567 Main Street

NASSAU COUNTY

WESTBURY, NEW YORK

SITE MANAGEMENT PLAN

NYSDEC Site Number: 130043B

Prepared for:

H.D.P Printing Industries Corporation 2459 Broadmoor Lane Spring Hill, Florida 34606

Prepared by:

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Revisions to Final Approved Site Management Plan:

	Date		NYSDEC
Revision No.	Submitted	Summary of Revision	Approval Date
1	10/16/2025	As per NYSDEC Comment Letter dated October 1, 2025	

October 2025

CERTIFICATION STATEMENT

I <u>KAREN TYLL</u> certify that	at I am currently a NYS registered professional
engineer as in defined in 6 NYCRR Part 375] an	d that this Site Management Plan was prepared in
accordance with all applicable statutes and reg	gulations and in substantial conformance with the
DER Technical Guidance for Site Investigation a	and Remediation (DER-10).
SignatureKaren G. Tyll, PE	OF NEW OF SESSION OF S
Date <u>10/16/2025</u>	

SITE MANAGEMENT PLAN

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EXECUTIVE SUMMARY

Site Identification:	Site # 130043B, Former Atlas Graphics,
	567 Main Street, Westbury, NY

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

Institutional Controls:

- 1. The property may be used for commercial use;
- The property may be used for commercial and/or industrial use;
- All ECs must be operated and maintained as specified in this SMP;
- All ECs must be inspected at a frequency and in a manner defined in the SMP;
- 5. The use of groundwater underlying the property is prohibited without necessary water quality treatment as determined by the NYSDOH or the Nassau County Department of Health to render it safe for use as drinking water or for industrial purposes, and the user must first notify and obtain written approval to do so from the Department;
- Data and information pertinent to site management must be reported at the frequency and in a manner as defined in this SMP;
- All future activities that will disturb the remaining contaminated material must be conducted in accordance with this SMP;
- Monitoring to assess the performance and effectiveness of the remedy must be performed as defined in this SMP;
- Operation, maintenance, monitoring, inspection, and reporting of any mechanical or physical component of the remedy shall be performed as defined in this SMP;

	 10. Access to the site must be provided to agene employees or other representatives of the State. New York with reasonable prior notice to the property owner to assure compliance with the restrictions identified by the Environment Easement; 11. Vegetable gardens and farming on the site and prohibited; and 12. An evaluation shall be performed to determine the need for further investigation and remediations should large scale redevelopment occur, if any of the existing structures are demolished, or if the subsurface is otherwise made accessible. 13. An evaluation of the potential for soil vapor intrusions. 	
	·	·
	must be completed in any nev	
	within the Institutional con	troi boundaries of the
	Site.	
Engineering Controls:	All ECs must be inspected at a frequency and in a manner	
	defined in the SMP.	
	Active Sub-Slab Depressurization Syst	tem
Inspections:		Frequency
Cover inspection		Annually
2. Sub-Slab Depressur	ization System	Annually
Maintenance:		
1. SSDS Fan maintenance		As needed
Reporting:		
1. Periodic Review Report		Annually

Further descriptions of the above requirements are provided in detail in the latter sections of this

Site

Management

Plan.

1.0 INTRODUCTION

1.1 General

This Site Management Plan (SMP) is a required element of the remedial program for the Former Atlas Graphics Site located in Westbury, New York (hereinafter referred to as the "Site"). See **Figure 1**. The Site is currently in the New York State (NYS) Inactive Hazardous Waste Disposal Site Remedial Program, Site No.130043B, which is administered by New York State Department of Environmental Conservation (NYSDEC or Department).

H.D.P. Printing Industries Corporation (H.D.P.) entered into an Order on Consent, on February 12. 2021 with the NYSDEC to remediate the site. A figure showing the site location and boundaries of this site is provided in **Figure 2.** The boundaries of the site are more fully described in the metes and bounds site description that is part of the Environmental Easement provided in **Appendix C**.

After completion of the remedial work, some contamination was left at this site, which is hereafter referred to as "remaining contamination". [Institutional and Engineering Controls (ICs and ECs)] have been incorporated into the site remedy to control exposure to remaining contamination to ensure protection of public health and the environment. An Environmental Easement granted to the NYSDEC, and recorded with the Nassau County Clerk, requires compliance with this SMP and all ECs and ICs placed on the site.

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

This SMP details the site-specific implementation procedures that are required by the Environmental Easement. Failure to properly implement the SMP is a violation of the Environmental Easement, which is grounds for revocation of the Certificate of Completion (COC); and Failure to comply with this SMP is also a violation of Environmental Conservation Law, 6 NYCRR Part 375 and the Order on Consent (Index #20201229-205; Site #130043B) for the site, and thereby subject to applicable penalties.

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

This SMP was prepared by Tyll Engineering and Consulting, PC, on behalf of H.D.P., in accordance with the requirements of the NYSDEC's DER-10 ("Technical Guidance for Site Investigation and Remediation"), dated June 2010, and the guidelines provided by the NYSDEC. This SMP addresses the means for implementing the ICs and/or ECs that are required by the Environmental Easement for the site.

1.2 Revisions and Alterations

Revisions and alterations to this plan will be proposed in writing to the NYSDEC's project manager. The NYSDEC can also make changes to the SMP or request revisions from the remedial party. Revisions will be necessary upon, but not limited to, the following occurring: a change in media monitoring requirements, upgrades to or shutdown of a remedial system, post-remedial removal of contaminated sediment or soil, or other significant change to the site conditions. All approved alterations must conform with Article 145 Section 7209 of the Education Law regarding the application of professional seals and alterations. For example, any changes to as-built drawings must be stamped by a New York State Professional Engineer. In accordance with the Environmental Easement for the site, the NYSDEC project manager will provide a notice of any approved changes to the SMP and append these notices to the SMP that is retained in its files.

1.3 Notifications

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

- 1. 60-day advance notice of any proposed changes in site use that are required under the terms of the Order on Consent, 6 NYCRR Part 375 and/or Environmental Conservation Law.
- 2. 7-day advance notice of any field activity associated with the remedial program.
- 3. 15-day advance notice of any proposed ground-intrusive activity pursuant to the Excavation Work Plan. If the ground-intrusive activity qualifies as a change of use as defined in 6 NYCRR Part 375, the above mentioned 60-day advance notice is also required.
- 4. Notice within 48 hours of any damage or defect to the foundation, structures or EC that reduces or has the potential to reduce the effectiveness of an EC, and likewise, any action to be taken to mitigate the damage or defect.

- 5. Notice within 48 hours of any non-routine maintenance activities.
- 6. Verbal notice by noon of the following day of any emergency, such as a fire; flood; or earthquake that reduces or has the potential to reduce the effectiveness of ECs in place at the site, with written confirmation within 7 days that includes a summary of actions taken, or to be taken, and the potential impact to the environment and the public.
- 7. Follow-up status reports on actions taken to respond to any emergency event requiring ongoing responsive action submitted to the NYSDEC within 45 days describing and documenting actions taken to restore the effectiveness of the ECs.

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

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

Table 1 on the following page includes contact information for the above notifications. The information on this table will be updated as necessary to provide accurate contact information. A full listing of site-related contact information is provided in **Appendix A**.

Table 1: Notifications*

Name	Contact Information	Required Notification**
NYSDEC Project Manager:	518-402-9613	All Notifications
Joe Jones	joseph.jones@dec.ny.gov	
NYSDEC Section Chief:	518-402-9658	All Notifications
Bob Corcoran, PE	bob.corcoran@dec.ny.gov	
NYSDEC Bureau Director	518-402-9647	Notifications 1 and 8
Richard Mustico	richard.mustico1@dec.ny.gov	
NYSDOH Project Manager	518-402-7860	Notifications 4, 6, and 7
Michele Dolan	michele.dolan@health.ny.gov	

^{*} Note: Notifications are subject to change and will be updated as necessary.

^{**} Note: Numbers in this column reference the numbered bullets in the notification list in this section.

2.0 SUMMARY OF PREVIOUS INVESTIGATIONS AND REMEDIAL ACTIONS

2.1 Site Location and Description

The site is located in Westbury, Nassau County, New York and is identified as Section 11 Block 164 and Lot 68 on the Nassau County Tax Map (see **Figure 2**). The site is an approximately 0.2-acre area and is roughly rectangular in shape, and is approximately 72 feet by 122 feet in size. There is a two story commercial building on site that occupies approximately 4,330 square feet (roughly ½) of the site's area. It is built on a concrete slab and has no basement, except for a small boiler room in the southwestern comer of the building. The designation on the New York State Registry of Inactive Hazardous Waste Disposal Sites (Registry) is# 1-30-034B. The boundaries of the site are more fully described in **Appendix C** –Environmental Easement. The owner(s) of the site parcel(s) at the time of issuance of this SMP is/are:

H.D. P. Printing Industries Corporation2459 Broodmor LaneSpring Hill, FL 34606

2.2 Physical Setting

2.2.1 Land Use

The Site consists a building surrounded by parking areas on the west, north, and south (see **Figure 2** – Site Layout Map). The Site is zoned industrial and is currently utilized for commercial uses. Site occupants include a Jeep customization Shop. The Site is bounded by commercial buildings and Parking Lots to the north and east, Main Street to the south, and Swalm Street to the west.

2.2.2 Geology

From oldest (deepest) to youngest (shallowest) the sediments are divided into a series of hydrogeologic units: the Lloyd Aquifer; the Raritan clay confining unit; the Magothy Aquifer; and the Upper Glacial Aquifer.

The Upper Glacial Aquifer consists of late Pleistocene and Holocene Age poorly sorted sand, gravel, silt and clay deposits. The Upper Glacial Aquifer at the site is found in this aquifer at a depth of approximately 60 feet below grade. The southernmost part of the Town is underlain by a highly permeable glacial outwash consisting of stratified sand and gravel and occasional thin clay layers. The deposits forming the Upper Glacial Aquifer range in thickness from 6 feet to more than 350 feet.

2.2.3 Hydrogeology

The Site's and surrounding area's geology is generally considered "urban land" and is characterized by a non-homogenous distribution of soil and fill types. No bedrock outcroppings are present at the site. Review of local maps prepared by the United States Geological Survey (USGS) (**Figure 1**) indicated that the site is located approximately 107 feet above mean sea level; the depth to groundwater in the area of the property is estimated to be approximately 50 feet below ground surface (bgs). Groundwater is estimated to flow in a southerly direction.

2.3 Investigation and Remedial History

The building at 567 Main Street was built in 1950 and used as a warehouse for construction vehicles until 1977. In 1977, the property was taken over by Atlas Graphics, which operated a photo engraving manufacturing operation. This operation reportedly utilized approximately 300 gallons of trichloroethene (TCE) annually. At the time, Atlas originally commenced operations on site there was a documented discharge of approximately 50-gallons of TCE to the site's on-site sanitary system. In 1978 the on-site cesspool collapsed, the on-site sanitary system was abandoned, and the site was connected to the public sewer system.

In 1988, the NYSDEC classified the entire New Cassel Industrial Area (NCIA) as a class 2 inactive hazardous waste disposal site. Based on the results of a subsequent Site Investigation (SI) and Preliminary Site Assessment (PSA performed by Lawler, Matusky and Skelly, LLP), the individual sites responsible for contamination were identified and placed on the Registry as class 2 sites. Atlas is one such site.

A soil vapor and groundwater investigation was conducted by CDM in 2008. Results from the investigation revealed concentrations of solvent VOCs in the soil vapor in excess of NYSDOH Final Guidance for Evaluating Soil Vapor Intrusion in the State of New York (2006), with updates, and concentrations of PCE, TCE, and 1, 1, 1-TCA in excess of New York State standards for Class GA groundwater. The investigation suggested a potential source area at the site and concluded that further investigation was required to evaluate potential exposures associated with vapor intrusion.

Records show that the NYSDEC completed groundwater sampling of one downgradient monitoring well and one on-site piezometer near the Site in March 1999 and Anson Environmental Ltd. (Anson) completed the same sampling in November 2002. Both sampling events yielded exceedances of TCE, PCE, and cis & t-1.2 Dichloroethylene over NYSDOH TOGS. Anson Environmental also completed a similar sampling event in May 2003 and yielded exceedances of TCE, PCE, 1,1,1-trichloroethane, and cis

& t-1.2 Dichloroethylene over NYSDOH TOGS. Anson (and the NYSDEC) completed another similar sampling event in November 2003 which yielded exceedances of TCE and PCE over NYSDOH TOGS. The system was reported to have been shut down in November 2003 based on the results from the sampling completed from 1999 to November 2003.

The ROD for this site was issued in February 2000, and an air sparging (AS) and SVE system was selected as the remedy to address the on-site contaminated soil and groundwater. The AS/SVE system was constructed in October 2000 and was operated from January 2001 through November 2003.

In 2005, the Site was designated as an SVI Legacy site requiring evaluation of the soil vapor intrusion pathway for the on-Site building.

In 2010, MACTEC Engineering and Consulting (MACTEC) completed a Vapor Intrusion (VI) sampling event on behalf of the NYSDEC in the NCIA. It was determined in that investigation that the results (exceedances of TCE and PCE) determined that MITIGATION was required.

2.4 Remedial Action Objectives

The Remedial Action Objectives (RAOs) for the Site are as follows:

Soil Vapor

RAOs for Public Health Protection

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

2.5 Remaining Contamination

2.5.1 Soil Vapor

On March 11, 2021, Seacliff Environmental Geology, PC completed a Soil Vapor Intrusion investigation on March 11, 2021, an additional sampling event was completed that included the collection of sub-slab, indoor air and outdoor ambient air. PCE was detected in indoor air within the building at concentrations of 1.7 at VP-1 and 1.5 ug/m³ at VP-2. These concentrations were below the NYSDOH indoor air guideline of 30 ug/m³. TCE was detected in the indoor air at concentrations of 2.0 at VP-1 and 1.4 ug/m³ at VP-2. The current NYSDOH indoor air guideline for TCE is 2 ug/m³. PCE and TCE were detected at maximum concentrations of 360 ug/m³ and 1,800 ug/m³ in soil vapor beneath the building slab. TCE was not

detected in the outside (ambient) air sample but PCE was detected at 2.7 ug/m³ (higher concentration than the two indoor air samples).

The comparison of indoor air and sub-slab soil vapor in VP-1 and VP-2 for TCE yielded "MITIGATE" on the NYSDOH Decision Matrices while the results for VP-1 and VP-2 for TCE yielded "No further Action".

3.0 INSTITUTIONAL AND ENGINEERING CONTROL PLAN

3.1 General

Since remaining contamination exists at the site, Institutional Controls (ICs) and Engineering Controls (ECs) are required to protect human health and the environment. This IC/EC Plan describes the procedures for the implementation and management of all IC/ECs at the site. The IC/EC Plan is one component of the SMP and is subject to revision by the NYSDEC project manager.

This plan provides:

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

3.2 Institutional Controls

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

- The property may be used for commercial and/or industrial use;
- All ECs must be operated and maintained as specified in this SMP;
- All ECs must be inspected at a frequency and in a manner defined in the SMP;

- The use of groundwater underlying the property is prohibited without necessary water quality
 treatment as determined by the NYSDOH or the Nassau County Department of Health to render
 it safe for use as drinking water or for industrial purposes, and the user must first notify and
 obtain written approval to do so from the Department;
- Data and information pertinent to site management must be reported at the frequency and in a manner as defined in this SMP;
- All future activities that will disturb the remaining contaminated material must be conducted in accordance with this SMP;
- Monitoring to assess the performance and effectiveness of the remedy must be performed as defined in this SMP;
- Operation, maintenance, monitoring, inspection, and reporting of any mechanical or physical component of the remedy shall be performed as defined in this SMP;
- Access to the site must be provided to agents, employees or other representatives of the State
 of New York with reasonable prior notice to the property owner to assure compliance with the
 restrictions identified by the Environmental Easement;
- Vegetable gardens and farming on the site are prohibited; and
- An evaluation of the potential for soil vapor intrusion must be completed in any newly developed buildings within the Institutional control boundaries of the Site.

3.3 Engineering Controls

One engineering control has been employed at the Site to maintain acceptable indoor air quality. The installation was completed in February and March 2023. The engineering controls include:

3.3.1 Active Sub-slab Depressurization System

The SSDS was installed as a retrofit the existing Commercial building, shown on **Figure 4**. The SSDS is capable of creating a negative pressure under the building slab and collecting potentially contaminated vapor for discharge to the atmosphere above the roof of the Subject building. The SSDS will address any potential soil vapor intrusion issues.

The installation of a SSDS facilitated the engineering control measure necessary for the documented CVOC SVI risk, as well as a means to reduce the exposure risk posed by residual CVOCs.

The SSDS system consists of an interior, horizontal SSDS installed within trenches under the concrete slab (**Figure 4**). Negative pressure gradients created by the SSDS fan have been accomplished within the trench system. The SSDS has been monitored on an annual basis and adjusted to confirm that there is a negative pressure gradient below the building slab and in the subsurface soils.

The SSDS utilizes a manometer (Dwyer, 0-5 inches of water manometer) and an alarm (Radonaway Checkpoint IIa alarm) installed on the rear wall of the building to ensure proper operation of the SSDS fan.

Procedures for operating and maintaining the SSDS system are documented in the Operation and Maintenance Plan (Section 5.0 of this SMP). As built drawings, signed and sealed by a professional engineer, are included in Attachment F – Operations and Maintenance Manual. **Figure 4** shows the layout of the SSDS system installed at the Site.

3.3.2 Criteria for Completion of Remediation/Termination of Remedial Systems

Generally, remedial processes are considered completed when monitoring indicates that the remedy has achieved the remedial action objectives identified by the decision document. The framework for determining when remedial processes are complete is provided in Section 6.4 of NYSDEC DER-10. Unless waived by the NYSDEC, confirmation samples of applicable environmental media are required before terminating any remedial actions at the site. Confirmation samples require Category B deliverables and a Data Usability Summary Report (DUSR).

The remedial party will also conduct any needed site restoration activities, such as concrete patching and decommissioning treatment system equipment.

3.3.3.1 - Sub-Slab Depressurization (SSD) System

The SSDS will not be discontinued unless prior written approval is granted by the NYSDEC and the NYSDOH project managers. If monitoring data indicates that the SSDS may no longer be required, a proposal to discontinue the SSDS will be submitted by the remedial party to the NYSDEC and NYSDOH project managers.

4.0 MONITORING AND SAMPLING PLAN

4.1 General

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

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

- Sampling and analysis of soil vapor;
- Evaluating site information periodically to confirm that the remedy continues to be effective in protecting public health and the environment;

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

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

Reporting requirements are provided in Section 7.0 of this SMP.

4.2 Site-wide Inspection

Site-wide inspections will be performed at a minimum of once per year. Site-wide inspections will be performed by a qualified environmental professional as defined in 6 NYCRR Part 375, a Professional Engineer (PE) who is licensed and registered in New York State, or a qualified person who directly reports to a PE who is licensed and registered in New York State. Modification to the frequency or duration of the inspections will require approval from the NYSDEC project manager. Site-wide inspections will also be performed after all severe weather conditions that may affect ECs or monitoring devices. During these inspections, an inspection form will be completed as provided in **Appendix F** – Site Management Forms. The form will compile sufficient information to assess the following:

- Compliance with all ICs, including site usage;
- An evaluation of the condition and continued effectiveness of ECs;

- General site conditions at the time of the inspection;
- The site management activities being conducted including, where appropriate, confirmation sampling and a health and safety inspection; and
- Confirm that site records are up to date.

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

- Whether ECs continue to perform as designed;
- If these controls continue to be protective of human health and the environment;
- Compliance with requirements of this SMP and the Environmental Easement;
- Achievement of remedial performance criteria; and
- If site records are complete and up to date.

Reporting requirements are outlined in Section 7.0 of this plan.

Inspections will also be performed in the event of an emergency. If an emergency, such as a natural disaster or an unforeseen failure of any of the ECs occurs that reduces or has the potential to reduce the effectiveness of ECs in place at the site, verbal notice to the NYSDEC project manager must be given by noon of the following day. In addition, an inspection of the site will be conducted within 5 days of the event to verify the effectiveness of the IC/ECs implemented at the site by a qualified environmental professional, as defined in 6 NYCCR Part 375. Written confirmation must be provided to the NYSDEC project manager within 7 days of the event that includes a summary of actions taken, or to be taken, and the potential impact to the environment and the public. The remedial party will submit follow-up status reports to the NYSDEC within 45 days of the event on actions taken to respond to any emergency event requiring ongoing responsive action, describing and documenting actions taken to restore the effectiveness of the ECs.

4.3 Routine SSDS Monitoring and Sampling

4.3.1 SSDS Monitoring

Monitoring of the SSDS will be performed on a routine basis, as identified in **Table 4** - Remedial System Monitoring Requirements and Schedule (see below). Modification to the frequency or sampling requirements will require approval from the NYSDEC. A visual inspection of the complete system will be

conducted during each monitoring event. Inspection of the SSDS fan and manometer will be conducted during each monitoring event. Unscheduled inspections and/or sampling may take place when a suspected failure of the SSD system has been reported or an emergency occurs that is deemed likely to affect the operation of the system. SSD system components to be monitored include, but are not limited to, the components included in **Table 4**.

Table 4 – Remedial System Monitoring Requirements and Schedule

Remedial System Component	Monitoring Parameter	Monitoring Schedule
SSDS Fan	Check on or off	Annual
Permanent sub-slab vacuum monitoring points (VMPs)	Check with digital micro- manometer to confirm minimum vacuum pressure of 0.002 water column inches	Annually
Magnahelic Meter	Vacuum at Riser	
Flow Alarm	Check for green light to confirm operation of fan	

A complete list of components to be inspected is provided in the Inspection Checklist, provided in **Appendix F**- Site Management Forms. If any equipment readings are not within their specified operation range, any equipment is observed to be malfunctioning or the system is not performing within specifications; maintenance and repair, as per the Operation and Maintenance Plan, is required immediately.

4.4 Post-Remediation Air Monitoring and Sampling

After the SSDS is installed, Indoor air samples were collected from within the building. Sampling locations, required analytical parameters, and schedule are provided in **Table 4.4 – Post Remediation Sampling Requirements and Schedule** below. Modification to the frequency or sampling requirements will require approval from the NYSDEC.

Table 4.4 – Post Remediation Sampling Requirements and Schedule

Sampling	Analytical	
Location	Parameters	Schedule
Indoor Air	VOC (EPA	After Start up
Samples	Method TO-15)	Completed on
To be		2/27/2024
collected at 2		
locations		
(front/back)		
and 1 outdoor		
sample in rear		
yard		
SSDS Effluent	VOC (EPA	As requested
From sample	Method TO-15)	
port on SSDS		
Riser pipe		

Detailed sample collection and analytical procedures and protocols are provided in **Appendix D** – **Quality Assurance Project Plan.**

4.4.1 Indoor Air Sampling

Modification to the frequency or sampling requirements will require approval from the NYSDEC. Indoor air samples will be collected using six or 2.7 Liter summa canisters fitted with 8-hour laboratory calibrated regulators. Three samples (two indoor air and one outdoor ambient) were collected onsite during this sampling event on February 27, 2024 for 8 hours. The summa canisters were placed approximately at a height of 3-4 feet above the floor to be within the breathing zone. The sample identification, date, start time, start vacuum, end time and end vacuum were recorded on the tags attached to each canister, on the Sampling logs, and on the chain of custody form.

All sampling activities will be recorded in a field book and/or an associated sampling log as provided in **Appendix F** - Site Management Forms. Other observations (e.g., groundwater monitoring well integrity)

will be noted on the sampling log. The sampling log will serve as the inspection form for the monitoring network.

This sampling was detailed in a letter to the NYSDEC submitted on March 28, 2024.

