STORMWATER POLLUTION PREVENTION PLAN

William Stanley Business Park of the Berkshires Pittsfield, Massachusetts 01201

NPDES Permit: MA0040231

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Prepared for:



70 Allen Street, Pittsfield, MA 01201

Prepared by:

Berkshire Environmental Consultants, Inc.

1450 East Street . Suite 6-H . Pittsfield, MA 01201 . (413) 443-0130 . Fax (413) 443-1297

TABLE OF CONTENTS

TABL	E OF	CONTENTS	1
RECO	ORD O	F CHANGES SUMMARY	4
1.0	IN	ITRODUCTION	5
•			
1.		GENERAL	_
1.	_	CONDITIONS OF THE PERMIT	
1.	_	SUMMARY OF PLAN REQUIREMENTS	
1.	-	NON-STORMWATER DISCHARGE EVALUATION	
1.		CONSISTENCY WITH OTHER PLANS AND PERMITS	
1.		PLAN DISTRIBUTION	
2.0	P	OLLUTION PREVENTION TEAM	8
2.	1	POLLUTION PREVENTION TEAM RESPONSIBILITIES	
2.	2	TEAM MEMBERS AND RESPONSIBILITIES	8
3.0	P	OTENTIAL POLLUTANT SOURCES	10
3.	1	DRAINAGE AREA OVERVIEW	10
	3.1.1	General Drainage Area Location, Use and Description	10
	3.1.2	•	
	3.1.3	- · · · · · · · · · · · · · · · · · · ·	
	3.1.4		
3.	-	SOUTH SIDE PARK DRAINAGE AREA	
	- 3.2.1		
	3.2.2		
	3.2.3		
	3.2.4	, ·	
3.	-	CSX RAILROAD TRACKS DRAINAGE AREA	
	3.3.1		
	3.3.2		
	3.3.3		
	3.3.4	· ·	
3.	4	NORTH SIDE PARK DRAINAGE AREA	
	3.4.1	Description of Drainage Area	17
	3.4.2	Current and Past Industrial Activities	18
	3.4.3		
	3.4.4	, ,	
3.	5	RESIDENTIAL, COMMERCIAL AND MUNICIPAL PROPERTIES DRAINAGE AREA	
	3.5.1		
	3.5.2		
	3.5.3		
	3.5.4		
3.	6	AUTHORIZED NON-STORMWATER DISCHARGES	
4.0	P	OLLUTION PREVENTION SYSTEM	22
4.	1	GENERAL REQUIREMENTS	22
4.	2	CONTROL MEASURES (BEST MANAGEMENT PRACTICES)	
	4.2.1		
	4.2.2	• =	
	4.2.3		
	4.2.4		

	4.2.5	Exposure Minimization	25
	4.2.6	Sediment/ Erosion Control	25
	4.2.7	Management of Stormwater Runoff	26
	4.2.8	Site Activities	
	4.2.9	Inspections and Preventative Maintenance	26
	4.2.10	Spill Prevention and Response Procedures	27
	4.2.1	! Employee Training	27
	4.2.12	? Non-Stormwater Discharges	27
	4.2.13	Solid De-Icing Material Storage	29
5.0	IN:	SPECTIONS	30
5.1		ROUTINE SITE INSPECTIONS AND DOCUMENTATION	30
6.0	M	ONITORING REQUIREMENTS	32
6.1		STORMWATER MONITORING PROCEDURES	32
	6.1.1	Sample Collection	32
	6.1.2	Precipitation Information	33
	6.1.3	Analytical Procedures	33
	6.1.4	Inability to Collect a Sample	33
6.2		REQUIRED STORMWATER DISCHARGE MONITORING	33
	6.2.1	Quarterly Visual Assessment/Monitoring	33
	6.2.2	Effluent Limitations and Monitoring Requirements	34
6.3		EVALUATION OF PREVIOUS MONITORING DATA	37
7.0	BE	ST MANAGEMENT PRACTICES (BMP) PLAN	38
7.1		SUMMARY	38
7.2		STANDARD AND CUSTOMARY CONTROL MEASURES	39
	7.2.1	Former Industrial Activity Areas – Permit Section I.C.2.a.(1)	39
	7.2.2	Good Housekeeping Measures - Permit Section I.C.2.a.(2)	41
	7.2.3	Preventative Maintenance - Permit Section I.C.2.a.(3)	42
	7.2.4	Spill Prevention and Response - Permit Section I.C.2.a.(4)	
	7.2.5	Erosion and Sedimentation Controls - Permit Section I.C.2.a.(5)	
	7.2.6	Stormwater Management Practices - Permit Section I.C.2.a.(6)	44
	7.2.7	Salt and Chloride-Containing Piles - Permit Section I.C.2.a.(7)	
	7.2.8	Employee Training - Permit Section I.C.2.a.(8)	
	7.2.9	Non-Stormwater Discharge Evaluation - Permit Section I.C.2.a.(9)	
	7.2.10		
7.3		EPA MULTI-SECTOR GENERAL PERMIT (MSGP) AND REMEDIATION GENERAL PERMIT (RGP)	
		ONS	
	7.3.1	MSGP Parts 2.1 and 2.1.1 – Control Technologies - Permit Section I.C.2.b.(1)	
	7.3.2	MSGP Parts 3.1 and 3.2 – Inspection and Monitoring - Permit Section I.C.2.b.(2)	
	7.3.3	MSGP Parts 5.1.1 through 5.1.4 – Corrective Action - Permit Section I.C.2.b.(3)	
	7.3.4	RGP Part 2.5.2 - Quality Assurance/Quality Control - Permit Section I.C.2.b.(4)	
	7.3.5	Minimization of Nutrients in Stormwater - Permit Section I.C.2.b.(5)	
7.4		EXCAVATION OF THE NORTH FOREBAY AND REPAIR OF THE SPILLWAY	
7.5		SOURCE IDENTIFICATION	
8.0		CORDKEEPING AND REPORTING REQUIREMENTS	
8.1		REQUIRED MONITORING RECORDS	
8.2		RECORDS RETENTION	
8.3		OTHER RECORDS	
8.4		REPORTING REQUIREMENTS	
8.5		REPORTS OF ADDITIONAL MONITORING	56

	8.6	PLANNED SITE MODIFICATIONS	56
	8.7	REPORTING PERMIT VIOLATIONS	56
	8.8	SPILL REPORTING REQUIREMENTS	57
9.	0	CORRECTIVE ACTIONS	. 58
10	.0	UPDATING THE PLAN	. 59
11	.0	DOCUMENTATION PERTAINING TO OTHER FEDERAL LAWS	. 60
	11.1 HABI	ENDANGERED SPECIES ACT-LISTED THREATENED AND ENDANGERED SPECIES AND CRITICAL TAT PROTECTION	60
		NATIONAL HISTORIC PRESERVATION ACT	

Figures

- 1 Location Map
- 2 Topographic and Drainage Basin Map
- 3 William Stanley Business Park Details
- 4 William Stanley Business Park Site 9 Stormwater Management

Appendices

- A Final Permit Authorization (MA0040231)
- B Non-stormwater Discharge Testing and/or Evaluation
- C List of William Stanley Business Park of the Berkshires Permits
- D Summary of Spills
- E Routine Monitoring QA/QC Practices
- F Corrective Action Practices
- G Routine Inspection Forms and Completed Reports
- H Procedures for Unloading Fuel Oil and Hazardous Materials
- I SWPPP Training Records
- J 2022-2026 Best Management Practices (BMP)
- K Technical Specifications
- L Tenant Certification
- M North Forebay Excavation and Spillway Dam Repair Summary Report
- N Source Identification
- O Documentation and Correspondence of Effluent Exceedances
- P Annual Certifications

RECORD OF CHANGES SUMMARY

No.	Description of Change	Sec./Page	Date	Ву
1	Frequency of various activities	4.2.9 / 20	March 25, 2022	VLM/ZUVIC
1.1	Storm event information	6.1.1.2 / 23 6.1.2 / 24	March 25, 2022	VLM/ZUVIC
2	2023 Annual Update	Cover page, update Plan Certification, Sections 1.3, 1.4, 4.2.1.2, 6.1.1, 6.1.2, 6.2.1, added Section 7.0, renumbered Sections 8, 9, 10, and 11, minor edits throughout	January 12, 2023	BEC
3	2024 Annual Update	Cover page, update Plan Certification, Sections 4.2.10, 4.2.11, 4.2.12, 7.1, 7.2.1, 7.2.8, 7.2.9, 7.3.1, 7.3.4, 7.3.5, 7.5, revised Appendix list, minor edits throughout	January 15, 2024	BEC
4	2025 Annual Update	Cover page/Sections 3.1.13, 3.1.4.7, 3.4.1, 3.4.2, 3.4.3, 4.2.7, 4.2.8, 4.2.9, 4.2.12, 5.1, 7.1, 7.2.1, 7.2.1, 7.2.1.3, 7.2.2, 7.2.6, 7.2.9, 7.5/ Appendix G, I, J, P and minor edits throughout	January 15, 2025	BEC

1.0 INTRODUCTION

1.1 GENERAL

Under the authority of the Federal Clean Water Act, as amended (33 U.S.C. §1251 et seq.; the "CWA"), and the Massachusetts Clean Waters Act, as amended, (M.G.L. Chap. 21 §§26-53), the National Pollutant Discharge Elimination System (NPDES) permit No. MA0040231(the Permit) requires the Pittsfield Economic Development Authority (PEDA) to prepare and implement a Stormwater Pollution Prevention Plan (SWPPP).

This SWPPP addresses applicable requirements of the Permit issued on August 18, 2021, by the U.S. Environmental Protection Agency (EPA) and the Commonwealth of Massachusetts Department of Environmental Protection (MassDEP). The Permit issued to PEDA (the Permittee), is effective November 1, 2021, expires on October 31, 2026, and supersedes Permit MA0003891 that became effective on February 7, 1992. The Permit incorporates certain requirements of the 2021 NPDES Multi-Sector General Permit – MSGP (https://www.epa.gov/npdes/stormwater-discharges-industrial-activities-epas-2021-msgp) and the EPA 2022 General Permit for Remediation Activity Discharges – RGP (https://www3.epa.gov/region1/npdes/drgp/drgp-2022-permit-final.pdf). A copy of PEDA's NPDES Permit is included in Appendix A.

This SWPPP addresses management of stormwater associated with activities at the William Stanley Business Park of the Berkshires (WSBP or the Site) located in Pittsfield, MA. WSBP is generally bounded by East Street, Silver Lake Boulevard, Kellogg Street, and Tyler Street and consists of South and North Side Parks bisected by the CSX railroad corridor. The drainage area subject to the Permit also includes residential, commercial and municipal properties north of the WSBP. The Stormwater Management System and discharge location (Outfall 001) are located in South Side Park, depicted on Figure 2.

WSBP is located at a former General Electric (GE) manufacturing facility which up until 1990 manufactured and serviced electrical transformer equipment containing polychlorinated biphenyls (PCBs) and manufactured military hardware. Pursuant to a special act of the Massachusetts Legislature, Pittsfield formed PEDA to plan and implement redevelopment of WSBP. PEDA currently manages 52 acres agreed to in the Definitive Economic Development Agreement. These include the former GE 19s (aka Teens), 20s, 30s and 40s Complexes. A portion of the pre-existing stormwater management system was abandoned and/or refurbished to comply with MassDEP Stormwater Management Standards.

1.2 CONDITIONS OF THE PERMIT

PEDA will ensure that authorized discharges of stormwater are conducted in accordance with conditions of the site-specific NDPES Permit and certain portions of the MSGP and the RGP.

The Permit requires that stormwater discharges not cause a violation of the water quality standards, or objectionable discoloration, of the receiving water, not contain a visible sheen, foam or floating solids, and not contain pollutants in amounts toxic to aquatic life. In addition, the discharge will be limited and monitored as described in Section 6 of this SWPPP and PEDA will operate and maintain all treatment systems.

1.3 SUMMARY OF PLAN REQUIREMENTS

Compliance with the NDPES Permit 2021 and applicable portions of the MSGP and RGP requires that PEDA conduct activities that will ensure that the objectives of the NPDES permit program for stormwater discharges associated with industrial activities are achieved. One of these requirements is that a Stormwater Pollution Prevention Plan (SWPPP) be prepared which will serve as a tool to

document compliance with the terms of the permit. The SWPPP is representative of current Site conditions and includes the following elements listed in Parts 6.2.1 through 6.2.5 of EPA's 2021 MSGP as required by Section C.1.b. of the Permit:

- Stormwater Pollution Prevention Team
- Site description
- Drainage area site map
- Summary of known and potential pollutant sources
- Description of stormwater control measures (e.g., Best Management Practices (BMPs))
- Schedules and procedures for implementation of stormwater control measures, including applicable inspections, assessments, and monitoring of the Stormwater Management System, and
- Documentation to support eligibility pertaining to other federal laws

The NPDES Permit requires that control measures, i.e., Best Management Practices (BMPs) be selected, designed, implemented and maintained to eliminate discharges of PCBs from the Site to receiving water through an iterative process over the five-year permit term. The control measures must address the following:

- Identify sources of PCBs that contribute PCBs to stormwater
- Optimize removal of PCBs from stormwater by techniques which may include cleaning stormwater conveyance structures, pavement sweeping and enhancing the storage capacity of the water quality basin.
- Minimize discharge of stormwater containing PCBs by completing source control and elimination of PCBs from soil, sediment, stormwater, and groundwater entering the stormwater conveyance system by disconnecting, relining, replacing, or abandoning appropriate conveyance structures or other measures leading to elimination of PCBs in stormwater.
- Prepare design standards (e.g., procedures and protocols) to eliminate discharges containing PCBs.
- Complete ongoing evaluation of drainage structures and routinely sample discharges for PCBs.

A description of the proposed BMPs, including technical specifications and other information which are intended to be undertaken during each calendar year of the permit term will be summarized and provided to EPA and MassDEP in accordance with Part I.C.3. of the Permit and Section 7.4 of this SWPPP.

In addition, PEDA will complete an evaluation of non-stormwater discharges as described in Section 1.4.

The SWPPP is organized into ten Sections:

- Introduction and plan description (Section 1.0)
- Stormwater Pollution Prevention Team members and duties (Section 2.0)
- Potential pollutant sources (Section 3.0)
- Pollution prevention systems used to attain SWPPP objectives (Section 4.0)
- Inspection requirements (Section 5.0)
- Monitoring requirements (Section 6.0)
- Best Management Practices (Section 7.0)
- Recordkeeping and reporting requirements (Section 8.0)
- Corrective Actions (Section 9.0)
- Procedures for Plan updates (Section 10.0), and

Documentation to support eligibility pertaining to other federal laws (Section 11.0)

1.4 NON-STORMWATER DISCHARGE EVALUATION

As required by the Permit and 2021 MSGP, a non-stormwater discharge evaluation was required by the end of the first year of the Permit term. A non-stormwater discharge evaluation was completed during October 2022. No significant sources of non-stormwater discharge were identified; however, five action items were identified for further evaluation. TWSBP Site 9 was redeveloped in 2024. The non-stormwater discharge evaluation will be updated in 2025 to reflect the changes to the site associated with the redevelopment. This evaluation update has been added to the BMPs for completion in 2025.

For any unauthorized non-stormwater discharges, PEDA will immediately take corrective action(s) to eliminate those discharges or seek and/or document that an individual NPDES wastewater permit was obtained for the discharge. Corrective actions will be managed and documented in accordance with Section 9 of this SWPPP.

The results and a description of the 2022 non-stormwater discharge evaluation is included in Appendix B.

1.5 CONSISTENCY WITH OTHER PLANS AND PERMITS

There are currently no other environmental or construction permits associated with WSBP property except for the Consent Decree (as modified) among the United States, Massachusetts, Connecticut, Pittsfield, PEDA and GE, the last modification of which was filed July 22, 2009.During 2024,the redevelopment of Site 9 was conducted under a Beneficial Use Determination (BUD) permit (App. No. 23-SW41-0002-APP) issued by MassDEP on 9/20/2023. The BUD permit and another any other environmental permits related to stormwater that may be issued to WSBP during the term of the Permit will be included in a table in Appendix C.

1.6 PLAN DISTRIBUTION

A complete copy of the SWPPP will be maintained at PEDA offices located within the Department of Community Development at Pittsfield City Hall, 70 Allen Street, Pittsfield, MA. Electronic copies of the SWPPP will be distributed to the facility managers of the two Site buildings (MountainOne Bank – 111 Silver Lake Boulevard and Berkshire Innovation Center – 45 Woodlawn Avenue) and Eversource, the operator of the solar array located in the northwestern portion of South Side Park upon completion of the training. In addition, the SWPPP will be available electronically at https://businesspittsfield.com/peda.

Upon request, the SWPPP will be available to Site employees, EPA, MassDEP, representatives of the U.S. Fish and Wildlife Service (USFWS) and the National Marine Fisheries Service (NMFS), and the public.

2.0 POLLUTION PREVENTION TEAM

2.1 POLLUTION PREVENTION TEAM RESPONSIBILITIES

The Pollution Prevention Team (PPT) is responsible for conducting the activities and meeting the objectives of the SWPPP under the direction of the Team Leader. The PPT is responsible for the following:

- Implementing SWPPP requirements
- Identifying and training new PPT members
- Conducting or supervising annual SWPPP training
- Assisting in implementation, maintenance, and development of revisions to the Plan
- Maintaining control measures and taking corrective actions when required
- Identifying potential new sources of stormwater pollution from activities as they occur or are planned due to Site redevelopment, and from routine maintenance activities
- Reviewing and improving the best management practices (BMPs) in place at the facility to minimize sources of stormwater pollution
- Conducting required inspections in accordance with the SWPPP and preparing inspection reports
- Maintaining required records
- Directing qualified personnel in the collection of stormwater samples for required effluent monitoring, and
- Maintaining consistency between the SWPPP and other facility plans

All Pollution Prevention Team members have access to the SWPPP.

2.2 TEAM MEMBERS AND RESPONSIBILITIES

The PEDA operations staff is limited, and any staff member may be involved in pollution prevention activities as part of their routine job functions. Since the Permit requires that at least one Pollution Prevention Team member be present at WSBP or on call, PEDA has designated all staff as members of the Team. These individuals participate in implementing stormwater pollution prevention control measures and in the development of revisions to the SWPPP. They have been or will be trained in stormwater pollution prevention and are familiar with spill prevention, spill containment, emergency response and pollution prevention best management practices.

The specific responsibilities of the PPT members are as follows:

<u>Team Leader(s)</u> – The PPT leader is the Site Manager, Michael Coakley (PEDA Interim Director) with overall responsibility for spill prevention and compliance with requirements of the Permit and the SWPPP. Specifically, the PPT Leader is responsible for the following:

- Identifying Permit compliance requirements
- Carrying out the provisions of the SWPPP
- Obtaining certification signatures required for the SWPPP
- Identifying new PPT members when changes in the PPT are necessary
- Ensuring routine inspections, effluent sampling, monitoring, and reporting are conducted as required
- Preparing and approving revisions to the SWPP Plan, as needed, and ensuring consistency with other facility plans and permits
- Keeping required records and internal correspondence
- Certifying storm water sampling results and Discharge Monitoring Reports (DMRs)

- Notifying the National Response Center, MassDEP and other agencies as required, in accordance with Section 7.8 of this Plan if a reportable release of oil or hazardous materials occurs, and
- Modifying the SWPPP whenever there is a change to the WSBP property, construction, operation, or maintenance that has a significant effect on the potential for the discharge of pollutants or when the SWPPP proves to be ineffective in controlling pollutants in stormwater discharges

<u>Team Members</u> – The PPT Leader is assisted by the members of the Pollution Prevention Team. Team members may consist of PEDA employees or employees of Berkshire Environmental Consultants, Inc. (BEC). The Pollution Prevention Team members have designated responsibilities for implementing SWPPP requirements under the direction of the PPT Leader. Specifically, the PPT members are responsible for the following:

- Implementing BMPs for spill prevention described in Section 4.0
- Conducting and documenting facility and equipment preventative maintenance and inspections described in Sections 4.2.9 and 5.0
- Ensuring that storm water samples are collected and documented as described in Section 6.0
- Participating in periodic employee training as described in Section 4.2.11, and
- Implementing Emergency Response Procedures in the event of a spill

3.0 POTENTIAL POLLUTANT SOURCES

3.1 DRAINAGE AREA OVERVIEW

3.1.1 General Drainage Area Location, Use and Description

The William Stanley Business Park of the Berkshires (WSBP), located in Pittsfield, Massachusetts, consists of two areas (North Side Park and South Side Park) separated by the CSX railroad corridor. The Stormwater Management System is located in South Side Park, depicted in Figure 2.

The drainage area comprises approximately 145 acres consisting of South and North Side Parks, the CSX railroad corridor, residential, commercial and municipal properties north of North Side Park.

3.1.1.1 South Side Park

South Side Park consists of approximately 26 acres and is currently developed with a bank (MountainOne, 111 Silver Lake Boulevard), the Berkshire Innovation Center (BIC) (45 Woodlawn Avenue), the Stormwater Management System (see Section 3.1.2), a solar cell array operated by Eversource Energy, and paved and undeveloped landscaped land identified by the WSBP as sites 3N, 4, 5 and 6. A portion of Woodlawn Avenue is within South Side Park and is located east of BIC and west of a sites 4, 5 and 6 and a paved parking lot where the former 20s Complex was located. South Side Park is bounded to the north by the CSX railroad corridor, to the west by Silver Lake Boulevard, and to the south by East Street. South Side Park includes the former GE 20s and 30s Complexes.

The solar array occupies approximately 2 acres in the northwestern portion of South Side Park and consists of solar cells mounted approximately 5 to 10 ft. above ground surface on pad-mounted metal stands. Gravel-covered driveways and vegetated areas surround the solar cell array.

3.1.1.2 CSX Railroad Property

The CSX rail corridor bisects South Side Park and North Side Park and is not owned, operated, or controlled by PEDA. Five railroad tracks, laid east to west, are present in the corridor.

3.1.1.3 North Side Park

North Side Park is bounded to the north by Kellogg Street and Tyler Street, to the east by 55 Merrill Road (GE Facility), to the west by Woodlawn Avenue and a commercial building (2 Brown Street), and to the south by the CSX railroad corridor. North Side Park includes the two areas referred to as the former GE 19s (i.e., the teens) and 40s Complexes. The former teens complex area is identified by the WSBP as Site 9 and is located east of Woodlawn Avenue. The former 40's complex is identified by the WSBP as Sites 7 and 8 and is west of Woodlawn Avenue.

North Side Park west of Woodlawn Avenue is approximately 6.3 acres and is currently undeveloped land covered with the remains of the concrete floor slabs and paved driveways of the former GE 40s Complex.

North Side Park east of Woodlawn Avenue is occupied by WSBP Site 9 consisting of approximately 16.5 acres. Site 9 was redeveloped during 2024 for future commercial activity. The redevelopment project included the installation of utilities (sewer, water, electricity) and a stormwater management system consisting of vegetated drainage swales, water quality basins, an underground infiltration basin and construction of three paved roadways. With the exception of the three roadways, the property is vegetated with grass, shrubs and trees. WSBP Site 9 does not currently include structures or buildings.

3.1.1.4 Residential, Commerical and Municipal Properties

The northern portion of the drainage area consists of approximately 90 acres of municipal roads (portions of Kellogg Street, Parker Street, Plunkett Street, Forest Place, Curtis Terrace, Dalton Avenue, Tyler Street, Westminster Street, Harvard Street, Springside Avenue, Perrine Avenue, Norman Avenue, Dickenson Avenue, Alden Avenue, Roland Street, East Park Terrace, Sadler Avenue, Draper Avenue, Tanner Street and Broadview Terrace and all of Woodlawn Avenue) and residential and commercial property. The off-site areas contribute runoff to Outfall 001 in the WSBP via the municipal stormwater conveyance system. PEDA does not own, operate, or control these municipal, residential or commercial properties.

3.1.2 Stormwater Management System

The Stormwater Management System for all of the WSBP is described below and consists in part of a water quality basin and north and south forebays located east of Silver Lake. The basin is approximately 50,000 sq. ft. and each forebay is approximately 4,000 sq. ft. Stormwater runoff from the drainage area is directed into the forebays for initial treatment, then flows into the water quality basin for detainment and treatment prior to discharging into Silver Lake through drainage Outfall 001. The basin and forebays were constructed circa 2009 by excavating soil, installing trap rock, and vegetating the sides of the features to control stormwater runoff.

The Stormwater Management System is designed to collect and treat stormwater from the drainage area and minimize erosion and sedimentation in accordance with the NPDES Permit and portions of the MSGP and GRP. The Stormwater Management System includes the following components (see Figure 2):

- Water Treatment System:
 - Forebays
 - Spillways
 - Water quality basin, and
 - Box culvert outfall
- Collection/Treatment System:
 - Step pools
 - Vegetated drainage swales
 - o Deep-sump catch basins and area drains, and
 - Storm collection piping and manholes

Stormwater runoff captured by the existing storm sewer system within the drainage area is conveyed to the north and south forebays and thence to the water quality basin. The collection/conveyance system for South Side Park consists of step pools, ten 4 ft. deep sump catch basins, 18 drain manholes (with 1 ft. sumps), 11 area drains (with 6 in. sumps) and high-density polyethylene stormwater collection pipe ranging from 12 in. to 36 in. in diameter. Prior to discharge into the south forebay, the step pools, sump catch basins, manholes and drains provide additional pretreatment of stormwater. Stormwater runoff from North Side Park and municipal, residential and commercial property north of WSBP is collected in both new and existing storm sewer systems and conveyed in an existing underground 48 in. conduit prior to discharge to the north forebay of the water quality basin. Refer to Figure 2 for a map of the Site and drainage features.

The final water treatment system includes two forebays (north and south), two rock spillways between the forebays and the water quality basin, a water quality basin, and a box culvert outfall (Outfall 001). The forebays provide pre-treatment (removal of sediment) of stormwater runoff before entering the water quality basin through rock spillways. The water quality basin is the secondary stormwater treatment feature (removal of sediment) and ranges in depth from 1 to 2 ft. and extends below the

water table. Stormwater exits the system through a 4 ft. by 8 ft. reinforced concrete box culvert to Silver Lake. The box culvert has been retrofitted with monitoring equipment.

The stormwater drainage areas associated with Outfall 001 shown on Figure 2 are described in detail in Sections 3.2 through 3.5 of this Plan.

3.1.3 Receiving Waters Description and Mapped Flood Elevations

Outfall 001 discharges into Silver Lake which is classified under the Federal Clean Water Act by MassDEP as a Class B warm water fishery. Class B waters are described as having the following designated uses: (1) a habitat for fish, other aquatic life, and wildlife, including for their reproduction, migration, growth and other critical functions, (2) primary and secondary contact recreation, (3) a source of public water supply (i.e., where designated and with appropriate treatment), (4) suitable for irrigation and other agricultural uses and for compatible industrial cooling and process uses, and (5) having consistently good aesthetic value. Primary contact recreation is defined as any recreation or other water use in which there is prolonged and intimate contact with the water with a significant risk of ingestion of water. These include, but are not limited to, wading, swimming, kayaking, diving, surfing and water skiing.

Secondary contact recreation is defined as recreation or other water use in which contact with the water is either incidental or accidental. These include, but are not limited to, fishing, human consumption of fish, boating, and limited contact incident to shoreline activities. The Massachusetts Surface Water Quality Standards also describe Class B warm water fisheries as having an instream temperature that shall not exceed 83° F (28.3° C), and the receiving waters shall be free from oil, grease and petrochemicals that produce a visible film on the surface of the water, impart an oily taste to the water or an oily or other undesirable taste to the edible portions of aquatic life, coat the banks or bottom of the water course, or are deleterious or toxic to aquatic life.

Note that the Consent Decree and signage in place at Silver Lake prohibits all activities and uses of Silver Lake described above regardless of the lake's classification.

Silver Lake drains into the East Branch of the Housatonic River via a 48" storm sewer located near the intersection of Fenn and East Streets. This section of the Housatonic River is listed as impaired by fecal coliform and PCBs in fish tissue.

The 100-year and 500-year Housatonic River Federal Emergency Management Agency (FEMA) mapped flood boundaries on the WSBP are shown on Flood Insurance Rate Map (FIRM) Panels 2500370010C and 2500370020C. 100-year base flood elevations around Silver Lake are indicated on these panels to be 990 ft. (NGVD 1929).

3.1.4 Inventory of Exposed Materials

Sections 3.2 through 3.4 of this Plan include a discussion of potential pollutants associated with specific materials and operations at WSBP. Potential pollutants that may be present at municipal, residential and commercial properties north of WSBP and along the CSX railroad corridor are unknown but may be present.

3.1.4.1 Loading and Unloading Operations

Loading docks are not present at either of the WSBP buildings. Materials delivered to the bank building consist of building maintenance supplies and cleaners that are stored inside the building.

Loading and unloading of materials and potential chemicals (for the wet laboratory or the prototype laboratory) at BIC are unknown but understood to be minor in nature. Other materials are not loaded or unloaded at WSBP.

Loading/unloading operations at properties north of the WSBP and in the CSX railroad corridor are unknown but may occur.

3.1.4.2 Roof Areas

Potential sources of pollutants for storm water runoff from the two WSBP building roofs including MountainOne Bank and Berkshire Innovation Center (BIC). The specifics of roof drainage off site and north of the WSBP are unknown but are known to be present since this is a residential and commercial area..

3.1.4.3 Outdoor Storage

Except for three transformers located in South Side Park, petroleum and hazardous materials are not stored outdoors. Outdoor storage areas north of the WSBP and within the CSX railroad corridor are unknown but may be present. Pole-mounted and pad-mounted transformers are likely present in these areas.

3.1.4.4 Outdoor Manufacturing or Processing

Outdoor manufacturing or processing activities are not conducted at WSBP. Outdoor manufacturing or processing activities north of the WSBP and in the CSX railroad corridor are unknown.

3.1.4.5 Dust or Particulate Generating Activities

Dust-generating operations or activities, including abrasive blasting or grinding, are not completed at WSBP. Exterior storage, or handling, of bulk materials does not occur at WSBP. On-site traffic is limited to low-speed passenger and delivery vehicles on paved roadways and parking areas associated with the two buildings at South Side Park; vehicle traffic is not expected to generate significant quantities of dust.

Areas within South Side Park are vegetated, paved or gravel-covered and are not expected to generate significant quantities of dust. North Side Park is primarily vegetated or covered with former building floor slabs and wind-blown dust may be generated in this area.

Off-site areas north of the WSBP and the CSX railroad corridor are primarily paved, covered by buildings, vegetated or gravel-covered; areas that may generate wind-blown dust may be present in these areas.

3.1.4.6 Waste Disposal Practices

Waste generated by occupants of South Side Park buildings is handled and disposed of in accordance with applicable regulations. Hazardous waste (if any), waste oil (if any) and universal waste are stored inside the buildings at South Side Park, pending removal by a licensed waste hauler. Covered dumpsters for non-hazardous solid waste (garbage) and recyclable materials (paper waste) are located near each of the buildings. Waste handling practices along the CSX railroad corridor and at residential, commercial and municipal properties north of WSBP are unknown.

