



HALEY & ALDRICH OF NEW YORK  
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Rochester, NY 14623  
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6 September 2023  
File No. 127981-031

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

Attention: Joshua J. Klier, G.I.T.

Subject: Addendum to Revised IRM-1 Work Plan– Acid Neutralization Systems Removal  
Former Philips Lighting Company Bath Site  
BCP Site # C851044

Dear Mr. Klier:

On behalf of the current site owner, Yort, Inc. (Yort), and the former site owner Philips North America, LLC, formerly Philips Electronics North America Corporation, (hereinafter collectively referred to as “Philips”), Haley & Aldrich of New York (Haley & Aldrich) has prepared this response and addendum to New York State Department of Environmental Conservation (NYSDEC) clarifying comments on the approved Revised Interim Remedial Measure Work Plan for IRM-1 – Acid Neutralization Systems Removal.

We received the NYSDEC’s conditional approval of the Work Plan on 16 August 2023 and have prepared the following responses to the conditional approval, along with the requested updates as an Addendum to the IRM-1 Work Plan. To expedite review and acceptance of the revised Work Plan, we have provided specific responses to each of the agency comments below; the NYSDEC comment is restated in italics and Signify’s response is then provided after the blue text.

## **NYSDEC Comment/Response**

***NYSDEC Comment No. 1:*** *Please include a note that that any observed grossly contaminated media may not be reused on-site as backfill at any depth on the site.*

**Yort Response No. 1:** The Revised IRM-1 Work Plan, Section 2.3.4 – Soil Reuse Evaluation outlines the procedures that will be used to determine if excavated material may be reused as backfill on Site. These procedures provide for analytical testing of the soils to determine their suitability for reuse as either backfill or contaminated backfill. These procedures would preclude the use of grossly contaminated soil, since they define specific DER-10 criteria that need to be achieved or other criteria to comply with NYSDEC CP-51 requirements to prevent the reuse of material that may be hazardous. In addition, consistent with the NYSDEC-approved Interim Site Management Plan’s Excavation Work Plan (ISMP EWP), exposed soils are to be visually evaluated and screened to determine if stained or grossly

contaminated areas are present. Consistent with the ISMP EWP, Yort acknowledges and agrees that observed grossly contaminated media, including soils, will not be reused on Site as backfill at any depth.

***NYSDEC Comment No. 2:*** Please provide construction details on the proposed decontamination pad and rinse containment.

**Yort Response No. 2:** Acknowledged; an updated Figure 4 showing the construction details of the proposed decontamination pad and rinse water containment is enclosed with this addendum as an attachment.

***NYSDEC Comment No. 3:*** As discussed in the August 15<sup>th</sup> meeting, please provide additional details on the plan to address mercury impacted soils around boring SB-AO2-103. If the soils are to be removed, please update the Department on the new dimensions of the excavation. If the soils are to be left in place, please provide the Department information on a sampling method to identify whether soils are considered hazardous waste. Following analytical testing, a contained-in determination should be submitted to [contained-inrequest@dec.ny.gov](mailto:contained-inrequest@dec.ny.gov).

**Yort Response No. 3:** Soil boring SB-AO2-103, which contained mercury in the sample collected at a depth of 1 to 2 feet below grade at a concentration above both the NYSDEC Industrial SCO and 20X TCLP, was installed along a seam in the concrete pad immediately adjacent to the cooling water cisterns; the cooling water cisterns are to be removed as part of the IRM-1 activities. A copy of the Soil Boring log for SB-AO2-103 showing that the upper 0.3 feet was comprised of concrete and underlain by 0.5 feet of crushed aggregate stone is included as an attachment. As a result, the soil containing mercury above criteria will be within the footprint of the soil that is to be removed during the excavation of the water cisterns. Yort proposes to confirm that the soil containing the elevated concentrations of mercury has been effectively removed by collecting two sidewall samples along the southern side of the cistern excavation, including one sample at the bottom sidewall of the excavation (per DER-10 and the IRM-1 Work Plan), and a second sidewall sample at a depth of 1 to 2 feet along the southern sidewall of the excavation in the immediate vicinity of where the original SB-AO2-101 sample was collected. Table II has been revised to reflect the additional sidewall sampling to evaluate the remaining mercury concentrations at SB-AO2-103; and a copy of the updated Table II is enclosed.