This SMP will be modified to reflect any future changes in sampling plans approved by the NYSDEC. Deliverables for the soil vapor sampling program are specified in Section 7.0 – Reporting Requirements.

4.4.2 SSDS Effluent Sampling

Effluent samples are not required as a part of the operations and maintenance of an SSDS. Effluent samples shall be collected on an as requested basis. The effluent sample is collected from the sample port on the SSDS Riser pipe. The required analytical parameters and schedule are provided in **Table 4.4** – **Post Remediation Sampling Requirements and Schedule** above. Modification to the frequency or sampling requirements will require approval from the NYSDEC.

Detailed sample collection and analytical procedures and protocols are provided in Appendix 5 – Field Sampling Plan and **Appendix D – Quality Assurance Project Plan**.

As suggested by the NYSDEC to assist with Site closure, effluent samples were collected on April 9, July 14, and October 9, 2025. The results for the first two have been submitted in a brief letter report to the NYSDEC on May 6, 2025 and August 7, 2025. The analytical results for the October 2025 sampling event are still outstanding at the time of this SMP submission.

5.0 OPERATION AND MAINTENANCE PLAN

5.1 General

This Operation and Maintenance Plan (**Appendix G**) provides a brief description of the measures necessary to operate, monitor and maintain the mechanical components of the remedy selected for the site. This Operation and Maintenance Plan:

- Includes the procedures necessary to allow individuals unfamiliar with the site to operate and maintain the SSDS systems;
- Will be updated periodically to reflect changes in site conditions or the manner in which the SSDS systems are operated and maintained.

Further detail regarding the Operation and Maintenance of the SSDS is provided in **Appendix G** - Operation and Maintenance Manual. A copy of this Operation and Maintenance Manual, along with the complete SMP, is to be maintained at the site. This Operation and Maintenance Plan is not to be used as a stand-alone document but as a component document of this SMP.

5.2 Remedial System (or other Engineering Control) Performance Criteria

The SSDS is designed to create a minimum pressure differential between the sub- slab vapor/air space (lower pressure) and the indoor air space (higher pressure) inside the facility building of 0.002 inches of water column. If a sub-slab vacuum of at least -0.002 inches of water column is not observed at each permanent sub-slab pressure monitoring point (PMP) during the annual SSDS monitoring activities described in Section 4, the SSDS may need to be adjusted or optimized. System optimization may include sealing or resealing of floor cracks or other floor slab penetrations, or selecting and installing replacement fans for one or more of the SSDS zones.

5.3 Operation and Maintenance of SSDS

The following sections provide a description of the operations and maintenance of the SSDS. Cut-sheets and as-built drawings for the SSDS are provided in **Appendix G** - Operations and Maintenance Manual.

5.3.1 System Start-Up and Testing

To turn the system on:

- 1. Ensure that the appropriate breakers in the electrical panel boxes are ON with the help of a person qualified to open the electrical panels on-site;
- 2. Ensure the motor starter switches are in the ON position. These are located on the roof

near the fans; and

3. Confirm proper SSDS operation by applying the appropriate monitoring tasks

The system testing described above will be conducted if, in the course of the SSDS lifetime, the system goes down or significant changes are made to the system and the system must be restarted.

The system testing described above will be conducted if, in the course of the SSDS system lifetime, the system goes down or significant changes are made to the system and the system must be restarted.

5.3.2 Routine System Operation and Maintenance

Other than routine monitoring, the SSDS operates continuously and does not require manual system operation. If the vacuum readings from the manometer instrument panels for the vacuum blower pressure gauges fall below 0.5 inches of water column (WC), or if vacuum at one or more of the pressure monitoring points (PMPs) does not achieve at least -0.002 in WC, the SSDS may need to be adjusted or optimized. System optimization may require replacement of one or more fans.

The operating personnel will consult the owner and its engineer prior to making any equipment changes.

In the event of an electrical failure, the system is designed to restart when power is restored. If the system fails to restart after electrical failure, the Site owner shall promptly contact the system installers.

5.3.3 <u>Non-Routine Operation</u> and Maintenance

The operating personnel will consult the owner and its engineer prior to making any equipment changes.

In the event of an electrical failure, the system is designed to restart when power is restored. If the system fails to restart after electrical failure, the Site owner shall promptly contact the system installers.

Non-routine maintenance will be conducted by the Site owner to correct the condition should it appear that an SSDS has reduced its effectiveness due to malfunction, renovation, or other unplanned circumstance. Examples of such circumstances include the following:

The building's tenants or the owner's staff report that a warning device

indicates that the SSDS is not operating properly;

- An SSDS component is accidentally damaged; or
- The building undergoes renovations that potentially reduce the effectiveness of the SSDS.

All operational problems will be noted in the subsequent Periodic Review Report.

If the effectiveness of the SSDS cannot be restored within two weeks from when the issue was identified, the Site owner will notify the NYSDEC project manager and provide a schedule for resolving the issue. Upon NYSDEC request, a formal Corrective Measures Plan will be prepared for NYSDEC approval.

5.3.4 <u>System Monitoring Devices and Alarms</u>

The SSDS has warning devices to indicate that the system is not operating properly. In the event that a warning device is activated, applicable maintenance and repairs will be conducted, as specified in the SSDS Operation and Maintenance Manual, and the SSDS will be restarted. Operational problems will be noted in the Periodic Review Report to be prepared for that reporting period.

6.0 PERIODIC ASSESSMENTS/EVALUATIONS

6.1 Climate Change Vulnerability Assessment

Increases in both the severity and frequency of storms/weather events, an increase in sea level elevations along with accompanying flooding impacts, shifting precipitation patterns and wide temperature fluctuation, resulting from global climactic change and instability, have the potential to significantly impact the performance, effectiveness and protectiveness of a given site and associated remedial systems. Vulnerability assessments provide information so that the site and associated remedial systems are prepared for the impacts of the increasing frequency and intensity of severe storms/weather events and associated flooding.

A climate change vulnerability assessment has not been performed for this site, and given its setting, the nature of the remedial program for the Site, and the past and current site conditions, it is evident that the Site and its remedial program will not be vulnerable to climate change impacts. The Site is not located in a flood plain, and because of the topography of the Site and surrounding area, potential for flooding at the Site is remote. Site contamination is confined to the subsurface in areas covered by pavements or buildings, and vulnerability to erosion is therefore not an issue. Similarly, vulnerability to increases in groundwater levels during extreme precipitation events will be managed as at present by removal of storm water in the storm drain system infrastructure presently in place.

During the periodic reviews required by this SMP, the integrity of the Site cover and area storm drains will be assessed to determine whether changes in site conditions have occurred that could affect vulnerability of the Site to the effects of extreme weather events.

The integrity of anchoring systems for rear wall/rooftop SSDS fan and discharge pipes will be assessed to determine whether the anchoring systems have been damaged by high wind events or lightning strikes.

6.2 Green Remediation Evaluation

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

The Green Remediation Evaluation will include the following items:

- Energy Usage: The small SSDS fan used on this SSDS system uses minimal energy.
- Emissions

Methods proposed to reduce energy consumption, resource usage, waste generation, water usage, etc. should be included in the PRR.

6.2.1 Timing of Green Remediation Evaluations

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

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

6.2.2. Remedial Systems

Remedial systems will be operated properly considering the current site conditions to conserve materials and resources to the greatest extent possible. Consideration will be given to operating rates and use of consumables during sampling events. Spent materials will be sent for recycling, as appropriate.

Remedial system types and associated parameters to be evaluated include, but are not limited to:

• SSDS points (24 hours, 7 days per week/location – rear wall of building);

6.2.3 Building Operations

Structures including buildings and sheds will be operated and maintained to provide for the most efficient operation of the remedy, while minimizing energy, waste generation and water consumption.

Components to be evaluated should include, but are not limited to:

- Heating/cooling systems and temperature set-points;
- Building skin, insulation and building use and occupancy;
- Ventilation;
- Lighting and plug loads; and
- Grounds and property management.

6.2.4 Frequency of System Checks, Sampling and Other Periodic Activities

Transportation to and from the Site, use of consumables in relation to visiting the Site in order to conduct system checks and/or collect samples, and shipping samples to a laboratory for analyses have direct and/or inherent energy costs. The schedule and/or means of these periodic activities have been prepared so that these tasks can be accomplished in a manner that does not impact remedy protectiveness but reduces expenditure of energy or resources.

Consideration shall be given to:

- Reduced sampling frequencies;
- Reduced site visits and system checks;
- Installation of remote sensing/operations and telemetry and;
- Coordination/consolidation of activities to maximize foreman/labor time

6.2.5 Metrics and Reporting

Metrics reporting for green remediation is required for state-funded projects however it is strongly recommended for all other sites.

As discussed in Section 7.0 and as shown in **Appendix F** – Site Management Forms, information on energy usage, solid waste generation, transportation and shipping, water usage and land use and ecosystems will be recorded to facilitate and document consistent implementation of green remediation during site management and to identify corresponding benefits. A set of metrics has been developed.

6.3 Remedial System Optimization

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

- The remedial actions have not met or are not expected to meet RAOs in the time frame estimated in the Decision Document;
- The management and operation of the remedial system is exceeding the estimated costs;
- The remedial system is not performing as expected or as designed;
- Previously unidentified source material may be suspected;
- Plume shift has potentially occurred;
- Site conditions change due to development, change of use, change in groundwater use, etc.;

- There is an anticipated transfer of the site management to another remedial party or agency;
 and
- A new and applicable remedial technology becomes available.

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

7.0 REPORTING REQUIREMENTS

7.1 Site Management Reports

All site management inspection, maintenance and monitoring events will be recorded on the appropriate site management forms provided in **Appendix F**. These forms are subject to NYSDEC revision. All site management inspection, maintenance, and monitoring events will be conducted by a qualified environmental professional (QEP) as defined in 6 NYCRR Part 375, a Professional Engineer (PE) who is licensed and registered in New York State, or a qualified person who directly reports to a PE who is licensed and registered in New York State

All applicable inspection forms and other records, including media sampling data and system maintenance reports, generated for the site during the reporting period will be provided in electronic format to the NYSDEC in accordance with the requirements of **Table 7** and summarized in the Periodic Review Report.

Table 7: Schedule of Interim Monitoring/Inspection Reports

Task/Report	Reporting Frequency*	
Inspection Report	Annually (to be included in the annual PRR unless otherwise requested by NYSDEC)	
Periodic Review Report	Annually, or as otherwise determined by the Department	

^{*} The frequency of events will be conducted as specified until otherwise approved by the NYSDEC project manager.

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

- Date of event or reporting period;
- Name, company, and position of person(s) conducting monitoring/inspection activities;
- Description of the activities performed;
- Where appropriate, color photographs or sketches showing the approximate location of any
 problems or incidents noted (included either on the checklist/form or on an attached sheet);

- Type of samples collected (e.g., sub-slab vapor, indoor air, outdoor air);
- Copies of all field forms completed (e.g., well sampling logs, chain-of-custody documentation);
- Sampling results in comparison to appropriate standards/criteria;
- A figure illustrating sample type and sampling locations;
- Copies of all laboratory data sheets and the required laboratory data deliverables required for all points sampled (to be submitted electronically in the NYSDEC-identified format);
- Any observations, conclusions, or recommendations; and
- A determination as to whether contaminant conditions have changed since the last reporting event.

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

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

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

- Date of event;
- Name, company, and position of person(s) conducting non-routine maintenance/repair activities;
- Description of non-routine activities performed;
- Where appropriate, color photographs or sketches showing the approximate location of any problems or incidents (included either on the form or on an attached sheet); and

 Other documentation such as copies of invoices for repair work, receipts for replacement equipment, etc. (attached to the checklist/form).

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

7.2 Periodic Review Report

A Periodic Review Report (PRR) will be submitted to the NYSDEC project manager beginning sixteen (16) months after the Certificate of Completion is issued. After submittal of the initial Periodic Review Report, the next PRR shall be submitted every third year, as appropriate to the NYSDEC project manager or at another frequency as may be required by the NYSDEC project manager. In the event that the site is subdivided into separate parcels with different ownership, a single Periodic Review Report will be prepared that addresses the site described in **Appendix C -Environmental Easement**. The report will be prepared in accordance with NYSDEC's DER-10 and submitted within 30 days of the end of each certification period. Media sampling results will also be incorporated into the Periodic Review Report. The report will include:

- Identification, assessment and certification of all ECs/ICs required by the remedy for the site.
- Results of the required annual site inspections or severe condition inspections, if applicable.
- All applicable site management forms and other records generated for the site during the reporting period in the NYSDEC-approved electronic format, if not previously submitted.
- Data summary tables and graphical representations of contaminants of concern by media (groundwater, soil vapor, etc.), which include a listing of all compounds analyzed, along with the applicable standards, with all exceedances highlighted. These tables and figures will include a presentation of past data as part of an evaluation of contaminant concentration trends, including but not limited to:
 - Trend monitoring graphs that present groundwater contaminant levels from before the start of the remedy implementation to the most current sampling data;
 - Trend monitoring graphs depicting system efffluent analytical data on a per event and cumulative basis;

- O&M data summary tables;
- Results of all analyses, copies of all laboratory data sheets, and the required laboratory data deliverables for all samples collected during the reporting period will be submitted in digital format as determined by the NYSDEC. Currently, data is supplied electronically and submitted to the NYSDEC EQuIS™ database in accordance with the requirements found at this link: http://www.dec.ny.gov/chemical/62440.html.
- A site evaluation, which includes the following:
 - The compliance of the remedy with the requirements of the site-specific Remedial
 Action Work Plan (RAWP), ROD or Decision Document;
 - The operation and the effectiveness of all treatment units, etc., including identification of any needed repairs or modifications;
 - Any new conclusions or observations regarding site contamination based on inspections or data generated by the Monitoring and Sampling Plan for the media being monitored;
 - Recommendations regarding any necessary changes to the remedy and/or Monitoring and Sampling Plan;
 - Trends in contaminant levels in the affected media to determine if the remedy continues to be effective in achieving remedial goals as specified by the RAWP, ROD or Decision Document; and
 - The overall performance and effectiveness of the remedy.
- A performance summary for all treatment systems at the site during the calendar year, including information such as:
 - The number of days the system operated for the reporting period;
 - The average, high, and low flows per day;
 - The contaminant mass removed and the cost per pound of mass removed during the certification period and during the life of the treatment system;
 - A description of breakdowns and/or repairs along with an explanation for any significant downtime;
 - A description of the resolution of performance problems;
 - Alarm conditions;
 - Trends in equipment failure;
 - A summary of the performance, effluent and/or effectiveness monitoring; and

Comments, conclusions, and recommendations based on data evaluation.

7.2.1 Certification of Institutional and Engineering Controls

Following the last inspection of the reporting period, a qualified environmental professional (QEP) as defined in 6 NYCRR Part 375 or Professional Engineer licensed to practice and registered in New York State will prepare, and include in the Periodic Review Report, the following certification as per the requirements of NYSDEC DER-10:

"For each institutional or engineering control identified for the site, I certify that all of the following statements are true:

- The inspection of the site to confirm the effectiveness of the institutional and engineering controls required by the remedial program was performed under my direction;
- The institutional control and/or engineering control employed at this site is unchanged from the date the control was put in place, or last approved by the Department;
- Nothing has occurred that would impair the ability of the control to protect the public health and environment;
- Nothing has occurred that would constitute a violation or failure to comply with any site management plan for this control;
- Access to the site will continue to be provided to the Department to evaluate the remedy, including access to evaluate the continued maintenance of this control;
- If a financial assurance mechanism is required under the oversight document for the site, the mechanism remains valid and sufficient for the intended purpose under the document;
- Use of the site is compliant with the environmental easement;
- The engineering control systems are performing as designed and are effective;
- To the best of my knowledge and belief, the work and conclusions described in this certification
 are in accordance with the requirements of the site remedial program and generally accepted
 engineering practices; and
- The information presented in this report is accurate and complete.

"I certify that all information and statements in this certification form are true. I understand that a false statement made herein is punishable as a Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law. I, [name], of [business address], am certifying as [Owner/Remedial Party or

Owner's/Remedial Party's Designated Site Representative]. [I have been authorized and designated by all site owners/remedial parties to sign this certification] for the site."

If NYSDEC DER-10 requires a Professional Engineering certification, add the following certification:

"I certify that the New York State Education Department has granted a Certificate of Authorization to provide Professional Engineering services to the firm that prepared this Periodic Review Report."

The signed certification will be included in the Periodic Review Report.

The Periodic Review Report will be submitted, in electronic format, to the NYSDEC project manager and the NYSDOH project manager. The Periodic Review Report may also need to be submitted in hard-copy format if requested by the NYSDEC project manager.

7.3 Corrective Measures Work Plan

If any component of the remedy is found to have failed, or if the periodic certification cannot be provided due to the failure of an institutional or engineering control or failure to conduct site management activities, a Corrective Measures Work Plan will be submitted to the NYSDEC project manager for approval. This plan will explain the failure and provide the details and schedule for performing work necessary to correct the failure. Unless an emergency condition exists, no work will be performed pursuant to the Corrective Measures Work Plan until it has been approved by the NYSDEC project manager.

7.4 Remedial System Optimization Report

If an RSO is to be performed (see Section 6.3), upon completion of an RSO, an RSO report must be submitted to the NYSDEC project manager for approval. A general outline for the RSO report is provided in **Appendix H**. The RSO report will document the research/ investigation and data gathering that was conducted, evaluate the results and facts obtained, present a revised conceptual site model and present recommendations. RSO recommendations are to be implemented upon approval from the NYSDEC. Additional work plans, design documents, HASPs etc., may still be required to implement the recommendations, based upon the actions that need to be taken. A final engineering report and update to the SMP may also be required.

The RSO report will be submitted, in electronic format, to the NYSDEC project manager and the NYSDOH project manager.

8.0 REFERENCES

SSDS Installation Workplan, Tyll Engineering and Consulting, January 2023

Construction Completion Report, Tyll Engineering and Consulting, October 2023

SSDS Performance Assessment Work Plan, Tyll Engineering and Consulting, December 2023

SSDS Performance Assessment Work Plan, Tyll Engineering and Consulting, December 2023

SSDS Performance Assessment Report, Tyll Engineering and Consulting, March 28, 2024

SSDS Effluent Sampling Report - 1st event, Tyll Engineering and Consulting, May 5, 2025

SSDS Effluent Sampling Report – #2, Tyll Engineering and Consulting, August 7, 2025

6 NYCRR Part 375, Environmental Remediation Programs. December 14, 2006.

NYSDEC DER-10 – "Technical Guidance for Site Investigation and Remediation".

NYSDOH, 2006. Final Guidance for Evaluating Soil Vapor Intrusion in the State of New York. October 2006.

NYSDOH, 2017/2024. Soil Vapor Intrusion Updates, May 2017 and February 2024: Updates to Soil Vapor/Indoor Air Decision Matrices.



