.033 U	0.033 U	0.0014 U	0.13 U	0.0014 U	0.035 U	0.028 U	0.034 U	0.036 U	0.029 U	0.00092 U	0.001 U	0.039 U	0.028 U	0.028 U	0.065 U
Trichlorofluoromethane	NS	NS	0.0046 U	0.0043 U	0.0048 U	0.0057 U	0.006 U	0.0085 U	0.3 U	0.0048 U	0.26 U	0.26 U	0.011 U	1 U	0.011 U	0.28 U	0.22 U	0.27 U	0.29 U	0.23 U	0.0074 U	0.0081 U	0.31 U	0.22 U	0.23 U	0.52 U
Vinyl chloride	0.02	13	0.0011 U	0.0011 U	0.0012 U	0.0014 U	0.0015 U	0.0021 U	0.074 U'	0.0012 U	0.065 U'	0.066 U'	0.0027 U	0.26 U'	0.0027 U	0.07 U'	0.055 U'	0.068 U'	0.072 U'	0.058 U'	0.0018 U	0.002 U	0.078 U'	0.056 U'	0.057 U'	0.13 U'
Xylene (m&p)	NS	NS	0.0023 U	0.0022 U	0.0024 U	0.0029 U	0.003 U	0.0042 U	0.098 J	0.2	0.04 J	0.13 U	0.0054 U	6.2	2.3	0.14 U	0.11 U	0.35	1.2	0.17	0.0037 U	0.0041 U	0.8	0.053 J	0.064 J	1.3
Xylene (o)	NS	NS	0.0011 U	0.0011 U	0.0012 U	0.0014 U	0.0015 U	0.0021 U	0.042 J	0.03 J	0.044 J	0.066 U	0.0027 U	1.5	0.59	0.07 U	0.055 U	0.094	0.27	0.028 J	0.0018 U	0.002 U	0.16	0.056 U	0.057 U	0.22
Xylenes (Total)	1.6	500	0.0011 U	0.0011 U	0.0012 U	0.0014 U	0.0015 U	0.0021 U	0.14 J	0.23 J	0.084 J	0.066 U	0.0027 U	**7.7**	**2.9**	0.07 U	0.055 U	0.44	1.5	0.2 J	0.0018 U	0.002 U	0.96	0.053 J	0.064 J	1.5
Total Volatile TICs	NS	NS	0.00994 J	ND	0.0104 J	ND	ND	ND	ND	ND	ND	14.7 J	ND	ND	ND	ND	ND	67.5 J	67.5 J	67.5 J	ND	ND	ND	ND	ND	102 J

Notes:

NYSDEC GW Protection SCO = New York State Department of Environmental Conservation Groundwater Protection Soil Cleanup Objectives, from Table 375-6.8 of 6 NYCRR Part 375.

NYSDEC Commercial SCO = New York State Department of Environmental Conservation Restricted Commercial Use Soil Cleanup Objectives, from Table 375-6.8 of 6 NYCRR Part 375.

ft bgs = Feet below ground surface.

mg/kg = Milligrams per kilogram.

Green concentrations exceed the NYSDEC GW Protection SCO.

Highlighted concentrations exceed the NYSDEC Commercial SCO.

— = Sample not analyzed.

NS = No standard currently established.

ND = Not Detected.

U = Not detected above laboratory detection limit.

U' = Laboratory reporting limit exceeds the applicable regulatory standard or criteria being utilized.

J = Result below the reporting limit (estimated value).

DUP = Duplicate sample was taken.

When the applicable state standard applies to mixed isomers and the laboratory reports individual isomers, the total standard is listed for each isomer.

* = Sample was analyzed twice by the laboratory. Higher detections were reported.

Table 5
Soil Reuse Characterization Sampling Results
Summary of Volatile Organic Compounds in Soil.
MJ Painting; Olean, New York.

Sample ID	NYSDEC GW Protection SCO	NYSDEC Commercial SCO	RX-406	RX-407	RX-407	RX-407	RX-407	RX-407	RX-409	RX-409	RX-409	RX-409	RX-410	RX-410	RX-410	RX-411	RX-411	RX-411	RX-411	RX-411	RX-413	RX-413	RX-413	RX-414	RX-415	RX-415
Sample Depth (ft bgs)			11	0-1	3	6	8	11	4	7	8	11	8	10-12	11	3	6.5	7-10	8	12	3	9	11	6	5	7.5
Sample Date			11/15/2021	11/15/2021	11/15/2021	11/15/2021	11/15/2021	11/15/2021	11/12/2021	11/12/2021	11/12/2021	11/12/2021	11/12/2021	11/12/2021	11/12/2021	11/12/2021	11/12/2021	11/12/2021	11/12/2021	11/12/2021	11/15/2021	11/15/2021	11/15/2021	11/15/2021	11/16/2021	11/16/2021
VOLATILE ORGANIC COMPOUNDS - 8260C (mg/kg)																										
1,1,1-Trichloroethane	0.68	500	0.03 U	0.0007 U	0.001 U	0.00071 U	0.00075 U	0.033 U	0.00085 U	0.044 U	0.034 U	0.026 U	0.00065 U	0.00055 U	0.031 U	0.00089 U	0.077 U	0.032 U	0.038 U	0.031 U	0.00053 U	0.03 U	0.029 U	0.001 U	0.00082 U	0.00052 U
1,1,2,2,-Tetrachloroethane	NS	NS	0.03 U	0.0007 U	0.001 U	0.00071 U	0.00075 U	0.033 U	0.00085 U	0.044 U	0.034 U	0.026 U	0.00065 U	0.00055 U	0.031 U	0.00089 U	0.077 U	0.032 U	0.038 U	0.031 U	0.00053 U	0.03 U	0.029 U	0.001 U	0.00082 U	0.00052 U
1,1,2-Trichloro-1,2,2-trifluoroethane	NS	NS	0.24 U	0.0056 U	0.0083 U	0.0057 U	0.006 U	0.26 U	0.0068 U	0.35 U	0.27 U	0.21 U	0.0052 U	0.0044 U	0.25 U	0.0071 U	0.62 U	0.26 U	0.31 U	0.25 U	0.0042 U	0.24 U	0.24 U	0.0081 U	0.0066 U	0.0041 U
1,1,2-Trichloroethane	NS	NS	0.06 U	0.0014 U	0.0021 U	0.0014 U	0.0015 U	0.065 U	0.0017 U	0.087 U	0.067 U	0.053 U	0.0013 U	0.0011 U	0.062 U	0.0018 U	0.15 U	0.065 U	0.077 U	0.062 U	0.001 U	0.06 U	0.059 U	0.002 U	0.0016 U	0.001 U
1,1,-Dichloroethene	0.33	500	0.06 U	0.0014 U	0.0021 U	0.0014 U	0.0015 U	0.065 U	0.0017 U	0.087 U	0.067 U	0.053 U	0.0013 U	0.0011 U	0.062 U	0.0018 U	0.15 U	0.065 U	0.077 U	0.062 U	0.001 U	0.06 U	0.059 U	0.002 U	0.0016 U	0.001 U
1,1-Dichloroethane	0.27	240	0.06 U	0.0014 U	0.0021 U	0.0014 U	0.0015 U	0.065 U	0.0017 U	0.087 U	0.067 U	0.053 U	0.0013 U	0.0011 U	0.062 U	0.0018 U	0.15 U	0.065 U	0.077 U	0.062 U	0.001 U	0.06 U	0.059 U	0.002 U	0.0016 U	0.001 U
1,2,3-Trichlorobenzene	NS	NS	0.12 U	0.0028 U	0.0042 U	0.0028 U	0.003 U	0.13 U	0.0034 U	0.17 U	0.13 U	0.1 U	0.0026 U	0.0022 U	0.12 U	0.0036 U	0.31 U	0.13 U	0.15 U	0.12 U	0.0021 U	0.12 U	0.12 U	0.004 U	0.0033 U	0.0021 U
1,2,4-Trichlorobenzene	NS	NS	0.12 U	0.0028 U	0.0042 U	0.0028 U	0.003 U	0.13 U	0.0034 U	0.17 U	0.13 U	0.1 U	0.0026 U	0.0022 U	0.12 U	0.0036 U	0.31 U	0.13 U	0.15 U	0.12 U	0.0021 U	0.12 U	0.12 U	0.004 U	0.0033 U	0.0021 U
1,2,4-Trimethylbenzene	3.6	190	0.27	0.0028 U	0.0013 J	0.0013 J	0.004	0.7	0.0034 U	1.5	0.031 J	0.23	0.00099 J	0.055	0.11 J	0.0011 J	2.6	0.62	0.51	0.078 J	0.00038 J	0.058 J	0.16	0.004	0.0033 U	0.0021 U
1,2-Dibromo-3-chloropropane	NS	NS	0.18 U	0.0042 U	0.0062 U	0.0042 U	0.0045 U	0.2 U	0.0051 U	0.26 U	0.2 U	0.16 U	0.0039 U	0.0033 U	0.19 U	0.0053 U	0.46 U	0.19 U	0.23 U	0.18 U	0.0032 U	0.18 U	0.18 U	0.0061 U	0.0049 U	0.0031 U
1,2-Dibromoethane	NS	NS	0.06 U	0.0014 U	0.0021 U	0.0014 U	0.0015 U	0.065 U	0.0017 U	0.087 U	0.067 U	0.053 U	0.0013 U	0.0011 U	0.062 U	0.0018 U	0.15 U	0.065 U	0.077 U	0.062 U	0.001 U	0.06 U	0.059 U	0.002 U	0.0016 U	0.001 U
1,2-Dichlorobenzene	1.1	500	0.12 U	0.0028 U	0.0042 U	0.0028 U	0.003 U	0.13 U	0.0034 U	0.17 U	0.13 U	0.1 U	0.0026 U	0.0022 U	0.12 U	0.0036 U	0.31 U	0.13 U	0.15 U	0.12 U	0.0021 U	0.12 U	0.12 U	0.004 U	0.0033 U	0.0021 U
1,2-Dichloroethane	0.02	30	0.06 U'	0.0014 U	0.0021 U	0.0014 U	0.0015 U	0.065 U'	0.0017 U	0.087 U'	0.067 U'	0.053 U'	0.0013 U	0.0011 U	0.021 J	0.0018 U	0.15 U'	0.065 U'	0.077 U'	0.062 U'	0.001 U	0.06 U'	0.059 U'	0.002 U	0.0016 U	0.001 U
1,2-Dichloroethene, Total	NS	NS	0.06 U	0.0014 U	0.0021 U	0.0014 U	0.0015 U	0.065 U	0.0017 U	0.087 U	0.067 U	0.053 U	0.0013 U	0.0011 U	0.062 U	0.0018 U	0.15 U	0.065 U	0.077 U	0.062 U	0.001 U	0.06 U	0.059 U	0.002 U	0.0016 U	0.001 U
1,2-Dichloropropane	NS	NS	0.06 U	0.0014 U	0.0021 U	0.0014 U	0.0015 U	0.065 U	0.0017 U	0.087 U	0.067 U	0.053 U	0.0013 U	0.0011 U	0.062 U	0.0018 U	0.15 U	0.065 U	0.077 U	0.062 U	0.001 U	0.06 U	0.059 U	0.002 U	0.0016 U	0.001 U
1,3,5-Trimethylbenzene	8.4	190	0.22	0.0028 U	0.0012 J	0.00074 J	0.00096 J	0.3	0.0034 U	0.58	0.13 U	0.054 J	0.00036 J	0.023	0.059 J	0.0018 J	0.65	0.18	0.11 J	0.029 J	0.0021 U	0.12 U	0.068 J	0.0029 J	0.00042 J	0.0021 U
1,3-Dichlorobenzene	2.4	280	0.12 U	0.0028 U	0.0042 U	0.0028 U	0.003 U	0.13 U	0.0034 U	0.17 U	0.13 U	0.1 U	0.0026 U	0.0022 U	0.12 U	0.0036 U	0.31 U	0.13 U	0.15 U	0.12 U	0.0021 U	0.12 U	0.12 U	0.004 U	0.0033 U	0.0021 U
1,3-Dichloropropene, Total	NS	NS	0.03 U	0.0007 U	0.001 U	0.00071 U	0.00075 U	0.033 U	0.00085 U	0.044 U	0.034 U	0.026 U	0.00065 U	0.00055 U	0.031 U	0.00089 U	0.077 U	0.032 U	0.038 U	0.031 U	0.00053 U	0.03 U	0.029 U	0.001 U	0.00082 U	0.00052 U
1,4-Dichlorobenzene	1.8	130	0.12 U	0.0028 U	0.0042 U	0.0028 U	0.003 U	0.13 U	0.0034 U	0.17 U	0.13 U	0.1 U	0.0026 U	0.0022 U	0.12 U	0.0036 U	0.31 U	0.13 U	0.15 U	0.12 U	0.0021 U	0.12 U	0.12 U	0.004 U	0.0033 U	0.0021 U
1,4-Dioxane	0.1	130	4.8 U'	0.11 U'	0.17 U'	0.11 U'	0.12 U'	5.2 U'	0.14 U'	7 U'	5.4 U'	4.2 U'	0.1 U	0.088 U	5 U'	0.14 U'	12 U'	5.2 U'	6.1 U'	4.9 U'	0.085 U	4.8 U'	4.7 U'	0.16 U'	0.13 U'	0.082 U
2-Butanone	0.12	500	0.6 U'	0.014 U	0.059	0.045	0.015 U	0.65 U'	0.01 J	0.87 U'	0.67 U'	0.53 U'	0.011 J	0.011 U	0.62 U'	0.018 U	1.5 U'	0.65 U'	0.77 U'	0.62 U'	0.01 U	0.6 U'	0.59 U'	0.046	0.023	0.01 U
2-Hexanone	NS	NS	0.6 U	0.014 U	0.021 U	0.014 U	0.015 U	0.65 U	0.017 U	0.87 U	0.67 U	0.53 U	0.013 U	0.011 U	0.62 U	0.018 U	1.5 U	0.65 U	0.77 U	0.62 U	0.01 U	0.6 U	0.59 U	0.02 U	0.016 U	0.01 U
4-Methyl-2-Pentanone	NS	NS	0.6 U	0.014 U	0.021 U	0.014 U	0.015 U	0.65 U	0.017 U	0.87 U	0.67 U	0.53 U	0.013 U	0.011 U	0.62 U	0.018 U	1.5 U	0.65 U	0.77 U	0.62 U	0.01 U	0.6 U	0.59 U	0.02 U	0.016 U	0.01 U
Acetone	0.05	500	0.6 U'	0.014 U	0.22	0.094	0.053	0.65 U'	0.044	0.87 U'	0.67 U'	0.53 U'	0.039	0.011 U	0.62 U'	0.025	1.5 U'	0.65 U'	0.77 U'	0.62 U'	0.01 U	0.6 U'	0.59 U'	0.14	0.25	0.02
Benzene	0.06	44	0.03 U	0.0007 U	0.0012	0.0018	0.0038	0.033 U	0.00085 U	0.049	0.034 U	0.026 U	0.00083	0.011	0.035	0.0082	0.29	0.056	0.13	0.046	0.0016	0.03 U	0.029 U	0.0008 J	0.00082 U	0.00017 J
Bromochloromethane	NS	NS	0.12 U	0.0028 U	0.0042 U	0.0028 U	0.003 U	0.13 U	0.0034 U	0.17 U	0.13 U	0.1 U	0.0026 U	0.0022 U	0.12 U	0.0036 U	0.31 U	0.13 U	0.15 U	0.12 U	0.0021 U	0.12 U	0.12 U	0.004 U	0.0033 U	0.0021 U
Bromodichloromethane	NS	NS	0.03 U	0.0007 U	0.001 U	0.00071 U	0.00075 U	0.033 U	0.00085 U	0.044 U	0.034 U	0.026 U	0.00065 U	0.00055 U	0.031 U	0.00089 U	0.077 U	0.032 U	0.038 U	0.031 U	0.00053 U	0.03 U	0.029 U	0.001 U	0.00082 U	0.00052 U
Bromoform	NS	NS	0.24 U	0.0056 U	0.0083 U	0.0057 U	0.006 U	0.26 U	0.0068 U	0.35 U	0.27 U	0.21 U	0.0052 U	0.0044 U	0.25 U	0.0071 U	0.62 U	0.26 U	0.31 U	0.25 U	0.0042 U	0.24 U	0.24 U	0.0081 U	0.0066 U	0.0041 U
Bromomethane	NS	NS	0.12 U	0.0028 U	0.0042 U	0.0028 U	0.003 U	0.13 U	0.0034 U	0.17 U	0.13 U	0.1 U	0.0026 U	0.0022 U	0.12 U	0.0036 U	0.31 U	0.13 U	0.15 U	0.12 U	0.0021 U	0.12 U	0.12 U	0.004 U	0.0033 U	0.0021 U
Carbon disulfide	NS	NS	0.6 U	0.014 U	0.021 U	0.014 U	0.015 U	0.65 U	0.017 U	0.87 U	0.67 U	0.53 U	0.013 U	0.011 U	0.62 U	0.018 U	1.5 U	0.65 U	0.77 U	0.62 U	0.01 U	0.6 U	0.59 U	0.02 U	0.016 U	0.01 U
Carbon tetrachloride	0.76	22	0.06 U	0.0014 U	0.0021 U	0.0014 U	0.0015 U	0.065 U	0.0017 U	0.087 U	0.067 U	0.053 U	0.0013 U	0.0011 U	0.062 U	0.0018 U	0.15 U	0.065 U	0.077 U	0.062 U	0.001 U	0.06 U	0.059 U	0.002 U	0.0016 U	0.001 U
Chlorobenzene	1.1	500	0.03 U	0.0007 U	0.001 U	0.00071 U	0.00075 U	0.033 U	0.00085 U	0.044 U	0.034 U	0.026 U	0.00065 U	0.00055 U	0.0082 J	0.00089 U	0.077 U	0.032 U	0.038 U	0.031 U	0.00053 U	0.03 U	0.029 U	0.001 U	0.00032 J	0.00052 U
Chloroethane	NS	NS	0.12 U	0.0028 U	0.0042 U	0.0028 U	0.003 U	0.13 U	0.0034 U	0.17 U	0.13 U	0.1 U	0.0026 U	0.0022 U	0.12 U	0.0036 U	0.31 U	0.13 U	0.15 U	0.12 U	0.0021 U	0.12 U	0.12 U	0.004 U	0.0033 U	0.0021 U
Chloroform	0.37	350	0.091 U	0.0021 U	0.0031 U	0.0021 U	0.0022 U	0.098 U	0.0025 U	0.13 U	0.1 U	0.079 U	0.0019 U	0.0016 U	0.094 U	0.0027 U	0.23 U	0.097 U	0.12 U	0.092 U	0.0016 U	0.09 U	0.088 U	0.003 U	0.0025 U	0.0015 U
Chloromethane	NS	NS	0.24 U	0.0056 U	0.0083 U	0.0057 U	0.006 U	0.26 U	0.0068 U	0.35 U	0.27 U	0.21 U	0.0052 U	0.0044 U	0.25 U	0.0071 U	0.62 U	0.26 U	0.31 U	0.25 U	0.0042 U	0.24 U	0.24 U	0.0081 U	0.0066 U	0.0041 U
cis-1,2-Dichloroethene	0.25	500	0.06 U	0.0014 U	0.0021 U	0.0014 U	0.0015 U	0.065 U	0.0017 U	0.087 U	0.067 U	0.053 U	0.0013 U	0.0011 U	0.062 U	0.0018 U	0.15 U	0.065 U	0.077 U	0.062 U	0.001 U	0.06 U	0.059 U	0.002 U	0.0016 U	0.001 U
cis-1,3-Dichloropropene	NS	NS	0.03 U	0.0007 U	0.001 U	0.00071 U	0.00075 U	0.033 U	0.00085 U	0.044 U	0.034 U	0.026 U	0.00065 U	0.00055 U	0.031 U	0.00089 U	0.077 U	0.032 U	0.038 U	0.031 U	0.00053 U	0.03 U	0.029 U	0.001 U	0.00082 U	0.00052 U
Cyclohexane	NS	NS	3.7	0.014 U	0.0018 J	0.0031 J	0.016	5	0.017 U	0.16 J	0.64 J	2	0.00086 J	0.33	2.4	0.071	4.6	3.5	4.2	0.68	0.0012 J	0.3 J	1.2	0.032	0.028	0.042
Dibromochloromethane	NS	NS	0.06 U	0.0014 U	0.0021 U	0.0014 U	0.0015 U	0.065 U	0.0017 U	0.087 U	0.067 U	0.053 U	0.0013 U	0.0011 U	0.062 U	0.0018 U	0.15 U	0.065 U	0.077 U	0.062 U	0.001 U	0.06 U	0.059 U	0.002 U	0.0016 U	0.001 U
Dichlorodifluoromethane	NS	NS	0.6 U	0.014 U	0.021 U	0.014 U	0.015 U	0.65 U	0.017 U	0.87 U	0.67 U	0.53 U	0.013 U	0.011 U	0.62 U	0.018 U	1.5 U	0.65 U	0.77 U	0.62 U	0.01 U	0.6 U	0.59 U	0.02 U	0.016 U	0.01 U
Ethylbenzene	1	390	0.03 J	0.0014 U	0.00053 J	0.00026 J	0.0005 J	0.38	0.0017 U	0.19	0.067 U	0.053 U	0.00026 J	0.0084	0.009 J	0.0065	0.26	0.23	0.13	0.01 J	0.0002 J	0.06 U	0.016 J	0.00073 J	0.0016 U	0.001 U
Isopropylbenzene	NS	NS	0.46	0.0014 U	0.00063 J	0.00046 J	0.00091 J	0.95	0.00024 J	0.12	0.15	0.37	0.00041 J	0.03	0.1	0.0013 J	1	1.6	1.3	0.23	0.001 U	0.15	0.56	0.00058 J	0.0016 U	0.00038 J
Methyl Acetate	NS	NS	0.065 J	0.0056 U	0.0083 U	0.0057 U	0.006 U	0.26 U	0.0068 U	0.35	0.12 J	0.21 U	0.0052 U	0.0044 U	0.25 U	0.0071 U	0.41 J	0.26 U	0.31 U	0.25 U	0.0042 U	0.24 U	0.24 U	0.0081 U	0.0066 U	0.0041 U
Methyl cyclohexane	NS	NS	11	0.0056 U	0.0063 J	0.0073	0.05	15	0.0014 J	1.1	3.4	12	0.0032 J	8.1	6.5	0.28	25	17	18	1.9	0.0011 J	1.7	4.2	0.07	0.03	0.071
Methyl tertiary butyl ether (MTBE)	0.93	500	0.12 U	0.0028 U	0.0042 U	0.0028 U	0.003 U	0.13 U	0.0034 U	0.17 U	0.13 U	0.1 U	0.0026 U	0.0022 U	0.12 U	0.0036 U	0.31 U	0.13 U	0.15 U	0.12 U	0.0021 U	0.12 U	0.12 U	0.004 U	0.0033 U	0.0021 U
Methylene chloride	0.05	500	0.3 U'	0.007 U	0.01 U	0.0071 U	0.0075 U	0.33 U'	0.0085 U	0.44 U'	0.34 U'	0.26 U'	0.0065 U	0.0055 U	0.31 U'	0.0089 U	0.77 U'	0.32 U'	0.38 U'	0.31 U'	0.0053 U	0.3 U'	0.29 U'	0.01 U	0.043	0.0052 U
n-Butylbenzene	12	500	0.62	0.0014 U	0.0021 U	0.0014 U	0.0034	1	0.0017 U	0.25	0.31	0.36	0.00036 J	0.012	0.057 J	0.00061 J	0.46	1.6	1.2	0.23	0.001 U	0.15	0.64	0.002 U	0.0016 U	0.001 U
n-Propylbenzene	3.9	500	1	0.0014 U	0.0006 J	0.0014 U	0.0014 J	2.1	0.0017 U	0.34	0.08	0.7	0.00046 J	0.05	0.18	0.002	1.6	3.4	2.6	0.42	0.001 U	0.32	1	0.00051 J	0.0016 U	0.001 U
sec-Butylbenzene	11	500	0.27	0.0014 U	0.00036 J	0.00043 J	0.0021	0.33	0.0017 U	0.21	0.44	0.36	0.00053 J	0.0076	0.038 J	0.00054 J	0.29	0.72	0.54	0.11	0.001 U	0.062	0.21	0.00034 J	0.0016 U	0.0027
Styrene	NS	NS	0.046 J	0.0014 U	0.0021 U	0.0014 U	0.0015 U	0.065 U	0.0017 U	0.072 J	0.02 J	0.053 U	0.0013 U	0.0011 U	0.062 U	0.0018 U	0.15 U	0.065 U	0.077 U	0.062 U	0.001 U	0.06 U	0.059 U	0.002 U	0.0016 U	0.001 U
tert-Butylbenzene	5.9	500	0.026 J	0.0028 U	0.0042 U	0.0028 U	0.003 U	0.024 J	0.0034 U	0.48	0.2	0.08 J	0.00028 J	0.0011 J	0.12 U	0.00021 J	0.069 J	0.12 J	0.092 J	0.016 J	0.0021 U	0.12 U	0.021 J	0.004 U	0.00023 J	0.0032
Tetrachloroethene	1.3	150	0.03 U	0.0007 U	0.001 U	0.00071 U	0.00075 U	0.033 U	0.00085 U	0.044 U	0.034 U	0.026 U	0.00065 U	0.00055 U	0.031 U	0.00089 U	0.077 U	0.032 U	0.038 U	0.031 U	0.00053 U	0.03 U	0.029 U	0.001 U	0.00082 U	0.00052 U
Toluene	0.7	500	0.039 J	0.0014 U	0.0021 U	0.002	0.0043	0.053 J	0.0017 U	0.074 J	0.067 U	0.04 J	0.0011 J	0.051	0.065	0.007	0.34	0.16	0.19	0.038 J	0.001 U	0.06 U	0.038 J	0.0018 J	0.0016 U	0.00073 J
trans-1,2-Dichloroethene	0.19	500	0.091 U	0.0021 U	0.0031 U	0.0021 U	0.0022 U	0.098 U	0.0025 U	0.13 U	0.1 U	0.079 U	0.0019 U	0.0016 U	0.094 U	0.0027 U	0.23 U'	0.097 U	0.12 U	0.092 U	0.0016 U	0.09 U	0.088 U	0.003 U	0.0025 U	0.0015 U
trans-1,3-Dichloropropene	NS	NS	0.06 U	0.0014 U	0.0021 U	0.0014 U	0.0015 U	0.065 U	0.0017 U	0.087 U	0.067 U	0.053 U	0.0013 U	0.0011 U	0.062 U	0.0018 U	0.15 U	0.065 U	0.077 U	0.062 U	0.001 U	0.06 U	0.059 U	0.002 U	0.0016 U	0.001 U
Trichloroethene	0.47	200	0.03 U	0.0007 U	0.001 U	0.00071 U	0.00075 U	0.033 U	0.00085 U	0.044 U	0.034 U	0.026 U	0.00065 U	0.00055 U	0.031 U	0.00089 U	0.077 U	0.032 U	0.038 U	0.031 U	0.00053 U	0.03 U	0.029 U	0.001 U	0.00082 U	0.00052 U
Trichlorofluoromethane	NS	NS	0.24 U	0.0056 U	0.0083 U	0.0057 U	0.006 U	0.26 U	0.0068 U	0.35 U	0.27 U	0.21 U	0.0052 U	0.0044 U	0.25 U	0.0071 U	0.62 U	0.26 U	0.31 U	0.25 U	0.0042 U	0.24 U	0.24 U	0.0081 U	0.0066 U	0.0041 U
Vinyl chloride	0.02	13	0.06 U'	0.0014 U	0.0021 U	0.0014 U	0.0015 U	0.065 U'	0.0017 U	0.087 U'	0.067 U'	0.053 U'	0.0013 U	0.0011 U	0.062 U'	0.0018 U	0.15 U'	0.065 U'	0.077 U'	0.062 U'	0.001 U	0.06 U'	0.059 U'	0.002 U	0.0016 U	0.001 U
Xylene (m&p)	NS	NS	0.48	0.0028 U	0.0028 J	0.0023 J	0.003	0.54	0.0034 U	0.56	0.13 U	0.11	0.0013 J	0.092	0.16	0.011	1.5	0.66	0.55	0.14	0.0021 U	0.12 U	0.11 J	0.0042	0.0033 U	0.0021 U
Xylene (o)	NS	NS	0.11	0.0014 U	0.0012 J	0.0011 J	0.0013 J	0.2	0.0017 U	0.1	0.022 J	0.028 J	0.00086 J	0.017	0.041 J	0.005	0.43	0.19	0.16	0.038 J	0.001 U	0.06 U	0.035 J	0.0025	0.0016 U	0.00033 J
Xylenes (Total)	1.6	500	0.59	0.0014 U	0.004 J	0.0034 J	0.0043 J	0.74	0.0017 U	0.66	0.022 J	0.14 J	0.0022 J	0.11	0.2 J	0.016	1.9	0.85	0.71	0.18 J	0.001 U	0.06 U	0.15 J	0.0067	0.0016 U	0.00033 J
Total Volatile TICs	NS	NS	75.7 J	ND	ND	ND	ND	ND	0.0671 J	0.0671 J	0.0671 J	0.0671 J	0.251 J	0.251 J	0.251 J	0.394 J	0.394 J	0.394 J	0.394 J	0.394 J	0.0324 J	0.0324 J	0.0324 J	0.298 J	0.527 J	0.527 J

Notes:

NYSDEC GW Protection SCO = New York State Department of Environmental Conservation Groundwater Protection Soil Cleanup Objectives, from Table 375-6.8 of 6 NYCRR Part 375.

NYSDEC Commercial SCO = New York State Department of Environmental Conservation Restricted Commercial Use Soil Cleanup Objectives, from Table 375-6.8 of 6 NYCRR Part 375.

ft bgs = Feet below ground surface.

mg/kg = Milligrams per kilogram.

Green concentrations exceed the NYSDEC GW Protection SCO.

Highlighted concentrations exceed the NYSDEC Commercial SCO.

— = Sample not analyzed.

NS = No standard currently established.

ND = Not Detected.

U = Not detected above laboratory detection limit.

U' = Laboratory reporting limit exceeds the applicable regulatory standard or criteria being utilized.

J = Result below the reporting limit (estimated value).

DUP = Duplicate sample was taken.

When the applicable state standard applies to mixed isomers and the laboratory reports individual isomers, the total standard is listed for each isomer.

* = Sample was analyzed twice by the laboratory. Higher detections were reported.

Table 5
Soil Reuse Characterization Sampling Results
Summary of Volatile Organic Compounds in Soil.
MJ Painting; Olean, New York.

Sample ID	NYSDEC GW Protection SCO	NYSDEC Commercial SCO	RX-415	RX-416	RX-416	RX-417	RX-417	RX-417	RX-417 DUP	RX-417	RX-417	RX-418	RX-418	RX-418	RX-418	RX-419	RX-419	RX-419	RX-419	RX-420
Sample Depth (ft bgs)			11	3	10-12	0-1	3	7	7	9	10-12	3	6	9	10-12	3	6	9	10-12	0-1
Sample Date			11/16/2021	11/16/2021	11/16/2021	11/11/2021	11/11/2021	11/11/2021	11/11/2021	11/11/2021	11/11/2021	11/11/2021	11/11/2021	11/11/2021	11/11/2021	11/15/2021	11/15/2021	11/15/2021	11/15/2021	11/15/2021
VOLATILE ORGANIC COMPOUNDS - 8260C (mg/kg)																				
1,1,1-Trichloroethane	0.68	500	0.00069 U	0.00085 U	0.00031 J	0.00063 U	0.00069 U	0.0015 U	0.0016 U	0.087 U	0.052 U	0.00068 U	0.00076 U	0.04 U	0.00044 U	0.00055 U	0.082 U	0.00087 U	0.00067 U	0.00047 U
1,1,2,2,-Tetrachloroethane	NS	NS	0.00069 U	0.00085 U	0.00056 U	0.00063 U	0.00069 U	0.0015 U	0.0016 U	0.087 U	0.052 U	0.00068 U	0.00076 U	0.04 U	0.00044 U	0.00055 U	0.082 U	0.00087 U	0.00067 U	0.00047 U
1,1,2-Trichloro-1,2,2-trifluoroethane	NS	NS	0.0056 U	0.0068 U	0.0045 U	0.005 U	0.0055 U	0.012 U	0.013 U	0.7 U	0.42 U	0.0054 U	0.0061 U	0.32 U	0.0035 U	0.0044 U	0.65 U	0.0069 U	0.0053 U	0.0038 U
1,1,2-Trichloroethane	NS	NS	0.0014 U	0.0017 U	0.0011 U	0.0012 U	0.0014 U	0.003 U	0.0032 U	0.17 U	0.1 U	0.0014 U	0.0015 U	0.08 U	0.00087 U	0.0011 U	0.16 U	0.0017 U	0.0013 U	0.00094 U
1,1,-Dichloroethene	0.33	500	0.0014 U	0.0017 U	0.0011 U	0.0012 U	0.0014 U	0.003 U	0.0032 U	0.17 U	0.1 U	0.0014 U	0.0015 U	0.08 U	0.00087 U	0.0011 U	0.16 U	0.0017 U	0.0013 U	0.00094 U
1,1-Dichloroethane	0.27	240	0.0014 U	0.0017 U	0.0011 U	0.0012 U	0.0014 U	0.003 U	0.0032 U	0.17 U	0.1 U	0.0014 U	0.0015 U	0.08 U	0.00087 U	0.0011 U	0.16 U	0.0017 U	0.0013 U	0.00094 U
1,2,3-Trichlorobenzene	NS	NS	0.0028 U	0.0034 U	0.0022 U	0.0025 U	0.0028 U	0.0061 U	0.0065 U	0.35 U	0.21 U	0.0027 U	0.003 U	0.16 U	0.0017 U	0.0022 U	0.33 U	0.0035 U	0.0027 U	0.0019 U
1,2,4-Trichlorobenzene	NS	NS	0.0028 U	0.0034 U	0.0022 U	0.0025 U	0.0028 U	0.0061 U	0.0065 U	0.35 U	0.21 U	0.0027 U	0.003 U	0.16 U	0.0017 U	0.0022 U	0.33 U	0.0035 U	0.0027 U	0.0019 U
1,2,4-Trimethylbenzene	3.6	190	0.0016 J	0.0025 J	0.039	0.0025 U	0.0028 U	0.0061 U	0.0065 U	1	0.61	0.0027 U	0.0007 J	0.14 J	0.0017 U	0.0016 J	**3.9**	2.7	0.52	0.002
1,2-Dibromo-3-chloropropane	NS	NS	0.0042 U	0.0051 U	0.0034 U	0.0038 U	0.0041 U	0.0091 U	0.0097 U	0.52 U	0.31 U	0.004 U	0.0046 U	0.24 U	0.0026 U	0.0033 U	0.49 U	0.0052 U	0.004 U	0.0028 U
1,2-Dibromoethane	NS	NS	0.0014 U	0.0017 U	0.0011 U	0.0012 U	0.0014 U	0.003 U	0.0032 U	0.17 U	0.1 U	0.0014 U	0.0015 U	0.08 U	0.00087 U	0.0011 U	0.16 U	0.0017 U	0.0013 U	0.00094 U
1,2-Dichlorobenzene	1.1	500	0.0028 U	0.0034 U	0.0022 U	0.0025 U	0.0028 U	0.0061 U	0.0065 U	0.35 U	0.21 U	0.0027 U	0.003 U	0.16 U	0.0017 U	0.0022 U	0.33 U	0.0035 U	0.0027 U	0.0019 U
1,2-Dichloroethane	0.02	30	0.0014 U	0.0017 U	0.0011 U	0.0012 U	0.0014 U	0.003 U	0.0032 U	0.17 U'	0.1 U'	0.0014 U	0.0015 U	0.08 U'	0.00087 U	0.0011 U	0.16 U'	0.0017 U	0.0013 U	0.00094 U
1,2-Dichloroethene, Total	NS	NS	0.0014 U	0.0017 U	0.0011 U	0.0012 U	0.0014 U	0.003 U	0.0032 U	0.17 U	0.1 U	0.0014 U	0.0015 U	0.08 U	0.00087 U	0.0011 U	0.16 U	0.0017 U	0.0013 U	0.00094 U
1,2-Dichloropropane	NS	NS	0.0014 U	0.0017 U	0.0011 U	0.0012 U	0.0014 U	0.003 U	0.0032 U	0.17 U	0.1 U	0.0014 U	0.0015 U	0.08 U	0.00087 U	0.0011 U	0.16 U	0.0017 U	0.0013 U	0.00094 U
1,3,5-Trimethylbenzene	8.4	190	0.00099 J	0.00065 J	0.0022 U	0.0025 U	0.0028 U	0.0061 U	0.0065 U	0.29 J	0.3	0.0027 U	0.0004 J	0.032 J	0.0017 U	0.00042 J	1.4	0.45	0.044	0.0019 U
1,3-Dichlorobenzene	2.4	280	0.0028 U	0.0034 U	0.0022 U	0.0025 U	0.0028 U	0.0061 U	0.0065 U	0.35 U	0.21 U	0.0027 U	0.003 U	0.16 U	0.0017 U	0.0022 U	0.33 U	0.0035 U	0.0027 U	0.0019 U
1,3-Dichloropropene, Total	NS	NS	0.00069 U	0.00085 U	0.00056 U	0.00063 U	0.00069 U	0.0015 U	0.0016 U	0.087 U	0.052 U	0.00068 U	0.00076 U	0.04 U	0.00044 U	0.00055 U	0.082 U	0.00087 U	0.00067 U	0.00047 U
1,4-Dichlorobenzene	1.8	130	0.0028 U	0.0034 U	0.0022 U	0.0025 U	0.0028 U	0.0061 U	0.0065 U	0.35 U	0.21 U	0.0027 U	0.003 U	0.16 U	0.0017 U	0.0022 U	0.33 U	0.0035 U	0.0027 U	0.0019 U
1,4-Dioxane	0.1	130	0.11 U'	0.14 U'	0.09 U	0.1 U	0.11 U'	0.24 U'	0.26 U'	14 U'	8.3 U'	0.11 U'	0.12 U'	6.4 U'	0.07 U	0.088 U	13 U'	0.14 U'	0.11 U'	0.075 U
2-Butanone	0.12	500	0.014 U	0.041	0.011 U	0.012 U	0.014 U	0.035	0.062	1.7 U'	1 U'	0.014 U	0.015 U	0.8 U'	0.0087 U	0.011 U	1.6 U'	0.017 U	0.013 U	0.0094 U
2-Hexanone	NS	NS	0.014 U	0.017 U	0.011 U	0.012 U	0.014 U	0.03 U	0.032 U	1.7 U	1 U	0.014 U	0.015 U	0.8 U	0.0087 U	0.011 U	1.6 U	0.017 U	0.013 U	0.0094 U
4-Methyl-2-Pentanone	NS	NS	0.014 U	0.017 U	0.011 U	0.012 U	0.014 U	0.03 U	0.032 U	1.7 U	1 U	0.014 U	0.015 U	0.8 U	0.0087 U	0.011 U	1.6 U	0.017 U	0.013 U	0.0094 U
Acetone	0.05	500	0.03	**0.16**	0.011 U	0.012 U	0.014 U	**0.2**	**0.3**	1.7 U'	1 U'	0.014 U	**0.066**	0.8 U'	0.022	0.011 U	1.6 U'	**0.22**	**0.079**	0.0094 U
Benzene	0.06	44	0.00026 J	0.00085 U	0.00056 U	0.00063 U	0.00069 U	0.0015 U	0.0016 U	**0.39**	**0.28**	0.00068 U	0.00093	**0.093**	0.00044 U	0.00025 J	**2.9**	**0.073**	0.018	0.00047 U
Bromochloromethane	NS	NS	0.0028 U	0.0034 U	0.0022 U	0.0025 U	0.0028 U	0.0061 U	0.0065 U	0.35 U	0.21 U	0.0027 U	0.003 U	0.16 U	0.0017 U	0.0022 U	0.33 U	0.0035 U	0.0027 U	0.0019 U
Bromodichloromethane	NS	NS	0.00069 U	0.00085 U	0.00056 U	0.00063 U	0.00069 U	0.0015 U	0.0016 U	0.087 U	0.052 U	0.00068 U	0.00076 U	0.04 U	0.00044 U	0.00055 U	0.082 U	0.00087 U	0.00067 U	0.00047 U
Bromoform	NS	NS	0.0056 U	0.0068 U	0.0045 U	0.005 U	0.0055 U	0.012 U	0.013 U	0.7 U	0.42 U	0.0054 U	0.0061 U	0.32 U	0.0035 U	0.0044 U	0.65 U	0.0069 U	0.0053 U	0.0038 U
Bromomethane	NS	NS	0.0028 U	0.0034 U	0.0022 U	0.0025 U	0.0028 U	0.0061 U	0.0065 U	0.35 U	0.21 U	0.0027 U	0.003 U	0.16 U	0.0017 U	0.0022 U	0.33 U	0.0035 U	0.0027 U	0.0019 U
Carbon disulfide	NS	NS	0.014 U	0.017 U	0.011 U	0.012 U	0.014 U	0.03 U	0.032 U	1.7 U	1 U	0.014 U	0.015 U	0.8 U	0.0087 U	0.011 U	1.6 U	0.017 U	0.013 U	0.0094 U
Carbon tetrachloride	0.76	22	0.0014 U	0.0017 U	0.0011 U	0.0012 U	0.0014 U	0.003 U	0.0032 U	0.17 U	0.1 U	0.0014 U	0.0015 U	0.08 U	0.00087 U	0.0011 U	0.16 U	0.0017 U	0.0013 U	0.00094 U
Chlorobenzene	1.1	500	0.00069 U	0.00085 U	0.00056 U	0.00063 U	0.00069 U	0.0015 U	0.0016 U	0.087 U	0.052 U	0.00068 U	0.00076 U	0.04 U	0.00044 U	0.00055 U	0.082 U	0.00087 U	0.00067 U	0.00047 U
Chloroethane	NS	NS	0.0028 U	0.0034 U	0.0022 U	0.0025 U	0.0028 U	0.0061 U	0.0065 U	0.35 U	0.21 U	0.0027 U	0.003 U	0.16 U	0.0017 U	0.0022 U	0.33 U	0.0035 U	0.0027 U	0.0019 U
Chloroform	0.37	350	0.0021 U	0.0026 U	0.0017 U	0.0019 U	0.0021 U	0.0046 U	0.0048 U	0.26 U	0.16 U	0.002 U	0.0023 U	0.12 U	0.0013 U	0.0016 U	0.24 U	0.0026 U	0.002 U	0.0014 U
Chloromethane	NS	NS	0.0056 U	0.0068 U	0.0045 U	0.005 U	0.0055 U	0.012 U	0.013 U	0.7 U	0.42 U	0.0054 U	0.0061 U	0.32 U	0.0035 U	0.0044 U	0.65 U	0.0069 U	0.0053 U	0.0038 U
cis-1,2-Dichloroethene	0.25	500	0.0014 U	0.0017 U	0.0011 U	0.0012 U	0.0014 U	0.003 U	0.0032 U	0.17 U	0.1 U	0.0014 U	0.0015 U	0.08 U	0.00087 U	0.0011 U	0.16 U	0.0017 U	0.0013 U	0.00094 U
cis-1,3-Dichloropropene	NS	NS	0.00069 U	0.00085 U	0.00056 U	0.00063 U	0.00069 U	0.0015 U	0.0016 U	0.087 U	0.052 U	0.00068 U	0.00076 U	0.04 U	0.00044 U	0.00055 U	0.082 U	0.00087 U	0.00067 U	0.00047 U
Cyclohexane	NS	NS	0.017	0.017 U	9.5	0.012 U	0.014 U	0.0099 J	0.011 J	4	4.2	0.014 U	0.0099 J	0.31 J	0.0087 U	0.00064 J	1.3 J	0.33	0.23	0.0094 U
Dibromochloromethane	NS	NS	0.0014 U	0.0017 U	0.0011 U	0.0012 U	0.0014 U	0.003 U	0.0032 U	0.17 U	0.1 U	0.0014 U	0.0015 U	0.08 U	0.00087 U	0.0011 U	0.16 U	0.0017 U	0.0013 U	0.00094 U
Dichlorodifluoromethane	NS	NS	0.014 U	0.017 U	0.011 U	0.012 U	0.014 U	0.03 U	0.032 U	1.7 U	1 U	0.014 U	0.015 U	0.8 U	0.0087 U	0.011 U	1.6 U	0.017 U	0.013 U	0.0094 U
Ethylbenzene	1	390	0.0014 U	0.00029 J	0.0011 U	0.0012 U	0.0014 U	0.003 U	0.0032 U	0.42	0.09 J	0.0014 U	0.00037 J	0.091	0.00016 J	0.00043 J	**2.4**	0.85	0.049	0.00022 J
Isopropylbenzene	NS	NS	0.0014 U	0.00027 J	1	0.0012 U	0.0014 U	0.003 U	0.0032 U	0.93	0.57	0.0014 U	0.00082 J	0.14	0.00068 J	0.00021 J	0.27	0.16	0.04	0.00094 U
Methyl Acetate	NS	NS	0.0056 U	0.0068 U	0.0045 U	0.005 U	0.0055 U	0.012 U	0.013 U	0.3 J	0.19 J	0.0054 U	0.0061 U	0.32 U	0.0035 U	0.0044 U	0.65 U	0.0069 U	0.0053 U	0.0038 U
Methyl cyclohexane	NS	NS	0.014	0.0026 J	57	0.005 U	0.0055 U	0.013	0.018	18	16	0.0054 U	0.027	2.3	0.002 J	0.0044 U	2.7	0.25	0.12	0.0038 U
Methyl tertiary butyl ether (MTBE)	0.93	500	0.0028 U	0.0034 U	0.0022 U	0.0025 U	0.0028 U	0.0061 U	0.0065 U	0.35 U	0.21 U	0.0027 U	0.003 U	0.16 U	0.0017 U	0.0022 U	0.33 U	0.0035 U	0.0027 U	0.0019 U
Methylene chloride	0.05	500	0.0069 U	0.0085 U	0.0056 U	0.0063 U	0.0069 U	0.015 U	0.016 U	0.87 U'	0.52 U'	0.0068 U	0.0076 U	0.4 U'	0.0044 U	0.0055 U	0.82 U'	0.0087 U	0.0067 U	0.0047 U
n-Butylbenzene	12	500	0.0014 U	0.0017 U	0.11	0.0012 U	0.0014 U	0.003 U	0.0032 U	1.4	0.84	0.0014 U	0.0015 U	0.31	0.0017	0.0011 U	0.28	0.035	0.012	0.00094 U
n-Propylbenzene	3.9	500	0.0014 U	0.00038 J	1.4	0.0012 U	0.0014 U	0.003 U	0.0032 U	0.75	0.31	0.0014 U	0.00061 J	0.17	0.00054 J	0.00024 J	0.75	0.21	0.042	0.00094 U
sec-Butylbenzene	11	500	0.0014 U	0.00044 J	1.6	0.0012 U	0.0014 U	0.003 U	0.0032 U	1.5	1.2	0.0014 U	0.00026 J	0.15	0.00081 J	0.0011 U	0.094 J	0.01	0.0045	0.00094 U
Styrene	NS	NS	0.0014 U	0.0017 U	0.0011 U	0.0012 U	0.0014 U	0.003 U	0.0032 U	0.17 U	0.1 U	0.0014 U	0.0015 U	0.08 U	0.00087 U	0.0011 U	0.16 U	0.0017 U	0.0013 U	0.00094 U
tert-Butylbenzene	5.9	500	0.00018 J	0.00065 J	0.84	0.0025 U	0.0028 U	0.0061 U	0.0065 U	0.63	0.66	0.0027 U	0.003 U	0.034 J	0.00026 J	0.0022 U	0.33 U	0.0035 U	0.0027 U	0.0019 U
Tetrachloroethene	1.3	150	0.00069 U	0.00085 U	0.00056 U	0.00063 U	0.00069 U	0.0015 U	0.0016 U	0.087 U	0.052 U	0.00068 U	0.00076 U	0.04 U	0.00044 U	0.00055 U	0.082 U	0.00087 U	0.00067 U	0.00047 U
Toluene	0.7	500	0.0014 U	0.0017 U	0.015	0.0012 U	0.0014 U	0.003 U	0.0032 U	**0.99**	0.45	0.0014 U	0.0015	0.3	0.00087 U	0.0011 U	**9.8**	0.23	0.049	0.00094 U
trans-1,2-Dichloroethene	0.19	500	0.0021 U	0.0026 U	0.0017 U	0.0019 U	0.0021 U	0.0046 U	0.0048 U	0.26 U'	0.16 U	0.002 U	0.0023 U	0.12 U	0.0013 U	0.0016 U	0.24 U'	0.0026 U	0.002 U	0.0014 U
trans-1,3-Dichloropropene	NS	NS	0.0014 U	0.0017 U	0.0011 U	0.0012 U	0.0014 U	0.003 U	0.0032 U	0.17 U	0.1 U	0.0014 U	0.0015 U	0.08 U	0.00087 U	0.0011 U	0.16 U	0.0017 U	0.0013 U	0.00094 U
Trichloroethene	0.47	200	0.00069 U	0.00085 U	0.00056 U	0.00063 U	0.00069 U	0.0015 U	0.0016 U	0.087 U	0.052 U	0.00068 U	0.00076 U	0.04 U	0.00044 U	0.00055 U	0.082 U	0.00087 U	0.00067 U	0.00047 U
Trichlorofluoromethane	NS	NS	0.0056 U	0.0068 U	0.0045 U	0.005 U	0.0055 U	0.012 U	0.013 U	0.7 U	0.42 U	0.0054 U	0.0061 U	0.32 U	0.0035 U	0.0044 U	0.65 U	0.0069 U	0.0053 U	0.0038 U
Vinyl chloride	0.02	13	0.0014 U	0.0017 U	0.0011 U	0.0012 U	0.0014 U	0.003 U	0.0032 U	0.17 U'	0.1 U'	0.0014 U	0.0015 U	0.08 U'	0.00087 U	0.0011 U	0.16 U'	0.0017 U	0.0013 U	0.00094 U
Xylene (m&p)	NS	NS	0.001 J	0.0012 J	0.079	0.0025 U	0.0028 U	0.0061 U	0.0065 U	1.8	0.58	0.0027 U	0.0015 J	0.32	0.0017 U	0.0022 U	11	0.2	0.036	0.0019 U
Xylene (o)	NS	NS	0.00041 J	0.0007 J	0.023	0.0012 U	0.0014 U	0.003 U	0.0032 U	0.41	0.22	0.0014 U	0.00058 J	0.066 J	0.00087 U	0.00093 J	2.5	1.8	0.62	0.00053 J
Xylenes (Total)	1.6	500	0.0014 J	0.0019 J	0.1	0.0012 U	0.0014 U	0.003 U	0.0032 U	**2.2**	0.8	0.0014 U	0.0021 J	0.39 J	0.00087 U	0.00093 J	**14**	**2 J**	0.66	0.00053 J
Total Volatile TICs	NS	NS	0.527 J	0.101 J	0.101 J	ND	ND	ND	0.234 J	ND	ND	ND	ND	ND	ND	0.0254 J	0.0254 J	0.0254 J	0.0254 J	0.0398 J

Notes:
NYSDEC GW Protection SCO = New York State Department of Environmental Conservation Groundwater Protection Soil Cleanup Objectives, from Table 375-6.8 of 6 NYCRR Part 375.
NYSDEC Commercial SCO = New York State Department of Environmental Conservation Restricted Commercial Use Soil Cleanup Objectives, from Table 375-6.8 of 6 NYCRR Part 375.
ft bgs = Feet below ground surface.
mg/kg = Milligrams per kilogram.
Green concentrations exceed the NYSDEC GW Protection SCO.
Highlighted concentrations exceed the NYSDEC Commercial SCO.
— = Sample not analyzed.
NS = No standard currently established.
ND = Not Detected.
U = Not detected above laboratory detection limit.
U' = Laboratory reporting limit exceeds the applicable regulatory standard or criteria being utilized.
J = Result below the reporting limit (estimated value).
DUP = Duplicate sample was taken.
When the applicable state standard applies to mixed isomers and the laboratory reports individual isomers, the total standard is listed for each isomer.
* = Sample was analyzed twice by the laboratory. Higher detections were reported.

Table 5
Soil Reuse Characterization Sampling Results
Summary of Volatile Organic Compounds in Soil.
MJ Painting; Olean, New York.

Sample ID	NYSDEC GW Protection SCO	NYSDEC Commercial SCO	RX-420	RX-420	RX-420	RX-420	RX-421	RX-422	RX-422	RX-422	RX-422	RX-422	RX-423	RX-423	RX-423	RX-423	RX-424	RX-424	RX-424	RX-424	RX-425	RX-425	RX-425 DUP	RX-425	RX-425
Sample Depth (ft bgs)			3	7	7-10	10-12	11	0-1	3	7	10	10-12	3	7	8	10-12	3	6.5	9	10-12	0-1	2	2	7	7-10
Sample Date			11/15/2021	11/15/2021	11/15/2021	11/15/2021	11/11/2021	11/10/2021	11/10/2021	11/10/2021	11/10/2021	11/10/2021	11/11/2021	11/11/2021	11/11/2021	11/11/2021	11/11/2021	11/11/2021	11/11/2021	11/11/2021	11/11/2021	11/11/2021	11/11/2021	11/11/2021	11/11/2021
VOLATILE ORGANIC COMPOUNDS - 8260C (mg/kg)																									
1,1,1-Trichloroethane	0.68	500	0.00069 U	0.0011 U	0.045 U	0.037 U	0.046 U	0.00062 U	0.00063 U	0.085 U	0.036 U	0.029 U	0.00072 U	0.087 U	0.049 U	0.00025 U	0.00056 U	0.00092 U	0.052 U	0.065 U	0.00061 U	0.00086 U	0.00062 U	0.0019 U	0.0011 U
1,1,2,2,-Tetrachloroethane	NS	NS	0.00069 U	0.0011 U	0.045 U	0.037 U	0.046 U	0.00062 U	0.00063 U	0.085 U	0.036 U	0.029 U	0.00072 U	0.087 U	0.049 U	0.00025 U	0.00056 U	0.00092 U	0.052 U	0.065 U	0.00061 U	0.00086 U	0.00062 U	0.0019 U	0.0011 U
1,1,2-Trichloro-1,2,2-trifluoroethane	NS	NS	0.0055 U	0.0091 U	0.36 U	0.3 U	0.37 U	0.005 U	0.005 U	0.68 U	0.29 U	0.23 U	0.0058 U	0.7 U	0.4 U	0.002 U	0.0045 U	0.0074 U	0.41 U	0.52 U	0.0049 U	0.0068 U	0.005 U	0.015 U	0.0089 U
1,1,2-Trichloroethane	NS	NS	0.0014 U	0.0023 U	0.09 U	0.074 U	0.092 U	0.0012 U	0.0013 U	0.17 U	0.073 U	0.058 U	0.0014 U	0.17 U	0.099 U	0.00049 U	0.0011 U	0.0018 U	0.1 U	0.13 U	0.0012 U	0.0017 U	0.0012 U	0.0039 U	0.0022 U
1,1,-Dichloroethene	0.33	500	0.0014 U	0.0023 U	0.09 U	0.074 U	0.092 U	0.0012 U	0.0013 U	0.17 U	0.073 U	0.058 U	0.0014 U	0.17 U	0.099 U	0.00049 U	0.0011 U	0.0018 U	0.1 U	0.13 U	0.0012 U	0.0017 U	0.0012 U	0.0039 U	0.0022 U
1,1-Dichloroethane	0.27	240	0.0014 U	0.0023 U	0.09 U	0.074 U	0.092 U	0.0012 U	0.0013 U	0.17 U	0.073 U	0.058 U	0.0014 U	0.17 U	0.099 U	0.00049 U	0.0011 U	0.0018 U	0.1 U	0.13 U	0.0012 U	0.0017 U	0.0012 U	0.0039 U	0.0022 U
1,2,3-Trichlorobenzene	NS	NS	0.0028 U	0.0045 U	0.18 U	0.15 U	0.18 U	0.0025 U	0.0025 U	0.34 U	0.15 U	0.12 U	0.0029 U	0.35 U	0.2 U	0.00099 U	0.0022 U	0.0037 U	0.21 U	0.26 U	0.0024 U	0.0034 U	0.0025 U	0.0077 U	0.0045 U
1,2,4-Trichlorobenzene	NS	NS	0.0028 U	0.0045 U	0.18 U	0.15 U	0.18 U	0.0025 U	0.0025 U	0.34 U	0.15 U	0.12 U	0.0029 U	0.35 U	0.2 U	0.00099 U	0.0022 U	0.0037 U	0.21 U	0.26 U	0.0024 U	0.0034 U	0.0025 U	0.0077 U	0.0045 U
1,2,4-Trimethylbenzene	3.6	190	0.0028 U	0.033	**21**	3.2	**38**	0.0025 U	0.00046 J	1.4	0.039 J	0.087 J	0.0029 U	0.8	0.35	0.0012	0.0022 U	0.01	1.4	2.8	0.0024 U	0.0034 U	0.0025 U	0.019	0.17
1,2-Dibromo-3-chloropropane	NS	NS	0.0041 U	0.0068 U	0.27 U	0.22 U	0.28 U	0.0037 U	0.0038 U	0.51 U	0.22 U	0.17 U	0.0043 U	0.52 U	0.3 U	0.0015 U	0.0034 U	0.0055 U	0.31 U	0.39 U	0.0037 U	0.0051 U	0.0037 U	0.012 U	0.0067 U
1,2-Dibromoethane	NS	NS	0.0014 U	0.0023 U	0.09 U	0.074 U	0.092 U	0.0012 U	0.0013 U	0.17 U	0.073 U	0.058 U	0.0014 U	0.17 U	0.099 U	0.00049 U	0.0011 U	0.0018 U	0.1 U	0.13 U	0.0012 U	0.0017 U	0.0012 U	0.0039 U	0.0022 U
1,2-Dichlorobenzene	1.1	500	0.0028 U	0.0045 U	0.18 U	0.15 U	0.18 U	0.0025 U	0.0025 U	0.34 U	0.15 U	0.12 U	0.0029 U	0.35 U	0.2 U	0.00099 U	0.0022 U	0.0037 U	0.21 U	0.26 U	0.0024 U	0.0034 U	0.0025 U	0.0077 U	0.0045 U
1,2-Dichloroethane	0.02	30	0.0014 U	0.0023 U	0.09 U'	0.074 U'	0.092 U'	0.0012 U	0.0013 U	0.17 U'	0.073 U'	0.058 U'	0.0014 U	0.17 U'	0.099 U'	0.00049 U	0.0011 U	0.0018 U	0.1 U'	0.13 U'	0.0012 U	0.0017 U	0.0012 U	0.0039 U	0.00098 J
1,2-Dichloroethene, Total	NS	NS	0.0014 U	0.0023 U	0.09 U	0.074 U	0.092 U	0.0012 U	0.0013 U	0.17 U	0.073 U	0.058 U	0.0014 U	0.17 U	0.0017 U	0.00049 U	0.0011 U	0.0018 U	0.0013 U	0.0021 U	0.0012 U	0.0017 U	0.0012 U	0.0039 U	0.0022 U
1,2-Dichloropropane	NS	NS	0.0014 U	0.0023 U	0.09 U	0.074 U	0.092 U	0.0012 U	0.0013 U	0.17 U	0.073 U	0.058 U	0.0014 U	0.17 U	0.099 U	0.00049 U	0.0011 U	0.0018 U	0.1 U	0.13 U	0.0012 U	0.0017 U	0.0012 U	0.0039 U	0.0022 U
1,3,5-Trimethylbenzene	8.4	190	0.0028 U	0.01	7.9	0.13 J	1.8	0.0025 U	0.00026 J	1.8	0.041 J	0.028 J	0.0029 U	0.38	0.13 J	0.00099 U	0.0022 U	0.004	0.25	0.29	0.0024 U	0.0034 U	0.0025 U	0.0083	0.013
1,3-Dichlorobenzene	2.4	280	0.0028 U	0.0045 U	0.18 U	0.15 U	0.18 U	0.0025 U	0.0025 U	0.34 U	0.15 U	0.12 U	0.0029 U	0.35 U	0.2 U	0.00099 U	0.0022 U	0.0037 U	0.21 U	0.26 U	0.0024 U	0.0034 U	0.0025 U	0.0077 U	0.0045 U
1,3-Dichloropropene, Total	NS	NS	0.00069 U	0.0011 U	0.045 U	0.037 U	0.046 U	0.00062 U	0.00063 U	0.085 U	0.036 U	0.029 U	0.00072 U	0.087 U	0.00084 U	0.00025 U	0.00056 U	0.00092 U	0.00066 U	0.001 U	0.00061 U	0.00086 U	0.00062 U	0.0019 U	0.0011 U
1,4-Dichlorobenzene	1.8	130	0.0028 U	0.0045 U	0.18 U	0.15 U	0.022 J	0.0025 U	0.0025 U	0.34 U	0.15 U	0.12 U	0.0029 U	0.35 U	0.2 U	0.00099 U	0.0022 U	0.0037 U	0.21 U	0.26 U	0.0024 U	0.0034 U	0.0025 U	0.0077 U	0.0045 U
1,4-Dioxane	0.1	130	0.11 U'	0.18 U'	7.2 U'	6 U'	7.4 U'	0.1 U	0.1 U	14 U'	5.8 U'	4.6 U'	0.12 U'	14 U'	7.9 U'	0.039 U	0.09 U	0.15 U'	8.3 U'	10 U'	0.098 U	0.14 U'	0.099 U	0.31 U'	0.18 U'
2-Butanone	0.12	500	0.014 U	0.078	0.9 U'	0.74 U'	0.92 U'	0.012 U	0.013 U	1.7 U'	0.73 U'	0.58 U'	0.014 U	1.7 U'	0.99 U'	0.0049 U	0.011 U	0.018	**0.44 J**	1.3 U'	0.012 U	0.017 U	0.012 U	0.039 U	0.022 U
2-Hexanone	NS	NS	0.014 U	0.023 U	0.9 U	0.74 U	0.92 U	0.012 U	0.013 U	1.7 U	0.73 U	0.58 U	0.014 U	1.7 U	0.99 U	0.0049 U	0.011 U	0.018 U	1 U	1.3 U	0.012 U	0.017 U	0.012 U	0.039 U	0.022 U
4-Methyl-2-Pentanone	NS	NS	0.014 U	0.023 U	0.9 U	0.74 U	0.92 U	0.012 U	0.013 U	1.7 U	0.73 U	0.58 U	0.014 U	1.7 U	0.99 U	0.0049 U	0.011 U	0.018 U	1 U	1.3 U	0.012 U	0.017 U	0.012 U	0.039 U	0.022 U
Acetone	0.05	500	0.014 U	**0.28**	0.9 U'	0.74 U'	0.92 U'	0.012 U	**0.077**	1.7 U'	0.73 U'	0.58 U'	0.014 U	1.7 U'	0.99 U'	0.0049 U	0.011 U	**0.061**	1 U'	1.3 U'	0.012 U	0.014 J	0.012 U	**0.85**	**0.092**
Benzene	0.06	44	0.00053 J	0.01	**0.4**	**0.13**	**0.7**	0.00062 U	0.00073	**0.22**	0.014 J	0.013 J	0.00026 J	**0.19**	**0.064**	0.00025 U	0.00056 U	0.0071	**0.68**	**0.3**	0.00061 U	0.00086 U	0.00062 U	0.0017 J	0.0079
Bromochloromethane	NS	NS	0.0028 U	0.0045 U	0.18 U	0.15 U	0.18 U	0.0025 U	0.0025 U	0.34 U	0.15 U	0.12 U	0.0029 U	0.35 U	0.2 U	0.00099 U	0.0022 U	0.0037 U	0.21 U	0.26 U	0.0024 U	0.0034 U	0.0025 U	0.0077 U	0.0045 U
Bromodichloromethane	NS	NS	0.00069 U	0.0011 U	0.045 U	0.037 U	0.046 U	0.00062 U	0.00063 U	0.085 U	0.036 U	0.029 U	0.00072 U	0.087 U	0.049 U	0.00025 U	0.00056 U	0.00092 U	0.052 U	0.065 U	0.00061 U	0.00086 U	0.00062 U	0.0019 U	0.0011 U
Bromoform	NS	NS	0.0055 U	0.0091 U	0.36 U	0.3 U	0.37 U	0.005 U	0.005 U	0.68 U	0.29 U	0.23 U	0.0058 U	0.7 U	0.4 U	0.002 U	0.0045 U	0.0074 U	0.41 U	0.52 U	0.0049 U	0.0068 U	0.005 U	0.015 U	0.0089 U
Bromomethane	NS	NS	0.0028 U	0.0045 U	0.18 U	0.15 U	0.18 U	0.0025 U	0.0025 U	0.34 U	0.15 U	0.12 U	0.0029 U	0.35 U	0.2 U	0.00099 U	0.0022 U	0.0037 U	0.21 U	0.26 U	0.0024 U	0.0034 U	0.0025 U	0.0077 U	0.0045 U
Carbon disulfide	NS	NS	0.014 U	0.023 U	0.9 U	0.74 U	0.92 U	0.012 U	0.013 U	1.7 U	0.73 U	0.58 U	0.014 U	1.7 U	0.99 U	0.0049 U	0.011 U	0.018 U	1 U	1.3 U	0.012 U	0.017 U	0.012 U	0.039 U	0.022 U
Carbon tetrachloride	0.76	22	0.0014 U	0.0023 U	0.09 U	0.074 U	0.092 U	0.0012 U	0.0013 U	0.17 U	0.073 U	0.058 U	0.0014 U	0.17 U	0.099 U	0.00049 U	0.0011 U	0.0018 U	0.1 U	0.13 U	0.0012 U	0.0017 U	0.0012 U	0.0039 U	0.0022 U
Chlorobenzene	1.1	500	0.00069 U	0.0011 U	0.045 U	0.037 U	0.046 U	0.00062 U	0.00063 U	0.085 U	0.036 U	0.029 U	0.00072 U	0.087 U	0.049 U	0.00025 U	0.00056 U	0.00092 U	0.052 U	0.065 U	0.00061 U	0.00086 U	0.00062 U	0.0019 U	0.0011 U
Chloroethane	NS	NS	0.0028 U	0.0045 U	0.18 U	0.15 U	0.18 U	0.0025 U	0.0025 U	0.34 U	0.15 U	0.12 U	0.0029 U	0.35 U	0.2 U	0.00099 U	0.0022 U	0.0037 U	0.21 U	0.26 U	0.0024 U	0.0034 U	0.0025 U	0.0077 U	0.0045 U
Chloroform	0.37	350	0.0021 U	0.0034 U	0.14 U	0.11 U	0.14 U	0.0019 U	0.0019 U	0.25 U	0.11 U	0.086 U	0.0022 U	0.26 U	0.15 U	0.00074 U	0.0017 U	0.0028 U	0.16 U	0.19 U	0.0018 U	0.0026 U	0.0019 U	0.0058 U	0.0034 U
Chloromethane	NS	NS	0.0055 U	0.0091 U	0.36 U	0.3 U	0.37 U	0.005 U	0.005 U	0.68 U	0.29 U	0.23 U	0.0058 U	0.7 U	0.4 U	0.002 U	0.0045 U	0.0074 U	0.098 J	0.52 U	0.0049 U	0.0068 U	0.005 U	0.015 U	0.0089 U
cis-1,2-Dichloroethene	0.25	500	0.0014 U	0.0023 U	0.09 U	0.074 U	0.092 U	0.0012 U	0.0013 U	0.17 U	0.073 U	0.058 U	0.0014 U	0.17 U	0.099 U	0.00049 U	0.0011 U	0.0018 U	0.1 U	0.13 U	0.0012 U	0.0017 U	0.0012 U	0.0039 U	0.0022 U
cis-1,3-Dichloropropene	NS	NS	0.00069 U	0.0011 U	0.045 U	0.037 U	0.046 U	0.00062 U	0.00063 U	0.085 U	0.036 U	0.029 U	0.00072 U	0.087 U	0.049 U	0.00025 U	0.00056 U	0.00092 U	0.052 U	0.065 U	0.00061 U	0.00086 U	0.00062 U	0.0019 U	0.0011 U
Cyclohexane	NS	NS	0.014 U	0.01 J	6.5	0.91	3.4	0.012 U	0.073	35	3	3.8	0.014 U	0.52 J	0.23 J	0.017	0.011 U	0.0048 J	0.1 J	0.21 J	0.012 U	0.017 U	0.012 U	0.36	0.25
Dibromochloromethane	NS	NS	0.0014 U	0.0023 U	0.09 U	0.074 U	0.092 U	0.0012 U	0.0013 U	0.17 U	0.073 U	0.058 U	0.0014 U	0.17 U	0.099 U	0.00049 U	0.0011 U	0.0018 U	0.1 U	0.13 U	0.0012 U	0.0017 U	0.0012 U	0.0039 U	0.0022 U
Dichlorodifluoromethane	NS	NS	0.014 U	0.023 U	0.9 U	0.74 U	0.92 U	0.012 U	0.013 U	1.7 U	0.73 U	0.58 U	0.014 U	1.7 U	0.99 U	0.0049 U	0.011 U	0.018 U	1 U	1.3 U	0.012 U	0.017 U	0.012 U	0.039 U	0.022 U
Ethylbenzene	1	390	0.0014 U	0.0011 J	**9**	**2.4**	1	0.0012 U	0.00032 J	**1.1**	0.073 U	0.058 U	0.0014 U	0.053 J	0.075 J	0.00049 U	0.0011 U	0.0046	0.67	0.63	0.0012 U	0.0017 U	0.0012 U	0.0044	0.0013 J
Isopropylbenzene	NS	NS	0.0014 U	0.0029	1.6	0.25	3.2	0.0012 U	0.00027 J	8.2	0.3	0.4	0.0014 U	0.39	0.14	0.0021	0.0011 U	0.0063	0.1	0.28	0.0012 U	0.0017 U	0.0012 U	0.0016 J	0.013
Methyl Acetate	NS	NS	0.0055 U	0.0091 U	0.36 U	0.3 U	0.37 U	0.005 U	0.005 U	0.68 U	0.29 U	0.23 U	0.0058 U	0.96	0.4 U	0.002 U	0.0045 U	0.0074 U	0.41 U	0.31 J	0.0049 U	0.0068 U	0.005 U	0.015 U	0.0089 U
Methyl cyclohexane	NS	NS	0.0055 U	0.025	10	2.4	14	0.005 U	0.12	460	13	16	0.00094 J	4.3	1.9	0.094	0.0045 U	0.021	0.86	2.8	0.0049 U	0.0068 U	0.005 U	0.81	0.59
Methyl tertiary butyl ether (MTBE)	0.93	500	0.0028 U	0.0045 U	0.18 U	0.15 U	0.18 U	0.0025 U	0.0025 U	0.34 U	0.15 U	0.12 U	0.0029 U	0.35 U	0.2 U	0.00099 U	0.0022 U	0.0037 U	0.21 U	0.26 U	0.0024 U	0.0034 U	0.0025 U	0.0077 U	0.0045 U
Methylene chloride	0.05	500	0.0069 U	0.011 U	0.45 U'	0.37 U'	0.46 U'	0.0062 U	0.0063 U	0.85 U'	0.36 U'	0.29 U'	0.0072 U	0.87 U'	0.49 U'	0.0025 U	0.0056 U	0.0092 U	0.52 U'	0.65 U'	0.0061 U	0.0086 U	0.0062 U	0.019 U	0.011 U
n-Butylbenzene	12	500	0.0014 U	0.00052 J	1	0.18	3	0.0012 U	0.0013 U	3.4	0.21	0.35	0.0014 U	0.24	0.31	0.0061	0.0011 U	0.0014 J	0.25	0.72	0.0012 U	0.0017 U	0.0012 U	0.0011 J	0.014
n-Propylbenzene	3.9	500	0.0014 U	0.0019 J	2.7	0.39	**6.1**	0.0012 U	0.0013 U	**13**	0.52	0.59	0.0014 U	0.35	0.11	0.00049 U	0.0011 U	0.0046	0.31	0.47	0.0012 U	0.0017 U	0.0012 U	0.0027 J	0.018
sec-Butylbenzene	11	500	0.0014 U	0.00097 J	0.65	0.12	1.7	0.0012 U	0.0013 U	8.2	0.25	0.38	0.0014 U	0.21	0.17	0.019	0.0011 U	0.002	0.07 J	0.28	0.0012 U	0.0017 U	0.0012 U	0.00076 J	0.0071
Styrene	NS	NS	0.0014 U	0.0023 U	0.09 U	0.074 U	0.023 J	0.0012 U	0.0013 U	0.17 U	0.073 U	0.058 U	0.0014 U	0.17 U	0.099 U	0.00049 U	0.0011 U	0.0018 U	0.1 U	0.031 J	0.0012 U	0.0017 U	0.0012 U	0.0039 U	0.0022 U
tert-Butylbenzene	5.9	500	0.0028 U	0.0045 U	0.043 J	0.15 U	0.18 U	0.0025 U	0.00019 J	5.4	0.11 J	0.14	0.0029 U	0.059 J	0.05 J	0.014	0.0022 U	0.00044 J	0.21 U	0.049 J	0.0024 U	0.0034 U	0.0025 U	0.0077 U	0.0011 J
Tetrachloroethene	1.3	150	0.00069 U	0.0011 U	0.045 U	0.037 U	0.046 U	0.00062 U	0.00063 U	0.085 U	0.036 U	0.029 U	0.00072 U	0.087 U	0.049 U	0.00025 U	0.00056 U	0.00092 U	0.052 U	0.065 U	0.00061 U	0.00086 U	0.00062 U	0.0019 U	0.0011 U
Toluene	0.7	500	0.0014 U	0.0045	**1.3**	0.16	**2.5**	0.0012 U	0.0018	**4.3**	0.059 J	0.053 J	0.0014 U	0.47	0.26	0.0019	0.0011 U	0.02	**2.6**	**1.4**	0.0012 U	0.0017 U	0.0012 U	0.0038 J	0.014
trans-1,2-Dichloroethene	0.19	500	0.0021 U	0.0034 U	0.14 U	0.11 U	0.14 U	0.0019 U	0.0019 U	0.25 U'	0.11 U	0.086 U	0.0022 U	0.26 U'	0.15 U	0.00074 U	0.0017 U	0.0028 U	0.16 U	0.19 U	0.0018 U	0.0026 U	0.0019 U	0.0058 U	0.0034 U
trans-1,3-Dichloropropene	NS	NS	0.0014 U	0.0023 U	0.09 U	0.074 U	0.092 U	0.0012 U	0.0013 U	0.17 U	0.073 U	0.058 U	0.0014 U	0.17 U	0.099 U	0.00049 U	0.0011 U	0.0018 U	0.1 U	0.13 U	0.0012 U	0.0017 U	0.0012 U	0.0039 U	0.0022 U
Trichloroethene	0.47	200	0.00069 U	0.0011 U	0.045 U	0.037 U	0.046 U	0.00062 U	0.00063 U	0.085 U	0.036 U	0.029 U	0.00072 U	0.087 U	0.049 U	0.00025 U	0.00056 U	0.00092 U	0.052 U	0.065 U	0.00061 U	0.00086 U	0.00062 U	0.0019 U	0.0011 U
Trichlorofluoromethane	NS	NS	0.0055 U	0.0091 U	0.36 U	0.3 U	0.37 U	0.005 U	0.005 U	0.68 U	0.29 U	0.23 U	0.0058 U	0.7 U	0.4 U	0.002 U	0.0045 U	0.0074 U	0.41 U	0.52 U	0.0049 U	0.0068 U	0.005 U	0.015 U	0.0089 U
Vinyl chloride	0.02	13	0.0014 U	0.0023 U	0.09 U'	0.074 U'	0.092 U'	0.0012 U	0.0013 U	0.17 U'	0.073 U'	0.058 U'	0.0014 U	0.17 U'	0.099 U'	0.00049 U	0.0011 U	0.0018 U	0.1 U'	0.13 U'	0.0012 U	0.0017 U	0.0012 U	0.0039 U	0.0022 U
Xylene (m&p)	NS	NS	0.0028 U	0.01	5.5	0.23	3.7	0.0025 U	0.0011 J	4.4	0.14 J	0.11 J	0.0029 U	0.98	0.45	0.00099 U	0.0022 U	0.016	2.7	1.9	0.0024 U	0.0034 U	0.0025 U	0.016	0.018
Xylene (o)	NS	NS	0.0014 U	0.0085	16	4.2	0.73	0.0012 U	0.00058 J	4.3	0.06 J	0.055 J	0.0014 U	0.3	0.13	0.0026	0.0011 U	0.0078	0.6	0.4	0.0012 U	0.0017 U	0.0012 U	0.009	0.0084
Xylenes (Total)	1.6	500	0.0014 U	0.019	**22**	**4.4**	**4.4**	0.0012 U	0.0017 J	**8.7**	0.2 J	0.17 J	0.0014 U	1.3	0.58	0.0026	0.0011 U	0.024	**3.3**	**2.3**	0.0012 U	0.0017 U	0.0012 U	0.025	0.026
Total Volatile TICs	NS	NS	0.0398 J	0.0398 J	0.0398 J	11.9 J	135 J	0.00687 J	0.00687 J	0.00687 J	0.00687 J	0.00687 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

Notes:

NYSDEC GW Protection SCO = New York State Department of Environmental Conservation Groundwater Protection Soil Cleanup Objectives, from Table 375-6.8 of 6 NYCRR Part 375.

NYSDEC Commercial SCO = New York State Department of Environmental Conservation Restricted Commercial Use Soil Cleanup Objectives, from Table 375-6.8 of 6 NYCRR Part 375.

ft bgs = Feet below ground surface.

mg/kg = Milligrams per kilogram.

Green concentrations exceed the NYSDEC GW Protection SCO.

Highlighted concentrations exceed the NYSDEC Commercial SCO.

— = Sample not analyzed.

NS = No standard currently established.

ND = Not Detected.

U = Not detected above laboratory detection limit.

U' = Laboratory reporting limit exceeds the applicable regulatory standard or criteria being utilized.

J = Result below the reporting limit (estimated value).

DUP = Duplicate sample was taken.

When the applicable state standard applies to mixed isomers and the laboratory reports individual isomers, the total standard is listed for each isomer.

* = Sample was analyzed twice by the laboratory. Higher detections were reported.

Table 5
Soil Reuse Characterization Sampling Results
Summary of Volatile Organic Compounds in Soil.
MJ Painting; Olean, New York.

Sample ID	NYSDEC GW Protection SCO	NYSDEC Commercial SCO	RX-425	RX-426	RX-426	RX-426	RX-426	RX-427	RX-427	RX-427	RX-427	RX-428	RX-428	RX-428	RX-428	RX-429	RX-429	RX-429	RX-429	RX-429	RX-430	RX-430	RX-430	RX-430	RX-431	RX-431
Sample Depth (ft bgs)			10-12	3	7	7-10	10-12	2-3	6	7-10	10-12	2	7.5	10	10-12	0-1	3	6	9	10-12	2	6.5	7-10	10-12	3.5	7
Sample Date			11/11/2021	11/11/2021	11/11/2021	11/11/2021	11/11/2021	11/16/2021	11/16/2021	11/16/2021	11/16/2021	11/10/2021	11/10/2021	11/10/2021	11/10/2021	11/10/2021	11/10/2021	11/10/2021	11/10/2021	11/10/2021	11/10/2021	11/10/2021	11/10/2021	11/10/2021	11/10/2021	11/10/2021
VOLATILE ORGANIC COMPOUNDS - 8260C (mg/kg)																										
1,1,1-Trichloroethane	0.68	500	0.034 U	0.0007 U	0.052 U	0.06 U	0.095 U	0.00052 U	0.00044 U	0.00096 U	0.00054 U	0.00065 U	0.00091 U	0.036 U	0.001 U	0.00053 U	0.00092 U	0.0012 U	0.06 U	0.00045 U	0.00054 U	0.00064 U	0.038 U	0.028 U	0.00067 U	0.043 U
1,1,2,2,-Tetrachloroethane	NS	NS	0.034 U	0.0007 U	0.052 U	0.06 U	0.095 U	0.00052 U	0.00044 U	0.00096 U	0.00054 U	0.00065 U	0.00091 U	0.036 U	0.001 U	0.00053 U	0.00092 U	0.0012 U	0.06 U	0.00045 U	0.00054 U	0.00064 U	0.038 U	0.028 U	0.00067 U	0.043 U
1,1,2-Trichloro-1,2,2-trifluoroethane	NS	NS	0.27 U	0.0056 U	0.42 U	0.48 U	0.76 U	0.0041 U	0.0035 U	0.0077 U	0.0043 U	0.0052 U	0.0073 U	0.29 U	0.0082 U	0.0043 U	0.0074 U	0.0093 U	0.48 U	0.0036 U	0.0044 U	0.0051 U	0.3 U	0.22 U	0.0054 U	0.34 U
1,1,2-Trichloroethane	NS	NS	0.068 U	0.0014 U	0.1 U	0.12 U	0.19 U	0.001 U	0.00088 U	0.0019 U	0.0011 U	0.0013 U	0.0018 U	0.072 U	0.002 U	0.0011 U	0.0018 U	0.0023 U	0.12 U	0.0009 U	0.0011 U	0.0013 U	0.075 U	0.056 U	0.0013 U	0.085 U
1,1,-Dichloroethene	0.33	500	0.068 U	0.0014 U	0.1 U	0.12 U	0.19 U	0.001 U	0.00088 U	0.0019 U	0.0011 U	0.0013 U	0.0018 U	0.072 U	0.002 U	0.0011 U	0.0018 U	0.0023 U	0.12 U	0.0009 U	0.0011 U	0.0013 U	0.075 U	0.056 U	0.0013 U	0.085 U
1,1-Dichloroethane	0.27	240	0.068 U	0.0014 U	0.1 U	0.12 U	0.19 U	0.001 U	0.00088 U	0.0019 U	0.0011 U	0.0013 U	0.0018 U	0.072 U	0.002 U	0.0011 U	0.0018 U	0.0023 U	0.12 U	0.0009 U	0.0011 U	0.0013 U	0.075 U	0.056 U	0.0013 U	0.085 U
1,2,3-Trichlorobenzene	NS	NS	0.14 U	0.0028 U	0.21 U	0.24 U	0.38 U	0.0021 U	0.0018 U	0.0038 U	0.0022 U	0.0026 U	0.0036 U	0.14 U	0.0041 U	0.0021 U	0.0037 U	0.0047 U	0.24 U	0.0018 U	0.0022 U	0.0025 U	0.15 U	0.11 U	0.0027 U	0.17 U
1,2,4-Trichlorobenzene	NS	NS	0.14 U	0.0028 U	0.21 U	0.24 U	0.38 U	0.0021 U	0.0018 U	0.0038 U	0.0022 U	0.0026 U	0.0036 U	0.14 U	0.0041 U	0.0021 U	0.0037 U	0.0047 U	0.24 U	0.0018 U	0.0022 U	0.0025 U	0.15 U	0.11 U	0.0027 U	0.17 U
1,2,4-Trimethylbenzene	3.6	190	**14**	0.0028 U	0.63	**6.8**	**21**	0.0021 U	0.0018 U	0.0022 J	**4**	0.0026 U	0.0036 U	0.037 J	0.0041 U	0.0021 U	0.0037 U	0.0053	0.71	0.06	0.0022 U	0.00044 J	0.19	**12**	0.0027 U	**5.5**
1,2-Dibromo-3-chloropropane	NS	NS	0.2 U	0.0042 U	0.31 U	0.36 U	0.57 U	0.0031 U	0.0026 U	0.0058 U	0.0032 U	0.0039 U	0.0055 U	0.22 U	0.0062 U	0.0032 U	0.0055 U	0.007 U	0.36 U	0.0027 U	0.0033 U	0.0038 U	0.22 U	0.17 U	0.004 U	0.26 U
1,2-Dibromoethane	NS	NS	0.068 U	0.0014 U	0.1 U	0.12 U	0.19 U	0.001 U	0.00088 U	0.0019 U	0.0011 U	0.0013 U	0.0018 U	0.072 U	0.002 U	0.0011 U	0.0018 U	0.0023 U	0.12 U	0.0009 U	0.0011 U	0.0013 U	0.075 U	0.056 U	0.0013 U	0.085 U
1,2-Dichlorobenzene	1.1	500	0.14 U	0.0028 U	0.21 U	0.24 U	0.38 U	0.0021 U	0.0018 U	0.0038 U	0.0022 U	0.0026 U	0.0036 U	0.14 U	0.0041 U	0.0021 U	0.0037 U	0.0047 U	0.24 U	0.0018 U	0.0022 U	0.0025 U	0.15 U	0.11 U	0.0027 U	0.17 U
1,2-Dichloroethane	0.02	30	0.068 U'	0.0014 U	0.1 U'	0.12 U'	0.19 U'	0.001 U	0.00088 U	0.0019 U	0.0011 U	0.0013 U	0.0018 U	0.072 U'	0.002 U	0.0011 U	0.0018 U	0.0023 U	0.12 U'	0.0009 U	0.0011 U	0.0013 U	0.075 U'	0.056 U'	0.0013 U	0.085 U'
1,2-Dichloroethene, Total	NS	NS	0.068 U	0.0014 U	0.1 U	0.12 U	0.19 U	0.001 U	0.00088 U	0.0019 U	0.0011 U	0.0013 U	0.0018 U	0.072 U	0.002 U	0.0011 U	0.0018 U	0.0023 U	0.12 U	0.0009 U	0.0011 U	0.0013 U	0.075 U	0.056 U	0.0013 U	0.085 U
1,2-Dichloropropane	NS	NS	0.068 U	0.0014 U	0.1 U	0.12 U	0.19 U	0.001 U	0.00088 U	0.0019 U	0.0011 U	0.0013 U	0.0018 U	0.072 U	0.002 U	0.0011 U	0.0018 U	0.0023 U	0.12 U	0.0009 U	0.0011 U	0.0013 U	0.075 U	0.056 U	0.0013 U	0.085 U
1,3,5-Trimethylbenzene	8.4	190	1.5	0.0028 U	0.43	3.6	6.2	0.0021 U	0.0018 U	0.0038 U	0.58	0.0026 U	0.0036 U	0.019 J	0.0041 U	0.0021 U	0.0037 U	0.0016 J	0.22 J	0.0036	0.0022 U	0.0025 U	0.056 J	0.74	0.0027 U	1.8
1,3-Dichlorobenzene	2.4	280	0.14 U	0.0028 U	0.21 U	0.037 J	0.38 U	0.0021 U	0.0018 U	0.0038 U	0.0022 U	0.0026 U	0.0036 U	0.14 U	0.0041 U	0.0021 U	0.0037 U	0.0047 U	0.24 U	0.0018 U	0.0022 U	0.0025 U	0.15 U	0.11 U	0.0027 U	0.17 U
1,3-Dichloropropene, Total	NS	NS	0.034 U	0.0007 U	0.052 U	0.06 U	0.095 U	0.00052 U	0.00044 U	0.00096 U	0.00054 U	0.00065 U	0.00091 U	0.036 U	0.001 U	0.00053 U	0.00092 U	0.0012 U	0.06 U	0.00045 U	0.00054 U	0.00064 U	0.038 U	0.028 U	0.00067 U	0.043 U
1,4-Dichlorobenzene	1.8	130	0.14 U	0.0028 U	0.21 U	0.24 U	0.38 U	0.0021 U	0.0018 U	0.0038 U	0.0022 U	0.0026 U	0.0036 U	0.14 U	0.0041 U	0.0021 U	0.0037 U	0.0047 U	0.24 U	0.0018 U	0.0022 U	0.0025 U	0.15 U	0.11 U	0.0027 U	0.17 U
1,4-Dioxane	0.1	130	5.4 U'	0.11 U'	8.4 U'	9.6 U'	15 U'	0.082 U	0.07 U	0.15 U'	0.086 U	0.1 U	0.14 U'	5.8 U'	0.16 U'	0.085 U	0.15 U'	0.19 U'	9.5 U'	0.072 U	0.087 U	0.1 U	6 U'	4.4 U'	0.11 U'	6.8 U'
2-Butanone	0.12	500	0.68 U'	0.014 U	1 U'	1.2 U'	1.9 U'	0.01 U	0.0088 U	0.019 U	0.011 U	0.013 U	0.015 J	0.72 U'	0.02 U	0.011 U	0.018 U	0.028	1.2 U'	0.009 U	0.011 U	0.013 U	0.75 U'	0.56 U'	0.013 U	0.85 U'
2-Hexanone	NS	NS	0.68 U	0.014 U	1 U	1.2 U	1.9 U	0.01 U	0.0088 U	0.019 U	0.011 U	0.013 U	0.018 U	0.72 U	0.02 U	0.011 U	0.018 U	0.023 U	1.2 U	0.009 U	0.011 U	0.013 U	0.75 U	0.56 U	0.013 U	0.85 U
4-Methyl-2-Pentanone	NS	NS	0.68 U	0.014 U	1 U	1.2 U	1.9 U	0.01 U	0.0088 U	0.019 U	0.011 U	0.013 U	0.018 U	0.72 U	0.02 U	0.011 U	0.018 U	0.023 U	1.2 U	0.009 U	0.011 U	0.013 U	0.75 U	0.56 U	0.013 U	0.85 U
Acetone	0.05	500	0.68 U'	0.014 U	1 U'	1.2 U'	1.9 U'	0.01 U	0.0088 U	0.019 U	0.011 U	0.013 U	**0.09**	0.72 U'	0.02 U	0.011 U	0.018 U	**0.17**	1.2 U'	0.045	0.011 U	**0.056**	0.75 U'	0.56 U'	0.013 U	0.85 U'
Benzene	0.06	44	0.027 J	0.00056 J	0.038 J	**0.79**	**1.1**	0.00052 U	0.00044 U	0.003	0.0015	0.00065 U	0.0024	0.036 U	0.001 U	0.00053 U	0.00077 J	0.006	**0.69**	0.00077	0.00054 U	0.00082	0.024 J	0.028 U	0.00065 J	**0.32**
Bromochloromethane	NS	NS	0.14 U	0.0028 U	0.21 U	0.24 U	0.38 U	0.0021 U	0.0018 U	0.0038 U	0.0022 U	0.0026 U	0.0036 U	0.14 U	0.0041 U	0.0021 U	0.0037 U	0.0047 U	0.24 U	0.0018 U	0.0022 U	0.0025 U	0.15 U	0.11 U	0.0027 U	0.17 U
Bromodichloromethane	NS	NS	0.034 U	0.0007 U	0.052 U	0.06 U	0.095 U	0.00052 U	0.00044 U	0.00096 U	0.00054 U	0.00065 U	0.00091 U	0.036 U	0.001 U	0.00053 U	0.00092 U	0.0012 U	0.06 U	0.00045 U	0.00054 U	0.00064 U	0.038 U	0.028 U	0.00067 U	0.043 U
Bromoform	NS	NS	0.27 U	0.0056 U	0.42 U	0.48 U	0.76 U	0.0041 U	0.0035 U	0.0077 U	0.0043 U	0.0052 U	0.0073 U	0.29 U	0.0082 U	0.0043 U	0.0074 U	0.0093 U	0.48 U	0.0036 U	0.0044 U	0.0051 U	0.3 U	0.22 U	0.0054 U	0.34 U
Bromomethane	NS	NS	0.14 U	0.0028 U	0.21 U	0.24 U	0.38 U	0.0021 U	0.0018 U	0.0038 U	0.0022 U	0.0026 U	0.0036 U	0.14 U	0.0041 U	0.0021 U	0.0037 U	0.0047 U	0.24 U	0.0018 U	0.0022 U	0.0025 U	0.15 U	0.11 U	0.0027 U	0.17 U
Carbon disulfide	NS	NS	0.68 U	0.014 U	1 U	1.2 U	1.9 U	0.01 U	0.0088 U	0.019 U	0.011 U	0.013 U	0.018 U	0.72 U	0.02 U	0.011 U	0.018 U	0.023 U	1.2 U	0.009 U	0.011 U	0.013 U	0.75 U	0.56 U	0.013 U	0.85 U
Carbon tetrachloride	0.76	22	0.068 U	0.0014 U	0.1 U	0.12 U	0.19 U	0.001 U	0.00088 U	0.0019 U	0.0011 U	0.0013 U	0.0018 U	0.072 U	0.002 U	0.0011 U	0.0018 U	0.0023 U	0.12 U	0.0009 U	0.0011 U	0.0013 U	0.075 U	0.056 U	0.0013 U	0.085 U
Chlorobenzene	1.1	500	0.034 U	0.0007 U	0.052 U	0.06 U	0.095 U	0.00052 U	0.00044 U	0.00096 U	0.00054 U	0.00065 U	0.00091 U	0.036 U	0.001 U	0.00053 U	0.00092 U	0.0012 U	0.06 U	0.00045 U	0.00054 U	0.00064 U	0.038 U	0.028 U	0.00067 U	0.043 U
Chloroethane	NS	NS	0.14 U	0.0028 U	0.21 U	0.24 U	0.38 U	0.0021 U	0.0018 U	0.0038 U	0.0022 U	0.0026 U	0.0036 U	0.14 U	0.0041 U	0.0021 U	0.0037 U	0.0047 U	0.24 U	0.0018 U	0.0022 U	0.0025 U	0.15 U	0.11 U	0.0027 U	0.17 U
Chloroform	0.37	350	0.1 U	0.0021 U	0.16 U	0.18 U	0.29 U	0.0015 U	0.0013 U	0.0029 U	0.0016 U	0.0019 U	0.0027 U	0.11 U	0.0031 U	0.0016 U	0.0028 U	0.0035 U	0.18 U	0.0014 U	0.0016 U	0.0019 U	0.11 U	0.083 U	0.002 U	0.13 U
Chloromethane	NS	NS	0.27 U	0.0056 U	0.42 U	0.48 U	0.76 U	0.0041 U	0.0035 U	0.0077 U	0.0043 U	0.0052 U	0.0073 U	0.29 U	0.0082 U	0.0043 U	0.0074 U	0.0093 U	0.48 U	0.0036 U	0.0044 U	0.0051 U	0.3 U	0.22 U	0.0054 U	0.34 U
cis-1,2-Dichloroethene	0.25	500	0.068 U	0.0014 U	0.1 U	0.12 U	0.19 U	0.001 U	0.00088 U	0.0019 U	0.0011 U	0.0013 U	0.0018 U	0.072 U	0.002 U	0.0011 U	0.0018 U	0.0023 U	0.12 U	0.0009 U	0.0011 U	0.0013 U	0.075 U	0.056 U	0.0013 U	0.085 U
cis-1,3-Dichloropropene	NS	NS	0.034 U	0.0007 U	0.052 U	0.06 U	0.095 U	0.00052 U	0.00044 U	0.00096 U	0.00054 U	0.00065 U	0.00091 U	0.036 U	0.001 U	0.00053 U	0.00092 U	0.0012 U	0.06 U	0.00045 U	0.00054 U	0.00064 U	0.038 U	0.028 U	0.00067 U	0.043 U
Cyclohexane	NS	NS	4.1	0.014 U	2.8	8.1	18	0.01 U	0.0088 U	0.012 J	0.26	0.013 U	0.018 U	0.63 J	0.02 U	0.011 U	0.018 U	0.023 U	0.22 J	0.0055 J	0.011 U	0.026	0.55 J	3.8	0.0056 J	18
Dibromochloromethane	NS	NS	0.068 U	0.0014 U	0.1 U	0.12 U	0.19 U	0.001 U	0.00088 U	0.0019 U	0.0011 U	0.0013 U	0.0018 U	0.072 U	0.002 U	0.0011 U	0.0018 U	0.0023 U	0.12 U	0.0009 U	0.0011 U	0.0013 U	0.075 U	0.056 U	0.0013 U	0.085 U
Dichlorodifluoromethane	NS	NS	0.68 U	0.014 U	1 U	1.2 U	1.9 U	0.01 U	0.0088 U	0.019 U	0.011 U	0.013 U	0.018 U	0.72 U	0.02 U	0.011 U	0.018 U	0.023 U	1.2 U	0.009 U	0.011 U	0.013 U	0.75 U	0.56 U	0.013 U	0.85 U
Ethylbenzene	1	390	0.18	0.00029 J	0.057 J	**1.3**	**2.6**	0.001 U	0.00088 U	0.0006 J	**1.1**	0.0013 U	0.0018 U	0.072 U	0.002 U	0.0011 U	0.0018 U	0.00093 J	0.14	0.002	0.0011 U	0.0013 U	0.039 J	0.056 U	0.00021 J	0.38
Isopropylbenzene	NS	NS	0.94	0.0014 U	0.052 J	1.5	2.6	0.001 U	0.00088 U	0.00048 J	0.31	0.0013 U	0.0018 U	0.2	0.002 U	0.0011 U	0.0018 U	0.00072 J	0.072 J	0.0091	0.0011 U	0.00017 J	0.064 J	1.4	0.0013 U	0.39
Methyl Acetate	NS	NS	0.27 U	0.0056 U	0.54	0.48 U	0.76 U	0.0041 U	0.0035 U	0.0077 U	0.0043 U	0.0052 U	0.0073 U	0.076 J	0.0082 U	0.0043 U	0.0074 U	0.0093 U	0.48 U	0.0036 U	0.0044 U	0.0051 U	0.21 J	0.22 U	0.0054 U	0.34 U
Methyl cyclohexane	NS	NS	8.4	0.0056 U	6.9	26	52	0.00087 J	0.0035 U	0.029	2.9	0.0052 U	0.0073 U	5	0.0082 U	0.0043 U	0.0074 U	0.0068 J	0.68	0.029	0.0044 U	0.049	2.2	26	0.0066	54
Methyl tertiary butyl ether (MTBE)	0.93	500	0.14 U	0.0028 U	0.21 U	0.24 U	0.38 U	0.0021 U	0.0018 U	0.0038 U	0.0022 U	0.0026 U	0.0036 U	0.14 U	0.0041 U	0.0021 U	0.0037 U	0.0047 U	0.24 U	0.0018 U	0.0022 U	0.0025 U	0.15 U	0.11 U	0.0027 U	0.17 U
Methylene chloride	0.05	500	0.34 U'	0.007 U	0.52 U'	0.6 U'	0.95 U'	0.0052 U	0.0044 U	0.0096 U	0.0054 U	0.0065 U	0.0091 U	0.36 U'	0.01 U	0.0053 U	0.0092 U	0.012 U	0.6 U'	0.0045 U	0.0054 U	0.0064 U	0.38 U'	0.28 U'	0.0067 U	0.43 U'
n-Butylbenzene	12	500	0.6	0.0014 U	0.053 J	2	3.5	0.001 U	0.00088 U	0.0019 U	0.15	0.0013 U	0.0018 U	0.12	0.002 U	0.0011 U	0.0018 U	0.0023 U	0.039 J	0.0042	0.0011 U	0.0013 U	0.17	2.2	0.0013 U	0.54
n-Propylbenzene	3.9	500	1.7	0.0014 U	0.083 J	3.1	**5.3**	0.001 U	0.00088 U	0.00041 J	0.41	0.0013 U	0.0018 U	0.47	0.002 U	0.0011 U	0.0018 U	0.0023 U	0.058 J	0.015	0.0011 U	0.0013 U	0.16	3.2	0.0013 U	0.73
sec-Butylbenzene	11	500	0.22	0.0014 U	0.026 J	0.75	1.2	0.001 U	0.00088 U	0.0019 U	0.069	0.0013 U	0.0018 U	0.26	0.002 U	0.0011 U	0.0018 U	0.00057 J	0.052 J	0.0017	0.0011 U	0.0013 U	0.058 J	0.71	0.0013 U	0.18
Styrene	NS	NS	0.068 U	0.0014 U	0.1 U	0.12 U	0.19 U	0.001 U	0.00088 U	0.0019 U	0.0011 U	0.0013 U	0.0018 U	0.072 U	0.002 U	0.0011 U	0.0018 U	0.0023 U	0.12 U	0.0006 J	0.0011 U	0.0013 U	0.075 U	0.056 U	0.0013 U	0.085 U
tert-Butylbenzene	5.9	500	0.022 J	0.0028 U	0.21 U	0.07 J	0.12 J	0.0021 U	0.0018 U	0.0038 U	0.0022 U	0.0026 U	0.0036 U	0.044 J	0.0041 U	0.0021 U	0.0037 U	0.0047 U	0.24 U	0.0018 U	0.0022 U	0.0025 U	0.15 U	0.11 U	0.0027 U	0.17 U
Tetrachloroethene	1.3	150	0.034 U	0.0007 U	0.052 U	0.06 U	0.095 U	0.00052 U	0.00044 U	0.00096 U	0.00054 U	0.00065 U	0.00091 U	0.036 U	0.001 U	0.00053 U	0.00092 U	0.0012 U	0.06 U	0.00045 U	0.00054 U	0.00064 U	0.038 U	0.028 U	0.00067 U	0.043 U
Toluene	0.7	500	0.13	0.0014 U	0.31	**3**	**4.6**	0.001 U	0.00088 U	0.0045	0.055	0.0013 U	0.0019	0.072 U	0.002 U	0.0011 U	0.0018 U	0.0072	**1.4**	0.0009	0.0011 U	0.0013 U	0.12	0.059	0.0013 U	**1.5**
trans-1,2-Dichloroethene	0.19	500	0.1 U	0.0021 U	0.16 U	0.18 U	0.29 U'	0.0015 U	0.0013 U	0.0029 U	0.0016 U	0.0019 U	0.0027 U	0.11 U	0.0031 U	0.0016 U	0.0028 U	0.0035 U	0.18 U	0.0014 U	0.0016 U	0.0019 U	0.11 U	0.083 U	0.002 U	0.13 U
trans-1,3-Dichloropropene	NS	NS	0.068 U	0.0014 U	0.1 U	0.12 U	0.19 U	0.001 U	0.00088 U	0.0019 U	0.0011 U	0.0013 U	0.0018 U	0.072 U	0.002 U	0.0011 U	0.0018 U	0.0023 U	0.12 U	0.0009 U	0.0011 U	0.0013 U	0.075 U	0.056 U	0.0013 U	0.085 U
Trichloroethene	0.47	200	0.034 U	0.0007 U	0.052 U	0.06 U	0.095 U	0.00052 U	0.00044 U	0.00096 U	0.00054 U	0.00065 U	0.00091 U	0.036 U	0.001 U	0.00053 U	0.00092 U	0.0012 U	0.06 U	0.00045 U	0.00054 U	0.00064 U	0.038 U	0.028 U	0.00067 U	0.043 U
Trichlorofluoromethane	NS	NS	0.27 U	0.0056 U	0.42 U	0.48 U	0.76 U	0.0041 U	0.0035 U	0.0077 U	0.0043 U	0.0052 U	0.0073 U	0.29 U	0.0082 U	0.0043 U	0.0074 U	0.0093 U	0.48 U	0.0036 U	0.0044 U	0.0051 U	0.3 U	0.22 U	0.0054 U	0.34 U
Vinyl chloride	0.02	13	0.068 U'	0.0014 U	0.1 U'	0.12 U'	0.19 U'	0.001 U	0.00088 U	0.0019 U	0.0011 U	0.0013 U	0.0018 U	0.072 U'	0.002 U	0.0011 U	0.0018 U	0.0023 U	0.12 U'	0.0009 U	0.0011 U	0.0013 U	0.075 U'	0.056 U'	0.0013 U	0.085 U'
Xylene (m&p)	NS	NS	0.21	0.0028 U	0.71	6.6	12	0.0021 U	0.0018 U	0.0036 J	0.16	0.0026 U	0.0036 U	0.14 U	0.0041 U	0.0021 U	0.0037 U	0.005	0.91	0.0049	0.0022 U	0.00085 J	0.15	0.21	0.00083 J	3
Xylene (o)	NS	NS	1.4	0.0014 U	0.3	0.9	1.5	0.001 U	0.00088 U	0.0013 J	2	0.0013 U	0.0018 U	0.072 U	0.002 U	0.0011 U	0.0018 U	0.0019 J	0.33	0.0022	0.0011 U	0.00041 J	0.063 J	0.14	0.0013 U	1.3
Xylenes (Total)	1.6	500	1.6	0.0014 U	1	**7.5**	**14**	0.001 U	0.00088 U	0.0049 J	**2.2**	0.0013 U	0.0018 U	0.072 U	0.002 U	0.0011 U	0.0018 U	0.0069 J	1.2	0.0071	0.0011 U	0.0013 J	0.21 J	0.35	0.00083 J	**4.3**
Total Volatile TICs	NS	NS	ND	0.0193 J	0.0193 J	0.0193 J	0.0193 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.0714 J	0.0714 J

Notes:

NYSDEC GW Protection SCO = New York State Department of Environmental Conservation Groundwater Protection Soil Cleanup Objectives, from Table 375-6.8 of 6 NYCRR Part 375.