***NYSDEC Comment No. 4:*** The Department understands that a portion of the concrete slab, as outlined on figure 5, is planned to be removed concurrently during the IRM-1 work. The Department also understands that, per figure 5A, a cover system is only planned to be installed in specific areas of removal. If a cover system will not be installed in other areas, then the newly exposed soils need to be characterized and assessed for contamination as well as their ability to support vegetation. This work may be handled separately as a notice under the Excavation Work Plan of the Interim Site Management Plan provided the notice is submitted and approved by the Department prior to initialization of this work.

**Yort Response No. 4:** Acknowledged; seven surficial (samples collected immediately beneath the building slab at depths of 0 to 1 foot) were collected and analyzed for the expanded list of analytical parameters during the interior sub-slab soil investigations of Building 1 in this area, and soils did not contain constituents above NYSDEC Industrial SCOs. In addition, 16 samples along sections of the piping

are planned to be collected and analyzed to determine if the acid drainage piping constituted a source of environmental impacts. The piping is present immediately below the building slab in the subbase for the building. However, Yort will collect additional soil cover samples from areas not currently assessed as part of the building slab removal. A notice under the ISMP EWP will be prepared and submitted to the NYSDEC for review and approval prior to initializing the work.

**NYSDEC Comment No. 5:** *During a soil removal, sidewall samples need to be collected from all four sidewalls and a sample from the “floor” of the excavation. On figure 5, it appears only two sidewall samples (east and west) are proposed. Please include samples on the northern and southern sidewalls as well, as depicted for the acid neutralization building.*

**Yort Response No. 5:** Acknowledged, we have included additional sidewall samples to be collected from the water cistern excavation as shown on revised Figure 5 (attached). This will include at least one sidewall sample for each face of the excavation. It will also include both a shallow and deeper sidewall on the southern face of the excavation in response to our response to NYSDEC Comment No. 3 regarding the mercury present in this area at a depth of 1 to 2 feet below grade.

We believe that the information included in this response is sufficient to address NYSDEC’s concerns regarding IRM-1. Following your approval, a copy of the NYSDEC approval of the work plan and addendum will be added to the public repository in Bath, New York. We will plan to complete this work in accordance with these clarifying comment responses. If you have any questions, please contact us.

Sincerely yours,

**HALEY & ALDRICH OF NEW YORK**



Mark Ramsdell, P.E. (NY)  
Sr. Project Manager



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

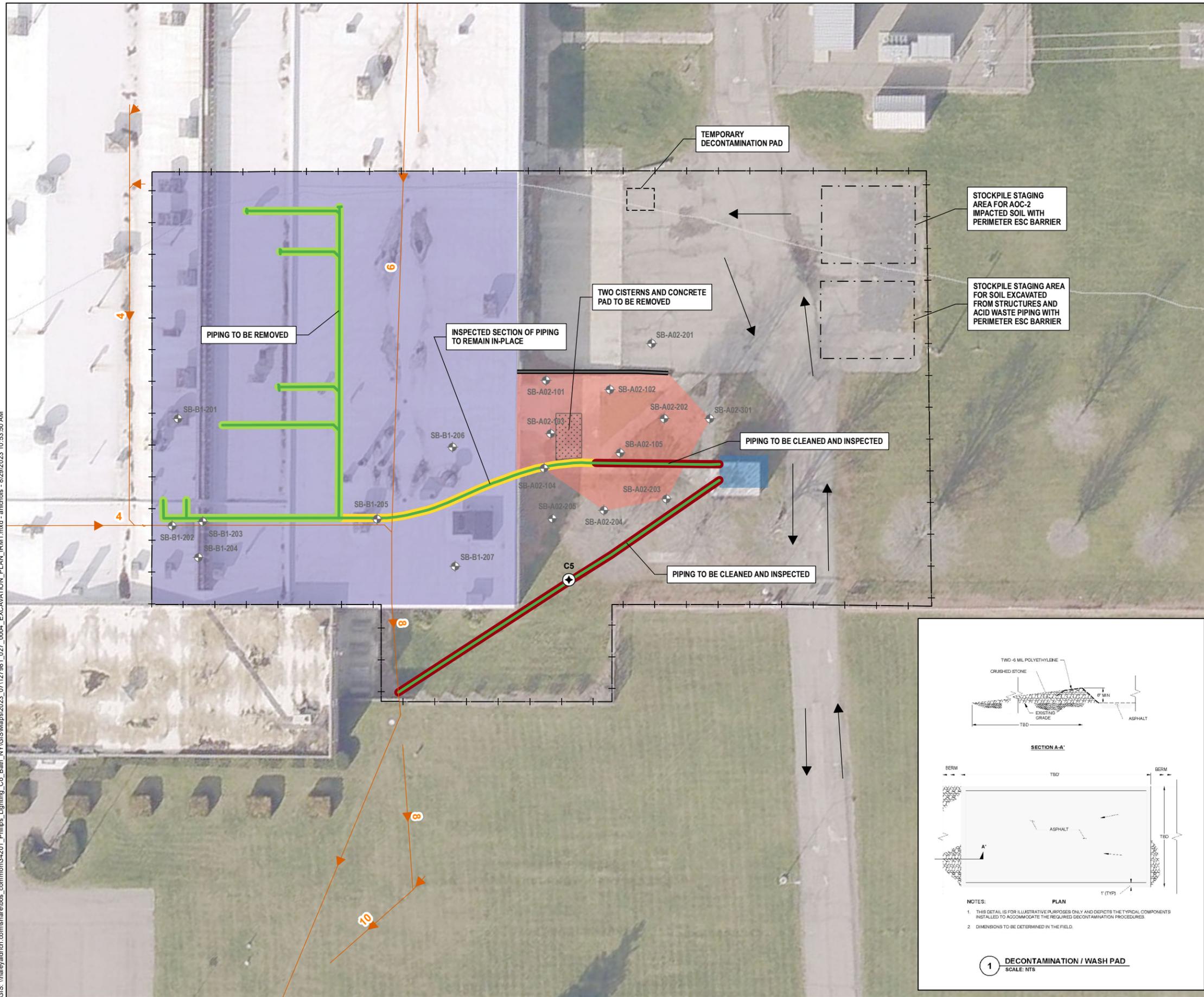
Attachments:

Figure 4 – Excavation Plan IRM-1 Equipment Decontamination  
Details SB-AO2-103 Boring Log  
Table II – IRM-1 Sampling & Analysis Plan  
Figure 5 – Sampling and Analysis Plan IRM-1

c: Signify; Attn: M. Manning and E. Filc  
NYSDEC; Attn: D. Loew and D. Pratt  
NYSDOH; Attn: J. Robinson and J. Deming

## **ATTACHMENTS**

GIS: \\haleyaldrich.com\share\cubos\_common\34201\_Philips\_Lighting\_Co\_Bath\_NYGIS\Maps\2023\_0712\27981\_027\_0004\_EXCAVATION\_PLAN\_IRM1.mxd - 8/29/2023 10:53:50 AM



**LEGEND**

- PREVIOUS SOIL BORING
- SAMPLED MANHOLE
- SANITARY SEWER, WITH PIPE DIAMETER (IN) AND FLOW DIRECTION
- ACID DRAIN

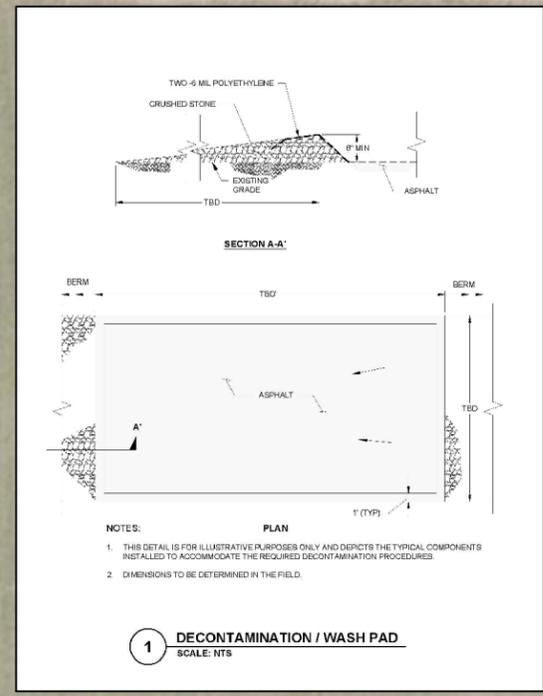
**ACID DRAIN PIPING STATUS**

- INSPECTED SECTION OF PIPING TO REMAIN IN-PLACE
- PIPING TO BE REMOVED
- PIPING TO BE CLEANED AND INSPECTED

- IRM-1 CONSTRUCTION AREA
- TEMPORARY DECONTAMINATION PAD
- PROPOSED SOIL STOCKPILE AREA
- EXCAVATE AND REMOVE TWO CISTERNS AND CONCRETE PAD
- AOC-2 EXCAVATION OF TOP 1-FT OF SOIL
- REMOVAL OF ACID NEUTRALIZATION BUILDING AND UNDERGROUND LINED PIT
- CONCRETE SLAB REMOVAL
- CONCRETE RETAINING WALL
- PROPOSED TRUCK ROUTE