Figures

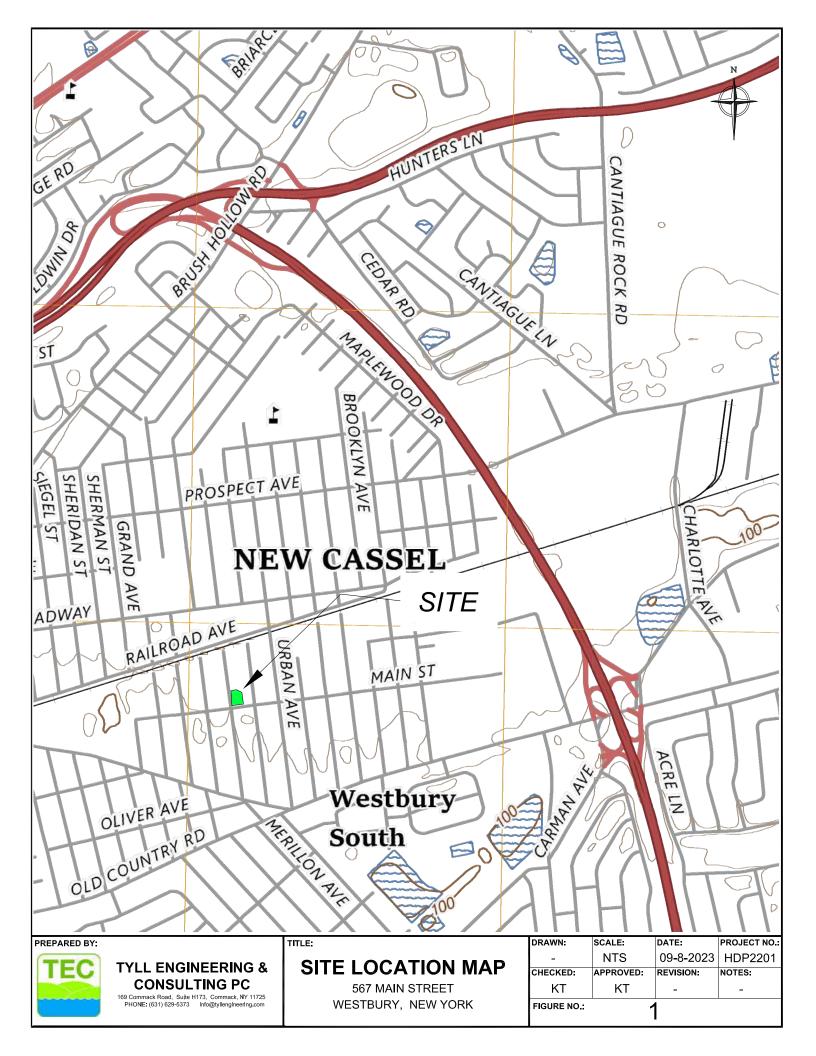
Figure 1 - Site Location Map

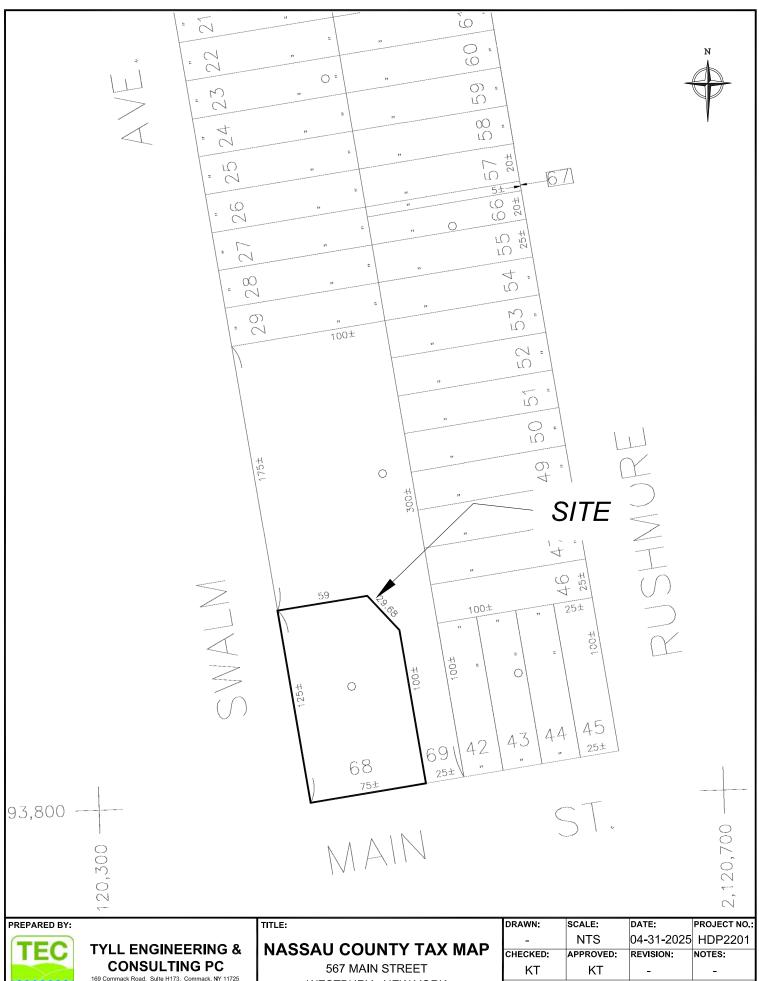
Figure 2 - Site Layout Map

Figure 3 - Institutional Control Boundaries

Figure 4 - Engineering Controls Location

Figure 5 - SSDS Layout Plan



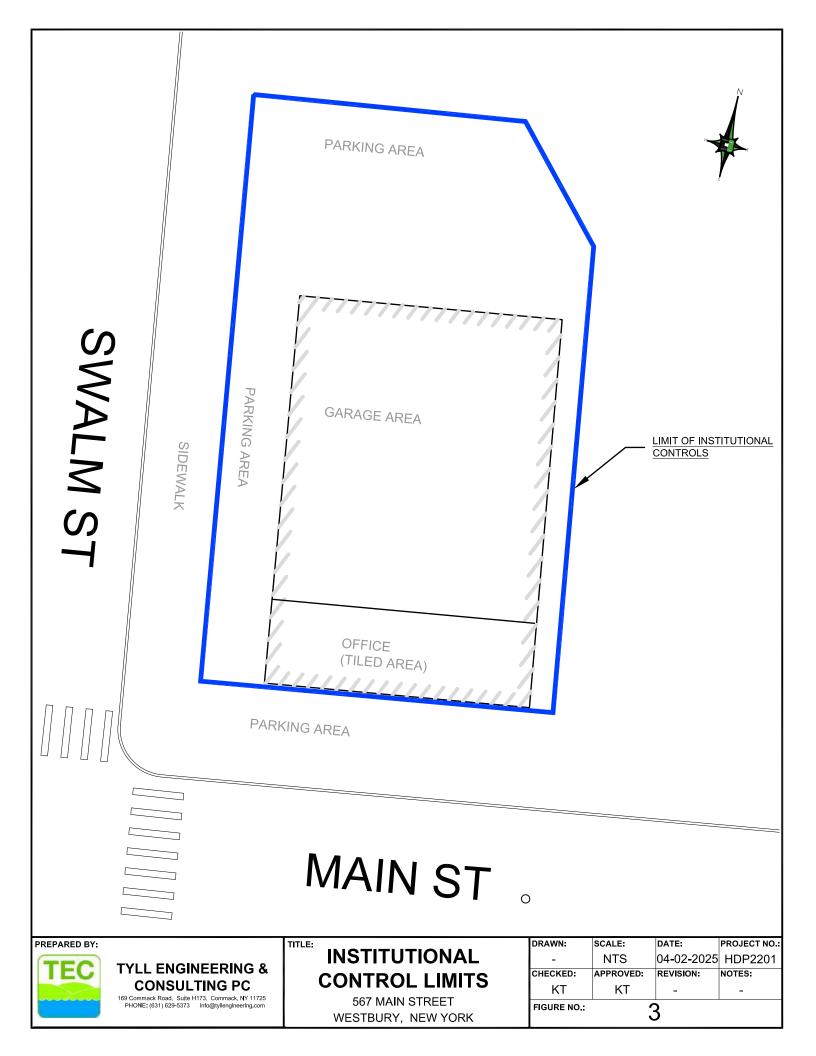


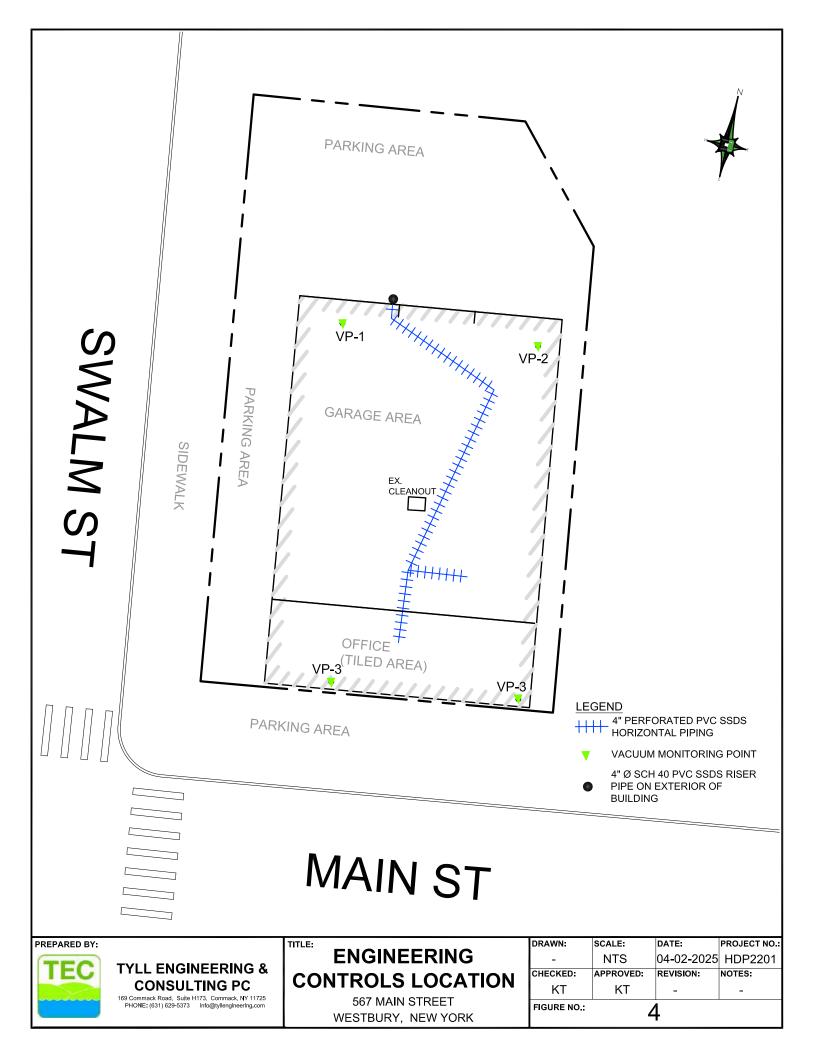


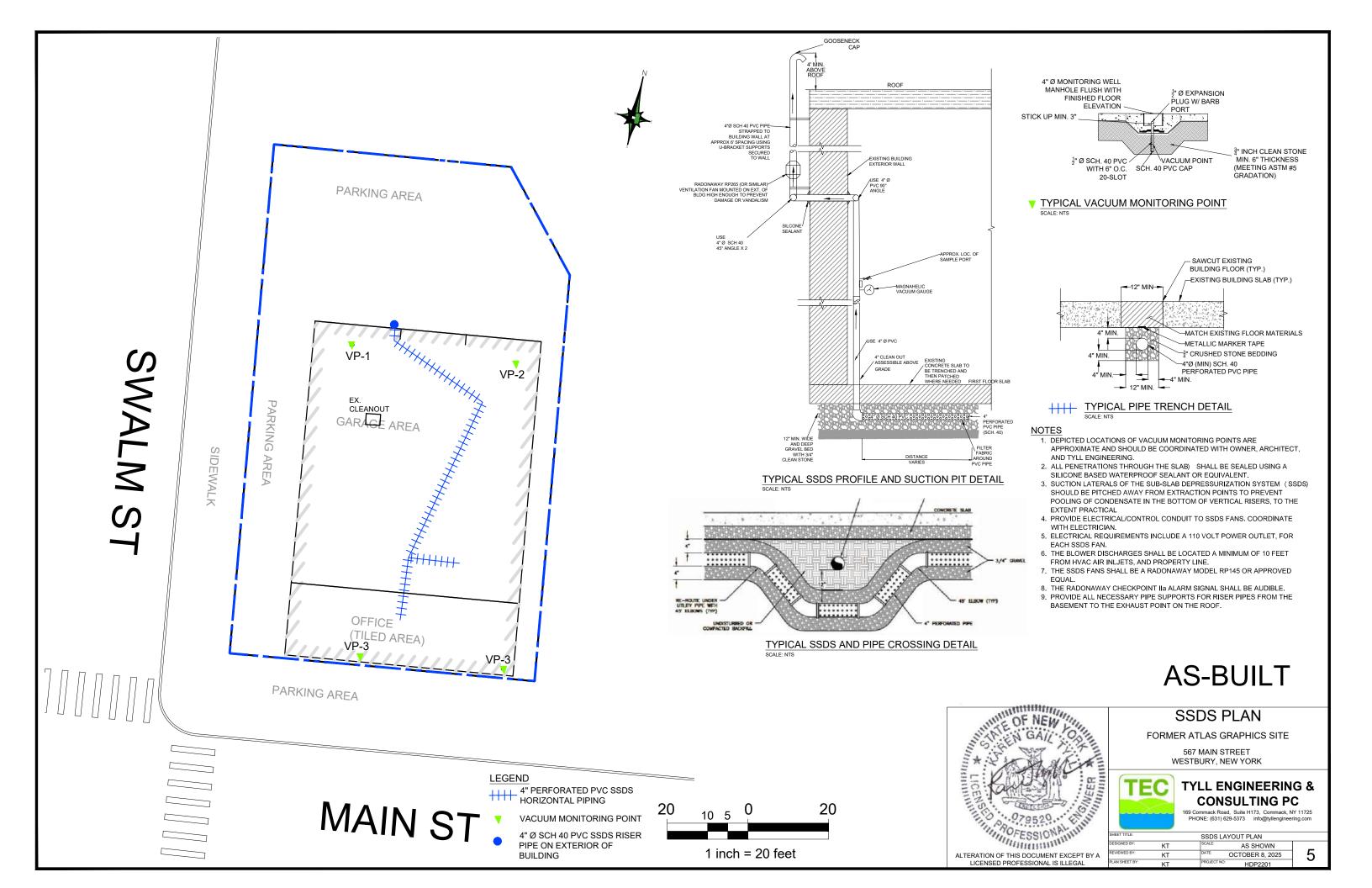
169 Commack Road, Sulte H173, Commack, NY 11725 PHONE: (631) 629-5373 info@tyllengineering.com

WESTBURY, NEW YORK

DRAWN:	SCALE:	DATE:	PROJECT NO.:	
=	NTS	04-31-2025	HDP2201	
CHECKED:	APPROVED:	REVISION:	NOTES:	
KT	KT	-	-	
FIGURE NO.: 2				









Appendix A

List of Site Contacts

Appendix A - LIST OF SITE CONTACTS

Name	Phone/Email Address
Site Owner and Remedial Party	609-551-2726
H.D.P Printing Industries Corporation	macalingo2@aol.com
2459 Broadmoor Lane, Spring Hill, Florida 34606	skywalker79_rgr@yahoo.com
Qualified Environmental Professional/Remedial Engineer	631-629-5373
Karen Tyll, PE	Karen@tyllengineering.com
Tyll Engineering and Consulting PC	
Remedial Party Attorney	516-496-9044
Kenneth Robinson, Esq.	envlaw516@aol.com
Robinson & Associates, P.C.	
NYSDEC DER Project Manager	518-402-9613
Joseph Jones	joseph.jones@dec.ny.gov
NYSDEC Section Chief	518-402-9658
Bob Corcoran, PE	bob.corcoran@dec.ny.gov
NYSDEC Bureau Director	518-402-9647
Richard Mustico	richard.mustico1@dec.ny.gov
NYSDEC Attorney	914-428-2505
Alali Tamuno,Esq.	alali.tamuno@dec.ny.gov
NYSDOH Project Manager	518-402-7860
Michele Dolan	michele.dolan@health.ny.gov



Appendix B

Excavation Work Plan

EXCAVATION WORK PLAN

1.0 NOTIFICATION

At least 15 days prior to the start of any activity that is anticipated to encounter remaining contamination or breach or alter the site's cover system, the site owner or their representative will notify the NYSDEC contacts listed in the table below. **Table 1-1** includes contact information for the above notification. The information on this table will be updated as necessary to provide accurate contact information. A full listing of site-related contact information is provided in **Attachment A** of the SMP.

Table 1-1: Notifications*

NYSDEC DER Project Manager	518-402-9613
Joseph Jones	joseph.jones@dec.ny.gov
NYSDEC Section Chief	518-402-9658
Bob Corcoran, PE	bob.corcoran@dec.ny.gov
NYSDEC Bureau Director	518-402-9647
Richard Mustico	richard.mustico1@dec.ny.gov

^{*} Note: Notifications are subject to change and will be updated as necessary.

This notification will include:

- A detailed description of the work to be performed, including the location and areal extent of
 excavation, plans/drawings for site re-grading, intrusive elements or utilities to be installed
 below the soil cover, estimated volumes of contaminated soil to be excavated, any
 modifications of truck routes, and any work that may impact an engineering control;
- A summary of environmental conditions anticipated to be encountered in the work areas, including the nature and concentration levels of contaminants of concern, potential presence of grossly contaminated media, and plans for any pre-construction sampling;
- A schedule for the work, detailing the start and completion of all intrusive work, and submittals (e.g., reports) to the NYSDEC documenting the completed intrusive work;
- A summary of the applicable components of this EWP;

- A statement that the work will be performed in compliance with this EWP, 29 CFR 1910.120
 and 29 CFR 1926 Subpart P;
- A copy of the contractor's health and safety plan (HASP), in electronic format, if it differs from the HASP provided in **Appendix E** of this SMP;
- Identification of disposal facilities for potential waste streams; and
- Identification of sources of any anticipated backfill, along with the required request to import form and all supporting documentation including, but not limited to, chemical testing results.

2.0 SOIL SCREENING METHODS

Visual, olfactory and instrument-based (e.g. photoionization detector) soil screening will be performed during all excavations into known or potentially contaminated material (remaining contamination) or a breach of the cover system. A qualified environmental professional as defined in 6 NYCRR Part 375, a PE who is licensed and registered in New York State, or a qualified person who directly reports to a PE who is licensed and registered in New York State will perform the screening. Soil screening will be performed when invasive work is done and will include all excavation and invasive work performed during development, such as excavations for foundations and utility work, after issuance of the COC.

Soils will be segregated based on previous environmental data and screening results into material that requires off-site disposal and material that requires testing to determine if the material can be reused on-site as soil beneath a cover or if the material can be used as cover soil. Further discussion of off-site disposal of materials and on-site reuse is provided in **Section 5** of this Excavation Work Plan.

3.0 SOIL STAGING METHODS

Soil stockpiles will be continuously encircled with a berm and/or silt fence. Hay bales will be used as needed near catch basins, surface waters and other discharge points.

Stockpiles will be kept covered at all times with appropriately anchored tarps. Stockpiles will be routinely inspected and damaged tarp covers will be promptly replaced.

Stockpiles will be inspected at a minimum once each week and after every storm event. Results of inspections will be recorded in a logbook and maintained at the site and available for inspection by the NYSDEC.

4.0 MATERIALS EXCAVATION AND LOAD-OUT

A qualified environmental professional as defined in 6 NYCRR Part 375, a PE who is licensed and registered in New York State, or a qualified person who directly reports to a PE who is licensed and registered in New York State will oversee all invasive work and the excavation and load-out of all excavated material.

The owner of the property and remedial party (if applicable) and its contractors are responsible for safe execution of all invasive and other work performed under this Plan.

The presence of utilities and easements on the site will be investigated by the qualified environmental professional. It will be determined whether a risk or impediment to the planned work under this SMP is posed by utilities or easements on the site. A site utility stakeout will be completed for all utilities prior to any ground intrusive activities at the site.

Loaded vehicles leaving the site will be appropriately lined, tarped, securely covered, manifested, and placarded in accordance with appropriate Federal, State, local, and NYSDOT requirements (and all other applicable transportation requirements). Trucks transporting contaminated soil must have either tight-fitting opaque covers that are secured on the sides and/or back, or opaque covers that are locked on all sides.

A truck wash will be operated on-site, as appropriate. The qualified environmental professional will be responsible for ensuring that all outbound trucks will be washed at the truck wash before leaving the site until the activities performed under this section are complete. Truck wash waters will be collected and disposed of off-site in an appropriate manner.

Locations where vehicles enter or exit the site shall be inspected daily for evidence of off-site soil tracking.

The qualified environmental professional will be responsible for ensuring that all egress points for truck and equipment transport from the site are clean of dirt and other materials derived from the site during intrusive excavation activities. Cleaning of the adjacent streets will be performed as needed to maintain a clean condition with respect to site-derived materials. Material accumulated from the street cleaning and egress cleaning activities will be disposed off-site at a permitted landfill facility in accordance with all applicable local, State, and Federal regulations.

5.0 MATERIALS TRANSPORT OFF-SITE

All transport of materials will be performed by licensed haulers in accordance with appropriate local, State, and Federal regulations, including 6 NYCRR Part 364. Haulers will be appropriately licensed and trucks properly placarded.

Material transported by trucks exiting the site will be secured with either tight-fitting opaque covers that are secured on the sides and/or back, or opaque covers that are locked on all sides. Loose-fitting canvastype truck covers will be prohibited. If loads contain wet material capable of producing free liquid, truck liners will be used.

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

Trucks will be prohibited from stopping and idling in the neighborhood outside the project site.

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

Queuing of trucks will be performed on-site, if possible, in order to minimize off-site disturbance. Off-site queuing will be prohibited.

6.0 MATERIALS DISPOSAL OFF-SITE

All material excavated and removed from the site will be treated as contaminated and regulated material and will be transported and disposed off-site in a permitted facility in accordance with all local, State and Federal regulations. If disposal of material from this site is proposed for unregulated off-site disposal (i.e. clean soil removed for development purposes), a formal request with an associated plan will be made to the NYSDEC project manager. Unregulated off-site management of materials from this site will not occur without formal NYSDEC project manager approval.

Off-site disposal locations for excavated soils will be identified in the pre-excavation notification. This will include estimated quantities and a breakdown by class of disposal facility if appropriate, (e.g. hazardous waste disposal facility, solid waste landfill, petroleum treatment facility, C&D debris recovery facility). Actual disposal quantities and associated documentation will be reported to the NYSDEC in the Periodic

Review Report. This documentation will include, but will not be limited to: waste profiles, test results, facility acceptance letters, manifests, bills of lading and facility receipts.

Non-hazardous historic fill and contaminated soils taken off-site will be handled consistent with 6 NYCRR Parts 360, 361, 362, 363, 364 and 365. Material that does not meet Unrestricted SCOs is prohibited from being taken to a New York State C&D debris recovery facility (6 NYCRR Subpart 360-15 registered or permitted facility).

7.0 MATERIALS REUSE ON-SITE

The qualified environmental professional, as defined in 6 NYCRR Part 375, will ensure that procedures defined for materials reuse in this SMP are followed and that unacceptable material (i.e. contaminated) does not remain on-site. Contaminated on-site material, including historic fill and contaminated soil, that is acceptable for reuse on-site will be placed below the demarcation layer or impervious surface, and will not be reused within the cover system or within landscaping berms. Contaminated on-site material may only be used beneath the site cover as backfill for subsurface utility lines with prior approval from the DEC project manager.

Proposed materials for reuse on-site must be sampled for full suite analytical parameters including perand polyfluoroalkyl substances (PFAS) and 1,4-dioxane. The sampling frequency will be in accordance with DER-10 Table 5.4(e)10 unless prior approval is obtained from the NYSDEC project manager for modification of the sampling frequency. The analytical results of soil/fill material testing must meet the site use criteria presented in NYSDEC DER-10 Appendix 5 – Allowable Constituent Levels for Imported Fill or Soil for all constituents listed, and the NYSDEC Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances (November 2022) guidance values. Approvals for modifications to the analytical parameters must be obtained from the NYSDEC project manager prior to the sampling event.

Soil/fill material for reuse on-site will be segregated and staged as described in **Sections 2 and 3** of this EWP. The anticipated size and location of stockpiles will be provided in the 15-day notification to the NYSDEC project manager. Stockpile locations will be based on the location of site excavation activities and proximity to nearby site features. Material reuse on-site will comply with requirements of NYSDEC DER-10 Section 5.4(e)4. Any modifications to the requirements of DER-10 Section 5.4(e)4 must be approved by the NYSDEC project manager.

Any demolition material proposed for reuse on-site will be sampled for asbestos and the results will be reported to the NYSDEC for acceptance. Concrete crushing or processing on-site will not be performed without prior NYSDEC approval. Organic matter (wood, roots, stumps, etc.) or other solid waste derived from clearing and grubbing of the site will not be reused on-site.

8.0 FLUIDS MANAGEMENT

All liquids to be removed from the site, including but not limited to, excavation dewatering, decontamination waters and groundwater monitoring well purge and development waters, will be handled, transported and disposed off-site at a permitted facility in accordance with applicable local, State, and Federal regulations. Dewatering, purge and development fluids will not be recharged back to the land surface or subsurface of the site, and will be managed off-site, unless prior approval is obtained from NYSDEC.

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

9.0 BACKFILL FROM OFF-SITE SOURCES

All materials proposed for import onto the site will be approved by the qualified environmental professional, as defined in 6 NYCRR Part 375, and will be in compliance with provisions in this SMP prior to receipt at the site. A Request to Import/Reuse Fill or Soil form, which can be found at http://www.dec.ny.gov/regulations/67386.html, will be prepared and submitted to the NYSDEC project manager allowing a minimum of 5 business days for review. A copy of the form is presented in **Attachment A**.

Material from industrial sites, spill sites, other environmental remediation sites, or potentially contaminated sites will not be imported to the site.

All imported soils will meet the backfill and cover soil quality standards established in 6 NYCRR 375-6.7(d) and DER-10 Appendix 5 for Light Industrial/Commercial. Based on an evaluation of the land use, protection of groundwater and protection of ecological resources criteria, the resulting soil quality standards are listed in **Table 9-1**. Soils that meet 'general' fill requirements under 6 NYCRR Part 360.13, but do not meet backfill or cover soil objectives for this site, will not be imported onto the site without prior approval by NYSDEC project manager. Soil material will be sampled for the full suite of analytical parameters, including PFAS and 1, 4-dioxane. Solid waste will not be imported onto the site.

Trucks entering the site with imported soils will be securely covered with tight fitting covers. Imported soils will be stockpiled separately from excavated materials and covered to prevent dust releases.

10.0 STORMWATER POLLUTION PREVENTION

This site is less than 1 acre, a Stormwater Pollution Prevention Plan is not required.

Barriers and hay bale checks will be installed and inspected once a week and after every storm event. Results of inspections will be recorded in a logbook and maintained at the site and available for inspection by the NYSDEC. All necessary repairs shall be made immediately.

Accumulated sediments will be removed as required to keep the barrier and hay bale check functional.

All undercutting or erosion of the silt fence toe anchor shall be repaired immediately with appropriate backfill materials.

Manufacturer's recommendations will be followed for replacing silt fencing damaged due to weathering.

Erosion and sediment control measures identified in the SMP shall be observed to ensure that they are operating correctly. Where discharge locations or points are accessible, they shall be inspected to ascertain whether erosion control measures are effective in preventing significant impacts to receiving waters.

Silt fencing or hay bales will be installed around the entire perimeter of the construction area.

11.0 EXCAVATION CONTINGENCY PLAN

If underground tanks or other previously unidentified contaminant sources are found during postremedial subsurface excavations or development related construction, excavation activities will be suspended until sufficient equipment is mobilized to address the condition. The NYSDEC project manager will be promptly notified of the discovery.

Sampling will be performed on product, sediment and surrounding soils, etc. as necessary to determine the nature of the material and proper disposal method. Chemical analysis will be performed for a full list of analytes [TAL metals, TCL volatiles and semi-volatiles (including 1,4-dioxane), TCL pesticides and PCBs, and PFAS], unless the site history and previous sampling results provide sufficient justification to limit the

list of analytes. In this case, a reduced list of analytes will be proposed to the NYSDEC project manager for approval prior to sampling. Any tanks will be closed as per NYSDEC regulations and guidance.

