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INTERIM REMEDIAL MEASURES WORK PLAN

Denison Park - Site #851066
Denison Park
Corning, New York

Prepared For:

Contract# D009808, Work Assignment No. 57
New York State Department of Environmental Conservation
Division of Environmental Remediation
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I, Joseph Richard Taormina, Jr., certify that I am currently a NYS registered professional engineer and that this IRM Scope of Work was prepared in accordance with all applicable statutes and regulations and in substantial conformance with the DER Technical Guidance for Site Investigation and Remediation (DER-10) and DER Green Remediation (DER-31) and that all activities were performed in full accordance with the DER-approved work plan and any DER-approved modifications.

Joseph Richard Taormina, Jr., P.E. - NYS Professional Engineer #103671

1.0 INTRODUCTION

This Interim Remedial Measures (IRM) Work Plan (WP) has been prepared to address the presence of ash, brick, and/or glass (ABG) observed in surficial soils that pose a potential exposure risk to receptors at the Denison Park Site (the Site). HRP Associates, Inc. (HRP) has prepared this WP on behalf of the New York Department of Environmental Conservation (NYSDEC). The Site location and site boundaries are depicted on **Figure 1** and **Figure 2**, respectively.

1.1 Site Characterization Summary

This section summarizes the assessment of existing sub-surface conditions presented in the Site Characterization Report (SCR) dated October 2023 by Parsons. The SCR was completed to investigate potential impacts to the Site from the presence of glass manufacturing waste consisting of ash, brick, and glass (ABG) which was previously identified in the park right-of-way.

ABG was observed in subsurface soil borings and test pits installed across the Site during the 2023 SCR. Pesticides, semivolatile organic compounds (SVOCs), and metals were detected at concentrations that exceed Restricted Residential Use Soil Cleanup Objectives (RRU SCOs) from subsurface soil boring samples. ABG was not observed in surface soil samples, however two metals (arsenic and barium) were detected at concentrations that exceed RRU SCOs. Metals such as arsenic, barium, cadmium, chromium, copper, lead, nickel, and mercury were detected above RRU SCOs in near-surface test pits soils. These SCR results are summarized in **Table 1** and shown on **Figure 3**.

1.2 Pre-Design Investigation Summary

In December 2025 and January 2026, HRP Associates performed a pre-design investigation (PDI) in accordance with the PDI Work Plan prepared by HRP dated November 24, 2025 and approved by the NYSDEC to further investigate the observation of ABG identified during the SC at Denison Park. Results of the PDI are discussed in the PDI report prepared by HRP Associates dated March 5, 2026.

ABG and nearby soil contain contaminants (such as arsenic, boron, cadmium, lead, and certain polycyclic aromatic hydrocarbons (PAHs)) at levels above New York State guidelines. Contaminants of concern related to ABG include arsenic, barium, boron, cadmium, chromium, lead, mercury, and semi-volatile organic compounds (SVOCs) known as polyaromatic hydrocarbons. A 75-foot by 75-foot sampling grid with one soil boring per grid cell was designed for a comprehensive distribution across the Site. Soil samples were collected from depths of 0–2 inches, 2–12 inches, and 12–24 inches below grade (bg) to inform the design of a 2-foot soil cover system. The soil cover system is to address both current and future site uses by confirming a clean 2-foot cover and/or removing soils containing ABG and soils with SVOCs or metals at concentrations exceeding the RRU SCOs. Additionally, surface soil samples were collected and analyzed during the PDI for waste profiling to inform proper handling, storage, and disposal in compliance with state and federal standards during the interim-remedial measure (IRM) phase.

ABG was identified during the PDI in 275 out of 348 soil borings. All soil samples were analyzed for SVOCs and metals. A full list of RRU SCO exceedances from the PDI is included in **Table 2** and shown on **Figure 3**.

1.3 Purpose

This IRM WP has been prepared to address the presence of observed ABG and exceedances of NYCRR Part 375 Restricted Residential Use SCOs in surface soils, soil borings, and test pits that pose a potential human health exposure risk to receptors at Denison Park. The investigation and remediation are being completed to address potential exposure to ABG-related constituents of concern above SCOs, including arsenic, barium, boron, cadmium, lead, mercury, and semi-volatile organic compounds known as polyaromatic hydrocarbons. This IRM WP provides an overview of how the remediation will be conducted and a set of IRM Design drawings will be developed with specifications and notes that will guide the remedy construction.

1.4 Remedial Action Objectives

The Remedial Action Objectives (RAOs) for the Site and the adjacent off-site properties are as follows:

- RAOs for Public Health Protection
  - Prevent ingestion/direct contact with contaminated soil
  - Prevent inhalation of or exposure to contaminants in soil
- RAOs for Environmental Protection
  - Prevent migration of contaminants that would result in groundwater or surface water contamination

1.4.1 Presumptive Remedy

Based on the presumptive approach, contamination is presumed to exist deeper than two feet across the site (or property) and a cover system will be required across the entire site/property (even when there is no excavation or a cover is installed only on a portion or based on limited investigation) to allow for restricted residential use. Any site/property redevelopment will maintain the existing cover system. The cover system may include paved surface parking areas, sidewalks or soil where the upper two feet of exposed surface soil meets the applicable SCOs for restricted residential use.

This IRM WP has been prepared to address the presence of ABG and exceedances of RRU SCOs that pose a potential human health risk to receptors at the Site, and Residential Use SCOs at off-site residential properties. Components of the presumptive remedy described in this IRM WP include:

- Excavation of up to 2 feet of ABG-impacted soils and/or soils which exceed RRU SCOs at the Site;
- Excavation of ABG-impacted soils and/or soil which exceed Residential Use SCOs at off-site properties;

- Placement of a geotextile demarcation layer and backfill materials in excavation areas
- Restoration of vegetation and other disturbed areas; and
- Implementation of engineering controls (ECs) and institutional controls (ICs) via a site management plan (SMP) for the entire Site (including areas where excavation did not take place).

Denison Park

Following the removal of impacted material in conjunction with sampling that shows no impacts in portions of the Site, a 2-foot soil cover will be placed over the Site to limit exposure to any deeper ABG impacts that will remain on-site. In addition to this IRM WP, a set of IRM Design drawings will be developed with specifications and notes that will guide the remedial construction.

Off Site Residential Properties

For the nearby off-site property locations, the presumptive remedy includes a site-specific clean cover system via the excavation of impacted soil, replacement with a cover of clean soil and vegetative cover system. The removal of impacted material in conjunction with end-point sampling showing no impacts in portions of these off-site locations will result in a clean cover over these locations which will limit exposure to any deeper ABG impact.

2.0 INTERIM REMEDIAL MEASURE CONSTRUCTION ACTIVITIES

2.1 Pre-Mobilization Activities

2.1.1 Coordination with Stakeholders

The City of Corning will provide access to the Site for construction activities. The NYSDEC and NYSDOH will coordinate with individual property owners for access to off-site residential properties as needed. The Contractor will need to coordinate with NYSDEC, the City of Corning, and the off-site property owners regarding, but not limited to the following:

- Work Schedule and Construction Hours
- Site Security and Designation of Work Areas
- Proposed Truck Routes and Other Traffic Concerns
- Access to Properties by the Public or Tenants
- Environmental Controls (Air Monitoring / Spill Prevention and Control)
- Emergency Response

2.1.2 Documentation and Reporting

Removal activities will be documented through daily field inspection reports and photographs will be taken prior to, during, and following removal activities. Following the completion of field activities, a summary report will be prepared and submitted to NYSDEC to document the following:

- Scope of work performed
- Location and extent of removal activities
- Site restoration
- Laboratory analysis (if required)
- Data validation (if required)
- Waste disposal

2.2 Site Preparation Activities

2.2.1 Survey Control

A grid-based survey program will be utilized to confirm and document pre- and post-cover system elevations, as well as the horizontal limits of the cover system. Removal activities will be documented through daily field summaries and photographs taken prior to, during, and after excavation activities. A 1-foot topographic survey was completed at the Site as a part of the PDI in February 2026 by a licensed surveyor and will act as the pre-construction survey.

Visual inspections, including photographs, of interior and exterior conditions of property structures (such as buildings, foundations, etc.) will be conducted by a qualified engineer to observe and document current conditions.

2.2.2 Utility Markout

The Contractor will be required to perform a utility clearance prior to beginning ground-intrusive activities. The utility clearance will include the filing of a New York U-dig location request ticket and performing a ground penetrating radar (GPR) survey.

2.2.3 Tree Preservation and Protection

Whenever possible, remedial activities are planned and staged to avoid disturbing healthy trees. If cleanup activities are scheduled near a tree, the NYSDEC will work with arborists and field specialists to assess its condition, develop protective measures, and minimize root disturbance. In cases where excavation is required in close proximity, protective fencing may be used to establish "tree protection zones," and hand tools may be needed in place of heavy machinery.

In rare cases where trees must be removed to ensure public health and safety, NYSDEC will work with the Site owner and local officials to replace trees with appropriate native species, supporting long-term health of the urban canopy.

2.2.4 Soil Erosion and Sediment Control

Prior to construction, erosion and sediment control measures will be installed in accordance with the New York State Standards and Specifications for Erosion (NYSDEC 2016). Control measures shall be provided to:

- Minimize potential erosion of existing soil within and adjacent to active work areas.
- Minimize the potential for conveyance of sediment-laden stormwater or surface water beyond active work areas.
- Minimize accumulation of water within active work areas; and minimize off-site tracking of materials.

Erosion and sedimentation control devices will be subject to a minimum of weekly inspection and maintenance. Results of the weekly inspections and maintenance will be provided to NYSDEC.

The remedial work will not require a New York State Pollutant Discharge Elimination System (NYSPDES) General Permit for Storm Water Discharges, however for excavations greater than 1 acre, the substantive requirements of the NYSDEC Division of Water guidelines and NYS regulations for storm water pollution prevention will be followed.

2.3 Excavation and Site Cover System Installation

2.3.1 Excavation

Proposed removal areas will be isolated and secured using temporary safety fencing, if needed. Erosion control features such as hay bales, silt socks, and drain covers may be employed in active work zones on an as-needed basis.

- Denison Park
  Removal will require excavating to a depth of 2 feet in each of the proposed removal areas (**Figure 4**) where ABG was identified, or where soil cleanup objectives were exceeded as part of the PDI. Additional removal areas may be included during the IRM Design period based on supplemental PDI work or based on ABG observations in the sidewalls of the excavations during IRM removal activities.

- Off-site Residential Properties
  Removal will require excavating each of the proposed removal areas where ABG was identified, or where soil cleanup objectives were exceeded as part of the PDI. Additional removal areas may be included during the IRM Design period based on supplemental PDI work or based on ABG observations in the sidewalls of the excavations during IRM removal activities.

The staging of excavated soils will be conducted in a controlled manner, such as through the use of a prepared pad lined with polyethylene sheeting that is bermed and/or tarped to provide containment and protection from precipitation, or in roll-off containers. If excavated soils are staged at the Site and left unattended, stockpiles are to be covered with polyethylene sheeting to reduce exposure.

All equipment used to excavate or transport excavated material will be decontaminated in the decontamination pad prior to leaving the Site using a steam pressure washer. Solids and grossly contaminated rinsate removed during decontamination will be included with excavated materials in waste containers to the extent practicable. If necessary, these decontamination fluids will be placed in sperate containers for characterization, transportation, and off-site disposal.

2.3.2 Site Cover System Installation

Based on the SC by Parsons and the PDI by HRP, soil throughout the Site had observations of ABG and some soil had exceedances of RRU SCOs (see **Figure 3**). In areas where ABG was observed or soils were identified in exceedance of RRU SCOs, 2-feet of existing surficial materials will be excavated and removed from the Site for off-site disposal to allow for installation of the Site cover system. In areas where soil excavation was determined to be unnecessary based on the limited subsurface investigations completed to date, existing soil will be considered an engineering control and part of the Site cover system. In this case there will be no demarcation layer. The Site cover system shall consist of the following components:

- Existing subgrade, compacted and proof rolled;
- Geotextile fabric demarcation layer, and;
- A 2-foot layer of compacted, clean fill and vegetative cover

The Site cover will generally be gently graded to maintain existing drainage patterns and convey stormwater from the cover system. **Figure 4** shows the cells selected for excavation and soil cover. These cells were determined by the observation of ABG in the top two feet of soil and any analytical exceedances of RRU SCOs. Operations, monitoring and maintenance (OM&M) of the Site cover system will consist of periodic inspections to ensure the Site cover remains intact and completion of any necessary repairs.

A cover will be constructed in areas where the upper two feet of exposed surface soil exceeds the applicable SCOs and/or ABG is present in the sample location to allow for future restricted residential use. Where a soil cover is to be constructed it will be a minimum of two feet of soil placed over a demarcation layer, with the upper six inches of soil of sufficient quality to maintain a vegetative layer.

Soil cover material, including any fill material brought to the site (or property), must meet the SCOs for cover material for the use of the property as set forth in 6 NYCRR Part 375-6.7(d). Substitution of other materials and components may be allowed where such components already exist or are a component of the tangible property to be placed as part of the property redevelopment. Such components may include but are not necessarily limited to pavement, concrete, paved surface parking areas, sidewalks, mature trees necessary to maintain the character of the property, building foundations, and building slabs.

2.3.3 Excavation Contingency

While the design and implementation of remediation on-site will not occur until characterization and remedial design activities are complete, the potential for encountering a layer of fill material containing ABG beyond the remediation areas is possible. In these instances, if a visual indication of a layer of fill material containing ABG is encountered in the side wall of a delineated excavation area within the respective cover system (i.e., the 0 to 1 foot interval or 1-to-2-foot interval) the footprint of the excavation will be expanded to excavate the material.

Where the final limits of excavation are extended, the need for collecting an additional endpoint sample, as required to have a minimum of one sample per 30 linear feet of excavation, will be reevaluated. If needed, an additional endpoint sample may be collected in the field. However, where possible, NYSDEC may elect to extend the limits of the excavation to an existing endpoint, property boundary, and/or property structure to eliminate the need for an additional endpoint sample. Any additional endpoint samples or extended excavation limits will be included in the final survey.

Considering that unlike conventional transport mechanisms, off-site material may have originated from glass manufacturing plants and been placed in off-site locations, further investigation of an adjoining property may be warranted and appropriate to fully investigate and characterize the nature and extent of contamination.

2.3.4 Air Monitoring and Dust Control

During the implementation of the remedial activities, HRP will perform continuous air monitoring of VOCs and particulates (less than 10 micrometers in size, PM-10) at the Site's perimeter in accordance with the NYSDOH Generic Community Air Monitoring Plan (NYSDEC, 2010b). Air monitoring will be conducted using a PID and an air particulate meter. The wind direction and temperature will be recorded as part of the monitoring activities. All monitoring equipment will be calibrated per the manufacturer's manual and will be kept on-site. During the remedial activities, procedures will be followed in accordance with **Appendix B** of Technical Guidance for Site Investigation and Remediation (NYSDEC 2010a), NYSDOH Generic CAMP.

An additional monitoring station, separate from the upwind and downwind stations, is to be operated to characterize any potential exposures to the nearest sensitive receptor population during the execution of ground intrusive work. In the event multiple excavations are performed simultaneously in geographically separate work areas, additional monitoring stations may be required after discussions with the NYSDEC or NYSDOH.

Should any work area be determined to be within 20 feet of potentially exposed populations or occupied structures, special requirements are to be implemented in accordance with **Appendix B**.

Daily monitoring station location maps, and copies of the action limit reports (if any) will be submitted to the NYSDEC and NYSDOH. If an action limit report is generated due to VOC exceedances, the NYSDEC and NYSDOH will be notified within 24 hours of the exceedance. Action limit exceedances for dust, if any, will be discussed in the daily report. A summary of Community Air Monitoring Plan (CAMP) activities, including any action limit reports generated, will be provided in the daily report. The daily reports will be summarized and submitted to the NYSDOH on a weekly basis. A CAMP is provided in **Appendix B**.

The Contractor shall execute work by methods to minimize the generation of dust from all construction activities. Fugitive dust control strategies shall prevent dust from exiting the work zone, prevent visible emissions from exceeding air quality regulations, and prevent public nuisance and exposure to Site contaminants.

The Contractor will be issued a temporary Stop Work Order, with no cause for delay or damages, and will reassess Site activities and dust control measures, if:

1. Visible dust is observed beyond the limits of the Site.
2. If airborne action levels are exceeded at any time during soil remedial activities until it is demonstrated that airborne action levels are achieved by the Contractor's upgraded control measures.
3. At the discretion of the NYSDEC.

2.3.5 Construction Oversight and Reporting

HRP will coordinate all Site activities to achieve the remedial objectives defined in this IRM WP. HRP will provide continual review of all quality control measures to ensure compliance with the Site's remedial objectives and the Site-specific HASP. HRP will provide oversight services for the duration of the remedial activities and will serve as the liaison between the City of Corning and the NYSDEC. The construction oversight activities are anticipated to include, but not limited to, the following:

- Photo documentation of pre- and post-construction Site conditions.
- Manage and oversee the IRM construction activities and remedial activities.
- Perform CAMP activities during ground intrusive activities.
- Prepare daily reports summarizing progress added during the reporting day, locations of work and any quantities of material moved on-site, imported to the Site, disposed of off-site, and an explanation of any notable Site conditions. Photos will also be included in the daily reports as needed, and a comprehensive collection of photos will be included in the construction completion report. The daily reports will be submitted to the NYSDEC by the end of each day. Any complaints received or reports of odors or dust leaving the Site during IRM activities received will be reported to the NYSDEC and NYSDOH as part of the daily reports.
- Participate in and conduct weekly construction status conference calls.
- A weekly update of the remedial schedule including the percentage of project completion, unresolved delays encountered or anticipated that may affect the future schedule, and efforts made to mitigate such delays.

Job-site record-keeping for all remedial work will be appropriately documented. These records will always be maintained on-site during the project.

2.3.6 Final Survey

A final post-construction survey will be conducted following Site cover installation. The survey will describe the horizontal Site cover limits and elevations as well as horizontal coordinates and elevations of monitoring wells which remain or were replaced following Site cover installation. Survey coordinates will be obtained to the nearest 0.1 foot for vertical elevations per North American Vertical Datum of 1988, and 0.1 foot for horizontal coordinates per North American Datum of 1983 and projected on the New York State Plane Coordinate System (Central Zone).

2.4 Waste Transportation and Disposal

Based on the results of waste characterization sampling, excavated soils will be disposed of off-site at approved landfills. Soils deemed hazardous, if any, may require onsite treatment prior to off-site disposal as non-hazardous soils. Other ABG-impacted sites in the Greater Corning Area require soils to be treated in on-site stockpiles to stabilize heavy metal impacted soils prior to disposal.

Waste including construction and demolition debris, and universal waste will be disposed of accordingly. Recycling of concrete and asphalt will be encouraged if it meets the requirements of the recycling facility.

2.5 Site Restoration

Excavated areas will be restored immediately following Site cover installation including establishment of a vegetative cover using NYSDEC-approved topsoil and seed, and replacement of any concrete curbs, pavement, and/or gravel to match the pre-existing conditions.

NYSDEC will submit a written notification to the property owner when vegetation is established, as determined by a qualified landscape architect licensed in New York State. This letter will document the transfer of any cover system maintenance activities from NYSDEC to the property owner; specify and require topsoil of a sufficient quality to maintain a vegetative cover of grass. The following list will be implemented to ensure the restoration of the vegetative layer is established and/or corrected if initial restoration is not successful:

- Use improved topsoil;
- Improve transition from installed sod to existing lawn;
- Aerate, overseed, and top-dress any remediated areas on these properties, as needed;
- Apply four fertilizer treatments during the growing season;
- Apply post emergent weed control in June and October;
- Maintain the properties (mowing and watering) following germination;
- Educate property owners on how to water the sod during challenging weather periods;
- Participate in a monthly walk through with NYSDEC representatives with corrective measures implemented, as needed;
- Address property owner complaints at the time they are received;
- Meet with the property owner to discuss turnover and ongoing maintenance requirements after the vegetation is established (expected to take up to one year); and
- Provide written notifications to the property owner when vegetation is established.

3.0 GREEN REMEDIATION

A remedial design program will be implemented to provide the details necessary for the construction, operation, optimization, maintenance, and monitoring of the remedial program, including an infrastructure protection plan. Green remediation principles and techniques will be implemented to the extent feasible in the design, implementation, and site management of the remedy as per DER-31. The major green remediation components are as follows:

- Considering the environmental impacts of treatment technologies and remedy stewardship over the long term;
- Reducing direct and indirect greenhouse gases and other emissions;
- Increasing energy efficiency and minimizing use of non-renewable energy;
- Conserving and efficiently managing resources and materials;
- Reducing waste, increasing recycling and increasing reuse of materials which would otherwise be considered a waste;
- Maximizing habitat value and creating habitat when possible;
- Fostering green and healthy communities and working landscapes which balance ecological, economic and social goals;
- Integrating the remedy with the end use where possible and encouraging green and sustainable re-development; and
- Additionally, to incorporate green remediation principles and techniques to the extent feasible in the future development at this property, any future buildings shall be constructed, at a minimum, to meet the 2020 Energy Conservation Construction Code of New York (or most recent edition) to improve energy efficiency as an element of construction.

