HALEY & ALDRICH OF NEW YORK
200 Town Centre Drive
Suite 2
Rochester, NY 14623
585.359.9000

19 May 2023
File No. 0127981-030

New York State Department of Environmental Conservation
Region 8 Division of Remediation
6274 East Avon-Lima Road
Avon, New York 14414

Attention: Mr. Timothy A. Schneider, P.E.

Subject: Response to NYSDEC Comments – IRM Sub-slab Depressurization System Installation
Steuben County Industrial Development Agency (IDA) - 7234 State Route 54
Philips Lighting Company Bath Facility
7265 State Route 54
Bath, New York
BCP Site # C851044

Dear Mr. Schneider:

On behalf of the current site owner, Yort, Inc., and the former site owner (Philips North America LLC, formerly Philips Electronics North America Corporation, hereafter collectively referred to as Philips), Haley & Aldrich of New York accepts the New York State Department of Environmental Conservation (NYSDEC) 12 April 2023 conditional approval letter "as modified" for the Interim Remedial Measure Work Plan (IRM Work Plan), Sub-slab Depressurization System Installation Steuben County Industrial Development Agency (IDA) - 7234 State Route 54, dated 10 March 2023. As requested, the April 2023 NYSDEC letter, this acceptance letter, and the attached calendar schedule will be appended to the IRM Work Plan and added to the document repository for the site prior to the commencement of work. Consistent with the BCA, a minimum of 7-days' notice would be provided to NYSDEC prior to the start of approved field activities.

Should you have any questions, please do not hesitate to contact the Signify Project Manager Mr. Emil Filc at 937.241.1867 or emil.filc@signify.com or the undersigned.

Sincerely yours,
HALEY & ALDRICH OF NEW YORK

E. Quinn Lewis, P.E. (NY)
Senior Project Manager

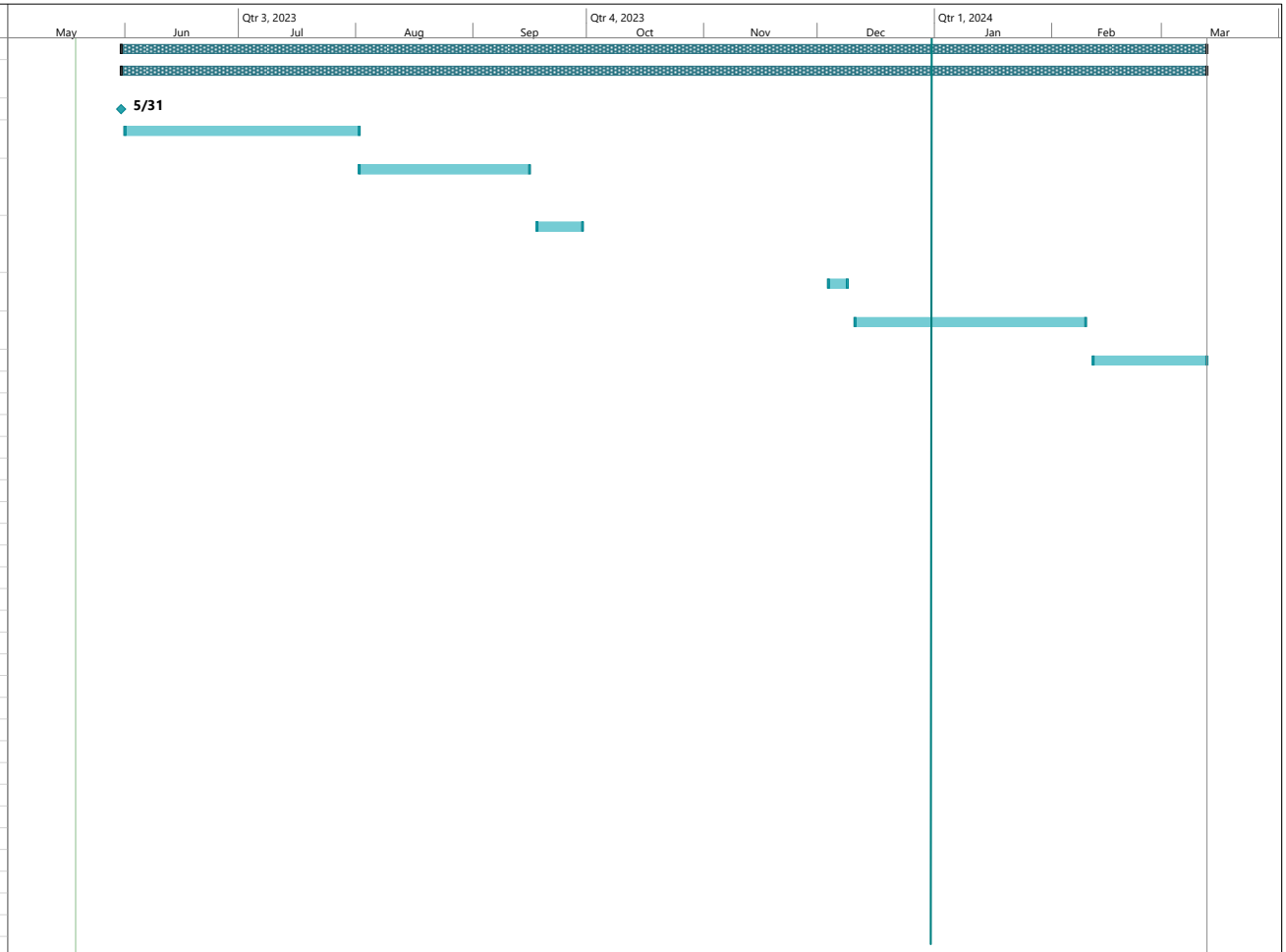
W. Thomas West, P.G. (NY)
Senior Associate

C: Signify; E. Filc, M. Manning
NYSDEC; D. Pratt, D. Loew
NYSDOH; J. Deming, J. Robinson

Attachments: IDA SSDS Calendar Schedule

G:\Projects\34201\Remedial_Investigation\Offsite Access\IDA\PFE-SSDS Workplan_Feb 2023\2023-0519 bcpC851044 HANY-NYSDEC IDA SSDS Installation acceptance letter_F2.docx