Identification of unknown or unexpected contaminated media identified by screening during invasive site work will be promptly communicated by phone within two hours to NYSDEC's Project Manager. Reportable quantities of petroleum product will also be reported to the NYSDEC spills hotline. These findings will be also included in the Periodic Review Report.

12.0 COMMUNITY AIR MONITORING PLAN

This section should provide all details of the Community Air Monitoring Plan. Guidance can be obtained in Appendix 1A of DER-10, Generic Community Air Monitoring Plan. At a minimum, this section must include:

- Details of the perimeter air monitoring program;
- Action levels to be used;
- Air monitoring methods;
- Analytes measured and instrumentation to be used;
- A figure of the location(s) of all air monitoring instrumentation. A figure showing specific locations
 must be presented for monitoring stations based on generally prevailing wind conditions, with a
 note that the exact locations to be monitored on a given day will be established based on the daily
 wind direction.

A figure showing the location of air sampling stations based on generally prevailing wind conditions is will be provided by Project Team. These locations will be adjusted on a daily or more frequent basis based on actual wind directions to provide an upwind and at least two downwind monitoring stations.

Exceedances of action levels listed in the CAMP will be reported to NYSDEC and NYSDOH Project Managers.

13.0 DUST CONTROL PLAN

Particulate monitoring must be conducted according to the Community Air Monitoring Plan (CAMP) provided in Section 12. If particulate levels at the site exceed the thresholds listed in the CAMP or if airborne dust is observed on the site or leaving the site, the dust suppression techniques listed below will be employed. The remedial party will also take measures listed below to prevent dust production on the site.

A dust suppression plan that addresses dust management during invasive on-site work will include, at a minimum, the items listed below:

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

Add other measures that will be taken to prevent dust production and suppress dust.

DER-10

Appendix 5 Allowable Constituent Levels for Imported Fill or Soil Subdivision 5.4(e)

Source: This table is derived from soil cleanup objective (SCO) tables in 6 NYCRR 375. Table 375-6.8(a) is the source for unrestricted use and Table 375-6.8(b) is the source for restricted use.

Note: For constituents not included in this table, refer to the contaminant for supplemental soil cleanup objectives (SSCOs) in the Commissioner Policy on <u>Soil Cleanup Guidance</u>. If an SSCO is not provided for a constituent, contact the DER PM to determine a site-specific level.

Constituent	Unrestricted Use	Residential Use	Restricted Residential Use	Commercial or Industrial Use	If Ecological Resources are Present
Metals	-			-	-
Arsenic	13	16	16	16	13
Barium	350	350	400	400	433
Beryllium	7.2	14	47	47	10
Cadmium	2.5	2.5	4.3	7.5	4
Chromium, Hexavalent ¹	1 3	19	19	19	1 3
Chromium, Trivalent ¹	30	36	180	1500	41
Copper	50	270	270	270	50
Cyanide	27	27	27	27	NS
Lead	63	400	400	450	63
Manganese	1600	2000	2000	2000	1600
Mercury (total)	0.18	0.73	0.73	0.73	0.18
Nickel	30	130	130	130	30
Selenium	3.9	4	4	4	3.9
Silver	2	8.3	8.3	8.3	2
Zinc	109	2200	2480	2480	109
PCBs/Pesticides	- 1		<u>-</u>	<u> </u>	<u>-</u>
2,4,5-TP Acid (Silvex)	3.8	3.8	3.8	3.8	NS
4,4'-DDE	0.0033 3	1.8	8.9	17	0.0033 3
4,4'-DDT	0.0033 3	1.7	7.9	47	0.0033 3
4,4'-DDD	0.0033 3	2.6	13	14	0.0033 3
Aldrin	0.005	0.019	0.097	0.19	0.14
Alpha-BHC	0.02	0.02	0.02	0.02	0.04^{4}
Beta-BHC	0.036	0.072	0.09	0.09	0.6
Chlordane (alpha)	0.094	0.91	2.9	2.9	1.3
Delta-BHC	0.04	0.25	0.25	0.25	0.04 4
Dibenzofuran	7	14	59	210	NS
Dieldrin	0.005	0.039	0.1	0.1	0.006
Endosulfan I	2.4^{2}	4.8	24	102	NS
Endosulfan II	2.4^{2}	4.8	24	102	NS
Endosulfan sulfate	2.4^{2}	4.8	24	200	NS
Endrin	0.014	0.06	0.06	0.06	0.014
Heptachlor	0.042	0.38	0.38	0.38	0.14
Lindane	0.1	0.1	0.1	0.1	6
Polychlorinated biphenyls	0.1	1	1	1	1

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Constituent	Unrestricted Use	Residential Use	Restricted Residential Use	Commercial or Industrial Use	If Ecological Resources are Present		
Semi-volatile Organic Compo	Semi-volatile Organic Compounds						
Acenaphthene	20	98	98	98	20		
Acenaphthylene	100	100	100	107	NS		
Anthracene	100	100	100	500	NS		
Benzo(a)anthracene	1	1	1	1	NS		
Benzo(a)pyrene	1	1	1	1	2.6		
Benzo(b)fluoranthene	1	1	1	1.7	NS		
Benzo(g,h,i)perylene	100	100	100	500	NS		
Benzo(k)fluoranthene	0.8	1	1.7	1.7	NS		
Chrysene	1	1	1	1	NS		
Dibenz(a,h)anthracene	0.33 ³	0.33^{3}	0.33^{3}	0.56	NS		
Fluoranthene	100	100	100	500	NS		
Fluorene	30	100	100	386	30		
Indeno(1,2,3-cd)pyrene	0.5	0.5	0.5	5.6	NS		
m-Cresol(s)	0.33 ³	0.33 3	0.33 ³	0.33 3	NS		
Naphthalene	12	12	12	12	NS		
o-Cresol(s)	0.33 ³	0.33 ³	0.33 ³	0.33 3	NS		
p-Cresol(s)	0.33	0.33	0.33	0.33	NS		
Pentachlorophenol	0.8 3	0.8 3	0.8^{-3}	0.8 3	$0.8^{\ 3}$		
Phenanthrene	100	100	100	500	NS		
Phenol	0.33 ³	0.33 ³	0.33 ³	0.33^{3}	30		
Pyrene	100	100	100	500	NS		
Volatile Organic Compounds							
1,1,1-Trichloroethane	0.68	0.68	0.68	0.68	NS		
1,1-Dichloroethane	0.27	0.27	0.27	0.27	NS		
1,1-Dichloroethene	0.33	0.33	0.33	0.33	NS		
1,2-Dichlorobenzene	1.1	1.1	1.1	1.1	NS		
1,2-Dichloroethane	0.02	0.02	0.02	0.02	10		
1,2-Dichloroethene(cis)	0.25	0.25	0.25	0.25	NS		
1,2-Dichloroethene(trans)	0.19	0.19	0.19	0.19	NS		
1,3-Dichlorobenzene	2.4	2.4	2.4	2.4	NS		
1,4-Dichlorobenzene	1.8	1.8	1.8	1.8	20		
1,4-Dioxane	0.1 3	0.1 3	0.1 3	0.1 3	0.1		
Acetone	0.05	0.05	0.05	0.05	2.2		
Benzene	0.06	0.06	0.06	0.06	70		
Butylbenzene	12	12	12	12	NS		
Carbon tetrachloride	0.76	0.76	0.76	0.76	NS		
Chlorobenzene	1.1	1.1	1.1	1.1	40		
Chloroform	0.37	0.37	0.37	0.37	12		
Ethylbenzene	1	1	1	1	NS		
Hexachlorobenzene	0.33 3	0.33 ³	1.2	3.2	NS		
Methyl ethyl ketone	0.12	0.12	0.12	0.12	100		
Methyl tert-butyl ether	0.93	0.93	0.93	0.93	NS		
Methylene chloride	0.05	0.05	0.05	0.05	12		

Volatile Organic Compounds	(continued)				
Propylbenzene-n	3.9	3.9	3.9	3.9	NS
Sec-Butylbenzene	11	11	11	11	NS
Tert-Butylbenzene	5.9	5.9	5.9	5.9	NS
Tetrachloroethene	1.3	1.3	1.3	1.3	2
Toluene	0.7	0.7	0.7	0.7	36
Trichloroethene	0.47	0.47	0.47	0.47	2
Trimethylbenzene-1,2,4	3.6	3.6	3.6	3.6	NS
Trimethylbenzene-1,3,5	8.4	8.4	8.4	8.4	NS
Vinyl chloride	0.02	0.02	0.02	0.02	NS
Xylene (mixed)	0.26	1.6	1.6	1.6	0.26

All concentrations are in parts per million (ppm)

NS = Not Specified

Footnotes:

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Tourics.

The SCO for Hexavalent or Trivalent Chromium is considered to be met if the analysis for the total species of this contaminant is below the specific SCO for Hexavalent Chromium.

The SCO is the sum of endosulfan I, endosulfan II and endosulfan sulfate.

³ For constituents where the calculated SCO was lower than the contract required quantitation limit (CRQL), the CRQL is used as the Track 1 SCO value.

⁴ This SCO is derived from data on mixed isomers of BHC.

Excavation Work Plan Attachment A



NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION



Request to Import/Reuse Fill or Soil

This form is based on the information required by DER-10, Section 5.4(e) and 6NYCRR Part 360.13. Use of this form is not a substitute for reading the applicable regulations and Technical Guidance document.

SECTION 1 – SITE BACKGROUND
Site Name:
Site Number:
The allowable site use is:
Have Ecological Resources been identified?
Is this soil originating from the site?
How many cubic yards of soil will be imported/reused? If greater than 1000 cubic yards will be imported, enter volume to be imported:
SECTION 2 – MATERIAL OTHER THAN SOIL
Is the material to be imported gravel, rock or stone?
Does it contain less than 10%, by weight, material that passes a size 100 sieve?
Is this virgin material from a permitted mine or quarry?
Is this material recycled concrete or brick from a DEC registered processing facility?
SECTION 3 - SAMPLING
Provide a brief description of the number and type of samples collected in the space below:
Example Text: 5 discrete samples were collected and analyzed for VOCs. 2 composite samples were collected and analyzed for SVOCs, Inorganics & PCBs/Pesticides.

If the material meets requirements of DER-10 section 5.4(e)5 (other material), no chemical testing needed.

SECTION 3 CONT'D - SAMPLING
Provide a brief written summary of the sampling results or attach evaluation tables (compare to DER-10, Appendix 5):
Example Text: Arsenic was detected up to 17 ppm in 1 (of 5) samples; the allowable level is 16 ppm.
If Ecological Resources have been identified use the "If Ecological Resources are Present" column in Appendix 5.
SECTION 4 – SOURCE OF FILL
Name of person providing fill and relationship to the source:
Name and address of fill source:
Location where fill was obtained:
Identification of any state or local approvals as a fill source:
If no approvals are available, provide a brief history of the use of the property that is the fill source:
Provide a list of supporting documentation included with this request:
Revised February 2025

The information provided on this form is	accurate and complete.
Signature	Date
Print Name	
Firm	



Appendix C

Environmental Easement

H.D.P. Printing Industries Corp. 2459 Broadmoor Lane Spring Hill, New York 22406

June 27, 2024 Hon. Jennifer DeSena Supervisor Town of North Hempstead 220 Plandome Road Manhasset, New York 11030

Re:

Environmental Easement

Dear Supervisor DeSena:

Attached please find a copy of an environmental easement granted to the New York State Department of Environmental Conservation ("Department")

on June 24, 2024
by H.D. P. Printing Industries Corp.
for property at 567 Main Street, Westbury, New York 11590
Tax Map No. Section 11, Block 164, Lot 68
DEC Site No: 130043B

This Environmental Easement restricts future use of the above-referenced property to commercial uses. Any on-site activity must be done in accordance with the Environmental Easement and the Site Management Plan which is incorporated into the Environmental Easement. Department approval is also required prior to any ground water use.

Article 71, Section 71-3607 of the New York State Environmental Conservation Law requires that:

- Whenever the department is granted an environmental easement, it shall provide each affected local government with a copy of such easement and shall also provide a copy of any documents modifying or terminating such environmental easement.
- 2. Whenever an affected local government receives an application for a building permit or any other application affecting land use or development of land that is subject to an environmental easement and that may relate to or impact such easement, the affected local government shall notify the department and refer such application to the department. The department shall evaluate whether the application is consistent with the environmental easement and shall notify the affected local government of its determination in a timely fashion, considering the time frame for the local government's review of the application. The affected local

government shall not approve the application until it receives approval from the department.

An electronic version of every environmental easement that has been accepted by the Department is available to the public at: http://www.dec.ny.gov/chemical/36045.html. Please forward this notice to your building and/or planning departments, as applicable, to ensure your compliance with these provisions of New York State Environmental Conservation Law. If you have any questions or comments regarding this matter, please do not hesitate to contact me.

Very truly yours,

Richard Degenhardt, President

H.D.P. Printing Industries Corp.

Letters HDP 624revised

SENDER: COMPLETE THIS SECTION	COMPLETE THIS SECTION ON	DELIVERY
 Complete items 1, 2, and 3. Print your name and address on the reverse so that we can return the card to you. 	A. Signature	☐ Agent ☐ Addressee
Attach this card to the back of the mailpiece, or on the front if space permits.	B. Received by (Printed Name)	C. Date of Delivery
Article Addressed to:	 D. Is delivery address different from If YES, enter delivery address 	
Hon. Jennifer DeSena Supervisor Town of North Hempstead 220 Plandome Road Manhasset, New York 11030		
9590 9402 8719 3310 8846 86	3. Service Type Adult Signature Adult Signature Restricted Delivery Certified Mail® Certified Mail® Certified Mail® Certified Mail®	☐ Priority Mail Express® ☐ Registered Mail* ☐ Registered Mail Restricter Delivery ☐ Signature Confirmation* ☐ Signature Confirmation
Article Number (Transfer from service label)	Collect on Delivery Restricted Delivery	Restricted Delivery

GENTIFIED WAIL.



7012 1640 0000 8166 9472

H.D.P. Printing Industries Corp. 2459 Broadmoor Lane Spring Hill, New York 22406

> Hon. Jennifer DeSena Supervisor Town of North Hempstead 220 Plandome Road Manhasset, New York 11030

U.S. Postal Service CERTIFIED MAIL RECEIPT 9472 (Domestic Mail Only; No Insurance Coverage Provided) For delivery information visit our website at www.usps.com@ 9918 0000 Postage \$ Certified Fee \$0.00/ \$0.00 Return Receipt Fee (Endorsement Required) \$0.00 Restricted Delivery Fee (Endorsement Required)
\$2.14
Total Postage & Fees
\$10.99
Sent To 1140 Street, Apt. No.; or PO Box No. City, State, ZIP onhaire to PS Form 3800, August 2006

**** Electronically Filed Document ****

Instrument Number: 2024-41019

CORPORATION SERVICE COMPANY

Recorded As:

EX-D06 - DEED AGREEM

Recorded On:

July 09, 2024

Recorded At:

11:02:30 am

Receipt Number:

3221176

Number of Pages: 11

Processed By:

001 MAC

Book-VI/Pg:

Bk-D VI-14515 Pg-217

Total Rec Fee(s):

\$400.00

** Examined and Charged as Follows **

06 - DEED AGREEMENT

\$ 95.00

EX-Blocks - Deeds - \$300

\$ 300.00

EX-TP-584 Affidavit Fee

\$ 5.00

Consid Amt RS#/CS# **Tax Amount**

\$0

\$0 RE 21804

\$ 0.00 Basic

\$ 0.00 Local NY CITY Additional MTA

\$ 0.00

Spec ASST Spec ADDL SONYMA \$ 0.00 \$ 0.00

Transfer

\$ 0.00

Tax Charge:

Tax-Transfer N. HEMPSTEAD

\$0

Property Information:

Section	Block	Lot	Unit	Town Name
******	****	*****	********	******************
11	164	68		N. HEMPSTEAD

Any provision herein which restricts the Sale, Rental or use of the described REAL PROPERTY because of color or race is invalid and unenforceable under federal law.



County Clerk Maureen O'Connell

County: Nassau Site No: 130043B Order on Consent Index : CO 1-20201229-205

OF THE NEW YORK STATE ENVIRONMENTAL CONSERVATION LAW

THIS INDENTURE made this 24th day of June, 2024, between Owner, H.D.P. Printing Industries Corp., having an office at 2459 Broadmoar Lane, Spring Hill, County of Hernando, State of Florida (the "Grantor"), and The People of the State of New York (the "Grantee"), acting through their Commissioner of the Department of Environmental Conservation (the "Commissioner", or "NYSDEC" or "Department" as the context requires) with its headquarters located at 625 Broadway, Albany, New York 12233,

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

B-164

1-68

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

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

WHEREAS, Grantor, is the owner of real property located at the address of 567 Main Street in the Village of Westbury, County of Nassau and State of New York, known and designated on the tax map of the County Clerk of Nassau as tax map parcel number: Section 11 Block 164 Lot 68, being the same as that property conveyed to Grantor by deed dated May 27, 1977 and recorded in the Nassua County Clerk's Office in Liber and Page 9038/151. The property subject to this Environmental Easement (the "Controlled Property") comprises approximately 0.21 +/- acres, and is hereinafter more fully described in the Land Title Survey dated November 17, 2023, prepared by Peter J. Brabazon, which will be attached to the Site Management Plan. The Controlled Property description is set forth in and attached hereto as Schedule A; and

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

NOW THEREFORE, in consideration of the mutual covenants contained herein and the terms and conditions of Order on Consent Index Number: CO 1-20201229-205, Grantor conveys to Grantee a permanent Environmental Easement pursuant to ECL Article 71, Title 36 in, on, over, under, and upon the Controlled Property as more fully described herein ("Environmental Easement").

- 1. <u>Purposes</u>. Grantor and Grantee acknowledge that the Purposes of this Environmental Easement are: to convey to Grantee real property rights and interests that will run with the land in perpetuity in order to provide an effective and enforceable means of encouraging the reuse and redevelopment of this Controlled Property at a level that has been determined to be safe for a specific use while ensuring the performance of operation, maintenance, and/or monitoring requirements; and to ensure the restriction of future uses of the land that are inconsistent with the above-stated purpose.
- 2. <u>Institutional and Engineering Controls</u>. The controls and requirements listed in the Department approved Site Management Plan ("SMP") including any and all Department approved amendments to the SMP are incorporated into and made part of this Environmental Easement. These controls and requirements apply to the use of the Controlled Property, run with the land, are binding on the Grantor and the Grantor's successors and assigns, and are enforceable in law or equity against any owner of the Controlled Property, any lessees and any person using the Controlled Property.
 - A. (1) The Controlled Property may be used for:

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

- All Engineering Controls must be operated and maintained as specified in the Site Management Plan (SMP);
- (3) All Engineering Controls must be inspected at a frequency and in a manner defined in the SMP;
- (4) The use of groundwater underlying the property is prohibited without necessary water quality treatment as determined by the NYSDOH or the Nassau County Department of Health to render it safe for use as drinking water or for industrial purposes, and the user must first notify and obtain written approval to do so from the Department;
- (5) Groundwater and other environmental or public health monitoring must be performed as defined in the SMP;
- (6) Data and information pertinent to Site Management of the Controlled Property must be reported at the frequency and in a manner defined in the SMP;
- (7) All future activities on the property that will disturb remaining contaminated material must be conducted in accordance with the SMP;

County: Nassau Site No: 130043B Order on Consent Index : CO 1-20201229-205

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

- (9) Operation, maintenance, monitoring, inspection, and reporting of any mechanical or physical components of the remedy shall be performed as defined in the SMP;
- (10) Access to the site must be provided to agents, employees or other representatives of the State of New York with reasonable prior notice to the property owner to assure compliance with the restrictions identified by this Environmental Easement.
- B. The Controlled Property shall not be used for Residential or Restricted Residential purposes as defined in 6NYCRR 375-1.8(g)(2)(i) and (ii), and the above-stated engineering controls may not be discontinued without an amendment or extinguishment of this Environmental Easement.
- C. The SMP describes obligations that the Grantor assumes on behalf of Grantor, its successors and assigns. The Grantor's assumption of the obligations contained in the SMP which may include sampling, monitoring, and/or operating a treatment system, and providing certified reports to the NYSDEC, is and remains a fundamental element of the Department's determination that the Controlled Property is safe for a specific use, but not all uses. The SMP may be modified in accordance with the Department's statutory and regulatory authority. The Grantor and all successors and assigns, assume the burden of complying with the SMP and obtaining an up-to-date version of the SMP from:

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

- D. Grantor must provide all persons who acquire any interest in the Controlled Property a true and complete copy of the SMP that the Department approves for the Controlled Property and all Department-approved amendments to that SMP.
- E. Grantor covenants and agrees that until such time as the Environmental Easement is extinguished in accordance with the requirements of ECL Article 71, Title 36 of the ECL, the property deed and all subsequent instruments of conveyance relating to the Controlled Property shall state in at least fifteen-point bold-faced type:

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

- F. Grantor covenants and agrees that this Environmental Easement shall be incorporated in full or by reference in any leases, licenses, or other instruments granting a right to use the Controlled Property.
- G. Grantor covenants and agrees that it shall, at such time as NYSDEC may require, submit to NYSDEC a written statement by an expert the NYSDEC may find acceptable certifying under penalty of perjury, in such form and manner as the Department may require, that:
- (1) the inspection of the site to confirm the effectiveness of the institutional and engineering controls required by the remedial program was performed under the direction of the individual set forth at 6 NYCRR Part 375-1.8(h)(3).
 - (2) the institutional controls and/or engineering controls employed at such site:
 - (i) are in-place;
- (ii) are unchanged from the previous certification, or that any identified changes to the controls employed were approved by the NYSDEC and that all controls are in the Department-approved format; and
- (iii) that nothing has occurred that would impair the ability of such control to protect the public health and environment;
- (3) the owner will continue to allow access to such real property to evaluate the continued maintenance of such controls;
- (4) nothing has occurred that would constitute a violation or failure to comply with any site management plan for such controls;
- (5) the report and all attachments were prepared under the direction of, and reviewed by, the party making the certification;
- (6) to the best of his/her knowledge and belief, the work and conclusions described in this certification are in accordance with the requirements of the site remedial program, and generally accepted engineering practices; and
 - (7) the information presented is accurate and complete.
- Right to Enter and Inspect. Grantee, its agents, employees, or other representatives of the State may enter and inspect the Controlled Property in a reasonable manner and at reasonable times to assure compliance with the above-stated restrictions.
- 4. <u>Reserved Grantor's Rights</u>. Grantor reserves for itself, its assigns, representatives, and successors in interest with respect to the Property, all rights as fee owner of the Property, including:
- A. Use of the Controlled Property for all purposes not inconsistent with, or limited by the terms of this Environmental Easement;
- B. The right to give, sell, assign, or otherwise transfer part or all of the underlying fee interest to the Controlled Property, subject and subordinate to this Environmental Easement;

Enforcement

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

County: Nassau Site No: 130043B Order on Consent Index : CO 1-20201229-205

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

- B. If any person violates this Environmental Easement, the Grantee may revoke the Certificate of Completion with respect to the Controlled Property.
- C. Grantee shall notify Grantor of a breach or suspected breach of any of the terms of this Environmental Easement. Such notice shall set forth how Grantor can cure such breach or suspected breach and give Grantor a reasonable amount of time from the date of receipt of notice in which to cure. At the expiration of such period of time to cure, or any extensions granted by Grantee, the Grantee shall notify Grantor of any failure to adequately cure the breach or suspected breach, and Grantee may take any other appropriate action reasonably necessary to remedy any breach of this Environmental Easement, including the commencement of any proceedings in accordance with applicable law.
- D. The failure of Grantee to enforce any of the terms contained herein shall not be deemed a waiver of any such term nor bar any enforcement rights.
- 6. <u>Notice</u>. Whenever notice to the Grantee (other than the annual certification) or approval from the Grantee is required, the Party providing such notice or seeking such approval shall identify the Controlled Property by referencing the following information:

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

Parties shall address correspondence to:

Site Number: 130043B

Office of General Counsel

NYSDEC 625 Broadway

Albany New York 12233-5500

With a copy to:

Site Control Section

Division of Environmental Remediation

NYSDEC 625 Broadway Albany, NY 12233

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

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

County: Nassau Site No: 130043B Order on Consent Index: CO 1-20201229-205

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

- 9. Extinguishment. This Environmental Easement may be extinguished only by a release by the Commissioner of the New York State Department of Environmental Conservation, or the Commissioner's Designee, and filed with the office of the recording officer for the county or counties where the Property is situated in the manner prescribed by Article 9 of the Real Property Law.
- 10. <u>Joint Obligation</u>. If there are two or more parties identified as Grantor herein, the obligations imposed by this instrument upon them shall be joint and several.
- 11. <u>Consistency with the SMP</u>. To the extent there is any conflict or inconsistency between the terms of this Environmental Easement and the SMP, regarding matters specifically addressed by the SMP, the terms of the SMP will control.