3.1 Environmental Footprint Analysis

As part of the remedial design program, to evaluate this presumptive approach with respect to green and sustainable remediation principles, an environmental footprint analysis will be completed. The environmental footprint analysis will be completed using an accepted environmental footprint analysis calculator such as SEFA (Spreadsheets for Environmental Footprint Analysis, USEPA), SiteWise (TM) (available in the Sustainable Remediation Forum [SURF] library) or similar NYSDEC accepted tool.

Water consumption, greenhouse gas emissions, renewable and non-renewable energy use, waste reduction and material use will be estimated, and goals for the project related to these green and sustainable remediation metrics, as well as for minimizing community impacts, protecting habitats and natural and cultural resources, and promoting environmental justice, will be incorporated into the remedial design program, as appropriate. The project design specifications will include detailed requirements to achieve the green and sustainable remediation goals. Further, progress with respect to green and sustainable remediation metrics will be tracked during implementation of this presumptive approach and reported in the final report, including a comparison to the goals established during the remedial design program

3.2 Climate Vulnerability Assessment

Additionally, the remedial design program will include a climate change vulnerability assessment, to evaluate the impact of climate change on the property and the proposed remedy. Potential vulnerabilities associated with extreme weather events (e.g., hurricanes, lightning, heat stress and drought), flooding, and sea level rise will be identified, and the remedial design program will incorporate measures to minimize the impact of climate change on potential identified vulnerabilities.

3.3 Waste Reduction

Waste reduction will be completed during the remedy by developing an on-site recycling program and by reusing acceptable site materials which would otherwise be disposed of:

- Implement an on-site recycling program for personal consumables during the remedial phase of site work (such as paper, plastics, and aluminum); and
- Use recycled content material during day-to-day operations, where practical.

4.0 ADAPTIVE MANAGEMENT

The PDI was performed to determine the general acceptability of the top 2-feet of soil to serve as a soil cover recognizing that certain grids may require additional investigation, including test pitting and trenching, to ensure an adequate clean cover spans the entire property which is protective of public health and the environment. The PDI Report and design drawings may be updated as new information becomes available.

Additionally, the NYSDEC is coordinating closely with the City of Corning on its redevelopment plans to minimize the need for NYSDEC to respond to and/or manage ABG encountered following implementation of the IRM WP during site management. To the extent practical, NYSDEC intends to provide a clean cover with grading, clean utility corridors to facilitate the restoration of Denison Park in a safe and effective manner. It is important to note that a clean cover may consist of vegetated soil, trees, asphalt, buildings, concrete or other features.

Similarly, off-site properties were initially evaluated only if the presence of ABG was known to NYSDEC or property owners. Visual evidence of ABG along the Denison Park property line may require the NYSDEC to evaluate additional off-site properties. This may also be necessary if a residential property cleanup encounters ABG along a residential property line.

NYSDEC is implementing a presumptive IRM which will consist of a soil cover, ICs including an environmental easement where appropriate and a SMP. This approach is intended to be flexible and will be adaptively managed to ensure the best possible remedial outcome. Revisions to the IRM WP may be documented in an updated IRM WP, revised design drawings and/or the Final Engineering Report for the Site.

5.0 POST-CONSTRUCTION ACTIVITIES

5.1 Construction Completion Report

A Construction Completion Report (CCR) will be prepared in accordance with Section 5.8 of DER-10 upon completion of the remedial action.

The CCR will present the following information, at a minimum:

- Description of the remediation activities and any deviations from the work plan;
- Record "as-built" drawings, tables and figures detailing the remediation activities completed;
- Information and documentation regarding the final quantities and disposition of imported materials and materials disposed of off-site during implementation of the remediation activities;
- Summaries of field observations, laboratory samples collected, and monitoring results obtained during construction;
- Summaries of problems/deficiencies encountered during construction;
- Representative photographs taken during implementation of remediation activities;
- Copies of material manifests, regulatory permits, and other key regulatory agency correspondence related to permits and permit compliance; and
- Certification statement signed and sealed by a professional engineer (PE) licensed in New York.

5.2 Site Management Plan

The remedial design will require that a SMP be prepared for the Site. The SMP will be consistent with the applicable requirements of DER-10 Section 6.2, and in a format generally consistent with the NYSDEC's SMP template. The SMP will consist of the following:

- Institutional and Engineering Controls Plan – describes the use restrictions and engineering controls that will be established, including but are not limited to:
    - Provisions for the evaluation of the potential for soil vapor intrusion for any building developed on the Site.
    - Provisions for the management and inspection of the engineering controls.
    - Maintaining Site access and Department notification.
    - The steps necessary for the periodic reviews and certification of the institutional control and/or engineering controls.
    - Provisions of the environmental easement including land use and groundwater restrictions.
- Excavation Plan – details the provisions for management of future excavations in areas of remaining contamination.
- Monitoring Plan – used to assess the performance and effectiveness of the remedy. The SMP will include requirements for post-remedial action groundwater monitoring, as well as Site inspection schedules, and NYSDEC reporting requirements.

- Operation and Maintenance (O&M) Plan – An O&M plan to ensure continued operation, maintenance, optimization, monitoring, inspection, and reporting of any mechanical or physical components of the cover system

5.2.1 Institutional Controls and Engineering Controls (ICs/ECs)

Institutional control in the form of an environmental easement will be established at the Site. Establishing an environmental easement for the controlled property requires the remedial party or Site owner to complete and submit to the Department a periodic certification of institutional and engineering controls in accordance with Part 375-1.8 (h)(3). The remedy will allow land use and development of the Site for restricted residential use, commercial, or industrial uses as defined by Part 375-1.8(g). The easement shall restrict the use of groundwater as a source of potable or process water, without necessary water quality treatment as determined by the NYSDOH or Steuben County DOH.

Additionally, the easement will require the remedial party and/or the Site owner to maintain engineering controls installed at the Site. The remedial party or Site owner would be required to complete the NYSDEC EC/IC form and maintain the Site cover. Exposure to excavated materials within the remediated areas of the Site is prevented by a cover system. The cover is vegetated to control erosion of the soil layers above the geotextile fabric. The vegetative cover will be maintained as part of the engineering controls for the Site. The easement shall also require compliance with an NYSDEC-approved SMP.

Prior to any disturbance of the soil cover, an Excavation Work Plan (EWP) will be submitted to and approved by NYSDEC. The EWP will consist of a field sampling plan, HASP, and a quality assurance project plan, as appropriate.

6.0 PRELIMINARY PROJECT SCHEDULE

HRP has the responsibility of the overall management of this project and will respond to any NYSDEC requests. A proposed project schedule, key milestones, key project personnel, and project-specific subcontractors follow.

Table 3
Preliminary Remedial Action Schedule

Task	Sub-Task	Start Date	End Date
Construct Site Cover System	Submit PDI Report and IRM Work Plan	3/05/2026	3/06/2026
	NYSDEC Review of PDI Report and IRM WP	3/06/2026	4/06/2026
	Bid Package Development/Contracting/Procurement of Relevant Permits	4/06/2026	7/06/2026
	*Mobilization	7/20/2026	7/25/2026
	*Clearing and Grubbing	7/20/2026	7/25/2026
	*Cover System Installation	7/27/2026	9/25/2026
	*Restoration	10/05/2026	10/09/2026
	*Demobilization	10/08/2026	10/09/2026
*Prepare and Revise SMP	---	10/09/2026	10/31/2026
*Prepare and Revise CCR	---	10/09/2026	10/31/2026

* Schedule is pendent upon agency review, approval of additional budget, and contracting

Table 4
Project Roles and Contact Information

Name	Role	Email	Address	Phone
New York State Department of Environmental Conservation				
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New York State Department of Health				
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FIGURES

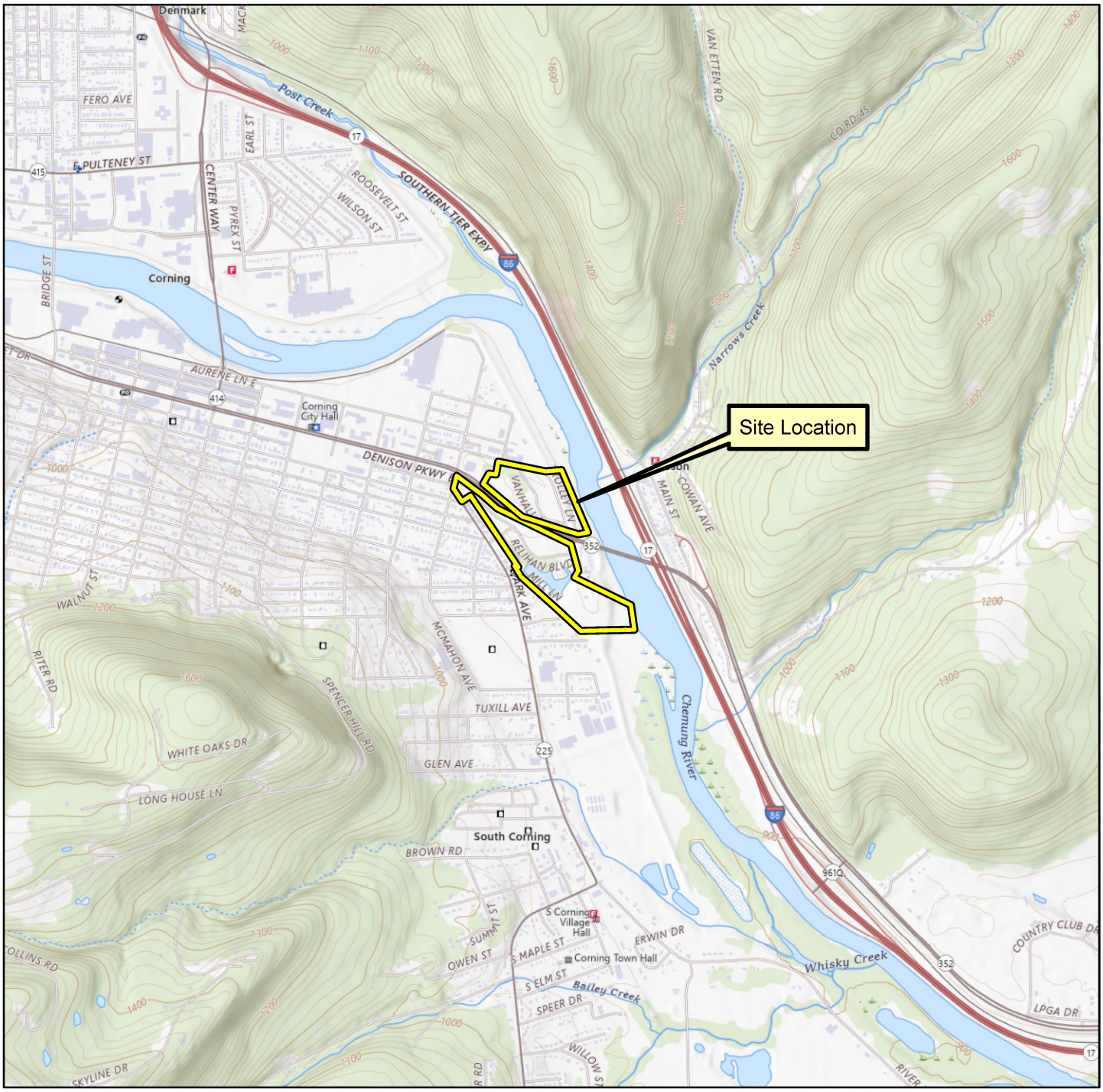

Figure 1
Site Location
Denison Park
Corning New York
HRP # DEC1057.P3

USGS Quadrangle Information
Quad ID: 42077-B1
Name: Corning, New York
Date Rev: 2016
Date Pub: 2019

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Figure No. **2**	**Site Boundary Denison Park** Denison Park Site ID 851066 Corning, New York 14830	Issue Date: 9/26/2025	Designed By: CMS	Revisions No. / Date	North
		Project No: DEC1057.P3	Drawn By: SP		0 105 210 Feet
		Sheet Size: 11x17	Reviewed By: DRAFT		

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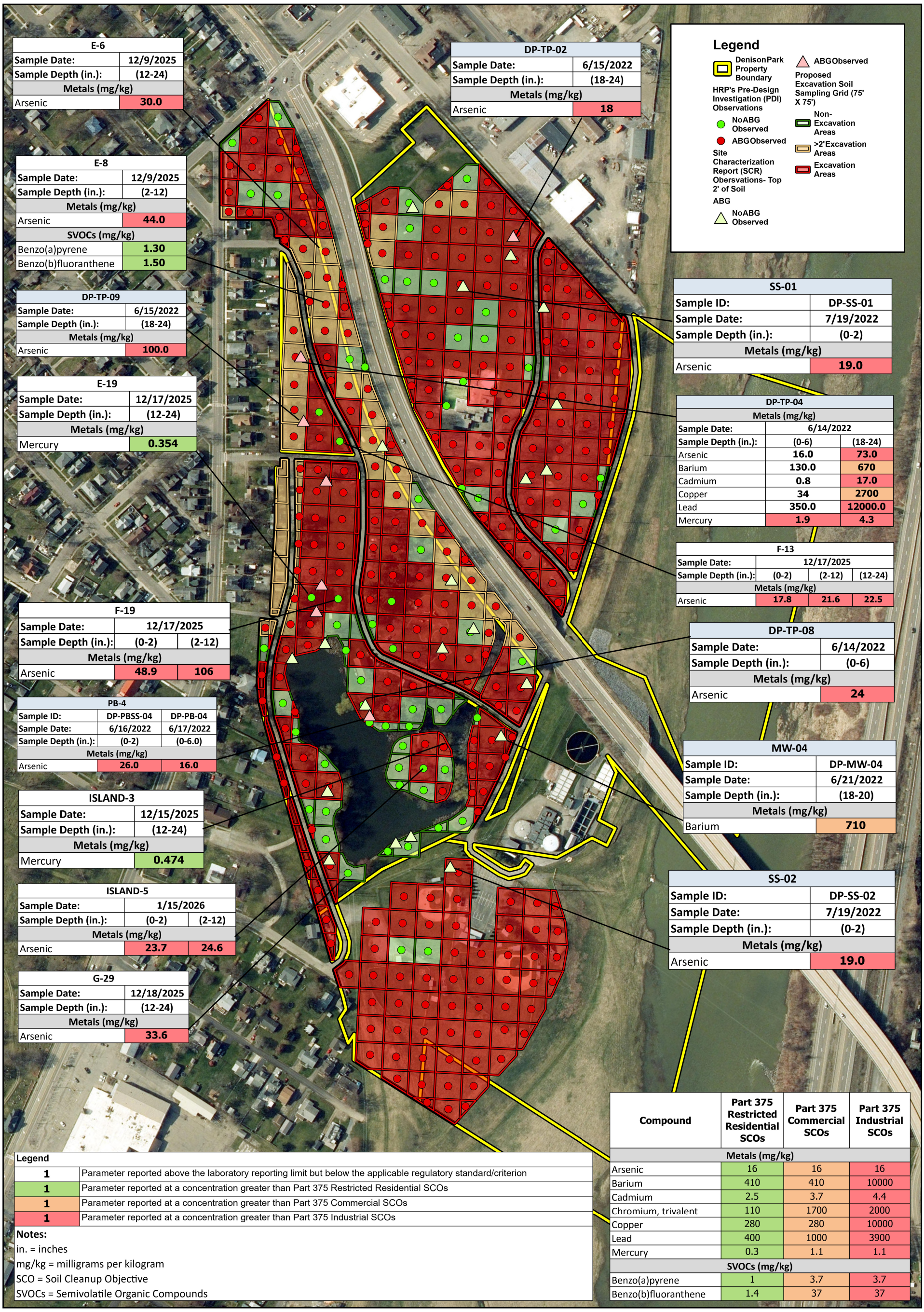

E-6	
Sample Date:	12/9/2025
Sample Depth (in.):	(12-24)
Metals (mg/kg)	
Arsenic	30.0

DP-TP-02	
Sample Date:	6/15/2022
Sample Depth (in.):	(18-24)
Metals (mg/kg)	
Arsenic	18

E-8	
Sample Date:	12/9/2025
Sample Depth (in.):	(2-12)
Metals (mg/kg)	
Arsenic	44.0
SVOCs (mg/kg)	
Benzo(a)pyrene	1.30
Benzo(b)fluoranthene	1.50

DP-TP-09	
Sample Date:	6/15/2022
Sample Depth (in.):	(18-24)
Metals (mg/kg)	
Arsenic	100.0

E-19	
Sample Date:	12/17/2025
Sample Depth (in.):	(12-24)
Metals (mg/kg)	
Mercury	0.354

SS-01	
Sample ID:	DP-SS-01
Sample Date:	7/19/2022
Sample Depth (in.):	(0-2)
Metals (mg/kg)	
Arsenic	19.0

DP-TP-04		
Metals (mg/kg)		
Sample Date:	6/14/2022	
Sample Depth (in.):	(0-6)	(18-24)
Arsenic	16.0	73.0
Barium	130.0	670
Cadmium	0.8	17.0
Copper	34	2700
Lead	350.0	12000.0
Mercury	1.9	4.3

F-13			
Sample Date:	12/17/2025		
Sample Depth (in.):	(0-2)	(2-12)	(12-24)
Metals (mg/kg)			
Arsenic	17.8	21.6	22.5

F-19		
Sample Date:	12/17/2025	
Sample Depth (in.):	(0-2)	(2-12)
Metals (mg/kg)		
Arsenic	48.9	106

DP-TP-08	
Sample Date:	6/14/2022
Sample Depth (in.):	(0-6)
Metals (mg/kg)	
Arsenic	24

PB-4		
Sample ID:	DP-PBSS-04	DP-PB-04
Sample Date:	6/16/2022	6/17/2022
Sample Depth (in.):	(0-2)	(0-6.0)
Metals (mg/kg)		
Arsenic	26.0	16.0

MW-04	
Sample ID:	DP-MW-04
Sample Date:	6/21/2022
Sample Depth (in.):	(18-20)
Metals (mg/kg)	
Barium	710

ISLAND-3	
Sample Date:	12/15/2025
Sample Depth (in.):	(12-24)
Metals (mg/kg)	
Mercury	0.474

SS-02	
Sample ID:	DP-SS-02
Sample Date:	7/19/2022
Sample Depth (in.):	(0-2)
Metals (mg/kg)	
Arsenic	19.0

ISLAND-5		
Sample Date:	1/15/2026	
Sample Depth (in.):	(0-2)	(2-12)
Metals (mg/kg)		
Arsenic	23.7	24.6

G-29	
Sample Date:	12/18/2025
Sample Depth (in.):	(12-24)
Metals (mg/kg)	
Arsenic	33.6

Legend	
1	Parameter reported above the laboratory reporting limit but below the applicable regulatory standard/criterion
1	Parameter reported at a concentration greater than Part 375 Restricted Residential SCOs
1	Parameter reported at a concentration greater than Part 375 Commercial SCOs
1	Parameter reported at a concentration greater than Part 375 Industrial SCOs

Notes:
in. = inches
mg/kg = milligrams per kilogram
SCO = Soil Cleanup Objective
SVOCs = Semivolatile Organic Compounds

Compound	Part 375 Restricted Residential SCOs	Part 375 Commercial SCOs	Part 375 Industrial SCOs
Metals (mg/kg)			
Arsenic	16	16	16
Barium	410	410	10000
Cadmium	2.5	3.7	4.4
Chromium, trivalent	110	1700	2000
Copper	280	280	10000
Lead	400	1000	3900
Mercury	0.3	1.1	1.1
SVOCs (mg/kg)			
Benzo(a)pyrene	1	3.7	3.7
Benzo(b)fluoranthene	1.4	37	37

Figure No. **3**	**On-Site Soil Analytical Results Exceedances Above Restricted Residential Use SCOs** Denison Park Site ID 851066 Corning, New York 14830	Issue Date: 02/25/2026 Project No: DEC1057.P3 Sheet Size: 11x17	Designed By: CMS Drawn By: JG Reviewed By:	Revisions No. / Date	North 0 65 130 260 Feet