ID	Task Name	Start	Finish
1	**0127981 - Philips Bath - Offsite Vapor Intrusion**	**Wed 5/31/23**	**Tue 3/12/24**
2	**Industrial Development Agency (IDA) Sub-Slab Depressurization System (SSDS) Installation**	**Wed 5/31/23**	**Tue 3/12/24**
3	Submit NYSDEC Approved IDA SSDS Work Plan to	Wed 5/31/23	Wed 5/31/23
4	Pre-mobilization access and coordination with IDA for SSDS implementation	Thu 6/1/23	Tue 8/1/23
5	Contractor pre-mobilization work area review, SSDS Pressure Field Extension Testing (PFET), SSDS Field Installation and Start-up	Wed 8/2/23	Fri 9/15/23
6	Prepare and submit PFET Interim Data Report (IDR) (will include SSDS design summary and initial system start-up operations data)	Mon 9/18/23	Fri 9/29/23
7	Post SSDS Installation Confirmation Indoor Air Sampling (during heating season)	Mon 12/4/23	Fri 12/8/23
8	Prepare and submit SSDS Construction Completion Report (CCR)	Mon 12/11/23	Fri 2/9/24
9	NYSDEC Review and Approval of the IDA CCR	Mon 2/12/24	Tue 3/12/24



Project: IDA SSDS Schedule
Date: Fri 5/19/23

Task	Project Summary	Manual Task	Start-only	Deadline
Split	Inactive Task	Duration-only	Finish-only	Progress
Milestone	Inactive Milestone	Manual Summary Rollup	External Tasks	Manual Progress
Summary	Inactive Summary	Manual Summary	External Milestone

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Division of Environmental Remediation, Region 8
6274 East Avon-Lima Road, Avon, NY 14414-9516
P: (585) 226-5353 I F: (585) 226-8139
www.dec.ny.gov

Via E-mail

Mr. Emil Filc
Signify N. America Corp.
400 Crossing Blvd. Suite 600
Bridgewater, New Jersey 08807-2863

April 12, 2022

Re: **Interim Remedial Measures Work Plan – 7234 State Route 54 North - SSDS**
Philips BCP Site (C851044)
Bath (T), Steuben (Co)

Dear Mr. Filc,

The New York State Department of Environmental Conservation (NYSDEC) and the New York State Health Department has reviewed the Interim Remedial Measures Work Plan, Sub-slab Depressurization System for 7234 State Route 54 North dated March 10, 2023, and **approve as modified** below:

1. 2.1 SSDS Design and Description: Additionally note the party installing the system should verify the warning device or indicator is working properly. Building occupants should be made aware of the warning device or indicator (what it is, where it is located, how it works, how to read/understand it, and what to do if it indicates the system is not working properly). Note in Section 3.3 SSDS Post-Installation Testing and Monitoring that adequate operation of the warning device or indicator should be confirmed.

2. 3.1 Health and Safety: It is recommended to install the sub-slab depressurization system when the building is unoccupied. When work areas are within 20ft of potentially exposed populations or occupied structures a Special Requirements CAMP should be implemented.

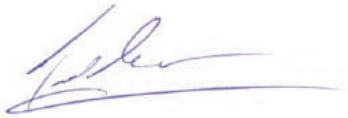
3. 3.3 Post-Installation SSD System Testing and Monitoring: Additionally note that post-mitigation indoor and ambient air sampling should be conducted concurrently with vacuum testing to confirm the system's efficacy in mitigating potential exposures. If the system is installed outside of the heating season or at the end of a season, post-mitigation air sampling may be postponed until the heating season.

4. 3.3 Post-Installation SSD System Testing and Monitoring: It is recommended to conduct an air quality questionnaire and building inventory, as well as a chemical inventory, to document any conditions that may affect indoor air quality or impact results during the post-installation sampling event.

Please elect in writing your acceptance of Agency approval "**as modified**" and provide a calendar schedule, compile with this cover letter and add to the document repository for the site prior to the commencement of work.

If you have questions about this letter, I can be reached at timothy.schneider@dec.ny.gov or (585) 226-5480.

Sincerely,



Timothy A. Schneider, P.E.
Professional Engineer 1
Division of Environmental Remediation

ec: D. Pratt - NYSDEC
J. Robinson - NYSDOH
T. West / S. Phillips – H&A

HALEY ALDRICH

www.haleyaldrich.com

INTERIM REMEDIAL MEASURE WORK PLAN

SUB-SLAB DEPRESSURIZATION SYSTEM INSTALLATION
STEUBEN COUNTY INDUSTRIAL DEVELOPMENT AGENCY
7234 STATE ROUTE 54 NORTH
BATH, STEUBEN COUNTY, NEW YORK
BCP SITE #C851044