NYSDEC Commercial SCO = New York State Department of Environmental Conservation Restricted Commercial Use Soil Cleanup Objectives, from Table 375-6.8 of 6 NYCRR Part 375.

ft bgs = Feet below ground surface.

mg/kg = Milligrams per kilogram.

Green concentrations exceed the NYSDEC GW Protection SCO.

Highlighted concentrations exceed the NYSDEC Commercial SCO.

— = Sample not analyzed.

NS = No standard currently established.

ND = Not Detected.

U = Not detected above laboratory detection limit.

U' = Laboratory reporting limit exceeds the applicable regulatory standard or criteria being utilized.

J = Result below the reporting limit (estimated value).

DUP = Duplicate sample was taken.

When the applicable state standard applies to mixed isomers and the laboratory reports individual isomers, the total standard is listed for each isomer.

* = Sample was analyzed twice by the laboratory. Higher detections were reported.

Table 5
Soil Reuse Characterization Sampling Results
Summary of Volatile Organic Compounds in Soil.
MJ Painting; Olean, New York.

Sample ID	NYSDEC GW Protection SCO	NYSDEC Commercial SCO	RX-431	RX-431	RX-432	RX-432	RX-432	RX-432	RX-432	RX-433	RX-433	RX-434	RX-434	RX-434	RX-434	RX-434	RX-435	RX-435	RX-435	RX-436	RX-436	RX-436	RX-436	RX-436 DUP	RX-436	RX-437
Sample Depth (ft bgs)			7-10	10-12	0-1	4	6	7-10	10-12	9	11	0-1	3	6	8	11	6	9	11	0-1	3	6	7.5	7.5	11	3
Sample Date			11/16/2021	11/16/2021	11/10/2021	11/16/2021	11/16/2021	11/16/2021	11/16/2021	11/17/2021	11/17/2021	11/17/2021	11/17/2021	11/17/2021	11/17/2021	11/17/2021	11/17/2021	11/17/2021	11/17/2021	11/17/2021	11/17/2021	11/17/2021	11/17/2021	11/17/2021	11/17/2021	11/17/2021
VOLATILE ORGANIC COMPOUNDS - 8260C (mg/kg)																										
1,1,1-Trichloroethane	0.68	500	0.00054 U	0.058 U	0.00051 U	0.042 U	0.00092 U	0.032 U	0.026 U	0.067 U	0.072 U	0.00052 U	0.00064 U	0.00041 U	0.00072 U	0.00066 U	0.00049 U	0.00072 U	0.0006 U	0.00076 U	0.00055 U	0.036 U	0.033 U	0.03 U	0.035 U	0.00088 U
1,1,2,2,-Tetrachloroethane	NS	NS	0.00054 U	0.058 U	0.00051 U	0.042 U	0.00092 U	0.032 U	0.026 U	0.067 U	0.072 U	0.00052 U	0.00064 U	0.00041 U	0.00072 U	0.00066 U	0.00049 U	0.00072 U	0.0006 U	0.00076 U	0.00055 U	0.036 U	0.033 U	0.03 U	0.035 U	0.00088 U
1,1,2-Trichloro-1,2,2-trifluoroethane	NS	NS	0.0043 U	0.47 U	0.0041 U	0.34 U	0.0073 U	0.26 U	0.21 U	0.54 U	0.58 U	0.0042 U	0.0052 U	0.0033 U	0.0057 U	0.0053 U	0.0039 U	0.0058 U	0.0048 U	0.006 U	0.0044 U	0.28 U	0.26 U	0.24 U	0.28 U	0.007 U
1,1,2-Trichloroethane	NS	NS	0.0011 U	0.12 U	0.001 U	0.084 U	0.0018 U	0.065 U	0.053 U	0.13 U	0.14 U	0.001 U	0.0013 U	0.00082 U	0.0014 U	0.0013 U	0.00098 U	0.0014 U	0.0012 U	0.0015 U	0.0011 U	0.071 U	0.065 U	0.06 U	0.07 U	0.0018 U
1,1,-Dichloroethene	0.33	500	0.0011 U	0.12 U	0.001 U	0.084 U	0.0018 U	0.065 U	0.053 U	0.13 U	0.14 U	0.001 U	0.0013 U	0.00082 U	0.0014 U	0.0013 U	0.00098 U	0.0014 U	0.0012 U	0.0015 U	0.0011 U	0.071 U	0.065 U	0.06 U	0.07 U	0.0018 U
1,1-Dichloroethane	0.27	240	0.0011 U	0.12 U	0.001 U	0.084 U	0.0018 U	0.065 U	0.053 U	0.13 U	0.14 U	0.001 U	0.0013 U	0.00082 U	0.0014 U	0.0013 U	0.00098 U	0.0014 U	0.0012 U	0.0015 U	0.0011 U	0.071 U	0.065 U	0.06 U	0.07 U	0.0018 U
1,2,3-Trichlorobenzene	NS	NS	0.0021 U	0.23 U	0.002 U	0.17 U	0.0037 U	0.13 U	0.11 U	0.27 U	0.29 U	0.0021 U	0.0026 U	0.0016 U	0.0029 U	0.0026 U	0.002 U	0.0029 U	0.0024 U	0.003 U	0.0022 U	0.14 U	0.13 U	0.12 U	0.14 U	0.0035 U
1,2,4-Trichlorobenzene	NS	NS	0.0021 U	0.23 U	0.002 U	0.17 U	0.0037 U	0.13 U	0.11 U	0.27 U	0.29 U	0.0021 U	0.0026 U	0.0016 U	0.0029 U	0.0026 U	0.002 U	0.0029 U	0.0024 U	0.003 U	0.0022 U	0.14 U	0.13 U	0.12 U	0.14 U	0.0035 U
1,2,4-Trimethylbenzene	3.6	190	2.4	**6.1**	0.002 U	0.18	0.025	0.82	**7.7**	0.82	0.29 U	0.0021 U	0.0026 U	0.0016 U	0.00056 J	0.0026 U	0.002 U	0.00093 J	0.0024 U	0.003 U	0.002 J	0.098 J	0.13 U	0.12 U	**10**	0.0035 U
1,2-Dibromo-3-chloropropane	NS	NS	0.0032 U	0.35 U	0.003 U	0.25 U	0.0055 U	0.19 U	0.16 U	0.4 U	0.43 U	0.0031 U	0.0039 U	0.0025 U	0.0043 U	0.004 U	0.0029 U	0.0043 U	0.0036 U	0.0045 U	0.0033 U	0.21 U	0.2 U	0.18 U	0.21 U	0.0052 U
1,2-Dibromoethane	NS	NS	0.0011 U	0.12 U	0.001 U	0.084 U	0.0018 U	0.065 U	0.053 U	0.13 U	0.14 U	0.001 U	0.0013 U	0.00082 U	0.0014 U	0.0013 U	0.00098 U	0.0014 U	0.0012 U	0.0015 U	0.0011 U	0.071 U	0.065 U	0.06 U	0.07 U	0.0018 U
1,2-Dichlorobenzene	1.1	500	0.0021 U	0.23 U	0.002 U	0.17 U	0.0037 U	0.13 U	0.11 U	0.27 U	0.29 U	0.0021 U	0.0026 U	0.0016 U	0.0029 U	0.0026 U	0.002 U	0.0029 U	0.0024 U	0.003 U	0.0022 U	0.14 U	0.13 U	0.12 U	0.14 U	0.0035 U
1,2-Dichloroethane	0.02	30	0.0011 U	0.12 U'	0.001 U	0.084 U'	0.0018 U	0.065 U'	0.053 U'	0.13 U'	0.14 U'	0.001 U	0.0013 U	0.00082 U	0.0014 U	0.0013 U	0.00098 U	0.0014 U	0.0012 U	0.0015 U	0.0011 U	0.071 U'	0.065 U'	0.06 U'	0.07 U'	0.0018 U
1,2-Dichloroethene, Total	NS	NS	0.0011 U	0.12 U	0.001 U	0.084 U	0.0018 U	0.065 U	0.053 U	0.13 U	0.14 U	0.001 U	0.0013 U	0.00082 U	0.0014 U	0.0013 U	0.00098 U	0.0014 U	0.0012 U	0.0015 U	0.0011 U	0.071 U	0.065 U	0.06 U	0.07 U	0.0018 U
1,2-Dichloropropane	NS	NS	0.0011 U	0.12 U	0.001 U	0.084 U	0.0018 U	0.065 U	0.053 U	0.13 U	0.14 U	0.001 U	0.0013 U	0.00082 U	0.0014 U	0.0013 U	0.00098 U	0.0014 U	0.0012 U	0.0015 U	0.0011 U	0.071 U	0.065 U	0.06 U	0.07 U	0.0018 U
1,3,5-Trimethylbenzene	8.4	190	0.054	0.76	0.002 U	0.14 J	0.0075	0.1 J	0.37	0.17 J	0.29 U	0.0021 U	0.0026 U	0.0016 U	0.0029 U	0.0026 U	0.002 U	0.00051 J	0.0024 U	0.003 U	0.00066 J	0.023 J	0.13 U	0.12 U	0.22	0.0035 U
1,3-Dichlorobenzene	2.4	280	0.0021 U	0.23 U	0.002 U	0.17 U	0.0037 U	0.13 U	0.11 U	0.27 U	0.29 U	0.0021 U	0.0026 U	0.0016 U	0.0029 U	0.0026 U	0.002 U	0.0029 U	0.0024 U	0.003 U	0.0022 U	0.14 U	0.13 U	0.12 U	0.14 U	0.0035 U
1,3-Dichloropropene, Total	NS	NS	0.00054 U	0.058 U	0.00051 U	0.042 U	0.00092 U	0.032 U	0.026 U	0.067 U	0.072 U	0.00052 U	0.00064 U	0.00041 U	0.00072 U	0.00066 U	0.00049 U	0.00072 U	0.0006 U	0.00076 U	0.00055 U	0.036 U	0.033 U	0.03 U	0.035 U	0.00088 U
1,4-Dichlorobenzene	1.8	130	0.0021 U	0.23 U	0.002 U	0.17 U	0.0037 U	0.13 U	0.11 U	0.27 U	0.29 U	0.0021 U	0.0026 U	0.0016 U	0.0029 U	0.0026 U	0.002 U	0.0029 U	0.0024 U	0.003 U	0.0022 U	0.14 U	0.13 U	0.12 U	0.14 U	0.0035 U
1,4-Dioxane	0.1	130	0.086 U	9.3 U'	0.081 U	6.8 U'	0.15 U'	5.2 U'	4.2 U'	11 U'	12 U'	0.084 U	0.1 U	0.066 U	0.11 U'	0.1 U	0.079 U	0.12 U'	0.095 U	0.12 U'	0.087 U	5.7 U'	5.2 U'	4.8 U'	5.6 U'	0.14 U'
2-Butanone	0.12	500	0.011 U	1.2 U'	0.01 U	0.84 U'	0.018 U	0.65 U'	0.53 U'	1.3 U'	1.4 U'	0.01 U	0.013 U	0.0082 U	0.014 U	0.013 U	0.0098 U	0.0059 J	0.012 U	0.015 U	0.011 U	0.71 U'	0.65 U'	0.6 U'	0.7 U'	0.018 U
2-Hexanone	NS	NS	0.011 U	1.2 U	0.01 U	0.84 U	0.018 U	0.65 U	0.53 U	1.3 U	1.4 U	0.01 U	0.013 U	0.0082 U	0.014 U	0.013 U	0.0098 U	0.014 U	0.012 U	0.015 U	0.011 U	0.71 U	0.65 U	0.6 U	0.7 U	0.018 U
4-Methyl-2-Pentanone	NS	NS	0.011 U	1.2 U	0.01 U	0.84 U	0.018 U	0.65 U	0.53 U	1.3 U	1.4 U	0.01 U	0.013 U	0.0082 U	0.014 U	0.013 U	0.0098 U	0.014 U	0.012 U	0.015 U	0.011 U	0.71 U	0.65 U	0.6 U	0.7 U	0.018 U
Acetone	0.05	500	0.011 U	1.2 U'	0.01 U	0.84 U'	**0.084**	0.65 U'	0.53 U'	1.3 U'	1.4 U'	0.01 U	0.013 U	0.0082 U	0.014 U	0.018	0.012	0.011 J	0.01 J	0.015 U	0.023	0.71 U'	0.65 U'	0.6 U'	0.7 U'	0.018 U
Benzene	0.06	44	0.0081	0.038 J	0.00051 U	**0.14**	0.0077	0.036	0.026 U	0.022 J	0.072 U'	0.00052 U	0.00064 U	0.00041 U	0.00072 U	0.00066 U	0.00049 U	0.00072 U	0.0006 U	0.00076 U	0.0032	0.015 J	0.033 U	0.03 U	0.035 U	0.00088 U
Bromochloromethane	NS	NS	0.0021 U	0.23 U	0.002 U	0.17 U	0.0037 U	0.13 U	0.11 U	0.27 U	0.29 U	0.0021 U	0.0026 U	0.0016 U	0.0029 U	0.0026 U	0.002 U	0.0029 U	0.0024 U	0.003 U	0.0022 U	0.14 U	0.13 U	0.12 U	0.14 U	0.0035 U
Bromodichloromethane	NS	NS	0.00054 U	0.058 U	0.00051 U	0.042 U	0.00092 U	0.032 U	0.026 U	0.067 U	0.072 U	0.00052 U	0.00064 U	0.00041 U	0.00072 U	0.00066 U	0.00049 U	0.00072 U	0.0006 U	0.00076 U	0.00055 U	0.036 U	0.033 U	0.03 U	0.035 U	0.00088 U
Bromoform	NS	NS	0.0043 U	0.47 U	0.0041 U	0.34 U	0.0073 U	0.26 U	0.21 U	0.54 U	0.58 U	0.0042 U	0.0052 U	0.0033 U	0.0057 U	0.0053 U	0.0039 U	0.0058 U	0.0048 U	0.006 U	0.0044 U	0.28 U	0.26 U	0.24 U	0.28 U	0.007 U
Bromomethane	NS	NS	0.0021 U	0.23 U	0.002 U	0.17 U	0.0037 U	0.13 U	0.11 U	0.27 U	0.29 U	0.0021 U	0.0026 U	0.0016 U	0.0029 U	0.0026 U	0.002 U	0.0029 U	0.0024 U	0.003 U	0.0022 U	0.14 U	0.13 U	0.12 U	0.14 U	0.0035 U
Carbon disulfide	NS	NS	0.011 U	1.2 U	0.01 U	0.84 U	0.018 U	0.65 U	0.53 U	1.3 U	1.4 U	0.01 U	0.013 U	0.0082 U	0.014 U	0.013 U	0.0098 U	0.014 U	0.0079 J	0.015 U	0.011 U	0.71 U	0.65 U	0.6 U	0.7 U	0.018 U
Carbon tetrachloride	0.76	22	0.0011 U	0.12 U	0.001 U	0.084 U	0.0018 U	0.065 U	0.053 U	0.13 U	0.14 U	0.001 U	0.0013 U	0.00082 U	0.0014 U	0.0013 U	0.00098 U	0.0014 U	0.0012 U	0.0015 U	0.0011 U	0.071 U	0.065 U	0.06 U	0.07 U	0.0018 U
Chlorobenzene	1.1	500	0.00054 U	0.058 U	0.00051 U	0.042 U	0.00092 U	0.032 U	0.026 U	0.067 U	0.072 U	0.00052 U	0.00064 U	0.00041 U	0.00072 U	0.00066 U	0.00049 U	0.00072 U	0.0006 U	0.00076 U	0.00055 U	0.036 U	0.033 U	0.03 U	0.035 U	0.00088 U
Chloroethane	NS	NS	0.0021 U	0.23 U	0.002 U	0.17 U	0.0037 U	0.13 U	0.11 U	0.27 U	0.29 U	0.0021 U	0.0026 U	0.0016 U	0.0029 U	0.0026 U	0.002 U	0.0029 U	0.0024 U	0.003 U	0.0022 U	0.14 U	0.13 U	0.12 U	0.14 U	0.0035 U
Chloroform	0.37	350	0.0016 U	0.17 U	0.0015 U	0.13 U	0.0027 U	0.097 U	0.08 U	0.2 U	0.22 U	0.0016 U	0.0019 U	0.0012 U	0.0021 U	0.002 U	0.0015 U	0.0022 U	0.0018 U	0.0023 U	0.0016 U	0.11 U	0.098 U	0.09 U	0.1 U	0.0026 U
Chloromethane	NS	NS	0.0043 U	0.47 U	0.0041 U	0.34 U	0.0073 U	0.26 U	0.21 U	0.54 U	0.58 U	0.0042 U	0.0052 U	0.0033 U	0.0057 U	0.0053 U	0.0039 U	0.0058 U	0.0048 U	0.006 U	0.0044 U	0.28 U	0.26 U	0.24 U	0.28 U	0.007 U
cis-1,2-Dichloroethene	0.25	500	0.0011 U	0.12 U	0.001 U	0.084 U	0.0018 U	0.065 U	0.053 U	0.13 U	0.14 U	0.001 U	0.0013 U	0.00082 U	0.0014 U	0.0013 U	0.00098 U	0.0014 U	0.0012 U	0.0015 U	0.0011 U	0.071 U	0.065 U	0.06 U	0.07 U	0.0018 U
cis-1,3-Dichloropropene	NS	NS	0.00054 U	0.058 U	0.00051 U	0.042 U	0.00092 U	0.032 U	0.026 U	0.067 U	0.072 U	0.00052 U	0.00064 U	0.00041 U	0.00072 U	0.00066 U	0.00049 U	0.00072 U	0.0006 U	0.00076 U	0.00055 U	0.036 U	0.033 U	0.03 U	0.035 U	0.00088 U
Cyclohexane	NS	NS	5.6	9.2	0.01 U	6.8	18	5.9	4.1	0.25 J	1.4 U	0.01 U	0.013 U	0.0082 U	0.014 U	0.013 U	0.0098 U	0.014 U	0.012 U	0.015 U	0.011 U	0.71 U	0.65 U	0.6 U	0.98	0.018 U
Dibromochloromethane	NS	NS	0.0011 U	0.12 U	0.001 U	0.084 U	0.0018 U	0.065 U	0.053 U	0.13 U	0.14 U	0.001 U	0.0013 U	0.00082 U	0.0014 U	0.0013 U	0.00098 U	0.0014 U	0.0012 U	0.0015 U	0.0011 U	0.071 U	0.065 U	0.06 U	0.07 U	0.0018 U
Dichlorodifluoromethane	NS	NS	0.011 U	1.2 U	0.01 U	0.84 U	0.018 U	0.65 U	0.53 U	1.3 U	1.4 U	0.01 U	0.013 U	0.0082 U	0.014 U	0.013 U	0.0098 U	0.014 U	0.012 U	0.015 U	0.011 U	0.71 U	0.65 U	0.6 U	0.7 U	0.018 U
Ethylbenzene	1	390	0.0069	0.033 J	0.001 U	0.07 J	0.0036	0.035 J	0.053 U	0.052 J	0.14 U	0.001 U	0.0013 U	0.00082 U	0.0014 U	0.0013 U	0.00098 U	0.0014 U	0.0012 U	0.0015 U	0.0012	0.029 J	0.065 U	0.06 U	0.07 U	0.0018 U
Isopropylbenzene	NS	NS	0.06	0.66	0.001 U	0.02 J	0.0063	0.12	0.36	0.073 J	0.14 U	0.001 U	0.0013 U	0.00082 U	0.0014 U	0.0013 U	0.00098 U	0.0014 U	0.0012 U	0.0015 U	0.0006 J	0.0094 J	0.065 U	0.06 U	0.0099 J	0.0018 U
Methyl Acetate	NS	NS	0.0043 U	0.47 U	0.007	0.42	0.0073 U	0.26	0.093 J	0.19 J	0.58 U	0.0042 U	0.0052 U	0.0033 U	0.0057 U	0.0053 U	0.0039 U	0.0058 U	0.0048 U	0.006 U	0.0044 U	0.72	0.072 J	0.062 J	0.28 U	0.007 U
Methyl cyclohexane	NS	NS	18	40	0.0041 U	35	62	21	20	6.1	6.7	0.0042 U	0.0052 U	0.0033 U	0.0057 U	0.0053 U	0.0061	0.0014 J	0.0078	0.006 U	0.13	1.3	2.6	2.9	5.8	0.007 U
Methyl tertiary butyl ether (MTBE)	0.93	500	0.0021 U	0.23 U	0.002 U	0.17 U	0.0037 U	0.13 U	0.11 U	0.27 U	0.29 U	0.0021 U	0.0026 U	0.0016 U	0.0029 U	0.0026 U	0.002 U	0.0029 U	0.0024 U	0.003 U	0.0022 U	0.14 U	0.13 U	0.12 U	0.14 U	0.0035 U
Methylene chloride	0.05	500	0.0054 U	0.58 U'	0.0051 U	0.42 U'	0.0092 U	0.32 U'	0.26 U'	0.67 U'	0.72 U'	0.0052 U	0.0064 U	0.0041 U	0.0072 U	0.0066 U	0.0049 U	0.0072 U	0.006 U	0.0076 U	0.0055 U	0.36 U'	0.33 U'	0.3 U'	0.35 U'	0.0088 U
n-Butylbenzene	12	500	0.053	1.1	0.001 U	0.084 U	0.00049 J	0.038 J	0.46	0.14	0.14 U	0.001 U	0.0013 U	0.00082 U	0.0014 U	0.0013 U	0.00098 U	0.0014 U	0.0012 U	0.0015 U	0.0011 U	0.071 U	0.065 U	0.06 U	0.14	0.0018 U
n-Propylbenzene	3.9	500	0.1	1.5	0.001 U	0.03 J	0.0051	0.17	0.67	0.15	0.14 U	0.001 U	0.0013 U	0.00082 U	0.0014 U	0.0013 U	0.00098 U	0.0014 U	0.0012 U	0.0015 U	0.0011 U	0.025 J	0.065 U	0.06 U	0.07 U	0.0018 U
sec-Butylbenzene	11	500	0.019	0.39	0.001 U	0.013 J	0.00094 J	0.056 J	0.3	0.51	0.4	0.001 U	0.0013 U	0.00082 U	0.0014 U	0.00034 J	0.00017 J	0.00021 J	0.0012 U	0.0015 U	0.011	0.044 J	0.062 J	0.063	0.25	0.0018 U
Styrene	NS	NS	0.0011 U	0.12 U	0.001 U	0.084 U	0.0018 U	0.065 U	0.053 U	0.13 U	0.14 U	0.001 U	0.0013 U	0.00082 U	0.0014 U	0.0013 U	0.00098 U	0.0014 U	0.0012 U	0.0015 U	0.0011 U	0.071 U	0.065 U	0.06 U	0.07 U	0.0018 U
tert-Butylbenzene	5.9	500	0.0021 U	0.04 J	0.002 U	0.17 U	0.00028 J	0.0096 J	0.033 J	0.14 J	0.2 J	0.0021 U	0.0026 U	0.0016 U	0.0029 U	0.0033	0.0002 J	0.0003 J	0.0057	0.003 U	0.0054	0.041 J	0.051 J	0.062 J	0.14	0.0035 U
Tetrachloroethene	1.3	150	0.00054 U	0.058 U	0.00051 U	0.042 U	0.00092 U	0.032 U	0.026 U	0.067 U	0.072 U	0.00052 U	0.00064 U	0.00041 U	0.00072 U	0.00066 U	0.00049 U	0.00072 U	0.0006 U	0.00076 U	0.00055 U	0.036 U	0.033 U	0.03 U	0.035 U	0.00088 U
Toluene	0.7	500	0.096	0.2	0.001 U	0.36	0.03	0.093	0.035 J	0.085 J	0.14 U	0.001 U	0.0013 U	0.00082 U	0.0014 U	0.0013 U	0.00098 U	0.0014 U	0.0012 U	0.0015 U	0.0035	0.071 U	0.065 U	0.06 U	0.07 U	0.0018 U
trans-1,2-Dichloroethene	0.19	500	0.0016 U	0.17 U	0.0015 U	0.13 U	0.0027 U	0.097 U	0.08 U	0.2 U'	0.22 U'	0.0016 U	0.0019 U	0.0012 U	0.0021 U	0.002 U	0.0015 U	0.0022 U	0.0018 U	0.0023 U	0.0016 U	0.11 U	0.098 U	0.09 U	0.1 U	0.0026 U
trans-1,3-Dichloropropene	NS	NS	0.0011 U	0.12 U	0.001 U	0.084 U	0.0018 U	0.065 U	0.053 U	0.13 U	0.14 U	0.001 U	0.0013 U	0.00082 U	0.0014 U	0.0013 U	0.00098 U	0.0014 U	0.0012 U	0.0015 U	0.0011 U	0.071 U	0.065 U	0.06 U	0.07 U	0.0018 U
Trichloroethene	0.47	200	0.00054 U	0.058 U	0.00051 U	0.042 U	0.00092 U	0.032 U	0.026 U	0.067 U	0.072 U	0.00052 U	0.00064 U	0.00041 U	0.00072 U	0.00066 U	0.00049 U	0.00025 J	0.0006 U	0.00076 U	0.00055 U	0.036 U	0.033 U	0.03 U	0.035 U	0.00088 U
Trichlorofluoromethane	NS	NS	0.0043 U	0.47 U	0.0041 U	0.34 U	0.0073 U	0.26 U	0.21 U	0.54 U	0.58 U	0.0042 U	0.0052 U	0.0033 U	0.0057 U	0.0053 U	0.0039 U	0.0058 U	0.0048 U	0.006 U	0.0044 U	0.28 U	0.26 U	0.24 U	0.28 U	0.007 U
Vinyl chloride	0.02	13	0.0011 U	0.12 U'	0.001 U	0.084 U'	0.0018 U	0.065 U'	0.053 U'	0.13 U'	0.14 U'	0.001 U	0.0013 U	0.00082 U	0.0014 U	0.0013 U	0.00098 U	0.0014 U	0.0012 U	0.0015 U	0.0011 U	0.071 U'	0.065 U'	0.06 U'	0.07 U'	0.0018 U
Xylene (m&p)	NS	NS	0.18	0.95	0.002 U	0.51	0.036	0.16	0.23	0.092 J	0.29 U	0.0021 U	0.0026 U	0.0016 U	0.0029 U	0.0026 U	0.002 U	0.0029 U	0.0024 U	0.003 U	0.0046	0.13 J	0.13 U	0.12 U	0.14 U	0.0035 U
Xylene (o)	NS	NS	0.051	0.18	0.001 U	0.15	0.013	0.06 J	0.074	0.086 J	0.14 U	0.001 U	0.0013 U	0.00082 U	0.0014 U	0.0013 U	0.00098 U	0.0014 U	0.0012 U	0.0015 U	0.0012	0.071 U	0.065 U	0.06 U	0.07 U	0.0018 U
Xylenes (Total)	1.6	500	0.23	1.1	0.001 U	0.66	0.049	0.22 J	0.3	0.18 J	0.14 U	0.001 U	0.0013 U	0.00082 U	0.0014 U	0.0013 U	0.00098 U	0.0014 U	0.0012 U	0.0015 U	0.0058	0.13 J	0.065 U	0.06 U	0.07 U	0.0018 U
Total Volatile TICs	NS	NS	0.0714 J	0.0714 J	0.016 J	0.016 J	0.016 J	0.016 J	0.016 J	95.6 J	95.6 J	ND	ND	ND	ND	ND	1.14 J	1.14 J	1.14 J	0.0347 J	0.0347 J	0.0347 J	0.0347 J	55.9 J	0.0347 J	ND

Notes:

NYSDEC GW Protection SCO = New York State Department of Environmental Conservation Groundwater Protection Soil Cleanup Objectives, from Table 375-6.8 of 6 NYCRR Part 375.

NYSDEC Commercial SCO = New York State Department of Environmental Conservation Restricted Commercial Use Soil Cleanup Objectives, from Table 375-6.8 of 6 NYCRR Part 375.

ft bgs = Feet below ground surface.

mg/kg = Milligrams per kilogram.

Green concentrations exceed the NYSDEC GW Protection SCO.

Highlighted concentrations exceed the NYSDEC Commercial SCO.

— = Sample not analyzed.

NS = No standard currently established.

ND = Not Detected.

U = Not detected above laboratory detection limit.

U' = Laboratory reporting limit exceeds the applicable regulatory standard or criteria being utilized.

J = Result below the reporting limit (estimated value).

DUP = Duplicate sample was taken.

When the applicable state standard applies to mixed isomers and the laboratory reports individual isomers, the total standard is listed for each isomer.

* = Sample was analyzed twice by the laboratory. Higher detections were reported.

Table 5
Soil Reuse Characterization Sampling Results
Summary of Volatile Organic Compounds in Soil.
MJ Painting; Olean, New York.

Sample ID	NYSDEC GW Protection SCO	NYSDEC Commercial SCO	RX-437	RX-437	RX-439	RX-439	RX-439 DUP	RX-439	RX-439	RX-439	RX-441	RX-442	RX-443	RX-443	RX-443	RX-443	RX-443	RX-444	RX-444	RX-444 DUP	RX-444	RX-444	RX-444	RX-446	RX-446	RX-446
Sample Depth (ft bgs)			6.5	11	0-1	3	3	6.5	8	11	9	3	0-1	3	6.5	8	11	0-1	3	3	6	8	11	3	5	8
Sample Date			11/17/2021	11/17/2021	11/17/2021	11/18/2021	11/18/2021	11/18/2021	11/18/2021	11/18/2021	11/16/2021	11/17/2021	11/16/2021	11/16/2021	11/16/2021	11/16/2021	11/16/2021	11/17/2021	11/17/2021	11/17/2021	11/17/2021	11/17/2021	11/17/2021	11/16/2021	11/16/2021	11/16/2021
VOLATILE ORGANIC COMPOUNDS - 8260C (mg/kg)																										
1,1,1-Trichloroethane	0.68	500	0.00058 U	0.00053 U	0.00063 U	0.00087 U	0.00065 U	0.039 U	0.064 U	0.00049 U	0.00051 U	0.00078 U	0.00062 U	0.039 U	0.027 U	0.045 U	0.00082 U	0.00076 U	0.00057 U	0.00066 U	0.00065 U	0.00058 U	0.034 U	0.05 U	0.00059 U	0.033 U
1,1,2,2,-Tetrachloroethane	NS	NS	0.00058 U	0.00053 U	0.00063 U	0.00087 U	0.00065 U	0.039 U	0.064 U	0.00049 U	0.00051 U	0.00078 U	0.00062 U	0.039 U	0.027 U	0.045 U	0.00082 U	0.00076 U	0.00057 U	0.00066 U	0.00065 U	0.00058 U	0.034 U	0.05 U	0.00059 U	0.033 U
1,1,2-Trichloro-1,2,2-trifluoroethane	NS	NS	0.0046 U	0.0042 U	0.005 U	0.0069 U	0.0052 U	0.31 U	0.52 U	0.0039 U	0.004 U	0.0062 U	0.005 U	0.31 U	0.22 U	0.36 U	0.0065 U	0.0061 U	0.0046 U	0.0052 U	0.0052 U	0.0046 U	0.27 U	0.4 U	0.0047 U	0.27 U
1,1,2-Trichloroethane	NS	NS	0.0012 U	0.0011 U	0.0012 U	0.0017 U	0.0013 U	0.078 U	0.13 U	0.00098 U	0.001 U	0.0016 U	0.0012 U	0.078 U	0.054 U	0.09 U	0.0016 U	0.0015 U	0.0011 U	0.0013 U	0.0013 U	0.0012 U	0.067 U	0.1 U	0.0012 U	0.067 U
1,1,-Dichloroethene	0.33	500	0.0012 U	0.0011 U	0.0012 U	0.0017 U	0.0013 U	0.078 U	0.13 U	0.00098 U	0.001 U	0.0016 U	0.0012 U	0.078 U	0.054 U	0.09 U	0.0016 U	0.0015 U	0.0011 U	0.0013 U	0.0013 U	0.0012 U	0.067 U	0.1 U	0.0012 U	0.067 U
1,1-Dichloroethane	0.27	240	0.0012 U	0.0011 U	0.0012 U	0.0017 U	0.0013 U	0.078 U	0.13 U	0.00098 U	0.001 U	0.0016 U	0.0012 U	0.078 U	0.054 U	0.09 U	0.0016 U	0.0015 U	0.0011 U	0.0013 U	0.0013 U	0.0012 U	0.067 U	0.1 U	0.0012 U	0.067 U
1,2,3-Trichlorobenzene	NS	NS	0.0023 U	0.0021 U	0.0025 U	0.0035 U	0.0026 U	0.16 U	0.26 U	0.002 U	0.002 U	0.0031 U	0.0025 U	0.16 U	0.11 U	0.18 U	0.0033 U	0.003 U	0.0023 U	0.0026 U	0.0026 U	0.0023 U	0.13 U	0.2 U	0.0024 U	0.13 U
1,2,4-Trichlorobenzene	NS	NS	0.0023 U	0.0021 U	0.0025 U	0.0035 U	0.0026 U	0.16 U	0.26 U	0.002 U	0.002 U	0.0031 U	0.0025 U	0.16 U	0.11 U	0.18 U	0.0033 U	0.003 U	0.0023 U	0.0026 U	0.0026 U	0.0023 U	0.13 U	0.2 U	0.0024 U	0.13 U
1,2,4-Trimethylbenzene	3.6	190	0.0023 U	0.0021 U	0.0025 U	0.0035 U	0.00058 J	0.11 J	0.096 J	0.002 U	0.0008 J	0.00055 J	0.0025 U	0.082 J	0.47	1.4	0.007	0.003 U	0.0023 U	0.00066 J	0.0026 U	0.0023 U	0.13 U	0.52	0.0011 J	0.81
1,2-Dibromo-3-chloropropane	NS	NS	0.0034 U	0.0032 U	0.0038 U	0.0052 U	0.0039 U	0.24 U	0.39 U	0.0029 U	0.003 U	0.0047 U	0.0037 U	0.23 U	0.16 U	0.27 U	0.0049 U	0.0046 U	0.0034 U	0.0039 U	0.0039 U	0.0034 U	0.2 U	0.3 U	0.0035 U	0.2 U
1,2-Dibromoethane	NS	NS	0.0012 U	0.0011 U	0.0012 U	0.0017 U	0.0013 U	0.078 U	0.13 U	0.00098 U	0.001 U	0.0016 U	0.0012 U	0.078 U	0.054 U	0.09 U	0.0016 U	0.0015 U	0.0011 U	0.0013 U	0.0013 U	0.0012 U	0.067 U	0.1 U	0.0012 U	0.067 U
1,2-Dichlorobenzene	1.1	500	0.0023 U	0.0021 U	0.0025 U	0.0035 U	0.0026 U	0.16 U	0.26 U	0.002 U	0.002 U	0.0031 U	0.0025 U	0.16 U	0.11 U	0.18 U	0.0033 U	0.003 U	0.0023 U	0.0026 U	0.0026 U	0.0023 U	0.13 U	0.2 U	0.0024 U	0.13 U
1,2-Dichloroethane	0.02	30	0.0012 U	0.0011 U	0.0012 U	0.0017 U	0.0013 U	0.078 U'	0.13 U'	0.00098 U	0.001 U	0.0016 U	0.0012 U	0.078 U'	0.054 U'	0.09 U'	0.0016 U	0.0015 U	0.0011 U	0.0013 U	0.0013 U	0.0012 U	0.067 U'	0.1 U'	0.0012 U	0.067 U'
1,2-Dichloroethene, Total	NS	NS	0.0012 U	0.0011 U	0.0012 U	0.0017 U	0.0013 U	0.078 U	0.00054 U	0.00098 U	0.001 U	0.0016 U	0.0012 U	0.0017 U	0.054 U	0.09 U	0.0016 U	0.0015 U	0.0011 U	0.0013 U	0.0013 U	0.0012 U	0.067 U	0.1 U	0.0012 U	0.067 U
1,2-Dichloropropane	NS	NS	0.0012 U	0.0011 U	0.0012 U	0.0017 U	0.0013 U	0.078 U	0.13 U	0.00098 U	0.001 U	0.0016 U	0.0012 U	0.078 U	0.054 U	0.09 U	0.0016 U	0.0015 U	0.0011 U	0.0013 U	0.0013 U	0.0012 U	0.067 U	0.1 U	0.0012 U	0.067 U
1,3,5-Trimethylbenzene	8.4	190	0.0023 U	0.0021 U	0.0025 U	0.0035 U	0.0026 U	0.063 J	0.034 J	0.002 U	0.00035 J	0.0031 U	0.0025 U	0.054 J	0.2	0.59	0.0018 J	0.003 U	0.0023 U	0.0005 J	0.0026 U	0.0023 U	0.13 U	0.26	0.00085 J	0.3
1,3-Dichlorobenzene	2.4	280	0.0023 U	0.0021 U	0.0025 U	0.0035 U	0.0026 U	0.16 U	0.26 U	0.002 U	0.002 U	0.0031 U	0.0025 U	0.16 U	0.11 U	0.18 U	0.0033 U	0.003 U	0.0023 U	0.0026 U	0.0026 U	0.0023 U	0.13 U	0.2 U	0.0024 U	0.13 U
1,3-Dichloropropene, Total	NS	NS	0.00058 U	0.00053 U	0.00063 U	0.00087 U	0.00065 U	0.039 U	0.00027 U	0.00049 U	0.00051 U	0.00078 U	0.00062 U	0.00086 U	0.027 U	0.045 U	0.00082 U	0.00076 U	0.00057 U	0.00066 U	0.00065 U	0.00058 U	0.034 U	0.05 U	0.00059 U	0.033 U
1,4-Dichlorobenzene	1.8	130	0.0023 U	0.0021 U	0.0025 U	0.0035 U	0.0026 U	0.16 U	0.26 U	0.002 U	0.00018 J	0.0031 U	0.0025 U	0.16 U	0.11 U	0.18 U	0.0033 U	0.003 U	0.0023 U	0.0026 U	0.0026 U	0.0023 U	0.13 U	0.2 U	0.0024 U	0.13 U
1,4-Dioxane	0.1	130	0.092 U	0.085 U	0.1 U	0.14 U'	0.1 U	6.3 U'	10 U'	0.078 U	0.081 U	0.12 U'	0.099 U	6.2 U'	4.3 U'	7.2 U'	0.13 U'	0.12 U'	0.092 U	0.1 U	0.1 U	0.092 U	5.4 U'	8 U'	0.095 U	5.3 U'
2-Butanone	0.12	500	0.012 U	0.011 U	0.012 U	0.017 U	0.013 U	0.78 U'	1.3 U'	0.0098 U	0.01 U	0.016 U	0.012 U	**0.23 J**	0.54 U'	0.9 U'	0.016 U	0.015 U	0.0079 J	0.013 U	0.013 U	0.012 U	0.67 U'	1 U'	0.012 U	0.67 U'
2-Hexanone	NS	NS	0.012 U	0.011 U	0.012 U	0.017 U	0.013 U	0.78 U	1.3 U	0.0098 U	0.01 U	0.016 U	0.012 U	0.78 U	0.54 U	0.9 U	0.016 U	0.015 U	0.011 U	0.013 U	0.013 U	0.012 U	0.67 U	1 U	0.012 U	0.67 U
4-Methyl-2-Pentanone	NS	NS	0.012 U	0.011 U	0.012 U	0.017 U	0.013 U	0.78 U	1.3 U	0.0098 U	0.01 U	0.016 U	0.012 U	0.78 U	0.54 U	0.9 U	0.016 U	0.015 U	0.011 U	0.013 U	0.013 U	0.012 U	0.67 U	1 U	0.012 U	0.67 U
Acetone	0.05	500	0.012 U	0.0052 J	0.012 U	0.017 U	0.013 U	0.78 U'	1.3 U'	0.0092 J	0.02	0.024	0.012 U	0.78 U'	0.54 U'	0.9 U'	0.03	0.015 U	0.032	0.021	0.039	0.035	0.67 U'	1 U'	0.033	**0.9**
Benzene	0.06	44	0.00058 U	0.00053 U	0.00063 U	0.00087 U	0.00065 U	0.039 U	0.064 U'	0.00049 U	0.00051 U	0.00078 U	0.00062 U	0.039 U	0.027 U	0.045 U	0.00082 U	0.00076 U	0.00057 U	0.00066 U	0.00065 U	0.00034 J	0.034 U	0.05 U	0.00059 U	0.033 U
Bromochloromethane	NS	NS	0.0023 U	0.0021 U	0.0025 U	0.0035 U	0.0026 U	0.16 U	0.26 U	0.002 U	0.002 U	0.0031 U	0.0025 U	0.16 U	0.11 U	0.18 U	0.0033 U	0.003 U	0.0023 U	0.0026 U	0.0026 U	0.0023 U	0.13 U	0.2 U	0.0024 U	0.13 U
Bromodichloromethane	NS	NS	0.00058 U	0.00053 U	0.00063 U	0.00087 U	0.00065 U	0.039 U	0.064 U	0.00049 U	0.00051 U	0.00078 U	0.00062 U	0.039 U	0.027 U	0.045 U	0.00082 U	0.00076 U	0.00057 U	0.00066 U	0.00065 U	0.00058 U	0.034 U	0.05 U	0.00059 U	0.033 U
Bromoform	NS	NS	0.0046 U	0.0042 U	0.005 U	0.0069 U	0.0052 U	0.31 U	0.52 U	0.0039 U	0.004 U	0.0062 U	0.005 U	0.31 U	0.22 U	0.36 U	0.0065 U	0.0061 U	0.0046 U	0.0052 U	0.0052 U	0.0046 U	0.27 U	0.4 U	0.0047 U	0.27 U
Bromomethane	NS	NS	0.0023 U	0.0021 U	0.0025 U	0.0035 U	0.0026 U	0.16 U	0.26 U	0.002 U	0.002 U	0.0017 J	0.0025 U	0.16 U	0.11 U	0.18 U	0.0033 U	0.003 U	0.0023 U	0.0026 U	0.0026 U	0.0023 U	0.13 U	0.2 U	0.0024 U	0.13 U
Carbon disulfide	NS	NS	0.012 U	0.011 U	0.012 U	0.017 U	0.013 U	0.78 U	1.3 U	0.0098 U	0.01 U	0.016 U	0.012 U	0.78 U	0.54 U	0.9 U	0.016 U	0.015 U	0.011 U	0.013 U	0.013 U	0.012 U	0.67 U	1 U	0.012 U	0.67 U
Carbon tetrachloride	0.76	22	0.0012 U	0.0011 U	0.0012 U	0.0017 U	0.0013 U	0.078 U	0.13 U	0.00098 U	0.001 U	0.0016 U	0.0012 U	0.078 U	0.054 U	0.09 U	0.0016 U	0.0015 U	0.0011 U	0.0013 U	0.0013 U	0.0012 U	0.067 U	0.1 U	0.0012 U	0.067 U
Chlorobenzene	1.1	500	0.00058 U	0.00053 U	0.00063 U	0.00087 U	0.00065 U	0.039 U	0.064 U	0.00049 U	0.00051 U	0.00027 J	0.00062 U	0.039 U	0.027 U	0.045 U	0.00082 U	0.00076 U	0.00057 U	0.00066 U	0.00065 U	0.00058 U	0.034 U	0.05 U	0.00059 U	0.033 U
Chloroethane	NS	NS	0.0023 U	0.0021 U	0.0025 U	0.0035 U	0.0026 U	0.16 U	0.26 U	0.002 U	0.002 U	0.0031 U	0.0025 U	0.16 U	0.11 U	0.18 U	0.0033 U	0.003 U	0.0023 U	0.0026 U	0.0026 U	0.0023 U	0.13 U	0.2 U	0.0024 U	0.13 U
Chloroform	0.37	350	0.0017 U	0.0016 U	0.0019 U	0.0026 U	0.002 U	0.12 U	0.19 U	0.0015 U	0.0015 U	0.0023 U	0.0019 U	0.12 U	0.081 U	0.14 U	0.0024 U	0.0023 U	0.0017 U	0.002 U	0.0019 U	0.0017 U	0.1 U	0.15 U	0.0018 U	0.1 U
Chloromethane	NS	NS	0.0046 U	0.0042 U	0.005 U	0.0069 U	0.0052 U	0.31 U	0.52 U	0.0039 U	0.004 U	0.0062 U	0.005 U	0.31 U	0.22 U	0.36 U	0.0065 U	0.0061 U	0.0046 U	0.0052 U	0.0052 U	0.0046 U	0.27 U	0.4 U	0.0047 U	0.27 U
cis-1,2-Dichloroethene	0.25	500	0.0012 U	0.0011 U	0.0012 U	0.0017 U	0.0013 U	0.078 U	0.13 U	0.00098 U	0.001 U	0.0016 U	0.0012 U	0.078 U	0.054 U	0.09 U	0.0016 U	0.0015 U	0.0011 U	0.0013 U	0.0013 U	0.0012 U	0.067 U	0.1 U	0.0012 U	0.067 U
cis-1,3-Dichloropropene	NS	NS	0.00058 U	0.00053 U	0.00063 U	0.00087 U	0.00065 U	0.039 U	0.064 U	0.00049 U	0.00051 U	0.00078 U	0.00062 U	0.039 U	0.027 U	0.045 U	0.00082 U	0.00076 U	0.00057 U	0.00066 U	0.00065 U	0.00058 U	0.034 U	0.05 U	0.00059 U	0.033 U
Cyclohexane	NS	NS	0.012 U	0.011 U	0.012 U	0.017 U	0.013 U	0.78 U	1.3 U	0.0098 U	0.0046 J	0.016 U	0.012 U	0.12 J	0.25 J	0.087 J	0.0017 J	0.015 U	0.011 U	0.058	0.007 J	0.0012 J	0.67 U	2.8	0.042	4.1
Dibromochloromethane	NS	NS	0.0012 U	0.0011 U	0.0012 U	0.0017 U	0.0013 U	0.078 U	0.13 U	0.00098 U	0.001 U	0.0016 U	0.0012 U	0.078 U	0.054 U	0.09 U	0.0016 U	0.0015 U	0.0011 U	0.0013 U	0.0013 U	0.0012 U	0.067 U	0.1 U	0.0012 U	0.067 U
Dichlorodifluoromethane	NS	NS	0.012 U	0.011 U	0.012 U	0.017 U	0.013 U	0.78 U	1.3 U	0.0098 U	0.01 U	0.016 U	0.012 U	0.78 U	0.54 U	0.9 U	0.016 U	0.015 U	0.011 U	0.013 U	0.013 U	0.012 U	0.67 U	1 U	0.012 U	0.67 U
Ethylbenzene	1	390	0.0012 U	0.0011 U	0.0012 U	0.0017 U	0.0013 U	0.015 J	0.13 U	0.00098 U	0.001 U	0.0016 U	0.0012 U	0.017 J	0.022 J	0.05 J	0.0016 U	0.0015 U	0.0011 U	0.0013 U	0.0013 U	0.0012 U	0.067 U	0.027 J	0.0012 U	0.016 J
Isopropylbenzene	NS	NS	0.0012 U	0.0011 U	0.0012 U	0.0017 U	0.0013 U	0.015 J	0.13 U	0.00098 U	0.00049 J	0.0016 U	0.0012 U	0.078 U	0.024 J	0.04 J	0.001 J	0.0015 U	0.0011 U	0.0019	0.00039 J	0.0012 U	0.067 U	0.037 J	0.0012 U	0.1
Methyl Acetate	NS	NS	0.0046 U	0.0042 U	0.005 U	0.0069 U	0.0052 U	0.43	0.52 U	0.0039 U	0.004 U	0.0062 U	0.02	0.29 J	0.077 J	0.56	0.0022 J	0.0061 U	0.0046 U	0.0052 U	0.0052 U	0.0046 U	0.27 U	0.43	0.0047 U	0.24 J
Methyl cyclohexane	NS	NS	0.0046 U	0.0042 U	0.005 U	0.0069 U	0.0052 U	0.31 U	2	0.0088	0.058	0.0062 U	0.005 U	0.36	4.4	0.6	0.02	0.0061 U	0.0012 J	0.38	0.043	0.011	1.5	5.5	0.04	23
Methyl tertiary butyl ether (MTBE)	0.93	500	0.0023 U	0.0021 U	0.0025 U	0.0035 U	0.0026 U	0.16 U	0.26 U	0.002 U	0.002 U	0.0031 U	0.0025 U	0.16 U	0.11 U	0.18 U	0.0033 U	0.003 U	0.0023 U	0.0026 U	0.0026 U	0.0023 U	0.13 U	0.2 U	0.0024 U	0.13 U
Methylene chloride	0.05	500	0.0058 U	0.0053 U	0.0063 U	0.0087 U	0.0065 U	0.39 U'	0.64 U'	0.0049 U	0.0051 U	0.0078 U	0.0062 U	0.39 U'	0.27 U'	0.45 U'	0.0082 U	0.0076 U	0.0057 U	0.0066 U	0.0065 U	0.0058 U	0.34 U'	0.5 U'	0.0059 U	0.33 U'
n-Butylbenzene	12	500	0.0012 U	0.0011 U	0.0012 U	0.0017 U	0.0013 U	0.078 U	0.13 U	0.00098 U	0.00082 J	0.0016 U	0.0012 U	0.078 U	0.044 J	0.1	0.0017	0.0015 U	0.0011 U	0.0006 J	0.0013 U	0.0012 U	0.067 U	0.026 J	0.0012 U	0.08
n-Propylbenzene	3.9	500	0.0012 U	0.0011 U	0.0012 U	0.0017 U	0.0013 U	0.078 U	0.13 U	0.00098 U	0.001 U	0.0016 U	0.0012 U	0.014 J	0.034 J	0.079 J	0.00087 J	0.0015 U	0.0011 U	0.0013	0.00028 J	0.0012 U	0.067 U	0.047 J	0.0012 U	0.14
sec-Butylbenzene	11	500	0.0012 U	0.00016 J	0.0012 U	0.0017 U	0.0013 U	0.087	0.084 J	0.00098 U	0.0017	0.0016 U	0.0012 U	0.078 U	0.052 J	0.044 J	0.004	0.0015 U	0.0011 U	0.0016	0.00025 J	0.0012 U	0.051 J	0.024 J	0.0012 U	0.19
Styrene	NS	NS	0.0012 U	0.0011 U	0.0012 U	0.0017 U	0.0013 U	0.078 U	0.13 U	0.00098 U	0.001 U	0.0016 U	0.0012 U	0.078 U	0.054 U	0.09 U	0.0016 U	0.0015 U	0.0011 U	0.0013 U	0.0013 U	0.0012 U	0.067 U	0.1 U	0.0012 U	0.067 U
tert-Butylbenzene	5.9	500	0.0023 U	0.0021 U	0.0025 U	0.0035 U	0.0026 U	0.63	0.42	0.029	0.00065 J	0.0031 U	0.0025 U	0.16 U	0.015 J	0.18 U	0.0018 J	0.003 U	0.0023 U	0.0013 J	0.00024 J	0.0023 U	0.036 J	0.2 U	0.0024 U	0.11 J
Tetrachloroethene	1.3	150	0.00058 U	0.00053 U	0.00063 U	0.00087 U	0.00038 J	0.039 U	0.064 U	0.00022 J	0.00051 U	0.00078 U	0.00062 U	0.039 U	0.027 U	0.045 U	0.00082 U	0.00076 U	0.00057 U	0.00066 U	0.00065 U	0.00058 U	0.034 U	0.05 U	0.00059 U	0.033 U
Toluene	0.7	500	0.0012 U	0.0011 U	0.0012 U	0.0017 U	0.0013 U	0.078 U	0.13 U	0.00098 U	0.001 U	0.0016 U	0.0012 U	0.078 U	0.054 U	0.09 U	0.0016 U	0.0015 U	0.0011 U	0.0013 U	0.0013 U	0.0012 U	0.067 U	0.1 U	0.0012 U	0.067 U
trans-1,2-Dichloroethene	0.19	500	0.0017 U	0.0016 U	0.0019 U	0.0026 U	0.002 U	0.12 U	0.19 U	0.0015 U	0.0015 U	0.0023 U	0.0019 U	0.12 U	0.081 U	0.14 U	0.0024 U	0.0023 U	0.0017 U	0.002 U	0.0019 U	0.0017 U	0.1 U	0.15 U	0.0018 U	0.1 U
trans-1,3-Dichloropropene	NS	NS	0.0012 U	0.0011 U	0.0012 U	0.0017 U	0.0013 U	0.078 U	0.13 U	0.00098 U	0.001 U	0.0016 U	0.0012 U	0.078 U	0.054 U	0.09 U	0.0016 U	0.0015 U	0.0011 U	0.0013 U	0.0013 U	0.0012 U	0.067 U	0.1 U	0.0012 U	0.067 U
Trichloroethene	0.47	200	0.00058 U	0.00053 U	0.00063 U	0.00087 U	0.00065 U	0.039 U	0.064 U	0.00049 U	0.00051 U	0.00078 U	0.00062 U	0.039 U	0.027 U	0.045 U	0.00082 U	0.00076 U	0.00057 U	0.00066 U	0.00065 U	0.00058 U	0.034 U	0.05 U	0.00059 U	0.033 U
Trichlorofluoromethane	NS	NS	0.0046 U	0.0042 U	0.005 U	0.0069 U	0.0052 U	0.31 U	0.52 U	0.0039 U	0.004 U	0.0062 U	0.005 U	0.31 U	0.22 U	0.36 U	0.0065 U	0.0061 U	0.0046 U	0.0052 U	0.0052 U	0.0046 U	0.27 U	0.4 U	0.0047 U	0.27 U
Vinyl chloride	0.02	13	0.0012 U	0.0011 U	0.0012 U	0.0017 U	0.0013 U	0.078 U'	0.13 U'	0.00098 U	0.001 U	0.0016 U	0.0012 U	0.078 U'	0.054 U'	0.09 U'	0.0016 U	0.0015 U	0.0011 U	0.0013 U	0.0013 U	0.0012 U	0.067 U'	0.1 U'	0.0012 U	0.067 U'
Xylene (m&p)	NS	NS	0.0023 U	0.0021 U	0.0025 U	0.0035 U	0.0026 U	0.078 J	0.26 U	0.002 U	0.002 U	0.0031 U	0.0025 U	0.082 J	0.075 J	0.28	0.0011 J	0.003 U	0.0023 U	0.0011 J	0.0026 U	0.0023 U	0.13 U	0.1 J	0.0024 U	0.14
Xylene (o)	NS	NS	0.0012 U	0.0011 U	0.0012 U	0.0017 U	0.0013 U	0.078 U	0.13 U	0.00098 U	0.0005 J	0.0016 U	0.0012 U	0.069 J	0.06	0.29	0.0011 J	0.0015 U	0.0011 U	0.0036	0.00098 J	0.0012 U	0.067 U	0.28	0.0015	0.091
Xylenes (Total)	1.6	500	0.0012 U	0.0011 U	0.0012 U	0.0017 U	0.0013 U	0.078 J	0.00054 U	0.00098 U	0.0005 J	0.0016 U	0.0012 U	0.15 J	0.14 J	0.57	0.0022 J	0.0015 U	0.0011 U	0.0047 J	0.00098 J	0.0012 U	0.067 U	0.38 J	0.0015	0.23
Total Volatile TICs	NS	NS	ND	ND	ND	ND	ND	ND	ND	ND	1.04 J	0.159 J	0.00443 J	0.00443 J	0.00443 J	0.00443 J	0.00443 J	0.00318 J	0.00318 J	0.802 J	0.00318 J	0.00318 J	0.00318 J	34.1 J	34.1 J	34.1 J

Notes:

NYSDEC GW Protection SCO = New York State Department of Environmental Conservation Groundwater Protection Soil Cleanup Objectives, from Table 375-6.8 of 6 NYCRR Part 375.
NYSDEC Commercial SCO = New York State Department of Environmental Conservation Restricted Commercial Use Soil Cleanup Objectives, from Table 375-6.8 of 6 NYCRR Part 375.
ft bgs = Feet below ground surface.
mg/kg = Milligrams per kilogram.
Green concentrations exceed the NYSDEC GW Protection SCO.
Highlighted concentrations exceed the NYSDEC Commercial SCO.
— = Sample not analyzed.
NS = No standard currently established.
ND = Not Detected.
U = Not detected above laboratory detection limit.
U' = Laboratory reporting limit exceeds the applicable regulatory standard or criteria being utilized.
J = Result below the reporting limit (estimated value).
DUP = Duplicate sample was taken.
When the applicable state standard applies to mixed isomers and the laboratory reports individual isomers, the total standard is listed for each isomer.
* = Sample was analyzed twice by the laboratory. Higher detections were reported.

Table 5
Soil Reuse Characterization Sampling Results
Summary of Volatile Organic Compounds in Soil.
MJ Painting; Olean, New York.

Sample ID	NYSDEC GW Protection SCO	NYSDEC Commercial SCO	RX-446	RX-447	RX-447	RX-447	RX-447	RX-448	RX-448	RX-448	RX-448	RXMW-106	RXMW-107	RXMW-108	RXMW-109	RXMW-110	RXMW-111	RXMW-112	RXMW-113	RXMW-113 DUP
Sample Depth (ft bgs)			11	3	5	7-10	10-12	3-4	7	9	11	26-28	26-27	18-20	20-22	20-24	8-10	28-32	20-25	20-25
Sample Date			11/16/2021	11/16/2021	11/16/2021	11/16/2021	11/16/2021	11/16/2021	11/18/2021	11/18/2021	11/18/2021	1/19/2022	1/5/2022	1/5/2022	1/6/2022	1/18/2022	1/19/2022	1/18/2022	1/18/2022	1/18/2022
VOLATILE ORGANIC COMPOUNDS - 8260C (mg/kg)																				
1,1,1-Trichloroethane	0.68	500	0.025 U	0.001 U	0.00064 U	0.00068 U	0.00073 U	0.00082 U	0.5 U	0.063 U	0.071 U	0.025 U	0.025 U	0.03 U	0.039 U	0.031 U	0.043 U	0.03 U	0.032 U	0.029 U
1,1,2,2,-Tetrachloroethane	NS	NS	0.025 U	0.001 U	0.00064 U	0.00068 U	0.00073 U	0.00082 U	0.5 U	0.063 U	0.071 U	0.025 U	0.025 U	0.03 U	0.039 U	0.031 U	0.043 U	0.03 U	0.032 U	0.029 U
1,1,2-Trichloro-1,2,2-trifluoroethane	NS	NS	0.2 U	0.0082 U	0.0051 U	0.0054 U	0.0058 U	0.0066 U	4 U	0.5 U	0.57 U	0.2 U	0.2 U	0.24 U	0.31 U	0.25 U	0.34 U	0.24 U	0.25 U	0.23 U
1,1,2-Trichloroethane	NS	NS	0.049 U	0.002 U	0.0013 U	0.0014 U	0.0014 U	0.0016 U	1 U	0.13 U	0.14 U	0.049 U	0.05 U	0.061 U	0.078 U	0.062 U	0.085 U	0.061 U	0.063 U	0.058 U
1,1,-Dichloroethene	0.33	500	0.049 U	0.002 U	0.0013 U	0.0014 U	0.0014 U	0.0016 U	1 U'	0.13 U	0.14 U	0.049 U	0.05 U	0.061 U	0.078 U	0.062 U	0.085 U	0.061 U	0.063 U	0.058 U
1,1-Dichloroethane	0.27	240	0.049 U	0.002 U	0.0013 U	0.0014 U	0.0014 U	0.0016 U	1 U'	0.13 U	0.14 U	0.049 U	0.05 U	0.061 U	0.078 U	0.062 U	0.085 U	0.061 U	0.063 U	0.058 U
1,2,3-Trichlorobenzene	NS	NS	0.099 U	0.0014 J	0.0026 U	0.0027 U	0.0029 U	0.0033 U	2 U	0.25 U	0.28 U	0.099 U	0.099 U	0.12 U	0.16 U	0.12 U	0.17 U	0.12 U	0.13 U	0.12 U
1,2,4-Trichlorobenzene	NS	NS	0.099 U	0.0041 U	0.0026 U	0.0027 U	0.0029 U	0.0033 U	2 U	0.25 U	0.28 U	0.099 U	0.099 U	0.12 U	0.16 U	0.12 U	0.17 U	0.12 U	0.13 U	0.12 U
1,2,4-Trimethylbenzene	3.6	190	0.41	0.0041 U	0.0026 U	0.0027 U	0.0029 U	0.0033 U	**170**	**19**	**130**	0.5	1	0.081 J	**20**	**6.4**	**33**	0.12 U	0.11 J	0.24
1,2-Dibromo-3-chloropropane	NS	NS	0.15 U	0.0061 U	0.0038 U	0.004 U	0.0044 U	0.0049 U	3 U	0.38 U	0.43 U	0.15 U	0.15 U	0.18 U	0.23 U	0.19 U	0.26 U	0.18 U	0.19 U	0.18 U
1,2-Dibromoethane	NS	NS	0.049 U	0.002 U	0.0013 U	0.0014 U	0.0014 U	0.0016 U	1 U	0.13 U	0.14 U	0.049 U	0.05 U	0.061 U	0.078 U	0.062 U	0.085 U	0.061 U	0.063 U	0.058 U
1,2-Dichlorobenzene	1.1	500	0.099 U	0.0041 U	0.0026 U	0.0027 U	0.0029 U	0.0033 U	2 U'	0.25 U	0.28 U	0.099 U	0.099 U	0.12 U	0.16 U	0.12 U	0.17 U	0.12 U	0.13 U	0.12 U
1,2-Dichloroethane	0.02	30	0.049 U'	0.002 U	0.0013 U	0.0014 U	0.0014 U	0.0016 U	1 U'	0.13 U'	0.14 U'	0.049 U'	0.05 U'	0.061 U'	0.078 U'	0.062 U'	0.085 U'	0.061 U'	0.063 U'	0.058 U'
1,2-Dichloroethene, Total	NS	NS	0.049 U	0.002 U	0.0013 U	0.0014 U	0.0014 U	0.0016 U	1 U	0.13 U	0.14 U	0.049 U	0.05 U	0.061 U	0.078 U	0.062 U	0.085 U	0.061 U	0.063 U	0.058 U
1,2-Dichloropropane	NS	NS	0.049 U	0.002 U	0.0013 U	0.0014 U	0.0014 U	0.0016 U	1 U	0.13 U	0.14 U	0.049 U	0.05 U	0.061 U	0.078 U	0.062 U	0.085 U	0.061 U	0.063 U	0.058 U
1,3,5-Trimethylbenzene	8.4	190	0.18	0.0041 U	0.0026 U	0.0027 U	0.0029 U	0.0033 U	**190**	**20**	**57**	0.031 J	0.025 J	0.12 U	0.36	0.028 J	**20**	0.12 U	0.018 J	0.092 J
1,3-Dichlorobenzene	2.4	280	0.099 U	0.0041 U	0.0026 U	0.0027 U	0.0029 U	0.0033 U	2 U	0.25 U	0.28 U	0.099 U	0.099 U	0.12 U	0.16 U	0.12 U	0.17 U	0.12 U	0.13 U	0.12 U
1,3-Dichloropropene, Total	NS	NS	0.025 U	0.001 U	0.00064 U	0.00068 U	0.00073 U	0.00082 U	0.5 U	0.063 U	0.071 U	0.025 U	0.025 U	0.03 U	0.039 U	0.031 U	0.043 U	0.03 U	0.032 U	0.029 U
1,4-Dichlorobenzene	1.8	130	0.099 U	0.0041 U	0.0026 U	0.0027 U	0.0029 U	0.0033 U	2 U'	0.25 U	0.28 U	0.099 U	0.026 J	0.12 U	0.16 U	0.12 U	0.17 U	0.12 U	0.13 U	0.12 U
1,4-Dioxane	0.1	130	3.9 U'	0.16 U'	0.1 U	0.11 U'	0.12 U'	0.13 U'	80 U'	10 U'	11 U'	4 U'	4 U'	4.8 U'	6.2 U'	5 U'	6.8 U'	4.8 U'	5 U'	4.7 U'
2-Butanone	0.12	500	0.49 U'	0.02 U	0.0046 J	0.014 U	0.0039 J	0.016 U	10 U'	1.3 U'	1.4 U'	0.49 U'	0.5 U'	0.61 U'	0.78 U'	0.62 U'	0.85 U'	0.61 U'	0.63 U'	0.58 U'
2-Hexanone	NS	NS	0.49 U	0.02 U	0.013 U	0.014 U	0.014 U	0.016 U	10 U	1.3 U	1.4 U	0.49 U	0.5 U	0.61 U	0.78 U	0.62 U	0.85 U	0.61 U	0.63 U	0.58 U
4-Methyl-2-Pentanone	NS	NS	0.49 U	0.02 U	0.013 U	0.014 U	0.014 U	0.016 U	10 U	1.3 U	1.4 U	0.49 U	0.5 U	0.61 U	0.78 U	0.62 U	0.85 U	0.61 U	0.63 U	0.58 U
Acetone	0.05	500	0.49 U'	0.02 U	0.041	0.041	0.028	0.015 J	**9.7 J**	**0.74 J**	1.4 U'	0.49 U'	0.5 U'	0.61 U'	0.78 U'	0.62 U'	0.85 U'	0.61 U'	0.63 U'	0.58 U'
Benzene	0.06	44	0.025 U	0.001 U	0.00064 U	0.00068 U	0.00073 U	0.00033 J	**11**	**1.1**	**4.2**	0.025 U	0.0087 J	0.03 U	0.022 J	**0.12**	**0.56**	0.03 U	0.012 J	0.012 J
Bromochloromethane	NS	NS	0.099 U	0.0041 U	0.0026 U	0.0027 U	0.0029 U	0.0033 U	2 U	0.25 U	0.28 U	0.099 U	0.099 U	0.12 U	0.16 U	0.12 U	0.17 U	0.12 U	0.13 U	0.12 U
Bromodichloromethane	NS	NS	0.025 U	0.001 U	0.00064 U	0.00068 U	0.00073 U	0.00082 U	0.5 U	0.063 U	0.071 U	0.025 U	0.025 U	0.03 U	0.039 U	0.031 U	0.043 U	0.03 U	0.032 U	0.029 U
Bromoform	NS	NS	0.2 U	0.0082 U	0.0051 U	0.0054 U	0.0058 U	0.0066 U	4 U	0.5 U	0.57 U	0.2 U	0.2 U	0.24 U	0.31 U	0.25 U	0.34 U	0.24 U	0.25 U	0.23 U
Bromomethane	NS	NS	0.099 U	0.0041 U	0.0026 U	0.0027 U	0.0029 U	0.0033 U	2 U	0.25 U	0.28 U	0.099 U	0.099 U	0.12 U	0.16 U	0.12 U	0.17 U	0.12 U	0.13 U	0.12 U
Carbon disulfide	NS	NS	0.49 U	0.02 U	0.013 U	0.014 U	0.014 U	0.016 U	10 U	1.3 U	1.4 U	0.49 U	0.5 U	0.61 U	0.78 U	0.62 U	0.85 U	0.61 U	0.63 U	0.58 U
Carbon tetrachloride	0.76	22	0.049 U	0.002 U	0.0013 U	0.0014 U	0.0014 U	0.0016 U	1 U'	0.13 U	0.14 U	0.049 U	0.05 U	0.061 U	0.078 U	0.062 U	0.085 U	0.061 U	0.063 U	0.058 U
Chlorobenzene	1.1	500	0.025 U	0.001 U	0.00064 U	0.00068 U	0.00073 U	0.00082 U	0.5 U	0.063 U	0.071 U	0.025 U	0.025 U	0.03 U	0.039 U	0.031 U	0.043 U	0.03 U	0.032 U	0.029 U
Chloroethane	NS	NS	0.099 U	0.0041 U	0.0026 U	0.0027 U	0.0029 U	0.0033 U	2 U	0.25 U	0.28 U	0.099 U	0.099 U	0.12 U	0.16 U	0.12 U	0.17 U	0.12 U	0.13 U	0.12 U
Chloroform	0.37	350	0.074 U	0.0031 U	0.0019 U	0.002 U	0.0022 U	0.0025 U	1.5 U'	0.19 U	0.21 U	0.074 U	0.074 U	0.091 U	0.12 U	0.094 U	0.13 U	0.091 U	0.095 U	0.088 U
Chloromethane	NS	NS	0.2 U	0.0082 U	0.0051 U	0.0054 U	0.0058 U	0.0066 U	4 U	0.5 U	0.57 U	0.2 U	0.2 U	0.24 U	0.31 U	0.25 U	0.34 U	0.24 U	0.25 U	0.23 U
cis-1,2-Dichloroethene	0.25	500	0.049 U	0.002 U	0.0013 U	0.0014 U	0.0014 U	0.0016 U	1 U'	0.13 U	0.14 U	0.049 U	0.05 U	0.061 U	0.078 U	0.062 U	0.085 U	0.061 U	0.063 U	0.058 U
cis-1,3-Dichloropropene	NS	NS	0.025 U	0.001 U	0.00064 U	0.00068 U	0.00073 U	0.00082 U	0.5 U	0.063 U	0.071 U	0.025 U	0.025 U	0.03 U	0.039 U	0.031 U	0.043 U	0.03 U	0.032 U	0.029 U
Cyclohexane	NS	NS	0.73	0.02 U	0.013 U	0.014 U	0.014 U	0.016 U	54	5.9	19	0.34 J	2.2	5.3	8.4	7.3	6.7	0.61 U	4.9	4.1
Dibromochloromethane	NS	NS	0.049 U	0.002 U	0.0013 U	0.0014 U	0.0014 U	0.0016 U	1 U	0.13 U	0.14 U	0.049 U	0.05 U	0.061 U	0.078 U	0.062 U	0.085 U	0.061 U	0.063 U	0.058 U
Dichlorodifluoromethane	NS	NS	0.49 U	0.02 U	0.013 U	0.014 U	0.014 U	0.016 U	10 U	1.3 U	1.4 U	0.49 U	0.5 U	0.61 U	0.78 U	0.62 U	0.85 U	0.61 U	0.63 U	0.58 U
Ethylbenzene	1	390	0.049 U	0.002 U	0.0013 U	0.0014 U	0.0014 U	0.0016 U	**68**	**6.5**	**18**	0.049 U	0.05 U	0.061 U	0.78	0.069	**3.4**	0.061 U	0.063 U	0.058 U
Isopropylbenzene	NS	NS	0.096	0.002 U	0.0013 U	0.0014 U	0.0014 U	0.0016 U	27	2.8	6.2	0.098	0.29	0.061 U	1.6	0.78	1.6	0.061 U	0.25	0.23
Methyl Acetate	NS	NS	0.2 U	0.0082 U	0.0051 U	0.0054 U	0.0058 U	0.0066 U	72	0.5 U	0.57 U	0.2 U	1	0.24 U	0.31 U	0.25 U	0.34 U	0.24 U	0.25 U	0.23 U
Methyl cyclohexane	NS	NS	16	0.0082 U	0.0051 U	0.0054 U	0.0058 U	0.0066 U	460	42	76	1.7	7	42	46	32	25	2.3	46	38
Methyl tertiary butyl ether (MTBE)	0.93	500	0.099 U	0.0041 U	0.0026 U	0.0027 U	0.0029 U	0.0033 U	2 U'	0.25 U	0.28 U	0.099 U	0.099 U	0.12 U	0.16 U	0.12 U	0.17 U	0.12 U	0.13 U	0.12 U
Methylene chloride	0.05	500	0.25 U'	0.01 U	0.0064 U	0.0068 U	0.0073 U	0.0082 U	5 U'	0.63 U'	0.71 U'	0.25 U'	0.25 U'	0.3 U'	0.39 U'	0.31 U'	0.43 U'	0.3 U'	0.32 U'	0.29 U'
n-Butylbenzene	12	500	0.033 J	0.002 U	0.0013 U	0.0014 U	0.0014 U	0.0016 U	**19**	1.5	5	0.12	0.3	0.061 U	1.8	0.37	1.6	0.061 U	0.31	0.29
n-Propylbenzene	3.9	500	0.086	0.002 U	0.0013 U	0.0014 U	0.0014 U	0.0016 U	**49**	**4.9**	**9.7**	0.13	0.43	0.061 U	2.4	1	3.1	0.061 U	0.063 U	0.058 U
sec-Butylbenzene	11	500	0.085	0.002 U	0.0013 U	0.0014 U	0.0014 U	0.0016 U	**22**	2.2	4.1	0.19	0.26	0.32	1.9	1	1.6	0.04 J	1.2	1
Styrene	NS	NS	0.049 U	0.002 U	0.0013 U	0.0014 U	0.0014 U	0.0016 U	1 U	0.13 U	0.14 U	0.049 U	0.05 U	0.061 U	0.054 J	0.062 U	0.085 U	0.061 U	0.063 U	0.058 U
tert-Butylbenzene	5.9	500	0.038 J	0.0041 U	0.0026 U	0.0027 U	0.0029 U	0.0033 U	**7.2**	0.76	1.3	0.034 J	0.064 J	0.23	0.48	0.5	0.73	0.29	0.52	0.45
Tetrachloroethene	1.3	150	0.025 U	0.001 U	0.00064 U	0.00068 U	0.00073 U	0.00082 U	0.5 U	0.063 U	0.071 U	0.025 U	0.025 U	0.03 U	0.039 U	0.031 U	0.043 U	0.03 U	0.032 U	0.029 U
Toluene	0.7	500	0.049 U	0.002 U	0.0013 U	0.0014 U	0.0014 U	0.0016 U	**93**	**7.7**	**11**	0.049 U	0.05 U	0.061 U	0.047 J	0.062 U	**3**	0.061 U	0.063 U	0.058 U
trans-1,2-Dichloroethene	0.19	500	0.074 U	0.0031 U	0.0019 U	0.002 U	0.0022 U	0.0025 U	1.5 U'	0.19 U	0.21 U'	0.074 U	0.074 U	0.091 U	0.12 U	0.094 U	0.13 U	0.091 U	0.095 U	0.088 U
trans-1,3-Dichloropropene	NS	NS	0.049 U	0.002 U	0.0013 U	0.0014 U	0.0014 U	0.0016 U	1 U	0.13 U	0.14 U	0.049 U	0.05 U	0.061 U	0.078 U	0.062 U	0.085 U	0.061 U	0.063 U	0.058 U
Trichloroethene	0.47	200	0.025 U	0.001 U	0.00064 U	0.00068 U	0.00073 U	0.00082 U	0.5 U'	0.063 U	0.071 U	0.025 U	0.025 U	0.03 U	0.039 U	0.031 U	0.043 U	0.03 U	0.032 U	0.029 U
Trichlorofluoromethane	NS	NS	0.2 U	0.0082 U	0.0051 U	0.0054 U	0.0058 U	0.0066 U	4 U	0.5 U	0.57 U	0.2 U	0.2 U	0.24 U	0.31 U	0.25 U	0.34 U	0.24 U	0.25 U	0.23 U
Vinyl chloride	0.02	13	0.049 U'	0.002 U	0.0013 U	0.0014 U	0.0014 U	0.0016 U	1 U'	0.13 U'	0.14 U'	0.049 U'	0.05 U'	0.061 U'	0.078 U'	0.062 U'	0.085 U'	0.061 U'	0.063 U'	0.058 U'
Xylene (m&p)	NS	NS	0.036 J	0.0041 U	0.0026 U	0.0027 U	0.0029 U	0.0033 U	200	20	27	0.099 U	0.054 J	0.12 U	0.052 J	0.12 U	13	0.12 U	0.13 U	0.051 J
Xylene (o)	NS	NS	0.018 J	0.002 U	0.0013 U	0.0014 U	0.0014 U	0.0016 U	84	8.6	35	0.049 U	0.031 J	0.061 U	2.2	0.42	7.6	0.061 U	0.061 J	0.082
Xylenes (Total)	1.6	500	0.054 J	0.002 U	0.0013 U	0.0014 U	0.0014 U	0.0016 U	**280**	**29**	**62**	0.049 U	0.085 J	0.061 U	**2.3 J**	0.42	**21**	0.061 U	0.061 J	0.13 J
Total Volatile TICs	NS	NS	34.1 J	0.221 J	0.221 J	0.221 J	0.221 J	ND	ND	ND	ND	21.1 J	21.1 J	64.8 J	22.1 J	90.3 J	125 J	55 J	79.8 J	72 J

Notes:
NYSDEC GW Protection SCO = New York State Department of Environmental Conservation Groundwater Protection Soil Cleanup Objectives, from Table 375-6.8 of 6 NYCRR Part 375.
NYSDEC Commercial SCO = New York State Department of Environmental Conservation Restricted Commercial Use Soil Cleanup Objectives, from Table 375-6.8 of 6 NYCRR Part 375.
ft bgs = Feet below ground surface.
mg/kg = Milligrams per kilogram.
Green concentrations exceed the NYSDEC GW Protection SCO.
Highlighted concentrations exceed the NYSDEC Commercial SCO.
— = Sample not analyzed.
NS = No standard currently established.
ND = Not Detected.
U = Not detected above laboratory detection limit.
U' = Laboratory reporting limit exceeds the applicable regulatory standard or criteria being utilized.
J = Result below the reporting limit (estimated value).
DUP = Duplicate sample was taken.
When the applicable state standard applies to mixed isomers and the laboratory reports individual isomers, the total standard is listed for each isomer.
* = Sample was analyzed twice by the laboratory. Higher detections were reported.

Table 5
Soil Reuse Characterization Sampling Results
Summary of Semi-Volatile Organic Compounds in Soil.
MJ Painting; Olean, New York.

