April 14, 2023

John Spellman, P.E.
New York State Department of Environmental Conservation
Division of Environmental Remediation, Remedial Bureau C
625 Broadway, 12th Floor, Albany, NY 12233-7014
john.spellman@dec.ny.gov

Re: Revised Interim Site Management Plan
Former Grant Hardware
44 High Street and 217 Rt. 59
West Nyack, New York 10994
Langan Project No.: 170602701

Dear Mr. Spellman:

Langan Engineering, Environmental, Surveying, Landscape Architecture and Geology, D.P.C. (Langan) prepared this Interim Site Management Plan (ISMP) for the sub-slab depressurization (SSD) systems at the Former Grant Hardware facility located at 44 High Street in West Nyack, New York ("Site") and the off-Site residential property located at 217 Rt. 59 in West Nyack, New York, as required by the New York State Department of Environmental Conservation (NYSDEC). This ISMP describes ongoing operation, monitoring and maintenance (OM&M) of the SSD systems.

The SSD systems will continue to operate in accordance with the ISMP until NYSDEC and New York State Department of Health (NYSDOH) approve a request to deactivate or terminate the systems or modify the ISMP. The following sections describe the OM&M and reporting requirements, and provide a contact list for personnel involved in the system OM&M. Figures of SSD system layouts are included as Figure 1.

INTERIM SITE MANAGEMENT PLAN – OM&M

System History and Ongoing Monitoring

The SSD systems at 44 High Street were expanded to their current layout of 11 fans and 43 depressurization points in March 2012. The systems have been effective at maintaining a vacuum field of 0.002 inches of water column or greater under the building slab. In February 2021, approximately 6,250 linear feet of expansion joints and cracks in the building slab were sealed to mitigate potential vapor intrusion and short circuiting of the SSD systems. However, post-joint sealing by Langan in February 2021 detected concentrations of the VOC trichloroethene (TCE) exceeding the NYSDOH Air Guidance Value (AGV) at several indoor air sampling locations. The results of subsequent pressure field extension (PFE) testing in February 2021 indicated sufficient vacuum under the slab across the building footprint. Langan reported on these activities in the

"Expansion Joint Sealing and Pressure Field Extension Test Technical Memo" dated March 15, 2021 and the "Indoor Air and Ambient Air Sampling Report" dated April 30, 2021.

Bulk-packaged bearings stored by former tenant General Bearing were identified as a potential background TCE source. The bulk-packaged bearings were completely removed from the facility in July 2021 when General Bearing's warehouse lease ended. A week later, the July 2021 indoor air sampling event was completed (documented in the "Vapor Intrusion Investigation Update" dated 23 December 2021. The change of tenant (currently Oak Beverages, LLC, a beer distributer) and removal of these bearings resulted in a decrease in TCE concentrations in the former General Bearing portion of the warehouse. However, indoor air quality remained above the NYS DOH AGVs in the Clancy Cullen portion of the warehouse.

In June 2022, Langan completed concrete slab screening activities in several areas, suspecting that indoor air quality issues were emanating from the concrete slab itself in the warehouse. These screening activities identified VOC-impacted areas of concrete. Langan recommended sealing 3,100 square feet (SF) of concrete slab in the Clancy Cullen portion of the building to address these issues. Approximately 3,500 SF of concrete was sealed by a contractor using the Retro-Coat™ product in October 2022. The January 2023 indoor air sampling results indicated that this floor sealing work was effective and indoor air TCE concentrations were below NYSDOH AGVs.

Ongoing indoor air monitoring in the warehouse and at 217 Rt. 59 is recommended on an annual basis in the heating season. This sampling will be in accordance with the *Guidance for Evaluating Soil Vapor Intrusion in the State of New York* (October 2006, with updates). Indoor air sampling may be conducted if required, when work is completed on the systems or additional work is done to remediate potential source areas of contamination within the site building footprint.

System Operation

The 11 active SSD systems at 44 High Street and 1 active SSD system at 217 Rt. 59 will operate continuously in accordance with design specifications and parameters, and the manufacturer's operation manuals (Attachment A). The SSD systems are equipped with audible alarms to indicate if the systems are not operating properly.

Technical difficulties may be encountered during the course of operation of the SSD systems, during which they may not operate within design specifications. The systems will be routinely inspected and adjusted so that the intended operation specifications are met. Any required maintenance, adjustments, or repairs to the system will be conducted as per manufacturer's recommendations and this ISMP.

All of the SSD systems will be operated until permission in writing is received from the NYSDEC AND NYSDOH to terminate operation of one or more of the systems. The ISMP may only be modified with NYSDEC approval.

Annual Routine System Inspection and Maintenance

Langan, on behalf of Gussack Realty, is responsible for performing annual routine inspection and maintenance of the SSD systems. Annual routine inspection/equipment maintenance may include, but is not limited to, lubricating motor bearings, replacing pressure gauges or sample ports, and testing the alarm system.

Routine equipment maintenance, repairs, and/or adjustments will be determined based on the life expectancy and warranty for specific components as well as visual observations over time. The need for repairs and/or adjustments will depend upon operating parameters compared to the parameters observed when the systems were started up.

If technical difficulties or non-optimal operating conditions are encountered with SSD systems at either property, Gussack Realty will complete necessary modifications or repairs to the system(s) to bring the system(s) into compliance with appropriate design specifications and parameters (to be coordinated with the NYSDEC).

Each annual inspection visit will include confirmation of current Site uses. The 44 High Street inspection will confirm if the warehouse tenants continue to use the facility for storage/distribution. Gussack Realty will notify Langan and NYSDEC if the current Site use changes between inspections. If a change of use occurs, the Langan team will complete an assessment to determine if any additional measures (i.e., indoor air sampling) will need to be implemented for the proposed use of the property. The assessment will be subject to review and approval by NYSDEC and NYSDOH.

Non-Routine Maintenance

Non-routine maintenance may also be required during the operation of the SSD systems, including the following situations:

- The alarm system is triggered indicating that an SSD system is not operating properly
- An SSD system has become damaged
- The building has undergone renovations that may reduce the effectiveness of an SSD system

Activities conducted during non-routine maintenance visits will vary. NYSDEC will be informed of any SSD system failure within 48 hours. Repairs or adjustments should be made to the affected system(s) as appropriate and as per manufacturer guidelines within 30 days of the equipment failure or whenever possible (i.e., pending availability of parts). If necessary, the affected system(s) will be redesigned and/or restarted.

Inspections will also be performed in the event of an emergency. If an emergency, such as a natural disaster or an unforeseen failure of a system that reduces or has the potential to reduce the effectiveness of the system, verbal notice to the NYSDEC must be given. In addition, Langan will conduct an inspection of the systems within 5 days of the event to verify the effectiveness by a qualified environmental professional. Written confirmation must be provided to the NYSDEC

by Gussack Realty within 7 days of the event that includes a summary of actions taken, or to be taken, and the potential impact the environment and the public.

In the event of a planned or unexpected shut down of the SSD system at either property, additional indoor air samples will be collected to confirm the effectiveness of one or more system, if required by NYSDEC.

Performance Monitoring

The remediation engineer (RE) or environmental personnel under the supervision of the RE will conduct quarterly performance monitoring at the 44 High Street property and annual performance monitoring at 217 Rt. 59 to determine whether the SSD systems are operating effectively. If the PFET data at 44 High Street is consistent, the quarterly monitoring will transition to annual after the first year. Inspections of the SSD systems were conducted on January 11 and 12, 2023 for the two properties and serve as baselines for future performance monitoring.

Unscheduled inspections may take place when a suspected failure of one or more of the SSD systems has been reported, after severe storms, reporting by owner or occupant that an SSD system is not operating properly or has system damage, or after the occurrence of an emergency that is deemed likely to affect the operation of the systems. Performance monitoring will include the following procedures completed for each SSD system:

- Visually inspect system components, including inside the weather enclosures and control panels, to check for damage and defects
- Document vacuum gauge readings at each blower
- Test the alarm system by briefly turning off each system
- Document vacuum at sub-slab Vapor Pin locations in the 44 High Street building and confirm the continued presence of a vacuum beneath the slab.
- Visually inspect to confirm that no new air intakes have been installed within 10-feet of SSD system blower exhaust points.

System Monitoring Devices and Alarms

The SSD systems are equipped with alarms to indicate if the systems are not operating properly. The alarms are audible and have instructions for the occupants to notify the building manager and Langan via phone call if a system stops operating or is operating at a low vacuum. In the event that an alarm is triggered, applicable maintenance and repairs will be conducted as specified in the ISMP and the SSD system will be restarted. Operational problems will be noted in the inspection form and communicated to the NYSDEC within 48 hours.

Criteria for System Termination

The SSD systems will not be discontinued unless prior written approval is granted by NYSDEC and NYSDOH. In the event that monitoring data indicates that one or more SSD system may no longer be required, a request to discontinue the SSD system(s) will be submitted by the remedial party to NYSDEC and NYSDOH.

Contact List

The following contact list will be used, as needed, to coordinate ISMP activities:

Name	Project Role	Phone Number	Email Address
Richard Azevedo (Owner Representative)	Property Owner Representative	914-588-3763	richard@gussackrealty.com
David Gussack	Property Owner	914-715-0700	dg@gussackrealty.com
Jason Hayes (Langan)	Remediation Engineer	212-479-5400	jahayes@langan.com
Kevin Kelly (Langan)	Senior Project Manager	267-879-4351	kkelly@langan.com
Zachary Villari (Langan)	Staff Geologist	215-872-0114	zvillari@langan.com
Tony Moffa (Langan)	Corporate Health & Safety Manager	215-756-2523	tmoffa@langan.com
Oak Beverages Inc.	Building Tenant (Oak Beverages)	(845) 353-1800	
Clancy Cullen Rockland Warehouse	Building Tenant (Clancy Cullen)	(718) 828-3000	

Reporting

Activities conducted to maintain compliance with the ISMP, such as routine and non-routine inspections, will be documented in the NYSDEC quarterly progress reports. The quarterly progress report will include a description of completed Site activities, a system inspection form, any encountered system deficiencies, implemented or proposed corrective actions, monitoring and sampling results or other date relevant to system performance. Indoor air monitoring reports and quarterly pressure field extension results will be appended to the NYSDEC quarterly progress reports.

CLOSING

Please contact Mr. Hayes or Mr. Kelly if you have any questions.

Sincerely,
Langan Engineering, Environmental, Surveying, Landscape Architecture and Geology, D.P.C.

Jason Hayes, PE, LEED AP
Principal/ Vice President

Attachments:

Table 1 – Sub-Slab Depressurization System Vacuum Readings
Table 2 – Pressure Field Extension Test Vacuum Readings
Table 3 – January 2023 Indoor and Ambient Air Results
Figure 1 – 44 High Street SSD System Layout
Attachment A – Manufacturer's Operation Manuals
Attachment B – Q1 2023 Quarterly Report

cc: Kevin Kelly (Langan), John Spellman (NJDEP), Bob Bond (Langan)

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TABLES

Table 1 - Sub-Slab Depressurization System Vacuum Readings
Former Grant Hardware
44 High Street, West Nyack, New York

Sub-Slab Depressurization System No.	Vacuum in Inches of Water Column				
	3/28/2020*	8/31/2020*	2/23/2021+	7/28/2021+	1/13/2023+
1A	-11	-11	-10.5	-11.8	-8.00
1B	-10	-10	-8.10	-9.12	-8.50
2	-2.1	-2.1	-1.80	-1.72	-2.00
3	-1.3	-1.8	-1.00	-1.86	-1.50
4	-2.4	-2.4	-2.10	-2.10	-1.61
5	-9.2	-9.3	-13.6	-14.6	-15.0
6	-1.1	-1.1	-1.00	-1.09	-1.10
7	-1.4	-1.4	-1.70	-1.66	-2.40
8	-1.1	-1.1	-1.30	-1.27	-1.32
9	-12	-12	-19.4	-11.7	-3.50
10	-17	-17	-17.0	-16.8	-12.5

Notes:

***** - Indicates measurements collected by Geovation Engineering, P.C.

+ - Indicates measurements collected by Langan (using a Dwyer digital manometer)

Table 2 - Pressure Field Extension Test Vacuum Readings
Former Grant Hardware
44 High Street, West Nyack, New York

Sub-Slab Vapor Point No.	Vacuum in Inches of Water Column		
	2/23/2021	7/28/2021	1/13/2023
VP-1	-0.425	-0.490	Not Accessible
VP-2	-0.339	-0.630	-0.186
VP-3	-5.80	-8.36	-0.1
VP-4	-0.141	-1.32	-0.38
VP-5	-0.211	-0.490	Not Accessible
VP-6	-0.032	-0.127	-0.036
VP-7	-0.154	-0.186	-0.218
VP-8	-3.00	Not Accessible	Not Accessible
VP-9	-0.509	-0.592	-0.421
VP-10	-0.022	Not Accessible	-0.025
VP-11	-0.020	Not Accessible	-0.022
VP-12	-0.010	-0.017	Not Accessible

Notes:

1. Vacuum measurements collected by Langan using a Dwyer digital manometer.
2. Not Accessible - Indicates that vapor pin could not be accessed due to stored materials in the building.