by
Haley & Aldrich of New York
Rochester, New York

for
New York State Department of Environmental Conservation
Avon, New York

File No. 0127981-029
March 2023

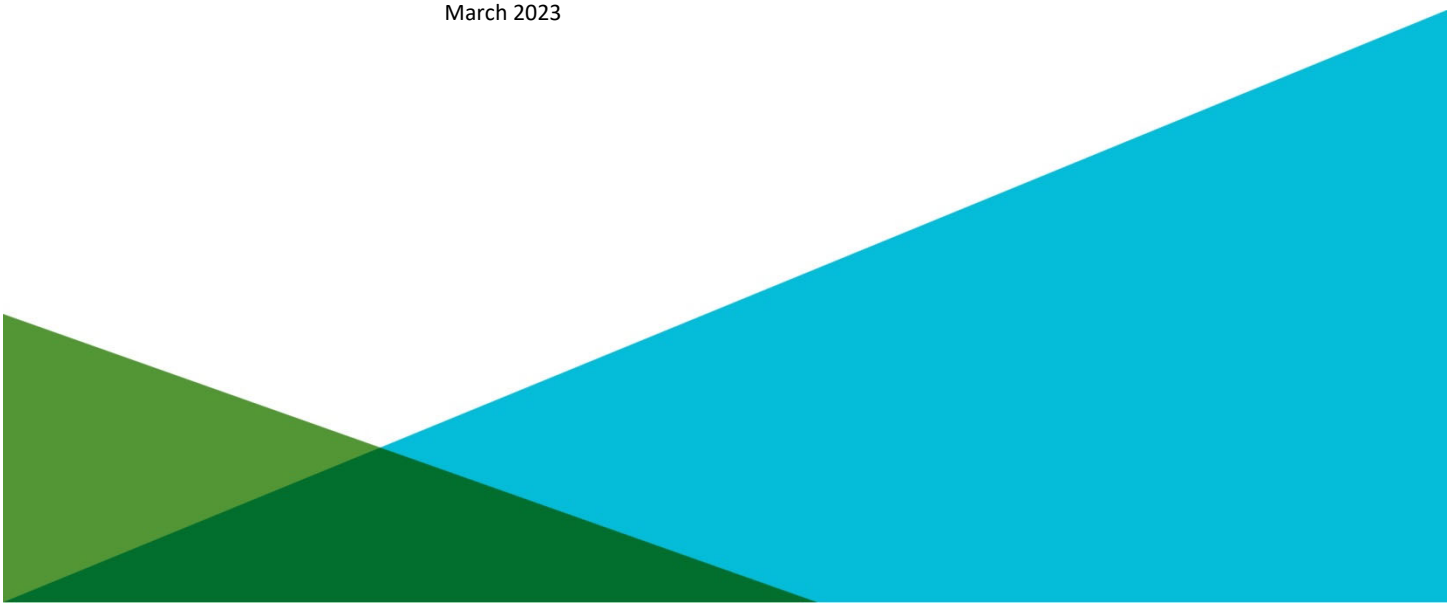


Table of Contents

List of Tables

List of Figures

1. Introduction

Yort, Inc. and the former owner (Philips North America LLC, formerly Philips Electronics North America Corporation – hereafter collectively referenced as Philips) have entered into a Brownfield Cleanup Agreement with the New York State Department of Environmental Conservation (NYSDEC), and are currently completing Remedial Investigation (RI) activities at the former Philips Lighting facility located at 7265 State Route 54 in Bath, New York ("the Site". The RI is being conducted to evaluate the environmental conditions at the Site and the RI is being conducted in accordance with NYSDEC-approved Remedial Investigation Work Plans (RIWPs). As part of these studies, vapor intrusion (VI) sampling was conducted at the Steuben County Industrial Development Agency (SCIDA or IDA) building located at 7234 State Route 54 in Bath, New York in April 2021, June 2021, and November 2022. The VI sampling was conducted in accordance with the NYSDEC-approved Amended Offsite Vapor Intrusion Work Plan (Haley & Aldrich 2020).

1.1 SUMMARY OF VAPOR INTRUSION SAMPLING IN THE IDA LOWER LEVEL / BASEMENT

The April 2021, VI sampling included the collection of samples from the sub-slab (soil) vapor beneath the basement floor slab in the IDA Building, collecting an indoor air sample within the basement of the IDA Building, and collecting an ambient air sample at an outdoor location. The indoor air (IA), IDA01-IA-040121 and soil vapor IDA01-SV-040121 samples collected from within the IDA basement contained low levels of trichloroethene (TCE) at concentrations of 0.468 micrograms per cubic meter (ug/m^3) and 6.45 ug/m^3 respectively. Based on the April 2021 IA sampling results, a supplemental IA sample, IDA01-IA-061721 was collected in June 2021 to confirm the initial detection of TCE in the indoor air. The confirmation IA sample collected in June 2021 contained TCE at a concentration of 0.478 ug/m^3 . The concentration of TCE detected in the initial and subsequent confirmation IA samples were below New York State Department of Health (NYSDOH) soil vapor intrusion screening criteria[1] for Matrix A compounds; however, the NYSDOH guidance recommended that additional monitoring be completed to continue to evaluate the potential VI pathway. As part of the IDA IA monitoring program, an annual IA sample was collected in November 2022; sample designated as IDA01-IA-111822. The annual IA sample contained TCE at a concentration of 1.43 ug/m^3 which slightly exceeded NYSDOH screening criteria for Matrix A compounds, suggesting that mitigation would be necessary. The concentration of carbon tetrachloride detected in the ambient (outdoor) air samples for the three sampling events was similar or higher than the indoor air samples. The presence of carbon tetrachloride in both the ambient air and IA samples demonstrates that the detection of carbon tetrachloride is a background condition and not related to VI issues The locations of the April 2021, June 2021 and November 2022 sampling events are shown on Figure 1. Summaries of the laboratory analytical data from the three VI related sampling events were previously provided to the NYSDEC in monthly progress reports[2], and are provided in Tables I and II for reference.

[1] New York State Department of Health Guidance for Evaluating Soil Vapor Intrusion in the State of New York, October 2006 (NYSDOH vapor intrusion guidance), Soil Vapor/Indoor Air Matrices A and B, May 2017.

[2] Progress Report No. 76 – April 2021 (May 2021) provided the 1 April 2021 VI sampling analytical results, Progress Report No. 79 – July 2021 (August 2021) provided the June 2021 IA sampling analytical results, Progress Report No. 95 – November 2022 (December 2022) provided the November 2022 IA sampling analytical.

1.2 BASIS FOR SUB-SLAB DEPRESSURIZATION RECOMMENDATION

Based on discussions with the NYSDEC and NYSDOH during program review calls for the Bath Site, due to the occurrence of an IA sample at concentrations which exceeded NYSDOH soil vapor intrusion screening criteria for Matrix A analytes, mitigation of the VI risks in the lower-level area / basement of the IDA will be required. To determine and evaluate sub-slab depressurization system (SSDS) design parameters for VI mitigation within the IDA basement, a pressure field extension (PFE) diagnostic testing program will be conducted. The results of the PFE diagnostic testing will be used to design the SSDS for the IDA building.

The following sections of this Interim Remedial Measures Work Plan (IRM WP) present the proposed activities for conducting the PFE diagnostic testing, and present the design, installation, and post-installation testing and monitoring for the proposed SSDS. In addition, information on the sequence of activities, installation of the SSDS, start-up testing of the system, and construction completion reporting are outlined.