3.1.4.7 Fire Department Training Exercises

The Pittsfield Fire Department periodically has used the northern paved area of South Side Park for ammonia vapor training exercises. Other materials and potential chemicals used during fire training exercises are unknown. Liquid ammonia that is atomized during hazardous material

training exercises has the potential to be discharged on the northern paved area in South Side Park. The Fire Department no longer conducts training exercises in/on the WSBP.

3.2 SOUTH SIDE PARK DRAINAGE AREA

3.2.1 Description of Drainage Area

South Side Park has changed considerably since PEDA acquired the land in 2005. GE demolished all buildings in the area and either buried or removed the demolition waste before transferring the property. PEDA redeveloped the property, including the following:

- Construction of a new stormwater conveyance system relying on vegetated swales and replacing a system of pavement and pipes
- Creation of vegetated building lots after removal of pavement and building foundations
- Construction of a water quality basin to treat discharges at Outfall 001, replacing a former oil
 water separator (OWS) which previously treated discharges to Outfall 001. In addition,
 consolidation of former outfalls into present-day Outfall 001 was completed, and
- Construction of two buildings and associated landscaped, parking and driveway areas

In accordance with a Consent Decree, dated October 27, 2000, PEDA is required to maintain pavement in the following areas of South Side Park where building demolition debris was buried:

- A large parking lot and small paved area in the southeastern portion east of Woodlawn Avenue
- A paved area where the former power plant was located in the northwestern portion, and
- A small, paved area in the northeastern portion

The bank building was constructed circa 2012 and is in the southwest portion of South Side Park on approximately 1.8 acres of land, and includes a 6,700 sq. ft. building, paved parking and driveway areas and landscaped areas. The building is heated by gas and is connected to public water and sanitary sewer systems. There are no fuel tanks associated with the building and use of chemicals or petroleum products (other than small quantities of cleaning and maintenance products) does not occur at the property. Cleaning and maintenance products are stored inside the building. Roof drains are connected to the Stormwater Management System via roof leaders that direct roof runoff to the water quality basin located north of the building. Stormwater runoff from paved areas drains to catch basins in the parking and driveway areas that discharge to the water quality basin. Stormwater in non-paved areas located southwest of the building are conveyed to a swale and catch basin via sheet flow or infiltrates into the ground.

BIC, a 20,000 sq. ft. entrepreneurial center, is located northeast of the bank and west of Woodlawn Avenue on approximately 14 acres of land. The building opened in 2020 and provides regional manufacturers and science, technology, engineering and mathematics (STEM) businesses with research and development equipment, laboratories and training spaces. The building is heated by gas and is connected to public water and sanitary sewer systems. There are no fuel tanks associated with the building and use of chemicals or petroleum products (other than small quantities of cleaning and maintenance products and laboratory chemicals) does not occur at the property. Cleaning and maintenance products and laboratory chemicals are stored inside the building. Roof drains are connected to the Stormwater Management System via roof leaders that direct roof runoff to the ground and then overland directly or indirectly to the water quality basin located west of the building.

The solar array occupies approximately 2 acres in the northwestern portion of South Side Park. Gravel-covered driveways and vegetated areas surround the solar cell array.

Other portions of South Side Park that are currently paved and vacant include the following:

- An approximately 40,000 sq. ft. paved area located north of the north forebay, east of the solar array, and south of the CSX railroad property. The paved area is the location of a former building and is used periodically by the fire department for training exercises. Stormwater runoff from this parking lot sheet flows to the south into the north forebay.
- An approximately 130,000 sq. ft. parking lot located in the former 20s Complex east of Woodlawn Avenue. The parking area is sloped slightly to the north and stormwater runoff is conveyed to gravel-covered drains that discharge to catch basins located north of the parking lot in a landscaped area approximately 1.5 acres in size. Catch basins are connected to the Stormwater Management System.

The South Side Park drainage area discharges stormwater runoff from east to west at an average slope of 3.5% into the forebays and water quality basin through overland flow, a series of grass-lined swales and storm sewers. Stormwater quality forebays and the water quality basin were constructed upstream of the box culvert described as Drainage Outfall 001, which conveys stormwater runoff from South Side Park under Silver Lake Boulevard into Silver Lake. National Resources Conservation Service (NRCS) soil surveys indicate the presence of Urban Land soils (Hydrologic Soil Group D) throughout the drainage area. Development in this basin should consider using a Curve Number (CN) of 95 (Table 2.2a, Urban Hydrology for Small Urban Watersheds) when calculating stormwater runoff rates using TR-55 software.

3.2.2 Current and Past Industrial Activities

Industrial activities are currently not conducted at South Side Park. South Side Park was formerly part of the General Electric facility that operated on a portion of the Site until circa 1990. GE operations included the manufacture and servicing of electrical transformers containing PCBs and petroleum products. In addition, GE manufactured military hardware.

3.2.3 Summary of Potential Pollutant Sources

3.2.3.1 Former General Electric Operations at South Side Park

Based on industry knowledge, GE operations at South Side Park likely included the use of PCBs, chlorinated and non-chlorinated volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), petroleum products, and metals. These compounds may be present on the former GE property and downgradient of there in groundwater.

Buried building debris containing PCBs and potentially other contaminants (e.g., petroleum or lead-based paint), is reportedly located under the paved area located in the northwestern portion of South Side Park (east of the solar array), under a paved area in the southeastern portion of South Side Park (parking area associated with BIC) and under a small, paved area in the northeastern portion of the South Side Park.

3.2.3.2 Transformer Oil

There are three pad-mounted electrical transformers in South Side Park. One is located west of the bank building and two are located near the Berkshire Innovation Center. The three transformers are believed to be owned by Eversource and are identified as "Non-PCB" (less than 2 parts per million of PCBs).

3.2.4 Spills and Leaks

According to PEDA, spills or leaks have not been reported at South Side Park during the past three years. If spills occur in the future, the SWPPP will be updated and the reported spills and/or leaks will be listed on the spill summary table presented in Appendix D of this SWPPP.

3.3 CSX RAILROAD TRACKS DRAINAGE AREA

3.3.1 Description of Drainage Area

The CSX rail corridor bisects South Side Park and North Side Park and is not owned, operated, or controlled by PEDA.

The CSX railroad right-of-way consists of approximately 3 acres and is currently developed with railroad tracks, ballast and associated infrastructure. Five railroad tracks, laid east to west, are approximately 5 ft. below grade of the adjacent North Side Park and 15 ft. above grade of the adjacent South Side Park. The ground surface of the railroad right-of-way is covered with processed gravel. Stormwater runoff in this area either infiltrates into the ground or is conveyed downslope to South Side Park or into an area drain present in the railroad corridor.

The drainage area is relatively flat from east to west, discharging stormwater runoff through infiltration. Historical drawings show an "area drain" (aka catch basin) and 18" vitrified clay pipe (VCP) located centrally within the drainage area running east to west that is understood to convey stormwater runoff from this area and North Side Park drainage area (see Figure 2). This 18" VCP is understood to combine with the 48" reinforced concrete pipe (RCP) storm sewer which conveys stormwater runoff south to the South Side Park drainage basin. NRCS soil surveys indicate the presence of Urban Land soils (Hydrologic Soil Group D) throughout the drainage area. Development in this basin should consider using a CN of 91 (Table 2.2a, Urban Hydrology for Small Urban Watersheds) when calculating stormwater runoff rates using TR-55.

3.3.2 Industrial Activities

Potential industrial activities within the CSX railroad property are unknown but may include equipment maintenance and repair.

3.3.3 Summary of Potential Pollutant Sources

Railroads are used for transportation of various goods and materials. Materials being transported may include potential hazardous materials, petroleum-based products, and other chemicals. Spills or leaks of chemicals and petroleum products may occur during transportation activities.

Based on industry knowledge, other potential pollutant sources may include contaminants along the railroad corridor due to chemical applications, releases from train equipment and contamination associated with equipment repair and maintenance along the tracks.

Potential pollutant sources include the following:

- Railroad ties that are treated with chemicals including creosote and arsenic-containing compounds
- Disposal/emplacement of coal ash and cinder containing elevated levels of lead, arsenic and other metals
- Application of herbicides/pesticides
- Petroleum products containing PCBs and elevated levels of metals, and
- Fossil fuel combustion products (polynuclear aromatic hydrocarbons (PAHs))

In addition, since it is expected that materials/chemicals used, and products produced, by GE were shipped via the CSX rail line, soil, gravel, and underlying groundwater may contain contaminants associated with GE operations.

The presence of transformers along the rail line is unknown, however it is expected that several pole-mounted transformers are present. Transformers would contain petroleum products and may contain PCBs.

3.3.4 Spills and Leaks

The occurrence of spills or leaks along the CSX rail line is unknown. If PEDA becomes aware of any spills or leaks that have occurred within the last three years associated with this drainage area, the SWPPP will be updated and the reported spills and/or leaks will be listed on the spill summary table presented in Appendix D.

3.4 NORTH SIDE PARK DRAINAGE AREA

3.4.1 Description of Drainage Area

3.4.1.1 East of Woodlawn Avenue

As described in Section 3.1.1.3, the North Side Park drainage area east of Woodlawn Avenue consists of approximately 16.5 acres and has recently been redeveloped to include three roadways, extensive vegetated areas (grass) and a stormwater drainage system. The redevelopment included the demolition of concrete walls and cracking of concrete foundations, redistribution of demolished materials and crushed materials temporarily stockpiled on WSBP Site 7 prior to the placement of a demarcation barrier at approximately 3-6 feet below grade. Clean soil placed above the demarcation layer is used to provide a gentle grade across the property and to allow for installation of utilities (municipal sewer, potable water, electricity) and a stormwater collection and conveyance system. Utility corridors including a stormwater management system were installed in the clean soil above the demarcation barrier. The historic stormwater system on WSBP Site 9 was disconnected and pipes were removed and/or filled with concrete. The new stormwater management system includes the following structures:

- Six (6) water quality basins;
- Numerous vegetated drainage swales; and
- One (1) subsurface water infiltration basin with a capacity of 65,290 gallons.

Upon completion of site utility work, three paved roadways were constructed, the remainder of the property was hydroseeded and trees were planted to further reduce stormwater runoff. Each of the water quality basins includes specialized shrubs and grasses to retain water as well as drainage swales around the property to divert surface water drainage into the six water quality basins. The water quality basins and the infiltration basin are all designed to hold water and allow for infiltration into the subsurface. Only a significant rain event would cause water to flow from the basins into the subsurface piping system. The six water quality basins and the infiltration basin are connected in one system via subsurface piping which conveys stormwater towards the southwest corner of the property where it discharges into an 18 inch VCP which conveys flow west across Woodlawn Avenue (beneath the railroad overpass) onto the south side of PEDA Site 8 (former 40s Complex). From Site 8, the stormwater combines with municipal stormwater coming from north of Northside Park and is conveyed via a 48-inch RCP below the CSX rail corridor into South Side Park and the north forebay.

The drainage area discharges stormwater runoff from north to south at an average slope of 3%, with a steep slope along the north side of the property along Tyler Street extension. Stormwater runoff infiltrates or is collected and conveyed through catch basins, water quality basins and the below grade infiltration basin. If a rain event is significant, stormwater will be conveyed to the existing manhole at the southwest corner of WSBP Site 9. NRCS soil surveys indicate the presence of Urban Land soils (Hydrologic Soil Group D) throughout the drainage area. Development in this basin should consider

using a CN of 95 (Table 2.2a, Urban Hydrology for Small Urban Watersheds) when calculating stormwater runoff rates using TR-55.

Note: the redevelopment of PEDA Site 9 resulted in a reduction of impervious surface area of approximately 96%. This resulted in a commensurate reduction in stormwater flows which is conservative considering the site has a large infiltration basin (65,290 gallons) to allow stormwater from a significant rain event to be retained in the basin and provide recharge to local groundwater. Very little stormwater is anticipated to be generated by WSBP Site 9.

3.4.1.2 West of Woodlawn Avenue

As described in Section 3.1.1.3, the North Side Park drainage area west of Woodlawn Avenue consists of approximately 6.3 acres, identified as WSBP Sites 7 and 8, and is currently developed with concrete floor slabs remaining after the existing structures were removed (former GE 40s Complex). The drainage area discharges stormwater runoff from north to south at an average slope of 4%. Stormwater runoff sheet flows to the south. The storm drainage system on WSBP Sites 7 and 8, consisting of several drains/catch basins, is not currently functional as the stormwater structures appear to be filled with debris and/or flowable fill material. Since the historic concrete stockpile was removed in 2024, the storm drainage system at WSBP Sites 7 and 8 will be confirmed during the Q1 2025 inspection.

Historical drawings indicate that a 30" RCP conveying stormwater runoff from the municipal and private-owned drainage area north of North Side Park enters WSBP Site 8 from the north. This stormwater combines with stormwater from PEDA Site 9 near the south side of WSBP Site 8 and is conveyed in a 48" RCP south under the CSX railroad corridor into South Side Park and the north forebay. NRCS soil surveys indicate the presence of Urban Land soils (Hydrologic Soil Group D) throughout the drainage area. Development in this basin should consider using a CN of 95 (Table 2.2a, Urban Hydrology for Small Urban Watersheds) when calculating stormwater runoff rates using TR-55.

3.4.2 Current and Past Industrial Activities

Industrial activities are not currently conducted at North Side Park.

North Side Park was formerly part of the General Electric facility that operated here until circa 1990. GE operations included the manufacture and servicing of electrical transformers containing PCBs and petroleum products. In addition, GE manufactured military hardware. Information on specific activities completed by GE on WSBP property was not readily available.

North Side Park was transferred from GE to PEDA in 2011/2012 and includes an area previously known as the "Teens Complex" (or the "19s Complex") in the eastern portion of North Side Park. Numerous GE buildings were formerly located in this area which were demolished by GE between 2001 and 2010. During Site cleanup activities, approximately 12,500 cu. yd. of crushed demolition debris (brick and concrete) was placed on-site in the Teens Complex.

WSBP Sites 7 and 8 (40s Complex) are located in the western portion of North Side Park and were formerly developed with several buildings that were demolished between 1993 and 2006. WSBP Sites 7 and 8 are currently undeveloped and are primarily paved or covered with former concrete building slabs. A stockpile area formerly located on WSBP Site 7 was removed in 2024 to provide crushed backfill material for the WSBP Site 9 redevelopment.

PEDA has plans to redevelop North Side Park WSBP Sites 7 and 8 in a similar fashion to WSBP Site 9, however no redevelopment activities have occurred yet.

3.4.3 Summary of Potential Pollutant Sources

The following description is based on general knowledge of potential chemical and petroleum product use at facilities that manufacture electrical equipment and hardware, contamination of environmental media that may occur because of these operations, and use of hazardous materials in building materials and available documents regarding the GE cleanup of these areas.

Former GE operations included the use of chlorinated and non-chlorinated VOCs, SVOCs, petroleum products, and metals. PCB contaminated building materials and soil are reportedly present at North Side Park based on information contained in the January 2011 Final Completion Report for the 40s Complex Removal Action (January 2011 report) and the November 2011 Final Completion Report for East Street Area 2-North Removal Action (November 2011 report), which were both prepared by ARCADIS of New York, Inc. for GE. Other contaminants, including chlorinated and non-chlorinated VOCs, SVOCs, petroleum constituents and metals may also be present on the former GE property and downgradient of there in groundwater.

As described in the January 2011 report, building debris is present in the 40s Complex, i.e., Site 7, in certain manholes and catch basins, and tunnels. . As noted above the vegetated stockpile has been removed. In addition, as described in the report, approximately 12,500 cy of crushed building debris were previously (prior to 2024) reused (buried) in the Teens Complex.

According to EPA, based on preliminary source tracking, subsurface drainage infrastructure in the Teens Complex (WSBP Site 9) was identified as the primary source of PCBs discharging from Outfall 001. Since this subsurface infrastructure has been removed/dismantled and the newly installed stormwater management system across the site is designed to retain stormwater on-site, this primary source of PCBs no longer exists.

3.4.4 Spills and Leaks

According to PEDA, spills and leaks have not been reported in North Side Park in the past three years. If spills occur in the future, the SWPPP will be updated and the reported spills and/or leaks will be listed in the spill summary table presented in Appendix D.

3.5 RESIDENTIAL, COMMERCIAL AND MUNICIPAL PROPERTIES DRAINAGE AREA

3.5.1 Description of Drainage Area

As described in Section 3.1.1.4, the drainage area consists of approximately 90 acres and is currently developed as medium-density residential and urban downtown commercial properties. The drainage area discharges stormwater runoff from north to south at an average slope of 6%. Stormwater runoff sheet flows to the south or is collected and conveyed through a series of existing catch basins and storm sewers. The existing 15" VCP storm sewer in Kellogg Street conveys stormwater runoff from Parker and Plunkett Streets to the east. The existing 30" storm sewer in Kellogg Street conveys stormwater runoff from Forest Street, Woodlawn Avenue and the streets to the north of the intersection of Woodlawn Ave, Tyler Street and Dalton Ave. Stormwater runoff from the municipal and privately-owned properties drainage area is conveyed via a 30" RCP through North Side Park and the CSX railroad corridor to South Side Park as previously described. NRCS soil surveys indicate the presence of Pittsfield-Urban Land soils (Hydrologic Soil Group D) throughout the drainage area. Development in this basin should consider using a CN of between 90 and 100 (Table 2.2a, Urban Hydrology for Small Urban Watersheds) when calculating stormwater runoff rates using TR-55.

3.5.2 Industrial Activities

Industrial activities may occur at one or more of the municipal and privately-owned properties in the northern portion of the drainage area, however these activities are unknown.

3.5.3 Summary of Potential Pollutant Sources

Potential pollutant sources that may be present on private and municipal properties are unknown.

There are three pad-mounted transformers including two on the BIC property and one transformer on the Mountain One property (both located in the former 30's Complex). The transformers contain transformer oil but given the age (< 10 years) of these transformers, PCBs would not be expected to be present in the oil. Pole-mounted transformers are present in the northern portion of the drainage area at/near municipal, residential and commercial properties and along public streets throughout the WSBP. The pole mounted transformers would contain petroleum products and may contain PCBs..

3.5.4 Spills and Leaks

The occurrence of spills or leaks in the northern portion of the drainage area at/near municipal, residential and commercial properties not owned or operated by PEDA is unknown. If PEDA becomes aware of any spills and leaks that have occurred within the last three years associated with this drainage area, the SWPPP will be updated and the reported spills and/or leaks will be listed on the spill summary table presented in Appendix D.

3.6 AUTHORIZED NON-STORMWATER DISCHARGES

Pursuant to Section 1.2.2.1 of the 2021 MSGP, discharge of waters from the following sources is allowable provided that all discharges comply with the effluent limits set forth in Parts 2 and 8 of the 2021 MSGP:

- Discharges from emergency/unplanned fire-fighting activities
- Fire hydrant flushing
- Potable water, including uncontaminated water line flushing water
- Uncontaminated condensate from air conditioners, coolers/chillers, and other compressors and from the outside storage of refrigerated gases or liquids
- Irrigation/landscape drainage, provided all pesticides, herbicides, and fertilizers have been applied in accordance with approved labeling
- Pavement wash waters, provided that detergents or hazardous cleaning products are not used (e.g., bleach, hydrofluoric acid, muriatic acid, sodium hydroxide, nonylphenols), and the wash waters do not come into contact with oil and grease deposits, sources of pollutants associated with industrial activities (see Part 6.2.3 of the 2021 MSGP), or any other toxic or hazardous materials, unless residues are first cleaned up using dry cleaning methods (e.g., applying absorbent materials and sweeping, using hydrophobic mops/rags) and appropriate control measures have been implemented to minimize discharges of mobilized solids and other pollutants (e.g., filtration, detention, settlement)
- External building/structure washdown / power wash water that does not use detergents or hazardous cleaning products (e.g., bleach, hydrofluoric acid, muriatic acid, sodium hydroxide, nonylphenols) and appropriate control measures have been implemented to minimize discharges of mobilized solids and other pollutants (e.g., filtration, detention, settlement), and
- Uncontaminated groundwater or spring water

The following allowable non-stormwater discharges may occur at the Site:

Lawn irrigation water runoff near MountainOne bank and BIC

•	Uncontaminated condensate from air conditioning units at MountainOne Bank and BIC, and Discharges of potable water from building fire protection systems during testing of sprinkler systems or fire-fighting activities

4.0 POLLUTION PREVENTION SYSTEM

4.1 GENERAL REQUIREMENTS

The stormwater pollution prevention system detailed in this section is designed, operated and maintained to ensure that stormwater discharges meet the following requirements of the Permit:

- Stormwater discharge will not include any visible scum, oil, or other matter, excluding naturally occurring substances such as leaves and twigs, provided no person has placed such substances in or near the discharge.
- Stormwater discharge will not result in pollution due to acute or chronic toxicity to aquatic and marine life, impair the biological integrity of aquatic or marine ecosystems, or result in an unacceptable risk to human health.
- Stormwater discharge will not cause or contribute to an exceedance of the applicable Water Quality Standards in the receiving water.

4.2 CONTROL MEASURES (BEST MANAGEMENT PRACTICES)

The Site will use best management practices (BMPs) to reduce or eliminate the potential for discharge of pollutants in stormwater, using technologically available, economically practicable and achievable control measures, as required by the Permit. Control measures are the best management practices including other structural/non-structural practices used to prevent or minimize discharge of pollutants to stormwater. Management procedures, structural controls and employee training provide the most cost-effective means of stormwater management.

Throughout the term of the Permit, BMPs to eliminate discharge of PCBs to Silver Lake will be developed and instituted in accordance with the permit. These BMPs will include the following:

- Identify sources of PCBs that contribute PCBs to stormwater.
- Optimize removal of PCBs from stormwater by techniques including cleaning stormwater conveyance structures, pavement sweeping and enhancing the storage capacity of the water quality basin.
- Minimize discharge of stormwater containing PCBs by completing source control and elimination of PCBs from soil, sediment, stormwater and groundwater entering the stormwater conveyance system by disconnecting, relining, replacing or abandoning appropriate conveyance structures or other measures leading to elimination of PCBs in stormwater.
- Prepare design standards (e.g., procedures and protocols) to eliminate discharges containing PCBs.
- Complete ongoing evaluation of drainage structures and routinely sample discharges for PCBs.
- Conduct a pH study to demonstrate that the pH in Silver Lake does not exceed the range of 6.5 to 8.3 S.U., including preparation of a work plan for the study based on guidance provided by MassDEP.

Control measures will be selected and designed with the following in mind:

- Preventing stormwater from coming into contact with polluting materials is more effective, and less costly, than trying to remove pollutants from stormwater.
- The use of stormwater control measures in combination may be more effective than using control measures in isolation for minimizing pollutants in stormwater discharges.
- Assessing the type and quantity of pollutants, including their potential to impact receiving water quality, is critical to designing effective stormwater control measures that will achieve limits in the Permit.
- Minimizing impervious areas during future construction at PEDA-owned property and infiltrating stormwater on site (including bioretention cells, green roofs, and pervious

- pavement) which can reduce the frequency and volume of discharges and improve ground water recharge and stream base flows in local streams.
- Attenuating flow using open vegetated swales and natural depressions can reduce in-stream impacts of erosive flows.
- Conserving and/or restoring riparian buffers will help protect streams from stormwater discharges and improve water quality.
- Using treatment interceptors (e.g., swirl separators and sand filters) may be appropriate in some instances to minimize the discharge of pollutants.
- Implementing structural improvements, enhanced/resilient pollution prevention measures, and other mitigation measures can help to minimize impacts from stormwater discharges from major storm events.
- Additional stormwater control measures that may be considered include the following:
 - Reinforce materials storage structures to withstand flooding and additional exertion of force.
 - When a delivery of exposed materials is expected, and a storm is anticipated within 48 hours, delay delivery until after the storm or store materials as appropriate.
 - o Temporarily store materials and waste above the base flood level.
 - o Temporarily reduce or eliminate outdoor storage.
 - o Temporarily relocate any mobile vehicles and equipment to higher ground.
 - Develop scenario-based emergency procedures for major storms that are complementary to regular stormwater pollution prevention planning and identify emergency contacts for staff and contractors.
 - Conduct staff training for implementing emergency procedures at regular intervals.

Control measures will also include those (as applicable) required by Section 2.5.2 of the EPA 2022 NPDES Remediation General Permit (RGP) (MAG910000)

(https://www.3.epa.gov/region1/ppdes/drgp/drgp-2022-permit-final pdf), including the following

(<u>https://www3.epa.gov/region1/npdes/drgp/drgp-2022-permit-final.pdf</u>), including the following BMPs:

- Effluent flow BMP that prevents discharge in exceedance of the design flow of the discharge and documentation of the methods for measuring effluent flow.
- Preventative maintenance BMP that includes the following:
 - o Procedures and protocols that ensure all control measures used to achieve the limitations in the Permit remain in effective operating condition
 - o A maintenance schedule for control measures, and
 - o Recordkeeping documenting completion of regular maintenance activities
- Site management BMP that includes control measures which ensure proper management of solid waste and prevents solids, sludge, and other pollutants from entering Silver Lake.
- A pollutant minimization BMP that includes identification and assessment of the type and quantity of pollutants.
- Administrative control BMP that includes the following:
 - Documentation of Site security procedures
 - o Documentation of employee training conducted at least annually
 - o Procedures for initiating corrective action and revision of control measures
 - Actions and reporting related to discovery of a Permit violation, and
 - Schedule for routine inspections
- Quality assurance/quality control (QA/QC) BMP that includes the following:
 - o Description of applicable monitoring requirements
 - o Map showing the location of each monitoring point with a geographic identifier
 - Specifications for the number of samples, type of sample containers, type of preservation, holding times, type and number of quality assurance field samples (i.e., matrix spiked and duplicate samples and sample blanks), sample preparation requirements (e.g., sampling equipment calibration, clean sampling procedures), and

- sample storage and shipping methods, including EPA QA/QC and chain-of-custody procedures, and
- Name(s), address(es), and telephone number(s) of the laboratories that will be used for sample testing

Note that as required by the Permit, the QA/QC BMP as well as the written procedure for the corrective action requirement were completed in 2022. The current QA/QC BMP and the corrective action procedure are included in Appendix E and F, respectively.

- Materials management BMP that includes the following:
 - o Good housekeeping practices
 - Material compatibility determination and practices
 - Documentation of product name, chemical formula, and manufacturer of any chemicals stored at WSBP
 - Purpose for use of the chemical
 - o Safety Data Sheet (SDS) and CAS number for each chemical
 - o Frequency, duration, magnitude, and method of application for the chemical
 - o Material compatibility risks for storage of the chemical;
 - Vendor's reported aquatic toxicity
 - Description of material management control measures employed and any measures taken to ensure material compatibility
 - Spill prevention practices and spill control measures, including handling and collection methods, that reduce spills and leaks at WSBP, and
 - Required actions upon detection of a leak, spill, or other release containing a hazardous substance or oil including cessation of the discharge immediately and notification to EPA within twenty-four (24) hours, identification and corrective action, and documentation and reporting

4.2.1 Good Housekeeping

Good housekeeping is an essential component of stormwater management and the most practical and cost-effective way to prevent potential pollutant sources from coming into contact with stormwater. The goal is to minimize the generation of dust and off-site tracking of sediment from the Site, and to ensure that Site stormwater does not carry waste, garbage, and floatable debris to receiving waters.

Good housekeeping practices are employed at WSBP for all storage areas (inside or outside the building) of potential pollutants:

- Wastes, chemicals, and petroleum products are stored in labeled containers made of materials that are compatible with the material stored.
- Containers are kept closed when not in use.
- Containers with a capacity of 55 gallons or more are stored in diked areas or on containment pallets except if they are empty.
- Containers are arranged neatly, ensuring they do not protrude into pathways or other traffic areas, and with sufficient room for visual inspection.
- Storage areas are inspected frequently, and any leaks or spills are investigated and promptly cleaned up.

Good housekeeping practices are also utilized at WSBP to minimize stormwater pollution:

- Indications of staining, discoloration or other signs of contaminants are promptly investigated and cleaned up.
- Outside areas are maintained free of litter and debris.

- Materials are stored in covered areas.
- Containment areas are kept free of debris, stormwater and other materials that would reduce the available containment volume below the minimum required.
- Trash containers are kept covered.

4.2.2 Vehicle or Equipment Washing

The MSGP does not authorize or allow discharges of wastewater generated during the washing or rinsing of vehicles; these activities are not permitted at WSBP but cannot be controlled in the area north of WSBP at municipal and privately-owned properties. External building/structure washing that does not use detergents or hazardous cleaning products is permitted provided appropriate control measures are implemented to minimize discharges of mobilized solids and other pollutants. Washing of buildings or materials is not permitted at WSBP unless cleaning chemicals are not used and control measures are in place.

4.2.3 Floor Drains

The MSGP does not authorize or allow discharges from interior floor drains to storm sewers or stormwater collection systems which discharge to surface waters. Floor drains currently in use at the WSBP buildings drain to the sanitary sewer system. The presence, and discharge locations, of floor drains at municipal and privately-owned properties in the northern portion of the drainage area are unknown.

4.2.4 Roof Areas

There are currently no roofs subject to drippage, dust or particulate accumulation from vents, stacks, or blowers at WSBP. Stormwater from roof drains discharge either directly to the Stormwater Management System via piping, or to the ground near the buildings. The presence, and discharge location, of roof areas where pollutants may enter stormwater at municipal and privately-owned properties north of the WSBP are unknown.

4.2.5 Exposure Minimization

An effective way to minimize stormwater pollution is to eliminate opportunities for stormwater to come into contact with industrial activities or polluting materials. Except as described in Section 3.0, potential pollutants are not stored outside at WSBP where they would be exposed to stormwater. Except for automobiles in parking areas, the only oil at the WSBP is in oil filled electrical equipment (i.e., transformers) believed to be owned by Eversource. The primary potential source of stormwater pollution at WSBP is from contaminants that may be present in exposed soil and/or building materials attributed to former GE operations at WSBP.

The presence of contaminants at municipal, residential and commercial properties north of the WSBP are unknown.

4.2.6 Sediment/ Erosion Control

Except for landscaped and vegetated areas in South Side Park and in the western portion of North Side Park in the 40s Complex, all drainage areas are paved with asphalt or concrete. Therefore, there is minimal potential for soil erosion under normal circumstances.

The presence of areas where erosion may occur at municipal and privately-owned properties north of WSBP is unknown.

4.2.7 Management of Stormwater Runoff

PEDA has implemented stormwater management and treatment measures determined to be reasonable and appropriate to minimize discharge of pollutants from WSBP. The primary method of managing/treating stormwater runoff from the drainage area is a water quality basin and two associated forebays that receive stormwater discharges from the drainage area as discussed in Section 3.1.2. In addition the redevelopment of WSBP Site 9 included the installation of numerous stormwater management structures including six stormwater quality basins, vegetated drainage swales and one below ground detention basin which significantly reduces the amount of stormwater from North Side Park. Stormwater enters the forebays where entrained particulate matter settles prior to discharge to the water quality basin for further solids settlement before being discharged to Silver Lake. The measures in place at Outfall 001 are discussed in the following paragraphs and in Section 3.1.2.