Table 3 - Indoor and Ambient Air Analytical Results
Former Grant Hardware
44 High Street, West Nyack, New York

Analyte	CAS Number	NYSDOH AGVs	Location	AA-1	AA-2	IA-1	IA-2	IA-3	IA-4	IA-5	IA-6	IA-7	IA-8	IA-9	IA-10
			Sample Name	AA-1_011123	AA-2_011123	IA-1_011123	IA-2_011123	IA-3_011123	IA-4_011123	IA-5_011123	IA-6_011123	IA-7_011123	IA-8_011123	IA-9_011123	IA-10_011123
			Sample Date	1/11/2023	1/11/2023	1/11/2023	1/11/2023	1/11/2023	1/11/2023	1/11/2023	1/11/2023	1/11/2023	1/11/2023	1/11/2023	1/11/2023
			Sample Type	Ambient Air	Ambient Air	Indoor Air	Indoor Air	Indoor Air	Indoor Air	Indoor Air	Indoor Air	Indoor Air	Indoor Air	Indoor Air	Indoor Air
			Unit	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
Volatile Organic Compounds															
1,1,1-Trichloroethane	71-55-6	NS	ug/m3	<0.109 U	<0.109 U	<0.109 U	<0.109 UJ	<0.109 U	<0.109 U	<0.109 U	<0.109 U	<0.109 U	<0.109 U	<0.109 U	<0.109 U
1,1,2,2-Tetrachloroethane	79-34-5	NS	ug/m3	<1.37 U	<1.37 U	<1.37 U	<1.37 UJ	<1.37 U	<1.37 U	<1.37 U	<1.37 U	<1.37 U	<1.37 U	<1.37 U	<1.37 U
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	NS	ug/m3	<1.53 U	<1.53 U	<1.53 U	<1.53 UJ	<1.53 U	<1.53 U	<1.53 U	<1.53 U	<1.53 U	<1.53 U	<1.53 U	<1.53 U
1,1,2-Trichloroethane	79-00-5	NS	ug/m3	<1.09 U	<1.09 U	<1.09 U	<1.09 UJ	<1.09 U	<1.09 U	<1.09 U	<1.09 U	<1.09 U	<1.09 U	<1.09 U	<1.09 U
1,1-Dichloroethane	75-34-3	NS	ug/m3	<0.809 U	<0.809 U	<0.809 U	<0.809 UJ	<0.809 U	<0.809 U	<0.809 U	<0.809 U	<0.809 U	<0.809 U	<0.809 U	<0.809 U
1,1-Dichloroethene	75-35-4	NS	ug/m3	<0.079 U	<0.079 U	<0.079 U	<0.079 UJ	<0.079 U	<0.079 U	<0.079 U	<0.079 U	<0.079 U	<0.079 U	<0.079 U	<0.079 U
1,2,4-Trichlorobenzene	120-82-1	NS	ug/m3	<1.48 U	<1.48 U	<1.48 U	<1.48 UJ	<1.48 U	<1.48 U	<1.48 U	<1.48 U	<1.48 U	<1.48 U	<1.48 U	<1.48 U
1,2,4-Trimethylbenzene	95-63-6	NS	ug/m3	<0.983 U	<0.983 U	<0.983 U	1.09 J	<0.983 U	<0.983 U	<0.983 U	2.73	1.33	1.68	1.02	<0.983 U
1,2-Dibromoethane (Ethylene Dibromide)	106-93-4	NS	ug/m3	<1.54 U	<1.54 U	<1.54 U	<1.54 UJ	<1.54 U	<1.54 U	<1.54 U	<1.54 U	<1.54 U	<1.54 U	<1.54 U	<1.54 U
1,2-Dichlorobenzene	95-50-1	NS	ug/m3	<1.2 U	<1.2 U	<1.2 U	<1.2 UJ	<1.2 U	<1.2 U	<1.2 U	<1.2 U	<1.2 U	<1.2 U	<1.2 U	<1.2 U
1,2-Dichloroethane	107-06-2	NS	ug/m3	<0.809 U	<0.809 U	<0.809 U	<0.809 UJ	<0.809 U	<0.809 U	<0.809 U	<0.809 U	<0.809 U	<0.809 U	<0.809 U	<0.809 U
1,2-Dichloropropane	78-87-5	NS	ug/m3	<0.924 U	<0.924 U	<0.924 U	<0.924 UJ	<0.924 U	<0.924 U	<0.924 U	<0.924 U	<0.924 U	<0.924 U	<0.924 U	<0.924 U
1,2-Dichlorotetrafluoroethane	76-14-2	NS	ug/m3	<1.4 U	<1.4 U	<1.4 U	<1.4 UJ	<1.4 U	<1.4 U	<1.4 U	<1.4 U	<1.4 U	<1.4 U	<1.4 U	<1.4 U
1,3,5-Trimethylbenzene (Mesitylene)	108-67-8	NS	ug/m3	<0.983 U	<0.983 U	<0.983 U	<0.983 UJ	<0.983 U	<0.983 U	<0.983 U	<0.983 U	<0.983 U	<0.983 U	<0.983 U	<0.983 U
1,3-Butadiene	106-99-0	NS	ug/m3	<0.442 U	<0.442 U	<0.442 U	<0.442 UJ	<0.442 U	<0.442 U	<0.442 U	<0.442 U	<0.442 U	<0.442 U	<0.442 U	<0.442 U
1,3-Dichlorobenzene	541-73-1	NS	ug/m3	<1.2 U	<1.2 U	<1.2 U	<1.2 UJ	<1.2 U	<1.2 U	<1.2 U	<1.2 U	<1.2 U	<1.2 U	<1.2 U	<1.2 U
1,4-Dichlorobenzene	106-46-7	NS	ug/m3	<1.2 U	<1.2 U	<1.2 U	<1.2 UJ	<1.2 U	<1.2 U	<1.2 U	<1.2 U	<1.2 U	<1.2 U	<1.2 U	<1.2 U
1,4-Dioxane (P-Dioxane)	123-91-1	NS	ug/m3	<0.721 U	<0.721 U	<0.721 U	<0.721 UJ	<0.721 U	<0.721 U	<0.721 U	<0.721 U	<0.721 U	<0.721 U	<0.721 U	<0.721 U
2,2,4-Trimethylpentane	540-84-1	NS	ug/m3	<0.934 U	<0.934 U	<0.934 U	<0.934 UJ	<0.934 U	<0.934 U	<0.934 U	<0.934 U	<0.934 U	<0.934 U	<0.934 U	<0.934 U
2-Hexanone (MBK)	591-78-6	NS	ug/m3	<0.82 U	<0.82 U	<0.82 U	<0.82 UJ	<0.82 U	<0.82 U	<0.82 U	<0.82 U	<0.82 U	<0.82 U	<0.82 U	<0.82 U
4-Ethyltoluene	622-96-8	NS	ug/m3	<0.983 U	<0.983 U	<0.983 U	<0.983 UJ	<0.983 U	<0.983 U	<0.983 U	<0.983 U	<0.983 U	<0.983 U	<0.983 U	<0.983 U
Acetone	67-64-1	NS	ug/m3	<2.38 U	3.68	7.72	9.17 J	7.1	5.82	4.96	14.4	12.3	12.5	18.7	10.9
Allyl Chloride (3-Chloropropene)	107-05-1	NS	ug/m3	<0.626 U	<0.626 U	<0.626 U	<0.626 UJ	<0.626 U	<0.626 U	<0.626 U	<0.626 U	<0.626 U	<0.626 U	<0.626 U	<0.626 U
Benzene	71-43-2	NS	ug/m3	<0.639 U	<0.639 U	<0.639 U	0.767 J	0.706	0.748	<0.639 U	1.09	1.05	1.06	1.1	0.738
Benzyl Chloride	100-44-7	NS	ug/m3	<1.04 U	<1.04 U	<1.04 U	<1.04 UJ	<1.04 U	<1.04 U	<1.04 U	<1.04 U	<1.04 U	<1.04 U	<1.04 U	<1.04 U
Bromodichloromethane	75-27-4	NS	ug/m3	<1.34 U	<1.34 U	<1.34 U	<1.34 UJ	<1.34 U	<1.34 U	<1.34 U	<1.34 U	<1.34 U	<1.34 U	<1.34 U	<1.34 U
Bromoethene	593-60-2	NS	ug/m3	<0.874 U	<0.874 U	<0.874 U	<0.874 UJ	<0.874 U	<0.874 U	<0.874 U	<0.874 U	<0.874 U	<0.874 U	<0.874 U	<0.874 U
Bromoform	75-25-2	NS	ug/m3	<2.07 U	<2.07 U	<2.07 U	<2.07 UJ	<2.07 U	<2.07 U	<2.07 U	<2.07 U	<2.07 U	<2.07 U	<2.07 U	<2.07 U
Bromomethane	74-83-9	NS	ug/m3	<0.777 U	<0.777 U	<0.777 U	<0.777 UJ	<0.777 U	<0.777 U	<0.777 U	<0.777 U	<0.777 U	<0.777 U	<0.777 U	<0.777 U
Carbon Disulfide	75-15-0	NS	ug/m3	<0.623 U	<0.623 U	<0.623 U	<0.623 UJ	<0.623 U	<0.623 U	<0.623 U	<0.623 U	<0.623 U	<0.623 U	<0.623 U	<0.623 U
Carbon Tetrachloride	56-23-5	NS	ug/m3	0.421	0.434	0.421	0.428 J	0.434	0.434	0.44	0.428	0.491	0.447	0.421	0.459
Chlorobenzene	108-90-7	NS	ug/m3	<0.921 U	<0.921 U	<0.921 U	<0.921 UJ	<0.921 U	<0.921 U	<0.921 U	<0.921 U	<0.921 U	<0.921 U	<0.921 U	<0.921 U
Chloroethane	75-00-3	NS	ug/m3	<0.528 U	<0.528 U	<0.528 U	<0.528 UJ	<0.528 U	<0.528 U	<0.528 U	<0.528 U	<0.528 U	<0.528 U	<0.528 U	<0.528 U
Chloroform	67-66-3	NS	ug/m3	<0.977 U	<0.977 U	<0.977 U	<0.977 UJ	<0.977 U	<0.977 U	<0.977 U	<0.977 U	<0.977 U	<0.977 U	<0.977 U	<0.977 U
Chloromethane	74-87-3	NS	ug/m3	0.985	1.01	1.03	1.01 J	1.01	1.01	1.06	1.01	1.05	1.13	3.99	1.02
Cis-1,2-Dichloroethene	156-59-2	NS	ug/m3	<0.079 U	<0.079 U	<0.079 U	<0.079 UJ	<0.079 U	<0.079 U	<0.079 U	<0.079 U	<0.079 U	0.079	0.091	<0.079 U
Cis-1,3-Dichloropropene	10061-01-5	NS	ug/m3	<0.908 U	<0.908 U	<0.908 U	<0.908 UJ	<0.908 U	<0.908 U	<0.908 U	<0.908 U	<0.908 U	<0.908 U	<0.908 U	<0.908 U
Cyclohexane	110-82-7	NS	ug/m3	<0.688 U	<0.688 U	<0.688 U	<0.688 UJ	<0.688 U	<0.688 U	<0.688 U	<0.688 U	<0.688 U	<0.688 U	<0.688 U	<0.688 U
Dibromochloromethane	124-48-1	NS	ug/m3	<1.7 U	<1.7 U	<1.7 U	<1.7 UJ	<1.7 U	<1.7 U	<1.7 U	<1.7 U	<1.7 U	<1.7 U	<1.7 U	<1.7 U
Dichlorodifluoromethane	75-71-8	NS	ug/m3	2.12	2.12	2.07	2.18 J	2.19	2.17	2.18	2.2	2.25	2.24	2.14	2.57
Ethanol	64-17-5	NS	ug/m3	10.7	<9.42 U	196	552 J	384	384	135	697	116	124	131	145
Ethyl Acetate	141-78-6	NS	ug/m3	<1.8 U	<1.8 U	<1.8 U	3.16 J	1.83	1.86	<1.8 U	3.42	<1.8 U	<1.8 U	<1.8 U	<1.8 U
Ethylbenzene	100-41-4	NS	ug/m3	<0.869 U	<0.869 U	<0.869 U	<0.869 UJ	<0.869 U	<0.869 U	<0.869 U	<0.869 U	1.02	1.02	1.06	<0.869 U
Hexachlorobutadiene	87-68-3	NS	ug/m3	<2.13 U	<2.13 U	<2.13 U	<2.13 UJ	<2.13 U	<2.13 U	<2.13 U	<2.13 U	<2.13 U	<2.13 U	<2.13 U	<2.13 U
Isopropanol	67-63-0	NS	ug/m3	<1.23 U	<1.23 U	1.8	3.1 J	2.36	3.2	<1.23 U	6.1	1.66	1.94	2.08	1.9
M,P-Xylene	179601-23-1	NS	ug/m3	<1.74 U	<1.74 U	<1.74 U	2.03 J	<1.74 U	<1.74 U	<1.74 U	3.54	4.25	4.47	4.6	<1.74 U
Methyl Ethyl Ketone (2-Butanone)	78-93-3	NS	ug/m3	<1.47 U	<1.47 U	<1.47 U	<1.47 UJ	<1.47 U	<1.47 U	<1.47 U	2.3	<1.47 U	<1.47 U	2.9	<1.47 U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	108-10-1	NS	ug/m3	<2.05 U	<2.05 U	<2.05 U	<2.05 UJ	<2.05 U	<2.05 U	<2.05 U	<2.05 U	<2.05 U	<2.05 U	<2.05 U	<2.05 U
Methylene Chloride	75-09-2	60	ug/m3	<1.74 U	<1.74 U	<1.74 U	<1.74 UJ	<1.74 U	<1.74 U	2.22	<1.74 U	<1.74 U	<1.74 U	<1.74 U	<1.74 U
n-Heptane	142-82-5	NS	ug/m3	<0.82 U	<0.82 U	<0.82 U	<0.82 UJ	<0.82 U	<0.82 U	<0.82 U	<0.82 U	<0.82 U	<0.82 U	1.03	<0.82 U
n-Hexane	110-54-3	NS	ug/m3	<0.705 U	<0.705 U	<0.705 U	0.744 J	<0.705 U	<0.705 U	<0.705 U	0.994	1.44	1.48	1.68	0.761
o-Xylene (1,2-Dimethylbenzene)	95-47-6	NS	ug/m3	<0.869 U	<0.869 U	<0.869 U	<0.869 UJ	<0.869 U	<0.869 U	<0.869 U	1.44	1.38	1.49	1.58	<0.869 U
Styrene	100-42-5	NS	ug/m3	<0.852 U	<0.852 U	<0.852 U	<0.852 UJ	<0.852 U	<0.852 U	<0.852 U	<0.852 U	<0.852 U	<0.852 U	<0.852 U	<0.852 U
Tert-Butyl Alcohol	75-65-0	NS	ug/m3	<1.52 U	<1.52 U	<1.52 U	<1.52 UJ	<1.52 U	<1.52 U	<1.52 U	<1.52 U	<1.52 U	<1.52 U	<1.52 U	<1.52 U
Tert-Butyl Methyl Ether	1634-04-4	NS	ug/m3	<0.721 U	<0.721 U	<0.721 U	<0.721 UJ	<0.721 U	<0.721 U	<0.721 U	<0.721 U	<0.721 U	<0.721 U	<0.721 U	<0.721 U
Tetrachloroethene (PCE)	127-18-4	30	ug/m3	<0.136 U	<0.136 U	0.136	0.203 J	0.149	<0.136 U	0.136	0.224	0.264	0.312	0.278	0.19
Tetrahydrofuran	109-99-9	NS	ug/m3	<1.47 U	<1.47 U	<1.47 U	<1.47 UJ	<1.47 U	<1.47 U	<1.47 U	<1.47 U	<1.47 U	<1.47 U	<1.47 U	<1.47 U
Toluene	108-88-3	NS	ug/m3	<0.754 U	<0.754 U	<0.754 U	2.17 J	1.1	1.14	<0.754 U	2.82	3.88	3.96	3.92	1.79
Trans-1,2-Dichloroethene	156-60-5	NS	ug/m3	<0.793 U	<0.793 U	<0.793 U	<0.793 UJ	<0.793 U	<0.793 U	<0.793 U	<0.793 U	<0.793 U	<0.793 U	<0.793 U	<0.793 U
Trans-1,3-Dichloropropene	10061-02-6	NS	ug/m3	<0.908 U	<0.908 U	<0.908 U	<0.908 UJ	<0.908 U	<0.908 U	<0.908 U	<0.908 U	<0.908 U	<0.908 U	<0.908 U	<0.908 U
Trichloroethene (TCE)	79-01-6	2	ug/m3	<0.107 U	<0.107 U	<0.107 U	0.623 J	0.124	0.129	<0.107 U	0.908	1.38	1.93	1.98	0.677
Trichlorofluoromethane	75-69-4	NS	ug/m3	<1.12 U	<1.12 U	<1.12 U	<1.12 UJ	<1.12 U	<1.12 U	<1.12 U	1.23	1.4	1.65	1.39	15.8
Vinyl Chloride	75-01-4	NS	ug/m3	<0.051 U	<0.051 U	<0.051 U	<0.051 UJ	<0.051 U	<0.051 U	<0.051 U	<0.051 U	<0.051 U	<0.051 U	<0.051 U	<0.051 U
Total VOCs	VOCs	NS	ug/m3	14.226	7.244	209.177	578.675	401.003	400.511	145.996	741.834	151.145	161.388	180.96	181.805