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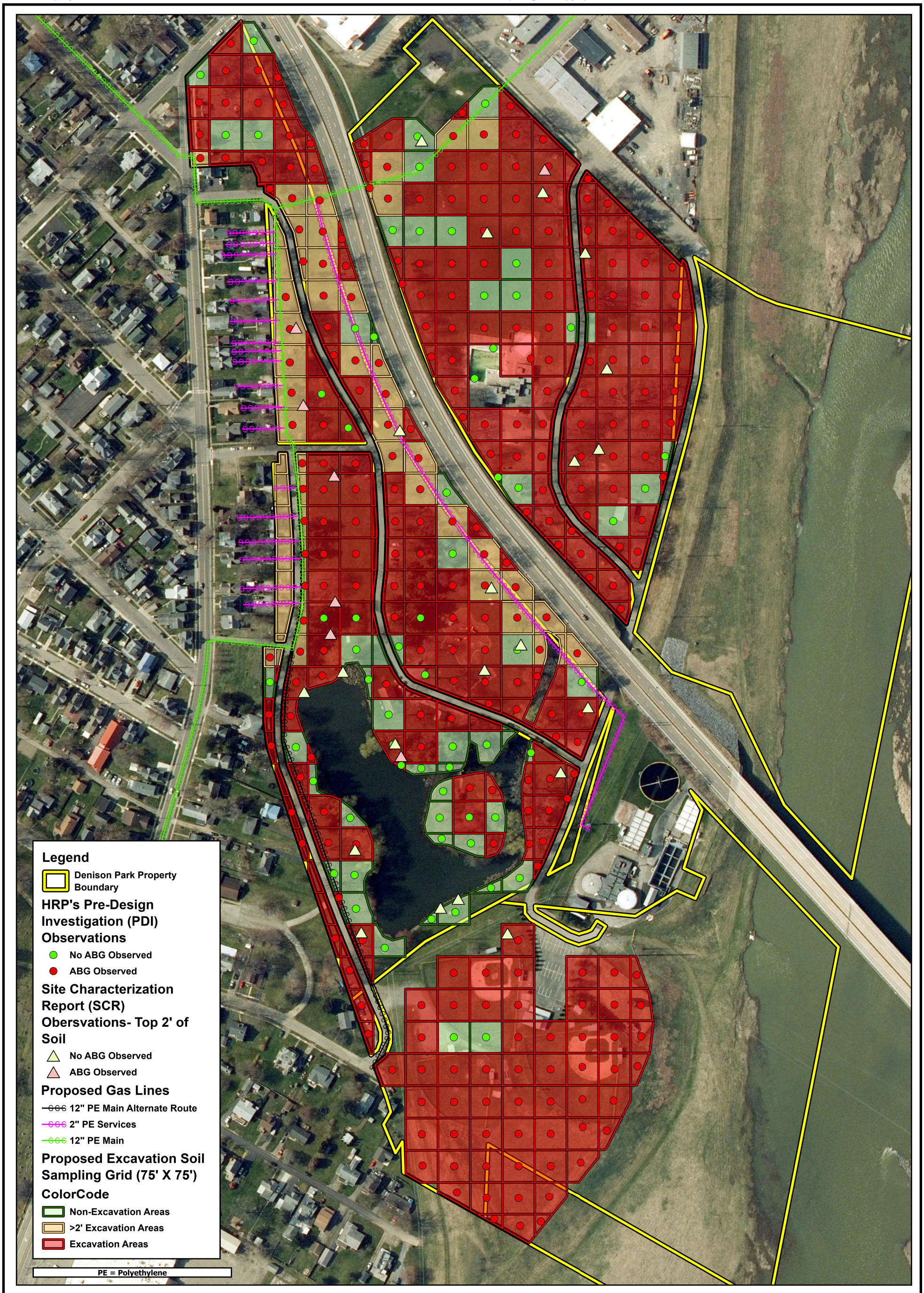

Figure No. **4**	**Sampling Grids Selected for Excavation** Denison Park Site ID 851066 Corning, New York 14830	Issue Date: 01/22/2026	Designed By: CMS	Revisions No. / Date	North	HRP MOVE YOUR ENVIRONMENT FORWARD ONE FAIRCHILD SQUARE SUITE 110 CLIFTON PARK, NY 12065 (518) 877-7101 HRPASSOCIATES.COM
		Project No: DEC1057.P3	Drawn By: SP		0 105 210 Feet	
		Sheet Size: 11x17	Reviewed By: DRAFT			

TABLES

Table 1
Site Characterization Results - Exceedances Only (Top 2 Feet)
Denison Park Site
Denison Park, Corning, New York 14830
NYSDEC Site # 851066

Sediment Exceedances

Analyte	NYSDEC Sediment Class A	DP-SED-01 (0-2 ft)	DP-SED-02 (0-2 ft)
Metals (mg/kg)			
Lead	**36**	**51**	**65**

Subsurface Soil Exceedances

Analyte	Restricted Residential SCO	DP-TP-02 (18-24 in)	DP-TP-04 (0-6 in)	DP-TP-04 (18-24 in)	DP-TP-09 (18-24 in)	DP-TP-08 (0-6 in)	DP-SS-02 (0-2 in)	DP-MW-04 (18-20 in)	DP-SS-01 (0-2 in)	DP-PB-04 (0-6 in)	DP-PBSS-04 (0-2 in)
Metals (mg/kg)											
Arsenic	**16**	**18**	--	**73**	**100**	**24**	**19**	--	**19**	**16**	**26**
Barium	**410**	--	--	**670**	--	--	--	**710**	--	--	--
Cadmium	**2.5**	--	--	**17**	--	--	--	--	--	--	--
Chromium	**1**	--	--	**73**	--	--	--	--	--	--	--
Copper	**280**	--	--	**2700**	--	--	--	--	--	--	--
Mercury	**0.3**	--	**1.9**	**4.3**	--	--	--	--	--	--	--
Lead	**400**	--	--	**12000**	--	--	--	--	--	--	--

Table 2
PDI Results in Soil - Denison Park - Exceeding Restricted Residential Use SCOs
Denison Park Site - Site # 851066
Denison Park, Corning, New York

Location:	Part 375 Restricted Residential Use SCOs	Part 375 Commercial Use SCOs	Part 375 Industrial Use SCOs	E-6	E-8	E-19	F-13	F-13	F-13	F-19	F-19	G-29	PC-4	ISLAND-2	ISLAND-2	ISLAND-3	ISLAND-5	ISLAND-5
Date Collected:				12/09/2025	12/09/2025	12/17/2025	12/17/2025	12/17/2025	12/17/2025	12/17/2025	12/17/2025	12/18/2025	01/14/2026	12/15/2025	12/15/2025	12/15/2025	01/15/2026	01/15/2026
Sample ID:				E-6 (12-24 in)	E-8 (2-12 in)	E-19 (12-24in)	F-13 (0-2 in)	F-13 (2-12 in)	F-13 (12-24 in)	F-19 (0-2 in)	F-19 (2-12 in)	G-29 (12-24in)	PC-4 (2-12in)	Island-2 (0-2in)	Island-2 (2-12in)	Island3 (12-24in)	Island-5 (0-2in)	Island-5 (2-12in)
Laboratory Sample ID:				25L0543-01	25L0543-03	25L1113-03	25L1361-04	25L1361-05	25L1361-06	25L1361-07	25L1361-08	25L1191-18	26A0497-16	25L0939-07	25L0939-08	25L0998-03	26A0598-10	26A0598-11
Semivolalite Organic Compounds (SVOC) (mg/kg)																		
1,1'-Biphenyl	NP	NP	NP	< 0.0790 U	**0.0650 J**	< 0.0800 U	< 0.0870 U	< 0.0840 U	< 0.0810 U	< 0.0880 U	< 0.0870 U	< 0.0770 U	< 0.0810 U	< 0.0810 U	< 0.0800 U	< 0.0780 U	< 0.0860 U	< 0.0820 U
1-Methylnaphthalene	NP	NP	NP	**0.0130 J**	**0.150**	**0.0180 J**	**0.00870 J**	**0.00910 J**	**0.0120 J**	**0.00870 J**	< 0.0430 U	< 0.0380 U	< 0.0400 U	< 0.0400 U	< 0.0400 U	< 0.0380 U	**0.00560 J**	< 0.0400 U
2-Methylnaphthalene	NP	NP	NP	**0.0180 J**	**0.170**	**0.0290 J**	**0.0100 J**	**0.0160 J**	**0.0150 J**	**0.0130 J**	< 0.0430 U	**0.00460 J**	< 0.0400 U	< 0.0400 U	< 0.0400 U	< 0.0380 U	**0.00730 J**	< 0.0400 U
Acenaphthene	100	500	1000	< 0.0390 U	**0.490**	**0.00720 J**	< 0.0430 U	< 0.0410 U	< 0.0400 U	< 0.0430 U	< 0.0430 U	< 0.0380 U	< 0.0400 U	< 0.0400 U	< 0.0400 U	< 0.0380 U	< 0.0430 U	< 0.0400 U
Acenaphthylene	100	500	1000	**0.0280 J**	**0.0160 J**	**0.0540**	**0.0120 J**	**0.0180 J**	**0.0130 J**	**0.0170 J**	< 0.0430 U	< 0.0380 U	< 0.0400 U	< 0.0400 U	< 0.0400 U	< 0.0380 U	**0.00560 J**	< 0.0400 U
Anthracene	100	500	1000	**0.0210 J**	**1.10**	**0.0300 J**	< 0.0430 U	**0.00960 J**	< 0.0400 U	**0.0140 J**	< 0.0430 U	**0.00650 J**	**0.00520 J**	< 0.0400 U	**0.00720 J**	< 0.0380 U	**0.00560 J**	< 0.0400 U
Benzaldehyde	NP	NP	NP	< 0.400 U	< 0.440 U	< 0.410 U	< 0.440 U	< 0.420 U	< 0.410 U	< 0.450 U	< 0.440 U	< 0.390 U	< 0.410 U	< 0.410 U	< 0.410 U	< 0.390 U	< 0.440 U	< 0.420 U
Benzo(a)anthracene	1.4	37	37	**0.0700**	**1.40**	**0.0990**	**0.0410 J**	**0.0510**	**0.0270 J**	**0.0510**	**0.0300 J**	**0.0330 J**	**0.0320 J**	**0.0110 J**	**0.0360 J**	**0.0100 J**	**0.0300 J**	**0.0220 J**
Benzo(a)pyrene	**1**	3.7	3.7	**0.0880**	**1.30**	**0.120**	**0.0480**	**0.0590**	**0.0270 J**	**0.0660**	**0.0340 J**	**0.0340 J**	**0.0290 J**	< 0.0400 U	**0.0320 J**	< 0.0380 U	**0.0290 J**	**0.0200 J**
Benzo(b)fluoranthene	**1.4**	37	37	**0.150**	**1.50**	**0.170**	**0.0700**	**0.0830**	**0.0430**	**0.0970**	**0.0420 J**	**0.0440**	**0.0380 J**	**0.0210 J**	**0.0570**	< 0.0380 U	**0.0520**	**0.0310 J**
Benzo(ghi)perylene	4.9	47	78	**0.0710**	**0.670**	**0.110**	**0.0420 J**	**0.0490**	**0.0220 J**	**0.0550**	**0.0400 J**	**0.0200 J**	**0.0220 J**	< 0.0400 U	**0.0270 J**	< 0.0380 U	**0.0210 J**	< 0.0400 U
Benzo(k)fluoranthene	4.9	47	78	**0.0430**	**0.590**	**0.0580**	**0.0240 J**	**0.0300 J**	**0.0140 J**	**0.0340 J**	**0.0160 J**	**0.0160 J**	**0.0160 J**	< 0.0400 U	**0.0200 J**	< 0.0380 U	**0.0170 J**	**0.0110 J**
Bis(2-ethylhexyl)phthalate	NP	NP	NP	< 0.400 U	**0.110 J**	**0.110 J**	< 0.440 U	< 0.420 U	< 0.410 U	< 0.450 U	< 0.440 U	< 0.390 U	< 0.410 U	< 0.410 U	< 0.410 U	< 0.390 U	< 0.440 U	< 0.420 U
Butylbenzyl phthalate	NP	NP	NP	< 0.400 U	< 0.440 U	< 0.410 U	< 0.440 U	< 0.420 U	< 0.410 U	< 0.450 U	< 0.440 U	< 0.390 U	< 0.410 U	< 0.410 U	< 0.410 U	< 0.390 U	< 0.440 U	< 0.420 U
Carbazole	NP	NP	NP	< 0.200 U	**0.390**	< 0.200 U	< 0.220 U	< 0.210 U	< 0.210 U	< 0.220 U	< 0.220 U	< 0.200 U	< 0.210 U	< 0.210 U	< 0.200 U	< 0.200 U	< 0.220 U	< 0.210 U
Chrysene	4.9	47	78	**0.110**	**1.30**	**0.140**	**0.0600**	**0.0730**	**0.0520**	**0.0840**	**0.0380 J**	**0.0400**	**0.0380 J**	**0.0170 J**	**0.0460**	**0.0100 J**	**0.0420 J**	**0.0310 J**
Dibenzo(a,h)anthracene	0.33	3.7	3.7	**0.0230 J**	**0.160**	**0.0210 J**	< 0.0430 U	< 0.0410 U	< 0.0400 U	< 0.0430 U	< 0.0430 U	< 0.0380 U	< 0.0400 U	< 0.0400 U	< 0.0400 U	< 0.0380 U	< 0.0430 U	< 0.0400 U
Dibenzofuran	18	180	290	< 0.400 U	**0.450**	< 0.410 U	< 0.440 U	< 0.420 U	< 0.410 U	< 0.450 U	< 0.440 U	< 0.390 U	< 0.410 U	< 0.410 U	< 0.410 U	< 0.390 U	< 0.440 U	< 0.420 U
Fluoranthene	100	500	1000	**0.120**	**4.00**	**0.220**	**0.0630**	**0.0850**	**0.0390 J**	**0.110**	**0.0500**	**0.0440**	**0.0520**	**0.0200 J**	**0.0670**	**0.00690 J**	**0.0470**	**0.0360 J**
Fluorene	100	500	1000	**0.00700 J**	**0.520**	**0.0120 J**	< 0.0430 U	< 0.0410 U	< 0.0400 U	< 0.0430 U	< 0.0430 U	< 0.0380 U	< 0.0400 U	< 0.0400 U	< 0.0400 U	< 0.0380 U	< 0.0430 U	< 0.0400 U
Indeno(1,2,3-cd)pyrene	1.4	37	37	**0.0720**	**0.770**	**0.120**	**0.0410 J**	**0.0500**	**0.0230 J**	**0.0600**	**0.0350 J**	**0.0220 J**	**0.0220 J**	< 0.0400 U	**0.0270 J**	< 0.0380 U	**0.0220 J**	< 0.0400 U
Naphthalene	100	500	1000	**0.0210 J**	**0.250**	**0.0300 J**	**0.0130 J**	**0.0170 J**	**0.0190 J**	**0.0190 J**	**0.0100 J**	**0.00690 J**	< 0.0400 U	< 0.0400 U	< 0.0400 U	< 0.0380 U	**0.00990 J**	< 0.0400 U
Phenanthrene	4.9	47	78	**0.0660**	**4.20**	**0.120**	**0.0320 J**	**0.0540**	**0.0390 J**	**0.0590**	**0.0350 J**	**0.0280 J**	**0.0320 J**	**0.0100 J**	**0.0360 J**	< 0.0380 U	**0.0280 J**	**0.0220 J**
Pyrene	100	500	1000	**0.110**	**2.80**	**0.180**	**0.0620**	**0.0800**	**0.0350 J**	**0.0870**	**0.0390 J**	**0.0530**	**0.0580**	**0.0150 J**	**0.0610**	**0.00930 J**	**0.0450**	**0.0370 J**
Metals (mg/kg)																		
Aluminum	NP	NP	NP	**5860**	**8130**	**9820**	**7310**	**7060**	**8540**	**5160**	**10400**	**7200**	**9390**	**6740**	**6520**	**4750**	**6570**	**7660**
Arsenic	**16**	**16**	**16**	**30.0**	**44.0**	**6.37**	**17.8**	**21.6**	**22.5**	**48.9**	**106**	**33.6**	**9.44**	**17.4**	**15.8**	**1.91**	**23.7**	**24.6**
Barium	410	410	10000	**98.9**	**120**	**151**	**96.5**	**90.1**	**106**	**72.7**	**172**	**82.5**	**162**	**75.3**	**72.8**	**55.8 B**	**79.0**	**92.8**
Beryllium	43	670	750	**0.460 J**	**0.535**	**0.571**	**0.433 J**	**0.414 J**	**0.506**	**0.305 J**	**0.581**	**0.428 J**	**0.524**	**0.365 J**	**0.353 J**	**0.273 J**	**0.388 J**	**0.453 J**
Boron	4300	62000	80000	**2.93**	**2.70 J**	**2.45 J**	**2.43 J**	**2.18 J**	**2.40 J**	**2.31 J**	**2.85 J**	**1.56 J**	**2.02 J**	**1.32 J**	**1.14 J**	**0.923 J**	**2.31 J**	**2.21 J**
Cadmium	2.5	3.7	4.4	**1.15**	**1.03**	**0.207 J**	**0.458 J**	**0.417 J**	**0.257 J**	**0.375 J**	**0.153 J**	**0.205 J**	**0.725 J**	**0.423 J**	**0.406 J**	**0.120 J**	**0.324 J**	**0.399 J**
Calcium	NP	NP	NP	**2270**	**3130**	**16500**	**1620**	**1460**	**1600**	**1800**	**17800**	**2930**	**2530**	**1070**	**966**	**730**	**874**	**1030**
Chromium	110	1700	2000	**9.12**	**11.5**	**12.7**	**9.20**	**8.74**	**10.2**	**6.88**	**13.3**	**9.03**	**14.1**	**7.89**	**7.63**	**5.71**	**8.10**	**9.18**
Cobalt	NP	NP	NP	**7.85**	**8.95**	**9.94**	**7.29**	**6.90**	**8.42**	**5.30**	**9.88**	**7.77**	**8.40**	**6.55**	**6.14**	**4.82**	**6.14**	**7.18**
Copper	280	280	10000	**19.8**	**87.4**	**22.4**	**15.0**	**14.4**	**16.6**	**11.7**	**22.0**	**15.0**	**27.6**	**11.4**	**10.9**	**7.34**	**14.0**	**16.6**
Iron	NP	NP	NP	**16100**	**19300**	**20000**	**15500**	**15800**	**17300**	**11200**	**20500**	**16100**	**17400 B**	**13300**	**12900**	**9640 B**	**12200 B**	**14100 B**
Lead	400	1000	3900	**168**	**208**	**90.4**	**117**	**206**	**138**	**74.5**	**195**	**42.5**	**108**	**30.8**	**28.6**	**12.4**	**59.1**	**66.4**
Magnesium	NP	NP	NP	**1760**	**2760**	**3280**	**2120**	**1980**	**2420**	**1550**	**3020**	**2970**	**2380**	**1980**	**1910**	**1510**	**1720**	**2000**
Manganese	2000	10000	10000	**548**	**644**	**607**	**511**	**489**	**601**	**352**	**679**	**428**	**632**	**278**	**275**	**134**	**383**	**428**
Mercury	**0.3**	1.1	5.7	**0.159**	**0.131**	**0.354**	**0.0740 J**	**0.138**	**0.0630 J**	**0.0880 J**	**0.274**	< 0.0780 U	**0.322**	**0.416**	**0.923**	**0.474**	< 0.0850 U	**0.0690 J**
Nickel	320	320	5900	**14.8**	**18.2**	**20.3**	**14.9**	**14.1**	**16.8**	**11.0**	**20.1**	**15.8**	**15.9**	**13.3**	**12.4**	**10.7**	**12.7**	**14.9**
Potassium	NP	NP	NP	**598**	**670**	**637**	**705**	**579**	**684**	**499**	**834**	**445**	**1120**	**595**	**457**	**247**	**679**	**704**
Selenium	110	1700	2000	< 1.85 U	**0.704 J**	< 1.86 U	< 2.09 U	**0.394 J**	< 1.85 U	< 2.11 U	**0.392 J**	< 1.82 U	< 1.86 U	**0.458 J**	**0.472 J**	< 1.82 U	**0.374 J**	**0.322 J**
Silver	110	1700	2000	< 0.462 U	**0.326 J**	< 0.464 U	< 0.522 U	< 0.488 U	< 0.464 U	< 0.528 U	**0.401 J**	< 0.455 U	**0.310 J**	< 0.478 U	< 0.460 U	< 0.456 U	< 0.484 U	< 0.479 U
Sodium	NP	NP	NP	< 185 U	< 206 U	< 186 U	< 209 U	< 195 U	< 185 U	< 211 U	< 200 U	< 182 U	**421**	< 191 U	< 184 U	< 182 U	< 193 U	< 192 U
Vanadium	NP	NP	NP	**11.4**	**13.5**	**13.8**	**10.3**	**9.91**	**11.9**	**7.26**	**14.4**	**9.76**	**13.9**	**8.71**	**8.50**	**5.96**	**9.31**	**10.4**
Zinc	6600	10000	10000	**79.4**	**96.0**	**87.0**	**62.0**	**54.3**	**55.4**	**50.0**	**83.5**	**63.9**	**178**	**47.3**	**43.2**	**31.1**	**55.8**	**63.0**

Legend	
<1	Parameter not detcted above the laboratory reporting limit
1	Parameter reported at a concentrations greater than Part 375 Restricted Residential Use SCOs
1	Parameter reported at a concentrations greater than Part 375 Commerical Use SCOs
1	Parameter reported at a concentrations greater than Part 375 Industrial Use SCOs
1	Parameter reported above the laboratory reporting limit but below the applicable regulatory standard/criterion

Notes:
in = inches
mg/kg = micrograms per kilogram
NP = not promulgated/ no applicable SCO
SCO Soil Cleanup Objective

APPENDIX A

Site-Specific Health and Safety Plan

MOVE YOUR ENVIRONMENT FORWARD

SITE-SPECIFIC HEALTH AND SAFETY PLAN (HASP)

Denison Park – Site # 851066
Denison Park
City of Corning, New York 14830

Prepared For:

New York State Department of Environmental Conservation
625 Broadway
Albany, New York 12233
Contract #D009808

Prepared By:

HRP Associates, Inc.
1 Fairchild Square, Suite 110
Clifton Park, NY 12065

HRP #: DEC1057.P3

Issued On: September 19, 2025

ADDENDUM LOG		
Addendum Number	**Date Issued**	**Modification(s) Needed/Reason(s)**

DISCLAIMER

HRP Associates, Inc. does not guarantee the health or safety of any person entering this site. Due to the potential hazards of this site and the activity occurring thereon, it is not possible to discover, evaluate, and provide protection for all possible hazards which may be encountered. Strict adherence to the health and safety guidelines set forth herein will reduce, but not eliminate, the potential for injury at this site. The health and safety guidelines in this plan were prepared specifically for this site for use and should not be used on any other site.