4.2.8 Site Activities

PEDA will select, design, implement, and maintain control measures for stormwater associated with WSBP activities to minimize discharge of nutrients, including nitrogen and phosphorus, from the Site to Silver Lake. The following BMPs will be implemented, at a minimum.

- Procedures to minimize the use of pesticides, herbicides, and fertilizers. Procedures will include requirements for use of slow-release fertilizers on PEDA-owned property, in addition to reducing and managing fertilizer use (i.e., proper use, storage, and disposal of pesticides, herbicides, and using only in accordance with manufacturer's instructions).
- Practices for lawn maintenance and landscaping activities at PEDA-owned property that are
 protective of water quality. Practices include reduced mowing frequency, proper management
 and disposal of grass clippings and leaf litter and use of alternative landscaping materials (e.g.,
 drought resistant planting). Blowing organic waste materials onto adjacent impervious
 surfaces will be prohibited.
- Routine sweeping of paved parking and driveway areas at PEDA-owned property as needed based on quarterly inspections.

PEDA has no control over the use of pesticides, herbicides and fertilizers at properties that are outside (north) of WSBP, nor of lawn maintenance or landscaping practices at these properties.

4.2.9 Inspections and Preventative Maintenance

PEDA has implemented, or will implement, a program that includes inspection and maintenance to avoid introduction of pollutants to stormwater.

Quarterly inspections of outdoor storage of oil-filled equipment (e.g., transformers), chemical and petroleum storage areas and stormwater management devices will be conducted as specified in Section 5.1. The results of the inspections will be documented on forms in Appendix G. Pollution Prevention Team personnel will perform inspections of stormwater management structures including on-site catch basins, the north and south forebays, the water quality basin, and Outfall 001 to ensure that the structures are in working order and are not clogged or backed up with sediment, trash, or leaf debris.

Preventative maintenance will be completed on an as-needed basis to avoid releases of pollutants to stormwater. Preventative maintenance ensures controls are effective, and transformers/equipment are kept in good operating condition. Areas where preventative maintenance may be required include catch basin sumps, sediment accumulation areas, areas subject to erosion, dumpsters and roll-offs and vehicle parking and travel areas. Trash pickup from exterior locations is routinely completed at WSBP. Periodic maintenance of the water quality basin, and forebays will also be completed, and may include sediment removal, replacement of riprap and placement of vegetation in unvegetated areas.

4.2.10 Spill Prevention and Response Procedures

In addition to the Best Management Practices described in this SWPPP, spill prevention and response procedures (technical specification) were developed in 2022 as well as a PowerPoint training module. The technical specification and training were completed in 2023 and 2024. If a small leak or spill occurs, it will be promptly contained and cleaned up by trained tenants or contractors responsible for the spill. In the event of a larger spill, tenants will contact a spill response contractor to assist with spill containment and cleanup, make all required regulatory notifications and notify PEDA.

4.2.10.1 Containment

There are no aboveground, outdoor liquid chemical storage areas or areas used for the collection, storage or treatment of wastewater at WSBP. Procedures for any future unloading/loading of oil and hazardous materials at WSBP (based on redevelopment) will be developed and included in Appendix H of the SWPPP.

4.2.10.2 Dumpsters

Containers for waste or recyclable materials are normally kept inside the WSBP buildings except for one covered dumpster located near each building at South Side Park. Additional waste containers may be temporarily located at WSBP for short-term construction or demolition projects. All dumpsters remain covered.

4.2.10.3 Loading Docks

Materials being delivered to the two buildings are delivered to the front entrances. There are no loading docks at the two buildings at WSBP.

4.2.11 Employee Training

As part of their emergency response and spill prevention training, PEDA employees will be trained within 90 days of employment and annually thereafter on the components and goals of the SWPPP. Training topics include the following:

- Location and use of emergency equipment
- Spill response procedures
- Spill prevention and control measures
- Inspection requirements, and
- Good housekeeping and materials management practices

If applicable, standard operating procedures will be used by PEDA personnel or tenants for receiving, storing and transferring chemicals and chemical waste at WSBP to reduce the likelihood of storm water contamination. No transfer operation will be performed at WSBP by unauthorized personnel or by personnel not instructed in the specific operation of the equipment being used.

In accordance with the Permit, initial employee training and annual refresher training will be conducted under the supervision of the Pollution Prevention Team. Records of employee training are included in Appendix I and will include the date(s), employee name, employee responsibility and topics covered. Employee and tenant training was completed in 2023 and 2024.

4.2.12 Non-Stormwater Discharges

A non-stormwater discharge evaluation was completed for WSBP in October 2022. The results of the evaluation have been included in Appendix B.

The evaluation did not identify significant sources of non-stormwater discharges, however further evaluation was required to address five action items. These items are listed below with comments on how they have been addressed:

- a. Further evaluation of the source of flow observed in MH-2 on Kellogg Street. The evaluation will include a detailed review of the City of Pittsfield stormwater drainage system maps and inspection of storm drains on the north end of Woodlawn Avenue and the drainage basin north of Tyler Street.
 - Resolution: Available maps were reviewed and the source of the water in MH-2 remains unknown.
- b. Further evaluation of flow observed in the catch basin located at the northeast corner of WSBP Site 9. Evaluation to include inspection of nearby municipal sanitary sewage system manholes and/or dye testing.
 - Resolution: This area of WSBP Site 9 was reconstructed in 2024 and the historic stormwater system was removed and/or permanently abandoned and replaced by a new stormwater drainage system. The sanitary sewer line from Building 100 was disconnected from the historic sewer line and connected to the new WSBP Site 9 sewer line. This catch basin appears to have been part of the historic sanitary sewer line from Building 100.
- c. Further evaluation of flow observed in the catch basin located between Buildings 15 and 17 (Site 9). Evaluation to include inspection of nearby municipal sanitary sewage system manholes and/or dye testing.
 - Resolution: Based on as-built PEDA Site 9 drawings, there is a sewer connection from GE Building 100 that is in the immediate vicinity of this former catch basin. The catch basin appears to have been part of the historic sanitary sewer line from Building 100. The historic catch basin and other infrastructure formerly located on the GE Teens Complex were demolished and/or removed as part of the WSBP Site 9 Redevelopment. The Building 100 sanitary sewer was re-connected to the new sanitary sewer line installed on PEDA Site 9.
- d. Placement of a temporary storm drain mat over the catch basin located on the south side of the temporary stockpile in the 40s Complex (WSBP Site 7). The storm drain has the potential to convey leachate (dust) from the crushed building material stockpile to the stormwater system.
 - Resolution: The temporary stockpile was removed from the former WSBP Site 7 (former GE 40s Complex) and re-used on WSBP Site 9 as backfill. Since the stockpile is no longer there and the area was swept following removal, the stockpile no longer represents a potential source of stormwater contamination and no storm drain mat is needed.
- e. Placement of a temporary storm drain mat over the catch basin located in the CSX right of way, south of the 40s Complex (WSBP Site 8). The storm drain has the potential to convey spills, drips, dust, and trash from CSX corridor into the stormwater system.

 Resolution: Since there have been no significant sources of spills, drips, dust and/or trash observed near this catch basin, no storm drain mat will be placed over the catch basin. This catch basin is inspected quarterly as part of the required quarterly inspections. If in the future evidence of contamination is identified near the catch basin, a cover will be purchased and placed over the top of the basin.

The non-stormwater discharge evaluation will be updated during 2025 to include information as noted above. This task has been added to the BMP list for completion in 2025.

Current knowledge indicates that there are no significant non-stormwater discharges at the Site other than those allowed by the Permit (Section 3.6).

4.2.13 Solid De-Icing Material Storage

Large quantities of de-icing materials are not stored outside on the Site. Small, covered containers (e.g., 5 gallon buckets, 20 to 40 lb. bags) of de-icing materials may be stored near doorways of the buildings for hand application to exterior walkways.

5.0 INSPECTIONS

5.1 ROUTINE SITE INSPECTIONS AND DOCUMENTATION

In accordance with the Permit, qualified personnel who are members of the Stormwater Pollution Prevention Team will conduct inspections at least quarterly (i.e., once each calendar quarter) at the Site. At least once each calendar year, routine inspections will be conducted during a period when a stormwater discharge is occurring and at least once per year, the inspections will be completed during a storm event. The inspection will be conducted using the checklist in Appendix G and will include the following:

- Visual inspection of the discharge point to Silver Lake (Outfall 001)
- Visual inspection of material handling areas, industrial activities (if any) and other potential sources of pollution for evidence of, or the potential for, pollutants entering the stormwater drainage system
- Observation of the structural stormwater management measures, control measures, and other pollution prevention measures identified in the SWPPP to ensure that they are properly implemented and maintained
- Visual inspection of equipment needed to implement the plan, such as spill response equipment, and
- Visual inspection of areas where spills and leaks have occurred in the past three years (if applicable)

The following, as applicable, will be observed:

- Industrial materials, residue or trash that may have, or could, come into contact with stormwater
- Leaks or spills from industrial equipment, drums, tanks and other containers
- Off-site tracking of wastes or sediment where vehicles enter or exit the Site
- Tracking or blowing of materials from areas of no exposure to exposed areas
- Erosion of soil, and channel streambank erosion near the discharge point (Outfall 001) and other areas potentially subject to erosion
- Non-authorized stormwater discharges
- Control measures that need repair, maintenance or replacement, and
- Control measures for proper functionality

At the completion of each quarterly routine inspection, an inspection report will be prepared using the completed inspection checklist and signed by the inspector(s). The report will include the following:

- The scope of the inspection
- The personnel who participated in the inspection
- The date(s), time(s) and weather conditions at time of the inspection
- All observations made relating to the SWPPP, including description of stormwater discharges
 that are occurring, previously unidentified stormwater discharges and/or pollutants, evidence
 of, or the potential for, pollutants to enter the stormwater system, physical conditions near
 Outfall 001, the water quality basin and forebays, flow dissipation devices, evidence of
 pollutants in discharges and Silver Lake and control measures that need repair, maintenance
 or replacement
- Inspection of the storm drainage system and control measures in place at WSBP Site 9 including catch basins, six water quality basins, and vegetated drainage swales
- For all areas the inspection will include an evaluation of the need for street sweeping
- Additional control measures required to comply with the permit
- Incidents of non-compliance

- Actions taken to address deficiencies identified
- Updates made to the SWPPP because of the quarterly routine inspections

The completed inspection report will be reviewed and signed by the inspector and a PEDA-authorized representative. The reports will be retained in Appendix G of the SWPPP for three years from the date of the inspection.

If the inspection indicates that the control measures used to prevent stormwater pollution are inadequate or are not properly operated or maintained, PEDA will review and revise the control measures to ensure that the condition is eliminated and will not occur in the future. Any changes to the control measures and procedures in use at the Site will be documented in the SWPPP in Appendix G.

6.0 MONITORING REQUIREMENTS

Stormwater discharges from the drainage area will be monitored on a periodic basis to ensure compliance with Permit objectives. Section 6.1 of the SWPPP describes the procedures for collecting, analyzing, and recording the results of required stormwater samples. Section 6.2 describes the periodic monitoring that is required for stormwater Outfall 001.

6.1 STORMWATER MONITORING PROCEDURES

6.1.1 Sample Collection

6.1.1.1 Preparation

Prior to a stormwater sampling event, qualified personnel will obtain the appropriate kind and number of clean sample containers from the analytical laboratory. The containers will be prepared with any required preservatives and containers used to collect bacteriological samples (e.g., *E. coli*) will be sterilized. Sample containers will be labeled with the following information:

- Facility name and address
- Sample location (i.e., Outfall 001)
- Name or initials of the person collecting the sample
- Parameter and associated analytical method
- Sample type (usually "grab")
- Sample preservation notes, and
- Date and time of sample collection

An additional clean, clear, glass or plastic container will be obtained from the laboratory for the quarterly visual assessment. Disposable, powder-free gloves will be worn while handling sample containers and during sampling.

6.1.1.2 Collection Method

Grab samples will be collected for visual assessment and effluent monitoring and samples will be representative of the discharge. Samples will be collected from the box culvert outfall (Outfall 001) that receives the final effluent from the water quality basin. Samples will be collected directly into the containers provided by the laboratory.

Sample containers will be filled nearly full but will not be rinsed or overfilled (to prevent loss of any preservative). Care should be taken to ensure that debris (e.g., pieces of leaves or twigs) is not entrained in the sample. Disposable gloves will be worn while sampling. The inside of the bottle or lid will not be touched, even if wearing gloves.

6.1.1.3 Sample Handling and Transport

Sample handling and transport will be completed as follows:

- Samples for pH will be analyzed within 15 minutes of collection.
- Samples will be kept refrigerated until they are delivered to the laboratory, which will be as soon as practicable but within the allowable method-specific hold time.
- The Sample Custody form will be completed when samples are collected, and any time sample custody is transferred.
- Any sample containing snow or ice melt will be noted in a field notebook dedicated to monthly monitoring.

6.1.2 Precipitation Information

Daily precipitation data from the Pittsfield Municipal Airport is downloaded monthly from the National Oceanic and Atmospheric Administration (NOAA) website and summarized in each monthly DMR.

6.1.3 Analytical Procedures

Except for visual monitoring and pH measurements conducted by monitoring personnel, all sample analyses will be conducted by a certified laboratory according to methods prescribed in 40 CFR 136 or required under 40 CFR Chapter I, Subchapter N or O, for analyses of pollutants or pollutant parameters (except whole effluent toxicity (WET)). Acute toxicity biomonitoring tests will be conducted according to the procedures and protocols specified in USEPA Region 1 Freshwater Acute Toxicity Test (WET) Procedure and Protocol document included in the NPDES Permit for the Site (See Appendix A).

6.1.4 Inability to Collect a Sample

If a required sample is not obtained during the monitoring period, this will be documented in the Stormwater Discharge Monitoring Report (DMR) along with the reason for failure to obtain a sample. Acceptable reasons are the absence of a rain event that produces a stormwater discharge, or safety considerations preventing access to a stormwater discharge location. Timing of a rain event is not an acceptable reason for a failure to sample unless it precludes the analysis of a parameter within the acceptable hold time specified in the test method.

6.2 REQUIRED STORMWATER DISCHARGE MONITORING

The following sections describe each type of monitoring in detail and the actions that will be taken when monitoring results do not meet effluent limitations.

6.2.1 Quarterly Visual Assessment/Monitoring

Treated stormwater and groundwater discharges at Outfall 001 will be visually assessed by a member of the Stormwater Pollution Prevention Team once per quarter for the duration of the permit using the following procedures:

- Collect a sample of the discharge in a clean, colorless glass or plastic container.
- Assess the sample in a well-lit area for color, odor, clarity, floating solids, settled solids, suspended solids, foam, oil sheen and other obvious indicators of pollution.

At the completion of each quarterly visual assessment, the results of the assessment will be documented on the visual assessment form in Appendix G and included in the SWPPP. The documentation will be reviewed and signed by the person who completed the assessment and monitoring and by a PEDA-authorized representative. The documentation will include the following:

- Personnel who participated in the assessment.
- Sample location, collection and visual assessment dates and times.
- Nature of the discharge (i.e., stormwater from rain or snow).
- Results of observations of the discharge sample.
- Probable sources of any observed contamination in the sample.
- If applicable, a statement regarding why the sample could not be collected within the first 30 minutes of discharge.

If the visual assessment indicates that the control measures used to prevent stormwater pollution are inadequate or are not being properly operated or maintained, PEDA will review and revise the control

measures to ensure that the condition is eliminated and will not occur in the future. Any changes to the control measures and procedures in use at the Site will be documented in Appendix G.

The visual assessment documentation will be retained in Appendix G for three years from the date of the assessment.

6.2.2 Effluent Limitations and Monitoring Requirements

During the period beginning with the effective date of the Permit and lasting through its expiration, PEDA is authorized to discharge treated stormwater and groundwater through Outfall 001 to Silver Lake. The discharge will be limited, and discharge samples collected and tested as specified in the Permit and described below.

TABLE 6-1								
	Effluent Limits and Monitoring Requirements							
Effluent Characteristics	Unit	Discharge Limitation		Monitoring Requirements ^{1,2}				
Parameter		Average Monthly	Maximum Daily	Measurement Frequency ³	Sample Type			
Flow ⁴ including reported precipitation at Pittsfield Airport	MGD	Report	Report	Whenever discharge occurs	Meter or Estimate			
Oil & Grease	mg/L	Report	15	1/Month	Grab			
TSS	mg/L	30	100	1/Month	Grab			
pH⁵		6.5 – 9.0 S.U.			Grab			
Escherichia coli	cfu/100ml	Report	Report	1/Year	Grab			
Total Nitrogen	mg/L lb/day		Report	2/Year	Grab			
PCBs, Total ^{6,7}	μg/L	Report	Report	1/Month	Grab			
Whole Effluent Toxicity ^{8,9,10}	Acute LC50 – Report							
Total Hardness	mg/L							
Total Suspended Solids	mg/L		Report	2/Year				
Specific Conductance	µmhos/cm							
Ammonia Nitrogen	mg/L				Grab			
Total Residual Chlorine	μg/L	Poport			Grab			
Total Cadmium	μg/L	Report						
Total Lead	μg/L							
Total Copper	μg/L							
Total Zinc	μg/L	- - -			l			
Total Nickel	μg/L							
Total Aluminum	μg/L							

Footnotes

- 1. Samples will be collected from the box culvert that receives final effluent from the water quality basin, unless otherwise specified. Samples will be representative of the discharge.
- 2. In accordance with 40 C.F.R. § 122.44(i)(I)(iv), the Permittee will monitor according to sufficiently sensitive test procedures (i.e., methods) approved under 40 C.F.R. Part 136 or required under 40 C.F.R. Chapter I, Subchapter N or 0, for the analysis of pollutants or pollutant parameters (except WET). A method is "sufficiently sensitive" when: 1) The method minimum level (ML) is at or below the level of the effluent limitation established in the permit for the measured pollutant or pollutant parameter; or 2) The method has the lowest ML of the analytical methods approved under 40 C.F.R. Part 136 or required under 40 C.F.R. Chapter I, Subchapter N or O for the measured pollutant or pollutant parameter. The term "minimum level" refers to either the sample concentration equivalent to the lowest calibration point in a method or a multiple of the method detection limit (MDL), whichever is higher. Minimum levels may be obtained in several ways: They may be published in a method; they may be based on the lowest acceptable calibration point used by a laboratory; or they may be calculated by multiplying the MDL in a method, or the MDL determined by a laboratory, by a factor.
- 3. Measurement frequency of 1/month is defined as the sampling of one discharge event in each calendar month. Measurement frequency of 1/year is defined as the sampling of one discharge event during one calendar year. If no sample is collected during the measurement frequencies defined above, the Permittee must report an appropriate No Data Indicator Code.
- 4. Report the monthly average and maximum daily flows. The monthly average flow is defined as the average flow per day of discharge. Also, report the flow from Outfall 001 and precipitation measured at the Pittsfield Airport or another nearby site for each day of the month as an attachment to the DMR. In the event of inclement weather, the permittee is allowed to estimate flow.
- 5. The pH of the effluent will not be less than 6.5 standard units (S.U.) nor greater than 9.0 SU at any time. In order to continue the pH limit range of 6.5 -9.0 S.U. in future permits, within 3 years of the effective date of the permit, PEDA must conduct a study to demonstrate that the pH in the receiving water does not exceed the range of 6.5 8.3 S.U. At least 6 months prior to beginning the study, PEDA will contact the MassDEP for guidance on completing the study. The pH study will be submitted to massdep.npdes@mass.gov.

TABLE 6-1 Effluent Limits and Monitoring Requirements

- 6. The minimum level (ML) for analysis for total PCBs will be no greater than the published ML of $0.095~\mu g/L$ using EPA test method 608.3, unless the permittee requests, and EPA approves, an alternate test method in accordance with Part 136.5. Provide the results of PCB analyses as the sum of Aroclors.
- 7. If EPA publishes a multi-lab validated method for PCBs in wastewater in 40 CFR Part 136 within the permit term that either replaces EPA test method 608.3 or achieves a ML less than the ML of EPA test method 608.3, the Permittee will use that test method for reporting of PCBs in the effluent. This requirement takes effect beginning six months after EPA notifies the Permittee that the updated PCB analytical method is available. Provide the results of PCB analyses as the sum of analyzed compounds.
- 8. Conduct acute toxicity tests twice per year (WET). Test the daphnid, *Ceriodaphnia dubia*, and the fathead minnow, *Pimephales promelas*. Perform the tests in accordance with test procedures and protocols specified in the Toxicity Test Procedure and Protocol document included in the NPDES permit (See Appendix A). After five years following the effective date of the permit and 10 valid test results (i.e., in the event the permit is administratively continued), the sampling frequency for WET testing will be reduced to once every two years. The once every two years sample will be collected in April. Sampling will be performed concurrently with the monthly monitoring event.

Test Dates	Submit Results By:	Test Species	LC50
April October	The 30 th day pf the month following the test	Ceriodaphnia dubia (daphnid) Pimephales promelas (fathead minnow	Report

- 9. The LC50 is the concentration of effluent which causes mortality to 50% of the test organisms.
- 10. If toxicity test(s) using receiving water as diluent show the receiving water to be toxic or unreliable, either follow procedures outlined in the Toxicity Test Procedure and Protocol document, Section IV., DILUTION WATER included in the NPDES permit (See Appendix A) to obtain an approval for use of an alternate dilution water.

The monitoring program specified above will provide continuous information on compliance, reliability, and effectiveness of the BMPs and installed pollution control equipment. PEDA will monitor and report sampling results to the EPA and the MassDEP in the manner, and within the time, specified in the NPDES permit as outlined in Section 7.0.

6.3 EVALUATION OF PREVIOUS MONITORING DATA

A summary of previous monitoring data collected between 2006 and 2014 is summarized below.

Effluent Characteristics were reported for monthly sampling events between January 2010 and December 2013, including daily and monthly flow, minimum and maximum pH and total suspended solids, oil and grease sample concentrations and calculated lb/day loading, and PCB sample concentrations and lb/day loading, as follows:

Parameter	Minimum	Maximum	Average
Average Monthly Flow	0.01	0.71	0.2
(MGD)			
Maximum Daily Flow	0.16	7.33	1.8
(MGD)			
Minimum pH (S.U.)	6.5	8.37	7.8
Maximum pH (S.U.)	7.36	9.14	8.37
Maximum Daily Total	0.2	1,850	228
Suspended Solids			
(lbs/day)			
Average Monthly Total	0.2	1,850	228
Suspended Solids			
(lbs/day)			
Oil and Grease	0	36.14	3.6
(lbs/day)			
Oil and Grease (mg/l)	0	40	3.3
PCB (lbs/day)	0.00000196	0.0161	0.00139
Total PCBs (µg/L)	0.0247	0.885	0.165 (median)

Silver Lake Pre-Remediation Data were reported for monthly sampling events between December 2006 and July 2012 for samples collected at the outlet of Silver Lake to the Housatonic River and tested for PCBs. The minimum concentration of total PCBs was reported as $0.044 \, \mu g/L$, maximum was reported as $0.930 \, \mu g/L$, and average was reported as $0.264 \, \mu g/L$.

Silver Lake Post-Remediation Data were reported for monthly sampling events between October 2013 and July 2014 for samples collected at the outlet of Silver Lake to the Housatonic River and tested for PCBs. The minimum concentration of total PCBs was reported as non-detected below 0.010 or 0.022 μ g/L, maximum was reported as 0.097 μ g/L, and median was reported as 0.044 μ g/L. The concentrations are approximately one order of magnitude lower than those determined pre-remediation.

7.0 Best Management Practices (BMP) Plan

7.1 SUMMARY

Permit Section I.C.3 requires a schedule and milestones for each BMP expected to be undertaken and identification of the party or parties which are responsible for implementing each BMP.

BMPs completed in 2024 are summarized in Appendix J and briefly described below:

- Q1 Q4 quarterly inspection
- Q1 Q4 quarterly visual assessment
- Monthly monitoring of Outfall 001 including flow, pH, TSS, O&G and PCBs
- Monthly reporting via CDX
- Semi-annual monitoring including WET Testing and Total Nitrogen (April, December 2024)
- Semi-annual reporting of WET Testing and Total Nitrogen (June, December 2024)
- Annual monitoring including e-coli
- Annual reporting of e-coli results
- Preparation of Technical Specifications including spill prevention and response procedures
- Implementation of spill Prevention and response procedures
- Conduct SWPPP and spill prevention and response training for PEDA personnel and WSBP tenants
- Tenant certification of the SWPPP
- Replace stormwater conveyance system in the former Teens Complex as part of the WSBP Site 9 Redevelopment project
- Evaluate the need for sweeping of the 20s and 30s Complex
- Installation of upstream engineering controls in the former Teens Complex as part of the WSBP Site 9 Redevelopment project (including rain gardens, vegetated swales and other designs to reduce flow to Outfall 001)
- Disconnect and replace the existing conveyance system in the former Teens Complex as part of the Site 9 Redevelopment project

No violations of the numerical or non-numerical effluent limits were identified during 2024.

The BMPs proposed for 2025 are summarized in Appendix J and include the following:

- Q1 Q4 quarterly inspections
- Q1 Q4 quarterly visual assessment
- Monthly monitoring of Outfall 001
- Monthly reporting via CDX
- Semi-annual monitoring including WET Testing and Total Nitrogen (April, October 2023)
- Semi-annual reporting of WET Testing and Total Nitrogen (June, December 2023)
- Annual monitoring including e-coli
- Annual reporting of e-coli results
- Conduct <u>refresher</u> training on the SWPPP (including spill prevention and response procedures) to PEDA personnel and WSBP tenants
- Implement Nutrient Minimization specification for PEDA personnel and contractors. Implementation of this specification was overlooked in 2024. This task will remain on the BMP list for 2025.
- Evaluate PCB concentrations and loading from the north forebay and the south forebay including the collection of two rounds of samples at each location. This was proposed to be completed during 2024 in June and December. However, the lack of rain precluded the collection of the samples. This task will remain on the BMP list for 2025.

Additional details on each proposed BMP are described in the following sections, including descriptions of goals, a schedule with milestones for implementation, a quantity or quality associated with implementation, how success will be measured and anticipated compliance with the numeric limits and non-numeric conditions stipulated in the permit. Persons responsible for each BMP are identified in Section 3.0.

7.2 STANDARD AND CUSTOMARY CONTROL MEASURES

Standard and customary control measures are outlined in Permit Sections I.C.2.a.(1) through (10) and described in Sections 2.2.1 through 2.2.10 below.

7.2.1 Former Industrial Activity Areas – Permit Section I.C.2.a.(1)

Permit Section I.C.2.a.(1) requires minimization of exposure of stormwater to areas where industrial activities were formerly undertaken so that contaminants do not impact stormwater. The goal will be maintaining vegetation and pavement in existing locations to reduce the potential for erosion. Success of the BMP will be measured by minimization of erosion, maintaining vegetation and attaining compliance with the numeric effluent limits.

Inspection of vegetated areas in former industrial activity areas will be conducted annually to ensure that erosion is not occurring. Maintenance of these areas will be conducted in accordance with Section 7.3.3.

Site areas where current and former industrial activities occur/occurred are described below. [Note that there are currently no industrial activities at the Site.] Exposure of former industrial activity areas to stormwater is currently minimized by non-pervious covers (pavement or concrete) in certain portions of the Site where contaminated soil/building materials may be present.

The initial tabulation of the Source Identification BMP (see Section 7.5) was completed in 2022. The summary report was completed in 2023 and did not identify any new sources of potential contaminants. However, the report indicated that while no sources of pollution were identified, there were areas on the WSBP that had not been ruled out as potential sources of PCB contamination. These areas include the following:

- Stormwater conveyance systems located on the former GE 40s complex which has not yet been redeveloped or modified following the initial demolishing of structures and partial closure of the stormwater management system.
- Surface and subsurface soil on the 19s and 40s complexes that contain low levels of PCBs.

As noted previously, the former GE 19s Complex (WSBP Site 9) has been redeveloped and is no longer considered a significant source of PCBs. All newly installed utilities/infrastructure were installed in clean soil above historic building foundations and footings. Also, the stockpile formerly located on the former GE 40s Complex (PEDA Site 7) was removed in 2024 and used as backfill at PEDA Site 9. The only known source of low levels of PCBs on the WSBP is contaminated groundwater from historic industrial activities conducted by GE. The functionality of stormwater drains on the former GE 40s Complex (WSBP Sites 7 and 8) is not known in detail but based on quarterly inspections most catch basins do not appear functional either being filled with sediment/debris or flowable fill material. Existing catch basins will be inspected in more detail during 2025 quarterly inspections.

PEDA has not performed a comprehensive study of the inflow of stormwater from the residential and commercial properties or from the CXS railroad catch basin as potential sources of pollution due to the uncontrolled nature of these portions of the stormwater drainage basin. At this time PEDA does not anticipate evaluating the CSX railroad catch basin and the inflow from the residential area to the north.

A summary of known and potential industrial activity areas and potential contaminants in these areas is presented below.

7.2.1.1 South Side Park

South Side Park was formerly part of the GE facility that operated on a portion of the Site until circa 1990. The South Side Park area formerly included the 20's and 30's GE building complexes.

Based on industry knowledge, GE operations at South Side Park may have included the use of PCBs. chlorinated and non-chlorinated volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), petroleum products and metals.

According to information contained in the EPA-prepared Factsheet associated with the 2015 DRAFT NPDES Permit, buried building debris is reportedly located under the paved area in the northwestern portion of South Side Park (east of the solar array), under a paved area in the southeastern portion of South Side Park (parking area associated with BIC), and under a small, paved area in the northeastern portion of the South Side Park.

There are three pad-mounted electrical transformers in South Side Park. One is located west of the bank building and two are located near the Berkshire Innovation Center. The transformers are owned by Eversource and are identified as "Non-PCB" (less than 2 parts per million of PCB). Two closed top trash dumpsters are located in South Side Park, associated with BIC and MountainOne bank.

7.2.1.2 CSX Railroad Corridor

The CSX railroad corridor separates South Side Park from North Side Park. Railroads are used for transportation of various goods and materials. Materials being transported may include potentially hazardous materials, petroleum-based products and other chemicals. Spills or leaks of chemicals and petroleum products may occur during transportation activities.

Based on industry knowledge, potential pollutant sources along the railroad corridor may include contaminants due to chemical applications, releases from train equipment and contamination associated with equipment repair and maintenance. Potential pollutant sources include the following:

- Railroad ties that are treated with chemicals including creosote and arsenic-containing compounds
- Disposal/emplacement of coal ash and cinder containing elevated levels of lead, arsenic and other metals
- Application of herbicides/pesticides
- Petroleum products containing PCBs and elevated levels of metals, and
- Fossil fuel combustion products (polynuclear aromatic hydrocarbons (PAHs))

Since it is expected that materials/chemicals used and products produced by GE were shipped via the CSX rail line, soil, gravel, and underlying groundwater may contain contaminants associated with historic GE operations.