Sample ID	NYSDEC GW Protection SCO	NYSDEC Commercial SCO	RX-301	RX-302	RX-303	RX-304	RX-305	RX-306	RX-307	RX-308	RX-309	RX-310	RX-311	RX-312	RX-313	RX-314	RX-315	RX-316	RX-317	RX-318	RX-319	RX-320	RX-321	RX-321 DUP	RX-401	RX-401	RX-401	RX-402	RX-403	RX-403
Sample Depth (ft bgs)			0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	1-4	7-10	7-10	0-1	4-7
Sample Date			11/15/2021	11/9/2021	11/15/2021	11/15/2021	11/15/2021	11/16/2021	11/17/2021	11/17/2021	11/17/2021	11/17/2021	11/18/2021	11/17/2021	1/5/2022	1/4/2022	1/7/2022	1/7/2022	1/7/2022	1/4/2022	1/7/2022	1/5/2022	1/7/2022	1/7/2022	11/12/2021	11/12/2021	11/12/2021	11/12/2021	11/12/2021	11/12/2021
SEMI-VOLATILE ORGANIC COMPOUNDS - 8270D (mg/kg)																														
1,2,4,5-Tetrachlorobenzene	NS	NS	0.19 U	1 U	0.21 U	0.19 U	0.21 U	0.19 U	0.18 U	0.19 U	0.18 U	0.19 U	0.2 U	0.2 U	0.65 U	1.1 U	0.66 U	0.72 U	0.62 U	0.22 U	0.21 U	0.22 U	0.21 U	0.21 U	0.19 U	1.9 U	2.1 U	2.1 U	0.21 U	2.1 U
2,3,4,6-Tetrachlorophenol	NS	NS	0.19 U	1 U	0.21 U	0.19 U	0.21 U	0.19 U	0.18 U	0.19 U	0.18 U	0.19 U	0.2 U	0.2 U	0.65 U	1.1 U	0.66 U	0.72 U	0.62 U	0.22 U	0.21 U	0.22 U	0.21 U	0.21 U	0.19 U	1.9 U	2.1 U	2.1 U	0.21 U	2.1 U
2,4,5-Trichlorophenol	NS	NS	0.19 U	1 U	0.21 U	0.19 U	0.21 U	0.19 U	0.18 U	0.19 U	0.18 U	0.19 U	0.2 U	0.2 U	0.65 U	1.1 U	0.66 U	0.72 U	0.62 U	0.22 U	0.21 U	0.22 U	0.21 U	0.21 U	0.19 U	1.9 U	2.1 U	2.1 U	0.21 U	2.1 U
2,4,6-Trichlorophenol	NS	NS	0.11 U	0.6 U	0.13 U	0.11 U	0.12 U	0.11 U	0.11 U	0.12 U	0.11 U	0.11 U	0.12 U	0.12 U	0.39 U	0.66 U	0.39 U	0.43 U	0.37 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.11 U	1.2 U	1.3 U	1.3 U	0.12 U	1.2 U
2,4-Dichlorophenol	NS	NS	0.17 U	0.9 U	0.19 U	0.17 U	0.19 U	0.17 U	0.16 U	0.17 U	0.16 U	0.17 U	0.18 U	0.18 U	0.59 U	0.99 U	0.59 U	0.65 U	0.56 U	0.19 U	0.19 U	0.2 U	0.19 U	0.19 U	0.17 U	1.7 U	1.9 U	1.9 U	0.18 U	1.9 U
2,4-Dimethylphenol	NS	NS	0.19 U	1 U	0.21 U	0.19 U	0.21 U	0.19 U	0.18 U	0.19 U	0.18 U	0.19 U	0.2 U	0.2 U	0.65 U	1.1 U	0.66 U	0.72 U	0.62 U	0.22 U	0.21 U	0.22 U	0.21 U	0.21 U	0.19 U	1.9 U	2.1 U	2.1 U	0.21 U	2.1 U
2,4-Dinitrophenol	NS	NS	0.91 U	4.8 U	1 U	0.9 U	1 U	0.9 U	0.86 U	0.93 U	0.88 U	0.91 U	0.98 U	0.95 U	3.1 U	5.3 U	3.2 U	3.4 U	3 U	1 U	1 U	1.1 U	1 U	1 U	0.92 U	9.3 U	10 U	10 U	0.99 U	10 U
2,4-Dinitrotoluene	NS	NS	0.19 U	1 U	0.21 U	0.19 U	0.21 U	0.19 U	0.18 U	0.19 U	0.18 U	0.19 U	0.2 U	0.2 U	0.65 U	1.1 U	0.66 U	0.72 U	0.62 U	0.22 U	0.21 U	0.22 U	0.21 U	0.21 U	0.19 U	1.9 U	2.1 U	2.1 U	0.21 U	2.1 U
2,6-Dinitrotoluene	NS	NS	0.19 U	1 U	0.21 U	0.19 U	0.21 U	0.19 U	0.18 U	0.19 U	0.18 U	0.19 U	0.2 U	0.2 U	0.65 U	1.1 U	0.66 U	0.72 U	0.62 U	0.22 U	0.21 U	0.22 U	0.21 U	0.21 U	0.19 U	1.9 U	2.1 U	2.1 U	0.21 U	2.1 U
2-Chloronaphthalene	NS	NS	0.19 U	1 U	0.21 U	0.19 U	0.21 U	0.19 U	0.18 U	0.19 U	0.18 U	0.19 U	0.2 U	0.2 U	0.65 U	1.1 U	0.66 U	0.72 U	0.62 U	0.22 U	0.21 U	0.22 U	0.21 U	0.21 U	0.19 U	1.9 U	2.1 U	2.1 U	0.21 U	2.1 U
2-Chlorophenol	NS	NS	0.19 U	1 U	0.21 U	0.19 U	0.21 U	0.19 U	0.18 U	0.19 U	0.18 U	0.19 U	0.2 U	0.2 U	0.65 U	1.1 U	0.66 U	0.72 U	0.62 U	0.22 U	0.21 U	0.22 U	0.21 U	0.21 U	0.19 U	1.9 U	2.1 U	2.1 U	0.21 U	2.1 U
2-Methylnapthalene	NS	NS	0.16 J	0.26 J	0.25 U	0.22 U	0.25 U	0.22 U	0.22 U	0.23 U	0.22 U	0.23 U	0.25 U	0.062 J	0.12 J	0.21 J	0.79 U	0.43 J	0.14 J	0.055 J	0.19 J	0.29	0.23 J	0.23 J	0.65	1 J	0.29 J	0.28 J	0.17 J	3.9
2-Methylphenol	0.33	500	0.19 U	1 U'	0.21 U	0.19 U	0.21 U	0.19 U	0.18 U	0.19 U	0.18 U	0.19 U	0.2 U	0.2 U	0.65 U'	1.1 U'	0.66 U'	0.72 U'	0.62 U'	0.22 U	0.21 U	0.22 U	0.21 U	0.21 U	0.091 J	1.9 U'	2.1 U'	2.1 U'	0.21 U	2.1 U'
2-Nitroaniline	NS	NS	0.19 U	1 U	0.21 U	0.19 U	0.21 U	0.19 U	0.18 U	0.19 U	0.18 U	0.19 U	0.2 U	0.2 U	0.65 U	1.1 U	0.66 U	0.72 U	0.62 U	0.22 U	0.21 U	0.22 U	0.21 U	0.21 U	0.19 U	1.9 U	2.1 U	2.1 U	0.21 U	2.1 U
2-Nitrophenol	NS	NS	0.41 U	2.2 U	0.45 U	0.41 U	0.45 U	0.4 U	0.39 U	0.42 U	0.4 U	0.41 U	0.44 U	0.43 U	1.4 U	2.4 U	1.4 U	1.6 U	1.3 U	0.46 U	0.46 U	0.48 U	0.46 U	0.46 U	0.41 U	4.2 U	4.5 U	4.6 U	0.44 U	4.5 U
3,3'-Dichlorobenzidine	NS	NS	0.19 U	1 U	0.21 U	0.19 U	0.21 U	0.19 U	0.18 U	0.19 U	0.18 U	0.19 U	0.2 U	0.2 U	0.65 U	1.1 U	0.66 U	0.72 U	0.62 U	0.22 U	0.21 U	0.22 U	0.21 U	0.21 U	0.19 U	1.9 U	2.1 U	2.1 U	0.21 U	2.1 U
3-Methylphenol/4-Methylphenol	NS	NS	0.27 U	1.4 U	0.3 U	0.27 U	0.3 U	0.27 U	0.26 U	0.28 U	0.26 U	0.27 U	0.3 U	0.28 U	0.94 U	1.6 U	0.94 U	1 U	0.9 U	0.31 U	0.31 U	0.32 U	0.31 U	0.3 U	0.084 J	2.8 U	3 U	3.1 U	0.3 U	3 U
3-Nitroaniline	NS	NS	0.19 U	1 U	0.21 U	0.19 U	0.21 U	0.19 U	0.18 U	0.19 U	0.18 U	0.19 U	0.2 U	0.2 U	0.65 U	1.1 U	0.66 U	0.72 U	0.62 U	0.22 U	0.21 U	0.22 U	0.21 U	0.21 U	0.19 U	1.9 U	2.1 U	2.1 U	0.21 U	2.1 U
4,6-Dinitro-o-cresol	NS	NS	0.49 U	2.6 U	0.55 U	0.49 U	0.54 U	0.49 U	0.47 U	0.5 U	0.48 U	0.49 U	0.53 U	0.51 U	1.7 U	2.8 U	1.7 U	1.9 U	1.6 U	0.56 U	0.55 U	0.58 U	0.56 U	0.55 U	0.5 U	5 U	5.5 U	5.6 U	0.54 U	5.4 U
4-Bromophenyl-phenylether	NS	NS	0.19 U	1 U	0.21 U	0.19 U	0.21 U	0.19 U	0.18 U	0.19 U	0.18 U	0.19 U	0.2 U	0.2 U	0.65 U	1.1 U	0.66 U	0.72 U	0.62 U	0.22 U	0.21 U	0.22 U	0.21 U	0.21 U	0.19 U	1.9 U	2.1 U	2.1 U	0.21 U	2.1 U
4-Chloroaniline	NS	NS	0.19 U	1 U	0.21 U	0.19 U	0.21 U	0.19 U	0.18 U	0.19 U	0.18 U	0.19 U	0.2 U	0.2 U	0.65 U	1.1 U	0.66 U	0.72 U	0.62 U	0.22 U	0.21 U	0.22 U	0.21 U	0.21 U	0.19 U	1.9 U	2.1 U	2.1 U	0.21 U	2.1 U
4-Chlorophenyl-phenylether	NS	NS	0.19 U	1 U	0.21 U	0.19 U	0.21 U	0.19 U	0.18 U	0.19 U	0.18 U	0.19 U	0.2 U	0.2 U	0.65 U	1.1 U	0.66 U	0.72 U	0.62 U	0.22 U	0.21 U	0.22 U	0.21 U	0.21 U	0.19 U	1.9 U	2.1 U	2.1 U	0.21 U	2.1 U
4-Nitroaniline	NS	NS	0.19 U	1 U	0.21 U	0.19 U	0.21 U	0.19 U	0.18 U	0.19 U	0.18 U	0.19 U	0.2 U	0.2 U	0.65 U	1.1 U	0.66 U	0.72 U	0.62 U	0.22 U	0.21 U	0.22 U	0.21 U	0.21 U	0.19 U	1.9 U	2.1 U	2.1 U	0.21 U	2.1 U
4-Nitrophenol	NS	NS	0.26 U	1.4 U	0.29 U	0.26 U	0.29 U	0.26 U	0.25 U	0.27 U	0.26 U	0.26 U	0.29 U	0.28 U	0.91 U	1.5 U	0.92 U	1 U	0.87 U	0.3 U	0.3 U	0.31 U	0.3 U	0.3 U	0.27 U	2.7 U	2.9 U	3 U	0.29 U	2.9 U
Acenaphthene	98	500	0.15 U	0.8 U	0.17 U	0.15 U	0.036 J	0.15 U	0.14 U	0.16 U	0.04 J	0.15 U	0.16 U	0.06 J	0.52 U	0.88 U	0.52 U	0.074 J	0.5 U	0.17 U	0.17 U	0.18 U	0.17 U	0.17 U	0.088 J	3.1	1.7 U	1.7 U	0.16 U	1.6
Acenaphthylene	107	500	0.15 U	0.8 U	0.17 U	0.15 U	0.17 U	0.15 U	0.14 U	0.16 U	0.15 U	0.15 U	0.16 U	0.16 U	0.52 U	0.88 U	0.52 U	0.57 U	0.5 U	0.17 U	0.17 U	0.054 J	0.041 J	0.17 U	0.33	1.6 U	1.7 U	1.7 U	0.16 U	1.6 U
Acetophenone	NS	NS	0.19 U	1 U	0.21 U	0.19 U	0.21 U	0.19 U	0.18 U	0.19 U	0.18 U	0.19 U	0.2 U	0.2 U	0.65 U	1.1 U	0.66 U	0.72 U	0.62 U	0.22 U	0.077 J	0.032 J	0.21 U	0.037 J	0.19 U	1.9 U	2.1 U	2.1 U	0.21 U	2.1 U
Anthracene	1000	500	0.046 J	0.6 U	0.13 U	0.11 U	0.12	0.11 U	0.11 U	0.12 U	0.081 J	0.11 U	0.12 U	0.058 J	0.15 J	0.66 U	0.39 U	0.27 J	0.37 U	0.046 J	0.13 U	0.098 J	0.074 J	0.13 U	0.44	5.2	1.3 U	1.3 U	0.051 J	2.6
Atrazine	NS	NS	0.15 U	0.8 U	0.17 U	0.15 U	0.17 U	0.15 U	0.14 U	0.16 U	0.15 U	0.15 U	0.16 U	0.16 U	0.52 U	0.88 U	0.52 U	0.57 U	0.5 U	0.17 U	0.17 U	0.18 U	0.17 U	0.17 U	0.15 U	1.6 U	1.7 U	1.7 U	0.16 U	1.6 U
Benzaldehyde	NS	NS	0.25 U	1.3 U	0.28 U	0.25 U	0.28 U	0.25 U	0.24 U	0.26 U	0.24 U	0.25 U	0.27 U	0.26 U	0.86 U	1.4 U	0.87 U	0.95 U	0.82 U	0.16 J	0.17 J	0.34	0.28 U	0.15 J	0.25 U	2.6 U	2.8 U	2.8 U	0.27 U	2.7 U
Benzo[a]anthracene	1	5.6	0.15	0.32 J	0.068 J	0.066 J	1	0.11 U	0.036 J	0.048 J	0.16	0.11 U	0.084 J	0.13	**1.4**	0.21 J	0.39 U	0.91	0.075 J	0.19	0.11 J	0.38	0.44	0.12 J	**1.4**	**7.1**	0.29 J	0.24 J	0.14	**1.6**
Benzo[a]pyrene	22	1	0.17	1	0.064 J	0.054 J	0.75	0.15 U	0.14 U	0.054 J	0.13 J	0.15 U	0.089 J	0.2	0.66	0.88 U	0.52 U	1.2	0.5 U	0.18	0.13 J	0.4	0.52	0.13 J	1.8	7.7	1.7 U'	1.7 U'	0.16	1.4 J
Benzo[b]fluoranthene	1.7	5.6	0.19	0.55 J	0.088 J	0.077 J	1.1	0.11 U	0.055 J	0.076 J	0.17	0.11 U	0.12	0.18	1.1	0.33 J	0.39 U	1.2	0.37 U	0.21	0.13	0.51	0.52	0.16	**1.9**	**8.7**	1.3 U'	1.3 U'	0.17	1.4
Benzo[g,h,i]perylene	1000	500	0.26	2.3	0.042 J	0.041 J	0.32	0.15 U	0.025 J	0.043 J	0.086 J	0.15 U	0.084 J	0.3	0.37 J	0.3 J	0.52 U	2.1	0.1 J	0.28	0.14 J	0.6	0.78	0.17	2.8	5.4	0.36 J	0.28 J	0.28	1.8
Benzo[k]fluoranthene	1.7	56	0.06 J	0.6 U	0.13 U	0.11 U	0.42	0.11 U	0.11 U	0.12 U	0.06 J	0.11 U	0.038 J	0.05 J	0.41	0.66 U	0.39 U	0.31 J	0.37 U	0.077 J	0.043 J	0.16	0.15	0.13 U	0.58	**2.3**	1.3 U'	1.3 U'	0.046 J	0.33 J
Biphenyl	NS	NS	0.43 U	2.3 U	0.48 U	0.43 U	0.48 U	0.43 U	0.41 U	0.44 U	0.42 U	0.43 U	0.47 U	0.45 U	1.5 U	2.5 U	1.5 U	0.12 J	1.4 U	0.49 U	0.029 J	0.037 J	0.04 J	0.04 J	0.099 J	4.4 U	4.8 U	4.9 U	0.47 U	4.7 U
Bis(2-Chloroethoxy)methane	NS	NS	0.2 U	1.1 U	0.23 U	0.2 U	0.22 U	0.2 U	0.19 U	0.21 U	0.2 U	0.2 U	0.22 U	0.21 U	0.7 U	1.2 U	0.71 U	0.78 U	0.67 U	0.23 U	0.23 U	0.24 U	0.23 U	0.23 U	0.21 U	2.1 U	2.3 U	2.3 U	0.22 U	2.2 U
Bis(2-Chloroethyl)ether	NS	NS	0.17 U	0.9 U	0.19 U	0.17 U	0.19 U	0.17 U	0.16 U	0.17 U	0.16 U	0.17 U	0.18 U	0.18 U	0.59 U	0.99 U	0.59 U	0.65 U	0.56 U	0.19 U	0.19 U	0.2 U	0.19 U	0.19 U	0.17 U	1.7 U	1.9 U	1.9 U	0.18 U	1.9 U
Bis(2-Chloroisopropyl)ether	NS	NS	0.23 U	1.2 U	0.25 U	0.22 U	0.25 U	0.22 U	0.22 U	0.23 U	0.22 U	0.23 U	0.25 U	0.24 U	0.78 U	1.3 U	0.79 U	0.86 U	0.75 U	0.26 U	0.26 U	0.26 U	0.26 U	0.25 U	0.23 U	2.3 U	2.5 U	2.6 U	0.25 U	2.5 U
Bis(2-Ethylhexyl)phthalate	NS	NS	0.19 U	1 U	0.21 U	0.19 U	0.21 U	0.19 U	0.18 U	0.19 U	0.18 U	0.19 U	0.2 U	0.2 U	0.65 U	1.1 U	0.66 U	0.72 U	0.62 U	0.22 U	0.21 U	0.22 U	0.21 U	0.21 U	0.19 U	1.9 U	2.1 U	2.1 U	0.21 U	2.1 U
Butyl benzyl phthalate	NS	NS	0.19 U	1 U	0.21 U	0.19 U	0.21 U	0.19 U	0.18 U	0.19 U	0.18 U	0.19 U	0.2 U	0.2 U	0.65 U	1.1 U	0.66 U	0.72 U	0.62 U	0.22 U	0.21 U	0.22 U	0.21 U	0.21 U	0.19 U	1.9 U	2.1 U	2.1 U	0.21 U	2.1 U
Caprolactam	NS	NS	0.19 U	1 U	0.21 U	0.19 U	0.21 U	0.19 U	0.18 U	0.19 U	0.18 U	0.19 U	0.2 U	0.2 U	0.65 U	1.1 U	0.66 U	0.72 U	0.62 U	0.22 U	0.21 U	0.22 U	0.21 U	0.21 U	0.19 U	1.9 U	2.1 U	2.1 U	0.21 U	2.1 U
Carbazole	NS	NS	0.023 J	1 U	0.21 U	0.19 U	0.051 J	0.19 U	0.18 U	0.19 U	0.036 J	0.19 U	0.2 U	0.2 U	0.65 U	1.1 U	0.66 U	0.094 J	0.62 U	0.22 U	0.21 U	0.037 J	0.023 J	0.21 U	0.26	2.2	2.1 U	2.1 U	0.02 J	2.1 U
Chrysene	1	56	0.19	0.66	0.063 J	0.068 J	1	0.11 U	0.038 J	0.053 J	0.14	0.11 U	0.088 J	0.15	**1.6**	0.27 J	0.39 U	0.98	0.076 J	0.21	0.2	0.47	0.39	0.29	**1.8**	**7**	0.51 J	0.45 J	0.17	**2**
Dibenzo(a,h)anthracene	1000	0.56	0.063 J	0.7	0.13 U	0.11 U	0.092 J	0.11 U	0.11 U	0.12 U	0.11 U	0.11 U	0.024 J	0.1 J	0.17 J	0.66 U'	0.39 U'	0.69	0.37 U'	0.081 J	0.05 J	0.17	0.2	0.05 J	0.37	1.3	1.3 U'	1.3 U'	0.054 J	0.38 J
Dibenzofuran	210	350	0.031 J	1 U	0.21 U	0.19 U	0.21 U	0.19 U	0.18 U	0.19 U	0.019 J	0.19 U	0.2 U	0.058 J	0.65 U	1.1 U	0.66 U	0.097 J	0.62 U	0.22 U	0.047 J	0.053 J	0.064 J	0.059 J	0.2	1.9	2.1 U	2.1 U	0.21 U	0.88 J
Diethyl phthalate	NS	NS	0.19 U	1 U	0.21 U	0.19 U	0.21 U	0.19 U	0.18 U	0.19 U	0.18 U	0.19 U	0.2 U	0.2 U	0.65 U	1.1 U	0.66 U	0.72 U	0.62 U	0.22 U	0.21 U	0.22 U	0.21 U	0.21 U	0.19 U	1.9 U	2.1 U	2.1 U	0.21 U	2.1 U
Dimethyl phthalate	NS	NS	0.19 U	1 U	0.21 U	0.19 U	0.21 U	0.19 U	0.18 U	0.19 U	0.18 U	0.19 U	0.2 U	0.2 U	0.65 U	1.1 U	0.66 U	0.72 U	0.62 U	0.22 U	0.21 U	0.22 U	0.21 U	0.21 U	0.19 U	1.9 U	2.1 U	2.1 U	0.21 U	2.1 U
Di-n-butylphthalate	NS	NS	0.19 U	1 U	0.21 U	0.19 U	0.21 U	0.19 U	0.18 U	0.19 U	0.18 U	0.19 U	0.2 U	0.2 U	0.65 U	1.1 U	0.66 U	0.72 U	0.62 U	0.22 U	0.21 U	0.22 U	0.21 U	0.21 U	0.19 U	1.9 U	2.1 U	2.1 U	0.21 U	2.1 U
Di-n-octylphthalate	NS	NS	0.19 U	1 U	0.21 U	0.19 U	0.21 U	0.19 U	0.18 U	0.19 U	0.18 U	0.19 U	0.2 U	0.2 U	0.65 U	1.1 U	0.66 U	0.72 U	0.62 U	0.22 U	0.21 U	0.22 U	0.21 U	0.21 U	0.19 U	1.9 U	2.1 U	2.1 U	0.21 U	2.1 U
Fluoranthene	1000	500	0.3	0.33 J	0.1 J	0.11	1.2	0.11 U	0.045 J	0.082 J	0.39	0.039 J	0.18	0.27	2	0.34 J	0.082 J	1.3	0.087 J	0.3	0.11 J	0.58	0.59	0.13	2.6	20	1.3 U	0.28 J	0.24	3
Fluorene	386	500	0.19 U	1 U	0.21 U	0.19 U	0.028 J	0.19 U	0.18 U	0.19 U	0.034 J	0.19 U	0.2 U	0.034 J	0.65 U	1.1 U	0.66 U	0.1 J	0.62 U	0.22 U	0.21 U	0.033 J	0.039 J	0.21 U	0.2	2.8	0.45 J	0.51 J	0.21 U	3.9
Hexachlorobenzene	3.2	6	0.11 U	0.6 U'	0.13 U	0.11 U	0.12 U	0.11 U	0.11 U	0.12 U	0.11 U	0.11 U	0.12 U	0.12 U	0.39 U'	0.66 U'	0.39 U'	0.43 U'	0.37 U'	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.11 U	1.2 U'	1.3 U'	1.3 U'	0.12 U	1.2 U'
Hexachlorobutadiene	NS	NS	0.19 U	1 U	0.21 U	0.19 U	0.21 U	0.19 U	0.18 U	0.19 U	0.18 U	0.19 U	0.2 U	0.2 U	0.65 U	1.1 U	0.66 U	0.72 U	0.62 U	0.22 U	0.21 U	0.22 U	0.21 U	0.21 U	0.19 U	1.9 U	2.1 U	2.1 U	0.21 U	2.1 U
Hexachlorocyclopentadiene	NS	NS	0.54 U	2.8 U	0.6 U	0.54 U	0.6 U	0.54 U	0.51 U	0.56 U	0.52 U	0.54 U	0.59 U	0.57 U	1.9 U	3.1 U	1.9 U	2 U	1.8 U	0.62 U	0.61 U	0.63 U	0.61 U	0.6 U	0.55 U	5.5 U	6 U	6.1 U	0.59 U	5.9 U
Hexachloroethane	NS	NS	0.15 U	0.8 U	0.17 U	0.15 U	0.17 U	0.15 U	0.14 U	0.16 U	0.15 U	0.15 U	0.16 U	0.16 U	0.52 U	0.88 U	0.52 U	0.57 U	0.5 U	0.17 U	0.17 U	0.18 U	0.17 U	0.17 U	0.15 U	1.6 U	1.7 U	1.7 U	0.16 U	1.6 U
Indeno[1,2,3-cd]pyrene	8.2	5.6	0.12 J	0.78 J	0.046 J	0.043 J	0.38	0.048 J	0.062 J	0.083 J	0.13 J	0.056 J	0.11 J	0.17	0.33 J	0.21 J	0.52 U'	0.93	0.5 U	0.12 J	0.061 J	0.3	0.25	0.061 J	1.3	5.1	1.7 U'	0.58 J	0.12 J	1.2 J
Isophorone	NS	NS	0.17 U	0.9 U	0.19 U	0.17 U	0.19 U	0.17 U	0.16 U	0.17 U	0.16 U	0.17 U	0.18 U	0.18 U	0.59 U	0.99 U	0.59 U	0.65 U	0.56 U	0.19 U	0.19 U	0.2 U	0.19 U	0.19 U	0.17 U	1.7 U	1.9 U	1.9 U	0.18 U	1.9 U
Naphthalene	12	500	0.1 J	1 U	0.21 U	0.19 U	0.21 U	0.19 U	0.18 U	0.19 U	0.18 U	0.19 U	0.2 U	0.09 J	0.65 U	1.1 U	0.66 U	0.22 J	0.083 J	0.037 J	0.11 J	0.13 J	0.11 J	0.13 J	0.43	2	2.1 U	2.1 U	0.061 J	2.2
Nitrobenzene	NS	NS	0.17 U	0.9 U	0.19 U	0.17 U	0.19 U	0.17 U	0.16 U	0.17 U	0.16 U	0.17 U	0.18 U	0.18 U	0.59 U	0.99 U	0.59 U	0.65 U	0.56 U	0.19 U	0.19 U	0.2 U	0.19 U	0.19 U	0.17 U	1.7 U	1.9 U	1.9 U	0.18 U	1.9 U
n-Nitrosodi-n-propylamine	NS	NS	0.19 U	1 U	0.21 U	0.19 U	0.21 U	0.19 U	0.18 U	0.19 U	0.18 U	0.19 U	0.2 U	0.2 U	0.65 U	1.1 U	0.66 U	0.72 U	0.62 U	0.22 U	0.21 U	0.22 U	0.21 U	0.21 U	0.19 U	1.9 U	2.1 U	2.1 U	0.21 U	2.1 U
N-Nitrosodiphenylamine	NS	NS	0.15 U	0.8 U	0.17 U	0.15 U	0.17 U	0.15 U	0.14 U	0.16 U	0.15 U	0.15 U	0.16 U	0.16 U	0.52 U	0.88 U	0.52 U	0.57 U	0.5 U	0.17 U	0.17 U	0.18 U	0.17 U	0.17 U	0.15 U	1.6 U	1.7 U	1.7 U	0.16 U	1.6 U
p-Chloro-m-cresol	NS	NS	0.19 U	1 U	0.21 U	0.19 U	0.21 U	0.19 U	0.18 U	0.19 U	0.18 U	0.19 U	0.2 U	0.2 U	0.65 U	1.1 U	0.66 U	0.72 U	0.62 U	0.22 U	0.21 U	0.22 U	0.21 U	0.21 U	0.19 U	1.9 U	2.1 U	2.1 U	0.21 U	2.1 U
Pentachlorophenol	0.8	6.7	0.15 U	0.8 U	0.17 U	0.15 U	0.17 U	0.15 U	0.14 U	0.16 U	0.15 U	0.15 U	0.16 U	0.16 U	0.52 U	0.88 U'	0.52 U	0.57 U	0.5 U	0.17 U	0.17 U	0.18 U	0.17 U	0.17 U	0.15 U	1.6 U'	1.7 U'	1.7 U'	0.16 U	1.6 U'
Phenanthrene	1000	500	0.3	0.44 J	0.037 J	0.05 J	0.4	0.11 U	0.11 U	0.031 J	0.33	0.11 U	0.075 J	0.24	0.43	0.37 J	0.39 U	1.3	0.15 J	0.2	0.24	0.51	0.41	0.33	2.6	20	1.6	1.1 J	0.28	12
Phenol	0.33	500	0.19 U	1 U'	0.21 U	0.19 U	0.21 U	0.19 U	0.18 U	0.19 U	0.18 U	0.19 U	0.2 U	0.2 U	0.65 U'	1.1 U'	0.66 U'	0.72 U'	0.62 U'	0.22 U	0.21 U	0.22 U	0.21 U	0.21 U	0.19 U	1.9 U'	2.1 U'	**0.62 J**	0.21 U	2.1 U'
Pyrene	1000	500	0.33	0.79	0.095 J	0.092 J	1.2	0.11 U	0.042 J	0.078 J	0.32	0.032 J	0.14	0.22	2	0.45 J	0.085 J	1.3	0.1 J	0.28	0.14	0.6	0.52	0.17	3	17	1 J	0.86 J	0.31	9.2
Total Semi-Volatile TICs	NS	NS	ND	ND	ND	ND	1.2 J	ND	0.147 J	0.608 J	ND	0.365 J	ND	0.159 J	ND	ND	ND	3.44 J	ND	ND	5.44 J	3.43 J	10 J	6.89 J	16.2 J	16.2 J	16.2 J	75.7 J	0.17 J	0.17 J

Notes:

NYSDEC GW Protection SCO = New York State Department of Environmental Conservation Groundwater Protection Soil Cleanup Objectives, from Table 375-6.8 of 6 NYCRR Part 375.
NYSDEC Commercial SCO = New York State Department of Environmental Conservation Restricted Commercial Use Soil Cleanup Objectives, from Table 375-6.8 of 6 NYCRR Part 375.
ft bgs = Feet below ground surface.
mg/kg = Milligrams per kilogram.
Green concentrations exceed the NYSDEC GW Protection SCO.
Highlighted concentrations exceed the NYSDEC Commercial SCO.
— = Sample not analyzed.
NS = No standard currently established.
ND = Not Detected.
U = Not detected above laboratory detection limit.
U' = Laboratory reporting limit exceeds the applicable regulatory standard or criteria being utilized.
J = Result below the reporting limit (estimated value).
DUP = Duplicate sample was taken.
When the applicable state standard applies to mixed isomers and the laboratory reports individual isomers, the total standard is listed for each isomer.

Table 5
Soil Reuse Characterization Sampling Results
Summary of Semi-Volatile Organic Compounds in Soil.
MJ Painting; Olean, New York.

Sample ID	NYSDEC GW Protection SCO	NYSDEC Commercial SCO	RX-403	RX-404	RX-405	RX-405	RX-405	RX-407	RX-407	RX-407	RX-409	RX-410	RX-411	RX-413	RX-414	RX-415	RX-416	RX-416	RX-417	RX-417	RX-417	RX-417	RX-418	RX-418	RX-419	RX-419	RX-419	RX-420	RX-420	RX-420
Sample Depth (ft bgs)			10-12	7-10	0-1	1-4	7-10	0-1	4-7	10-12	1-4	10-12	7-10	10-12	4-7	7-10	1-4	10-12	0-1	1-4	7-10	10-12	4-7	10-12	1-4	7-10	10-12	0-1	4-7	7-10
Sample Date			11/12/2021	11/12/2021	11/15/2021	11/15/2021	11/15/2021	11/15/2021	11/15/2021	11/15/2021	11/12/2021	11/12/2021	11/12/2021	11/15/2021	11/15/2021	11/16/2021	11/16/2021	11/16/2021	11/11/2021	11/11/2021	11/11/2021	11/11/2021	11/11/2021	11/11/2021	11/15/2021	11/15/2021	11/15/2021	11/15/2021	11/15/2021	11/15/2021
SEMI-VOLATILE ORGANIC COMPOUNDS - 8270D (mg/kg)																														
1,2,4,5-Tetrachlorobenzene	NS	NS	0.19 U	2 U	0.22 U	0.94 U	0.19 U	0.18 U	0.21 U	0.18 U	0.2 U	0.2 U	0.2 U	0.19 U	1 U	0.22 U	0.2 U	0.18 U	0.19 U	0.18 U	1 U	0.27 U	0.56 U	0.21 U	0.19 U	1.4 U	0.19 U	0.2 U	0.18 U	1.2 U
2,3,4,6-Tetrachlorophenol	NS	NS	0.19 U	2 U	0.22 U	0.94 U	0.19 U	0.18 U	0.21 U	0.18 U	0.2 U	0.2 U	0.2 U	0.19 U	1 U	0.22 U	0.2 U	0.18 U	0.19 U	0.18 U	1 U	0.27 U	0.56 U	0.21 U	0.19 U	1.4 U	0.19 U	0.2 U	0.18 U	1.2 U
2,4,5-Trichlorophenol	NS	NS	0.19 U	2 U	0.22 U	0.94 U	0.19 U	0.18 U	0.21 U	0.18 U	0.2 U	0.2 U	0.2 U	0.19 U	1 U	0.22 U	0.2 U	0.18 U	0.19 U	0.18 U	1 U	0.27 U	0.56 U	0.21 U	0.19 U	1.4 U	0.19 U	0.2 U	0.18 U	1.2 U
2,4,6-Trichlorophenol	NS	NS	0.12 U	1.2 U	0.13 U	0.56 U	0.12 U	0.11 U	0.12 U	0.11 U	0.12 U	0.12 U	0.12 U	0.12 U	0.61 U	0.13 U	0.12 U	0.11 U	0.11 U	0.1 U	0.63 U	0.16 U	0.33 U	0.13 U	0.11 U	0.86 U	0.12 U	0.12 U	0.11 U	0.7 U
2,4-Dichlorophenol	NS	NS	0.17 U	1.8 U	0.2 U	0.85 U	0.17 U	0.17 U	0.19 U	0.17 U	0.18 U	0.18 U	0.18 U	0.18 U	0.92 U	0.2 U	0.18 U	0.17 U	0.17 U	0.16 U	0.94 U	0.25 U	0.5 U	0.19 U	0.17 U	1.3 U	0.17 U	0.18 U	0.17 U	1 U
2,4-Dimethylphenol	NS	NS	0.19 U	2 U	0.22 U	0.94 U	0.19 U	0.18 U	0.21 U	0.18 U	0.2 U	0.2 U	0.2 U	0.19 U	1 U	0.22 U	0.2 U	0.18 U	0.19 U	0.18 U	1 U	0.27 U	0.56 U	0.21 U	0.19 U	1.4 U	0.19 U	0.2 U	0.18 U	1.2 U
2,4-Dinitrophenol	NS	NS	0.92 U	9.5 U	1 U	4.5 U	0.93 U	0.89 U	0.99 U	0.89 U	0.96 U	0.94 U	0.94 U	0.93 U	4.9 U	1 U	0.98 U	0.89 U	0.9 U	0.84 U	5 U	1.3 U	2.7 U	1 U	0.9 U	6.9 U	0.92 U	0.96 U	0.89 U	5.6 U
2,4-Dinitrotoluene	NS	NS	0.19 U	2 U	0.22 U	0.94 U	0.19 U	0.18 U	0.21 U	0.18 U	0.2 U	0.2 U	0.2 U	0.19 U	1 U	0.22 U	0.2 U	0.18 U	0.19 U	0.18 U	1 U	0.27 U	0.56 U	0.21 U	0.19 U	1.4 U	0.19 U	0.2 U	0.18 U	1.2 U
2,6-Dinitrotoluene	NS	NS	0.19 U	2 U	0.22 U	0.94 U	0.19 U	0.18 U	0.21 U	0.18 U	0.2 U	0.2 U	0.2 U	0.19 U	1 U	0.22 U	0.2 U	0.18 U	0.19 U	0.18 U	1 U	0.27 U	0.56 U	0.21 U	0.19 U	1.4 U	0.19 U	0.2 U	0.18 U	1.2 U
2-Chloronaphthalene	NS	NS	0.19 U	2 U	0.22 U	0.94 U	0.19 U	0.18 U	0.21 U	0.18 U	0.2 U	0.2 U	0.2 U	0.19 U	1 U	0.22 U	0.2 U	0.18 U	0.19 U	0.18 U	1 U	0.27 U	0.56 U	0.21 U	0.19 U	1.4 U	0.19 U	0.2 U	0.18 U	1.2 U
2-Chlorophenol	NS	NS	0.19 U	2 U	0.22 U	0.94 U	0.19 U	0.18 U	0.21 U	0.18 U	0.2 U	0.2 U	0.2 U	0.19 U	1 U	0.22 U	0.2 U	0.18 U	0.19 U	0.18 U	1 U	0.27 U	0.56 U	0.21 U	0.19 U	1.4 U	0.19 U	0.2 U	0.18 U	1.2 U
2-Methylnapthalene	NS	NS	0.23 U	16	0.69	6.7	0.16 J	0.067 J	1.8	0.22 U	0.12 J	0.23 U	0.11 J	0.055 J	3.4	0.26 U	0.074 J	0.22 U	0.22 U	0.21 U	0.48 J	0.56	0.52 J	0.26 U	0.22 U	25	0.03 J	0.24 U	0.19 J	11
2-Methylphenol	0.33	500	0.19 U	2 U'	0.22 U	0.17 J	0.19 U	0.18 U	0.21 U	0.18 U	0.2 U	0.2 U	0.2 U	0.19 U	1 U'	0.22 U	0.2 U	0.18 U	0.19 U	0.18 U	1 U'	0.27 U	0.56 U'	0.21 U	0.19 U	1.4 U'	0.19 U	0.2 U	0.18 U	1.2 U'
2-Nitroaniline	NS	NS	0.19 U	2 U	0.22 U	0.94 U	0.19 U	0.18 U	0.21 U	0.18 U	0.2 U	0.2 U	0.2 U	0.19 U	1 U	0.22 U	0.2 U	0.18 U	0.19 U	0.18 U	1 U	0.27 U	0.56 U	0.21 U	0.19 U	1.4 U	0.19 U	0.2 U	0.18 U	1.2 U
2-Nitrophenol	NS	NS	0.42 U	4.3 U	0.47 U	2 U	0.42 U	0.4 U	0.45 U	0.4 U	0.43 U	0.42 U	0.42 U	0.42 U	2.2 U	0.48 U	0.44 U	0.4 U	0.4 U	0.38 U	2.3 U	0.59 U	1.2 U	0.46 U	0.4 U	3.1 U	0.42 U	0.43 U	0.4 U	2.5 U
3,3'-Dichlorobenzidine	NS	NS	0.19 U	2 U	0.22 U	0.94 U	0.19 U	0.18 U	0.21 U	0.18 U	0.2 U	0.2 U	0.2 U	0.19 U	1 U	0.22 U	0.2 U	0.18 U	0.19 U	0.18 U	1 U	0.27 U	0.56 U	0.21 U	0.19 U	1.4 U	0.19 U	0.2 U	0.18 U	1.2 U
3-Methylphenol/4-Methylphenol	NS	NS	0.28 U	2.8 U	0.32 U	0.47 J	0.28 U	0.27 U	0.3 U	0.26 U	0.29 U	0.28 U	0.28 U	0.28 U	1.5 U	0.32 U	0.29 U	0.27 U	0.27 U	0.25 U	1.5 U	0.4 U	0.8 U	0.31 U	0.27 U	2.1 U	0.28 U	0.29 U	0.27 U	1.7 U
3-Nitroaniline	NS	NS	0.19 U	2 U	0.22 U	0.94 U	0.19 U	0.18 U	0.21 U	0.18 U	0.2 U	0.2 U	0.2 U	0.19 U	1 U	0.22 U	0.2 U	0.18 U	0.19 U	0.18 U	1 U	0.27 U	0.56 U	0.21 U	0.19 U	1.4 U	0.19 U	0.2 U	0.18 U	1.2 U
4,6-Dinitro-o-cresol	NS	NS	0.5 U	5.1 U	0.57 U	2.4 U	0.5 U	0.48 U	0.54 U	0.48 U	0.52 U	0.51 U	0.51 U	0.51 U	2.6 U	0.57 U	0.53 U	0.48 U	0.49 U	0.46 U	2.7 U	0.71 U	1.4 U	0.56 U	0.49 U	3.7 U	0.5 U	0.52 U	0.48 U	3 U
4-Bromophenyl-phenylether	NS	NS	0.19 U	2 U	0.22 U	0.94 U	0.19 U	0.18 U	0.21 U	0.18 U	0.2 U	0.2 U	0.2 U	0.19 U	1 U	0.22 U	0.2 U	0.18 U	0.19 U	0.18 U	1 U	0.27 U	0.56 U	0.21 U	0.19 U	1.4 U	0.19 U	0.2 U	0.18 U	1.2 U
4-Chloroaniline	NS	NS	0.19 U	2 U	0.22 U	0.94 U	0.19 U	0.18 U	0.21 U	0.18 U	0.2 U	0.2 U	0.2 U	0.19 U	1 U	0.22 U	0.2 U	0.18 U	0.19 U	0.18 U	1 U	0.27 U	0.56 U	0.21 U	0.19 U	1.4 U	0.19 U	0.2 U	0.18 U	1.2 U
4-Chlorophenyl-phenylether	NS	NS	0.19 U	2 U	0.22 U	0.94 U	0.19 U	0.18 U	0.21 U	0.18 U	0.2 U	0.2 U	0.2 U	0.19 U	1 U	0.22 U	0.2 U	0.18 U	0.19 U	0.18 U	1 U	0.27 U	0.56 U	0.21 U	0.19 U	1.4 U	0.19 U	0.2 U	0.18 U	1.2 U
4-Nitroaniline	NS	NS	0.19 U	2 U	0.22 U	0.94 U	0.19 U	0.18 U	0.21 U	0.18 U	0.2 U	0.2 U	0.2 U	0.19 U	1 U	0.22 U	0.2 U	0.18 U	0.19 U	0.18 U	1 U	0.27 U	0.56 U	0.21 U	0.19 U	1.4 U	0.19 U	0.2 U	0.18 U	1.2 U
4-Nitrophenol	NS	NS	0.27 U	2.8 U	0.31 U	1.3 U	0.27 U	0.26 U	0.29 U	0.26 U	0.28 U	0.27 U	0.28 U	0.27 U	1.4 U	0.31 U	0.28 U	0.26 U	0.26 U	0.25 U	1.5 U	0.38 U	0.78 U	0.3 U	0.26 U	2 U	0.27 U	0.28 U	0.26 U	1.6 U
Acenaphthene	98	500	0.15 U	0.59 J	0.092 J	6.5	0.092 J	0.15 U	0.043 J	0.022 J	0.16 U	0.16 U	0.16 U	0.12 J	0.8 J	0.18 U	0.022 J	0.081 J	0.15 U	0.14 U	0.84 U	0.29	0.44 U	0.17 U	0.15 U	1.6	0.15 U	0.16 U	0.15 U	0.53 J
Acenaphthylene	107	500	0.15 U	1.6 U	0.045 J	1	0.15 U	0.15 U	0.16 U	0.15 U	0.16 U	0.16 U	0.16 U	0.16 U	0.81 U	0.18 U	0.16 U	0.15 U	0.15 U	0.14 U	0.84 U	0.22 U	0.44 U	0.17 U	0.15 U	1.2 U	0.15 U	0.16 U	0.15 U	0.93 U
Acetophenone	NS	NS	0.19 U	2 U	0.22 U	0.94 U	0.19 U	0.18 U	0.21 U	0.18 U	0.2 U	0.2 U	0.2 U	0.19 U	0.3 J	0.22 U	0.2 U	0.18 U	0.19 U	0.18 U	1 U	0.27 U	0.56 U	0.21 U	0.19 U	1.4 U	0.19 U	0.2 U	0.18 U	1.2 U
Anthracene	1000	500	0.12 U	1.8	0.34	19	0.23	0.11 U	0.27	0.049 J	0.056 J	0.12 U	0.28	0.32	2.9	0.13 U	0.12 U	0.11	0.11 U	0.1 U	0.63 U	0.64	0.33 U	0.13 U	0.11 U	2.8	0.12 U	0.12 U	0.11	0.8
Atrazine	NS	NS	0.15 U	1.6 U	0.18 U	0.75 U	0.15 U	0.15 U	0.16 U	0.15 U	0.16 U	0.16 U	0.16 U	0.16 U	0.81 U	0.18 U	0.16 U	0.15 U	0.15 U	0.14 U	0.84 U	0.22 U	0.44 U	0.17 U	0.15 U	1.2 U	0.15 U	0.16 U	0.15 U	0.93 U
Benzaldehyde	NS	NS	0.25 U	2.6 U	0.29 U	1.2 U	0.26 U	0.24 U	0.27 U	0.24 U	0.26 U	0.26 U	0.26 U	0.26 U	1.3 U	0.29 U	0.27 U	0.24 U	0.25 U	0.23 U	1.4 U	0.36 U	0.73 U	0.28 U	0.25 U	1.9 U	0.25 U	0.26 U	0.24 U	1.5 U
Benzo[a]anthracene	1	5.6	0.12 U	0.69 J	0.6	**22**	0.13	0.052 J	0.34	0.03 J	0.13	0.12 U	0.098 J	0.12 U	**3.8**	0.13 U	0.067 J	0.048 J	0.11 U	0.1 U	0.18 J	0.2	0.18 J	0.13 U	0.11 U	0.95	0.12 U	0.12 U	0.046 J	0.64 J
Benzo[a]pyrene	22	1	0.15 U	0.61 J	0.47	16	0.12 J	0.15 U	0.31	0.15 U	0.19	0.16 U	0.078 J	0.16 U	2.5	0.18 U	0.12 J	0.15 U	0.15 U	0.14 U	0.84 U	0.13 J	0.2 J	0.17 U	0.15 U	0.7 J	0.15 U	0.16 U	0.046 J	0.4 J
Benzo[b]fluoranthene	1.7	5.6	0.12 U	1.2 U'	0.54	**19**	0.11 J	0.058 J	0.23	0.11 U	0.18	0.12 U	0.047 J	0.12 U	**3.1**	0.13 U	0.083 J	0.11 U	0.11 U	0.1 U	0.63 U	0.084 J	0.22 J	0.13 U	0.11 U	0.86 U	0.12 U	0.12 U	0.045 J	0.38 J
Benzo[g,h,i]perylene	1000	500	0.15 U	1.1 J	0.64	8.9	0.18	0.035 J	0.7	0.031 J	0.32	0.16 U	0.11 J	0.16 U	2.3	0.18 U	0.13 J	0.033 J	0.15 U	0.14 U	1.9	0.21 J	0.45	0.17 U	0.15 U	1.1 J	0.15 U	0.16 U	0.33	0.53 J
Benzo[k]fluoranthene	1.7	56	0.12 U	1.2 U'	0.19	**7.4**	0.037 J	0.11 U	0.046 J	0.11 U	0.053 J	0.12 U	0.12 U	0.12 U	0.84	0.13 U	0.12 U	0.11 U	0.11 U	0.1 U	0.63 U	0.16 U	0.33 U	0.13 U	0.11 U	0.86 U'	0.12 U	0.12 U	0.11 U	0.7 U
Biphenyl	NS	NS	0.44 U	4.5 U	0.055 J	1.3 J	0.44 U	0.42 U	0.17 J	0.42 U	0.46 U	0.44 U	0.45 U	0.44 U	0.37 J	0.5 U	0.46 U	0.42 U	0.43 U	0.4 U	2.4 U	0.62 U	1.3 U	0.49 U	0.43 U	2.1 J	0.44 U	0.45 U	0.42 U	0.66 J
Bis(2-Chloroethoxy)methane	NS	NS	0.21 U	2.1 U	0.24 U	1 U	0.21 U	0.2 U	0.22 U	0.2 U	0.22 U	0.21 U	0.21 U	0.21 U	1.1 U	0.24 U	0.22 U	0.2 U	0.2 U	0.19 U	1.1 U	0.3 U	0.6 U	0.23 U	0.2 U	1.6 U	0.21 U	0.22 U	0.2 U	1.2 U
Bis(2-Chloroethyl)ether	NS	NS	0.17 U	1.8 U	0.2 U	0.85 U	0.17 U	0.17 U	0.19 U	0.17 U	0.18 U	0.18 U	0.18 U	0.18 U	0.92 U	0.2 U	0.18 U	0.17 U	0.17 U	0.16 U	0.94 U	0.25 U	0.5 U	0.19 U	0.17 U	1.3 U	0.17 U	0.18 U	0.17 U	1 U
Bis(2-Chloroisopropyl)ether	NS	NS	0.23 U	2.4 U	0.26 U	1.1 U	0.23 U	0.22 U	0.25 U	0.22 U	0.24 U	0.23 U	0.24 U	0.23 U	1.2 U	0.26 U	0.24 U	0.22 U	0.22 U	0.21 U	1.3 U	0.33 U	0.67 U	0.26 U	0.22 U	1.7 U	0.23 U	0.24 U	0.22 U	1.4 U
Bis(2-Ethylhexyl)phthalate	NS	NS	0.19 U	2 U	0.22 U	0.94 U	0.19 U	0.18 U	0.21 U	0.18 U	0.2 U	0.2 U	0.2 U	0.19 U	1 U	0.22 U	0.2 U	0.18 U	0.19 U	0.18 U	1 U	0.27 U	0.56 U	0.21 U	0.19 U	1.4 U	0.19 U	0.2 U	0.18 U	1.2 U
Butyl benzyl phthalate	NS	NS	0.19 U	2 U	0.22 U	0.94 U	0.19 U	0.18 U	0.21 U	0.18 U	0.2 U	0.2 U	0.2 U	0.19 U	1 U	0.22 U	0.2 U	0.18 U	0.19 U	0.18 U	1 U	0.27 U	0.56 U	0.21 U	0.19 U	1.4 U	0.19 U	0.2 U	0.18 U	1.2 U
Caprolactam	NS	NS	0.19 U	2 U	0.22 U	0.94 U	0.19 U	0.18 U	0.21 U	0.18 U	0.2 U	0.2 U	0.2 U	0.19 U	1 U	0.22 U	0.2 U	0.18 U	0.19 U	0.18 U	1 U	0.27 U	0.56 U	0.21 U	0.19 U	1.4 U	0.19 U	0.2 U	0.18 U	1.2 U
Carbazole	NS	NS	0.19 U	2 U	0.14 J	8.6	0.06 J	0.18 U	0.043 J	0.18 U	0.2 U	0.2 U	0.2 U	0.19 U	0.98 J	0.22 U	0.2 U	0.18 U	0.19 U	0.18 U	1 U	0.27 U	0.56 U	0.21 U	0.19 U	1.4 U	0.19 U	0.2 U	0.18 U	1.2 U
Chrysene	1	56	0.12 U	0.94 J	0.6	**18**	0.18	0.054 J	0.53	0.034 J	0.23	0.12 U	0.12	0.12 U	**3.7**	0.13 U	0.13	0.074 J	0.11 U	0.1 U	0.33 J	0.23	0.27 J	0.13 U	0.11 U	**2.2**	0.031 J	0.12 U	0.079 J	**2.4**
Dibenzo(a,h)anthracene	1000	0.56	0.12 U	1.2 U'	0.12 J	2.5	0.029 J	0.11 U	0.14	0.11 U	0.066 J	0.12 U	0.12 U	0.12 U	0.57 J	0.13 U	0.04 J	0.11 U	0.11 U	0.1 U	0.63 U'	0.16 U	0.096 J	0.13 U	0.11 U	0.86 U'	0.12 U	0.12 U	0.11 U	0.19 J
Dibenzofuran	210	350	0.19 U	0.27 J	0.11 J	9.4	0.076 J	0.18 U	0.095 J	0.021 J	0.2 U	0.2 U	0.2 U	0.1 J	1.1	0.22 U	0.2 U	0.058 J	0.19 U	0.18 U	1 U	0.13 J	0.56 U	0.21 U	0.19 U	1.4 U	0.19 U	0.2 U	0.18 U	0.37 J
Diethyl phthalate	NS	NS	0.19 U	2 U	0.22 U	0.94 U	0.19 U	0.18 U	0.21 U	0.18 U	0.2 U	0.2 U	0.2 U	0.19 U	1 U	0.22 U	0.2 U	0.18 U	0.19 U	0.18 U	1 U	0.27 U	0.56 U	0.21 U	0.19 U	1.4 U	0.19 U	0.2 U	0.18 U	1.2 U
Dimethyl phthalate	NS	NS	0.19 U	2 U	0.22 U	0.94 U	0.19 U	0.18 U	0.21 U	0.18 U	0.2 U	0.2 U	0.2 U	0.19 U	1 U	0.22 U	0.2 U	0.18 U	0.19 U	0.18 U	1 U	0.27 U	0.56 U	0.21 U	0.19 U	1.4 U	0.19 U	0.2 U	0.18 U	1.2 U
Di-n-butylphthalate	NS	NS	0.19 U	2 U	0.22 U	0.94 U	0.19 U	0.18 U	0.21 U	0.18 U	0.2 U	0.2 U	0.2 U	0.19 U	1 U	0.22 U	0.2 U	0.18 U	0.19 U	0.18 U	1 U	0.27 U	0.56 U	0.21 U	0.19 U	1.4 U	0.19 U	0.2 U	0.18 U	1.2 U
Di-n-octylphthalate	NS	NS	0.19 U	2 U	0.22 U	0.94 U	0.19 U	0.18 U	0.21 U	0.18 U	0.2 U	0.2 U	0.2 U	0.19 U	1 U	0.22 U	0.2 U	0.18 U	0.19 U	0.18 U	1 U	0.27 U	0.56 U	0.21 U	0.19 U	1.4 U	0.19 U	0.2 U	0.18 U	1.2 U
Fluoranthene	1000	500	0.12 U	0.89 J	1.2	49	0.28	0.058 J	0.27	0.055 J	0.25	0.12 U	0.18	0.1 J	7	0.13 U	0.062 J	0.071 J	0.11 U	0.1 U	0.63 U	0.35	0.21 J	0.13 U	0.11 U	1.2	0.12 U	0.12 U	0.06 J	0.7 U
Fluorene	386	500	0.19 U	1.8 J	0.21 J	13	0.23	0.18 U	0.14 J	0.064 J	0.03 J	0.2 U	0.32	0.36	1.7	0.22 U	0.048 J	0.19	0.19 U	0.18 U	1 U	0.82	0.56 U	0.21 U	0.19 U	3.8	0.19 U	0.2 U	0.077 J	1.3
Hexachlorobenzene	3.2	6	0.12 U	1.2 U'	0.13 U	0.56 U'	0.12 U	0.11 U	0.12 U	0.11 U	0.12 U	0.12 U	0.12 U	0.12 U	0.61 U'	0.13 U	0.12 U	0.11 U	0.11 U	0.1 U	0.63 U'	0.16 U	0.33 U	0.13 U	0.11 U	0.86 U'	0.12 U	0.12 U	0.11 U	0.7 U'
Hexachlorobutadiene	NS	NS	0.19 U	2 U	0.22 U	0.94 U	0.19 U	0.18 U	0.21 U	0.18 U	0.2 U	0.2 U	0.2 U	0.19 U	1 U	0.22 U	0.2 U	0.18 U	0.19 U	0.18 U	1 U	0.27 U	0.56 U	0.21 U	0.19 U	1.4 U	0.19 U	0.2 U	0.18 U	1.2 U
Hexachlorocyclopentadiene	NS	NS	0.55 U	5.6 U	0.63 U	2.7 U	0.55 U	0.53 U	0.59 U	0.53 U	0.57 U	0.56 U	0.56 U	0.56 U	2.9 U	0.63 U	0.58 U	0.53 U	0.54 U	0.5 U	3 U	0.78 U	1.6 U	0.61 U	0.54 U	4.1 U	0.55 U	0.57 U	0.53 U	3.3 U
Hexachloroethane	NS	NS	0.15 U	1.6 U	0.18 U	0.75 U	0.15 U	0.15 U	0.16 U	0.15 U	0.16 U	0.16 U	0.16 U	0.16 U	0.81 U	0.18 U	0.16 U	0.15 U	0.15 U	0.14 U	0.84 U	0.22 U	0.44 U	0.17 U	0.15 U	1.2 U	0.15 U	0.16 U	0.15 U	0.93 U
Indeno[1,2,3-cd]pyrene	8.2	5.6	0.15 U	0.65 J	0.34	**10**	0.067 J	0.027 J	0.17	0.027 J	0.14 J	0.16 U	0.031 J	0.16 U	1.5	0.18 U	0.049 J	0.15 U	0.15 U	0.14 U	0.26 J	0.066 J	0.18 J	0.17 U	0.15 U	1.2 U'	0.15 U	0.16 U	0.06 J	0.93 U'
Isophorone	NS	NS	0.17 U	1.8 U	0.2 U	0.85 U	0.17 U	0.17 U	0.19 U	0.17 U	0.18 U	0.18 U	0.18 U	0.18 U	0.92 U	0.2 U	0.18 U	0.17 U	0.17 U	0.16 U	0.94 U	0.25 U	0.5 U	0.19 U	0.17 U	1.3 U	0.17 U	0.18 U	0.17 U	1 U
Naphthalene	12	500	0.19 U	1.1 J	0.34	**16**	0.15 J	0.18 U	0.93	0.18 U	0.055 J	0.2 U	0.2 U	0.061 J	1.8	0.22 U	0.05 J	0.18 U	0.19 U	0.18 U	0.2 J	0.48	0.23 J	0.21 U	0.19 U	5.4	0.19 U	0.2 U	0.11 J	5.5
Nitrobenzene	NS	NS	0.17 U	1.8 U	0.2 U	0.85 U	0.17 U	0.17 U	0.19 U	0.17 U	0.18 U	0.18 U	0.18 U	0.18 U	0.92 U	0.2 U	0.18 U	0.17 U	0.17 U	0.16 U	0.94 U	0.25 U	0.5 U	0.19 U	0.17 U	1.3 U	0.17 U	0.18 U	0.17 U	1 U
n-Nitrosodi-n-propylamine	NS	NS	0.19 U	2 U	0.22 U	0.94 U	0.19 U	0.18 U	0.21 U	0.18 U	0.2 U	0.2 U	0.2 U	0.19 U	1 U	0.22 U	0.2 U	0.18 U	0.19 U	0.18 U	1 U	0.27 U	0.56 U	0.21 U	0.19 U	1.4 U	0.19 U	0.2 U	0.18 U	1.2 U
N-Nitrosodiphenylamine	NS	NS	0.15 U	1.6 U	0.18 U	0.75 U	0.15 U	0.15 U	0.16 U	0.15 U	0.16 U	0.16 U	0.16 U	0.16 U	0.81 U	0.18 U	0.16 U	0.15 U	0.15 U	0.14 U	0.84 U	0.22 U	0.44 U	0.17 U	0.15 U	1.2 U	0.15 U	0.16 U	0.15 U	0.93 U
p-Chloro-m-cresol	NS	NS	0.19 U	2 U	0.22 U	0.94 U	0.19 U	0.18 U	0.21 U	0.18 U	0.2 U	0.2 U	0.2 U	0.19 U	1 U	0.22 U	0.2 U	0.18 U	0.19 U	0.18 U	1 U	0.27 U	0.56 U	0.21 U	0.19 U	1.4 U	0.19 U	0.2 U	0.18 U	1.2 U
Pentachlorophenol	0.8	6.7	0.15 U	1.6 U'	0.18 U	0.75 U	0.15 U	0.15 U	0.16 U	0.15 U	0.16 U	0.16 U	0.16 U	0.16 U	0.81 U'	0.18 U	0.16 U	0.15 U	0.15 U	0.14 U	0.84 U'	0.22 U	0.44 U	0.17 U	0.15 U	1.2 U'	0.15 U	0.16 U	0.15 U	0.93 U'
Phenanthrene	1000	500	0.091 J	8.7	1.8	63	1.2	0.074 J	1.9	0.28	0.2	0.024 J	1.5	1.7	11	0.065 J	0.14	0.72	0.11 U	0.026 J	0.89	3.6	0.39	0.13 U	0.11 U	18	0.08 J	0.12 U	0.47	7.4
Phenol	0.33	500	0.19 U	2 U'	0.22 U	0.16 J	0.19 U	0.18 U	0.21 U	0.18 U	0.2 U	0.2 U	0.2 U	0.19 U	1 U'	0.22 U	0.2 U	0.18 U	0.19 U	0.18 U	1 U'	0.27 U	0.56 U'	0.21 U	0.19 U	1.4 U'	0.19 U	0.2 U	0.18 U	1.2 U'
Pyrene	1000	500	0.053 J	7.1	1.3	35	0.64	0.074 J	1.1	0.12	0.38	0.12 U	0.99	0.62	7.8	0.13 U	0.15	0.3	0.11 U	0.022 J	1	1.8	0.45	0.13 U	0.11 U	11	0.12 U	0.022 J	0.32	4.4
Total Semi-Volatile TICs	NS	NS	0.17 J	98.5 J	4.71 J	4.71 J	4.71 J	ND	ND	ND	5.47 J	6.22 J	17.2 J	20 J	70 J	2.71 J	26.1 J	26.1 J	1.21 J	1.21 J	1.21 J	1.21 J	13.5 J	13.5 J	0.193 J	0.193 J	0.193 J	0.77 J	0.77 J	0.77 J

Notes:
NYSDEC GW Protection SCO = New York State Department of Environmental Conservation Groundwater Protection Soil Cleanup Objectives, from Table 375-6.8 of 6 NYCRR Part 375.
NYSDEC Commercial SCO = New York State Department of Environmental Conservation Restricted Commercial Use Soil Cleanup Objectives, from Table 375-6.8 of 6 NYCRR Part 375.
ft bgs = Feet below ground surface.
mg/kg = Milligrams per kilogram.
Green concentrations exceed the NYSDEC GW Protection SCO.
Highlighted concentrations exceed the NYSDEC Commercial SCO.
— = Sample not analyzed.
NS = No standard currently established.
ND = Not Detected.
U = Not detected above laboratory detection limit.
U' = Laboratory reporting limit exceeds the applicable regulatory standard or criteria being utilized.
J = Result below the reporting limit (estimated value).
DUP = Duplicate sample was taken.
When the applicable state standard applies to mixed isomers and the laboratory reports individual isomers, the total standard is listed for each isomer.

Table 5

Soil Reuse Characterization Sampling Results

Summary of Semi-Volatile Organic Compounds in Soil.

MJ Painting; Olean, New York.

Sample ID	NYSDEC GW Protection SCO	NYSDEC Commercial SCO	RX-420	RX-421	RX-422	RX-422	RX-422	RX-422 DUP	RX-422	RX-423	RX-423	RX-424	RX-424	RX-424	RX-425	RX-425	RX-425	RX-425	RX-426	RX-426	RX-426	RX-427	RX-427	RX-428	RX-428	RX-428	RX-429	RX-429	RX-429 DUP	RX-429
Sample Depth (ft bgs)			10-12	10-12	0-1	1-4	7-10	7-10	10-12	4-7	10-12	1-4	7-10	10-12	0-1	4-7	7-10	10-12	1-4	7-10	10-12	7-10	10-12	1-4	8-10	10-12	0-1	4-7	4-7	10-12
Sample Date			11/15/2021	11/11/2021	11/10/2021	11/10/2021	11/10/2021	11/10/2021	11/10/2021	11/11/2021	11/11/2021	11/11/2021	11/11/2021	11/11/2021	11/11/2021	11/11/2021	11/11/2021	11/11/2021	11/11/2021	11/11/2021	11/11/2021	11/16/2021	11/16/2021	11/10/2021	11/10/2021	11/10/2021	11/10/2021	11/10/2021	11/10/2021	11/10/2021
SEMI-VOLATILE ORGANIC COMPOUNDS - 8270D (mg/kg)																														
1,2,4,5-Tetrachlorobenzene	NS	NS	0.21 U	2.2 U	0.24 U	0.17 U	2.2 U	1 U	0.98 U	0.58 U	0.21 U	0.18 U	0.19 U	1.1 U	0.19 U	0.18 U	1.1 U	0.19 U	0.18 U	10 U	13 U	1 U	1 U	0.22 U	0.2 U	0.2 U	0.18 U	0.17 U	0.18 U	0.19 U
2,3,4,6-Tetrachlorophenol	NS	NS	0.21 U	2.2 U	0.24 U	0.17 U	2.2 U	1 U	0.98 U	0.58 U	0.21 U	0.18 U	0.19 U	1.1 U	0.19 U	0.18 U	1.1 U	0.19 U	0.18 U	10 U	13 U	1 U	1 U	0.22 U	0.2 U	0.2 U	0.18 U	0.17 U	0.18 U	0.19 U
2,4,5-Trichlorophenol	NS	NS	0.21 U	2.2 U	0.24 U	0.17 U	2.2 U	1 U	0.98 U	0.58 U	0.21 U	0.18 U	0.19 U	1.1 U	0.19 U	0.18 U	1.1 U	0.19 U	0.18 U	10 U	13 U	1 U	1 U	0.22 U	0.2 U	0.2 U	0.18 U	0.17 U	0.18 U	0.19 U
2,4,6-Trichlorophenol	NS	NS	0.13 U	1.4 U	0.15 U	0.1 U	1.3 U	0.61 U	0.59 U	0.35 U	0.12 U	0.11 U	0.11 U	0.67 U	0.11 U	0.11 U	0.68 U	0.12 U	0.11 U	6.2 U	7.7 U	0.62 U	0.6 U	0.13 U	0.12 U	0.12 U	0.11 U	0.1 U	0.11 U	0.11 U
2,4-Dichlorophenol	NS	NS	0.19 U	2 U	0.22 U	0.16 U	2 U	0.91 U	0.88 U	0.52 U	0.19 U	0.16 U	0.17 U	1 U	0.17 U	0.16 U	1 U	0.17 U	0.16 U	9.2 U	12 U	0.93 U	0.9 U	0.2 U	0.18 U	0.18 U	0.17 U	0.16 U	0.17 U	0.17 U
2,4-Dimethylphenol	NS	NS	0.21 U	2.2 U	0.24 U	0.17 U	2.2 U	1 U	0.98 U	0.58 U	0.21 U	0.18 U	0.19 U	1.1 U	0.19 U	0.18 U	1.1 U	0.19 U	0.18 U	10 U	13 U	1 U	1 U	0.22 U	0.2 U	0.2 U	0.18 U	0.17 U	0.18 U	0.19 U
2,4-Dinitrophenol	NS	NS	1 U	11 U	1.2 U	0.84 U	11 U	4.9 U	4.7 U	2.8 U	1 U	0.85 U	0.91 U	5.3 U	0.89 U	0.88 U	5.4 U	0.93 U	0.85 U	49 U	62 U	5 U	4.8 U	1 U	0.94 U	0.96 U	0.89 U	0.84 U	0.89 U	0.91 U
2,4-Dinitrotoluene	NS	NS	0.21 U	2.2 U	0.24 U	0.17 U	2.2 U	1 U	0.98 U	0.58 U	0.21 U	0.18 U	0.19 U	1.1 U	0.19 U	0.18 U	1.1 U	0.19 U	0.18 U	10 U	13 U	1 U	1 U	0.22 U	0.2 U	0.2 U	0.18 U	0.17 U	0.18 U	0.19 U
2,6-Dinitrotoluene	NS	NS	0.21 U	2.2 U	0.24 U	0.17 U	2.2 U	1 U	0.98 U	0.58 U	0.21 U	0.18 U	0.19 U	1.1 U	0.19 U	0.18 U	1.1 U	0.19 U	0.18 U	10 U	13 U	1 U	1 U	0.22 U	0.2 U	0.2 U	0.18 U	0.17 U	0.18 U	0.19 U
2-Chloronaphthalene	NS	NS	0.21 U	2.2 U	0.24 U	0.17 U	2.2 U	1 U	0.98 U	0.58 U	0.21 U	0.18 U	0.19 U	1.1 U	0.19 U	0.18 U	1.1 U	0.19 U	0.18 U	10 U	13 U	1 U	1 U	0.22 U	0.2 U	0.2 U	0.18 U	0.17 U	0.18 U	0.19 U
2-Chlorophenol	NS	NS	0.21 U	2.2 U	0.24 U	0.17 U	2.2 U	1 U	0.98 U	0.58 U	0.21 U	0.18 U	0.19 U	1.1 U	0.19 U	0.18 U	1.1 U	0.19 U	0.18 U	10 U	13 U	1 U	1 U	0.22 U	0.2 U	0.2 U	0.18 U	0.17 U	0.18 U	0.19 U
2-Methylnapthalene	NS	NS	0.025 J	0.44 J	0.29 U	0.045 J	6.8	1.9	1.2 U	0.25 J	0.056 J	0.21 U	4	5.6	0.025 J	0.19 J	0.84 J	0.073 J	0.21 U	10 J	49	3	0.8 J	0.26 U	0.24 U	0.078 J	0.22 U	0.17 J	0.045 J	0.98
2-Methylphenol	0.33	500	0.21 U	2.2 U'	0.24 U	0.17 U	2.2 U'	1 U'	0.98 U'	0.58 U'	0.21 U	0.18 U	0.034 J	1.1 U'	0.19 U	0.18 U	1.1 U'	0.19 U	0.18 U	10 U'	13 U'	1 U'	1 U'	0.22 U	0.2 U	0.2 U	0.18 U	0.17 U	0.18 U	0.19 U
2-Nitroaniline	NS	NS	0.21 U	2.2 U	0.24 U	0.17 U	2.2 U	1 U	0.98 U	0.58 U	0.21 U	0.18 U	0.19 U	1.1 U	0.19 U	0.18 U	1.1 U	0.19 U	0.18 U	10 U	13 U	1 U	1 U	0.22 U	0.2 U	0.2 U	0.18 U	0.17 U	0.18 U	0.19 U
2-Nitrophenol	NS	NS	0.46 U	4.9 U	0.53 U	0.38 U	4.8 U	2.2 U	2.1 U	1.2 U	0.45 U	0.38 U	0.41 U	2.4 U	0.4 U	0.39 U	2.4 U	0.42 U	0.38 U	22 U	28 U	2.2 U	2.2 U	0.47 U	0.42 U	0.43 U	0.4 U	0.38 U	0.4 U	0.41 U
3,3'-Dichlorobenzidine	NS	NS	0.21 U	2.2 U	0.24 U	0.17 U	2.2 U	1 U	0.98 U	0.58 U	0.21 U	0.18 U	0.19 U	1.1 U	0.19 U	0.18 U	1.1 U	0.19 U	0.18 U	10 U	13 U	1 U	1 U	0.22 U	0.2 U	0.2 U	0.18 U	0.17 U	0.18 U	0.19 U
3-Methylphenol/4-Methylphenol	NS	NS	0.3 U	3.2 U	0.35 U	0.25 U	3.2 U	1.5 U	1.4 U	0.83 U	0.3 U	0.26 U	0.096 J	1.6 U	0.27 U	0.26 U	1.6 U	0.28 U	0.25 U	15 U	18 U	1.5 U	1.4 U	0.32 U	0.28 U	0.29 U	0.27 U	0.25 U	0.27 U	0.27 U
3-Nitroaniline	NS	NS	0.21 U	2.2 U	0.24 U	0.17 U	2.2 U	1 U	0.98 U	0.58 U	0.21 U	0.18 U	0.19 U	1.1 U	0.19 U	0.18 U	1.1 U	0.19 U	0.18 U	10 U	13 U	1 U	1 U	0.22 U	0.2 U	0.2 U	0.18 U	0.17 U	0.18 U	0.19 U
4,6-Dinitro-o-cresol	NS	NS	0.55 U	5.8 U	0.64 U	0.45 U	5.8 U	2.6 U	2.5 U	1.5 U	0.54 U	0.46 U	0.49 U	2.9 U	0.48 U	0.47 U	3 U	0.5 U	0.46 U	27 U	33 U	2.7 U	2.6 U	0.57 U	0.51 U	0.52 U	0.48 U	0.45 U	0.48 U	0.49 U
4-Bromophenyl-phenylether	NS	NS	0.21 U	2.2 U	0.24 U	0.17 U	2.2 U	1 U	0.98 U	0.58 U	0.21 U	0.18 U	0.19 U	1.1 U	0.19 U	0.18 U	1.1 U	0.19 U	0.18 U	10 U	13 U	1 U	1 U	0.22 U	0.2 U	0.2 U	0.18 U	0.17 U	0.18 U	0.19 U
4-Chloroaniline	NS	NS	0.21 U	2.2 U	0.24 U	0.17 U	2.2 U	1 U	0.98 U	0.58 U	0.21 U	0.18 U	0.19 U	1.1 U	0.19 U	0.18 U	1.1 U	0.19 U	0.18 U	10 U	13 U	1 U	1 U	0.22 U	0.2 U	0.2 U	0.18 U	0.17 U	0.18 U	0.19 U
4-Chlorophenyl-phenylether	NS	NS	0.21 U	2.2 U	0.24 U	0.17 U	2.2 U	1 U	0.98 U	0.58 U	0.21 U	0.18 U	0.19 U	1.1 U	0.19 U	0.18 U	1.1 U	0.19 U	0.18 U	10 U	13 U	1 U	1 U	0.22 U	0.2 U	0.2 U	0.18 U	0.17 U	0.18 U	0.19 U
4-Nitroaniline	NS	NS	0.21 U	2.2 U	0.24 U	0.17 U	2.2 U	1 U	0.98 U	0.58 U	0.21 U	0.18 U	0.19 U	1.1 U	0.19 U	0.18 U	1.1 U	0.19 U	0.18 U	10 U	13 U	1 U	1 U	0.22 U	0.2 U	0.2 U	0.18 U	0.17 U	0.18 U	0.19 U
4-Nitrophenol	NS	NS	0.3 U	3.2 U	0.34 U	0.24 U	3.1 U	1.4 U	1.4 U	0.81 U	0.29 U	0.25 U	0.26 U	1.6 U	0.26 U	0.26 U	1.6 U	0.27 U	0.25 U	14 U	18 U	1.4 U	1.4 U	0.31 U	0.28 U	0.28 U	0.26 U	0.24 U	0.26 U	0.26 U
Acenaphthene	98	500	0.17 U	1.8 U	0.2 U	0.14 U	0.57 J	0.18 J	0.63 J	0.38 J	0.17	0.14 U	0.15 U	0.89 U	0.15 U	0.15 U	0.24 J	0.16 U	0.14 U	3.3 J	1.8 J	0.22 J	0.42 J	0.18 U	0.16 U	0.03 J	0.15 U	0.14 U	0.15 U	0.037 J
Acenaphthylene	107	500	0.17 U	1.8 U	0.2 U	0.14 U	1.8 U	0.81 U	0.78 U	0.46 U	0.17 U	0.14 U	0.052 J	0.89 U	0.15 U	0.15 U	0.91 U	0.16 U	0.14 U	8.2 U	10 U	0.83 U	0.8 U	0.18 U	0.16 U	0.16 U	0.15 U	0.14 U	0.15 U	0.15 U
Acetophenone	NS	NS	0.21 U	2.2 U	0.24 U	0.17 U	2.2 U	1 U	0.98 U	0.58 U	0.21 U	0.18 U	0.19 U	1.1 U	0.19 U	0.18 U	1.1 U	0.19 U	0.18 U	10 U	13 U	1 U	1 U	0.22 U	0.2 U	0.2 U	0.18 U	0.17 U	0.18 U	0.19 U
Anthracene	1000	500	0.13 U	1.4 U	0.15 U	0.1 U	1.1 J	0.28 J	2.1	0.35 U	0.18	0.11 U	0.16	1.5	0.11 U	0.057 J	0.43 J	0.12 U	0.11 U	15	4.2 J	1.1	1	0.13 U	0.12 U	0.078 J	0.11 U	0.036 J	0.11 U	0.091 J
Atrazine	NS	NS	0.17 U	1.8 U	0.2 U	0.14 U	1.8 U	0.81 U	0.78 U	0.46 U	0.17 U	0.14 U	0.15 U	0.89 U	0.15 U	0.15 U	0.91 U	0.16 U	0.14 U	8.2 U	10 U	0.83 U	0.8 U	0.18 U	0.16 U	0.16 U	0.15 U	0.14 U	0.15 U	0.15 U
Benzaldehyde	NS	NS	0.28 U	3 U	0.32 U	0.23 U	2.9 U	1.3 U	1.3 U	0.76 U	0.28 U	0.23 U	0.25 U	1.5 U	0.24 U	0.24 U	1.5 U	0.26 U	0.23 U	14 U	17 U	1.4 U	1.3 U	0.29 U	0.26 U	0.26 U	0.24 U	0.23 U	0.24 U	0.25 U
Benzo[a]anthracene	1	5.6	0.13 U	1.4 U'	0.15 U	0.026 J	0.52 J	0.15 J	0.32 J	0.12 J	0.12 U	0.11 U	0.067 J	0.52 J	0.11 U	0.14	0.22 J	0.12 U	0.11 U	**5.7 J**	**2.7 J**	0.53 J	0.28 J	0.13 U	0.022 J	0.32	0.11 U	0.14	0.044 J	0.021 J
Benzo[a]pyrene	22	1	0.17 U	1.8 U'	0.2 U	0.14 U	1.8 U'	0.81 U	0.78 U	0.14 J	0.17 U	0.14 U	0.15 U	0.31 J	0.15 U	0.13 J	0.91 U	0.16 U	0.14 U	4.2 J	10 U'	1	0.8 U	0.18 U	0.16 U	0.29	0.15 U	0.22	0.15 U	0.15 U
Benzo[b]fluoranthene	1.7	5.6	0.13 U	1.4 U'	0.15 U	0.032 J	1.3 U'	0.61 U	0.59 U	0.22 J	0.12 U	0.11 U	0.056 J	0.25 J	0.11 U	0.14	0.68 U	0.12 U	0.11 U	**1.8 J**	7.7 U'	0.54 J	0.6 U	0.13 U	0.12 U	0.39	0.11 U	0.22	0.039 J	0.11 U
Benzo[g,h,i]perylene	1000	500	0.17 U	1.8 U	0.037 J	0.11 J	0.31 J	0.81 U	0.14 J	0.26 J	0.17 U	0.14 U	0.052 J	0.72 J	0.15 U	0.19	0.19 J	0.16 U	0.14 U	5.1 J	2.4 J	2	0.2 J	0.18 U	0.16 U	0.21	0.15 U	0.38	0.15 U	0.15 U
Benzo[k]fluoranthene	1.7	56	0.13 U	1.4 U'	0.15 U	0.1 U	1.3 U'	0.61 U	0.59 U	0.35 U	0.12 U	0.11 U	0.11 U	0.67 U	0.11 U	0.043 J	0.68 U	0.12 U	0.11 U	6.2 U'	7.7 U'	0.62 U	0.6 U	0.13 U	0.12 U	0.12	0.11 U	0.033 J	0.11 U	0.11 U
Biphenyl	NS	NS	0.48 U	5.1 U	0.56 U	0.4 U	5 U	2.3 U	2.2 U	1.3 U	0.48 U	0.4 U	0.31 J	0.57 J	0.42 U	0.42 U	2.6 U	0.44 U	0.4 U	23 U	29 U	2.4 U	2.3 U	0.5 U	0.45 U	0.46 U	0.42 U	0.4 U	0.42 U	0.43 U
Bis(2-Chloroethoxy)methane	NS	NS	0.23 U	2.4 U	0.26 U	0.19 U	2.4 U	1.1 U	1 U	0.62 U	0.23 U	0.19 U	0.2 U	1.2 U	0.2 U	0.2 U	1.2 U	0.21 U	0.19 U	11 U	14 U	1.1 U	1.1 U	0.24 U	0.21 U	0.22 U	0.2 U	0.19 U	0.2 U	0.2 U
Bis(2-Chloroethyl)ether	NS	NS	0.19 U	2 U	0.22 U	0.16 U	2 U	0.91 U	0.88 U	0.52 U	0.19 U	0.16 U	0.17 U	1 U	0.17 U	0.16 U	1 U	0.17 U	0.16 U	9.2 U	12 U	0.93 U	0.9 U	0.2 U	0.18 U	0.18 U	0.17 U	0.16 U	0.17 U	0.17 U
Bis(2-Chloroisopropyl)ether	NS	NS	0.25 U	2.7 U	0.29 U	0.21 U	2.6 U	1.2 U	1.2 U	0.7 U	0.25 U	0.21 U	0.23 U	1.3 U	0.22 U	0.22 U	1.4 U	0.23 U	0.21 U	12 U	15 U	1.2 U	1.2 U	0.26 U	0.24 U	0.24 U	0.22 U	0.21 U	0.22 U	0.23 U
Bis(2-Ethylhexyl)phthalate	NS	NS	0.21 U	2.2 U	0.24 U	0.17 U	2.2 U	1 U	0.98 U	0.58 U	0.21 U	0.18 U	0.19 U	1.1 U	0.19 U	0.18 U	1.1 U	0.19 U	0.18 U	10 U	13 U	1 U	1 U	0.22 U	0.2 U	0.2 U	0.18 U	0.17 U	0.18 U	0.19 U
Butyl benzyl phthalate	NS	NS	0.21 U	2.2 U	0.24 U	0.17 U	2.2 U	1 U	0.98 U	0.58 U	0.21 U	0.18 U	0.19 U	1.1 U	0.19 U	0.18 U	1.1 U	0.19 U	0.18 U	10 U	13 U	1 U	1 U	0.22 U	0.2 U	0.2 U	0.18 U	0.17 U	0.18 U	0.19 U
Caprolactam	NS	NS	0.21 U	2.2 U	0.24 U	0.17 U	2.2 U	1 U	0.98 U	0.58 U	0.21 U	0.18 U	0.19 U	1.1 U	0.19 U	0.18 U	1.1 U	0.19 U	0.18 U	10 U	13 U	1 U	1 U	0.22 U	0.2 U	0.2 U	0.18 U	0.17 U	0.18 U	0.19 U
Carbazole	NS	NS	0.21 U	2.2 U	0.24 U	0.17 U	2.2 U	1 U	0.98 U	0.58 U	0.21 U	0.18 U	0.19 U	1.1 U	0.19 U	0.18 U	1.1 U	0.19 U	0.18 U	10 U	13 U	1 U	1 U	0.22 U	0.2 U	0.049 J	0.18 U	0.17 U	0.18 U	0.19 U
Chrysene	1	56	0.052 J	1.4 U'	0.15 U	0.048 J	0.78 J	0.24 J	0.47 J	0.26 J	0.04 J	0.11 U	0.14	0.72	0.11 U	0.17	0.32 J	0.038 J	0.11 U	**7.8**	**6.6 J**	**1.4**	0.62	0.13 U	0.022 J	0.33	0.11 U	0.3	0.091 J	0.025 J
Dibenzo(a,h)anthracene	1000	0.56	0.13 U	1.4 U'	0.15 U	0.1 U	1.3 U'	0.61 U'	0.59 U'	0.35 U'	0.12 U	0.11 U	0.11 U	0.67 U'	0.11 U	0.042 J	0.68 U'	0.12 U	0.11 U	6.2 U'	7.7 U'	0.18 J	0.6 U'	0.13 U	0.12 U	0.053 J	0.11 U	0.096 J	0.11 U	0.11 U
Dibenzofuran	210	350	0.21 U	2.2 U	0.24 U	0.17 U	0.54 J	0.18 J	0.98 U	0.58 U	0.081 J	0.18 U	0.078 J	1.1 U	0.19 U	0.03 J	1.1 U	0.19 U	0.18 U	2 J	1.2 J	1 U	0.28 J	0.22 U	0.2 U	0.032 J	0.18 U	0.033 J	0.18 U	0.02 J
Diethyl phthalate	NS	NS	0.21 U	2.2 U	0.24 U	0.17 U	2.2 U	1 U	0.98 U	0.58 U	0.21 U	0.18 U	0.19 U	1.1 U	0.19 U	0.18 U	1.1 U	0.19 U	0.18 U	10 U	13 U	1 U	1 U	0.22 U	0.2 U	0.2 U	0.18 U	0.17 U	0.18 U	0.19 U
Dimethyl phthalate	NS	NS	0.21 U	2.2 U	0.24 U	0.17 U	2.2 U	1 U	0.98 U	0.58 U	0.21 U	0.18 U	0.19 U	1.1 U	0.19 U	0.18 U	1.1 U	0.19 U	0.18 U	10 U	13 U	1 U	1 U	0.22 U	0.2 U	0.2 U	0.18 U	0.17 U	0.18 U	0.19 U
Di-n-butylphthalate	NS	NS	0.21 U	2.2 U	0.24 U	0.17 U	2.2 U	1 U	0.98 U	0.58 U	0.21 U	0.18 U	0.19 U	1.1 U	0.19 U	0.18 U	1.1 U	0.19 U	0.18 U	10 U	13 U	1 U	1 U	0.22 U	0.2 U	0.2 U	0.18 U	0.17 U	0.18 U	0.19 U
Di-n-octylphthalate	NS	NS	0.21 U	2.2 U	0.24 U	0.17 U	2.2 U	1 U	0.98 U	0.58 U	0.21 U	0.18 U	0.19 U	1.1 U	0.19 U	0.18 U	1.1 U	0.19 U	0.18 U	10 U	13 U	1 U	1 U	0.22 U	0.2 U	0.2 U	0.18 U	0.17 U	0.18 U	0.19 U
Fluoranthene	1000	500	0.13 U	1.4 U	0.032 J	0.024 J	0.47 J	0.61 U	0.88	0.26 J	0.091 J	0.11 U	0.1 J	0.67 U	0.11 U	0.25	0.23 J	0.12 U	0.11 U	8.1	2.1 J	0.41 J	0.3 J	0.13 U	0.035 J	0.61	0.11 U	0.21	0.043 J	0.043 J
Fluorene	386	500	0.21 U	0.59 J	0.24 U	0.17 U	2.2	0.66 J	1.8	0.58 U	0.35	0.18 U	0.11 J	1.1 U	0.19 U	0.044 J	0.65 J	0.024 J	0.18 U	8.5 J	4.7 J	0.63 J	1.2	0.22 U	0.026 J	0.054 J	0.18 U	0.019 J	0.18 U	0.098 J
Hexachlorobenzene	3.2	6	0.13 U	1.4 U'	0.15 U	0.1 U	1.3 U'	0.61 U'	0.59 U'	0.35 U'	0.12 U	0.11 U	0.11 U	0.67 U'	0.11 U	0.11 U	0.68 U'	0.12 U	0.11 U	6.2 U'	7.7 U'	0.62 U'	0.6 U'	0.13 U	0.12 U	0.12 U	0.11 U	0.1 U	0.11 U	0.11 U
Hexachlorobutadiene	NS	NS	0.21 U	2.2 U	0.24 U	0.17 U	2.2 U	1 U	0.98 U	0.58 U	0.21 U	0.18 U	0.19 U	1.1 U	0.19 U	0.18 U	1.1 U	0.19 U	0.18 U	10 U	13 U	1 U	1 U	0.22 U	0.2 U	0.2 U	0.18 U	0.17 U	0.18 U	0.19 U
Hexachlorocyclopentadiene	NS	NS	0.6 U	6.4 U	0.7 U	0.5 U	6.3 U	2.9 U	2.8 U	1.6 U	0.6 U	0.51 U	0.54 U	3.2 U	0.53 U	0.52 U	3.2 U	0.55 U	0.5 U	29 U	37 U	3 U	2.9 U	0.63 U	0.56 U	0.57 U	0.53 U	0.5 U	0.53 U	0.54 U
Hexachloroethane	NS	NS	0.17 U	1.8 U	0.2 U	0.14 U	1.8 U	0.81 U	0.78 U	0.46 U	0.17 U	0.14 U	0.15 U	0.89 U	0.15 U	0.15 U	0.91 U	0.16 U	0.14 U	8.2 U	10 U	0.83 U	0.8 U	0.18 U	0.16 U	0.16 U	0.15 U	0.14 U	0.15 U	0.15 U
Indeno[1,2,3-cd]pyrene	8.2	5.6	0.17 U	1.8 U'	0.2 U	0.029 J	1.8 U'	0.81 U'	0.78 U'	0.16 J	0.17 U	0.14 U	0.15 U	0.26 J	0.15 U	0.095 J	0.91 U'	0.16 U	0.14 U	1.4 J	10 U'	0.42 J	0.8 U'	0.18 U	0.16 U	0.22	0.15 U	0.14	0.15 U	0.15 U
Isophorone	NS	NS	0.19 U	2 U	0.22 U	0.16 U	2 U	0.91 U	0.88 U	0.52 U	0.19 U	0.16 U	0.17 U	1 U	0.17 U	0.16 U	1 U	0.17 U	0.16 U	9.2 U	12 U	0.93 U	0.9 U	0.2 U	0.18 U	0.18 U	0.17 U	0.16 U	0.17 U	0.17 U
Naphthalene	12	500	0.21 U	0.36 J	0.24 U	0.027 J	2.4	0.78 J	0.42 J	0.15 J	0.095 J	0.18 U	3	2.9	0.19 U	0.08 J	0.76 J	0.079 J	0.18 U	2.6 J	8.7 J	1.7	1 U	0.071 J	0.2 U	0.12 J	0.18 U	0.084 J	0.032 J	0.074 J
Nitrobenzene	NS	NS	0.19 U	2 U	0.22 U	0.16 U	2 U	0.91 U	0.88 U	0.52 U	0.19 U	0.16 U	0.17 U	1 U	0.17 U	0.16 U	1 U	0.17 U	0.16 U	9.2 U	12 U	0.93 U	0.9 U	0.2 U	0.18 U	0.18 U	0.17 U	0.16 U	0.17 U	0.17 U
n-Nitrosodi-n-propylamine	NS	NS	0.21 U	2.2 U	0.24 U	0.17 U	2.2 U	1 U	0.98 U	0.58 U	0.21 U	0.18 U	0.19 U	1.1 U	0.19 U	0.18 U	1.1 U	0.19 U	0.18 U	10 U	13 U	1 U	1 U	0.22 U	0.2 U	0.2 U	0.18 U	0.17 U	0.18 U	0.19 U
N-Nitrosodiphenylamine	NS	NS	0.17 U	1.8 U	0.2 U	0.14 U	1.8 U	0.81 U	0.78 U	0.46 U	0.17 U	0.14 U	0.15 U	0.89 U	0.15 U	0.15 U	0.91 U	0.16 U	0.14 U	8.2 U	10 U	0.83 U	0.8 U	0.18 U	0.16 U	0.16 U	0.15 U	0.14 U	0.15 U	0.15 U
p-Chloro-m-cresol	NS	NS	0.21 U	2.2 U	0.24 U	0.17 U	2.2 U	1 U	0.98 U	0.58 U	0.21 U	0.18 U	0.19 U	1.1 U	0.19 U	0.18 U	1.1 U	0.19 U	0.18 U	10 U	13 U	1 U	1 U	0.22 U	0.2 U	0.2 U	0.18 U	0.17 U	0.18 U	0.19 U
Pentachlorophenol	0.8	6.7	0.17 U	1.8 U'	0.2 U	0.14 U	1.8 U'	0.81 U'	0.78 U	0.46 U	0.17 U	0.14 U	0.15 U	0.89 U'	0.15 U	0.15 U	0.91 U'	0.16 U	0.14 U	8.2 U'	10 U'	0.83 U'	0.8 U	0.18 U	0.16 U	0.16 U	0.15 U	0.14 U	0.15 U	0.15 U
Phenanthrene	1000	500	0.12 J	2	0.15 U	0.059 J	7.8	2.2	11	0.35	0.94	0.11 U	0.96	6	0.025 J	0.39	2	0.084 J	0.11 U	69	24	3.3	4.7	0.13 U	0.062 J	0.39	0.11 U	0.26	0.17	0.56
Phenol	0.33	500	0.21 U	**0.46 J**	0.24 U	0.17 U	2.2 U'	1 U'	0.98 U'	0.58 U'	0.21 U	0.18 U	0.19 U	1.1 U'	0.19 U	0.18 U	1.1 U'	0.19 U	0.18 U	10 U'	13 U'	1 U'	1 U'	0.22 U	0.2 U	0.2 U	0.18 U	0.17 U	0.18 U	0.19 U
Pyrene	1000	500	0.073 J	0.63 J	0.036 J	0.069 J	2.4	0.63	5.4	0.4	0.25	0.11 U	0.51	4.7	0.026 J	0.3	2.1	0.081 J	0.11 U	64	19	4	2.4	0.13 U	0.052 J	0.56	0.11 U	0.3	0.054 J	0.22
Total Semi-Volatile TICs	NS	NS	9.57 J	84.8 J	3.11 J	3.11 J	3.11 J	329 J	3.11 J	109 J	109 J	0.484 J	0.484 J	0.484 J	4.01 J	4.01 J	4.01 J	4.01 J	0.547 J	0.547 J	0.547 J	151 J	151 J	0.507 J	0.507 J	0.507 J	ND	ND	13.8 J	ND

Notes:
NYSDEC GW Protection SCO = New York State Department of Environmental Conservation Groundwater Protection Soil Cleanup Objectives, from Table 375-6.8 of 6 NYCRR Part 375.
NYSDEC Commercial SCO = New York State Department of Environmental Conservation Restricted Commercial Use Soil Cleanup Objectives, from Table 375-6.8 of 6 NYCRR Part 375.
ft bgs = Feet below ground surface.
mg/kg = Milligrams per kilogram.
Green concentrations exceed the NYSDEC GW Protection SCO.
Highlighted concentrations exceed the NYSDEC Commercial SCO.
— = Sample not analyzed.
NS = No standard currently established.
ND = Not Detected.
U = Not detected above laboratory detection limit.
U' = Laboratory reporting limit exceeds the applicable regulatory standard or criteria being utilized.
J = Result below the reporting limit (estimated value).
DUP = Duplicate sample was taken.
When the applicable state standard applies to mixed isomers and the laboratory reports individual isomers, the total standard is listed for each isomer.

Table 5

Soil Reuse Characterization Sampling Results

Summary of Semi-Volatile Organic Compounds in Soil.

MJ Painting; Olean, New York.