Table 3 - Indoor and Ambient Air Analytical Results
Former Grant Hardware
44 High Street, West Nyack, New York

Notes:

AA - Ambient Air
IA - Indoor Air
CAS - Chemical Abstract Service
NS - No standard
ug/m3 - microgram per cubic meter
RL - Reporting limit
<RL - Not detected
Indoor air sample analytical results are compared to the New York State Department of Health (NYSDOH) Air Guideline Values (AGVs) as set forth in the NYSDOH October 2006 Guidance for Evaluating Soil Vapor Intrusion in the State of New York and subsequent updates (2013, 2015, 2017).
Ambient air sample analytical results are shown for reference only.

Qualifiers:

J - The analyte was positively identified and the associated numerical value is the approximate concentration of the analyte in the sample.
UJ - The analyte was not detected at a level greater than or equal to the RL; however, the reported RL is approximate and may be inaccurate or imprecise.
U - The analyte was analyzed for, but was not detected at a level greater than or equal to the level of the RL or the sample concentration for results impacted by blank contamination.

Exceedance Summary:

10 - Result exceeds NYSDOH AGVs

FIGURE 1

44 HIGH STREET SSD SYSTEM LAYOUT

Location	AA-1
Sample Name	AA-1_011123
Sample Date	01/11/2023
Sample Type	AA
VOCs	
Trichloroethene (TCE)	<0.107 U

Location	AA-2
Sample Name	AA-2_011123
Sample Date	01/11/2023
Sample Type	AA
VOCs	
Trichloroethene (TCE)	<0.107 U

Location	IA-1
Sample Name	IA-1_011123
Sample Date	01/11/2023
Sample Type	IA
VOCs	
Trichloroethene (TCE)	<0.107 U

Location	IA-2
Sample Name	IA-2_011123
Sample Date	01/11/2023
Sample Type	IA
VOCs	
Trichloroethene (TCE)	0.623 J

Location	IA-3
Sample Name	IA-3_011123
Sample Date	01/11/2023
Sample Type	IA
VOCs	
Trichloroethene (TCE)	0.124

Location	IA-4
Sample Name	IA-4_011123
Sample Date	01/11/2023
Sample Type	IA
VOCs	
Trichloroethene (TCE)	0.129

Location	IA-5
Sample Name	IA-5_011123
Sample Date	01/11/2023
Sample Type	IA
VOCs	
Trichloroethene (TCE)	<0.107 U

Location	IA-6
Sample Name	IA-6_011123
Sample Date	01/11/2023
Sample Type	IA
VOCs	
Trichloroethene (TCE)	0.908

Location	IA-7
Sample Name	IA-7_011123
Sample Date	01/11/2023
Sample Type	IA
VOCs	
Trichloroethene (TCE)	1.38

Location	IA-8
Sample Name	IA-8_011123
Sample Date	01/11/2023
Sample Type	IA
VOCs	
Trichloroethene (TCE)	1.93

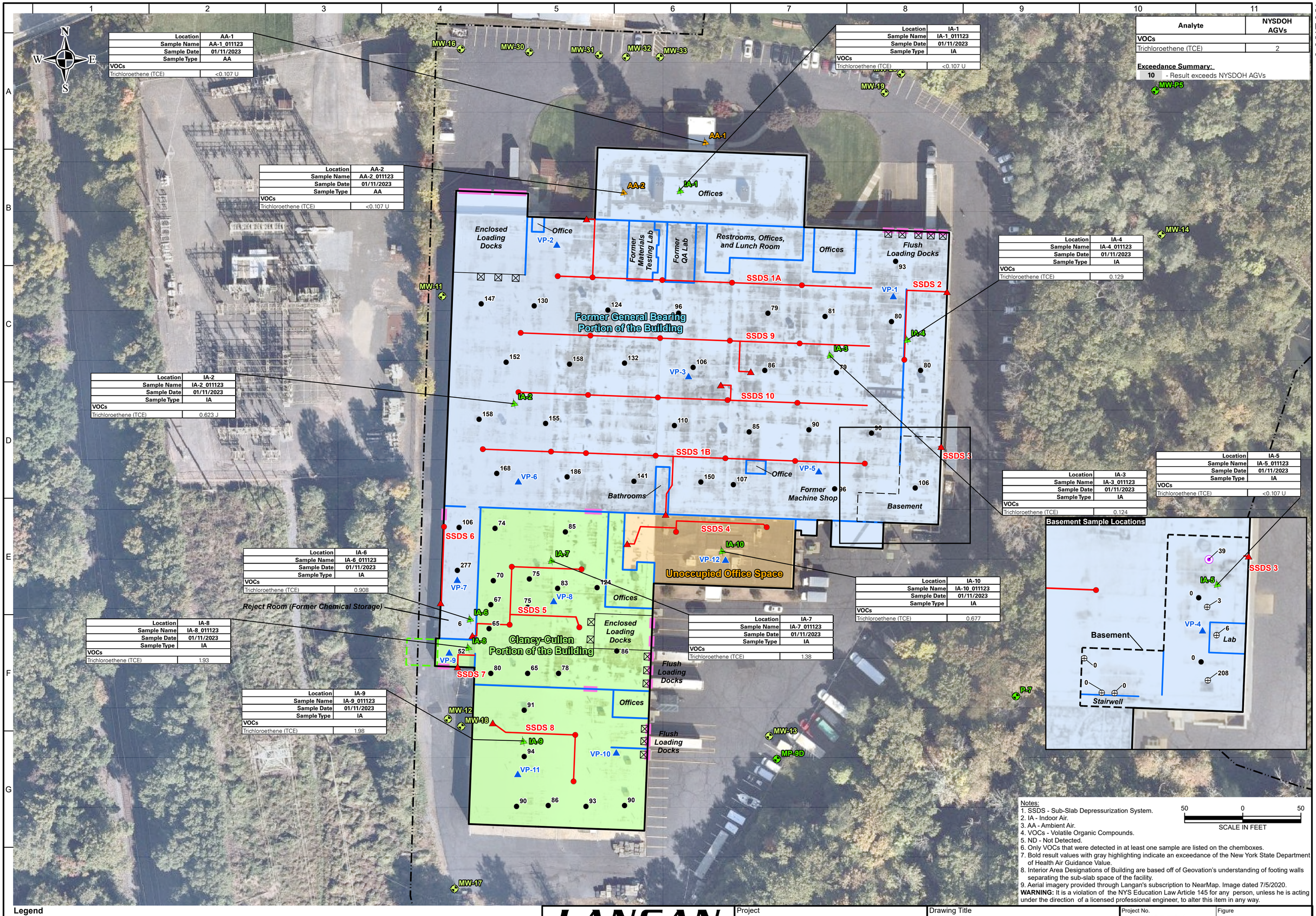
Location	IA-9
Sample Name	IA-9_011123
Sample Date	01/11/2023
Sample Type	IA
VOCs	
Trichloroethene (TCE)	1.98

Location	IA-10
Sample Name	IA-10_011123
Sample Date	01/11/2023
Sample Type	IA
VOCs	
Trichloroethene (TCE)	0.677

Analyte	NYSDOH AGVs
VOCs	
Trichloroethene (TCE)	2

Exceedance Summary:

10 - Result exceeds NYSDOH AGVs



Notes:
1. SSDS - Sub-Slab Depressurization System.
2. IA - Indoor Air.
3. AA - Ambient Air.
4. VOCs - Volatile Organic Compounds.
5. ND - Not Detected.
6. Only VOCs that were detected in at least one sample are listed on the chemboxes.
7. Bold result values with gray highlighting indicate an exceedance of the New York State Department of Health Air Guidance Value.
8. Interior Area Designations of Building are based off of Geovation's understanding of footing walls separating the sub-slab space of the facility.
9. Aerial imagery provided through Langan's subscription to NearMap. Image dated 7/5/2020.

WARNING: It is a violation of the NYS Education Law Article 145 for any person, unless he is acting under the direction of a licensed professional engineer, to alter this item in any way.

50 0 50
SCALE IN FEET

Legend

- Ambient Air Sample
- Indoor Air Sample
- PID Reading (ppb)
- Bedrock Monitoring Well
- Overburden Monitoring Well
- Sub-Slab Vapor Point
- Floor Drain
- Sump
- SSDS Blower
- SSDS Extraction Point
- SSDS Piping
- Exterior Building Wall
- Interior Rooms of Building
- Garage Door
- Approximate Location of Former Excavation
- Approximate Site Boundary
- Dock Leveler

LANGAN
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Langan Engineering & Environmental Services, Inc.
Langan Engineering, Environmental, Surveying and Landscape Architecture, D.P.C.
Langan International LLC
Collectively known as Langan

Project	FORMER GRANT HARDWARE 44 HIGH STREET WEST NYACK ROCKLAND NEW YORK
Drawing Title	JANUARY 2023 INDOOR AIR SAMPLING RESULTS
Project No.	170602701
Date	2/17/2023
Scale	1"=50'
Drawn By	LB
Submission Date	
Figure	1
	Sheet 001 of 001

LANGAN

SUBMISSION DATE: XXXX ##, ####

PROJECT No. 170602701

ATTACHMENT A

MANUFACTURER'S OPERATION MANUALS

LANGAN

Distributed by Obar Systems

Installation & Warranty

Read these instructions completely and retain for future reference.