The presence of transformers along the rail line is unknown, however it is believed that several pole-mounted transformers are present. All transformers would contain petroleum products and may contain PCBs.

7.2.1.3 North Side Park

North Side Park was formerly part of the GE facility that operated here until circa 1990. North Side Park was transferred from GE to PEDA in 2011/2012 and includes an area previously known as the Teens Complex / WSBP Site 9 and the 40s Complex / WSBP Sites 7 and 8.

The 40s Complex was in the western portion of North Side Park and was developed with several buildings that were demolished between 1993 and 2006. The 40s Complex including WSBP Site 7 and 8 is currently undeveloped and is primarily paved or covered with former building slabs. The stockpile that was formerly located on the western portion of the 40s (WSBP Site 7) was removed in 2024.

As described in the January 2011 Final Completion Report for the 40s Complex Removal Action, prepared by ARCADIS of New York, Inc., PCB-contaminated soil is present in North Side Park, and building debris is present in certain manholes, catch basins, tunnels and in the vegetated stockpile. In addition, as described in the report, approximately 12,500 cu. yd. of crushed building debris were reused (buried) in the Teens Complex, WSBP Site 9. The vegetated stockpile was removed in 2024 and used as backfill at WSBP Site 9. There may be a source of sediment from North Side Park/40s Complex that is being transported through the existing storm sewer system into the North Forebay. This source should be identified and eliminated if present. It is anticipated that when the 40s Complex is redeveloped in a fashion similar to the WSBP Site 9 (Teens Complex), these potential sources will be eliminated.

The former Teens Complex included numerous GE buildings which were demolished by GE between 2001 and 2010. This portion of the WSBP is identified as Site 9. The former Teens Complex (WSBP Site 9) was redeveloped in 2024 where all historic foundations and/or walls were demolished, cracked or removed, a demarcation barrier and clean soil was placed over the entire site. Utilities (sewer, water electric) and a stormwater management system were installed in clean soil above the historic foundations. The historic utility and stormwater infrastructure was demolished and/or removed. This area of North Side Park is not considered a significant source of PCBs.

Potential contaminants in buried building debris placed on WSBP Sites 7, 8 & 9 in North Side Park may include PCBs and lead-based paint. Based on industry knowledge, these materials were used during building construction and maintenance in the early- to-mid 1900s. In addition, any chemicals or petroleum products used during GE operations may have caused contamination of building materials.

7.2.1.4 Residential, Commercial and Municipal Properties

This off-site area includes a 90-acre residential/commercial neighborhood located north of the former GE facility. This area contributes runoff to Outfall 001 in the WSBP via the municipal stormwater conveyance system. Industrial activities may occur at one or more of the municipal and privately-owned properties in the northern portion of the drainage area, however these activities are unknown. Potential pollutant sources that may be present on private and municipal properties are unknown.

The presence of transformers is unknown; however, it is expected that several pole-mounted transformers are present in the northern portion of the drainage area at/near municipal, residential and commercial properties. Pad-mounted transformers may also be located in these areas. Transformers would contain petroleum products and may contain PCBs.

7.2.2 Good Housekeeping Measures - Permit Section I.C.2.a.(2)

Permit Section I.C.2.a.(2) requires the design of good housekeeping measures to maintain areas that are potential sources of pollutants so that these potential pollutant sources do not enter or pollute stormwater. These areas include waste and chemical/petroleum storage and use areas and trash and debris accumulation areas. Waste and chemical/petroleum storage and use areas are not currently present at WSBP with the exception of transformers. The goal of this BMP is to ensure that Site

stormwater does not carry pollutants, waste, garbage, and floatable debris to receiving waters. Success will be measured by minimization of waste, garbage and floatable debris in the water quality basin and Silver Lake and by attaining compliance with the non-numeric effluent requirements of the Permit.

Good housekeeping is an essential component of stormwater management and is a practical and costeffective way to prevent potential pollutant sources from coming into contact with stormwater. The following good housekeeping practices are, and will continue to be, employed at WSBP:

- Covered trash dumpsters will not be used for storage or disposal of wastes, chemicals, or petroleum products. Trash dumpsters will be inspected quarterly.
- Any potential waste, chemical or oil products from tenants of the WSBP will be stored inside
 the buildings and will be disposed of off-site by a licensed waste hauler.
- Areas where equipment is stored will be inspected quarterly, and any leaks or spills are investigated and promptly cleaned up.
- Transformers will be inspected quarterly.
- The need for street sweeping will be evaluated quarterly.

Currently the WSBP has no outdoor storage of wastes, chemicals or petroleum products.

Good housekeeping practices are, and will continue to be, utilized at WSBP to minimize stormwater pollution, as follows:

- Indications of staining, discoloration or other signs of contaminants will be promptly investigated and cleaned up.
- Outside areas will be maintained frequently to minimize accumulation of litter and debris.
- Trash containers will be kept covered.

PEDA staff, contractors and WSBP tenants will receive training on good housekeeping practices as described in Section 7.2.8. Quarterly inspections will be completed to verify that good housekeeping practices are in use at the Site. Corrective action will be implemented as required in accordance with Section 7.3.3.

7.2.3 Preventative Maintenance - Permit Section I.C.2.a.(3)

Permit Section I.C.2.a.(3) requires implementation of preventative maintenance programs to avoid leaks, spills and other releases of pollutants in wastewater discharged to receiving waters. The goal of this BMP is to minimize the potential for pollutants to reach Silver Lake. This will be accomplished by maintaining the forebays and water quality basin, minimizing the potential for leaks or spills and providing adequate containment or diversionary structures for leaks or spills that do occur, and preventing exposure of stormwater to waste and chemical/petroleum storage areas. Success will be measured by well-maintained forebays and the water quality basin, leaked or spilled materials not entering the stormwater management system and by attaining compliance with the numeric and non-numeric effluent limits/requirements of the Permit.

PEDA has implemented a program that includes training, inspection, preventative maintenance and corrective action as required in accordance with Section 7.3.3. to avoid the introduction of pollutants to stormwater.

Quarterly inspections of outdoor storage of oil-filled equipment (e.g., transformers) and chemical and petroleum storage areas (none currently exists). Pollution Prevention Team personnel will perform quarterly inspections of the site and stormwater management structures including on-site catch basins, the north and south forebays, the water quality basin, and Outfall 001 to ensure that leaked or spilled

material is not entering the stormwater collection system and the structures are in working order and are not clogged or backed up with sediment, trash, or leaf debris. Corrective action will be implemented as required in accordance with Section 7.3.3.

Preventative maintenance will be completed quarterly or on an as-needed basis to avoid releases of pollutants to stormwater and ensure controls are effective, and transformers/equipment are not leaking. Areas where preventative maintenance may be required include catch basin sumps, sediment accumulation areas, areas subject to erosion, dumpsters and roll-offs and vehicle parking and travel areas. Trash pickup from exterior locations is routinely completed at WSBP. Periodic maintenance of the water quality basin, and forebays will also be completed, and may include sediment removal, replacement of riprap and placement of vegetation in unvegetated areas. Maintenance of the north forebay and spillway were completed in 2022 as described in Section 7.4.

7.2.4 Spill Prevention and Response - Permit Section I.C.2.a.(4)

Permit Section I.C.2.a.(4) requires implementation of spill prevention and response procedures to ensure effective response to spills and leaks. The goal of this BMP is to ensure that Site stormwater is not impacted by spills of chemicals or petroleum products. Success will be measured by the absence of unusual colors, odors, foam, oil sheen and other obvious indicators of pollution in stormwater and by attaining compliance with the numeric and non-numeric effluent limits/requirements of the Permit.

A spill prevention and response procedure was developed in 2022 and incorporated into a specification and training module for implementation at WSBP during 2023. Quarterly inspections will be completed to verify that spill prevention practices are in use at the Site. Corrective action will be implemented as required in accordance with Section 7.3.3.

In summary, if a small leak or spill occurs, it will be promptly contained and cleaned up by trained tenants or contractors responsible for the spill. In the event of a larger spill, tenants will immediately contact emergency response contractors as required to assist with containment and cleanup, make all required regulatory notifications and notify PEDA. The spill prevention specification has been included in Appendix K.

7.2.5 Erosion and Sedimentation Controls - Permit Section I.C.2.a.(5)

Permit Section I.C.2.a.(5) requires the design of erosion and sedimentation controls to stabilize exposed areas and contain runoff. The goal of this BMP is to minimize the introduction of sediment to stormwater, maintain the capacity of the forebays and water quality basin and prevent sediment from entering Silver Lake. Success will be measured by attaining low levels of total suspended and settleable solids in the discharge, minimal accumulation of sediment in the forebays and water quality basin, and by attaining compliance with the non-numeric effluent limits/requirements of the Permit.

The stormwater management system was designed to minimize erosion and sedimentation. Both South Side Park and North Side Park include landscaped and vegetated areas as well as paved/concrete surfaces. Where the surface is paved or includes concrete slabs/foundations, the potential for erosion is minimal under normal circumstances. The stormwater collection/treatment system for South Side Park consists of step pools, rip rap drainage swales, ten 4 ft. deep sump catch basins, 18 drain manholes (with 1 ft. sumps), 11 area drains (with 6 in. sumps) and high-density polyethylene pipe ranging from 12 in. to 36 in. in diameter. The stormwater collection/treatment system was designed to slow incoming stormwater runoff (step pools, rip rap drainage swales, sump catch basins) and facilitate the gravity separation of suspended solids (forebays). This design minimizes erosion to landscaped and vegetated areas.

Quarterly inspections will be completed to verify that erosion and sedimentation controls are in working order. Corrective action will be implemented as required in accordance with Section 7.3.3.

As described in Section 7.3.5, paved areas owned by WSBP will be maintained to remove accumulated sediment and vegetated areas will be inspected to ensure adequate vegetative cover and repaired/revegetated as required. Vegetative cover at and near the north forebay were repaired/replaced in December 2022 as described in Section 7.4.

7.2.6 Stormwater Management Practices - Permit Section I.C.2.a.(6)

Permit Section I.C.2.a.(6) requires the utilization of stormwater management practices to divert, reuse, contain or otherwise reduce stormwater runoff. Diversion and reuse of stormwater at WSBP is not applicable, however the existing stormwater management system temporarily retains stormwater runoff in the two forebays (South Side Park) and in six water quality basins and a below-ground infiltration basin (North Side Park). The goal of these BMPs is, and success will be measured by, attaining compliance with the non-numeric effluent limits/requirements of the Permit.

The stormwater management system at South Side Park was designed, constructed and/or rehabilitated previously by WSBP/GE. The stormwater conveyance system in North Side Park (east side/WSBP Site 9) has been rehabilitated by WSBP during 2024 and it is anticipated that North Side Park (west side/WSBP Sites 7 & 8) will be redeveloped in the future. Removal of sediment from the north forebay and repair of the spillway between the north forebay and the water quality basin were completed in December 2022 as described in Section 7.4.

Quarterly inspections will be completed to verify that stormwater management controls are in working order. Corrective action will be implemented as required in accordance with Section 7.3.3.

Stormwater runoff captured by the existing storm sewer system within the drainage area is conveyed to the north and south forebays and thence to the water quality basin. A grass-lined swale and newly constructed storm sewer piping collect stormwater runoff from South Side Park and convey it to the water quality basin via the south forebay. Stormwater runoff from North Side Park and municipal and privately-owned property north of WSBP is collected in the existing storm sewer system on the 40s Complex (WSBP Site 7 & 8) and the newly constructed system in the Teens Complex (WSBP Site 9) and conveyed through South Side Park in an existing underground 48 in. storm sewer prior to discharging into the north forebay of the water quality basin. Refer to Figure 2 for a map of the Site and drainage features.

The water treatment system for managing stormwater from North and South Side Park includes two forebays (north and south) and the water quality basin. The forebays provide pre-treatment (removal of sediment) of stormwater runoff before entering the water quality basin through gravel spillways. The permanent pool water quality basin allows for additional removal of sediment and ranges in depth from 1 to 2 ft. Stormwater exits the system through a 4 ft. by 8 ft. reinforced concrete box culvert to Silver Lake. The box culvert has been retrofitted with flow monitoring equipment.

The stormwater collection/treatment system for South Side Park consists of step pools, rip rap drainage swales, ten 4 ft. deep sump catch basins, 18 drain manholes (with 1 ft. sumps), 11 area drains (with 6 in. sumps) and high-density polyethylene pipe ranging from 12 in. to 36 in. in diameter. Prior to discharge to the south forebay, the step pools, sump catch basins, manholes and drains provide additional pretreatment of stormwater.

The stormwater collection/treatment system for North Side Park (WSBP Site 9) consists of six small water quality basins, vegetated drainage swales and an underground infiltration basin. Water from this system combines with minor discharges from the 40s Complex (WSBP Site 7 and 8) and is discharged into the north forebay. The water quality basins, infiltration basin and vegetated nature of the site

provide for a significant reduction in stormwater generated from North Side Park, specifically WSBP Site 9.

7.2.7 Salt and Chloride-Containing Piles - Permit Section I.C.2.a.(7)

Permit Section I.C.2.a.(7) requires that salt and chloride-containing (de-icing materials) piles be enclosed or covered. The goal of this BMP is to minimize the introduction of salt and chloride-containing compounds to stormwater.

Large quantities of de-icing materials are not stored outside on the Site. Small, covered containers (e.g., 5 gallon buckets, 20 to 40 lb. bags) of de-icing materials may be stored near doorways of buildings for hand application to exterior walkways. Therefore, this BMP is not currently applicable. Any future de-icing material piles present at the Site will be enclosed or covered.

7.2.8 Employee Training - Permit Section I.C.2.a.(8)

Permit Section I.C.2.a.(8) requires that employee training be conducted to ensure that the requirements of the Permit are understood. The goal of this BMP is for PEDA consultants, employees and tenants to demonstrate knowledge of the practices and procedures required by the SWPPP, as described below. Success will be measured by completing the training specification and obtaining tenant certification.

A specification and training module were completed in 2022 and the initial training was completed in July 2023 for tenants and PEDA employees. The training specification and 2023 and 2024 training documentation have been included in Appendix K and I, respectively. Training will be conducted on an annual basis. New PEDA employees will be trained within 90 days of employment and annually thereafter. Training topics include the following:

- Location and use of emergency equipment
- Spill response procedures
- Spill prevention and control measures
- Inspection requirements
- Good housekeeping and materials management practices, and
- Procedures for receiving, storing and transferring chemicals, petroleum products and wastes (if applicable)
- Notification procedures

In addition, facility managers for MountainOne and BIC were provided with a copy of the SWPPP and have certified that they understand and agree to comply with the terms and conditions of the SWPPP for activities at their facilities. This documentation is included in Appendix L.

7.2.9 Non-Stormwater Discharge Evaluation - Permit Section I.C.2.a.(9)

Permit Section I.C.2.a.(9) requires that a non-stormwater discharge evaluation be completed. The goal of this BMP is to identify any non-stormwater contributions to the stormwater conveyance and treatment system. Success will be measured by producing a report on the evaluation and eliminating any non-stormwater discharges.

The non-stormwater discharge evaluation will include the following:

- Review of plans for existing buildings (MountainOne and BIC) for presence of non-stormwater connections (e.g., floor drains, sinks, irrigation water) to the stormwater conveyance or treatment system.
- Dye tests if required to confirm any questionable connections.

 Preparation of a report documenting the evaluation, including a description of the evaluation criteria used and a list of any non-stormwater discharges.

For any unauthorized non-stormwater discharges, PEDA will immediately take action(s) to eliminate those discharges or seek and/or document that an individual NPDES wastewater permit was obtained for the discharge. In addition, PEDA will provide a description of all implemented corrective actions.

The non-stormwater discharge evaluation was completed during 2022 and a copy of the evaluation is included in Appendix B. The evaluation identified several items for follow-up which were completed during 2024 following completion of the WSBP Site 9 Redevelopment project. The non-stormwater discharge evaluation will be updated in 2025 to include information regarding the WSBP Site 9 redevelopment project.

7.2.10 Dust Generation - Permit Section I.C.2.a.(10)

Permit Section I.C.2.a.(10) requires that dust generation and vehicle tracking of industrial materials are minimized. The goal of this BMP is to minimize the introduction of sediment to stormwater, maintain the capacity of the forebays and water quality basin and prevent sediment from entering Silver Lake. Success will be measured by attaining low levels of total suspended and settleable solids in the discharge, minimal accumulation of sediment in the forebays and water quality basin and by attaining compliance with the numeric and non-numeric effluent limits/requirements of the Permit.

Quarterly inspections will be completed to verify that excessive dust is not present on paved areas. Vegetated areas will be inspected quarterly to verify that they remain vegetated. Corrective action will be implemented as required in accordance with Section 7.3.3.

Dust-generating operations or activities, including abrasive blasting or grinding, are not completed at WSBP. Exterior storage, or handling, of bulk materials does not occur at WSBP. On-site traffic is limited to low-speed passenger and delivery vehicles on paved roadways and parking areas associated with the two buildings at South Side Park; vehicle traffic is not expected to generate significant quantities of dust.

Areas within South Side Park are vegetated, paved or gravel-covered and are not expected to generate significant quantities of dust. North Side Park is primarily covered with former building floor slabs and wind-blown dust may be generated in this area. As described in Section 7.3.5, paved/concrete-covered areas will be maintained (swept) to remove accumulated sand and sediment.

Off-site areas north of the WSBP and the CSX railroad corridor are primarily paved, covered by buildings, vegetated or gravel-covered; areas that may generate wind-blown dust may be present in these areas. In addition, the City of Pittsfield may apply sand to roadways during snow/ice events. PEDA does not own, operate, or control these municipal or privately-owned properties.

7.3 EPA MULTI-SECTOR GENERAL PERMIT (MSGP) AND REMEDIATION GENERAL PERMIT (RGP) CONDITIONS

Section I.C.2.b requires compliance with certain BMPs contained in the MSGP and the RGP, as follows.

7.3.1 MSGP Parts 2.1 and 2.1.1 – Control Technologies - Permit Section I.C.2.b.(1)

Permit Section I.C.2.b.(1) requires implementation of the requirements in MSGP Parts 2.1 and 2.1.1 to identify pollutant sources, and design, install and maintain the control technologies so that Permit effluent limits are met while ensuring that dilution is not used as treatment. Specifically, MSGP Part 2.1 requires that the discharge meet Permit effluent numeric and non-numeric limits and ensure that Silver Lake water quality meets applicable water quality standards.

The goal of this BMP is to minimize the introduction of pollutants and sediment to stormwater, maintain the capacity of the forebays and water quality basin and prevent sediment from entering Silver Lake. Success will be measured by attaining low levels of total suspended and settleable solids in the discharge, minimal accumulation of sediment in the forebays and water quality basin and by attaining compliance with the numeric and non-numeric effluent limits/requirements of the Permit.

In accordance with MSGP requirements, the following were considered in the design of the existing control technologies, and will be considered in 2023 if required to meet numeric effluent limits and non-numeric requirements of the Permit:

- Preventing stormwater from coming into contact with polluting materials is generally more effective, and less costly, than trying to remove chemical/petroleum pollutants and pollutants in sediment from stormwater. See Sections 7.2.1 (Former Industrial Activity Areas), 7.2.2 (Good Housekeeping Measures), 7.2.3 (Preventative Maintenance), 7.2.4 (Spill Prevention and Response) and 7.2.10 (Dust Generation) for information regarding preventing stormwater from contacting chemicals and petroleum, and Section 7.2.5 (Erosion and Sedimentation Controls) regarding minimizing sediment in stormwater.
- The use of stormwater control measures in combination may be more effective than using control measures in isolation for minimizing pollutants in stormwater discharges. See Section 7.2.6 (existing Stormwater Management System) for a description of the several control measures used currently.
- Assessing the type and quantity of pollutants, including their potential to impact receiving water quality, is critical to designing effective stormwater control measures that will achieve limits in the Permit. See Section 7.5 for a description of the source identification tasks and Section 7.3.2 (Inspections) that will be completed in 2023.
- Minimizing impervious areas during future construction at PEDA-owned property and infiltrating stormwater on site (including bioretention cells, green roofs, and pervious pavement) which can reduce the frequency and volume of discharges and improve ground water recharge and stream base flows in local streams. This control technology will be considered during any future redevelopment at WSBP.
- Attenuating flow using open vegetated swales, rip rap swales and natural depressions can reduce in-stream impacts of erosive flows. Open vegetated swales and rip rap swales are currently in use at WSBP (see Section 7.2.6).
- Conserving and/or restoring riparian buffers will help protect streams from stormwater discharges and improve water quality. See Section 7.4 for a description of the repair to the riparian buffer around the north forebay that was completed in 2022.
- Using treatment interceptors (e.g., swirl separators and sand filters) may be appropriate in some instances to minimize the discharge of pollutants. This control technology will be considered in the future if required to minimize entry of sediments into the forebays and water quality basin.
- Implementing structural improvements, enhanced/resilient pollution prevention measures, and
 other mitigation measures can help to minimize impacts from stormwater discharges from
 major storm events. Structural considerations, pollution prevention measures and other
 mitigation measures will be considered during any future redevelopment at WSBP to minimize
 impacts during major storm events.

Quarterly inspections will be completed to verify that stormwater management controls are in working order. Corrective action will be implemented as required in accordance with Section 7.3.2.

7.3.2 MSGP Parts 3.1 and 3.2 – Inspection and Monitoring - Permit Section I.C.2.b.(2)

Permit Section I.C.2.b.(2) requires implementation of inspection requirements in MSGP Parts 3.1 and 3.2. The BMP includes quarterly inspections, quarterly visual assessment, monthly effluent monitoring

and record keeping. The goal of this BMP is to complete the required inspections, assessment, monitoring and record keeping in accordance with the Permit and MSGP. Success will be measured by on-time reporting of inspections, assessment, monitoring and maintenance of appropriate records in the SWPPP.

The following sections describe each type of inspection/assessment/monitoring that will be conducted in 2023 and the actions that will be taken when monitoring results do not meet effluent limitations.

7.3.2.1 Inspections

Quarterly inspections of outdoor storage of oil-filled equipment (e.g., transformers), chemical and petroleum storage areas and stormwater management devices will be conducted. Pollution Prevention Team personnel will perform inspections of stormwater management structures including on-site catch basins, the north and south forebays, the water quality basin, and Outfall 001 to ensure that the structures are in working order and are not clogged or backed up with sediment, trash, or leaf debris. Specifically, the following will be inspected:

- The discharge point to Silver Lake (Outfall 001)
- Material handling areas, industrial activities (if any) and other potential sources of pollution for evidence of, or the potential for, pollutants entering the stormwater drainage system
- The structural stormwater management measures, control measures, and other pollution prevention measures identified in the SWPPP to ensure that they are properly implemented and maintained
- Equipment needed to implement the plan, such as spill response equipment, and
- Areas where spills and leaks have occurred in the past three years (if applicable)

The following, as applicable, will be observed:

- Industrial materials, residue or trash that may have, or could, come into contact with stormwater
- Leaks or spills from industrial equipment, drums, tanks and other containers
- Off-site tracking of wastes or sediment where vehicles enter or exit the Site
- Tracking or blowing of materials
- Erosion of soil, and channel streambank erosion near the discharge point (Outfall 001) and other areas potentially subject to erosion
- Non-authorized stormwater discharges
- Control measures that need repair, maintenance or replacement, and
- Control measures for proper functionality

At the completion of each quarterly routine inspection, an inspection report will be prepared using the completed inspection checklist and signed by the inspector(s). The report will include the following:

- The scope of the inspection
- The personnel who participated in the inspection
- The date(s), time(s) and weather conditions at time of inspection
- All observations made relating to the SWPPP, including description of stormwater discharges
 that are occurring, previously unidentified stormwater discharges and/or pollutants, evidence
 of, or the potential for, pollutants to enter the stormwater system, physical conditions near
 Outfall 001, the water quality basin and forebays, flow dissipation devices, evidence of
 pollutants in discharges and Silver Lake and control measures that need repair, maintenance
 or replacement
- Additional control measures required to comply with the permit
- Incidents of non-compliance

- Actions taken to address deficiencies identified, and
- Updates made to the SWPPP because of the guarterly routine inspections

The completed inspection report will be reviewed and signed by the inspector and a PEDA-authorized representative and retained in the SWPPP.

If the inspection indicates that the control measures used to prevent stormwater pollution are inadequate or are not being properly operated or maintained, PEDA will review and revise the control measures to ensure that the condition is eliminated and will not occur in the future. Any changes to the control measures and procedures in use at the Site will be documented in the SWPPP.

7.3.2.2 Quarterly Visual Assessment/Monitoring

Stormwater discharge at Outfall 001 will be visually assessed by a member of the Stormwater Pollution Prevention Team once per quarter for the duration of the permit using the procedures described in Section 7.3.4.

At the completion of each quarterly visual assessment, the results of the assessment will be documented on the Stormwater Discharge Monitoring Data (DMR) form and the visual assessment will be documented on the visual assessment form and included in the SWPPP. The documentation will be reviewed and signed by the person who completed the assessment and monitoring and by a PEDA-authorized representative and retained in the SWPPP. The documentation will include the following:

- Personnel who participated in the assessment
- Sample location, collection and visual assessment dates and times
- Nature of the discharge (i.e., stormwater from rain or snow)
- Results of observations of the discharge sample
- Probable sources of any observed contamination in the sample, and
- If applicable, a statement regarding why the sample could not be collected within the first 30 minutes of discharge

If the visual assessment indicates that the control measures used to prevent stormwater pollution are inadequate or are not being properly operated or maintained, PEDA will review and revise the control measures to ensure that the condition is eliminated and will not occur in the future. Any changes to the control measures and procedures in use at the Site will be documented in the SWPPP.

The visual assessment documentation is retained in Appendix G.

7.3.2.3 Monitoring Requirements and Effluent Limitations

During the period beginning with the effective date of the Permit and lasting through its expiration, PEDA is authorized to discharge treated stormwater and groundwater through Outfall 001 to Silver Lake. The discharge will be limited, and discharge samples collected and tested as specified in the Permit. The monitoring program (see Table 6-1) will provide continuous information on compliance, reliability, and effectiveness of BMPs and the installed pollution control equipment. PEDA will monitor and report sampling results to the EPA and the MassDEP in the manner, and within the time specified in the NPDES permit as outlined in Section 7.0 of the SWPPP.

7.3.2.4 Reporting

The results of monthly discharge monitoring data (except for the quarterly visual assessment) conducted pursuant to the Permit will be submitted to the EPA and MassDEP on the Stormwater Discharge Monitoring Report (DMR) form (included in the SWPPP) no later than the 15th day of the month following the completed reporting period. Monthly DMRs will be reported using NetDMR.

Hard copies of all whole effluent toxicity test reports will be submitted to MassDEP, Division of Watershed Management.

Requests, reports, and information described in the Permit will be submitted to EPA and to MassDEP. Verbal reports and notifications will be made to EPA and to MassDEP in accordance with Section 9.0 of the SWPPP.

7.3.3 MSGP Parts 5.1.1 through 5.1.4 – Corrective Action - Permit Section I.C.2.b.(3)

Permit Section I.C.2.b.(3) requires corrective actions be undertaken in accordance with MSGP Parts 5.1.1 through 5.1.4. These corrective actions include revising the SWPPP if the stormwater discharge does not meet the effluent criteria, and if Site operations, maintenance or control technology change as described below. The goal of this BMP is to complete the corrective actions, including reviewing and revising (as appropriate) the SWPPP, and completing the record keeping in accordance with the Permit and MSGP. Success will be measured by on-time SWPPP revision, record keeping and reporting.

7.3.3.1 Conditions Requiring SWPPP Review and Revisions to Ensure Effluent Limits are Met

When any of the conditions described below are observed/detected during an inspection, monitoring or other means, or EPA informs PEDA that any of the following conditions have occurred, PEDA will review and revise, as appropriate, the SWPPP (e.g., sections related to sources of pollution, spill and leak procedures, non-stormwater discharges, the selection, design, installation and implementation of stormwater control measures) so that Permit effluent limits are met and pollutant discharges are minimized.

- An unauthorized release or discharge (e.g., spill, leak, or discharge of non-stormwater not authorized by the Permit) occurs to the Stormwater Management System.
- A discharge violates a numeric effluent limit listed in the table above.
- Stormwater control measures are not sufficient to meet numeric or non-numeric effluent limits/requirements in the Permit (i.e., reporting of concentrations of various constituents, not meeting effluent limitations and required BMPs) in the Permit, or Silver Lake water not meeting applicable water quality standards.
- A required control measure was not installed, was installed incorrectly, is not in accordance with the MSGP (Parts 2 or 8) or is not being properly operated or maintained.
- Whenever a visual assessment shows evidence of stormwater pollution (e.g., unusual color, odor, floating solids, settled solids, suspended solids, foam).

7.3.3.2 Conditions Requiring SWPPP Review to Determine if Modifications are Necessary

If construction or a change in operation or maintenance at WSBP occurs that significantly changes the nature of pollutants discharged via stormwater, or significantly increases the quantity of pollutants discharged, PEDA will review the SWPPP (e.g., sections related to sources of pollution, spill and leak procedures, non-stormwater discharges, selection, design, installation, and implementation of stormwater control measures) to determine if modifications are necessary to meet the effluent limits in the Permit.

7.3.3.3 Deadlines for Corrective Actions

On the day a condition is found requiring corrective action, PEDA will take all reasonable steps to minimize or prevent discharge of pollutants until a permanent solution can be implemented, including cleaning up any contaminated surfaces so that the material will not be discharged in subsequent storm events. If additional actions are necessary beyond the initial corrective actions, these actions will be completed before the next storm event if possible, and within 14 calendar days from the time of

discovery. A description of the action will be included in corrective action documentation. Where the corrective action results in changes to any of the controls or procedures documented in the SWPPP, the SWPPP will be modified within 14 calendar days of completing the corrective action.

If completion of corrective action cannot be completed within the timeframe described above, additional conditions will apply as described in Appendix F, Corrective Action Procedure.

7.3.4 RGP Part 2.5.2 - Quality Assurance/Quality Control - Permit Section I.C.2.b.(4)

Permit Section I.C.2.b.(4) requires the implementation of quality assurance/quality control procedures in accordance with RGP Part 2.5.2. These procedures include documentation, sample collection and analysis procedures, data validation, reporting and a schedule for data review as described below. The goal of this BMP is to complete a QA/QC specification in accordance with procedures and practices in the Permit and the RGP. Success will be measured by following the QA/QC procedures and obtaining high-quality data that are useful for their intended purposes.

A QA/QC specification was prepared in 2022 and includes the following:

- Description of applicable monitoring requirements
- Map showing the location of each monitoring point with a geographic identifier
- Number of samples, type of sample containers, type of preservation, holding times, type and number of quality assurance field samples (i.e., matrix spiked and duplicate samples and sample blanks), sample preparation requirements (e.g., sampling equipment calibration, clean sampling procedures), and sample storage and shipping methods, including EPA QA/QC and chain-of-custody procedures, and
- Name(s), address(es), and telephone number(s) of the laboratories that will be used for sample testing

The QA/QC specification is revised as needed.