2. IRM Work Plan

Details in the IRM Work Plan have been divided into three sections. Section 2 provides a description of activities associated with the PFE testing and potential features of the proposed SSDS; Section 3 provides information relative to site safety, waste management during PFE testing and SSDS installation, and post-SSDS installation testing and monitoring; and Section 4 describes the level of reporting and documentation that will be provided, including in the IRM Construction Completion Report (CCR).

2.1 PRESSURE FIELD EXTENSION TESTING

To evaluate the design parameters for the construction of the SSDS, PFE testing will be conducted. The PFE testing will include the installation of temporary suction points that will be used to create a negative pressure in areas beneath the building slab. The temporary suction points will be installed by core drilling approximately 4-inch diameter holes through the existing concrete floor slab at the IDA, and then extending the cores into the sub-base material to a depth of approximately 6-inches below the bottom of the lower-level floor slab. A vacuum blower will then be utilized to apply vacuum to the suction points in each test area. Temporary vacuum monitoring points (TMPs), comprised of approximately ½"-inch diameter borings, will be installed radially from each of the suction points. The TMPs will be used during the PFE testing to measure induced vacuum beneath the floor slab to assess the radius of vacuum influence. A digital manometer will be used to measure pressure differentials at the TMPs. At the completion of the field testing, the temporary points will be filled with non-shrink grout.

2.2 SSDS DESIGN AND DESCRIPTION

Based on the results of the PFE diagnostic testing, an SSDS design will be developed to achieve a minimum sub-slab vacuum (negative pressure field) of 0.004 inches W.C. The target minimum sub-slab vacuum of -0.004 inches W.C. is the prescribed criterion to demonstrate sub-slab depressurization in accordance with NYSDOH guidance for the control of soil vapor intrusion, and is a greater sub-slab vacuum criteria than the USEPA standards for the control of radon gas[3]. The major design features associated with the proposed SSDS shall include installing the following equipment and materials:

- Multiple suction pits installed in 5-inch diameter core drill borings through the concrete floor. After the concrete has been cored, approximately one cubic foot of sub-base material would be hand excavated to promote increased permeability for vacuum induction beneath the concrete slab. The suction pits will be connected to vertical conveyance piping, and the concrete surrounding the suction pits would be restored.
- An SSDS fan located on the exterior of the IDA building to allow for routing of the conveyance piping from the sub-slab connection points on the interior of the building directly to the inlet side of the fan under vacuum, and discharge piping under positive pressure from the outlet side of the fan. The SSDS fan will have an audible warning device suitably located to alert building occupants in the event that the fan/ SSDS stops working properly.

[3] A vacuum level of 0.004 inches WC is prescribed as the criteria to demonstrate sub-slab depressurization in the New York State Department of Health, (2006), *Guidance for Evaluating Soil Vapor Intrusion in the State of New York,* Center for Environmental Health, Bureau of Environmental Expose Investigation, October 2006 and USEPA's *Radon Prevention in the Design and Construction of Schools and Other Large Buildings* [EPA 625-R-92-016, June 1994].

- Appropriately sized schedule 40 polyvinyl chloride (PVC) conveyance piping routed from the individual suction points vertically and horizontally to the SSDS fan. Building wall penetrations would be made to facilitate the installation of the SSDS piping would be installed where the piping exits the building. Labels on the SSDS piping and associated equipment would include the appropriate alpha/numeric number of each suction pit and would identify the purpose of the system typically identified as "Active Sub-Slab Depressurization System"
- Vacuum monitoring gauges on the suction pit pipe runs to permit post-installation monitoring.
- Permanent sub-slab vacuum monitoring points to allow for direct measurement of the induced sub-slab vacuum.
- Electrical wiring and conduit to provide power service to the fan unit.
- Sealing visible expansion joints or slab crack with urethane caulk to optimize operation of the SSDS.

The SSDS fan discharge piping would be at least 10 feet above the eave of the building roof, 10 feet away from any building openings that are less than 2 feet below the exhaust point, and at least 10 feet from any HVAC intakes or supply registers. All components of the system will be installed compliant with the applicable mechanical, electrical, building, plumbing, energy, and fire prevention codes, standards, and regulations of the local jurisdiction. The actual location of the fan unit, suction points, and piping configurations will be determined by field conditions and accessibility during the installation.

3. PFE Testing, SSDS Design and Installation

3.1 HEALTH AND SAFETY

Prior to initiating any field work associated with the PFE diagnostic testing and SSDS installation, the current health and safety plan (HASP) utilized for other off-site VI testing and SSDS work will be refined as needed to address specific health and safety items related to the IDA PFE testing and SSDS work. Prior to the installation of temporary or permanent vacuum monitoring and suction points associated with the PFE diagnostic testing and SSDS installation, real-time ambient air will be monitored for total volatile organic compounds (VOCs) with an organic vapor meter (OVM) equipped with a photoionization detector (PID), to establish background levels, and during system installation activities. During the field-testing activities, monitoring will be conducted at a frequency necessary to adequately characterize potential VOC levels within the breathing zone, the work areas, fan discharge during PFE testing, and during the installation and startup of the SSDS.

3.2 WASTE MANAGEMENT

Waste generated from the installation of temporary or permanent vacuum monitoring and suction points associated with the PFE diagnostic testing and SSDS installation, is expected to consist of solid debris (concrete) and sub-base materials comprised of gravels and stone. It is anticipated that less than ½ cubic yard of concrete slab and sub-base materials will be generated during the PFE testing program and SSDS installation. The waste material generated during the installation of the SSDS would be temporarily staged at the central staging area at the main facility, pending analysis, waste profiling, and approval for transport to a permitted offsite disposal facility. The concrete debris would be containerized and once the project is completed, removed from the site and disposed of at a Subtitle D landfill as demolition debris. Sub-base soils, if encountered, will also be containerized and managed for offsite disposal. Prior to transport offsite, the soils would be sampled in accordance with the requirements of DER-10 (Table 5.4(e)10, Recommended Number of Soil Samples for Soil Import to or Export from a Site".