If unexpected conditions were to arise, any employee will have "Stop Work Authority." Employees should be capable of identifying existing and predictable hazards in their surroundings or working conditions that are unsanitary, hazardous, or dangerous to the workers. The employee(s) has the authority to impose prompt corrective measures to eliminate these hazards. Some examples include the ability to stop work, close a jobsite, or evacuate workers if needed.

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Appendices

1.0 INTRODUCTION

This Health and Safety Plan (HASP) has been prepared for the Denison Park (NYSDEC Site #851066) Remedial Investigation/Feasibility Study (RI/FS). The general and contact information of the site can be found on **Table 1** below.

This HASP has been developed in accordance with HRP Associates, Inc.'s (HRP) Health and Safety (H&S) procedures as required under the Occupational Safety and Health Administration's (OSHA) Hazardous Waste Operations and Emergency Response (HAZWOPER) regulation (Code of Federal Regulations (CFR), 29 CFR 1910.120). Specific H&S information for the project is contained in this HASP. This Plan has also been developed to establish minimum standards necessary for onsite investigation activities to protect the H&S of HRP personnel.

HRP personnel and associated contractors shall be familiar with this HASP prior to conducting proposed site work. This plan must be present onsite and be available for reference/inspection when the subject site work is being conducted.

All project personnel shall sign the certification page acknowledging that they have read and understand this HASP. Changes in the scope of the project or introduction of new hazards to the project shall require revision of the HASP, and approval by the Project Manager (PM) under the Addendum Log.

TABLE 1 GENERAL INFORMATION		
Project Number	DEC1057.P3	
Site/Project Name	Denison Park – Site #851066	
Site Address/Location	Denison Park, Corning, NY	
CONTACTS		
HRP's Contacts		
Title	**Name**	**Phone Number**
Project Manager	John Gorman	716-225-5545
Site Safety Officer	Stephanie Pascual	518-914-6012
Site-Specific Contacts		
Name	Thoren Gianuzzi, Project Manager	
Title	Project Manager, New York State Department of Environmental Conservation	
Phone	518-402-8246	

2.0 EMERGENCY CONTACTS AND PROCEDURES

2.1 Contacts

Table 2 presents the Emergency Contact information associated with the planned RI/FS work. The following information, including directions to the nearest hospital shall be posted at the Site. When contacting the local authorities, be sure to provide: your name, facility name, full address, telephone number, and the nature of the emergency. The information on **Table 2** should be revised, if necessary, upon review of the work to be completed and prior to initializing the activities.

TABLE 2
EMERGENCY CONTACTS

Contact	Name	Phone Number
Local Police	City of Corning Police Department	607-962-0340 ext. 1500
Local Ambulance	Guthrie Corning Hospital	607-937-7200
Local Fire Department	City of Corning Fire Department	607-962-0340
Poison Control Center		1-800-222-1222
National Response Center		800-424-8802
Spill Response Agency	NYSDEC Spills Hotline	1-800-457-7362
Local Hospital	Guthrie Corning Hospital	607-937-7200
Local Hospital Address (Map in **Figure 3**)	1 Guthrie Drive, Corning, NY	
HRP's Site Safety Officer	Stephanie Pascual	518-914-6012
Project Manager	John Gorman	716-225-5545
State Agency PM	Thoren Gianuzzi, Project Manager, NYSDEC	518-402-8246
Site Owner/Contact	Alex Hamilton, Recreation Director – City of Corning	607-962-0340 ext 1125

For the police, ambulance, and fire department, contact 9-1-1.

The Site Safety Officer will coordinate the entry and exit of response personnel in the event of an emergency.

Map and directions to the following medical facilities are provided on **Figure 3**.

2.2 Emergency Procedures

In the event of a worker injury, fire, explosion, spill, flood, or other emergency that threatens the safety and health of site workers, the following procedure will be followed:

1. If the emergency originates within the work area covered by this Plan, the HRP Site Safety Officer shall act as the Emergency Coordinator. The emergency evacuation signal is an air horn or a loud yell. All emergency situations (including worker injuries, no matter how

small) will be reported to the Site Safety Officer, who will determine the appropriate emergency response, up to and including evacuation. The Site Safety Officer will be responsible for reporting any emergency situation to the appropriate authorities, using a telephone or other appropriate method.

2. In the case of an evacuation, site workers will exit the site along the safest route(s) and assemble with team members at a safe rally point. Those workers in the Exclusion Zone will follow the emergency decontamination procedures outlined in **Section 6.4**. Accounting for all site personnel will be conducted by the Site Safety Officer using the personnel log at a location determined by the Site Safety Officer.
3. HRP personnel are not permitted to participate in handling the emergency. Fire and medical emergencies will be handled by the local fire department and ambulance service. In the case of a spill of hazardous materials, a local commercial spill clean-up firm should be contacted.

   If the spill begins to flow overland and threatens to contaminate a storm drain or surface water, HRP personnel may attempt to contain and isolate the spill using any available resources, but only if, in the judgment of the Site Safety Officer, such action will not expose the workers to dangerous levels of hazardous substances and is necessary to preserve life or property. In the event that a spill of material of any amount threatens to reach navigable waters, the National Response Center (NRC) shall be contacted.
4. Once initial emergency procedures to protect worker safety and health have been addressed, and control of emergency has been completed, the Site Safety Officer will complete HRP's Incident Investigation Report and submit this form to the appropriate personnel (HRP and/or client contact).
5. All site workers will be familiarized with the above procedures during the pre-entry briefing to be conducted before site work begins.

In the event of an evacuation, meet at the following rally points (shown on **Figure 2**):

- Denison Park Pool Buildings

2.3 Emergency Supplies and Equipment

Table 3 presents the appropriate Emergency Supplies and Equipment List for the planned listed work. Select the appropriate supplies and equipment based on the proposed work. The information on **Table 3** should be revised, if necessary, upon review of the listed work and prior to initializing the activities.

TABLE 3
EMERGENCY SUPPLIES/EQUIPMENT

SUPPLY ITEM	LOCATION ONSITE
☒ First Aid Kit	In Vehicle
☒ Fire Extinguisher	In Vehicle
☒ Eye Wash (Bottle)	In Vehicle
☒ Spill Kit	In Vehicle

TABLE 3 EMERGENCY SUPPLIES/EQUIPMENT	
SUPPLY ITEM	**LOCATION ONSITE**
☒ Hand Sanitizer	In Vehicle
☒ Caution Tape, Cones	In Vehicle
☐ Air Horn	In Vehicle
☒ Flashlight	In Vehicle
☒ Water or Other Fluid	In Vehicle
☒ Wash and Dry Towels	In Vehicle
☒ Sunscreen	In Vehicle
☒ Insect Repellant	In Vehicle
☒ Cooling Aids (cooling towels, vests, etc.)	In Vehicle
☐ Other	

3.0 SCOPE OF WORK

3.1 Site's Background

Denison Park is located in the southeastern portion of the City of Corning, NY and is bordered by residential neighborhoods to the west and south, the Wastewater Treatment facility and Baseball Complex on the southeast, the Chemung River to the east, and commercial and industrial facilities to the north.

The Site is a City park and is split into north and south sections by New York State Route 352, an elevated roadway and bridge that spans the Chemung River to connect the City of Corning with the City of Elmira, New York.

In 1857, the site was undeveloped with several low-lying areas representing floodplain ponds or drainages. In 1906, 33 acres were purchased by the Business Men's Association for a park, and Harold A. Caparn, a prominent Landscape Architect from New York City, was hired to design the park. With donations from the Denison family and the public, park construction began in 1907 and included a small zoo and a 10-15 foot high levee along the Chemung River floodplain that was wide enough to be used as a carriage path. Ongoing construction in 1910 included a concrete children's wading pool, picnic pavilions, drinking fountains, a concrete bridge, a tower, a baseball field, a quarter mile running track and a playground. The original spatial organization of the park (1907-1910) indicated a U-shaped water feature which appears to correspond to the two original drainages (as arms of the U) and mill pond location from 1873. Additional park features were added from 1916-1919, including sandboxes, a large open-air picnic pavilion, tennis courts, and Memorial Gate, designed by James Walker, an Architect from Buffalo, New York. A public swimming pool and bath house were built and opened in 1921. The 1972 flood destroyed much of Denison Park. When the

park was rehabilitated and repaired, the original 1920s pool and bath house were demolished and replaced. Portions of the two arms of the lake were truncated and infilled south of the elevated roadway and a portion of the eastern arm north of the elevated roadway was isolated becoming a lagoon. Subsequently, the lagoon in the north park area was infilled and by 1973, the west arm was infilled and the west side of the lake was squared off in the south park area.

Figure 1 shows the site's location map.

3.2 Project's Description

The Site is currently utilized for passive and active recreation with uses including sports fields, walking trails, playgrounds, picnic areas, a community pool, disc golf course, and a small pond. Based on investigations conducted to date, on-site soils and groundwater are contaminated with metals and semi-volatile organic compounds at levels exceeding applicable standards, criteria, and guidance. Glass manufacturing waste material, including ash, brick, and/or glass (ABG), was also observed in Site soils. This investigation will further delineate the nature and extent of contamination identified in previous investigations to assist in the design of the presumed remedy of excavating contaminated surface soils and installing a site cover.

Figure 2 shows the areas of environmental concern(s).

Refer to the Introduction (**Section 1.0**) for the site's information and contacts.

3.3 Site Type

TABLE 4 **SITE TYPE** (Check all that may apply to the site/project.)	
☒ Active	☐ Abandoned
☐ Industrial	☐ Landfill
☐ Inactive	☒ Unsecured
☐ Well Field	☐ Water Work
☐ Residential	☐ Railroad
☐ Undeveloped	☐ Commercial
☐ Secure	☐ Service Station
☒ Other – Active Park	

3.4 Scope of Work

In general, the work to be performed by HRP and/or HRP's subcontractors consists of investigative methods to evaluate the environmental condition of the Site. The fieldwork for this task includes the following subtasks:

• The pre-design investigation sampling will include the components described below and consist of characterizing and sampling surface soil to meet project objectives. The number and type of samples

to be collected for laboratory analysis is discussed below. Field investigation tasks are listed below in the order that they will be completed:

1. Ground Penetrating Radar (GPR) and Utility Locate
2. GPS Survey of 75 x 75-foot Sampling Points
3. Soil Boring Installation and Surface Soil Sampling
4. Site Survey
5. Characterization and Disposal of Investigation Derived Waste (IDW)
6. Analytical Data Quality Evaluation
7. Base Map Development and Site Survey

3.4.1 Geophysical Investigation/Ground Penetrating Radar (GPR)

Prior to the initiation of subsurface drilling activities completed during the pre-design investigation and in accordance with New York state law, the Site will be marked out for underground utilities by Dig Safely New York. In addition, since Dig Safe does not locate any on-site private utilities, a ground penetrating radar (GPR) survey of proposed sampling locations will be completed at the Site under HRP supervision in order to clear unmarked, underground utilities and identify subsurface anomalies, such as possible USTs, hydraulic lifts, septic tanks, etc. All identified subsurface anomalies will be painted and marked at the ground surface. Geophysical techniques include the use of GPR, radio frequency, and electromagnetic induction within each 75 x 75-foot cell. A map will be provided of identified Site utilities and subsurface anomalies to HRP by the geophysical contractor prior to any subsurface intrusive work.

3.4.2 GPS Survey

The proposed layout consists of a 75 x 75-foot grid, with one, 2-foot deep boring advanced towards the center of each grid cell. Specific sampling locations will be marked using a GPS unit to establish soil sampling coordinates prior to subsurface work. Any boring locations that were planned will be field-verified during the GPS survey to ensure that the proposed location can be accessed by a drill rig.

3.4.3 Site Survey

Following the completion of the geophysical survey and utility mark out, the surveyor contractor will collect and incorporate all previously identified utilities and subsurface anomalies as a part of the Site survey. The corners of existing hardscapes (such as paved asphalt parking lots, pools, courts, sidewalks, and buildings) will be surveyed at the Site.

A comprehensive topographic survey will be performed to provide base maps for developing the remedial design. A New York State licensed professional land surveyor will perform the survey and collect ground surface point elevation data to construct a Site contour map with 1-foot intervals. The surveyor will provide Computer-Aided Design (CAD) and PDF survey files for all collected Site data.

The survey will be referenced horizontally to the North American Datum 1983, 2011 adjustment (NAD83/2011), and vertically to the North American Vertical Datum of 1988 (NAVD88).

3.4.4 Soil Boring Installation and Surface Soil Sampling

All installed soil borings will be named in accordance with the established grid (**Figure 2**). The grid is established to provide adequate distribution and coverage across the Site area. Subsurface anomalies and utilities as well as overhead utilities may affect planned soil boring locations prior to installation. A minimum 10-foot distance will be maintained for soil borings in close proximity to marked or observed utilities. A GPS unit will be used to locate the coordinates for each installed boring.

Shallow soil borings will be installed to evaluate for the presence of ABG and Soil Cleanup Objective (SCO) exceedances to support and determine the footprint of any remedial actions. Soil borings will be advanced using a direct-push technique (DPT) drilling rig equipped with MacroCore samplers to confirm the degree and extent of surface soil impacts above the RRU SCO. Soil cores will be advanced continuously until a depth of two-feet below grade is achieved. If ABG is observed during soil boring installation, field personnel will describe and document the location, depth, and photograph the material.

All soil samples will be screened for organic vapors using a photoionization detector (PID) and any evidence of contamination will be noted and/or used for selection of soil samples for laboratory analysis. All samples will be submitted to a New York State Department of Health (NYSDOH) Environmental Laboratory Approval Program (ELAP) certified laboratory for analysis of Target Compound List (TCL) SVOCs by EPA Method 8270 and Target Analyte List metals by EPA Methods 6010D & 6020B. Quality control samples will be collected during soil sampling to ensure precision and accuracy of results. Duplicate and matrix/matrix spike duplicates will be collected at a frequency of 1 per 20 samples.

Up to three soil sample samples from each boring will be collected from the depths intervals summarized below and results will be compared against the Part 375 Commercial Use SCO. Soil samples will only be collected from native soils or fill that does not contain ABG. Any samples containing ABG will be considered to be contaminated in accordance with Commissioner Policy CP-51 Section G and do not require laboratory analysis. Soil boring samples will be collected from the following intervals and submitted for laboratory analysis:

- 0-2 inches (excludes sod/grass/organic)
- 2-12 inches
- 12-24 inches

Upon completion, each soil boring will be backfilled with clean sand and topped with topsoil. The area surrounding each soil boring will be returned to match previous existing conditions prior to soil boring installation.

3.4.5 Soil Sampling Collection and Handling Procedures

Soil sampling equipment to be used includes stainless steel trowels, bowls, spoons, or scoops, hand auger, sample containers, sampling zip lock bags, and coolers with ice. Nitrile gloves will be worn by personnel collecting and handling the samples. All non-disposable equipment and tooling used for sampling will be properly decontaminated as described in **Sections 3.4.6 and 6.3** between sampling locations and intervals. Soil samples will be collected using clean laboratory-supplied appropriate containers and will be preserved on ice in coolers during field sampling activities. Target samples will then be submitted for laboratory analysis, and contingency samples will be stored at proper temperatures, pending follow-up analysis, as necessary.

3.4.6 Decontamination Procedures

Non-dedicated sampling equipment (i.e., drill rods, shovels, augers, etc.) will be subject to decontamination procedures prior to each sample collected to reduce the potential for cross-contamination. The decontamination procedures will include the use of a scrub wash with a solution consisting of Alconox® detergent and potable water followed by a rinse with DI water. The decontaminated equipment will be stored in clean environments (i.e., the manufacturer's storage case). Decontamination fluids will be properly labeled and securely stored in the designated waste-container staging area.

3.4.7 Disposal of Investigation Derived Waste (IDW)

Soils from the PDI may be disposed within the direct push hole (cuttings may be used to backfill holes resulting from soil sampling), the direct push hole did not penetrate an aquitard nor an aquiclude and backfilling the hole with cuttings will not create a significant path for vertical movement of contaminants. Material that is visually stained, creates high PID measurements, or exhibits strong odors shall be sampled and analyzed to ensure chemical compatibility with other cuttings before placing the materials in a common storage/disposal area if staining is present in the cuttings.

Investigation-derived waste (IDW) generated during the PDI will be containerized in NYSDOT-approved 55-gallon drums or roll-off container, labeled as IDW, and temporarily staged in a secure area. One composite sample of soil will be collected, if needed, for waste disposal profiling. The specific parameters to be analyzed will be determined in consultation with the selected disposal facility but are likely to include the following analyses:

- Corrosivity (pH)
- Ignitability
- TCLP SVOCs
- TCLP RCRA 8 Metals
- Total petroleum hydrocarbons
- Reactive sulfide
- Reactive cyanide
- Total PCBs
- Percent Solids

Upon receipt of laboratory results, HRP will arrange for disposal of the wastes. HRP will sign any waste manifests as agent of the generator (NYSDEC) prior to waste transport leaving the Site. HRP

will label drums as hazardous waste or as non-hazardous waste upon receipt of laboratory analytical data, or as "Pending Analysis" if results have not been received. Data validation will not be required for the waste characterization samples.

Decontamination fluids will be containerized separately from other IDW, and any decontamination fluids that do not exhibit evidence of contamination will be containerized separately from those exhibiting evidence of contamination, if present.

An IDW storage area will be established at the Site at the start of field work. The IDW storage area will include plastic sheeting and silt sock to prevent rainwater runoff. Daily IDW will be drummed and labeled as "Pending Analysis". IDW will be stored in 55-gallon steel drums in the designated storage area until waste characterization analytical results are received and sent to the disposal facility for approval. IDW will be disposed of in accordance with DER-10 as well as local, State, and Federal regulations.

Although not expected, any intrusive ground work that involves the transport and disposal of large quantities of IDW will be performed by licensed waste haulers and in accordance with local, State, and Federal regulations. Haulers will be appropriately licensed and trucks placarded. Materials to be transported by haulers will be secured using covers or tarps. If wet materials are being transported, truck liners will be used prior to leaving the Site.

3.4.7.1. Base Map Development and Site Survey

The Site and surrounding areas will be surveyed by a New York State licensed land surveyor. The field survey will include establishing project horizontal control and the collection of planimetric features for the development of 2D mapping. Only the exterior Site features will be recorded on the survey. Subsequently, a base map of the Site will be developed using CAD software that will be utilized to place all PDI soil borings and previous on-site investigations. The sample locations will be placed on the base map by geo-referencing previous figures into the local CAD coordinate system, and will include all Geoprobe® boring locations.

Check the box for the following topics that are applicable to the project being completed (**Table 5**).

TABLE 5 TASKS	
☐ Site Inspections (e.g., ESA)	☒ Drum Sampling
☐ Industrial Hygiene	☐ Ground Water Sampling
☐ Asbestos Survey	☐ Landfill Sampling
☐ Bridge Inspections	☐ Product Sampling
☒ Drilling/Probing	☐ Remediation Monitoring (air/water)
☐ Well Repair/Abandonment	☐ Soil Gas Sampling
☐ Stack Testing	☐ Stormwater Sampling
☐ Surface Water Sampling	☒ Surveying
☐ Wastewater Sampling/Benchmark Test	☐ Confined Space Entry

☐ Excavation	☐ Emergency Spill Response Oversight
☐ Chemical/Waste Exposure/Handling	☒ Surface Soil Sampling

Should conditions or the scope of work described herein change significantly; a HASP Addendum will be completed.