1. Warning! The use of this fan may affect combustion devices, always check for a backdraft on all combustion devices before and after installation.
2. Warning! This fan is not intended for use in hazardous environments where a motor spark could ignite combustible or flammable materials.
3. All wiring must be performed by a licensed electrical contractor in accordance with the National Electrical Code and all local and state codes governing the municipality in which it is installed.
4. The GBR series blowers are intended for use and installation by professionals familiar with installation and design of systems for the remediation of radon and volatile organic compounds. Unqualified or unlicensed individuals should not undertake the installation or service of this product.

INSTALLATION

The installation instructions provided are for guidance only, any installation should meet all state and local codes and guidelines.

1. Temperature restrictions: The GBR SOE/UD will run and start in a temperature range from -20 to 180 degrees F. The GBR HA will run at a temperature of -20 to 180 degrees F but may not start if the motor temperature is below 0 degrees F at time of startup.
2. Ground water restrictions: The blower should not be installed at a height above water table that is less than the vacuum setting for the blower, if the water table is unknown then the base of the slab should be used as a default. The GBR series is a high vacuum blower and will draw water into the assembly and damage the impeller and motor if not properly installed.
3. Speed control: The GBR series blowers have a built in speed control that can be used to field adjust the vacuum on your system. These should only be adjusted by an experienced installer familiar advanced systems design and installation. For information regarding on site adjustments please contact Obar Systems for further information.
4. Enclosure: It is not recommended that the enclosure be opened except for repairs and adjustments. Contact Obar Systems before removing the cover.
5. Mounting: The fan should be mounted in a vertical orientation with the discharge pointing

upward. The inlet and discharge should be attached with a PipeConx or similar flexible connector of the appropriate size. The connector should provide a gap of 1.5 inches between the inlet pipe and inlet fitting and discharge pipe and discharge fitting. This will allow for motor assembly replacement in future repairs. The GBR comes with wall fastening lugs that provide for a flush installation on a flat even surface. Optional roof and wall mounts are available and are designed to reduce installation times dramatically. Contact Obar Systems for additional information on mounting systems. The fan should be located in an area that provides easy access and does not obstruct the operations of the building to which it is attached.

6. Discharge: Make sure the discharge meets or exceeds National guidelines and local codes for the installation and venting of Radon and or VOCs (Volatile Organic Compounds). In the event that there is the possibility of debris entering the discharge of the fan, it is recommended that a guard be installed to protect the blower from damage.

Warranty

Subject to any applicable consumer protection legislation, Obar Systems warrants the GBR series fans for 12 months from the date of purchase.

Obar systems will repair or replace any fan which fails due to defects in materials and workmanship. A RMA must be obtained and proof of purchase is required to be serviced by this warranty.

This warranty is contingent upon the fan having been installed as per the installation requirements set forth by Obar Systems and in accordance with the requirements of federal and state authorities governing the installation systems designed for radon and volatile organic compounds.

Obar systems is not responsible for the installation, removal or delivery costs associated with this warranty.

Except as stated, the GBR series are provided without warranty of any kind, either expressed or implied, including without limitation, implied warranties of merchantability and fitness for a particular use.

Obar systems is in no way responsible for any direct or indirect damages relating to the performance of the GBR series fan. Any liability shall not exceed the purchase price of the unit. The sole remedy under this warranty shall be the repair or replacement of the unit

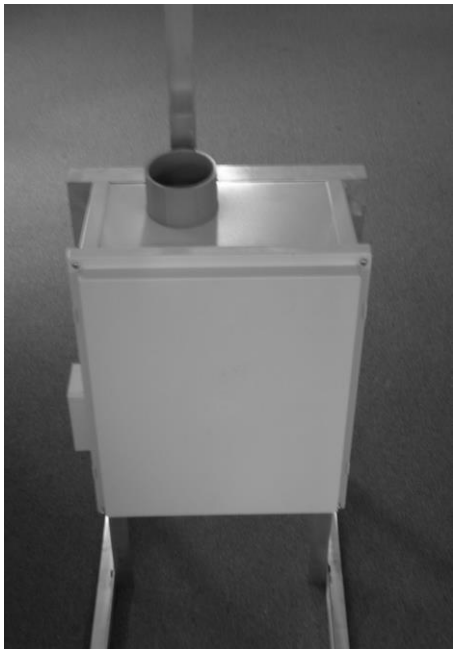
Contact Obar Systems to obtain a RMA (Return Material Authorization) number for any and all warranties. If return is required, the customer is responsible for all freight charges.

Obar Systems Inc.
2969 Route 23 South
Newfoundland NJ 07435
800 949 6227

THE OBAR GBR76

COMPACT RADIAL BLOWER

Based on 25 years of experience and 2 years of research and development, the patent pending GBR series of compact radial blowers provide the perfect combination of performance and design.



GBR76 WITH ROOF MOUNT

PERFORMANCE

- GBR76 SOE 16" WC @ 0 Max flow 155 CFM.
- GBR76 UD 40" WC @ 0 Max flow 195 CFM.
- Built in speed control to customize performance.
- Condensate bypass built in.
- 12 month warranty - 40,000 hr sealed bearings.

DESIGN

- Our modular design means the blower and manifold assembly can be removed and replaced as a unit. This makes repairs cost effective and easy and allows contractors to upgrade systems simply by swapping assemblies.
- The GBR series is based on a bypass blower designed to handle combustible materials.
- The housing is not required to be air tight, so you can add gauges and alarms without compromising the system.
- Built in condensate bypass.
- Built in speed control.
- Quick disconnect electrical harness.
- All UL listed components including UL listed enclosure for outside use.
- Wall fastening lugs included.
- GBR series roof and wall mounts available to quickly configure the blowers for your installation while providing a custom built look.
- Compact design 16"x 14"x 8" weighing only 18 lbs.
- 3" schedule 40 inlet and exhaust.
- Universal Drive model accepts voltage from 120-240V without alteration

COST	GBR76 SOE	GBR76 UD
COMPLETE UNIT	**$1289.00**	**$1489.00**
3 YEAR WARRANTY	**$450.00**	**$550.00**

OBAR SYSTEMS INC 2969 ROUTE 23 SOUTH NEWFOUNDLAND NJ 07435 800 949 6227

GBR76 SOE	0”	2”	4”	6”	8”	10”	12”	16”	Wattage
SOE 16	150	140	129	118	105	90	75	35	150-320
SOE 12	125	115	100	83	62	39	0		110-200
SOE 8	105	90	70	42	0				60-120
SOE 4	75	50	0						37-50

GBR SOE performance using built in potentiometer set at sealed vacuums of 16, 12, 8, and 4” WC

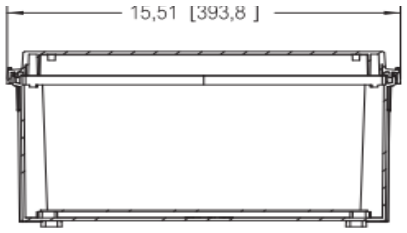
GBR76 UD	0”	10”	20”	30”	37”	Wattage
110V	195	158	118	63	20	700-870
220V	197	162	130	89	50	800-1100

Blower Specifications

Notes:

- **Input Voltage Range:** 108-132 Volts AC RMS, 50/60 Hz, single phase.
- **Input Current:** 6 amps AC RMS
- **Operating Temperature (Ambient Air and Working Air):** 0°C to 50°C
- **Storage Temperature:** -40°C to 85°C
- **Dielectric Testing:** 1500 Volts AC RMS 60 Hz applied for one second between input pins and ground, 3mA leakage maximum.
- **Speed Control Methods:** PWM (Pulse Width Modulation) (1 kHz to 10 kHz)
  0 to 10 VDC speed control.
  Mechanical: A potentiometer is available for speed control of the blower. The potentiometer can be preset for a specific speed. Access for speed adjustment located in motor housing.
- **Approximate Weight:** 4.8 Lbs. / 2.2 Kg
- **Regulatory Agency Certification:** Underwriters Laboratories Inc. UL507 Recognized under File E94403 and compliant under the CE Low Voltage Directive 2006/95/EC.
- **Design Features:** Designed to provide variable airflow for low NOx & CO emission in high efficiency gas fired combustion systems. Built with non-sparking materials. Blower housing assembly constructed of die cast aluminum. Impeller constructed from hardened aluminum. Rubber isolation mounts built into blower construction to dampen vibration within the motor. Two piece blower housing assembly sealed with O-ring gasket for combustion applications. Customer is responsible to check for any leakage once the blower is installed into the final application.
- **Miscellaneous:** Blower inlet, discharge, and all motor cooling inlet and discharge vents must not be obstructed. Motor ventilation air to be free of oils and other foreign particles, (i.e. breathing quality air). Blower is to be mounted so ventilation air cannot be re-circulated.
  POWER CONNECTION: Blower connector, AMP Universal MATE-N-LOK, part no. 1-350943-0.
  SPEED CONNECTION: Blower connector, Molex Mini-Fit Jr., part no. 39-30-3056.
  Mating harnesses available upon request.

Enclosure Specifications



Screw cover

Ratings:

Ingress Protection (EN 60529): 66/67

Electrical insulation: Totally insulated

Halogen free (DIN/VDE 0472, Part 815): yes

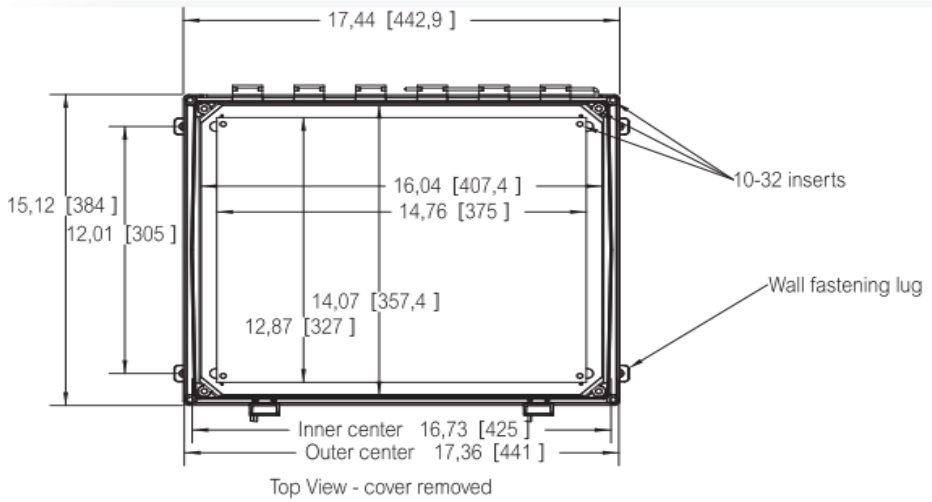
UV resistance: UL 508

Flammability Rating (UL 746 C 5): complies with UL 508

Glow Wire Test (IEC 695-2-1) °C: 960

NEMA Class: UL Type 4, 4X, 6, 6P, 12 and 13

Certificates: Underwriters Laboratories



Top View - cover removed

RadonAway®

The world's leading radon fan manufacturer

HS2750 and HS5500 Installation & Operating Instructions

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

1. **WARNING!** Do not use blower in hazardous environments where blower electrical system could provide ignition to combustible or flammable materials.

2. **WARNING!** Check voltage at the blower to ensure it corresponds with nameplate. See Vapor Intrusion Application Note #AN001 for important information on VI Applications. RadonAway.com/vapor-intrusion

3. **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.

4. All wiring must be performed in accordance with the National Fire Protection Association's (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.

5. **WARNING!** In the event that the blower is immersed in water, return unit to factory for service before operating.

6. **WARNING!** Do not twist or torque blower inlet or outlet piping as leakage may result.

7. **WARNING!** Do not leave blower unit installed on system piping without electrical power for more than 48 hours. Blower failure could result from this non-operational storage.

8. **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.

    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.

1.0 SYSTEM DESIGN CONSIDERATIONS

1.1 INTRODUCTION

The HS2750 and HS5500 Blowers are intended for use by trained, certified/licensed, professional radon mitigators. The purpose of these instructions is to provide additional guidance for the most effective use of the HS2750 and HS5500 Blowers. These instructions should be considered supplemental to current industry standards and federal, state, county and local building codes and regulations. In the event of a conflict, those codes, practices and regulations take precedence over these instructions.