Sample ID	NYSDEC GW Protection SCO	NYSDEC Commercial SCO	RX-430	RX-430	RX-430	RX-431	RX-431	RX-431	RX-432	RX-432	RX-432	RX-432	RX-433	RX-434	RX-434	RX-434	RX-435	RX-436	RX-436	RX-436	RX-437	RX-439	RX-439	RX-439	RX-440	RX-441	RX-442	RX-443	RX-443
Sample Depth (ft bgs)			1-4	7-10	10-12	3-7	7-10	10-12	0-1	1-4	7-10	10-12	7-10	0-1	4-7	10-12	7-10	0-1	4-7	10-12	1-4	0-1	4-7	10-12	4-7	7-10	1-4	0-1	4-7
Sample Date			11/10/2021	11/10/2021	11/10/2021	11/10/2021	11/16/2021	11/16/2021	11/10/2021	11/16/2021	11/16/2021	11/16/2021	11/17/2021	11/17/2021	11/17/2021	11/17/2021	11/17/2021	11/17/2021	11/17/2021	11/17/2021	11/17/2021	11/17/2021	11/18/2021	11/18/2021	11/17/2021	11/16/2021	11/17/2021	11/16/2021	11/16/2021
SEMI-VOLATILE ORGANIC COMPOUNDS - 8270D (mg/kg)																													
1,2,4,5-Tetrachlorobenzene	NS	NS	0.2 U	0.2 U	0.2 U	2.3 U	2.1 U	0.19 U	0.18 U	0.95 U	0.21 U	0.19 U	0.18 U	0.2 U	1 U	0.18 U	0.18 U	1 U	0.22 U	0.18 U	1 U	0.21 U	0.24 U	0.2 U	0.25 U	0.18 U	0.2 U	0.22 U	0.99 U
2,3,4,6-Tetrachlorophenol	NS	NS	0.2 U	0.2 U	0.2 U	2.3 U	2.1 U	0.19 U	0.18 U	0.95 U	0.21 U	0.19 U	0.18 U	0.2 U	1 U	0.18 U	0.18 U	1 U	0.22 U	0.18 U	1 U	0.21 U	0.24 U	0.2 U	0.25 U	0.18 U	0.2 U	0.22 U	0.99 U
2,4,5-Trichlorophenol	NS	NS	0.2 U	0.2 U	0.2 U	2.3 U	2.1 U	0.19 U	0.18 U	0.95 U	0.21 U	0.19 U	0.18 U	0.2 U	1 U	0.18 U	0.18 U	1 U	0.22 U	0.18 U	1 U	0.21 U	0.24 U	0.2 U	0.25 U	0.18 U	0.2 U	0.22 U	0.99 U
2,4,6-Trichlorophenol	NS	NS	0.12 U	0.12 U	0.12 U	1.4 U	1.3 U	0.11 U	0.11 U	0.57 U	0.13 U	0.12 U	0.11 U	0.12 U	0.6 U	0.1 U	0.1 U	0.6 U	0.13 U	0.11 U	0.6 U	0.12 U	0.14 U	0.12 U	0.15 U	0.11 U	0.12 U	0.13 U	0.59 U
2,4-Dichlorophenol	NS	NS	0.18 U	0.18 U	0.18 U	2 U	1.9 U	0.17 U	0.16 U	0.86 U	0.19 U	0.17 U	0.16 U	0.18 U	0.9 U	0.16 U	0.16 U	0.9 U	0.2 U	0.16 U	0.9 U	0.18 U	0.21 U	0.18 U	0.22 U	0.17 U	0.18 U	0.2 U	0.89 U
2,4-Dimethylphenol	NS	NS	0.2 U	0.2 U	0.2 U	2.3 U	2.1 U	0.19 U	0.18 U	0.95 U	0.21 U	0.19 U	0.18 U	0.2 U	1 U	0.18 U	0.18 U	1 U	0.22 U	0.18 U	1 U	0.21 U	0.24 U	0.2 U	0.25 U	0.18 U	0.2 U	0.22 U	0.99 U
2,4-Dinitrophenol	NS	NS	0.94 U	0.95 U	0.95 U	11 U	10 U	0.91 U	0.86 U	4.6 U	1 U	0.93 U	0.88 U	0.95 U	4.8 U	0.84 U	0.84 U	4.8 U	1.1 U	0.88 U	4.8 U	0.99 U	1.1 U	0.95 U	1.2 U	0.89 U	0.95 U	1.1 U	4.7 U
2,4-Dinitrotoluene	NS	NS	0.2 U	0.2 U	0.13 J	2.3 U	2.1 U	0.19 U	0.18 U	0.95 U	0.21 U	0.19 U	0.18 U	0.2 U	1 U	0.18 U	0.18 U	1 U	0.22 U	0.18 U	1 U	0.21 U	0.24 U	0.2 U	0.25 U	0.18 U	0.2 U	0.22 U	0.99 U
2,6-Dinitrotoluene	NS	NS	0.2 U	0.2 U	0.2 U	2.3 U	2.1 U	0.19 U	0.18 U	0.95 U	0.21 U	0.19 U	0.18 U	0.2 U	1 U	0.18 U	0.18 U	1 U	0.22 U	0.18 U	1 U	0.21 U	0.24 U	0.2 U	0.25 U	0.18 U	0.2 U	0.22 U	0.99 U
2-Chloronaphthalene	NS	NS	0.2 U	0.2 U	0.2 U	2.3 U	2.1 U	0.19 U	0.18 U	0.95 U	0.21 U	0.19 U	0.18 U	0.2 U	1 U	0.18 U	0.18 U	1 U	0.22 U	0.18 U	1 U	0.21 U	0.24 U	0.2 U	0.25 U	0.18 U	0.2 U	0.22 U	0.99 U
2-Chlorophenol	NS	NS	0.2 U	0.2 U	0.2 U	2.3 U	2.1 U	0.19 U	0.18 U	0.95 U	0.21 U	0.19 U	0.18 U	0.2 U	1 U	0.18 U	0.18 U	1 U	0.22 U	0.18 U	1 U	0.21 U	0.24 U	0.2 U	0.25 U	0.18 U	0.2 U	0.22 U	0.99 U
2-Methylnapthalene	NS	NS	0.24 U	0.54	0.24 U	3.8	5.4	0.33	0.22 U	0.36 J	0.028 J	0.038 J	0.14 J	0.061 J	0.22 J	0.03 J	0.21 U	0.73 J	0.17 J	0.11 J	0.33 J	0.25 U	0.16 J	0.24 U	0.3 U	0.22 U	0.094 J	0.24 J	22
2-Methylphenol	0.33	500	0.2 U	0.2 U	0.2 U	2.3 U'	2.1 U'	0.19 U	0.18 U	0.95 U'	0.21 U	0.19 U	0.18 U	0.2 U	1 U'	0.18 U	0.18 U	1 U'	0.22 U	0.18 U	1 U'	0.21 U	0.24 U	0.2 U	0.25 U	0.18 U	0.2 U	0.22 U	0.99 U'
2-Nitroaniline	NS	NS	0.2 U	0.2 U	0.2 U	2.3 U	2.1 U	0.19 U	0.18 U	0.95 U	0.21 U	0.19 U	0.18 U	0.2 U	1 U	0.18 U	0.18 U	1 U	0.22 U	0.18 U	1 U	0.21 U	0.24 U	0.2 U	0.25 U	0.18 U	0.2 U	0.22 U	0.99 U
2-Nitrophenol	NS	NS	0.42 U	0.43 U	0.43 U	4.9 U	4.6 U	0.41 U	0.39 U	2 U	0.45 U	0.42 U	0.4 U	0.43 U	2.2 U	0.38 U	0.38 U	2.2 U	0.48 U	0.4 U	2.2 U	0.45 U	0.52 U	0.43 U	0.53 U	0.4 U	0.43 U	0.48 U	2.1 U
3,3'-Dichlorobenzidine	NS	NS	0.2 U	0.2 U	0.2 U	2.3 U	2.1 U	0.19 U	0.18 U	0.95 U	0.21 U	0.19 U	0.18 U	0.2 U	1 U	0.18 U	0.18 U	1 U	0.22 U	0.18 U	1 U	0.21 U	0.24 U	0.2 U	0.25 U	0.18 U	0.2 U	0.22 U	0.99 U
3-Methylphenol/4-Methylphenol	NS	NS	0.28 U	0.28 U	0.29 U	3.3 U	3 U	0.27 U	0.26 U	1.4 U	0.3 U	0.28 U	0.26 U	0.29 U	1.4 U	0.25 U	0.25 U	1.4 U	0.32 U	0.26 U	1.4 U	0.3 U	0.34 U	0.29 U	0.36 U	0.26 U	0.28 U	0.32 U	1.4 U
3-Nitroaniline	NS	NS	0.2 U	0.2 U	0.2 U	2.3 U	2.1 U	0.19 U	0.18 U	0.95 U	0.21 U	0.19 U	0.18 U	0.2 U	1 U	0.18 U	0.18 U	1 U	0.22 U	0.18 U	1 U	0.21 U	0.24 U	0.2 U	0.25 U	0.18 U	0.2 U	0.22 U	0.99 U
4,6-Dinitro-o-cresol	NS	NS	0.51 U	0.52 U	0.52 U	5.9 U	5.5 U	0.49 U	0.47 U	2.5 U	0.55 U	0.5 U	0.48 U	0.52 U	2.6 U	0.46 U	0.46 U	2.6 U	0.58 U	0.48 U	2.6 U	0.54 U	0.62 U	0.52 U	0.64 U	0.48 U	0.51 U	0.58 U	2.6 U
4-Bromophenyl-phenylether	NS	NS	0.2 U	0.2 U	0.2 U	2.3 U	2.1 U	0.19 U	0.18 U	0.95 U	0.21 U	0.19 U	0.18 U	0.2 U	1 U	0.18 U	0.18 U	1 U	0.22 U	0.18 U	1 U	0.21 U	0.24 U	0.2 U	0.25 U	0.18 U	0.2 U	0.22 U	0.99 U
4-Chloroaniline	NS	NS	0.2 U	0.2 U	0.2 U	2.3 U	2.1 U	0.19 U	0.18 U	0.95 U	0.21 U	0.19 U	0.18 U	0.2 U	1 U	0.18 U	0.18 U	1 U	0.22 U	0.18 U	1 U	0.21 U	0.24 U	0.2 U	0.25 U	0.18 U	0.2 U	0.22 U	0.99 U
4-Chlorophenyl-phenylether	NS	NS	0.2 U	0.2 U	0.2 U	2.3 U	2.1 U	0.19 U	0.18 U	0.95 U	0.21 U	0.19 U	0.18 U	0.2 U	1 U	0.18 U	0.18 U	1 U	0.22 U	0.18 U	1 U	0.21 U	0.24 U	0.2 U	0.25 U	0.18 U	0.2 U	0.22 U	0.99 U
4-Nitroaniline	NS	NS	0.2 U	0.2 U	0.2 U	2.3 U	2.1 U	0.19 U	0.18 U	0.95 U	0.21 U	0.19 U	0.18 U	0.2 U	1 U	0.18 U	0.18 U	1 U	0.22 U	0.18 U	1 U	0.21 U	0.24 U	0.2 U	0.25 U	0.18 U	0.2 U	0.22 U	0.99 U
4-Nitrophenol	NS	NS	0.28 U	0.28 U	0.28 U	3.2 U	3 U	0.27 U	0.25 U	1.3 U	0.29 U	0.27 U	0.26 U	0.28 U	1.4 U	0.25 U	0.24 U	1.4 U	0.31 U	0.26 U	1.4 U	0.29 U	0.33 U	0.28 U	0.34 U	0.26 U	0.28 U	0.31 U	1.4 U
Acenaphthene	98	500	0.16 U	0.34	0.11 J	0.24 J	1.8	0.32	0.14 U	0.76 U	0.028 J	0.12 J	0.15 U	0.16	0.11 J	0.14 U	0.021 J	0.8 U	0.18 U	0.15 U	0.8 U	0.16 U	0.19 U	0.16 U	0.2 U	0.15 U	0.16 U	0.088 J	1.4
Acenaphthylene	107	500	0.16 U	0.13 J	0.075 J	1.8 U	1.7 U	0.15 U	0.14 U	0.76 U	0.17 U	0.16 U	0.15 U	0.057 J	0.8 U	0.14 U	0.14 U	0.8 U	0.18 U	0.15 U	0.8 U	0.16 U	0.19 U	0.16 U	0.2 U	0.15 U	0.16 U	0.047 J	0.79 U
Acetophenone	NS	NS	0.2 U	0.68	0.2 U	2.3 U	2.1 U	0.19 U	0.18 U	0.95 U	0.21 U	0.19 U	0.18 U	0.2 U	1 U	0.18 U	0.18 U	1 U	0.22 U	0.18 U	1 U	0.21 U	0.24 U	0.2 U	0.25 U	0.18 U	0.2 U	0.22 U	0.99 U
Anthracene	1000	500	0.12 U	1.2	0.4	1.2 J	7.5	1.2	0.11 U	0.57 U	0.089 J	0.25	0.045 J	0.36	0.28 J	0.1 U	0.046 J	0.6 U	0.13 U	0.053 J	0.28 J	0.12 U	0.14 U	0.12 U	0.15 U	0.11 U	0.12 U	0.27	2
Atrazine	NS	NS	0.16 U	0.16 U	0.16 U	1.8 U	1.7 U	0.15 U	0.14 U	0.76 U	0.17 U	0.16 U	0.15 U	0.16 U	0.8 U	0.14 U	0.14 U	0.8 U	0.18 U	0.15 U	0.8 U	0.16 U	0.19 U	0.16 U	0.2 U	0.15 U	0.16 U	0.18 U	0.79 U
Benzaldehyde	NS	NS	0.26 U	0.26 U	0.26 U	3 U	2.8 U	0.25 U	0.24 U	1.2 U	0.28 U	0.26 U	0.24 U	0.064 J	1.3 U	0.23 U	0.23 U	1.3 U	0.3 U	0.24 U	1.3 U	0.27 U	0.31 U	0.26 U	0.32 U	0.24 U	0.26 U	0.29 U	1.3 U
Benzo[a]anthracene	1	5.6	0.12 U	0.26	0.051 J	1.4 U'	**2.7**	0.3	0.11 U	0.18 J	0.13	0.11 J	0.11 U	0.79	0.47 J	0.029 J	0.074 J	0.11 J	0.13 U	0.038 J	0.99	0.081 J	0.066 J	0.12 U	0.15 U	0.11 U	0.11 J	**1.3**	**1.4**
Benzo[a]pyrene	22	1	0.16 U	0.18	0.16 U	1.7 J	2	0.19	0.14 U	0.24 J	0.1 J	0.067 J	0.15 U	0.78	0.46 J	0.14 U	0.069 J	0.8 U	0.18 U	0.15 U	1	0.081 J	0.19 U	0.16 U	0.2 U	0.15 U	0.14 J	0.9	1.4
Benzo[b]fluoranthene	1.7	5.6	0.12 U	0.085 J	0.12 U	1.4 U'	0.79 J	0.082 J	0.11 U	0.17 J	0.056 J	0.034 J	0.11 U	0.96	0.64	0.033 J	0.085 J	0.6 U	0.13 U	0.11 U	1.4	0.1 J	0.14 U	0.12 U	0.15 U	0.11 U	0.15	1.2	0.63
Benzo[g,h,i]perylene	1000	500	0.16 U	0.3	0.063 J	4.6	2.3	0.25	0.14 U	0.9	0.12 J	0.079 J	0.15 U	0.56	0.56 J	0.043 J	0.053 J	0.24 J	0.026 J	0.048 J	1.1	0.07 J	0.19 U	0.16 U	0.2 U	0.15 U	0.2	0.6	1.9
Benzo[k]fluoranthene	1.7	56	0.12 U	0.12 U	0.12 U	1.4 U'	1.3 U'	0.11 U	0.11 U	0.57 U	0.13 U	0.12 U	0.11 U	0.33	0.18 J	0.1 U	0.029 J	0.6 U	0.13 U	0.11 U	0.44 J	0.037 J	0.14 U	0.12 U	0.15 U	0.11 U	0.038 J	0.47	0.59 U
Biphenyl	NS	NS	0.45 U	0.11 J	0.45 U	5.2 U	4.8 U	0.43 U	0.41 U	2.2 U	0.48 U	0.44 U	0.42 U	0.45 U	2.3 U	0.4 U	0.4 U	2.3 U	0.51 U	0.42 U	2.3 U	0.47 U	0.54 U	0.45 U	0.56 U	0.42 U	0.45 U	0.5 U	1.4 J
Bis(2-Chloroethoxy)methane	NS	NS	0.21 U	0.21 U	0.21 U	2.5 U	2.3 U	0.2 U	0.19 U	1 U	0.23 U	0.21 U	0.2 U	0.21 U	1.1 U	0.19 U	0.19 U	1.1 U	0.24 U	0.2 U	1.1 U	0.22 U	0.26 U	0.21 U	0.27 U	0.2 U	0.21 U	0.24 U	1.1 U
Bis(2-Chloroethyl)ether	NS	NS	0.18 U	0.18 U	0.18 U	2 U	1.9 U	0.17 U	0.16 U	0.86 U	0.19 U	0.17 U	0.16 U	0.18 U	0.9 U	0.16 U	0.16 U	0.9 U	0.2 U	0.16 U	0.9 U	0.18 U	0.21 U	0.18 U	0.22 U	0.17 U	0.18 U	0.2 U	0.89 U
Bis(2-Chloroisopropyl)ether	NS	NS	0.24 U	0.24 U	0.24 U	2.7 U	2.5 U	0.23 U	0.22 U	1.1 U	0.25 U	0.23 U	0.22 U	0.24 U	1.2 U	0.21 U	0.21 U	1.2 U	0.27 U	0.22 U	1.2 U	0.25 U	0.29 U	0.24 U	0.3 U	0.22 U	0.24 U	0.27 U	1.2 U
Bis(2-Ethylhexyl)phthalate	NS	NS	0.2 U	0.2 U	0.2 U	2.3 U	2.1 U	0.19 U	0.18 U	0.95 U	0.21 U	0.19 U	0.18 U	0.2 U	1 U	0.18 U	0.18 U	1 U	0.22 U	0.18 U	1 U	0.21 U	0.24 U	0.2 U	0.25 U	0.18 U	0.2 U	0.22 U	0.99 U
Butyl benzyl phthalate	NS	NS	0.2 U	0.2 U	0.2 U	2.3 U	2.1 U	0.19 U	0.18 U	0.95 U	0.21 U	0.19 U	0.18 U	0.2 U	1 U	0.18 U	0.18 U	1 U	0.22 U	0.18 U	1 U	0.21 U	0.24 U	0.2 U	0.25 U	0.18 U	0.2 U	0.22 U	0.99 U
Caprolactam	NS	NS	0.2 U	0.2 U	0.2 U	2.3 U	2.1 U	0.19 U	0.18 U	0.95 U	0.21 U	0.19 U	0.18 U	0.2 U	1 U	0.18 U	0.18 U	1 U	0.22 U	0.18 U	1 U	0.21 U	0.24 U	0.2 U	0.25 U	0.18 U	0.2 U	0.22 U	0.99 U
Carbazole	NS	NS	0.2 U	0.2 U	0.2 U	2.3 U	2.1 U	0.19 U	0.18 U	0.95 U	0.21 U	0.19 U	0.18 U	0.16 J	1 U	0.18 U	0.02 J	1 U	0.22 U	0.18 U	0.16 J	0.21 U	0.24 U	0.2 U	0.25 U	0.18 U	0.2 U	0.11 J	0.99 U
Chrysene	1	56	0.12 U	0.37	0.082 J	**1.6**	**3.7**	0.42	0.11 U	0.37 J	0.2	0.16	0.11	0.74	0.49 J	0.048 J	0.07 J	0.16 J	0.073 J	0.084 J	**1.3**	0.076 J	0.18	0.12 U	0.036 J	0.11 U	0.14	**1.2**	**2.6**
Dibenzo(a,h)anthracene	1000	0.56	0.12 U	0.12 U	0.12 U	1.4 U'	1.3 U'	0.11 U	0.11 U	0.57 U'	0.13 U	0.12 U	0.11 U	0.18	0.12 J	0.1 U	0.1 U	0.6 U'	0.13 U	0.11 U	0.23 J	0.12 U	0.14 U	0.12 U	0.15 U	0.11 U	0.076 J	0.13	0.59 U'
Dibenzofuran	210	350	0.2 U	0.2 U	0.2 U	2.3 U	1.1 J	0.19 U	0.18 U	0.95 U	0.21 U	0.08 J	0.091 J	0.089 J	1 U	0.18 U	0.18 U	1 U	0.05 J	0.082 J	0.098 J	0.21 U	0.24 U	0.2 U	0.25 U	0.18 U	0.03 J	0.052 J	0.94 J
Diethyl phthalate	NS	NS	0.2 U	0.2 U	0.2 U	2.3 U	2.1 U	0.19 U	0.18 U	0.95 U	0.21 U	0.19 U	0.18 U	0.2 U	1 U	0.18 U	0.18 U	1 U	0.22 U	0.18 U	1 U	0.21 U	0.24 U	0.2 U	0.25 U	0.18 U	0.2 U	0.22 U	0.99 U
Dimethyl phthalate	NS	NS	0.2 U	0.2 U	0.2 U	2.3 U	2.1 U	0.19 U	0.18 U	0.95 U	0.21 U	0.19 U	0.18 U	0.2 U	1 U	0.18 U	0.18 U	1 U	0.22 U	0.18 U	1 U	0.21 U	0.24 U	0.2 U	0.25 U	0.18 U	0.2 U	0.22 U	0.99 U
Di-n-butylphthalate	NS	NS	0.2 U	0.2 U	0.2 U	2.3 U	2.1 U	0.19 U	0.18 U	0.95 U	0.21 U	0.19 U	0.18 U	0.2 U	1 U	0.18 U	0.18 U	1 U	0.22 U	0.18 U	1 U	0.21 U	0.24 U	0.2 U	0.25 U	0.18 U	0.2 U	0.22 U	0.99 U
Di-n-octylphthalate	NS	NS	0.2 U	0.2 U	0.2 U	2.3 U	2.1 U	0.19 U	0.18 U	0.95 U	0.21 U	0.19 U	0.18 U	0.2 U	1 U	0.18 U	0.18 U	1 U	0.22 U	0.18 U	1 U	0.21 U	0.24 U	0.2 U	0.25 U	0.18 U	0.2 U	0.22 U	0.99 U
Fluoranthene	1000	500	0.12 U	0.27	0.099 J	1.1 J	3.6	0.46	0.11 U	0.17 J	0.086 J	0.13	0.032 J	1.7	1	0.048 J	0.17	0.12 J	0.13 U	0.028 J	1.9	0.15	0.14 U	0.12 U	0.15 U	0.11 U	0.17	1.9	1.5
Fluorene	386	500	0.2 U	0.88	0.35	0.75 J	5.7	1.1	0.18 U	0.95 U	0.029 J	0.34	0.19	0.15 J	0.11 J	0.18 U	0.022 J	1 U	0.12 J	0.18	0.1 J	0.21 U	0.24 U	0.2 U	0.25 U	0.18 U	0.2 U	0.088 J	3
Hexachlorobenzene	3.2	6	0.12 U	0.12 U	0.12 U	1.4 U'	1.3 U'	0.11 U	0.11 U	0.57 U'	0.13 U	0.12 U	0.11 U	0.12 U	0.6 U'	0.1 U	0.1 U	0.6 U'	0.13 U	0.11 U	0.6 U'	0.12 U	0.14 U	0.12 U	0.15 U	0.11 U	0.12 U	0.13 U	0.59 U'
Hexachlorobutadiene	NS	NS	0.2 U	0.2 U	0.2 U	2.3 U	2.1 U	0.19 U	0.18 U	0.95 U	0.21 U	0.19 U	0.18 U	0.2 U	1 U	0.18 U	0.18 U	1 U	0.22 U	0.18 U	1 U	0.21 U	0.24 U	0.2 U	0.25 U	0.18 U	0.2 U	0.22 U	0.99 U
Hexachlorocyclopentadiene	NS	NS	0.56 U	0.57 U	0.57 U	6.5 U	6.1 U	0.54 U	0.51 U	2.7 U	0.6 U	0.55 U	0.53 U	0.57 U	2.8 U	0.5 U	0.5 U	2.9 U	0.64 U	0.52 U	2.9 U	0.59 U	0.68 U	0.57 U	0.7 U	0.53 U	0.56 U	0.63 U	2.8 U
Hexachloroethane	NS	NS	0.16 U	0.16 U	0.16 U	1.8 U	1.7 U	0.15 U	0.14 U	0.76 U	0.17 U	0.16 U	0.15 U	0.16 U	0.8 U	0.14 U	0.14 U	0.8 U	0.18 U	0.15 U	0.8 U	0.16 U	0.19 U	0.16 U	0.2 U	0.15 U	0.16 U	0.18 U	0.79 U
Indeno[1,2,3-cd]pyrene	8.2	5.6	0.16 U	0.1 J	0.057 J	0.9 J	0.64 J	0.066 J	0.14 U	0.21 J	0.037 J	0.16 U	0.15 U	0.53	0.53 J	0.026 J	0.083 J	0.36 J	0.18 U	0.063 J	0.94	0.1 J	0.19 U	0.16 U	0.064 J	0.15 U	0.15 J	0.51	0.69 J
Isophorone	NS	NS	0.18 U	0.18 U	0.18 U	2 U	1.9 U	0.17 U	0.16 U	0.86 U	0.19 U	0.17 U	0.16 U	0.18 U	0.9 U	0.16 U	0.16 U	0.9 U	0.2 U	0.16 U	0.9 U	0.18 U	0.21 U	0.18 U	0.22 U	0.17 U	0.18 U	0.2 U	0.89 U
Naphthalene	12	500	0.03 J	0.28	0.085 J	0.6 J	1.9 J	0.19 U	0.18 U	0.95 U	0.21 U	0.19 U	0.11 J	0.062 J	0.12 J	0.18 U	0.18 U	0.38 J	0.16 J	0.14 J	0.17 J	0.21 U	0.24 U	0.2 U	0.25 U	0.18 U	0.059 J	0.11 J	2.3
Nitrobenzene	NS	NS	0.18 U	0.18 U	0.18 U	2 U	1.9 U	0.17 U	0.16 U	0.86 U	0.19 U	0.17 U	0.16 U	0.18 U	0.9 U	0.16 U	0.16 U	0.9 U	0.2 U	0.16 U	0.9 U	0.18 U	0.21 U	0.18 U	0.22 U	0.17 U	0.18 U	0.2 U	0.89 U
n-Nitrosodi-n-propylamine	NS	NS	0.2 U	0.2 U	0.2 U	2.3 U	2.1 U	0.19 U	0.18 U	0.95 U	0.21 U	0.19 U	0.18 U	0.2 U	1 U	0.18 U	0.18 U	1 U	0.22 U	0.18 U	1 U	0.21 U	0.24 U	0.2 U	0.25 U	0.18 U	0.2 U	0.22 U	0.99 U
N-Nitrosodiphenylamine	NS	NS	0.16 U	0.16 U	0.16 U	1.8 U	1.7 U	0.15 U	0.14 U	0.76 U	0.17 U	0.16 U	0.15 U	0.16 U	0.8 U	0.066 J	0.14 U	0.8 U	0.18 U	0.15 U	0.8 U	0.16 U	0.19 U	0.16 U	0.2 U	0.15 U	0.16 U	0.18 U	0.79 U
p-Chloro-m-cresol	NS	NS	0.2 U	0.2 U	0.2 U	2.3 U	2.1 U	0.19 U	0.18 U	0.95 U	0.21 U	0.19 U	0.18 U	0.2 U	1 U	0.18 U	0.18 U	1 U	0.22 U	0.18 U	1 U	0.21 U	0.24 U	0.2 U	0.25 U	0.18 U	0.2 U	0.22 U	0.99 U
Pentachlorophenol	0.8	6.7	0.16 U	0.16 U	0.16 U	1.8 U'	1.7 U'	0.15 U	0.14 U	0.76 U	0.17 U	0.16 U	0.15 U	0.16 U	0.8 U	0.14 U	0.14 U	0.8 U	0.18 U	0.15 U	0.8 U	0.16 U	0.19 U	0.16 U	0.2 U	0.15 U	0.16 U	0.18 U	0.79 U
Phenanthrene	1000	500	0.12 U	3.5	1.6	5.6	40	5.2	0.11 U	0.46 J	0.24	1.5	0.24	1.4	1	0.06 J	0.15	0.28 J	0.081 J	0.38	1.4	0.097 J	0.14 U	0.12 U	0.03 J	0.11 U	0.18	1.2	13
Phenol	0.33	500	0.2 U	0.2 U	0.2 U	2.3 U'	2.1 U'	0.19 U	0.18 U	0.95 U'	0.21 U	0.19 U	0.18 U	0.2 U	1 U'	0.18 U	0.18 U	1 U'	0.22 U	0.18 U	1 U'	0.21 U	0.24 U	0.2 U	0.25 U	0.18 U	0.2 U	0.22 U	0.99 U'
Pyrene	1000	500	0.12 U	3.4	0.73	11	31	3.4	0.11 U	1	1.3	1.1	0.074 J	1.4	0.99	0.09 J	0.14	0.2 J	0.048 J	0.063 J	1.9	0.14	0.14 U	0.12 U	0.15 U	0.11 U	0.17	1.9	14
Total Semi-Volatile TICs	NS	NS	ND	ND	ND	64.1 J	64.1 J	64.1 J	0.448 J	0.448 J	0.448 J	0.448 J	47.9 J	1.31 J	1.31 J	1.31 J	4.81 J	ND	ND	ND	7.07 J	ND	ND	ND	12.3 J	0.658 J	0.651 J	4.02 J	4.02 J

Notes:

NYSDEC GW Protection SCO = New York State Department of Environmental Conservation Groundwater Protection Soil Cleanup Objectives, from Table 375-6.8 of 6 NYCRR Part 375.
NYSDEC Commercial SCO = New York State Department of Environmental Conservation Restricted Commercial Use Soil Cleanup Objectives, from Table 375-6.8 of 6 NYCRR Part 375.
ft bgs = Feet below ground surface.
mg/kg = Milligrams per kilogram.
Green concentrations exceed the NYSDEC GW Protection SCO.
Highlighted concentrations exceed the NYSDEC Commercial SCO.
— = Sample not analyzed.
NS = No standard currently established.
ND = Not Detected.
U = Not detected above laboratory detection limit.
U' = Laboratory reporting limit exceeds the applicable regulatory standard or criteria being utilized.
J = Result below the reporting limit (estimated value).
DUP = Duplicate sample was taken.
When the applicable state standard applies to mixed isomers and the laboratory reports individual isomers, the total standard is listed for each isomer.

Table 5
Soil Reuse Characterization Sampling Results
Summary of Semi-Volatile Organic Compounds in Soil.
MJ Painting; Olean, New York.

Sample ID	NYSDEC GW Protection SCO	NYSDEC Commercial SCO	RX-443	RX-444	RX-444	RX-444	RX-446	RX-446	RX-447	RX-447 DUP	RX-447	RX-447	RX-448	RX-448	RXMW-106	RXMW-107	RXMW-108	RXMW-109	RXMW-110	RXMW-111	RXMW-112	RXMW-113	RXMW-113 DUP
Sample Depth (ft bgs)			10-12	0-1	1-4	7-10	1-4	7-10	4-7	4-7	7-10	10-12	1-4	7-10	26-28	26-27	18-20	20-22	20-24	8-10	28-32	20-25	20-25
Sample Date			11/16/2021	11/17/2021	11/17/2021	11/17/2021	11/16/2021	11/16/2021	11/16/2021	11/16/2021	11/16/2021	11/16/2021	11/16/2021	11/18/2021	1/19/2022	1/5/2022	1/5/2022	1/6/2022	1/18/2022	1/19/2022	1/18/2022	1/18/2022	1/18/2022
SEMI-VOLATILE ORGANIC COMPOUNDS - 8270D (mg/kg)																							
1,2,4,5-Tetrachlorobenzene	NS	NS	0.19 U	1 U	1 U	0.19 U	2 U	0.96 U	0.2 U	0.2 U	0.21 U	0.2 U	0.27 U	2.5 U	0.18 U	0.18 U	0.19 U	0.2 U	0.52 U	3.6 U	0.52 U	0.56 U	0.54 U
2,3,4,6-Tetrachlorophenol	NS	NS	0.19 U	1 U	1 U	0.19 U	2 U	0.96 U	0.2 U	0.2 U	0.21 U	0.2 U	0.27 U	2.5 U	0.18 U	0.18 U	0.19 U	0.2 U	0.52 U	3.6 U	0.52 U	0.56 U	0.54 U
2,4,5-Trichlorophenol	NS	NS	0.19 U	1 U	1 U	0.19 U	2 U	0.96 U	0.2 U	0.2 U	0.21 U	0.2 U	0.27 U	2.5 U	0.18 U	0.18 U	0.19 U	0.2 U	0.52 U	3.6 U	0.52 U	0.56 U	0.54 U
2,4,6-Trichlorophenol	NS	NS	0.12 U	0.62 U	0.62 U	0.11 U	1.2 U	0.57 U	0.12 U	0.12 U	0.13 U	0.12 U	0.16 U	1.5 U	0.1 U	0.11 U	0.11 U	0.12 U	0.32 U	2.2 U	0.31 U	0.34 U	0.33 U
2,4-Dichlorophenol	NS	NS	0.17 U	0.93 U	0.94 U	0.17 U	1.8 U	0.86 U	0.18 U	0.18 U	0.19 U	0.18 U	0.24 U	2.2 U	0.16 U	0.16 U	0.17 U	0.18 U	0.47 U	3.2 U	0.47 U	0.5 U	0.49 U
2,4-Dimethylphenol	NS	NS	0.19 U	1 U	1 U	0.19 U	2 U	0.96 U	0.2 U	0.2 U	0.21 U	0.2 U	0.27 U	2.5 U	0.18 U	0.18 U	0.19 U	0.2 U	0.52 U	3.6 U	0.52 U	0.56 U	0.54 U
2,4-Dinitrophenol	NS	NS	0.92 U	4.9 U	5 U	0.9 U	9.4 U	4.6 U	0.96 U	0.95 U	1 U	0.94 U	1.3 U	12 U	0.85 U	0.85 U	0.9 U	0.97 U	2.5 U	17 U	2.5 U	2.7 U	2.6 U
2,4-Dinitrotoluene	NS	NS	0.19 U	1 U	1 U	0.19 U	2 U	0.96 U	0.2 U	0.2 U	0.21 U	0.2 U	0.27 U	2.5 U	0.18 U	0.18 U	0.19 U	0.2 U	0.52 U	3.6 U	0.52 U	0.56 U	0.54 U
2,6-Dinitrotoluene	NS	NS	0.19 U	1 U	1 U	0.19 U	2 U	0.96 U	0.2 U	0.2 U	0.21 U	0.2 U	0.27 U	2.5 U	0.18 U	0.18 U	0.19 U	0.2 U	0.52 U	3.6 U	0.52 U	0.56 U	0.54 U
2-Chloronaphthalene	NS	NS	0.19 U	1 U	1 U	0.19 U	2 U	0.96 U	0.2 U	0.2 U	0.21 U	0.2 U	0.27 U	2.5 U	0.18 U	0.18 U	0.19 U	0.2 U	0.52 U	3.6 U	0.52 U	0.56 U	0.54 U
2-Chlorophenol	NS	NS	0.19 U	1 U	1 U	0.19 U	2 U	0.96 U	0.2 U	0.2 U	0.21 U	0.2 U	0.27 U	2.5 U	0.18 U	0.18 U	0.19 U	0.2 U	0.52 U	3.6 U	0.52 U	0.56 U	0.54 U
2-Methylnapthalene	NS	NS	6.3	1.9	0.34 J	0.046 J	0.27 J	2.1	0.24 U	0.24 U	0.037 J	0.24 U	0.12 J	4.2	0.14 J	0.21 U	0.22 U	0.24 U	0.63 U	17	0.63 U	0.67 U	0.65 U
2-Methylphenol	0.33	500	0.19 U	1 U'	1 U'	0.19 U	2 U'	0.96 U'	0.2 U	0.2 U	0.21 U	0.2 U	0.27 U	2.5 U'	0.18 U	0.18 U	0.19 U	0.2 U	0.52 U'	3.6 U'	0.52 U'	0.56 U'	0.54 U'
2-Nitroaniline	NS	NS	0.19 U	1 U	1 U	0.19 U	2 U	0.96 U	0.2 U	0.2 U	0.21 U	0.2 U	0.27 U	2.5 U	0.18 U	0.18 U	0.19 U	0.2 U	0.52 U	3.6 U	0.52 U	0.56 U	0.54 U
2-Nitrophenol	NS	NS	0.41 U	2.2 U	2.2 U	0.4 U	4.2 U	2.1 U	0.43 U	0.43 U	0.46 U	0.42 U	0.59 U	5.4 U	0.38 U	0.38 U	0.4 U	0.44 U	1.1 U	7.8 U	1.1 U	1.2 U	1.2 U
3,3'-Dichlorobenzidine	NS	NS	0.19 U	1 U	1 U	0.19 U	2 U	0.96 U	0.2 U	0.2 U	0.21 U	0.2 U	0.27 U	2.5 U	0.18 U	0.18 U	0.19 U	0.2 U	0.52 U	3.6 U	0.52 U	0.56 U	0.54 U
3-Methylphenol/4-Methylphenol	NS	NS	0.28 U	1.5 U	1.5 U	0.27 U	2.8 U	1.4 U	0.29 U	0.28 U	0.31 U	0.28 U	0.39 U	3.6 U	0.25 U	0.26 U	0.27 U	0.29 U	0.76 U	5.2 U	0.75 U	0.81 U	0.78 U
3-Nitroaniline	NS	NS	0.19 U	1 U	1 U	0.19 U	2 U	0.96 U	0.2 U	0.2 U	0.21 U	0.2 U	0.27 U	2.5 U	0.18 U	0.18 U	0.19 U	0.2 U	0.52 U	3.6 U	0.52 U	0.56 U	0.54 U
4,6-Dinitro-o-cresol	NS	NS	0.5 U	2.7 U	2.7 U	0.49 U	5.1 U	2.5 U	0.52 U	0.51 U	0.55 U	0.51 U	0.71 U	6.5 U	0.46 U	0.46 U	0.49 U	0.53 U	1.4 U	9.4 U	1.4 U	1.4 U	1.4 U
4-Bromophenyl-phenylether	NS	NS	0.19 U	1 U	1 U	0.19 U	2 U	0.96 U	0.2 U	0.2 U	0.21 U	0.2 U	0.27 U	2.5 U	0.18 U	0.18 U	0.19 U	0.2 U	0.52 U	3.6 U	0.52 U	0.56 U	0.54 U
4-Chloroaniline	NS	NS	0.19 U	1 U	1 U	0.19 U	2 U	0.96 U	0.2 U	0.2 U	0.21 U	0.2 U	0.27 U	2.5 U	0.18 U	0.18 U	0.19 U	0.2 U	0.52 U	3.6 U	0.52 U	0.56 U	0.54 U
4-Chlorophenyl-phenylether	NS	NS	0.19 U	1 U	1 U	0.19 U	2 U	0.96 U	0.2 U	0.2 U	0.21 U	0.2 U	0.27 U	2.5 U	0.18 U	0.18 U	0.19 U	0.2 U	0.52 U	3.6 U	0.52 U	0.56 U	0.54 U
4-Nitroaniline	NS	NS	0.19 U	1 U	1 U	0.19 U	2 U	0.96 U	0.2 U	0.2 U	0.21 U	0.2 U	0.27 U	2.5 U	0.18 U	0.18 U	0.19 U	0.2 U	0.52 U	3.6 U	0.52 U	0.56 U	0.54 U
4-Nitrophenol	NS	NS	0.27 U	1.4 U	1.4 U	0.26 U	2.7 U	1.3 U	0.28 U	0.28 U	0.3 U	0.27 U	0.38 U	3.5 U	0.25 U	0.25 U	0.26 U	0.28 U	0.74 U	5 U	0.73 U	0.78 U	0.76 U
Acenaphthene	98	500	0.55	13	0.83 U	0.15 U	0.24 J	0.36 J	0.16 U	0.16 U	0.17 U	0.16 U	0.22 U	2 U	0.14 U	0.042 J	0.15 U	0.16 U	0.42 U	2.9 U	0.42 U	0.45 U	0.43 U
Acenaphthylene	107	500	0.15 U	0.82 U	0.83 U	0.15 U	1.6 U	0.76 U	0.16 U	0.16 U	0.17 U	0.16 U	0.22 U	2 U	0.14 U	0.03 J	0.15 U	0.16 U	0.42 U	2.9 U	0.42 U	0.45 U	0.43 U
Acetophenone	NS	NS	0.19 U	1 U	1 U	0.19 U	2 U	0.96 U	0.2 U	0.2 U	0.21 U	0.2 U	0.27 U	2.5 U	0.18 U	0.18 U	0.19 U	0.81	0.52 U	3.6 U	0.52 U	0.56 U	0.54 U
Anthracene	1000	500	0.88	21	0.27 J	0.062 J	1.1 J	0.35 J	0.12 U	0.12 U	0.13 U	0.12 U	0.16 U	1.5 U	0.092 J	0.065 J	0.26	0.089 J	0.32 U	2.2 U	0.31 U	0.34 U	0.33 U
Atrazine	NS	NS	0.15 U	0.82 U	0.83 U	0.15 U	1.6 U	0.76 U	0.16 U	0.16 U	0.17 U	0.16 U	0.22 U	2 U	0.14 U	0.14 U	0.15 U	0.16 U	0.42 U	2.9 U	0.42 U	0.45 U	0.43 U
Benzaldehyde	NS	NS	0.25 U	1.4 U	1.4 U	0.25 U	2.6 U	1.3 U	0.26 U	0.26 U	0.28 U	0.26 U	0.36 U	3.3 U	0.23 U	0.23 U	0.25 U	0.27 U	0.69 U	4.8 U	0.69 U	0.74 U	0.72 U
Benzo[a]anthracene	1	5.6	0.44	**26**	0.27 J	0.088 J	**2**	0.24 J	0.12 U	0.12 U	0.13 U	0.12 U	0.082 J	0.83 J	0.1 U	0.026 J	0.16	0.04 J	0.072 J	0.78 J	0.31 U	0.34 U	0.33 U
Benzo[a]pyrene	22	1	0.57	21	1	0.17	2.9	0.35 J	0.16 U	0.16 U	0.17 U	0.16 U	0.22 U	0.7 J	0.14 U	0.14 U	0.1 J	0.16 U	0.42 U	2.9 U'	0.42 U	0.45 U	0.43 U
Benzo[b]fluoranthene	1.7	5.6	0.24	**27**	0.42 J	0.069 J	1.3	0.26 J	0.12 U	0.12 U	0.13 U	0.12 U	0.068 J	0.89 J	0.1 U	0.11 U	0.059 J	0.12 U	0.32 U	0.7 J	0.31 U	0.34 U	0.33 U
Benzo[g,h,i]perylene	1000	500	0.86	12	2	0.28	4	0.54 J	0.16 U	0.16 U	0.034 J	0.16 U	0.053 J	0.7 J	0.14 U	0.14 U	0.14 J	0.16 U	0.42 U	0.49 J	0.42 U	0.45 U	0.43 U
Benzo[k]fluoranthene	1.7	56	0.057 J	**9**	0.62 U	0.11 U	1.2 U'	0.57 U	0.12 U	0.12 U	0.13 U	0.12 U	0.16 U	1.5 U'	0.1 U	0.11 U	0.11 U	0.12 U	0.32 U	2.2 U'	0.31 U	0.34 U	0.33 U
Biphenyl	NS	NS	0.4 J	0.57 J	2.4 U	0.43 U	4.4 U	2.2 U	0.45 U	0.45 U	0.49 U	0.45 U	0.62 U	0.9 J	0.4 U	0.4 U	0.43 U	0.15 J	0.14 J	3.5 J	1.2 U	1.3 U	1.2 U
Bis(2-Chloroethoxy)methane	NS	NS	0.21 U	1.1 U	1.1 U	0.2 U	2.1 U	1 U	0.21 U	0.21 U	0.23 U	0.21 U	0.29 U	2.7 U	0.19 U	0.19 U	0.2 U	0.22 U	0.57 U	3.9 U	0.56 U	0.6 U	0.59 U
Bis(2-Chloroethyl)ether	NS	NS	0.17 U	0.93 U	0.94 U	0.17 U	1.8 U	0.86 U	0.18 U	0.18 U	0.19 U	0.18 U	0.24 U	2.2 U	0.16 U	0.16 U	0.17 U	0.18 U	0.47 U	3.2 U	0.47 U	0.5 U	0.49 U
Bis(2-Chloroisopropyl)ether	NS	NS	0.23 U	1.2 U	1.2 U	0.22 U	2.3 U	1.1 U	0.24 U	0.24 U	0.26 U	0.24 U	0.33 U	3 U	0.21 U	0.21 U	0.22 U	0.24 U	0.63 U	4.3 U	0.63 U	0.67 U	0.65 U
Bis(2-Ethylhexyl)phthalate	NS	NS	0.19 U	1 U	1 U	0.19 U	2 U	0.96 U	0.2 U	0.2 U	0.21 U	0.2 U	0.27 U	2.5 U	0.18 U	0.17 J	0.32	0.2 U	0.52 U	3.6 U	0.52 U	0.56 U	0.54 U
Butyl benzyl phthalate	NS	NS	0.19 U	1 U	1 U	0.19 U	2 U	0.96 U	0.2 U	0.2 U	0.21 U	0.2 U	0.27 U	2.5 U	0.18 U	0.18 U	0.19 U	0.2 U	0.52 U	3.6 U	0.52 U	0.56 U	0.54 U
Caprolactam	NS	NS	0.19 U	1 U	1 U	0.19 U	2 U	0.96 U	0.2 U	0.2 U	0.21 U	0.2 U	0.27 U	2.5 U	0.18 U	0.18 U	0.19 U	0.2 U	0.52 U	3.6 U	0.52 U	0.56 U	0.54 U
Carbazole	NS	NS	0.19 U	8	1 U	0.19 U	2 U	0.96 U	0.2 U	0.2 U	0.21 U	0.2 U	0.27 U	0.38 J	0.18 U	0.18 U	0.19 U	0.2 U	0.52 U	3.6 U	0.52 U	0.56 U	0.54 U
Chrysene	1	56	**1.2**	**23**	**1.2**	0.22	**4.1**	0.64	0.12 U	0.12 U	0.052 J	0.12 U	0.13 J	**2**	0.03 J	0.047 J	0.28	0.14	0.18 J	**2.9**	0.31 U	0.34 U	0.097 J
Dibenzo(a,h)anthracene	1000	0.56	0.12 U	3	0.62 U'	0.11 U	0.3 J	0.57 U'	0.12 U	0.12 U	0.13 U	0.12 U	0.16 U	0.29 J	0.1 U	0.11 U	0.11 U	0.12 U	0.32 U	2.2 U'	0.31 U	0.34 U'	0.33 U
Dibenzofuran	210	350	0.33	6.8	1 U	0.19 U	2 U	0.33 J	0.2 U	0.2 U	0.21 U	0.2 U	0.27 U	0.34 J	0.18 U	0.039 J	0.19 U	0.2 U	0.12 J	0.99 J	0.52 U	0.068 J	0.54 U
Diethyl phthalate	NS	NS	0.19 U	1 U	1 U	0.19 U	2 U	0.96 U	0.2 U	0.2 U	0.21 U	0.2 U	0.27 U	2.5 U	0.18 U	0.18 U	0.19 U	0.2 U	0.52 U	3.6 U	0.52 U	0.56 U	0.54 U
Dimethyl phthalate	NS	NS	0.19 U	1 U	1 U	0.19 U	2 U	0.96 U	0.2 U	0.2 U	0.21 U	0.2 U	0.27 U	2.5 U	0.18 U	0.18 U	0.19 U	0.2 U	0.52 U	3.6 U	0.52 U	0.56 U	0.54 U
Di-n-butylphthalate	NS	NS	0.19 U	1 U	1 U	0.19 U	2 U	0.96 U	0.2 U	0.2 U	0.21 U	0.2 U	0.27 U	2.5 U	0.18 U	0.18 U	0.19 U	0.2 U	0.52 U	3.6 U	0.52 U	0.56 U	0.54 U
Di-n-octylphthalate	NS	NS	0.19 U	1 U	1 U	0.19 U	2 U	0.96 U	0.2 U	0.2 U	0.21 U	0.2 U	0.27 U	2.5 U	0.18 U	0.18 U	0.19 U	0.2 U	0.52 U	3.6 U	0.52 U	0.56 U	0.54 U
Fluoranthene	1000	500	0.59	67	0.24 J	0.072 J	2.1	0.29 J	0.12 U	0.12 U	0.13 U	0.12 U	0.078 J	1.3 J	0.028 J	0.11 U	0.079 J	0.12 U	0.32 U	1.1 J	0.31 U	0.34 U	0.33 U
Fluorene	386	500	1.1	11	1 U	0.033 J	0.29 J	0.76 J	0.2 U	0.2 U	0.21 U	0.2 U	0.27 U	0.45 J	0.13 J	0.12 J	0.44	0.2 U	0.21 J	1.2 J	0.52 U	0.12 J	0.27 J
Hexachlorobenzene	3.2	6	0.12 U	0.62 U'	0.62 U'	0.11 U	1.2 U'	0.57 U'	0.12 U	0.12 U	0.13 U	0.12 U	0.16 U	1.5 U'	0.1 U	0.11 U	0.11 U	0.12 U	0.32 U	2.2 U'	0.31 U	0.34 U'	0.33 U
Hexachlorobutadiene	NS	NS	0.19 U	1 U	1 U	0.19 U	2 U	0.96 U	0.2 U	0.2 U	0.21 U	0.2 U	0.27 U	2.5 U	0.18 U	0.18 U	0.19 U	0.2 U	0.52 U	3.6 U	0.52 U	0.56 U	0.54 U
Hexachlorocyclopentadiene	NS	NS	0.55 U	2.9 U	3 U	0.53 U	5.6 U	2.7 U	0.57 U	0.56 U	0.61 U	0.56 U	0.78 U	7.2 U	0.5 U	0.51 U	0.53 U	0.58 U	1.5 U	10 U	1.5 U	1.6 U	1.6 U
Hexachloroethane	NS	NS	0.15 U	0.82 U	0.83 U	0.15 U	1.6 U	0.76 U	0.16 U	0.16 U	0.17 U	0.16 U	0.22 U	2 U	0.14 U	0.14 U	0.15 U	0.16 U	0.42 U	2.9 U	0.42 U	0.45 U	0.43 U
Indeno[1,2,3-cd]pyrene	8.2	5.6	0.25	**12**	0.6 J	0.11 J	1.2 J	0.23 J	0.16 U	0.16 U	0.17 U	0.16 U	0.038 J	0.58 J	0.14 U	0.14 U	0.037 J	0.16 U	0.42 U	2.9 U'	0.42 U	0.45 U	0.43 U
Isophorone	NS	NS	0.17 U	0.93 U	0.94 U	0.17 U	1.8 U	0.86 U	0.18 U	0.18 U	0.19 U	0.18 U	0.24 U	2.2 U	0.16 U	0.16 U	0.17 U	0.18 U	0.47 U	3.2 U	0.47 U	0.5 U	0.49 U
Naphthalene	12	500	0.68	4.3	1 U	0.024 J	2 U	0.22 J	0.2 U	0.2 U	0.21 U	0.2 U	0.093 J	2 J	0.074 J	0.069 J	0.12 J	0.2 U	0.52 U	5.8	0.52 U	0.56 U	0.54 U
Nitrobenzene	NS	NS	0.17 U	0.93 U	0.94 U	0.17 U	1.8 U	0.86 U	0.18 U	0.18 U	0.19 U	0.18 U	0.24 U	2.2 U	0.16 U	0.16 U	0.17 U	0.18 U	0.47 U	3.2 U	0.47 U	0.5 U	0.49 U
n-Nitrosodi-n-propylamine	NS	NS	0.19 U	1 U	1 U	0.19 U	2 U	0.96 U	0.2 U	0.2 U	0.21 U	0.2 U	0.27 U	2.5 U	0.18 U	0.18 U	0.19 U	0.2 U	0.52 U	3.6 U	0.52 U	0.56 U	0.54 U
N-Nitrosodiphenylamine	NS	NS	0.15 U	0.82 U	0.83 U	0.15 U	1.6 U	0.76 U	0.16 U	0.16 U	0.17 U	0.16 U	0.22 U	2 U	0.14 U	0.14 U	0.15 U	0.16 U	0.42 U	2.9 U	0.42 U	0.45 U	0.43 U
p-Chloro-m-cresol	NS	NS	0.19 U	1 U	1 U	0.19 U	2 U	0.96 U	0.2 U	0.2 U	0.21 U	0.2 U	0.27 U	2.5 U	0.18 U	0.18 U	0.19 U	0.2 U	0.52 U	3.6 U	0.52 U	0.56 U	0.54 U
Pentachlorophenol	0.8	6.7	0.15 U	0.82 U'	0.83 U'	0.15 U	1.6 U'	0.76 U	0.16 U	0.16 U	0.17 U	0.16 U	0.22 U	2 U'	0.14 U	0.14 U	0.15 U	0.16 U	0.42 U	2.9 U'	0.42 U	0.45 U	0.43 U
Phenanthrene	1000	500	4.8	74	0.6 J	0.18	3.8	3.8	0.12 U	0.12 U	0.041 J	0.12 U	0.097 J	3.1	0.07 J	0.26	1.8	0.48	0.59	5.1	0.075 J	0.32 J	0.59
Phenol	0.33	500	0.19 U	1 U'	1 U'	0.19 U	2 U'	0.96 U'	0.2 U	0.2 U	0.21 U	0.2 U	0.27 U	2.5 U'	0.18 U	0.18 U	0.19 U	0.2 U	0.52 U'	3.6 U'	0.52 U'	0.56 U'	0.54 U'
Pyrene	1000	500	5.8	53	4.4	0.97	25	1.9	0.12 U	0.12 U	0.042 J	0.12 U	0.12 J	1.3 J	0.21	0.16	0.74	0.11 J	0.13 J	1.4 J	0.31 U	0.067 J	0.13 J
Total Semi-Volatile TICs	NS	NS	4.02 J	99.4 J	99.4 J	99.4 J	52.5 J	52.5 J	ND	ND	ND	ND	0.766 J	0.766 J	24.8 J	29.5 J	66.9 J	70.2 J	76.3 J	1020 J	42.9 J	57.8 J	80.3 J

Notes:

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ft bgs = Feet below ground surface.

mg/kg = Milligrams per kilogram.

Green concentrations exceed the NYSDEC GW Protection SCO.

Highlighted concentrations exceed the NYSDEC Commercial SCO.

— = Sample not analyzed.

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ND = Not Detected.

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When the applicable state standard applies to mixed isomers and the laboratory reports individual isomers, the total standard is listed for each isomer.

Table 5
Soil Reuse Characterization Sampling Results
Summary of Metals in Soil.
MJ Painting; Olean, New York.

Sample ID	NYSDEC GW Protection SCO	NYSDEC Commercial SCO	RX-301	RX-302	RX-303	RX-304	RX-305	RX-306	RX-307	RX-308	RX-309	RX-310	RX-311	RX-312	RX-313	RX-314	RX-315
Sample Depth (ft bgs)			0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1
Sample Date			11/15/2021	11/9/2021	11/15/2021	11/15/2021	11/15/2021	11/16/2021	11/17/2021	11/17/2021	11/17/2021	11/17/2021	11/18/2021	11/17/2021	1/5/2022	1/4/2022	1/7/2022
METALS - 6010D (mg/kg)																	
Aluminum	NS	NS	11600	6410	10000	6160	5900	5380	4330	4730	6940	4240	8630	5490	9480	13800	13700
Antimony	NS	NS	4.51 U	10.6	4.81 U	4.49 U	0.784 J	0.511 J	0.628 J	0.913 J	0.728 J	4.48 U	0.754 J	1.03 J	2.38 J	2.56 J	5.47 U
Arsenic	16	16	**19**	**29.9**	11.8	7.32	6.9	10.7	6.71	5.7	10.6	5.25	8.2	**20.6**	10.3	**18.5**	12.6
Barium	820	400	74	80.8	86.5	39.8	64.7	360	70.1	45.3	81.6	57.9	101	60.6	86.1	114	97.3
Beryllium	47	590	0.64	0.5	0.538	0.26 J	0.321 J	0.272 J	0.209 J	0.242 J	0.33 J	0.197 J	0.358 J	0.27 J	0.524	0.567	0.657
Cadmium	7.5	9.3	0.902 U	1.41	0.961 U	0.899 U	0.562 J	0.852 U	0.468 J	0.606 J	0.744 J	0.448 J	0.698 J	0.744 J	2.08	1.05 U	1.09 U
Calcium	NS	NS	5770	8160	2920	6230	10500	1550	6080	1330	15000	22300	1520	3300	3480	3700	9790
Chromium	NS	1500	15.2	12	12.5	6.45	8.9	7.33	4.49	19	7.49	4.9	8.87	7.21	27.6	24.6	28.1
Cobalt	NS	NS	12	6.9	10.3	5.1	6.14	5.67	4.33	4.18	6.32	3.89	7.13	5.34	5.38	5.85	6.45
Copper	1720	270	40.8	72.1	37.5	108	21.1	13.6	10.7	22.8	15.5	12.3	28.2	28.6	65.5	75.2	39.1
Iron	NS	NS	29100	25100	25400	11900	16500	15200	13200	13000	19700	12100	16700	18100	41500	23900	17100
Lead	450	1000	60.9	298	33.3	12.4	21.4	11	10.5	74.2	16.6	9.96	41.6	32.4	167	**559**	202
Magnesium	NS	NS	4510	3010	3270	2000	2890	1610	1350	1280	2600	1310	1400	1380	5520	6430	9350
Manganese	2000	10000	476	602	649	551	531	**3520**	569	492	600	381	801	568	443	330	396
Mercury	0.73	2.8	0.146	0.71	0.081 U	0.074 U	0.085 U	0.08 U	0.079 U	0.086 U	0.078 U	0.073 U	0.086 U	0.076 U	0.301	0.435	0.267
Nickel	130	310	22.3	15.6	19.4	9.68	12.7	12	9.5	10.2	13.1	8.38	10.7	11.1	15.6	15	13.9
Potassium	NS	NS	848	581	743	307	377	387	259	264	342	205 J	267	343	1300	941	1380
Selenium	4	1500	0.334 J	0.99 J	0.375 J	1.8 U	2.01 U	1.92	1.67 U	0.307 J	1.69 U	1.79 U	0.726 J	0.418 J	0.86 J	2.1 U	0.394 J
Silver	8.3	1500	0.902 U	0.95 U	0.961 U	0.899 U	1 U	0.264 J	0.837 U	0.932 U	0.846 U	0.896 U	0.943 U	0.93 U	1.05 U	1.05 U	1.09 U
Sodium	NS	NS	44.8 J	81.9 J	60.4 J	8.11 J	30.6 J	25.5 J	21.7 J	16.1 J	41.9 J	32.4 J	47.6 J	26.5 J	170 J	249	187 J
Thallium	NS	NS	1.8 U	0.3 J	1.92 U	1.8 U	2.01 U	1.7 U	1.67 U	1.86 U	1.69 U	1.79 U	1.89 U	1.86 U	2.1 U	0.588 J	0.646 J
Vanadium	NS	NS	10.1	16.5	7.72	6.01	9.24	5.85	6.7	8.66	10.1	7.07	15.9	10.3	23	21.4	24
Zinc	2480	10000	78.4	158	66	40.9	53.3	37.4	31.7	53.6	50.8	31.5	59.9	66	82.5	120	68

Notes:

NYSDEC GW Protection SCO = New York State Department of Environmental Conservation Groundwater Protection Soil Cleanup Objectives, from Table 375-6.8 of 6 NYCRR Part 375.

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Green concentrations exceed the NYSDEC GW Protection SCO.

Highlighted concentrations exceed the NYSDEC Commercial SCO.

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Table 5
Soil Reuse Characterization Sampling Results
Summary of Metals in Soil.
MJ Painting; Olean, New York.

Sample ID	NYSDEC GW Protection SCO	NYSDEC Commercial SCO	RX-316	RX-317	RX-318	RX-319	RX-320	RX-321	RX-321 DUP	RX-401	RX-401	RX-401	RX-402	RX-403	RX-403	RX-403	RX-404
Sample Depth (ft bgs)			0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	1-4	7-10	7-10	0-1	4-7	10-12	7-10
Sample Date			1/7/2022	1/7/2022	1/4/2022	1/7/2022	1/5/2022	1/7/2022	1/7/2022	11/12/2021	11/12/2021	11/12/2021	11/12/2021	11/12/2021	11/12/2021	11/12/2021	11/12/2021
METALS - 6010D (mg/kg)																	
Aluminum	NS	NS	9390	11600	6530	6300	7240	9300	8780	7930	9290	8980	8610	7430	7820	9620	12700
Antimony	NS	NS	3.2 J	5.12 U	5.27 U	5.1 U	1.78 J	5 U	5.03 U	1.36 J	1.94 J	3.12 J	1.85 J	1.19 J	1.35 J	1.08 J	0.89 J
Arsenic	16	16	18	18.8	11.3	14.9	17.6	17.4	17.9	19.9	119	21.5	20.6	13.5	29.2	7.56	10
Barium	820	400	106	101	56.1	150	84.8	89.3	142	81.5	61.5	60.2	75.8	80.7	49.4	60.2	58.6
Beryllium	47	590	0.437 J	0.676	0.359 J	0.479 J	0.469 J	0.48 J	0.534	0.476	0.59	0.51	0.362 J	0.444 J	0.499	0.484	0.634
Cadmium	7.5	9.3	1.21 U	1.02 U	0.58 J	1.02 U	0.898 J	1 U	1.01 U	1.2	1.29	1.05	1.03	0.967 J	1.29	0.771 J	0.833 J
Calcium	NS	NS	4180	4540	115000	2540	3370	3570	3210	18500	5700	4300	2960	18100	21000	888	907
Chromium	NS	1500	18.5	24.7	11.9	13.7	12.6	13.5	17.8	14.3	14.4	13.8	12.3	11	11.6	11.7	14.7
Cobalt	NS	NS	4.85	6.47	3.55	4.57	5.11	5.98	5.12	7.14	12	5.95	5.92	6.95	9.34	7.8	13.1
Copper	1720	270	47.5	21.7	19.9	30.2	46.6	41.9	39	56	52.9	405	23	33.6	25.9	18.1	17.4
Iron	NS	NS	20400	20600	10700	15000	16100	18800	22500	25200	28800	22200	28400	22200	31400	22000	23100
Lead	450	1000	734	117	225	139	231	233	191	118	165	198	64	56.1	62.9	12.3	15.2
Magnesium	NS	NS	4550	8400	4850	3150	2900	2960	4630	3800	4070	3450	2500	3540	4950	2890	3080
Manganese	2000	10000	289	247	252	184	328	502	259	401	484	148	139	508	1080	162	192
Mercury	0.73	2.8	0.75	0.091	0.185	0.164	0.463	0.228	0.244	0.26	0.392	0.14	0.097 U	0.208	0.829	0.088 U	0.087
Nickel	130	310	11.6	13.9	9.01	11	12.7	13.4	12.3	17.3	22.8	12.1	17.6	16.3	18.7	19.7	20
Potassium	NS	NS	823	989	606	632	717	661	863	738	739	659	676	628	580	554	602
Selenium	4	1500	0.497 J	0.594 J	2.11 U	0.479 J	2.04 U	0.48 J	0.483 J	0.805 J	0.876 J	0.82 J	0.916 J	0.385 J	0.638 J	0.412 J	0.558 J
Silver	8.3	1500	1.21 U	1.02 U	1.05 U	1.02 U	1.02 U	1 U	1.01 U	0.914 U	0.922 U	0.999 U	1.01 U	0.987 U	0.998 U	0.896 U	0.946 U
Sodium	NS	NS	112 J	136 J	120 J	55.7 J	66.9 J	39.2 J	72.8 J	86.4 J	78.8 J	81 J	63.4 J	47.4 J	80.4 J	18.2 J	26.7 J
Thallium	NS	NS	0.461 J	0.44 J	2.11 U	0.326 J	2.04 U	0.59 J	0.493 J	1.83 U	1.84 U	2 U	2.01 U	1.97 U	2 U	1.79 U	0.312 J
Vanadium	NS	NS	17.9	27.7	17	15.3	16.9	14.2	17.7	17.3	18.9	21.2	19.9	14.2	15	14.8	18.3
Zinc	2480	10000	190	51.6	37.4	53.5	65.4	74.3	71.5	90.1	85.7	90.6	48.5	70.7	62.3	52.6	54.2

Notes:

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Green concentrations exceed the NYSDEC GW Protection SCO.

Highlighted concentrations exceed the NYSDEC Commercial SCO.

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Table 5
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Summary of Metals in Soil.
MJ Painting; Olean, New York.

Sample ID	NYSDEC GW Protection SCO	NYSDEC Commercial SCO	RX-405	RX-405	RX-405	RX-407	RX-407	RX-407	RX-409	RX-410	RX-411	RX-413	RX-414	RX-415	RX-416	RX-416
Sample Depth (ft bgs)			0-1	1-4	7-10	0-1	4-7	10-12	1-4	10-12	7-10	10-12	4-7	7-10	1-4	10-12
Sample Date			11/15/2021	11/15/2021	11/15/2021	11/15/2021	11/15/2021	11/15/2021	11/12/2021	11/12/2021	11/12/2021	11/15/2021	11/15/2021	11/16/2021	11/16/2021	11/16/2021
METALS - 6010D (mg/kg)																
Aluminum	NS	NS	7740	9700	8770	9060	8490	7760	8830	10900	12200	8940	8740	11800	9740	8720
Antimony	NS	NS	5.24 U	4.58 U	4.6 U	4.4 U	0.369 J	4.3 U	0.942 J	0.786 J	0.799 J	4.66 U	4.76 U	0.793 J	0.795 J	0.652 J
Arsenic	16	16	12.8	16	6.24	9.41	**16.7**	8.45	12.9	9.55	5.88	9.37	**17.9**	11.8	13.4	11.6
Barium	820	400	60.7	69	38.9	70.5	104	45.6	71.4	59.6	64	70.9	79.3	38.9	82.7	57.7
Beryllium	47	590	0.398 J	0.558	0.414 J	0.404 J	0.486	0.378 J	0.476	0.484	0.483	0.512	0.458 J	0.562	0.533	0.443
Cadmium	7.5	9.3	0.22 J	0.247 J	0.92 U	0.141 J	0.292 J	0.095 J	0.96	0.868 J	0.799 J	0.931 U	0.324 J	1.22	0.767 J	0.574 J
Calcium	NS	NS	7700	6540	664	24700	4020	972	2620	540	1100	803	2700	766	8420	2810
Chromium	NS	1500	10.5	13.4	9.84	10.9	11.2	8.5	10.6	11.1	12.1	10.6	13.7	12.3	12.1	11.5
Cobalt	NS	NS	7.31	9.87	7.04	8.7	7.7	9.84	7.61	11.8	8.63	8.66	5.95	13.6	10.6	8.22
Copper	1720	270	28	138	13.5	18.5	51.4	21.2	45.6	16.8	12.2	39	56.8	29	25.3	22.6
Iron	NS	NS	18200	24300	16900	22000	23500	17500	22300	24100	22200	18800	20200	21600	24600	18400
Lead	450	1000	65.6	87.6	9.04	27.2	88	12.8	69.1	15.6	14	10.5	149	18.6	24.5	23.9
Magnesium	NS	NS	3370	4330	2350	14800	2550	2090	2570	2980	3040	2210	3340	2870	4090	2590
Manganese	2000	10000	397	500	164	541	253	376	594	722	316	140	241	182	720	414
Mercury	0.73	2.8	**0.808**	**3.03**	0.075 U	0.073 U	0.463	0.073 U	0.189	0.094 U	0.082 U	0.076 U	0.554	0.072 J	0.082 U	0.071 U
Nickel	130	310	16.4	21.3	14.7	17.7	19.2	14.7	16.8	19.4	19.3	15.1	13.4	18.6	21.4	16
Potassium	NS	NS	660	791	396	684	534	378	407	474	552	412	688	590	712	496
Selenium	4	1500	0.314 J	0.348 J	1.84 U	1.76 U	0.554 J	1.72 U	0.317 J	1.83 U	0.409 J	1.86 U	0.877 J	0.472 J	0.309 J	1.74 U
Silver	8.3	1500	1.05 U	0.916 U	0.92 U	0.879 U	0.972 U	0.859 U	0.932 U	0.914 U	0.929 U	0.931 U	0.953 U	1 U	0.935 U	0.87 U
Sodium	NS	NS	38.7 J	68.8 J	22.4 J	56.6 J	29.6 J	13.6 J	39.1 J	25.8 J	57.9 J	7.18 J	62 J	26.6 J	55.8 J	27.1 J
Thallium	NS	NS	2.09 U	1.83 U	1.84 U	1.76 U	1.94 U	1.72 U	1.86 U	1.83 U	1.86 U	1.86 U	1.91 U	2.01 U	1.87 U	1.74 U
Vanadium	NS	NS	7.42	10	7.73	8.12	9.7	6.5	16.4	16	16.1	9.02	14	15.3	14	13.5
Zinc	2480	10000	66.3	76	43	70.6	57.4	46.4	77.1	48.1	54.8	38.6	58.8	146	63.2	50.6

Notes:

NYSDEC GW Protection SCO = New York State Department of Environmental Conservation Groundwater Protection Soil Cleanup Objectives, from Table 375-6.8 of 6 NYCRR Part 375.

NYSDEC Commercial SCO = New York State Department of Environmental Conservation Restricted Commercial Use Soil Cleanup Objectives, from Table 375-6.8 of 6 NYCRR Part 375.

ft bgs = Feet below ground surface.

mg/kg = Milligrams per kilogram.

Green concentrations exceed the NYSDEC GW Protection SCO.

Highlighted concentrations exceed the NYSDEC Commercial SCO.

— = Sample not analyzed.

NS = No standard currently established.

ND = Not Detected.

U = Not detected above laboratory detection limit.

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When the applicable state standard applies to mixed isomers and the laboratory reports individual isomers, the total standard is listed for each isomer.

Table 5
Soil Reuse Characterization Sampling Results
Summary of Metals in Soil.
MJ Painting; Olean, New York.

Sample ID Sample Depth (ft bgs) Sample Date	NYSDEC GW Protection SCO	NYSDEC Commercial SCO	RX-417 0-1 11/11/2021	RX-417 1-4 11/11/2021	RX-417 7-10 11/11/2021	RX-417 10-12 11/11/2021	RX-418 4-7 11/11/2021	RX-418 10-12 11/11/2021	RX-419 1-4 11/15/2021	RX-419 7-10 11/15/2021	RX-419 10-12 11/15/2021	RX-420 0-1 11/15/2021	RX-420 4-7 11/15/2021	RX-420 7-10 11/15/2021	RX-420 10-12 11/15/2021	RX-421 10-12 11/11/2021
METALS - 6010D (mg/kg)																
Aluminum	NS	NS	5020	9320	17900	11500	8060	4380	9050	5990	8840	5550	6540	2730	12700	8040
Antimony	NS	NS	0.452 J	0.884 J	0.399 J	7.24	4.51 J	62.6	4.4 U	1.58 J	4.45 U	4.72 U	4.25 U	5.39 U	5.07 U	0.746 J
Arsenic	16	16	6.06	12.5	**27.3**	**18.8**	**18.8**	**45.8**	10.9	**28.5**	7.33	5.79	13.5	5.51	**32**	13.2
Barium	820	400	48.2	85	79.3	74.5	90.7	82.8	69	191	68.5	55.3	103	89.6	61.6	39
Beryllium	47	590	0.296 J	0.523	1.11	0.589 J	0.658	0.773	0.458	0.554 J	0.223 J	0.217 J	0.399 J	0.172 J	0.284 J	0.368 J
Cadmium	7.5	9.3	0.87 U	0.858 U	0.489 J	0.656 J	1.14	1.9	0.106 J	0.249 J	0.89 U	0.378 J	0.849 U	1.08 U	1.01 U	0.767 J
Calcium	NS	NS	13300	4040	8640	14600	5010	4970	8410	4170	1040	59400	2770	1460	1030	12900
Chromium	NS	1500	6.73	11.6	40.1	14.4	12	6.55	10.9	10.4	9.73	6.52	8.76	4.27	17.5	10.9
Cobalt	NS	NS	5.09	10.4	9.1	13.2	7.22	5.59	9.16	8.2	3.89	3.94	7.92	5.24	7.13	6.29
Copper	1720	270	16.9	18.8	15.8	231	41	140	17.1	410	24.2	15.5	20.9	27.2	27.4	32.8
Iron	NS	NS	13600	24700	19100	36900	21200	26600	22000	27600	16800	11700	20900	14100	37100	20400
Lead	450	1000	11.4	12.7	24.3	202	**561**	**4580**	10.2	110	14.3	8.95	55.5	36.3	12.7	17.4
Magnesium	NS	NS	2890	3850	12300	4120	2790	1060	3750	1960	1850	4550	2630	848	3430	2500
Manganese	2000	10000	556	706	374	**2070**	187	92.8	721	238	95.3	409	673	100	139	229
Mercury	0.73	2.8	0.088 U	0.087 U	0.094 U	0.13 J	0.112	0.181	0.071 U	0.352	0.103	0.085 U	0.087	0.09 U	0.081 U	0.059 J
Nickel	130	310	10.9	20.5	25.6	22.1	19	16.6	19	18.9	10.5	9.18	15.3	9.65	18.4	16.1
Potassium	NS	NS	350	690	2190	636	530	316	776	516	425	248	564	340	763	535
Selenium	4	1500	0.252 J	1.72 U	2 U	1.11 J	1.1 J	1.34 J	1.76 U	1.44 J	0.338 J	1.89 U	0.399 J	0.55 J	0.496 J	0.714 J
Silver	8.3	1500	0.87 U	0.858 U	0.998 U	1.34 U	0.926 U	1.02 U	0.881 U	1.38 U	0.89 U	0.944 U	0.849 U	1.08 U	1.01 U	1.05 U
Sodium	NS	NS	41.8 J	54.3 J	311	49.3 J	134 J	85.5 J	30.1 J	73.4 J	15.4 J	48.1 J	39.3 J	17.5 J	54.4 J	91.5 J
Thallium	NS	NS	1.74 U	0.549 J	2 U	3.12	1.85 U	2.03 U	1.76 U	2.77 U	1.78 U	1.89 U	1.7 U	2.16 U	0.334 J	2.1 U
Vanadium	NS	NS	8.92	13.3	35.7	14.2	18.1	15.1	6.7	10.7	11.6	9.31	5.44	2.81	24.8	18.3
Zinc	2480	10000	49	63.8	70.2	148	103	226	55.3	51.9	37	37.5	40	14.4	48	41.1

Notes:

NYSDEC GW Protection SCO = New York State Department of Environmental Conservation Groundwater Protection Soil Cleanup Objectives, from Table 375-6.8 of 6 NYCRR Part 375.
NYSDEC Commercial SCO = New York State Department of Environmental Conservation Restricted Commercial Use Soil Cleanup Objectives, from Table 375-6.8 of 6 NYCRR Part 375.
ft bgs = Feet below ground surface.
mg/kg = Milligrams per kilogram.
Green concentrations exceed the NYSDEC GW Protection SCO.
Highlighted concentrations exceed the NYSDEC Commercial SCO.
— = Sample not analyzed.
NS = No standard currently established.
ND = Not Detected.
U = Not detected above laboratory detection limit.
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J = Result below the reporting limit (estimated value).
DUP = Duplicate sample was taken.
When the applicable state standard applies to mixed isomers and the laboratory reports individual isomers, the total standard is listed for each isomer.

Table 5
Soil Reuse Characterization Sampling Results
Summary of Metals in Soil.
MJ Painting; Olean, New York.

Sample ID	NYSDEC GW Protection SCO	NYSDEC Commercial SCO	RX-422	RX-422	RX-422	RX-422 DUP	RX-422	RX-423	RX-423	RX-424	RX-424	RX-424	RX-425	RX-425	RX-425	RX-425
Sample Depth (ft bgs)			0-1	1-4	7-10	7-10	10-12	4-7	10-12	1-4	7-10	10-12	0-1	4-7	7-10	10-12
Sample Date			11/10/2021	11/10/2021	11/10/2021	11/10/2021	11/10/2021	11/11/2021	11/11/2021	11/11/2021	11/11/2021	11/11/2021	11/11/2021	11/11/2021	11/11/2021	11/11/2021
METALS - 6010D (mg/kg)																
Aluminum	NS	NS	5380	8510	10100	7660	5450	8700	13900	9110	5200	1840	4000	7910	3430	6980
Antimony	NS	NS	0.637 J	0.698 J	1.62 J	2.59 J	0.571 J	1.28 J	0.646 J	1.01 J	0.878 J	0.973 J	4.55 U	1.14 J	0.769 J	0.406 J
Arsenic	16	16	6.2	14.2	9.13	16.2	5.77	37	19.9	12.4	17.6	13	4.57	12	12.7	6.97
Barium	820	400	51.3	46.2	89.6	60.4	22.7	85.5	110	61	106	40.6	42.1	68.4	89.5	53.7
Beryllium	47	590	0.272 J	0.446	0.457 J	0.5	0.243 J	0.872	0.832	0.54	0.788	0.299 J	0.209 J	0.478	0.326 J	0.199 J
Cadmium	7.5	9.3	0.118 J	0.841 U	0.135 J	0.173 J	0.936 U	0.186 J	0.352 J	0.806 U	0.905 U	1.07 U	0.109 J	0.869 U	1.05 U	0.903 U
Calcium	NS	NS	3010	1650	3000	6180	651	13300	6710	6470	1900	904	12300	2480	1110	951
Chromium	NS	1500	7.12	11.1	11.8	12.9	4.88	14.7	32	12.2	6.64	3.03	5.74	12.1	5.51	9.81
Cobalt	NS	NS	4.91	9.42	6.94	5.71	5.14	6.93	4.36	11	5.98	4.91	3.69	10	3.8	4.45
Copper	1720	270	20	11.5	40	91.7	12.2	43.5	27.1	18.2	482	229	15.6	29.9	67.6	36.3
Iron	NS	NS	13400	21000	15900	15200	12600	26600	18400	26200	19400	15200	11400	22800	18000	14000
Lead	450	1000	15.4	9.61	95	277	7.54	115	123	11.4	19.9	56.3	11.2	54.1	15.7	12.8
Magnesium	NS	NS	2440	3740	2390	3480	1500	3690	10100	3950	1120	323	2410	3270	574	1740
Manganese	2000	10000	559	508	626	608	766	221	85.2	730	255	36.7	433	269	77.9	79
Mercury	0.73	2.8	0.102 U	0.074 U	0.091 U	0.091 U	0.091 U	0.111	0.1	0.078 U	0.096 U	0.1 U	0.223	0.081 U	0.319	0.087 U
Nickel	130	310	11.4	18.5	10.2	11.6	11	13.5	11.6	21	13.7	9.06	8.91	20.4	6.68	10.6
Potassium	NS	NS	356	712	627	683	247	788	1610	729	493	211 J	336	655	219 J	421
Selenium	4	1500	2.36 U	1.68 U	2.08 U	1.92 U	0.505 J	0.705 J	1.96 U	0.282 J	0.362 J	0.278 J	1.82 U	0.252 J	0.59 J	1.81 U
Silver	8.3	1500	1.18 U	0.841 U	1.04 U	0.962 U	0.936 U	0.979 U	0.978 U	0.806 U	0.905 U	1.07 U	0.91 U	0.869 U	1.05 U	0.903 U
Sodium	NS	NS	32.2 J	55.4 J	52.3 J	81.9 J	14.4 J	171 J	272	41.9 J	65 J	32.7 J	21.4 J	46.7 J	12.7 J	14.3 J
Thallium	NS	NS	2.36 U	0.311 J	2.08 U	1.92 U	0.702 J	1.96 U	1.96 U	0.806 J	1.81 U	2.14 U	1.82 U	1.74 U	2.11 U	1.81 U
Vanadium	NS	NS	9.44	12.6	18	14.9	6.58	25.3	31.9	13.8	17.2	7.39	7.42	13.4	12.5	19.8
Zinc	2480	10000	56.3	51	77.8	123	37.2	63.3	52.8	59.5	22.8	15.8	46.6	62.6	17.3	35.9

Notes:

NYSDEC GW Protection SCO = New York State Department of Environmental Conservation Groundwater Protection Soil Cleanup Objectives, from Table 375-6.8 of 6 NYCRR Part 375.

NYSDEC Commercial SCO = New York State Department of Environmental Conservation Restricted Commercial Use Soil Cleanup Objectives, from Table 375-6.8 of 6 NYCRR Part 375.

ft bgs = Feet below ground surface.

mg/kg = Milligrams per kilogram.

Green concentrations exceed the NYSDEC GW Protection SCO.

Highlighted concentrations exceed the NYSDEC Commercial SCO.

— = Sample not analyzed.

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Table 5
Soil Reuse Characterization Sampling Results
Summary of Metals in Soil.
MJ Painting; Olean, New York.

Sample ID	NYSDEC GW Protection SCO	NYSDEC Commercial SCO	RX-426	RX-426	RX-426	RX-427	RX-427	RX-428	RX-428	RX-428	RX-429	RX-429	RX-429 DUP	RX-429	RX-430	RX-430
Sample Depth (ft bgs)			1-4	7-10	10-12	7-10	10-12	1-4	8-10	10-12	0-1	4-7	4-7	10-12	1-4	7-10
Sample Date			11/11/2021	11/11/2021	11/11/2021	11/16/2021	11/16/2021	11/10/2021	11/10/2021	11/10/2021	11/10/2021	11/10/2021	11/10/2021	11/10/2021	11/10/2021	11/10/2021
METALS - 6010D (mg/kg)																
Aluminum	NS	NS	8960	9900	13000	4500	9190	9820	8340	8420	3420	3470	1910	6710	10900	7790
Antimony	NS	NS	0.928 J	1.94 J	1.05 J	1.24 J	0.806 J	0.99 J	0.62 J	0.77 J	1.42 J	1.49 J	1.2 J	0.81 J	1.28 J	1.31 J
Arsenic	16	16	9.54	59.2	14	20.8	23.4	14.4	7.56	7.14	3.64	28.4	15.5	6.93	12.3	19.7
Barium	820	400	63.4	77.4	82.4	72	58.7	76	45.6	114	39.4	173	140	102	86.7	141
Beryllium	47	590	0.505	0.677	0.668	0.556	0.459 J	0.61	0.46 J	0.44 J	0.17 J	0.61	0.5	0.39 J	0.73	0.64
Cadmium	7.5	9.3	0.828 U	0.968 U	0.101 J	0.939 J	0.609 J	1.04	0.76 J	0.75 J	0.44 J	0.91	0.69 J	0.62 J	1.09	0.89 J
Calcium	NS	NS	6590	3610	1060	11800	1430	1530	847	3130	2720	923	1090	1080	2050	1260
Chromium	NS	1500	10.8	14.4	13.4	5.59	7.33	12.9	8.42	11.5	4.47	5.3	3.4	7.43	14	9.5
Cobalt	NS	NS	9.38	7.41	9.58	8.12	11	13.2	10.3	6.68	3.61	3.54	3.47	6.95	14.6	5.33
Copper	1720	270	15.6	97.2	49.5	491	328	18	17.9	36	14.3	457	172	29.5	20.3	56.7
Iron	NS	NS	26500	38400	25700	26800	18800	27600	18300	17100	9070	24700	19100	15500	29100	16600
Lead	450	1000	11.3	188	18.3	73.3	11.2	13.7	32.3	63.4	7.9	33	47.2	27.8	22	307
Magnesium	NS	NS	3660	1720	2470	1200	417	4180	2180	2740	1620	339	166	1490	4600	1030
Manganese	2000	10000	839	167	245	309	37.9	905	867	660	586	38.9	24.2	648	616	144
Mercury	0.73	2.8	0.097	0.226	0.096 U	0.117	0.078 U	0.1 U	0.05 J	0.09 U	0.05 J	0.12	0.37	0.17	0.09 U	0.07 J
Nickel	130	310	18.9	18.9	18.2	14.6	19.9	26.1	18.7	13.4	7.83	9.52	8.16	12.5	28	12.1
Potassium	NS	NS	675	440	576	444	1010	718	342	534	151 J	209	123 J	376	818	507
Selenium	4	1500	0.315 J	0.464 J	0.395 J	1.11 J	0.872 J	0.4 J	0.39 J	0.58 J	1.79 U	1.24 J	0.78 J	0.42 J	0.76 J	0.65 J
Silver	8.3	1500	0.828 U	0.968 U	1.01 U	0.958 U	0.937 U	1.04 U	0.94 U	0.94 U	0.9 U	0.8 U	0.87 U	0.88 U	0.94 U	0.94 U
Sodium	NS	NS	51.8 J	270	38 J	77.4 J	110 J	42.1 J	21 J	59.4 J	18.9 J	44.3 J	48.1 J	27.5 J	39.7 J	49.7 J
Thallium	NS	NS	0.82 J	0.445 J	2.02 U	1.92 U	0.403 J	2.09 U	1.88 U	1.88 U	1.79 U	1.59 U	1.75 U	0.35 J	1.87 U	0.53 J
Vanadium	NS	NS	12.8	24.8	23	17.6	12.6	15.1	12	16.9	6.1	22.3	14.1	12.4	16.2	19.1
Zinc	2480	10000	58.6	59.9	69.6	43	47.9	66.1	55.8	65.4	44.9	12.7	9.93	42.3	68.7	41.3

Notes:

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Table 5
Soil Reuse Characterization Sampling Results
Summary of Metals in Soil.
MJ Painting; Olean, New York.

Sample ID	NYSDEC GW Protection SCO	NYSDEC Commercial SCO	RX-430	RX-431	RX-431	RX-431	RX-432	RX-432	RX-432	RX-432	RX-433	RX-434	RX-434	RX-434	RX-435	RX-436
Sample Depth (ft bgs)			10-12	3-7	7-10	10-12	0-1	1-4	7-10	10-12	7-10	0-1	4-7	10-12	7-10	0-1
Sample Date			11/10/2021	11/10/2021	11/16/2021	11/16/2021	11/10/2021	11/16/2021	11/16/2021	11/16/2021	11/17/2021	11/17/2021	11/17/2021	11/17/2021	11/17/2021	11/17/2021
METALS - 6010D (mg/kg)																
Aluminum	NS	NS	9990	7450	5340	7200	6650	8320	5850	6490	5120	8540	6390	4340	5590	5250
Antimony	NS	NS	0.99 J	2.64 J	0.463 J	1.04 J	0.6 J	1.08 J	0.449 J	11.3 U	0.814 J	1.3 J	2.6 J	1.33 J	1.12 J	2.34 J
Arsenic	16	16	**16.6**	**24.3**	12.7	11.6	8.12	14.7	8.44	6.99	11.1	11.8	13.3	9.89	8.31	14.8
Barium	820	400	43.9	97.4	49.5	120	75	83.4	107	80.7	40.8	71.7	72.9	32.2	43.4	88.3
Beryllium	47	590	0.55	0.58	0.367 J	0.498	0.35 J	0.498	0.469 J	0.383 J	0.201 J	0.404 J	0.312 J	0.307 J	0.586	0.451 J
Cadmium	7.5	9.3	0.89 J	1.44	0.444 J	0.915	0.72 J	0.851 J	0.419 J	0.586 J	0.088 J	0.165 J	0.229 J	0.348 J	0.883	0.141 J
Calcium	NS	NS	858	3830	1810	1260	8980	5710	631	1010	2040	2350	14700	46100	1210	1130
Chromium	NS	1500	11	20	8.79	9	8.23	12	5.64	8.39	9.88	10	10	7.45	8.88	8.32
Cobalt	NS	NS	12.4	8.38	7	13.1	7.85	9.75	19.6	6.38	3.28	6.77	4.28	2.85 J	4.42	4.46
Copper	1720	270	19.8	63.1	113	29.8	15.8	41.8	293	65.9	25.7	38.1	46.3	22.4	14.8	66.8
Iron	NS	NS	22400	28800	14000	23100	18700	24900	12300	13500	21600	21600	14500	12000	15200	19200
Lead	450	1000	14	168	17.5	14.6	13.2	62.4	8.71	13.8	25.3	82.7	318	30.2	15	213
Magnesium	NS	NS	2260	4130	1210	1760	3410	3260	1070	1900	1440	1570	3430	5660	1870	925
Manganese	2000	10000	1100	332	332	1490	824	878	64	473	106	529	278	274	96.7	139
Mercury	0.73	2.8	0.08 U	**0.93**	0.088 U	0.08 U	0.08 U	0.067 J	0.084 U	0.084 U	0.077 U	0.101	0.561	0.081 U	0.073 U	0.131
Nickel	130	310	18.3	22	13.3	14	15.9	19.9	15.1	15.6	10.5	15.6	10.8	7.35	11.6	11.4
Potassium	NS	NS	410	622	301	312	439	607	365	281 J	512	488	482	276 J	294	308
Selenium	4	1500	0.69 J	1.62 J	0.627 J	1.78 U	1.65 U	0.48 J	0.379 J	4.51 U'	1.75 U	0.294 J	1.84 U	4.1 U'	0.71 J	1.88 U
Silver	8.3	1500	0.94 U	1.08 U	0.965 U	0.889 U	0.83 U	0.905 U	0.999 U	2.26 U'	0.875 U	0.918 U	0.918 U	2.05 U'	0.826 U	0.939 U
Sodium	NS	NS	19.5 J	67.5 J	22 J	17.7 J	33.9 J	44.2 J	19.1 J	23.4 J	22.4 J	28.5 J	191	67.7 J	38.3 J	45.9 J
Thallium	NS	NS	1.88 U	2.16 U	1.93 U	0.524 J	1.65 U	0.335 J	2 U	4.51 U	1.75 U	1.84 U	1.84 U	4.1 U	0.438 J	1.88 U
Vanadium	NS	NS	17	19.5	12.2	12.3	9.86	13.8	11.2	9.74	17.4	14.4	13.3	12.3	15.4	14.6
Zinc	2480	10000	57.2	102	37	75.6	48.8	58.9	47.8	73.2	81.2	66.7	61.1	46.8	37.6	40.3

Notes:

NYSDEC GW Protection SCO = New York State Department of Environmental Conservation Groundwater Protection Soil Cleanup Objectives, from Table 375-6.8 of 6 NYCRR Part 375.

NYSDEC Commercial SCO = New York State Department of Environmental Conservation Restricted Commercial Use Soil Cleanup Objectives, from Table 375-6.8 of 6 NYCRR Part 375.

ft bgs = Feet below ground surface.

mg/kg = Milligrams per kilogram.

Green concentrations exceed the NYSDEC GW Protection SCO.

Highlighted concentrations exceed the NYSDEC Commercial SCO.

— = Sample not analyzed.

NS = No standard currently established.

ND = Not Detected.

U = Not detected above laboratory detection limit.

U' = Laboratory reporting limit exceeds the applicable regulatory standard or criteria being utilized.

J = Result below the reporting limit (estimated value).

DUP = Duplicate sample was taken.

When the applicable state standard applies to mixed isomers and the laboratory reports individual isomers, the total standard is listed for each isomer.

Table 5
Soil Reuse Characterization Sampling Results
Summary of Metals in Soil.
MJ Painting; Olean, New York.

Sample ID	NYSDEC GW Protection SCO	NYSDEC Commercial SCO	RX-436	RX-436	RX-437	RX-439	RX-439	RX-439	RX-440	RX-441	RX-442	RX-443	RX-443	RX-443	RX-444	RX-444
Sample Depth (ft bgs)			4-7	10-12	1-4	0-1	4-7	10-12	4-7	7-10	1-4	0-1	4-7	10-12	0-1	1-4
Sample Date			11/17/2021	11/17/2021	11/17/2021	11/17/2021	11/18/2021	11/18/2021	11/17/2021	11/16/2021	11/17/2021	11/16/2021	11/16/2021	11/16/2021	11/17/2021	11/17/2021
METALS - 6010D (mg/kg)																
Aluminum	NS	NS	11300	4990	7360	6450	5360	6220	5260	3220	4820	7170	7360	3860	9360	8540
Antimony	NS	NS	0.644 J	0.561 J	8.95	0.973 J	4.09 J	0.581 J	2.27 J	0.606 J	1.01 J	3.11 J	5.48	0.969 J	2.65 J	2.51 J
Arsenic	16	16	4.92	8.95	**18.6**	9.89	**18.8**	8.42	**26.8**	6.6	13.1	**25.1**	12.3	4.54	**20.4**	9.32
Barium	820	400	50.5	26.9	133	49.3	76.4	38.1	93.8	26.2	115	143	71.8	31.2	85.7	62.4
Beryllium	47	590	0.449 J	0.255 J	0.457 J	0.293 J	0.356 J	0.366 J	0.536 J	0.196 J	0.583	0.366 J	0.298 J	0.151 J	0.546	0.41 J
Cadmium	7.5	9.3	1.02 U	0.85 U	0.578 J	0.586 J	1.46	0.741 J	0.163 J	0.854 U	0.148 J	1.19	0.298 J	0.116 J	0.23 J	0.127 J
Calcium	NS	NS	1360	512	3590	1090	3440	682	1670	1310	1340	8790	55900	6720	3930	1940
Chromium	NS	1500	11	5.63	19.4	8.1	10.2	6.94	7.45	4.36	4.85	18.8	9.6	4.46	14.8	11.2
Cobalt	NS	NS	7.74	5.08	7.88	4.99	6.69	7.68	4.3	3.18	4.89	5.88	4.24	3.23	12	6.29
Copper	1720	270	15.1	25.7	162	22.7	229	21.6	35.8	14.8	77.5	112	485	54.1	63.4	79.2
Iron	NS	NS	22000	12600	29200	14300	34900	14800	16900	8920	18600	21200	14200	8770	28500	14400
Lead	450	1000	13.4	14.7	309	41.8	380	12.1	70.8	13.1	211	440	**488**	80	133	219
Magnesium	NS	NS	1820	1400	1870	1390	1230	1720	1080	939	632	2980	3170	1490	3220	1460
Manganese	2000	10000	451	208	429	586	202	140	75.4	746	55.5	428	592	423	641	123
Mercury	0.73	2.8	0.097 U	0.077 U	0.524	0.109	0.247	0.083 U	0.108 U	0.083 U	0.086 U	**1.02**	0.276	0.109	0.129	0.155
Nickel	130	310	12.8	11	25.9	11.4	15.2	13.8	12.9	7.2	11.9	19.5	11.2	8.17	22.3	12.8
Potassium	NS	NS	508	273	420	514	360	318	367	247	265	495	779	329	594	351
Selenium	4	1500	2.04 U	1.7 U	0.597 J	1.89 U	1.56 J	1.88 U	0.326 J	0.316 J	0.602 J	0.817 J	1.26 J	1.78 U	0.393 J	1.95 U
Silver	8.3	1500	1.02 U	0.85 U	0.933 U	0.945 U	1.11 U	0.938 U	1.17 U	0.854 U	0.926 U	1.08 U	0.931 U	0.889 U	0.958 U	0.975 U
Sodium	NS	NS	30.8 J	23.9 J	60.1 J	14.8 J	130 J	15.7 J	128 J	22.6 J	64.3 J	124 J	370	56 J	44.2 J	78.4 J
Thallium	NS	NS	2.04 U	1.7 U	1.87 U	1.89 U	2.23 U	1.88 U	2.33 U	1.71 U	1.85 U	2.15 U	1.86 U	1.78 U	1.92 U	1.95 U
Vanadium	NS	NS	17.8	7.99	18.8	11.2	16	12.2	15	5.98	12.5	15.6	13.4	6.52	15.1	14.5
Zinc	2480	10000	44.4	42.6	134	58.6	47.4	48.6	40.4	32.3	36.1	190	120	45	81.8	63.6

Notes:

NYSDEC GW Protection SCO = New York State Department of Environmental Conservation Groundwater Protection Soil Cleanup Objectives, from Table 375-6.8 of 6 NYCRR Part 375.

NYSDEC Commercial SCO = New York State Department of Environmental Conservation Restricted Commercial Use Soil Cleanup Objectives, from Table 375-6.8 of 6 NYCRR Part 375.

ft bgs = Feet below ground surface.

mg/kg = Milligrams per kilogram.

Green concentrations exceed the NYSDEC GW Protection SCO.

Highlighted concentrations exceed the NYSDEC Commercial SCO.

— = Sample not analyzed.

NS = No standard currently established.

ND = Not Detected.

U = Not detected above laboratory detection limit.

U' = Laboratory reporting limit exceeds the applicable regulatory standard or criteria being utilized.

J = Result below the reporting limit (estimated value).

DUP = Duplicate sample was taken.

When the applicable state standard applies to mixed isomers and the laboratory reports individual isomers, the total standard is listed for each isomer.

Table 5
Soil Reuse Characterization Sampling Results
Summary of Metals in Soil.
MJ Painting; Olean, New York.

Sample ID	NYSDEC GW Protection SCO	NYSDEC Commercial SCO	RX-444	RX-446	RX-446	RX-447	RX-447 DUP	RX-447	RX-447	RX-448	RX-448
Sample Depth (ft bgs)			**7-10**	**1-4**	**7-10**	**4-7**	**4-7**	**7-10**	**10-12**	**1-4**	**7-10**
Sample Date			**11/17/2021**	**11/16/2021**	**11/16/2021**	**11/16/2021**	**11/16/2021**	**11/16/2021**	**11/16/2021**	**11/16/2021**	**11/18/2021**
METALS - 6010D (mg/kg)											
Aluminum	NS	NS	10300	5100	7800	9360	9380	8940	7230	14300	7390
Antimony	NS	NS	0.678 J	2.55 J	2.09 J	0.883 J	1.11 J	0.791 J	0.645 J	6.38 U	8.76
Arsenic	16	16	11.5	13.9	**33.3**	10.9	13.2	10.8	10.3	12.4	**20.1**
Barium	820	400	33	54.7	53.2	38.2	39.2	65.5	58.5	112	76.3
Beryllium	47	590	0.487	0.261 J	0.451 J	0.385 J	0.328 J	0.456 J	0.452 J	0.842	0.472 J
Cadmium	7.5	9.3	0.869 U	1.04	1.53	0.686 J	0.757 J	0.831 J	0.553 J	0.931 J	1.24
Calcium	NS	NS	380	40300	4050	473	685	807	803	12100	4320
Chromium	NS	1500	10.6	6.71	7.15	14.6	14	12.9	7.23	33.8	18.6
Cobalt	NS	NS	6.2	4.4	7.62	5.92	5.69	5.88	5.15	4.28	3.56
Copper	1720	270	76.4	469	78.6	18.6	14.6	25.5	28	13	27.9
Iron	NS	NS	21500	14300	42200	23900	25600	22400	17900	14000	12500
Lead	450	1000	9.75	**884**	93.2	15.5	12.9	15.1	11.9	70.4	**1160**
Magnesium	NS	NS	2260	3920	1310	2410	2260	2220	1720	15000	6640
Manganese	2000	10000	265	304	159	154	139	181	172	190	106
Mercury	0.73	2.8	0.075 U	**1.21**	**1.34**	0.077 U	0.075 U	0.087 U	0.08 U	0.105 U	0.727
Nickel	130	310	15.7	10.7	16.4	15.8	14.9	17.9	14	11.6	12.4
Potassium	NS	NS	408	382	435	456	463	418	326	1680	848
Selenium	4	1500	1.74 U	0.675 J	1.3 J	0.704 J	0.766 J	0.355 J	0.489 J	0.332 J	1.25 J
Silver	8.3	1500	0.869 U	0.9 U	0.92 U	0.939 U	0.912 U	1.01 U	0.922 U	1.28 U	1.18 U
Sodium	NS	NS	21.4 J	204	336	85.4 J	112 J	178 J	223	543	564
Thallium	NS	NS	1.74 U	1.8 U	0.294 J	1.88 U	1.82 U	2.03 U	1.84 U	2.55 U	2.36 U
Vanadium	NS	NS	16.7	20.4	15.4	16.8	24.2	13.6	11.1	53.8	41.5
Zinc	2480	10000	43.3	234	53.4	43.1	40.7	61.5	59	62.6	59

Notes:

NYSDEC GW Protection SCO = New York State Department of Environmental Conservation Groundwater Protection Soil Cleanup Objectives, from Table 375-6.8 of 6 NYCRR Part 375.
NYSDEC Commercial SCO = New York State Department of Environmental Conservation Restricted Commercial Use Soil Cleanup Objectives, from Table 375-6.8 of 6 NYCRR Part 375.
ft bgs = Feet below ground surface.
mg/kg = Milligrams per kilogram.
Green concentrations exceed the NYSDEC GW Protection SCO.
Highlighted concentrations exceed the NYSDEC Commercial SCO.
— = Sample not analyzed.
NS = No standard currently established.
ND = Not Detected.
U = Not detected above laboratory detection limit.
U' = Laboratory reporting limit exceeds the applicable regulatory standard or criteria being utilized.
J = Result below the reporting limit (estimated value).
DUP = Duplicate sample was taken.
When the applicable state standard applies to mixed isomers and the laboratory reports individual isomers, the total standard is listed for each isomer.

Table 5
Soil Reuse Characterization Sampling Results
Summary of PCB Soil Analytical Data.
MJ Painting; Olean, New York.