A Safety and Logistics Planning call will be held prior to conducting any intrusive activities at the site. Representatives from HRP and each subcontractor will attend the call to discuss logistical and safety challenges general to the scope of work and specific to the Site. This call is documented on the Safety and Logistics Planning Log in **Appendix A**.

Specific procedures may be needed for certain job tasks, include at the end of this HASP.

4.0 ROLES AND RESPONSIBILITIES

The following personnel on **Table 6** are designated to perform the stated project activities and to ensure that the requirements of this HASP are met. The same person may fill more than one role, and/or serve as an alternate in the absence of the designated team member.

A complete list of HRP employee and subcontractor responsibilities (as applicable) can be found in the HRP's H&S procedures.

NOTE: Any employee has the STOP WORK AUTHORITY (sometimes known as PAUSE WORK).

TABLE 6 ROLES AND RESPONSIBILITIES	
Project Team Member	**Responsibilities and Tasks**
Stephanie Pascual, Consultant	**HRP's Site Safety Officer:** Ensuring all site work is performed in accordance with HRP's H&S Programs, as well as in accordance with local, state, and federal regulations. • Directing and implementing HRP's HASP. • Reviewing the Subcontractor's HASP and being aware of the hazards detailed therein. • Conduct a job orientation meeting and routine safety meetings for HRP employees and subcontractors, as applicable. • Provide copies of these inspections, recordkeeping/personnel logs to the engineer/contractor as required. • Ensuring all project personnel have been adequately trained in the recognition and avoidance of unsafe conditions. • Address Stop Work Orders that shall be executed upon the determination of an imminent H&S concern and will notify the appropriate contacts upon issuance of this order. • Authorizing work to resume, upon approval from the Contractor. • Directing activities, as defined in the HRP's and the Contractor's written HASP, during emergency situations. • Providing personnel monitoring where applicable. • Ensuring that adequate personal protective equipment (PPE) and first aid supplies are available. • Ensure site security, to the extent practicable. • Ensure accident victims are promptly cared for, and the incident is investigated and properly reported. • Communicating with HRP's PM, Office H&S Manager (OHSM), and others when needed. • Report all injuries, illnesses, and other incidents to the PM.
John Gorman – Project Manager **Mark Wright, DEC Contracts Manager**	**HRP's Site Supervisor/Project Manager** • Monitor and assist the Site Safety Officer. • Maintain appropriate rules, regulations, and codes at the job site. • Provide advanced safety planning for all activities through the use of scheduling and administrative controls. • Obtain site-specific H&S information and communicate that information with the appropriate personnel (i.e., contractors, client, etc.) • Report all injuries, illnesses, and other incidents to the Regional Office Manager (ROM) and Corporate H&S Officer (CHSO). If ROM or CHSO cannot be reached, contact Chief Operating Officer (COO) or Human Resources. • Ensure all HRP personnel are trained and qualified to perform site work.
Site Workers (Subcontractors)	**Site Workers** • Read and work in accordance with this HASP. • Report all unsafe work practices to the Site Safety Officer. • Report all incidents, including near-misses to the Site Safety Officer. • Work in a safe manner. • Provide designated Competent Person

*A list of site workers will be maintained in the Personnel Log (**Appendix B**).

5.0 PROJECT HAZARDS AND CONTROL MEASURES

5.1 Identifying Hazards

The Site Supervisor/PM shall complete the Job Safety Analysis (JSA) in **Appendix C** prior to the start of the project. The JSA identifies the steps of the task to be performed with its hazards, unsafe conditions, and materials that are known or suspected to be onsite. The hazards that are listed in the JSA must be ranked using HIGH (H), MEDIUM (M), or LOW (L) based on current site knowledge. Use the results of this analysis to verify that controls in the JSA are adequate to mitigate task hazards.

Details of specific hazards associated with individual tasks will be discussed in the Toolbox Talk (formerly known as the Daily Job Brief Record (**Appendix D**)). **The Toolbox Talk is the key to the entire operation**. We are writing this HASP prior to going onsite and therefore cannot anticipate all of the site-specific hazards. The PM must do a thorough job on the Toolbox Talk, so we remain compliant. The Daily Toolbox Talk records will be reviewed by the PM at the conclusion of the field work.

5.2 Task Policy Reminders

Confined Spaces

Only properly trained HRP personnel are authorized to enter confined spaces. Confined space entry may be performed by subcontractors who have the proper training and experience to conduct this work.

Emergency Spill Response Oversight

HRP personnel are not permitted to participate in handling the emergency, only the oversight of such activities.

Excavations

It is HRP's policy to ensure that for excavation projects the subcontracted environmental contractor will provide a competent person to perform daily and as needed inspections of excavation sites. This policy will be conveyed through the subcontract agreement with the environmental contractor. At a minimum HRP will provide our employees involved with construction projects with awareness level training regarding excavation hazards and notify the subcontracted firm if any obvious excavation safety hazard exists during the course of onsite activities.

Drilling

HRP employees will not perform drilling, rather HRP will use a competent subcontractor to perform drilling services. At a minimum, HRP will provide our employees involved with this type of project with awareness level training regarding drilling, the hazards of the equipment and distance of the drilling.

Chemical Hazards

Hazardous materials and/or chemicals are listed on **Table 9**. Contaminants that are known or suspected onsite are listed at the end of this document on **Table 13** includes Chemical name, odor threshold OSHA permissible exposure limit (PEL), the American Conference of Governmental

Industrial Hygienists (ACGIH) threshold limit value (TLV), OSHA short-term exposure limit (STEL), Immediately Dangerous to Life or Health (IDLH) Concentrations, routes of exposure, and symptoms of acute exposure. Chemicals likely to be encountered during site work are highlighted.

Physical Hazards

Physical hazards known or suspected to be onsite are listed on **Table 8**. **Table 8** includes description of potential hazards, methods to identify/minimize them, potential for occurrence and potentially affected tasks.

Air Monitoring

In order to determine potential health hazards and to determine the level of personal protection needed during drilling, excavation, and sampling activities within the areas of concern, a photoionization detector (PID) will be periodically operated to monitor air quality for the purpose of ensuring minimal exposure to volatile organic compounds.

Background ambient air levels will be established outside the exclusion zone prior to commencement of site work. Ambient air sampling will occur in the breathing zone of site workers for comparison to the action levels (described below). Additionally, air sampling will be conducted in the vicinity of any intrusive exploration (i.e., near excavations, trenches, etc.) to determine if any contaminants are present. See **Table 7** for action levels to be used.

TABLE 7
ACTION LEVELS
Use the following Action Levels

INSTRUMENT	ACTION LEVEL	LEVEL OF PROTECTION OR ACTION REQUIRED
PID	<5 ppm	• Continue to monitor • Recheck levels after fifteen minutes • If levels are sustained, reassess • Use engineering controls to lower breathing zone vapors • Level C protection (at the H&S Officer's (HSO) discretion)
PID	>5 ppm	• Stop work and evacuate exclusion zone • Recheck levels after fifteen mins • Use engineering controls to lower breathing zone vapors • If levels are sustained, contact CHSO and/or OHSM, and re-evaluate HASP

NOTE: When the background reading is >1 ppm, assess the area and equipment, but continue PID monitoring and wear Level D protection

ppm = parts per million

When an action level is equaled or exceeded, the work area should be evacuated, and the area re-tested with the sampling device. If the appropriate action level continues to be exceeded, the Site Safety Officer will have to assess the use of engineering controls to lower vapor levels or availability of required increased personal protection equipment before authorizing re-entry.

5.3 Community Air Monitoring (required by DER 10)

AWARENESS FOR NEW YORK ONLY:

To ensure the protection of receptors surrounding the site HRP has developed and will implement a Community Air Monitoring Program (CAMP), which requires real time monitoring of volatile organics and dust during the remedial investigation. The CAMP will be implemented during all intrusive activities.

Particulate concentrations will be monitored continuously at the upwind and downwind perimeters of the exclusion zone at temporary particulate monitoring stations. The particulate monitoring will be performed using real-time monitoring equipment capable of measuring particulate matter less than ten micrometers (10 µm) in size (PM-10) and capable of integrating over a period of fifteen minutes (or less) for comparison to the airborne particulate action level. The equipment will be equipped with an audible alarm to indicate exceedance of the action level. In addition, fugitive dust migration will be visually assessed during all work activities.

If the downwind PM-10 particulate level is 100 micrograms per cubic meter($\mu g/m^3$) greater than the background (upwind perimeter) for the fifteen-minute period or if airborne dust is observed leaving the work area, then dust suppression techniques will be employed. Work may continue with dust suppression techniques 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 $\mu g/m^3$ above the upwind level, work will be stopped, and a re-evaluation of activities initiated. Work can resume provided that dust suppression measures and other controls are successful in reducing the downwind PM-10 particulate concentration to within 150 $\mu g/m^3$ of the upwind level and in preventing visible dust migration.

TABLE 8
HAZARDS KNOWN OR SUSPECTED ONSITE
*Check all that may potentially apply to the tasks being performed. Chemical Hazards are included on **Table 8**.

PHYSICAL HAZARDS	SAFETY HAZARDS	BIOLOGICAL HAZARDS	ERGONOMIC HAZARDS	PSYCHOLOGICAL HAZARDS
☐ Structure Unsafe	☒ Slipping/Tripping/Falling	☐ Bacteria	☒ Repetitive Movements	☐ Workload
☐ Uneven Floors/Surfaces	☐ Improper Machine Guard	☐ Viruses	☐ Improper Work Setup	☐ New Worker
☐ Ceiling Unsafe	☐ Equipment Malfunction	☐ Insects	☐ Poor Equipment Design	☐ Lone Worker
☐ Falling Objects/Loads	☒ Struck By	☒ Plants	☐ Poor Workstation Design	☐ Stress
☐ Flying Debris	☐ Homeless Encampments	☒ Animals/Birds	☒ Postural/Workflow	☐ Harassment
☒ Slippery Floor/Ground	☐ Falling Into	☐ Other (Specify)	☒ Manual Handling	☐ Communication Issue
☐ Obstructed Walking Areas	☐ Cave In/Collapses		☐ Other (Specify)	☐ Other (Specify)
☐ Misuse of Machinery	☒ Underground Utilities			
☒ Excessive/Loud Noise	☐ Excavation Spoils			
☐ Poor Lighting	☐ Superimposed Loads			
☐ Fire	☒ Mobile Equipment/Machinery			
☐ Radiation	☐ Electrical			
☐ Magnetic Fields	☐ Poor Housekeeping			
☐ Pressure Extremes	☐ Suspicious Activity/Person			
☒ Extreme Heat/Cold	☐ Security			
☒ Inclement Weather	☐ Traffic			
☐ Confined Space Entry	☐ Other (Specify)			
☐ Atmosphere				
☐ Drowning				
☒ Flooding				
☐ Poor Visibility				
☐ Other (Specify)				

CONTROL MEASURES AND WORK PRACTICES

NOTE: Hand signals are encouraged to communicate during a job where hearing is limited, but vision is not. These hand signals should be listed within the Toolbox Talk and JSA.

REQUIRED PERMITS

☒ None ☐ Excavation ☐ Encroachment ☐ Confined Space Entry ☐ Hot Tap ☐ Street Open/Closing ☐ Hot Work
☐ Energized Equipment ☐Other (Specify)

***These permits may not be issued by HRP employees. You may reference them as needed.**

TABLE 9
HAZARDOUS MATERIAL SUMMARY
Check all that may apply onsite. Attach Safety Data Sheets (SDS) in **Appendix F** for each chemical that will be brought to the site.

HAZARDOUS MATERIAL LIST		KNOWN CHEMICALS List the actual chemical name that HRP employees are exposed to.
☐ Acids	☐ Diesel Fuel/Oil	Arsenic, barium, boron, cadmium, chromium, lead, mercury
☐ Pickling Liquors	☐ Lubricants	Benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene
☐ Caustics	☒ PCBs	Chrysene, dibenz(a,h)anthracene, indeno(1,2,3-cd)pyrene, phenol
☒ Pesticides	☒ PAHs	Trichloroethylene, 1,4-dioxane, 1,4-dichlorobenzene
☐ Dyes/Inks	☐ Kerosene	PFOS
☐ Cyanides	☐ Propane	PCBs
☒ Phenols	☒ PFAS	P,P'-DDD, P,P'-DDE, P,P'-DDT
☐ Halogens	☐ Mold	
☐ Dioxins	☐ Distillation Bottoms	**CONTROL MEASURES:**
☒ Fly Ash	☐ Fecal Matter/Animal Waste	Avoid skin contact with surface soil. Wear nitrile gloves when sampling/handling soils.
☐ Asbestos	☐ Laboratory Waste	
☐ Millings/Mine Tailings	☐ Pharmaceuticals	
☐ Ferrous Smelter	☐ Hospital Waste	
☐ Non-Ferrous Smelter	☐ Radiological Waste	
☒ Metals	☐ Municipal Waste	
☒ Chlorinated Solvents	☒ Construction Debris	
☐ Hydrocarbons	☐ Aluminum	
☐ Alcohols	☐ Paint	
☐ Ketones	☐ Pigments	
☐ Esters	☐ Metal Sludges	
☐ Ethers	☐ POTW Sludges	
☐ Oily Wastes	☒ Glass	
☐ Gasoline		

5.4 Equipment Usage

Table 10 below lists the equipment that will be used for the above task(s). Equipment must be included in the JSA and/or Toolbox Talk for proper hazard identification of tasks being performed.

TABLE 10 EQUIPMENT USAGE			
EQUIPMENT/ INSTRUMENT	**USED FOR**	**CALIBRATION BY**	**CALIBRATION DATE**
MiniRae 3000 PID	Screening Soils		
MiniRae 3000 PID x 2	CAMP - VOCs		
DustTrack x 2	CAMP – Particulates		

6.0 SUSPECTED CONTAMINATION AND DECONTAMINATION

6.1 Suspected Contamination

Prior to commencement of work in the area of suspected contamination, protective zones specific for each phase of the HASP will be established by the Site Safety Officer, if necessary, prior to the start of field work. These zones will be defined during the Toolbox Talk.

The purpose of the protective zones is to prevent potential cross-contamination of adjacent areas as well as to protect project personnel from exposure to contaminated areas.

6.2 Protective Zones

Protective zones shall be delineated as follows:

- **Exclusion Zone:**

  This is the contaminated area in which intrusive activities are performed. The area of environmental concern (AOEC) is located within this area. A single access point for entrance and exit should be established and maintained, if possible. This zone should be delineated from the Contaminant Reduction Zone via perimeter cones or caution tape, or other applicable method. Work areas are shown on **Figure 2**. The Exclusion Zone delineation and any necessary modifications will be based onsite conditions.

- **Contaminant Reduction Zone:**

  This zone is a transition zone located between the Exclusion Zone and the Support Zone and is utilized to decontaminate personnel and equipment.

- **Support Zone:**

  This zone will be utilized by equipment and vehicle storage and will be kept free of contaminated material. The Site Safety Officer will determine the location of this zone. In the event of a site evacuation, see **Figure 2** and **Section 2.2** (Emergency Contacts/Planning) for the rally point. The designated rally point may be relocated by the Site Safety Officer based on project or site conditions. All site workers will be notified of any relocation prior to implementation.

NOTE: Protective zones are not anticipated for this project.

6.3 Decontamination Procedures

All personnel and equipment leaving the exclusion zone must be properly cleaned and decontaminated. When there is evidence of chemical contamination during the site operations, all personnel will be decontaminated under the direction of the Site Safety Officer. Clean-up and/or decontamination of personnel shall consist of washing off excessively soiled PPE with a disinfectant detergent scrub and water. At the very least, all personnel should wash their hands and face before leaving the exclusion zone. After washing, all disposable clothing (Tyvek, gloves, etc.) will be removed and placed in a double lined plastic bag.

Sampling tools and any other non-disposable items will be decontaminated between sampling points, and at the direction of HRP personnel, to prevent cross-contamination of work areas or environmental samples, as applicable.

6.4 Emergency Decontamination

If immediate medical attention is required in an emergency, decontamination will be performed after the victim has been stabilized. If a worker has been exposed to an extremely toxic or corrosive material, then emergency decontamination will consist of flushing with copious amounts of water. If the victim cannot be decontaminated because it will interfere with emergency medical aid being administered, then the victim should be wrapped with plastic or other available items (i.e., an uncontaminated coverall) to reduce potential contamination of other personnel or medical equipment.

If a site worker has been overcome by heat related illness, then any protective clothing should be removed immediately. In the case of non-medical emergency evacuation, decontamination should be performed as quickly as possible, unless instant evacuation is necessary to save life or prevent injury.

6.5 Personal Hygiene

All employees will be required to wash their hands and face prior to eating, smoking, drinking, and going to the bathroom. Workers will be required to remove contaminated PPE and clothing prior to leaving the Contaminant Reduction Zone. All field personnel should avoid contact with potentially contaminated substances such as puddles, pools, mud, etcetera.

7.0 PERSONAL PROTECTIVE EQUIPMENT

There is different equipment that is worn to minimize exposure to hazards that can cause serious work injuries and illnesses. **Table 11** will list out the PPE that is required onsite and for the job that needs to be performed.

TABLE 11
PERSONAL PROTECTIVE EQUIPMENT
Check all the PPE that may apply and give the description of PPE.

TYPE of PPE	DESCRIPTION of PPE
HEAD AND FACE: ☐ Not Needed ☒ Safety Glasses ☐ Safety Goggles ☐ Face Shield ☐ Hard Hat ☒ Hearing ☐ Other	Hearing protection needed when drilling
FEET: ☐ Not Needed ☒ Steel Toes ☐ Overboots ☐ Disposable Booties ☐ Rubber Boots ☐ Electrostatic Discharge (ESD) ☐ Chemical Resistant ☐ Other	
PROTECTIVE CLOTHING: ☐ Not Needed ☐ Encapsulated Suit ☐ Splash Suit ☐ Apron ☒ High Visibility Vest ☐ Coveralls ☐ Other	
HANDS: ☐ Not Needed ☐ Cut Resistant ☐ Chemical Resistant ☐ Under Gloves ☐ Over Gloves ☐ Heat Resistant ☒ Other	Nitrile Gloves
RESPIRATOR: ☒ Not Needed ☐ Supplied Air ☐ APR	☐ Filtering Face Piece (N95/Dust Mask) ☐ Half Face ☐ Full Face

7.1 Levels of Personal Protective Equipment

As identified in **Section 5.0**, the overall H&S risk associated with chemical hazards for HRP, and associated contractors is considered significant. This is primarily due to the moderate concentrations of chemical contaminants expected based on minimal contact personnel will have with any potentially contaminated media. Therefore, the minimal level of protection for HRP personnel during the conduct of all the environmental work performed at the site will be Level D PPE. The following constitute Level D PPE; it may be used as appropriate:

- Coveralls
- Gloves, as applicable
- Chemical-resistant steel toe and shank shoes
- Boots, outer, chemical-resistant (disposable), as applicable
- Safety glasses or chemical splash goggles
- Hard hat, as applicable
- Escape mask, as applicable
- Face shield, as applicable

If site conditions warrant, an upgrade to Level C PPE may be required. If required, the Contractor will make Level C PPE readily available. The following constitute Level C PPE; it may be used as appropriate:

- Full-face or half-mask, air purifying respirators (National Institute for Occupational Safety and Health (NIOSH) approved)
- Hooded chemical-resistant clothing (e.g., Tyvek, overalls, two-piece chemical-splash suit, disposable chemical-resistant overalls)
- Coveralls, as applicable
- Gloves, outer, chemical-resistant
- Gloves, inner, chemical-resistant
- Boots (outer), chemical-resistant steel toe and shank, as applicable
- Boot-covers, outer, chemical-resistant (disposable), as applicable
- Hard hat, as applicable
- Escape mask, as applicable
- Face shield, as applicable

NOTE: Safety vest may or may not be required depending onsite conditions/location and will be addressed at the time of task assignment by the Site Safety Officer.

If the Toolbox Talk determines that protection beyond Level D is required, HRP will re-evaluate the HASP as well as the site conditions, and will revise the HASP as required.

NOTE: The level of protection identified here does not include the necessary equipment for entering confined spaces.

The following table provides a general description of potential field activity tasks to be performed and associated (recommended) PPE. The use of this PPE may or may not vary depending onsite conditions and will be addressed at the time of task assignment by the Site Safety Officer.