1.2 ENVIRONMENTALS

The HS2750 and HS5500 Blowers 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, HS2750 and HS5500 Blowers should be stored in an area where the temperature is always greater than 32°F or less than 100°F. The HS2750 and HS5500 Blowers are thermally protected such that they will shut off when the internal temperature is above 185°F / 85°C. If the HS2750 or HS5500 Blower is idle in an area where the ambient temperature exceeds this shut off, it will not restart until the internal temperature falls below 75°C.

1.3 ACOUSTICS

The HS2750 or HS5500 Blower, when installed properly, operates with little or no noticeable noise to the building occupants. Recommended system design and installation considerations to minimize noise: When installing the HS2750 or HS5500 Blower above sleeping areas, select a location for mounting at the farthest possible distance. Avoid mounting near doors, fold-down stairs or other uninsulated structures which may transmit sound. Ensure a solid mounting for the HS2750 or HS5500 Blower to avoid structure-borne vibration or noise.

The velocity of the outgoing air must also be considered in the overall system design. With small diameter piping, in some cases a “rushing” sound of the outlet air may be audible. In these instances, the use of a RadonAway Exhaust Muffler (p/n 24002) is recommended.

1.4 GROUND WATER

Under no circumstances should water be allowed to be drawn into the inlet of the HS2750 and HS5500 Blowers as this may result in damage to the unit. The HS2750 or HS5500 Blower should be mounted at least 5 feet above the slab penetration to minimize the risk of filling the Blower with water in installations with occasional high water tables.

In the event that a temporary high water table results in water at or above slab level, water will be drawn into the riser pipes thus blocking air flow to the HS2750 or HS5500 Blower. The lack of cooling air will result in the Blower cycling on and off as the internal temperature rises above the thermal cutoff and falls upon shutoff. Should this condition arise, power down and disconnect the HS2750 or HS5500 Blower until the water recedes allowing for return to normal operation; then reconnect and power on to turn the Blower back on.

1.5 CONDENSATION & DRAINAGE

WARNING!: Failure to provide adequate drainage for condensation can result in system failure and damage the HS Blower.
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 use of small diameter piping in a system increases the speed at which the air moves. The speed of the air can pull water uphill and, at sufficient velocity, it can actually move water vertically up the side walls of the pipe. This has the potential of creating a problem in the negative pressure (inlet) side piping. For HS2750 or HS5500 Blower inlet piping, the following table provides the minimum recommended pipe diameters as well as minimum pitch under several system conditions. Use this chart to size piping for a system.

Pipe Diameter	Minimum Rise per 1 Foot of Run*		
	@ 25 CFM	@ 50 CFM	@ 100 CFM
4”	1/32”	3/32”	3/8”
3”	1/8”	3/8”	1 1/2”

*Typical operational flow rates:

All exhaust piping should be 2” PVC.

1.6 SYSTEM MONITOR & LABEL

A properly designed system should incorporate a “System On” indicator for affirmation of system operation. The HS2750 and HS5500 Blowers come equipped with a built-in magnehelic pressure gauge located on the front cover which serves this purpose. Other indicator products such as u-tube manometers should be mounted at least 5 feet above the slab penetration to minimize the risk of filling the gauge with water in installations with occasional high water tables. If required, place in a conspicuous location a System Label (such as RadonAway P/N 15005-20) with instructions for contacting the installing contractor for service and also identifying the necessity for regular radon tests to be conducted.

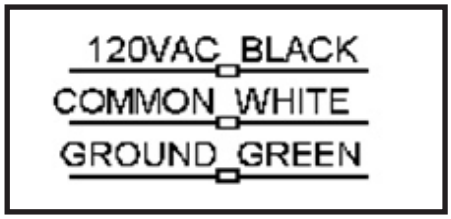
1.7 SLAB COVERAGE

The HS2750 or HS5500 Blower can provide coverage of well over 1000 sq. ft. per slab penetration. This will, of course, depend on the sub-slab aggregate in any particular installation and the diagnostic results. In general, sand and gravel are much looser aggregates than dirt and clay. Additional suction points can be added as required. It is recommended that a small pit (5 to 10 gallons in size; larger as needed) be created below the slab at each suction hole. When fine sand or dirt is present it is recommended that the pit be lined with a material such as clean gravel, size 4, 5, 56, or 6 as classified (ASTM C33).

1.8 ELECTRICAL WIRING

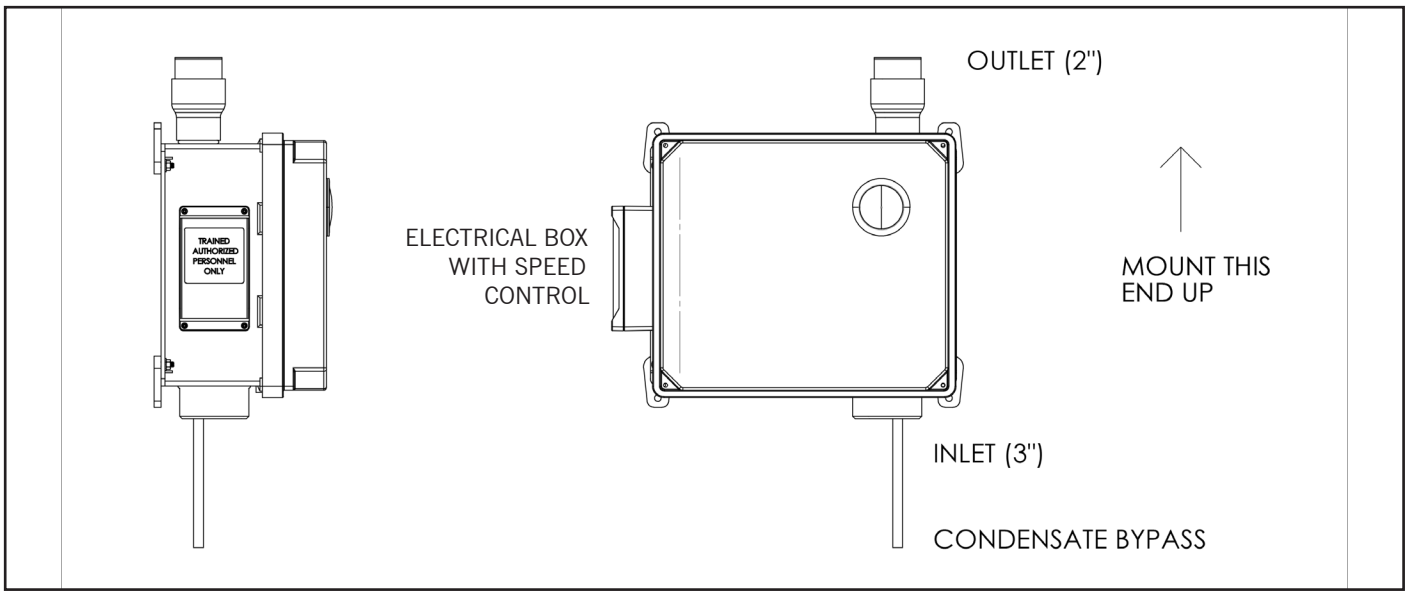
HS2750 or HSHS5500 Blower models come with an electrical switch box for hard wiring to a 120V electrical source. All wiring must be performed in accordance with the National Fire Protection Association’s (NFPA)”National Electrical Code, Standard #70”-current edition for all commercial and industrial 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 caulked to prevent water penetration into the box. A means, such as a weep hole, is recommended to drain the box.

WIRING DIAGRAM



1.9 SPEED CONTROLS

The HS2750 and HS5500 have 4-speed (low, medium, high, maximum) built-in speed controls. They are not safe for use with solid state speed controls.



2.0 INSTALLATION

2.1 MOUNTING

Mount the HS2750 or HS5500 Blower to the wall studs, or similar structure, in the selected location with (4) 1/4" x 1 1/2" lag screws (not provided). Ensure the HS2750 or HS5500 Blower is both plumb and level.

2.2 DUCTING CONNECTIONS

Make final ducting connection to HS2750 or HS5500 Blower with flexible couplings. Ensure all connections are tight. Do not twist or torque inlet and outlet piping on HS2750 or HS5500 Blower or leaks may result.

NOTE: Do NOT solvent weld fittings to unit hubs.

2.3 VENT MUFFLER INSTALLATION

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

2.4 OPERATION CHECKS & ANNUAL SYSTEM MAINTENANCE

_____ **Verify** all connections are tight and **leak-free**.

_____ **Ensure** the HS2750 or HS5500 Blower and all ducting is secure and vibration-free.

_____ **Verify** system vacuum pressure with Magnehelic. **Ensure** vacuum pressure is within normal operating range and **less than** the maximum recommended as shown below:

HS2750: 5" WC (low) / 10" WC (medium) / 15" WC (high) / 20" WC (maximum)
HS5500: 20" WC (low) / 30" WC (medium) / 40" WC (high) / 50" WC (maximum)

(Above are based on sea-level operation, at higher altitudes reduce above by about 4% per 1000 Feet.)
If these are exceeded, increase number of suction points.

_____ **Verify Radon levels** by testing to applicable current industry standards and federal, state, county and local building codes and regulations.

HS2750 and HS5500 PRODUCT SPECIFICATIONS

Model	Speed Setting (Max. Op. Pressure: "WC@Sea Level)	Typical CFM vs Static Suction WC (Recommended Operating Range)								Power* Watts @ 120VAC
		2.5"	5.0"	7.5"	10.0"	12.5"	15.0"	20.0"	25.0"	
HS2750	**Low** (5")	33	24	n/a	n/a	n/a	n/a	n/a	n/a	112-123
	Medium (10")	47	42	34	25	n/a	n/a	n/a	n/a	199-245
	High (15")	n/a	n/a	47	43	33	23	n/a	n/a	266-337
	Maximum (20")	n/a	n/a	n/a	n/a	48	43	24	n/a	361-463

Shutoff Pressure ("WC @ Sea Level): Low 7.8", Med 13.5", High 17.6", Max 22.6"

**Power consumption varies with actual load conditions*

Model	Speed Setting (Max. Op. Pressure: "WC@Sea Level)	Typical CFM vs Static Suction WC (Recommended Operating Range)								Power* Watts @ 120VAC
		5.0"	10.0"	20.0"	25.0"	30.0"	35.0"	40.0"	50.0"	
HS5500	**Low** (20")	44	39	22	n/a	n/a	n/a	n/a	n/a	243-281
	Medium (30")	n/a	n/a	53	41	36	22	n/a	n/a	372-477
	High (40")	n/a	n/a	n/a	45	39	31	22	n/a	527-625
	Maximum (50")	n/a	n/a	n/a	n/a	n/a	34	29	17	591-632

Shutoff Pressure ("WC @ Sea Level): Low 24.5", Med 34.7", High 44.6", Max 52.6"

**Power consumption varies with actual load conditions*

Number Of Speeds: 4

Volts: 120

Hz: 60

AMPS (Max): 4

Inlet: 3" PVC (3.5" OD)

Outlet: 2" PVC (2.37" OD)

Mounting: Brackets for vertical mount

Weight: HS2750, 18 lbs; HS5500, 19.25 lbs

Size: 17.5" W x 9.0" D x 18.5" H

Minimum Recommended PVC Ducting (2" / 3" / 4" / 6" / 8"): 3" Inlet; 2" Outlet

Storage Temperature Range: 32°F-100°F

Thermal Cutout: 185°F / 85°C

Locked rotor protection

LISTED
Electric Fan

Intertek

Conforms to
UL STD. 507

Certified to
CAN/CSA STD.
C22.2 No.113

IMPORTANT INSTRUCTIONS TO INSTALLER

Inspect the RadonAway® HS2750 or HS5500 Blower for shipping damage within 15 days of receipt. **Notify RadonAway® of any damages immediately.** RadonAway® is not responsible for damages incurred during shipping.

Install the HS2750 or HS5500 Blower in accordance with all current industry standards and federal, state, county 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 HS2750/HS5500 Blower (the "Blower") 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 or repair any Blower which fails due to defects in materials or workmanship during the Warranty Term. This Warranty is contingent on installation of the blower 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 Blower must be returned (at Owner's cost) to the RadonAway® factory. Any Blower returned to the factory will be discarded unless the Owner provides specific instructions along with the Blower when it is returned regardless of whether or not the Blower is actually replaced under this warranty. Proof of purchase must be supplied upon request for service under this Warranty.

2-YEAR EXTENDED WARRANTY WITH INSTALLATION BY A FACTORY-CERTIFIED PROFESSIONAL

RadonAway® will extend the Warranty Term of the Blower to twenty-four (24) months from date of purchase or thirty (30) months from the date of manufacture, whichever is sooner, if: (1) the Blower is installed in a professionally designed and professionally installed active soil depressurization system or installed as a replacement Blower in a professionally designed and professionally installed active soil depressurization system; and (2) proof of an installer Factory Training Certificate. Upon request, 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 or 18 months from the date of manufacture, whichever is sooner. RadonAway® is not responsible for installation, removal or delivery costs associated with this Warranty.

EXCEPT AS STATED ABOVE, THE HS2750/HS5500 BLOWERS 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 BLOWER 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 No. _____

Purchase Date: _____

RP and XP Pro Series Installation 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 #AN001 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.