Sample ID	NYSDEC GW Protection SCO	NYSDEC Commercial SCO	RX-301	RX-302	RX-303	RX-304	RX-305	RX-306	RX-307	RX-308	RX-309	RX-310	RX-311	RX-312	RX-313	RX-314	RX-315
Sample Depth (ft bgs)			0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1
Sample Date			11/15/2021	11/9/2021	11/15/2021	11/15/2021	11/15/2021	11/16/2021	11/17/2021	11/17/2021	11/17/2021	11/17/2021	11/18/2021	11/17/2021	1/5/2022	1/4/2022	1/7/2022
POLYCHLORINATED BIPHENYLS - 8082A (mg/kg)																	
Aroclor-1016	NS	NS	0.0388 U	0.0384 U	0.04 U	0.0365 U	0.0402 U	0.036 U	0.0356 U	0.0396 U	0.0364 U	0.0368 U	0.0407 U	0.038 U	0.0451 U	0.0435 U	0.0452 U
Aroclor-1221	NS	NS	0.0388 U	0.0384 U	0.04 U	0.0365 U	0.0402 U	0.036 U	0.0356 U	0.0396 U	0.0364 U	0.0368 U	0.0407 U	0.038 U	0.0451 U	0.0435 U	0.0452 U
Aroclor-1232	NS	NS	0.0388 U	0.0384 U	0.04 U	0.0365 U	0.0402 U	0.036 U	0.0356 U	0.0396 U	0.0364 U	0.0368 U	0.0407 U	0.038 U	0.0451 U	0.0435 U	0.0452 U
Aroclor-1242	NS	NS	0.0388 U	0.0384 U	0.04 U	0.0365 U	0.0402 U	0.036 U	0.0356 U	0.0396 U	0.0364 U	0.0368 U	0.0407 U	0.038 U	0.0451 U	0.0435 U	0.0452 U
Aroclor-1248	NS	NS	0.0388 U	0.0384 U	0.04 U	0.0365 U	0.0402 U	0.036 U	0.0356 U	0.0396 U	0.0364 U	0.0368 U	0.0407 U	0.038 U	0.0451 U	0.0435 U	0.0452 U
Aroclor-1254	NS	NS	0.0388 U	0.0384 U	0.04 U	0.0365 U	0.0402 U	0.036 U	0.0356 U	0.0396 U	0.0364 U	0.0368 U	0.0407 U	0.038 U	0.0451 U	0.0335 J	0.0452 U
Aroclor-1260	NS	NS	0.0388 U	0.0384 U	0.04 U	0.0365 U	0.0402 U	0.036 U	0.0356 U	0.0396 U	0.0364 U	0.0368 U	0.0407 U	0.038 U	0.0451 U	0.0184 J	0.0452 U
Aroclor-1262	NS	NS	0.0388 U	0.0384 U	0.04 U	0.0365 U	0.0402 U	0.036 U	0.0356 U	0.0396 U	0.0364 U	0.0368 U	0.0407 U	0.038 U	0.0451 U	0.0435 U	0.0452 U
Aroclor-1268	NS	NS	0.0388 U	0.0384 U	0.04 U	0.0365 U	0.0402 U	0.036 U	0.0356 U	0.0396 U	0.0364 U	0.0368 U	0.0407 U	0.038 U	0.00932 J	0.0132 J	0.00619 J
Total PCBs	NS	1	0.0388 U	0.0384 U	0.04 U	0.0365 U	0.0402 U	0.036 U	0.0356 U	0.0396 U	0.0364 U	0.0368 U	0.0407 U	0.038 U	0.00932 J	0.0651 J	0.00619 J
Total PCBs	NS	10	0.0388 U	0.0384 U	0.04 U	0.0365 U	0.0402 U	0.036 U	0.0356 U	0.0396 U	0.0364 U	0.0368 U	0.0407 U	0.038 U	0.00932 J	0.0651 J	0.00619 J
Total PCBs	3.2	1	0.0388 U	0.0384 U	0.04 U	0.0365 U	0.0402 U	0.036 U	0.0356 U	0.0396 U	0.0364 U	0.0368 U	0.0407 U	0.038 U	0.00932 J	0.0651 J	0.00619 J

Notes:

NYSDEC GW Protection SCO = New York State Department of Environmental Conservation Groundwater Protection Soil Cleanup Objectives, from Table 375-6.8 of 6 NYCRR Part 375.
NYSDEC Commercial SCO = New York State Department of Environmental Conservation Restricted Commercial Use Soil Cleanup Objectives, from Table 375-6.8 of 6 NYCRR Part 375.
ft bgs = Feet below ground surface.
mg/kg = Milligrams per kilogram.
No samples exceed the NYSDEC GW Protection SCO.
No samples exceed the NYSDEC Commercial SCO.
— = Sample not analyzed.
NS = No standard currently established.
ND = Not Detected.
U = Not detected above laboratory detection limit.
U' = Laboratory reporting limit exceeds the applicable regulatory standard or criteria being utilized.
J = Result below the reporting limit (estimated value).
DUP = Duplicate sample was taken.
When the applicable state standard applies to mixed isomers and the laboratory reports individual isomers, the total standard is listed for each isomer.

Table 5
Soil Reuse Characterization Sampling Results
Summary of PCB Soil Analytical Data.
MJ Painting; Olean, New York.

Sample ID	NYSDEC GW Protection SCO	NYSDEC Commercial SCO	RX-316	RX-317	RX-318	RX-319	RX-320	RX-321	RX-321 DUP	RX-401	RX-401	RX-401	RX-402	RX-403	RX-403	RX-403	RX-404
Sample Depth (ft bgs)			0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	1-4	7-10	7-10	0-1	4-7	10-12	7-10
Sample Date			1/7/2022	1/7/2022	1/4/2022	1/7/2022	1/5/2022	1/7/2022	1/7/2022	11/12/2021	11/12/2021	11/12/2021	11/12/2021	11/12/2021	11/12/2021	11/12/2021	11/12/2021
POLYCHLORINATED BIPHENYLS - 8082A (mg/kg)																	
Aroclor-1016	NS	NS	0.0513 U	0.0434 U	0.0422 U	0.0429 U	0.0434 U	0.0412 U	0.0422 U	0.0379 U	0.038 U	0.0408 U	0.0438 U	0.0417 U	0.0414 U	0.0377 U	0.0395 U
Aroclor-1221	NS	NS	0.0513 U	0.0434 U	0.0422 U	0.0429 U	0.0434 U	0.0412 U	0.0422 U	0.0379 U	0.038 U	0.0408 U	0.0438 U	0.0417 U	0.0414 U	0.0377 U	0.0395 U
Aroclor-1232	NS	NS	0.0513 U	0.0434 U	0.0422 U	0.0429 U	0.0434 U	0.0412 U	0.0422 U	0.0379 U	0.038 U	0.0408 U	0.0438 U	0.0417 U	0.0414 U	0.0377 U	0.0395 U
Aroclor-1242	NS	NS	0.0513 U	0.0434 U	0.0422 U	0.0429 U	0.0434 U	0.0412 U	0.0422 U	0.0379 U	0.038 U	0.0408 U	0.0438 U	0.0417 U	0.0414 U	0.0377 U	0.0395 U
Aroclor-1248	NS	NS	0.0513 U	0.0434 U	0.0422 U	0.0429 U	0.0434 U	0.0412 U	0.0422 U	0.0379 U	0.038 U	0.0408 U	0.0438 U	0.0417 U	0.0414 U	0.0377 U	0.0395 U
Aroclor-1254	NS	NS	0.0513 U	0.0434 U	0.0422 U	0.0429 U	0.00496 J	0.0412 U	0.0422 U	0.0379 U	0.038 U	0.0408 U	0.0438 U	0.0417 U	0.0414 U	0.0377 U	0.0395 U
Aroclor-1260	NS	NS	0.0133 J	0.0434 U	0.0422 U	0.0429 U	0.0434 U	0.0412 U	0.0422 U	0.0379 U	0.038 U	0.0408 U	0.0438 U	0.0417 U	0.0414 U	0.0377 U	0.0395 U
Aroclor-1262	NS	NS	0.0513 U	0.0434 U	0.0422 U	0.0429 U	0.0434 U	0.0412 U	0.0422 U	0.0379 U	0.038 U	0.0408 U	0.0438 U	0.0417 U	0.0414 U	0.0377 U	0.0395 U
Aroclor-1268	NS	NS	0.00707 J	0.0434 U	0.0422 U	0.00742 J	0.0434 U	0.0412 U	0.00626 J	0.0379 U	0.038 U	0.0408 U	0.0438 U	0.0417 U	0.0414 U	0.0377 U	0.0395 U
Total PCBs	NS	1	0.0204 J	0.0434 U	0.0422 U	0.00742 J	0.00496 J	0.0412 U	0.00626 J	0.0379 U	0.038 U	0.0408 U	0.0438 U	0.0417 U	0.0414 U	0.0377 U	0.0395 U
Total PCBs	NS	10	0.0204 J	0.0434 U	0.0422 U	0.00742 J	0.00496 J	0.0412 U	0.00626 J	0.0379 U	0.038 U	0.0408 U	0.0438 U	0.0417 U	0.0414 U	0.0377 U	0.0395 U
Total PCBs	3.2	1	0.0204 J	0.0434 U	0.0422 U	0.00742 J	0.00496 J	0.0412 U	0.00626 J	0.0379 U	0.038 U	0.0408 U	0.0438 U	0.0417 U	0.0414 U	0.0377 U	0.0395 U

Notes:
NYSDEC GW Protection SCO = New York State Department of Environmental Conservation Groundwater Protection Soil Cleanup Objectives, from Table 375-6.8 of 6 NYCRR Part 375.
NYSDEC Commercial SCO = New York State Department of Environmental Conservation Restricted Commercial Use Soil Cleanup Objectives, from Table 375-6.8 of 6 NYCRR Part 375.
ft bgs = Feet below ground surface.
mg/kg = Milligrams per kilogram.
No samples exceed the NYSDEC GW Protection SCO.
No samples exceed the NYSDEC Commercial SCO.
— = Sample not analyzed.
NS = No standard currently established.
ND = Not Detected.
U = Not detected above laboratory detection limit.
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J = Result below the reporting limit (estimated value).
DUP = Duplicate sample was taken.
When the applicable state standard applies to mixed isomers and the laboratory reports individual isomers, the total standard is listed for each isomer.

Table 5
Soil Reuse Characterization Sampling Results
Summary of PCB Soil Analytical Data.
MJ Painting; Olean, New York.

Sample ID	NYSDEC GW Protection SCO	NYSDEC Commercial SCO	RX-405	RX-405	RX-405	RX-407	RX-407	RX-407	RX-409	RX-410	RX-411	RX-413	RX-414	RX-415	RX-416	RX-416
Sample Depth (ft bgs)			0-1	1-4	7-10	0-1	4-7	10-12	1-4	10-12	7-10	10-12	4-7	7-10	1-4	10-12
Sample Date			11/15/2021	11/15/2021	11/15/2021	11/15/2021	11/15/2021	11/15/2021	11/12/2021	11/12/2021	11/12/2021	11/15/2021	11/15/2021	11/16/2021	11/16/2021	11/16/2021
POLYCHLORINATED BIPHENYLS - 8082A (mg/kg)																
Aroclor-1016	NS	NS	0.0436 U	0.0373 U	0.0392 U	0.0368 U	0.0415 U	0.037 U	0.0401 U	0.0381 U	0.0398 U	0.0392 U	0.0403 U	0.044 U	0.0403 U	0.0366 U
Aroclor-1221	NS	NS	0.0436 U	0.0373 U	0.0392 U	0.0368 U	0.0415 U	0.037 U	0.0401 U	0.0381 U	0.0398 U	0.0392 U	0.0403 U	0.044 U	0.0403 U	0.0366 U
Aroclor-1232	NS	NS	0.0436 U	0.0373 U	0.0392 U	0.0368 U	0.0415 U	0.037 U	0.0401 U	0.0381 U	0.0398 U	0.0392 U	0.0403 U	0.044 U	0.0403 U	0.0366 U
Aroclor-1242	NS	NS	0.0436 U	0.0373 U	0.0392 U	0.0368 U	0.0415 U	0.037 U	0.0401 U	0.0381 U	0.0398 U	0.0392 U	0.0403 U	0.044 U	0.0403 U	0.0366 U
Aroclor-1248	NS	NS	0.0436 U	0.0373 U	0.0392 U	0.0368 U	0.0415 U	0.037 U	0.0401 U	0.0381 U	0.0398 U	0.0392 U	0.0403 U	0.044 U	0.0403 U	0.0366 U
Aroclor-1254	NS	NS	0.0436 U	0.0373 U	0.0392 U	0.0368 U	0.0415 U	0.037 U	0.0401 U	0.0381 U	0.0398 U	0.0392 U	0.0403 U	0.044 U	0.0403 U	0.0366 U
Aroclor-1260	NS	NS	0.0436 U	0.0373 U	0.0392 U	0.0368 U	0.0415 U	0.037 U	0.0401 U	0.0381 U	0.0398 U	0.0392 U	0.0403 U	0.044 U	0.0403 U	0.0366 U
Aroclor-1262	NS	NS	0.0436 U	0.0373 U	0.0392 U	0.0368 U	0.0415 U	0.037 U	0.0401 U	0.0381 U	0.0398 U	0.0392 U	0.0403 U	0.044 U	0.0403 U	0.0366 U
Aroclor-1268	NS	NS	0.0436 U	0.0373 U	0.0392 U	0.0368 U	0.0415 U	0.037 U	0.0401 U	0.0381 U	0.0398 U	0.0392 U	0.0403 U	0.044 U	0.0403 U	0.0366 U
Total PCBs	NS	1	0.0436 U	0.0373 U	0.0392 U	0.0368 U	0.0415 U	0.037 U	0.0401 U	0.0381 U	0.0398 U	0.0392 U	0.0403 U	0.044 U	0.0403 U	0.0366 U
Total PCBs	NS	10	0.0436 U	0.0373 U	0.0392 U	0.0368 U	0.0415 U	0.037 U	0.0401 U	0.0381 U	0.0398 U	0.0392 U	0.0403 U	0.044 U	0.0403 U	0.0366 U
Total PCBs	3.2	1	0.0436 U	0.0373 U	0.0392 U	0.0368 U	0.0415 U	0.037 U	0.0401 U	0.0381 U	0.0398 U	0.0392 U	0.0403 U	0.044 U	0.0403 U	0.0366 U

Notes:
NYSDEC GW Protection SCO = New York State Department of Environmental Conservation Groundwater Protection Soil Cleanup Objectives, from Table 375-6.8 of 6 NYCRR Part 375.
NYSDEC Commercial SCO = New York State Department of Environmental Conservation Restricted Commercial Use Soil Cleanup Objectives, from Table 375-6.8 of 6 NYCRR Part 375.
ft bgs = Feet below ground surface.
mg/kg = Milligrams per kilogram.
No samples exceed the NYSDEC GW Protection SCO.
No samples exceed the NYSDEC Commercial SCO.
— = Sample not analyzed.
NS = No standard currently established.
ND = Not Detected.
U = Not detected above laboratory detection limit.
U' = Laboratory reporting limit exceeds the applicable regulatory standard or criteria being utilized.
J = Result below the reporting limit (estimated value).
DUP = Duplicate sample was taken.
When the applicable state standard applies to mixed isomers and the laboratory reports individual isomers, the total standard is listed for each isomer.

Table 5
Soil Reuse Characterization Sampling Results
Summary of PCB Soil Analytical Data.
MJ Painting; Olean, New York.

Sample ID	NYSDEC GW Protection SCO	NYSDEC Commercial SCO	RX-417	RX-417	RX-417	RX-417	RX-418	RX-418	RX-419	RX-419	RX-419	RX-420	RX-420	RX-420	RX-420	RX-421
Sample Depth (ft bgs)			0-1	1-4	7-10	10-12	4-7	10-12	1-4	7-10	10-12	0-1	4-7	7-10	10-12	10-12
Sample Date			11/11/2021	11/11/2021	11/11/2021	11/11/2021	11/11/2021	11/11/2021	11/15/2021	11/15/2021	11/15/2021	11/15/2021	11/15/2021	11/15/2021	11/15/2021	11/11/2021
POLYCHLORINATED BIPHENYLS - 8082A (mg/kg)																
Aroclor-1016	NS	NS	0.0363 U	0.0356 U	0.0412 U	0.0533 U	0.0377 U	0.0409 U	0.0372 U	0.0564 U	0.0375 U	0.0382 U	0.0371 U	0.046 U	0.0421 U	0.0441 U
Aroclor-1221	NS	NS	0.0363 U	0.0356 U	0.0412 U	0.0533 U	0.0377 U	0.0409 U	0.0372 U	0.0564 U	0.0375 U	0.0382 U	0.0371 U	0.046 U	0.0421 U	0.0441 U
Aroclor-1232	NS	NS	0.0363 U	0.0356 U	0.0412 U	0.0533 U	0.0377 U	0.0409 U	0.0372 U	0.0564 U	0.0375 U	0.0382 U	0.0371 U	0.046 U	0.0421 U	0.0441 U
Aroclor-1242	NS	NS	0.0363 U	0.0356 U	0.0412 U	0.0533 U	0.0377 U	0.0409 U	0.0372 U	0.0564 U	0.0375 U	0.0382 U	0.0371 U	0.046 U	0.0421 U	0.0441 U
Aroclor-1248	NS	NS	0.0363 U	0.0356 U	0.0412 U	0.0533 U	0.0377 U	0.0409 U	0.0372 U	0.0564 U	0.0375 U	0.0382 U	0.0371 U	0.046 U	0.0421 U	0.0441 U
Aroclor-1254	NS	NS	0.0363 U	0.0356 U	0.0412 U	0.0533 U	0.0377 U	0.0409 U	0.0372 U	0.0564 U	0.0375 U	0.0382 U	0.0371 U	0.046 U	0.0421 U	0.0441 U
Aroclor-1260	NS	NS	0.0363 U	0.0356 U	0.0412 U	0.0533 U	0.0377 U	0.0409 U	0.0372 U	0.0564 U	0.0375 U	0.0382 U	0.0371 U	0.046 U	0.0421 U	0.0441 U
Aroclor-1262	NS	NS	0.0363 U	0.0356 U	0.0412 U	0.0533 U	0.0377 U	0.0409 U	0.0372 U	0.0564 U	0.0375 U	0.0382 U	0.0371 U	0.046 U	0.0421 U	0.0441 U
Aroclor-1268	NS	NS	0.0363 U	0.0356 U	0.0412 U	0.0533 U	0.0377 U	0.0409 U	0.0372 U	0.0564 U	0.0375 U	0.0382 U	0.0371 U	0.046 U	0.0421 U	0.0441 U
Total PCBs	NS	1	0.0363 U	0.0356 U	0.0412 U	0.0533 U	0.0377 U	0.0409 U	0.0372 U	0.0564 U	0.0375 U	0.0382 U	0.0371 U	0.046 U	0.0421 U	0.0441 U
Total PCBs	NS	10	0.0363 U	0.0356 U	0.0412 U	0.0533 U	0.0377 U	0.0409 U	0.0372 U	0.0564 U	0.0375 U	0.0382 U	0.0371 U	0.046 U	0.0421 U	0.0441 U
Total PCBs	3.2	1	0.0363 U	0.0356 U	0.0412 U	0.0533 U	0.0377 U	0.0409 U	0.0372 U	0.0564 U	0.0375 U	0.0382 U	0.0371 U	0.046 U	0.0421 U	0.0441 U

Notes:
NYSDEC GW Protection SCO = New York State Department of Environmental Conservation Groundwater Protection Soil Cleanup Objectives, from Table 375-6.8 of 6 NYCRR Part 375.
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ft bgs = Feet below ground surface.
mg/kg = Milligrams per kilogram.
No samples exceed the NYSDEC GW Protection SCO.
No samples exceed the NYSDEC Commercial SCO.
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U = Not detected above laboratory detection limit.
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J = Result below the reporting limit (estimated value).
DUP = Duplicate sample was taken.
When the applicable state standard applies to mixed isomers and the laboratory reports individual isomers, the total standard is listed for each isomer.

Table 5
Soil Reuse Characterization Sampling Results
Summary of PCB Soil Analytical Data.
MJ Painting; Olean, New York.

Sample ID	NYSDEC GW Protection SCO	NYSDEC Commercial SCO	RX-422	RX-422	RX-422	RX-422 DUP	RX-422	RX-423	RX-423	RX-424	RX-424	RX-424	RX-425	RX-425	RX-425	RX-425
Sample Depth (ft bgs)			0-1	1-4	7-10	7-10	10-12	4-7	10-12	1-4	7-10	10-12	0-1	4-7	7-10	10-12
Sample Date			11/10/2021	11/10/2021	11/10/2021	11/10/2021	11/10/2021	11/11/2021	11/11/2021	11/11/2021	11/11/2021	11/11/2021	11/11/2021	11/11/2021	11/11/2021	11/11/2021
POLYCHLORINATED BIPHENYLS - 8082A (mg/kg)																
Aroclor-1016	NS	NS	0.0492 U	0.0347 U	0.0421 U	0.0393 U	0.0389 U	0.106 U	0.0429 U	0.0345 U	0.0374 U	0.0448 U	0.0371 U	0.0358 U	0.0457 U	0.0391 U
Aroclor-1221	NS	NS	0.0492 U	0.0347 U	0.0421 U	0.0393 U	0.0389 U	0.106 U	0.0429 U	0.0345 U	0.0374 U	0.0448 U	0.0371 U	0.0358 U	0.0457 U	0.0391 U
Aroclor-1232	NS	NS	0.0492 U	0.0347 U	0.0421 U	0.0393 U	0.0389 U	0.106 U	0.0429 U	0.0345 U	0.0374 U	0.0448 U	0.0371 U	0.0358 U	0.0457 U	0.0391 U
Aroclor-1242	NS	NS	0.0492 U	0.0347 U	0.0421 U	0.0393 U	0.0389 U	0.106 U	0.0429 U	0.0345 U	0.0374 U	0.0448 U	0.0371 U	0.0358 U	0.0457 U	0.0391 U
Aroclor-1248	NS	NS	0.0492 U	0.0347 U	0.0421 U	0.0393 U	0.0389 U	0.106 U	0.0429 U	0.0345 U	0.0374 U	0.0448 U	0.0371 U	0.0358 U	0.0457 U	0.0391 U
Aroclor-1254	NS	NS	0.0492 U	0.0347 U	0.0421 U	0.0393 U	0.0389 U	0.106 U	0.0429 U	0.0345 U	0.0374 U	0.0448 U	0.0371 U	0.0358 U	0.0457 U	0.0391 U
Aroclor-1260	NS	NS	0.0492 U	0.0347 U	0.0421 U	0.0393 U	0.0389 U	0.106 U	0.0429 U	0.0345 U	0.0374 U	0.0448 U	0.0371 U	0.0358 U	0.0457 U	0.0391 U
Aroclor-1262	NS	NS	0.0492 U	0.0347 U	0.0421 U	0.0393 U	0.0389 U	0.106 U	0.0429 U	0.0345 U	0.0374 U	0.0448 U	0.0371 U	0.0358 U	0.0457 U	0.0391 U
Aroclor-1268	NS	NS	0.0492 U	0.0347 U	0.0421 U	0.0393 U	0.0389 U	0.106 U	0.0429 U	0.0345 U	0.0374 U	0.0448 U	0.0371 U	0.0358 U	0.033 J	0.0391 U
Total PCBs	NS	1	0.0492 U	0.0347 U	0.0421 U	0.0393 U	0.0389 U	0.106 U	0.0429 U	0.0345 U	0.0374 U	0.0448 U	0.0371 U	0.0358 U	0.033 J	0.0391 U
Total PCBs	NS	10	0.0492 U	0.0347 U	0.0421 U	0.0393 U	0.0389 U	0.106 U	0.0429 U	0.0345 U	0.0374 U	0.0448 U	0.0371 U	0.0358 U	0.033 J	0.0391 U
Total PCBs	3.2	1	0.0492 U	0.0347 U	0.0421 U	0.0393 U	0.0389 U	0.106 U'	0.0429 U	0.0345 U	0.0374 U	0.0448 U	0.0371 U	0.0358 U	0.033 J	0.0391 U

Notes:
NYSDEC GW Protection SCO = New York State Department of Environmental Conservation Groundwater Protection Soil Cleanup Objectives, from Table 375-6.8 of 6 NYCRR Part 375.
NYSDEC Commercial SCO = New York State Department of Environmental Conservation Restricted Commercial Use Soil Cleanup Objectives, from Table 375-6.8 of 6 NYCRR Part 375.
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mg/kg = Milligrams per kilogram.
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No samples exceed the NYSDEC Commercial SCO.
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U' = Laboratory reporting limit exceeds the applicable regulatory standard or criteria being utilized.
J = Result below the reporting limit (estimated value).
DUP = Duplicate sample was taken.
When the applicable state standard applies to mixed isomers and the laboratory reports individual isomers, the total standard is listed for each isomer.

Table 5
Soil Reuse Characterization Sampling Results
Summary of PCB Soil Analytical Data.
MJ Painting; Olean, New York.

Sample ID	NYSDEC GW Protection SCO	NYSDEC Commercial SCO	RX-426	RX-426	RX-426	RX-427	RX-427	RX-428	RX-428	RX-428	RX-429	RX-429	RX-429 DUP	RX-429	RX-430	RX-430
Sample Depth (ft bgs)			1-4	7-10	10-12	7-10	10-12	1-4	8-10	10-12	0-1	4-7	4-7	10-12	1-4	7-10
Sample Date			11/11/2021	11/11/2021	11/11/2021	11/16/2021	11/16/2021	11/10/2021	11/10/2021	11/10/2021	11/10/2021	11/10/2021	11/10/2021	11/10/2021	11/10/2021	11/10/2021
POLYCHLORINATED BIPHENYLS - 8082A (mg/kg)																
Aroclor-1016	NS	NS	0.0339 U	0.04 U	0.0429 U	0.0396 U	0.0396 U	0.0429 U	0.0386 U	0.0404 U	0.0372 U	0.0334 U	0.0372 U	0.0376 U	0.0394 U	0.0394 U
Aroclor-1221	NS	NS	0.0339 U	0.04 U	0.0429 U	0.0396 U	0.0396 U	0.0429 U	0.0386 U	0.0404 U	0.0372 U	0.0334 U	0.0372 U	0.0376 U	0.0394 U	0.0394 U
Aroclor-1232	NS	NS	0.0339 U	0.04 U	0.0429 U	0.0396 U	0.0396 U	0.0429 U	0.0386 U	0.0404 U	0.0372 U	0.0334 U	0.0372 U	0.0376 U	0.0394 U	0.0394 U
Aroclor-1242	NS	NS	0.0339 U	0.04 U	0.0429 U	0.0396 U	0.0396 U	0.0429 U	0.0386 U	0.0404 U	0.0372 U	0.0334 U	0.0372 U	0.0376 U	0.0394 U	0.0394 U
Aroclor-1248	NS	NS	0.0339 U	0.04 U	0.0429 U	0.0396 U	0.0396 U	0.0429 U	0.0386 U	0.0404 U	0.0372 U	0.0334 U	0.0372 U	0.0376 U	0.0394 U	0.0394 U
Aroclor-1254	NS	NS	0.0339 U	0.04 U	0.0429 U	0.0396 U	0.0396 U	0.0429 U	0.0386 U	0.0404 U	0.0372 U	0.00453 J	0.0372 U	0.0376 U	0.0394 U	0.0394 U
Aroclor-1260	NS	NS	0.0339 U	0.04 U	0.0429 U	0.0396 U	0.0396 U	0.0429 U	0.0386 U	0.0404 U	0.0372 U	0.0334 U	0.0372 U	0.0376 U	0.0394 U	0.0394 U
Aroclor-1262	NS	NS	0.0339 U	0.04 U	0.0429 U	0.0396 U	0.0396 U	0.0429 U	0.0386 U	0.0404 U	0.0372 U	0.0334 U	0.0372 U	0.0376 U	0.0394 U	0.0394 U
Aroclor-1268	NS	NS	0.0339 U	0.04 U	0.0429 U	0.0396 U	0.0396 U	0.0429 U	0.0386 U	0.0404 U	0.0372 U	0.0334 U	0.0372 U	0.0376 U	0.0394 U	0.0394 U
Total PCBs	NS	1	0.0339 U	0.04 U	0.0429 U	0.0396 U	0.0396 U	0.0429 U	0.0386 U	0.0404 U	0.0372 U	0.00453 J	0.0372 U	0.0376 U	0.0394 U	0.0394 U
Total PCBs	NS	10	0.0339 U	0.04 U	0.0429 U	0.0396 U	0.0396 U	0.0429 U	0.0386 U	0.0404 U	0.0372 U	0.00453 J	0.0372 U	0.0376 U	0.0394 U	0.0394 U
Total PCBs	3.2	1	0.0339 U	0.04 U	0.0429 U	0.0396 U	0.0396 U	0.0429 U	0.0386 U	0.0404 U	0.0372 U	0.00453 J	0.0372 U	0.0376 U	0.0394 U	0.0394 U

Notes:
NYSDEC GW Protection SCO = New York State Department of Environmental Conservation Groundwater Protection Soil Cleanup Objectives, from Table 375-6.8 of 6 NYCRR Part 375.
NYSDEC Commercial SCO = New York State Department of Environmental Conservation Restricted Commercial Use Soil Cleanup Objectives, from Table 375-6.8 of 6 NYCRR Part 375.
ft bgs = Feet below ground surface.
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No samples exceed the NYSDEC GW Protection SCO.
No samples exceed the NYSDEC Commercial SCO.
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J = Result below the reporting limit (estimated value).
DUP = Duplicate sample was taken.
When the applicable state standard applies to mixed isomers and the laboratory reports individual isomers, the total standard is listed for each isomer.

Table 5

Soil Reuse Characterization Sampling Results

Summary of PCB Soil Analytical Data.

MJ Painting; Olean, New York.

Sample ID	NYSDEC GW Protection SCO	NYSDEC Commercial SCO	RX-430	RX-431	RX-431	RX-431	RX-432	RX-432	RX-432	RX-432	RX-433	RX-434	RX-434	RX-434	RX-435	RX-436
Sample Depth (ft bgs)			10-12	3-7	7-10	10-12	0-1	1-4	7-10	10-12	7-10	0-1	4-7	10-12	7-10	0-1
Sample Date			11/10/2021	11/10/2021	11/16/2021	11/16/2021	11/10/2021	11/16/2021	11/16/2021	11/16/2021	11/17/2021	11/17/2021	11/17/2021	11/17/2021	11/17/2021	11/17/2021
POLYCHLORINATED BIPHENYLS - 8082A (mg/kg)																
Aroclor-1016	NS	NS	0.0386 U	0.0446 U	0.0417 U	0.0372 U	0.0351 U	0.0367 U	0.0418 U	0.0383 U	0.0377 U	0.0396 U	0.0396 U	0.0351 U	0.0356 U	0.0395 U
Aroclor-1221	NS	NS	0.0386 U	0.0446 U	0.0417 U	0.0372 U	0.0351 U	0.0367 U	0.0418 U	0.0383 U	0.0377 U	0.0396 U	0.0396 U	0.0351 U	0.0356 U	0.0395 U
Aroclor-1232	NS	NS	0.0386 U	0.0446 U	0.0417 U	0.0372 U	0.0351 U	0.0367 U	0.0418 U	0.0383 U	0.0377 U	0.0396 U	0.0396 U	0.0351 U	0.0356 U	0.0395 U
Aroclor-1242	NS	NS	0.0386 U	0.0446 U	0.0417 U	0.0372 U	0.0351 U	0.0367 U	0.0418 U	0.0383 U	0.0377 U	0.0396 U	0.0396 U	0.0351 U	0.0356 U	0.0395 U
Aroclor-1248	NS	NS	0.0386 U	0.0446 U	0.0417 U	0.0372 U	0.0351 U	0.0367 U	0.0418 U	0.0383 U	0.0377 U	0.0396 U	0.0396 U	0.0351 U	0.0356 U	0.0395 U
Aroclor-1254	NS	NS	0.0386 U	0.0446 U	0.0417 U	0.0372 U	0.0351 U	0.0367 U	0.0418 U	0.0383 U	0.0377 U	0.0396 U	0.0148 J	0.0351 U	0.0188 J	0.00527 J
Aroclor-1260	NS	NS	0.0386 U	0.0446 U	0.0417 U	0.0372 U	0.0351 U	0.0367 U	0.0418 U	0.0383 U	0.0377 U	0.0396 U	0.00914 J	0.0351 U	0.0356 U	0.0395 U
Aroclor-1262	NS	NS	0.0386 U	0.0446 U	0.0417 U	0.0372 U	0.0351 U	0.0367 U	0.0418 U	0.0383 U	0.0377 U	0.0396 U	0.0396 U	0.0351 U	0.0356 U	0.0395 U
Aroclor-1268	NS	NS	0.0386 U	0.0446 U	0.0417 U	0.0372 U	0.0351 U	0.0367 U	0.0418 U	0.0383 U	0.0377 U	0.0396 U	0.00532 J	0.0351 U	0.0356 U	0.0395 U
Total PCBs	NS	1	0.0386 U	0.0446 U	0.0417 U	0.0372 U	0.0351 U	0.0367 U	0.0418 U	0.0383 U	0.0377 U	0.0396 U	0.0293 J	0.0351 U	0.0188 J	0.00527 J
Total PCBs	NS	10	0.0386 U	0.0446 U	0.0417 U	0.0372 U	0.0351 U	0.0367 U	0.0418 U	0.0383 U	0.0377 U	0.0396 U	0.0293 J	0.0351 U	0.0188 J	0.00527 J
Total PCBs	3.2	1	0.0386 U	0.0446 U	0.0417 U	0.0372 U	0.0351 U	0.0367 U	0.0418 U	0.0383 U	0.0377 U	0.0396 U	0.0293 J	0.0351 U	0.0188 J	0.00527 J

Notes:

NYSDEC GW Protection SCO = New York State Department of Environmental Conservation Groundwater Protection Soil Cleanup Objectives, from Table 375-6.8 of 6 NYCRR Part 375.

NYSDEC Commercial SCO = New York State Department of Environmental Conservation Restricted Commercial Use Soil Cleanup Objectives, from Table 375-6.8 of 6 NYCRR Part 375.

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J = Result below the reporting limit (estimated value).

DUP = Duplicate sample was taken.

When the applicable state standard applies to mixed isomers and the laboratory reports individual isomers, the total standard is listed for each isomer.

Table 5
Soil Reuse Characterization Sampling Results
Summary of PCB Soil Analytical Data.
MJ Painting; Olean, New York.

Sample ID	NYSDEC GW Protection SCO	NYSDEC Commercial SCO	RX-436	RX-436	RX-437	RX-439	RX-439	RX-439	RX-440	RX-441	RX-442	RX-443	RX-443	RX-443	RX-444	RX-444
Sample Depth (ft bgs)			4-7	10-12	1-4	0-1	4-7	10-12	4-7	7-10	1-4	0-1	4-7	10-12	0-1	1-4
Sample Date			11/17/2021	11/17/2021	11/17/2021	11/17/2021	11/18/2021	11/18/2021	11/17/2021	11/16/2021	11/17/2021	11/16/2021	11/16/2021	11/16/2021	11/17/2021	11/17/2021
POLYCHLORINATED BIPHENYLS - 8082A (mg/kg)																
Aroclor-1016	NS	NS	0.0444 U	0.0361 U	0.0388 U	0.0416 U	0.0474 U	0.0406 U	0.0502 U	0.0368 U	0.039 U	0.045 U	0.0392 U	0.0387 U	0.0404 U	0.0421 U
Aroclor-1221	NS	NS	0.0444 U	0.0361 U	0.0388 U	0.0416 U	0.0474 U	0.0406 U	0.0502 U	0.0368 U	0.039 U	0.045 U	0.0392 U	0.0387 U	0.0404 U	0.0421 U
Aroclor-1232	NS	NS	0.0444 U	0.0361 U	0.0388 U	0.0416 U	0.0474 U	0.0406 U	0.0502 U	0.0368 U	0.039 U	0.045 U	0.0392 U	0.0387 U	0.0404 U	0.0421 U
Aroclor-1242	NS	NS	0.0444 U	0.0361 U	0.0388 U	0.0416 U	0.0474 U	0.0406 U	0.0502 U	0.0368 U	0.039 U	0.045 U	0.0392 U	0.0387 U	0.0404 U	0.0421 U
Aroclor-1248	NS	NS	0.0444 U	0.0361 U	0.0388 U	0.0416 U	0.0474 U	0.0406 U	0.0502 U	0.0368 U	0.039 U	0.045 U	0.0392 U	0.0387 U	0.0404 U	0.0421 U
Aroclor-1254	NS	NS	0.0444 U	0.0361 U	0.324	0.0416 U	0.0474 U	0.0406 U	0.00652 J	0.0368 U	0.039 U	0.0445 J	0.0392 U	0.0387 U	0.00889 J	0.0421 U
Aroclor-1260	NS	NS	0.0444 U	0.0361 U	0.0388 U	0.0416 U	0.0474 U	0.0406 U	0.0502 U	0.0368 U	0.039 U	0.045 U	0.0392 U	0.0387 U	0.00789 J	0.0421 U
Aroclor-1262	NS	NS	0.0444 U	0.0361 U	0.0388 U	0.0416 U	0.0474 U	0.0406 U	0.0502 U	0.0368 U	0.039 U	0.045 U	0.0392 U	0.0387 U	0.0404 U	0.0421 U
Aroclor-1268	NS	NS	0.0444 U	0.0361 U	0.0388 U	0.0416 U	0.0474 U	0.0406 U	0.0502 U	0.0368 U	0.039 U	0.015 J	0.0392 U	0.0387 U	0.0404 U	0.0421 U
Total PCBs	NS	1	0.0444 U	0.0361 U	0.324	0.0416 U	0.0474 U	0.0406 U	0.00652 J	0.0368 U	0.039 U	0.0595 J	0.0392 U	0.0387 U	0.0168 J	0.0421 U
Total PCBs	NS	10	0.0444 U	0.0361 U	0.324	0.0416 U	0.0474 U	0.0406 U	0.00652 J	0.0368 U	0.039 U	0.0595 J	0.0392 U	0.0387 U	0.0168 J	0.0421 U
Total PCBs	3.2	1	0.0444 U	0.0361 U	0.324	0.0416 U	0.0474 U	0.0406 U	0.00652 J	0.0368 U	0.039 U	0.0595 J	0.0392 U	0.0387 U	0.0168 J	0.0421 U

Notes:
NYSDEC GW Protection SCO = New York State Department of Environmental Conservation Groundwater Protection Soil Cleanup Objectives, from Table 375-6.8 of 6 NYCRR Part 375.
NYSDEC Commercial SCO = New York State Department of Environmental Conservation Restricted Commercial Use Soil Cleanup Objectives, from Table 375-6.8 of 6 NYCRR Part 375.
ft bgs = Feet below ground surface.
mg/kg = Milligrams per kilogram.
No samples exceed the NYSDEC GW Protection SCO.
No samples exceed the NYSDEC Commercial SCO.
— = Sample not analyzed.
NS = No standard currently established.
ND = Not Detected.
U = Not detected above laboratory detection limit.
U' = Laboratory reporting limit exceeds the applicable regulatory standard or criteria being utilized.
J = Result below the reporting limit (estimated value).
DUP = Duplicate sample was taken.
When the applicable state standard applies to mixed isomers and the laboratory reports individual isomers, the total standard is listed for each isomer.

Table 5
Soil Reuse Characterization Sampling Results
Summary of PCB Soil Analytical Data.
MJ Painting; Olean, New York.

Sample ID Sample Depth (ft bgs) Sample Date	NYSDEC GW Protection SCO	NYSDEC Commercial SCO	RX-444 7-10 11/17/2021	RX-446 1-4 11/16/2021	RX-446 7-10 11/16/2021	RX-447 4-7 11/16/2021	RX-447 DUP 4-7 11/16/2021	RX-447 7-10 11/16/2021	RX-447 10-12 11/16/2021	RX-448 1-4 11/16/2021	RX-448 7-10 11/18/2021
POLYCHLORINATED BIPHENYLS - 8082A (mg/kg)											
Aroclor-1016	NS	NS	0.0369 U	0.0375 U	0.038 U	0.0399 U	0.0391 U	0.0415 U	0.0391 U	0.0541 U	0.0502 U
Aroclor-1221	NS	NS	0.0369 U	0.0375 U	0.038 U	0.0399 U	0.0391 U	0.0415 U	0.0391 U	0.0541 U	0.0502 U
Aroclor-1232	NS	NS	0.0369 U	0.0375 U	0.038 U	0.0399 U	0.0391 U	0.0415 U	0.0391 U	0.0541 U	0.0502 U
Aroclor-1242	NS	NS	0.0369 U	0.0375 U	0.038 U	0.0399 U	0.0391 U	0.0415 U	0.0391 U	0.0541 U	0.0502 U
Aroclor-1248	NS	NS	0.0369 U	0.0375 U	0.038 U	0.0399 U	0.0391 U	0.0415 U	0.0391 U	0.0541 U	0.0502 U
Aroclor-1254	NS	NS	0.0369 U	0.0375 U	0.038 U	0.0399 U	0.0391 U	0.0415 U	0.0391 U	0.0541 U	0.0502 U
Aroclor-1260	NS	NS	0.0369 U	0.0375 U	0.038 U	0.0399 U	0.0391 U	0.0415 U	0.0391 U	0.0541 U	0.0502 U
Aroclor-1262	NS	NS	0.0369 U	0.0375 U	0.038 U	0.0399 U	0.0391 U	0.0415 U	0.0391 U	0.0541 U	0.0502 U
Aroclor-1268	NS	NS	0.0369 U	0.0375 U	0.038 U	0.0399 U	0.0391 U	0.0415 U	0.0391 U	0.0541 U	0.0502 U
Total PCBs	NS	1	0.0369 U	0.0375 U	0.038 U	0.0399 U	0.0391 U	0.0415 U	0.0391 U	0.0541 U	0.0502 U
Total PCBs	NS	10	0.0369 U	0.0375 U	0.038 U	0.0399 U	0.0391 U	0.0415 U	0.0391 U	0.0541 U	0.0502 U
Total PCBs	3.2	1	0.0369 U	0.0375 U	0.038 U	0.0399 U	0.0391 U	0.0415 U	0.0391 U	0.0541 U	0.0502 U

Notes:
NYSDEC GW Protection SCO = New York State Department of Environmental Conservation Groundwater Protection Soil Cleanup Objectives, from Table 375-6.8 of 6 NYCRR Part 375.
NYSDEC Commercial SCO = New York State Department of Environmental Conservation Restricted Commercial Use Soil Cleanup Objectives, from Table 375-6.8 of 6 NYCRR Part 375.
ft bgs = Feet below ground surface.
mg/kg = Milligrams per kilogram.
No samples exceed the NYSDEC GW Protection SCO.
No samples exceed the NYSDEC Commercial SCO.
— = Sample not analyzed.
NS = No standard currently established.
ND = Not Detected.
U = Not detected above laboratory detection limit.
U' = Laboratory reporting limit exceeds the applicable regulatory standard or criteria being utilized.
J = Result below the reporting limit (estimated value).
DUP = Duplicate sample was taken.
When the applicable state standard applies to mixed isomers and the laboratory reports individual isomers, the total standard is listed for each isomer.

Table 5
Soil Reuse Characterization Sampling Results
Summary of Cyanide, Herbicides, and Pesticides in Soil.
MJ Painting; Olean, New York.

Sample ID	NYSDEC GW Protection	NYSDEC Commercial SCO	RX-301	RX-302	RX-303	RX-304	RX-305	RX-306	RX-307	RX-308	RX-309	RX-310	RX-311	RX-312	RX-313	RX-314
Sample Depth (ft bgs)			0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1
Sample Date			11/15/2021	11/9/2021	11/15/2021	11/15/2021	11/15/2021	11/16/2021	11/17/2021	11/17/2021	11/17/2021	11/17/2021	11/18/2021	11/17/2021	1/5/2022	1/4/2022
CYANIDE - 9010C/9012B (mg/kg)																
Cyanide	40	27	—	—	—	—	—	—	—	—	—	—	—	—	—	—
HERBICIDES - 8151A (mg/kg)																
2,4,5-T	NS	NS	0.192 U	0.2 U	0.212 U	0.19 U	0.208 U	0.186 U	0.18 U	0.197 U	0.185 U	0.188 U	0.203 U	0.195 U	0.232 U	0.22 U
2,4,5-TP (Silvex)	3.8	500	0.192 U	0.2 U	0.212 U	0.19 U	0.208 U	0.186 U	0.18 U	0.197 U	0.185 U	0.188 U	0.203 U	0.195 U	0.232 U	0.22 U
2,4-D	NS	NS	0.192 U	0.2 U	0.212 U	0.19 U	0.208 U	0.186 U	0.18 U	0.197 U	0.185 U	0.188 U	0.203 U	0.195 U	0.232 U	0.22 U
PESTICIDES - 8081B (mg/kg)																
Aldrin	0.19	0.68	0.00187 U	0.019 U'	0.00198 U	0.0018 U	0.002 U	0.00174 U	0.0017 U	0.00188 U	0.00173 U	0.00184 U	0.00198 U	0.00184 U	0.0213 U'	0.0204 U'
alpha-BHC	0.02	3.4	0.000778 U	0.0079 U	0.000824 U	0.000752 U	0.000834 U	0.000727 U	0.00071 U	0.000783 U	0.000722 U	0.000766 U	0.000823 U	0.000769 U	0.00887 U	0.0085 U
beta-BHC	0.09	3	0.00187 U	0.019 U	0.00198 U	0.0018 U	0.002 U	0.00174 U	0.0017 U	0.00188 U	0.00173 U	0.00184 U	0.00198 U	0.00184 U	0.0213 U	0.0204 U
Chlordane	NS	NS	0.0156 U	0.158 U	0.0165 U	0.015 U	0.0167 U	0.0145 U	0.0142 U	0.0157 U	0.0144 U	0.0153 U	0.0165 U	0.0154 U	0.177 U	0.17 U
cis-Chlordane	2.9	24	0.00233 U	0.0237 U	0.00247 U	0.00225 U	0.0025 U	0.00218 U	0.00213 U	0.00235 U	0.00217 U	0.0023 U	0.00247 U	0.00231 U	0.0266 U	0.0255 U
delta-BHC	0.25	500	0.00187 U	0.019 U	0.00198 U	0.0018 U	0.002 U	0.00174 U	0.0017 U	0.00188 U	0.00173 U	0.00184 U	0.00198 U	0.00184 U	0.0213 U	0.0204 U
Dieldrin	0.1	1.4	0.00117 U	0.0118 U'	0.00124 U	0.00113 U	0.00125 U	0.00109 U	0.00106 U	0.00117 U	0.00108 U	0.00115 U	0.00124 U	0.00115 U	0.0133 U'	0.0127 U'
Endosulfan I	102	200	0.00187 U	0.019 U	0.00198 U	0.0018 U	0.002 U	0.00174 U	0.0017 U	0.00188 U	0.00173 U	0.00184 U	0.00198 U	0.00184 U	0.0213 U	0.0204 U
Endosulfan II	102	200	0.00187 U	0.019 U	0.00198 U	0.0018 U	0.002 U	0.00174 U	0.0017 U	0.00188 U	0.00173 U	0.00184 U	0.00198 U	0.00184 U	0.0213 U	0.0204 U
Endosulfan sulfate	1000	200	0.000778 U	0.0079 U	0.000824 U	0.000752 U	0.000834 U	0.000727 U	0.00071 U	0.000783 U	0.000722 U	0.000766 U	0.000823 U	0.000769 U	0.00887 U	0.0085 U
Endrin	0.06	89	0.000778 U	0.0079 U	0.000824 U	0.000752 U	0.000834 U	0.000727 U	0.00071 U	0.000783 U	0.000722 U	0.000766 U	0.000823 U	0.000769 U	0.00887 U	0.0085 U
Endrin Aldehyde	NS	NS	0.00233 U	0.0237 U	0.00247 U	0.00225 U	0.0025 U	0.00218 U	0.00213 U	0.00235 U	0.00217 U	0.0023 U	0.00247 U	0.00231 U	0.0266 U	0.0255 U
Endrin Ketone	NS	NS	0.00187 U	0.019 U	0.00198 U	0.0018 U	0.002 U	0.00174 U	0.0017 U	0.00188 U	0.00173 U	0.00184 U	0.00198 U	0.00184 U	0.0213 U	0.0204 U
Heptachlor	0.38	15	0.000933 U	0.00948 U	0.000989 U	0.000902 U	0.001 U	0.000872 U	0.000852 U	0.00094 U	0.000866 U	0.000919 U	0.000988 U	0.000923 U	0.0106 U	0.0102 U
Heptachlor Epoxide	NS	NS	0.0035 U	0.0356 U	0.00371 U	0.00338 U	0.00375 U	0.00327 U	0.0032 U	0.00352 U	0.00325 U	0.00345 U	0.0037 U	0.00346 U	0.0399 U	0.0382 U
Lindane	0.1	9.2	0.000778 U	0.0079 U	0.000824 U	0.000752 U	0.000834 U	0.000727 U	0.00071 U	0.000783 U	0.000722 U	0.000766 U	0.000823 U	0.000769 U	0.00887 U	0.0085 U
Methoxychlor	NS	NS	0.0035 U	0.0356 U	0.00371 U	0.00338 U	0.00375 U	0.00327 U	0.0032 U	0.00352 U	0.00325 U	0.00345 U	0.0037 U	0.00346 U	0.0399 U	0.0382 U
p,p'-DDD	14	92	0.00187 U	0.019 U'	0.000924 J	0.0018 U	0.002 U	0.00174 U	0.0017 U	0.00188 U	0.00173 U	0.00184 U	0.00198 U	0.00184 U	0.0213 U'	0.0102 J
p,p'-DDE	17	62	0.00187 U	0.019 U'	0.0033	0.0018 U	0.002 U	0.00174 U	0.0017 U	0.00188 U	0.00173 U	0.00184 U	0.00198 U	0.00184 U	0.0213 U'	0.00629 J
p,p'-DDT	136	47	0.0035 U'	0.0356 U'	0.00286 J	0.00338 U'	0.00375 U'	0.00327 U	0.0032 U	0.00352 U'	0.00325 U	0.00345 U'	0.0037 U'	0.00346 U'	0.0399 U'	0.0267 J
Toxaphene	NS	NS	0.035 U	0.356 U	0.0371 U	0.0338 U	0.0375 U	0.0327 U	0.032 U	0.0352 U	0.0325 U	0.0345 U	0.037 U	0.0346 U	0.399 U	0.382 U
trans-Chlordane	NS	NS	0.00233 U	0.0237 U	0.00247 U	0.00225 U	0.0025 U	0.00218 U	0.00213 U	0.00235 U	0.00217 U	0.0023 U	0.00247 U	0.00231 U	0.0266 U	0.0255 U

Notes:
NYSDEC GW Protection SCO = New York State Department of Environmental Conservation Groundwater Protection Soil Cleanup Objectives, from Table 375-6.8 of 6 NYCRR Part 375.
NYSDEC Commercial SCO = New York State Department of Environmental Conservation Restricted Commercial Use Soil Cleanup Objectives, from Table 375-6.8 of 6 NYCRR Part 375.
ft bgs = Feet below ground surface.
mg/kg = Milligrams per kilogram.
No samples exceed the NYSDEC GW Protection SCO.
No samples exceed the NYSDEC Commercial SCO.
— = Sample not analyzed.
NS = No standard currently established.
ND = Not Detected.
U = Not detected above laboratory detection limit.
U' = Laboratory reporting limit exceeds the applicable regulatory standard or criteria being utilized.
I = The lower value for the two columns has been reported due to obvious interference
P = The RPD between the results for the two columns exceeds the method-specified criteria.
J = Result below the reporting limit (estimated value).
DUP = Duplicate sample was taken.
When the applicable state standard applies to mixed isomers and the laboratory reports individual isomers, the total standard is listed for each isomer.

Table 5
Soil Reuse Characterization Sampling Results
Summary of Cyanide, Herbicides, and Pesticides in Soil.
MJ Painting; Olean, New York.

Sample ID	NYSDEC GW Protection	NYSDEC Commercial SCO	RX-315	RX-316	RX-317	RX-318	RX-319	RX-320	RX-321	RX-321 DUP	RX-401	RX-401	RX-401	RX-402	RX-403	RX-403	RX-403	RX-404
Sample Depth (ft bgs)			0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	1-4	7-10	7-10	0-1	4-7	10-12	7-10
Sample Date			1/7/2022	1/7/2022	1/7/2022	1/4/2022	1/7/2022	1/5/2022	1/7/2022	1/7/2022	11/12/2021	11/12/2021	11/12/2021	11/12/2021	11/12/2021	11/12/2021	11/12/2021	11/12/2021
CYANIDE - 9010C/9012B (mg/kg)																		
Cyanide	40	27	—	—	—	—	—	—	—	—	10 U	—	10 U	—	10 U	—	—	10 U
HERBICIDES - 8151A (mg/kg)																		
2,4,5-T	NS	NS	0.228 U	0.257 U	0.225 U	0.221 U	0.216 U	0.22 U	0.214 U	0.211 U	0.193 U	0.968 U	0.213 U	0.214 U	0.207 U	0.209 U	0.192 U	0.198 U
2,4,5-TP (Silvex)	3.8	500	0.228 U	0.257 U	0.225 U	0.221 U	0.216 U	0.22 U	0.214 U	0.211 U	0.193 U	0.968 U	0.213 U	0.214 U	0.207 U	0.209 U	0.192 U	0.198 U
2,4-D	NS	NS	0.228 U	0.257 U	0.225 U	0.221 U	0.216 U	0.22 U	0.214 U	0.211 U	0.193 U	0.968 U	0.213 U	0.214 U	0.207 U	0.209 U	0.192 U	0.198 U
PESTICIDES - 8081B (mg/kg)																		
Aldrin	0.19	0.68	0.0111 U'	0.024 U'	0.0104 U'	0.0209 U'	0.0102 U'	0.0214 U'	0.0104 U'	0.00972 U'	0.0176 U'	0.0184 U'	0.00201 U	0.00201 U	0.00192 U	0.0195 U'	0.00186 U	0.00186 U
alpha-BHC	0.02	3.4	0.00461 U	0.00999 U	0.00436 U	0.00871 U	0.00425 U	0.00894 U	0.00432 U	0.00405 U	0.00735 U	0.00769 U	0.000837 U	0.000838 U	0.0008 U	0.00812 U	0.000777 U	0.000774 U
beta-BHC	0.09	3	0.0111 U	0.024 U	0.0104 U	0.0209 U	0.0102 U	0.0214 U	0.0104 U	0.00972 U	0.0176 U	0.0184 U	0.00201 U	0.00201 U	0.00192 U	0.0195 U	0.00186 U	0.00186 U
Chlordane	NS	NS	0.0922 U	0.2 U	0.0872 U	0.174 U	0.085 U	0.179 U	0.0863 U	0.081 U	0.147 U	0.154 U	0.0167 U	0.0168 U	0.016 U	0.162 U	0.0155 U	0.0155 U
cis-Chlordane	2.9	24	0.0138 U	0.03 U	0.0131 U	0.0261 U	0.0128 U	0.0268 U	0.013 U	0.0122 U	0.022 U	0.0231 U	0.00251 U	0.00251 U	0.0024 U	0.0244 U	0.00233 U	0.00232 U
delta-BHC	0.25	500	0.0111 U	0.024 U	0.0104 U	0.0209 U	0.0102 U	0.0214 U	0.0104 U	0.00972 U	0.0176 U	0.0184 U	0.00201 U	0.00201 U	0.00192 U	0.0195 U	0.00186 U	0.00186 U
Dieldrin	0.1	1.4	0.00692 U'	0.015 U'	0.00654 U'	0.0131 U'	0.00638 U'	0.0134 U'	0.00648 U'	0.00608 U'	0.011 U'	0.0115 U'	0.00126 U	0.00126 U	0.0012 U	0.0122 U'	0.00116 U	0.00116 U
Endosulfan I	102	200	0.0111 U	0.024 U	0.0104 U	0.0209 U	0.0102 U	0.0214 U	0.0104 U	0.00972 U	0.0176 U	0.0184 U	0.00201 U	0.00201 U	0.00192 U	0.0195 U	0.00186 U	0.00186 U
Endosulfan II	102	200	0.0111 U	0.024 U	0.0104 U	0.0209 U	0.0102 U	0.0214 U	0.0104 U	0.00972 U	0.0176 U	0.0184 U	0.00201 U	0.00201 U	0.00192 U	0.0195 U	0.00186 U	0.00186 U
Endosulfan sulfate	1000	200	0.00461 U	0.00999 U	0.00436 U	0.00871 U	0.00425 U	0.00894 U	0.00432 U	0.00405 U	0.00735 U	0.00769 U	0.000837 U	0.000838 U	0.0008 U	0.00812 U	0.000777 U	0.000774 U
Endrin	0.06	89	0.00461 U	0.00999 U	0.00436 U	0.00871 U	0.00425 U	0.00894 U	0.00432 U	0.00405 U	0.00735 U	0.00769 U	0.000837 U	0.000838 U	0.0008 U	0.00812 U	0.000777 U	0.000774 U
Endrin Aldehyde	NS	NS	0.0138 U	0.03 U	0.0131 U	0.0261 U	0.0128 U	0.0268 U	0.013 U	0.0122 U	0.022 U	0.0231 U	0.00251 U	0.00251 U	0.0024 U	0.0244 U	0.00233 U	0.00232 U
Endrin Ketone	NS	NS	0.0111 U	0.024 U	0.0104 U	0.0209 U	0.0102 U	0.0214 U	0.0104 U	0.00972 U	0.0176 U	0.0184 U	0.00201 U	0.00201 U	0.00192 U	0.0195 U	0.00186 U	0.00186 U
Heptachlor	0.38	15	0.00553 U	0.012 U	0.00523 U	0.0104 U	0.0051 U	0.0107 U	0.00518 U	0.00486 U	0.00882 U	0.00923 U	0.001 U	0.001 U	0.00096 U	0.00975 U	0.000932 U	0.000928 U
Heptachlor Epoxide	NS	NS	0.0207 U	0.045 U	0.0196 U	0.0392 U	0.0191 U	0.0402 U	0.0194 U	0.0182 U	0.0331 U	0.0346 U	0.00376 U	0.00377 U	0.0036 U	0.0366 U	0.0035 U	0.00348 U
Lindane	0.1	9.2	0.00461 U	0.00999 U	0.00436 U	0.00871 U	0.00425 U	0.00894 U	0.00432 U	0.00405 U	0.00735 U	0.00769 U	0.000837 U	0.000838 U	0.0008 U	0.00812 U	0.000777 U	0.000774 U
Methoxychlor	NS	NS	0.0207 U	0.045 U	0.0196 U	0.0392 U	0.0191 U	0.0402 U	0.0194 U	0.0182 U	0.0331 U	0.0346 U	0.00376 U	0.00377 U	0.0036 U	0.0366 U	0.0035 U	0.00348 U
p,p'-DDD	14	92	0.0111 U'	0.024 U'	0.0104 U'	0.0209 U'	0.0102 U'	0.0214 U'	0.0104 U'	0.00972 U'	0.0618	0.0184 U'	0.00201 U	0.00201 U	0.00192 U	0.0195 U'	0.00186 U	0.00186 U
p,p'-DDE	17	62	0.0111 U'	0.024 U'	0.0104 U'	0.0209 U'	0.0102 U'	0.0214 U'	0.0104 U'	0.00972 U'	0.0176 U'	0.0184 U'	0.00201 U	0.00201 U	0.00192 U	0.0195 U'	0.00186 U	0.00186 U
p,p'-DDT	136	47	0.0207 U'	0.045 U'	0.0196 U'	0.0392 U'	0.0191 U'	0.0402 U'	0.0194 U'	0.0182 U'	0.0331 U'	0.0346 U'	0.00376 U'	0.00377 U'	0.0036 U'	0.0366 U'	0.0035 U'	0.00348 U'
Toxaphene	NS	NS	0.207 U	0.45 U	0.196 U	0.392 U	0.191 U	0.402 U	0.194 U	0.182 U	0.331 U	0.346 U	0.0376 U	0.0377 U	0.036 U	0.366 U	0.035 U	0.0348 U
trans-Chlordane	NS	NS	0.0138 U	0.03 U	0.0131 U	0.0261 U	0.0128 U	0.0268 U	0.013 U	0.0122 U	0.022 U	0.0231 U	0.00251 U	0.00251 U	0.0024 U	0.0244 U	0.00233 U	0.00232 U

Notes:
NYSDEC GW Protection SCO = New York State Department of Environmental Conservation Groundwater Protection Soil Cleanup Objectives, from Table 375-6.8 of 6 NYCRR Part 375.
NYSDEC Commercial SCO = New York State Department of Environmental Conservation Restricted Commercial Use Soil Cleanup Objectives, from Table 375-6.8 of 6 NYCRR Part 375.
ft bgs = Feet below ground surface.
mg/kg = Milligrams per kilogram.
No samples exceed the NYSDEC GW Protection SCO.
No samples exceed the NYSDEC Commercial SCO.
— = Sample not analyzed.
NS = No standard currently established.
ND = Not Detected.
U = Not detected above laboratory detection limit.
U' = Laboratory reporting limit exceeds the applicable regulatory standard or criteria being utilized.
I = The lower value for the two columns has been reported due to obvious interference
P = The RPD between the results for the two columns exceeds the method-specified criteria.
J = Result below the reporting limit (estimated value).
DUP = Duplicate sample was taken.
When the applicable state standard applies to mixed isomers and the laboratory reports individual isomers, the total standard is listed for each isomer.

Table 5
Soil Reuse Characterization Sampling Results
Summary of Cyanide, Herbicides, and Pesticides in Soil.
MJ Painting; Olean, New York.

Sample ID	NYSDEC GW Protection	NYSDEC Commercial SCO	RX-405	RX-405	RX-405	RX-407	RX-407	RX-407	RX-409	RX-410	RX-411	RX-413	RX-414	RX-415	RX-416	RX-416	RX-417
Sample Depth (ft bgs)			0-1	1-4	7-10	0-1	4-7	10-12	1-4	10-12	7-10	10-12	4-7	7-10	1-4	10-12	0-1
Sample Date			11/15/2021	11/15/2021	11/15/2021	11/15/2021	11/15/2021	11/15/2021	11/12/2021	11/12/2021	11/12/2021	11/15/2021	11/15/2021	11/16/2021	11/16/2021	11/16/2021	11/11/2021
CYANIDE - 9010C/9012B (mg/kg)																	
Cyanide	40	27	10 U	—	—	10 U	—	—	—	10 U	10 U	—	—	—	—	10 U	10 U
HERBICIDES - 8151A (mg/kg)																	
2,4,5-T	NS	NS	0.221 U	0.19 U	0.198 U	0.186 U	0.209 U	0.189 U	0.2 U	0.191 U	0.201 U	0.194 U	0.201 U	0.217 U	0.203 U	0.186 U	0.185 U
2,4,5-TP (Silvex)	3.8	500	0.221 U	0.19 U	0.198 U	0.186 U	0.209 U	0.189 U	0.2 U	0.191 U	0.201 U	0.194 U	0.201 U	0.217 U	0.203 U	0.186 U	0.185 U
2,4-D	NS	NS	0.221 U	0.19 U	0.198 U	0.186 U	0.209 U	0.189 U	0.2 U	0.191 U	0.201 U	0.194 U	0.201 U	0.217 U	0.203 U	0.186 U	0.185 U
PESTICIDES - 8081B (mg/kg)																	
Aldrin	0.19	0.68	0.00207 U	0.0184 U'	0.00182 U	0.00182 U	0.002 U	0.00174 U	0.00921 U'	0.00903 U'	0.00187 U	0.00185 U	0.0198 U'	0.0021 U	0.00186 U	0.00178 U	0.00171 U
alpha-BHC	0.02	3.4	0.000861 U	0.00765 U	0.000756 U	0.000757 U	0.000835 U	0.000727 U	0.00384 U	0.00376 U	0.00078 U	0.000769 U	0.00824 U	0.000877 U	0.000775 U	0.000743 U	0.000714 U
beta-BHC	0.09	3	0.00207 U	0.0184 U	0.00182 U	0.00182 U	0.002 U	0.00174 U	0.00921 U	0.00903 U	0.00187 U	0.00185 U	0.0198 U	0.0021 U	0.00186 U	0.00178 U	0.00171 U
Chlordane	NS	NS	0.0172 U	0.153 U	0.0151 U	0.0151 U	0.0167 U	0.0145 U	0.0767 U	0.0752 U	0.0156 U	0.0154 U	0.165 U	0.0175 U	0.0155 U	0.0149 U	0.0143 U
cis-Chlordane	2.9	24	0.00258 U	0.0229 U	0.00227 U	0.00227 U	0.0025 U	0.00218 U	0.0115 U	0.0113 U	0.00234 U	0.00231 U	0.0247 U	0.00263 U	0.00232 U	0.00223 U	0.00214 U
delta-BHC	0.25	500	0.00207 U	0.0184 U	0.00182 U	0.00182 U	0.002 U	0.00174 U	0.00921 U	0.00903 U	0.00187 U	0.00185 U	0.0198 U	0.0021 U	0.00186 U	0.00178 U	0.00171 U
Dieldrin	0.1	1.4	0.00129 U	0.0115 U'	0.00113 U	0.00114 U	0.00125 U	0.00109 U	0.00576 U'	0.00564 U'	0.00117 U	0.00115 U	0.0124 U'	0.00132 U	0.00116 U	0.00111 U	0.00107 U
Endosulfan I	102	200	0.00207 U	0.0184 U	0.00182 U	0.00182 U	0.002 U	0.00174 U	0.00921 U	0.00903 U	0.00187 U	0.00185 U	0.0198 U	0.0021 U	0.00186 U	0.00178 U	0.00171 U
Endosulfan II	102	200	0.00207 U	0.0184 U	0.00182 U	0.00182 U	0.002 U	0.00174 U	0.00921 U	0.00903 U	0.00187 U	0.00185 U	0.0198 U	0.0021 U	0.00186 U	0.00178 U	0.00171 U
Endosulfan sulfate	1000	200	0.000861 U	0.00765 U	0.000756 U	0.000757 U	0.000835 U	0.000727 U	0.00384 U	0.00376 U	0.00078 U	0.000769 U	0.00824 U	0.000877 U	0.000775 U	0.000743 U	0.000714 U
Endrin	0.06	89	0.000861 U	0.00765 U	0.000756 U	0.000757 U	0.000835 U	0.000727 U	0.00384 U	0.00376 U	0.00078 U	0.000769 U	0.00824 U	0.000877 U	0.000775 U	0.000743 U	0.000714 U
Endrin Aldehyde	NS	NS	0.00258 U	0.0229 U	0.00227 U	0.00227 U	0.0025 U	0.00218 U	0.0115 U	0.0113 U	0.00234 U	0.00231 U	0.0247 U	0.00263 U	0.00232 U	0.00223 U	0.00214 U
Endrin Ketone	NS	NS	0.00207 U	0.0184 U	0.00182 U	0.00182 U	0.002 U	0.00174 U	0.00921 U	0.00903 U	0.00187 U	0.00185 U	0.0198 U	0.0021 U	0.00186 U	0.00178 U	0.00171 U
Heptachlor	0.38	15	0.00103 U	0.00918 U	0.000908 U	0.000908 U	0.001 U	0.000872 U	0.0046 U	0.00452 U	0.000936 U	0.000923 U	0.00989 U	0.00105 U	0.00093 U	0.000892 U	0.000857 U
Heptachlor Epoxide	NS	NS	0.00388 U	0.0344 U	0.0034 U	0.0034 U	0.00376 U	0.00327 U	0.0173 U	0.0169 U	0.00351 U	0.00346 U	0.0371 U	0.00395 U	0.00348 U	0.00334 U	0.00321 U
Lindane	0.1	9.2	0.000861 U	0.00765 U	0.000756 U	0.000757 U	0.000835 U	0.000727 U	0.00384 U	0.00376 U	0.00078 U	0.000769 U	0.00824 U	0.000877 U	0.000775 U	0.000743 U	0.000714 U
Methoxychlor	NS	NS	0.00388 U	0.0344 U	0.0034 U	0.0034 U	0.00376 U	0.00327 U	0.0173 U	0.0169 U	0.00351 U	0.00346 U	0.0371 U	0.00395 U	0.00348 U	0.00334 U	0.00321 U
p,p'-DDD	14	92	0.00207 U	0.0184 U'	0.00182 U	0.00182 U	0.002 U	0.00174 U	0.00921 U'	0.00903 U'	0.00187 U	0.00185 U	0.0198 U'	0.0021 U	0.00186 U	0.00178 U	0.00171 U
p,p'-DDE	17	62	0.00207 U	0.0184 U'	0.00182 U	0.00182 U	0.002 U	0.00174 U	0.00921 U'	0.00903 U'	0.00187 U	0.00185 U	0.0198 U'	0.0021 U	0.00186 U	0.00178 U	0.00171 U
p,p'-DDT	136	47	0.00388 U'	0.0344 U'	0.0034 U'	0.0034 U'	0.00376 U'	0.00327 U	0.0173 U'	0.0169 U'	0.00351 U'	0.00346 U'	0.0371 U'	0.00395 U'	0.00348 U'	0.00334 U'	0.00321 U
Toxaphene	NS	NS	0.0388 U	0.344 U	0.034 U	0.034 U	0.0376 U	0.0327 U	0.173 U	0.169 U	0.0351 U	0.0346 U	0.371 U	0.0395 U	0.0348 U	0.0334 U	0.0321 U
trans-Chlordane	NS	NS	0.00258 U	0.0229 U	0.00227 U	0.00227 U	0.0025 U	0.00218 U	0.0115 U	0.0113 U	0.00234 U	0.00231 U	0.0247 U	0.00263 U	0.00232 U	0.00223 U	0.00214 U

Notes:

NYSDEC GW Protection SCO = New York State Department of Environmental Conservation Groundwater Protection Soil Cleanup Objectives, from Table 375-6.8 of 6 NYCRR Part 375.
NYSDEC Commercial SCO = New York State Department of Environmental Conservation Restricted Commercial Use Soil Cleanup Objectives, from Table 375-6.8 of 6 NYCRR Part 375.
ft bgs = Feet below ground surface.
mg/kg = Milligrams per kilogram.
No samples exceed the NYSDEC GW Protection SCO.
No samples exceed the NYSDEC Commercial SCO.
— = Sample not analyzed.
NS = No standard currently established.
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U = Not detected above laboratory detection limit.
U' = Laboratory reporting limit exceeds the applicable regulatory standard or criteria being utilized.
I = The lower value for the two columns has been reported due to obvious interference
P = The RPD between the results for the two columns exceeds the method-specified criteria.
J = Result below the reporting limit (estimated value).
DUP = Duplicate sample was taken.
When the applicable state standard applies to mixed isomers and the laboratory reports individual isomers, the total standard is listed for each isomer.

Table 5
Soil Reuse Characterization Sampling Results
Summary of Cyanide, Herbicides, and Pesticides in Soil.
MJ Painting; Olean, New York.

Sample ID	NYSDEC	NYSDEC	RX-417	RX-417	RX-417	RX-418	RX-418	RX-419	RX-419	RX-419	RX-420	RX-420	RX-420	RX-420	RX-421	RX-422	RX-422
Sample Depth (ft bgs)	GW	Commercial	1-4	7-10	10-12	4-7	10-12	1-4	7-10	10-12	0-1	4-7	7-10	10-12	10-12	0-1	1-4
Sample Date	Protection	SCO	11/11/2021	11/11/2021	11/11/2021	11/11/2021	11/11/2021	11/15/2021	11/15/2021	11/15/2021	11/15/2021	11/15/2021	11/15/2021	11/15/2021	11/11/2021	11/10/2021	11/10/2021
CYANIDE - 9010C/9012B (mg/kg)																	
Cyanide	40	27	—	—	10 U	—	10 U	—	—	10 U	10 U	—	10 U	10 U	—	10 U	—
HERBICIDES - 8151A (mg/kg)																	
2,4,5-T	NS	NS	0.177 U	0.211 U	0.277 U	0.193 U	0.211 U	0.189 U	0.283 U	0.196 U	0.195 U	0.186 U	0.233 U	0.209 U	0.223 U	0.249 U	0.177 U
2,4,5-TP (Silvex)	3.8	500	0.177 U	0.211 U	0.277 U	0.193 U	0.211 U	0.189 U	0.283 U	0.196 U	0.195 U	0.186 U	0.233 U	0.209 U	0.223 U	0.249 U	0.177 U
2,4-D	NS	NS	0.177 U	0.211 U	0.277 U	0.193 U	0.211 U	0.189 U	0.283 U	0.196 U	0.195 U	0.186 U	0.233 U	0.209 U	0.223 U	0.249 U	0.177 U
PESTICIDES - 8081B (mg/kg)																	
Aldrin	0.19	0.68	0.00164 U	0.00202 U	0.00259 U	0.0178 U'	0.00978 U'	0.00174 U	0.027 U'	0.00179 U	0.00187 U	0.0175 U'	0.0215 U'	0.00206 U	0.00208 U	0.00232 U	0.00164 U
alpha-BHC	0.02	3.4	0.000685 U	0.000842 U	0.00108 U	0.0074 U	0.00408 U	0.000724 U	0.0112 U	0.000747 U	0.000779 U	0.00731 U	0.00895 U	0.000858 U	0.000869 U	0.000969 U	0.000683 U
beta-BHC	0.09	3	0.00164 U	0.00202 U	0.00259 U	0.0178 U	0.00978 U	0.00174 U	0.027 U	0.00179 U	0.00187 U	0.0175 U	0.0215 U	0.00206 U	0.00208 U	0.00232 U	0.00164 U
Chlordane	NS	NS	0.0137 U	0.0168 U	0.0216 U	0.148 U	0.0815 U	0.0145 U	0.225 U	0.0149 U	0.0156 U	0.146 U	0.179 U	0.0172 U	0.0174 U	0.0194 U	0.0137 U
cis-Chlordane	2.9	24	0.00205 U	0.00253 U	0.00324 U	0.0222 U	0.0122 U	0.00217 U	0.0337 U	0.00224 U	0.00234 U	0.0219 U	0.0268 U	0.00257 U	0.00261 U	0.00291 U	0.00205 U
delta-BHC	0.25	500	0.00164 U	0.00202 U	0.00259 U	0.0178 U	0.00978 U	0.00174 U	0.027 U	0.00179 U	0.00187 U	0.0175 U	0.0215 U	0.00206 U	0.00208 U	0.00232 U	0.00164 U
Dieldrin	0.1	1.4	0.00103 U	0.00126 U	0.00162 U	0.0111 U'	0.00611 U'	0.00108 U	0.0169 U'	0.00112 U	0.00117 U	0.011 U'	0.0134 U'	0.00129 U	0.0013 U	0.00145 U	0.00102 U
Endosulfan I	102	200	0.00164 U	0.00202 U	0.00259 U	0.0178 U	0.00978 U	0.00174 U	0.027 U	0.00179 U	0.00187 U	0.0175 U	0.0215 U	0.00206 U	0.00208 U	0.00232 U	0.00164 U
Endosulfan II	102	200	0.00164 U	0.00202 U	0.00259 U	0.0178 U	0.00978 U	0.00174 U	0.027 U	0.00179 U	0.00187 U	0.0175 U	0.0215 U	0.00206 U	0.00208 U	0.00232 U	0.00164 U
Endosulfan sulfate	1000	200	0.000685 U	0.000842 U	0.00108 U	0.0074 U	0.00408 U	0.000724 U	0.0112 U	0.000747 U	0.000779 U	0.00731 U	0.00895 U	0.000858 U	0.000869 U	0.000969 U	0.000683 U
Endrin	0.06	89	0.000685 U	0.000842 U	0.00108 U	0.0074 U	0.00408 U	0.000724 U	0.0112 U	0.000747 U	0.000779 U	0.00731 U	0.00895 U	0.000858 U	0.000869 U	0.000969 U	0.000683 U
Endrin Aldehyde	NS	NS	0.00205 U	0.00253 U	0.00324 U	0.0222 U	0.0122 U	0.00217 U	0.0337 U	0.00224 U	0.00234 U	0.0219 U	0.0268 U	0.00257 U	0.00261 U	0.00291 U	0.00205 U
Endrin Ketone	NS	NS	0.00164 U	0.00202 U	0.00259 U	0.0178 U	0.00978 U	0.00174 U	0.027 U	0.00179 U	0.00187 U	0.0175 U	0.0215 U	0.00206 U	0.00208 U	0.00232 U	0.00164 U
Heptachlor	0.38	15	0.000822 U	0.00101 U	0.0013 U	0.00889 U	0.00489 U	0.000869 U	0.0135 U	0.000897 U	0.000935 U	0.00877 U	0.0107 U	0.00103 U	0.00104 U	0.00116 U	0.00082 U
Heptachlor Epoxide	NS	NS	0.00308 U	0.00379 U	0.00486 U	0.0333 U	0.0183 U	0.00326 U	0.0506 U	0.00336 U	0.00351 U	0.0329 U	0.0402 U	0.00386 U	0.00391 U	0.00436 U	0.00307 U
Lindane	0.1	9.2	0.000685 U	0.000842 U	0.00108 U	0.0074 U	0.00408 U	0.000724 U	0.0112 U	0.000747 U	0.000779 U	0.00731 U	0.00895 U	0.000858 U	0.000869 U	0.000969 U	0.000683 U
Methoxychlor	NS	NS	0.00308 U	0.00379 U	0.00486 U	0.0333 U	0.0183 U	0.00326 U	0.0506 U	0.00336 U	0.00351 U	0.0329 U	0.0402 U	0.00386 U	0.00391 U	0.00436 U	0.00307 U
p,p'-DDD	14	92	0.00164 U	0.00202 U	0.00259 U	0.0178 U'	0.00978 U'	0.00174 U	0.027 U'	0.00179 U	0.00187 U	0.0175 U'	0.0215 U'	0.00206 U	0.00208 U	0.00232 U	0.00164 U
p,p'-DDE	17	62	0.00164 U	0.00202 U	0.00259 U	0.0178 U'	0.00978 U'	0.00174 U	0.027 U'	0.00179 U	0.00187 U	0.0175 U'	0.0215 U'	0.00206 U	0.00208 U	0.00232 U	0.00164 U
p,p'-DDT	136	47	0.00308 U	0.00379 U'	0.00486 U'	0.0333 U'	0.0183 U'	0.00326 U	0.0506 U'	0.00336 U'	0.00351 U'	0.0329 U'	0.0402 U'	0.00386 U'	0.00391 U'	0.00436 U'	0.00307 U
Toxaphene	NS	NS	0.0308 U	0.0379 U	0.0486 U	0.333 U	0.183 U	0.0326 U	0.506 U	0.0336 U	0.0351 U	0.329 U	0.402 U	0.0386 U	0.0391 U	0.0436 U	0.0307 U
trans-Chlordane	NS	NS	0.00205 U	0.00253 U	0.00324 U	0.0222 U	0.0122 U	0.00217 U	0.0337 U	0.00224 U	0.00234 U	0.0219 U	0.0268 U	0.00257 U	0.00261 U	0.00291 U	0.00205 U

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No samples exceed the NYSDEC Commercial SCO.
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I = The lower value for the two columns has been reported due to obvious interference
P = The RPD between the results for the two columns exceeds the method-specified criteria.
J = Result below the reporting limit (estimated value).
DUP = Duplicate sample was taken.
When the applicable state standard applies to mixed isomers and the laboratory reports individual isomers, the total standard is listed for each isomer.

Table 5
Soil Reuse Characterization Sampling Results
Summary of Cyanide, Herbicides, and Pesticides in Soil.
MJ Painting; Olean, New York.

Sample ID	**NYSDEC**	**NYSDEC**	**RX-422**	**RX-422 DUP**	**RX-422**	**RX-423**	**RX-423**	**RX-424**	**RX-424**	**RX-424**	**RX-425**	**RX-425**	**RX-425**	**RX-425**	**RX-426**	**RX-426**
Sample Depth (ft bgs)	**GW**	**Commercial**	**7-10**	**7-10**	**10-12**	**4-7**	**10-12**	**1-4**	**7-10**	**10-12**	**0-1**	**4-7**	**7-10**	**10-12**	**1-4**	**7-10**
Sample Date	**Protection**	**SCO**	**11/10/2021**	**11/10/2021**	**11/10/2021**	**11/11/2021**	**11/11/2021**	**11/11/2021**	**11/11/2021**	**11/11/2021**	**11/11/2021**	**11/11/2021**	**11/11/2021**	**11/11/2021**	**11/11/2021**	**11/11/2021**
CYANIDE - 9010C/9012B (mg/kg)																
Cyanide	40	27	—	—	10 U	—	10 U	—	—	10 U	10 U	—	10 U	10 U	—	10 U
HERBICIDES - 8151A (mg/kg)																
2,4,5-T	NS	NS	0.219 U	0.203 U	0.196 U	0.204 U	0.214 U	0.175 U	0.19 U	0.227 U	0.187 U	0.183 U	0.228 U	0.197 U	0.176 U	0.595 U
2,4,5-TP (Silvex)	3.8	500	0.219 U	0.203 U	0.196 U	0.204 U	0.214 U	0.175 U	0.19 U	0.227 U	0.187 U	0.183 U	0.228 U	0.197 U	0.176 U	0.595 U
2,4-D	NS	NS	0.219 U	0.203 U	0.196 U	0.204 U	0.214 U	0.175 U	0.19 U	0.227 U	0.187 U	0.183 U	0.228 U	0.197 U	0.176 U	0.595 U
PESTICIDES - 8081B (mg/kg)																
Aldrin	0.19	0.68	0.00207 U	0.0019 U	0.00182 U	0.00196 U	0.00201 U	0.0017 U	0.00175 U	0.0104 U'	0.00178 U	0.00176 U	0.00215 U	0.00188 U	0.00164 U	0.0192 U'
alpha-BHC	0.02	3.4	0.000864 U	0.000792 U	0.000757 U	0.000816 U	0.000838 U	0.000709 U	0.00073 U	0.00431 U	0.00074 U	0.000732 U	0.000897 U	0.000783 U	0.000685 U	0.00801 U
beta-BHC	0.09	3	0.00207 U	0.0019 U	0.00182 U	0.00196 U	0.00201 U	0.0017 U	0.00175 U	0.0104 U	0.00178 U	0.00176 U	0.00215 U	0.00188 U	0.00164 U	0.0192 U
Chlordane	NS	NS	0.0173 U	0.0158 U	0.0151 U	0.0163 U	0.0168 U	0.0142 U	0.0146 U	0.0863 U	0.0148 U	0.0146 U	0.0179 U	0.0157 U	0.0137 U	0.16 U
cis-Chlordane	2.9	24	0.00259 U	0.00238 U	0.00227 U	0.00245 U	0.00252 U	0.00213 U	0.00219 U	0.0129 U	0.00222 U	0.0022 U	0.00269 U	0.00235 U	0.00206 U	0.024 U
delta-BHC	0.25	500	0.00207 U	0.0019 U	0.00182 U	0.00196 U	0.00201 U	0.0017 U	0.00175 U	0.0104 U	0.00178 U	0.00176 U	0.00215 U	0.00188 U	0.00164 U	0.0192 U
Dieldrin	0.1	1.4	0.0013 U	0.00119 U	0.00114 U	0.00122 U	0.00126 U	0.00106 U	0.00109 U	0.00647 U'	0.00111 U	0.0011 U	0.00134 U	0.00117 U	0.00103 U	0.012 U'
Endosulfan I	102	200	0.00207 U	0.0019 U	0.00182 U	0.00196 U	0.00201 U	0.0017 U	0.00175 U	0.0104 U	0.00178 U	0.00176 U	0.00215 U	0.00188 U	0.00164 U	0.0192 U
Endosulfan II	102	200	0.00207 U	0.0019 U	0.00182 U	0.00196 U	0.00201 U	0.0017 U	0.00175 U	0.0104 U	0.00178 U	0.00176 U	0.00215 U	0.00188 U	0.00164 U	0.0192 U
Endosulfan sulfate	1000	200	0.000864 U	0.000792 U	0.000757 U	0.000816 U	0.000838 U	0.000709 U	0.00073 U	0.00431 U	0.00074 U	0.000732 U	0.000897 U	0.000783 U	0.000685 U	0.00801 U
Endrin	0.06	89	0.000864 U	0.000792 U	0.000757 U	0.000816 U	0.000838 U	0.000709 U	0.00073 U	0.00431 U	0.00074 U	0.000732 U	0.000897 U	0.000783 U	0.000685 U	0.00801 U
Endrin Aldehyde	NS	NS	0.00259 U	0.00238 U	0.00227 U	0.00245 U	0.00252 U	0.00213 U	0.00219 U	0.0129 U	0.00222 U	0.0022 U	0.00269 U	0.00235 U	0.00206 U	0.024 U
Endrin Ketone	NS	NS	0.00207 U	0.0019 U	0.00182 U	0.00196 U	0.00201 U	0.0017 U	0.00175 U	0.0104 U	0.00178 U	0.00176 U	0.00215 U	0.00188 U	0.00164 U	0.0192 U
Heptachlor	0.38	15	0.00104 U	0.00095 U	0.000908 U	0.000979 U	0.00101 U	0.000851 U	0.000876 U	0.00518 U	0.000888 U	0.000878 U	0.00108 U	0.00094 U	0.000822 U	0.00962 U
Heptachlor Epoxide	NS	NS	0.00389 U	0.00356 U	0.00341 U	0.0161	0.00377 U	0.00319 U	0.00328 U	0.0194 U	0.00333 U	0.00329 U	0.00404 U	0.00352 U	0.00308 U	0.0361 U
Lindane	0.1	9.2	0.000864 U	0.000792 U	0.000757 U	0.000816 U	0.000838 U	0.000709 U	0.00073 U	0.00431 U	0.00074 U	0.000732 U	0.000897 U	0.000783 U	0.000685 U	0.00801 U
Methoxychlor	NS	NS	0.00389 U	0.00356 U	0.00341 U	0.00367 U	0.00377 U	0.00319 U	0.00328 U	0.0194 U	0.00333 U	0.00329 U	0.00404 U	0.00352 U	0.00308 U	0.0361 U
p,p'-DDD	14	92	0.00207 U	0.0019 U	0.00182 U	0.00196 U	0.00201 U	0.0017 U	0.00175 U	0.0104 U'	0.00178 U	0.00176 U	0.00215 U	0.00188 U	0.00164 U	0.0192 U'
p,p'-DDE	17	62	0.00207 U	0.0019 U	0.00182 U	0.00196 U	0.00201 U	0.0017 U	0.00175 U	0.0104 U'	0.00178 U	0.00176 U	0.00215 U	0.00188 U	0.00164 U	0.0192 U'
p,p'-DDT	136	47	0.00389 U'	0.00356 U'	0.00341 U'	0.00367 U'	0.00377 U'	0.00319 U	0.00328 U	0.0194 U'	0.00333 U'	0.00329 U	0.00404 U'	0.00352 U'	0.00308 U	0.0361 U'
Toxaphene	NS	NS	0.0389 U	0.0356 U	0.0341 U	0.0367 U	0.0377 U	0.0319 U	0.0328 U	0.194 U	0.0333 U	0.0329 U	0.0404 U	0.0352 U	0.0308 U	0.361 U
trans-Chlordane	NS	NS	0.00259 U	0.00238 U	0.00227 U	0.00245 U	0.00252 U	0.00213 U	0.00219 U	0.0129 U	0.00222 U	0.0022 U	0.00269 U	0.00235 U	0.00206 U	0.024 U

Notes:
NYSDEC GW Protection SCO = New York State Department of Environmental Conservation Groundwater Protection Soil Cleanup Objectives, from Table 375-6.8 of 6 NYCRR Part 375.
NYSDEC Commercial SCO = New York State Department of Environmental Conservation Restricted Commercial Use Soil Cleanup Objectives, from Table 375-6.8 of 6 NYCRR Part 375.
ft bgs = Feet below ground surface.
mg/kg = Milligrams per kilogram.
No samples exceed the NYSDEC GW Protection SCO.
No samples exceed the NYSDEC Commercial SCO.
— = Sample not analyzed.
NS = No standard currently established.
ND = Not Detected.
U = Not detected above laboratory detection limit.
U' = Laboratory reporting limit exceeds the applicable regulatory standard or criteria being utilized.
I = The lower value for the two columns has been reported due to obvious interference
P = The RPD between the results for the two columns exceeds the method-specified criteria.
J = Result below the reporting limit (estimated value).
DUP = Duplicate sample was taken.
When the applicable state standard applies to mixed isomers and the laboratory reports individual isomers, the total standard is listed for each isomer.

Table 5
Soil Reuse Characterization Sampling Results
Summary of Cyanide, Herbicides, and Pesticides in Soil.
MJ Painting; Olean, New York.

Sample ID	NYSDEC GW Protection	NYSDEC Commercial SCO	RX-426	RX-427	RX-427	RX-428	RX-428	RX-428	RX-429	RX-429	RX-429 DUP	RX-429	RX-430	RX-430	RX-430	RX-431	RX-431
Sample Depth (ft bgs)			10-12	7-10	10-12	1-4	8-10	10-12	0-1	4-7	4-7	10-12	1-4	7-10	10-12	3-7	7-10
Sample Date			11/11/2021	11/16/2021	11/16/2021	11/10/2021	11/10/2021	11/10/2021	11/10/2021	11/10/2021	11/10/2021	11/10/2021	11/10/2021	11/10/2021	11/10/2021	11/10/2021	11/16/2021
CYANIDE - 9010C/9012B (mg/kg)																	
Cyanide	40	27	10 U	10 U	10 U	—	—	10 U	10 U	—	—	10 U	—	10 U	10 U	—	10 U
HERBICIDES - 8151A (mg/kg)																	
2,4,5-T	NS	NS	0.612 U	0.209 U	0.202 U	0.221 U	0.198 U	0.202 U	0.188 U	0.173 U	0.188 U	0.189 U	0.198 U	0.203 U	0.2 U	0.224 U	0.21 U
2,4,5-TP (Silvex)	3.8	500	0.612 U	0.209 U	0.202 U	0.221 U	0.198 U	0.202 U	0.188 U	0.173 U	0.188 U	0.189 U	0.198 U	0.203 U	0.2 U	0.224 U	0.21 U
2,4-D	NS	NS	0.612 U	0.209 U	0.202 U	0.221 U	0.198 U	0.202 U	0.188 U	0.173 U	0.188 U	0.189 U	0.198 U	0.203 U	0.2 U	0.224 U	0.21 U
PESTICIDES - 8081B (mg/kg)																	
Aldrin	0.19	0.68	0.02 U'	0.0192 U'	0.00194 U	0.00212 U	0.00183 U	0.00188 U	0.00175 U	0.00162 U	0.00175 U	0.00176 U	0.00185 U	0.00189 U	0.00183 U	0.0214 U'	0.0203 U'
alpha-BHC	0.02	3.4	0.00835 U	0.008 U	0.000808 U	0.00088 U	0.00076 U	0.00078 U	0.00073 U	0.00068 U	0.00073 U	0.00073 U	0.00077 U	0.00079 U	0.00076 U	0.0089 U	0.00846 U
beta-BHC	0.09	3	0.02 U	0.0192 U	0.00194 U	0.00212 U	0.00183 U	0.00188 U	0.00175 U	0.00162 U	0.00175 U	0.00176 U	0.00185 U	0.00189 U	0.00183 U	0.0214 U	0.0203 U
Chlordane	NS	NS	0.167 U	0.16 U	0.0162 U	0.0176 U	0.0152 U	0.0157 U	0.0146 U	0.0135 U	0.0146 U	0.0146 U	0.0154 U	0.0157 U	0.0152 U	0.178 U	0.169 U
cis-Chlordane	2.9	24	0.025 U	0.024 U	0.00242 U	0.00264 U	0.00228 U	0.00235 U	0.00219 U	0.00203 U	0.00219 U	0.0022 U	0.00231 U	0.00236 U	0.00228 U	0.0267 U	0.0254 U
delta-BHC	0.25	500	0.02 U	0.0192 U	0.00194 U	0.00212 U	0.00183 U	0.00188 U	0.00175 U	0.00162 U	0.00175 U	0.00176 U	0.00185 U	0.00189 U	0.00183 U	0.0214 U	0.0203 U
Dieldrin	0.1	1.4	0.0125 U'	0.012 U'	0.00121 U	0.00132 U	0.00114 U	0.00118 U	0.00109 U	0.00101 U	0.0011 U	0.0011 U	0.00116 U	0.00118 U	0.00114 U	0.0134 U'	0.0127 U'
Endosulfan I	102	200	0.02 U	0.0192 U	0.00194 U	0.00212 U	0.00183 U	0.00188 U	0.00175 U	0.00162 U	0.00175 U	0.00176 U	0.00185 U	0.00189 U	0.00183 U	0.0214 U	0.0203 U
Endosulfan II	102	200	0.02 U	0.0192 U	0.00194 U	0.00212 U	0.00183 U	0.00188 U	0.00175 U	0.00162 U	0.00175 U	0.00176 U	0.00185 U	0.00189 U	0.00183 U	0.0214 U	0.0203 U
Endosulfan sulfate	1000	200	0.00835 U	0.008 U	0.000808 U	0.00088 U	0.00076 U	0.00078 U	0.00073 U	0.00068 U	0.00073 U	0.00073 U	0.00077 U	0.00079 U	0.00076 U	0.0089 U	0.00846 U
Endrin	0.06	89	0.00835 U	0.008 U	0.000808 U	0.00088 U	0.00076 U	0.00078 U	0.00073 U	0.00068 U	0.00073 U	0.00073 U	0.00077 U	0.00079 U	0.00076 U	0.0089 U	0.00846 U
Endrin Aldehyde	NS	NS	0.025 U	0.024 U	0.00242 U	0.00264 U	0.00228 U	0.00235 U	0.00219 U	0.00203 U	0.00219 U	0.0022 U	0.00231 U	0.00236 U	0.00228 U	0.0267 U	0.0254 U
Endrin Ketone	NS	NS	0.02 U	0.0192 U	0.00194 U	0.00212 U	0.00183 U	0.00188 U	0.00175 U	0.00162 U	0.00175 U	0.00176 U	0.00185 U	0.00189 U	0.00183 U	0.0214 U	0.0203 U
Heptachlor	0.38	15	0.01 U	0.0096 U	0.00097 U	0.00106 U	0.00091 U	0.00094 U	0.00088 U	0.00081 U	0.00088 U	0.00088 U	0.00093 U	0.00094 U	0.00091 U	0.0107 U	0.0101 U
Heptachlor Epoxide	NS	NS	0.0376 U	0.036 U	0.00364 U	0.00397 U	0.00343 U	0.00353 U	0.00328 U	0.00304 U	0.00329 U	0.00329 U	0.00347 U	0.00354 U	0.00343 U	0.0401 U	0.0381 U
Lindane	0.1	9.2	0.00835 U	0.008 U	0.000808 U	0.00088 U	0.00076 U	0.00078 U	0.00073 U	0.00068 U	0.00073 U	0.00073 U	0.00077 U	0.00079 U	0.00076 U	0.0089 U	0.00846 U
Methoxychlor	NS	NS	0.0376 U	0.036 U	0.00364 U	0.00397 U	0.00343 U	0.00353 U	0.00328 U	0.00304 U	0.00329 U	0.00329 U	0.00347 U	0.00354 U	0.00343 U	0.0401 U	0.0381 U
p,p'-DDD	14	92	0.02 U'	0.0192 U'	0.00194 U	0.00212 U	0.00183 U	0.00188 U	0.00175 U	0.00162 U	0.00175 U	0.00176 U	0.00185 U	0.00189 U	0.00183 U	0.0214 U'	0.0203 U'
p,p'-DDE	17	62	0.02 U'	0.0192 U'	0.00194 U	0.00212 U	0.00183 U	0.00188 U	0.00175 U	0.00162 U	0.00175 U	0.00176 U	0.00185 U	0.00189 U	0.00183 U	0.0214 U'	0.0203 U'
p,p'-DDT	136	47	0.0376 U'	0.036 U'	0.00364 U'	0.00397 U'	0.00343 U'	0.00353 U'	0.00328 U	0.00304 U	0.00329 U	0.00329 U	0.00347 U'	0.00354 U'	0.00343 U'	0.0401 U'	0.0381 U'
Toxaphene	NS	NS	0.376 U	0.36 U	0.0364 U	0.0397 U	0.0343 U	0.0353 U	0.0328 U	0.0304 U	0.0329 U	0.0329 U	0.0347 U	0.0354 U	0.0343 U	0.401 U	0.381 U
trans-Chlordane	NS	NS	0.025 U	0.024 U	0.00242 U	0.00264 U	0.00228 U	0.00235 U	0.00219 U	0.00203 U	0.00219 U	0.0022 U	0.00231 U	0.00236 U	0.00228 U	0.0267 U	0.0254 U

Notes:

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ft bgs = Feet below ground surface.
mg/kg = Milligrams per kilogram.
No samples exceed the NYSDEC GW Protection SCO.
No samples exceed the NYSDEC Commercial SCO.
— = Sample not analyzed.
NS = No standard currently established.
ND = Not Detected.
U = Not detected above laboratory detection limit.
U' = Laboratory reporting limit exceeds the applicable regulatory standard or criteria being utilized.
I = The lower value for the two columns has been reported due to obvious interference
P = The RPD between the results for the two columns exceeds the method-specified criteria.
J = Result below the reporting limit (estimated value).
DUP = Duplicate sample was taken.
When the applicable state standard applies to mixed isomers and the laboratory reports individual isomers, the total standard is listed for each isomer.