Remainder of Page Intentionally Left Blank

County: Nassau Site No: 130043B Order on Consent Index: CO 1-20201229-205

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

H.D.P. Printing Industries Corp.:

Print Name: RICHALD A DEGENHALD

Title: PAESIDEUF Date: 6.13.24

Grantor's Acknowledgment

STATE OF FLORIDA

COUNTY OF HERNANDO)

On the 13th day of June, in the year 2024, before me, the undersigned, personally appeared Richard A Decen hard, personally known to me or proved to me on the basis of satisfactory evidence to be the individual(s) whose name is (are) subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their capacity(ies), and that by his/her/their signature(s) on the instrument, the individual(s), or the person upon behalf of which the individual(s) acted, executed the instrument.

Notary Public - State of New York

MIGDALIA ORTIZ Notary Public - State of Florida Commission # HH 132749 My Comm. Expires May 23, 2025 Bonded through National Notary Assn.

SCHEDULE "A" PROPERTY DESCRIPTION

ALL that certain plot, piece or parcel of land, situate, lying and being at Westbury, Town of North Hempstead, County of Nassau and State of New York, known and designated as Lots Nos. 38, 39 and 40 and part of Lot 37 in Block 51 on map entitled, "2nd Map of the City of New Cassel, Queens County, L.I., surveyed August 1891, by William E. Hawxhurst, C.E." and filed in the Office of the Clerk of the County of Queens on April 22, 1892 under Map No. 256, filed in the Office of the County Clerk of Nassau as File No. 3, Case No. 14, being more particularly bounded and described as follows:

BEGINNING at the corner formed by the intersection of the easterly side of Swalm Avenue with the northerly side of Main Street;

RUNNING THENCE from said point of beginning along the easterly side of Swalm Avenue, North 1 degree 00 minutes East, a distance of 125.00 feet;

RUNNING THENCE South 89 degrees 00 minutes East, a distance of 59.00 feet;

RUNNING THENCE South 31 degrees 37 minutes 10 seconds East, a distance of 29.68 feet;

RUNNING THENCE South 1 degree 00 minutes West, a distance of 100.00 feet to the northerly side of Main Street; and

THENCE along the northerly side of Main Street, North 89 degrees 00 minutes West, a distance of 75.00 feet to the point or place of BEGINNING.

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Appendix D

Quality Assurance Project Plan

1.0 QUALITY ASSURANCE PROJECT PLAN (QAPP)

The fundamental QA objective with respect to accuracy, precision, and sensitivity of analysis for laboratory analytical data is to achieve the QC acceptance of the analytical protocol. The accuracy, precision and completeness requirements will be addressed by the laboratory for all data generated.

Collected samples will be appropriately packaged and transported via laboratory dispatched courier to the analytical laboratory.

Laboratory reports will include ASP category B deliverables for use in the preparation of a data usability report (DUSR), if required. The DUSR will be applicable to all samples collected during the RI.

2.0 Subslab Vapor and Indoor /Outdoor Air Samples

Extreme care will be taken during all aspects of sample collection to ensure that sampling error is minimized and high quality data are obtained. The sampling team members will avoid actions (e.g., using permanent marker pens and wearing freshly dry-cleaned clothes or personal fragrances) which can cause sample interference in the field. A tracer gas, helium, will be used in accordance with NYSDOH sampling protocols to serve as a QA/QC device to verify the integrity of the soil vapor probe seals. QA/QC protocols will be followed for sample collection and laboratory analysis, such as use of certified clean sample devices, meeting sample holding times and temperatures, sample accession, and chain of custody.

Samples will be delivered to the analytical laboratory as soon as possible after collection. The laboratory analyzes QC samples with each analytical batch, including a Method Blank (MB), Laboratory Control Sample (LCS), and a Laboratory Control Sample Duplicate (LCSD). Internal standards are added to all calibration standards, samples, and blanks to verify that the analytical system is in control.

3.0 Sample Handling and Decontamination Procedures

Collected samples will be appropriately packaged, placed in coolers and shipped via overnight courier or delivered directly to the analytical laboratory by field personnel. Samples will be containerized in appropriate laboratory provided glassware and shipped in plastic coolers. Samples will be preserved through the use of ice or cold-pak(s) to maintain a temperature of 4°C.

Dedicated disposable sampling materials will be used for soil, groundwater and soil vapor samples (if collected), eliminating the need to prepare field equipment (rinsate) blanks. However, if non- disposable equipment is used, (stainless steel scoop, etc.) field rinsate blanks will be prepared at the rate of one for every eight samples collected. No field filtering will be conducted; any required filtration will be completed by the laboratory.

Decontamination of non-dedicated sampling equipment will consist of the following:

- Gently tap or scrape to remove adhered soil;
- Rinse with tap water;
- Wash with alconox® detergent solution and scrub;
- Rinse with tap water;
- Rinse with distilled or deionized water.

Prepare field blanks by pouring distilled or deionized water over decontaminated equipment and collecting the water in laboratory provided containers. Trip blanks will accompany samples each time they are transported to the laboratory. Matrix spike and matrix spike duplicates (MS/MSD) will be collected at the rate of one per 20 samples submitted to the laboratory and duplicate samples will be collected at a rate of one per ten samples submitted to the laboratory.

4.0 QA / QC Requirements for Analytical Laboratory

Samples will be analyzed by the NYSDOH ELAP laboratory for one or more of the following parameters: VOCs in air by USEPA Method TO15 (Table 2). If any modifications or additions to the standard procedures are anticipated and if any nonstandard sample preparation or analytical protocol is to be used, the modifications and the nonstandard protocol will be explicitly defined and documented.

Data generated from the laboratory will be used to evaluate contaminants such as chlorinated and other volatile organic compounds (VOCs) in soil vapor. The QA requirements for all subcontracted analytical laboratory work performed on this project are described below. QA elements to be evaluated include accuracy, precision, sensitivity, representativeness, and completeness. The data generated by the analytical laboratory for this project are required to be sensitive enough to achieve required quantification limits as specified in NYSDEC Analytical Services Protocol (NYSDEC ASP, 07/2005) and useful for comparison with clean-up objectives. The analytical results meeting the required quantification limits will provide data sensitive enough to meet the data quality objectives of this remedial program as described in the work plan. Reporting of the data must be clear, concise, and comprehensive. The QC elements that are important to this project are completeness of field data, sample custody, sample holding times, sample preservation, sample storage, instrument calibration and blank contamination.

5.0 Reporting of Results

Draft soil vapor intrusion data, sampling location figures and completed Building Questionnaires and Product Inventories (for each sampled building) will be provided to the NYSDEC and the NYSDOH Project Managers as soon as the draft data is available.

Sample analysis will be provided by a New York State certified environmental laboratory.

Laboratory reports will include ASP category B deliverables for use in the preparation of a data usability summary report (DUSR). All results will be provided in accordance with the NYSDEC electronic data deliverable (EDD) format (EQuIS).

6.0 DUSR

The DUSR provides a thorough evaluation of analytical data without third party data validation. The primary objective of a DUSR is to determine whether or not the data, as presented, meets the

site/project specific criteria for data quality and data use. Verification and/or performance monitoring samples collected under this RIWP will be reviewed and evaluated in accordance with the Guidance for the Development of Data Usability Summary Reports as presented in Appendix 2B of DER-10. The completed DUSR for verification/performance samples collected during implementation of this SVI will be included in the SVI Report prior to its formal approval.



Appendix E

Health and Safety Plan

Construction Health and Safety Plan

567 Main Street Westbury, New York

September 2022

Prepared by:

Tyll Engineering and Consulting, PC
169 Commack Road, Suite H173
Commack, New York
Karen G. Tyll, PE
(631) 629-5373 / Karen@tyllengineering.com

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Construction Health and Safety Plan
567 Main Street
Westbury, New York

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Equipment Cleaning and Decontamination Procedures. Appendix A

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1.0 INTRODUCTION

This section of the Health and Safety Plan (HASP) document defines general applicability and general responsibilities with respect to compliance with Health and Safety programs. This plan has been prepared for invasive remediation activities to be conducted in the future.

1.1 Scope and Applicability of the Site Health and Safety Plan

The purpose of this HASP is to define the requirements and designate protocols to be followed during future excavation/remediation activities at the site. Applicability extends to all government employees, contractors, subcontractors, and visitors.

All personnel on site, contractors and subcontractors included, shall be informed of the site emergency response procedures and any potential fire, explosion, health, or safety hazards of the operation. This HASP summarizes those hazards in Table 3.1 and defines protective measures planned for the site.

This plan must be reviewed and an agreement to comply with the requirements must be signed by all personnel prior to entering the exclusion zone or contamination reduction zone.

During development of this plan, consideration was given to current safety standards as defined by the Environmental Protection Agency (EPA)/Occupational Health and Safety Administration (OSHA)/National Institute of Occupational Safety and Health (NIOSH), health effects and standards for known contaminants, and procedures designed to account for the potential for exposure to unknown substances. Specifically, the following reference sources have been consulted:

- OSHA 29 CFR 1910.120 and EPA 40 CFR 311
- USEPA, Office of Emergency and Remedial Response, Emergency Response Team,
 Standard Operating Safety Guides
- NIOSH/OSHA/USCG/EPA Occupational Health and Safety Guidelines

> American Conference of Governmental Industrial Hygienists (ACGIH) Threshold Limit Values

2.0 KEY PERSONNEL/IDENTIFICATION OF HEALTH AND SAFETY

2.1 Key Personnel

The organizational structure will be reviewed and updated periodically by the site supervisor.

Team Representatives:

- 1. Andrew Finkelstein, Property Manager
- 2. Sam of the Jeep Store
- 3. Karen G. Tyll, PE

2.2 Site Specific Health and Safety Personnel

The SHSO at the site with respect to any remedial activities is:

Karen Tyll, PE

Tyll Engineering and Consulting, PC

Designated alternates include:

TO BE DETERMINED

2.3 Organizational Responsibility

1. The SHSO of the site will conduct site inspections throughout the project making sure the Health and Safety Plan is followed. Their main concern is the personal protection of the workers.

3.0 TASK SAFETY AND HEALTH RISK ANALYSIS

3.1 Historical Overview of Site

567 Main Street (Section 11, Block 164 and Lot 68 on the Nassau County Tax Map) Currently, the Lot is 9,183 square feet and contains one, 2,950 (gross) square foot, two-story commercial/residential building constructed in 1952. The Site is bounded by a computer supplier to the north, Main Street and Saf-T-Swim and a church to the south, a commercial building to the east, and Swalm Street and a sandwich shop to the west. There are no sensitive receptors such as schools, hospitals, and day care facilities within a 250 to 500-foot radius of the Site.

In 2010, a NYSDEC Contractor collected three samples, 2 from within the building and 1 from outside the building. Tetrachloroethylene (PCE) was detected in indoor air within the Site building at concentrations of 27 and 28 micrograms per cubic meter (ug/m3). At the time, these concentrations were below the NYSDOH indoor air guideline of 100 ug/m3 but were near the current NYSDOH indoor air guideline of 30 ug/m3. Trichloroethylene (TCE) was detected in the indoor air at concentrations of 1.9 and 1.6 ug/m3. The current NYSDOH indoor air guideline for TCE is 2 ug/m3. In addition, PCE and TCE were detected at (maximum of 4,200 ug/m3 and 31 ,000 ug/m3 respectively) in soil vapor beneath the building.

On March 11, 2021, an additional sampling event was completed that included the collection of subslab, indoor air and outdoor ambient air. PCE was detected in indoor air within the building at concentrations of 1.7 at VP-1 and 1.5 ug/m3 at VP-2. These concentrations were below the NYSDOH indoor air guideline of 30 ug/m3. TCE was detected in the indoor air at concentrations of 2.0 at VP-1 and 1.4 ug/m3 at VP-2. The current NYSDOH indoor air guideline for TCE is 2 ug/m3. PCE and TCE were detected at maximum concentrations of 360 ug/m3 and 1800 ug/m3 in soil vapor beneath the building slab. TCE was not detected in the outside (ambient) air sample but PCE was detected at 2.7 ug/m³ (higher concentration than the two indoor air samples).

3.2 Task-by-Task Risk Analysis

The evaluation of hazards will be based upon the knowledge of the site background presented in Section 3.1 above, and anticipated risks posed by the specific tasks to be performed.

The following subsections describe each task/operation in terms of the specific hazards associated with it. In addition, the protective measures to be implemented during completion of future tasks are also identified.

Table 3.1 provides a summary of task analysis and chemical hazards potentially encountered at the Site.

TABLE 3.1 TASK ANALYSIS				
POTEN	TIAL CHEMICAL H	IAZARDS	OF CONCERN	
Contaminant	PEL/TLV	LEL (%)	IDLH	
	VO	Cs		
Benzene	1/0.5ppm	1.2	500 ppm	
Toluene	200/50 ppm	1.1	500 ppm	
Xylenes	100/100 ppm	~1	900 ppm	
Ethyl benzene	100/100ppm	0.8	800 ppm	
MTBE	NE/50ppm	NE	NE	
Diesel Fuel	NE/100mg/m ³		Ca (exhaust)	
Gasoline	NE/300	1.4	Ca	
Lead	0.05/0.05 mg/m ³	N/A	100 mg/m ³	
PCBs	0.5-1 mg/m3	N/A	5 mg/m ³	
PAHs	0.2 mg/m ³	N/A	1750 mg/m ³	
tetrachlorethylene	100 ppm/25	N/A	150 ppm	
Trichloroethylene	100 ppm/24 hr	N/A/	25 ppm	
Pesticides	Variable	N/A	N/A	
Arsenic	0.01 mg/m ³	N/A	5 mg/m ³	
Mercury	0.025 mg/m ³	N/A	10 mg/m ³	
Barium		N/A	0.5 mg/m3	

NE – not established N/A-not appropriate

Ca - Cancer

Notes:

- 1. TLV = Threshold Limit Value
- 2. IDLH = Immediately Dangerous to Life and Health

3.3 Chemical Hazards

3.3.1 Hazard Identification and Prevention

- Safety related work practices would be used to prevent electric shock or other injuries
 resulting from either direct or indirect electrical contacts. Overhead power lines,
 buried cables and electrical equipment used on site all pose a danger of shock or
 electrocution if workers contact or sever them during field operations.
- New York State law requires that a utility mark out to be performed at a site at least 72 hours prior to starting any subsurface work. The tank removal contractor will contact New York City One Call (1-800-272-4480) to request a mark out of underground utilities in the proposed excavation and drilling areas. Work will not begin until the required utility clearances have been completed.
- Public utilities typically do not mark-out utility lines that are located on private property. Therefore, contractors must exercise due diligence and try to identify the location of any private utilities at the site. A private utility contractor will clear on-site subsurface disturbance locations for utilities prior to the commencement of any such work. Contractors will also use as-built drawings for the area being investigated, perform a line locating survey, and identify a no-dig/drill zone and hand dig if there is insufficient data to determine the location of utility lines.
- Care must be taken to ensure loose clothing does not get tangled in any moving equipment while borings are being drilled.
- There may be slip or trip hazards associated with rough, slippery or elevated work surfaces at the site. The sampling sites could contain a number of slip, trip and fall hazards for site workers, such as: holes, pits, or ditches; excavation faces and slippery surfaces (steep grades, uneven grades, snow and ice and sharp objects).
- Drilling or excavating is dangerous during electrical storms. All field activity must terminate when thunderstorms are evident. Extreme heat and cold, ice and heavy rain can produce unsafe conditions for drilling work. Such conditions, when present, will be evaluated on a case-by-case basis to determine if work shall terminate.
- The use of an excavator and other equipment that are gasoline or fuel powered presents the possibility of encountering fire and explosion hazards.
- Plants and animals that are known to be hazardous to humans may affect work that
 takes place. Spiders, bees, wasps, hornets, ticks, poison oak and poison ivy are only
 some of the hazards that may be encountered. Individuals who may potentially be
 exposed to these hazards should be made aware of their existence and instructed in
 their identification. Emergencies resulting from contact with a natural hazard should be

handled through the normal medical emergency channels. Individuals who are sensitive to these types of "natural" hazards should indicate their susceptibility to the SHSO.

Work on-site will involve the use of heavy construction equipment such as an excavator.
The unprotected exposure of site workers to this noise during field activities can result
in noise induced hearing loss. The SHSO will monitor the noise exposure for the initial
trip and determine whether noise protection is warranted for each of the team
members. The SHSO will ensure that either ear muffs or disposable foam earplugs are
made available to all personnel and are used by the personnel in the immediate vicinity
of the field operation as required.

3.3.1 General Description

There is Trichloroethylene and Tetrachloroethylene found in the soil vapor under the concrete slab on Site.

Potential chemical hazards below the building slab are evaluated below. It is anticipated that printing/dry cleaning compounds and dust could be of concern if the concrete slab is opened. The potential for exposure to vapors, contaminated dusts, and contaminated soil/groundwater is of utmost concern.

3.3.2 First Aid

If soil comes in contact with the eyes immediately wash the eyes with large amounts of water, occasionally lifting the lower and upper lids. Contact lenses should not be worn but can be protected by safety glasses/goggles. If lead contaminated soil comes in contact with the skin, wash the skin with soap and water prior to leaving the site. If a person breathes in large amounts of dust, move the exposed person to fresh air at once. If contaminated soil has been swallowed, get medical attention immediately (NIOSH, 1987).

4.0 PERSONNEL TRAINING REQUIREMENTS

Consistent with OSHA 29 CFR 1910.120 regulation covering Hazardous Waste Operations and Emergency Response, all site personnel will be required to be trained in accordance with the standard. At a minimum, all personnel will be required to be trained to recognize the hazards on-site, the provisions of this HASP, and the responsible personnel. The SHSO at the site pre-entry briefing(s) or periodic site briefings will discuss this plan.

5.0 PERSONNEL PROTECTIVE EQUIPMENT TO BE USED

This section describes the general requirements of the EPA designated Levels of Protection (A through D), and the specific levels of protection required for each task at the Site.

5.1 Levels of Protection

Personnel will wear the appropriate protective equipment when response activities involve known or suspected atmospheric contamination, vapors, gases, or particulates may be generated by site activities, or when direct contact with skin-affecting substances may occur. Full face piece respirators protect lungs, gastrointestinal tract, and eyes against airborne toxicants. Chemical-resistant clothing protects the skin from contact with skin-destructive and absorbable chemicals.

The specific levels of protection and necessary components for each have been divided into four categories according to the degrees of protection afforded:

Level A: Should be worn when the highest level of respiratory, skin, and eye protection is needed.

Level B: Should be worn when the highest level of respiratory protection is needed, but a lesser level of skin protection. Level B is the primary level of choice when encountering unknown environments.

Level C: Should be worn when the criteria for using air-purifying respirators are met, and a lesser level of skin protection is needed.

Level D: Should be worn only as a work uniform and not in any area with respiratory or skin hazards. It provides minimal protection against chemical hazards.

Modifications of these levels are permitted, and routinely employed during site work activities to maximize efficiency. For example, Level C respiratory protection and Level D skin protection may be required for a given task. Likewise, the type of chemical protective ensemble (i.e., material, format) will depend upon contaminants and degrees of contact.

The Level of Protection selected is based upon the following:

- Type and measured concentration of the chemical substance in the ambient atmosphere and its toxicity.
- Potential for exposure to substances in air, liquids, or other direct contact with material due to work being done.

• Knowledge of chemicals on-site along with properties such as toxicity, route of exposure, and contaminant matrix.

In situations where the type of chemical, concentration, and possibilities of contact are not known, the appropriate Level of Protection must be selected based on professional experience and judgment until the hazards can be better identified.

5.2 Level D Personnel Protective Equipment:

- Disposable Tyvek^R coveralls (as needed)
- Disposable Nitrile Exam gloves (as needed)
- Disposable Tyvek^R booties (as needed)
- Steel-tipped work boots
- Safety glasses
- Hard hat
- 3M N95 Dust Masks with Exhalation Valves (if needed)

5.3 Reassessment of Protection Program

The Level of Protection provided by PPE selection shall be upgraded or downgraded based upon changes in site conditions or investigation findings. When a significant change occurs, the hazards should be reassessed. Some indicators of the need for reassessment are:

- Commencement of a new work phase.
- Change in job tasks during a work phase.
- Change of season/weather
- When temperature extremes or individual medical considerations limit the effectiveness of PPE.
- Change in work scope, which affects the degree of contact with contaminants.

5.4 Work Mission Duration

Before the workers actually begin work in their PPE ensembles, the anticipated duration of the work mission will be established. Several factors limit mission length, including:

- Air supply consumption (SCBA use)-Not Applicable.
- Suit/Ensemble permeation and penetration rates for chemicals-Not Applicable.
- Ambient temperature and weather conditions (heat stress/cold stress).
- Capacity of personnel to work in PPE.

5.5 Personal Protective Equipment Recommended for Site

The following specific clothing materials are recommended for the site:

Soil Sampling and Excavation - Level D

Site activities will require PPE as follows: hardhat, disposable Tyvek^R coveralls (if needed), disposable Tyvek^R booties (if needed), safety glasses and chemical resistant gloves. Particulate respirator-3M N95 Dust Masks with exhalation valves will be available.

5.6 SOP for Personal Protective Equipment

Proper inspection of PPE features several sequences of inspection depending upon specific articles of PPE and its frequency of use. The different levels of inspection are as follows:

- Inspection and operation testing of equipment received from the factory or distributor.
- Inspection of equipment as it is issued to workers.
- Inspection after use or training and prior to maintenance.
- Periodic inspection of stored equipment.
- Periodic inspection when a question arises concerning the appropriateness of the selected equipment, or when problems with similar equipment arise.
 - The primary inspection of the PPE in use for activities at the Site will occur prior to immediate use and will be conducted by the user. This ensures

that the specific device or article has been checked-out by the user and that the user is familiar with its use.

•

TABLE 5.1

SAMPLE PPE INSPECTION CHECKLIST CLOTHING

Before use:

- Determine that the clothing material is correct for the specified task at hand.
- Visually inspect for:
- Imperfect seams
- Non-uniform coatings
- Tears
- Malfunctioning closures
- Hold up to light and check for pinholes.
- Flex product:
- Observe for cracks
- Observe for other signs of shelf deterioration
- If the product has been used previously, inspect inside and out for signs of chemical attack:
- Discoloration
- Swelling
- Stiffness During the work task:
- Evidence of chemical attack such as discoloration, swelling, stiffening, and softening.

Keep in mind, however, that chemical permeation can occur without any visible effects.

- Closure failure.
- Tears.
- Punctures.
- Seam Discontinuities.

GLOVES

Before use:

- Visually inspect for:
- Imperfect seams
- Tears
- Non-uniform coating
- Pressurize glove with air; listen for pinhole leaks.