7.3.5 Minimization of Nutrients in Stormwater - Permit Section I.C.2.b.(5)

As required by Permit Section I.C.2.b.(5), PEDA will select, design, implement, and maintain control measures for stormwater associated with WSBP activities to minimize discharge of nutrients, including nitrogen and phosphorus, from the Site to Silver Lake. The goals of this BMP are to prepare specifications for landscaping practices and driveway and parking area sweeping in accordance with the Permit. Success will be measured by contractors following the specifications and timelines outlined in them, reducing nutrients in stormwater, attaining low levels of total suspended and settleable solids in the discharge and by attaining compliance with the non-numeric effluent limits/requirements of the Permit.

A nutrient minimization specification was prepared in 2022 and will be provided to landscape personnel during 2024; the specification has been included in Appendix K. PEDA will monitor adherence to the specification. The specification includes the following:

- Practices to minimize the use of pesticides, herbicides, and fertilizers. Procedures will include requirements for use of slow-release fertilizers on PEDA-owned property, in addition to reducing and managing fertilizer/pesticide/herbicide use (i.e., proper use, storage, and disposal, and using only in accordance with manufacturer's instructions).
- Practices for lawn maintenance and landscaping activities at PEDA-owned property that are
 protective of water quality. Practices include reduced mowing frequency, proper management
 and disposal of grass clippings and leaf litter and use of alternative landscaping materials (e.g.,
 drought resistant planting). Grasses will be mowed to a height no greater than 6 inches and

no lower than 3 to 4 inches. Blowing organic waste materials onto impervious surfaces will be prohibited.

Practices for pavement sweeping.

Please note that PEDA has not determined a routine frequency for street sweeping at the WSBP but the need for sweeping will be evaluated quarterly.

7.4 EXCAVATION OF THE NORTH FOREBAY AND REPAIR OF THE SPILLWAY

The sediment forebays consist of excavated areas designed to slow incoming stormwater runoff and facilitate gravity separation of suspended solids. Stormwater runoff is discharged from the forebays to a water quality basin through and over gravel berms/check dams (aka spillway).

The north forebay at the PEDA Site has captured a significant amount of sediment and has become overrun with vegetation. Plans and specifications were prepared in 2022 to describe the required maintenance and repair work. The plans and specifications were in general conformance with guidance in the Massachusetts stormwater handbook.

During December 2022 Maxymillian Technologies excavated 300 tons of soil/sediment from the north forebay as well as a large amount of vegetation (trees, shrubs, phragmites etc.). In addition to excavation of the north forebay, the north forebay dam/spillway was also repaired. The repairs restored the full function of the north forebay and spillway/dam which were engineered to minimize suspension of sediments, increase the capacity of the forebay and reduce suspended and settleable solids accumulation in the water quality basin.

Sediment was removed down to the gravel floor installed during construction of the forebays and disposed of offsite at an approved receiving facility. The floor and sidewalls of the forebay were stabilized before becoming operational, to avoid discharging excess amounts of suspended sediments. The spillway was restored to its original design conditions. Grasses will be mowed to a height no greater than 6 inches and no lower than 3 to 4 inches. Any vegetation around the forebay damaged during clean-out were reseeded. Reseeding was applied as hydroseed with a tackifier, blanket, or similar practice to ensure that no scour occurs.

A report summarizing these activities has been included in Appendix M.

7.5 SOURCE IDENTIFICATION

Permit Section I.C.2.c.(1) requires identification of potential sources of contamination to stormwater, including the following:

- Residual presence of PCBs in soil and other surfaces exposed to stormwater
- Residual presence of PCBs in stormwater conveyance structures, including pipes and catch basins
- Infiltration of groundwater into the stormwater conveyance system on PEDA property
- Infiltration of groundwater into the water quality basin
- PCBs in sediment in the forebays and water quality basin that may become resuspended
- Onflow from off site that contributes to stormwater discharged to Silver Lake through Outfall 001 and,
- Inflow from illicit connections to the conveyance system

In addition, the conveyance system must be mapped and other contaminants related to PEDA-owned property identified.

PEDA completed the first task (presence of PCBs in soil and other surfaces) in the above list in 2022. Existing data on soil and groundwater quality and the quality of building materials that remain at WSBP have been reviewed and summarized in a tabular form including a figure(s). In addition, as required for disposal facility acceptance, the quality of sediment removed from the north forebay (including PCB content) was evaluated prior to off-site disposal of the material. A narrative report was prepared in 2023 referencing the sources of information used, listing sources that are expected to exist but were not available for review, describing contaminant sources and concentrations in sediment removed from the north forebay and providing recommendations concerning completion of one or more of the source identification tasks. The narrative report indicates that while no sources of pollution were identified through this investigation, there were areas on the WSBP that have not been ruled out as potential sources of PCB contamination. These areas include the following:

- Stormwater conveyance systems located on the former GE 19s complex (WSBP Site 9) were demolished/removed during redevelopment of PEDA Site 9 in 2024. The redevelopment included the removal of historic utilities/infrastructure, removal of concrete walls, cracking of foundations and placement of a demarcation barrier across the entire site. The demarcation barrier was covered with clean soil and all new utilities and infrastructure (including a stormwater management system) were installed in the newly placed clean soil. The stormwater management system includes six small water quality basins, vegetated drainage swales and one 65,290-gallon below grade infiltration basin. The entire site with the exception of three small roadways is vegetated. The stormwater management system is intended to reduce stormwater generated from this portion of the WSBP and only generate discharge during a significant rain event.
- Stormwater conveyance systems located on the former GE 40s Complexe which has not yet been redeveloped or modified following the initial demolition and partial closure of stormwater management systems.
- Subsurface soils on the former GE 19s Complex (WSBP Site 9).
- Surface and subsurface soil on the GE former 40s complex that contain low levels of PCBs (see Table 3).

Additionally, PEDA has not performed a comprehensive study of the inflow of stormwater from the residential and commercial properties or from the CXS railroad catch basin as potential sources of pollution due to the uncontrolled nature of these portions of the stormwater drainage basin.

The source identification report will be updated in 2025 to address changes to PEDA Site 9. A copy of the 2023 narrative report is included in Appendix N.

8.0 RECORDKEEPING AND REPORTING REQUIREMENTS

8.1 REQUIRED MONITORING RECORDS

For all stormwater monitoring and visual assessments, the following information will be recorded and maintained:

- Location (i.e., Outfall 001), date, and time of sampling
- Time the discharge started
- Personnel collecting samples
- Dates and times analyses were initiated
- Personnel or laboratory that performed the analyses
- Analytical techniques or methods used, and

Results of analyses

This information will be documented on the form in Appendix G and the analytical report provided by the MA-certified laboratory performing sample analyses.

Reporting for WET testing will additionally include the following:

- Description of tests including age of test organisms and origin
- Dates and results of standard toxicant test
- Light and temperature regime
- Reference toxicant data
- Other information on test conditions if they are different than specified test procedures
- Chemical/physical data generated (including minimum detection levels and minimum quantification levels)
- Raw data and bench sheets, and
- Other observations or test conditions that affected the results of testing

8.2 RECORDS RETENTION

All records and information from stormwater discharge monitoring activities, including calibration and maintenance records and original strip chart recordings for continuous monitoring instrumentation, copies of reports required by the Permit, and records of data used to complete the application for the Permit, will be retained for a minimum of three years from the date of sampling, measurement, report, or permit application.

8.3 OTHER RECORDS

In addition to the monitoring records and reports, the following additional records will be maintained with the SWPPP:

- Records of revisions and updates to the SWPPP will be documented in the "Record of Summary Changes" found on page v of the Plan.
- Records of Routine Inspections, including corrective actions taken, will be maintained in Appendices I and J for three years from the date of the inspection.
- Documentation of any testing or evaluation for the presence of non-stormwater discharges will be maintained in Appendix B for three years from the date of the evaluation.
- Documentation and correspondence pertaining to any exceedances of an applicable discharge limitation will be maintained in Appendix O for a minimum of three years following the expiration date of the Permit.
- Records of any reportable spills that occurred three years prior to the date of certification of the Plan will be maintained on a log included in Appendix D.

8.4 REPORTING REQUIREMENTS

The results of monthly discharge monitoring data (except for the quarterly visual assessment) conducted pursuant to the Permit will be submitted to the EPA and MassDEP on the electronic Stormwater Discharge Monitoring Report (DMR) (via CDX Data Portal) no later than the 15th day of the month following the completed reporting period.

For a period of one month from the effective date of the permit, PEDA may submit its monthly monitoring data in DMRs to EPA and MassDEP either in hard copy form, or in DMRs electronically submitted using NetDMR. NetDMR is accessed from: https://npdes-ereporting.epa.gov/net-netdmr

If applicable, a hardcopy of the DMR will be submitted to EPA at the following address:

U.S. Environmental Protection Agency
Enforcement and Compliance Assurance Division
Water Compliance Section
5 Post Office Square, Suite 100 (04-SMR)
Boston, MA 02109-3912

If applicable, a hardcopy of the DMR will be submitted to MassDEP at the following address:

Massachusetts Department of Environmental Protection
Bureau of Water Resources
Division of Watershed Management
8 New Bond Street
Worcester, Massachusetts 01606

Beginning no later than one month after the effective date of the Permit, monthly DMRs will be reported using NetDMR. After PEDA begins submitting DMR reports to EPA electronically using NetDMR, PEDA will electronically submit all reports to EPA as NetDMR attachments rather than as hard copies. Because the due dates for reports described in the Permit may not coincide with the due date for submitting DMRs (which is no later than the 15th day of the month), a report submitted electronically as a NetDMR attachment will be considered timely if it is electronically submitted to EPA using NetDMR with the next DMR due following the particular report due date specified in this Permit.

PEDA will send hard copies of all WET test reports to the MassDEP, Division of Watershed Management, at the following address:

Massachusetts Department of Environmental Protection
Bureau of Water Resources
Division of Watershed Management
8 New Bond Street
Worcester, Massachusetts 01606

The following requests, reports, and information described in the Permit will be submitted to EPA and to MassDEP as described below:

- Transfer of Permit notice
- Request for changes in sampling location
- Request for reduction in testing frequency
- Request for reduction in WET testing requirements
- Report on unacceptable dilution water or requests for alternative dilution water for WET testing
- SWPPP Certification, and
- Reports specified in Part I.C.3. of the Permit (Appendix A), Compliance Schedule

The above reports, information, and requests will be submitted to EPA Water Department electronically at RINPDESReporting@epa.gov or by hard copy mail to the following address:

U.S. Environmental Protection Agency Water Division NPDES Applications Coordinator 5 Post Office Square, Suite 100 (06-03) Boston, MA 02109-3912 The above reports, information and requests will also be submitted electronically to MassDEP SWD Permitting program at <u>MassDEP.NPDES@mass.gov</u>.

Verbal reports and notifications will be made to EPA at (617) 918-1510 and to MassDEP at (888) 304-1133.

The following will apply for submittal of reports in hard copy:

Written notifications and reports concerning planned Site modifications and anticipated noncompliance with the Permit will be signed and dated originals, submitted in hard copy, with a cover letter describing the submission. The information will be submitted to EPA at the following address:

U.S. Environmental Protection Agency
Enforcement and Compliance Assurance Division
Water Compliance Section
5 Post Office Square, Suite 100 (04-SMR)
Boston, MA 02109-3912

Beginning December 21, 2025, these notifications will be completed electronically using EPA's NPDES Electronic Reporting Tool ("NeT"), or another approved EPA system, which will be accessible through EPA's Central Data Exchange at https://cdx.epa.gov/.

8.5 REPORTS OF ADDITIONAL MONITORING

If PEDA monitors any pollutant more frequently than required by the Permit using test procedures approved under 40 C.F.R. § 136, or another method required for an industry-specific waste stream under 40 CFR Subchapters N or O, the results of such monitoring will be included in the calculation and reporting of data submitted in the DMR form specified by the Directors of MassDEP and EPA.

8.6 PLANNED SITE MODIFICATIONS

PEDA will give advance notice to MassDEP and EPA of any planned changes at WSBP or activities at WSBP that may result in noncompliance with Permit requirements.

PEDA will give notice to MassDEP and EPA as soon as possible of any planned physical alterations or additions to the Site. Notice is only required when:

- The alteration or addition may meet one of the criteria for determining whether a facility is a new source defined at 40 CFR §122.29(b).
- The alteration or addition could significantly change the nature of and/or increase the quantity of pollutants discharged.

8.7 REPORTING PERMIT VIOLATIONS

Non-compliance which may endanger health or the environment will be reported orally within 24 hours of discovery to MassDEP and EPA, followed by a written report within 5 days of discovery. Written reports will include the following:

- A description of the noncompliance and its cause.
- The period of noncompliance, including dates and times.
- If the noncompliance has not been corrected, the anticipated time it is expected to continue and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.

The Directors of MassDEP and EPA may waive the written report on a case-by-case basis for reports if the oral report is received within 24 hours.

8.8 SPILL REPORTING REQUIREMENTS

Any person observing evidence of a spill or leak of oil or hazardous material (or the potential for a spill or leak) at WSBP must immediately report it to Site personnel who will notify members of the Spill Prevention Team.

Where a leak, spill or other release containing a hazardous substance or oil in an amount equal to or in excess of a reportable quantity established under MassDEP requirements at 40 CFR Part 110, 40 CFR Part 117, or 40 CFR Part 302, occurs during a 24-hour period, an authorized PEDA representative will notify the National Response Center (NRC) at (800) 424-8802 in accordance with the requirements of 40 CFR Part 110, 40 CFR Part 117, and 40 CFR Part 302 as soon as knowledge of the discharge is known. MassDEP will also be notified.

The following information concerning the spill will be reported:

- Date, time, location, and cause of the incident.
- Quantity and type of substance, material or waste spilled.
- Name and address of the owner and the person making the report.
- Measures that were undertaken to mitigate and cleanup the spill.

9.0 CORRECTIVE ACTIONS

When any of the conditions described below are observed/detected during an inspection, monitoring or other means, or EPA informs PEDA that any of the following conditions have occurred, PEDA will review and revise, as appropriate, the SWPPP (e.g., sections related to sources of pollution, spill and leak procedures, non-stormwater discharges, the selection, design, installation and implementation of stormwater control measures) so that Permit effluent limits are met and pollutant discharges are minimized:

- An unauthorized release or discharge (e.g., spill, leak, or discharge of non-stormwater not authorized by the Permit) occurs to the Stormwater Management System.
- A discharge violates a numeric effluent limit listed in the table in Section 6.2.2 of this Plan.
- Stormwater control measures are not sufficient to meet numeric or non-numeric effluent limits/requirements in Sections I.A.1 (i.e., reporting of concentrations of various constituents, not meeting effluent limitations) and I.C.2.a (required BMPs) in the Permit, or Silver Lake water not meeting applicable water quality standards.
- A required control measure was not installed, was installed incorrectly, is not in accordance with the MSGP (Parts 2 or 8) or is not being properly operated or maintained.
- Whenever a visual assessment shows evidence of stormwater pollution (e.g., unusual color, odor, floating solids, settled solids, suspended solids, foam).

A Corrective Action Procedure has been prepared and is retained in Appendix F.

10.0 UPDATING THE PLAN

PEDA will amend and update the SWPPP within 14 days of any changes at WSBP and as described in other sections the Plan. Changes that may affect the SWPPP include the following:

- Conditions or circumstances described in other sections of the Plan.
- A change in construction, operation, or maintenance, which may have a significant effect on the potential for the discharge of pollutants.
- A release of a reportable quantity of pollutants as described in 40 CFR § 302.
- A determination by PEDA or EPA that the SWPPP appears to be ineffective in achieving the general objective of controlling pollutants in stormwater discharges associated.
- Revisions or improvements are made to the stormwater management program based on new information and experiences with wet weather events.

Any amended, modified, or new versions of the SWPPP will be re-certified and signed by PEDA's authorized representative. In addition, at least annually, PEDA will certify in an updated SWPPP that required inspections, control measures and training activities completed during the previous year were conducted, results recorded and maintained. Annual certifications are retained in Appendix P.

11.0 DOCUMENTATION PERTAINING TO OTHER FEDERAL LAWS

11.1 ENDANGERED SPECIES ACT-LISTED THREATENED AND ENDANGERED SPECIES AND CRITICAL HABITAT PROTECTION

As described in the Permit, EPA consulted with the National Marine Fisheries Services (NMFS) since issuance of the Permit might adversely impact an essential fish habitat (EFH) quality and/or quantity. Since Silver Lake and downstream Housatonic River are not covered by the EFH designation, the EPA determined that a formal EFH consultation with NMFS is not required.

Also as described in the Permit, in accordance with requirements of the Endangered Species Act (ESA), EPA reviewed the federal endangered and threatened species of fish and wildlife to determine if any listed species might potentially be impacted by issuance of the Permit. The review revealed that the only federally protected species that merited further evaluation was the bog turtle (*Clemmys muhlenbergii*).

PEDA discharges stormwater, and groundwater infiltrates, into Silver Lake, which discharges into the East Branch of the Housatonic River. The bog turtle has been identified in Egremont and Sheffield, Massachusetts, which are approximately 25 miles away from Pittsfield. The bog turtle is found in wet meadows and would not likely be found in an open lake, therefore if the species were to be found closer to the Pittsfield area, it is unlikely that it would come into contact with the PEDA discharge. Based on the permit conditions and the absence of listed species in the vicinity of the discharge, EPA determined that issuance of the Permit will have no effect on this species.

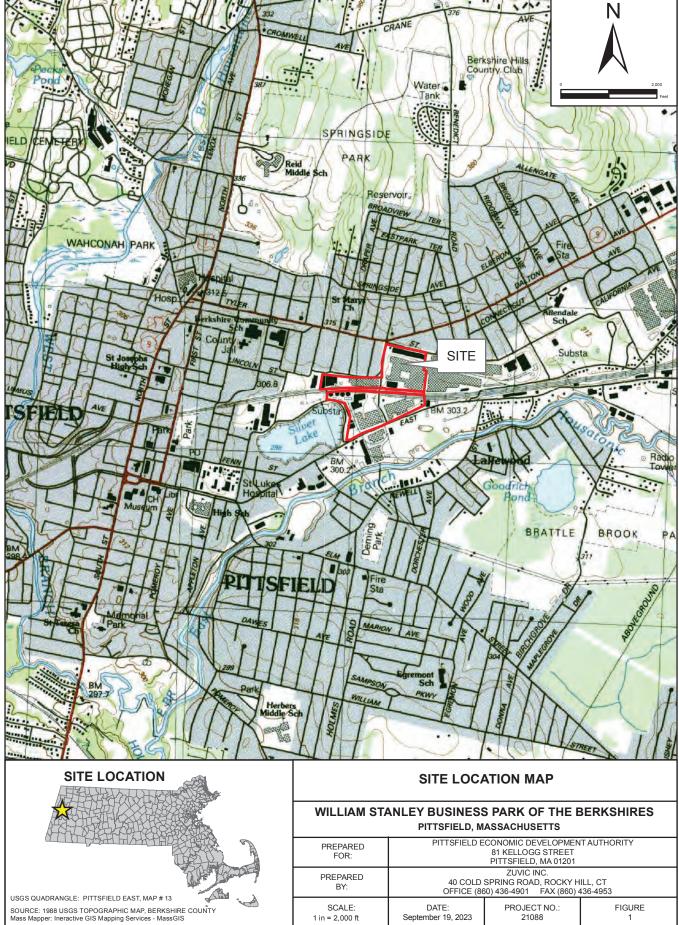
11.2 NATIONAL HISTORIC PRESERVATION ACT

PEDA is not aware of the presence of historic properties within WSBP. The presence of historic properties within municipal and privately-owned land in the northern portion of the drainage area is unknown.

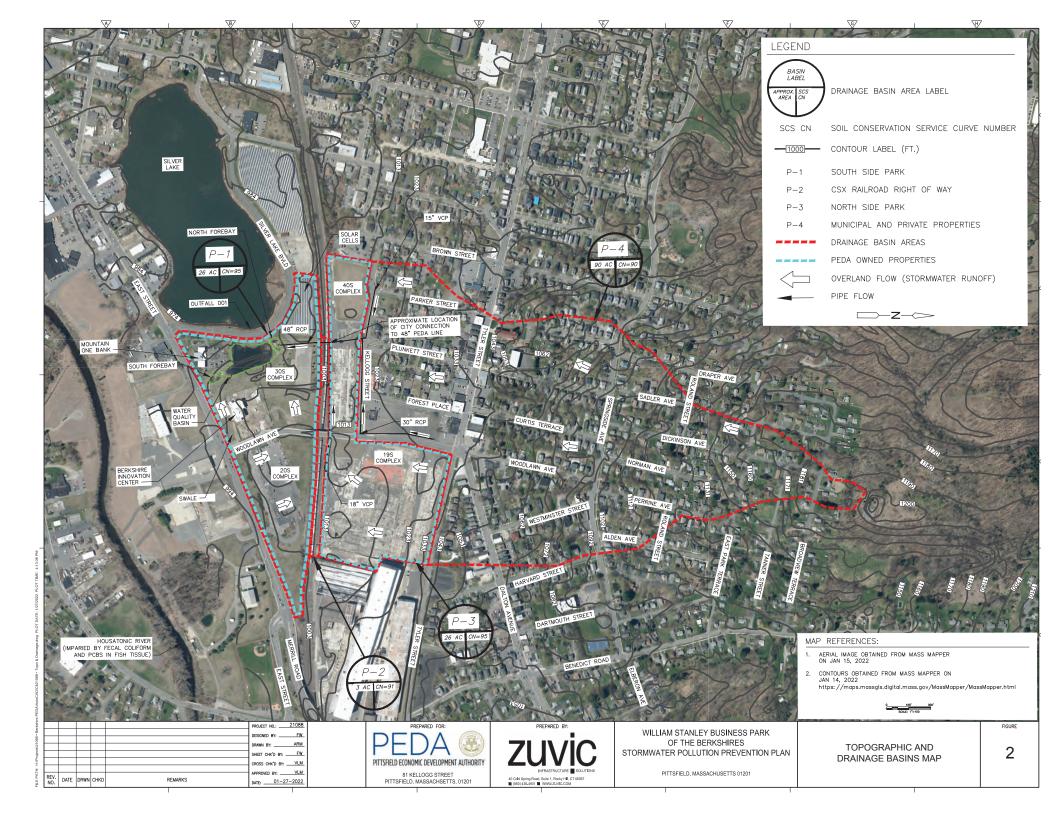
If determinations of eligibility under the National Historic Preservation Act (NHPA) or through the Massachusetts State Historic Preservation Office (SHPO) under Massachusetts Regulation 950 CMR 71 have not been previously completed for the drainage area, such determinations may be required. However, since current activities at the Site pertinent to requirements under NHPA and the Massachusetts- equivalent program are not underway, it is unlikely that NHPA or SHPO determinations are required, especially since EPA did not make such a determination when evaluating Permit issuance. Activities that could be subject to NHPA and equivalent Massachusetts regulations include new construction and expansion projects, alteration or renovation projects on existing historic buildings or structures, interior renovations on buildings over 50 years old, or ground disturbances on historic properties.

Furthermore, as stated in MSGP Appendix F – Procedures Relating to Historic Properties Preservation, EPA concluded that issuance of stormwater permits for the majority of sites have no potential to have effects on historic properties. Since the purpose of the MSGP is to control pollutants that may be transported in stormwater runoff from industrial facilities, EPA does not anticipate effects on historic properties from the pollutants in stormwater and allowable non-stormwater discharges from these facilities. To the extent that the MSGP authorizes discharges confined to existing stormwater channels or natural drainage areas, the permitting action does not have the potential to cause effects on historic properties.

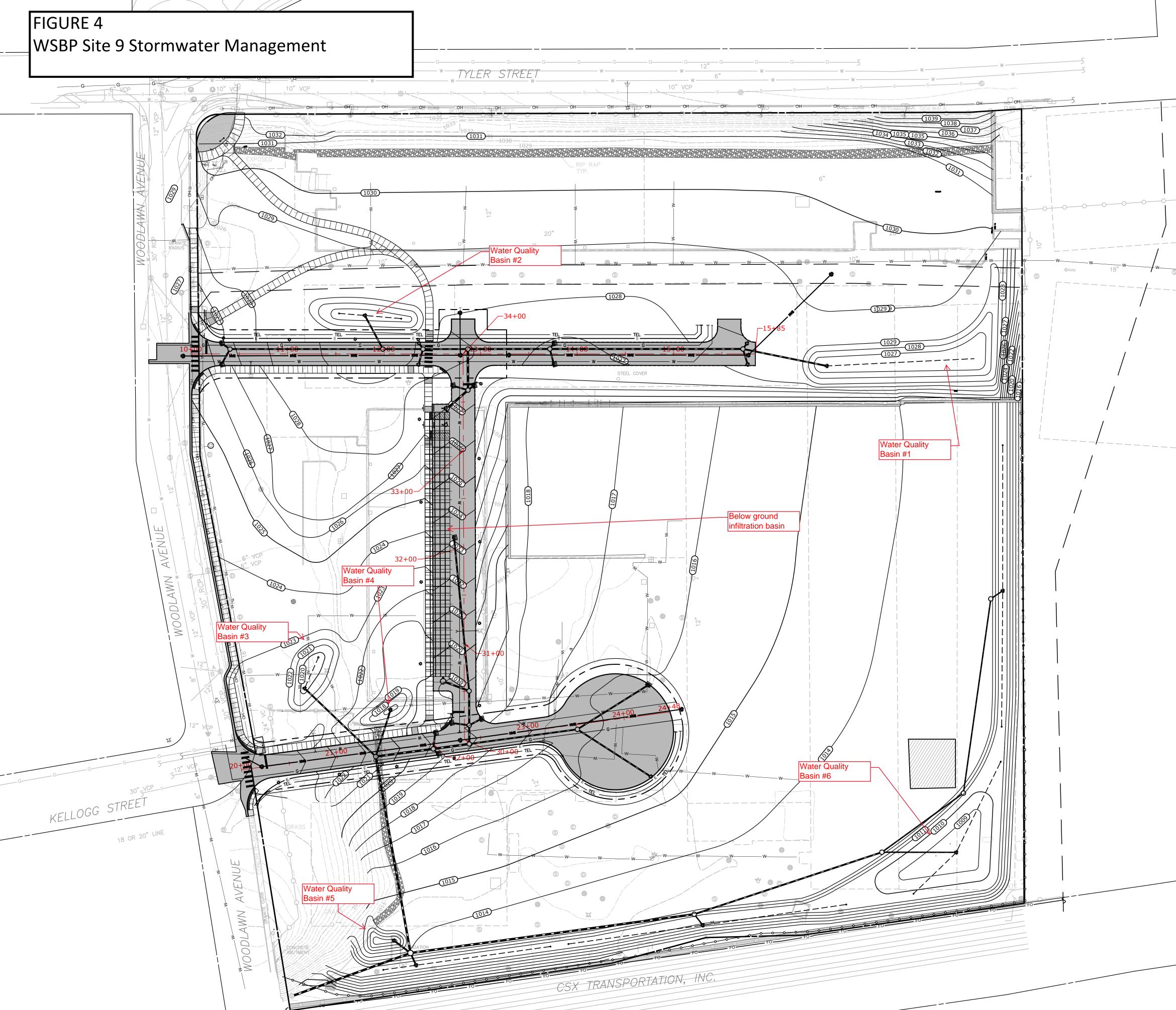




ROJECT NUMBER: 21088/ DATE: JANUARY 19, 2022/ FILE NAME: SITE LOCAT









AUTHORIZATION TO DISCHARGE UNDER THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

In compliance with the provisions of the Federal Clean Water Act as amended (33 U.S.C. §1251 et seq.; the "CWA"), and the Massachusetts Clean Waters Act, as amended, (M.G.L. Chap. 21, §§26-53),

Pittsfield Economic Development Authority 81 Kellogg Street Pittsfield, Massachusetts 01201

is authorized to discharge from the facility located at

William Stanley Business Park of the Berkshires Generally bounded by East Street, Silver Lake Boulevard, Kellogg Street, and Tyler Street Pittsfield, Massachusetts 01201

to receiving waters named the

Silver Lake (Housatonic River Watershed)

in accordance with effluent limitations, monitoring requirements and other conditions set forth herein This permit shall become effective on November 1, 2021.

This permit expires at midnight on October 31, 2026.

This permit supersedes Permit MA0003891 that became on effective February 7, 1992.

This permit consists of 17 pages in Part I including effluent limitations and monitoring requirements; Attachment A (Freshwater Acute Toxicity Test Procedure and Protocol (February 2011), Attachment B: Site Map, and 25 pages in Part II including Standard Conditions.

Signed this day of

KENNETH Digitally signed by KENNETH MORAFF Date: 2021.08.18 11:35:54-04'00'

Ken Moraff, Director Water Division Environmental Protection Agency Boston, MA Lealdon Langley, Director

Division of Watershed Management Department of Environmental Protection Commonwealth of Massachusetts

Boston, MA

PART I

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

1. During the period beginning the effective date and lasting through expiration, the permittee is authorized to discharge treated stormwater and groundwater through outfall serial number 001 to Silver Lake. The discharge will be limited and monitored by the permittee as specified below.