TABLE 12
POTENTIAL FIELD ACTIVITY TASKS AND ASSOCIATED PPE

Task Description	Invasive (Y/N)	Protection Level
Site Mobilization - Surveying, fence and barrier installation, hay bale installation, decon and work zone set up, soil staging areas preparation	N	Level D
Soil and Water Sampling - Drilling, sampling, soil moving as needed.	Y	Modified Level D or Level C – Respirator as needed based on monitoring. Eye protection required during collection of any liquid sample
Soil Excavation, Staging and Load-Out	Y	Modified Level D – or Upgrade to Level C dependent on monitoring
Decontamination - Truck dry sweeping, decon pressure wash of equipment, PPE change out	Y	Modified Level D – or Upgrade to Level C dependent on monitoring
Waste Management - Soil load-out for offsite disposal, water removal for disposal, PPE disposal	Y	Modified Level D – or Upgrade to Level C dependent on monitoring
Site Control (Exclusion, Decontamination, Support Zones)	N	Modified Level D – or Upgrade to Level C dependent on monitoring
Communications - Use of hand signals, backup alarms, and voice	N	NA
Site Restoration	Y	Level D

8.0 TRAINING/MEDICAL SURVEILLANCE

8.1 Training Requirements

All HRP and HRP subcontractor personnel who enter the work zone and/or Exclusion Zone must have successfully completed the 40-hour or 24-hour training requirement outlined in 29 CFR 1910.120(e). If the 40-hour or 24-hour training of any person occurred more than twelve months prior to commencement of work, then that person must have attended an 8-hour refresher course within the twelve months prior to commencement of work.

If respirators are in use in the Exclusion Zone, then all personnel must have undergone respirator training and a fit test within the last twelve months.

Training certificates and records for HRP employee(s) are maintained by HRP. All other contractors will be required to supply written proof of training before being allowed into the Exclusion Zone.

8.2 Pre-Entry Briefing

Prior to commencement of work in an area of suspected contamination, HRP's HSO will conduct a pre-entry briefing with onsite contractors, which will include the following:

- Name of the Site Safety Officer and person responsible for the visitor log
- Description of the parcel as well as location of emergency telephones and the location/boundaries of the Exclusion Zone, Contamination Reduction Zone, and Support Zone, if established
- Review of hospital locations and directions
- Review of tasks to be conducted within the parcel by the site workers
- Review of the Emergency Action Plan and rally point, including the nearest emergency communications and telephone numbers
- The nature, level, and degree of anticipated hazards (physical and chemical) involved in the site work
- Required PPE
- Decontamination procedures

The Site Safety Officer should also, at this time, ensure that all onsite HRP and HRP subcontractor personnel have read the HASP and signed the Field Team Acknowledgement (**Section 12.0**). If additional information on the site becomes available, the Site Safety Officer will call additional briefings, as necessary.

8.3 Toolbox Talk (Daily Job Brief)

The HRP Site Safety Officer will conduct a safety overview meeting at the beginning of each workday on the site. The meeting will be given in addition to any safety meetings that the subcontractor conducts. A summary of the meeting topics signed by the personnel attending the meeting is included in **Appendix D**.

8.4 Medical Surveillance

All HRP and HRP subcontractor personnel entering the Exclusion Zone must have had a physical within the twelve months prior to commencement of site work. A physician's written opinion regarding fitness for work for each employee including work limitations, if any, is on file at HRP, as applicable. A written opinion for all other site personnel must be supplied prior to commencement of site work to the HRP Site Safety Officer. Any work limitations for site personnel, or relevant medical information (i.e., allergic reactions to medication) should be included in this Plan.

9.0 AUTHORIZATION

Personnel authorized to enter the Exclusion Zone include the personnel listed from **Table 6** of this plan. Persons not listed on **Table 6** may enter the Exclusion Zone only if the appropriate training and medical fitness certifications have been supplied to either the HRP PM or OHSM and the Site

Safety Officer or his/her designee onsite has approved site entry. All personnel entering or leaving the Exclusion Zone must sign in and sign out with the recordkeeper.

10.0 RECORDKEEPING

By the completion of the Project this Site-Specific HASP document, and all associated records (Toolbox Talks, JSA, Monitoring data, etc.) must be provided to the appropriate personnel at the office that implemented the Project. The appropriate personnel will then electronically store these records into the project folder. It is expected that some scanning will be necessary.

11.0 SITE-SPECIFIC HEALTH AND SAFETY PLAN APPROVAL

This plan meets the minimum requirements of 29 CFR 1910.120 and 29 CFR 1929.65 and has been written for specified site conditions, dates, and personnel, and must be amended if conditions change. By their signature, the undersigned certify that this HASP is approved and will be utilized during activities at the project.

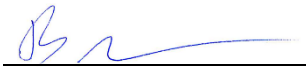
Stephanie Pascual
Site Safety Officer

Date

9/19/2025

John Gorman
Project Manager

Date



9/18/2025

Bryan Sherman
Office Health and Safety Manager

Date

Subcontractor:
I have been provided a copy of this HASP for review.

[Name]

Date

Representing _____

The Designated Competent person representing [subcontractor] at the site will be:

_____.

Any alternate Competent Person will be noted in the Toolbox Talk (**Appendix D**).

ADDITIONAL APPROVALS (or Re-Approvals)	
Name:	**Date:**

12.0 FIELD TEAM ACKNOWLEDGMENT

All HRP personnel shall sign below after reading this HASP and shall agree with the following statement:

"I have read and understand this Site-Specific Health and Safety Plan.
I will comply with the provisions set forth therein."

Printed Name	Signature	Date

FIGURES

Figure 1
Site Location Map

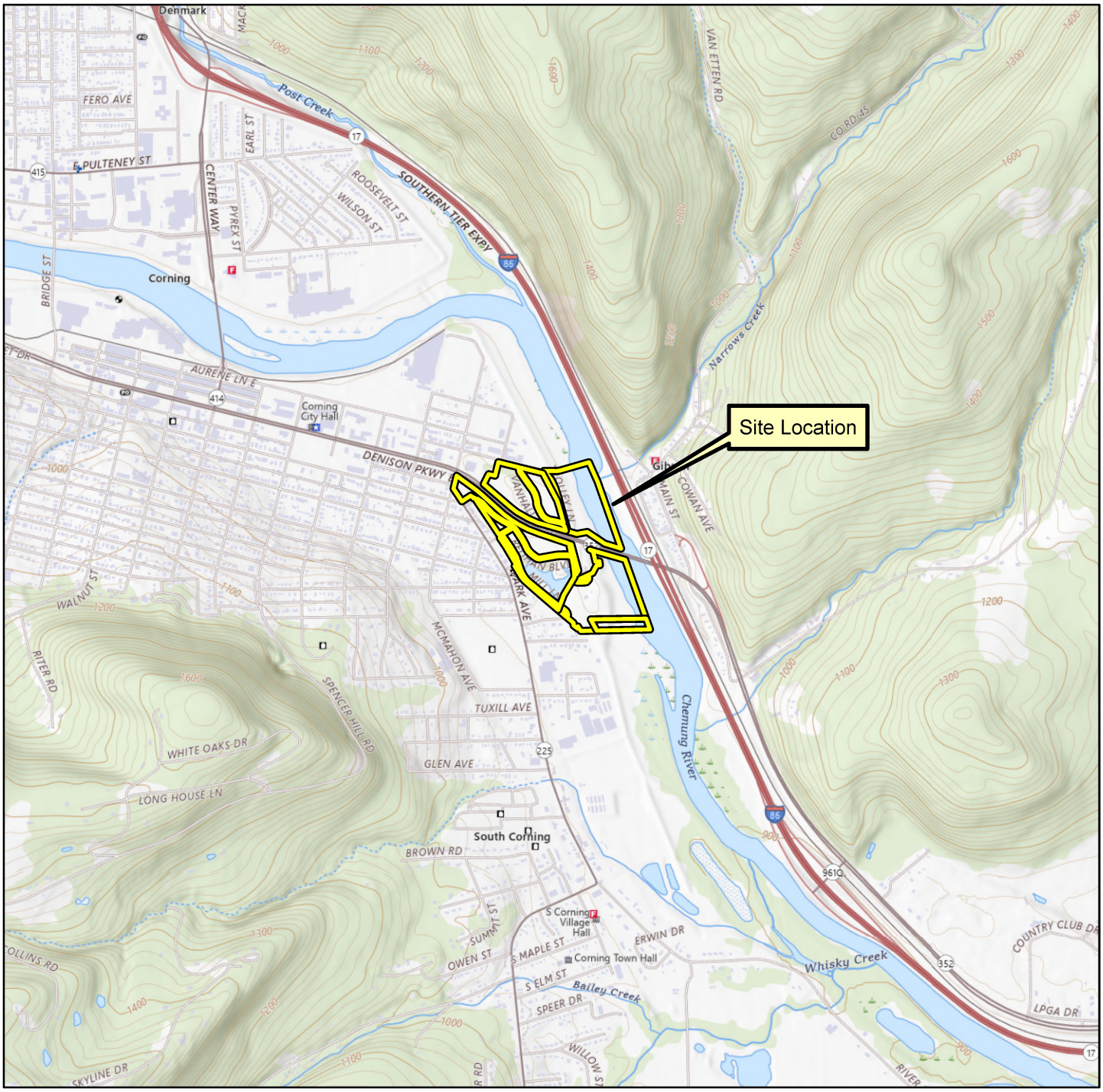


Figure 1
Site Location
Denison Park
Corning New York
HRP # DEC1057.P3

USGS Quadrangle Information
Quad ID: 42077-B1
Name: Corning, New York
Date Rev: 2016
Date Pub: 2019

MOVE YOUR ENVIRONMENT FORWARD
ONE FAIRCHILD SQUARE
SUITE 110
CLIFTON PARK, NY 12065
(518) 877-7101
HRPASSOCIATES.COM

Path: S:\Data\NNYDEC - NYSDEC\Temp Holding\Corning\Denison Park\denison_park\denison_park.aprx

Figure 2

Site Plan with Areas of Environmental Concern

Path: S:\Data\N\NYDEC - NYSDEC\CORNING ABG\DEC1057P3 - Denison Park\GIS\denison park gis.aprx

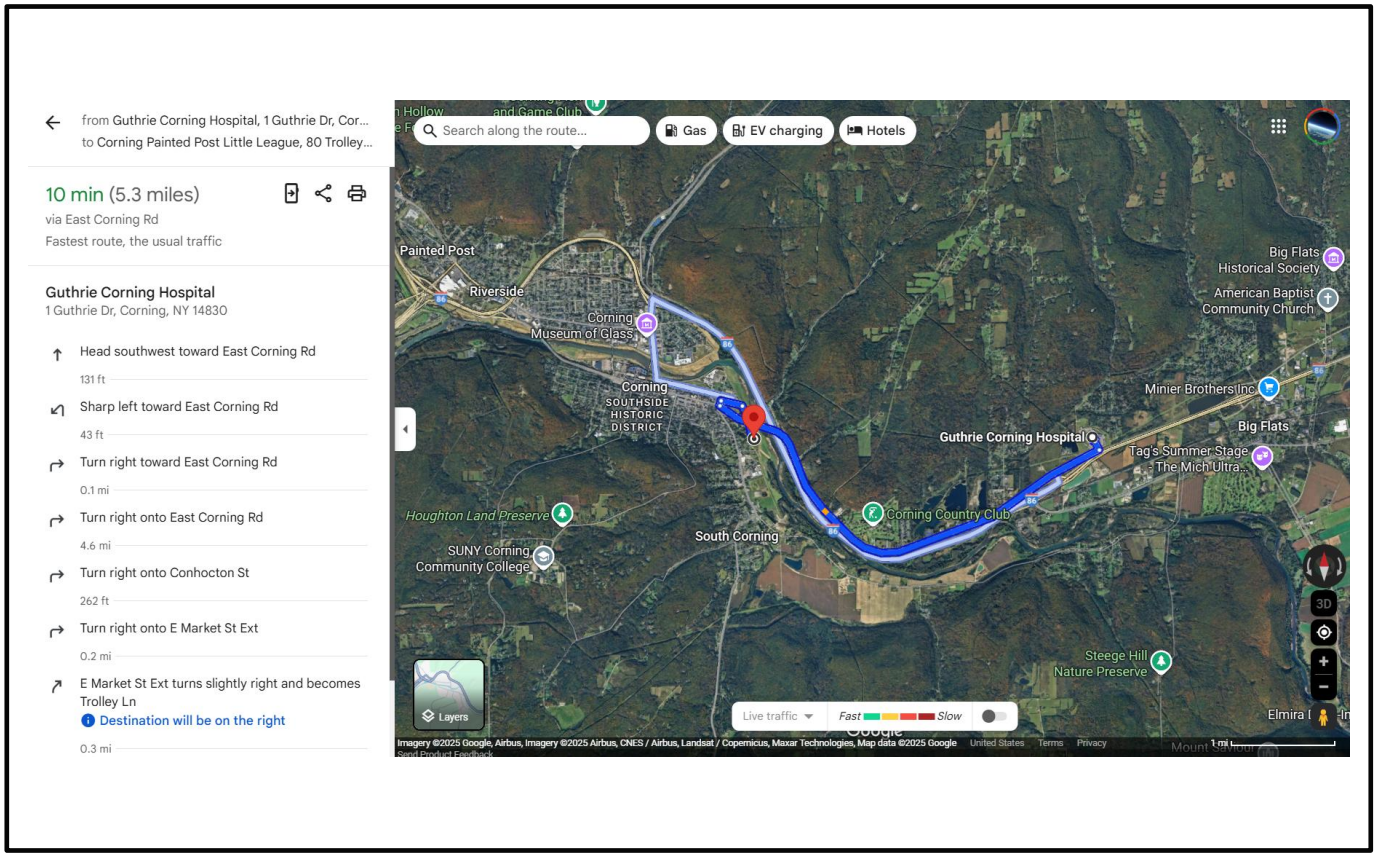
Figure No. **2**	Site Plan Proposed Sediment and Soil Sampling Grid Denison Park Site ID 851066 Corning, New York 14830	Issue Date: 9/26/2025 Project No: DEC1057.P3 Sheet Size: 11x17	Designed By: CMS Drawn By: CMS Reviewed By: MEW	Revisions No. Date	North 0 105 210 Feet	HRP MOVE YOUR ENVIRONMENT FORWARD ONE FAIRCHILD SQUARE SUITE 110 CLIFTON PARK, NY 12065 (518) 877-7101 HRPASSOCIATES.COM

Figure 3
Route and Map to Nearest Hospital

Directions to Guthrie Corning Hospital

Starting Address: Denison Park Corning, NY
Ending Address: 1 Guthrie Drive, Corning, NY

Total Estimated Time: 10 minutes
Total Estimated Distance: 5.3 miles



TABLES

TABLE 13
CONTAMINANTS OF CHEMICALS KNOWN OR SUSPECTED ONSITE
*HIGHLIGHT THOSE THAT APPLY TO THE TASK BEING PERFORMED.

CONTAMINANT	ODOR THRESHOLD	OSHA PEL[1]	TLV (ACGIH)	OSHA CEILING[2] /STEL	IDLH CONC.	ROUTES OF EXPOSURE	SYMPTOMS OF ACUTE EXPOSURE[3]
1,1,1 Trichloroethane	44 ppm	350 ppm	350 ppm	---	700 ppm	Inh, Ing, Con	Head, Lass, CNS, Derm
1,1,2-Trichloroethane	---	10 ppm	10 ppm	----	[100 ppm]	Inh, Ing, Abs, Con	Eyes, Nose Irrit, Resp Irrit, CNS, Liver, Kidney Damage, Derm, [Carc]
1,2,4 Trimethylbenzene 1,3,5 Trimethylbenzene		25 mg/m^3	25 ppm	25 mg/m^3	ND	Inh, Ing, Con	Irrit Eyes, Skin, Nose, Throat, Resp Sys, Bron, Hyprochronic Anemia, Head, Drow, Ftg, Dizz, Nau, Inco, Vomit, Conf, Chemical Pneu (aspir lig)
1,1′ Biphenyl	0.0062 mg/m^3	0.2 ppm	0.2 ppm	---	100 mg/m^3	Inh	
1,1-Dichloroethane	120 ppm	100 ppm	100 ppm	---	3,000 ppm	Inh, Ing, Con	CNS Depres, Skin Irrit, Liver, Lung, and Kidney Damage
1,1-Dichloroethylene***	500 ppm	---	5 ppm	---	---	Inh, Con	CNS depress, Resp, [Carc]
1,2-Dichlorobenzene	50 ppm	50 ppm	25 ppm		200 ppm	Inh, Ing, Abs, Con	Irrit, Resp
1,2-Dichloroethylene	26-87 ppm	200 ppm	200 ppm	---	1,000 ppm	Inh, Ing, Con	Vomit, Irrit Eyes, Resp Sys; CNS Depres
1,2-Dichloropropane	130-190 ppm	75 ppm	75 ppm	---	[400 ppm]	Inh, Con, Ing	Eye irritation, Drow, light-headedness; irritated skin, [Carc]
1,3-Dichlorobenzene	---	----	---	----	---	----	----
1,4-Dichlorobenzene	20 ppm	75 ppm	10 ppm	----	[150 ppm]	Inh, Ing	[Carc], Eye Irrit, swelling around eye, headache, nausea, vomiting
1-Methylnaphthalene	0.02 ppm	---	---	---	---	---	---
2,4-Dichlorophenol	1.4007 mg/m^3	---	---	---	---	---	---
2,4-Dimethylphenol	0.001 mg/m^3	---	---	---	---	---	---
2-Methylnaphthalene	0.01 ppm	---	---	---	---	---	---
2-Methylphenol (o-cresol) [skin]	1.4 mg/L	5 ppm	5 ppm	---	250 ppm	Inh, Abs, Ing, Con	Confusion, depression, Resp Fail; difficulty breathing, irregular rapid respiration, weak pulse; skin, eye burns; dermatitis

TABLE 13
CONTAMINANTS OF CHEMICALS KNOWN OR SUSPECTED ONSITE
*HIGHLIGHT THOSE THAT APPLY TO THE TASK BEING PERFORMED.

CONTAMINANT	ODOR THRESHOLD	OSHA PEL[1]	TLV (ACGIH)	OSHA CEILING[2] /STEL	IDLH CONC.	ROUTES OF EXPOSURE	SYMPTOMS OF ACUTE EXPOSURE[3]
3, 3'-Dichlorobenzidine	---	None	**---**	---	---	Inh, Abs, Ing, Con	Sens, Derm, Head, Dizz, Burns, GI Upset, [Carc]
4-Isopropyltoluene	---	---	---	---	---	Con, Inh, Ing	Defat, Eryt
Acenephthene	0.5048 mg/m^3	---	---	---	---	---	---
Acenaphthylene	---	---	---	---	---	---	---
Acetone	47.5 mg/m^3	1,000 ppm	500 ppm		2,500 ppm	Ing, Inh, Con	Head, Dizz; Irrit Eyes, Nose, Throat; Derm, CNS, Depress, Derm
Acetonitrile	70 mg/m^3	40 ppm	20 ppm	---	500 ppm	Inh, Ing, Abs, Con	Asphy; Nau, Vomit; Chest Pain; Weak, Stupor, Convuls; Eye Irrit
Aldrin	---	0.25 mg/m^3	0.25 mg/m^3	---	25 mg/m^3	Inh, Abs, Ing, Con	Head, Dizz, Nau, Vomit, Mal, Myo, [Carc]
Anthracene (Coal Tar Pitch)	---	0.2 mg/m^3			[80 mg/m^3]	Inh, Con	Derm, bron, [carc]
Antifreeze		50 ppm	100 mg/m^3 (aerosol)	---	ND	Inh, Ing, Con	Irrit Eyes, Skin, Nose, Throat, Nau, Vomit, Abdom Pain, Lass, Dizz, Stup, Conv, CNS, Depres, Skin Sen
Arsenic	----	0.010 mg/m^3	0.01 mg/m^3	----	[5 mg/m^3]	Abs, Inh, Con, Ing	Derm; GI; Resp Irrit; ulceration of nasal septum; Resp, Irrit, Hyper Pig of Skin, [Carc]
Barium (elemental)	---	0.5 mg/m^3	0.5 mg/m^3		50 mg/m^3 (barium components)	Inh, Ing, Con	Resp. Irrit, GI, Muscle Spasm, Eye Irrit, Slow Pulse; skin burns
Benzene*	4.7 ppm	1 ppm	0.5 ppm	5 ppm	[500 ppm]	Inh, Ing, Abs, Con	Irrit Eyes, Nose, Throat; Head, Nau, Derm, Ftg, Anor, Lass, [Carc]
Benzo(a)anthracene (coal tar pitch)	---	0.2 mg/m^3			[80 mg/m^3]	Inh, Con	[Carc], Derm, Bron
Benzo(a)pyrene (coal tar pitch)	---	0.2 mg/m^3	---		[80 mg/m^3]	Inh, Con	[Carc], Derm, Bron

TABLE 13
CONTAMINANTS OF CHEMICALS KNOWN OR SUSPECTED ONSITE
*HIGHLIGHT THOSE THAT APPLY TO THE TASK BEING PERFORMED.