Table 5
Soil Reuse Characterization Sampling Results
Summary of Cyanide, Herbicides, and Pesticides in Soil.
MJ Painting; Olean, New York.

Sample ID	NYSDEC GW Protection	NYSDEC Commercial SCO	RX-431	RX-432	RX-432	RX-432	RX-432	RX-433	RX-434	RX-434	RX-434	RX-435	RX-436	RX-436	RX-436	RX-437	RX-439
Sample Depth (ft bgs)			10-12	0-1	1-4	7-10	10-12	7-10	0-1	4-7	10-12	7-10	0-1	4-7	10-12	1-4	0-1
Sample Date			11/16/2021	11/10/2021	11/16/2021	11/16/2021	11/16/2021	11/17/2021	11/17/2021	11/17/2021	11/17/2021	11/17/2021	11/17/2021	11/17/2021	11/17/2021	11/17/2021	11/17/2021
CYANIDE - 9010C/9012B (mg/kg)																	
Cyanide	40	27	10 U	10 U	—	10 U	10 U	10 U	10 U	—	—	—	10 U	—	—	—	10 U
HERBICIDES - 8151A (mg/kg)																	
2,4,5-T	NS	NS	0.191 U	0.18 U	0.194 U	0.209 U	0.194 U	0.19 U	0.197 U	0.2 U	0.177 U	0.177 U	0.204 U	0.226 U	0.186 U	0.398 U	0.206 U
2,4,5-TP (Silvex)	3.8	500	0.191 U	0.18 U	0.194 U	0.209 U	0.194 U	0.19 U	0.197 U	0.2 U	0.177 U	0.177 U	0.204 U	0.226 U	0.186 U	0.398 U	0.206 U
2,4-D	NS	NS	0.191 U	0.18 U	0.194 U	0.209 U	0.194 U	0.19 U	0.197 U	0.2 U	0.177 U	0.177 U	0.204 U	0.226 U	0.186 U	0.398 U	0.206 U
PESTICIDES - 8081B (mg/kg)																	
Aldrin	0.19	0.68	0.018 U'	0.00166 U	0.00183 U	0.00196 U	0.00182 U	0.00174 U	0.00181 U	0.00187 U	0.0017 U	0.00163 U	0.0019 U	0.00212 U	0.00176 U	0.00189 U	0.00195 U
alpha-BHC	0.02	3.4	0.00749 U	0.00069 U	0.000764 U	0.000816 U	0.00076 U	0.000724 U	0.000754 U	0.000778 U	0.000707 U	0.000681 U	0.000792 U	0.000883 U	0.000732 U	0.000789 U	0.000812 U
beta-BHC	0.09	3	0.018 U	0.00166 U	0.00183 U	0.00196 U	0.00182 U	0.00174 U	0.00181 U	0.00187 U	0.0017 U	0.00163 U	0.0019 U	0.00212 U	0.00176 U	0.00189 U	0.00195 U
Chlordane	NS	NS	0.15 U	0.0138 U	0.0153 U	0.0163 U	0.0152 U	0.0145 U	0.0151 U	0.0156 U	0.0141 U	0.0136 U	0.0158 U	0.0177 U	0.0146 U	0.0158 U	0.0162 U
cis-Chlordane	2.9	24	0.0225 U	0.00208 U	0.00229 U	0.00245 U	0.00228 U	0.00217 U	0.00226 U	0.00233 U	0.00212 U	0.00204 U	0.00238 U	0.00265 U	0.0022 U	0.00237 U	0.00244 U
delta-BHC	0.25	500	0.018 U	0.00166 U	0.00183 U	0.00196 U	0.00182 U	0.00174 U	0.00181 U	0.00187 U	0.0017 U	0.00163 U	0.0019 U	0.00212 U	0.00176 U	0.00189 U	0.00195 U
Dieldrin	0.1	1.4	0.0112 U'	0.00104 U	0.00114 U	0.00122 U	0.00114 U	0.00109 U	0.00113 U	0.00117 U	0.00106 U	0.00102 U	0.00119 U	0.00132 U	0.0011 U	0.00118 U	0.00122 U
Endosulfan I	102	200	0.018 U	0.00166 U	0.00183 U	0.00196 U	0.00182 U	0.00174 U	0.00181 U	0.00187 U	0.0017 U	0.00163 U	0.0019 U	0.00212 U	0.00176 U	0.00189 U	0.00195 U
Endosulfan II	102	200	0.018 U	0.00166 U	0.00183 U	0.00196 U	0.00182 U	0.00174 U	0.00181 U	0.00187 U	0.0017 U	0.00163 U	0.0019 U	0.00212 U	0.00176 U	0.00189 U	0.00195 U
Endosulfan sulfate	1000	200	0.00749 U	0.00069 U	0.000764 U	0.000816 U	0.00076 U	0.000724 U	0.000754 U	0.000778 U	0.000707 U	0.000681 U	0.000792 U	0.000883 U	0.000732 U	0.000789 U	0.000812 U
Endrin	0.06	89	0.00749 U	0.00069 U	0.000764 U	0.000816 U	0.00076 U	0.000724 U	0.000754 U	0.000778 U	0.000707 U	0.000681 U	0.000792 U	0.000883 U	0.000732 U	0.000789 U	0.000812 U
Endrin Aldehyde	NS	NS	0.0225 U	0.00208 U	0.00229 U	0.00245 U	0.00228 U	0.00217 U	0.00226 U	0.00233 U	0.00212 U	0.00204 U	0.00238 U	0.00265 U	0.0022 U	0.00237 U	0.00244 U
Endrin Ketone	NS	NS	0.018 U	0.00166 U	0.00183 U	0.00196 U	0.00182 U	0.00174 U	0.00181 U	0.00187 U	0.0017 U	0.00163 U	0.0019 U	0.00212 U	0.00176 U	0.00189 U	0.00195 U
Heptachlor	0.38	15	0.00898 U	0.00083 U	0.000917 U	0.000979 U	0.000912 U	0.000869 U	0.000905 U	0.000934 U	0.000849 U	0.000817 U	0.00095 U	0.00106 U	0.000879 U	0.000946 U	0.000974 U
Heptachlor Epoxide	NS	NS	0.0337 U	0.00312 U	0.00344 U	0.00367 U	0.00342 U	0.00326 U	0.0034 U	0.0035 U	0.00318 U	0.00306 U	0.00356 U	0.00398 U	0.00329 U	0.00355 U	0.00365 U
Lindane	0.1	9.2	0.00749 U	0.00069 U	0.000764 U	0.000816 U	0.00076 U	0.000724 U	0.000754 U	0.000778 U	0.000707 U	0.000681 U	0.000792 U	0.000883 U	0.000732 U	0.000789 U	0.000812 U
Methoxychlor	NS	NS	0.0337 U	0.00312 U	0.00344 U	0.00367 U	0.00342 U	0.00326 U	0.0034 U	0.0035 U	0.00318 U	0.00306 U	0.00356 U	0.00398 U	0.00329 U	0.00355 U	0.00365 U
p,p'-DDD	14	92	0.018 U'	0.00166 U	0.00183 U	0.00196 U	0.00182 U	0.00174 U	0.0012 J	0.00227 P	0.0017 U	0.00163 U	0.0019 U	0.00212 U	0.00176 U	0.00189 U	0.00195 U
p,p'-DDE	17	62	0.018 U'	0.00166 U	0.00183 U	0.00196 U	0.00182 U	0.00174 U	0.00181 U	0.00187 U	0.0017 U	0.00163 U	0.0019 U	0.00212 U	0.00176 U	0.00189 U	0.00195 U
p,p'-DDT	136	47	0.0337 U'	0.00312 U	0.00344 U'	0.00367 U'	0.00342 U'	0.00468 P	0.00219 J	0.00462 IP	0.00318 U	0.00306 U	0.00356 U'	0.00398 U'	0.00166 JP	0.00355 U'	0.00365 U'
Toxaphene	NS	NS	0.337 U	0.0312 U	0.0344 U	0.0367 U	0.0342 U	0.0326 U	0.034 U	0.035 U	0.0318 U	0.0306 U	0.0356 U	0.0398 U	0.0329 U	0.0355 U	0.0365 U
trans-Chlordane	NS	NS	0.0225 U	0.00208 U	0.00229 U	0.00245 U	0.00228 U	0.00217 U	0.00226 U	0.00233 U	0.00212 U	0.00204 U	0.00238 U	0.00265 U	0.0022 U	0.00237 U	0.00244 U

Notes:
NYSDEC GW Protection SCO = New York State Department of Environmental Conservation Groundwater Protection Soil Cleanup Objectives, from Table 375-6.8 of 6 NYCRR Part 375.
NYSDEC Commercial SCO = New York State Department of Environmental Conservation Restricted Commercial Use Soil Cleanup Objectives, from Table 375-6.8 of 6 NYCRR Part 375.
ft bgs = Feet below ground surface.
mg/kg = Milligrams per kilogram.
No samples exceed the NYSDEC GW Protection SCO.
No samples exceed the NYSDEC Commercial SCO.
— = Sample not analyzed.
NS = No standard currently established.
ND = Not Detected.
U = Not detected above laboratory detection limit.
U' = Laboratory reporting limit exceeds the applicable regulatory standard or criteria being utilized.
I = The lower value for the two columns has been reported due to obvious interference
P = The RPD between the results for the two columns exceeds the method-specified criteria.
J = Result below the reporting limit (estimated value).
DUP = Duplicate sample was taken.
When the applicable state standard applies to mixed isomers and the laboratory reports individual isomers, the total standard is listed for each isomer.

Table 5
Soil Reuse Characterization Sampling Results
Summary of Cyanide, Herbicides, and Pesticides in Soil.
MJ Painting; Olean, New York.

Sample ID	NYSDEC GW Protection	NYSDEC Commercial SCO	RX-439	RX-439	RX-440	RX-441	RX-442	RX-443	RX-443	RX-443	RX-444	RX-444	RX-444	RX-446	RX-446	RX-447	RX-447 DUP
Sample Depth (ft bgs)			4-7	10-12	4-7	7-10	1-4	0-1	4-7	10-12	0-1	1-4	7-10	1-4	7-10	4-7	4-7
Sample Date			11/18/2021	11/18/2021	11/17/2021	11/16/2021	11/17/2021	11/16/2021	11/16/2021	11/16/2021	11/17/2021	11/17/2021	11/17/2021	11/16/2021	11/16/2021	11/16/2021	11/16/2021
CYANIDE - 9010C/9012B (mg/kg)																	
Cyanide	40	27	—	—	—	—	—	10 U	—	—	10 U	—	—	—	—	—	—
HERBICIDES - 8151A (mg/kg)																	
2,4,5-T	NS	NS	0.237 U	0.201 U	0.251 U	0.185 U	0.2 U	0.221 U	0.198 U	0.194 U	0.204 U	0.208 U	0.186 U	0.196 U	0.192 U	0.201 U	0.197 U
2,4,5-TP (Silvex)	3.8	500	0.237 U	0.201 U	0.251 U	0.185 U	0.2 U	0.221 U	0.198 U	0.194 U	0.204 U	0.208 U	0.186 U	0.196 U	0.192 U	0.201 U	0.197 U
2,4-D	NS	NS	0.237 U	0.201 U	0.251 U	0.185 U	0.2 U	0.221 U	0.198 U	0.194 U	0.204 U	0.208 U	0.186 U	0.196 U	0.192 U	0.201 U	0.197 U
PESTICIDES - 8081B (mg/kg)																	
Aldrin	0.19	0.68	0.00224 U	0.00192 U	0.00238 U	0.00174 U	0.00184 U	0.00208 U	0.0186 U'	0.0183 U'	0.00194 U	0.0197 U'	0.00175 U	0.0184 U'	0.00183 U	0.00194 U	0.00185 U
alpha-BHC	0.02	3.4	0.000934 U	0.000801 U	0.000994 U	0.000727 U	0.000766 U	0.000868 U	0.00776 U	0.00762 U	0.000807 U	0.0082 U	0.000728 U	0.00767 U	0.000762 U	0.000807 U	0.000772 U
beta-BHC	0.09	3	0.00224 U	0.00192 U	0.00238 U	0.00174 U	0.00184 U	0.00208 U	0.0186 U	0.0183 U	0.00194 U	0.0197 U	0.00175 U	0.0184 U	0.00183 U	0.00194 U	0.00185 U
Chlordane	NS	NS	0.0187 U	0.016 U	0.0199 U	0.0145 U	0.0153 U	0.0174 U	0.155 U	0.152 U	0.0161 U	0.164 U	0.0146 U	0.153 U	0.0152 U	0.0161 U	0.0154 U
cis-Chlordane	2.9	24	0.0028 U	0.0024 U	0.00298 U	0.00218 U	0.0023 U	0.0026 U	0.0233 U	0.0229 U	0.00242 U	0.0246 U	0.00218 U	0.023 U	0.00228 U	0.00242 U	0.00232 U
delta-BHC	0.25	500	0.00224 U	0.00192 U	0.00238 U	0.00174 U	0.00184 U	0.00208 U	0.0186 U	0.0183 U	0.00194 U	0.0197 U	0.00175 U	0.0184 U	0.00183 U	0.00194 U	0.00185 U
Dieldrin	0.1	1.4	0.0014 U	0.0012 U	0.00149 U	0.00109 U	0.00115 U	0.0013 U	0.0116 U'	0.0114 U'	0.00121 U	0.0123 U'	0.00109 U	0.0115 U'	0.00114 U	0.00121 U	0.00116 U
Endosulfan I	102	200	0.00224 U	0.00192 U	0.00238 U	0.00174 U	0.00184 U	0.00208 U	0.0186 U	0.0183 U	0.00194 U	0.0197 U	0.00175 U	0.0184 U	0.00183 U	0.00194 U	0.00185 U
Endosulfan II	102	200	0.00224 U	0.00192 U	0.00238 U	0.00174 U	0.00184 U	0.00208 U	0.0186 U	0.0183 U	0.00194 U	0.0197 U	0.00175 U	0.0184 U	0.00183 U	0.00194 U	0.00185 U
Endosulfan sulfate	1000	200	0.000934 U	0.000801 U	0.000994 U	0.000727 U	0.000766 U	0.000868 U	0.00776 U	0.00762 U	0.000807 U	0.0082 U	0.000728 U	0.00767 U	0.000762 U	0.000807 U	0.000772 U
Endrin	0.06	89	0.000934 U	0.000801 U	0.000994 U	0.000727 U	0.000766 U	0.000868 U	0.00776 U	0.00762 U	0.000807 U	0.0082 U	0.000728 U	0.00767 U	0.000762 U	0.000807 U	0.000772 U
Endrin Aldehyde	NS	NS	0.0028 U	0.0024 U	0.00298 U	0.00218 U	0.0023 U	0.0026 U	0.0233 U	0.0229 U	0.00242 U	0.0246 U	0.00218 U	0.023 U	0.00228 U	0.00242 U	0.00232 U
Endrin Ketone	NS	NS	0.00224 U	0.00192 U	0.00238 U	0.00174 U	0.00184 U	0.00208 U	0.0186 U	0.0183 U	0.00194 U	0.0197 U	0.00175 U	0.0184 U	0.00183 U	0.00194 U	0.00185 U
Heptachlor	0.38	15	0.00112 U	0.000961 U	0.00119 U	0.000873 U	0.000919 U	0.00104 U	0.00931 U	0.00915 U	0.000969 U	0.00984 U	0.000873 U	0.00921 U	0.000914 U	0.000969 U	0.000927 U
Heptachlor Epoxide	NS	NS	0.0042 U	0.0036 U	0.00447 U	0.00327 U	0.00345 U	0.0039 U	0.0349 U	0.0343 U	0.00363 U	0.0369 U	0.00327 U	0.0345 U	0.00343 U	0.00363 U	0.00348 U
Lindane	0.1	9.2	0.000934 U	0.000801 U	0.000994 U	0.000727 U	0.000766 U	0.000868 U	0.00776 U	0.00762 U	0.000807 U	0.0082 U	0.000728 U	0.00767 U	0.000762 U	0.000807 U	0.000772 U
Methoxychlor	NS	NS	0.0042 U	0.0036 U	0.00447 U	0.00327 U	0.00345 U	0.0039 U	0.0349 U	0.0343 U	0.00363 U	0.0369 U	0.00327 U	0.0345 U	0.00343 U	0.00363 U	0.00348 U
p,p'-DDD	14	92	0.00224 U	0.00192 U	0.00238 U	0.00174 U	0.00184 U	0.00208 U	0.0186 U'	0.0183 U'	0.00194 U	0.0197 U'	0.00175 U	0.0184 U'	0.00183 U	0.00194 U	0.00185 U
p,p'-DDE	17	62	0.00224 U	0.00192 U	0.00238 U	0.00174 U	0.00184 U	0.00208 U	0.0186 U'	0.0183 U'	0.00194 U	0.0197 U'	0.00175 U	0.0184 U'	0.00183 U	0.00194 U	0.00185 U
p,p'-DDT	136	47	0.0042 U'	0.0036 U'	0.00447 U'	0.00327 U	0.00345 U'	0.0039 U'	0.0349 U'	0.0343 U'	0.00363 U'	0.0369 U'	0.00327 U	0.0345 U'	0.00343 U'	0.00363 U'	0.00348 U'
Toxaphene	NS	NS	0.042 U	0.036 U	0.0447 U	0.0327 U	0.0345 U	0.039 U	0.349 U	0.343 U	0.0363 U	0.369 U	0.0327 U	0.345 U	0.0343 U	0.0363 U	0.0348 U
trans-Chlordane	NS	NS	0.0028 U	0.0024 U	0.00298 U	0.00218 U	0.0023 U	0.0026 U	0.0233 U	0.0229 U	0.00242 U	0.0246 U	0.00218 U	0.023 U	0.00228 U	0.00242 U	0.00232 U

Notes:
NYSDEC GW Protection SCO = New York State Department of Environmental Conservation Groundwater Protection Soil Cleanup Objectives, from Table 375-6.8 of 6 NYCRR Part 375.
NYSDEC Commercial SCO = New York State Department of Environmental Conservation Restricted Commercial Use Soil Cleanup Objectives, from Table 375-6.8 of 6 NYCRR Part 375.
ft bgs = Feet below ground surface.
mg/kg = Milligrams per kilogram.
No samples exceed the NYSDEC GW Protection SCO.
No samples exceed the NYSDEC Commercial SCO.
— = Sample not analyzed.
NS = No standard currently established.
ND = Not Detected.
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U' = Laboratory reporting limit exceeds the applicable regulatory standard or criteria being utilized.
I = The lower value for the two columns has been reported due to obvious interference
P = The RPD between the results for the two columns exceeds the method-specified criteria.
J = Result below the reporting limit (estimated value).
DUP = Duplicate sample was taken.
When the applicable state standard applies to mixed isomers and the laboratory reports individual isomers, the total standard is listed for each isomer.

Table 5
Soil Reuse Characterization Sampling Results
Summary of Cyanide, Herbicides, and Pesticides in Soil.
MJ Painting; Olean, New York.

Sample ID	NYSDEC GW Protection	NYSDEC Commercial SCO	RX-447	RX-447	RX-448	RX-448
Sample Depth (ft bgs)			7-10	10-12	1-4	7-10
Sample Date			11/16/2021	11/16/2021	11/16/2021	11/18/2021
CYANIDE - 9010C/9012B (mg/kg)						
Cyanide	40	27	10 U	10 U	—	10 U
HERBICIDES - 8151A (mg/kg)						
2,4,5-T	NS	NS	0.216 U	0.197 U	0.27 U	0.249 U
2,4,5-TP (Silvex)	3.8	500	0.216 U	0.197 U	0.27 U	0.249 U
2,4-D	NS	NS	0.216 U	0.197 U	0.27 U	0.249 U
PESTICIDES - 8081B (mg/kg)						
Aldrin	0.19	0.68	0.00203 U	0.00184 U	0.0259 U'	0.0244 U'
alpha-BHC	0.02	3.4	0.000848 U	0.000768 U	0.0108 U	0.0102 U
beta-BHC	0.09	3	0.00203 U	0.00184 U	0.0259 U	0.0244 U
Chlordane	NS	NS	0.017 U	0.0154 U	0.216 U	0.204 U
cis-Chlordane	2.9	24	0.00254 U	0.0023 U	0.0324 U	0.0306 U
delta-BHC	0.25	500	0.00203 U	0.00184 U	0.0259 U	0.0244 U
Dieldrin	0.1	1.4	0.00127 U	0.00115 U	0.0162 U'	0.0153 U'
Endosulfan I	102	200	0.00203 U	0.00184 U	0.0259 U	0.0244 U
Endosulfan II	102	200	0.00203 U	0.00184 U	0.0259 U	0.0244 U
Endosulfan sulfate	1000	200	0.000848 U	0.000768 U	0.0108 U	0.0102 U
Endrin	0.06	89	0.000848 U	0.000768 U	0.0108 U	0.0102 U
Endrin Aldehyde	NS	NS	0.00254 U	0.0023 U	0.0324 U	0.0306 U
Endrin Ketone	NS	NS	0.00203 U	0.00184 U	0.0259 U	0.0244 U
Heptachlor	0.38	15	0.00102 U	0.000922 U	0.013 U	0.0122 U
Heptachlor Epoxide	NS	NS	0.00382 U	0.00346 U	0.0486 U	0.0458 U
Lindane	0.1	9.2	0.000848 U	0.000768 U	0.0108 U	0.0102 U
Methoxychlor	NS	NS	0.00382 U	0.00346 U	0.0486 U	0.0458 U
p,p'-DDD	14	92	0.00203 U	0.00184 U	0.0259 U'	0.0244 U'
p,p'-DDE	17	62	0.00203 U	0.00184 U	0.0259 U'	0.0244 U'
p,p'-DDT	136	47	0.00382 U'	0.00346 U'	0.0486 U'	0.0458 U'
Toxaphene	NS	NS	0.0382 U	0.0346 U	0.486 U	0.458 U
trans-Chlordane	NS	NS	0.00254 U	0.0023 U	0.0324 U	0.0306 U

Notes:
NYSDEC GW Protection SCO = New York State Department of Environmental Conservation Groundwater Protection Soil Cleanup Objectives, from Table 375-6.8 of 6 NYCRR Part 375.
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No samples exceed the NYSDEC GW Protection SCO.
No samples exceed the NYSDEC Commercial SCO.
— = Sample not analyzed.
NS = No standard currently established.
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I = The lower value for the two columns has been reported due to obvious interference
P = The RPD between the results for the two columns exceeds the method-specified criteria.
J = Result below the reporting limit (estimated value).
DUP = Duplicate sample was taken.
When the applicable state standard applies to mixed isomers and the laboratory reports individual isomers, the total standard is listed for each isomer.

Table 5
Soil Reuse Characterization Sampling Results
Summary of Per- and Polyfluoroalkyl Substances Soil Analytical Data.
MJ Painting; Olean, New York.

Sample ID	NYSDEC GW Protection SCO	NYSDEC Commercial SCO	RX-301	RX-302	RX-303	RX-304	RX-305	RX-306	RX-307	RX-308	RX-309	RX-310	RX-311
Sample Depth (ft bgs)			0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1	0-1
Sample Date			11/15/2021	11/9/2021	11/15/2021	11/15/2021	11/15/2021	11/16/2021	11/17/2021	11/17/2021	11/17/2021	11/17/2021	11/18/2021
PFAS - LCMSMS-ID (mg/kg)													
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	NS	NS	0.000554 U	0.00053 U	0.000625 U	0.000513 U	0.000572 U	0.000515 U	0.00052 U	0.000555 U	0.000539 U	0.000517 U	0.000583 U
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	NS	NS	0.000554 U	0.00053 U	0.000625 U	0.000513 U	0.000572 U	0.000515 U	0.00052 U	0.000555 U	0.000539 U	0.000517 U	0.00134
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	NS	NS	0.000554 U	0.00053 U	0.000625 U	0.000513 U	0.000572 U	0.000515 U	0.00052 U	0.000555 U	0.000539 U	0.000517 U	0.000583 U
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	NS	NS	0.000554 U	0.00053 U	0.000625 U	0.000513 U	0.000572 U	0.000515 U	0.00052 U	0.000555 U	0.000539 U	0.000517 U	0.000583 U
Perfluorobutanesulfonic Acid (PFBS)	NS	NS	0.000277 U	0.00026 U	0.000313 U	0.000257 U	0.000286 U	0.000257 U	0.00026 U	0.000278 U	0.000269 U	0.000258 U	0.000292 U
Perfluorobutanoic Acid (PFBA)	NS	NS	0.000034 J	0.00012 J	0.000046 J	0.000032 J	0.000073 J	0.00004 J	0.00006 J	0.000555 U	0.000089 J	0.000042 J	0.000123 J
Perfluorodecanesulfonic Acid (PFDS)	NS	NS	0.000554 U	0.00053 U	0.000625 U	0.000513 U	0.000572 U	0.000515 U	0.00052 U	0.000555 U	0.000539 U	0.000517 U	0.000583 U
Perfluorodecanoic Acid (PFDA)	NS	NS	0.000277 U	0.00026 U	0.000313 U	0.000257 U	0.000286 U	0.000257 U	0.00026 U	0.000278 U	0.000269 U	0.000258 U	0.000292 U
Perfluorododecanoic Acid (PFDoA)	NS	NS	0.000554 U	0.00053 U	0.000625 U	0.000513 U	0.000572 U	0.000515 U	0.00052 U	0.000555 U	0.000539 U	0.000517 U	0.000583 U
Perfluoroheptanesulfonic Acid (PFHpS)	NS	NS	0.000554 U	0.00053 U	0.000625 U	0.000513 U	0.000572 U	0.000515 U	0.00052 U	0.000555 U	0.000539 U	0.000517 U	0.000583 U
Perfluoroheptanoic Acid (PFHpA)	NS	NS	0.000277 U	0.00005 J	0.000313 U	0.000257 U	0.000286 U	0.000257 U	0.00026 U	0.000278 U	0.000269 U	0.000258 U	0.000292 U
Perfluorohexanesulfonic Acid (PFHxS)	NS	NS	0.000277 U	0.00026 U	0.000313 U	0.000257 U	0.000286 U	0.000257 U	0.00026 U	0.000278 U	0.000269 U	0.000258 U	0.000292 U
Perfluorohexanoic Acid (PFHxA)	NS	NS	0.000554 U	0.00053 U	0.000625 U	0.000513 U	0.000572 U	0.000515 U	0.00052 U	0.000555 U	0.000539 U	0.000517 U	0.000583 U
Perfluorononanoic Acid (PFNA)	NS	NS	0.000277 U	0.00026 U	0.000313 U	0.000257 U	0.000129 J	0.000257 U	0.00026 U	0.000278 U	0.000269 U	0.000258 U	0.000292 U
Perfluorooctanesulfonamide (FOSA)	NS	NS	0.000554 U	0.00053 U	0.000625 U	0.000513 U	0.000572 U	0.000515 U	0.00052 U	0.000555 U	0.000539 U	0.000517 U	0.000583 U
Perfluorooctanesulfonic Acid (PFOS)	NS	NS	0.000254 J	0.00026 J	0.000196 J	0.000257 U	0.000389	0.000257 U	0.00026 U	0.000278 U	0.000269 U	0.000258 U	0.000292 U
Perfluorooctanoic Acid (PFOA)	NS	NS	0.000055 JF	0.00015 JF	0.000313 U	0.000257 U	0.000139 J	0.000079 J	0.000086 J	0.000278 U	0.000059 J	0.000075 J	0.000108 J
Perfluoropentanoic Acid (PFPeA)	NS	NS	0.000554 U	0.00005 J	0.000625 U	0.000513 U	0.000572 U	0.000515 U	0.00052 U	0.000555 U	0.000539 U	0.000517 U	0.000583 U
Perfluorotetradecanoic Acid (PFTA)	NS	NS	0.000554 U	0.00053 U	0.000625 U	0.000513 U	0.000572 U	0.000056 J	0.000064 J	0.000068 J	0.000071 JF	0.000517 U	0.000086 JF
Perfluorotridecanoic Acid (PFTrDA)	NS	NS	0.000554 U	0.00053 U	0.000625 U	0.000513 U	0.000572 U	0.000515 U	0.00052 U	0.000555 U	0.000539 U	0.000517 U	0.000583 U
Perfluoroundecanoic Acid (PFUnA)	NS	NS	0.000554 U	0.00053 U	0.000625 U	0.000513 U	0.000091 JF	0.000515 U	0.00052 U	0.000555 U	0.000539 U	0.000517 U	0.000583 U
PFOA/PFOS, Total	NS	NS	0.000343	0.00063	0.000242	0.000032	0.000821	0.000175	0.00021	0.000068	0.000219	0.000117	0.001657

Notes:
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NYSDEC Commercial SCO = New York State Department of Environmental Conservation Restricted Commercial Use Soil Cleanup Objectives, from Table 375-6.8 of 6 NYCRR Part 375.
New York State Department of Environmental Conservation (NYSDEC) Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances under NYSDEC's Part 375 Remedial Programs, January 2021.
ft bgs = Feet below ground surface.
mg/kg = Milligrams per kilogram.
— = Sample not analyzed.
NS = No standard currently established.
ND = Not Detected.
U = Not detected above laboratory detection limit.
U' = Laboratory reporting limit exceeds the applicable regulatory standard or criteria being utilized.
J = Result below the reporting limit (estimated value).
F = The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.
DUP = Duplicate sample was taken.
When the applicable state standard applies to mixed isomers and the laboratory reports individual isomers, the total standard is listed for each isomer.
PFOA/PFOS, Total includes J and F qualified results.

Table 5
Soil Reuse Characterization Sampling Results
Summary of Per- and Polyfluoroalkyl Substances Soil Analytical Data.
MJ Painting; Olean, New York.

Sample ID Sample Depth (ft bgs) Sample Date	NYSDEC GW Protection SCO	NYSDEC Commercial SCO	RX-312 0-1 11/17/2021	RX-313 0-1 1/5/2022	RX-314 0-1 1/4/2022	RX-315 0-1 1/7/2022	RX-316 0-1 1/7/2022	RX-317 0-1 1/7/2022	RX-318 0-1 1/4/2022	RX-319 0-1 1/7/2022	RX-320 0-1 1/5/2022	RX-321 0-1 1/7/2022	RX-321 DUP 0-1 1/7/2022	RX-401 1-4 11/12/2021
PFAS - LCMSMS-ID (mg/kg)														
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	NS	NS	0.000544 U	0.000614 U	0.000624 U	0.000626 U	0.00074 U	0.000615 U	0.000632 U	0.000604 U	0.000597 U	0.000591 U	0.000609 U	0.000542 U
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	NS	NS	0.000544 U	0.000614 U	0.000624 U	0.000626 U	0.00074 U	0.000615 U	0.000632 U	0.000604 U	0.000597 U	0.000591 U	0.000609 U	0.000542 U
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	NS	NS	0.000544 U	0.000614 U	0.000624 U	0.000626 U	0.00074 U	0.000615 U	0.000632 U	0.000604 U	0.000597 U	0.000591 U	0.000609 U	0.000542 U
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	NS	NS	0.000544 U	0.000614 U	0.000624 U	0.000626 U	0.00074 U	0.000615 U	0.000632 U	0.000604 U	0.000597 U	0.000591 U	0.000609 U	0.000542 U
Perfluorobutanesulfonic Acid (PFBS)	NS	NS	0.000272 U	0.000307 U	0.000312 U	0.000313 U	0.00037 U	0.000308 U	0.000316 U	0.000302 U	0.000298 U	0.000296 U	0.000305 U	0.000271 U
Perfluorobutanoic Acid (PFBA)	NS	NS	0.000159 J	0.000198 J	0.000145 J	0.000191 J	0.000084 J	0.000175 J	0.000116 J	0.000167 J	0.000215 J	0.000158 J	0.000141 J	0.000031 J
Perfluorodecanesulfonic Acid (PFDS)	NS	NS	0.000544 U	0.000614 U	0.000624 U	0.000626 U	0.00074 U	0.000615 U	0.000632 U	0.000604 U	0.000597 U	0.000591 U	0.000609 U	0.000542 U
Perfluorodecanoic Acid (PFDA)	NS	NS	0.000272 U	0.000307 U	0.000312 U	0.000313 U	0.00037 U	0.000308 U	0.000316 U	0.000302 U	0.000298 U	0.000296 U	0.000305 U	0.000271 U
Perfluorododecanoic Acid (PFDoA)	NS	NS	0.000544 U	0.000614 U	0.000624 U	0.000626 U	0.00074 U	0.000615 U	0.000632 U	0.000604 U	0.000597 U	0.000591 U	0.000609 U	0.000542 U
Perfluoroheptanesulfonic Acid (PFHpS)	NS	NS	0.000544 U	0.000614 U	0.000624 U	0.000626 U	0.00074 U	0.000615 U	0.000632 U	0.000604 U	0.000597 U	0.000591 U	0.000609 U	0.000542 U
Perfluoroheptanoic Acid (PFHpA)	NS	NS	0.000062 J	0.00007 J	0.000312 U	0.000073 J	0.00037 U	0.000074 J	0.000316 U	0.000302 U	0.000061 J	0.000296 U	0.000305 U	0.000271 U
Perfluorohexanesulfonic Acid (PFHxS)	NS	NS	0.000272 U	0.000307 U	0.000312 U	0.000313 U	0.00037 U	0.000308 U	0.000316 U	0.000302 U	0.000298 U	0.000296 U	0.000305 U	0.000271 U
Perfluorohexanoic Acid (PFHxA)	NS	NS	0.000544 U	0.000614 U	0.000624 U	0.000075 J	0.00074 U	0.000084 J	0.000632 U	0.000604 U	0.000597 U	0.000591 U	0.000609 U	0.000542 U
Perfluorononanoic Acid (PFNA)	NS	NS	0.000114 J	0.000307 U	0.000312 U	0.000121 J	0.00037 U	0.000308 U	0.000316 U	0.000302 U	0.000112 JF	0.000296 U	0.000305 U	0.000271 U
Perfluorooctanesulfonamide (FOSA)	NS	NS	0.000544 U	0.000614 U	0.000624 U	0.000626 U	0.00074 U	0.000615 U	0.000632 U	0.000604 U	0.000597 U	0.000591 U	0.000609 U	0.000542 U
Perfluorooctanesulfonic Acid (PFOS)	NS	NS	0.000268 J	0.000272 J	0.000265 J	0.000264 J	0.000487	0.000308 U	0.000316 U	0.000201 J	0.000289 J	0.000197 J	0.000255 J	0.000271 U
Perfluorooctanoic Acid (PFOA)	NS	NS	0.000176 J	0.000128 JF	0.000166 JF	0.000228 J	0.000084 J	0.000227 J	0.000102 JF	0.000094 J	0.000211 JF	0.00015 J	0.00014 J	0.000061 JF
Perfluoropentanoic Acid (PFPeA)	NS	NS	0.000544 U	0.00006 J	0.000624 U	0.000068 J	0.00074 U	0.000088 J	0.000632 U	0.000604 U	0.000597 U	0.000591 U	0.000609 U	0.000542 U
Perfluorotetradecanoic Acid (PFTA)	NS	NS	0.000065 JF	0.000614 U	0.000624 U	0.000096 J	0.000135 J	0.000114 J	0.000632 U	0.000107 J	0.000597 U	0.000119 J	0.000092 JF	0.000542 U
Perfluorotridecanoic Acid (PFTrDA)	NS	NS	0.000544 U	0.000614 U	0.000624 U	0.000626 U	0.00074 U	0.000615 U	0.000632 U	0.000604 U	0.000597 U	0.000591 U	0.000609 U	0.000542 U
Perfluoroundecanoic Acid (PFUnA)	NS	NS	0.000544 U	0.000614 U	0.000624 U	0.000626 U	0.00074 U	0.000615 U	0.000632 U	0.000604 U	0.000597 U	0.000591 U	0.000609 U	0.000542 U
PFOA/PFOS, Total	NS	NS	0.000844	0.000728	0.000576	0.001116	0.00079	0.000762	0.000218	0.000569	0.000888	0.000624	0.000628	0.000092

Notes:

NYSDEC GW Protection SCO = New York State Department of Environmental Conservation Groundwater Protection Soil Cleanup Objectives, from Table 375-6.8 of 6 NYCRR Part 375.
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New York State Department of Environmental Conservation (NYSDEC) Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances under NYSDEC's Part 375 Remedial Programs, January 2021.
ft bgs = Feet below ground surface.
mg/kg = Milligrams per kilogram.
— = Sample not analyzed.
NS = No standard currently established.
ND = Not Detected.
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DUP = Duplicate sample was taken.
When the applicable state standard applies to mixed isomers and the laboratory reports individual isomers, the total standard is listed for each isomer.
PFOA/PFOS, Total includes J and F qualified results.

Table 5
Soil Reuse Characterization Sampling Results
Summary of Per- and Polyfluoroalkyl Substances Soil Analytical Data.
MJ Painting; Olean, New York.

Sample ID	NYSDEC GW Protection SCO	NYSDEC Commercial SCO	RX-402	RX-403	RX-403	RX-405	RX-405	RX-407	RX-407	RX-409	RX-413	RX-414	RX-415	RX-416
Sample Depth (ft bgs)			7-10	4-7	10-12	1-4	7-10	4-7	10-12	1-4	10-12	4-7	7-10	1-4
Sample Date			11/12/2021	11/12/2021	11/12/2021	11/15/2021	11/15/2021	11/15/2021	11/15/2021	11/12/2021	11/15/2021	11/15/2021	11/16/2021	11/16/2021
PFAS - LCMSMS-ID (mg/kg)														
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	NS	NS	0.000607 U	0.000597 U	0.000574 U	0.000526 U	0.000526 U	0.000564 U	0.000514 U	0.000534 U	0.000556 U	0.000553 U	0.000633 U	0.000572 U
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	NS	NS	0.000607 U	0.000597 U	0.000574 U	0.000526 U	0.000526 U	0.000564 U	0.000514 U	0.000534 U	0.000556 U	0.000553 U	0.000633 U	0.000572 U
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	NS	NS	0.000607 U	0.000597 U	0.000574 U	0.000526 U	0.000526 U	0.000564 U	0.000514 U	0.000534 U	0.000556 U	0.000553 U	0.000633 U	0.000572 U
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	NS	NS	0.000607 U	0.000597 U	0.000574 U	0.000526 U	0.000526 U	0.000564 U	0.000514 U	0.000534 U	0.000556 U	0.000553 U	0.000633 U	0.000572 U
Perfluorobutanesulfonic Acid (PFBS)	NS	NS	0.000304 U	0.000298 U	0.000287 U	0.000263 U	0.000263 U	0.000282 U	0.000257 U	0.000267 U	0.000278 U	0.000276 U	0.000316 U	0.000286 U
Perfluorobutanoic Acid (PFBA)	NS	NS	0.000607 U	0.000597 U	0.000574 U	0.000526 U	0.000526 U	0.000564 U	0.000514 U	0.000534 U	0.000556 U	0.000553 U	0.000633 U	0.000031 J
Perfluorodecanesulfonic Acid (PFDS)	NS	NS	0.000607 U	0.000597 U	0.000574 U	0.000526 U	0.000526 U	0.000564 U	0.000514 U	0.000534 U	0.000556 U	0.000553 U	0.000633 U	0.000572 U
Perfluorodecanoic Acid (PFDA)	NS	NS	0.000304 U	0.000298 U	0.000287 U	0.000263 U	0.000263 U	0.000282 U	0.000257 U	0.000267 U	0.000278 U	0.000276 U	0.000316 U	0.000286 U
Perfluorododecanoic Acid (PFDoA)	NS	NS	0.000607 U	0.000597 U	0.000574 U	0.000526 U	0.000526 U	0.000564 U	0.000514 U	0.000534 U	0.000556 U	0.000553 U	0.000633 U	0.000572 U
Perfluoroheptanesulfonic Acid (PFHpS)	NS	NS	0.000607 U	0.000597 U	0.000574 U	0.000526 U	0.000526 U	0.000564 U	0.000514 U	0.000534 U	0.000556 U	0.000553 U	0.000633 U	0.000572 U
Perfluoroheptanoic Acid (PFHpA)	NS	NS	0.000304 U	0.000298 U	0.000287 U	0.000263 U	0.000263 U	0.000282 U	0.000257 U	0.000267 U	0.000278 U	0.000276 U	0.000316 U	0.000286 U
Perfluorohexanesulfonic Acid (PFHxS)	NS	NS	0.000304 U	0.000298 U	0.000287 U	0.000263 U	0.000263 U	0.000282 U	0.000257 U	0.000267 U	0.000278 U	0.000276 U	0.000316 U	0.000286 U
Perfluorohexanoic Acid (PFHxA)	NS	NS	0.000607 U	0.000597 U	0.000574 U	0.000526 U	0.000526 U	0.000564 U	0.000514 U	0.000534 U	0.000556 U	0.000553 U	0.000633 U	0.000572 U
Perfluorononanoic Acid (PFNA)	NS	NS	0.000304 U	0.000298 U	0.000287 U	0.000263 U	0.000263 U	0.000282 U	0.000257 U	0.000267 U	0.000278 U	0.000276 U	0.000316 U	0.000139 J
Perfluorooctanesulfonamide (FOSA)	NS	NS	0.000607 U	0.000597 U	0.000574 U	0.000526 U	0.000526 U	0.000564 U	0.000514 U	0.000534 U	0.000556 U	0.000553 U	0.000633 U	0.000572 U
Perfluorooctanesulfonic Acid (PFOS)	NS	NS	0.000304 U	0.000298 U	0.000287 U	0.000263 U	0.000263 U	0.000282 U	0.000257 U	0.000267 U	0.000278 U	0.000276 U	0.000316 U	0.00036
Perfluorooctanoic Acid (PFOA)	NS	NS	0.000304 U	0.000298 U	0.000287 U	0.000263 U	0.000263 U	0.000282 U	0.000257 U	0.000267 U	0.000278 U	0.000066 JF	0.000316 U	0.00012 JF
Perfluoropentanoic Acid (PFPeA)	NS	NS	0.000607 U	0.000597 U	0.000574 U	0.000526 U	0.000526 U	0.000564 U	0.000514 U	0.000534 U	0.000556 U	0.000553 U	0.000633 U	0.000572 U
Perfluorotetradecanoic Acid (PFTA)	NS	NS	0.000607 U	0.000597 U	0.000574 U	0.000526 U	0.000526 U	0.000564 U	0.000514 U	0.000534 U	0.000556 U	0.000553 U	0.000633 U	0.000572 U
Perfluorotridecanoic Acid (PFTrDA)	NS	NS	0.000607 U	0.000597 U	0.000574 U	0.000526 U	0.000526 U	0.000564 U	0.000514 U	0.000534 U	0.000556 U	0.000553 U	0.000633 U	0.000572 U
Perfluoroundecanoic Acid (PFUnA)	NS	NS	0.000607 U	0.000597 U	0.000574 U	0.000526 U	0.000526 U	0.000564 U	0.000514 U	0.000534 U	0.000556 U	0.000553 U	0.000633 U	0.000073 JF
PFOA/PFOS, Total	NS	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.000066	ND	0.000723

Notes:
NYSDEC GW Protection SCO = New York State Department of Environmental Conservation Groundwater Protection Soil Cleanup Objectives, from Table 375-6.8 of 6 NYCRR Part 375.
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New York State Department of Environmental Conservation (NYSDEC) Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances under NYSDEC's Part 375 Remedial Programs, January 2021.
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mg/kg = Milligrams per kilogram.
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J = Result below the reporting limit (estimated value).
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DUP = Duplicate sample was taken.
When the applicable state standard applies to mixed isomers and the laboratory reports individual isomers, the total standard is listed for each isomer.
PFOA/PFOS, Total includes J and F qualified results.

Table 5

Soil Reuse Characterization Sampling Results

Summary of Per- and Polyfluoroalkyl Substances Soil Analytical Data.

MJ Painting; Olean, New York.

Sample ID	NYSDEC GW Protection SCO	NYSDEC Commercial SCO	RX-417	RX-417	RX-418	RX-419	RX-419	RX-420	RX-421	RX-422	RX-422	RX-422 DUP	RX-423	RX-424
Sample Depth (ft bgs)			1-4	7-10	4-7	1-4	7-10	4-7	10-12	1-4	7-10	7-10	4-7	1-4
Sample Date			11/11/2021	11/11/2021	11/11/2021	11/15/2021	11/15/2021	11/15/2021	11/11/2021	11/10/2021	11/10/2021	11/10/2021	11/11/2021	11/11/2021
PFAS - LCMSMS-ID (mg/kg)														
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	NS	NS	0.000479 U	0.000597 U	0.00057 U	0.000499 U	0.000788 U	0.000525 U	0.000634 U	0.000471 U	0.000619 U	0.000569 U	0.000562 U	0.000484 U
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	NS	NS	0.000479 U	0.000597 U	0.00057 U	0.000499 U	0.000788 U	0.000525 U	0.000634 U	0.000471 U	0.000619 U	0.000569 U	0.000562 U	0.000484 U
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	NS	NS	0.000479 U	0.000597 U	0.00057 U	0.000499 U	0.000788 U	0.000525 U	0.000634 U	0.000471 U	0.000619 U	0.000569 U	0.000562 U	0.000484 U
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	NS	NS	0.000479 U	0.000597 U	0.00057 U	0.000499 U	0.000788 U	0.000525 U	0.000634 U	0.000471 U	0.000619 U	0.000569 U	0.000562 U	0.000484 U
Perfluorobutanesulfonic Acid (PFBS)	NS	NS	0.00024 U	0.000299 U	0.000285 U	0.00025 U	0.000394 U	0.000262 U	0.000317 U	0.000236 U	0.00031 U	0.000285 U	0.000281 U	0.000242 U
Perfluorobutanoic Acid (PFBA)	NS	NS	0.000479 U	0.000597 U	0.00057 U	0.000499 U	0.000788 U	0.000525 U	0.000634 U	0.000471 U	0.000619 U	0.000569 U	0.000147 J	0.000038 J
Perfluorodecanesulfonic Acid (PFDS)	NS	NS	0.000479 U	0.000597 U	0.00057 U	0.000499 U	0.000788 U	0.000525 U	0.000634 U	0.000471 U	0.000619 U	0.000569 U	0.000562 U	0.000484 U
Perfluorodecanoic Acid (PFDA)	NS	NS	0.00024 U	0.000299 U	0.000285 U	0.00025 U	0.000394 U	0.000262 U	0.000317 U	0.000236 U	0.00031 U	0.000285 U	0.000281 U	0.000242 U
Perfluorododecanoic Acid (PFDoA)	NS	NS	0.000479 U	0.000597 U	0.00057 U	0.000499 U	0.000788 U	0.000525 U	0.000634 U	0.000471 U	0.000619 U	0.000569 U	0.000562 U	0.000484 U
Perfluoroheptanesulfonic Acid (PFHpS)	NS	NS	0.000479 U	0.000597 U	0.00057 U	0.000499 U	0.000788 U	0.000525 U	0.000634 U	0.000471 U	0.000619 U	0.000569 U	0.000562 U	0.000484 U
Perfluoroheptanoic Acid (PFHpA)	NS	NS	0.00024 U	0.000299 U	0.000285 U	0.00025 U	0.000394 U	0.000262 U	0.000317 U	0.000236 U	0.00031 U	0.000285 U	0.000281 U	0.000242 U
Perfluorohexanesulfonic Acid (PFHxS)	NS	NS	0.00024 U	0.000299 U	0.000285 U	0.00025 U	0.000394 U	0.000262 U	0.000317 U	0.000236 U	0.00031 U	0.000285 U	0.000281 U	0.000242 U
Perfluorohexanoic Acid (PFHxA)	NS	NS	0.000479 U	0.000597 U	0.00057 U	0.000499 U	0.000788 U	0.000525 U	0.000634 U	0.000471 U	0.000619 U	0.000569 U	0.000562 U	0.000484 U
Perfluorononanoic Acid (PFNA)	NS	NS	0.00024 U	0.000299 U	0.000285 U	0.00025 U	0.000394 U	0.000262 U	0.000317 U	0.000236 U	0.00031 U	0.000285 U	0.000281 U	0.000242 U
Perfluorooctanesulfonamide (FOSA)	NS	NS	0.000479 U	0.000597 U	0.00057 U	0.000499 U	0.000788 U	0.000525 U	0.000634 U	0.000471 U	0.000619 U	0.000569 U	0.000562 U	0.000484 U
Perfluorooctanesulfonic Acid (PFOS)	NS	NS	0.00024 U	0.000299 U	0.000285 U	0.00025 U	0.000394 U	0.000262 U	0.000317 U	0.000236 U	0.00031 U	0.000285 U	0.000281 U	0.000242 U
Perfluorooctanoic Acid (PFOA)	NS	NS	0.00024 U	0.000299 U	0.000285 U	0.00025 U	0.000394 U	0.000262 U	0.000317 U	0.000236 U	0.00031 U	0.000285 U	0.000281 U	0.000051 J
Perfluoropentanoic Acid (PFPeA)	NS	NS	0.000479 U	0.000597 U	0.00057 U	0.000499 U	0.000788 U	0.000525 U	0.000634 U	0.000471 U	0.000619 U	0.000569 U	0.000061 J	0.000484 U
Perfluorotetradecanoic Acid (PFTA)	NS	NS	0.000479 U	0.000597 U	0.00057 U	0.000499 U	0.000788 U	0.000525 U	0.000634 U	0.000074 JF	0.000072 J	0.000077 J	0.000064 J	0.00007 JF
Perfluorotridecanoic Acid (PFTrDA)	NS	NS	0.000479 U	0.000597 U	0.00057 U	0.000499 U	0.000788 U	0.000525 U	0.000634 U	0.000471 U	0.000619 U	0.000569 U	0.000562 U	0.000484 U
Perfluoroundecanoic Acid (PFUnA)	NS	NS	0.000479 U	0.000597 U	0.00057 U	0.000499 U	0.000788 U	0.000525 U	0.000634 U	0.000471 U	0.000619 U	0.000569 U	0.000562 U	0.000484 U
PFOA/PFOS, Total	NS	NS	ND	ND	ND	ND	ND	ND	ND	0.000074	0.000072	0.000077	0.000272	0.000159

Notes:

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New York State Department of Environmental Conservation (NYSDEC) Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances under NYSDEC's Part 375 Remedial Programs, January 2021.

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— = Sample not analyzed.

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J = Result below the reporting limit (estimated value).

F = The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.

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When the applicable state standard applies to mixed isomers and the laboratory reports individual isomers, the total standard is listed for each isomer.

PFOA/PFOS, Total includes J and F qualified results.

Table 5
Soil Reuse Characterization Sampling Results
Summary of Per- and Polyfluoroalkyl Substances Soil Analytical Data.
MJ Painting; Olean, New York.

Sample ID	NYSDEC GW Protection SCO	NYSDEC Commercial SCO	RX-424	RX-425	RX-426	RX-428	RX-428	RX-429	RX-429 DUP	RX-430	RX-431	RX-432	RX-434	RX-434
Sample Depth (ft bgs)			7-10	4-7	1-4	1-4	8-10	4-7	4-7	1-4	4-7	1-4	4-7	10-12
Sample Date			11/11/2021	11/11/2021	11/11/2021	11/10/2021	11/10/2021	11/10/2021	11/10/2021	11/10/2021	11/16/2021	11/16/2021	11/17/2021	11/17/2021
PFAS - LCMSMS-ID (mg/kg)														
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	NS	NS	0.000532 U	0.000502 U	0.000513 U	0.00064 U	0.00053 U	0.0005 U	0.00052 U	0.00054 U	0.000889 U	0.000531 U	0.000556 U	0.000479 U
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	NS	NS	0.000532 U	0.000502 U	0.000513 U	0.00027 J	0.00053 U	0.00072	0.00052 U	0.00054 U	0.000889 U	0.000531 U	0.000556 U	0.000479 U
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	NS	NS	0.000532 U	0.000502 U	0.000513 U	0.00064 U	0.00053 U	0.0005 U	0.00052 U	0.00234 U	0.000889 U	0.000531 U	0.000556 U	0.000479 U
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	NS	NS	0.000532 U	0.000502 U	0.000513 U	0.00064 U	0.00053 U	0.0005 U	0.00052 U	0.00234 U	0.000889 U	0.000531 U	0.000556 U	0.000479 U
Perfluorobutanesulfonic Acid (PFBS)	NS	NS	0.000266 U	0.000251 U	0.000256 U	0.00032 U	0.00026 U	0.00025 U	0.00026 U	0.00027 U	0.000445 U	0.000266 U	0.000278 U	0.00024 U
Perfluorobutanoic Acid (PFBA)	NS	NS	0.000532 U	0.000502 U	0.000513 U	0.00064 U	0.00053 U	0.0005 U	0.0021 U	0.00054 U	0.000889 U	0.000531 U	0.000556 U	0.000479 U
Perfluorodecanesulfonic Acid (PFDS)	NS	NS	0.000532 U	0.000502 U	0.000513 U	0.00064 U	0.00053 U	0.0005 U	0.00052 U	0.00054 U	0.000889 U	0.000531 U	0.000556 U	0.000479 U
Perfluorodecanoic Acid (PFDA)	NS	NS	0.000266 U	0.000251 U	0.000256 U	0.00032 U	0.00026 U	0.00025 U	0.00026 U	0.00027 U	0.000445 U	0.000266 U	0.000278 U	0.00024 U
Perfluorododecanoic Acid (PFDoA)	NS	NS	0.000532 U	0.000502 U	0.000513 U	0.00064 U	0.00053 U	0.0005 U	0.00052 U	0.00054 U	0.000889 U	0.000531 U	0.000556 U	0.000479 U
Perfluoroheptanesulfonic Acid (PFHpS)	NS	NS	0.000532 U	0.000502 U	0.000513 U	0.00064 U	0.00053 U	0.0005 U	0.00052 U	0.00054 U	0.000889 U	0.000531 U	0.000556 U	0.000479 U
Perfluoroheptanoic Acid (PFHpA)	NS	NS	0.000266 U	0.000251 U	0.000256 U	0.00032 U	0.00026 U	0.00025 U	0.00026 U	0.00027 U	0.000445 U	0.000266 U	0.000278 U	0.00024 U
Perfluorohexanesulfonic Acid (PFHxS)	NS	NS	0.000266 U	0.000251 U	0.000256 U	0.00032 U	0.00026 U	0.00025 U	0.00026 U	0.00027 U	0.000445 U	0.000266 U	0.000278 U	0.00024 U
Perfluorohexanoic Acid (PFHxA)	NS	NS	0.000532 U	0.000502 U	0.000513 U	0.00064 U	0.00053 U	0.0005 U	0.0021 U	0.00054 U	0.000889 U	0.000531 U	0.000556 U	0.000479 U
Perfluorononanoic Acid (PFNA)	NS	NS	0.000266 U	0.000251 U	0.000256 U	0.00032 U	0.00026 U	0.00025 U	0.00026 U	0.00027 U	0.000445 U	0.000266 U	0.000278 U	0.00024 U
Perfluorooctanesulfonamide (FOSA)	NS	NS	0.000532 U	0.000502 U	0.000513 U	0.00064 U	0.00053 U	0.0005 U	0.0021 U	0.00054 U	0.000889 U	0.000531 U	0.000556 U	0.000479 U
Perfluorooctanesulfonic Acid (PFOS)	NS	NS	0.000266 U	0.000251 U	0.000256 U	0.00032 U	0.00026 U	0.00025 U	0.00026 U	0.00027 U	0.000445 U	0.000266 U	0.000278 U	0.00024 U
Perfluorooctanoic Acid (PFOA)	NS	NS	0.000266 U	0.000251 U	0.000256 U	0.00032 U	0.00026 U	0.00025 U	0.00026 U	0.00027 U	0.000445 U	0.000266 U	0.000107 J	0.00024 U
Perfluoropentanoic Acid (PFPeA)	NS	NS	0.000532 U	0.000502 U	0.000513 U	0.00064 U	0.00053 U	0.0005 U	0.0021 U	0.00054 U	0.000889 U	0.000531 U	0.000556 U	0.000479 U
Perfluorotetradecanoic Acid (PFTA)	NS	NS	0.000532 U	0.000066 JF	0.000074 J	0.00064 U	0.00053 U	0.0005 U	0.00052 U	0.00234 U	0.000889 U	0.000531 U	0.000071 J	0.000479 U
Perfluorotridecanoic Acid (PFTrDA)	NS	NS	0.000532 U	0.000502 U	0.000513 U	0.00064 U	0.00053 U	0.0005 U	0.00052 U	0.00234 U	0.000889 U	0.000531 U	0.000556 U	0.000479 U
Perfluoroundecanoic Acid (PFUnA)	NS	NS	0.000532 U	0.000502 U	0.000513 U	0.00064 U	0.00053 U	0.0005 U	0.00052 U	0.00054 U	0.000889 U	0.000531 U	0.000556 U	0.000479 U
PFOA/PFOS, Total	NS	NS	ND	0.000066	0.000074	0.00027	ND	0.00072	ND	ND	ND	ND	0.000178	ND

Notes:
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U' = Laboratory reporting limit exceeds the applicable regulatory standard or criteria being utilized.
J = Result below the reporting limit (estimated value).
F = The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.
DUP = Duplicate sample was taken.
When the applicable state standard applies to mixed isomers and the laboratory reports individual isomers, the total standard is listed for each isomer.
PFOA/PFOS, Total includes J and F qualified results.

Table 5
Soil Reuse Characterization Sampling Results
Summary of Per- and Polyfluoroalkyl Substances Soil Analytical Data.
MJ Painting; Olean, New York.

Sample ID	NYSDEC GW Protection SCO	NYSDEC Commercial SCO	RX-435	RX-436	RX-436	RX-437	RX-439	RX-439	RX-440	RX-441	RX-442	RX-443	RX-443	RX-444
Sample Depth (ft bgs)			7-10	4-7	10-12	1-4	4-7	10-12	4-7	7-10	1-4	4-7	10-12	1-4
Sample Date			11/17/2021	11/17/2021	11/17/2021	11/17/2021	11/18/2021	11/18/2021	11/17/2021	11/16/2021	11/17/2021	11/16/2021	11/16/2021	11/17/2021
PFAS - LCMSMS-ID (mg/kg)														
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	NS	NS	0.000532 U	0.000642 U	0.000512 U	0.000585 U	0.000687 U	0.000575 U	0.000702 U	0.000528 U	0.000553 U	0.000541 U	0.000545 U	0.000585 U
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	NS	NS	0.000532 U	0.000642 U	0.000512 U	0.000585 U	0.000687 U	0.000364 JF	0.000702 U	0.000528 U	0.000553 U	0.000541 U	0.000545 U	0.000585 U
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	NS	NS	0.000532 U	0.000642 U	0.000512 U	0.000585 U	0.000687 U	0.000575 U	0.000702 U	0.000528 U	0.000553 U	0.000541 U	0.000545 U	0.000585 U
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	NS	NS	0.000532 U	0.000642 U	0.000512 U	0.000585 U	0.000687 U	0.000575 U	0.000702 U	0.000528 U	0.000553 U	0.000541 U	0.000545 U	0.000585 U
Perfluorobutanesulfonic Acid (PFBS)	NS	NS	0.000266 U	0.000321 U	0.000256 U	0.000292 U	0.000344 U	0.000288 U	0.000351 U	0.000264 U	0.000277 U	0.00027 U	0.000272 U	0.000292 U
Perfluorobutanoic Acid (PFBA)	NS	NS	0.000532 U	0.000642 U	0.000512 U	0.000585 U	0.000687 U	0.000575 U	0.000702 U	0.000528 U	0.000034 J	0.000541 U	0.000545 U	0.000585 U
Perfluorodecanesulfonic Acid (PFDS)	NS	NS	0.000532 U	0.000642 U	0.000512 U	0.000585 U	0.000687 U	0.000575 U	0.000702 U	0.000528 U	0.000553 U	0.000541 U	0.000545 U	0.000585 U
Perfluorodecanoic Acid (PFDA)	NS	NS	0.000266 U	0.000321 U	0.000256 U	0.000292 U	0.000344 U	0.000288 U	0.000351 U	0.000264 U	0.000277 U	0.00027 U	0.000272 U	0.000292 U
Perfluorododecanoic Acid (PFDoA)	NS	NS	0.000532 U	0.000642 U	0.000512 U	0.000585 U	0.000687 U	0.000575 U	0.000702 U	0.000528 U	0.000553 U	0.000541 U	0.000545 U	0.000585 U
Perfluoroheptanesulfonic Acid (PFHpS)	NS	NS	0.000532 U	0.000642 U	0.000512 U	0.000585 U	0.000687 U	0.000575 U	0.000702 U	0.000528 U	0.000553 U	0.000541 U	0.000545 U	0.000585 U
Perfluoroheptanoic Acid (PFHpA)	NS	NS	0.000266 U	0.000321 U	0.000256 U	0.000292 U	0.000344 U	0.000288 U	0.000351 U	0.000264 U	0.000277 U	0.00027 U	0.000272 U	0.000292 U
Perfluorohexanesulfonic Acid (PFHxS)	NS	NS	0.000266 U	0.000321 U	0.000256 U	0.000292 U	0.000344 U	0.000288 U	0.000351 U	0.000264 U	0.000277 U	0.00027 U	0.000272 U	0.000292 U
Perfluorohexanoic Acid (PFHxA)	NS	NS	0.000532 U	0.000642 U	0.000512 U	0.000585 U	0.000687 U	0.000575 U	0.000702 U	0.000528 U	0.000553 U	0.000541 U	0.000545 U	0.000585 U
Perfluorononanoic Acid (PFNA)	NS	NS	0.000266 U	0.000321 U	0.000256 U	0.000292 U	0.000344 U	0.000288 U	0.000351 U	0.000264 U	0.000277 U	0.00027 U	0.000272 U	0.000292 U
Perfluorooctanesulfonamide (FOSA)	NS	NS	0.000532 U	0.000642 U	0.000512 U	0.000585 U	0.000687 U	0.000575 U	0.000702 U	0.000528 U	0.000553 U	0.000541 U	0.000545 U	0.000585 U
Perfluorooctanesulfonic Acid (PFOS)	NS	NS	0.000266 U	0.000321 U	0.000256 U	0.000292 U	0.000344 U	0.000288 U	0.000351 U	0.000264 U	0.000277 U	0.00027 U	0.000272 U	0.000292 U
Perfluorooctanoic Acid (PFOA)	NS	NS	0.000266 U	0.000321 U	0.000256 U	0.000082 J	0.000344 U	0.000288 U	0.000351 U	0.000264 U	0.000277 U	0.00027 U	0.000272 U	0.000292 U
Perfluoropentanoic Acid (PFPeA)	NS	NS	0.000532 U	0.000642 U	0.000512 U	0.000585 U	0.000687 U	0.000575 U	0.000702 U	0.000528 U	0.000553 U	0.000541 U	0.000545 U	0.000585 U
Perfluorotetradecanoic Acid (PFTA)	NS	NS	0.000066 J	0.000073 J	0.00006 J	0.000066 J	0.000091 J	0.000575 U	0.000702 U	0.000528 U	0.000063 J	0.000065 J	0.000063 J	0.000585 U
Perfluorotridecanoic Acid (PFTrDA)	NS	NS	0.000532 U	0.000642 U	0.000512 U	0.000585 U	0.000687 U	0.000575 U	0.000702 U	0.000528 U	0.000553 U	0.000541 U	0.000545 U	0.000585 U
Perfluoroundecanoic Acid (PFUnA)	NS	NS	0.000532 U	0.000642 U	0.000512 U	0.000585 U	0.000687 U	0.000575 U	0.000702 U	0.000528 U	0.000553 U	0.000541 U	0.000545 U	0.000585 U
PFOA/PFOS, Total	NS	NS	0.000066	0.000073	0.00006	0.000148	0.000091	0.000364	ND	ND	0.000097	0.000065	0.000063	ND

Notes:

NYSDEC GW Protection SCO = New York State Department of Environmental Conservation Groundwater Protection Soil Cleanup Objectives, from Table 375-6.8 of 6 NYCRR Part 375.
NYSDEC Commercial SCO = New York State Department of Environmental Conservation Restricted Commercial Use Soil Cleanup Objectives, from Table 375-6.8 of 6 NYCRR Part 375.
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J = Result below the reporting limit (estimated value).
F = The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.
DUP = Duplicate sample was taken.
When the applicable state standard applies to mixed isomers and the laboratory reports individual isomers, the total standard is listed for each isomer.
PFOA/PFOS, Total includes J and F qualified results.

Table 5
Soil Reuse Characterization Sampling Results
Summary of Per- and Polyfluoroalkyl Substances Soil Analytical Data.
MJ Painting; Olean, New York.

Sample ID	NYSDEC GW Protection SCO	NYSDEC Commercial SCO	RX-444	RX-446	RX-446	RX-447	RX-447 DUP	RX-448
Sample Depth (ft bgs)			7-10	1-4	7-10	4-7	4-7	1-4
Sample Date			11/17/2021	11/16/2021	11/16/2021	11/16/2021	11/16/2021	11/16/2021
PFAS - LCMSMS-ID (mg/kg)								
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	NS	NS	0.000528 U	0.000564 U	0.00056 U	0.000554 U	0.000589 U	0.000784 U
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	NS	NS	0.000528 U	0.000564 U	0.00056 U	0.000554 U	0.000589 U	0.000784 U
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	NS	NS	0.000528 U	0.000564 U	0.00056 U	0.000554 U	0.000589 U	0.000784 U
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	NS	NS	0.000528 U	0.000564 U	0.00056 U	0.000554 U	0.000589 U	0.000784 U
Perfluorobutanesulfonic Acid (PFBS)	NS	NS	0.000264 U	0.000282 U	0.00028 U	0.000277 U	0.000295 U	0.000392 U
Perfluorobutanoic Acid (PFBA)	NS	NS	0.000528 U	0.000564 U	0.00056 U	0.000554 U	0.000589 U	0.00006 J
Perfluorodecanesulfonic Acid (PFDS)	NS	NS	0.000528 U	0.000564 U	0.00056 U	0.000554 U	0.000589 U	0.000784 U
Perfluorodecanoic Acid (PFDA)	NS	NS	0.000264 U	0.000282 U	0.00028 U	0.000277 U	0.000295 U	0.000392 U
Perfluorododecanoic Acid (PFDoA)	NS	NS	0.000528 U	0.000564 U	0.00056 U	0.000554 U	0.000589 U	0.000784 U
Perfluoroheptanesulfonic Acid (PFHpS)	NS	NS	0.000528 U	0.000564 U	0.00056 U	0.000554 U	0.000589 U	0.000784 U
Perfluoroheptanoic Acid (PFHpA)	NS	NS	0.000264 U	0.000282 U	0.00028 U	0.000277 U	0.000295 U	0.000392 U
Perfluorohexanesulfonic Acid (PFHxS)	NS	NS	0.000264 U	0.000282 U	0.00028 U	0.000277 U	0.000295 U	0.000392 U
Perfluorohexanoic Acid (PFHxA)	NS	NS	0.000528 U	0.000564 U	0.00056 U	0.000554 U	0.000589 U	0.000784 U
Perfluorononanoic Acid (PFNA)	NS	NS	0.000264 U	0.000282 U	0.00028 U	0.000277 U	0.000295 U	0.000392 U
Perfluorooctanesulfonamide (FOSA)	NS	NS	0.000528 U	0.000564 U	0.00056 U	0.000554 U	0.000589 U	0.000784 U
Perfluorooctanesulfonic Acid (PFOS)	NS	NS	0.000264 U	0.000282 U	0.00028 U	0.000277 U	0.000295 U	0.000392 U
Perfluorooctanoic Acid (PFOA)	NS	NS	0.000264 U	0.000282 U	0.00028 U	0.000277 U	0.000295 U	0.000146 JF
Perfluoropentanoic Acid (PFPeA)	NS	NS	0.000528 U	0.000564 U	0.00056 U	0.000554 U	0.000589 U	0.000784 U
Perfluorotetradecanoic Acid (PFTA)	NS	NS	0.000528 U	0.000564 U	0.00056 U	0.000554 U	0.000589 U	0.000784 U
Perfluorotridecanoic Acid (PFTrDA)	NS	NS	0.000528 U	0.000564 U	0.00056 U	0.000554 U	0.000589 U	0.000784 U
Perfluoroundecanoic Acid (PFUnA)	NS	NS	0.000528 U	0.000564 U	0.00056 U	0.000554 U	0.000589 U	0.000784 U
PFOA/PFOS, Total	NS	NS	ND	ND	ND	ND	ND	0.000206

Notes:

NYSDEC GW Protection SCO = New York State Department of Environmental Conservation Groundwater Protection Soil Cleanup Objectives, from Table 375-6.8 of 6 NYCRR Part 375.

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ft bgs = Feet below ground surface.

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U = Not detected above laboratory detection limit.

U' = Laboratory reporting limit exceeds the applicable regulatory standard or criteria being utilized.

J = Result below the reporting limit (estimated value).

F = The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.

DUP = Duplicate sample was taken.

When the applicable state standard applies to mixed isomers and the laboratory reports individual isomers, the total standard is listed for each isomer.

PFOA/PFOS, Total includes J and F qualified results.

LEGEND

▨	AREAS OF SURFICIAL SCO EXCEEDANCES 0–1' BGS., PROPOSED TO BE MITIGATED VIA SURFICIAL EXCAVATION AND COVER
▨	AREAS OF SURFICIAL SCO EXCEEDANCES 0–0.5' BGS., PROPOSED TO BE MITIGATED VIA SURFICIAL EXCAVATION AND COVER
● RX–220	DESIGNATION AND APPROXIMATE LOCATION OF SURFICIAL SOIL SAMPLE AND SOIL BORING
—	SITE BOUNDARY
▨	AREAS TO DISPOSE OF SURFICIAL SOIL
▨	AREAS OF SURFICIAL GCM (0–1' BGS.), PROPOSED TO BE MITIGATED VIA SURFICIAL EXCAVATION AND COVER

NOTES:

ALL FEATURES ARE APPROXIMATE

THE ENTIRE BCP SITE WILL HAVE A BCP COMPLIANT SITE COVER SYSTEM

ALL REMEDY AREAS ARE TRACK 4 EXCEPT WHERE NOTED

SOURCE:

AERIAL IMAGE OBTAINED FROM GOOGLE EARTH

45' 0 45'

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DRAWING DATE: 3/16/2022	PRINT TYPE: COLOR
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PROJECT NAME:
350 FRANKLIN STREET
OLEAN, NEW YORK

PROJECT FOR:
MJ PAINTING CONTRACTOR CORP.

TITLE:
SURFICIAL SOIL SAMPLE PLAN

DRAWING NO.
1
DRAWING
1 OF 4

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LEGEND

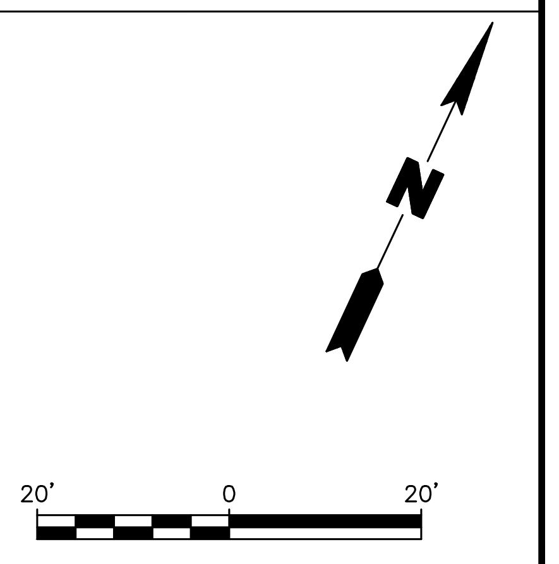
▬	SITE BOUNDARY
● RX-420	DESIGNATION AND APPROXIMATE LOCATION OF SOIL SAMPLE

NOTES:

ALL FEATURES ARE APPROXIMATE

THE ENTIRE BCP SITE WILL HAVE A BCP COMPLIANT SITE COVER SYSTEM

WHERE NO SOIL SAMPLE IS LOCATED WITHIN A POLYGON, DESIGNATION WAS DETERMINED BASED ON SURROUNDING SAMPLES



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PROJECT NAME:
350 FRANKLIN STREET
OLEAN, NEW YORK
PROJECT FOR:
MJ PAINTING CONTRACTOR CORP.

TITLE:
SUBSURFACE SOIL SAMPLE PLAN
AREA 1

DRAWING NO.
2
DRAWING
2 OF 4

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LEGEND

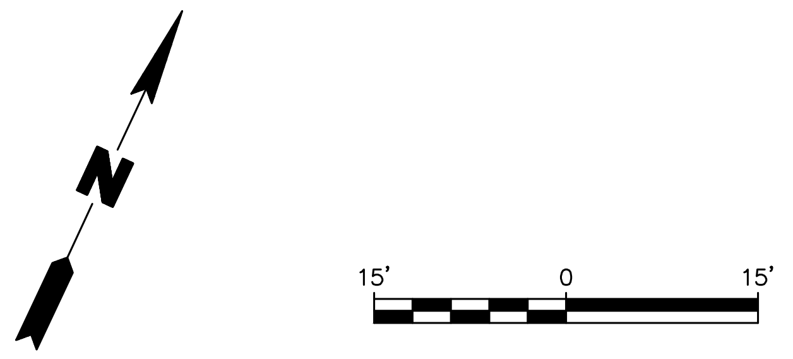
▬	SITE BOUNDARY
● RX−420	DESIGNATION AND APPROXIMATE LOCATION OF SOIL SAMPLE

NOTES:

ALL FEATURES ARE APPROXIMATE

THE ENTIRE BCP SITE WILL HAVE A BCP COMPLIANT SITE COVER SYSTEM

WHERE NO SOIL SAMPLE IS LOCATED WITHIN A POLYGON, DESIGNATION WAS DETERMINED BASED ON SURROUNDING SAMPLES



NO.	DATE	REVISION DESCRIPTION	INT.

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ROUX
Roux Environmental
Engineering and Geology, D.P.C.
12 GILL STREET, SUITE 4700 WOBURN MA 01801
(781) 569-4000

PROJECT NAME:
350 FRANKLIN STREET
OLEAN, NEW YORK

PROJECT FOR:
MJ PAINTING CONTRACTOR CORP.

TITLE:
SUBSURFACE SOIL SAMPLE PLAN
AREA 2

DRAWING NO.
3
DRAWING
3 OF 4

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LEGEND

RX-008	REMEDIAL INVESTIGATION (2019-2020) MONITORING WELL LOCATION
RXMW-005 ●	REMEDIAL INVESTIGATION (2019-2022) SOIL BORING LOCATION
MW-104	MONITORING WELL INSTALLED PRIOR TO REMEDIAL INVESTIGATION
SB-108 ■	SOIL BORING INSTALLED PRIOR TO REMEDIAL INVESTIGATION
RXMW-107	MONITORING WELL LOCATION
☐	RI TEST PIT LOCATIONS
───	SITE BOUNDARY
─o─o─	NEIGHBORING FENCE LINE
▨	AREA TO BE COVERED WITH BCP COMPLIANT COVER
🟨	AREAS OF PETROLEUM-RELATED IMPACTS, PROPOSED TO BE ASSESSED FOR ABSENCE OF GCM VIA MONITORING WELL INSTALLATION AND LNAPL GAUGING. PORTIONS IN WHICH GCM/SOURCE MATERIAL IS IDENTIFIED WILL BE REMEDIED VIA EXCAVATION AND/OR SOLIDIFICATION, AND COVER
🟥	AREAS OF POTENTIAL ON-SITE MIGRATION OF GCM, PROPOSED TO BE MITIGATED VIA RECOVERY WELL INSTALLATION TO INHIBIT ENCROACHMENT OF OFF-SITE GCM, AND COVER
🟦	AREAS OF SURFICIAL GCM (0-1' BGS.), PROPOSED TO BE MITIGATED VIA SURFICIAL EXCAVATION AND COVER
🟩	AREAS OF GCM AND/OR LNAPL, PROPOSED TO BE MITIGATED VIA EXCAVATION, AND/OR SOLIDIFICATION, AND COVER

── W ──	UNDERGROUND WATER UTILITY
── ST ──	UNDERGROUND STORM SEWER UTILITY
── SS ──	UNDERGROUND SANITARY SEWER UTILITY
── UE ──	UNDERGROUND ELECTRIC UTILITY
— · — · —	OVERHEAD ELECTRIC UTILITY
───	UTILITY LINE IDENTIFIED ON FELMONT OIL CORP SURVEY MAPS, NOT FIELD VERIFIED.
— —	UTILITY CORRIDOR IDENTIFIED ON FELMONT OIL CORP SURVEY MAPS, NOT FIELD VERIFIED.

SOURCE:

AERIAL IMAGE OBTAINED FROM GOOGLE EARTH

NOTES:

ALL FEATURES ARE APPROXIMATE

THE ENTIRE BCP SITE WILL HAVE A BCP COMPLIANT SITE COVER SYSTEM

ALL REMEDY AREAS ARE TRACK 4 EXCEPT WHERE NOTED

45' 0 45'

N

NO.	DATE	REVISION DESCRIPTION	INT.

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ROUX
Roux Environmental
Engineering and Geology, D.P.C.
12 GILL STREET, SUITE 4700 WOBURN MA 01801
(781) 569-4000

PROJECT NAME:

350 FRANKLIN STREET
OLEAN, NEW YORK

PROJECT FOR:

MJ PAINTING CONTRACTOR CORP.

TITLE:

AREA OF IDENTIFIED GCM - PLAN VIEW

DRAWING NO.

4

DRAWING
4 OF 4

N:\PROJECTS\MJ PAINTING CONTRACTOR CORP\2317.0002M000\132 REV\2317.0002M000.132REV.10-2.DWG

12 Gill Street
Suite 4700
Woburn MA 01801
Telephone: (781)-569-4000
Fax: (781)-569-4001

BORING ID: RX-401

CLIENT: MJ Painting
DRILLING CONTRACTOR: TREC
SITE NAME/ADDRESS: 350 Franklin Street
DRILLING METHOD: Geoprobe
CITY/STATE: Olean, NY
SAMPLER TYPE: Macro Core
DATE(S): 11/12/2021 - 11/12/2021
BOREHOLE DIAMETER: 3.25 inches
LOGGED BY: S. Hibben
BOREHOLE DEPTH: 12'

DEPTH (ft)	Sample Interval	RECOVERY (ft)	PID (ppm)	MATERIAL DESCRIPTION	U.S.C.S.	Notes
0		3	4.9	Brown fine to coarse SAND, trace silt, trace fine Gravel; dry.	SW	Collected sample RX-401 (0-1) for waste characterization. Collected sample RX-401 (4) collected for VOCs.
			7.4	Gray coarse GRAVEL, some Silt; dry.	GP	Collected sample RX-401 (1-4) for composite re-use suite.
			20.1	Black SILT, trace fine to coarse sand, trace fine gravel; moist.	ML	
5		3.5	15.3	Same as above.		
			9.8 4.9	Black medium SAND, trace fine gravel; moist.	SP	Collected sample RX-401 (6) for VOCs.
			232.0	Black SILT, trace fine Gravel; staining; odor; moist; SPH globules.	ML	Collected sample RX-401 (7-10) for composite re-use suite. Collected sample RX-401 (7.5) for waste characterization.
		3.8	118.6	Same as above; wet.		
10			232.9	Gray CLAY, some Silt; staining; odor; SPH globules.	CH	Collected sample RX-401 (11.5) for VOCs.
			571.7	Gray fine to coarse SAND, some Silt; moist; petroluem odor.	SM	

Bottom of borehole at 12.0 ft.

Additional Notes: Mention of odor, staining, and/or sheen is based on observations by person(s) logging the soil samples collected from the borehole and indicates odor, staining, and/or sheen related to the apparent presence of oil and/or hazardous material (OHM). Where not noted, OHM odor, OHM staining, and/or OHM sheen were not observed. In addition, where noted, soil has been characterized as fill based on observations. No mention of fill or other features in the soil descriptions does not indicate lack of of the same.

Photoionization detector (PID) readings are affected by multiple factors, including sample consistency, moisture, relative humidity, and dust. Therefore, PID readings are just one of the factors considered when making a determination of the absence or prescence of SPH in a given sample.

12 Gill Street
Suite 4700
Woburn MA 01801
Telephone: (781)-569-4000
Fax: (781)-569-4001

BORING ID: RX-402

CLIENT: MJ Painting
DRILLING CONTRACTOR: TREC
SITE NAME/ADDRESS: 350 Franklin Street
DRILLING METHOD: Geoprobe
CITY/STATE: Olean, NY
SAMPLER TYPE: Macro Core
DATE(S): 11/12/2021 - 11/12/2021
BOREHOLE DIAMETER: 3.25 inches
LOGGED BY: S. Hibben
BOREHOLE DEPTH: 12'

DEPTH (ft)	Sample Interval	RECOVERY (ft)	PID (ppm)	MATERIAL DESCRIPTION	U.S.C.S.	Notes
0		2.5	19.9	Brown fine to coarse SAND, and Silt, trace fine gravel; fill (brick); dry to moist.	SM	
5		4	16.6	Same as above.		
			76.9	Black medium to coarse SAND, some fine Gravel; moist; petroleum odor.	SW	Collected sample RX-402 (7-10) for composite re-use suite. Collected sample RX-402 (8) for VOCs.
			539.0	Grey CLAY; petroleum odor; moist.	CH	
			463.0	Same as above.		
10			408.6	Same as above; SPH Globules at 11 ft bgs.		

Bottom of borehole at 12.0 ft.

Additional Notes: Mention of odor, staining, and/or sheen is based on observations by person(s) logging the soil samples collected from the borehole and indicates odor, staining, and/or sheen related to the apparent presence of oil and/or hazardous material (OHM). Where not noted, OHM odor, OHM staining, and/or OHM sheen were not observed. In addition, where noted, soil has been characterized as fill based on observations. No mention of fill or other features in the soil descriptions does not indicate lack of of the same.

Photoionization detector (PID) readings are affected by multiple factors, including sample consistency, moisture, relative humidity, and dust. Therefore, PID readings are just one of the factors considered when making a determination of the absence or prescence of SPH in a given sample.

ROUX
12 Gill Street
Suite 4700
Woburn MA 01801
Telephone: (781)-569-4000
Fax: (781)-569-4001

BORING ID: RX-403

CLIENT: MJ Painting
DRILLING CONTRACTOR: TREC
SITE NAME/ADDRESS: 350 Franklin Street
DRILLING METHOD: Geoprobe
CITY/STATE: Olean, NY
SAMPLER TYPE: Macro Core
DATE(S): 11/12/2021 - 11/12/2021
BOREHOLE DIAMETER: 3.25 inches
LOGGED BY: S. Hibben
BOREHOLE DEPTH: 12'

DEPTH (ft)	Sample Interval	RECOVERY (ft)	PID (ppm)	MATERIAL DESCRIPTION	U.S.C.S.	Notes
0		3.5		Brown fine to coarse SAND, some Silt, some fine Gravel; dry; fill (brick, wood); organics.	SM	Collected sample RX-403 (0-1) for waste characterization.
			13.4	Gray coarse Gravel, some Silt; dry.	GM	
			577.3	Black fine (+) to coarse (-) SAND, trace silt, trace fine gravel; dry; petroleum odor.	SW	
5		3	184.3	Black fine to coarse SAND, and fine Gravel; dry.		Collected sample RX-403 (4) for VOCs. Collected sample RX-403 (4-7) for composite re-use suite.
			438.0	Black medium to coarse SAND, and fine Gravel; dry; petroleum odor.		Collected sample RX-403 (6) for VOCs.
				Gray CLAY, some Silt; moist; petroleum odor.	CH	
			403.7	Black SILT, some fine Gravel; moist/wet; petroleum odor.	ML	
10			567.3	Gray CLAY; petroleum odor; moist.	CH	Collected sample RX-403 (10-12) for composite re-use suite. Collected sample RX-403 (11) for VOCs.

Bottom of borehole at 12.0 ft.

Additional Notes: Mention of odor, staining, and/or sheen is based on observations by person(s) logging the soil samples collected from the borehole and indicates odor, staining, and/or sheen related to the apparent presence of oil and/or hazardous material (OHM). Where not noted, OHM odor, OHM staining, and/or OHM sheen were not observed. In addition, where noted, soil has been characterized as fill based on observations. No mention of fill or other features in the soil descriptions does not indicate lack of of the same.

Photoionization detector (PID) readings are affected by multiple factors, including sample consistency, moisture, relative humidity, and dust. Therefore, PID readings are just one of the factors considered when making a determination of the absence or prescence of SPH in a given sample.

ROUX

12 Gill Street
Suite 4700
Woburn MA 01801
Telephone: (781)-569-4000
Fax: (781)-569-4001

BORING ID: RX-404

CLIENT: MJ Painting

SITE NAME/ADDRESS: 350 Franklin Street

CITY/STATE: Olean, NY

DATE(S): 11/12/2021 - 11/12/2021

LOGGED BY: S. Hibben

DRILLING CONTRACTOR: TREC

DRILLING METHOD: Geoprobe

SAMPLER TYPE: Macro Core

BOREHOLE DIAMETER: 3.25 inches

BOREHOLE DEPTH: 12'

DEPTH (ft)	Sample Interval	RECOVERY (ft)	PID (ppm)	MATERIAL DESCRIPTION	U.S.C.S.	Notes
0		3.5	13.1	Light brown and gray fine to coarse GRAVEL, some Silt, trace fine to coarse sand; dry; fill (brick).	GM	
			97.6	Black fine to coarse SAND, trace silt; dry; petroleum odor.	SW	
5		3	88.2	Same as above; moist at bottom.		
			386.3	Dark gray SILT, and Clay; moist; petroleum odor.	ML	Collected sample RX-404 (7-10) for composite re-use suite.
10		3.8	531.8	Dark gray CLAY, and Silt; petroleum odor; moist; SPH Globules.	CH	Collected sample RX-404 (8) for VOCs.
			840.7			Collected sample RX-404 (11) for VOCs.

Bottom of borehole at 12.0 ft.

Additional Notes: Mention of odor, staining, and/or sheen is based on observations by person(s) logging the soil samples collected from the borehole and indicates odor, staining, and/or sheen related to the apparent presence of oil and/or hazardous material (OHM). Where not noted, OHM odor, OHM staining, and/or OHM sheen were not observed. In addition, where noted, soil has been characterized as fill based on observations. No mention of fill or other features in the soil descriptions does not indicate lack of of the same.

Photoionization detector (PID) readings are affected by multiple factors, including sample consistency, moisture, relative humidity, and dust. Therefore, PID readings are just one of the factors considered when making a determination of the absence or prescence of SPH in a given sample.

12 Gill Street
Suite 4700
Woburn MA 01801
Telephone: (781)-569-4000
Fax: (781)-569-4001

BORING ID: RX-405

CLIENT: MJ Painting

DRILLING CONTRACTOR: TREC

SITE NAME/ADDRESS: 350 Franklin Street

DRILLING METHOD: Geoprobe

CITY/STATE: Olean, NY

SAMPLER TYPE: Macro Core

DATE(S): 11/15/2021 - 11/15/2021

BOREHOLE DIAMETER: 3.25 inches

LOGGED BY: S. Hibben

BOREHOLE DEPTH: 12'

DEPTH (ft)	Sample Interval	RECOVERY (ft)	PID (ppm)	MATERIAL DESCRIPTION	U.S.C.S.	Notes
0		3	2.1	Brown fine to coarse SAND, and fine Gravel; organics; dry.	SW	Collected sample RX-405 (0-1) for waste characterization. Collected sample RX-405 (1-4) for composite re-use.
			5.4	Gray coarse GRAVEL, some Silt; dry.	GM	Collected sample RX-405 (3) for VOCS.
5		4	76.0	Black fine to coarse SAND, some Silt; fill (brick, wood); dry to moist. Same as above.	SM	
			370.0 442.0	Black SILT; petroleum odor; moist.	ML	Collected sample RX-405 (6) for VOCs. Collected sample RX-405 (7) for VOCs.
10		4	389.5 102.5	Gray CLAY, some Silt; petroleum odor; moist. Same as above; sheen at 11 ft bgs.	CH	Collected sample RX-405 (7-10) for VOCs.
				Brown fine to coarse SAND, some Silt; moist; petroleum odor; SPH globules.	SM	Collected sample RX-405 (11) for VOCs with DUP20211115.

Bottom of borehole at 12.0 ft.

Additional Notes: Mention of odor, staining, and/or sheen is based on observations by person(s) logging the soil samples collected from the borehole and indicates odor, staining, and/or sheen related to the apparent presence of oil and/or hazardous material (OHM). Where not noted, OHM odor, OHM staining, and/or OHM sheen were not observed. In addition, where noted, soil has been characterized as fill based on observations. No mention of fill or other features in the soil descriptions does not indicate lack of of the same.

Photoionization detector (PID) readings are affected by multiple factors, including sample consistency, moisture, relative humidity, and dust. Therefore, PID readings are just one of the factors considered when making a determination of the absence or prescence of SPH in a given sample.

12 Gill Street
Suite 4700
Woburn MA 01801
Telephone: (781)-569-4000
Fax: (781)-569-4001

BORING ID: RX-406

CLIENT: MJ Painting

DRILLING CONTRACTOR: TREC

SITE NAME/ADDRESS: 350 Franklin Street

DRILLING METHOD: Geoprobe

CITY/STATE: Olean, NY

SAMPLER TYPE: Macro Core

DATE(S): 11/15/2021 - 11/15/2021

BOREHOLE DIAMETER: 3.25 inches

LOGGED BY: S. Hibben

BOREHOLE DEPTH: 12'

DEPTH (ft)	Sample Interval	RECOVERY (ft)	PID (ppm)	MATERIAL DESCRIPTION	U.S.C.S.	Notes
0		4	1.8	Brown fine to coarse SAND, some Silt, trace gravel; dry.	SW	
			35.3	Black fine to medium SAND, trace silt; fill (brick, wood); petroleum odor; dry.		
5		4	56.9	Same as above.		
			704.2	Gray SILT; petroleum odor; moist.	ML	
10			910.1	Same as above; slight sheen; SPH globules.		
			728.1	Brown and gray medium to coarse SAND alternating with layers of fine Gravel; petroleum odor; sheen; moist.	SW	Collected sample RX-406 (11) for VOCs.

Bottom of borehole at 12.0 ft.

Additional Notes: Mention of odor, staining, and/or sheen is based on observations by person(s) logging the soil samples collected from the borehole and indicates odor, staining, and/or sheen related to the apparent presence of oil and/or hazardous material (OHM). Where not noted, OHM odor, OHM staining, and/or OHM sheen were not observed. In addition, where noted, soil has been characterized as fill based on observations. No mention of fill or other features in the soil descriptions does not indicate lack of of the same.

Photoionization detector (PID) readings are affected by multiple factors, including sample consistency, moisture, relative humidity, and dust. Therefore, PID readings are just one of the factors considered when making a determination of the absence or prescence of SPH in a given sample.

12 Gill Street
Suite 4700
Woburn MA 01801
Telephone: (781)-569-4000
Fax: (781)-569-4001

BORING ID: RX-407

CLIENT: MJ Painting
DRILLING CONTRACTOR: TREC
SITE NAME/ADDRESS: 350 Franklin Street
DRILLING METHOD: Geoprobe
CITY/STATE: Olean, NY
SAMPLER TYPE: Macro Core
DATE(S): 11/15/2021 - 11/15/2021
BOREHOLE DIAMETER: 3.25 inches
LOGGED BY: S. Hibben
BOREHOLE DEPTH: 12'

DEPTH (ft)	Sample Interval	RECOVERY (ft)	PID (ppm)	MATERIAL DESCRIPTION	U.S.C.S.	Notes
0		3.5	1.4	Brown fine to coarse SAND, some fine Gravel, trace silt.	SW	Collected sample RX-407 (1) for waste characterization.
			5.9	Black fine to medium SAND, trace silt; fill (brick, wood); dry.		Collected sample RX-407 (3) for VOCs.
5		3.8	4.8	Black fine to medium SAND, some Silt; fill (brick, wood); dry.	SM	Collected sample RX-407 (4-7) for composite re-use suite. Collected sample RX-407 (6) for VOCs.
			462.3	Black-gray SILT; moist; petroleum odor.	ML	Collected sample RX-407 (8) for VOCs.
		3	657.3	Black-gray SILT; moist; petroleum odor.		
10			834.2	Black-gray SILT, some Sand; Gravel at 10 and 11.5 ft; moist; petroleum odor.		Collected sample RX-407 (10-12) for composite re-use suite. Collected sample RX-407 (11) for VOCs.

Bottom of borehole at 12.0 ft.

Additional Notes: Mention of odor, staining, and/or sheen is based on observations by person(s) logging the soil samples collected from the borehole and indicates odor, staining, and/or sheen related to the apparent presence of oil and/or hazardous material (OHM). Where not noted, OHM odor, OHM staining, and/or OHM sheen were not observed. In addition, where noted, soil has been characterized as fill based on observations. No mention of fill or other features in the soil descriptions does not indicate lack of of the same.

Photoionization detector (PID) readings are affected by multiple factors, including sample consistency, moisture, relative humidity, and dust. Therefore, PID readings are just one of the factors considered when making a determination of the absence or prescence of SPH in a given sample.

12 Gill Street
Suite 4700
Woburn MA 01801
Telephone: (781)-569-4000
Fax: (781)-569-4001

BORING ID: RX-408

CLIENT: MJ Painting
DRILLING CONTRACTOR: TREC
SITE NAME/ADDRESS: 350 Franklin Street
DRILLING METHOD: Geoprobe
CITY/STATE: Olean, NY
SAMPLER TYPE: Macro Core
DATE(S): 11/15/2021 - 11/15/2021
BOREHOLE DIAMETER: 3.25 inches
LOGGED BY: S. Hibben
BOREHOLE DEPTH: 12'

DEPTH (ft) 0	Sample Interval	RECOVERY (ft)	PID (ppm)	MATERIAL DESCRIPTION	U.S.C.S.	Notes
		3.5		Brown fine SAND and fine GRAVEL; dry.	SP	
			0.8	Gray coarse GRAVEL, some Silt; dry.	GM	No Samples Collected.
			2.7	Black fine SAND, trace fine Gravel; fill (brick/wood); dry.	SP	
5		4	104.3	Same as above.		
			197.2	Black medium SAND; fill (brick); dry.		
				Gray SILT, some Clay; moist; petroleum odor.	ML	
10		4	196.1	Gray SILT; wet; petroleum odor; sheen.		
			168.0	Gray SILT and CLAY; moist; petroleum odor; sheen.		