3.3 SSDS POST-INSTALLATION TESTING AND MONITORING

Following installation of the SSDS, temporary vacuum testing points will be installed around the perimeter of the area of influence and vacuum readings will be collected using a handheld digital manometer. The monitoring would be conducted to confirm that the design criteria for depressurization of the building has been achieved. If during the initial start-up, target vacuum levels are not confirmed, then modifications to the existing system may be considered. Based on the results of the start-up testing, a select number of temporary vacuum monitoring points will be converted to permanent vacuum monitoring points to allow for long term monitoring of the pressure field.

One post-SSDS installation IA sample will be collected as part of the IRM. This sample will be collected at least 1-month after SSDS start-up, and the performance air sample will be collected during the heating season (generally in New York State to extend between November 15th and March 31st). The sample will be analyzed at a NYSDOH ELAP certified laboratory for analysis of VOCs via EPA Method TO-15. The air sampling results will be reported in NYSDEC Analytical Services Protocol (ASP) Category B format data deliverables. Procedures for ongoing operations, maintenance, and monitoring of the SSDS will be provided in an SSDS O&M manual which will be included with the Construction Completion Report.

3.4 PROPOSED SCHEDULE

Contingent upon NYSDECs approval of this SSDS IRM Work Plan, the following schedule is proposed:

- PFE Testing – 1-2 days (within 2-3 weeks of agency approval)
- PFE Testing Interim Data Report (IDR) (will include SSDS design details) – 3-4 weeks after PFE Testing
- SSDS long lead equipment order and receipt – 3-4 weeks after PFE Testing IDR submission
- SSDS field installation and start-up – 1-2 weeks after receipt of long lead equipment and building access coordination with the IDA
- SSDS Construction Completion Report Submission – within 90-days of system start-up

This schedule is contingent on materials, equipment, and contractor availability at the time of NYSDEC IRM Work Plan approval. Consistent with the BCA, a minimum of 7-days' notice would be provided to NYSDEC prior to scheduling the start of approved field activities.

4. Reporting

4.1 PFE TESTING, SSDS DESIGN AND INSTALLATION

An interim data report summarizing the results of the PFE diagnostic testing and SSDS design details will be provided to the NYSDEC after the PFE testing. Progress summaries of the PFE testing, SSDS design and installation activities will be provided in the appropriate monthly progress reports for the Site.

4.2 CONSTRUCTION COMPLETION REPORTING

After the SSDS has been installed, start-up testing and post-installation testing and monitoring has been conducted to confirm that the operating criteria have been achieved and the system is performing as designed, a construction completion report (CCR) will be prepared in accordance with the requirements of NYSDEC DER-10. The construction completion report will include at a minimum the following:

- A site description and background;
- A summary of the implemented interim remedial measure, including PFE testing results informing the SSDS design, any problems that were encountered during construction, and any changes to the design that were made;
- A summary of the post-installation testing and monitoring to verify that the SSDS is operating as designed and achieving mitigation criteria;
- As-built drawings of the installed SSDS; and,
- An SSDS Operation, Maintenance, and Monitoring manual.

The CCR will include copies of the executed non-hazardous waste manifests/bills of lading documenting the offsite transport and disposal of the solid waste, along with supporting photographs of the construction activities during the implementation of the IRM. The CCR will be prepared, stamped, and include the required certification signed by a NYS licensed professional engineer.

5. Professional Engineer's Certification

I, Edmund Quinn Lewis, P.E., certify that I am currently a New York State registered professional engineer ad defined in 6 NYCRR Part 375 and that this Interim Remedial Measure Work Plan was prepared in accordance with all applicable statues and regulations and in substantial conformance with the DER Technical Guidance for Site Investigation and Remediation (DER-10).

Edmund Quinn Lewis 10 MARCH 2023

Edmund Quinn Lewis, P.E. Date
Senior Project Manger

It is a violation of New York State Education Law Article 145 for any person, unless he or she is acting under the direction of a licensed Professional Engineer, to alter this item in any way.

HALEY ALDRICH

References

1. Addendum to Offsite Vapor Intrusion Evaluation Work Plan, November 2020.

2. Progress Report No. 76 – April 2021, Philips Lighting Company Bath Facility, Haley & Aldrich of New York, May 10, 2021.

3. Progress Report No. 79 – July 2021, Philips Lighting Company Bath Facility, Haley & Aldrich of New York, August 11, 2021.

4. Progress Report No. 95 – November 2022, Philips Lighting Company Bath Facility, Haley & Aldrich of New York, December 12, 2022.

5. Off-Site Soil Vapor Intrusion Assessment, Interim Data Report, 7234 Route 54 North Property, Former Philips Lighting Facility, Bath, New York, Haley & Aldrich of New York, November 2021, Revised, August 2022.

6. New York State Department of Health (NYSDOH) Guidance for Evaluating Soil Vapor Intrusion in the State of New York, October 2006 (NYSDOH vapor intrusion guidance), Soil Vapor / Indoor Air Matrices A and B, May 2017.