CONTAMINANT	ODOR THRESHOLD	OSHA PEL[1]	TLV (ACGIH)	OSHA CEILING[2] /STEL	IDLH CONC.	ROUTES OF EXPOSURE	SYMPTOMS OF ACUTE EXPOSURE[3]
Benzo(b)fluoranthene (coal tar pitch)	---	0.2 mg/m^3	---		[80 mg/m^3]	Inh, Con	[Carc], Derm, Bron
Benzo(g,h,i)perylene (coal tar pitch)	---	0.2 mg/m^3			[80 mg/m^3]	Inh, Con	[Carc], Derm, Bron
Benzo(k)fluoranthene (coal tar pitch)	---	0.2 mg/m^3			[80 mg/m^3]	Inh, Con	[Carc], Derm, Bron
Bis (2-ethylhexyl) Phthalate**	N/A	5 mg/m^3	5 mg/m^3	10 mg/m^3	[5,000 mg/m^3]	Inh, Ing, Con	[Carc], Irrit Eyes
Cadmium (dust)	---	0.005 mg/m^3	Lowest concentration feasible 0.01 mg/m^3	---	[9 mg/m^3]	Inh, Ing	CNS, Resp, Irrit, Vomit, Cough, Head, Chills, Nau, Diarr, Pulm Edema, Dysp, Chest Tight, [Carc]
Carbazole	---	---	---	---	---	Inh	---
Carbon disulfide	0.1-0.2 ppm	20 ppm	1 ppm	30 ppm	500 ppm	Inh, Abs, Ing, Con	Diz, Head,Ftg, Ner, anorexia, trembling hands, loss of fine motor coord, gastritis, eye, skin burns, Derm
Carbon Tetrachloride***	21.4 ppm	10 ppm	5 ppm	25 ppm	[200 ppm]	Inh, Abs, Con, Ing	CNS Depres, Nau, Vomit, Irrit, Irrit Eyes, Skin, Drow, Dizz, [Carc]
Chlorobenzene***	0.98 mg/m^3	75 ppm	10 ppm	---	1,000 ppm	Inh, Ing, Con	Irrit, Drow, CNS, Depres, Eyes, Skin, Nose, Inco.
Chloroform***	85 ppm	50 ppm	10 ppm	50 ppm	[500 ppm]	Inh, Ing. Con, Abs	Dizz, Dullness, Nau, Head, Ftg, Irrit Eyes, Skin, Conf, [Carc]
Chromium	---	1 mg/m^3	0.5 mg/m^3	---	250 mg/m^3	Inh, Ing, Con	Irrit Eyes, Sens Derm
Chrysene (coal tar pitch)		0.2 mg/m^3	---		[80 mg/m^3]	Inh, Con	Derm, Bron, [Carc]
Cis-1-2-Dichloroethylene	---	200 ppm	200 ppm	----	1000 ppm	Inh, Con, Ing	Irrit Eyes, Resp, CNS Depress
Copper (dusts and mists) (fumes)		1 mg/m^3 0.1 mg/m^3	1 mg/m^3 0.2 mg/m^3	----	100 mg/m^3	Inh, Ing, Con	Vomit, Derm, CNS, Irrit, Derm, Nau, Taste (metallic)

TABLE 13
CONTAMINANTS OF CHEMICALS KNOWN OR SUSPECTED ONSITE
*HIGHLIGHT THOSE THAT APPLY TO THE TASK BEING PERFORMED.

CONTAMINANT	ODOR THRESHOLD	OSHA PEL[1]	TLV (ACGIH)	OSHA CEILING[2] /STEL	IDLH CONC.	ROUTES OF EXPOSURE	SYMPTOMS OF ACUTE EXPOSURE[3]
Cyanide	0.9 mg/m^3	5 mg/m^3	5 mg/m^3 (10 min)	5 mg/m^3	25 mg/m^3	Inh, Ing, Abs, Con	Weak, Head, Nau, Conf, Cyan
Dibenzo(a,h)anthracene						Inh, Ing	
Dichloromethane	540 mg/m^3	25 ppm	50 ppm	125 ppm	[2,300 ppm]	Inh, Abs, Ing, Con	Irrit Eyes, Skin, lass, drow, dizz, Numb, tingl, Nau, [Carc]
Diethylphthalate**	---	None	5 mg/m^3	---	N.D.	Inh, Ing, Con	Irrit Eyes, Skin, Nose, Throat, Head, Dizz, Nau, Lac, Possible Polyneur, Vestibular Dysfunc, Pain, Numb, lass, Spasms in Arms and Legs
Di-n-octylphthalate	---	---	---	---	---	Inh, Ing, Con	---
Dimethylpthalate	---	5 mg/m^3	5 mg/m^3	---	2,000 mg/m^3	Inh, Ing, Con	Irrit, Resp, Abdom
Ethyl Benzene*	8.7 mg/m^3	100 ppm	100 ppm	125 ppm	700 ppm	Inh, Abs, Con	Head. Irrit, Derm, Narc., Irrit Eyes, Skin; Coma
Fluoranthene		0.2 mg/m^3	0.2 mg/m^3			Ing, Inh	[Carc]
Fluorine*	6 mg/m^3	0.1 ppm	1 ppm	2 ppm	25 ppm	Inh, Con	
Fuel Oil/#2	----	----	300 ppm	----		Inh, Abs, Ins, Con	Irrit Eyes, Skin, Derm, Head, Ftg, Blurred Vision, Dizz, Conf
Ideno(1,2,3-cd)pyrene		0.2 mg/m^3				Ing, Inh	
Lead (inorganic forms and dust as Pb)****		0.05 mg/m^3	0.05 mg/m^3		100 mg/m^3	Inh, Ing, Con	Irrit, Cns, Vomit, Narco, Weak, Pall, Insom, Lass, Abdom, Constip
Mercury (organic alkyl compounds) [skin]		0.01 mg/m^3	0.01 mg/m^3	0.03 mg/m^3	2 mg/m^3	Inh, Abs, Ing, Con	Irrit Eyes, Skin; Cough & Chest Pain, Bron Pneu, Tremor, Insom, Irrty, Indecision, Head, Ftg, Weak, Stomatitis, Salv, GI Dist, Anor, Low-wgt, Ataxia

TABLE 13
CONTAMINANTS OF CHEMICALS KNOWN OR SUSPECTED ONSITE
*HIGHLIGHT THOSE THAT APPLY TO THE TASK BEING PERFORMED.

CONTAMINANT	ODOR THRESHOLD	OSHA PEL[1]	TLV (ACGIH)	OSHA CEILING[2] /STEL	IDLH CONC.	ROUTES OF EXPOSURE	SYMPTOMS OF ACUTE EXPOSURE[3]
Mercury (compounds)	----	0.1 mg/m^3	0.025 mg/m^3	0.1 mg/m^3	10 mg/m^3	Inh, Abs, Ing, Con	Irrit Eyes, Skin; Cough & Chest Pain, Bron Pneu, Tremor, Insom, Irrty, Indecision, Head, Ftg, Weak, Stomatitis, Salv, GI Dist, Anor, Low-wgt, Ataxia
Methanol	13.1150 mg/m^3	200 ppm	200 ppm	---	6,000 ppm	Inh, Abs, Ing, Con	Irrit Eyes, Skin, Resp, Head, drow, dizz, Nau, Vomit, vis dist, Optic, derm
Methyl Ether	----	----	---	----	---	Inh	Poison
Methyl Ethyl Ketone (2-Butanone)***	0.7375 mg/m^3	200 ppm	200 ppm	300 ppm	3,000 ppm	Inh, Con, Ing	Irrit Eyes, Skin, Nose, Throat, Head, Dizz, Vomit, Derm
Methylene Chloride	540 mg/m^3	25 ppm	50 ppm	125 ppm	[2,300 ppm]	Inh, Ing, Con, Abs	Ftg, Weak, dizz, drow, Numb, Tingle [carc], Irrit Eyes, Skin, Nau
Mineral Spirit	20 ppm	500 ppm	100 ppm	---	20,000 mg/m^3	Inh, Ing, Con	Irrit Eyes, Nose, Throat, Dizz, Derm, Chemical pneu
Methyl tert butyl ether (MTBE)	---	---	50 ppm	---		Inh, Abs	
Naphtha	0.86 ppm	100 ppm	400 ppm	---	1,000 ppm	Inh, Con, Ing	Light Head, Drow, Irrit, Derm, Irrit Eyes, Skin, Nose
Naphthalene*	0.084 ppm	10 ppm	10 ppm	15 ppm	250 ppm	Inh, Abs, Ing, Con	Eye irritation; headache; confusion, excitement, malaise (vague feeling of ill-being); nausea, vomiting, abdominal pain; irritated bladder; profuse sweating; renal shutdown; dermatitis
Nickel (metal)	---	1 mg/m^3	1.5 mg/m^3	---	[10 mg/m^3]	Inh, Ing, Con	Head, Verti, Nau, Vomit, Pain, Cough, Weak, Convuls, Delirium, Pneu, ,[Carc]
Nitrobenzene	0.0235 mg/m^3	1 ppm	1 ppm	---	200 ppm	Inh, Abs, Ing, Con	Irrit Eyes, Skin, Anoxia, Derm, Anem, Methem

TABLE 13
CONTAMINANTS OF CHEMICALS KNOWN OR SUSPECTED ONSITE
*HIGHLIGHT THOSE THAT APPLY TO THE TASK BEING PERFORMED.

CONTAMINANT	ODOR THRESHOLD	OSHA PEL[1]	TLV (ACGIH)	OSHA CEILING[2] /STEL	IDLH CONC.	ROUTES OF EXPOSURE	SYMPTOMS OF ACUTE EXPOSURE[3]
n-Butylbenzene	---	---	---	---	---	---	---
n-Propylbenzene	---	---	---	---	---	---	---
PCBs 42% chlorine (Aroclor 1242)	---	1 mg/m^3 (skin)	1 mg/m^3 (skin)	---	[5 mg/m^3]	Inh, Abs, Ing, Con	Irrit Eyes, Chloracne, Liver Damage [carc]
PCBs 54% chlorine (Aroclor 1254)	---	0.5 mg/m^3 (skin)	0.5 mg/m^3 (skin)	---	[5 mg/m^3]	Inh, Abs, Ing, Con	Irrit Eyes; Chloracne, Liver Damage [carc]
PFAS	There are currently no established exposure limits for PFAS. If your project involves potential exposure to PFAS, reach out to the CHSO or OHSM about current best practices relative to exposure controls.						
Petroleum Distillates	---	500 ppm	100 ppm		[1,100 ppm]	Inh, Ing, Con	Dizz, Drow, Head, Dry Skin, Nau, Irrit Eyes, Nose, Throat, [Carc]
Phenanthrene (Coal Tar Pitch)		0.2 mg/m^3	0.2 mg/m^3		[80 mg/m^3]	Inh, Con	Derm, bron, (carc)
Phenol**	0.1786 mg/m^3	5 ppm	5 ppm	---	250 ppm	Inh, Abs, Ing, Con	Irrit Eyes, Nose, Throat, Anor, Low Wgt, Weak Musc Ache, Pain, Dark Urine, Cyan, Liver, Kidney Damage, Skin, Burns, Derm, Ochronosis, Tremor, Convuls, Twitch
Pyrene		0.2 mg/m^3			[80 mg/m^3]	Inh, Con	[Carc]
Sec-Butylbenzene	---	---	---	---	---	---	---
Selenium	N/A	0.2 mg/m^3	0.2 mg/m^3	Unknown	1 mg/m^3	Inh, Ing, Con	Irrit, Head, Fever, Chills, Skin/Eye Burns, Metallic Taste, GI, Dysp, Bron
Silver (metal and soluble compounds as Ag)	----	0.01 mg/m^3	Metal = 0.1 mg/m^3 Soluble 0.01 mg/m^3		10 mg/m^3	Inh, Ing, Con	Blue-gray Eyes, Nasal Septum, Throat, Skin; Irrit, Ulcer, Skin, GI Dist
Tetrachloroethylene (a.k.a. perchloroethylene)***	4.68 ppm	100 ppm	25 ppm	200 ppm	[150 ppm]	Inh, Ing, Con, Abs	Irrit Eyes, Skin, Nose, throat, Resp. Nau, flush face, Neck, dizz, inco, head, drow, eryth, [Carc]

TABLE 13
CONTAMINANTS OF CHEMICALS KNOWN OR SUSPECTED ONSITE
*HIGHLIGHT THOSE THAT APPLY TO THE TASK BEING PERFORMED.

CONTAMINANT	ODOR THRESHOLD	OSHA PEL[1]	TLV (ACGIH)	OSHA CEILING[2] /STEL	IDLH CONC.	ROUTES OF EXPOSURE	SYMPTOMS OF ACUTE EXPOSURE[3]
Toluene*	2.14 ppm	200 ppm	50 ppm	300 ppm	500 ppm	Inh, Abs, Ins, Con	Resp, Irrit, Ftg, Conf, Dizz, Head, Derm, Euph, Head, Dilated Pupils, Lac, Ner, Musc FTg, Insom, Pares, Derm, lass
Petroleum Distillates (naphtha)	10 ppm	100 ppm	400 ppm	---	1,000 ppm	Con, Inh, Ing	---
Trans 1,2-Dichloroethylene	0.3357 mg/m^3	200 ppm	200 ppm	---	1,000 ppm	Inh, Con	Irrit, Resp, CNS depress
Trichloroethylene***	21.4 ppm	100 ppm	50 ppm	200 ppm	[1,000 ppm]	Inh, Con, Abs, Ing	Head, Vert, Nau, Vomit, Derm, Vis Dist, Tremors, Som, Nau, Irrit Eyes, Skin, Card Acc., Ftg, [Carc]
Trichlorofluoromethane	28 mg/m^3	1,000 ppm	1,000 ppm		2,000 ppm	Inh, Con, Ing	Inco, trem, derm, card, asph, frost
Trichlorotrifluoroethane	45 ppm	1,000 ppm	1,000 ppm	1,250 ppm	2,000 ppm	Inh, Con, Ing	Irrit Skin, throat, Drow, Derm, CSN, Depress
Vinyl Chloride***	10-20 ppm	1 ppm	1 ppm	5 ppm	ND	Inh, Con	Lass, Abdom, Gi Bleeding; Hepatomegaly; Pallor or Cyan of Extremities; Liq: Frostbite; [Carc]
VM&P Naphtha (petroleum naphtha)	---	---	300 ppm	---	ND	Con, Ing, Inh	Irrit Eyes, Nose, Throat, Dizz, drow, head, nau, dry skin, chem. Pneumonitis
Xylene*	4.5 mg/m^3	100 ppm	100 ppm	150 ppm	900 ppm	Inh, Ing, Abs, Con	Dizz, Drow, Irrit, Excite, Nau, Vomit, Eyes, Skin, Nose, Throat
Zinc (oxide)	---	5 mg/m^3	2 mg/m^3	---	500 mg/m^3	Inh	Dry Throat, Cough, Chills, Tight Chest, Blurred Vision
4,4' DDD	---	---	---	---	---	Ing, Inh, Con	---
4,4' DDE	---	---	---	---	---	Ing, Inh, Con	---
4,4' DDT	5.0725 mg/m^3	1 mg/m^3	1 mg/m^3	---	[500 mg/m^3]	Inh, Abs, Ing, Con	Irrit Eyes, Skin, Pares, Tongue, Lips, Face, Trem, Anxi, Dizz, Conf, Mal, Head, Lass, Conv, Paresi Hands, Vomit, [Carc]

TABLE 13
CONTAMINANTS OF CHEMICALS KNOWN OR SUSPECTED ONSITE
*HIGHLIGHT THOSE THAT APPLY TO THE TASK BEING PERFORMED.

CONTAMINANT	ODOR THRESHOLD	OSHA PEL[1]	TLV (ACGIH)	OSHA CEILING[2] /STEL	IDLH CONC.	ROUTES OF EXPOSURE	SYMPTOMS OF ACUTE EXPOSURE[3]
Aldrin		0.25 mg/m^3	0.25 mg/m^3	---	[25 mg/m^3]	Inh, Abs, Ing, Con	Head, Dizz, Nau, Vomit, Mal, Myo [Carc]
Chlordane [skin]	0.0084 mg/m^3	0.5 mg/m^3	0.5 mg/m^3		[100 mg/m^3]	Inh, Abs, Ing, Con	Blurred vision, confusion, delirium, cough; abdominal pian, nausea, vomiting diarrhea; irritability, tremor, convulsions [Carc]
EDB	76.8 mg/m^3	20 ppm		30 ppm	[100 ppm]	Inh, Abs	Resp. Irr, Eye Irr. [Carc]
Endosulfan I Endosulfan II	---	0.1 mg/m^3	0.1 mg/m^3	---	N.D.	Inh, Abs, Ing, Con	Irrit, Skin, Nau, Conf, Agit, Flush, Dry, Trem, Conv, Head
Endosulfan Sulfate		---	0.1 mg/m^3	---	---	Ing, Con	---
Endrin	1.8 x 10^{-2} ppm	0.1 mg/m^3	0.1 mg/m^{-3}	---	2 mg/m^3	Inh, Abs, Ing, Con	Epil Conv, Stup, Head, Dizz, Abdom, Nau, Vomit, Insom, Agress, Conf, Drow, Lass, Anor
Endrin Aldehyde	1.8 x 10^{-2} ppm	---	---	---	---	Inh, Con	---
Endrin Ketone	---	---	---	---	---	---	---
Heptachlor	0.02 ppm	0.5 mg/m^3	0.05 mg/m^3	---	[35 mg/m^3]	Inh, Abs, Ing, Con	In animals, Trem, Conv, [Carc]
Heptachlor epoxide	0.02 ppm	---	0.05 mg/m^3	---	---	Ing, Inh	Trem, Conv, [Carc]
Hydrogen Cyanide(Hydrocyanic Acid)	0.9 mg/m^3	10 ppm (11 mg/m^3)	4.7 ppm	4.7 ppm	50 ppm	Con, Inh, Ing, Abs	Asphy & death at high levels; Weak, Head, Conf, Nau, Vomit, Incr. Rate and Depth of Respiration or Respiration Slow and Gasping

TABLE 13
CONTAMINANTS OF CHEMICALS KNOWN OR SUSPECTED ONSITE
*HIGHLIGHT THOSE THAT APPLY TO THE TASK BEING PERFORMED.

CONTAMINANT	ODOR THRESHOLD	OSHA PEL[1]	TLV (ACGIH)	OSHA CEILING[2] /STEL	IDLH CONC.	ROUTES OF EXPOSURE	SYMPTOMS OF ACUTE EXPOSURE[3]

NOTES

* = Constituent found in ETPH

**=Constituent found in Acid/Base/Neutral Extractable Compounds

***=Constituent found in Volatile Organic Compounds

****=Constituent found in Leaching Lead

[1]PEL = Permissible Exposure Limit. If no PEL is available, then the NIOSH Threshold Limit Value (TLV) should be used, if available.

[2]Ceiling limit or Short-Term Exposure Limit (STEL), if available. Again, the NIOSH TLV may be used if no OSHA standard exists.