**NOTES**

1. ALL LOCATIONS AND DIMENSIONS ARE APPROXIMATE.
2. SANITARY SEWER PIPE AND ACID DRAIN DATA SOURCES: MCFARLAND AND JOHNSON ENGINEERING BUILDING PLANS (1985), HOFFMAN LAND SURVEYING AND GEOMATICS TOPOGRAPHIC SURVEY (2020), PLAN A-100-7 EXISTING YARD SERVICES (1970).
3. SANITARY SEWER AND ACID DRAIN SURFACE FEATURE SOURCE: HOFFMAN LAND SURVEYING AND GEOMATICS TOPOGRAPHIC SURVEY (2020), PLAN A-100-7 EXISTING YARD SERVICES (1970).
4. AERIAL IMAGERY SOURCE: EAGLEVIEW, 15 NOVEMBER 2017
5. VIDEO INSPECTION AND MANHOLE SAMPLING ACTIVITIES WERE CONDUCTED IN APRIL 2023 AS PART OF NYSDEC-APPROVED SEWER INSPECTION, CLEANING, AND CLOSURE WORK PLAN.



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

**EXCAVATION PLAN**  
IRM-1

AUGUST 2023

**FIGURE 4**

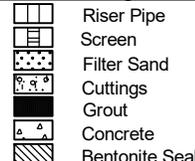
Project Philips Lighting Facility Remedial Investigation, Bath, NY  
 Client Philips Electronics Corporation  
 Contractor Nothnagle Drilling, Inc.

File No. 34201-222  
 Sheet No. 1 of 1  
 Start April 27, 2015  
 Finish April 27, 2015  
 Driller J. Schweitzer  
 H&A Rep. D. Keller

	Casing	Sampler	Barrel	Drilling Equipment and Procedures
Type	-	G	-	Rig Make & Model: Geoprobe 6610DT
Inside Diameter (in.)	-	1 1/4	-	Bit Type:
Hammer Weight (lb)	-	140	-	Drill Mud: None
Hammer Fall (in.)	-	30	-	Casing: N/A
				Hoist/Hammer: Automatic Hammer
				PID Make & Model:

Elevation  
 Datum  
 Location See Plan

Depth (ft)	Sampler Blows per 6 in.	Sample No. & Rec. (in.)	Sample Depth (ft)	PID Readings (ppm)	USCS Symbol	Stratum Change Elev/Depth (ft)	VISUAL-MANUAL IDENTIFICATION AND DESCRIPTION  (Color, GROUP NAME, max. particle size <sup>†</sup> , structure, odor, moisture, optional descriptions GEOLOGIC INTERPRETATION)	Gravel		Sand			Field Test				
								% Coarse	% Fine	% Coarse	% Medium	% Fine	% Fines	Dilatancy	Toughness	Plasticity	Strength
0		G1 18	0.0 2.0	0.0	SM	0.3	-CONCRETE-  Brown silty SAND with gravel (SM), mps 30 mm, no odor, wet	5	10	5	5	35	40				
						2.0	-FILL-  BOTTOM OF EXPLORATION 2.0 FT										
							Environmental Sample(s): SB-A02-103-1.0-2.0										

Water Level Data						Sample ID	Well Diagram	Summary
Date	Time	Elapsed Time (hr.)	Depth (ft) to:			O - Open End Rod T - Thin Wall Tube U - Undisturbed Sample S - Splitspoon Sample G - Geoprobe		Overburden (ft) 2.0 Rock Cored (ft) - Samples G1 <b>Boring No. SB-A02-103</b>
4/27/20215	12:00	0	Bottom of Casing	Bottom of Hole	Water			

**Field Tests:** Dilatancy: R - Rapid S - Slow N - None Plasticity: N - Nonplastic L - Low M - Medium H - High  
 Toughness: L - Low M - Medium H - High Dry Strength: N - None L - Low M - Medium H - High V - Very High

<sup>†</sup>Note: Maximum particle size is determined by direct observation within the limitations of sampler size.  
 Note: Soil identification based on visual-manual methods of the USCS as practiced by Haley & Aldrich, Inc.