6.0 FREQUENCY AND TYPES OF AIR MONITORING/SAMPLING

This section explains the general concepts of an air-monitoring program and specifies the surveillance activities that will take place during future invasive work at the Site.

The purpose of air monitoring is to identify and quantify airborne contaminants in order to verify and determine the level of worker protection needed. Initial screening for identification is often qualitative, i.e., the contaminant, or the class to which it belongs, is demonstrated to be present, but the determination of its concentration (quantification) must await subsequent testing. Two principal approaches are available for identifying and/or quantifying airborne contaminants:

- The on-site use of direct-reading instruments.
- Laboratory analysis of air samples obtained by a gas-sampling bag, collection media (i.e., filter, sorbent) and/or wet-contaminant collection methods.

6.1 Direct-Reading Monitoring Instruments

Unlike air sampling devices, which are used to collect samples for subsequent analysis in a laboratory, direct-reading instruments provide information at the time of sampling, enabling rapid decision-making. Data obtained from the real-time monitors are used to assure proper selection of personnel protection equipment, engineering controls, and work practices. Overall, the instruments provide the user the capability to determine if site personnel are being exposed to concentrations that exceed exposure limits or action levels for specific hazardous materials.

Of significant importance, especially during initial entries, is the potential for IDLH conditions or oxygen deficient atmospheres. Real-time monitors can be useful in identifying any IDLH conditions, toxic levels of airborne contaminants, flammable atmospheres, or radioactive hazards. Periodic monitoring of conditions is critical, especially, as exposures may have increased since initial monitoring or if new site activities have commenced.

6.2 Site Air Monitoring and Sampling Program

1. Air Monitoring Instruments

Organic Vapor Monitoring

Instrument: Photoionization Detector (PID) with for use during all intrusive activities (10.6 Ev lamp).

Dust Monitoring

Instrument: TSI DustTrak Model 8520 (or equivalent)

If required, continuous dust monitoring during all site activities will be conducted with readings taken every 15 minutes. Dust mitigation must be employed should readings exceed 10 mg/m³.

Calibration and Record keeping

Equipment used will be calibrated in accordance with the manufacturers' specifications. The PID and CGI will be calibration checked before and after use under approximately the same conditions at which the instrument will be used. Calibration information will be kept in the field notebook or instrument log. The date, time, location, instrument serial number, calibration gas and concentration, will be noted.

A. Action Levels

TABLE 6.1					
SITE AIR MONITORIN	SITE AIR MONITORING AND SAMPLING PROGRAM SUMMARY				
Instrument Action Level Action					
PID (10.6 ev)	Continuous readings to 9ppm	Remain in level D PPE.			
PID	Continuous reading of 10 to 100 ppm above background	Level D PPE			
PID	Continuous reading over 100 ppm background	Stop Work. Reevaluate work conditions and procedures, Contact SHSO prior to continuing for authorization.			

Suppress by spraying the dusty area with water.

Notes: PEL = Occupational Safety and Health Administration (OSHA) Permissible Exposure Limit

REL = National Institute of Occupational Safety and Health (NIOSH) Recommended Exposure Limit TLV = American

Conference of Governmental Industrial Hygienists (ACGIH) Threshold Limit Value

Continuous reading >10.0 mg/m³

B. Reporting Format

Dust Monitor

1 Air Monitoring Log

7.0 SITE CONTROL MEASURES

The following section defines measures and procedures for maintaining site control. Site control is an essential component in the implementation of the site health and safety program.

7.1 Buddy System

During all Level B, C or D activities or when some conditions present a risk to personnel, the implementation of a buddy system is recommended if not mandatory. A buddy system requires at least two (2) people to work as a team, each looking out for each other. Table 8.1 lists those tasks, which require a buddy system and any additional site control requirements.

TABLE 7.1				
PERSONNEL REQUIREMENTS				
Task	Control Measures			
Soil Sampling	Line of sight, buddy system			
Excavation	Line of sight, buddy system			

7.2 Site Communications Plan

Successful communications between field teams and personnel in the support zone is essential. The following communications systems will be available during activities at the Site.

- Hand Signals
- Direct Vocal Communication
- For hand signal communications, the following definitions will apply during activities at the Site:

TABLE 7.2				
HAND SIGNAL DEFINITIONS				
Signal	Definition			
Hands clutching throat	Out of air/cannot breath			
Hands on top of head	Need assistance			
Thumbs up	OK/I am all right/I understand			
Thumbs down	No/Negative			
Arms waving upright	Send backup support			
Grip partners wrist	Exit area immediately			

7.3 Work Zone Definition

The three general work zones established at the Site are the Exclusion Zone, Contamination Reduction Zone, and Support Zone. One of the basic elements of effective site soil remediation activities is the delineation of work zones. The purpose of establishing work zones is to:

- Reduce the accidental spread of hazardous substances by workers or equipment from the contaminated areas to the clean areas;
- Confine work activities to the appropriate areas, thereby minimizing the likelihood of accidental exposures;
- Facilitate the location and evacuation of personnel in case of an emergency; and
- Prevent unauthorized personnel from entering controlled areas.

Although a site may be divided into as many zones as necessary to ensure minimal employee exposure to hazardous substances, this plan uses the three most frequently identified zones in similar projects. These zones are the Exclusion Zone, the Decontamination Zone, and the Support Zone (sometimes referred to by others as the "clean zone"). Movement of personnel and equipment between these zones should be minimized and restricted to specific access control points to minimize the spreading of contamination, if encountered.

7.3.1 Exclusion Zone

The Exclusion Zone is the area where contamination is either known or expected to occur and where the greatest potential for exposure exists. No contamination is actually known to exist on this site. Therefore, the following protective measures will be taken in the Exclusion Zone.

Unprotected onlookers will be restricted from suspicious pre-screened soils requiring sampling such that they are 25 feet upwind or 50 feet downwind of excavation or drilling activities.

Those conducting activities and sampling in the Exclusion Zone will wear the applicable Personal Protective Equipment (PPE). The actions to be taken and PPE to be worn in the Exclusion Zone if VOCs are determined with the PID to be above background are described in Section 6 and Table 6.1.

7.3.2 Decontamination Zone

A Decontamination Zone will be established between the Exclusion Zone and the Support Zone, and will include the personnel, equipment and supplies that are needed to decontaminate equipment and personnel. The size will be selected by the SHSO to be sufficient to conduct the necessary decontamination activities. Personnel and equipment in the Exclusion Zone must pass through this zone before leaving or entering the Support Zone. This zone should always be established and maintained upwind of the Exclusion Zone.

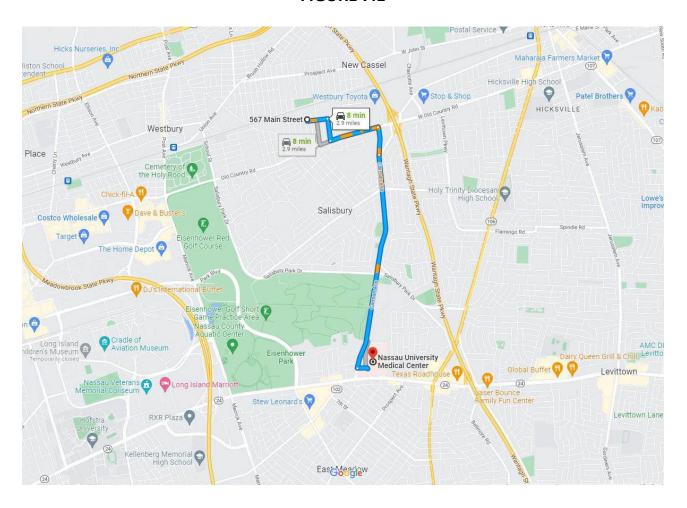
7.3.3 Support Zone

The Support Zone will surround the Decontamination Zone and the Exclusion Zone. Break areas, operational direction and support facilities will be located in this area. Eating, smoking and drinking will be allowed only in this area.

7.4 Nearest Medical Assistance

Figure 7.1 shows a map of the route to the Nassau University Medical Center located at 2201 Hempstead Turnpike, East Meadow, NY 11554 (516) 572-0123), which is the nearest hospital that can provide emergency care for individuals who may experience an injury or exposure on site. The route to the hospital will be verified by the SHSO and will be familiar to all site personnel.

FIGURE 7.1



Construction Health and Safety Plan 567 Main Street Westbury, New York

7.5 Safe Work Practices

Table 7.3 provides a list of standing orders for the Exclusion Zone.

Table 7.4 provides a list of standing orders for the Decontamination Zone.

7.6 Emergency Alarm Procedures

The warning signals described in Section 9.4 "Evacuation Routes and Procedures," will be deployed in the event of an emergency. Communication signals will also be used according to Section 7.2.

TABLE 7.3

STANDING ORDERS FOR EXCLUSION ZONE

- No smoking, eating, or drinking in this zone.
- No horseplay.
- No matches or lighters in this zone.
- Check-in on entrance to this zone.
- Check-out on exit from this zone.
- Implement the communications system.
- Line of sight must be in position.
- Wear the appropriate level of protection as defined in the HASP.

TABLE 7.4

STANDING ORDERS FOR CONTAMINATION REDUCTION ZONE

- No smoking, eating, or drinking in this zone.
- No horseplay.
- No matches or lighters in this zone.
- Wear the appropriate level of protection.

8.0 DECONTAMINATION PLAN

Consistent with the levels of protection required, the decontamination table(s) provides a stepby-step representation of the personnel decontamination process. These procedures should be modified to suit site conditions and protective ensembles in use.

8.1 Standard Operating Procedures

Decontamination involves the orderly controlled removal of contaminants. Standard decontamination sequences are presented in Table 8.1. All site personnel should minimize contact with contaminants in order to minimize the need for extensive decontamination. Personnel shall clean on-site as much gross contamination from clothing and equipment, as possible.

8.2 Levels of Decontamination Protection Required for Personnel

The levels of protection required for personnel assisting with decontamination will be Level D. The SHSO is responsible for monitoring decontamination procedures and determining their effectiveness.

8.3 Equipment Decontamination

Sampling equipment will be dedicated to each sample as practicable. Appendix A is the decontamination protocol for equipment. After on-site decontamination, non-disposable materials, such as gloves and booties, will be placed in plastic bags and for proper disposal off site.

8.4 Disposition of Decontamination Wastes

Contaminated disposable materials will be left in a secured condition on-site.

TABLE 8.1		
LEVEL D DECONTAMINATION STEPS		
Step 1	Remove outer garments (i.e., coveralls) and boots	
Step 2	Remove gloves	
Step 3	Wash hands and face	

9.0 EMERGENCY RESPONSE/CONTINGENCY PLAN

This section describes contingencies and emergency planning procedures to be implemented at the Site. This plan is compatible with local, state and federal disaster and emergency management plans, as appropriate.

9.1 Pre-Emergency Planning

During the site briefing held periodically/daily, all employees will be trained in and reminded of provisions of the emergency response plan, communication systems, and evacuation routes. Table 9.1 identifies potential hazards associated with site activities, along with the available emergency prevention/control equipment and its location. The plan will be reviewed and revised, if necessary, on a regular basis by the SHSO. This will ensure that the plan is adequate and consistent with prevailing site conditions.

	TABLE 9.	1
EMERGENCY RECO	OGNITION/CONTROL MEASURES	
HAZARD	PREVENTION/CONTROL	LOCATION
Fire/Explosion	Fire Extinguisher	Site Trailer and Heavy
		Equipment. mounted
Spill	Sorbent Materials	Not Applicable
Air Release	Evacuation Routes	Not Applicable

9.2 Personnel Roles and Lines of Authority

The Site Supervisor has primary responsibility for responding to and correcting emergency situations. This includes taking appropriate measures to ensure the safety of site personnel and the public. Possible actions may involve evacuation of personnel from the site area, and evacuation of adjacent residents. He/she is additionally responsible for ensuring that corrective measures have been implemented, appropriate authorities notified and follow-up reports completed. The SHSO may be called upon to act on the behalf of the site supervisor, and will direct responses to any medical emergency. The individual contractor organizations are responsible for assisting the project manager in his/her mission within the parameters of their scope of work.

9.3 Emergency Recognition/Prevention

Table 3.1 provides a listing of chemical and physical hazards on-site. Additional potential hazards associated with site activities are listed in Table 9.1, along with the available emergency

prevention/control equipment and its location. Personnel will be familiar with techniques of hazard recognition from pre-assignment training and site- specific briefings. The SHSO is responsible for ensuring that prevention devices and equipment are available to personnel.

9.4 Evacuation Routes/Procedures

In the event of an emergency which necessitates an evacuation of the site, the following alarm procedures will be implemented:

- Insure that a predetermined location is identified off-site in case of an emergency, so that all personnel can be accounted for.
- Personnel will be expected to proceed to the closest site exit with their buddy, and mobilize to the safe distance area associated with the evacuation route.
 Personnel will remain at that area until the re-entry alarm is sounded or an authorized individual provides further instructions.

9.5 Emergency Contact/Notification System

The following list provides names and telephone numbers for emergency contact personnel. In the event of a medical emergency, personnel will take direction from the SHSO and notify the appropriate emergency organization(s). In the event of a fire or spill, the site supervisor will notify the appropriate local, state and federal agencies.

	TABLE 9.2	
	List of Emergency Contacts	
Organization	Contact	Telephone
Police	NYPD	911
Fire	FDNY	911
Hospital	Flushing Hospital Medical Center	(516) 572-0123
EPA Emergency Response Team		800-424-8802
NYSDEC	Spill Hotline	800-457-7362
National Response Center		800-424-8802
Center for Disease Control		404-488-4100
Chemtrec		800-424-9555

9.6 Emergency Medical Treatment Procedures

Any person who becomes ill or injured in the Exclusion Zone must be decontaminated to the maximum extent possible. If the injury or illness is minor, full decontamination should be completed and first aid administered prior to transport. If the patient's condition is serious, at least partial decontamination should be completed (i.e., complete disrobing of the victim and redressing in clean coveralls or wrapping in a blanket.) First aid should be administered while awaiting an ambulance or paramedics. All injuries and illnesses must immediately be reported to the Site Supervisor.

Any person being transported to a clinic or hospital for treatment should take with them information on the chemical(s) they have been exposed to at the site. This information is included in Table 3.1.

Any vehicle used to transport contaminated personnel will be treated and cleaned as necessary.

9.7 Fires or Explosion

In the event of a fire or explosion, the local fire department should be summoned immediately. Upon their arrival, the project manager or designated alternate will advise the fire commander of the location, nature, and identification of the hazardous materials on site.

If it is safe to do so, site personnel may:

- Use firefighting equipment available on site to control or extinguish the fire; and,
- Remove or isolate flammable or other hazardous materials, which may contribute to the fire.

9.8 Spill or Leaks

In the event of a spill or a leak from excavation or drilling equipment, including containers, site personnel will:

- Inform their supervisor immediately;
- Locate the source of the spillage and stop the flow if it can be done safely; and,
- Begin containment and recovery of the spilled materials.

9.9 Emergency Equipment/Facilities

The following emergency equipment/facilities will be utilized on-site.

	TABLE 9.3	
LIST OF EMERGENCY EQUIPMENT/FACILITIES		
List of Emergency Equipment/Facilities	Storage Location	
First Aid Kit	Support Zone	
Fire Extinguisher	Support Zone	
Spill Kits	Support Zone	
Berm Materials	Support Zone	
Eye Wash	Support Zone	
Real Time Air Equipment	Exclusion Zone	

10.0 REFERENCES

- 1. Aldrich Chemical Book, RTECS
- 2. American Conference of Governmental Industrial Hygienists (ACGIH) Threshold Limit Values
- 3. Chemical Protective Clothing Performance Index Book, Forsburg
- 4. Dangerous Properties of Industrial Materials, SAX and Lewis
- 5. Emergency Response Guide Book, DOT P 5800.5, 1990
- 6. EPA 40 CFR 311 Health and Safety Regulations
- 7. EPA/Office of Emergency and Remedial Response/Environmental Response Team
 Standard Operating Safety Guide
- 8. Extremely Hazardous Substances, EPA, Noyes
- 9. Guide to Occupational Exposure Values 1992
- 10. Guidelines for the Selection of Chemical Protective Clothing, Little
- 11. Handbook of Toxic and Hazardous Chemicals and Carcinogens, Sittig, np (Noyes)
- 12. Hazardous Chemicals Data Book, G. Weiss, ndc (Noyes)
- 13. Hazardous Chemicals Desk Reference
- 14. NIOSH/OSHA/USCG/EPA Occupational Health and Safety Guidelines
- 15. OHMTADS Database
- 16. OSHA 29 CFR 1910.120 Health and Safety Regulations
- 17. The Merck Index, an Encyclopedia of Chemicals, Drugs, and Biologicals, Merck & Co., Inc.
- 18. Threshold Limit Values and Biological Exposure Indices, ACGIH, 1991-1992

APPENDIX A

EQUIPMENT CLEANING AND DECONTAMINATION PROCEDURES

STANDARD OPERATING PROCEDURES

EQUIPMENT CLEANING AND DECONTAMINATION PROCEDURES

Summary

Equipment, tools, materials, etc. used in the excavation/remediation and collection of samples at the site must be properly prepared and cleaned/decontaminated during and after each sampling event. The degree of cleaning/decontamination will be dependent upon site conditions and the nature and type of contamination, if present, the intent and goal(s) of the remediation, and data quality objectives, as well as other site-specific requirements. The importance of this action must be impressed upon the sampling team and those assisting the team, such as a backhoe or drill rig operator.

<u>Procedure</u>

1 Heavy Equipment Decontamination

All equipment, tools and materials associated with sampling events must be cleaned or decontaminated prior to usage. Items such as drill rigs, auger flights, trackhoes, and backhoes all present potential sources of contamination to environmental samples. Therefore, all heavy equipment utilized at a site must undergo the following decontamination procedures:

- the equipment will first be high pressure, hot washed or steam-cleaned with potable water; and,
- the equipment will be rinsed thoroughly with potable water.

Contain, collect and dispose of all decontamination fluids in accordance with site/project- specific requirements. The bucket of trackhoes and backhoes may be cleaned over the excavation allowing high pressure decontamination wash water to return to the excavation.

2 Cleaning of Field Sampling Equipment

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

non-phosphate detergent wash;

- potable water or distilled/deionized water rinse; and
- air or oven-dry.

If the equipment, listed above, is to be stored for future use, allow to dry and then wrap in aluminum foil (shiny-side out) or seal in plastic bags. Collect or dispose of all decontamination fluids in accordance with site/project-specific requirements.

3 Personal Clothing Decontamination

All footwear worn in and around a contamination area will be washed down using soap and water to remove any soil or oily residue remnants. If disposable gloves, booties or suits (such as Tyvek® suits) are worn, these suits or booties are to be removed and disposed of in a designated 55-gallon drum on site for future disposal. Any other clothing that comes in contact with contaminated soil should not be worn again.



Appendix F

Site Management Forms

Annual Site-wide Inspection Form

567 Main Street, Westbury, New York

ather:ason for Inspection: □ Routine ☑ other		al Sit	te-wide Insp	pection and Certification
pection Observations				
theck one of the following: Y: Yes N: No N	IA: No	T	oplicable NA	Remarks
Records		- · ·	107.	- Tomano
Based on site records, when was the last inspection maintenance, or repair event?	n,			
Based on site records, was the system not operating for a amount of time since the last inspection, maintenance, or repevent? For how long? Provide details.				
Has the site use changed to a type of use higher than the curre commercial use (as allowed in environmental easement)?	ent			
General System				
Is there any construction activity, or indication of any				
construction activity within the past certification year (including any tenant improvements), that included the breaching of the concrete floor slab?				
Are there any cracks in the concrete slab or concrete basement walls?				
If YES to number 6, is there documentation that the Soil Management Plan (SMP), HASP, and CAMP for the site was/is being followed?				
If YES to number 6, is there documentation that all breaches in the floor slab have been sealed?				
Does all visible SSDS piping appear intact and undamaged?				
Have any HVAC intake points been constructed at the roof n (less than 10 feet) the SSDS blower discharge point?	ear			
2 Is the SSDS System expelling Air from the exhaust on the roof the building?	of			
formed by:	,	•		
Printed Name		,	Signature/Da	ate

SITE INSPECTION CHECKLIST

567 Main Street Westbury NY

Date: Time:				
Inspector Name/Organization:				
Physical Inspection of Fan				
SSDS Fan 1 :	yes	no	Fan Model No. Manufacturer:	
Operational?	•			
Observed Leaks at Seals?Air				
Flow at Exhaust Stack?			Other Comments / Observations	
Vacuum Reading:	_			
Repairs Needed and / or Mainten	ance at this	time?		
Signature:			Date:	



Appendix G

O&M Manual

1.0 OPERATION AND MAINTENANCE PLAN

The Operations, Monitoring, and Maintenance (OM&M) Plan has been prepared by Tyll Engineering and Consulting, PC (TEC) on behalf of the current owner, HDP Printing. The subject Property is located at 567 Main Street, Westbury, Nassau County, New York (hereinafter referred to as "Site"). This Plan details the procedures for the proper operation, monitoring, and maintenance of the Sub-Slab Depressurization System (SSDS).

The installation of an SSDS in the Site building was performed as an element of the NYSDEC BCP required SSDS Installation Work plan approved by NYSDEC and the New York State Department of Health (NYSDOH) in February 2023. The SSDS Installation was implemented to address the presence of contamination by volatile organic compounds (VOCs) in sub-slab vapors. The SSDS was designed to mitigate the potential for soil vapor intrusion (SVI), a process by which VOCs could migrate in vapor present beneath the floor of the Site building into indoor air inside the Site building.

1.1 General

The Operation and Maintenance Plan provides a brief description of the measures necessary to operate, monitor and maintain the mechanical components of the remedy selected for the site. This Operation and Maintenance Plan:

- Includes the procedures necessary to allow individuals unfamiliar with the Site to operate and maintain the SSDS System;
- Will be updated periodically to reflect changes in site conditions or the manner in which the SSDS System are operated and maintained.

A copy of this Operation and Maintenance Manual, along with the complete SMP, is maintained at the site. This Operation and Maintenance Plan is not to be used as a stand-alone document, but as a component document of this SMP.

1.2 Installation of the Sub-Slab Depressurization System

The SSDS trenches including piping, gravel backfill, and re-concreting were completed in February and March 2023. The SSDS followed the design presented in the SSDS Work Plan approved by NYSDEC and NYSDOH. The SSDS consists of two intersecting trenches leading to one SSDS fan installed upon the rear of the building. Photographs are

provided in Appendix C.

The trenches were cut into the concrete basement slab using an electric powered saw and jackhammer and was approximately 12-inches wide and was excavated to 1 feet deep below the slab. Each trench has a 4-inch diameter, fabric wrapped perforated pipe running through it surrounded by gravel. The piping was connected to a vertical riser which extends up through the building wall to the roof.

The trenches were topped off with gravel and the tenant had their concrete contractor close the tops of the trench with concrete to match the existing floor slab.

1.3 Remedial System (or other Engineering Control) Performance Criteria

The Remedial Goals in the SSDSWP were as follows:

- Install a SSDS to create negative sub-slab pressure beneath the site building, thus
 mitigating potential soil vapor intrusion issues within the site building.
- Install gauges associated with the SSDS as well as vacuum monitoring points to confirm the influence, confirm, and monitor the operation of the system.

The SSDS System was designed with an SSDS fan capable of producing enough negative pressure in the sub-slab as to be able to remove any potential off-gases. A minimum of 0.002" WC will be sought in the most remote sub-slab area between the sub-slab soil void spaces and the occupied interior spaces of the building. The vacuum achieved at the riser will be 1.5" WC or higher. The SSDS fan, located on the 1st floor rear building sidewall and is electrically fed with a dedicated circuit. The exhaust point is located on the roof and is installed a minimum distance of 10 ft from any vent or operable windows. A visual and audible alarm, which signals when vacuum is lost at the riser, is powered independently from the SSDS fan, such that if the SSDS fan causes the breaker to trip, the alarm will still provide an alarm status. The SSDS fan was designed for continuous duty, and will be used continuously.