1.0 SYSTEM DESIGN CONSIDERATIONS

1.1 INTRODUCTION

The RP and XP Pro Series Radon and Vapor Intrusion (VI) 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 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 and XP Pro Series Radon and VI Fans are factory sealed; no additional caulk or other materials are required to inhibit air leakage.

1.3 ENVIRONMENTALS

The RP and XP Pro Series Radon and VI 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 and XP Pro Series Radon and VI 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 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 and XP Pro Series Radon and VI 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 and XP Pro Series Radon and VI 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 and XP Pro Series Radon and VI Fan best suited for the sub-slab material can improve the slab coverage. The RP and XP Pro Series Radon and VI 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 and XP Pro Series Radon and VI 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 and XP Pro Series Radon and VI Fans are NOT suitable for underground burial.

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

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

*See p. 7 for detailed specifications.

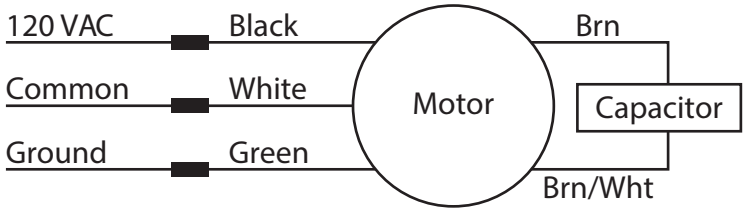
1.8 SYSTEM MONITOR & LABEL

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 and XP Pro Series Radon and VI 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.

The RP and XP Pro Series Radon and VI Fan Wiring Diagram



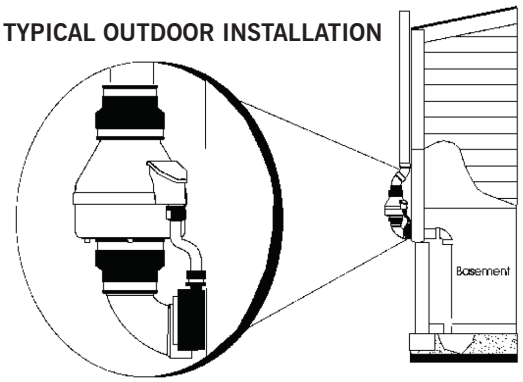
1.10 SPEED CONTROLS

The RP and XP Pro Series Radon and VI 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).

2.0 INSTALLATION

The RP 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 RP and XP Pro Series Radon and VI 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.

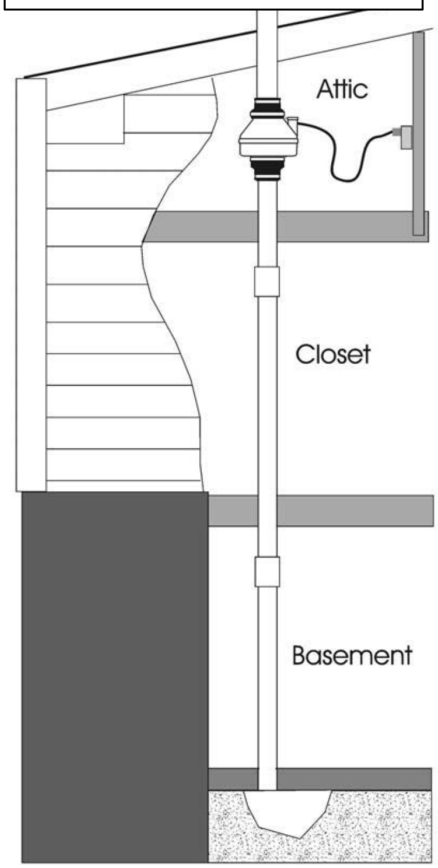
TYPICAL OUTDOOR INSTALLATION



2.1 MOUNTING

Mount the RP and XP Pro Series Radon and VI 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.

TYPICAL INDOOR INSTALLATION



2.2 MOUNTING BRACKET (optional)

The RP and XP Pro Series Radon and VI 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 and XP Pro Series Radon and VI 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 AND XP PRO SERIES RADON AND VI 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	541	510*	461*	409	347*	292	235	171	107

**Denotes HVI certified values. †Energy Star® Rated. ◆Vapor Tite™ fans.*

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	90 - 145 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

RP and XP Pro Series Additional Specifications

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

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

ENERGY STAR
RP140 Only

LISTED
Electric Fan

Intertek
77728

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

IMPORTANT INSTRUCTIONS TO INSTALLER

Inspect the RP and XP Pro Series Radon and VI 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 and XP Pro Series Radon and VI 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 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 or 18 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 AND XP PRO SERIES RADON AND VI 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
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Record the following information for your records:

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ATTACHMENT B

Q1 2023 QUARTERLY REPORT

LANGAN

Quarterly Progress Report
Former Grant Hardware Facility
44 High Street, West Nyack, Rockland County, NY
NYSDEC Site ID No. 344031
Reporting Period: 1st Quarter 2023

1. Introduction

Langan Engineering, Environmental, Surveying, Landscape Architecture and Geology, D.P.C. (Langan), on behalf of Gussack Realty, prepared this quarterly progress report to summarize the work performed at the Former Grant Hardware Facility Site ("Site") from January 1, 2023 through March 31, 2023. The Site is located at 44 High Street, West Nyack, New York. A Site location map is attached as Figure 1. The Site was formerly occupied by the Grant Hardware Company. Their operations at the Site spanned from approximately 1957 to 1990.

2. Remedial Actions Relative to the Site during this Reporting Period

a. The Annual Routine System Inspection and Maintenance of the warehouse sub-slab depressurization (SSD) systems was completed on January 11 and 12, 2023. Indoor Air sampling evaluated the effectiveness of the newly sealed areas in the Clancy-Cullen portion of the warehouse (Area #5) and the Refrigerated Storage Room (Area #6).

b. Pressure field extension testing (PFET) was completed at the 44 High Street building on January 11 and 12, 2023.

c. Annual indoor air sampling at 217 Rt. 59 residential property was completed on January 11 and 12, 2023.

d. The SSD systems at 44 High Street and 217 Rt. 59 were fully functional and operating during the inspection.

3. Actions Relative to the Site Anticipated for the Next Reporting Period

Activities anticipated for the next reporting period include:

a. Submittal of PFET results for 44 High Street (attached to this report)

b. Submittal of Indoor air results for 44 High Street (submitted concurrently with this report)

c. Submittal of Indoor air results for 217 Rt. 59 (submitted concurrently with this report)

d. Submittal of the Revised Interim Site Management Plan (ISMP) for sub-slab SSD systems (attached to this report)

e. Revised Project Schedule

f. Preparation of a Remedial Alternatives Analysis/Remedial Action Workplan for the soil source area

4. Approved Activity Modifications (changes of work scope and/or schedule)

An updated project schedule is attached to this quarterly report.

5. Results of Sampling, Testing and Other Relevant Data

The results of PFET sampling in 44 High Street and the indoor air results from 44 High Street and 217 Rt. 59 are attached to this quarterly report.

6. Deliverables Submitted During This Reporting Period

a. The Draft ISMP was submitted to NYSDEC on January 10, 2023. NYSDEC and NYSDOH provided comments on February 28, 2023. A Revised ISMP is being submitted with this quarterly report.

7. Information Regarding Percentage of Completion

Not Applicable.

8. Unresolved Delays Encountered or Anticipated That May Affect the Schedule and Mitigation Efforts

None.

9. Community Participation Plan (CPP) Activities during This Reporting Period

None.

10. Activities Anticipated in Support of the CPP for the Next Reporting Period:

None.

11. Miscellaneous Information

None.

REVISED SCHEDULE

LANGAN

DRAFT- Former Grant Hardware Schedule

44 High Street, West Nyack, New York

Last Revised April 27, 2022

	ACTION	Q1		Q2		Q3			Q4		
		MAR	APRIL	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC
VI	VI Annual M&M and certification - 44 High St.										
	VI Annual M&M and certification - 217 Rt. 59										
	Quarterly PFET										
	Indoor Air Sampling and Reporting										
ISMP	Revised Interim Site Management Plan - SSDS Submission										
Qtrly Updates	Quarterly Updates Reports to DEC										
Source Area Remedial Plan	Remedial Alternatives Analysis/Remedial Action Workplan - Soil Source Area										
	NYSDEC Review and associated revisions										
	Remedial Design/Pilot Study										TBD
	Remedial Implementation - Source Area										TBD
	Remedial Action Report - Source Area										TBD
	Potential SVE Start Up (based on remedy selection)										TBD
GW	Groundwater Monitoring										TBD
	Groundwater Remedial Plan and Implementation										TBD

TBD - To Be Determined

TABLES

Table 1 - Sub-Slab Depressurization System Vacuum Readings
Former Grant Hardware
44 High Street, West Nyack, New York

Sub-Slab Depressurization System No.	Vacuum in Inches of Water Column				
	3/28/2020*	8/31/2020*	2/23/2021+	7/28/2021+	1/13/2023+
1A	-11	-11	-10.5	-11.8	-8.00
1B	-10	-10	-8.10	-9.12	-8.50
2	-2.1	-2.1	-1.80	-1.72	-2.00
3	-1.3	-1.8	-1.00	-1.86	-1.50
4	-2.4	-2.4	-2.10	-2.10	-1.61
5	-9.2	-9.3	-13.6	-14.6	-15.0
6	-1.1	-1.1	-1.00	-1.09	-1.10
7	-1.4	-1.4	-1.70	-1.66	-2.40
8	-1.1	-1.1	-1.30	-1.27	-1.32
9	-12	-12	-19.4	-11.7	-3.50
10	-17	-17	-17.0	-16.8	-12.5

Notes:

***** - Indicates measurements collected by Geovation Engineering, P.C.

+ - Indicates measurements collected by Langan (using a Dwyer digital manometer)

Table 2 - Pressure Field Extension Test Vacuum Readings
Former Grant Hardware
44 High Street, West Nyack, New York

Sub-Slab Vapor Point No.	Vacuum in Inches of Water Column		
	2/23/2021	7/28/2021	1/13/2023
VP-1	-0.425	-0.490	Not Accessible
VP-2	-0.339	-0.630	-0.186
VP-3	-5.80	-8.36	-0.1
VP-4	-0.141	-1.32	-0.38
VP-5	-0.211	-0.490	Not Accessible
VP-6	-0.032	-0.127	-0.036
VP-7	-0.154	-0.186	-0.218
VP-8	-3.00	Not Accessible	Not Accessible
VP-9	-0.509	-0.592	-0.421
VP-10	-0.022	Not Accessible	-0.025
VP-11	-0.020	Not Accessible	-0.022
VP-12	-0.010	-0.017	Not Accessible

Notes:

1. Vacuum measurements collected by Langan using a Dwyer digital manometer.
2. Not Accessible - Indicates that vapor pin could not be accessed due to stored materials in the building.

Table 3 - Indoor and Ambient Air Analytical Results
Former Grant Hardware
44 High Street, West Nyack, New York