Effluent Characteristic	Unit	Discharge Limitation		Monitoring Requirement ^{1,2}	
Parameter		Average Monthly	Maximum Daily	Measurement Frequency ³	Sample Type
Flow ⁴	MGD	Report	Report	When Discharging	Meter or Estimate
Oil and Grease	mg/L	Report	15	1/Month	Grab
TSS	mg/L	30	100	1/Month	Grab
pH ⁵	6.5 – 9.0 S.U.		1/Month	Grab	
Escherichia coli	cfu/100 ml	Report	Report	1/Year	Grab
Total Nitrogen	mg/L lb/day		Report	2/Year	Grab
PCBs, Total 6,7	μg/L	Report	Report	1/Month	Grab
Whole Effluent Toxicity ^{8,9,10}		Acute LC50 – Report	,		
Total Hardness Total Suspended Solids Specific Conductance Ammonia Nitrogen Total Residual Chlorine Total Cadmium Total Chromium Total Lead Total Copper Total Zinc Total Aluminum	mg/L mg/L µmhos/cm mg/L µg/L µg/L µg/L µg/L µg/L µg/L µg/L	Report	Report	2/Year	Grab

Footnotes:

- 1. Samples shall be collected from the box culvert that receives final effluent from the water quality basin, unless otherwise specified. Samples shall be representative of the discharge.
- 2. In accordance with 40 C.F.R. § 122.44(i)(1)(iv), the Permittee shall monitor according to sufficiently sensitive test procedures (i.e., methods) approved under 40 C.F.R. Part 136 or required under 40 C.F.R. chapter I, subchapter N or O, for the analysis of pollutants or pollutant parameters (except WET). A method is "sufficiently sensitive" when: 1) The method minimum level (ML) is at or below the level of the effluent limitation established in the permit for the measured pollutant or pollutant parameter; or 2) The method has the lowest ML of the analytical methods approved under 40 C.F.R. Part 136 or required under 40 C.F.R. chapter I, subchapter N or O for the measured pollutant or pollutant parameter. The term "minimum level" refers to either the sample concentration equivalent to the lowest calibration point in a method or a multiple of the method detection limit (MDL), whichever is higher. Minimum levels may be obtained in several ways: They may be published in a method; they may be based on the lowest acceptable calibration point used by a laboratory; or they may be calculated by multiplying the MDL in a method, or the MDL determined by a laboratory, by a factor.
- 3. Measurement frequency of 1/month is defined as the sampling of one discharge event in each calendar month. Measurement frequency of 1/year is defined as the sampling of one discharge event during one calendar year. If no sample is collected during the measurement frequencies defined above, the Permittee must report an appropriate No Data Indicator Code.
- 4. Report the monthly average and maximum daily flows. The monthly average flow is defined as the average flow per day of discharge. Also, report the flow from Outfall 001 and precipitation measured at the Pittsfield Airport or another nearby site for each day of the month as an attachment to the DMR. In the event of inclement weather, the permittee is allowed to estimate flow.
- 5. The pH of the effluent shall not be less than 6.5 standard units (S.U.) nor greater than 9.0 SU at any time. Please see Section I.C.4 of this permit for information on requirements for maintaining this pH limit range in future permits.
- 6. The minimum level (ML) for analysis for total PCBs shall be no greater than the published ML of $0.095~\mu g/L$ using EPA test method 608.3, unless the permittee requests, and EPA approves an alternate test method in accordance with Part 136.5. Provide the results of PCB analyses as the sum of Aroclors.
- 7. If EPA publishes a multi-lab validated method for PCBs in wastewater in 40 CFR Part 136 within the permit term that either replaces EPA test method 608.3 or achieves a ML less than the ML of EPA test method 608.3, the Permittee shall use that test method for reporting of PCBs in the effluent. This requirement takes effect beginning six months

after EPA notifies the Permittee that the updated PCB analytical method is available. Provide the results of PCB analyses as the sum of analyzed compounds.

8. Conduct acute toxicity tests twice per year. Test the daphnid, *Ceriodaphnia dubia*, and the fathead minnow, *Pimephales promelas*. Perform the tests in accordance with test procedures and protocols specified in **Attachment B** of this permit. After five years following the effective date of the permit and 10 valid test results (i.e., in the event the permit is administratively continued), the sampling frequency for WET testing shall be reduced to once every two years. The once every two years sample shall be collected in April. Sampling shall be performed concurrently with the monthly monitoring event.

Test Dates	Submit Results By:	Test Species	LC50
April October	the 30 th day of the month following the test	Ceriodaphnia dubia (daphnid) Pimephales promelas (fathead minnow)	Report

- 9. The LC50 is the concentration of effluent which causes mortality to 50% of the test organisms.
- 10. If toxicity test(s) using receiving water as diluent show the receiving water to be toxic or unreliable, either follow procedures outlined in Attachments B (Toxicity Test Procedure and Protocol) Section IV., DILUTION WATER in order to obtain an individual approval for use of an alternate dilution water.

Part I.A., continued

- 2. The discharge shall not cause a violation of the water quality standards of the receiving water.
- 3. The discharge will not cause objectionable discoloration of the receiving waters.
- 4. The effluent will contain neither a visible oil sheen, foam, nor floating solids at any time.
- 5. All existing manufacturing, commercial, mining, and silvicultural dischargers must notify EPA as soon as they know or have reason to believe (40 CFR § 122.42):
 - a. That any activity has occurred or will occur which would result in the discharge, on a routine or frequent basis, of any toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels":
 - (1) 100 micrograms per liter ($\mu g/L$);
 - (2) 200 μg/L for acrolein and acrylonitrile; 500 μg/L for 2,4-dinitrophenol and for 2-methyl-4,6-dinitrophenol; and one milligram per liter (mg/L) for antimony;

- (3) Five times the maximum concentration value reported for that pollutant in the permit application in accordance with 40 CFR § 122.21(g)(7); or
- (4) Any other notification level established by EPA in accordance with 40 CFR § 122.44(f) and State regulations.
- b. That any activity has occurred or will occur which would result in the discharge, on a non-routine or infrequent basis, of any toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels":
 - (1) $500 \mu g/L$;
 - (2) One mg/L for antimony;
 - (3) 10 times the maximum concentration value reported for that pollutant in the permit application in accordance with 40 CFR § 122.21(g)(7); or
 - (4) Any other notification level established by EPA in accordance with 40 CFR § 122.44(f) and State regulations.
- c. That they have begun or expect to begin to use or manufacture as an intermediate or final product or byproduct any toxic pollutant which was not reported in the permit application.
- 6. Properly operate and maintain all treatment systems.

7. Toxics Control

- a. The permittee will not discharge any pollutant or combination of pollutants in toxic amounts.
- b. Any toxic components of the effluent will not result in any demonstrable harm to aquatic life or violate any state or federal water quality standard which has been or may be promulgated. Upon promulgation of any such standard, this permit may be revised or amended in accordance with such standards.

8. Numerical Effluent Limitations for Toxicants

EPA or the MassDEP may use the results of the toxicity tests and chemical analysis conducted pursuant to this permit, as well as national water quality criteria developed pursuant to Section 304(a) (1) of the Clean Water Act (CWA), state water quality criteria, and any other appropriate information or data, to develop numerical effluent limitations for any pollutants, including but not limited to those pollutants listed in Appendix D of 40 CFR § 122.

B. REOPENER CLAUSE

The results of sampling required by the permit shall constitute new information within the meaning of 40 CFR § 122.62(a)(2) and shall be assessed by EPA during the term of the permit. If the results demonstrate that the permit as written is insufficiently stringent to comply with applicable water quality standards for toxics, including PCBs, EPA may re-open and modify the permit's terms to impose additional BMPs and/or numeric effluent limitations sufficient to ensure compliance with such water quality standards.

C. SPECIAL CONDITIONS

1. STORMWATER POLLUTION PREVENTION PLAN (SWPPP)

The Permittee shall develop a Stormwater Pollution Prevention Plan (SWPPP) to document the selection, design, installation, and maintenance of control measures, including BMPs, selected to meet the effluent limitations required in this permit, and Parts 2.1.2 and 9.10.7.2 of EPA's 2021 Multi-Sector General Permit (MSGP) for Stormwater Discharges Associated with Industrial Activities. The SWPPP shall be a written document that is consistent with the terms of this permit designed to reduce, or prevent, the discharge of pollutants from the site to the receiving water. Additionally, the SWPPP shall serve as a tool to document the permittee's compliance with the terms of this permit.

- a. The Permittee shall develop and certify the SWPPP in accordance with the signatory requirements in 40 CFR §122.22 and Part II. D.2 of this permit within 90 days after the effective date of this permit. The Permittee shall submit a copy of this initial certification to EPA and MassDEP within 120 days of the effective date of this permit in accordance with Part I.D.2 and 3 of this permit.
- b. The SWPPP shall be consistent with the general provisions for SWPPPs included in Part 6 of EPA's 2021 MSGP. The SWPPP shall be prepared in accordance with good engineering practices and manufacturer's specifications. Specifically, the SWPPP shall contain the elements listed in Parts 6.2.1 through 6.2.5 of EPA's 2021 MSGP and as briefly listed below:
 - (1) A stormwater pollution prevention team;
 - (2) A site description;
 - (3) A drainage area site map;
 - (4) A summary of known and potential pollutant sources;
 - (5) A description of all stormwater control measures (e.g., BMPs); and
 - (6) Schedules and procedures for implementation of stormwater control measures, including the BMPs described below, inspections, assessments, and monitoring.
- c. The Permittee shall amend and update the SWPPP within 14 days of any changes at the site affecting the SWPPP. Changes that may affect the SWPPP include, but are not limited to: a change in design, construction, operation, or maintenance, which has a significant effect on the potential for the discharge of pollutants to the waters of the United States; a release of a reportable quantity of pollutants as described in 40 CFR § 302; a determination by the Permittee or EPA that the SWPPP appears to be ineffective in achieving the general objective of controlling pollutants in stormwater discharges associated; and revisions or improvements are made to the stormwater management program based on new information and experiences with wet weather events. Any amended, modified, or new versions of the SWPPP shall be re-certified

¹ The 2021 MSGP is currently available at: https://www.epa.gov/npdes/stormwater-discharges-industrial-activities-epas-2021-msgp.

and signed by the Permittee. Such re-certifications also shall be signed in accordance with the requirements identified in Part II.D.2 of this Permit.

- d. The Permittee shall certify at least annually that the previous year's required inspections, control measures, and training activities were conducted, results were recorded, and records were maintained, as described. If the facility is not in compliance with any limitations of this permit, the annual certification shall state the non-compliance and the remedies that are or will be undertaken. Such annual certifications also shall be signed in accordance with the requirements identified in Part II.D.2 of this permit. The Permittee shall keep a copy of the current SWPPP and all SWPPP certifications (i.e., the initial certification, re-certifications, and annual certifications) signed during the effective period of this permit at the site, and shall make these available for inspection by EPA. In addition, document in the SWPPP any violation of numerical or non-numerical stormwater effluent limits with a date and description of the corrective actions taken.
- e. The Permittee shall keep all documentation of SWPPP activities shall be kept at the site for at least three years and provided to EPA upon request. EPA may extend this period and, if extended, will provide confirmation in writing to the Permittee.

2. BEST MANAGEMENT PRACTICES (BMPs)

- a. The Permittee shall select, design, implement, and maintain control measures (e.g., BMPs) to minimize the discharge of pollutants in stormwater to waters of the United States. At a minimum, the Permittee must implement both structural controls (e.g., conveyance infrastructure and containment areas) and non-structural controls (e.g., operational procedures and operator training) consistent with those described in Part 2.1.2 of EPA's 2021 MSGP. The control measures must ensure the following effluent limitations are met:
 - (1) Minimize exposure of former industrial activity areas to stormwater discharges.
 - (2) Design good housekeeping measures to maintain areas that are potential sources of pollutants.
 - (3) Implement preventative maintenance programs to avoid leaks, spills, and other releases of pollutants in wastewater discharged to receiving waters.
 - (4) Implement spill prevention and response procedures to ensure effective response to spills and leaks if or when they occur.
 - (5) Design erosion and sediment controls to stabilize exposed areas and contain runoff using structural and/or non-structural control measures to minimize onsite erosion and sedimentation, and the resulting discharge of pollutants.
 - (6) Utilize stormwater management practices to divert, reuse, contain, or otherwise reduce stormwater runoff to minimize pollutants in the discharge.
 - (7) Enclose or cover storage piles for salt or materials containing chlorides that are used for snow and ice control.
 - (8) Conduct employee training to ensure personnel understand the requirements of this permit;

- (9) Evaluate for the presence of non-stormwater discharges. Any non-stormwater discharges not explicitly authorized in the permit or covered by another NPDES permit must be eliminated; and
- (10) Minimize dust generation and vehicle tracking of industrial materials.
- b. The control measures must include, at a minimum, the following components:
 - (1) The Permittee shall implement the control measure requirements in Part 2.1 and 2.1.1 of EPA's 2021 Multi-Sector General Permit (MSGP)² to identify pollutant sources, and select, design, install and maintain the pollution control technology necessary to meet the effluent limitations in the permit that ensure dilution is not used as a form of treatment;³
 - (2) The Permittee shall implement the inspection requirements in Part 3.1 and 3.2 of the 2021 MSGP to conduct routine site inspections;
 - (3) The Permittee shall implement the corrective action requirements in Part 5.1.1 through 5.1.4 of the 2021 MSGP if at any time the Permittee becomes aware, or EPA determines, that the discharge exceeds any effluent limitation, or does not meet applicable water quality standards;⁴
 - (4) The Permittee shall implement the quality assurance/quality control BMP in Part 2.5.2 of EPA's 2017 RGP⁵ to document monitoring requirements, sample collection procedures, sample analysis procedures,⁶ a schedule for the review of sample results, and data validation and reporting processes.
 - (5) The Permittee shall select, design, implement, and maintain control measures for stormwater associated with site activities to minimize the discharge of nutrients, including nitrogen and phosphorus, from the site to the receiving water. The following BMPs shall be implemented, at a minimum.
 - i. Procedures to minimize the use of pesticides, herbicides, and fertilizers. Procedures must include requirements for use of slow release fertilizers on permittee-owned property, in addition to reducing and managing fertilizer use (i.e., the proper use, storage, and disposal of pesticides, herbicides, and using only in accordance manufacturer's instructions).
 - ii. Practices for lawn maintenance and landscaping activities that are protective of water quality. Practices include reduced mowing frequencies, proper management and disposal of grass clippings and leaf litter, and use of alternative landscaping materials (e.g., drought resistant planting). Blowing organic waste materials onto adjacent impervious surfaces is prohibited.

 $^{2\} The\ 2021\ MSGP\ is\ currently\ available\ at:\ \underline{https://www.epa.gov/npdes/stormwater-discharges-industrial-activities-epas-2021-msgp}.$

³ See Part 2.5.2.d of the 2017 RGP for example technologies and additional resources.

⁴ Where the MSGP refers to limitations, conditions or benchmarks, including the SWPPP, for the purposes of this permit, these shall refer to the limitations and conditions in this permit.

⁵ The 2017 RGP is currently available at: https://www.epa.gov/npdes-permits/remediation-general-permit-rgp-massachusetts-new-hampshire.

⁶ Sample analysis must comply with the *National Pollutant Discharge Elimination System (NPDES): Use of Sufficiently Sensitive Test Methods for Permit Applications and Reporting Rule. See* Fed. Reg. 49,001 (Aug. 19, 2014).

- iii. Routine street sweeping program. The minimum frequency is monthly.
- c. The Permittee shall select, design, implement, and maintain control measures to eliminate discharges of PCBs from the site to the receiving water through an iterative approach over the permit term, which must include the following components, at a minimum.

(1) Source Identification

The Permittee shall identify the components of the conveyance system and trace the components that contribute PCBs to the discharge. Specifically, the conveyance system must be accurately mapped and the sources of PCBs, or other site-related contaminants of concern, contributing to the Outfall 001 must be specifically identified. The following potential sources must be evaluated, at a minimum:

- i. Residual presence of PCBs in soils, and other surfaces exposed to stormwater;
- ii. Residual presence of PCBs in pipes, catch basins, and other conveyance system structures;
- iii. Infiltration of groundwater into the conveyance system on PEDA property;
- iv. Infiltration of groundwater directly into the water quality basin;
- v. PCBs in sediment in the forebays and water quality basin being resuspended;
- vi. Onflow from offsite that contributes to the Outfall 001 conveyance system; and
- vii. Inflow from illicit connections to PEDA's conveyance system.

EPA notes that the permittee may rely on existing site characterization to the extent that it meets the listed source identification requirements. The permittee shall use the results of this evaluation to prioritize the implementation of BMPs as appropriate.

(2) Optimization

The Permittee shall evaluate, select, design, implement, and maintain abatement and removal BMPs for existing infrastructure as follows:

- i. Remove accumulated solids from the existing conveyance system, including, but not limited to: trunkline inlets/manholes, catch basins, sediment traps, sumps, which must include all of the 20s and 30s complex areas and Woodlawn Avenue adjacent to the 20s and 30s complex where owned or controlled by the Permittee, at a minimum;
- ii. Remove accumulated solids from the existing forebays, and water quality basin;
- iii. Complete line cleaning operations (e.g., jetting, vacuuming, removal, loading, storage, and/or transport), which must include the trunk line,

- manholes DMH 396 and DMH 27, and any remaining storm drain lines in the 40s to DMH 27;
- iv. Conduct street sweeping at paved areas, which must include all of the 20s and 30s complex and Woodlawn Avenue adjacent to the 20s and 30s complex, at a minimum;
- v. Dispose of removed storm drain solids and liquids in accordance with applicable laws and regulations and document in the SWPPP;
- vi. Enhance storage capacity of the water quality basin through upstream engineering controls, including, but not limited to: remotely controlled discharge valves, in-pipe and/or aboveground water storage, reuse systems, and passive remediation measures (e.g., infiltration through engineered media, targeted infiltration);
- vii. Enhance storage capacity of the existing water quality basin;
- viii. Inspect and evaluate the effectiveness of the optimization measures taken through routine site inspections, referenced in Part I.C.2.c.(2), and evaluation, described below, in Part I.C.2.c.(5).

These BMPs must be consistent with those found in Part 9.10.7.2 of EPA's 2021 MSGP,⁷ which specifies Additional Effluent Limits for Discharges to Certain Impaired Waters and Sediment Cleanup Sites applicable to discharges to either directly or indirectly through a stormwater drainage system.

(3) Minimization

The Permittee shall evaluate, select, design, implement, and maintain control measures (i.e., BMPs) that eliminate or otherwise minimize (i.e., non-detect) the discharge of PCBs to the receiving water. Minimization must address source control and elimination of PCBs from contaminated soils, sediments, stormwater and groundwater entering the conveyance system via inflow and infiltration, as follows:

- i. Disconnect the existing conveyance system identified as contributing PCBs to the discharge, including, at a minimum the current infrastructure from the Teens area through the 40s complex at the location where it combines with the City system that proceeds onto the Water Quality Basin and Outfall 001(e.g. to BMH 396), and must include: lines/trunkline, manholes, catch basins, sediment traps, and sumps; or
- ii. Reline, recondition, replace or abandon in place existing conveyance system identified as contributing PCBs to the discharge, including, at a minimum the current infrastructure from the Teens area through the 40s complex at the location where it combines with the City system that proceeds onto the Water Quality Basin and Outfall 001(e.g. to BMH 396);

⁷ EPA-821-R-04-014 is currently available at: https://www.epa.gov/eg/effluent-guidelines-plan-support-documents; The 2021 MSGP is currently available at: https://www.epa.gov/npdes/stormwater-discharges-industrial-activities-epas-2021-msgp. The 2017 RGP is currently available at: https://www.epa.gov/npdes-permits/remediation-general-permit-rgp-massachusetts-new-hampshire.

- iii. If other modification is determined equivalent to elimination of PCB contributions (e.g., installation of active or passive treatment, diverting significant sources to sanitary sewer), notification must be provided to EPA for concurrence.
- iv. Any future stormwater management infrastructure shall consist solely of new or slip lined stormwater piping.

(4) Design Standards

The Permittee shall evaluate, select, design, implement, and maintain design standards (e.g., procedures and protocols) that eliminate the discharge of PCBs during and following site redevelopment as follows:

- i. Establish a frequency for routine cleaning for the conveyance system, including, but not limited to: trunkline inlets/manholes, catch basins, sediment traps, sumps, no less than annually, and that will ensure that no component shall be more than 50 percent full;
- ii. Implement a frequency for routine cleaning for the forebays, and water quality basin, no less than annually, and that ensures proper operation and that will ensure the average thickness of debris does not exceed 12 inches in the forebays and the calculated pool volume in the water quality basin is not reduced by more than 25% due to sediment accumulation;
- iii. Establish a frequency for routine street sweeping, no less than twice per year
- iv. If any redevelopment results in new pavement, new catch basins, or new sediment treatment systems in the teens or 40s complexes, implement the optimization measures specified above for the existing infrastructure.
- v. Utilize green infrastructure measures where practicable, such as streetscapes, vacant lots, riparian corridors, green roof systems, cisterns, bioswales and biobasins, and porous paving;
- vi. Reuse runoff, where practicable, for irrigation, toilet flushing, and other site needs that may exist, including beneficial reuse of stored volumes; and
- vii. Minimize the hydraulic gradient that draws contaminated groundwater into the system, where practicable.

(5) Evaluation

The Permittee shall implement ongoing evaluation. Specifically, the Permittee must maintain an accurate site plan depicting all drainage features and connections to the conveyance system. In addition, routine sampling for PCBs must be conducted no less than annually to assess areas to prioritize BMPs and to evaluate the effectiveness of BMPs, design standards, and procedures and protocols. Finally, the permittee must conduct representative sampling during both wet weather and dry weather conditions to determine:

- i. Influent concentration of total PCBs and estimated total annual load⁸ into the north forebay.
- ii. Influent concentration of total PCBs and estimated total annual load into the south forebay.
- iii. Effluent concentration of total PCBs and estimated total annual load discharging from outfall 001.
- iv. Concentration of total PCBs and estimated total annual load in Silver Lake at the outlet.

The Permittee may rely on existing routine characterization conducted by both PEDA and GE, to the extent that it meets the listed evaluation requirements. For the purposes of this permit, samples analyzed using test methods that are not currently listed in 40 CFR Part 136 (i.e., EPA Method 8082A), are acceptable for characterization. This exception does not apply to the test method specified for compliance monitoring in this permit.

The Permittee shall document these components in the SWPPP. The Permittee shall submit a report annually to EPA certifying that discharges comply with these permit requirements and summarizing activities conducted to achieve such compliance.

3. COMPLIANCE SCHEDULE

- a. The following must be completed within 120 days of the permit effective date and no later than January 15th of each calendar year thereafter:
 - (1) Submit written notification to EPA of completion and certification of the SWPPP, attaching a complete copy of the SWPPP and certification.
 - (2) Submit a written proposal for the BMPs required in Part I.C.2.b. to EPA that includes the following:
 - i. Description of proposed BMPs for the calendar year, including technical specifications;
 - ii. Description of the measurable goal(s) for each BMP, including a schedule, with milestones as prioritized based on the source identification required in Part I.C.2.C.(1), for its implementation that do not exceed the expiration date of this permit, have a quantity or quality associated with its endpoint, and a measure of assessment associated with it;
 - iii. Description of how these BMPs will achieve compliance with numeric limits in Part I.A.1, and non-numeric limits in Part I.C.2.a.; and
 - iv. The person(s) or entity responsible for each BMP.
 - (3) The Permittee shall submit the notifications and proposals specified in this part to EPA in writing in accordance with Part I.D.2. EPA will notify the Permittee in writing of any deficiency within 30 days following receipt of notification to EPA.

⁸ Loading calculation: Total PCBs (lb/day) = [(average monthly PCBs (mg/L) * total monthly effluent flow (MG)) / # of days in the month] * 8.345.

- b. The following must be included in the SWPPP within one year of the permit effective date and updated annually thereafter:
 - (1) Documentation of the selection, design, implementation, and maintenance of control measures required in Part I.C.2.b.1. that includes a description of the BMPs implemented to date.
 - (2) Written procedures for the inspection requirements in Part I.C.2.b.2., including schedules and forms necessary to conduct routine site inspections;

 Documentation of compliance with inspection requirements must be included.
 - (3) Written procedures for the corrective action requirements in Part I.C.2.b.3.; Documentation of any corrective actions undertaken during the previous calendar year must be included.
 - (4) Written quality assurance/quality control requirements in Part I.C.2.b.4.; Documentation of monitoring requirements, sample collection procedures, sample analysis procedures, a schedule for the review of sample results, and data validation and reporting processes must be included.
 - (5) Documentation of the selection, design, implementation, and maintenance of BMPs required in Part I.C.2.b.5. to minimize the discharge of nutrients, including nitrogen and phosphorus.
 - (6) Documentation of the selection, design, implementation, and maintenance of BMPs to eliminate discharges of PCBs. The documentation must include, at a minimum:
 - i. Documentation of the source identification requirements in Part I.C.2.c.1. completed to date.
 - ii. Documentation of the optimization requirements in Part I.C.2.c.2. completed to date.
 - iii. Documentation of the minimization requirements in Part I.C.2.c.3. completed to date and must include the components listed in Part I.C.3.a.(2), above.
 - iv. Documentation of the design standards requirements (e.g., procedures and protocols) in Part I.C.2.c.4. completed to date.
 - v. Documentation of the evaluation requirements in Part I.C.2.c.5. completed to date.
- c. The following information must be included in the SWPPP within five (5) years of the permit effective date and updated annually thereafter, in the event this permit is administratively continued following expiration:
 - i. Description of the BMPs completed (or updated, in the event of expiration).
 - ii. Confirmation that these BMPs have achieved (or continue to achieve, in the event of expiration) compliance with numeric limits in Part I.A.1, and non-numeric limits in Part I.C.2.a.
 - iii. Description of requested SWPPP, BMP and/or Compliance Schedule considerations for permit reissuance.

4. pH STUDY

In order to continue the pH limit range of 6.5 - 9.0 S.U. in future permits, within three (3) years of the effective date of the permit, the Permittee must conduct a study to demonstrate that the pH in the receiving water does not exceed the range of 6.5 - 8.3 S.U. At least six (6) months prior to beginning the study, the Permittee shall contact MassDEP (<u>massdep.npdes@mass.gov</u>) for guidance on how to complete the study. The completed pH study shall be submitted to <u>massdep.npdes@mass.gov</u>.

D. MONITORING AND REPORTING

The monitoring program in the permit specifies sampling and analysis, which will provide continuous information on compliance and the reliability and effectiveness of the installed pollution abatement equipment and measures. The approved analytical procedures found in 40 CFR Part 136 are required unless other procedures are explicitly required in the permit. The Permittee is obligated to monitor and report sampling results to EPA and the MassDEP within the time specified within the permit. Unless otherwise specified in this permit, the permittee shall submit reports, requests, and information and provide notices in the manner described in this section.

1. Submittal of DMRs and the Use of NetDMR

- a. **Beginning on the issuance date of the permit** the permittee must submit its monthly monitoring data in discharge monitoring reports (DMRs) to EPA and MassDEP no later than the 15th day of the month following the completed reporting period.
- b. **For a period of one month from the effective date of the permit**, the permittee may submit its monthly monitoring data in DMRs to EPA and MassDEP either in hard copy form, as described in Part I.E.5, or in DMRs electronically submitted using NetDMR. NetDMR is a web-based tool that allows permittees to electronically submit DMRs and other required reports via a secure internet connection. NetDMR is accessed from:
- c. Beginning no later than one month after the effective date of the permit, the Permittee shall begin reporting monthly monitoring data using NetDMR. The permittee must continue to use the NetDMR after the permittee begins to do so. When a permittee begins submitting reports using NetDMR, it will no longer be required to submit hard copies of DMRs to EPA or MassDEP, unless otherwise specified in this permit.
- d. After the Permittee begins submitting DMR reports to EPA electronically using NetDMR, the Permittee shall electronically submit all reports to EPA as NetDMR attachments rather than as hard copies, unless otherwise specified in this permit. Permittees shall continue to send hard copies of WET test reports to MassDEP as specified in Part I.D.3. Because the due dates for reports described in this permit may not coincide with the due date for submitting DMRs (which is no later than the 15th

day of the month), a report submitted electronically as a NetDMR attachment shall be considered timely if it is electronically submitted to EPA using NetDMR with the next DMR due following the particular report due date specified in this permit.

- 2. Submittal of Requests and Reports to EPA and MassDEP Surface Water Discharge Permitting Program
 - a. The following requests, reports, and information described in this permit shall be submitted to the EPA Water Division (WD) NPDES Applications Coordinator in the EPA and to the MassDEP Surface Water Discharge (SWD) Permitting Program
 - (1) Transfer of Permit notice
 - (2) Request for changes in sampling location
 - (3) Request for reduction in testing frequency
 - (4) Request for reduction in WET testing requirements
 - (5) Report on unacceptable dilution water / request for alternative dilution water for WET testing
 - (6) SWPPP Certification
 - (7) Reports specified in Part I.C.3., Compliance Schedule
 - b. These reports, information, and requests shall be submitted to EPA WD electronically at R1NPDESReporting@epa.gov or by hard copy mail to the following address:

U.S. Environmental Protection Agency Water Division NPDES Applications Coordinator 5 Post Office Square - Suite 100 (06-03) Boston, MA 02109-3912

And also submitted electronically to MassDEP SWD Permitting program at MassDEP.NPDES@mass.gov.

- c. Submittal of Reports in Hard Copy Form
 - (1) The following notifications and reports shall be signed and dated originals, submitted in hard copy, with a cover letter describing the submission:
 - i. Written notifications required under Part II, Standard Conditions. Beginning December 21, 2025, such notifications must be done electronically using EPA's NPDES Electronic Reporting Tool ("NeT"), or another approved EPA system, which will be accessible through EPA's Central Data Exchange at https://cdx.epa.gov/.
 - (2) This information shall be submitted to EPA ECAD at the following address:

U.S. Environmental Protection Agency Enforcement and Compliance Assurance Division

Water Compliance Section 5 Post Office Square, Suite 100 (04-SMR) Boston, MA 02109-3912

3. State Reporting

Duplicate signed copies of all WET test reports shall be submitted to the Massachusetts Department of Environmental Protection, Division of Watershed Management, at the following address:

Massachusetts Department of Environmental Protection Bureau of Water Resources Division of Watershed Management 8 New Bond Street Worcester, Massachusetts 01606

- 4. Verbal Reports and Verbal Notifications
 - a. Any verbal reports or verbal notifications, if required in Parts I and/or II of this Permit, shall be made to both EPA and to the State. This includes verbal reports and notifications which require reporting within 24 hours (e.g., Part II.B.4.c. (2), Part II.B.5.c. (3), and Part II.D.1.e.).
 - b. Verbal reports and verbal notifications shall be made to EPA's Enforcement and Compliance Assurance Division at:

617-918-1510

c. Verbal reports and verbal notifications shall be made to the State's Emergency Response at:

888-304-1133

E. STATE PERMIT CONDITIONS

1. This authorization to discharge includes two separate and independent permit authorizations. The two permit authorizations are (i) a federal National Pollutant Discharge Elimination System permit issued by the U.S. Environmental Protection Agency (EPA) pursuant to the Federal Clean Water Act, 33 U.S.C. §§1251 et seq.; and (ii) an identical state surface water discharge permit issued by the Commissioner of the Massachusetts Department of Environmental Protection (MassDEP) pursuant to the Massachusetts Clean Waters Act, M.G.L. c. 21, §§26-53, and 314 C.M.R. 3.00. All of the requirements contained in this authorization, as well as the standard conditions contained in 314 CMR 3.19, are hereby incorporated by reference into this state surface water discharge permit.

2. Each agency shall have the independent right to enforce the terms and conditions of this permit. Any modification, suspension or revocation of this permit shall be effective only with respect to the agency taking such action, and shall not affect the validity or status of this permit as issued by the other agency, unless and until each agency has concurred in writing with such modification, suspension or revocation. In the event any portion of this permit is declared invalid, illegal or otherwise issued in violation of state law such permit shall remain in full force and effect under federal law as a NPDES Permit issued by the U.S. Environmental Protection Agency. In the event this permit is declared invalid, illegal or otherwise issued in violation of federal law, this permit shall remain in full force and effect under state law as a permit issued by the Commonwealth of Massachusetts.

USEPA REGION 1 FRESHWATER ACUTE TOXICITY TEST PROCEDURE AND PROTOCOL

I. GENERAL REQUIREMENTS

The permittee shall conduct acceptable acute toxicity tests in accordance with the appropriate test protocols described below:

- Daphnid (Ceriodaphnia dubia) definitive 48 hour test.
- Fathead Minnow (Pimephales promelas) definitive 48 hour test.