1.4 Operation and Maintenance of the Sub Slab Depressurization System

Cut-sheets and as-built drawings for the Sub Slab Depressurization System (SSDS) system are provided. Operations and maintenance procedures include the following:

- RadonAway RP 265 fans require a physical inspection of the fans to confirm that
 air is being discharged and that the fan is operating. No other maintenance is
 recommended in the owner's manual. The fan is not serviceable. If the fan is not
 operable and the power has been checked, then the fan must be replaced.
- Magnehelic gage requires no routine maintenance and are not field serviceable.
 If not operating, a new gauge should be installed.
- The RadonAway Checkpoint IIa Mitigation Alarms do not require routine maintenance. However, operations of the alarm should be confirmed by disconnecting the alarm from the vacuum source and confirming the red indicator light and audible alarm are working properly. If the alarm is not operating properly, then the old alarm should be removed and a new alarm installed.

A copy of each owner's manual is included as **Appendix A**.

1.5 SYSTEM START-UP AND TESTING

After the initiation of the active SSDS, a start-up test was performed by TEC to determine sub-slab pressure readings under operational conditions and to establish the efficacy of the SSDS.

On March 22, 2023, TEC went to the Site and determined that the SSDS was in operation. Pressure readings were collected from the 4 sub-slab soil vapor monitoring points using a digital manometer to determine the pressure differentials beneath the building slab. The results were all above the required pressure readings of -0.004 inches of water. Chart below shows the results:

	Pressure (in
Point	H ₂ 0)
VP-1	-0.94
VP-2	-0.32
VP-3	-0.04
VP-4	-0.07

The SSDS remains in operation and will not be shut down unless the NYSDEC approves it.

The system testing described above will be conducted if, in the course of the SSDS System lifetime, the system goes down or significant changes are made to the system and the system must be restarted.

Please see the manufacturer's instructions regarding additional information regarding system start-up, maintenance, and testing, provided.

1.6 ROUTINE SYSTEM OPERATION AND MAINTENANCE

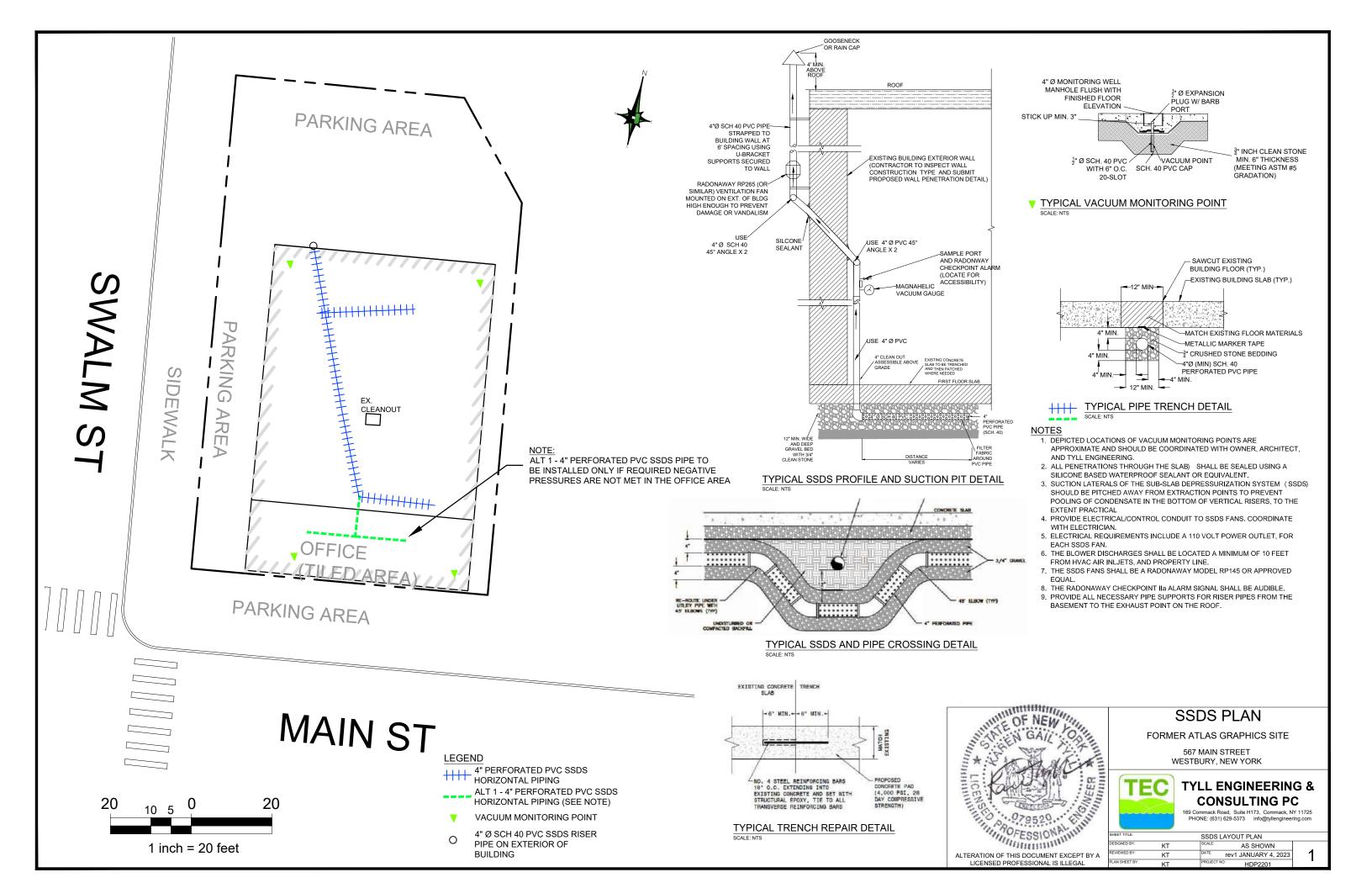
The system as designed is virtually maintenance free. If any of the components fail (SSDS fan, meter, alarm, they must be replaced with in kind. Please see the manufacturer's instructions regarding routine system operation and maintenance, provided.

1.7 NON-ROUTINE OPERATION AND MAINTENANCE

The system as designed has no non-routine operation and maintenance requirements. It is important to label the riser on every floor, even if it is concealed behind chases or walls, to prevent unwanted future taps. Please see the manufacturer's instructions regarding non-routine operation and maintenance, provided.

1.8 SYSTEM MONITORING DEVICES AND ALARMS

The SSDS System has an alarm, which will go off when the fan is not working properly to maintain a minimum vacuum reading. The SSDS System has warning devices to indicate that the system is not operating properly. In the event that warning device is activated, applicable maintenance and repairs will be conducted, as specified in the Operation and Maintenance Plan, and the SSDS System will be restarted. Operational problems will be noted in the Periodic Review Report to be prepared for that reporting period.







Installs white, stays white

Radon Mitigation Fan

All RadonAway® fans are specifically designed for radon mitigation. RP Series Fans provide superb performance, run ultra-quiet and are attractive. They are ideal for most sub-slab radon mitigation systems.

Features

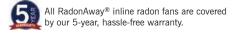
- Eternalast[™] polycarbonate plastic housing
- Energy efficient
- Ultra-quiet operation
- Meets all electrical code requirements
- Water-hardened motorized impeller
- Seams sealed to inhibit radon leakage (RP140 & RP145 double snap sealed)
- ETL Listed for indoor or outdoor use
- Thermally protected motor
- · Rated for commercial and residential use
- HVI certified fan performance

	D/11	FAN DUCT	RECOM. MAX.		T	/PICAL CI	FM vs. ST	ATIC PRE	SSURE W	/C
MODEL	P/N	DIAMETER	WATTS	OP. PRESSURE "WC	0"	.2"	.5"	1.0"	1.5"	2.0"
RP140†	28460	4"	14-19	0.6	152	120*	64*	-	-	-
RP145	28461	4"	34-66	1.7	169	150*	124*	81*	42	4
RP260	28462	6"	47-65	1.3	251	210*	157	70	-	-
RP265	28463	6"	96-136	2.3	375	340*	282*	204*	140	70
RP380	28464	8"	96-138	2.0	531	490*	415*	268*	139	41

*HVI Certified Values. †Energy Star® Rated.











В



Α

Model	Α	В	С
RP140	4.5"	9.7"	8.5"
RP145	4.5"	9.7"	8.5"
RP260	6"	11.75"	8.6"
RP265	6"	11.75"	8.6"
RP380	8"	13.41"	10.53"

For Further Information, Contact Your Radon Professional:









RP, GP, XP Pro Series Installation Instructions



Fan Installation & Operating Instructions RP, GP, XP Pro Series Fans Please Read and Save These Instructions.

DO NOT CONNECT POWER SUPPLY UNTIL FAN IS COMPLETELY INSTALLED. MAKE SURE ELECTRICAL SERVICE TO FAN IS LOCKED IN "OFF" POSITION. DISCONNECT POWER BEFORE SERVICING FAN.

- 1. **WARNING!** For General Ventilating Use Only. Do Not Use to Exhaust Hazardous, Corrosive or Explosive Materials, Gases or Vapors. See Vapor Intrusion Application Note #ANO01 for important information on VI Applications. RadonAway.com/vapor-intrusion
- 2. **NOTE:** Fan is suitable for use with solid state speed controls; however, use of speed controls is not generally recommended.
- 3. **WARNING!** Check voltage at the fan to ensure it corresponds with nameplate.
- 4. **WARNING!** Normal operation of this device may affect the combustion airflow needed for safe operation of fuel burning equipment. Check for possible backdraft conditions on all combustion devices after installation.
- 5. **NOTICE!** There are no user serviceable parts located inside the fan unit. **Do NOT attempt to open.** Return unit to the factory. (See Warranty, p. 8, for details.)
- 6. **WARNING!** Do not leave fan unit installed on system piping without electrical power for more than 48 hours. Fan failure could result from this non-operational storage.
- 7. **WARNING!** TO REDUCE THE RISK OF FIRE, ELECTRIC SHOCK, OR INJURY TO PERSONS, OBSERVE THE FOLLOWING:
 - a) Use this unit only in the manner intended by the manufacturer. If you have questions, contact the manufacturer. (See p. 8.)
 - b) Before servicing or cleaning unit, switch power off at service panel and lock the service disconnecting means to prevent power from being switched on accidentally. When the service disconnecting means cannot be locked, securely fasten a prominent warning device, such as a tag, to the service panel.
 - c) Installation work and electrical wiring must be done by qualified person(s) in accordance with all applicable codes and standards, including fire rated construction.
 - d) Sufficient air is needed for proper combustion and exhausting of gases through the flue (chimney) of fuel burning equipment to prevent backdrafting. Follow the heating equipment manufacturers' guidelines and safety standards such as those published by any National Fire Protection Association, and the American Society for Heating, Refrigerating and Air Conditioning Engineers (ASHRAE), and the local code authorities.
 - e) When cutting or drilling into a wall or ceiling, do not damage electrical wiring and other hidden utilities.
 - f) Ducted fans must always be vented to outdoors.
 - g) If this unit is to be installed over a tub or shower, it must be marked as appropriate for the application and be connected to a GFCI (Ground Fault Circuit Interrupter) protected branch circuit.



Fan Installation & Operating Instructions

RP Pro Series	GP Pro Series	XP Pro Series
RP140 P/N 28460	GP201 P/N 28465	XP151 P/N 28469
RP145 P/N 28461	GP301 P/N 28466	XP201 P/N 28470
RP260 P/N 28462	GP401 P/N 28467	
RP265 P/N 28463	GP501 P/N 28468	
RP380 P/N 28464	·	

1.0 SYSTEM DESIGN CONSIDERATIONS

1.1 INTRODUCTION

The RP, GP and XP Pro Series Radon Fans are intended for use by trained, professional, certified/licensed radon mitigators. The purpose of these instructions is to provide additional guidance for the most effective use of RP, GP and XP Series Fans. These instructions should be considered supplemental to EPA/radon industry standard practices, state and local building codes and regulations. In the event of a conflict, those codes, practices and regulations take precedence over these instructions.

1.2 FAN SEALING

The RP, GP and XP Pro Series Radon Fans are factory sealed; no additional caulk or other materials are required to inhibit air leakage.

1.3 ENVIRONMENTALS

The RP, GP and XP Pro Series Radon Fans are designed to perform year-round in all but the harshest climates without additional concern for temperature or weather. For installations in an area of severe cold weather, please contact RadonAway for assistance. When not in operation, the fan should be stored in an area where the temperature is never less than 32 degrees F or more than 100 degrees F.

1.4 ACOUSTICS

The RP, GP and XP Pro Series Radon Fans, when installed properly, operate with little or no noticeable noise to the building occupants. The velocity of the outgoing air should be considered in the overall system design. In some cases the "rushing" sound of the outlet air may be disturbing. In these instances, the use of a RadonAway Exhaust Muffler is recommended.

(To ensure quiet operation of inline and remote fans, each fan shall be installed using sound attenuation techniques appropriate for the installation. For bathroom and general ventilation applications, at least 8 feet of insulated flexible duct shall be installed between the exhaust or supply grille(s) and the fan(s). The RP, GP and XP Pro Series Radon Fans are not suitable for kitchen range hood remote ventilation applications.)

1.5 GROUND WATER

In the event that a temporary high water table results in water at or above slab level, water may be drawn into the riser pipes, thus blocking air flow to the RP, GP and XP Pro Series Radon Fan. The lack of cooling air may result in the fan cycling on and off as the internal temperature rises above the thermal cutoff. Should this condition arise, it is recommended that the fan be turned off until the water recedes, allowing for return to normal operation.

1.6 SLAB COVERAGE

The RP, GP and XP Pro Series Radon Fans can provide coverage up to 2000+ sq. ft. per slab penetration. This will primarily depend on the sub-slab material in any particular installation. In general, the tighter the material, the smaller the area covered per penetration. Appropriate selection of the RP, GP and XP Pro Series Radon Fan best suited for the sub-slab material can improve the slab coverage. The RP, GP and XP Pro Series Radon Fans have a wide range of models to choose from to cover a wide range of sub-slab materials. The RP140 and 145 are best suited for general purpose use. The RP260 can be used where additional airflow is required, and the RP265 and RP380 are best suited for large slab, high airflow applications. Additional suction points can be added as required. It is recommended that a small pit (5 to 10 gallons in size) be created below the slab at each suction hole.

1.7 CONDENSATION & DRAINAGE

Condensation is formed in the piping of a mitigation system when the air in the piping is chilled below its dew point. This can occur at points where the system piping goes through unheated space such as an attic, garage or outside. The system design must provide a means for water to drain back to a slab hole to remove the condensation. The RP, GP and XP Pro Series Radon Fan MUST be mounted vertically plumb and level, with the outlet pointing up for proper drainage through the fan. Avoid mounting the fan in any orientation that will allow water to accumulate inside the fan housing. The RP, GP and XP Pro Series Radon Fans are NOT suitable for underground burial.

For RP, GP and XP Pro Series Fan piping, the following table provides the minimum recommended pipe diameter and pitch under several system conditions.

Pipe	Minimum Rise per Ft of Run*				
Diameter	@25 CFM	@50 CFM	@100 CFM		
4"	1/8"	1/4"	3/8"		
3"	1/4"	3/8"	1 1/2"		

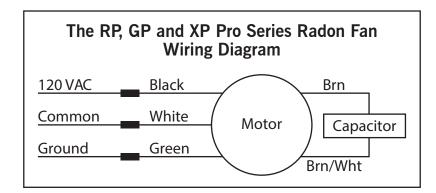


1.8 SYSTEM MONITOR & LABEL

A System Monitor, such as a manometer (P/N 50017) or audible alarm (P/N 28535, 28001-2, 28001-4 or 28421), is required to notify the occupants of a fan system malfunction. A System Label (provided with Manometer P/N 50017) with instructions for contacting the installing contractor for service and identifying the necessity for regular radon tests to be conducted by the building occupants must be conspicuously placed in a location where the occupants frequent and can see the label.

1.9 ELECTRICAL WIRING

The RP, GP and XP Pro Series Radon Fans operate on standard 120V, 60Hz AC. All wiring must be performed in accordance with National Fire Protection (NFPA) National Electrical Code, Standard #70, current edition, for all commercial and industrial work, and state and local building codes. All wiring must be performed by a qualified and licensed electrician. Outdoor installations require the use of a UL Listed watertight conduit. Ensure that all exterior electrical boxes are outdoor rated and properly sealed to prevent water penetration into the box. A means, such as a weep hole, is recommended to drain the box.



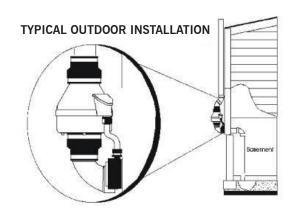
1.10 SPEED CONTROLS

The RP, GP and XP Pro Series Radon Fans are rated for use with electronic speed controls; however, speed controls are generally not recommended. If used, the recommended speed control is Pass & Seymour Solid State Speed Control (Cat. No. 94601-1).

^{*}See p. 7 for detailed specifications.

2.0 INSTALLATION

The RP, GP and XP Pro Series Radon Fans can be mounted indoors or outdoors. (It is suggested that EPA and radon mitigation standards recommendations be followed in choosing the fan location.) The GP fans have an integrated mounting bracket; the RP, GP and XP Pro Series Radon Fans may be mounted directly on the system piping or fastened to a supporting structure by means of an optional mounting bracket. The ducting from the fan to the outside of the building has a strong effect on noise and fan energy use. Use the shortest, straightest duct routing possible for best performance, and avoid installing the fan with smaller ducts than recommended. Insulation around the ducts can reduce energy loss and inhibit mold growth. Fans installed with existing ducts may not achieve their rated airflow.



2.1 MOUNTING

Mount the RP, GP and XP Pro Series Radon Fan vertically with outlet up. Ensure the unit is plumb and level. When mounting directly on the system piping assure that the fan does not contact any building surface to avoid vibration noise.

2.2 MOUNTING BRACKET (optional)

The RP, GP and XP Pro Series Radon Fans may be optionally secured with the RadonAway Fan Mounting Bracket (P/N 25007). Foam or rubber grommets may also be used between the bracket and mounting surface for vibration isolation.

2.3 SYSTEM PIPING

Complete piping run, using flexible couplings as a means of disconnect for servicing the unit and for vibration isolation. As the fan is typically outside of the building thermal boundary and is venting to the outside, installation of insulation around the fan is not required.

2.4 ELECTRICAL CONNECTION

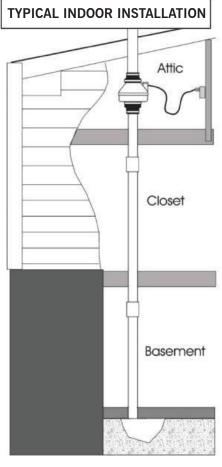
Connect wiring with wire nuts provided, observing proper connections (See Section 1.9). Note that the fan is not intended for connection to rigid metal conduit.

2.5 VENT MUFFLER (optional)

Install the muffler assembly in the selected location in the outlet ducting. Solvent weld all connections. The muffler is normally installed at the end of the vent pipe.

2.6 OPERATION CHECKS & ANNUAL SYSTEM MAINTENANCE

 Verify all connections are tight and leak-free.
 Ensure the RP, GP and XP Pro Series Radon Fan and all ducting are secure and vibration-free.
 Verify system vacuum pressure with manometer. Ensure vacuum pressure is within normal operating range and less than the maximum recommended operating pressure. (Based on sea-level operation, at higher altitudes reduce by about 4% per 1000 feet) (Further reduce Maximum Operating Pressure by 10% for High Temperature environments.) See Product Specifications. If this is exceeded, increase the number of suction points.
 Verify Radon levels by testing to EPA Protocol and applicable testing standards.



THE FOLLOWING CHARTS SHOW THE PERFORMANCE OF THE RP, GP AND XP PRO SERIES RADON FANS

RP Pro Series Product Specifications

Typical CFM Vs. Static Pressure "WC									
Model 0" .2" .5" .75" 1.0" 1.25" 1.5" 1.75"								2.0"	
RP140	152	120*	64*	-	-	-	-	-	
RP145	169	150*	124*	101	81*	61	42	22	4
RP260	251	210*	157	117	70	26	-	-	-
RP265	375	340*	282*	238	204*	170	140	108	70
RP380	531	490*	415*	340	268*	200	139	84	41

*Denotes HVI certified values.

Model	Power Consumption 120VAC, 60Hz, 1.5 Amp Maximum	Maximum Recommended Operation Pressure* (Sea Level Operation)**
RP140	14 - 19 watts	0.6" WC
RP145	34 - 66 watts	1.7" WC
RP260	47-65 watts	1.3" WC
RP265	96 - 136 watts	2.3" WC
RP380	96 - 138 watts	2.0" WC

*Reduce by 10% for High Temperature Operation. **Reduce by 4% per 1000 ft. of altitude.

Model	Size	Weight	Inlet/Outlet	L.2
RP140	8.5"H x 9.7" Dia.	5.5 lbs	4.5"OD (4.0" PVC Sched 40 size compatible)	25
RP145	8.5"H x 9.7" Dia.	5.5 lbs	4,5" OD	15
RP260	8.6"H x 11.75" Dia.	5.5 lbs	6.0" OD	48
RP265	8.6"H x 11.75" Dia.	6.5 lbs	6.0" OD	30
RP380	10.53"H x 13.41" Dia.	11.5 lbs	8.0" OD	57

L.2 = Estimated Equivalent Length of Rigid Metal Ducting resulting in .2" WC pressure loss for Duct Size listed. Longer Equivalent Lengths can be accommodated at Flows Lower than that at .2" WC pressure loss (see CFM Vs Static Pressure "WC Table).

XP Pro Series Product Specifications

Typical CFM Vs. Static Pressure "WC						
	0"	.5"	1.0"	1.5"	1.75"	2.0"
XP151	167	127	77	-	-	-
XP201	126	98	66	26	-	-

Model	Power Consumption 120VAC, 60Hz, 1.5 Amp Maximum	Maximum Recommended Operation Pressure* (Sea Level Operation)**
XP151	53-70 watts	1.4" WC
XP201	38-74 watts	1.6" WC

*Reduce by 10% for High Temperature Operation **Reduce by 4% per 1000 ft. of altitude.

Model	Size	Weight	Inlet/Outlet
XP151	9.5"H x 8.5" Dia.	6 lbs	4.5"OD (4.0" PVC Sched 40 size compatible)
XP201	9.5"H x 8.5" Dia.	6 lbs	4.5" OD

GP Pro Series Product Specifications

Typical CFM Vs. Static Pressure "WC							
	1.0"	1.5"	2.0"	2.5"	3.0"	3.5"	4.0"
GP201	54	42	11	-	-	-	-
GP301	64	54	41	4	-	-	-
GP401	-	61	52	44	22	-	-
GP501	-	-	66	58	50	27	4

Model	Power Consumption 120VAC, 60Hz, 1.5 Amp Maximum	Maximum Recommended Operation Pressure* (Sea Level Operation)**
GP201	31-67 watts	1.8" WC
GP301	56-100 watts	2.3" WC
GP401	62-128 watts	3.0" WC
GP501	68 - 146 watts	3.8" WC

*Reduce by 10% for High Temperature Operation **Reduce by 4% per 1000 ft. of altitude.