Bottom of borehole at 12.0 ft.

Additional Notes: Mention of odor, staining, and/or sheen is based on observations by person(s) logging the soil samples collected from the borehole and indicates odor, staining, and/or sheen related to the apparent presence of oil and/or hazardous material (OHM). Where not noted, OHM odor, OHM staining, and/or OHM sheen were not observed. In addition, where noted, soil has been characterized as fill based on observations. No mention of fill or other features in the soil descriptions does not indicate lack of of the same.

Photoionization detector (PID) readings are affected by multiple factors, including sample consistency, moisture, relative humidity, and dust. Therefore, PID readings are just one of the factors considered when making a determination of the absence or prescence of SPH in a given sample.

ROUX
12 Gill Street
Suite 4700
Woburn MA 01801
Telephone: (781)-569-4000
Fax: (781)-569-4001

BORING ID: RX-409

CLIENT: MJ Painting
DRILLING CONTRACTOR: TREC
SITE NAME/ADDRESS: 350 Franklin Street
DRILLING METHOD: Geoprobe
CITY/STATE: Olean, NY
SAMPLER TYPE: Macro Core
DATE(S): 11/12/2021 - 11/12/2021
BOREHOLE DIAMETER: 3.25 inches
LOGGED BY: S. Hibben
BOREHOLE DEPTH: 12'

DEPTH (ft)	Sample Interval	RECOVERY (ft)	PID (ppm)	MATERIAL DESCRIPTION	U.S.C.S.	Notes
0	☒	3	31.3	Brown fine to coarse SAND, trace fine Gravel; organics; dry.	SW	Collected sample RX-409 (1-4) for composite re-use suite.
			51.3	Dark gray SILT, some coarse Sand; petroleum odor; organics (wood); fill (brick, glass); moist.	ML	Collected sample RX-409 (4) for VOCs.
5	☒	3	284.0	Same as above; moist.		
			335.7	Gray SILT, some Clay; moist.		Collected sample RX-409 (7) for VOCs. Collected sample RX-409 (8) for VOCs.
10	☒	4	381.1	Gray SILT; petroleum odor; wet.		
			565.8	Gray CLAY, some Silt, trace fine Gravel in layers; wet.	CH	Collected sample RX-409 (11) for VOCs.

Bottom of borehole at 12.0 ft.

Additional Notes: Mention of odor, staining, and/or sheen is based on observations by person(s) logging the soil samples collected from the borehole and indicates odor, staining, and/or sheen related to the apparent presence of oil and/or hazardous material (OHM). Where not noted, OHM odor, OHM staining, and/or OHM sheen were not observed. In addition, where noted, soil has been characterized as fill based on observations. No mention of fill or other features in the soil descriptions does not indicate lack of of the same.

Photoionization detector (PID) readings are affected by multiple factors, including sample consistency, moisture, relative humidity, and dust. Therefore, PID readings are just one of the factors considered when making a determination of the absence or prescence of SPH in a given sample.

12 Gill Street
Suite 4700
Woburn MA 01801
Telephone: (781)-569-4000
Fax: (781)-569-4001

BORING ID: RX-410

CLIENT: MJ Painting

SITE NAME/ADDRESS: 350 Franklin Street

CITY/STATE: Olean, NY

DATE(S): 11/12/2021 - 11/12/2021

LOGGED BY: S. Hibben

DRILLING CONTRACTOR: TREC

DRILLING METHOD: Geoprobe

SAMPLER TYPE: Macro Core

BOREHOLE DIAMETER: 3.25 inches

BOREHOLE DEPTH: 12'

DEPTH (ft)	Sample Interval	RECOVERY (ft)	PID (ppm)	MATERIAL DESCRIPTION	U.S.C.S.	Notes
0		3.5	8.5	Dark brown fine SAND; organics; dry.	SP	
			8.3	Brown/gray fine GRAVEL, some Silt, some fine Sand; dry.	GM	
5		3.8	8.8	Same as above.		
			31.4	Black fine to medium SAND; fill at top (wood); dry; petroleum odor.	SW	
			10.8	Dark gray CLAY; petroleum odor; moist.	CH	
			21.0	Black SILT, some fine to coarse SAND; moist; petroleum odor.	ML	Collected sample RX-410 (8) for VOCs.
10			254.3	Gray CLAY and SILT, some fine Gravel at bottom; moist; petroleum odor; SPH globules.	CH	Collected sample RX-410 (10-12) for composite re-use suite. Collected sample RX-410 (11) for VOCs.

Bottom of borehole at 12.0 ft.

Additional Notes: Mention of odor, staining, and/or sheen is based on observations by person(s) logging the soil samples collected from the borehole and indicates odor, staining, and/or sheen related to the apparent presence of oil and/or hazardous material (OHM). Where not noted, OHM odor, OHM staining, and/or OHM sheen were not observed. In addition, where noted, soil has been characterized as fill based on observations. No mention of fill or other features in the soil descriptions does not indicate lack of of the same.

Photoionization detector (PID) readings are affected by multiple factors, including sample consistency, moisture, relative humidity, and dust. Therefore, PID readings are just one of the factors considered when making a determination of the absence or prescence of SPH in a given sample.

12 Gill Street
Suite 4700
Woburn MA 01801
Telephone: (781)-569-4000
Fax: (781)-569-4001

BORING ID: RX-411

CLIENT: MJ Painting
DRILLING CONTRACTOR: TREC
SITE NAME/ADDRESS: 350 Franklin Street
DRILLING METHOD: Geoprobe
CITY/STATE: Olean, NY
SAMPLER TYPE: Macro Core
DATE(S): 11/12/2021 - 11/12/2021
BOREHOLE DIAMETER: 3.25 inches
LOGGED BY: S. Hibben
BOREHOLE DEPTH: 12'

DEPTH (ft)	Sample Interval	RECOVERY (ft)	PID (ppm)	MATERIAL DESCRIPTION	U.S.C.S.	Notes
0		3.5	6.3	Brown and gray fine to coarse GRAVEL, some Silt, some fine Sand; dry.	GW	
			429.4	Black medium SAND, some Silt, trace fine gravel; fill (brick, wood); dry; petroleum odor.	SM	Collected sample RX-411 (3) for VOCs.
5		3.5	956.1	Black medium SAND, trace silt; petroleum odor; dry.	SP	Collected sample RX-411 (6.5) for VOCs. Collected sample RX-411 (7-10) for composite re-use suite.
			1345	Dark gray CLAY, and Silt; staining; petroleum odor; moist; SPH globules.	CH	Collected sample RX-411 (8) for VOCs.
			708.9	Same as above; sheen.		
10			552.2	Gray CLAY, trace silt; staining; petroleum odor; SPH globules.		Collected sample RX-411 (12) for VOCs.

Bottom of borehole at 12.0 ft.

Additional Notes: Mention of odor, staining, and/or sheen is based on observations by person(s) logging the soil samples collected from the borehole and indicates odor, staining, and/or sheen related to the apparent presence of oil and/or hazardous material (OHM). Where not noted, OHM odor, OHM staining, and/or OHM sheen were not observed. In addition, where noted, soil has been characterized as fill based on observations. No mention of fill or other features in the soil descriptions does not indicate lack of of the same.

Photoionization detector (PID) readings are affected by multiple factors, including sample consistency, moisture, relative humidity, and dust. Therefore, PID readings are just one of the factors considered when making a determination of the absence or prescence of SPH in a given sample.

12 Gill Street
Suite 4700
Woburn MA 01801
Telephone: (781)-569-4000
Fax: (781)-569-4001

BORING ID: RX-412

CLIENT: MJ Painting
DRILLING CONTRACTOR: TREC
SITE NAME/ADDRESS: 350 Franklin Street
DRILLING METHOD: Geoprobe
CITY/STATE: Olean, NY
SAMPLER TYPE: Macro Core
DATE(S): 11/15/2021 - 11/15/2021
BOREHOLE DIAMETER: 3.25 inches
LOGGED BY: S. Hibben
BOREHOLE DEPTH: 12'

DEPTH (ft)	Sample Interval	RECOVERY (ft)	PID (ppm)	MATERIAL DESCRIPTION	U.S.C.S.	Notes
0		3.5	1.5	Brown fine to coarse SAND, and Silt, some fine to coarse Gravel; dry.	SW	No samples collected.
		3.8		Gray coarse GRAVEL, some fine Sand; dry.	GP	
5			10.5 113.7	Black fine to coarse SAND; some Silt, trace fine gravel; fill (brick, wood); dry to moist; petroleum odor at bottom.	SM	
		3.5	109.3	Dark gray SILT, some fine Gravel; petroleum odor; wet.	ML	
10			236.1	Gray SILT, and Clay; petroleum odor; moist.	CH	
			102.0	Gray fine to coarse SAND, some fine Gravel; petroleum odor; wet.	SW	

Bottom of borehole at 12.0 ft.

Additional Notes: Mention of odor, staining, and/or sheen is based on observations by person(s) logging the soil samples collected from the borehole and indicates odor, staining, and/or sheen related to the apparent presence of oil and/or hazardous material (OHM). Where not noted, OHM odor, OHM staining, and/or OHM sheen were not observed. In addition, where noted, soil has been characterized as fill based on observations. No mention of fill or other features in the soil descriptions does not indicate lack of of the same.

Photoionization detector (PID) readings are affected by multiple factors, including sample consistency, moisture, relative humidity, and dust. Therefore, PID readings are just one of the factors considered when making a determination of the absence or prescence of SPH in a given sample.

ROUX
12 Gill Street
Suite 4700
Woburn MA 01801
Telephone: (781)-569-4000
Fax: (781)-569-4001

BORING ID: RX-413

CLIENT: MJ Painting
DRILLING CONTRACTOR: TREC
SITE NAME/ADDRESS: 350 Franklin Street
DRILLING METHOD: Geoprobe
CITY/STATE: Olean, NY
SAMPLER TYPE: Macro Core
DATE(S): 11/15/2021 - 11/15/2021
BOREHOLE DIAMETER: 3.25 inches
LOGGED BY: S. Hibben
BOREHOLE DEPTH: 12'

DEPTH (ft)	Sample Interval	RECOVERY (ft)	PID (ppm)	MATERIAL DESCRIPTION	U.S.C.S.	Notes
0				Brown fine to coarse SAND, and fine Gravel; dry.	SW	
		3.5	4.5	Gray coarse GRAVEL, some fine to coarse Sand, trace silt; dry.	GP	Collected sample RX-413 (3) for VOCs.
				Same as above.		
5		3.8	3.7	Black fine to coarse SAND, trace silt; dry to moist.	SW	
				Same as above.		
10			605.3	Gray-brown SILT, some Clay, trace fine gravel; petroleum odor.	ML	Collected sample RX-413 (9) for VOCs. Collected sample RX-413 (10-12) for composite re-use suite. Collected sample RX-413 (11) for VOCs.
			449.9	Gray fine to coarse SAND, some Silt; petroleum odor; sheen; moist.	SM	

Bottom of borehole at 12.0 ft.

Additional Notes: Mention of odor, staining, and/or sheen is based on observations by person(s) logging the soil samples collected from the borehole and indicates odor, staining, and/or sheen related to the apparent presence of oil and/or hazardous material (OHM). Where not noted, OHM odor, OHM staining, and/or OHM sheen were not observed. In addition, where noted, soil has been characterized as fill based on observations. No mention of fill or other features in the soil descriptions does not indicate lack of of the same.

Photoionization detector (PID) readings are affected by multiple factors, including sample consistency, moisture, relative humidity, and dust. Therefore, PID readings are just one of the factors considered when making a determination of the absence or prescence of SPH in a given sample.

12 Gill Street
Suite 4700
Woburn MA 01801
Telephone: (781)-569-4000
Fax: (781)-569-4001

BORING ID: RX-414

CLIENT: MJ Painting
SITE NAME/ADDRESS: 350 Franklin Street
CITY/STATE: Olean, NY
DATE(S): 11/15/2021 - 11/15/2021
LOGGED BY: S. Hibben

DRILLING CONTRACTOR: TREC
DRILLING METHOD: Geoprobe
SAMPLER TYPE: Macro Core
BOREHOLE DIAMETER: 3.25 inches
BOREHOLE DEPTH: 12'

DEPTH (ft)	Sample Interval	RECOVERY (ft)	PID (ppm)	MATERIAL DESCRIPTION	U.S.C.S.	Notes
0				Brown fine Gravel, some fine Sand; dry.	GP	
		3.2	2.4	Light brown/gray fine to coarse SAND, some fine Gravel, trace silt; dry.	SW	
			4.6	Black fine SAND, some Silt, trace fine gravel; fill (brick); dry.	SM	
5			8.9	Same as above.		Collected sample RX-414 (4-7) for composite re-use suite.
		4	13.0	Black medium to coarse SAND, trace fine gravel; fill (brick); dry.	SW	Collected sample RX-414 (6) for VOCs.
			67.3	Gray SILT; petroleum odor and sheen; moist.	ML	
10		4	148.7	Gray-brown SILT, coarse Sand at bottom; petroleum odor; moist.		

Bottom of borehole at 12.0 ft.

Additional Notes: Mention of odor, staining, and/or sheen is based on observations by person(s) logging the soil samples collected from the borehole and indicates odor, staining, and/or sheen related to the apparent presence of oil and/or hazardous material (OHM). Where not noted, OHM odor, OHM staining, and/or OHM sheen were not observed. In addition, where noted, soil has been characterized as fill based on observations. No mention of fill or other features in the soil descriptions does not indicate lack of of the same.

Photoionization detector (PID) readings are affected by multiple factors, including sample consistency, moisture, relative humidity, and dust. Therefore, PID readings are just one of the factors considered when making a determination of the absence or prescence of SPH in a given sample.

12 Gill Street
Suite 4700
Woburn MA 01801
Telephone: (781)-569-4000
Fax: (781)-569-4001

BORING ID: RX-415

CLIENT: MJ Painting

SITE NAME/ADDRESS: 350 Franklin Street

CITY/STATE: Olean, NY

DATE(S): 11/16/2021 - 11/16/2021

LOGGED BY: S. Hibben

DRILLING CONTRACTOR: TREC

DRILLING METHOD: Geoprobe

SAMPLER TYPE: Macro Core

BOREHOLE DIAMETER: 3.25 inches

BOREHOLE DEPTH: 12'

DEPTH (ft)	Sample Interval	RECOVERY (ft)	PID (ppm)	MATERIAL DESCRIPTION	U.S.C.S.	Notes
0		3.5	0.7	Brown fine GRAVEL, some fine Sand; dry.	GP	
				Gray fine to coarse GRAVEL, some Silt; dry.	GM	
				Same as above; wet.		
5		4	2.3	Black medium SAND; fill (brick); moist.	SP	Collected sample RX-415 (5) for VOCs.
			110.7	Gray SILT, some Clay; petroleum odor; moist.	ML	Collected sample RX-415 (7-10) for composite re-use suite. Collected sample RX-415 (7.5) for VOCs.
10		1	152.7	Gray fine GRAVEL, and coarse Sand, trace silt; wet.	GP	Collected sample RX-415 (11) for VOCs.

Bottom of borehole at 12.0 ft.

Additional Notes: Mention of odor, staining, and/or sheen is based on observations by person(s) logging the soil samples collected from the borehole and indicates odor, staining, and/or sheen related to the apparent presence of oil and/or hazardous material (OHM). Where not noted, OHM odor, OHM staining, and/or OHM sheen were not observed. In addition, where noted, soil has been characterized as fill based on observations. No mention of fill or other features in the soil descriptions does not indicate lack of of the same.

Photoionization detector (PID) readings are affected by multiple factors, including sample consistency, moisture, relative humidity, and dust. Therefore, PID readings are just one of the factors considered when making a determination of the absence or prescence of SPH in a given sample.

ROUX
12 Gill Street
Suite 4700
Woburn MA 01801
Telephone: (781)-569-4000
Fax: (781)-569-4001

BORING ID: RX-416

CLIENT: MJ Painting
DRILLING CONTRACTOR: TREC
SITE NAME/ADDRESS: 350 Franklin Street
DRILLING METHOD: Geoprobe
CITY/STATE: Olean, NY
SAMPLER TYPE: Macro Core
DATE(S): 11/16/2021 - 11/16/2021
BOREHOLE DIAMETER: 3.25 inches
LOGGED BY: S. Hibben
BOREHOLE DEPTH: 12'

DEPTH (ft)	Sample Interval	RECOVERY (ft)	PID (ppm)	MATERIAL DESCRIPTION	U.S.C.S.	Notes
0	☒	3.5	298	Brown fine GRAVEL, some Silt, trace fine to coarse sand; fill (brick); dry to moist.	GM	Collected sample RX-416 (1-4) for composite re-use suite. Collected sample RX-416 (3) for VOCs.
5	☒	3.5	192.6	Alternating Gray SILT, and black medium Sand, trace fine Gravel; petroleum odor; moist.	ML	
			430.3	Gray SILT, trace Clay; petroleum odor; moist; SPH globules.		
10	☒	2.5	1036	Gray SILT, some Clay; petroleum odor; sheen; SPH globules (10-11).		
				Gray medium SAND, some fine Gravel; petroleum odor; sheen; SPH globules.	SP	Collected sample RX-416 (10-12) for waste characterization.

Bottom of borehole at 12.0 ft.

Additional Notes: Mention of odor, staining, and/or sheen is based on observations by person(s) logging the soil samples collected from the borehole and indicates odor, staining, and/or sheen related to the apparent presence of oil and/or hazardous material (OHM). Where not noted, OHM odor, OHM staining, and/or OHM sheen were not observed. In addition, where noted, soil has been characterized as fill based on observations. No mention of fill or other features in the soil descriptions does not indicate lack of of the same.

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Telephone: (781)-569-4000
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BORING ID: RX-417

CLIENT: MJ Painting

SITE NAME/ADDRESS: 350 Franklin Street

CITY/STATE: Olean, NY

DATE(S): 11/11/2021 - 11/11/2021

LOGGED BY: S. Hibben

DRILLING CONTRACTOR: TREC

DRILLING METHOD: Geoprobe

SAMPLER TYPE: Macro Core

BOREHOLE DIAMETER: 3.25 inches

BOREHOLE DEPTH: 12'

DEPTH (ft)	Sample Interval	RECOVERY (ft)	PID (ppm)	MATERIAL DESCRIPTION	U.S.C.S.	Notes
0		3.1	2.6	Brown fine to medium SAND, some Silt, trace fine Gravel; organics at surface; dry.	SW	Collected sample RX-417 (1-4) for composite re-use suite. Collected sample RX-417 (3) for VOCs.
				Gray coarse GRAVEL, some Silt, some Clay; dry.	GM	
5		3.5	2.9	Same as above.		
			32.7	Black medium SAND; trace fill (brick); petroleum odor; dry.	SP	Collected sample RX-417 (7) for VOCs with DUP20211111(2).
10		2.5	435.6	Black fine to coarse SAND, and Silt; petroleum odor and sheen; moist.	SM	Collected sample RX-417 (7-10) for composite re-use suite. Collected sample RX-417 (9) for VOCs.
				Gray CLAY, some Silt; petroleum odor and sheen; moist.	CL	Collected sample RX-417 (1012) for waste characterization.

Bottom of borehole at 12.0 ft.

Additional Notes: Mention of odor, staining, and/or sheen is based on observations by person(s) logging the soil samples collected from the borehole and indicates odor, staining, and/or sheen related to the apparent presence of oil and/or hazardous material (OHM). Where not noted, OHM odor, OHM staining, and/or OHM sheen were not observed. In addition, where noted, soil has been characterized as fill based on observations. No mention of fill or other features in the soil descriptions does not indicate lack of of the same.

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ROUX
12 Gill Street
Suite 4700
Woburn MA 01801
Telephone: (781)-569-4000
Fax: (781)-569-4001

BORING ID: RX-418

CLIENT: MJ Painting

DRILLING CONTRACTOR: TREC

SITE NAME/ADDRESS: 350 Franklin Street

DRILLING METHOD: Geoprobe

CITY/STATE: Olean, NY

SAMPLER TYPE: Macro Core

DATE(S): 11/11/2021 - 11/11/2021

BOREHOLE DIAMETER: 3.25 inches

LOGGED BY: S. Hibben

BOREHOLE DEPTH: 12'

DEPTH (ft)	Sample Interval	RECOVERY (ft)	PID (ppm)	MATERIAL DESCRIPTION	U.S.C.S.	Notes
0		3.5	2.1	Brown coarse GRAVEL, some fine to coarse Sand; organics; dry.	GP	
			6.2	Gray coarse GRAVEL, some Silt; dry.	GM	Collected sample RX-418 (3) for VOCs.
5		3	3.5	Same as above.		Collected sample RX-418 (4-7) for composite re-use suite.
			95.9	Black fine to coarse SAND; petroleum odor; dry.		Collected sample RX-418 (6) for VOCs.
				Black fine to coarse SAND and coarse GRAVEL; fill (brick); petroleum odor and sheen; wet.	SW	Re-advance 8-12 ft for more volume. Collected sample RX-418 (9) for VOCs with MS/MSD.
10		1.5	129.9	Black SILT and gray CLAY; petroleum odor and sheen on surface (clean clay in core interior).	ML	Collected sample RX-418 (10-12) for waste characterization.

Bottom of borehole at 12.0 ft.

Additional Notes: Mention of odor, staining, and/or sheen is based on observations by person(s) logging the soil samples collected from the borehole and indicates odor, staining, and/or sheen related to the apparent presence of oil and/or hazardous material (OHM). Where not noted, OHM odor, OHM staining, and/or OHM sheen were not observed. In addition, where noted, soil has been characterized as fill based on observations. No mention of fill or other features in the soil descriptions does not indicate lack of of the same.

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12 Gill Street
Suite 4700
Woburn MA 01801
Telephone: (781)-569-4000
Fax: (781)-569-4001

BORING ID: RX-419

CLIENT: MJ Painting
DRILLING CONTRACTOR: TREC
SITE NAME/ADDRESS: 350 Franklin Street
DRILLING METHOD: Geoprobe
CITY/STATE: Olean, NY
SAMPLER TYPE: Macro Core
DATE(S): 11/15/2021 - 11/15/2021
BOREHOLE DIAMETER: 3.25 inches
LOGGED BY: S. Hibben
BOREHOLE DEPTH: 12'

DEPTH (ft)	Sample Interval	RECOVERY (ft)	PID (ppm)	MATERIAL DESCRIPTION	U.S.C.S.	Notes
0		3	0.7	Brown fine GRAVEL, some fine to coarse Sand; dry.	GP	
				Gray coarse GRAVEL, some Silt; dry.	GM	Collected sample RX-419 (1-4) for composite re-use suite. Collected sample RX-419 (3) for VOCs.
		3	323.7	Same as above.		
5				Black fine to coarse SAND, some Gravel; petroleum odor; dry to moist.	SW	Collected sample RX-419 (6) for VOCs. Collected sample RX-419 (7-10) for composite re-use suite.
		3.5	211.3	Same as above.		Collected sample RX-419 (9) for VOCs.
10			50.0	Gray SILT; petroleum odor; sheen.	ML	Collected sample RX-419 (10-12) for VOCs.

Bottom of borehole at 12.0 ft.

Additional Notes: Mention of odor, staining, and/or sheen is based on observations by person(s) logging the soil samples collected from the borehole and indicates odor, staining, and/or sheen related to the apparent presence of oil and/or hazardous material (OHM). Where not noted, OHM odor, OHM staining, and/or OHM sheen were not observed. In addition, where noted, soil has been characterized as fill based on observations. No mention of fill or other features in the soil descriptions does not indicate lack of of the same.

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12 Gill Street
Suite 4700
Woburn MA 01801
Telephone: (781)-569-4000
Fax: (781)-569-4001

BORING ID: RX-420

CLIENT: MJ Painting

DRILLING CONTRACTOR: TREC

SITE NAME/ADDRESS: 350 Franklin Street

DRILLING METHOD: Geoprobe

CITY/STATE: Olean, NY

SAMPLER TYPE: Macro Core

DATE(S): 11/15/2021 - 11/15/2021

BOREHOLE DIAMETER: 3.25 inches

LOGGED BY: S. Hibben

BOREHOLE DEPTH: 12'

DEPTH (ft)	Sample Interval	RECOVERY (ft)	PID (ppm)	MATERIAL DESCRIPTION	U.S.C.S.	Notes
0		4	0.8	Brown fine GRAVEL, some fine to coarse Sand, some Silt; dry.	GM	Collected sample RX-420 (3) for VOCs.
		4		Brown SILT, and fine Gravel; moist.	ML	Collected sample RX-420 (4-7) for composite re-use suite.
5			2.0	Gray coarse GRAVEL, some Silt; dry.	GM	
			11.0 94.9	Black medium to coarse SAND, trace fine gravel; fill (brick); petroleum odor; dry.	SW	Collected sample RX-420 (7) for VOCs.
		4	225.3	Black fine (+) to coarse (-) SAND, trace fine gravel; petroleum odor and sheen; wet; SPH globules.		Collected sample RX-420 (7-10) for waste characterization.
10			66.1	Black-gray SILT, some Clay; moist to wet; petroleum odor and sheen; SPH globules.	ML	Collected sample RX-420 (10-12) for waste characterization.

Bottom of borehole at 12.0 ft.

Additional Notes: Mention of odor, staining, and/or sheen is based on observations by person(s) logging the soil samples collected from the borehole and indicates odor, staining, and/or sheen related to the apparent presence of oil and/or hazardous material (OHM). Where not noted, OHM odor, OHM staining, and/or OHM sheen were not observed. In addition, where noted, soil has been characterized as fill based on observations. No mention of fill or other features in the soil descriptions does not indicate lack of of the same.

Photoionization detector (PID) readings are affected by multiple factors, including sample consistency, moisture, relative humidity, and dust. Therefore, PID readings are just one of the factors considered when making a determination of the absence or prescence of SPH in a given sample.

ROUX
12 Gill Street
Suite 4700
Woburn MA 01801
Telephone: (781)-569-4000
Fax: (781)-569-4001

BORING ID: RX-421

CLIENT: MJ Painting
DRILLING CONTRACTOR: TREC
SITE NAME/ADDRESS: 350 Franklin Street
DRILLING METHOD: Geoprobe
CITY/STATE: Olean, NY
SAMPLER TYPE: Macro Core
DATE(S): 11/11/2021 - 11/11/2021
BOREHOLE DIAMETER: 3.25 inches
LOGGED BY: S. Hibben
BOREHOLE DEPTH: 12'

DEPTH (ft)	Sample Interval	RECOVERY (ft)	PID (ppm)	MATERIAL DESCRIPTION	U.S.C.S.	Notes
0		3	0.6	Brown fine GRAVEL and fine SAND; organics; dry.	GP	
			1.9	Gray coarse GRAVEL and SILT; dry.	GM	
5		3	1.6	Same as above, trace Clay, trace fine to coarse Gravel.		
			55.2	Black medium SAND, trace fine Gravel; fill (brick); petroleum odor; dry.	SP	
				Same as above.		
				Brown fine to coarse SAND, some fine Gravel; dry.	SW	Collected sample RX-421 (9) for VOCs.
10		3	715.3	Black fine SAND, some Silt, trace fine Gravel; petroleum odor.	SM	
				Black fine GRAVEL, trace Sand; petroleum odor and sheen; wet.	GP	Collected sample RX-421 (10-12) for composite re-use suite.
			132.7	Gray CLAY; petroleum odor; moist.	CH	

Bottom of borehole at 12.0 ft.

Additional Notes: Mention of odor, staining, and/or sheen is based on observations by person(s) logging the soil samples collected from the borehole and indicates odor, staining, and/or sheen related to the apparent presence of oil and/or hazardous material (OHM). Where not noted, OHM odor, OHM staining, and/or OHM sheen were not observed. In addition, where noted, soil has been characterized as fill based on observations. No mention of fill or other features in the soil descriptions does not indicate lack of of the same.

Photoionization detector (PID) readings are affected by multiple factors, including sample consistency, moisture, relative humidity, and dust. Therefore, PID readings are just one of the factors considered when making a determination of the absence or prescence of SPH in a given sample.

ROUX
12 Gill Street
Suite 4700
Woburn MA 01801
Telephone: (781)-569-4000
Fax: (781)-569-4001

BORING ID: RX-422

CLIENT: MJ Painting
DRILLING CONTRACTOR: TREC
SITE NAME/ADDRESS: 350 Franklin Street
DRILLING METHOD: Geoprobe
CITY/STATE: Olean, NY
SAMPLER TYPE: Macro Core
DATE(S): 11/10/2021 - 11/10/2021
BOREHOLE DIAMETER: 3.25 inches
LOGGED BY: S. Hibben
BOREHOLE DEPTH: 12'

DEPTH (ft)	Sample Interval	RECOVERY (ft)	PID (ppm)	MATERIAL DESCRIPTION	U.S.C.S.	Notes
0		3	10.3	Brown fine to coarse SAND, some fine Gravel, trace silt; organics; concrete (1ft bgs); dry.	SW	Collected sample RX-422 (0-1) for waste characterization. Collected sample RX-422 (1-4) for composite re-use suite.
			5.4	Gray coarse GRAVEL, trace silt; dry.	GP	Collected sample RX-422 (3) for VOCs.
5		4	701.3	Dark brown fine to coarse SAND; dry.	SW	
			797.8	Dark brown SILT; moist.	ML	Collected sample RX-422 (7) for VOCs. Collected sample RX-422 (7-10) for composite re-use suite.
10		2	119.6	Dark gray fine to coarse SAND, some Silt, trace fine gravel; moist.	SM	Collected sample RX-422 (10) for VOCs. Collected sample RX-422 (10-12) for waste characterization.

Bottom of borehole at 12.0 ft.

Additional Notes: Collected two macrocores between 8-12 to get enough sample volume.

Mention of odor, staining, and/or sheen is based on observations by person(s) logging the soil samples collected from the borehole and indicates odor, staining, and/or sheen related to the apparent presence of oil and/or hazardous material (OHM). Where not noted, OHM odor, OHM staining, and/or OHM sheen were not observed. In addition, where noted, soil has been characterized as fill based on observations. No mention of fill or other features in the soil descriptions does not indicate lack of of the same.

Photoionization detector (PID) readings are affected by multiple factors, including sample consistency, moisture, relative humidity, and dust. Therefore, PID readings are just one of the factors considered when making a determination of the absence or prescence of SPH in a given sample.

ROUX
12 Gill Street
Suite 4700
Woburn MA 01801
Telephone: (781)-569-4000
Fax: (781)-569-4001

BORING ID: RX-423

CLIENT: MJ Painting
DRILLING CONTRACTOR: TREC
SITE NAME/ADDRESS: 350 Franklin Street
DRILLING METHOD: Geoprobe
CITY/STATE: Olean, NY
SAMPLER TYPE: Macro Core
DATE(S): 11/11/2021 - 11/11/2021
BOREHOLE DIAMETER: 3.25 inches
LOGGED BY: S. Hibben
BOREHOLE DEPTH: 12'

DEPTH (ft)	Sample Interval	RECOVERY (ft)	PID (ppm)	MATERIAL DESCRIPTION	U.S.C.S.	Notes
0	☒	4	0.6	Brown fine GRAVEL and fine SAND; organics; dry.	GP	
				Gray coarse GRAVEL, some Silt; dry.	GM	Collected sample RX-423 (3) for VOCs.
	☒	3.5		Same as above.		Collected sample RX-423 (4-7) for composite re-use suite with MS/MSD.
5			18.6	Black medium SAND, some Silt at 5' and 7.5'; dry.	SM	Collected sample RX-423 (7) for VOCs.
			41.3	Black SILT, some fine to coarse SAND, trace Gravel; organics; petroleum odor; moist.	ML	Collected sample RX-423 (8) for VOCs.
	☒	1	399.5	Black medium SAND, some Silt; petroleum odor and sheen; wet.	SM	
10						Collected sample RX-423 (10-12) for waste characterization.
			126.8	Dark gray CLAY; petroleum odor and sheen; wet.	CH	

Bottom of borehole at 12.0 ft.

Additional Notes: Readvanced 4-12 ft bgs to get more sample volume.

Mention of odor, staining, and/or sheen is based on observations by person(s) logging the soil samples collected from the borehole and indicates odor, staining, and/or sheen related to the apparent presence of oil and/or hazardous material (OHM). Where not noted, OHM odor, OHM staining, and/or OHM sheen were not observed. In addition, where noted, soil has been characterized as fill based on observations. No mention of fill or other features in the soil descriptions does not indicate lack of of the same.

Photoionization detector (PID) readings are affected by multiple factors, including sample consistency, moisture, relative humidity, and dust. Therefore, PID readings are just one of the factors considered when making a determination of the absence or prescence of SPH in a given sample.

12 Gill Street
Suite 4700
Woburn MA 01801
Telephone: (781)-569-4000
Fax: (781)-569-4001

BORING ID: RX-424

CLIENT: MJ Painting

DRILLING CONTRACTOR: TREC

SITE NAME/ADDRESS: 350 Franklin Street

DRILLING METHOD: Geoprobe

CITY/STATE: Olean, NY

SAMPLER TYPE: Macro Core

DATE(S): 11/11/2021 - 11/11/2021

BOREHOLE DIAMETER: 3.25 inches

LOGGED BY: S. Hibben

BOREHOLE DEPTH: 12'

DEPTH (ft)	Sample Interval	RECOVERY (ft)	PID (ppm)	MATERIAL DESCRIPTION	U.S.C.S.	Notes
0		3	0.9	Brown fine to coarse SAND, some fine Gravel; organics at surface; dry.	SW	Collected sample RX-424 (1-4) for composite re-use suite. Collected sample RX-424 (3) for VOCs.
				Gray coarse GRAVEL, trace silt; dry.	GP	
5		3		Same as above.		
				Black fine to coarse SAND, trace silt, trace fine Gravel; dry.	SW	Collected sample RX-424 (6.5) for VOCs. Collected sample RX-424 (7-8) for composite re-use suite.
			388.0	Black fine to coarse SAND; petroleum odor and sheen; wet.		Collected sample RX-424 (9) for VOCs.
10			190.4			Collected sample RX-424 (10-12) for waste characterization.

Bottom of borehole at 12.0 ft.

Additional Notes: Mention of odor, staining, and/or sheen is based on observations by person(s) logging the soil samples collected from the borehole and indicates odor, staining, and/or sheen related to the apparent presence of oil and/or hazardous material (OHM). Where not noted, OHM odor, OHM staining, and/or OHM sheen were not observed. In addition, where noted, soil has been characterized as fill based on observations. No mention of fill or other features in the soil descriptions does not indicate lack of of the same.

Photoionization detector (PID) readings are affected by multiple factors, including sample consistency, moisture, relative humidity, and dust. Therefore, PID readings are just one of the factors considered when making a determination of the absence or prescence of SPH in a given sample.

ROUX
12 Gill Street
Suite 4700
Woburn MA 01801
Telephone: (781)-569-4000
Fax: (781)-569-4001

BORING ID: RX-425

CLIENT: MJ Painting
SITE NAME/ADDRESS: 350 Franklin Street
CITY/STATE: Olean, NY
DATE(S): 11/11/2021 - 11/11/2021
LOGGED BY: S. Hibben
DRILLING CONTRACTOR: TREC
DRILLING METHOD: Geoprobe
SAMPLER TYPE: Macro Core
BOREHOLE DIAMETER: 3.25 inches
BOREHOLE DEPTH: 12'

DEPTH (ft)	Sample Interval	RECOVERY (ft)	PID (ppm)	MATERIAL DESCRIPTION	U.S.C.S.	Notes
0		0.5	1.5	Brown fine to coarse SAND, some fine Gravel; dry.	SW	*Large rock stuck in front of drillcore impeded recovery. Collected sample RX-425 (0-1) for waste characterization. Collected sample RX-425 (2) for VOCs with DUP20211111.
5		1	9.3	Gray fine to coarse SAND, some fine Gravel; dry.		Collected sample RX-425 (4-7) for composite re-use suite.
			11.6	Black fine to coarse SAND, trace silt; moist.		Collected sample RX-425 (7) for VOCs.
		0.5		Black SILT and, fine to coarse Gravel; odor and sheen; wet.	GM	*Very little recovery. Collected sample RX-425 (7-10) for waste characterization.
10			208.3	Black SILT, some coarse SAND; odor and sheen; wet.	ML	Collected sample RX-425 (10-12) for waste characterization.

Bottom of borehole at 12.0 ft.

Additional Notes: Hit concrete refusal at ~6 ft bgs in five locations. Final borehole location ~12 ft South of original.
Re-advanced from 4-12 to get more recovery.

Mention of odor, staining, and/or sheen is based on observations by person(s) logging the soil samples collected from the borehole and indicates odor, staining, and/or sheen related to the apparent presence of oil and/or hazardous material (OHM). Where not noted, OHM odor, OHM staining, and/or OHM sheen were not observed. In addition, where noted, soil has been characterized as fill based on observations. No mention of fill or other features in the soil descriptions does not indicate lack of of the same.

Photoionization detector (PID) readings are affected by multiple factors, including sample consistency, moisture, relative humidity, and dust. Therefore, PID readings are just one of the factors considered when making a determination of the absence or prescence of SPH in a given sample.

ROUX
12 Gill Street
Suite 4700
Woburn MA 01801
Telephone: (781)-569-4000
Fax: (781)-569-4001

BORING ID: RX-426

CLIENT: MJ Painting
DRILLING CONTRACTOR: TREC
SITE NAME/ADDRESS: 350 Franklin Street
DRILLING METHOD: Geoprobe
CITY/STATE: Olean, NY
SAMPLER TYPE: Macro Core
DATE(S): 11/11/2021 - 11/11/2021
BOREHOLE DIAMETER: 3.25 inches
LOGGED BY: S. Hibben
BOREHOLE DEPTH: 12'

DEPTH (ft)	Sample Interval	RECOVERY (ft)	PID (ppm)	MATERIAL DESCRIPTION	U.S.C.S.	Notes
0		3.5	1.5	Brown fine to medium SAND, trace fine gravel; Organics; Dry.	SW	Collected sample RX-426 (1-4) for composite re-use suite.
			2.2	Gray coarse GRAVEL, and Silt; Dry.	GM	Collected sample RX-426 (3) for VOCs.
5		3	36.5	Same as above.		
			402.4	Black fine to coarse SAND, and Silt; fill (brick); petroleum odor; dry to moist.	SW	Collected sample RX-426 (7) for VOCs with MS/MSD. Collected sample RX-426 (7-10) for waste characterization.
10		3	418.3	Same as above.		
				Black fine to coarse SAND; petroleum odor; sheen; and wet.		Collected sample RX-426 (10-12) for waste characterization.

Bottom of borehole at 12.0 ft.

Additional Notes: Mention of odor, staining, and/or sheen is based on observations by person(s) logging the soil samples collected from the borehole and indicates odor, staining, and/or sheen related to the apparent presence of oil and/or hazardous material (OHM). Where not noted, OHM odor, OHM staining, and/or OHM sheen were not observed. In addition, where noted, soil has been characterized as fill based on observations. No mention of fill or other features in the soil descriptions does not indicate lack of of the same.

Photoionization detector (PID) readings are affected by multiple factors, including sample consistency, moisture, relative humidity, and dust. Therefore, PID readings are just one of the factors considered when making a determination of the absence or prescence of SPH in a given sample.

ROUX
12 Gill Street
Suite 4700
Woburn MA 01801
Telephone: (781)-569-4000
Fax: (781)-569-4001

BORING ID: RX-427

CLIENT: MJ Painting
SITE NAME/ADDRESS: 350 Franklin Street
CITY/STATE: Olean, NY
DATE(S): 11/16/2021 - 11/16/2021
LOGGED BY: S. Hibben, W. Peterson
DRILLING CONTRACTOR: TREC
DRILLING METHOD: Hand Tools / Direct Push
SAMPLER TYPE: Hand Auger / Macrocore
BOREHOLE DIAMETER: 12 / 3.25 inches
BOREHOLE DEPTH: 12'

DEPTH (ft)	Sample Interval	RECOVERY (ft)	PID (ppm)	MATERIAL DESCRIPTION	U.S.C.S.	Notes
0	☒	4	0.5	Brown fine to coarse GRAVEL, some fine to coarse Sand; moist.	GW	
	☒		1.2	Gray fine to coarse SAND, trace fine gravel; dry.	SW	Precleared first 5 feet.
	☒		1.9	Gray SILT, some fine to coarse Sand; densely compacted.	ML	Collected sample RX-427 (2-3) for VOCs.
	☒		0.0	Brown SILT and fine GRAVEL, some fine to coarse SAND; dry.		
5	☒	3		Same as above.		
			1.4	Gray coarse GRAVEL, some Silt.	GP	Collected sample RX-427 (6) for VOCs.
			114.3	Black medium to coarse SAND, some fine Gravel; fill (brick); petroleum odor; dry.	SW	Collected sample RX-427 (7-10) for waste characterization.
	☒		142	Black fine (-) to coarse (+) SAND, some fine Gravel; petroleum odor; wet; SPH globules.		
10			314.6	Gray SILT; petroleum odor; wet; SPH globules.	ML	Collected sample RX-427 (10-12) for waste characterization.

Bottom of borehole at 12.0 ft.

Additional Notes: Location precelared to 5 ft bgs with hand tools.

Mention of odor, staining, and/or sheen is based on observations by person(s) logging the soil samples collected from the borehole and indicates odor, staining, and/or sheen related to the apparent presence of oil and/or hazardous material (OHM). Where not noted, OHM odor, OHM staining, and/or OHM sheen were not observed. In addition, where noted, soil has been characterized as fill based on observations. No mention of fill or other features in the soil descriptions does not indicate lack of of the same.

Photoionization detector (PID) readings are affected by multiple factors, including sample consistency, moisture, relative humidity, and dust. Therefore, PID readings are just one of the factors considered when making a determination of the absence or prescence of SPH in a given sample.

ROUX
12 Gill Street
Suite 4700
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Telephone: (781)-569-4000
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BORING ID: RX-428

CLIENT: MJ Painting

DRILLING CONTRACTOR: TREC

SITE NAME/ADDRESS: 350 Franklin Street

DRILLING METHOD: Geoprobe

CITY/STATE: Olean, NY

SAMPLER TYPE: Macro Core

DATE(S): 11/10/2021 - 11/10/2021

BOREHOLE DIAMETER: 3.25 inches

LOGGED BY: S. Hibben

BOREHOLE DEPTH: 12'

DEPTH (ft)	Sample Interval	RECOVERY (ft)	PID (ppm)	MATERIAL DESCRIPTION	U.S.C.S.	Notes
0						
				Brown fine to coarse SAND and fine GRAVEL; organics; dry.	SW	Collected sample RX-428 (1-4) for composite re-use suite. Collected sample RX-428 (2) for VOCs.
		4	2.9	Gray coarse GRAVEL, trace silt; dry.	GP	
				Same as above.		
5		1.5	3.0			
				Brown and Black fine to coarse SAND, some fine Gravel, trace silt; dry.	SW	Collected sample RX-428 (7-10) for composite re-use suite. Collected sample RX-428 (7.5) for VOCs.
				Same as above.		
				Dark gray SILT; wet.	ML	
10		4	173.0	Dark gray fine to coarse SAND, some Silt, some fine Gravel; wet/moist; petroleum odor and sheen.	SM	Collected sample RX-428 (10) for VOCS. Collected sample RX-428 (10-12) for VOCs.
			81.2			

Bottom of borehole at 12.0 ft.

Additional Notes: Readvanced 8-12 ft interval to collect sufficient sample volume.

Mention of odor, staining, and/or sheen is based on observations by person(s) logging the soil samples collected from the borehole and indicates odor, staining, and/or sheen related to the apparent presence of oil and/or hazardous material (OHM). Where not noted, OHM odor, OHM staining, and/or OHM sheen were not observed. In addition, where noted, soil has been characterized as fill based on observations. No mention of fill or other features in the soil descriptions does not indicate lack of of the same.

Photoionization detector (PID) readings are affected by multiple factors, including sample consistency, moisture, relative humidity, and dust. Therefore, PID readings are just one of the factors considered when making a determination of the absence or prescence of SPH in a given sample.

ROUX
12 Gill Street
Suite 4700
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Telephone: (781)-569-4000
Fax: (781)-569-4001

BORING ID: RX-429

CLIENT: MJ Painting
DRILLING CONTRACTOR: TREC
SITE NAME/ADDRESS: 350 Franklin Street
DRILLING METHOD: Geoprobe
CITY/STATE: Olean, NY
SAMPLER TYPE: Macro Core
DATE(S): 11/10/2021 - 11/10/2021
BOREHOLE DIAMETER: 3.25 inches
LOGGED BY: S. Hibben
BOREHOLE DEPTH: 12'

DEPTH (ft)	Sample Interval	RECOVERY (ft)	PID (ppm)	MATERIAL DESCRIPTION	U.S.C.S.	Notes
0	☒	1.5	3.1	Brown fine GRAVEL, some fine to coarse Sand; organics; dry.	GP	Collected sample RX-429 (0-1) for waste characterization.
				Gray coarse GRAVEL, some Silt; dry.	GM	Collected sample RX-429 (3) for VOCs. Collected sample RX-429 (4-7) for composite re-use suite with DUP11102021. This interval was redrilled three times to get enough volume.
5	☒	3	5.8	Gray to black fine to coarse SAND, some fine Gravel; fill material (slag, brick); dry.	SW	Collected sample RX-429 (6) for VOCs.
	☒		16.0	Same as above.		Collected sample RX-429 (9) for VOCs.
10		3.5				Collected sample RX-429 (10-12) for waste characterization.
			402.7	Black fine GRAVEL, and Silt, some fine to coarse Sand; petroleum odor; wet.	GM	

Bottom of borehole at 12.0 ft.

Additional Notes: Mention of odor, staining, and/or sheen is based on observations by person(s) logging the soil samples collected from the borehole and indicates odor, staining, and/or sheen related to the apparent presence of oil and/or hazardous material (OHM). Where not noted, OHM odor, OHM staining, and/or OHM sheen were not observed. In addition, where noted, soil has been characterized as fill based on observations. No mention of fill or other features in the soil descriptions does not indicate lack of of the same.

Photoionization detector (PID) readings are affected by multiple factors, including sample consistency, moisture, relative humidity, and dust. Therefore, PID readings are just one of the factors considered when making a determination of the absence or prescence of SPH in a given sample.

ROUX
12 Gill Street
Suite 4700
Woburn MA 01801
Telephone: (781)-569-4000
Fax: (781)-569-4001

BORING ID: RX-430

CLIENT: MJ Painting
DRILLING CONTRACTOR: TREC
SITE NAME/ADDRESS: 350 Franklin Street
DRILLING METHOD: Geoprobe
CITY/STATE: Olean, NY
SAMPLER TYPE: Macro Core
DATE(S): 11/10/2021 - 11/10/2021
BOREHOLE DIAMETER: 3.25 inches
LOGGED BY: S. Hibben
BOREHOLE DEPTH: 12'

DEPTH (ft)	Sample Interval	RECOVERY (ft)	PID (ppm)	MATERIAL DESCRIPTION	U.S.C.S.	Notes
0		3	1.7	Brown fine to coarse SAND and GRAVEL; organics; dry.	SW	Collected sample RX-430 (1-4) for composite re-use suite. Collected sample RX-430 (2) for VOCs.
				Gray coarse GRAVEL, some Silt; dry.	GM	
5		2	20.5	Dark gray coarse GRAVEL and SILT; moist.		
				Dark gray/brown SILT, some fine Gravel; organics; moist to wet.	ML	Collected sample RX-430 (6.5) for VOCs. Collected sample RX-430 (7-10) for waste characterization.
10		3.5	250.0 573.8	Gray SILT, some fine Gravel, trace Clay; petroleum odor; wet.		Collected sample RX-430 (10-12) for waste characterization.

Bottom of borehole at 12.0 ft.

Additional Notes: Repeatedly hit refusal at approximately 1.5 ft bgs with Geoprobe.

Mention of odor, staining, and/or sheen is based on observations by person(s) logging the soil samples collected from the borehole and indicates odor, staining, and/or sheen related to the apparent presence of oil and/or hazardous material (OHM). Where not noted, OHM odor, OHM staining, and/or OHM sheen were not observed. In addition, where noted, soil has been characterized as fill based on observations. No mention of fill or other features in the soil descriptions does not indicate lack of of the same.

Photoionization detector (PID) readings are affected by multiple factors, including sample consistency, moisture, relative humidity, and dust. Therefore, PID readings are just one of the factors considered when making a determination of the absence or prescence of SPH in a given sample.

ROUX
12 Gill Street
Suite 4700
Woburn MA 01801
Telephone: (781)-569-4000
Fax: (781)-569-4001

BORING ID: RX-431

CLIENT: MJ Painting
DRILLING CONTRACTOR: TREC
SITE NAME/ADDRESS: 350 Franklin Street
DRILLING METHOD: Hand Tools / Direct Push
CITY/STATE: Olean, NY
SAMPLER TYPE: Hand Auger / Macrocore
DATE(S): 11/10/2021 - 11/16/2021
BOREHOLE DIAMETER: 12 / 3.25 inches
LOGGED BY: S. Hibben, W. Peterson
BOREHOLE DEPTH: 12'

DEPTH (ft)	Sample Interval	RECOVERY (ft)	PID (ppm)	MATERIAL DESCRIPTION	U.S.C.S.	Notes
0			3.1	Brown SILT, some fine to coarse Sand, some fine Gravel; moist.		
			3.0	Same as above.		
			30.9	Gray-brown SILT, some fine to coarse Sand, trace fine gravel; slight petroleum odor; moist.		
			19.2	Same as above.		Collected sample RX-431(3.5) for VOCs.
			17.5	Black SILT and fine to coarse SAND; wood fragments; petroleum odor; moist.		Collected sample RX-431(4-7) for composite re-use suite.
5		3		Same as above; SPH globules.	ML	
			79.3			Collected sample RX-431(7) for VOCs.
			170.6	Gray SILT; petroleum odor; moist; SPH globules.		
			181.3	Same as above; some fine Sand; petroleum odor.		Collected sample RX-431(7-10) for waste characterization.
10		3.5		Gray fine GRAVEL, some fine to coarse Sand; petroleum odor; moist.		
			395.6		GP	Collected sample RX-431(10-12) for waste characterization.

Bottom of borehole at 12.0 ft.

Additional Notes: Hit refusal at 7' bgs, moved to and precleared second location. Location precleared to 5 ft bgs with hand tools.

Mention of odor, staining, and/or sheen is based on observations by person(s) logging the soil samples collected from the borehole and indicates odor, staining, and/or sheen related to the apparent presence of oil and/or hazardous material (OHM). Where not noted, OHM odor, OHM staining, and/or OHM sheen were not observed. In addition, where noted, soil has been characterized as fill based on observations. No mention of fill or other features in the soil descriptions does not indicate lack of of the same.

Photoionization detector (PID) readings are affected by multiple factors, including sample consistency, moisture, relative humidity, and dust. Therefore, PID readings are just one of the factors considered when making a determination of the absence or prescence of SPH in a given sample.

ROUX
12 Gill Street
Suite 4700
Woburn MA 01801
Telephone: (781)-569-4000
Fax: (781)-569-4001

BORING ID: RX-432

CLIENT: MJ Painting
SITE NAME/ADDRESS: 350 Franklin Street
CITY/STATE: Olean, NY
DATE(S): 11/16/2021 - 11/16/2021
LOGGED BY: S. Hibben, W. Peterson
DRILLING CONTRACTOR: TREC
DRILLING METHOD: Hand Tools / Direct Push
SAMPLER TYPE: Hand Auger / Macrocore
BOREHOLE DIAMETER: 12 / 3.25 inches
BOREHOLE DEPTH: 12'

DEPTH (ft)	Sample Interval	RECOVERY (ft)	PID (ppm)	MATERIAL DESCRIPTION	U.S.C.S.	Notes
0	☒	5	2.0	Brown fine to coarse SAND, some fine Gravel; moist.	SW	Collected sample RX-432 (1-4) for composite re-use suite.
	☒		2.9	Gray-brown fine to coarse SAND, and fine Gravel; weathered rock; dry.		
	☒		3.8	Gray-brown SILT, and Clay, trace fine to coarse sand, trace fine gravel; dry.	ML	
	☒		15.7	Same as above; slight petroleum odor.		
	☒		421.8	Black fine to coarse SAND, some Silt; petroleum odor; moist.	SM	Collected sample RX-432 (4-5) for VOCs.
5	☒	2.5	247.2	Black fine to coarse SAND, trace fine gravel; fill (brick); petroleum odor.	SW	Collected sample RX-432 (6) for VOCs.
			423.9	Gray SILT; petroleum odor; moist; SPH globules.	ML	Collected sample RX-432 (7-10) for waste characterization.
	☒			Same as above; SPH globules.		
10			418.9	Gray fine to coarse SAND, and fine Gravel, trace silt; petroleum odor; moist.	SW	Collected sample RX-432 (10-12) for VOCs.

Bottom of borehole at 12.0 ft.

Additional Notes: Location precleared to 5 ft bgs with hand tools.

Mention of odor, staining, and/or sheen is based on observations by person(s) logging the soil samples collected from the borehole and indicates odor, staining, and/or sheen related to the apparent presence of oil and/or hazardous material (OHM). Where not noted, OHM odor, OHM staining, and/or OHM sheen were not observed. In addition, where noted, soil has been characterized as fill based on observations. No mention of fill or other features in the soil descriptions does not indicate lack of of the same.

Photoionization detector (PID) readings are affected by multiple factors, including sample consistency, moisture, relative humidity, and dust. Therefore, PID readings are just one of the factors considered when making a determination of the absence or prescence of SPH in a given sample.

ROUX
12 Gill Street
Suite 4700
Woburn MA 01801
Telephone: (781)-569-4000
Fax: (781)-569-4001

BORING ID: RX-433

CLIENT: MJ Painting
DRILLING CONTRACTOR: TREC
SITE NAME/ADDRESS: 350 Franklin Street
DRILLING METHOD: Geoprobe
CITY/STATE: Olean, NY
SAMPLER TYPE: Macro Core
DATE(S): 11/17/2021 - 11/17/2021
BOREHOLE DIAMETER: 3.25 inches
LOGGED BY: S. Hibben
BOREHOLE DEPTH: 12'

DEPTH (ft)	Sample Interval	RECOVERY (ft)	PID (ppm)	MATERIAL DESCRIPTION	U.S.C.S.	Notes
0		3.2	356.4	Brown fine to coarse SAND, some fine Gravel; fill (brick); petroleum odor; moist.	SW	
			687.7	Gray SILT; petroleum odor; moist.	ML	
5		3	562.9	Gray fine to coarse SAND, and fine Gravel, some Silt; petroleum odor; wet.	SM	Collected sample RX-433 (7-10) for composite re-use suite. Note: "Hold PPAS, run WC."
			355.9	Black fine SAND, trace fine gravel; petroleum odor; wet; SPH globules 1".	SP	Only 1 inch of SPH Globules observed.
10			647.8	Black fine GRAVEL and fine to coarse SAND; petroleum odor; moist.	GP	Collected sample RX-433 (9) for VOCs. Collected sample RX-433 (11) for VOCs.

Bottom of borehole at 12.0 ft.

Additional Notes: Mention of odor, staining, and/or sheen is based on observations by person(s) logging the soil samples collected from the borehole and indicates odor, staining, and/or sheen related to the apparent presence of oil and/or hazardous material (OHM). Where not noted, OHM odor, OHM staining, and/or OHM sheen were not observed. In addition, where noted, soil has been characterized as fill based on observations. No mention of fill or other features in the soil descriptions does not indicate lack of of the same.

Photoionization detector (PID) readings are affected by multiple factors, including sample consistency, moisture, relative humidity, and dust. Therefore, PID readings are just one of the factors considered when making a determination of the absence or prescence of SPH in a given sample.

12 Gill Street
Suite 4700
Woburn MA 01801
Telephone: (781)-569-4000
Fax: (781)-569-4001

BORING ID: RX-434

CLIENT: MJ Painting
DRILLING CONTRACTOR: TREC
SITE NAME/ADDRESS: 350 Franklin Street
DRILLING METHOD: Geoprobe
CITY/STATE: Olean, NY
SAMPLER TYPE: Macro Core
DATE(S): 11/17/2021 - 11/17/2021
BOREHOLE DIAMETER: 3.25 inches
LOGGED BY: S. Hibben
BOREHOLE DEPTH: 12'

DEPTH (ft)	Sample Interval	RECOVERY (ft)	PID (ppm)	MATERIAL DESCRIPTION	U.S.C.S.	Notes
0		2	11.3	Brown fine to coarse SAND, and fine Gravel, trace silt; fill (brick); dry.	SW	Collected sample RX-434 (0-1) for waste characterization. Collected sample RX-434 (3) for VOCs.
5		2		Same as above.		Collected sample RX-434 (4-7) for composite re-use suite.
			13.5	Black SILT, some fine to coarse Sand, trace fine gravel; moist.	ML	Collected sample RX-434 (6) for VOCs.
				Gray fine to coarse SAND, and fine Gravel, trace silt; moist.	SW	
			37.8	Gray fine GRAVEL, some fine to coarse Sand; moist.	GP	Collected sample RX-434 (8) for VOCs.
10		2	61.4	Gray fine to coarse SAND, some fine Gravel; moist.	SW	Collected sample RX-434 (10-12) for composite re-use suite. Collected sample RX-434 (11) for VOCs.

Bottom of borehole at 12.0 ft.

Additional Notes: Mention of odor, staining, and/or sheen is based on observations by person(s) logging the soil samples collected from the borehole and indicates odor, staining, and/or sheen related to the apparent presence of oil and/or hazardous material (OHM). Where not noted, OHM odor, OHM staining, and/or OHM sheen were not observed. In addition, where noted, soil has been characterized as fill based on observations. No mention of fill or other features in the soil descriptions does not indicate lack of of the same.

Photoionization detector (PID) readings are affected by multiple factors, including sample consistency, moisture, relative humidity, and dust. Therefore, PID readings are just one of the factors considered when making a determination of the absence or prescence of SPH in a given sample.

12 Gill Street
Suite 4700
Woburn MA 01801
Telephone: (781)-569-4000
Fax: (781)-569-4001

BORING ID: RX-435

CLIENT: MJ Painting

DRILLING CONTRACTOR: TREC

SITE NAME/ADDRESS: 350 Franklin Street

DRILLING METHOD: Geoprobe

CITY/STATE: Olean, NY

SAMPLER TYPE: Macro Core

DATE(S): 11/17/2021 - 11/17/2021

BOREHOLE DIAMETER: 3.25 inches

LOGGED BY: S. Hibben

BOREHOLE DEPTH: 12'

DEPTH (ft)	Sample Interval	RECOVERY (ft)	PID (ppm)	MATERIAL DESCRIPTION	U.S.C.S.	Notes
0		1.5	12.2	Brown fine to coarse SAND, trace silt; trace fine gravel; fill (brick, slag).	SW	
5		2	26.2	Brown SILT, some fine Gravel; wet.	ML	Collected sample RX-435 (6) for VOCs.
			103.3	Brown to black fine GRAVEL, some fine to coarse Sand; petroleum odor; moist.	GW	Collected sample RX-435 (7-10) for composite re-use suite.
		2	37.0	Gray SILT, some fine Gravel; wet.	ML	Collected sample RX-435 (9) for VOCs.
10			252.9	Gray fine GRAVEL, some fine to coarse Sand; moist.	GP	Collected sample RX-435 (11) for VOCs.

Bottom of borehole at 12.0 ft.

Additional Notes: Mention of odor, staining, and/or sheen is based on observations by person(s) logging the soil samples collected from the borehole and indicates odor, staining, and/or sheen related to the apparent presence of oil and/or hazardous material (OHM). Where not noted, OHM odor, OHM staining, and/or OHM sheen were not observed. In addition, where noted, soil has been characterized as fill based on observations. No mention of fill or other features in the soil descriptions does not indicate lack of of the same.

Photoionization detector (PID) readings are affected by multiple factors, including sample consistency, moisture, relative humidity, and dust. Therefore, PID readings are just one of the factors considered when making a determination of the absence or prescence of SPH in a given sample.

12 Gill Street
Suite 4700
Woburn MA 01801
Telephone: (781)-569-4000
Fax: (781)-569-4001

BORING ID: RX-436

CLIENT: MJ Painting

DRILLING CONTRACTOR: TREC

SITE NAME/ADDRESS: 350 Franklin Street

DRILLING METHOD: Geoprobe

CITY/STATE: Olean, NY

SAMPLER TYPE: Macro Core

DATE(S): 11/17/2021 - 11/17/2021

BOREHOLE DIAMETER: 3.25 inches

LOGGED BY: S. Hibben

BOREHOLE DEPTH: 12'

DEPTH (ft)	Sample Interval	RECOVERY (ft)	PID (ppm)	MATERIAL DESCRIPTION	U.S.C.S.	Notes
0		3	27.6	Brown fine to coarse SAND, some fine Gravel, trace Silt; organics; dry.	SW	Collected sample RX-436 (0-1) for waste characterization.
				Light brown SILT; moist.	ML	
				Black fine to coarse SAND, some fine Gravel, trace silt; fill (brick); petroleum odor; wet.	SW	Collected sample RX-436 (3) for VOCs. Collected sample RX-436 (4-7) for composite re-use suite.
		3	585.9	Same as above.		
5			456.1	Gray SILT; petroleum odor; wet.	ML	Collected sample RX-436 (6) for VOCs.
			393.6	Gray fine to coarse SAND, some fine Gravel; petroleum odor; wet.	SW	Collected sample RX-436 (7.5) for VOCs with DUP20211117(2).
		2	111.8	Gray SILT, some fine Gravel; petroleum odor; wet.	ML	
10			481.3	Gray fine GRAVEL, some fine to coarse Sand; petroleum odor and sheen; staining; wet.	GP	Collected sample RX-436 (10-12) for composite re-use suite. Collected sample RX-436 (11) for VOCs.

Bottom of borehole at 12.0 ft.

Additional Notes: Mention of odor, staining, and/or sheen is based on observations by person(s) logging the soil samples collected from the borehole and indicates odor, staining, and/or sheen related to the apparent presence of oil and/or hazardous material (OHM). Where not noted, OHM odor, OHM staining, and/or OHM sheen were not observed. In addition, where noted, soil has been characterized as fill based on observations. No mention of fill or other features in the soil descriptions does not indicate lack of of the same.

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ROUX

12 Gill Street
Suite 4700
Woburn MA 01801
Telephone: (781)-569-4000
Fax: (781)-569-4001

BORING ID: RX-437

CLIENT: MJ Painting

DRILLING CONTRACTOR: TREC

SITE NAME/ADDRESS: 350 Franklin Street

DRILLING METHOD: Geoprobe

CITY/STATE: Olean, NY

SAMPLER TYPE: Macro Core

DATE(S): 11/17/2021 - 11/17/2021

BOREHOLE DIAMETER: 3.25 inches

LOGGED BY: S. Hibben

BOREHOLE DEPTH: 12'

DEPTH (ft)	Sample Interval	RECOVERY (ft)	PID (ppm)	MATERIAL DESCRIPTION	U.S.C.S.	Notes
0	☒	3	5.9	Brown fine to medium SAND, trace silt, trace fine gravel; fill (brick, wood); organics; dry.	SW	Collected sample RX-437 (1-4) for composite re-use suite. Collected sample RX-437 (3) for VOCs.
5	☒	3	8.7	Brown fine SAND, and Silt, trace fine Gravel; organics; fill (brick); dry.	SM	
			13.3	Light brown fine to coarse SAND, some fine Gravel; dry.	SW	Collected sample RX-437 (6.5) for VOCs.
	☒	3		Dark brown fine SAND, and Silt; fill (bricks); organics; moist.	SM	
10			12.4	Gray fine to coarse GRAVEL, some fine to coarse Sand; moist.	GW	
			35.4	Gray fine SAND, some fine Gravel; moist; sweet smelling.	SP	Collected sample RX-437 (11) for VOCs.

Bottom of borehole at 12.0 ft.

Additional Notes: Mention of odor, staining, and/or sheen is based on observations by person(s) logging the soil samples collected from the borehole and indicates odor, staining, and/or sheen related to the apparent presence of oil and/or hazardous material (OHM). Where not noted, OHM odor, OHM staining, and/or OHM sheen were not observed. In addition, where noted, soil has been characterized as fill based on observations. No mention of fill or other features in the soil descriptions does not indicate lack of of the same.

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12 Gill Street
Suite 4700
Woburn MA 01801
Telephone: (781)-569-4000
Fax: (781)-569-4001

BORING ID: RX-438

CLIENT: MJ Painting

DRILLING CONTRACTOR: TREC

SITE NAME/ADDRESS: 350 Franklin Street

DRILLING METHOD: Geoprobe

CITY/STATE: Olean, NY

SAMPLER TYPE: Macro Core

DATE(S): 11/17/2021 - 11/17/2021

BOREHOLE DIAMETER: 3.25 inches

LOGGED BY: S. Hibben

BOREHOLE DEPTH: 12'

DEPTH (ft)	Sample Interval	RECOVERY (ft)	PID (ppm)	MATERIAL DESCRIPTION	U.S.C.S.	Notes
0	☒	3.5	7.7	Brown fine to coarse SAND; some fine Gravel; trace Silt; fill (brick, glass, wood); dry. Same as above; dark brown.	SW	No samples collected.
5	☒	3	12.0	Same as above.		
			73.3	Gray SILT, some fine Sand, some fine Gravel; petroleum odor; moist.	ML	
			231.0	Gray fine GRAVEL, some Silt, trace fine to coarse Sand; petroleum odor; moist.	GM	
10	☒	2	430.7	Same as above.		

Bottom of borehole at 12.0 ft.

Additional Notes: Mention of odor, staining, and/or sheen is based on observations by person(s) logging the soil samples collected from the borehole and indicates odor, staining, and/or sheen related to the apparent presence of oil and/or hazardous material (OHM). Where not noted, OHM odor, OHM staining, and/or OHM sheen were not observed. In addition, where noted, soil has been characterized as fill based on observations. No mention of fill or other features in the soil descriptions does not indicate lack of of the same.

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12 Gill Street
Suite 4700
Woburn MA 01801
Telephone: (781)-569-4000
Fax: (781)-569-4001

BORING ID: RX-439

CLIENT: MJ Painting
DRILLING CONTRACTOR: TREC
SITE NAME/ADDRESS: 350 Franklin Street
DRILLING METHOD: Geoprobe
CITY/STATE: Olean, NY
SAMPLER TYPE: Macro Core
DATE(S): 11/18/2021 - 11/18/2021
BOREHOLE DIAMETER: 3.25 inches
LOGGED BY: S. Hibben
BOREHOLE DEPTH: 12'

DEPTH (ft)	Sample Interval	RECOVERY (ft)	PID (ppm)	MATERIAL DESCRIPTION	U.S.C.S.	Notes
0		3	5.3	Brown fine to coarse SAND, some Silt, trace fine gravel; fill (brick); dry. Same as above, dark brown.	SM	Collected sample RX-439 (0-1) for waste characterization. Collected sample RX-439 (3) for VOCs with DUP.
5		2	165.1	Black fine GRAVEL, some Silt, trace fine to coarse sand; fill (brick); petroleum odor; wet.	GM	Collected sample RX-439 (4-7) for composite re-use suite. Collected sample RX-439 (6.5) for VOCs.
			375.4	Dark gray SILT; petroleum odor; wet.	ML	
10			195.3 230.7	Dark gray SILT, trace clay; petroleum odor and sheen; wet; SPH globules.		Collected sample RX-439 (8) for VOCs with MS/MSD. Collected sample RX-439 (10-12) for composite re-use suite. Collected sample RX-439 (11) for VOCs.
				Dark gray fine SAND, some Gravel; wet.	SP	

Bottom of borehole at 12.0 ft.

Additional Notes: Mention of odor, staining, and/or sheen is based on observations by person(s) logging the soil samples collected from the borehole and indicates odor, staining, and/or sheen related to the apparent presence of oil and/or hazardous material (OHM). Where not noted, OHM odor, OHM staining, and/or OHM sheen were not observed. In addition, where noted, soil has been characterized as fill based on observations. No mention of fill or other features in the soil descriptions does not indicate lack of of the same.

Photoionization detector (PID) readings are affected by multiple factors, including sample consistency, moisture, relative humidity, and dust. Therefore, PID readings are just one of the factors considered when making a determination of the absence or prescence of SPH in a given sample.

ROUX
12 Gill Street
Suite 4700
Woburn MA 01801
Telephone: (781)-569-4000
Fax: (781)-569-4001

BORING ID: RX-440

CLIENT: MJ Painting
DRILLING CONTRACTOR: TREC
SITE NAME/ADDRESS: 350 Franklin Street
DRILLING METHOD: Geoprobe
CITY/STATE: Olean, NY
SAMPLER TYPE: Macro Core
DATE(S): 11/17/2021 - 11/17/2021
BOREHOLE DIAMETER: 3.25 inches
LOGGED BY: S. Hibben
BOREHOLE DEPTH: 12'

DEPTH (ft)	Sample Interval	RECOVERY (ft)	PID (ppm)	MATERIAL DESCRIPTION	U.S.C.S.	Notes
0		2	4.6	Brown and reddish brown fine (-) to coarse (+) SAND; some fine Gravel; fill (brick); dry.	SW	
				Brown SILT and fine to coarse SAND; petroleum odor; wet.	ML	
		3	146.6	Red-brown medium SAND; wet.	SP	Collected sample RX-440 (4-7) for composite re-use suite with MS/MSD.
5			218.9	Gray SILT, trace fine Gravel; petroleum odor and sheen; wet.	ML	
			684.0	Gray fine (-) to coarse (+) SAND and fine GRAVEL, trace Silt; petroleum odor; moist.	SW	
		3		Gray medium SAND; wet.	SP	
10			70.9	Gray fine SILT and GRAVEL, trace fine to coarse Sand; petroleum odor; wet.	GM	
			694.0	Gray medium SAND; petroleum odor; staining; moist.	SP	

Bottom of borehole at 12.0 ft.

Additional Notes: Mention of odor, staining, and/or sheen is based on observations by person(s) logging the soil samples collected from the borehole and indicates odor, staining, and/or sheen related to the apparent presence of oil and/or hazardous material (OHM). Where not noted, OHM odor, OHM staining, and/or OHM sheen were not observed. In addition, where noted, soil has been characterized as fill based on observations. No mention of fill or other features in the soil descriptions does not indicate lack of of the same.

Photoionization detector (PID) readings are affected by multiple factors, including sample consistency, moisture, relative humidity, and dust. Therefore, PID readings are just one of the factors considered when making a determination of the absence or prescence of SPH in a given sample.

ROUX
12 Gill Street
Suite 4700
Woburn MA 01801
Telephone: (781)-569-4000
Fax: (781)-569-4001

BORING ID: RX-441

CLIENT: MJ Painting
DRILLING CONTRACTOR: TREC
SITE NAME/ADDRESS: 350 Franklin Street
DRILLING METHOD: Geoprobe
CITY/STATE: Olean, NY
SAMPLER TYPE: Macro Core
DATE(S): 11/16/2021 - 11/16/2021
BOREHOLE DIAMETER: 3.25 inches
LOGGED BY: S. Hibben
BOREHOLE DEPTH: 12'

DEPTH (ft)	Sample Interval	RECOVERY (ft)	PID (ppm)	MATERIAL DESCRIPTION	U.S.C.S.	Notes
0		3	0.4	Brown fine to coarse SAND, some Silt, some fine Gravel; fill (brick, wood); dry to moist.	SM	
5		2	0.3	Black fine to coarse SAND, trace Silt, trace fine Gravel; fill (brick); dry.	SW	
			128.5	Gray SILT; petroleum odor; moist.	ML	
			2.1	Gray medium SAND and fine GRAVEL; trace Silt; moist.	SP	Collected sample RX-441 (7-10) for composite re-use suite.
10		2	1.0	Same as above.		Collected sample RX-441 (9) for VOCs.

Bottom of borehole at 12.0 ft.

Additional Notes: Mention of odor, staining, and/or sheen is based on observations by person(s) logging the soil samples collected from the borehole and indicates odor, staining, and/or sheen related to the apparent presence of oil and/or hazardous material (OHM). Where not noted, OHM odor, OHM staining, and/or OHM sheen were not observed. In addition, where noted, soil has been characterized as fill based on observations. No mention of fill or other features in the soil descriptions does not indicate lack of of the same.

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ROUX
12 Gill Street
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Telephone: (781)-569-4000
Fax: (781)-569-4001

BORING ID: RX-442

CLIENT: MJ Painting
DRILLING CONTRACTOR: TREC
SITE NAME/ADDRESS: 350 Franklin Street
DRILLING METHOD: Geoprobe
CITY/STATE: Olean, NY
SAMPLER TYPE: Macro Core
DATE(S): 11/17/2021 - 11/17/2021
BOREHOLE DIAMETER: 3.25 inches
LOGGED BY: S. Hibben
BOREHOLE DEPTH: 12'

DEPTH (ft)	Sample Interval	RECOVERY (ft)	PID (ppm)	MATERIAL DESCRIPTION	U.S.C.S.	Notes
0	☒	3.5	0.5	Dark brown fine to coarse SAND, some Silt, trace fine Gravel; fill (brick); dry.	SM	Collected sample RX-442 (1-4) for composite re-use suite. Collected sample RX-442 (3) for VOCs.
5	☒	2.5	1.3	Gray SILT, trace fine Gravel, trace medium to coarse Sand; wet.	ML	
			4.8	Gray medium to coarse SAND, some fine Gravel, trace Silt; moist.	SW	
	☒	3	4.6	Same as above.		
10			372.1	Dark gray medium SAND; petroleum odor; moist.	SP	

Bottom of borehole at 12.0 ft.

Additional Notes: Mention of odor, staining, and/or sheen is based on observations by person(s) logging the soil samples collected from the borehole and indicates odor, staining, and/or sheen related to the apparent presence of oil and/or hazardous material (OHM). Where not noted, OHM odor, OHM staining, and/or OHM sheen were not observed. In addition, where noted, soil has been characterized as fill based on observations. No mention of fill or other features in the soil descriptions does not indicate lack of of the same.

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12 Gill Street
Suite 4700
Woburn MA 01801
Telephone: (781)-569-4000
Fax: (781)-569-4001

BORING ID: RX-443

CLIENT: MJ Painting

DRILLING CONTRACTOR: TREC

SITE NAME/ADDRESS: 350 Franklin Street

DRILLING METHOD: Geoprobe

CITY/STATE: Olean, NY

SAMPLER TYPE: Macro Core

DATE(S): 11/16/2021 - 11/16/2021

BOREHOLE DIAMETER: 3.25 inches

LOGGED BY: S. Hibben

BOREHOLE DEPTH: 12'

DEPTH (ft)	Sample Interval	RECOVERY (ft)	PID (ppm)	MATERIAL DESCRIPTION	U.S.C.S.	Notes
0			0.3	Brown fine SAND and fine GRAVEL; fill (brick); dry.	SP	Collected sample RX-443 (0-1) for waste characterization.
		3		Black fine to coarse SAND, some Silt, some fine Gravel; dry to moist.	SM	
			3.3			Collected sample RX-443 (3) for VOCs.
				Same as above; wet.		Collected sample RX-443 (4-7) for composite re-use suite.
5			3.0			
		2		Gray fine SAND and SILT, some fine Gravel; petroleum odor; moist.		Collected sample RX-443 (6.5) for VOCs.
			219.9			
				Black medium SAND and fine Gravel; wet.	SP	Collected sample RX-443 (8) for VOCs.
			5.1			
10		3		Gray coarse GRAVEL; some fine to medium Sand; wet.	GP	Collected sample RX-443 (10-12) for composite re-use suite with MS/MSD.
			39.9	Gray medium SAND, trace fine Gravel; wet.	SP	Collected sample RX-443 (11) for VOCs.

Bottom of borehole at 12.0 ft.

Additional Notes: Mention of odor, staining, and/or sheen is based on observations by person(s) logging the soil samples collected from the borehole and indicates odor, staining, and/or sheen related to the apparent presence of oil and/or hazardous material (OHM). Where not noted, OHM odor, OHM staining, and/or OHM sheen were not observed. In addition, where noted, soil has been characterized as fill based on observations. No mention of fill or other features in the soil descriptions does not indicate lack of of the same.

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12 Gill Street
Suite 4700
Woburn MA 01801
Telephone: (781)-569-4000
Fax: (781)-569-4001

BORING ID: RX-444

CLIENT: MJ Painting
DRILLING CONTRACTOR: TREC
SITE NAME/ADDRESS: 350 Franklin Street
DRILLING METHOD: Geoprobe
CITY/STATE: Olean, NY
SAMPLER TYPE: Macro Core
DATE(S): 11/17/2021 - 11/17/2021
BOREHOLE DIAMETER: 3.25 inches
LOGGED BY: S. Hibben
BOREHOLE DEPTH: 12'

DEPTH (ft)	Sample Interval	RECOVERY (ft)	PID (ppm)	MATERIAL DESCRIPTION	U.S.C.S.	Notes
0				Brown fine GRAVEL, some fine Sand; fill (brick); organics.	GP	
				Black medium to coarse SAND; fill (brick); moist.	SW	Collected sample RX-444 (1-4) for composite re-use suite.
		3	0.8			
			2.0	Gray SILT, trace clay, trace fine Sand; moist.	ML	Collected sample RX-444 (3) for VOCs.
				Same as above.		
5						
			15.75	Gray SILT, trace fine gravel; moist.		Collected sample RX-444 (6) for VOCs with DUP20211117.
		3.5				
			615.8	Gray medium (-) to coarse (+) SAND, some fine Gravel, trace silt; petroleum odor; moist.	SW	Collected sample RX-444 (7-10) for composite re-use suite.
				Same as above.		Collected sample RX-444 (8) for VOCs.
			265.7	Gray SILT, trace fine gravel; petroleum odor; moist.	ML	
10						
			354.0	Gray medium (-) to coarse (+) SAND; some fine Gravel; moist.	SW	Collected sample RX-444 (11) for VOCs with MS/MSD.

Bottom of borehole at 12.0 ft.

Additional Notes: Mention of odor, staining, and/or sheen is based on observations by person(s) logging the soil samples collected from the borehole and indicates odor, staining, and/or sheen related to the apparent presence of oil and/or hazardous material (OHM). Where not noted, OHM odor, OHM staining, and/or OHM sheen were not observed. In addition, where noted, soil has been characterized as fill based on observations. No mention of fill or other features in the soil descriptions does not indicate lack of of the same.

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ROUX
12 Gill Street
Suite 4700
Woburn MA 01801
Telephone: (781)-569-4000
Fax: (781)-569-4001

BORING ID: RX-445

CLIENT: MJ Painting

SITE NAME/ADDRESS: 350 Franklin Street

CITY/STATE: Olean, NY

DATE(S): 11/16/2021 - 11/16/2021

LOGGED BY: S. Hibben

DRILLING CONTRACTOR: TREC

DRILLING METHOD: Geoprobe

SAMPLER TYPE: Macro Core

BOREHOLE DIAMETER: 3.25 inches

BOREHOLE DEPTH: 12'

DEPTH (ft)	Sample Interval	RECOVERY (ft)	PID (ppm)	MATERIAL DESCRIPTION	U.S.C.S.	Notes
0				Brown fine SAND, and fine Gravel; fill (brick); dry.	SP	
		3	4.4	Black fine to coarse SAND, and fine Gravel, trace Silt; fill (brick); dry to moist.	SW	No Samples Collected.
5			335.2	Same as above; wet.		
		2	513.6	Gray fine SAND, and fine Gravel; petroleum odor; dry.	SP	
			29.7	Black fine to coarse SAND, and fine Gravel, trace silt; fill (brick); wet.	SW	
10		2	7.9	Gray fine SAND, and fine Gravel; moist.	SP	

Bottom of borehole at 12.0 ft.

Additional Notes: No Samples Collected.

Mention of odor, staining, and/or sheen is based on observations by person(s) logging the soil samples collected from the borehole and indicates odor, staining, and/or sheen related to the apparent presence of oil and/or hazardous material (OHM). Where not noted, OHM odor, OHM staining, and/or OHM sheen were not observed. In addition, where noted, soil has been characterized as fill based on observations. No mention of fill or other features in the soil descriptions does not indicate lack of of the same.

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ROUX
12 Gill Street
Suite 4700
Woburn MA 01801
Telephone: (781)-569-4000
Fax: (781)-569-4001

BORING ID: RX-446

CLIENT: MJ Painting

DRILLING CONTRACTOR: TREC

SITE NAME/ADDRESS: 350 Franklin Street

DRILLING METHOD: Geoprobe

CITY/STATE: Olean, NY

SAMPLER TYPE: Macro Core

DATE(S): 11/16/2021 - 11/16/2021

BOREHOLE DIAMETER: 3.25 inches

LOGGED BY: S. Hibben

BOREHOLE DEPTH: 12'

DEPTH (ft)	Sample Interval	RECOVERY (ft)	PID (ppm)	MATERIAL DESCRIPTION	U.S.C.S.	Notes
0	☒	2.5	0.2	Brown fine SAND, and fine Gravel; fill (brick); organics; dry.	SP	Collected sample RX-446 (1-4) for composite re-use suite.
			12.7	Black fine to coarse SAND, trace fine gravel, trace silt; fill (brick); dry.	SW	Collected sample RX-446 (3) for VOCs.
5	☒	3		Same as above; dry to moist.		Collected sample RX-446 (5) for VOCs.
			96.2	Gray SILT, some fine Gravel; petroleum odor; wet.	ML	
			377.0	Brown GRAVEL, some Silt, trace fine to coarse sand; petroleum odor; moist.	GM	Collected sample RX-446 (7-10) for composite re-use suite.
	☒	2	85.5	Gray fine SAND and fine GRAVEL; petroleum odor; wet.	SP	Collected sample RX-446 (8) for VOCs.
10			371.0	Gray fine GRAVEL, some Silt, trace fine to coarse Sand; petroleum odor; wet.	GM	Collected sample RX-446 (11) for VOCs.

Bottom of borehole at 12.0 ft.

Additional Notes: Mention of odor, staining, and/or sheen is based on observations by person(s) logging the soil samples collected from the borehole and indicates odor, staining, and/or sheen related to the apparent presence of oil and/or hazardous material (OHM). Where not noted, OHM odor, OHM staining, and/or OHM sheen were not observed. In addition, where noted, soil has been characterized as fill based on observations. No mention of fill or other features in the soil descriptions does not indicate lack of of the same.

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ROUX
12 Gill Street
Suite 4700
Woburn MA 01801
Telephone: (781)-569-4000
Fax: (781)-569-4001

BORING ID: RX-447

CLIENT: MJ Painting
DRILLING CONTRACTOR: TREC
SITE NAME/ADDRESS: 350 Franklin Street
DRILLING METHOD: Geoprobe
CITY/STATE: Olean, NY
SAMPLER TYPE: Macro Core
DATE(S): 11/16/2021 - 11/16/2021
BOREHOLE DIAMETER: 3.25 inches
LOGGED BY: S. Hibben
BOREHOLE DEPTH: 12'

DEPTH (ft)	Sample Interval	RECOVERY (ft)	PID (ppm)	MATERIAL DESCRIPTION	U.S.C.S.	Notes
0	☒	3	1.2	Brown fine (+) to coarse (-) SAND, trace silt, trace fine gravel; fill (brick); dry.	SW	
			1.0	Black medium SAND; fill (wood, brick); dry.	SP	Collected sample RX-447 (3) for VOCs. Collected sample RX-447 (4-7) for composite re-use suite with DUP20211116(1). Collected sample RX-447 (5) for VOCs.
	☒	3.8		Gray SILT; moist.	ML	
5			12.5	Orange-brown SILT, and fine Sand.	SM	
				Gray SILT, and fine Sand; moist.		Collected sample RX-447 (7-10) for waste characterization.
			24.9	Gray fine SAND, some Silt, some fine Gravel; moist to wet.		
10	☒	2	1.7	Gray SILT, and fine Gravel, some fine to medium Sand; wet.	GM	Collected sample RX-447 (10-12) for waste characterization.

Bottom of borehole at 12.0 ft.

Additional Notes: Mention of odor, staining, and/or sheen is based on observations by person(s) logging the soil samples collected from the borehole and indicates odor, staining, and/or sheen related to the apparent presence of oil and/or hazardous material (OHM). Where not noted, OHM odor, OHM staining, and/or OHM sheen were not observed. In addition, where noted, soil has been characterized as fill based on observations. No mention of fill or other features in the soil descriptions does not indicate lack of of the same.

Photoionization detector (PID) readings are affected by multiple factors, including sample consistency, moisture, relative humidity, and dust. Therefore, PID readings are just one of the factors considered when making a determination of the absence or prescence of SPH in a given sample.

12 Gill Street
Suite 4700
Woburn MA 01801
Telephone: (781)-569-4000
Fax: (781)-569-4001

BORING ID: RX-448

CLIENT: MJ Painting

DRILLING CONTRACTOR: TREC

SITE NAME/ADDRESS: 350 Franklin Street

DRILLING METHOD: Hand Tools / Direct Push

CITY/STATE: Olean, NY

SAMPLER TYPE: Hand Auger / Macrocore

DATE(S): 11/16/2021 - 11/18/2021

BOREHOLE DIAMETER: 12 / 3.25 inches

LOGGED BY: S. Hibben, W. Peterson

BOREHOLE DEPTH: 12'

DEPTH (ft)	Sample Interval	RECOVERY (ft)	PID (ppm)	MATERIAL DESCRIPTION	U.S.C.S.	Notes
0		4	2.5	Black fine SAND; moist to dry.	SP	Collected sample RX-448 (1-4) for composite re-use suite.
			2.9	Brown-black fine to coarse SAND; brick; wet.	SW	Collected sample RX-448 (3-4) for VOCs.
			3.5	Red-brown to black fine to coarse SAND; brick; slight petroleum odor; wet.		
5		2	337.8	Black SILT; petroleum odor; moist.	ML	
			153.6	Brown to black fine to medium SAND; fill (brick); petroleum odor; wet; SPH globules.	SW	Collected sample RX-448 (7) for VOCs.
10		3.5	190.4	Black fine to medium SAND, trace fine gravel; petroleum odor; wet.		Collected sample RX-448 (7-10) for composite re-use suite. Collected sample RX-448 (9) for VOCS.
			642.8	Black fine to coarse SAND, and fine Gravel; petroleum odor; wet; SPH globules.		Collected sample RX-448 (11) for VOCs.
			295.1	Brown-gray SILT, some fine Gravel; moist.	ML	

Bottom of borehole at 12.0 ft.

Additional Notes: Location precleared to 5' bgs with hand tools.

Mention of odor, staining, and/or sheen is based on observations by person(s) logging the soil samples collected from the borehole and indicates odor, staining, and/or sheen related to the apparent presence of oil and/or hazardous material (OHM). Where not noted, OHM odor, OHM staining, and/or OHM sheen were not observed. In addition, where noted, soil has been characterized as fill based on observations. No mention of fill or other features in the soil descriptions does not indicate lack of of the same.

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ROUX

12 Gill Street
Suite 4700
Woburn MA 01801
Telephone: (781)-569-4000
Fax: (781)-569-4001

WELL ID: RXMW-106

TOP - BOTTOM (T-B)

CLIENT: MJ Painting

SITE NAME/ADDRESS: 350 Franklin St

CITY/STATE: Olean, NY

DATE(S): 1/19/2022 - 1/19/2022

LOGGED BY: S. Barrientos

DRILLING CONTRACTOR: Parrat Wolff

DRILLING METHOD: Hollow Stem Auger

SAMPLER TYPE: Macro Core

BOREHOLE DIAMETER: 2"

WELL DIAM & MAT'L: 4" PVC

ANNULAR SEAL (T-B): Grout (0'-4')

DIVIDER SEAL (T-B): Bentonite (4'-6')

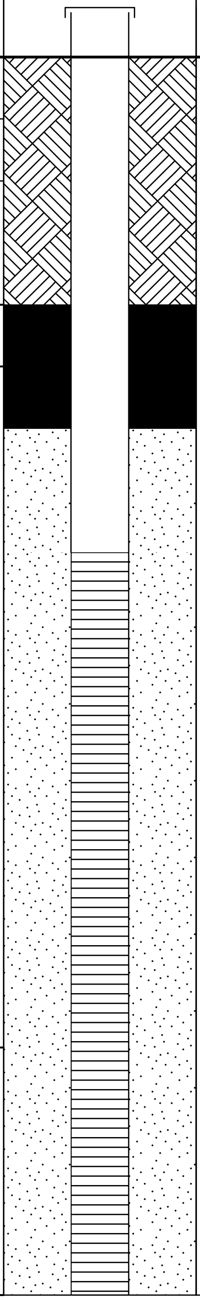
SAND PACK (T-B): #1 Sand (6'-32')

SCREEN (T-B): 20 Slot (8'-28')

WELL DEPTH: 28"

DEPTH (ft)	Sample Interval	RECOVERY (ft)	PID (ppm)	MATERIAL DESCRIPTION	U.S.C.S.	Notes
0		4	4.9	Brown fine SAND.	SP	Location precleared to 5 fbgs with Vac Truck and hand tools.
			1.4	Tan SILT.	ML	
			3.6	Light Gray SILT and large Gravel.	GM	
		4	54.7	Brown SILT and fine to medium SAND; odor; moist.	SM	
5 10 15		4 2	13.2 27.5 NM	Gray Silty CLAY, trace fine to medium Sand; moist.	CH	
20		3.5	3.9	Fine GRAVEL, some fine Sand; slight odor; sheen; wet.	GP	

WELL DIAGRAM



Additional Notes: Mention of odor, staining, and/or sheen is based on observations by person(s) logging the soil samples collected from the borehole and indicates odor, staining, and/or sheen related to the apparent presence of oil and/or hazardous material (OHM). Where not noted, OHM odor, OHM staining, and/or OHM sheen were not observed. In addition, where noted, soil has been characterized as fill based on observations. No mention of fill or other features in the soil descriptions does not indicate lack of of the same.

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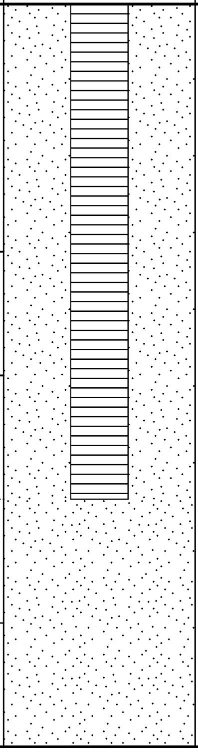
WELL ID: RXMW-106

TOP - BOTTOM (T-B)

CLIENT: MJ Painting
DRILLING CONTRACTOR: Parrat Wolff
ANNULAR SEAL (T-B): Grout (0'-4')
SITE NAME/ADDRESS: 350 Franklin St
DRILLING METHOD: Hollow Stem Auger
DIVIDER SEAL (T-B): Bentonite (4'-6')
CITY/STATE: Olean, NY
SAMPLER TYPE: Macro Core
SAND PACK (T-B): #1 Sand (6'-32')
DATE(S): 1/19/2022 - 1/19/2022
BOREHOLE DIAMETER: 2"
SCREEN (T-B): 20 Slot (8'-28')
LOGGED BY: S. Barrientos
WELL DIAM & MAT'L: 4" PVC
WELL DEPTH: 28"

DEPTH (ft)	Sample Interval	RECOVERY (ft)	PID (ppm)	MATERIAL DESCRIPTION	U.S.C.S.	WELL DIAGRAM	Notes
20		3.5	2738	Gray fine SAND, trace Fines, trace fine Gravel; sheen; odor; wet.	SP		
25		3.5	3892	Grey fine GRAVEL.	GP		
			6541	Gray fine SAND.	SP		Collected sample RXMW-106 (26-28') at 11:45 (1.19.2022)
		4	80.6	Gray fine SAND; odor; wet.	SP		
30			4.0	Gray CLAY; wet.	CH		



Bottom of borehole at 32.0 ft.

Additional Notes: Mention of odor, staining, and/or sheen is based on observations by person(s) logging the soil samples collected from the borehole and indicates odor, staining, and/or sheen related to the apparent presence of oil and/or hazardous material (OHM). Where not noted, OHM odor, OHM staining, and/or OHM sheen were not observed. In addition, where noted, soil has been characterized as fill based on observations. No mention of fill or other features in the soil descriptions does not indicate lack of of the same.

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12 Gill Street
Suite 4700
Woburn MA 01801
Telephone: (781)-569-4000
Fax: (781)-569-4001

WELL ID: RXMW-107

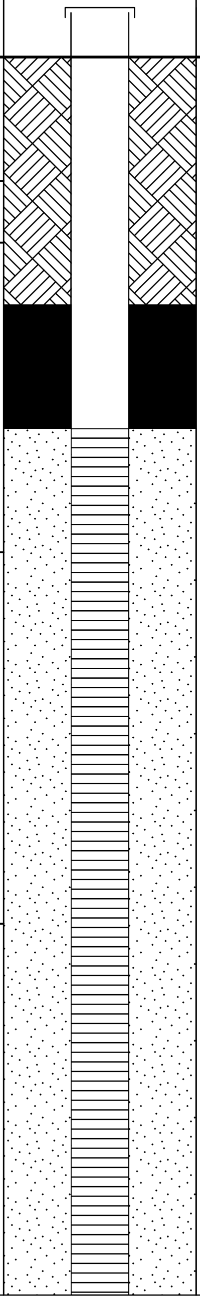
TOP - BOTTOM (T-B)

CLIENT: MJ Painting
SITE NAME/ADDRESS: 350 Franklin St
CITY/STATE: Olean, NY
DATE(S): 1/4/2022 - 1/5/2022
LOGGED BY: S. Hibben

DRILLING CONTRACTOR: Parrat Wolff
DRILLING METHOD: Hollow Stem Auger
SAMPLER TYPE: Split Spoon
BOREHOLE DIAMETER: 6.25"
WELL DIAM & MAT'L: 4" PVC

ANNULAR SEAL (T-B): Grout (0'-4')
DIVIDER SEAL (T-B): Bentonite (4'-6')
SAND PACK (T-B): #1 Sand (6'-35')
SCREEN (T-B): 20 Slot (8'-28')
WELL DEPTH: 28'

DEPTH (ft)	Sample Interval	RECOVERY (ft)	BLOW COUNTS	PID (ppm)	MATERIAL DESCRIPTION	U.S.C.S.	WELL DIAGRAM	Notes
0	╳	1	5-6-7-7 (13)	2.5	Brown fine SAND, and Silt, some fine Gravel; organics present (roots); dry.	SM		
	╳	1	7-5-5-6 (10)	3.4	Gray coarse GRAVEL; dry. Dark gray SILT, and fine Sand; moist.	GP		
5	╳	0.1	2-4-4-4 (8)	NM	Gray SILT, some Clay; moist.	ML		
	╳	1.5	8-8-9-7 (17)	507.6	Gray SILT, and fine Sand, trace fine gravel; petroleum odor; moist.			
10	╳	0.75	4-2-4-2 (6)	870.4	Brown fine to coarse SAND; trace silt, trace fine gravel; petroleum odor; moist.			
	╳	0.75	5-6-6-5 (12)	732.6	Same as above.	SW		
	╳	0.75	12-13-14-12 (27)	926.6	Brown fine to coarse SAND; some fine Gravel; petroleum odor; moist to wet.			
15	╳	0.5	15-15-16-15 (31)	408.2	Gray fine GRAVEL, and fine to coarse Sand, petroluem odor; wet.			
	╳	1.5	19-20-19-14 (39)	797.8	Same as above.	GP		
20	╳	0.5	7-7-6-3 (13)	745.3	Same as above.			