Analyte	CAS Number	NYSDOH AGVs	Location	AA-1	AA-2	IA-1	IA-2	IA-3	IA-4	IA-5	IA-6	IA-7	IA-8	IA-9	IA-10
			Sample Name	AA-1_011123	AA-2_011123	IA-1_011123	IA-2_011123	IA-3_011123	IA-4_011123	IA-5_011123	IA-6_011123	IA-7_011123	IA-8_011123	IA-9_011123	IA-10_011123
			Sample Date	1/11/2023	1/11/2023	1/11/2023	1/11/2023	1/11/2023	1/11/2023	1/11/2023	1/11/2023	1/11/2023	1/11/2023	1/11/2023	1/11/2023
			Sample Type	Ambient Air	Ambient Air	Indoor Air	Indoor Air	Indoor Air	Indoor Air	Indoor Air	Indoor Air	Indoor Air	Indoor Air	Indoor Air	Indoor Air
			Unit	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
Volatile Organic Compounds															
1,1,1-Trichloroethane	71-55-6	NS	ug/m3	<0.109 U	<0.109 U	<0.109 U	<0.109 UJ	<0.109 U	<0.109 U	<0.109 U	<0.109 U	<0.109 U	<0.109 U	<0.109 U	<0.109 U
1,1,2,2-Tetrachloroethane	79-34-5	NS	ug/m3	<1.37 U	<1.37 U	<1.37 U	<1.37 UJ	<1.37 U	<1.37 U	<1.37 U	<1.37 U	<1.37 U	<1.37 U	<1.37 U	<1.37 U
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	NS	ug/m3	<1.53 U	<1.53 U	<1.53 U	<1.53 UJ	<1.53 U	<1.53 U	<1.53 U	<1.53 U	<1.53 U	<1.53 U	<1.53 U	<1.53 U
1,1,2-Trichloroethane	79-00-5	NS	ug/m3	<1.09 U	<1.09 U	<1.09 U	<1.09 UJ	<1.09 U	<1.09 U	<1.09 U	<1.09 U	<1.09 U	<1.09 U	<1.09 U	<1.09 U
1,1-Dichloroethane	75-34-3	NS	ug/m3	<0.809 U	<0.809 U	<0.809 U	<0.809 UJ	<0.809 U	<0.809 U	<0.809 U	<0.809 U	<0.809 U	<0.809 U	<0.809 U	<0.809 U
1,1-Dichloroethene	75-35-4	NS	ug/m3	<0.079 U	<0.079 U	<0.079 U	<0.079 UJ	<0.079 U	<0.079 U	<0.079 U	<0.079 U	<0.079 U	<0.079 U	<0.079 U	<0.079 U
1,2,4-Trichlorobenzene	120-82-1	NS	ug/m3	<1.48 U	<1.48 U	<1.48 U	<1.48 UJ	<1.48 U	<1.48 U	<1.48 U	<1.48 U	<1.48 U	<1.48 U	<1.48 U	<1.48 U
1,2,4-Trimethylbenzene	95-63-6	NS	ug/m3	<0.983 U	<0.983 U	<0.983 U	1.09 J	<0.983 U	<0.983 U	<0.983 U	2.73	1.33	1.68	1.02	<0.983 U
1,2-Dibromoethane (Ethylene Dibromide)	106-93-4	NS	ug/m3	<1.54 U	<1.54 U	<1.54 U	<1.54 UJ	<1.54 U	<1.54 U	<1.54 U	<1.54 U	<1.54 U	<1.54 U	<1.54 U	<1.54 U
1,2-Dichlorobenzene	95-50-1	NS	ug/m3	<1.2 U	<1.2 U	<1.2 U	<1.2 UJ	<1.2 U	<1.2 U	<1.2 U	<1.2 U	<1.2 U	<1.2 U	<1.2 U	<1.2 U
1,2-Dichloroethane	107-06-2	NS	ug/m3	<0.809 U	<0.809 U	<0.809 U	<0.809 UJ	<0.809 U	<0.809 U	<0.809 U	<0.809 U	<0.809 U	<0.809 U	<0.809 U	<0.809 U
1,2-Dichloropropane	78-87-5	NS	ug/m3	<0.924 U	<0.924 U	<0.924 U	<0.924 UJ	<0.924 U	<0.924 U	<0.924 U	<0.924 U	<0.924 U	<0.924 U	<0.924 U	<0.924 U
1,2-Dichlorotetrafluoroethane	76-14-2	NS	ug/m3	<1.4 U	<1.4 U	<1.4 U	<1.4 UJ	<1.4 U	<1.4 U	<1.4 U	<1.4 U	<1.4 U	<1.4 U	<1.4 U	<1.4 U
1,3,5-Trimethylbenzene (Mesitylene)	108-67-8	NS	ug/m3	<0.983 U	<0.983 U	<0.983 U	<0.983 UJ	<0.983 U	<0.983 U	<0.983 U	<0.983 U	<0.983 U	<0.983 U	<0.983 U	<0.983 U
1,3-Butadiene	106-99-0	NS	ug/m3	<0.442 U	<0.442 U	<0.442 U	<0.442 UJ	<0.442 U	<0.442 U	<0.442 U	<0.442 U	<0.442 U	<0.442 U	<0.442 U	<0.442 U
1,3-Dichlorobenzene	541-73-1	NS	ug/m3	<1.2 U	<1.2 U	<1.2 U	<1.2 UJ	<1.2 U	<1.2 U	<1.2 U	<1.2 U	<1.2 U	<1.2 U	<1.2 U	<1.2 U
1,4-Dichlorobenzene	106-46-7	NS	ug/m3	<1.2 U	<1.2 U	<1.2 U	<1.2 UJ	<1.2 U	<1.2 U	<1.2 U	<1.2 U	<1.2 U	<1.2 U	<1.2 U	<1.2 U
1,4-Dioxane (P-Dioxane)	123-91-1	NS	ug/m3	<0.721 U	<0.721 U	<0.721 U	<0.721 UJ	<0.721 U	<0.721 U	<0.721 U	<0.721 U	<0.721 U	<0.721 U	<0.721 U	<0.721 U
2,2,4-Trimethylpentane	540-84-1	NS	ug/m3	<0.934 U	<0.934 U	<0.934 U	<0.934 UJ	<0.934 U	<0.934 U	<0.934 U	<0.934 U	<0.934 U	<0.934 U	<0.934 U	<0.934 U
2-Hexanone (MBK)	591-78-6	NS	ug/m3	<0.82 U	<0.82 U	<0.82 U	<0.82 UJ	<0.82 U	<0.82 U	<0.82 U	<0.82 U	<0.82 U	<0.82 U	<0.82 U	<0.82 U
4-Ethyltoluene	622-96-8	NS	ug/m3	<0.983 U	<0.983 U	<0.983 U	<0.983 UJ	<0.983 U	<0.983 U	<0.983 U	<0.983 U	<0.983 U	<0.983 U	<0.983 U	<0.983 U
Acetone	67-64-1	NS	ug/m3	<2.38 U	3.68	7.72	9.17 J	7.1	5.82	4.96	14.4	12.3	12.5	18.7	10.9
Allyl Chloride (3-Chloropropene)	107-05-1	NS	ug/m3	<0.626 U	<0.626 U	<0.626 U	<0.626 UJ	<0.626 U	<0.626 U	<0.626 U	<0.626 U	<0.626 U	<0.626 U	<0.626 U	<0.626 U
Benzene	71-43-2	NS	ug/m3	<0.639 U	<0.639 U	<0.639 U	0.767 J	0.706	0.748	<0.639 U	1.09	1.05	1.06	1.1	0.738
Benzyl Chloride	100-44-7	NS	ug/m3	<1.04 U	<1.04 U	<1.04 U	<1.04 UJ	<1.04 U	<1.04 U	<1.04 U	<1.04 U	<1.04 U	<1.04 U	<1.04 U	<1.04 U
Bromodichloromethane	75-27-4	NS	ug/m3	<1.34 U	<1.34 U	<1.34 U	<1.34 UJ	<1.34 U	<1.34 U	<1.34 U	<1.34 U	<1.34 U	<1.34 U	<1.34 U	<1.34 U
Bromoethene	593-60-2	NS	ug/m3	<0.874 U	<0.874 U	<0.874 U	<0.874 UJ	<0.874 U	<0.874 U	<0.874 U	<0.874 U	<0.874 U	<0.874 U	<0.874 U	<0.874 U
Bromoform	75-25-2	NS	ug/m3	<2.07 U	<2.07 U	<2.07 U	<2.07 UJ	<2.07 U	<2.07 U	<2.07 U	<2.07 U	<2.07 U	<2.07 U	<2.07 U	<2.07 U
Bromomethane	74-83-9	NS	ug/m3	<0.777 U	<0.777 U	<0.777 U	<0.777 UJ	<0.777 U	<0.777 U	<0.777 U	<0.777 U	<0.777 U	<0.777 U	<0.777 U	<0.777 U
Carbon Disulfide	75-15-0	NS	ug/m3	<0.623 U	<0.623 U	<0.623 U	<0.623 UJ	<0.623 U	<0.623 U	<0.623 U	<0.623 U	<0.623 U	<0.623 U	<0.623 U	<0.623 U
Carbon Tetrachloride	56-23-5	NS	ug/m3	0.421	0.434	0.421	0.428 J	0.434	0.434	0.44	0.428	0.491	0.447	0.421	0.459
Chlorobenzene	108-90-7	NS	ug/m3	<0.921 U	<0.921 U	<0.921 U	<0.921 UJ	<0.921 U	<0.921 U	<0.921 U	<0.921 U	<0.921 U	<0.921 U	<0.921 U	<0.921 U
Chloroethane	75-00-3	NS	ug/m3	<0.528 U	<0.528 U	<0.528 U	<0.528 UJ	<0.528 U	<0.528 U	<0.528 U	<0.528 U	<0.528 U	<0.528 U	<0.528 U	<0.528 U
Chloroform	67-66-3	NS	ug/m3	<0.977 U	<0.977 U	<0.977 U	<0.977 UJ	<0.977 U	<0.977 U	<0.977 U	<0.977 U	<0.977 U	<0.977 U	<0.977 U	<0.977 U
Chloromethane	74-87-3	NS	ug/m3	0.985	1.01	1.03	1.01 J	1.01	1.01	1.06	1.01	1.05	1.13	3.99	1.02
Cis-1,2-Dichloroethene	156-59-2	NS	ug/m3	<0.079 U	<0.079 U	<0.079 U	<0.079 UJ	<0.079 U	<0.079 U	<0.079 U	<0.079 U	<0.079 U	0.079	0.091	<0.079 U
Cis-1,3-Dichloropropene	10061-01-5	NS	ug/m3	<0.908 U	<0.908 U	<0.908 U	<0.908 UJ	<0.908 U	<0.908 U	<0.908 U	<0.908 U	<0.908 U	<0.908 U	<0.908 U	<0.908 U
Cyclohexane	110-82-7	NS	ug/m3	<0.688 U	<0.688 U	<0.688 U	<0.688 UJ	<0.688 U	<0.688 U	<0.688 U	<0.688 U	<0.688 U	<0.688 U	<0.688 U	<0.688 U
Dibromochloromethane	124-48-1	NS	ug/m3	<1.7 U	<1.7 U	<1.7 U	<1.7 UJ	<1.7 U	<1.7 U	<1.7 U	<1.7 U	<1.7 U	<1.7 U	<1.7 U	<1.7 U
Dichlorodifluoromethane	75-71-8	NS	ug/m3	2.12	2.12	2.07	2.18 J	2.19	2.17	2.18	2.2	2.25	2.24	2.14	2.57
Ethanol	64-17-5	NS	ug/m3	10.7	<9.42 U	196	552 J	384	384	135	697	116	124	131	145
Ethyl Acetate	141-78-6	NS	ug/m3	<1.8 U	<1.8 U	<1.8 U	3.16 J	1.83	1.86	<1.8 U	3.42	<1.8 U	<1.8 U	<1.8 U	<1.8 U
Ethylbenzene	100-41-4	NS	ug/m3	<0.869 U	<0.869 U	<0.869 U	<0.869 UJ	<0.869 U	<0.869 U	<0.869 U	<0.869 U	1.02	1.02	1.06	<0.869 U
Hexachlorobutadiene	87-68-3	NS	ug/m3	<2.13 U	<2.13 U	<2.13 U	<2.13 UJ	<2.13 U	<2.13 U	<2.13 U	<2.13 U	<2.13 U	<2.13 U	<2.13 U	<2.13 U
Isopropanol	67-63-0	NS	ug/m3	<1.23 U	<1.23 U	1.8	3.1 J	2.36	3.2	<1.23 U	6.1	1.66	1.94	2.08	1.9
M,P-Xylene	179601-23-1	NS	ug/m3	<1.74 U	<1.74 U	<1.74 U	2.03 J	<1.74 U	<1.74 U	<1.74 U	3.54	4.25	4.47	4.6	<1.74 U
Methyl Ethyl Ketone (2-Butanone)	78-93-3	NS	ug/m3	<1.47 U	<1.47 U	<1.47 U	<1.47 UJ	<1.47 U	<1.47 U	<1.47 U	2.3	<1.47 U	<1.47 U	2.9	<1.47 U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	108-10-1	NS	ug/m3	<2.05 U	<2.05 U	<2.05 U	<2.05 UJ	<2.05 U	<2.05 U	<2.05 U	<2.05 U	<2.05 U	<2.05 U	<2.05 U	<2.05 U
Methylene Chloride	75-09-2	60	ug/m3	<1.74 U	<1.74 U	<1.74 U	<1.74 UJ	<1.74 U	<1.74 U	2.22	<1.74 U	<1.74 U	<1.74 U	<1.74 U	<1.74 U
n-Heptane	142-82-5	NS	ug/m3	<0.82 U	<0.82 U	<0.82 U	<0.82 UJ	<0.82 U	<0.82 U	<0.82 U	<0.82 U	<0.82 U	<0.82 U	1.03	<0.82 U
n-Hexane	110-54-3	NS	ug/m3	<0.705 U	<0.705 U	<0.705 U	0.744 J	<0.705 U	<0.705 U	<0.705 U	0.994	1.44	1.48	1.68	0.761
o-Xylene (1,2-Dimethylbenzene)	95-47-6	NS	ug/m3	<0.869 U	<0.869 U	<0.869 U	<0.869 UJ	<0.869 U	<0.869 U	<0.869 U	1.44	1.38	1.49	1.58	<0.869 U
Styrene	100-42-5	NS	ug/m3	<0.852 U	<0.852 U	<0.852 U	<0.852 UJ	<0.852 U	<0.852 U	<0.852 U	<0.852 U	<0.852 U	<0.852 U	<0.852 U	<0.852 U
Tert-Butyl Alcohol	75-65-0	NS	ug/m3	<1.52 U	<1.52 U	<1.52 U	<1.52 UJ	<1.52 U	<1.52 U	<1.52 U	<1.52 U	<1.52 U	<1.52 U	<1.52 U	<1.52 U
Tert-Butyl Methyl Ether	1634-04-4	NS	ug/m3	<0.721 U	<0.721 U	<0.721 U	<0.721 UJ	<0.721 U	<0.721 U	<0.721 U	<0.721 U	<0.721 U	<0.721 U	<0.721 U	<0.721 U
Tetrachloroethene (PCE)	127-18-4	30	ug/m3	<0.136 U	<0.136 U	0.136	0.203 J	0.149	<0.136 U	0.136	0.224	0.264	0.312	0.278	0.19
Tetrahydrofuran	109-99-9	NS	ug/m3	<1.47 U	<1.47 U	<1.47 U	<1.47 UJ	<1.47 U	<1.47 U	<1.47 U	<1.47 U	<1.47 U	<1.47 U	<1.47 U	<1.47 U
Toluene	108-88-3	NS	ug/m3	<0.754 U	<0.754 U	<0.754 U	2.17 J	1.1	1.14	<0.754 U	2.82	3.88	3.96	3.92	1.79
Trans-1,2-Dichloroethene	156-60-5	NS	ug/m3	<0.793 U	<0.793 U	<0.793 U	<0.793 UJ	<0.793 U	<0.793 U	<0.793 U	<0.793 U	<0.793 U	<0.793 U	<0.793 U	<0.793 U
Trans-1,3-Dichloropropene	10061-02-6	NS	ug/m3	<0.908 U	<0.908 U	<0.908 U	<0.908 UJ	<0.908 U	<0.908 U	<0.908 U	<0.908 U	<0.908 U	<0.908 U	<0.908 U	<0.908 U
Trichloroethene (TCE)	79-01-6	2	ug/m3	<0.107 U	<0.107 U	<0.107 U	0.623 J	0.124	0.129	<0.107 U	0.908	1.38	1.93	1.98	0.677
Trichlorofluoromethane	75-69-4	NS	ug/m3	<1.12 U	<1.12 U	<1.12 U	<1.12 UJ	<1.12 U	<1.12 U	<1.12 U	1.23	1.4	1.65	1.39	15.8
Vinyl Chloride	75-01-4	NS	ug/m3	<0.051 U	<0.051 U	<0.051 U	<0.051 UJ	<0.051 U	<0.051 U	<0.051 U	<0.051 U	<0.051 U	<0.051 U	<0.051 U	<0.051 U
Total VOCs	VOCs	NS	ug/m3	14.226	7.244	209.177	578.675	401.003	400.511	145.996	741.834	151.145	161.388	180.96	181.805