TABLE II

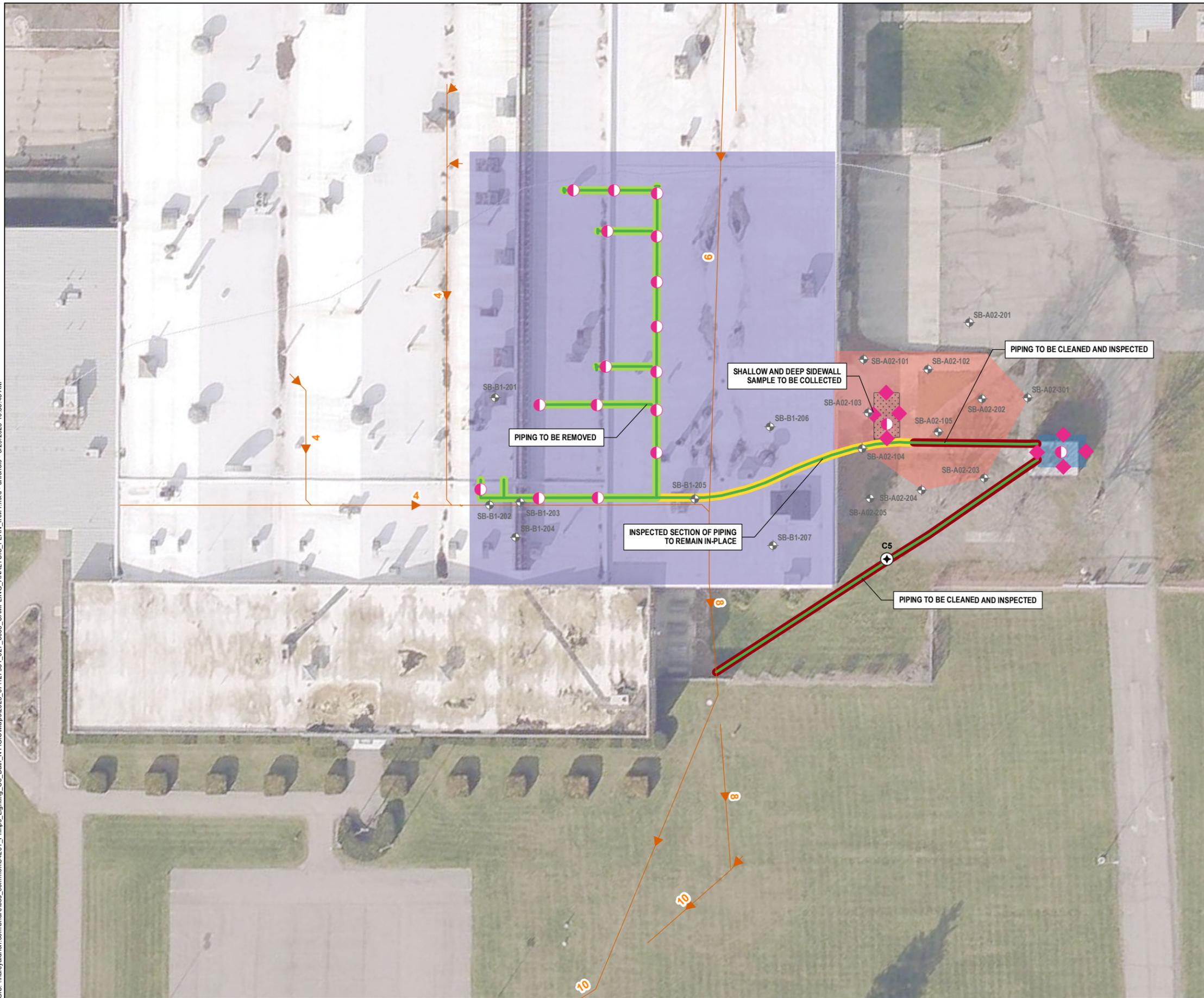
**IRM-1 SAMPLING ANALYSIS PLAN**  
 PHILIPS LIGHTNING COMPANY BATH FACILITY  
 BATH, NEW YORK  
 BCP SITE #851044