TABLES

TABLE I
SUMMARY OF IDA SOIL VAPOR AND AIR ANALYTICAL RESULTS
PHILIPS BCP SITE (#c851044)
BATH, NEW YORK

LOCATION	Ambient Air - North of IDA		IDA01-Indoor Air		IDA01-Soil Vapor		Ambient Air - North of IDA		IDA-01 Indoor Air	
SAMPLING DATE	AA01-040121-0920		IDA01-IA-040121-0905		IDA01-SV-040121-0910		AA01-061721-0823		IDA01-IA-061721-0820	
LAB SAMPLE ID	4/1/2021		4/1/2021		4/1/2021		6/17/2021		6/17/2021	
SAMPLE TYPE	L2117641-03		L2117641-02		L2117641-01		L2133401-03		L2133401-02	
	AIR		AIR		SOIL_VAPOR		AIR		AIR	
	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual
Volatile Organics in Air (µg/m3)										
1,1,1-Trichloroethane	-	-	-	-	1.09	U	-	-	-	-
1,1,2,2-Tetrachloroethane	1.37	U	1.37	U	1.37	U	1.37	U	1.37	U
1,1,2-Trichloroethane	1.09	U	1.09	U	1.09	U	1.09	U	1.09	U
1,1-Dichloroethane	0.809	U	0.809	U	0.809	U	0.809	U	0.809	U
1,1-Dichloroethene	-	-	-	-	0.793	U	-	-	-	-
1,2,4-Trichlorobenzene	1.48	U	1.48	U	1.48	U	1.48	U	1.48	U
1,2,4-Trimethylbenzene	0.983	U	0.983	U	0.983	U	0.983	U	0.983	U
1,2-Dibromoethane	1.54	U	1.54	U	1.54	U	1.54	U	1.54	U
1,2-Dichlorobenzene	1.2	U	1.2	U	1.2	U	1.2	U	1.2	U
1,2-Dichloroethane	0.809	U	0.809	U	0.809	U	0.809	U	0.809	U
1,2-Dichloropropane	0.924	U	0.924	U	0.924	U	0.924	U	0.924	U
1,3,5-Trimethylbenzene	0.983	U	0.983	U	0.983	U	0.983	U	0.983	U
1,3-Butadiene	0.442	U	0.442	U	0.442	U	0.442	U	0.442	U
1,3-Dichlorobenzene	1.2	U	1.2	U	1.2	U	1.2	U	1.2	U
1,4-Dichlorobenzene	1.2	U	1.2	U	1.2	U	1.2	U	1.2	U
1,4-Dioxane	0.721	U	0.721	U	0.721	U	0.721	U	0.721	U
2,2,4-Trimethylpentane	0.934	U	0.934	U	0.934	U	0.934	U	0.934	U
2-Butanone	1.47	U	1.47	U	1.47	U	1.47	U	**10.4**	
2-Hexanone	0.82	U	0.82	U	0.82	U	0.82	U	0.82	U
3-Chloropropene	0.626	U	0.626	U	0.626	U	0.626	U	0.626	U
4-Ethyltoluene	0.983	U	0.983	U	0.983	U	0.983	U	0.983	U
4-Methyl-2-pentanone	2.05	U	2.05	U	2.05	U	2.05	U	2.05	U
Acetone	2.38	U	**3.14**		**4.54**		**4.2**		**27.8**	
Benzene	0.639	U	0.639	U	0.639	U	0.639	U	0.639	U
Benzyl chloride	1.04	U	1.04	U	1.04	U	1.04	U	1.04	U
Bromodichloromethane	1.34	U	1.34	U	1.34	U	1.34	U	1.34	U
Bromoform	2.07	U	2.07	U	2.07	U	2.07	U	2.07	U
Bromomethane	0.777	U	0.777	U	0.777	U	0.777	U	0.777	U
Carbon disulfide	0.623	U	0.623	U	0.623	U	0.623	U	0.623	U
Carbon tetrachloride	-	-	-	-	1.26	U	-	-	-	-
Chlorobenzene	0.921	U	0.921	U	0.921	U	0.921	U	0.921	U
Chloroethane	0.528	U	0.528	U	0.528	U	0.528	U	0.528	U
Chloroform	0.977	U	0.977	U	0.977	U	0.977	U	0.977	U
Chloromethane	**1.19**		**1.02**		0.413	U	**1.01**		**0.88**	
cis-1,2-Dichloroethene	-	-	-	-	0.793	U	-	-	-	-
cis-1,3-Dichloropropene	0.908	U	0.908	U	0.908	U	0.908	U	0.908	U
Cyclohexane	0.688	U	0.688	U	0.688	U	0.688	U	0.688	U
Dibromochloromethane	1.7	U	1.7	U	1.7	U	1.7	U	1.7	U
Dichlorodifluoromethane	**2.17**		**2.18**		**2.15**		**2.29**		**2.51**	
Ethanol	9.42	U	**11.5**		**57.1**		9.42	U	9.42	U
Ethyl Acetate	1.8	U	1.8	U	1.8	U	1.8	U	1.8	U
Ethylbenzene	0.869	U	0.869	U	0.869	U	0.869	U	0.869	U
Freon-113	1.53	U	1.53	U	1.53	U	1.53	U	1.53	U
Freon-114	1.4	U	1.4	U	1.4	U	1.4	U	1.4	U
Heptane	0.82	U	0.82	U	0.82	U	0.82	U	0.82	U
Hexachlorobutadiene	2.13	U	2.13	U	2.13	U	2.13	U	2.13	U
Isopropanol	1.23	U	**1.63**		**4.06**		1.23	U	1.23	U
Methyl tert butyl ether	0.721	U	0.721	U	0.721	U	0.721	U	0.721	U
Methylene chloride	1.74	U	1.74	U	1.74	U	1.74	U	1.74	U
n-Hexane	0.705	U	0.705	U	0.705	U	0.705	U	0.705	U
o-Xylene	0.869	U	0.869	U	**0.995**		0.869	U	0.869	U
p/m-Xylene	1.74	U	1.74	U	**1.85**		1.74	U	1.74	U
Styrene	0.852	U	0.852	U	**0.984**		0.852	U	0.852	U
Tertiary butyl Alcohol	1.52	U	1.52	U	1.52	U	1.52	U	1.52	U
Tetrachloroethene	-	-	-	-	1.36	U	-	-	-	-
Tetrahydrofuran	1.47	U	1.47	U	1.47	U	1.47	U	**18.5**	
Toluene	0.754	U	**1.03**		**0.995**		0.754	U	0.754	U
trans-1,2-Dichloroethene	0.793	U	0.793	U	0.793	U	0.793	U	0.793	U
trans-1,3-Dichloropropene	0.908	U	0.908	U	0.908	U	0.908	U	0.908	U
Trichloroethene	-	-	-	-	**6.45**		-	-	-	-
Trichlorofluoromethane	1.12	U	1.12	U	1.12	U	**1.26**		**1.37**	
Vinyl bromide	0.874	U	0.874	U	0.874	U	0.874	U	0.874	U
Vinyl chloride	-	-	-	-	0.511	U	-	-	-	-