Acute toxicity test data shall be reported as outlined in Section VIII.

II. METHODS

The permittee shall use 40 CFR Part 136 methods. Methods and guidance may be found at:

http://water.epa.gov/scitech/methods/cwa/wet/disk2_index.cfm

The permittee shall also meet the sampling, analysis and reporting requirements included in this protocol. This protocol defines more specific requirements while still being consistent with the Part 136 methods. If, due to modifications of Part 136, there are conflicting requirements between the Part 136 method and this protocol, the permittee shall comply with the requirements of the Part 136 method.

III. SAMPLE COLLECTION

A discharge sample shall be collected. Aliquots shall be split from the sample, containerized and preserved (as per 40 CFR Part 136) for chemical and physical analyses required. The remaining sample shall be measured for total residual chlorine and dechlorinated (if detected) in the laboratory using sodium thiosulfate for subsequent toxicity testing. (Note that EPA approved test methods require that samples collected for metals analyses be preserved immediately after collection.) Grab samples must be used for pH, temperature, and total residual chlorine (as per 40 CFR Part 122.21).

Standard Methods for the Examination of Water and Wastewater describes dechlorination of samples (APHA, 1992). Dechlorination can be achieved using a ratio of 6.7 mg/L anhydrous sodium thiosulfate to reduce 1.0 mg/L chlorine. If dechlorination is necessary, a thiosulfate control (maximum amount of thiosulfate in lab control or receiving water) must also be run in the WET test.

All samples held overnight shall be refrigerated at 1-6°C.

IV. DILUTION WATER

A grab sample of dilution water used for acute toxicity testing shall be collected from the receiving water at a point immediately upstream of the permitted discharge's zone of influence at a reasonably accessible location. Avoid collection near areas of obvious road or agricultural runoff, storm sewers or other point source discharges and areas where stagnant conditions exist. In the case where an alternate dilution water has been agreed upon an additional receiving water control (0% effluent) must also be tested.

If the receiving water diluent is found to be, or suspected to be toxic or unreliable, an alternate standard dilution water of known quality with a hardness, pH, conductivity, alkalinity, organic carbon, and total suspended solids similar to that of the receiving water may be substituted **AFTER RECEIVING WRITTEN APPROVAL FROM THE PERMIT ISSUING AGENCY(S)**. Written requests for use of an alternate dilution water should be mailed with supporting documentation to the following address:

Director
Office of Ecosystem Protection (CAA)
U.S. Environmental Protection Agency-New England
5 Post Office Sq., Suite 100 (OEP06-5)
Boston, MA 02109-3912

and

Manager Water Technical Unit (SEW) U.S. Environmental Protection Agency 5 Post Office Sq., Suite 100 (OES04-4) Boston, MA 02109-3912

Note: USEPA Region 1 retains the right to modify any part of the alternate dilution water policy stated in this protocol at any time. Any changes to this policy will be documented in the annual DMR posting.

See the most current annual DMR instructions which can be found on the EPA Region 1 website at http://www.epa.gov/region1/enforcement/water/dmr.html for further important details on alternate dilution water substitution requests.

It may prove beneficial to have the proposed dilution water source screened for suitability prior to toxicity testing. EPA strongly urges that screening be done prior to set up of a full definitive toxicity test any time there is question about the dilution water's ability to support acceptable performance as outlined in the 'test acceptability' section of the protocol.

V. TEST CONDITIONS

The following tables summarize the accepted daphnid and fathead minnow toxicity test conditions and test acceptability criteria:

EPA NEW ENGLAND EFFLUENT TOXICITY TEST CONDITIONS FOR THE DAPHNID, CERIODAPHNIA DUBIA 48 HOUR ACUTE TESTS¹

1.	Test type	Static, non-renewal	
2.	Temperature (°C)	$20 \pm 1^{\circ}$ C or $25 \pm 1^{\circ}$ C	
3.	Light quality	Ambient laboratory illumination	
4.	Photoperiod	16 hour light, 8 hour dark	
5.	Test chamber size	Minimum 30 ml	
6.	Test solution volume	Minimum 15 ml	
7.	Age of test organisms	1-24 hours (neonates)	
8.	No. of daphnids per test chamber	5	
9.	No. of replicate test chambers per treatment	4	
10.	Total no. daphnids per test concentration	20	
11.	Feeding regime	As per manual, lightly feed YCT and Selenastrum to newly released organisms while holding prior to initiating test	
12.	Aeration	None	
13.	Dilution water ²	Receiving water, other surface water, synthetic water adjusted to the hardness and alkalinity of the receiving water (prepared using either Millipore Milli-Q ^R or equivalent deionized water and reagent grade chemicals according to EPA acute toxicity test manual) or deionized water combined with mineral water to appropriate hardness.	
14.	Dilution series	\geq 0.5, must bracket the permitted RWC	
15.	Number of dilutions	5 plus receiving water and laboratory water control and thiosulfate control, as necessary. An additional dilution at the permitted effluent concentration (% effluent) is required if it is not included in the dilution	

series.

16. Effect measured Mortality-no movement of body

or appendages on gentle prodding

17. Test acceptability 90% or greater survival of test organisms in

dilution water control solution

18. Sampling requirements For on-site tests, samples must be used

within 24 hours of the time that they are removed from the sampling device. For offsite tests, samples must first be used within

36 hours of collection.

19. Sample volume required Minimum 1 liter

Footnotes:

1. Adapted from EPA-821-R-02-012.

2. Standard prepared dilution water must have hardness requirements to generally reflect the characteristics of the receiving water.

EPA NEW ENGLAND TEST CONDITIONS FOR THE FATHEAD MINNOW (PIMEPHALES PROMELAS) 48 HOUR ACUTE ${\sf TEST}^1$

1.	Test Type	Static, non-renewal
2.	Temperature (°C)	20 ± 1 ° C or 25 ± 1 °C
3.	Light quality	Ambient laboratory illumination
4.	Photoperiod	16 hr light, 8 hr dark
5.	Size of test vessels	250 mL minimum
6.	Volume of test solution	Minimum 200 mL/replicate
7.	Age of fish	1-14 days old and age within 24 hrs of each other
8.	No. of fish per chamber	10
9.	No. of replicate test vessels per treatment	4
10.	Total no. organisms per concentration	40
11.	Feeding regime	As per manual, lightly feed test age larvae using concentrated brine shrimp nauplii while holding prior to initiating test
12.	Aeration	None, unless dissolved oxygen (D.O.) concentration falls below 4.0 mg/L, at which time gentle single bubble aeration should be started at a rate of less than 100 bubbles/min. (Routine D.O. check is recommended.)
13.	dilution water ²	Receiving water, other surface water, synthetic water adjusted to the hardness and alkalinity of the receiving water (prepared using either Millipore Milli-Q ^R or equivalent deionized and reagent grade chemicals according to EPA acute toxicity test manual) or deionized water combined with mineral water to appropriate hardness.
14.	Dilution series	\geq 0.5, must bracket the permitted RWC

15. Number of dilutions

5 plus receiving water and laboratory water control and thiosulfate control, as necessary. An additional dilution at the permitted effluent concentration (% effluent) is required if it is not included in the dilution series.

16. Effect measured

17. Test acceptability

Mortality-no movement on gentle prodding 90% or greater survival of test organisms in

dilution water control solution

18. Sampling requirements For on-site tests, samples must be used within 24 hours of the time that they are removed from the sampling device. For offsite tests, samples are used within 36 hours

of collection.

19. Sample volume required Minimum 2 liters

Footnotes:

1. Adapted from EPA-821-R-02-012

2. Standard dilution water must have hardness requirements to generally reflect characteristics of the receiving water.

VI. CHEMICAL ANALYSIS

At the beginning of a static acute toxicity test, pH, conductivity, total residual chlorine, oxygen, hardness, alkalinity and temperature must be measured in the highest effluent concentration and the dilution water. Dissolved oxygen, pH and temperature are also measured at 24 and 48 hour intervals in all dilutions. The following chemical analyses shall be performed on the 100 percent effluent sample and the upstream water sample for each sampling event.

<u>Parameter</u>	Effluent	Receiving Water	ML (mg/l)
Hardness ¹	X	X	0.5
Total Residual Chlorine (TRC) ^{2, 3}	X		0.02
Alkalinity	X	X	2.0
рН	X	X	
Specific Conductance	X	X	
Total Solids	X		
Total Dissolved Solids	X		
Ammonia	X	X	0.1
Total Organic Carbon	X	X	0.5
Total Metals			
Cd	X	X	0.0005
Pb	X	X	0.0005
Cu	X	X	0.003
Zn	X	X	0.005
Ni	X	X	0.005
Al	X	X	0.02
Other as permit requires			

Other as permit requires

Notes:

- 1. Hardness may be determined by:
 - APHA <u>Standard Methods for the Examination of Water and Wastewater</u>, 21st Edition
 - Method 2340B (hardness by calculation)
 - Method 2340C (titration)
- 2. Total Residual Chlorine may be performed using any of the following methods provided the required minimum limit (ML) is met.
 - APHA <u>Standard Methods for the Examination of Water and Wastewater</u>, 21st Edition
 - Method 4500-CL E Low Level Amperometric Titration
 - Method 4500-CL G DPD Colorimetric Method
- 3. Required to be performed on the sample used for WET testing prior to its use for toxicity testing.

VII. TOXICITY TEST DATA ANALYSIS

LC50 Median Lethal Concentration (Determined at 48 Hours)

Methods of Estimation:

- Probit Method
- Spearman-Karber
- Trimmed Spearman-Karber
- Graphical

See the flow chart in Figure 6 on p. 73 of EPA-821-R-02-012 for appropriate method to use on a given data set.

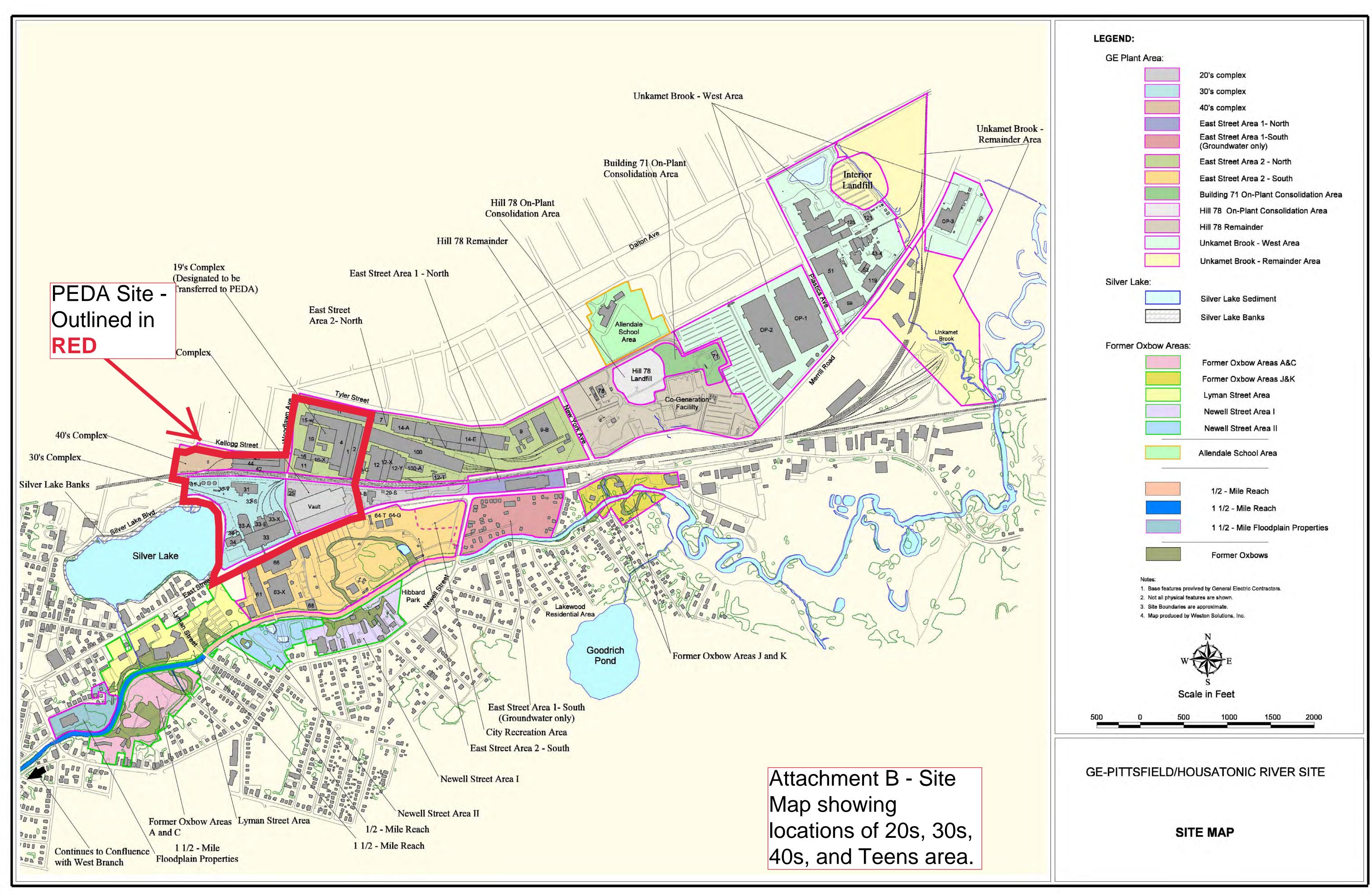
No Observed Acute Effect Level (NOAEL)

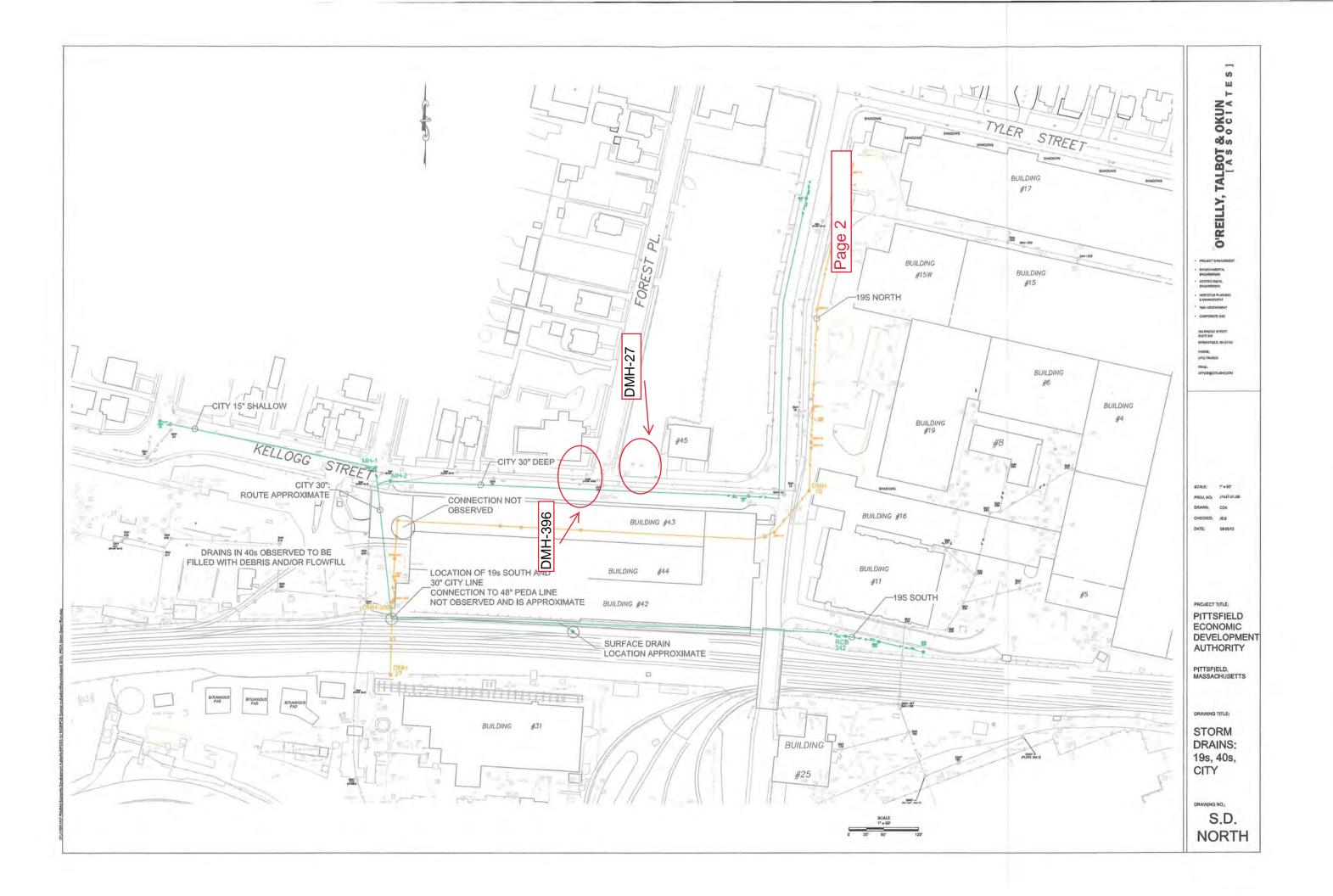
See the flow chart in Figure 13 on p. 87 of EPA-821-R-02-012.

VIII. TOXICITY TEST REPORTING

A report of the results will include the following:

- Description of sample collection procedures, site description
- Names of individuals collecting and transporting samples, times and dates of sample collection and analysis on chain-of-custody
- General description of tests: age of test organisms, origin, dates and results of standard toxicant tests; light and temperature regime; other information on test conditions if different than procedures recommended. Reference toxicant test data should be included.
- All chemical/physical data generated. (Include minimum detection levels and minimum quantification levels.)
- Raw data and bench sheets.
- Provide a description of dechlorination procedures (as applicable).
- Any other observations or test conditions affecting test outcome.





NPDES PART II STANDARD CONDITIONS (April 26, 2018)¹

TABLE OF CONTENTS

A.	GENER	AL CONDITIONS F	Page
	1.	Duty to Comply	2
	2.	Permit Actions	3
	3.	Duty to Provide Information	4
	4.	Oil and Hazardous Substance Liability	4
	5.	Property Rights	4
	6.	Confidentiality of Information	4
	7.	Duty to Reapply	4
	8.	State Authorities	4
	9.	Other laws	5
В.	OPERA	TION AND MAINTENANCE OF POLLUTION CONTROLS	
	1.	Proper Operation and Maintenance	5
	2.	Need to Halt or Reduce Not a Defense	5
		Duty to Mitigate	5
		Bypass	5
		<u>Upset</u>	6
C.	MONIT	ORING AND RECORDS	
	1.	Monitoring and Records	7
	2.	Inspection and Entry	8
D.	REPOR	TING REQUIREMENTS	
	1.	Reporting Requirements	8
		a. Planned changes	8
		b. Anticipated noncompliance	8
		c. Transfers	9
		d. Monitoring reports	9
		e. Twenty-four hour reporting	9
		f. Compliance schedules	10
		g. Other noncompliance	10
		h. Other information	10
		i. Identification of the initial recipient for NPDES electronic reporting data	
	2.	Signatory Requirement	11
	3.	Availability of Reports	11
E.	DEFINI	ΓΙΟΝS AND ABBREVIATIONS	
	1.	General Definitions	11
	2.		20
			-

¹ Updated July 17, 2018 to fix typographical errors.

A. GENERAL REQUIREMENTS

1. <u>Duty to Comply</u>

The Permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Clean Water Act (CWA or Act) and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or denial of a permit renewal application.

- a. The Permittee shall comply with effluent standards or prohibitions established under Section 307(a) of the Clean Water Act for toxic pollutants and with standards for sewage sludge use or disposal established under Section 405(d) of the CWA within the time provided in the regulations that establish these standards or prohibitions, or standards for sewage sludge use or disposal, even if the permit has not yet been modified to incorporate the requirement.
- b. Penalties for Violations of Permit Conditions: The Director will adjust the civil and administrative penalties listed below in accordance with the Civil Monetary Penalty Inflation Adjustment Rule (83 Fed. Reg. 1190-1194 (January 10, 2018) and the 2015 amendments to the Federal Civil Penalties Inflation Adjustment Act of 1990, 28 U.S.C. § 2461 note. See Pub. L.114-74, Section 701 (Nov. 2, 2015)). These requirements help ensure that EPA penalties keep pace with inflation. Under the above-cited 2015 amendments to inflationary adjustment law, EPA must review its statutory civil penalties each year and adjust them as necessary.

(1) Criminal Penalties

- (a) Negligent Violations. The CWA provides that any person who negligently violates permit conditions implementing Sections 301, 302, 306, 307, 308, 318, or 405 of the Act is subject to criminal penalties of not less than \$2,500 nor more than \$25,000 per day of violation, or imprisonment of not more than 1 year, or both. In the case of a second or subsequent conviction for a negligent violation, a person shall be subject to criminal penalties of not more than \$50,000 per day of violation or by imprisonment of not more than 2 years, or both.
- (b) *Knowing Violations*. The CWA provides that any person who knowingly violates permit conditions implementing Sections 301, 302, 306, 307, 308, 318, or 405 of the Act is subject to a fine of not less than \$5,000 nor more than \$50,000 per day of violation, or by imprisonment for not more than 3 years, or both. In the case of a second or subsequent conviction for a knowing violation, a person shall be subject to criminal penalties of not more than \$100,000 per day of violation, or imprisonment of not more than 6 years, or both.
- (c) *Knowing Endangerment*. The CWA provides that any person who knowingly violates permit conditions implementing Sections 301, 302, 303, 306, 307, 308, 318, or 405 of the Act and who knows at that time that he or she is placing another person in imminent danger of death or serious bodily injury shall upon conviction be subject to a fine of not more than \$250,000 or by imprisonment of not more than 15 years, or both. In the case of a second or subsequent conviction for a knowing

endangerment violation, a person shall be subject to a fine of not more than \$500,000 or by imprisonment of not more than 30 years, or both. An organization, as defined in Section 309(c)(3)(B)(iii) of the Act, shall, upon conviction of violating the imminent danger provision, be subject to a fine of not more than \$1,000,000 and can be fined up to \$2,000,000 for second or subsequent convictions.

- (d) False Statement. The CWA provides that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this permit shall, upon conviction, be punished by a fine of not more than \$10,000, or by imprisonment for not more than 2 years, or both. If a conviction of a person is for a violation committed after a first conviction of such person under this paragraph, punishment is a fine of not more than \$20,000 per day of violation, or by imprisonment of not more than 4 years, or both. The Act further provides that any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or noncompliance shall, upon conviction, be punished by a fine of not more than \$10,000 per violation, or by imprisonment for not more than 6 months per violation, or by both.
- (2) Civil Penalties. The CWA provides that any person who violates a permit condition implementing Sections 301, 302, 306, 307, 308, 318, or 405 of the Act is subject to a civil penalty not to exceed the maximum amounts authorized by Section 309(d) of the Act, the 2015 amendments to the Federal Civil Penalties Inflation Adjustment Act of 1990, 28 U.S.C. § 2461 note, and 40 C.F.R. Part 19. See Pub. L.114-74, Section 701 (Nov. 2, 2015); 83 Fed. Reg. 1190 (January 10, 2018).
- (3) *Administrative Penalties*. The CWA provides that any person who violates a permit condition implementing Sections 301, 302, 306, 307, 308, 318, or 405 of the Act is subject to an administrative penalty as follows:
 - (a) Class I Penalty. Not to exceed the maximum amounts authorized by Section 309(g)(2)(A) of the Act, the 2015 amendments to the Federal Civil Penalties Inflation Adjustment Act of 1990, 28 U.S.C. § 2461 note, and 40 C.F.R. Part 19. See Pub. L.114-74, Section 701 (Nov. 2, 2015); 83 Fed. Reg. 1190 (January 10, 2018).
 - (b) Class II Penalty. Not to exceed the maximum amounts authorized by Section 309(g)(2)(B) of the Act the 2015 amendments to the Federal Civil Penalties Inflation Adjustment Act of 1990, 28 U.S.C. § 2461 note, and 40 C.F.R. Part 19. See Pub. L.114-74, Section 701 (Nov. 2, 2015); 83 Fed. Reg. 1190 (January 10, 2018).

2. Permit Actions

This permit may be modified, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit

condition.

3. Duty to Provide Information

The Permittee shall furnish to the Director, within a reasonable time, any information which the Director may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The Permittee shall also furnish to the Director, upon request, copies of records required to be kept by this permit.

4. Oil and Hazardous Substance Liability

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the Permittee from responsibilities, liabilities or penalties to which the Permittee is or may be subject under Section 311 of the CWA, or Section 106 of the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA).

5. Property Rights

This permit does not convey any property rights of any sort, or any exclusive privilege.

6. Confidentiality of Information

- a. In accordance with 40 C.F.R. Part 2, any information submitted to EPA pursuant to these regulations may be claimed as confidential by the submitter. Any such claim must be asserted at the time of submission in the manner prescribed on the application form or instructions or, in the case of other submissions, by stamping the words "confidential business information" on each page containing such information. If no claim is made at the time of submission, EPA may make the information available to the public without further notice. If a claim is asserted, the information will be treated in accordance with the procedures in 40 C.F.R. Part 2 (Public Information).
- b. Claims of confidentiality for the following information will be denied:
 - (1) The name and address of any permit applicant or Permittee;
 - (2) Permit applications, permits, and effluent data.
- c. Information required by NPDES application forms provided by the Director under 40 C.F.R. § 122.21 may not be claimed confidential. This includes information submitted on the forms themselves and any attachments used to supply information required by the forms.

7. Duty to Reapply

If the Permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the Permittee must apply for and obtain a new permit. The Permittee shall submit a new application at least 180 days before the expiration date of the existing permit, unless permission for a later date has been granted by the Director. (The Director shall not grant permission for applications to be submitted later than the expiration date of the existing permit.)

8. State Authorities

Nothing in Parts 122, 123, or 124 precludes more stringent State regulation of any activity

covered by the regulations in 40 C.F.R. Parts 122, 123, and 124, whether or not under an approved State program.

9. Other Laws

The issuance of a permit does not authorize any injury to persons or property or invasion of other private rights, or any infringement of State or local law or regulations.

B. OPERATION AND MAINTENANCE OF POLLUTION CONTROLS

1. Proper Operation and Maintenance

The Permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the Permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems which are installed by a Permittee only when the operation is necessary to achieve compliance with the conditions of the permit.

2. Need to Halt or Reduce Not a Defense

It shall not be a defense for a Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

3. Duty to Mitigate

The Permittee shall take all reasonable steps to minimize or prevent any discharge or sludge use or disposal in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.

4. Bypass

a. Definitions

- (1) *Bypass* means the intentional diversion of waste streams from any portion of a treatment facility.
- (2) Severe property damage means substantial physical damage to property, damage to the treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.
- b. *Bypass not exceeding limitations*. The Permittee may allow any bypass to occur which does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions of paragraphs (c) and (d) of this Section.

c. Notice

- (1) Anticipated bypass. If the Permittee knows in advance of the need for a bypass, it shall submit prior notice, if possible at least ten days before the date of the bypass. As of December 21, 2020 all notices submitted in compliance with this Section must be submitted electronically by the Permittee to the Director or initial recipient, as defined in 40 C.F.R. § 127.2(b), in compliance with this Section and 40 C.F.R. Part 3 (including, in all cases, Subpart D to Part 3), § 122.22, and 40 C.F.R. Part 127. Part 127 is not intended to undo existing requirements for electronic reporting. Prior to this date, and independent of Part 127, Permittees may be required to report electronically if specified by a particular permit or if required to do so by state law.
- (2) Unanticipated bypass. The Permittee shall submit notice of an unanticipated bypass as required in paragraph D.1.e. of this part (24-hour notice). As of December 21, 2020 all notices submitted in compliance with this Section must be submitted electronically by the Permittee to the Director or initial recipient, as defined in 40 C.F.R. § 127.2(b), in compliance with this Section and 40 C.F.R. Part 3 (including, in all cases, Subpart D to Part 3), § 122.22, and 40 C.F.R. Part 127. Part 127 is not intended to undo existing requirements for electronic reporting. Prior to this date, and independent of Part 127, Permittees may be required to report electronically if specified by a particular permit or required to do so by law.

d. Prohibition of bypass.

- (1) Bypass is prohibited, and the Director may take enforcement action against a Permittee for bypass, unless:
 - (a) Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;
 - (b) There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventative maintenance; and
 - (c) The Permittee submitted notices as required under paragraph 4.c of this Section.
- (2) The Director may approve an anticipated bypass, after considering its adverse effects, if the Director determines that it will meet the three conditions listed above in paragraph 4.d of this Section.

5. Upset

a. *Definition. Upset* means an exceptional incident in which there is an unintentional and temporary noncompliance with technology based permit effluent limitations because of factors beyond the reasonable control of the Permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or

improper operation.

- b. *Effect of an upset*. An upset constitutes an affirmative defense to an action brought for noncompliance with such technology based permit effluent limitations if the requirements of paragraph B.5.c. of this Section are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review.
- c. Conditions necessary for a demonstration of upset. A Permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:
 - (1) An upset occurred and that the Permittee can identify the cause(s) of the upset;
 - (2) The permitted facility was at the time being properly operated; and
 - (3) The Permittee submitted notice of the upset as required in paragraph D.1.e.2.b. (24-hour notice).
 - (4) The Permittee complied with any remedial measures required under B.3. above.
- d. *Burden of proof.* In any enforcement proceeding the Permittee seeking to establish the occurrence of an upset has the burden of proof.

C. MONITORING REQUIREMENTS

1. Monitoring and Records

- a. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.
- b. Except for records of monitoring information required by this permit related to the Permittee's sewage sludge use and disposal activities, which shall be retained for a period of at least 5 years (or longer as required by 40 C.F.R. § 503), the Permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least 3 years from the date of the sample, measurement, report or application. This period may be extended by request of the Director at any time.
- c. Records of monitoring information shall include:
 - (1) The date, exact place, and time of sampling or measurements;
 - (2) The individual(s) who performed the sampling or measurements;
 - (3) The date(s) analyses were performed;
 - (4) The individual(s) who performed the analyses;
 - (5) The analytical techniques or methods used; and
 - (6) The results of such analyses.
- d. Monitoring must be conducted according to test procedures approved under 40 C.F.R. § 136 unless another method is required under 40 C.F.R. Subchapters N or O.
- e. The Clean Water Act provides that any person who falsifies, tampers with, or

knowingly renders inaccurate any monitoring device or method required to be maintained under this permit shall, upon conviction, be punished by a fine of not more than \$10,000, or by imprisonment for not more than 2 years, or both. If a conviction of a person is for a violation committed after a first conviction of such person under this paragraph, punishment is a fine of not more than \$20,000 per day of violation, or by imprisonment of not more than 4 years, or both.