Model	Size	Weight	Inlet/Outlet
GP201	13"H x 12.5" Dia.	12 lbs	3.5"OD (3.0" PVC Sched 40 size compatible)
GP301	13"H x 12.5" Dia.	12 lbs	3.5" OD
GP401	13"H x 12.5" Dia.	12 lbs	3.5" OD
GP501	13"H x 12.5" Dia.	12 lbs	3.5" OD

RP, XP and GP Pro Series Additional Specifications

Model	Recommended Duct	PVC Pipe Mounting	Thermal Cutout	Insulation Class
RP140			130°C/266°F	Class B Insulation
RP145	3" or 4" Schedule	Mount on the duct pipe or with	130°C/266°F	Class F Insulation
RP260	20/40 PVC	optional mounting bracket. For Ventilation: 4", 6" or 8" Rigid	150°C/302°F	
RP265		or Flexible Ducting.	150°C/302°F	
RP380	6" Schedule 20/40 PVC Pipe	_	150°C/302°F	
XP151	3" or 4" Schedule	Fan may be mounted on the duct	120°C/248°F	Class B Insulation
XP201	20/40 PVC	pipe or with integral flanges.	120 0/246 F	CIASS D IIISUIALIOII
GP201				
GP301	3" or 4" Schedule	Fan may be mounted on the duct	120°C/248°F	Class B Insulation
GP401	20/40 PVC	pipe or with integral flanges.	120 0/248 6	Class B Insulation
GP501				

Continuous Duty 3000 RPM Thermally Protected RP, GP Residential and Commercial XP Residential Only Rated for Indoor or Outdoor Use



LISTED Electric Fan



Conforms to UL STD, 507 Certified to CAN/CSA STD, C22.2 No.113

IMPORTANT INSTRUCTIONS TO INSTALLER

Inspect the RP, GP and XP Pro Series Radon Fan for shipping damage within 15 days of receipt. **Notify RadonAway of any damages immediately.** RadonAway is not responsible for damages incurred during shipping. However, for your benefit, RadonAway does insure shipments.

There are no user serviceable parts inside the fan. **Do not attempt to open the housing.** Return unit to factory. (See Warranty below).

Install the RP, GP and XP Pro Series Radon Fan in accordance with all EPA, ANSI/AARST standard practices, and state and local building codes and regulations.

Provide a copy of this instruction or comparable radon system and testing information to the building occupants after completing system installation.

Warranty

RadonAway® warrants that the RP, GP (excluding GP500) and XP Pro Series Radon Fan (the "Fan") will be free from defects in materials and workmanship for a period of 12 months from the date of purchase or 18 months from the date of manufacture, whichever is sooner (the "Warranty Term").

RadonAway[®] will replace any fan which fails due to defects in materials or workmanship during the Warranty Term. This Warranty is contingent on installation of the Fan in accordance with the instructions provided. This Warranty does not apply where any repairs or alterations have been made or attempted by others, or if the unit has been abused or misused. Warranty does not cover damage in shipment unless the damage is due to the negligence of RadonAway[®].

The Fan must be returned (at Owner's cost) to the RadonAway® factory. Any Fan returned to the factory will be discarded unless the Owner provides specific instructions along with the Fan when it is returned regardless of whether or not the Fan is actually replaced under this warranty. Proof of purchase must be supplied upon request for service under this Warranty.

5-YEAR EXTENDED WARRANTY WITH PROFESSIONAL INSTALLATION.

RadonAway® will extend the Warranty Term of the fan to 60 months (5 years) from date of purchase or 66 months from date of manufacture, whichever is sooner, provided that the fan is installed by a professional radon mitigation contractor. Proof of purchase and/or proof of professional installation may be required for service under this warranty. No extended warranty is offered outside the Continental United States and Canada beyond the standard 12 months from the date of purchase or18 months from the date of manufacture, whichever is sooner.

RadonAway® is not responsible for installation, removal or delivery costs associated with this Warranty.

LIMITATION OF WARRANTY

EXCEPT AS STATED ABOVE, THE RP, GP (excluding GP500) and XP PRO SERIES RADON FANS ARE PROVIDED WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESS OR IMPLIED, INCLUDING, WITHOUT LIMITATION, IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

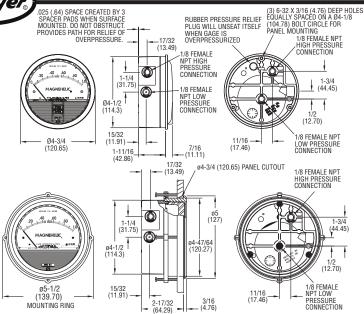
IN NO EVENT SHALL RADONAWAY BE LIABLE FOR ANY DIRECT, INDIRECT, SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES ARISING OUT OF, OR RELATING TO, THE FAN OR THE PERFORMANCE THEREOF. RADONAWAY'S AGGREGATE LIABILITY HEREUNDER SHALL NOT IN ANY EVENT EXCEED THE AMOUNT OF THE PURCHASE PRICE OF SAID PRODUCT. THE SOLE AND EXCLUSIVE REMEDY UNDER THIS WARRANTY SHALL BE THE REPAIR OR REPLACEMENT OF THE PRODUCT, TO THE EXTENT THE SAME DOES NOT MEET WITH RADONAWAY'S WARRANTY AS PROVIDED ABOVE.

For service under this Warranty, contact RadonAway for a Return Material Authorization (RMA) number and shipping information. No returns can be accepted without an RMA. If factory return is required, the customer assumes all shipping costs, including insurance, to and from factory.

RadonAway® 3 Saber Way Ward Hill, MA 01835 USA TEL (978) 521-3703 FAX (978) 521-3964 Email to: Returns@RadonAway.com

Record the following information for your records:	
Serial Number:	Purchase Date:

Magnehelic® Differential Pressure Gage



*The blowout plug is not used on models above 180 inches of water pressure, medium or high pressure models, or on gages which require an elastomer other than silicone for the diaphragm

STANDARD GAGE ACCESSORIES: Two 1/8" NPT plugs for duplicate pressure taps, two 1/8" pipe thread to rubber tubing adapters and three flush mounting adapters with screws.

MP AND HP GAGE ACCESSORIES: Mounting ring and snap ring retainer substituted for 3 adaptors. 1/4" compression fittings replace 1/8" pipe thread to rubber tubing adaptors.

OVERPRESSURE PROTECTION: Standard Magnehelic® Differential Pressure Gages are rated for a maximum pressure of 15 psig and should not be used where that limit could be exceeded. Models employ a rubber plug on the rear which functions as a relief valve by unseating and venting the gage interior when over pressure reaches approximately 25 psig (excludes MP and HP models). To provide a free path for pressure relief, there are four spacer pads which maintain .023" clearance when gage is surface mounted. Do not obstruct the gap created by these pads.

SPECIFICATIONS

Service: Air and non-combustible, compatible gases, (Natural Gas option available.)

Wetted Materials: Consult factory.

Housing: Die cast aluminum case and bezel, with acrylic cover. (MP model has polycarbonate cover).

Accuracy: 2% of full scale (±3% on -0, -100PA, -125PA, -10MM and ±4% on -00, -60PA, -6MM), throughout range at 70°F (21.1°C); High accuracy version: ±1% on full scale (±1.5% on -0. -100PA, -125PA, -10MM and ±2% on -00. -60PA, -6MM),

Pressure Limits: -20" Hg to 15 psig.† (-0.677 bar to 1.034 bar); MP option: 35 psig (2.41 bar), HP option: 80 psig (5.52 har)

Enclosure Rating: IP67.

Overpressure: Relief plug opens at approximately 25 psig (1.72 bar), standard gages only. The blowout plug is not used on models above 180 inches of water pressure, medium or high pressure models, or on gages which require an elastomer other than silicone for the diaphragm.

Temperature Limits: 20 to 140°F (-6.67 to 60°C). *Low temperature models available as special option.

Size: 4" (101.6 mm) diameter dial face.

Mounting Orientation: Diaphragm in vertical position.

Consult factory for other position orientations.

Process Connections: 1/8" female NPT duplicate high and low pressure taps - one pair side and one pair back.

Weight: 1 lb 2 oz (510 a), MP & HP 2 lb 2 oz (963 a). Agency Approvals: RoHS.

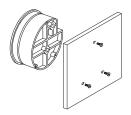
†For applications with high cycle rate within gage total pressure rating, next higher rating is recommended. See Medium and High pressure

Note: May be used with hydrogen when ordering Buna-N diaphragm. Pressure must be less than 35 psi.

INSTALL ATION

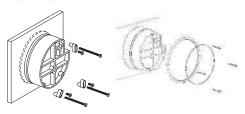
Select a location free from excessive vibration and where the ambient temperature will not exceed 140°F (60°C). Also, avoid direct sunlight which accelerates discoloration of the clear plastic cover. Sensing lines may be run any necessary distance. Long tubing lengths will not affect accuracy but will increase response time slightly. Do not restrict lines. If pulsating pressures or vibration cause excessive pointer oscillation. consult the factory for ways to provide additional damping. All standard Magnehelic® Differential Pressure Gages are calibrated with the diaphragm vertical and should be used in that position for maximum accuracy. If gages are to be used in other than vertical position, this should be specified on the order. Many higher range gages will perform within tolerance in other positions with only rezeroing. Low range models of 0.5" w.c. plus 0.25" w.c. and metric equivalents must be used in the

vertical position only. SURFACE MOUNTING



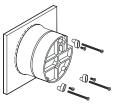
Locate mounting holes, 120° apart on a 4-1/8" dia, circle, Use No. 6-32 machine screws of appropriate length.

FLUSH MOUNTING



Provide a 4-9/16" dia. (116 mm) opening in panel. Provide a 4-3/4" dia. (120 mm) opening for MP and HP models. Insert gage and secure in place with No. 6-32 machine screws of appropriate length, with adapters, firmly secured in place.

FOR -SS BEZEL INSTALLATION



Provide a 4-9/16" opening in panel. Insert gage and secure with supplied mounting hardware.

PIPE MOUNTING

To mount gage on 1-1/4" - 2" pipe, order optional A-610 pipe

TO ZERO GAGE AFTER INSTALLATION

Set the indicating pointer exactly on the zero mark, using the external zero adjust screw on the cover at the bottom. Note that the zero check or adjustment can only be made with the high and low pressure taps both open to atmosphere.

OPERATION

Positive Pressure: Connect tubing from source of pressure to either of the two high pressure ports. Plug the port not used. Vent one or both low pressure ports to atmosphere.

Negative Pressure: Connect tubing from source of vacuum or negative pressure to either of the two low pressure ports. Plug the port not used. Vent one or both high pressure ports to atmosphere.

Differential Pressure: Connect tubing from the greater of two pressure sources to either high pressure port and the lower to either low pressure port. Plug both unused ports.

When one side of the gage is vented in dirty, dusty atmosphere, we suggest an A-331 Filter Vent Plug be installed in the open port to keep inside of gage clean.

A. For portable use of temporary installation use 1/8" pipe thread to rubber tubing adapter and connect to source of pressure with flexible rubber or vinvl tubing.

B. For permanent installation, 1/4" O.D., or larger, copper or aluminum tubing is recommended.

MAINTENANCE

No lubrication or periodic servicing is required. Keep case exterior and cover clean. Occasionally disconnect pressure lines to vent both sides of gage to atmosphere and re-zero. Optional vent valves should be used in permanent installations. The Series 2000 is not field serviceable and should be returned if repair is needed (field repair should not be attempted and may void warranty). Be sure to include a brief description of the problem plus any relevant application notes. Contact customer service to receive a return goods authorization number before shipping.

Attempted field repair may void your warranty. Recalibration or repair by the user is not recommended.

TROUBLE SHOOTING TIPS Gage won't indicate or is sluggish.

- Duplicate pressure port not plugged.
- Diaphragm ruptured due to overpressure.
- Fittings or sensing lines blocked, pinched,
- Cover loose or "O"ring damaged, missing.
- Pressure sensor, (static tips, Pitot tube, etc.) improperly located.
- Ambient temperature too low. For operation below 20°F (-7°C), order gage with low temperature. (LT) option.

Magnehelic® Differential Pressure Gage **INSTRUCCIONES Y LISTA DE PARTES** (3) 6-32 X 3/16 (4.76) DEEP HOLES EQUALLY SPACED ON A Ø4-1/8 (104.78) BOLT CIRCLE FOR 25 (.64) SPACE CREATED BY 3 RUBBER PRESSURE RELIEF PLUG WILL UNSEAT ITSELF SPACER PADS WHEN SURFACE MOUNTED DO NOT OBSTRUCT PANEL MOUNTING PROVIDES PATH FOR BEI IFF OF WHEN GAGE IS OVERPRESSURIZED 1/8 FEMALE NPT OVERPRESSURE. HIGH PRESSURE (13.49) 1/8 FEMALE NPT HIGH PRESSURE 1-1/4 (31.75) (44.45) 1/8 FEMALE NPT LOW PRESSURE 114.3) CONNECTION 1/2 (12.70) /8 FFMALE NPT LOW PRESSURE CONNECTION 7/16 1-11/16_ 17/32 -- (13.49) ø4-3/4 (120.65) PANEL CUTOUT 1/8 FEMALE NPT HIGH PRESSURE 1-1/4 (31.75) a4-47/64 ø4-1/2 (114.3) 120.27)

2-17/32 (64,29) (El tapón de goma no es usado en los modelos sobre 180 pulgadas de presión de agua, modelos de presión media o alta, o en instrumentos que requieren un elastizado en cualquier otro material que no sea silicona para el diafragma.)

(11.91)

Accesorios: Tapones 1/8" NPT para las conexiones duplicadas, dos adaptadores de rosca 1/8" NPT a tubo de goma; y tres adaptadores para montaje al ras y tornillos.

a5 - 1/2

MOUNTING RING

(139.70)

Accesorios para Los Modelos MP v HP: El anillo de montaie y el retensor del anillo de presión son substituidos por 3 adaptadores, accesorios de compresión de 1/4" remplazan a los adaptadores de rosca 1/8" a tubo de goma.

Protección Para Sobrepresión: Los Manómetros Diferenciales Magnehelic Estándar están clasificados para una presión máxima de 15 psi y no se deberían de usar donde el límite puede excederse. Los modelos emplean un tapón de goma en el trasero que funciona como una válvula de alivio desmontándose y ventilando el interior del instrumento cuando la sobrepresión alcanza aproximadamente 25 psig. (Los modelos MP y HP son excluidos) Para proveer un camino libre para el alivio de presión, el instrumento viene con rodilleras que mantienen un espacio de .023" cuando el instrumento es montado en superficie. No bloque el espacio creado por estas rodilleras.

El instrumento puede ser usado con hidrogeno cuando se ordena con diafragma de Buna-N. La presion tiene que ser menos de 35 psi

ESPECIFICACIONES

Servicio: aire y gases no combustibles, gases compatibles. (ópcion disponible para uso con gas natural).

1/8 FEMALE NPT LOW

PRESSURE

CONNECTION

Materiales Mojados: Consulte con la fábrica.

(17.46)

Carcasa: Caja y anillo de retención de aluminio fundido a presión con tapadera de acrílico. (El modelo MP tiene la tapadera de policarbonato.)

Exactitud: ±2% de la escala completa (±3% en los márgenes de -0. -100PA. -125PA v -10MM v ±4 % en los márgenes de -00, -60PA y -6MM), en todo el margen a 21.1 °C (70 °F); Versión de alta precisión: ±1% de la escala completa (±1.5% en los márgenes de -0, -100PA, -125PA, -10MM y ±2% en los márgenes de -00, -60PA, -6MM).

Límite de Presión: -20 Hg. a 15 psig. † (-0.677 bar a 1,034 bar); opción MP: 35 psig (2.41 bar), opción HP: 80 psig (5.52

Clasificación de gabinete: IP67.

Sobrepresión: El tapón de alivio se abre aproximadamente a los 25 psig, modelos estandard únicamente. El tapón de goma no es usado en los modelos sobre 180 pulgadas de presión de aqua, modelos de presión media o alta, o en instrumentos que requieren un elastizado en cualquier otro material que no sea silicio para el diafragma.

Límite de Temperatura: -6.67 a 60°C. * Modelos de baja temperatura disponibles como opción especial.

Dimensiones: diám. 120,65 mm x 55,6 prof.

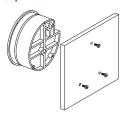
Orientación de Montaje: El diafragma debe ser usado solo en posición vertical. Consulte con la fábrica para otras orientaciones de posición.

Conexiones: 1/8" NPT para alta y baja presión, duplicadas (atrás, a los lados).

Peso: 510 g, MP y HP 963 g. Aprobación de la agencia: RoHS. Seleccione un lugar libe de exceso de vibraciones, y donde la temperatura ambiente no supere los 60°C. Evite luz solar directa, para evitar decoloración de la cubierta plástica. Las conexiones de proceso pueden tener cualquier longitud sin afectar la exactitud, pero pueden extender el tiempo de respuesta del instrumento. Si hay pulsación de presión o vibración, consulte a fábrica sobre medios de amortiquación. Los MAGNEHELIC han sido calibrados con el diafragma vertical, y deben ser usados en esas condiciones. Para otras posiciones, se debe especificar en la orden de provisión. Los de rango elevado pueden ser usados en diversas posiciones, pero se debe reajustar el cero. Los modelos de la serie 2000-00 v equivalentes métricos deben ser usados solo verticalmente.

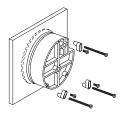
Montaie en Superficie

Instalacion



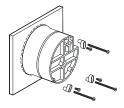
Perfore tres orificios separados 120° sobre una circunferencia de 105 mm de diám. y sostenga el instrumento con tres tornillos 6-32 de long, apropiada.

Montaje alineado



Perfore un circulo de 115 mm de diám, en el panel, y sostenga el instrumento mediante los.

Para instalar el bisel de acero inoxidable



Haga una apertura de 4-9/16 pulgadas en el panel. Inserte el medidor y asegure con los herrajes de montaje provistos.

Montaie Sobre Pipa

Para montar el instrumento sobre pipas de 32 a 50 mm de diám., ordene el adaptador opcional A-610.

Puesta a Cero Después de Instalar

Deie las conexiones de presión abiertas a atmósfera y aiuste a cero desde tornillo del panel frontal.

Operacion

Presión Positiva: Conecte la tubería desde la fuente de presión a cualquiera de las dos conexiones de alta presión (HIGH), bloqueando la no usada: Las conexiones de baia (LOW) presión pueden dejarse uno o los dos abiertos a la atmósfera.

Presión Negativa: Repita el procedimiento anterior, conectado en este caso las conexiones de baja presión (LOW). Deje las otras conexiones abiertas.

Presión diferencial: Conecte el tubo correspondiente a la presión más positiva al cualquiera de los conectores de alta presión (HIGH) bloqueando el no usado, y la más baja presión o presión negativa (vacío) al conector de baia presión (LOW). Puede usarse cualquier conector de cada par, deiando siempre uno bloqueado. Si se deja una conexión abierta a la atmósfera, se recomienda el uso de un filtro tipo A-331 en el lugar correspondiente para mantener limpio el interior del instrumento. Para uso portable, o instalación temporaria, uso adapta dores para rosca de tubo de 1/89 a tubo flexible, y conecte a proceso mediante una tubería de goma, o equivalente. Para instalación permanente, se recomienda el uso de tubo de cobre o aluminio de por lo menos 1/4" de diám. exterior

No se requiere mantenimiento específico alguno, ni lubricación. Periódicamente, desconecte el instrumento, ventee la presión acumulada, y reajuste el cero. Para instalaciones permanentes, se debe usar un juego de válvulas de montaje permanente para el venteo

El instrumento de Serie 2000 no puede ser re parado en el campo y debería de ser regresado si reparos son necesarios (Reparos en el campo no deben de ser intentados y pueden cancelar la garantía.). Asegurarse de incluir una descripción breve del problema más cualquier notas pertinentes a la aplicación para devolución de productos antes de enviar el

Cuidado! : La recalibración en campo puede invalidar la garantía. No se recomienda la recalibracion por parte del usuario. En caso necesario envie el instrumento con transporte pago a:

Localización De Fallas

- · El instrumento no indica, o es lento en reacción.
- 1. Conexión duplicada abierta.
- 2. Diafragma roto por sobrepresión.
- 3. Tubería de conexión perforada, con pérdidas o pinchazos
- 4. Anillo de retención floio, u "O " ring dañado.
- 5. Conexión a proceso indebida o inadecuada.
- 6. Temperatura muy baia. Para este caso ordene tipos LT (baia temperatura).

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[†] Para aplicaciones con alto ciclo de velocidad dentro de la clasificación de presión total del instrumento, la próxima clasificación mas alta es recomendada. Vea las opciones de media y alta presión



INSTALLATION & OPERATING INSTRUCTIONS Instruction P/N IN015 Rev E FOR CHECKPOINT IIa TM P/N 28001-2 & 28001-3 RADON SYSTEM ALARM

INSTALLATION INSTRUCTIONS (WALL MOUNTING)

Select a suitable wall location near a vertical section of the suction pipe. The unit should be mounted about four or five feet above the floor and as close to the suction pipe as possible. Keep in mind that with the plug-in transformer provided, the unit must also be within six feet of a 120V receptacle. NOTE: The Checkpoint IIa is calibrated for vertical mounting, horizontal mounting will affect switchpoint calibration.

Drill two 1/4" holes 4" apart horizontally where the unit is to be mounted.

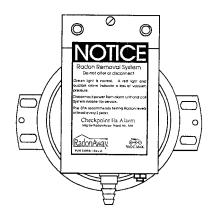
Install the two 1/4" wall anchors provided.

Hang the CHECKPOINT IIa from the two mouting holes located on the mounting bracket. Tighten the mounting screws so the unit

fits snugly and securely against the wall.

Drill a 5/16" hole into the side of the vent pipe about 6" higher than the top of the unit.

Insert the vinyl tubing provided about 1" inside the suction pipe.



Cut a suitable length of vinyl tubing and attach it to the pressure switch connector on the CHECKPOINT IIa.

CALIBRATION AND OPERATION.

The CHECKPOINT IIa units are calibrated and sealed at the factory to alarm when the vacuum pressure falls below the factory setting and should not normally require field calibration. Factory Settings are:

28001-2 -.25" WC Vacuum 28001-3 -.10" WC Vacuum

To Verify Operation:

With the exhaust fan off or the pressure tubing disconnected and the CHECKPOINT IIa plugged in, both the red indicator light and the audible alarm should be on.

Turn the fan system on or connect the pressure tubing to the fan piping. The red light and the audible alarm should go off. The green light should come on.

Now turn the fan off. The red light and audible alarm should come on in about two or three seconds and the green light should go out.

WARRANTY INFORMATION

Subject to applicable consumer protection legislation, RadonAway warrants that the CHECKPOINT IIa will be free from defective material and workmanship for a period of (1) year from the date of purchase. Warranty is contingent on installation in accordance with the instructions provided. This warranty does not apply where repairs or alterations have been made or attempted by others; or the unit has been abused or misused. Warranty does not include damage in shipment unless the damage is due to the negligence of RadonAway. All other warranties, expressed or written, are not valid. To make a claim under these limited warranties, you must return the defective item to RadonAway with a copy of the purchase receipt. RadonAway is not responsible for installation or removal cost associated with this warranty. In no case is RadonAway liable beyond the repair or replacement of the defective product FOB RadonAway.

THERE ARE NO WARRANTIES WHICH EXTEND BEYOND THE DESCRIPTION ON THE FACE HEREOF. THERE IS NO WARRANTY OF MERCHANTIBILITY. ALL OTHER WARRANTIES, EXPRESSED OR WRITTEN, ARE NOT VALID.

For service under these warranties, contact RadonAway for a Return Material Authorization (RMA) number and shipping information. **No returns can be accepted without an RMA.** If factory return is required, the customer assumes all shipping costs to and from factory.

Manufactured by: RadonAway Ward Hill, MA





Appendix H

Remedial System Optimization Table of Contents

REMEDIAL SYSTEM OPTIMIZATION FOR ATLAS GRAPHICS SITE

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