Additional Notes: Mention of odor, staining, and/or sheen is based on observations by person(s) logging the soil samples collected from the borehole and indicates odor, staining, and/or sheen related to the apparent presence of oil and/or hazardous material (OHM). Where not noted, OHM odor, OHM staining, and/or OHM sheen were not observed. In addition, where noted, soil has been characterized as fill based on observations. No mention of fill or other features in the soil descriptions does not indicate lack of of the same.

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GENERAL BH / TP / WELL - GINT STD US.GDT - 2/4/22 10:44 - T:\GINT\PROJECTS\MJ PAINTING\2317.0002M000\2022\PDI WELL INSTALL.GPJ

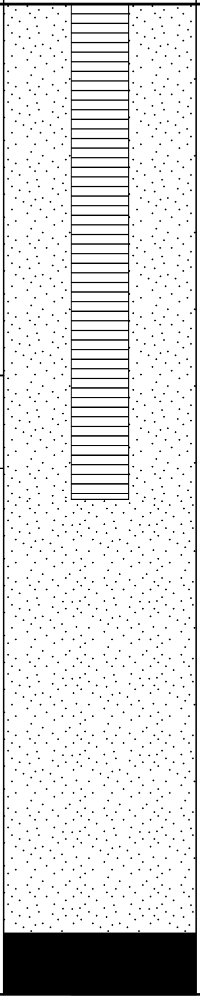
12 Gill Street
Suite 4700
Woburn MA 01801
Telephone: (781)-569-4000
Fax: (781)-569-4001

WELL ID: RXMW-107

TOP - BOTTOM (T-B)

CLIENT: MJ Painting	**DRILLING CONTRACTOR:** Parrat Wolff	**ANNULAR SEAL (T-B):** Grout (0'-4')
SITE NAME/ADDRESS: 350 Franklin St	**DRILLING METHOD:** Hollow Stem Auger	**DIVIDER SEAL (T-B):** Bentonite (4'-6')
CITY/STATE: Olean, NY	**SAMPLER TYPE:** Split Spoon	**SAND PACK (T-B):** #1 Sand (6'-35')
DATE(S): 1/4/2022 - 1/5/2022	**BOREHOLE DIAMETER:** 6.25"	**SCREEN (T-B):** 20 Slot (8'-28')
LOGGED BY: S. Hibben	**WELL DIAM & MAT'L:** 4" PVC	**WELL DEPTH:** 28'

DEPTH (ft)	Sample Interval	RECOVERY (ft)	BLOW COUNTS	PID (ppm)	MATERIAL DESCRIPTION	U.S.C.S.	WELL DIAGRAM	Notes
20	☒	1	2-7-12-14 (19)	677.0	Same as above.			
	☒	1.5	3-7-9-8 (16)	765.8	Same as above.	GP		
25	☒	1.5	3-4-6-6 (10)	811.2	Gray fine GRAVEL, some fine to coarse Sand; petroleum odor; wet.			
	☒	2	20-20-10-10 (30)	856.7 93	Gray fine to coarse SAND, and fine Gravel; petroleum odor; wet. Gray CLAY; moist.	GW		Collected sample RXMW-107(26-27) for VOCs and SVOCs. Set well above clay layer at 8 ft bgs.
30	☒	1.5	1-1-3-4 (4)	145.9	Same as above.			
	☒	2	1-2-4-5 (6)	32.2	Gray CLAY, some Silt; wet.	CH		
	☒				No Recovery			
35	☒	1	3-5-2-2 (7)	107.0	Gray CLAY; moist.			



Bottom of borehole at 36.0 ft.

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12 Gill Street
Suite 4700
Woburn MA 01801
Telephone: (781)-569-4000
Fax: (781)-569-4001

WELL ID: RXMW-108

TOP - BOTTOM (T-B)

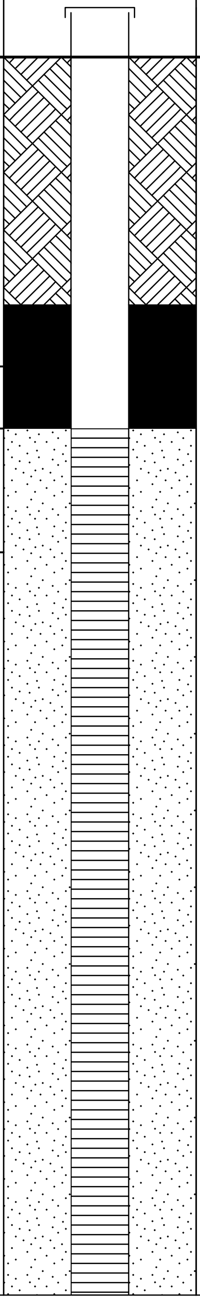
CLIENT: MJ Painting
SITE NAME/ADDRESS: 350 Franklin St
CITY/STATE: Olean, NY
DATE(S): 1/4/2022 - 1/6/2022
LOGGED BY: S. Hibben

DRILLING CONTRACTOR: Parrat Wolff
DRILLING METHOD: Hollow Stem Auger
SAMPLER TYPE: Hand Auger / Split Spoon
BOREHOLE DIAMETER: 12" / 6.25"
WELL DIAM & MAT'L: 4" PVC

ANNULAR SEAL (T-B): Grout (0'-4')
DIVIDER SEAL (T-B): Bentonite (4'-6')
SAND PACK (T-B): #1 Sand (6'-35')
SCREEN (T-B): 20 Slot (8'-28')
WELL DEPTH: 28'

DEPTH (ft)	Sample Interval	RECOVERY (ft)	BLOW COUNTS	PID (ppm)	MATERIAL DESCRIPTION	U.S.C.S.	Notes
0	☒	1		1.1	Brown fine to coarse SAND, some Silt, trace fine gravel; moist.		
	☒	1		1.1	Same as above.		Location precleared to 5 ft bgs with Vac Truck and hand tools.
	☒	1		1.4	Same as above; moist.	SM	
	☒	1		22.9	Dark gray and brown fine to coarse SAND, some Silt, trace fine Gravel; petroleum odor; moist to wet at bottom.		
5	☒	1		22.9	Same as above.		
	☒	0.5		63	Black fine to coarse SAND, some fine Gravel; petroleum odor; moist.	SW	Begin drilling on 1/5/2022 with hollow stem auger at 5 ft bgs.
	☒	1	8-10-5-5 (15)	317.6	Brown and black fine to coarse SAND, some Silt, some coarse Gravel; petroleum odor; moist.	SM	
10	☒	1	5-4-10-13 (14)	287.1	Gray fine to coarse GRAVEL, and fine to coarse Sand; petroleum odor; moist.		
	☒	1	5-10-14-14 (24)	385.1	Same as above; sheen; moist to wet.		
	☒	1.5	8-12-20-16 (32)	368.3	Same as above.		
15	☒	1.5	9-19-17-18 (36)	862.2	Same as above.	GW	
	☒	2	16-17-20-22 (37)	861.3	Same as above.		
20	☒	1.5	6-12-18-25 (30)	870.0	Same as above; SPH globules.		Collected sample RXMW-108 (18'-20').

WELL DIAGRAM



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Telephone: (781)-569-4000
Fax: (781)-569-4001

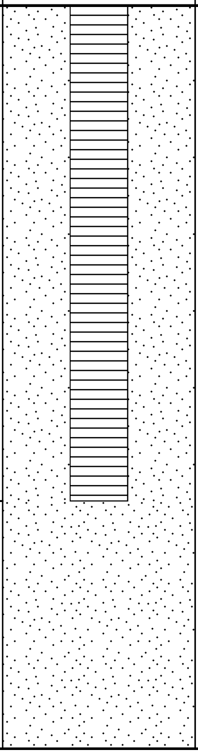
WELL ID: RXMW-108

TOP - BOTTOM (T-B)

CLIENT: MJ Painting
SITE NAME/ADDRESS: 350 Franklin St
CITY/STATE: Olean, NY
DATE(S): 1/4/2022 - 1/6/2022
LOGGED BY: S. Hibben

DRILLING CONTRACTOR: Parrat Wolff
DRILLING METHOD: Hollow Stem Auger
SAMPLER TYPE: Hand Auger / Split Spoon
BOREHOLE DIAMETER: 12" / 6.25"
WELL DIAM & MAT'L: 4" PVC

ANNULAR SEAL (T-B): Grout (0'-4')
DIVIDER SEAL (T-B): Bentonite (4'-6')
SAND PACK (T-B): #1 Sand (6'-35')
SCREEN (T-B): 20 Slot (8'-28')
WELL DEPTH: 28'

DEPTH (ft) 20	Sample Interval	RECOVERY (ft)	BLOW COUNTS	PID (ppm)	MATERIAL DESCRIPTION	U.S.C.S.	WELL DIAGRAM	Notes
	☒	1	4-12-15-15 (27)	768.6	Gray fine to coarse GRAVEL, and fine to coarse Sand; petroleum odor and sheen; wet.	GW		
	☒	1	17-14-12-11 (26)	200.1	Same as above.			
25	☒	0.5	6-8-13-17 (21)	119.3	Same as above.			
	☒	1.5	9-8-8-9 (16)	98.2	Same as above.			
30	☒	0.5	4-3-4-6 (7)	27.8	Gray CLAY; moist.	CH		Installed well above the clay layer at 28 ft bgs.
	☒	1	5-7-10-10 (17)	12.8	Same as above.			

Bottom of borehole at 32.0 ft.

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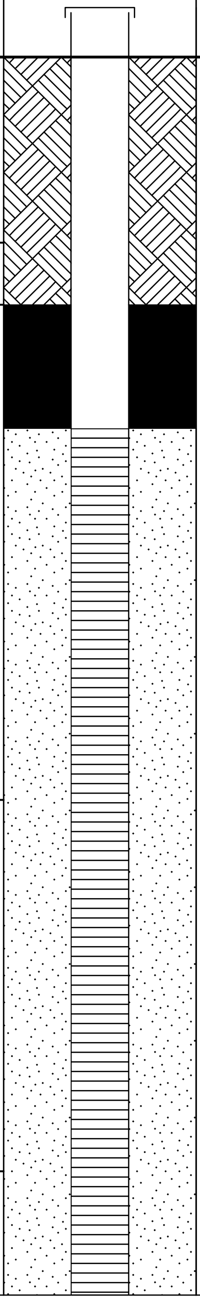
ROUX
12 Gill Street
Suite 4700
Woburn MA 01801
Telephone: (781)-569-4000
Fax: (781)-569-4001

WELL ID: RXMW-109

TOP - BOTTOM (T-B)

CLIENT: MJ Painting
DRILLING CONTRACTOR: Parrat Wolff
ANNULAR SEAL (T-B): Grout (0'-4')
SITE NAME/ADDRESS: 350 Franklin St
DRILLING METHOD: Hollow Stem Auger
DIVIDER SEAL (T-B): Bentonite (4'-6')
CITY/STATE: Olean, NY
SAMPLER TYPE: Split Spoon
SAND PACK (T-B): #1 Sand (6'-35')
DATE(S): 1/6/2022 - 1/7/2022
BOREHOLE DIAMETER: 6.25"
SCREEN (T-B): 20 Slot (8'-28')
LOGGED BY: S. Hibben
WELL DIAM & MAT'L: 4" PVC
WELL DEPTH: 28'

DEPTH (ft)	Sample Interval	RECOVERY (ft)	BLOW COUNTS	PID (ppm)	MATERIAL DESCRIPTION	U.S.C.S.	WELL DIAGRAM	Notes
0	☒	1	3-4-6-3 (10)	1.4	Brown fine to coarse SAND; trace fine Gravel; organics; fill (brick); dry.	SW		
	☒	1	3-5-6-3 (11)	1.8	Same as above. Light brown fine to coarse SAND, some Silt, trace fine gravel; dry.	SM		
5	☒	1	5-8-7-7 (15)	1.8	Light brown fine to coarse SAND; trace fine to coarse gravel; dry.	SW		
	☒	1	8-4-7-6 (11)	402.5	Same as above. Gray fine to coarse SAND, some fine to coarse Gravel, trace silt; petroluem odor; moist.			
	☒	1	4-8-10-11 (18)	868.4	Same as above.			
10	☒	0.75	3-8-13-8 (21)	846.1	Gray fine to coarse SAND, and Gravel, trace silt; petroluem odor; moist.			
	☒	1.5	12-8-10-23 (18)	437.8	Gray fine GRAVEL, and fine to coarse SAND; petroleum odor and sheen; SPH globules; wet.	GP		
15	☒	1	19-14-14-15 (28)	482.3	Same as above.			
	☒	1.75	12-12-15-14 (27)	819.5	Same as above.			
20	☒	0.5	14-14-16-15 (30)	535.7	Gray/brown fine to coarse GRAVEL, and fine Sand; petroleum odor; SPH globules; wet.	GW		Hit coarse gravel at 21.6 ft bgs, stop

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ROUX
12 Gill Street
Suite 4700
Woburn MA 01801
Telephone: (781)-569-4000
Fax: (781)-569-4001

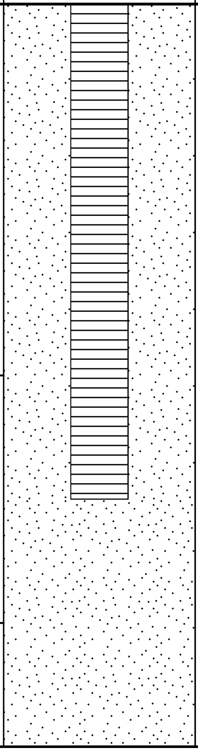
WELL ID: RXMW-109

TOP - BOTTOM (T-B)

CLIENT: MJ Painting
SITE NAME/ADDRESS: 350 Franklin St
CITY/STATE: Olean, NY
DATE(S): 1/6/2022 - 1/7/2022
LOGGED BY: S. Hibben

DRILLING CONTRACTOR: Parrat Wolff
DRILLING METHOD: Hollow Stem Auger
SAMPLER TYPE: Split Spoon
BOREHOLE DIAMETER: 6.25"
WELL DIAM & MAT'L: 4" PVC

ANNULAR SEAL (T-B): Grout (0'-4')
DIVIDER SEAL (T-B): Bentonite (4'-6')
SAND PACK (T-B): #1 Sand (6'-35')
SCREEN (T-B): 20 Slot (8'-28')
WELL DEPTH: 28'

DEPTH (ft)	Sample Interval	RECOVERY (ft)	BLOW COUNTS	PID (ppm)	MATERIAL DESCRIPTION	U.S.C.S.	WELL DIAGRAM	Notes
20		1	4-12-18-50 (30)	1127	Gray fine to coarse GRAVEL; some fine to coarse Sand; petroleum odor; SPH globules; wet.			advancing split spoon after 50 blows. Sample RXMW-109 (20-22) for SVOCs and VOCs.
		0.9	17-50	194.3	Same as above.	GW		Hit coarse gravel at 22.9 ft bgs, stop advancing split spoon after 50 blows.
25		0.8	17-50	157.4	Same as above.			Hit coarse gravel at 24.8 ft bgs, stop advancing split spoon after 50 blows.
		2	13-7-6-4 (13)	781.6	Gray fine to coarse SAND, and Silt, trace fine gravel; petroleum odor and sheen, SPH globules; wet.			
		0	2-3-4-4 (7)	N/A	No recovery (wet).	SM		Install well on 1/7/2022 above the clay/silt layer at 28 ft bgs.
30		2	5-4-5-5 (9)	171.2 15.0	Gray CLAY; moist.	CH		

Bottom of borehole at 32.0 ft.

Additional Notes: Mention of odor, staining, and/or sheen is based on observations by person(s) logging the soil samples collected from the borehole and indicates odor, staining, and/or sheen related to the apparent presence of oil and/or hazardous material (OHM). Where not noted, OHM odor, OHM staining, and/or OHM sheen were not observed. In addition, where noted, soil has been characterized as fill based on observations. No mention of fill or other features in the soil descriptions does not indicate lack of of the same.

Photoionization detector (PID) readings are affected by multiple factors, including sample consistency, moisture, relative humidity, and dust. Therefore, PID readings are just one of the factors considered when making a determination of the absence or prescence of SPH in a given sample.

12 Gill Street
Suite 4700
Woburn MA 01801
Telephone: (781)-569-4000
Fax: (781)-569-4001

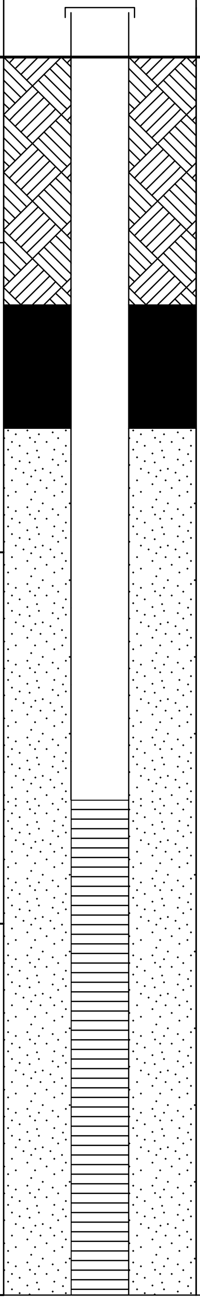
WELL ID: RXMW-110

TOP - BOTTOM (T-B)

CLIENT: MJ Painting
SITE NAME/ADDRESS: 350 Franklin St
CITY/STATE: Olean, NY
DATE(S): 1/17/2022 - 1/17/2022
LOGGED BY: S. Barrientos

DRILLING CONTRACTOR: Parrat Wolff
DRILLING METHOD: Direct Push / HSA
SAMPLER TYPE: Macro Core
BOREHOLE DIAMETER: 2" / 6.25"
WELL DIAM & MAT'L: 4" PVC

ANNULAR SEAL (T-B): Grout (0'-4')
DIVIDER SEAL (T-B): Bentonite (4'-6')
SAND PACK (T-B): #1 Sand (6'-27')
SCREEN (T-B): 20 Slot (12'-27')
WELL DEPTH: 28'

DEPTH (ft)	Sample Interval	RECOVERY (ft)	PID (ppm)	MATERIAL DESCRIPTION	U.S.C.S.	WELL DIAGRAM	Notes
0	0-4	4	0	Brown SILT; roots; dry.	ML		Moisture in top foot due to recent precipitation.
3				Light brown fine GRAVEL and fine Sand; dry.	GP		
4	4-8	3.5	NA				
5							
8	8-10	3		Tan fine GRAVEL and Silt, some Sand; moist.	GM		
10	10-14		314.7	Same as above.			
14	14-20			Light gray fine to coarse SAND, some Silt, little Gravel; odor; staining; wet.	SM		
15			153.6				
18			426.9				
20							

Additional Notes: Mention of odor, staining, and/or sheen is based on observations by person(s) logging the soil samples collected from the borehole and indicates odor, staining, and/or sheen related to the apparent presence of oil and/or hazardous material (OHM). Where not noted, OHM odor, OHM staining, and/or OHM sheen were not observed. In addition, where noted, soil has been characterized as fill based on observations. No mention of fill or other features in the soil descriptions does not indicate lack of of the same.

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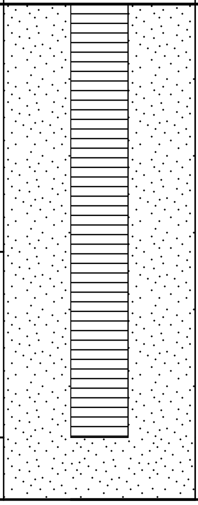
ROUX

12 Gill Street
Suite 4700
Woburn MA 01801
Telephone: (781)-569-4000
Fax: (781)-569-4001

WELL ID: RXMW-110

TOP - BOTTOM (T-B)

CLIENT: MJ Painting
DRILLING CONTRACTOR: Parrat Wolff
ANNULAR SEAL (T-B): Grout (0'-4')
SITE NAME/ADDRESS: 350 Franklin St
DRILLING METHOD: Direct Push / HSA
DIVIDER SEAL (T-B): Bentonite (4'-6')
CITY/STATE: Olean, NY
SAMPLER TYPE: Macro Core
SAND PACK (T-B): #1 Sand (6'-27')
DATE(S): 1/17/2022 - 1/17/2022
BOREHOLE DIAMETER: 2" / 6.25"
SCREEN (T-B): 20 Slot (12'-27')
LOGGED BY: S. Barrientos
WELL DIAM & MAT'L: 4" PVC
WELL DEPTH: 28'

DEPTH (ft)	Sample Interval	RECOVERY (ft)	PID (ppm)	MATERIAL DESCRIPTION	U.S.C.S.	WELL DIAGRAM	Notes
20	☒	3	729.8	Gray fine to medium SAND. some Silt, some Gravel; staining; sheen; strong odor; wet.	SM		Collected sample RXMW-110 (20'-24').
25	☒	3		Gray SILT, little fine Sand; odor; sheen; wet.	ML		
			0	Gray CLAY.	CH		

Bottom of borehole at 28.0 ft.

Additional Notes: Mention of odor, staining, and/or sheen is based on observations by person(s) logging the soil samples collected from the borehole and indicates odor, staining, and/or sheen related to the apparent presence of oil and/or hazardous material (OHM). Where not noted, OHM odor, OHM staining, and/or OHM sheen were not observed. In addition, where noted, soil has been characterized as fill based on observations. No mention of fill or other features in the soil descriptions does not indicate lack of of the same.

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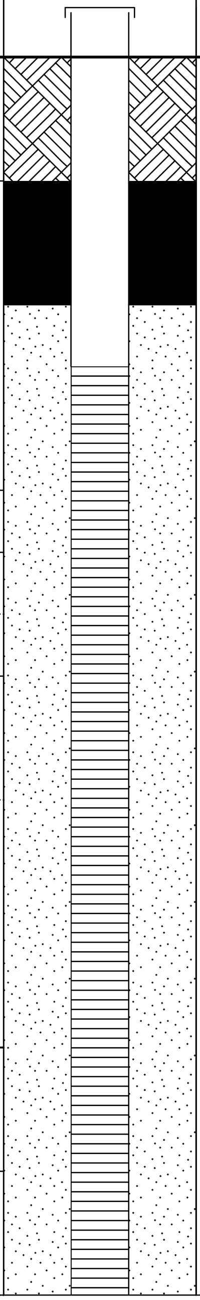
12 Gill Street
Suite 4700
Woburn MA 01801
Telephone: (781)-569-4000
Fax: (781)-569-4001

WELL ID: RXMW-111

TOP - BOTTOM (T-B)

CLIENT: MJ Painting
DRILLING CONTRACTOR: Parrat Wolff
ANNULAR SEAL (T-B): Grout (0'-2')
SITE NAME/ADDRESS: 350 Franklin St
DRILLING METHOD: Direct Push / HSA
DIVIDER SEAL (T-B): Bentonite (2'-4')
CITY/STATE: Olean, NY
SAMPLER TYPE: Macro Core
SAND PACK (T-B): #1 Sand (5'-30')
DATE(S): 1/19/2022 - 1/19/2022
BOREHOLE DIAMETER: 2" / 6.25"
SCREEN (T-B): 20 Slot (5'-30')
LOGGED BY: S. Barrientos
WELL DIAM & MAT'L: 4" PVC
WELL DEPTH: 30'



DEPTH (ft)	Sample Interval	RECOVERY (ft)	PID (ppm)	MATERIAL DESCRIPTION	U.S.C.S.	WELL DIAGRAM	Notes
0		4	10.6	Brown fine to medium SAND; roots; dry.	SW		
			1005	Brown Peat; staining; odor; moist.	--		
5		4	1127				
			244.6	Grey SILT, some Clay; moist.	ML		
		4	313.7	Light Brown CLAY, some Silt; moist.	CH		Collected sample RXMW-111(8'-10') at 9:10.
10			4272	Light Brown CLAY, some Silt; stained; moist to wet.	CH		
			161.9	Brown SILT, some fine to coarse Sand and fine Gravel; staining.	ML		
			282.2				
15		3.5	672.4	Brown SILT, some fine to coarse Sand and fine Gravel; staining; wet.	ML		
		4	994.8	Brown fine to medium SAND; staining; odor; wet.	SW		
20			941.9	Fine to coarse SAND, and fine Gravel; stained; odor; wet.	SW		

Additional Notes: Mention of odor, staining, and/or sheen is based on observations by person(s) logging the soil samples collected from the borehole and indicates odor, staining, and/or sheen related to the apparent presence of oil and/or hazardous material (OHM). Where not noted, OHM odor, OHM staining, and/or OHM sheen were not observed. In addition, where noted, soil has been characterized as fill based on observations. No mention of fill or other features in the soil descriptions does not indicate lack of of the same.

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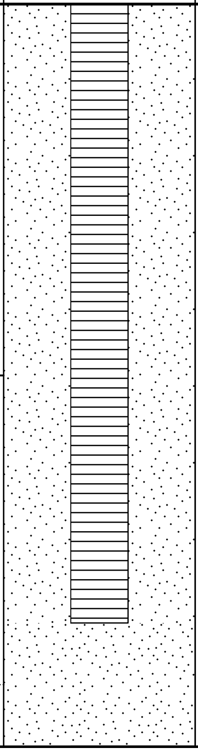
WELL ID: RXMW-111

TOP - BOTTOM (T-B)

CLIENT: MJ Painting
DRILLING CONTRACTOR: Parrat Wolff
ANNULAR SEAL (T-B): Grout (0'-2')
SITE NAME/ADDRESS: 350 Franklin St
DRILLING METHOD: Direct Push / HSA
DIVIDER SEAL (T-B): Bentonite (2'-4')
CITY/STATE: Olean, NY
SAMPLER TYPE: Macro Core
SAND PACK (T-B): #1 Sand (5'-30')
DATE(S): 1/19/2022 - 1/19/2022
BOREHOLE DIAMETER: 2" / 6.25"
SCREEN (T-B): 20 Slot (5'-30')
LOGGED BY: S. Barrientos
WELL DIAM & MAT'L: 4" PVC
WELL DEPTH: 30'

DEPTH (ft)	Sample Interval	RECOVERY (ft)	PID (ppm)	MATERIAL DESCRIPTION	U.S.C.S.	WELL DIAGRAM	Notes
20				Same as above.			
		3	894.2		SW		
			602.4	Same as above.			
25		3					
			986.5	Gray fine SAND; odor; staining; wet.	CH		
			250.8				
30		3					
			45.1	Gray CLAY, little Silt.	CH		Plasticity test. Difficult to get through.

Bottom of borehole at 32.0 ft.

Additional Notes: Mention of odor, staining, and/or sheen is based on observations by person(s) logging the soil samples collected from the borehole and indicates odor, staining, and/or sheen related to the apparent presence of oil and/or hazardous material (OHM). Where not noted, OHM odor, OHM staining, and/or OHM sheen were not observed. In addition, where noted, soil has been characterized as fill based on observations. No mention of fill or other features in the soil descriptions does not indicate lack of of the same.

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12 Gill Street
Suite 4700
Woburn MA 01801
Telephone: (781)-569-4000
Fax: (781)-569-4001

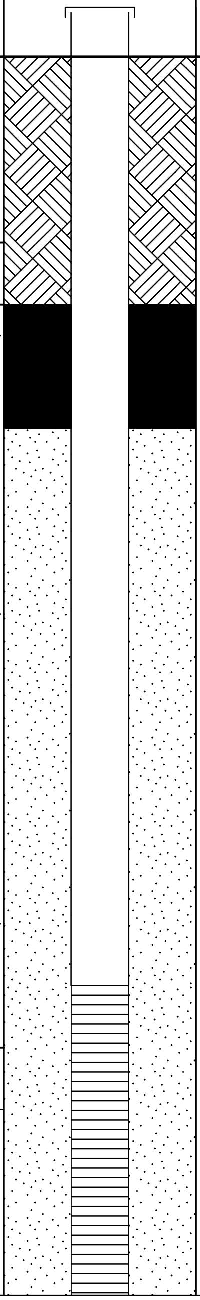
WELL ID: RXMW-112

TOP - BOTTOM (T-B)

CLIENT: MJ Painting
DRILLING CONTRACTOR: Parrat Wolff
ANNULAR SEAL (T-B): Grout (0'-4')
SITE NAME/ADDRESS: 350 Franklin St
DRILLING METHOD: Direct Push / HSA
DIVIDER SEAL (T-B): Bentonite (4'-6')
CITY/STATE: Olean, NY
SAMPLER TYPE: Macro Core
SAND PACK (T-B): #1 Sand (6'-36')
DATE(S): 1/18/2022 - 1/18/2022
BOREHOLE DIAMETER: 2" / 6.25"
SCREEN (T-B): 20 Slot (15'-35')
LOGGED BY: S. Barrientos
WELL DIAM & MAT'L: 4" PVC
WELL DEPTH: 35

DEPTH (ft)	Sample Interval	RECOVERY (ft)	PID (ppm)	MATERIAL DESCRIPTION	U.S.C.S.	Notes
0						
		4	0.1	Dark brown SILT, trace medium to coarse Sand; vegetation; dry.	ML	
			2.7	Peat.	--	
		4	44.4	Brown SILT, little coarse Sand; odor; wet.	ML	
5			260.1	Dark grey SILT; odor; staining; globules; wet.	ML	
		3	111.7			
10			NM	Light grey SILT, trace dark grey fine to medium Sand, and fine Gravel; moist.	ML	
		3.5	279.4			
15			144.9	Light grey SILT, little gravel; odor; sheen; moist.	ML	
		4	187.7	Medium to coarse gray SAND, trace fines and Gravel; odor; globules; wet.	SW	
20			486.8	Grey coarse SAND, and Gravel; odor; globules; wet.	SP	

WELL DIAGRAM



Additional Notes: Mention of odor, staining, and/or sheen is based on observations by person(s) logging the soil samples collected from the borehole and indicates odor, staining, and/or sheen related to the apparent presence of oil and/or hazardous material (OHM). Where not noted, OHM odor, OHM staining, and/or OHM sheen were not observed. In addition, where noted, soil has been characterized as fill based on observations. No mention of fill or other features in the soil descriptions does not indicate lack of of the same.

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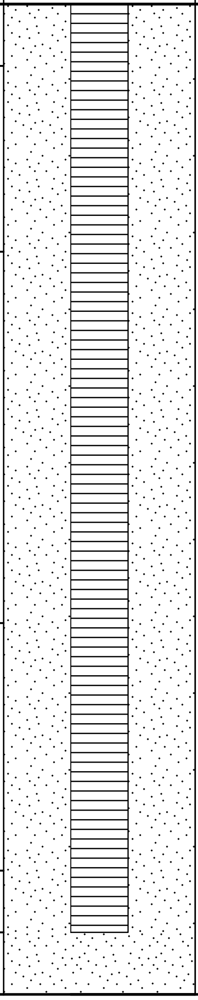
GENERAL BH / TP / WELL - GINT STD US.GDT - 2/4/22 10:44 - T:\GINT\PROJECTS\MJ PAINTING\2317.0002M000\2022\PDI WELL INSTALL.GPJ

ROUX
12 Gill Street
Suite 4700
Woburn MA 01801
Telephone: (781)-569-4000
Fax: (781)-569-4001

WELL ID: RXMW-112

TOP - BOTTOM (T-B)

CLIENT: MJ Painting
DRILLING CONTRACTOR: Parrat Wolff
ANNULAR SEAL (T-B): Grout (0'-4')
SITE NAME/ADDRESS: 350 Franklin St
DRILLING METHOD: Direct Push / HSA
DIVIDER SEAL (T-B): Bentonite (4'-6')
CITY/STATE: Olean, NY
SAMPLER TYPE: Macro Core
SAND PACK (T-B): #1 Sand (6'-36')
DATE(S): 1/18/2022 - 1/18/2022
BOREHOLE DIAMETER: 2" / 6.25"
SCREEN (T-B): 20 Slot (15'-35')
LOGGED BY: S. Barrientos
WELL DIAM & MAT'L: 4" PVC
WELL DEPTH: 35

DEPTH (ft)	Sample Interval	RECOVERY (ft)	PID (ppm)	MATERIAL DESCRIPTION	U.S.C.S.	WELL DIAGRAM	Notes
20		3.5	12.2	Brown to gray SILT; odor; wet.	ML		Drilling past gravel patch.
			297.7	Grey fine to coarse SAND, and Gravel; odor; sheen; wet.	SW		
25		2	414.6	Fine to coarse GRAVEL; odor; sheen; wet.	GW		Collected sample RXMW-112 (28'-32') at 14:23.
30		3.5	433.6 46.4	Grey SILT, and fine Sand; trace medium to coarse Sand; odor; globules; wet.	SM		
35			28.3	Grey SILT; odor; sheen; wet.	ML		
			9.8	Grey CLAY.	CH		

Bottom of borehole at 36.0 ft.

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ROUX

12 Gill Street
Suite 4700
Woburn MA 01801
Telephone: (781)-569-4000
Fax: (781)-569-4001

WELL ID: RXMW-113

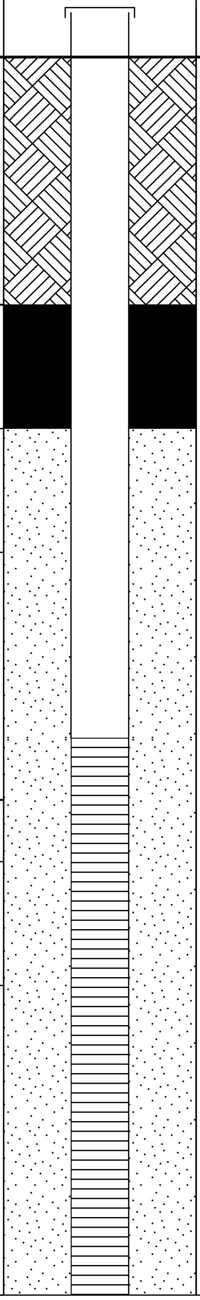
TOP - BOTTOM (T-B)

CLIENT: MJ Painting
SITE NAME/ADDRESS: 350 Franklin St
CITY/STATE: Olean, NY
DATE(S): 1/18/2022 - 1/18/2022
LOGGED BY: S. Barrientos

DRILLING CONTRACTOR: Parrat Wolff
DRILLING METHOD: Direct Push / HSA
SAMPLER TYPE: Macro Core
BOREHOLE DIAMETER: 2" / 6.25"
WELL DIAM & MAT'L: 4" PVC

ANNULAR SEAL (T-B): Grout (0'-4')
DIVIDER SEAL (T-B): Bentonite (4'-6')
SAND PACK (T-B): #1 Sand (6'-31')
SCREEN (T-B): 20 Slot (11'-31')
WELL DEPTH: 31

DEPTH (ft)	Sample Interval	RECOVERY (ft)	PID (ppm)	MATERIAL DESCRIPTION	U.S.C.S.	WELL DIAGRAM	Notes
0		3	20.7	Dark brown SILT, little fine to coarse Sand; slight odor; moist.	ML		
5		4	592.4	Dark grey SILT; sheen; odor; moist.	ML		
			672.3	Dark grey SILT and fine to coarse SAND; sheen; staining; odor; moist.	SM		
10		2	353.8	Dark grey fine to coarse SAND, little Fines, lenses/seams of light-grey fine Sand; sheen; staining; odor; moist.	SW		
		4	399.1	Dark grey fine to coarse SAND, trace Fines; sheen; staining; odor; moist.	SW		
			730.6	Crushed GRAVEL; dry.	GP		
15			1032	Dark grey fine to coarse SAND, trace Fines; sheen; staining; wet.	SW		
20		4	1005 1033	Same as above.	SW		



Additional Notes: Mention of odor, staining, and/or sheen is based on observations by person(s) logging the soil samples collected from the borehole and indicates odor, staining, and/or sheen related to the apparent presence of oil and/or hazardous material (OHM). Where not noted, OHM odor, OHM staining, and/or OHM sheen were not observed. In addition, where noted, soil has been characterized as fill based on observations. No mention of fill or other features in the soil descriptions does not indicate lack of of the same.

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WELL ID: RXMW-113

TOP - BOTTOM (T-B)

CLIENT: MJ Painting

SITE NAME/ADDRESS: 350 Franklin St

CITY/STATE: Olean, NY

DATE(S): 1/18/2022 - 1/18/2022

LOGGED BY: S. Barrientos

DRILLING CONTRACTOR: Parrat Wolff

DRILLING METHOD: Direct Push / HSA

SAMPLER TYPE: Macro Core

BOREHOLE DIAMETER: 2" / 6.25"

WELL DIAM & MAT'L: 4" PVC

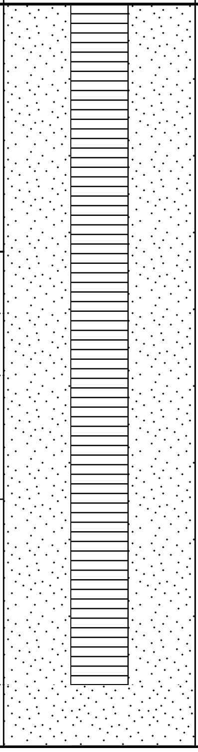
ANNULAR SEAL (T-B): Grout (0'-4')

DIVIDER SEAL (T-B): Bentonite (4'-6')

SAND PACK (T-B): #1 Sand (6'-31')

SCREEN (T-B): 20 Slot (11'-31')

WELL DEPTH: 31

DEPTH (ft)	Sample Interval	RECOVERY (ft)	PID (ppm)	MATERIAL DESCRIPTION	U.S.C.S.	WELL DIAGRAM	Notes
20		1	1135	Dark gray fine SAND; sheen; strong odor; wet.	SP		Collected sample RXMW-113 (20'-25'), VOC + SVOC + Dup.
		4	959.8	Grey fine to coarse SAND, trace Fines; slight odor; sheen; wet.	SW		
25			856.8	Gray fine to medium SAND, trace Gravel; sheen; slight odor; wet.	SW		
			803.6	Dark grey fine to coarse SAND, trace Fines and Gravel; sheen; odor; wet.	SW		
30		4	96.6	Silty CLAY; wet.	CH		
			10.3	Clay.	CH		

Bottom of borehole at 32.0 ft.

Additional Notes: Mention of odor, staining, and/or sheen is based on observations by person(s) logging the soil samples collected from the borehole and indicates odor, staining, and/or sheen related to the apparent presence of oil and/or hazardous material (OHM). Where not noted, OHM odor, OHM staining, and/or OHM sheen were not observed. In addition, where noted, soil has been characterized as fill based on observations. No mention of fill or other features in the soil descriptions does not indicate lack of of the same.

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GENERAL BH / TP / WELL - GINT STD US.GDT - 2/4/22 10:44 - T:\GINT\PROJECTS\MJ PAINTING\2317.0002M000\2022\PDI WELL INSTALL.GPJ

REMEDIAL ACTION WORK PLAN

MJ Painting Site
350 Franklin Street
Olean, New York

APPENDIX E

Professional Profiles

Noelle M. Clarke, P.E.

Principal Engineer

TECHNICAL SPECIALTIES

Feasibility studies, pilot testing, remedial design, implementation, construction management, and startup evaluations for remediation of soil, groundwater, and sediment. Phase I/Phase II Environmental Site Assessments (ESA). Extensive experience at brownfields redevelopment sites, former industrial facilities, and public works facilities. Evaluation and design of storm water drainage systems. Evaluation, design, and construction management for new and existing wastewater treatment processes.

EXPERIENCE SUMMARY

Thirty years' experience: Principal Engineer/Senior Engineer at Remedial Engineering, P.C./Roux Associates; Project Engineer at Camp Dresser & McKee.

CREDENTIALS

B.S. – Civil Engineering, Manhattan College, 1991
M.E. – Environmental Engineering, Manhattan College, 1994

PAPERS AND PRESENTATIONS

Sparging Targets Submerged Residual Saturation Contamination, written with D. Bennett and L. Buchanan. Presented at the 66th New York Water Environment Federation Association Annual Meeting, New York, New York, February 1994.

Suffolk County Wetlands – Flow Augmentation Needs Study, written with M. A. Taylor and R. Southard. In Proceedings of the Annual Meeting, Hydrology and Hydrogeology of Urban and Urbanizing Areas. American Institute of Hydrology, April 1996.

KEY PROJECTS

- Principal Engineer providing due diligence support for real estate transactions on multiple projects in the New York metropolitan area. Projects have included multi-family housing (both affordable and market rate), retail/ commercial, community services and industrial properties. Services have included Phase I and Phase II ESAs.

- Principal Engineer for a Brownfield redevelopment of a property adjacent to a dry cleaning solvent distribution facility in Brooklyn, New York under the NYSDEC BCP. The site was previously a warehouse built on a former freight railyard that serviced the dry cleaning solvent facility. Offloading spillage on site and migration from the offsite facility resulted in significant soil, groundwater, and vapor contamination with chlorinated VOCs. The site was developed into multifamily housing with first floor retail use. Pre-remediation and posts-remediation Phase I ESAs were prepared by Roux Associates. The remedy, as summarized in the Remedial Action Work Plan (RAWP), consisted of soil hot spot removal, a physical barrier to limit on site migration, a permeable reactive wall to mitigate offsite migration, and a sub slab depressurization system. Roux Associates, under the direction of Ms. Clarke provided full time oversight of the remediation and prepared the Final Engineering Report and Site management Plan. The Certificate of Completion for the Site was obtained in October 2015 and Roux Associates is currently providing post-remediation monitoring services.

- Principal Engineer for a Brownfield redevelopment in Brooklyn, New York at a mixed-use multifamily housing/neighborhood retail complex with a former onsite dry cleaner under the NYSDEC BCP. There is soil, groundwater, and vapor contamination from chlorinated VOCs from the former onsite dry cleaner, as well as groundwater contamination from offsite dry cleaners. The remedy, described in the Remedial Action Work Plan prepared by Roux, consisted of hot spot soil removal, *in situ* groundwater treatment and a sub slab depressurization system for vapor mitigation in the existing buildings. The NYSDEC accepted the Final Engineering Report prepared by Roux Associates and the Site received a Certificate of Completion from NYSDEC in 2016.

- Principal Engineer for a complex dredging project for a major petroleum company on the Allegheny River in New York. The goal of the project is to remove 1,000 tons petroleum impacted sediments from the river. Work includes Site investigation, remedial investigation, alternatives evaluation, remedial design, planning and extensive regulatory permitting with multiple federal, state and local agencies.

- Principal Engineer for the alternatives evaluation, remedy selection, regulatory negotiation, preparation of design documents (drawings, specifications and permit applications) and permitting for all remedial components in support of redevelopment at a former metals manufacturing site in Staten Island, New York under the NYSDEC Voluntary Cleanup Program (VCP). The remedy included dredging and onsite disposal of stream sediments; consolidation and capping of fill material across the site; in-place abandonment of the Site's former sewer system; installation of drainage swales for storm water management; and wetland bank stabilization and mitigation/restoration. The work included a significant permitting component from multiple federal, state, and New York City regulatory agencies, including USACE, National Marine Fisheries, NYSDEC, NYSDOS, New York City Department of Environmental Protection, and Department of City Planning.

- Principal Engineer for the design, bidding, contractor selection, and remedial construction phase at a former metals manufacturing facility in Staten Island under the NYSDEC VCP. Responsibilities included finalizing biddable construction documents, issuing to bidders, preparing addenda and evaluating bids for presentation to the client. Following contractor selection Roux was heavily involved in coordinating with the client, regulators and contractor for mobilization to the site in late 2006.

During the construction Ms. Clarke provided support to the onsite construction manager regarding field changes, design revisions to account for unexpected conditions and contractor questions. The Final Engineering Report summarizing the construction activities was accepted by NYSDEC.

- Principal engineer for permitting of remedial activities at a metals manufacturing site in Staten Island, New York under the NYSDEC VCP. Required permits and regulatory approvals for the project included a Joint Permit from the USACE and NYSDEC for dredging of Mill Creek, bank stabilization and construction activities in the wetlands; a NYSDEC SPDES equivalency permit for discharge of treated water to the Arthur Kill, a New York State Department of State Coastal Management Program (CMP) Federal Consistency Assessment; a New York City Waterfront Revitalization Program Consistency Assessment, a modification of topography authorization from New York City Department of City Planning; and a New York City Department of Environmental Protection permit for temporary discharge to a combined sewer. Also required by the USACE and National Marine Fisheries, was preparation of an Essential Fish Habitat Study, in support of the Joint Permit application. Permitting activities included preparation of the various permit applications, forms and supporting documentation, as well as follow up meetings and correspondence to finalize the authorizations.
- Principal-in-Charge of an investigation and remediation project at a former petroleum refinery and current distribution facility located in Buffalo, New York. The site entered the NYSDEC BCP in 2006. Roux Associates completed the BCP application and supported the application process. The work included assessing and remediating the potential environmental impacts associated with historical Site operations. These activities have included preparing multiple work plans and directing the activities of another consultant performing the fieldwork and preparing reports of results for field investigations including soil boring and sampling, well installation and groundwater sampling, aquifer pump testing, and groundwater/separate phase modeling. An *in situ* chemical oxidation system was designed, installed and was operated as an IRM to remediate and area of free product and impacted groundwater discharging to the Buffalo River in OU-4.
- For the same petroleum Site in Buffalo, New York, multiple Alternatives Analysis Reports (to document analysis of engineering options and remedy recommendation), Remedial Action Work Plans and remedial design documents have been prepared to address the environmental impacts associated with the five Operable Units (OU) on the Site. Remedial construction for OU-1 was completed in 2007 and included excavation and disposal of impacted soil. The Final Construction Certification Report for OU-1 was accepted by the NYSDEC. The Alternatives Analysis Report and Remedial Design for OU-4 were submitted and approved by NYSDEC. The remedy for OU-4 included excavation and onsite consolidation of river sediments and site soil, stabilization of 1,400 linear feet of river embankment using tiered slopes, rip rap, and reinforced bioengineering, slurry wall groundwater containment, low permeability capping, a stormwater collection system and constructed wetland treatment for stormwater. Various vegetative measures were incorporated into the design in order to promote vegetative growth and enhance wildlife habitats. The remedial construction was completed in 2013 and 2014 and preparation of the Final Construction Completion Report was competed in 2015. The Alternatives Analysis Reports for OU-2 and OU-3 were submitted to NYSDEC. For OU-2, bench scale studies of stabilization/solidification agents were completed and evaluated for treatment of lead and petroleum impacted soil. In addition, field pilot studies of multiple options to treat petroleum impacted soils were completed and evaluated. Design of a stormwater collection system for portions of OU-2 and OU-3 was completed in 2010 and construction was completed in 2014 under the direction of Ms. Clarke.
- For the same petroleum terminal in Buffalo, New York, the work also included performing activities related to the operation of the remediation systems at the Site. These activities have included preparing a feasibility study work plan for improving water management systems at the site; preparing a work plan, directing the field work and preparing an evaluation summary report for startup and testing of a portion of the groundwater extraction system at the Site; and assisting in preparation of plans to upgrade the existing treatment facilities at the Site.
- For the same petroleum terminal in Buffalo, New York, the work also included preparation of design documents and a completion report for in-place closure of the site's former in-ground oil water separator. In addition, a vapor enhanced extraction pilot study work plan was prepared and implemented at the site for recovery of separate-phase product in one portion of the site located adjacent to the Buffalo River. The results of the VER pilot testing, along with the results of chemical oxidation pilot testing conducted at the site, have been summarized in a Remedial Action Selection report, which recommended implementation of chemical oxidation in this portion of the site. A conceptual plan for implementation of chemical oxidation was submitted with the selection document. The work also included maintaining contact with regulatory agencies regarding the status of activities at the Terminal; preparing compliance monitoring reports for submittal to

the regulatory agencies; overall project coordination; and budget management and tracking.

- Principal Engineer for the investigation, design, and implementation of a soil remediation project at a 4-acre former oil terminal in Cold Spring Harbor, New York under the NYSDEC spills program. The remedy completed included excavation and offsite disposal of approximately 20,000 tons of petroleum contaminated and/or hazardous lead contaminated soil in accordance with the future use of the site under an Environmental Easement. Additional activities completed by Roux at the site included asbestos remediation followed by building demolition, UST removal, and cesspool remediation. Roux prepared a Final Engineering Report, which was accepted by NYSDEC and resulted in the closure of the spill number for the Site.
- Principal Engineer for the investigation, design, and implementation of a soil remediation project at a portion of a former oil terminal in Sag Harbor, New York. The remedy completed included excavation and offsite disposal of approximately 2,000 tons of petroleum contaminated soil from beneath an active public roadway under the NYSDEC spills program. The remedy included extensive traffic control and coordination with Village of Sag Harbor officials, dewatering, water treatment, temporary water discharge of treated water to Sag Harbor and restoration of the public roadway in accordance with the Village of Sag Harbor Department of Public Works requirements. Roux prepared a Final Engineering Report, which was accepted by NYSDEC and resulted in the closure of the spill number for the Site. Project Manager for preparation of a work plan, direction the field activities and preparation of a summary report for investigation of the storm-water collection system at a petroleum terminal in Buffalo, New York. The objectives of the storm sewer investigation were to: prepare a detailed map of the Site's sewer system; re-establish connections that may have become blocked by debris; investigate the structural integrity of the storm sewers; locate areas of groundwater infiltration and assess infiltration rate and quality; assess wet and dry-weather flow and quality; and identify areas contributing surface water to the collection system, including hydrologic modeling using TR-55. Based on the results of the investigation, several improvements to the sewer system were recommended, including eliminating inlets to the system in areas of the site where no active operations currently take place and rehabilitation and/or installation of new sewers to restore flow by gravity to the treatment system.
- Principal Engineer for the investigation, remedial design, construction oversight and operation and maintenance of a bioventing and soil vapor extraction system at the Site of a diesel UST failure in Brooklyn. A free product recovery system was also designed, installed, and operated by Roux. Investigation activities included the use of the sonic drilling technique to advance twelve wells to 85 feet below grade through cobbles and boulders for delineation of separate phase product, soil and groundwater impacts. Eight wells were converted to combination biovent/SVE wells. Design included specification of SVE and biovent blowers, piping, valves, and an automatic control system. Product only pumps were also designed and installed in three wells. Approximately 2,000 gallons of product were recovered to by the two systems and the spill was closed by NYSDEC in 2011.
- Principal Engineer for a Brownfield redevelopment in Staten Island, New York of a former retail service station site under the NYSDEC BCP. There is soil, groundwater and vapor contamination from petroleum-related constituents in the vicinity of the former gasoline piping and pump island (the petroleum source area), as well as historic fill across the entire site. The remedy, described in the Remedial Action Work Plan prepared by Roux, will consist of a sheet pile containment wall around the petroleum source area, a Site Cover System across the entire site, comprised of concrete building slab/walkways, asphalt parking areas and limited landscaped areas and site-wide a sub-slab depressurization system to prevent vapor intrusion into the proposed retail building and offsite migration of impacted soil vapor. A certificate of completion from NYSDEC was obtained in 2020.
- Project Manager for the remedial design at a Superfund Site in Nanuet, New York for the New York State Department of Environmental Conservation. The work included preparation of a preliminary design report, which evaluated two alternatives for handling hazardous soils and sediments at the site contaminated with volatile organic compounds. Each alternative was evaluated on the basis of technical feasibility, cost and schedule for implementation. Based upon this evaluation, off-site disposal was recommended over on-site treatment. The report presented a site-wide conceptual plan for remediation, including soil/sediment excavation, staging and sampling; stream diversion; excavation dewatering; temporary on-site groundwater treatment; and long term monitoring. Duties also included managing and tracking all project budgets and serving as the main client contact.
- Principal Engineer for the design and specification of a large-scale (750 scfm) soil vapor extraction (SVE) pilot system with thermal oxidation off-gas treatment for a client in Brazil. Responsibilities included equipment sizing and specification, selection of materials of construction, SVE well and equipment layout, description of general startup procedures and preparation of a pilot test work plan. The pilot test work plan included a description of the pilot test operating procedures to be followed, operating parameters to be monitored and data to be collected and analyzed. The work also included

conducting the pilot test activities and generating a report that included plans for expanding the SVE system across the Site. The work currently also included technical support for evaluating and optimizing system performance.

- Project Manager for a storm sewer study at the former metals manufacturing facility in Staten Island, New York as part of the Voluntary Cleanup Program for the Site to identify contaminated infiltration sources, provide an accurate site drainage map, and verify contributing areas to each outfall. The investigation included field inspections, surveying, dye testing, and sampling during varying tidal conditions. The storm sewer map prepared was used for future sewer closure and site redevelopment planning.
- Principal engineer for the design of a new storm water collection system for a metals manufacturing site in Staten Island, New York under the NYSDEC VCP. The design included evaluation and hydrologic modeling of the system using the U.S.g Soil Conservation Service TR-55 hydrologic analysis model, inlet structure and pipe sizing and layout, outfall design and specification of materials and methods of construction for all system components.
- Principal-in-Charge of the operation, maintenance, monitoring and reporting activities at multiple active and former petroleum storage and distribution terminals located in New York for a large petroleum company. The work includes operation, maintenance, and performance/ compliance monitoring services at the sites that currently have active remediation system installed and monitoring, sampling, and reporting services at sites without systems. The remediation systems include groundwater extraction and treatment, free product recovery, bio-sparging, and soil vapor extraction/air sparging. At these sites, Roux Associates is responsible for: maintaining and troubleshooting the various system components to reduce downtime to the extent possible; repairing and/or replacing equipment as needed; coordinating the upgrading of the electrical systems, as needed, to meet current building code requirements; expanding systems to meet regulatory requirements, as needed; optimizing system performance; collecting performance monitoring samples and data to track the efficiency of the treatment systems; and collecting compliance monitoring data.
- Principal Engineer for at multiple petroleum terminals in New York State for groundwater quality and surface water quality sampling and monitoring well gauging as required by the New York State Department of Environmental Conservation, as well as quarterly reporting for all sites. The work has also included collection of soil quality data at several sites and performance of an electromagnetic survey to support the divestiture and redevelopment of one of these sites. Based on these results, soil removal activities were performed at one of the former terminals in order to obtain regulatory closure of the site. Roux Associates successfully completed the remedial activities to the satisfaction of the regulator and received closure for the client of the open spill number. Regulatory closure of another of these former terminals was obtained based upon the results of ongoing groundwater monitoring and reporting.
- Project Engineer for design of a 2.6-mgd groundwater treatment system at the Fireman's Training Center for Nassau County Department of Public Works on Long Island. The work included design of air strippers, exhaust stacks, liquid-phase GAC treatment units, and all chemical feed and storage facilities, including unit sizing, selection of materials of construction, equipment layout, and coordination with other disciplines. The work also included development of the "mass balance" for the facility.
- Task leader in charge of overseeing a bioventing pilot study conducted by a subconsultant, to treat contaminated vadose zone soils at the Fireman's Training Center site in Nassau County, New York. The work included development of a preliminary design report for the full-scale implementation of bioventing at the site based upon the results of the pilot study.
- Project Engineer for the design, specification, construction and operation of an air sparging and soil vapor extraction pilot at the Long Island terminal of a large petrochemical distributor. The pilot was designed to treat contaminated ground water and vadose zone soils resulting from a one-million-gallon gasoline spill at the site. The work included development of the field sampling program and sampling and evaluation of various parameters to determine the pilot's radius of influence and effectiveness. The work also included performing data analysis and preparation of the pilot study report, which recommended full scale implementation of air sparging at the site. The site-wide implementation of air sparging and expansion of the site's existing vapor extraction system at the same Long Island petrochemical terminal was also part of the work. Responsibilities included design, specification, and layout of all mechanical equipment, vapor extraction, and air sparging wells and new vapor extraction/air sparging piping.
- Task leader responsible for investigating alternatives for the treatment of gasoline contaminated off-gas from air stripping operations a Long Island petrochemical terminal. Based on this evaluation, biofiltration was selected for piloting. Responsibilities included design of a pilot unit; development of sampling and data collection procedures; construction oversight and "troubleshooting" for the unit; coordination of data collection activities; and compilation and analysis of the pilot data.

- Project Engineer for the design of a 0.50-mgd groundwater treatment facility a Long Island petrochemical terminal. Responsibilities included the design, specification, and layout of mechanical equipment, including the air stripping tower, vapor phase granular activated carbon off-gas treatment, centrifugal blowers, ductwork, influent pump, and concrete wet well. Responsible for shop drawing review during the construction phase.
- Project Manager for an investigation at a gasoline service station with soil and groundwater contamination. Responsible for reviewing and evaluating the work of another consultant that performed the soil and groundwater sampling and conducted remedial activities at the site including: investigation summary reports; remedial designs; remediation progress reports; correspondence with regulators; and plans for future work at the Site. The work also included mapping the groundwater flow patterns in the area of the service station and mapping the areal and vertical extent of the groundwater contamination. Responsible for project coordination and budget management and tracking.
- Project Manager for the field investigation, feasibility evaluation, and remedial design at Superfund Site in Spring Valley, New York for the New York State Department of Environmental Conservation. The work included development of a work plan and site operations plan. The field investigations included Geoprobe soil borings; groundwater monitoring well installation; groundwater sampling; aquifer pump testing; and vapor extraction pilot testing. Work also included conducting the field operations for the vapor extraction pilot and producing a summary report of the field investigation results. The report presented an evaluation of the cost and feasibility of several alternatives for remediation of the site. It recommended reducing the level of effort of the remediation presented in the Record of Decision, based on lower levels of contamination encountered during the investigation. Duties also included project coordination; budget management and tracking; and development of subcontract agreements.
- Project Engineer for upgrades to the Spring Creek Auxiliary Water Pollution Control Plant for the City of New York. The work included the evaluation, design, and specification of a two-stage odor control system, chemical storage and feed facilities and new effluent disinfection system.
- Project Engineer responsible for preparation of design documents for the replacement of the sodium hypochlorite pumps and piping at the Mamaroneck Wastewater Treatment Plant for Westchester County Department of Environmental Facilities in New York.
- Project Engineer for design of upgrades to the New Rochelle Wastewater Treatment Facility for Westchester Count Department of Environmental Facilities in New York. Designed upgrades to the main influent pump station, including rehabilitation of the existing influent pumps and replacement of the magnetic drives with new variable frequency drives. Responsibilities also included design of a submersible automatic duplex sump pump system, new primary sludge pumps and piping and new primary and secondary settling tank equipment. The work also included assisting the County during the bidding and contractor selection phase and preparing addenda to the contract documents.
- Project Manager for the construction of upgrades to the New Rochelle Wastewater Treatment Facility. Responsibilities included overseeing the shop drawing logging and distribution process; reviewing mechanical equipment shop drawings; addressing contractor questions regarding the contract documents; and coordinating with the resident engineer in the field and the electrical and general contractors.
- Project Engineer for the performance evaluation of the Harriman Wastewater Treatment Plant for the Orange County Department of Environmental Facilities and Services. Responsibilities included documentation of the existing conditions at the plant and evaluation of the historical and current performance of the plant with respect to its potential for expansion. A summary report was prepared, which included evaluations of the existing plant processes with respect to standard design criteria, typical design practices and receiving water considerations. This summary report served as the basis for the facilities plan prepared as the next phase of the project.
- Project Engineer for the facilities plan for the upgrade of the Harriman Wastewater Treatment Plant. Responsibilities included evaluation of alternatives for expanding the plant's treatment capacity. A report was prepared, which recommended the conversion of the existing oxidation ditches to sequencing batch reactors (SBR) in order to increase the plant's treatment capacity to 6.0 mgd within the limited space available on the site.
- Project Engineer for the Gates-Chili-Ogden Pump Station and Force main design for Monroe County, New York. The design consisted of a new 36 mgd wet pit/dry pit pump station, influent sewer and force main. Responsibilities included evaluating influent pumping conditions, and design of the influent sewer, manual influent bar racks and a duplex automatic submersible sump pump system for the station.

Ian T. Reed

Vice President/Principal Hydrogeologist

TECHNICAL SPECIALTIES

Development, implementation and management of comprehensive site investigations, implement remedial work plans, environmental investigations, and construction management.

Development and implementation of project/regulatory closure strategies for challenging sites in New England and New York.

Management and support for construction/redevelopment projects including Brownfields regulatory stewardship. Regulatory liaison and customer support with extensive experience in New England and New York.

Investigation and remedial implementations of impacted sediments including development and implementation of investigations in navigable waterways in New England. Scopes have included conventional sediment sample collections as well as innovative qualitative analysis (Sediment Profile Imagining). Sediment remediation scopes have included dredging, sheet pile installations, and engineered natural systems.

Management of environment and construction projects for oil and gas industry including pipeline maintenance and repairs, facility compliance, engineering support and construction management in MA, CT, RI, NY and NJ.

Management and support of litigation projects for both petroleum and industrial clients. Currently technical expert for major oil company on challenging petroleum site investigation and remediation strategies.

Management and strategic support for challenging insurance claim cases in Massachusetts and New Hampshire. General duties performed have included both federal, state and local reporting, project and construction management, litigation support, soil/sediment excavation/dredge/removal management, emergency response management, soil and groundwater sampling, soil gas surveys, stream gauging, sediment investigations, soil immunoassay/XRF testing and hazardous materials surveys/ demo management, GIS data evaluations and mapping, UXO geophysical surveys, treatment system installations, Cone Penetration Testing, phytoremediation implementation, data tabulation and report preparation.

EXPERIENCE SUMMARY

Vice President – Roux Associates, New England Office (current)

Principal / Office Manager – Roux Associates, New England Office (2012-2017)

Senior Hydrogeologist/Project Manager, Roux Associates (2005-2012)

Project Hydrogeologist, Roux Associates (2001-2005)

Associate Hydrogeologist, Aqua Science Engineer, Inc. – San Francisco, CA (1998-2001)

Associate Geologist, Parsons ES - Boston, MA (1997-1998)

Emerald Excavating – Plymouth, MA (1993 – 1997)

CREDENTIALS

B.S. Environmental Science, Springfield College, 1997

Operator Qualification (OQ) Training (several tasks)

OSHA 29 CFR 1910.120 40-Hour Safety Training

OSHA 29 CFR 1910.120 8-Hour Annual Refresher

Confined Space Safety Training

DOT HM-181/126F Certificate

Red Cross Certified, First Aid and CPR

ExxonMobil Loss Prevention System Training

Radiation Safety and monitoring/measurement

KEY PROJECTS

- Project Principal, Major Oil Company. Manager of a complex dredging project on the Allegheny River to remove petroleum impacted sediments. Included the Site Investigation, Remedial Investigation, Alternative Feasibility Study, regulatory permitting and planning for upcoming dredge of 1,000 tons of sediment. Project requires the relocation of the largest documented population of a federally listed endangered mussel species.

- Project Principal, Major Oil Company, Active Bulk Storage and Pipeline Facilities. Manager of environment and construction projects at both active terminals and pipeline facilities on the east coast (Florida to Maine). Work scopes have included various types of permitting, pipeline corrosion/dent inspections and repairs, OWS design and installation, Method 21/LDAR inspections, AST annual inspections, building upgrades including demo surveys and general construction management, containment dike surveys and secondary containment evaluations and designs. Safety awards received by Major Oil Company multiple times over the last several years.

- Project Principal, Major Oil Company, Pipeline facilities. Provided engineering and technical support for securing > 100 wetland and various construction permits (state, local, federal). Developed risk reduction plans, engineering design for stream & RR crossings. Work scopes included assisting with foreign lines, dent anomalies (>1,000). Permits include CWA Order of Conditions, DOT access, road opening/construction, NHESP VMP & OMP, Water Quality Cert., and US Army Corp.

- Project Principal, Major Petroleum Co., Former Petroleum Refinery, Upstate New York. Site is one of the 1st refineries in the US, at one time encompassing 700+ acres of land now in various stages of investigation, cleanup and redevelopment. Roux currently has several roles and manages many aspects of the overall project. Serving as technical consultant for this client reviewing all regulatory submittals and overall strategy to achieve site closure through both the NY

State Brownfields and Spills Programs. Serves as liaison to regulators, local stake holders and construction/redevelopment firms. Additional value added has included significant identified cost efficiencies during both remediation and redevelopment.

- Expert/Technical Witness and Project Principal, Major Oil Company, Rochester New York. Oversaw large-sale investigation of several 100+ acre former refinery. Assisted with 3rd party negotiations and regulatory liaison.
- Project Manager, Oil Company, Albany New York. Project Manager in-charge for large scale dredging project on the Hudson River to remove petroleum impacted sediments and soil. Included the removal of 3,000 tons of sediment, installation of sheet pile wall, carbon trench and phyto-remediation plot. Work performed in accordance with Stip. Agreement with NYSDEC. Included various stages of client advocacy. Project was completed on-time and under budget resulting in significant cost savings to the client.
- Project Manager, Oil Company, Newington, New Hampshire. Project Manager in-charge for large scale remediation and regulatory closure of former petroleum terminal on navigational waterway.
- Project Principal, multiple spill sites for Insurance Co., New Hampshire and Massachusetts. Assist local insurance company with complex emergency response spills including development of closure strategy and oversight/management of response actions.
- Project Manager, Demolition of Former Bulk Storage Facilities, New England and New York. Oversaw and managed team during the demolition of several facilities including completing the hazardous materials surveys, ACM removal, building demo and soil excavations.
- Litigation Project Manager, Several Projects. Managed litigation teams for several large-scale litigation, allocation and facility assessment projects. Included the development and design of significant GIS and database systems to assist in the review of large quantities of both analytical and geographic information.
- Project Manager for several secondary containment system evaluation projects on petroleum bulk storage facilities in several states. Included both aerial and conventional surveys/mapping, use of 3D AutoCAD/GIS for evaluating secondary containment requirements in accordance with local, state and federal programs. Project work also included the development of complex containment system designs and engineering oversight.
- Project Manager, Major Oil Company, Everett Massachusetts. Project Manager in-charge for massive exploration, investigation and rehabilitation of storm water collection system for former refinery and active petroleum bulk storage facility. Included the mapping of 5 miles of piping, extensive reconstruction and abandonment of large-scale and deep structures in an active loading rack and terminal. Included the oversight of numerous subcontractors performing permit-required CSEs with Marine Chemist certs.
- Field Manager, USARMY, Seneca, New York and Falmouth, Massachusetts. Oversaw numerous geophysical surveys, locating unexploded ordinance (UXO) and radioactive materials at a former US Army Depot (storing tactical nuclear weapons) and at on a former anti-tank weapons range. Responsible for performing extensive and thorough geophysical surveys using GPS and GIS mapping. Required compliance of strict UXO and radiation safety programs.
- Project Manager, Oil Company, upstate New York. Project Manager in-charge and point of contact with NYSDEC project managers for emergency response following release of 30,000 gallons of Jet Fuel from a bulk storage facility in New York. Oversaw initial cleanup, following by rapid subsurface investigation to identify leak location and product plume.
- Task/Field Manager, Major Oil Company, Several locations. Manager for multiple bulk petroleum storage and distribution facilities/terminals located in New England and New York. Schedule, coordination, and oversight of all field operations including remediation system O&M, subsurface investigations, product recovery, surface water sampling, groundwater sampling events, waste management including soil excavation/removal.
- Hydrogeologist/Field Manager, Stratford, Connecticut. Site Assessments for Major Design Plant including Phase II Site Assessments of various industrial properties. Assessments included property inspection and review of state and federal documents, aerial photographs and environmental databases. Historical land use research and interviews with property occupants and municipal personnel were conducted as part of these assessments.
- Field Manager, Retail Service Station, Manteca, CA. Oversaw down-gradient groundwater investigation, domestic well sampling, cone penetration testing.

Brian Robinson, P.E.

Senior Engineer

TECHNICAL SPECIALTIES

Mr. Robinson has over twelve years of experience with multidisciplinary environmental engineering projects including remedial investigations and feasibility studies (RI/FS), remedial design, and construction management. Mr. Robinson has experience as a lead engineer involved in the design of several soil and groundwater remediation and wastewater treatment projects, where he developed design work plans, design reports, construction specifications, operation, monitoring and maintenance (OMM) manuals, and contract and bid documents. Mr. Robinson is OSHA and MSHA trained and has served a variety of industrial, mining, and petroleum focused clients.

EXPERIENCE SUMMARY

Mr. Robinson has experience in design and construction management for several soil and/or groundwater remediation projects involving groundwater pump and treat systems; enhanced bioremediation; *in situ* chemical oxidation (ISCO), *in situ* solidification and/or stabilization (ISS/S), soil vapor extraction (SVE); dual phase extraction; thermal treatment; passive/reactive treatment walls; excavation, retrieval and disposal of hazardous soils; and remedial containment systems. Beyond site investigation and remediation capabilities, Mr. Robinson has also been engaged in various geotechnical projects including slope stabilization and support of excavation (SOE) systems.

Specific areas of expertise include environmental due diligence; environmental liability assessments and cost estimation; multi-media remedial investigations, feasibility and treatability studies, and design and implementation of cost-effective and innovative remedial technologies under RCRA, TSCA, CERCLA, NY State BCP, NY State VCP and other State regulatory and voluntary cleanup programs; and construction management

CREDENTIALS

B.S. Environmental Engineering, Rensselaer Polytechnic Institute, 2009

M.S. Environmental Engineering, University of New Haven, 2013

PROFESSIONAL LICENSURE

Professional Engineer, State of Connecticut, License No. 31190

Professional Engineer, State of Florida, License No. 91793

Professional Engineer, State of Maine, License No. 16897

Professional Engineer, Commonwealth of Massachusetts, License No. 56256

Professional Engineer, State of New Hampshire, License No. 16743

Professional Engineer, State of New York, License No. 094490

Professional Engineer, State of Rhode Island, License No. 13852

Professional Engineer, State of Tennessee, License No. 125243

Professional Engineer, State of Vermont, License No. 0134920

HEALTH AND SAFETY TRAINING

OSHA 40-Hour HAZWOPER Training

OSHA HAZWOPER Site Supervisor

OSHA 10-Hour Construction Certified

MSHA Part 48 Surface Mine Certified

Transportation Worker Identification

American Petroleum Institute WorkSafe

KEY PROJECTS

- Brownfield Cleanup Program, Olean, NY. Senior engineer responsible for the design and implementation of a 25,000 cubic yard soil in-situ stabilization, and excavation and backfill of a 75,000 cubic yards. Work included engineering design, development of an excavation and solidification sequencing plan to minimize and control vapors and odors; and installation QA/QC and validation.
- Commercial location, Burlington, MA. Senior engineer responsible for SVE system as part of a remedial action at a former dry cleaner in Massachusetts. Work included system design including horizontal perforated vapor collection piping, manifold piping, vacuum blowers, air-moisture separator units, condensate tanks, discharge piping, and system controls; technical specifications; design calculations QA/QC; coordination with stakeholders: and bid document preparation and review.
- Manufactured Gas Plant, Fostoria, OH. Senior engineer responsible for the design and implementation of an 1,000 cubic yard soil mix wall support of excavation (SOE) system and excavation and backfill of a 20,000 square foot former manufactured gas plant in Ohio. Work included engineering design, development of an excavation sequencing plan to minimize and control vapors and odors; installation QA/QC and validation; oversight of excavation, grading, and backfilling.
- Industrial Facility, Memphis, TN. Senior engineer responsible for the design and implementation of a 4,000 cubic yard targeted remediation supported by a slide rail support of excavation (SOE) system former industrial facility in Tennessee. Work included design of an excavation sequencing plan to minimize SOE and excavation footprint; field engineering support; remediation QA/QC; oversight of excavation, grading, and backfilling.
- Manufactured Gas Plant, Alliance, OH. Senior engineer responsible for the design and implementation of an 20,000 cubic yard ISS system and capping of a 60,000 square foot former manufactured gas plant in Ohio. Work included design of an ISS treatability protocol; solidification mix testing and design; design of an excavation sequencing plan to minimize and control vapors and odors; field engineering support of the Haley & Aldrich Construction Services team implementing the remedy; installation QA/QC and validation; excavation, grading, and backfilling oversite; cap design; surface water runoff treatment system design and implementation; and hydrogeologic studies including characterization of aquifer and groundwater.

- Manufactured Gas Plant, Rochester, NY. Senior engineer responsible for the design and assessment of feasibility study of a 750,000 square foot former manufactured gas plant in New York. Remedial alternatives assessed included excavation and ISS capable of addressing up to 450,000 cubic yards of impacted material.
- Industrial Facility, Mobile, AL. Senior engineer responsible for testing, data analysis, and design of 2,500,000 cubic yard in-situ solidification/stabilization (ISS/S) system and capping of a 56-acre iron oxide impoundment at an industrial facility in Alabama. Work included design of an ISS treatability protocol; stabilization mix testing and design; impoundment consolidation testing; leachability assessment; and data analysis, management, and visualization using the LeachXS Leaching Environmental Assessment Framework tool.
- Power Station, Richmond, VA. Senior engineer responsible for the design and implementation of an active groundwater collection and treatment system at a power station in Virginia. Work included design of piping and instrumentation; process flow design; pump calculations and selection; technical specifications; design drawings; and management of contractor submittals and RFIs prior to and during construction.
- Mine, Mountain Iron, MN. Senior engineer responsible for the development and implementation of pilot study to evaluate *in situ* passive treatment method for reducing sulfate concentrations in groundwater downgradient of a tailing basin. The pilot study design included an array of large diameter PRB caissons, a matrix of small diameter borings comprising a PRB, and a PRB installed via jet-grouting. The various in-situ treatment systems employed Zero-Valent Iron (ZVI) to evaluate and demonstrate the efficacy of sulfate reduction. Project responsibilities included design, implementation, and assessment at an active iron mine in Minnesota. The work scope included evaluation of soil and groundwater data, evaluation of PRB construction alternatives, cost estimates, preparation of design report, design drawings, technical specifications, installation QA/QC, site earthworks and construction management and oversight; subsurface shoring design and caisson installation; in-situ treatment system design and installation; treatment system assessment; geologic and hydrogeologic studies including bedrock drilling and characterization of aquifer and groundwater.
- Industrial Facility, Troy, NY. Senior engineer responsible for the design and implementation of remedial investigations and remedial action work plans at a former metal finishing facility in New York. Work included design and installation of a funnel and gate ZVI PRB consisting of 250 feet of sheet pile keyed into bedrock, a detailed hydrogeologic study to delineate the vertical and horizontal extent of the contaminant plume in groundwater; characterization of groundwater flow patterns; design and installation of an excavation support system; design of a demolition plan for an 40,000 square foot industrial building; monitoring well installation; aquifer testing; geotechnical assessment of underlying soils; vapor intrusion screening design, installation, and assessment; permitting; and waste disposal.
- Industrial Facility, Bolivar, TN. Senior engineer responsible for the design and implementation of an 125,000 cubic yard ISS system and capping of a 325,000 square foot sludge lagoon at an industrial facility in Tennessee. Work included design of an ISS treatability protocol; stabilization mix testing and design; design of an excavation sequencing plan to minimize and control vapors and odors; installation QA/QC and validation; grading, excavation, and backfilling oversite; cap design; surface water runoff treatment system design and implementation; and hydrogeologic studies including characterization of aquifer and groundwater.
- Defense Facility, Bethpage, NY. Senior engineer responsible for the pre-design investigation and implementation of an in-situ thermal remediation (ISTR) system at a defense contractor's facility in New York. Work included a detailed hydrogeologic study to delineate the vertical and horizontal extent of the plume in groundwater; characterization of groundwater flow patterns; characterization of deep aquifers up to 450 feet below grade; monitoring well installation; aquifer testing; geotechnical assessment of underlying soils; thermal remediation system and vapor mitigation and confinement system development; permitting; and waste disposal.
- Radiological Facility, Plainville, MA. Senior engineer responsible for the design and implementation of demolition plans at a former radiological facility involved fabricating uranium fuel elements in Massachusetts. Work included hazard assessment and screening; Beneficial Use Determination; design and execution of a demolition plan for an 100,000 square foot industrial building and several contaminated concrete slabs; excavation and removal of 3,200 tons of material contaminated with low levels of enriched uranium; and permitting.
- Mine, Palmerton, PA. Senior engineer responsible for field engineering and implementation of remedial action at a former zinc smelter and mine Superfund Site in Pennsylvania. Work included design support and installation of excavation support system for a 3,000 foot trench; excavation, installation, backfilling, grading and restoration oversight of a 2-acre passive groundwater treatment system; installation of a surface water diversion system; installation of a leachate treatment system; monitoring of the treated discharge; and revegetation.
- Industrial Facility, Loudonville, OH. Senior engineer responsible for field engineering and implementation of a SVE system as part of a remedial action at an EPA Voluntarily Action Program (VAP) site in Ohio. Work

included implementation of an excavation support system for a 1,200-foot-long trench; grading, excavation, and backfilling oversight of a 4-acre site; earthwork QA/QC; installation and field engineering of an SVE treatment system including horizontal perforated vapor collection piping, manifold piping, vacuum blowers, air-moisture separator units, condensate tanks, discharge piping, and system controls; and SVE system startup and commissioning.

- Service Station, Norwalk, CT. Senior engineer responsible for SVE system as part of a remedial action at a redeveloped former service station in Connecticut. Work included system design including horizontal perforated vapor collection piping, manifold piping, vacuum blowers, air-moisture separator units, condensate tanks, discharge piping, and system controls; site grading, excavation, and backfilling oversight; earthwork QA/QC; system installation; system field engineering; and system startup and commissioning.
- Fuel Terminal, Brooklyn, NY. Project engineer for a dual phase product extraction and groundwater treatment remediation system at an active fuel terminal in Brooklyn, New York, where he was responsible for design, operation, optimization, integrity management, implementation of the remediation system, and reporting. Work included grading, excavation, and backfilling oversight over a 1.5 acre site; geologic and hydrogeologic studies including bedrock drilling and groundwater characterization; detailed study to delineate the vertical and horizontal extent of the plume in groundwater; characterization of groundwater flow patterns; characterization of free product flow patterns; tidal influence assessments; aquifer testing; monitoring well installation; recovery well installation; piping, distribution system, and tank design and installation; dual phase free product extraction system design, permitting, installation, operation, and maintenance; filtration system design, permitting, installation, operation, and maintenance; and air stripper design, permitting, installation, startup, commissioning, operation, and maintenance.
- Municipal Facility, Enfield, CT. Project engineer responsible for the design and implementation of geotechnical investigations to support the foundation design for an expansion to a municipal facility in Connecticut. Work included a detailed geotechnical study; design of a geotechnical boring protocol; exploratory boring and test pit installation; installation oversight of a 50,000 square foot foundation; design of underpinning system for existing foundation; and grading, excavation, and backfilling oversight of a 3.5-acre site.
- Municipal Facility, Plainfield, CT. Project engineer responsible for the design and implementation of geotechnical investigations to support the foundation design for construction of a municipal facility in Connecticut. Work included a detailed geotechnical study; design of a geotechnical boring protocol; exploratory boring and test pit installation; installation oversight of a 40,000 square foot foundation; and grading, excavation, and backfilling oversight of a 2-acre site.
- Industrial Facility, Danbury, CT. Engineer responsible for the implementation of remedial investigations and remedial action work plans at a former metal finishing facility in Connecticut. Work included a detailed hydrogeologic study to delineate the vertical and horizontal extent of the contaminant plume in groundwater; characterization of groundwater flow patterns; monitoring well installation; aquifer testing; installation oversight of a 250 foot of sheet pile support of excavation system; grading, excavation, and backfilling oversight of a 2-acre site; and waste disposal.
- Municipal Facility, Ridgefield, CT. Engineer responsible for the design and implementation of a groundwater pump and treatment system at a municipal facility in Connecticut. Work included design of treatment train, piping, and instrumentation; process flow design; pump calculations and selection; filter loading calculation and selection; technical specifications; design drawings; and management of contractor submittals and RFIs prior to and during construction.
- Landfill, Jackson, MO. Engineer responsible for the system design of a landfill leachate pumping system at a 225-acre landfill in Missouri. Work included geotechnical, structural, process and piping design for the landfill leachate retention basin and treatment distribution system.

ROUX

PROFESSIONAL PROFILE

Brian Klaus

Senior Geologist

TECHNICAL EXPERIENCE

Mr. Klaus has over eight years of experience conducting environmental site assessments, environmental due diligence, and designing and implementing environmental remediation projects. These experiences are focused around identifying, assessing, and remediating environmental contamination in soil, groundwater, and soil vapor. Mr. Klaus also has significant experience managing remedial construction and soil excavation oversight, including management of subcontractors, waste characterization, regulatory reporting, and community air monitoring. Mr. Klaus also has experience with implementing hazardous building materials surveys in support of real estate transactions.

EXPERIENCE SUMMARY:

Prior work experience includes: Senior Geologist (2019- present); Project Geologist (2017- 2019), Roux Associates, Inc.; Staff Geologist, Roux Associates, Inc. (2013- 2017); Intern, Chartis (AIG), Boston, MA (2012); and Intern, Department of the Environment, Community and Local Government, Dublin, Ireland (2011).

CREDENTIALS:

B.S. Environmental Geosciences, Boston College, 2013
B.A. Communications, Boston College, 2013

HEALTH AND SAFETY TRAINING:

OSHA 40-Hour HAZWOPER Training, (yearly 8-hr refreshers)
OSHA 10-Hour Construction Outreach Training
First Aid and CPR Certified
Loss Prevention System (LPS) Manager/Supervisor Certification
Industrial Safety Training Council (ISTC) Certification
Transportation Worker Identification Credential (TWIC) Certification

KEY PROJECTS

- *Urban Redevelopment, South Boston, MA.* Managed overall environmental services in support of redevelopment across multiple parcels encompassing approximately 12-acres and multiple environmental releases. Managed waste characterization and waste profiling efforts, Massachusetts Contingency Plan (MCP) reporting, and environmental investigation activities, all of which were performed on an expedited schedule to meet property redevelopment goals. In addition to environmental releases being regulated by the Massachusetts Department of Environmental Protection (MassDEP), portions of the project were subject to USEPA Toxic Substances Control Act (TSCA) regulations due to elevated levels of polychlorinated biphenyls (PCBs) present in environmental media.
- *Phase I Environmental Site Assessments.* Conducted, oversaw, and managed dozens of Phase I Environmental Site Assessments in accordance with ASTM E1527-13 throughout New England, New York, and New Jersey for due diligence of large retail shopping centers, industrial facilities, and residential buildings. Associated activities included agency contact, database management and interpretation, site inspections, identification of recognized environmental conditions (RECs), and report preparation. Based on Phase I findings, provide recommendations to clients, legal counsel, and lenders on potential liabilities and, and recommendations for additional due diligence.
- *Demolition and Redevelopment Support.* Managed numerous hazardous building material surveys (asbestos-containing building materials [ACBM], lead-based paint [LBP] and PCBs) in support of demolition, as well as in support of due diligence for real estate transactions. Surveys often conducted on an aggressive schedule to meet client deadlines. Surveys included subsequent PCB substrate sampling, and consulting on approaches for bulk product removal/remediation of PCB impacted materials. Coordinated and oversaw abatement measures with strict timeframes. Associated activities included daily reporting, oversight of subcontractor field crews, and coordination with property tenants.
- *Petroleum Bulk Storage Facility, Albany, New York.* Provided remediation management, regulatory interfacing and reporting for bulk petroleum terminal in upstate New York. Remediation includes recovery of separate phase petroleum hydrocarbons through passive pumping and the installation and operation of an air sweep/soil vapor extraction system.
- *Retail Center, Enfield, Connecticut.* Implemented remedial responses to a CT DEEP Significant Environmental Hazard (SEH) created by a chlorinated solvent plume located beneath an active restaurant after original consultant's remedy was unsuccessful. Response actions included investigation to properly identify the source and source extents, design and installation of a sub-slab depressurization (SSDS) system, and the design and implementation of an in-situ chemical oxidation (ISCO) injection system infrastructure beneath the restaurant. Chemical injections and air sparging technologies were implemented to address the source zone of contamination. Work was completed on an aggressive schedule to reduce the impacts to restaurant operations. Work included remedial system infrastructure installation, abatement of ACBM floor tile, chemical injections, air sparging, environmental monitoring, and regulatory coordination and reporting.
- *Former Industrial Waste Discharge Site, Middleborough, MA.* Project manager for the investigation and MCP reporting of a 26-acre Site. The Site featured three ponds that received industrial wastewater discharge between approximately 1900 and 1983. Prior to Roux's involvement, the Site was in a state of regulatory non-compliance with MassDEP. Designed, implemented, and managed investigation, response, and assessment actions, including human health and ecological risk assessments, in order to bring the Site back into a state of regulatory compliance.
- *Brownfields Cleanup Program, Olean, New York.* Project manager for a 9-acre NYSDEC Brownfields Cleanup Program Site, located on one of the first oil storage and refining centers in the Northeast. Project included the design and implementation of a 25,000 cubic yard soil in-situ stabilization, and excavation and backfill of approximately 75,000 cubic yards of soil. Work included engineering design, development of an excavation and solidification sequencing plan to minimize and control vapors and odors; and installation QA/QC and validation. Work conducted to allow for redevelopment of property for an industrial client.

- *Bulk Storage Facility, East Providence, Rhode Island.* Designed and implemented a direct sensing investigation to identify the extents of LNAPL at a petroleum bulk storage terminal in order to evaluate additional LNAPL recovery potential. Technologies utilized include Laser Induced Fluorescence (LIF) and Hydraulic Profiling Tool (HPT), as well as traditional direct-push soil borings. Delineation efforts reduced the estimated size of the LNAPL plume from 24 acres to 13 acres.
- *I-495 Roadway Spill; Chelmsford, MA.* Managed and oversaw response actions and remediation of a roadside diesel spill resulting from a vehicle accident involving an international shipping clients' fleet vehicle. Managed all aspects of remediation, including subcontractor management, MCP reporting, and Massachusetts Department of Transportation (MassDOT) coordination. Spill was located directly above a fiber-optic cable, which required additional coordination with the fiber-optic company.
- *Environmental Consulting and Support, Massachusetts Municipality.* Provided environmental support to a local municipality and its water treatment plant by monitoring contaminated groundwater near the town's drinking water withdrawal wells. Provide recommendations relating to temporary shutdowns of certain drinking water wells and the impacts of off-site chemical plumes to the water treatment plant. More specifically, worked with the town to prevent 1,4- dioxane from entering the drinking water withdrawal wells and treatment plant influent.
- *Bulk Storage Facility, East Providence, Rhode Island.* Oversaw the installation of an Engineered Natural System (ENS) to treat shallow groundwater and surface water in East Providence, Rhode Island. Provided oversight of installation of permeable reactive barrier, subsurface flow constructed treatment wetland, and contingency treatment system. Work was completed to fulfill the requirements of the Rhode Island Department of Environmental Management.
- *Field Manager, Rutland, Vermont*; Field Manager for a remedial excavation project to remove 11,000 tons of petroleum impacted soil from 3 excavation areas to depths exceeding 30 feet below grade. Responsible for overseeing subcontractors and ensuring the work and the support-of-excavation system installation were completed in accordance with engineering specifications.
- *Field Manager, Brooklyn, New York*; Field Manager for large redevelopment project encompassing approximately 22 acres. Project included coordination and oversight of *in situ* waste characterization sampling, excavation, and proper disposal of soil. Managed field personnel and subcontractors for characterization of 250,000 cubic yards of soil. Provided excavation and construction oversight of NYCOER E-designation site with the removal of 20 unknown USTs and off-site disposal of 300,000 tons of soil. Inspected SSDS infrastructure and vapor barrier installation as part of remedial implementation.
- *Field Sampling Team Leader, Los Angeles, California*; Field Sampling Team Leader for residential surficial soil assessment throughout the County of Los Angeles, California. Responsible for implementing DTSC Work Plan in conjunction with LA County personnel. Soil was analyzed utilizing X-ray fluorescence (XRF) equipment to provide real-time results. Results were then communicated to homeowners via public health nurses, in conjunction with LA County.
- *Field Manager, Manhattan, New York*; Field Manager for a NYCOER E-designation redevelopment site. Responsibilities included excavation oversight and waste disposal oversight of 20,000 tons of soil, Community Air Monitoring implementation, as well as waterproofing and vapor barrier inspections as part of remedial implementation.
- *Field Manager; Multiple Sites; New York City;* Field Manager for numerous NYCOER Remedial Investigations and NYSDEC Brownfields Cleanup Program Remedial Investigations in the five boroughs of New York. Responsibilities included the installation of soil borings, monitoring wells, and soil vapor points, *in situ* waste characterization, health and safety oversight, Community Air Monitoring implementation, and report preparation.

JUDY V. HARRY
P. O. Box 208
120 Cobble Creek Rd.
North Creek, NY 12853

Occupation:	Data Validator/Environmental Technical Consultant
Years Experience:	46
Education:	B.S., Chemistry, Magna cum laude, 1976, Phi Beta Kappa
Certifications:	New York State Woman-Owned Business Enterprise (WBE)

Relevant Work History:

Data Validation Services: September 1989 - present

Sole proprietor of Data Validation Services, a woman-owned small business registered with SAM, providing consultation/validation services to regulatory and commercial clients.

These services include the review of analytical laboratory data for compliance with respect to specific protocols, accuracy and defensibility of data, verification of reported values, and evaluation of quality parameters for analytical usability of results. Approved by USEPA, NYSDEC, NJDEP, NYSERDA, and NYCDEP as a data validator for projects, including USEPA Superfund, Brownfield, and lead sites, and those contracted through the NYSDEC Division of Hazardous Waste Remediation, Division of Solid Waste, and Division of Water Quality.

Performed validation for compliance with laboratory analytical protocols including USEPA OLM, USEPA OLC, USEPA ILM, USEPA DFLM, USEPA SOW3/90, USEPA SOW 7/87 CLP, USEPA SOW 2/88 CLP, USEPA SW846, RCRA, AFCEE, NYS 6 NYCRR Part 360, 40 CFR, Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air, including TO-15, 1989/1991/1995/2000/2005 NYSDEC ASPs, and 1987 NYSDEC CLP.

Performed validation according to the USEPA National and Regional SOPs and Functional Guidelines, AFCEE requirements, NYSDEC Validation Scope of Work, NYS DUSR, and NJDEP Division of Hazardous Site Mitigation/Publicly Funded Site Remediation SOPs.

Performed validation for USEPA Superfund Sites including Salem Acres, York Oil, Port Washington L-4 Landfill, Bridgeport Rental and Oil Services, GE-MRFA, MMR/ OTIS AFB, LCP, and Peter Cooper site; and for USEPA lead sites including SJ&J Piconne, Maska, Bowe System, Jones Sanitation, and Syossett Landfill, involving CLP, RAS, and SAS protocols.

Contracted for NYSDEC Superfund Standby Contracts with LMS Engineers/HDR, CDM Smith, Malcolm-Pirnie/ARCADIS, Ecology & Environment, Shaw Environmental/APTIM, CG&I, O'Brien & Gere Engineers, and EC Jordan, involving samples collected at NYS Superfund Sites and analyzed under the NYSDEC ASP.

Performed validation services for NYSDEC Phase II remedial investigations, RI/FS projects, Brownfield sites, and PRP over-site projects for hazardous waste sites.

Performed validation services for clients conducting RI/FS activities involving samples of many matrices, including waste, air, sludges, leachates, solids/sediments, aqueous, and biota.

Clients have included AECOM, ARCADIS, Barton & Loguidice, Benchmark Engineering, Bergmann Associates, Blasland, Bouck & Lee, Brown and Caldwell, CDM Smith, CB&I Shaw Environmental, C&S Consulting Engineers, Chazen Companies, Clough Harbour & Associates, Columbia Analytical Services, C.T. Male, Dames & Moore, Day Engineering, EA Engineering, EcolSciences, Ecology & Environment, Ecosystems, EC Jordan, Environmental Chemical Corporation, EHRT, ENSR Consulting, ELM, ERM-Northeast, Fagan Engineers, Fanning Phillips & Molnar, FluorDaniel GTI, Frontier, Foster Wheeler Environmental Corp, Frontier Technical, Galson Consultants, GEI, GE&R, Geomatrix Consultants, GZA Environmental, Handex of N, Hazard Evaluations, H2M Group, HDR, HRP, IT Corp, Jacques Whitford, JTM Associates, JMT, Labella Associates, Langan Engineers, Leader Environmental, Lockwood, Kessler & Bartlett, LMS Engineers, Malcolm-Pirnie, Metcalf & Eddy, NWEC&C, O'Brien & Gere Engineers, Pace, Parsons Engineering-Science, Plumley Engineering, Prescott Environmental, P. W. Grosser, Ramboll, Rizzo Associates, Roux Associates, Sear Brown Group, SECOR, Shaw Environmental, Stantec, ThermoRemediation Inc., TRC Environmental, Turnkey Environmental Restoration, TVGA Engineering, URS Consultants, Wehran Emcon, Weston, Wittman Geosciences, YEC, and private firms.

Provided consultation services to laboratories regarding analytical procedures and protocol interpretation, and to law firms for litigation support.

Provided services to firms involving audits of environmental analytical laboratories to determine analytical capability, particularly for compliance with NYSDEC ASP and AFCEE requirements.

Guest speaker on a panel discussing Data Review/Compliance and Usability, for an analysis workshop for the New York Association of Approved Environmental Laboratories, 1993.

Adirondack Environmental Services: June 1987 - August 1989

Senior mass spectroscopist for AES. Responsible for GC/MS analyses of environmental samples by USEPA and NYSDEC protocols, development of the GC/MS laboratory, initiating the instrumental and computer operations from the point of installation, and for implementing the procedures and methodologies for Contract Laboratory Protocol.

CompuChem Laboratories: May 1982 - January 1987

Managed a GC/MS production laboratory; developed, implemented, and supervised QA/QC criteria at three different levels of review; and was responsible for the development and production of the analysis of environmental and clinical samples. Directed a staff of 23 technical and clerical personnel, and managed the extraction and GC/MS labs and data review operations.

Research Triangle Institute (RTI): December 1979 - May 1982

Worked as an analytical research chemist responsible for development of analytical methods for the EPA Federal Register at RTI. This involved analysis of biological and environmental samples for priority pollutants, primarily relating to wastewaters and to human sampling studies. Method development included modification and interfacing of the initially developed Tekmar volatile purge apparatus to GC/MS, development and refinement of methods for entrapment and concentration of the air medium for subsequent volatile analysis, and the analysis and resolution/ identification of individual PCB congeners within Aroclor mixtures by capillary column and mass spectra.

Guardsman Chemical Company: February 1977 - November 1979

Performed all quality control functions for the manufacturing plant. Performed research and development on coatings and dyes.

Almay Cosmetics: May 1976 - December 1976

Product evaluation chemist. Responsible for analytical QC of manufactured products.

Publication

Pellizzzari, E.D., Moseley, M.A., Cooper, S.D., Harry, J.V., Demian, B., & Mullin, M. D. (1985). Recent Advances in the Analysis of Polychlorinated Biphenyls in Environmental and Biological Media. *Journal of Chromatography*, 334(3) 277-314.