IRM	Area Description	Sample Matrix	Sample Description	Location ID	Collection Method	Sample Depth (Feet b.g.s)	Minimum No. Samples	Sample Type	Analytical Method
IRM-1	Acid Neutralization Building	Soil	Post-Removal Sampling per DER-10	Bottom Excavation samples	Hand Auger or shovel	Surface: 0-2 and 0-6 inches below surface	18	Grab	All Samples: Part 375 VOCs via EPA 8260B, Part 375 Metals via EPA Methods 6010/7471A, Part 375 SVOCs via EPA Method 8270, and PCBs via EPA Method 8082.  25% of Samples: Part 375 Pesticides via EPA Method 8081 and cyanide.
				Sidewall samples	Hand Auger or shovel	Varying depths based on excavation depth; halfway down excavation	9	Grab	All Samples: Part 375 VOCs via EPA 8260B, Part 375 Metals via EPA Methods 6010/7471A, Part 375 SVOCs via EPA Method 8270, and PCBs via EPA Method 8082.  25% of Samples: Part 375 Pesticides via EPA Method 8081 and cyanide.
			Sampling for backfill of soils from AOC-2	AOC-2	Hand Auger	N/A	1 Discrete	Grab	Part 375 VOCs via EPA 8260B, Part 375 Metals via EPA Methods 6010/7471A, Part 375 SVOCs via EPA Method 8270, Part 375 Pesticides via EPA Method 8081, PCBs via EPA Method 8082, PFOS/PFOA, TCLP Metals and TCLP Mercury via EPA Method 1311
			Sampling for reuse of Excavated soils	Acid Waste Trench and Acid Waste Building Excavations	Hand Auger	N/A	2 Discrete	Grab	Part 375 VOCs via EPA 8260B, Part 375 Metals via EPA Methods 6010/7471A, Part 375 SVOCs via EPA Method 8270, Part 375 Pesticides via EPA Method 8081, PCBs via EPA Method 8082, PFOS/PFOA
			Sampling of Import per DER-10	To be determined	Hand Auger	N/A	3 Discrete 1 Composite	Grab/ Composite	Discrete: Part 375 VOCs via EPA 8260B.  Composite: Part 375 Metals via EPA Methods 6010/7471A, Part 375 SVOCs via EPA Method 8270, Part 375 Pesticides via EPA Method 8081, PCBs via EPA Method 8082, PFOS/PFOA

**Notes & Abbreviations:**

- DER-10: NYSDEC Technical Guidance for Site Investigation and Remediation
- EPA: Environmental Protection Agency
- Part 375: Constituents included in NYSDEC Division of Environmental Remediation 6 NYCRR Part 375 Table 375-6.8(b)
- PCBs: Polychlorinated Biphenyls
- PFOS/PFOA: Perfluorooctane sulfonate/perfluorooctanoic acid
- SCO: Soil Cleanup Objective
- SVOCs: Semi-volatile Organic Compounds
- TCLP: Toxicity Characteristic Leaching Procedure
- VOCs: Volatile Organic Compounds

GIS: \\haleyaldrich.com\share\elias.common\34201\_Philips\_Lighting\_Co\_Bath\_NY\GIS\Maps\2023\_071127\981\_027\_0005\_SAMPLING\_ANALYSIS\_PLAN\_IRM1.mxd - anichols - 8/29/2023 10:55:45 AM

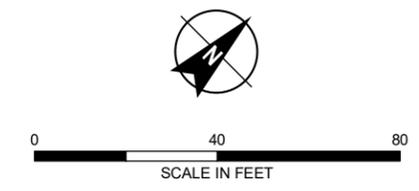


**LEGEND**

-  PREVIOUS SOIL BORING
-  SAMPLED MANHOLE
- PROPOSED DOCUMENTATION SAMPLE TYPE**
-  EXCAVATION BOTTOM
-  EXCAVATION SIDEWALL
-  SANITARY SEWER, WITH PIPE DIAMETER (IN) AND FLOW DIRECTION
-  ACID DRAIN
- ACID DRAIN PIPING STATUS**
-  INSPECTED SECTION OF PIPING TO REMAIN IN-PLACE
-  PIPING TO BE REMOVED
-  PIPING TO BE CLEANED AND INSPECTED
-  EXCAVATE AND REMOVE TWO CISTERNS AND CONCRETE PAD
-  AOC-2 EXCAVATION OF TOP 1-FT OF SOIL
-  REMOVAL OF ACID NEUTRALIZATION BUILDING AND UNDERGROUND LINED PIT
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**SAMPLING AND ANALYSIS PLAN  
IRM-1**

AUGUST 2023

FIGURE 5