TABLE I
SUMMARY OF IDA SOIL VAPOR AND AIR ANALYTICAL RESULTS
PHILIPS BCP SITE (#c851044)
BATH, NEW YORK

LOCATION	Ambient Air - North of IDA		IDA01-Indoor Air		IDA01-Soil Vapor		Ambient Air - North of IDA		IDA-01 Indoor Air	
SAMPLING DATE	AA01-040121-0920		IDA01-IA-040121-0905		IDA01-SV-040121-0910		AA01-061721-0823		IDA01-IA-061721-0820	
LAB SAMPLE ID	4/1/2021		4/1/2021		4/1/2021		6/17/2021		6/17/2021	
SAMPLE TYPE	L2117641-03		L2117641-02		L2117641-01		L2133401-03		L2133401-02	
	AIR		AIR		SOIL_VAPOR		AIR		AIR	
	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual
Volatile Organics in Air by SIM (µg/m3)										
1,1,1-Trichloroethane	0.109	U	0.109	U	-	-	0.109	U	0.109	U
1,1-Dichloroethene	0.079	U	0.079	U	-	-	0.079	U	0.079	U
Carbon tetrachloride	**0.409**		**0.39**		-	-	**0.516**		**0.535**	
cis-1,2-Dichloroethene	0.079	U	0.079	U	-	-	0.079	U	0.079	U
Tetrachloroethene	0.136	U	0.136	U	-	-	0.136	U	0.136	U
Trichloroethene	0.107	U	**0.468**		-	-	0.107	U	**0.478**	
Vinyl chloride	0.051	U	0.051	U	-	-	0.051	U	0.051	U

Notes and Abbreviations:

1. New York DOH Matrix A Indoor Air Concentrations Criteria per Guidance for Evaluating Soil Vapor Intrusion, October 2006, and updated May 2017.
2. New York DOH Matrix B Indoor Air Concentrations Criteria per Guidance for Evaluating Soil Vapor Intrusion, October 2006, and updated May 2017.
3. New York DOH Matrix C Indoor Air Concentrations Criteria per Guidance for Evaluating Soil Vapor Intrusion, October 2006, and updated May 2017.
4. New York DOH Matrix A Sub-slab Vapor Concentrations Criteria per Guidance for Evaluating Soil Vapor Intrusion, October 2006, and updated May 2017.
5. New York DOH Matrix B Sub-slab Vapor Concentrations Criteria per Guidance for Evaluating Soil Vapor Intrusion, October 2006, and updated May 2017.
6. New York DOH Matrix C Sub-slab Vapor Concentrations Criteria per Guidance for Evaluating Soil Vapor Intrusion, October 2006, and updated May 2017.
7. U = Not detected at the reported detection limit for the sample.
8. µg/m3 = micrograms per cubic meter