[3]Abbreviations are contained on the next page

[ ] = Potential Occupational Carcinogen

ND = Not Been Determined

ABBREVIATIONS

abdom = Abdominal
abs = Absorption
aggress = Aggressiveness
agit = Agitation
anor = Anorexia
anos = Anosmia (loss of the sense of smell)
Anxi = anxiety
anem – Anemia
aspir = Aspiration
asph – asphyxia
bron = Bronchitis
bron pneu = Bronchitis pneumonitis
[carc] = Potential occupational carcinogen
Card = Cardiac arrhythmias
CNS = Central nervous system
conf = Confusion
constip = Constipation
con = Skin and/or eye contact
conv = Convulsions
corn = Corneal
cyan = Cyanosis
defat = Defatting
depres = Depressant/Depression
derm = Dermatitis
diarr = Diarrhea
dist = Disturbance
dizz = Dizziness
drow = Drowsiness
dry = Dry mouth
dysp = Dyspnea (breathing difficulty)
emphy = Emphysema
epil-conv = Epileptiform convulsions
eryth = Erythema
euph = Euphoria
fib = Fibrosis
frost = frostbite
ftg = Fatigue
flush = Flushing
GI = Gastrointestinal
head = Headache
hyperpig = Hyperpigmentation
inco = Incoordination
ing = Ingestion
inh = Inhalation
inj = Injury
insom = Insomnia
irrit = Irritation
irrty = Irritability
lac = Lacrimination (discharge of tears)
lass = Lassitude (weakness, exhaustion)
li-head = Lightheadedness
liq = Liquid
low-wgt = Weight loss
mal = Malaise (vague feeling of discomfort)
malnut = Malnutrition
methem = Methemoglobinemia
myo = Myochonic (jerks of limbs)
mg/m = milligrams/cubic meter
muc memb = Mucous membrane
mus ftg = Muscle fatigue
narco = Narcosis
nau = Nausea
ner = Nervousness
numb = Numbness
optic = Optic nerve damage (blindness)
pall = Facial pallor
parap = Paralysis
ppm = Parts per million
pares = Paresthesia
paresi = Paresis
peri neur = Peripheral neuropathy
pneu = Pneumonitis
prot = Proteinuria
pulm = Pulmonary
peri neur = Peripheral neuropathy
pneu = Pneumonia
prot = Proteinuria
pulm = Pulmonary
repro = Reproductive
resp = Respiratory
skin sen = skin sensitization
salv = Salvation
som = Somnolence (sleepiness unnatural drowsiness)
subs = Substernal (occurring beneath the sternum)
stup = Stupor
sys = System
tingle = tingle limbs
trem – Tremors
verti = Vertigo
vis dist = Visual disturbance
vomit = Vomiting
weak = Weakness

APPENDIX A

Safety and Logistics Planning Log

Safety and Logistics Planning Log
DEC009808

Date of Call	
Work Assignment Number / Task	
DEC Site Name and Number	

ATTENDEES		
HRP		
POSITION	**NAME**	**NUMBER**
HRP PM		
HRP SSO		
HRP Other:		
HRP Other:		
SUBCONTRACTORS		
POSITION	**NAME**	**NUMBER**
Driller Contact		
Utility Survey		
Surveyor		
Construction		
Other		
DEC		
POSITION	**NAME**	**NUMBER**
DEC PM		
DEC Other:		
DEC Other:		

BRIEF DESCRIPTION: SCOPE OF WORK (Task Specific)	*Use additional forms for additional tasks

LOGISTICS			
Date of Work		Time to Meet	
Site Contact (phone)			
Notification of Site Contact made by			
Describe any unusual site-specific conditions/logistics here (if any):			

QUESTIONS	**Y/N**	**NOTES**
Water Needed? Source Confirmed?	Y / N	
Electricity Needed? Source Confirmed?	Y / N	
Water Storage Needed?	Y / N	
Water Discharges? Permits Needed/Attained?	Y / N	
Air Monitoring – CAMP?	Y / N	
Will there be intrusive work?	Y / N	
Locations marked in the field?	Y / N	
NYS Code Rule 753/Dig Safe System	Y / N	Ticket Number:
Confirmed that mark-out complete?	Y / N	
Anticipated Subsurface Conditions (Geology, Utilities, etc.):		
Anticipated Depth to Groundwater:		
Will NAPL/Product be Present?	Y / N Describe:	
Will there be any other parties entering the work zones? Describe control measures.		

APPENDIX B
Personnel Log

PERSONNEL LOG				
Name	**Representing**	**Date**	**Time In**	**Time Out**

APPENDIX C
Job Safety Analysis (JSA)

JSA Completed By	

HAZARD RANKING CHART

SEVERITY	CONSEQUENCE	PROBABILITY				
	Injury	**Frequent**	**Likely**	**Occasional**	**Seldom**	**Unlikely**
	Fatality	**H**	**H**	**H**	**H**	**M**
	Injury Requiring Hospitalization	**H**	**H**	**H**	**M**	**L**
	Injury Requiring Medical Treatment Beyond First Aid	**H**	**M**	**M**	**L**	**L**
	Injury Requiring First Aid	**M**	**L**	**L**	**L**	**L**

TASK			
LOCATION OF TASK PERFORMED		**DATE OF JSA**	

TASK DESCRIPTION

*There are different categories of hazards to include: Biological, Physical, Safety, Chemicals, and Ergonomics

STEPS	HAZARD	CONTROL MEASURES	RISK RATING

APPENDIX D
Toolbox Talk

TOOLBOX TALK

GENERAL INFORMATION		
Person Conducting	**Site Name/Address**	**HRP Client Name/Job #**
Client Contact/Phone	**HRP H&S Rep.**	**HRP Supervisor**
Date/Time	**Number Attending**	**Weather**
Designated Competent Person:		
Description of Work		

ATTENDEES (Use additional sheets as needed)		
Name	**Company**	**Signature**

EMERGENCY CONTACT INFORMATION		
Emergency Telephone Numbers	FIRE / POLICE / AMBULANCE: 911	
Hospital Name & Location:		
NYSDEC Spill Line: 1-518-457-7362	National Response Center: 800-424-8802	CBYD: 800-922-4455
Health & Safety Manager:		

HAZARDS		
☐ Toxic	☐ Extreme Cold/Heat	☐ Soil Excavation
☐ Corrosive	☐ Drains/Sumps	☐ Tank Excavation
☐ Flammable	☐ Sharp Objects	☐ Trenching
☐ Combustible	☐ Drilling in Soil	☐ Floor Holes
☐ Reactive	☐ Lighting	☐ Working on/near Water
☐ Path Waste	☐ Slips/Trips/Falls	☐ Underground/Overhead Utilities
☐ Asbestos	☐ Lead	☐ Power washing
☐ Abrasive Blasting	☐ Abrasive Blasting	☐ Lifting
☐ Drum Handling	☐ Live Electrical Circuits	☐ Noise
☐ Pneumatic Tools	☐ Elevated Work Area	☐ Ladders
☐ Vac Truck	☐ Hot Work	☐ Vehicle Traffic
☐ Other (s):		

TOOLBOX TALK

PERSONAL SAFETY / PERSONAL PROTECTIVE EQUIPMENT (PPE)			
☐ Supplied Air Respirator	☐ SAR w/Egress Bottle	☐ SCBA	☐ Air Purifying Respirator Cartridge:
☐ Fully Encapsulating Suit	☐ Flash Suit	☐ NOMEX (flam resistant)	☐ Protected Coveralls, Type:
☐ Overboots	☐ Lifebelt/Lanyard	☐ Hardhats	☐ Outer Gloves, Type:
☐ Safety Glasses	☐ Chemical Goggles	☐ Face Shield	☐ Inner Gloves, Type:
☐ Reflective Vests	☐ Eye Wash	☐ Safety Shower	☐ First Aid Kit
☐ Hearing Protection	☐ Evacuation Plan	☐ Communications	☐ Properly Sloped Excavation/ Trench
☐ PFD's	☐ Ventilation	☐ Steel Toe Boots	

FIRE SAFETY			
☐ Fire Extinguishers	☐ Hot Work Permit	☐ Fire Blanket	☐ Explosion-Proof Equipment
☐ Equipment Grounded & Bonded	☐ Non-Sparking Tools	☐ Eliminate Ignition Sources	☐ Area Kept Wet
☐ Smoking Area Designated Location:	☐ Fire Hose Laid Out	☐ Alarm Box in Area, Location:	

ISOLATE EQUIPMENT & ELECTRICAL EQUIPMENT			
☐ Establish Exclusion Zone/Traffic Cones	☐ Work Signs	☐ LockOut/TagOut	☐ Non-Conductive Tools
☐ Stop Transfers	☐ Caution Tape Area	☐ Equipment Grounded	☐ FR Suits/Coveralls
☐ GFCIS	☐ Temporary Fencing		

AIR MONITORING			
Type of Meter:		Date last calibrated:	
SUBSTANCE	**LEVEL B MAX.**	**ACTION LEVEL/LEVEL C MAX.**	**LEVEL D MAX.**

HEALTH & SAFETY COMMENTS-QUESTIONS-CONCERNS / TOPICS & SAFET RULES REVIEWED

Contaminants of Concern:			
HEALTH & SAFETY SIGNATURE:		Date:	

Is there a Health & Safety Plan available on-site? Yes ☐ No ☐

☐ HAZARD ZONES NOT APPLICABLE, GENERAL WORK AREA Level D ☐ Modified Level D ☐ Level C ☐

Anything above Level C, foreman should use a Confined Space Permit/Form.

Note: HOT WORK requires a hot work permit and minimum 20# fire extinguisher. Foreman or HSM must record at least one contaminant of concern above. Toxic plants may be considered a COC if no chemical hazards are expected.

LEVEL C

Respirator Type:	

Name	Zone	Time In	Time Out	Decon Type

Before performing Level C work, ALL employees must review HRP's Respiratory Protection Program - a copy of which must be on-site along with a HASP.

APPENDIX E
Specific Procedures

APPENDIX F

Safety Data Sheets

(for chemicals brought to the site)

REVISION HISTORY

REVISION AND APPROVAL LOG			
REVISION DATE	**REVISION CONTENT**	**REVISED BY**	**APPROVED BY**
1/18/2021	Initiation of document/Reviewed by Jackie Baxley	SF	TAG
6/6/2024	- Update formatting - Update order of headers - Implemented tables within HASP, not as Appendix - Combining NY and other states – generic HASP to make site-specific - Checkbox formatting - Updated Action Levels Table	JLE	TAG

APPENDIX B

Community Air Monitoring Program (CAMP)

Community Air Monitoring Plan
Denison Park, Corning, New York

This Community Air Monitoring Plan (CAMP) requires real-time monitoring for volatile organic compounds (VOCs) and particulates (i.e., dust) at the downwind perimeter of each designated work area when certain activities are in progress during remedial activities at the site. The CAMP is not intended for use in establishing action levels for workers respiratory protection. Rather, its intent is to provide a measure of protection for the downwind community (i.e., off-site receptors including residences and businesses and on-site workers not directly involved with the subject work activities) from potential airborne contaminant releases as a direct result of investigative and remedial work activities. The action levels specified herein require increased monitoring, corrective actions to abate emissions, and/or work shutdown. Additionally, the CAMP helps to confirm that work activities did not spread contamination off-site through the air.

Reliance on the CAMP should not preclude simple, common sense measures to keep VOCs, dust, and odors at a minimum around the work areas.

Depending on the nature of known or potential contaminants at the site, real-time air monitoring for VOCs and/or particulate levels at the perimeter of the exclusion zone or work area will be necessary.

Continuous monitoring will be required for all ground intrusive activities. Ground intrusive activities include, but are not limited to, soil/waste excavation and handling, test pitting or trenching.

Periodic monitoring for VOCs will be required during non-intrusive activities such as the collection of soil samples. "Periodic" monitoring during sample collection might reasonably consist of taking a reading upon arrival at a sample location, monitoring while opening a well cap or overturning soil, monitoring during well baling/purging, and taking a reading prior to leaving a sample location. In some instances, depending upon the proximity of potentially exposed individuals, continuing monitoring may be required during sampling activities.

Particulate Monitoring, Response Levels, and Actions

Particulate concentrations will be monitored continuously at the upwind and downwind perimeters of the exclusion zone at temporary particulate monitoring stations. A third CAMP monitor station will be setup and ran if receptors are determined to be in close proximity to any active work areas as any added measure of protection. The particulate monitoring will be performed using real-time monitoring equipment capable of measuring particulate matter less than 10 micrometers in size (PM-10) and capable of integrating over a period of 15 minutes (or less) for comparison to the airborne particulate action level. The equipment will be equipped with an audible alarm to indicate exceedance of the action level. In addition, fugitive dust migration will be visually assessed during all work activities. Work will be completed in accordance with Appendix 1B: Fugitive Dust and Particulate Monitoring of DER-10.

- If the downwind PM-10 particulate level is 100 micrograms per cubic meter (mcg/m^3) greater than the background (upwind perimeter) for the 15-minute period or if airborne dust is observed leaving the work area, then dust suppression techniques will be employed. Work may continue with dust suppression techniques provided that no visible dust is migrating from the work area.

- If, after implementation of dust suppression techniques, downwind PM-10 particulate levels are greater than 150 mcg/m^3 above the upwind level, work will be stopped and a re-evaluation of activities initiated. Work can resume provided that dust suppression measures

and other controls are successful in reducing the downwind PM-10 particulate concentration to within 150 mcg/m^3 of the upwind level and in preventing visible dust migration.

All readings will be recorded and be available for State (DEC and DOH) personnel to review.

VOC Monitoring, Response Levels, and Actions

VOCs will be monitored at the downwind perimeter of the immediate work area (i.e., the exclusion zone) on a continuous basis or as otherwise specified. Upwind concentrations will be measured at the start of each workday and periodically thereafter to establish background conditions. The monitoring work will be performed using a photo ionization detector (PID) equipped with a 10.2 eV bulb. The PID will be calibrated at least daily for the contaminant(s) of concern or for an appropriate surrogate. The equipment will be capable of calculating 15-minute running average concentrations, which will be compared to the levels specified below.

- If the ambient air concentration of total organic vapors at the downwind perimeter of the work area or exclusion zone exceeds 5 parts per million (ppm) above background for the 15-minute average, work activities must be temporarily halted and monitoring continued. If the total organic vapor level readily decreases (per instantaneous readings) below 5 ppm over background, work activities can resume with continued monitoring.

- If total organic vapor levels at the downwind perimeter of the work area or exclusion zone persist at levels in excess of 5 ppm over background but less than 25 ppm, work activities will be halted, the source of the vapors identified, corrective actions taken to abate emissions, and monitoring continued. After these steps, work activities can resume provided that the total organic vapor level 200 feet downwind of the exclusion zone or half the distance to the nearest potential receptor or residential/commercial structure, whichever is less- but in no case less than 20 feet, is below 5 ppm over background for the 15-minute average.

- If the organic vapor level is above 25 ppm at the perimeter of the work area, activities will be shutdown.

All 15-minute readings will be recorded and be available for State (NYSDEC and NYSDOH) personnel to review. Instantaneous readings, if any, used for decision purposes will also be recorded. Readings are to be provided at least on a weekly basis with all exceedances reported to the NYSDEC and NYSDOH on the same day, or next business day if exceedances are identified after work hours, along with any suspected reasoning, any corrective measures executed, and a conclusion if the corrective measures were effective.

Appendix 1B Fugitive Dust and Particulate Monitoring

A program for suppressing fugitive dust and particulate matter monitoring at hazardous waste sites is a responsibility on the remedial party performing the work. These procedures must be incorporated into appropriate intrusive work plans. The following fugitive dust suppression and particulate monitoring program should be employed at sites during construction and other intrusive activities which warrant its use:

1. Reasonable fugitive dust suppression techniques must be employed during all site activities which may generate fugitive dust.

2. Particulate monitoring must be employed during the handling of waste or contaminated soil or when activities on site may generate fugitive dust from exposed waste or contaminated soil. Remedial activities may also include the excavation, grading, or placement of clean fill. These control measures should not be considered necessary for these activities.

3. Particulate monitoring must be performed using real-time particulate monitors and shall monitor particulate matter less than ten microns (PM10) with the following minimum performance standards:

(a) Objects to be measured: Dust, mists or aerosols;
(b) Measurement Ranges: 0.001 to 400 mg/m3 (1 to 400,000 :ug/m3);
(c) Precision (2-sigma) at constant temperature: +/- 10 :g/m3 for one second averaging; and +/- 1.5 g/m3 for sixty second averaging;
(d) Accuracy: +/- 5% of reading +/- precision (Referred to gravimetric calibration with SAE fine test dust (mmd= 2 to 3 :m, g= 2.5, as aerosolized);
(e) Resolution: 0.1% of reading or 1g/m3, whichever is larger;
(f) Particle Size Range of Maximum Response: 0.1-10;
(g) Total Number of Data Points in Memory: 10,000;
(h) Logged Data: Each data point with average concentration, time/date and data point number
(i) Run Summary: overall average, maximum concentrations, time/date of maximum, total number of logged points, start time/date, total elapsed time (run duration), STEL concentration and time/date occurrence, averaging (logging) period, calibration factor, and tag number;
(j) Alarm Averaging Time (user selectable): real-time (1-60 seconds) or STEL (15 minutes), alarms required;
(k) Operating Time: 48 hours (fully charged NiCd battery); continuously with charger;
(l) Operating Temperature: -10 to 50 degrees C (14 to 122 degrees F);
(m) Particulate levels will be monitored upwind and immediately downwind at the working site and integrated over a period not to exceed 15 minutes.
4. In order to ensure the validity of the fugitive dust measurements performed, there must be appropriate Quality Assurance/Quality Control (QA/QC). It is the responsibility of the remedial party to adequately supplement QA/QC Plans to include the following critical features: periodic instrument calibration, operator training, daily instrument performance (span) checks, and a record keeping plan.

5. The action level will be established at 150 ug/m3 (15 minutes average). While conservative this short-term interval will provide a real-time assessment of on-site air quality to assure both health and safety. If particulate levels are detected in excess of 150 ug/m3, the upwind background level must be confirmed immediately. If the working site particulate measurement is greater than 100 ug/m3 above the background level, additional dust suppression techniques must be implemented to

reduce the generation of fugitive dust and corrective action taken to protect site personnel and reduce the potential for contaminant migration. Corrective measures may include increasing the level of personal protection for on-site personnel and implementing additional dust suppression techniques (see paragraph 7). Should the action level of 150 ug/m3 continue to be exceeded work must stop and DER must be notified as provided in the site design or remedial work plan. The notification shall include a description of the control measures implemented to prevent further exceedances.

6. It must be recognized that the generation of dust from waste or contaminated soil that migrates off-site, has the potential for transporting contaminants off-site. There may be situations when dust is being generated and leaving the site and the monitoring equipment does not measure PM10 at or above the action level. Since this situation has the potential to allow for the migration of contaminants off-site, it is unacceptable. While it is not practical to quantify total suspended particulates on a real-time basis, it is appropriate to rely on visual observation. If dust is observed leaving the working site, additional dust suppression techniques must be employed. Activities that have a high dusting potential-- such as solidification and treatment involving materials like kiln dust and lime--will require the need for special measures to be considered.

7. The following techniques have been shown to be effective for the controlling of the generation and migration of dust during construction activities:
(a) Applying water on haul roads;
(b) Wetting equipment and excavation faces;
(c) Spraying water on buckets during excavation and dumping;
(d) Hauling materials in properly tarped or watertight containers;
(e) Restricting vehicle speeds to 10 mph;
(f) Covering excavated areas and material after excavation activity ceases; and
(g) Reducing the excavation size and/or number of excavations.
Experience has shown that the chance of exceeding the 150ug/m3 action level is remote when the above-mentioned techniques are used. When techniques involving water application are used, care must be taken not to use excess water, which can result in unacceptably wet conditions. Using atomizing sprays will prevent overly wet conditions, conserve water, and provide an effective means of suppressing the fugitive dust.

8. The evaluation of weather conditions is necessary for proper fugitive dust control. When extreme wind conditions make dust control ineffective, as a last resort remedial actions may need to be suspended. There may be situations that require fugitive dust suppression and particulate monitoring requirements with action levels more stringent than those provided above. Under some circumstances, the contaminant concentration and/or toxicity may require additional monitoring to protect site personnel and the public. Additional integrated sampling and chemical analysis of the dust may also be in order. This must be evaluated when a health and safety plan is developed and when appropriate suppression and monitoring requirements are established for protection of health and the environment.

Special Requirements for Work Within 20 Feet of Potentially Exposed Individuals or Structures

When work areas are within 20 feet of potentially exposed populations or occupied structures, the continuous monitoring locations for VOCs and particulates must reflect the nearest potentially exposed individuals and the location of ventilation system intakes for nearby structures. The use of engineering controls such as vapor/dust barriers, temporary negative- pressure enclosures, or special ventilation devices should be considered to prevent exposures related to the work activities and to control dust and odors. Consideration should be given to implementing the planned activities when potentially exposed populations are at a minimum, such as during weekends or evening hours in non-residential settings.

If total VOC concentrations opposite the walls of occupied structures or next to intake vents exceed 1 ppm, monitoring should occur within the occupied structure(s). Depending upon the nature of contamination, chemical-specific colorimetric tubes of sufficient sensitivity may be necessary for comparing the exposure point concentrations with appropriate pre-determined response levels (response actions should also be pre-determined). Background readings in the occupied spaces must be taken prior to commencement of the planned work. Any unusual background readings should be discussed with NYSDOH prior to commencement of the work.

If total particulate concentrations opposite the walls of occupied structures or next to intake vents exceed 150 mcg/m3, work activities should be suspended until controls are implemented and are successful in reducing the total particulate concentration to 150 mcg/m3 or less at the monitoring point.

Depending upon the nature of contamination and remedial activities, other parameters (e.g., explosivity, oxygen, hydrogen sulfide, carbon monoxide) may also need to be monitored. Response levels and actions should be pre-determined, as necessary, for each site.

Special Requirements for Indoor Work With Co-Located Residences or Facilities

Unless a self-contained, negative-pressure enclosure with proper emission controls will encompass the work area, all individuals not directly involved with the planned work must be absent from the room in which the work will occur. Monitoring requirements shall be as stated above under "Special Requirements for Work Within 20 Feet of Potentially Exposed Individuals or Structures" except that in this instance "nearby/occupied structures" would be adjacent occupied rooms. Additionally, the location of all exhaust vents in the room and their discharge points, as well as potential vapor pathways (openings, conduits, etc.) relative to adjoining rooms, should be understood and the monitoring locations established accordingly. In these situations, it is strongly recommended that exhaust fans or other engineering controls be used to create negative air pressure within the work area during remedial activities. Additionally, it is strongly recommended that the planned work be implemented during hours (e.g. weekends or evenings) when building occupancy is at a minimum.