Table 3 - Indoor and Ambient Air Analytical Results
Former Grant Hardware
44 High Street, West Nyack, New York

Notes:

AA - Ambient Air
IA - Indoor Air
CAS - Chemical Abstract Service
NS - No standard
ug/m3 - microgram per cubic meter
RL - Reporting limit
<RL - Not detected
Indoor air sample analytical results are compared to the New York State Department of Health (NYSDOH) Air Guideline Values (AGVs) as set forth in the NYSDOH October 2006 Guidance for Evaluating Soil Vapor Intrusion in the State of New York and subsequent updates (2013, 2015, 2017).
Ambient air sample analytical results are shown for reference only.

Qualifiers:

J - The analyte was positively identified and the associated numerical value is the approximate concentration of the analyte in the sample.
UJ - The analyte was not detected at a level greater than or equal to the RL; however, the reported RL is approximate and may be inaccurate or imprecise.
U - The analyte was analyzed for, but was not detected at a level greater than or equal to the level of the RL or the sample concentration for results impacted by blank contamination.

Exceedance Summary:

10 - Result exceeds NYSDOH AGVs

Table 4 - Indoor and Ambient Air Analytical Results for 217 Route 59
Former Grant Hardware
44 High Street, West Nyack, New York

Analyte	CAS Number	NYSDOH AGVs	Sample	AA-1_R59	IA-1_R59	IA-2_R59	IA-3_R59
			Location	Outside of residence	Living Room	Basement	Basement
			Sample Name	AA-1_011223	IA-1_011223	IA-2_011223	IA-3_011223
			Sample Date	1/12/2023	1/12/2023	1/12/2023	1/12/2023
			Sample Type	Ambient Air	Indoor Air	Indoor Air	Indoor Air
			Unit	Result	Result	Result	Result
Volatile Organic Compounds							
1,1,1-Trichloroethane	71-55-6	NS	µg/m^3	<0.109 U	<0.109 U	<0.109 U	<0.109 U
1,1,2,2-Tetrachloroethane	79-34-5	NS	µg/m^3	<1.37 U	<1.37 U	<1.37 U	<1.37 U
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	NS	µg/m^3	<1.53 U	<1.53 U	<1.53 U	<1.53 U
1,1,2-Trichloroethane	79-00-5	NS	µg/m^3	<1.09 U	<1.09 U	<1.09 U	<1.09 U
1,1-Dichloroethane	75-34-3	NS	µg/m^3	<0.809 U	<0.809 U	<0.809 U	<0.809 U
1,1-Dichloroethene	75-35-4	NS	µg/m^3	<0.079 U	<0.079 U	<0.079 U	<0.079 U
1,2,4-Trichlorobenzene	120-82-1	NS	µg/m^3	<1.48 U	<1.48 U	<1.48 U	<1.48 U
1,2,4-Trimethylbenzene	95-63-6	NS	µg/m^3	<0.983 U	<0.983 U	<0.983 U	<0.983 U
1,2-Dibromoethane (Ethylene Dibromide)	106-93-4	NS	µg/m^3	<1.54 U	<1.54 U	<1.54 U	<1.54 U
1,2-Dichlorobenzene	95-50-1	NS	µg/m^3	<1.2 U	<1.2 U	<1.2 U	<1.2 U
1,2-Dichloroethane	107-06-2	NS	µg/m^3	<0.809 U	<0.809 U	<0.809 U	<0.809 U
1,2-Dichloropropane	78-87-5	NS	µg/m^3	<0.924 U	<0.924 U	<0.924 U	<0.924 U
1,2-Dichlorotetrafluoroethane	76-14-2	NS	µg/m^3	<1.4 U	<1.4 U	<1.4 U	<1.4 U
1,3,5-Trimethylbenzene (Mesitylene)	108-67-8	NS	µg/m^3	<0.983 U	<0.983 U	<0.983 U	<0.983 U
1,3-Butadiene	106-99-0	NS	µg/m^3	<0.442 U	<0.442 U	<0.442 U	<0.442 U
1,3-Dichlorobenzene	541-73-1	NS	µg/m^3	<1.2 U	<1.2 U	<1.2 U	<1.2 U
1,4-Dichlorobenzene	106-46-7	NS	µg/m^3	<1.2 U	<1.2 U	<1.2 U	<1.2 U
1,4-Dioxane (P-Dioxane)	123-91-1	NS	µg/m^3	<0.721 U	<0.721 U	<0.721 U	<0.721 U
2,2,4-Trimethylpentane	540-84-1	NS	µg/m^3	<0.934 U	<0.934 U	<0.934 U	<0.934 U
2-Hexanone (MBK)	591-78-6	NS	µg/m^3	<0.82 U	<0.82 U	<0.82 U	<0.82 U
4-Ethyltoluene	622-96-8	NS	µg/m^3	<0.983 U	<0.983 U	<0.983 U	<0.983 U
Acetone	67-64-1	NS	µg/m^3	2.45	273	101	92.9
Allyl Chloride (3-Chloropropene)	107-05-1	NS	µg/m^3	<0.626 U	<0.626 U	<0.626 U	<0.626 U
Benzene	71-43-2	NS	µg/m^3	<0.639 U	0.687	0.68	0.652
Benzyl Chloride	100-44-7	NS	µg/m^3	<1.04 U	<1.04 U	<1.04 U	<1.04 U
Bromodichloromethane	75-27-4	NS	µg/m^3	<1.34 U	<1.34 U	<1.34 U	<1.34 U
Bromoethene	593-60-2	NS	µg/m^3	<0.874 U	<0.874 U	<0.874 U	<0.874 U
Bromoform	75-25-2	NS	µg/m^3	<2.07 U	<2.07 U	<2.07 U	<2.07 U
Bromomethane	74-83-9	NS	µg/m^3	<0.777 U	<0.777 U	<0.777 U	<0.777 U
Carbon Disulfide	75-15-0	NS	µg/m^3	<0.623 U	<0.623 U	<0.623 U	<0.623 U
Carbon Tetrachloride	56-23-5	NS	µg/m^3	0.434	0.421	0.453	0.447
Chlorobenzene	108-90-7	NS	µg/m^3	<0.921 U	<0.921 U	<0.921 U	<0.921 U
Chloroethane	75-00-3	NS	µg/m^3	<0.528 U	<0.528 U	<0.528 U	<0.528 U
Chloroform	67-66-3	NS	µg/m^3	<0.977 U	<0.977 U	<0.977 U	<0.977 U
Chloromethane	74-87-3	NS	µg/m^3	0.931	1.39	1.14	1.1
Cis-1,2-Dichloroethene	156-59-2	NS	µg/m^3	<0.079 U	<0.079 U	<0.079 U	<0.079 U
Cis-1,3-Dichloropropene	10061-01-5	NS	µg/m^3	<0.908 U	<0.908 U	<0.908 U	<0.908 U
Cyclohexane	110-82-7	NS	µg/m^3	<0.688 U	<0.688 U	<0.688 U	<0.688 U
Dibromochloromethane	124-48-1	NS	µg/m^3	<1.7 U	<1.7 U	<1.7 U	<1.7 U
Dichlorodifluoromethane	75-71-8	NS	µg/m^3	2.09	2.13	2.26	2.28
Ethanol	64-17-5	NS	µg/m^3	<9.42 U	339	142	117
Ethyl Acetate	141-78-6	NS	µg/m^3	<1.8 U	3.05	<1.8 U	<1.8 U
Ethylbenzene	100-41-4	NS	µg/m^3	<0.869 U	<0.869 U	<0.869 U	<0.869 U
Hexachlorobutadiene	87-68-3	NS	µg/m^3	<2.13 U	<2.13 U	<2.13 U	<2.13 U
Isopropanol	67-63-0	NS	µg/m^3	<1.23 U	24.2	8.5	7.28
M,P-Xylene	179601-23-1	NS	µg/m^3	<1.74 U	<1.74 U	<1.74 U	<1.74 U
Methyl Ethyl Ketone (2-Butanone)	78-93-3	NS	µg/m^3	<1.47 U	<1.47 U	2.63	2.92
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone	108-10-1	NS	µg/m^3	<2.05 U	<2.05 U	<2.05 U	<2.05 U
Methylene Chloride	75-09-2	60	µg/m^3	<1.74 U	5.52	<1.74 U	<1.74 U
n-Heptane	142-82-5	NS	µg/m^3	<0.82 U	<0.82 U	<0.82 U	<0.82 U
n-Hexane	110-54-3	NS	µg/m^3	<0.705 U	<0.705 U	<0.705 U	<0.705 U
o-Xylene (1,2-Dimethylbenzene)	95-47-6	NS	µg/m^3	<0.869 U	<0.869 U	<0.869 U	<0.869 U
Styrene	100-42-5	NS	µg/m^3	<0.852 U	1.53	2.23	5.24
Tert-Butyl Alcohol	75-65-0	NS	µg/m^3	<1.52 U	19.9	4.94	4.37
Tert-Butyl Methyl Ether	1634-04-4	NS	µg/m^3	<0.721 U	<0.721 U	<0.721 U	<0.721 U
Tetrachloroethene (PCE)	127-18-4	30	µg/m^3	0.149	0.136	0.183	0.176
Tetrahydrofuran	109-99-9	NS	µg/m^3	<1.47 U	<1.47 U	<1.47 U	<1.47 U
Toluene	108-88-3	NS	µg/m^3	<0.754 U	1.99	2.98	3.61
Trans-1,2-Dichloroethene	156-60-5	NS	µg/m^3	<0.793 U	<0.793 U	<0.793 U	<0.793 U
Trans-1,3-Dichloropropene	10061-02-6	NS	µg/m^3	<0.908 U	<0.908 U	<0.908 U	<0.908 U
Trichloroethene (TCE)	79-01-6	2	µg/m^3	<0.107 U	<0.107 U	<0.107 U	<0.107 U
Trichlorofluoromethane	75-69-4	NS	µg/m^3	<1.12 U	<1.12 U	<1.12 U	<1.12 U
Vinyl Chloride	75-01-4	NS	µg/m^3	<0.051 U	<0.051 U	<0.051 U	<0.051 U
Total VOCs	VOCs	NS	µg/m^3	6.054	672.954	268.996	237.975

Table 4 - Indoor and Ambient Air Analytical Results for 217 Route 59
Former Grant Hardware
44 High Street, West Nyack, New York

Notes:
AA - Ambient Air
IA - Indoor Air
CAS - Chemical Abstract Service
NS - No standard
µg/m^3 - microgram per cubic meter
RL - Reporting limit
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Indoor air sample analytical results are compared to the New York State Department of Health (NYSDOH) Air Guideline Values (AGVs) as set forth in the NYSDOH October 2006 Guidance for Evaluating Soil Vapor Intrusion in the State of New York and subsequent updates (2013, 2015, 2017).
Ambient air sample analytical results are shown for reference only.

Qualifiers:
U - The analyte was analyzed for, but was not detected at a level greater than or equal to the level of the RL or the sample concentration for results impacted by blank contamination.

Exceedance Summary:
10 - Result exceeds NYSDOH AGVs