TABLE II
SUMMARY OF IDA INDOOR AIR ANALYTICAL RESULTS
PHILIPS LIGHTING BCP SITE (#c851044)
BATH , NY

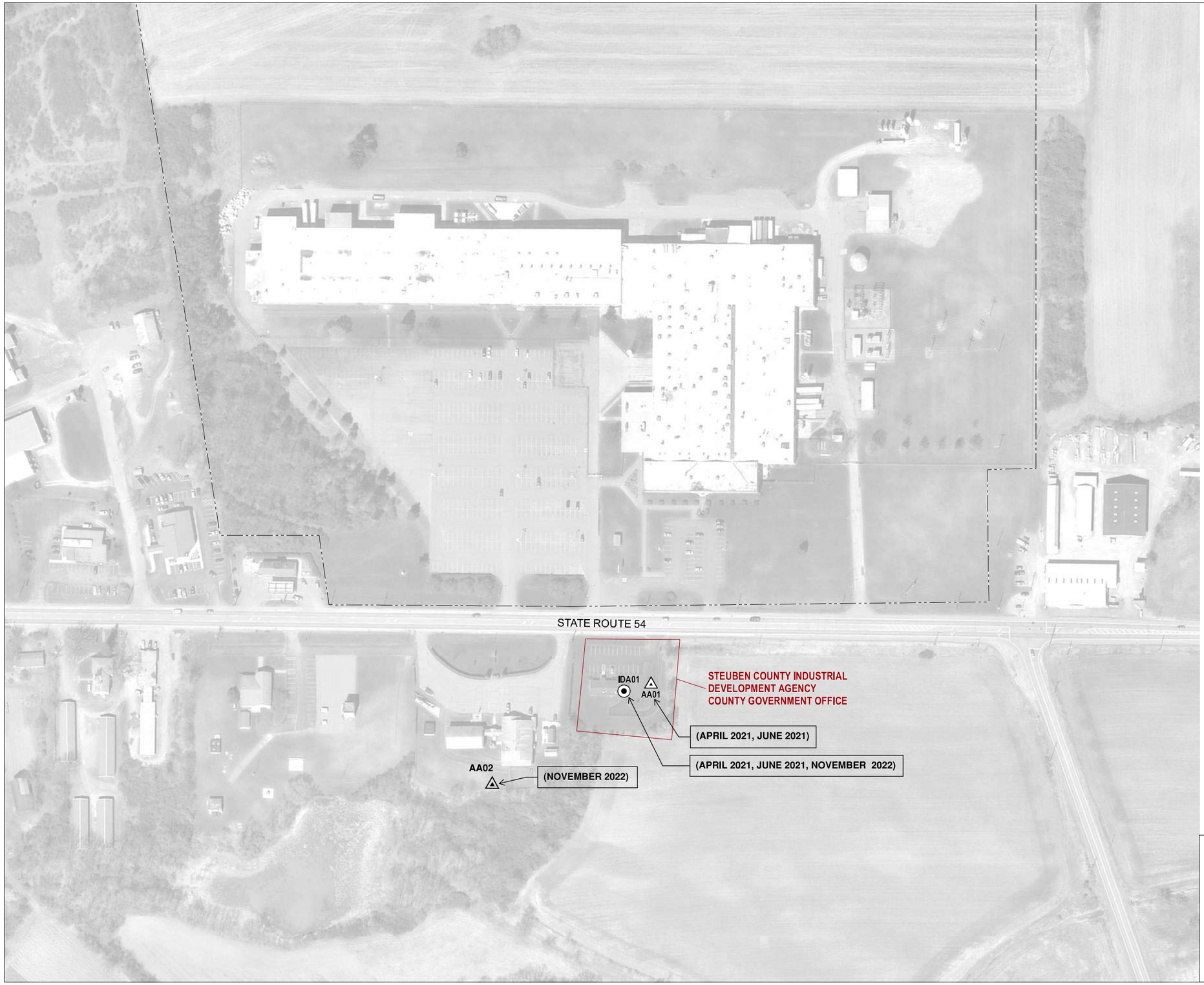
Location Group			IDA	
Location	AA02		IDA01-IA	
Sample Date	11/18/2022		11/18/2022	
Sample Type	Primary		Primary	
Sample Name	AA02-111822-0906		IDA01-IA-111822-0855	
Matrix	Ambient Air		Indoor Air	
Volatile Organic Compounds (ug/m3)				
1,1,2,2-Tetrachloroethane	0.422	U	0.422	U
1,1,2-Trichloroethane	0.366	U	0.366	U
1,1-Dichloroethane	0.254	U	0.254	U
1,2,4-Trichlorobenzene	0.5	U	0.5	U
1,2,4-Trimethylbenzene	0.181	U	0.181	U
1,2-Dibromoethane (Ethylene Dibromide)	0.431	U	0.431	U
1,2-Dichlorobenzene	0.378	U	0.378	U
1,2-Dichloroethane	0.244	U	0.244	U
1,2-Dichloropropane	0.282	U	0.282	U
1,2-Dichlorotetrafluoroethane (CFC 114)	0.413	U	0.413	U
1,3,5-Trimethylbenzene	0.332	U	0.332	U
1,3-Butadiene	0.148	U	0.148	U
1,3-Dichlorobenzene	0.377	U	0.377	U
1,4-Dichlorobenzene	0.382	U	0.382	U
1,4-Dioxane	0.29	U	0.29	U
2,2,4-Trimethylpentane	0.169	U	0.169	U
2-Butanone (Methyl Ethyl Ketone)	0.142	U	0.142	U
2-Hexanone (Methyl Butyl Ketone)	0.266	U	0.266	U
4-Ethyltoluene (1-Ethyl-4-Methylbenzene)	0.182	U	0.182	U
4-Methyl-2-Pentanone (Methyl Isobutyl Ketone)	0.173	U	0.173	U
Acetone	**3.8**	-	**4.39**	-
Allyl chloride	0.183	U	0.183	U
Benzene	0.156	U	0.156	U
Benzyl Chloride (alpha-Chlorotoluene)	0.25	U	0.25	U
Bromodichloromethane	0.338	U	0.338	U
Bromoform	0.663	U	0.663	U
Bromomethane (Methyl Bromide)	0.3	U	0.3	U
Carbon disulfide	0.174	U	0.174	U
Chlorobenzene	0.287	U	0.287	U
Chloroethane	0.212	U	0.212	U
Chloroform (Trichloromethane)	0.309	U	0.309	U
Chloromethane (Methyl Chloride)	**1.16**	-	**1.02**	-
cis-1,3-Dichloropropene	0.186	U	0.186	U
Cyclohexane	0.127	U	0.127	U
Dibromochloromethane	0.523	U	0.523	U
Dichlorodifluoromethane (CFC-12)	**2.34**	-	**2.34**	-
Ethanol	1.38	U	**21.3**	-
Ethyl acetate	0.44	U	0.44	U
Ethylbenzene	0.188	U	0.188	U
Hexachlorobutadiene	0.564	U	0.564	U
Hexane	**5.85**	-	0.128	U
Isopropyl Alcohol (2-Propanol)	1.17	U	1.17	U
m,p-Xylenes	0.395	U	0.395	U
Methyl Tert Butyl Ether (MTBE)	0.189	U	0.189	U
Methylene chloride (Dichloromethane)	0.466	U	0.466	U
N-Heptane	0.193	U	0.193	U
o-Xylene	0.197	U	0.197	U
Styrene	0.185	U	0.185	U
Tert-Butyl Alcohol (tert-Butanol)	0.141	U	0.141	U
Tetrahydrofuran	0.168	U	0.168	U
Toluene	0.196	U	0.196	U
trans-1,2-Dichloroethene	0.255	U	0.255	U
trans-1,3-Dichloropropene	0.198	U	0.198	U
Trichlorofluoromethane (CFC-11)	**1.27**	-	**1.21**	-
Trifluorotrichloroethane (Freon 113)	0.503	U	0.503	U
Vinyl Bromide (Bromoethene)	0.313	U	0.313	U

TABLE II
SUMMARY OF IDA INDOOR AIR ANALYTICAL RESULTS
PHILIPS LIGHTING BCP SITE (#c851044)
BATH , NY

Location Group			IDA	
Location	AA02		IDA01-IA	
Sample Date	11/18/2022		11/18/2022	
Sample Type	Primary		Primary	
Sample Name	AA02-111822-0906		IDA01-IA-111822-0855	
Matrix	Ambient Air		Indoor Air	
Volatile Organic Compounds SIM (ug/m3)				
1,1,1-Trichloroethane	0.045	U	0.045	U
1,1-Dichloroethene	0.033	U	0.033	U
Carbon tetrachloride	**0.528**	-	**0.516**	-
cis-1,2-Dichloroethene	0.038	U	0.038	U
Tetrachloroethene	0.053	U	0.053	U
Trichloroethene	0.033	U	**1.43**	-
Vinyl chloride	0.018	U	0.018	U

Notes:
1. Results in **bold** are detected.
2. Results qualifiers:
   U: Not detected above the method detection limit (MDL).

FIGURES



LEGEND

- INDOOR AIR AND SUB-SLAB SOIL VAPOR SAMPLE
- AMBIENT AIR SAMPLE
- SITE BOUNDARY
- OFFSITE PROPERTY BOUNDARY

NOTES

1. ALL LOCATIONS AND DIMENSIONS ARE APPROXIMATE.
2. PARCEL BOUNDARY DATA SOURCE: STEUBEN COUNTY
3. AERIAL IMAGERY SOURCE: NEW YORK STATE, 2012

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SCALE IN FEET

HALEY ALDRICH

PHILIPS LIGHTING COMPANY
BATH FACILITY
7265 STATE ROUTE 54
BATH, NEW YORK

OFFSITE INDOOR AIR AND SUB-SLAB VAPOR SAMPLING LOCATIONS - IDA

MARCH 2023

FIGURE 1