2. Inspection and Entry

The Permittee shall allow the Director, or an authorized representative (including an authorized contractor acting as a representative of the Administrator), upon presentation of credentials and other documents as may be required by law, to:

- a. Enter upon the Permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit;
- b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- c. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and
- d. Sample or monitor at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the Clean Water Act, any substances or parameters at any location.

D. REPORTING REQUIREMENTS

1. Reporting Requirements

- a. *Planned Changes*. The Permittee shall give notice to the Director as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is required only when:
 - (1) The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source in 40 C.F.R. § 122.29(b); or
 - (2) The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants which are subject neither to effluent limitations in the permit, nor to notification requirements at 40 C.F.R. § 122.42(a)(1).
 - (3) The alteration or addition results in a significant change in the Permittee's sludge use or disposal practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use or disposal sites not reported during the permit application process or not reported pursuant to an approved land application plan.
- b. Anticipated noncompliance. The Permittee shall give advance notice to the Director of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.

- c. *Transfers*. This permit is not transferable to any person except after notice to the Director. The Director may require modification or revocation and reissuance of the permit to change the name of the Permittee and incorporate such other requirements as may be necessary under the Clean Water Act. *See* 40 C.F.R. § 122.61; in some cases, modification or revocation and reissuance is mandatory.
- d. *Monitoring reports*. Monitoring results shall be reported at the intervals specified elsewhere in this permit.
 - (1) Monitoring results must be reported on a Discharge Monitoring Report (DMR) or forms provided or specified by the Director for reporting results of monitoring of sludge use or disposal practices. As of December 21, 2016 all reports and forms submitted in compliance with this Section must be submitted electronically by the Permittee to the Director or initial recipient, as defined in 40 C.F.R. § 127.2(b), in compliance with this Section and 40 C.F.R. Part 3 (including, in all cases, Subpart D to Part 3), § 122.22, and 40 C.F.R. Part 127. Part 127 is not intended to undo existing requirements for electronic reporting. Prior to this date, and independent of Part 127, Permittees may be required to report electronically if specified by a particular permit or if required to do so by State law.
 - (2) If the Permittee monitors any pollutant more frequently than required by the permit using test procedures approved under 40 C.F.R. § 136, or another method required for an industry-specific waste stream under 40 C.F.R. Subchapters N or O, the results of such monitoring shall be included in the calculation and reporting of the data submitted in the DMR or sludge reporting form specified by the Director.
 - (3) Calculations for all limitations which require averaging or measurements shall utilize an arithmetic mean unless otherwise specified by the Director in the permit.
- e. Twenty-four hour reporting.
 - (1) The Permittee shall report any noncompliance which may endanger health or the environment. Any information shall be provided orally within 24 hours from the time the Permittee becomes aware of the circumstances. A written report shall also be provided within 5 days of the time the Permittee becomes aware of the circumstances. The written report shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance. For noncompliance events related to combined sewer overflows, sanitary sewer overflows, or bypass events, these reports must include the data described above (with the exception of time of discovery) as well as the type of event (combined sewer overflows, sanitary sewer overflows, or bypass events), type of sewer overflow structure (e.g., manhole, combined sewer overflow outfall), discharge volumes untreated by the treatment works treating domestic sewage, types of human health and environmental impacts of the sewer overflow event, and whether the noncompliance was related to wet weather. As of December 21, 2020 all

reports related to combined sewer overflows, sanitary sewer overflows, or bypass events submitted in compliance with this section must be submitted electronically by the Permittee to the Director or initial recipient, as defined in 40 C.F.R. § 127.2(b), in compliance with this Section and 40 C.F.R. Part 3 (including, in all cases Subpart D to Part 3), § 122.22, and 40 C.F.R. Part 127. Part 127 is not intended to undo existing requirements for electronic reporting. Prior to this date, and independent of Part 127, Permittees may be required to electronically submit reports related to combined sewer overflows, sanitary sewer overflows, or bypass events under this section by a particular permit or if required to do so by state law. The Director may also require Permittees to electronically submit reports not related to combined sewer overflows, sanitary sewer overflows, or bypass events under this section.

- (2) The following shall be included as information which must be reported within 24 hours under this paragraph.
 - (a) Any unanticipated bypass which exceeds any effluent limitation in the permit. *See* 40 C.F.R. § 122.41(g).
 - (b) Any upset which exceeds any effluent limitation in the permit.
 - (c) Violation of a maximum daily discharge limitation for any of the pollutants listed by the Director in the permit to be reported within 24 hours. *See* 40 C.F.R. § 122.44(g).
- (3) The Director may waive the written report on a case-by-case basis for reports under paragraph D.1.e. of this Section if the oral report has been received within 24 hours.
- f. *Compliance Schedules*. Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit shall be submitted no later than 14 days following each schedule date.
- Other noncompliance. The Permittee shall report all instances of noncompliance not reported under paragraphs D.1.d., D.1.e., and D.1.f. of this Section, at the time monitoring reports are submitted. The reports shall contain the information listed in paragraph D.1.e. of this Section. For noncompliance events related to combined sewer overflows, sanitary sewer overflows, or bypass events, these reports shall contain the information described in paragraph D.1.e. and the applicable required data in Appendix A to 40 C.F.R. Part 127. As of December 21, 2020 all reports related to combined sewer overflows, sanitary sewer overflows, or bypass events submitted in compliance with this section must be submitted electronically by the Permittee to the Director or initial recipient, as defined in 40 C.F.R. § 127.2(b), in compliance with this Section and 40 C.F.R. Part 3 (including, in all cases, Subpart D to Part 3), §122.22, and 40 C.F.R. Part 127. Part 127 is not intended to undo existing requirements for electronic reporting. Prior to this date, and independent of Part 127, Permittees may be required to electronically submit reports related to combined sewer overflows, sanitary sewer overflows, or bypass events under this section by a particular permit or if required to do so by state law. The Director may also require Permittees to electronically submit reports not related to combined sewer overflows, sanitary sewer overflows, or bypass events under this Section.
- h. Other information. Where the Permittee becomes aware that it failed to submit any

relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the Director, it shall promptly submit such facts or information.

i. Identification of the initial recipient for NPDES electronic reporting data. The owner, operator, or the duly authorized representative of an NPDES-regulated entity is required to electronically submit the required NPDES information (as specified in Appendix A to 40 C.F.R. Part 127) to the appropriate initial recipient, as determined by EPA, and as defined in 40 C.F.R. § 127.2(b). EPA will identify and publish the list of initial recipients on its Web site and in the FEDERAL REGISTER, by state and by NPDES data group (see 40 C.F.R. § 127.2(c) of this Chapter). EPA will update and maintain this listing.

2. Signatory Requirement

- a. All applications, reports, or information submitted to the Director shall be signed and certified. *See* 40 C.F.R. §122.22.
- b. The CWA provides that any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or non-compliance shall, upon conviction, be punished by a fine of not more than \$10,000 per violation, or by imprisonment for not more than 6 months per violation, or by both.

3. Availability of Reports.

Except for data determined to be confidential under paragraph A.6. above, all reports prepared in accordance with the terms of this permit shall be available for public inspection at the offices of the State water pollution control agency and the Director. As required by the CWA, effluent data shall not be considered confidential. Knowingly making any false statements on any such report may result in the imposition of criminal penalties as provided for in Section 309 of the CWA.

E. DEFINITIONS AND ABBREVIATIONS

1. General Definitions

For more definitions related to sludge use and disposal requirements, see EPA Region 1's NPDES Permit Sludge Compliance Guidance document (4 November 1999, modified to add regulatory definitions, April 2018).

Administrator means the Administrator of the United States Environmental Protection Agency, or an authorized representative.

Applicable standards and limitations means all, State, interstate, and federal standards and limitations to which a "discharge," a "sewage sludge use or disposal practice," or a related activity is subject under the CWA, including "effluent limitations," water quality standards, standards of performance, toxic effluent standards or prohibitions, "best management practices," pretreatment standards, and "standards for sewage sludge use or disposal" under Sections 301, 302, 303, 304, 306, 307, 308, 403 and 405 of the CWA.

Application means the EPA standard national forms for applying for a permit, including any additions, revisions, or modifications to the forms; or forms approved by EPA for use in

"approved States," including any approved modifications or revisions.

Approved program or approved State means a State or interstate program which has been approved or authorized by EPA under Part 123.

Average monthly discharge limitation means the highest allowable average of "daily discharges" over a calendar month, calculated as the sum of all "daily discharges" measured during a calendar month divided by the number of "daily discharges" measured during that month.

Average weekly discharge limitation means the highest allowable average of "daily discharges" over a calendar week, calculated as the sum of all "daily discharges" measured during a calendar week divided by the number of "daily discharges" measured during that week.

Best Management Practices ("BMPs") means schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the pollution of "waters of the United States." BMPs also include treatment requirements, operating procedures, and practices to control plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage.

Bypass see B.4.a.1 above.

C-NOEC or "Chronic (Long-term Exposure Test) – No Observed Effect Concentration" means the highest tested concentration of an effluent or a toxicant at which no adverse effects are observed on the aquatic test organisms at a specified time of observation.

Class I sludge management facility is any publicly owned treatment works (POTW), as defined in 40 C.F.R. § 501.2, required to have an approved pretreatment program under 40 C.F.R. § 403.8 (a) (including any POTW located in a State that has elected to assume local program responsibilities pursuant to 40 C.F.R. § 403.10 (e)) and any treatment works treating domestic sewage, as defined in 40 C.F.R. § 122.2, classified as a Class I sludge management facility by the EPA Regional Administrator, or, in the case of approved State programs, the Regional Administrator in conjunction with the State Director, because of the potential for its sewage sludge use or disposal practice to affect public health and the environment adversely.

Contiguous zone means the entire zone established by the United States under Article 24 of the Convention on the Territorial Sea and the Contiguous Zone.

Continuous discharge means a "discharge" which occurs without interruption throughout the operating hours of the facility, except for infrequent shutdowns for maintenance, process changes, or similar activities.

CWA means the Clean Water Act (formerly referred to as the Federal Water Pollution Control Act or Federal Water Pollution Control Act Amendments of 1972) Public Law 92-500, as amended by Public Law 95-217, Public Law 95-576, Public Law 96-483 and Public Law 97-117, 33 U.S.C. 1251 *et seq*.

CWA and regulations means the Clean Water Act (CWA) and applicable regulations promulgated thereunder. In the case of an approved State program, it includes State program requirements.

Daily Discharge means the "discharge of a pollutant" measured during a calendar day or any

other 24-hour period that reasonably represents the calendar day for purposes of sampling. For pollutants with limitations expressed in units of mass, the "daily discharge" is calculated as the total mass of the pollutant discharged over the day. For pollutants with limitations expressed in other units of measurements, the "daily discharge" is calculated as the average measurement of the pollutant over the day.

Direct Discharge means the "discharge of a pollutant."

Director means the Regional Administrator or an authorized representative. In the case of a permit also issued under Massachusetts' authority, it also refers to the Director of the Division of Watershed Management, Department of Environmental Protection, Commonwealth of Massachusetts.

Discharge

- (a) When used without qualification, discharge means the "discharge of a pollutant."
- (b) As used in the definitions for "interference" and "pass through," *discharge* means the introduction of pollutants into a POTW from any non-domestic source regulated under Section 307(b), (c) or (d) of the Act.

Discharge Monitoring Report ("DMR") means the EPA uniform national form, including any subsequent additions, revisions, or modifications for the reporting of self-monitoring results by Permittees. DMRs must be used by "approved States" as well as by EPA. EPA will supply DMRs to any approved State upon request. The EPA national forms may be modified to substitute the State Agency name, address, logo, and other similar information, as appropriate, in place of EPA's.

Discharge of a pollutant means:

- (a) Any addition of any "pollutant" or combination of pollutants to "waters of the United States" from any "point source," or
- (b) Any addition of any pollutant or combination of pollutants to the waters of the "contiguous zone" or the ocean from any point source other than a vessel or other floating craft which is being used as a means of transportation.

This definition includes additions of pollutants into waters of the United States from: surface runoff which is collected or channeled by man; discharges through pipes, sewers, or other conveyances owned by a State, municipality, or other person which do not lead to a treatment works; and discharges through pipes, sewers, or other conveyances, leading into privately owned treatment works. This term does not include an addition of pollutants by any "indirect discharger."

Effluent limitation means any restriction imposed by the Director on quantities, discharge rates, and concentrations of "pollutants" which are "discharged" from "point sources" into "waters of the United States," the waters of the "contiguous zone," or the ocean.

Effluent limitation guidelines means a regulation published by the Administrator under section 304(b) of CWA to adopt or revise "effluent limitations."

Environmental Protection Agency ("EPA") means the United States Environmental Protection

Agency.

Grab Sample means an individual sample collected in a period of less than 15 minutes.

Hazardous substance means any substance designated under 40 C.F.R. Part 116 pursuant to Section 311 of CWA.

Incineration is the combustion of organic matter and inorganic matter in sewage sludge by high temperatures in an enclosed device.

Indirect discharger means a nondomestic discharger introducing "pollutants" to a "publicly owned treatment works."

Interference means a discharge (see definition above) which, alone or in conjunction with a discharge or discharges from other sources, both:

- (a) Inhibits or disrupts the POTW, its treatment processes or operations, or its sludge processes, use or disposal; and
- (b) Therefore is a cause of a violation of any requirement of the POTW's NPDES permit (including an increase in the magnitude or duration of a violation) or of the prevention of sewage sludge use or disposal in compliance with the following statutory provisions and regulations or permits issued thereunder (or more stringent State or local regulations): Section 405 of the Clean Water Act, the Solid Waste Disposal Act (SWDA) (including title II, more commonly referred to as the Resources Conservation and Recovery Act (RCRA), and including State regulations contained in any State sludge management plan prepared pursuant to Subtitle D of the SDWA), the Clean Air Act, the Toxic Substances Control Act, and the Marine Protection, Research and Sanctuaries Act.

Landfill means an area of land or an excavation in which wastes are placed for permanent disposal, and that is not a land application unit, surface impoundment, injection well, or waste pile.

Land application is the spraying or spreading of sewage sludge onto the land surface; the injection of sewage sludge below the land surface; or the incorporation of sewage sludge into the soil so that the sewage sludge can either condition the soil or fertilize crops or vegetation grown in the soil.

Land application unit means an area where wastes are applied onto or incorporated into the soil surface (excluding manure spreading operations) for agricultural purposes or for treatment and disposal.

 LC_{50} means the concentration of a sample that causes mortality of 50% of the test population at a specific time of observation. The $LC_{50} = 100\%$ is defined as a sample of undiluted effluent.

Maximum daily discharge limitation means the highest allowable "daily discharge."

Municipal solid waste landfill (MSWLF) unit means a discrete area of land or an excavation that receives household waste, and that is not a land application unit, surface impoundment, injection well, or waste pile, as those terms are defined under 40 C.F.R. § 257.2. A MSWLF unit also may receive other types of RCRA Subtitle D wastes, such as commercial solid waste, nonhazardous sludge, very small quantity generator waste and industrial solid waste. Such a landfill may be

publicly or privately owned. A MSWLF unit may be a new MSWLF unit, an existing MSWLF unit or a lateral expansion. A construction and demolition landfill that receives residential lead-based paint waste and does not receive any other household waste is not a MSWLF unit.

Municipality

- (a) When used without qualification *municipality* means a city, town, borough, county, parish, district, association, or other public body created by or under State law and having jurisdiction over disposal of sewage, industrial wastes, or other wastes, or an Indian tribe or an authorized Indian tribal organization, or a designated and approved management agency under Section 208 of CWA.
- (b) As related to sludge use and disposal, *municipality* means a city, town, borough, county, parish, district, association, or other public body (including an intermunicipal Agency of two or more of the foregoing entities) created by or under State law; an Indian tribe or an authorized Indian tribal organization having jurisdiction over sewage sludge management; or a designated and approved management Agency under Section 208 of the CWA, as amended. The definition includes a special district created under State law, such as a water district, sewer district, sanitary district, utility district, drainage district, or similar entity, or an integrated waste management facility as defined in Section 201 (e) of the CWA, as amended, that has as one of its principal responsibilities the treatment, transport, use or disposal of sewage sludge.

National Pollutant Discharge Elimination System means the national program for issuing, modifying, revoking and reissuing, terminating, monitoring and enforcing permits, and imposing and enforcing pretreatment requirements, under Sections 307, 402, 318, and 405 of the CWA. The term includes an "approved program."

New Discharger means any building, structure, facility, or installation:

- (a) From which there is or may be a "discharge of pollutants;"
- (b) That did not commence the "discharge of pollutants" at a particular "site" prior to August 13, 1979;
- (c) Which is not a "new source;" and
- (d) Which has never received a finally effective NPDES permit for discharges at that "site."

This definition includes an "indirect discharger" which commences discharging into "waters of the United States" after August 13, 1979. It also includes any existing mobile point source (other than an offshore or coastal oil and gas exploratory drilling rig or a coastal oil and gas exploratory drilling rig or a coastal oil and gas developmental drilling rig) such as a seafood processing rig, seafood processing vessel, or aggregate plant, that begins discharging at a "site" for which it does not have a permit; and any offshore or coastal mobile oil and gas exploratory drilling rig or coastal mobile oil and gas developmental drilling rig that commences the discharge of pollutants after August 13, 1979, at a "site" under EPA's permitting jurisdiction for which it is not covered by an individual or general permit and which is located in an area determined by the Director in the issuance of a final permit to be in an area of biological concern. In determining whether an area is an area of biological concern, the Director shall consider the factors specified in 40 C.F.R. §§ 125.122 (a) (1) through (10).

An offshore or coastal mobile exploratory drilling rig or coastal mobile developmental drilling rig will be considered a "new discharger" only for the duration of its discharge in an area of biological concern.

New source means any building, structure, facility, or installation from which there is or may be a "discharge of pollutants," the construction of which commenced:

- (a) After promulgation of standards of performance under Section 306 of CWA which are applicable to such source, or
- (b) After proposal of standards of performance in accordance with Section 306 of CWA which are applicable to such source, but only if the standards are promulgated in accordance with Section 306 within 120 days of their proposal.

NPDES means "National Pollutant Discharge Elimination System."

Owner or operator means the owner or operator of any "facility or activity" subject to regulation under the NPDES programs.

Pass through means a Discharge (see definition above) which exits the POTW into waters of the United States in quantities or concentrations which, alone or in conjunction with a discharge or discharges from other sources, is a cause of a violation of any requirement of the POTW's NPDES permit (including an increase in the magnitude or duration of a violation).

Pathogenic organisms are disease-causing organisms. These include, but are not limited to, certain bacteria, protozoa, viruses, and viable helminth ova.

Permit means an authorization, license, or equivalent control document issued by EPA or an "approved State" to implement the requirements of Parts 122, 123, and 124. "Permit" includes an NPDES "general permit" (40 C.F.R § 122.28). "Permit" does not include any permit which has not yet been the subject of final agency action, such as a "draft permit" or "proposed permit."

Person means an individual, association, partnership, corporation, municipality, State or Federal agency, or an agent or employee thereof.

Person who prepares sewage sludge is either the person who generates sewage sludge during the treatment of domestic sewage in a treatment works or the person who derives a material from sewage sludge.

pH means the logarithm of the reciprocal of the hydrogen ion concentration measured at 25° Centigrade or measured at another temperature and then converted to an equivalent value at 25° Centigrade.

Point Source means any discernible, confined, and discrete conveyance, including but not limited to, any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, landfill leachate collection system, vessel or other floating craft from which pollutants are or may be discharged. This term does not include return flows from irrigated agriculture or agricultural storm water runoff (see 40 C.F.R. § 122.3).

Pollutant means dredged spoil, solid waste, incinerator residue, filter backwash, sewage, garbage, sewage sludge, munitions, chemical wastes, biological materials, radioactive materials

(except those regulated under the Atomic Energy Act of 1954, as amended (42 U.S.C. 2011 *et seq.*)), heat, wrecked or discarded equipment, rock, sand, cellar dirt and industrial, municipal, and agricultural waste discharged into water. It does not mean:

- (a) Sewage from vessels; or
- (b) Water, gas, or other material which is injected into a well to facilitate production of oil or gas, or water derived in association with oil and gas production and disposed of in a well, if the well is used either to facilitate production or for disposal purposes is approved by the authority of the State in which the well is located, and if the State determines that the injection or disposal will not result in the degradation of ground or surface water resources.

Primary industry category means any industry category listed in the NRDC settlement agreement (Natural Resources Defense Council et al. v. Train, 8 E.R.C. 2120 (D.D.C. 1976), modified 12 E.R.C. 1833 (D.D.C. 1979)); also listed in Appendix A of 40 C.F.R. Part 122.

Privately owned treatment works means any device or system which is (a) used to treat wastes from any facility whose operator is not the operator of the treatment works and (b) not a "POTW."

Process wastewater means any water which, during manufacturing or processing, comes into direct contact with or results from the production or use of any raw material, intermediate product, finished product, byproduct, or waste product.

Publicly owned treatment works (POTW) means a treatment works as defined by Section 212 of the Act, which is owned by a State or municipality (as defined by Section 504(4) of the Act). This definition includes any devices and systems used in the storage, treatment, recycling and reclamation of municipal sewage or industrial wastes of a liquid nature. It also includes sewers, pipes and other conveyances only if they convey wastewater to a POTW Treatment Plant. The term also means the municipality as defined in Section 502(4) of the Act, which has jurisdiction over the indirect discharges to and the discharges from such a treatment works.

Regional Administrator means the Regional Administrator, EPA, Region I, Boston, Massachusetts.

Secondary industry category means any industry which is not a "primary industry category."

Septage means the liquid and solid material pumped from a septic tank, cesspool, or similar domestic sewage treatment system, or a holding tank when the system is cleaned or maintained.

Sewage Sludge means any solid, semi-solid, or liquid residue removed during the treatment of municipal waste water or domestic sewage. Sewage sludge includes, but is not limited to, solids removed during primary, secondary, or advanced waste water treatment, scum, septage, portable toilet pumpings, type III marine sanitation device pumpings (33 C.F.R. Part 159), and sewage sludge products. Sewage sludge does not include grit or screenings, or ash generated during the incineration of sewage sludge.

Sewage sludge incinerator is an enclosed device in which only sewage sludge and auxiliary fuel are fired.

Sewage sludge unit is land on which only sewage sludge is placed for final disposal. This does

not include land on which sewage sludge is either stored or treated. Land does not include waters of the United States, as defined in 40 C.F.R. § 122.2.

Sewage sludge use or disposal practice means the collection, storage, treatment, transportation, processing, monitoring, use, or disposal of sewage sludge.

Significant materials includes, but is not limited to: raw materials; fuels; materials such as solvents, detergents, and plastic pellets; finished materials such as metallic products; raw materials used in food processing or production; hazardous substance designated under Section 101(14) of CERCLA; any chemical the facility is required to report pursuant to Section 313 of title III of SARA; fertilizers; pesticides; and waste products such as ashes, slag and sludge that have the potential to be released with storm water discharges.

Significant spills includes, but is not limited to, releases of oil or hazardous substances in excess of reportable quantities under Section 311 of the CWA (see 40 C.F.R. §§ 110.10 and 117.21) or Section 102 of CERCLA (see 40 C.F.R. § 302.4).

Sludge-only facility means any "treatment works treating domestic sewage" whose methods of sewage sludge use or disposal are subject to regulations promulgated pursuant to section 405(d) of the CWA, and is required to obtain a permit under 40 C.F.R. § 122.1(b)(2).

State means any of the 50 States, the District of Columbia, Guam, the Commonwealth of Puerto Rico, the Virgin Islands, American Samoa, the Commonwealth of the Northern Mariana Islands, the Trust Territory of the Pacific Islands, or an Indian Tribe as defined in the regulations which meets the requirements of 40 C.F.R. § 123.31.

Store or storage of sewage sludge is the placement of sewage sludge on land on which the sewage sludge remains for two years or less. This does not include the placement of sewage sludge on land for treatment.

Storm water means storm water runoff, snow melt runoff, and surface runoff and drainage.

Storm water discharge associated with industrial activity means the discharge from any conveyance that is used for collecting and conveying storm water and that is directly related to manufacturing, processing, or raw materials storage areas at an industrial plant.

Surface disposal site is an area of land that contains one or more active sewage sludge units.

Toxic pollutant means any pollutant listed as toxic under Section 307(a)(1) or, in the case of "sludge use or disposal practices," any pollutant identified in regulations implementing Section 405(d) of the CWA.

Treatment works treating domestic sewage means a POTW or any other sewage sludge or waste water treatment devices or systems, regardless of ownership (including federal facilities), used in the storage, treatment, recycling, and reclamation of municipal or domestic sewage, including land dedicated for the disposal of sewage sludge. This definition does not include septic tanks or similar devices.

For purposes of this definition, "domestic sewage" includes waste and waste water from humans or household operations that are discharged to or otherwise enter a treatment works. In States where there is no approved State sludge management program under Section 405(f) of the CWA, the Director may designate any person subject to the standards for sewage sludge use and

disposal in 40 C.F.R. Part 503 as a "treatment works treating domestic sewage," where he or she finds that there is a potential for adverse effects on public health and the environment from poor sludge quality or poor sludge handling, use or disposal practices, or where he or she finds that such designation is necessary to ensure that such person is in compliance with 40 C.F.R. Part 503.

Upset see B.5.a. above.

Vector attraction is the characteristic of sewage sludge that attracts rodents, flies, mosquitoes, or other organisms capable of transporting infectious agents.

Waste pile or pile means any non-containerized accumulation of solid, non-flowing waste that is used for treatment or storage.

Waters of the United States or waters of the U.S. means:

- (a) All waters which are currently used, were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide;
- (b) All interstate waters, including interstate "wetlands;"
- (c) All other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, "wetlands", sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds the use, degradation, or destruction of which would affect or could affect interstate or foreign commerce including any such waters:
 - (1) Which are or could be used by interstate or foreign travelers for recreational or other purpose;
 - (2) From which fish or shellfish are or could be taken and sold in interstate or foreign commerce; or
 - (3) Which are used or could be used for industrial purposes by industries in interstate commerce;
- (d) All impoundments of waters otherwise defined as waters of the United States under this definition;
- (e) Tributaries of waters identified in paragraphs (a) through (d) of this definition;
- (f) The territorial sea; and
- (g) "Wetlands" adjacent to waters (other than waters that are themselves wetlands) identified in paragraphs (a) through (f) of this definition.

Waste treatment systems, including treatment ponds or lagoons designed to meet the requirements of CWA (other than cooling ponds as defined in 40 C.F.R. § 423.11(m) which also meet the criteria of this definition) are not waters of the United States. This exclusion applies only to manmade bodies of water which neither were originally created in waters of the United States (such as disposal area in wetlands) nor resulted from the impoundment of waters of the United States. Waters of the United States do not include prior converted cropland.

Notwithstanding the determination of an area's status as prior converted cropland by any other federal agency, for the purposes of the Clean Water Act, the final authority regarding Clean Water Act jurisdiction remains with EPA.

Wetlands means those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas.

Whole Effluent Toxicity (WET) means the aggregate toxic effect of an effluent measured directly by a toxicity test.

Zone of Initial Dilution (ZID) means the region of initial mixing surrounding or adjacent to the end of the outfall pipe or diffuser ports, provided that the ZID may not be larger than allowed by mixing zone restrictions in applicable water quality standards.

2. Commonly Used Abbreviations

BOD Five-day biochemical oxygen demand unless otherwise specified

CBOD Carbonaceous BOD

CFS Cubic feet per second

COD Chemical oxygen demand

Chlorine

Cl2 Total residual chlorine

TRC Total residual chlorine which is a combination of free available chlorine

(FAC, see below) and combined chlorine (chloramines, etc.)

TRO Total residual chlorine in marine waters where halogen compounds are

present

FAC Free available chlorine (aqueous molecular chlorine, hypochlorous acid,

and hypochlorite ion)

Coliform

Coliform, Fecal Total fecal coliform bacteria

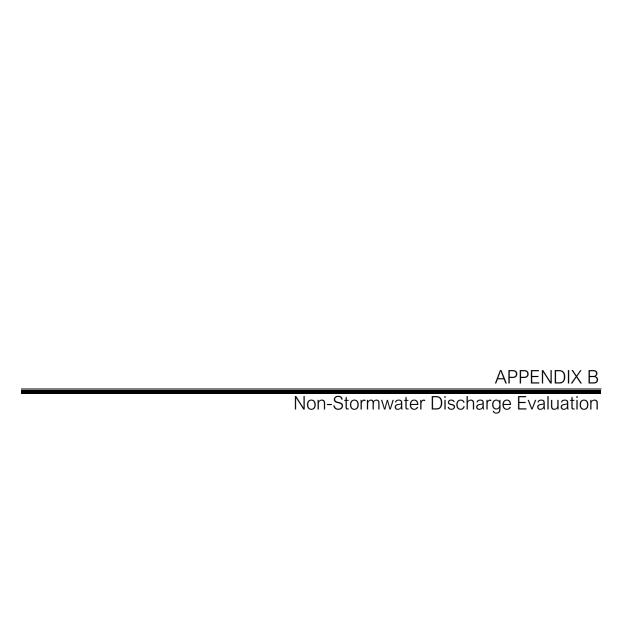
Coliform, Total Total coliform bacteria

Cont. Continuous recording of the parameter being monitored, i.e.

flow, temperature, pH, etc.

Cu. M/day or M³/day Cubic meters per day

DO Dissolved oxygen



Pittsfield Economic Development Authority (PEDA)

Non-stormwater Discharge Evaluation

Evaluation Conducted by: Berkshire Environmental Consultants, Inc.

Evaluation Conducted: October 2022

1.0 OVERVIEW

The Pittsfield Economic Development Authority (PEDA) is authorized to discharge treated stormwater and groundwater from the Williams Stanley Business Park (WSBP) in Pittsfield, Massachusetts to Silver Lake, also in Pittsfield, Massachusetts, under National Pollutant Discharge Elimination System (NPDES) Permit No. MA0040231 (the Permit). Stormwater from the WSBP as well as a large residential/commercial area in the northeast quadrant of the City of Pittsfield contribute storm water to a stormwater collection and treatment system that discharges through the WSBP outfall into Silver Lake. This outfall is identified as Outfall 001 in the Permit. Section C.2.a.9 of the Permit requires PEDA to conduct a Non-stormwater Discharge (NSD) Evaluation for the WSBP to evaluate for the presence of any non-stormwater discharges and to eliminate any non-stormwater discharges that are not explicitly authorized in the permit or covered by another NPDES permit.

The storm water collection and conveyance system at the WSBP includes storm drains and below ground piping in both the former General Electric (GE) industrial areas as well as residential and commercial areas in the City of Pittsfield. Stormwater and groundwater discharges from the drainage area are managed with two forebays, a water quality basin and a concrete culvert that discharges collected water conveys stormwater and groundwater to Silver Lake via Outfall 001 on the west side of Silver Lake Boulevard. A figure depicting the storm water drainage basin and discharge location is presented in Attachment A and maps depicting the storm water management features constructed east of Silver Lake is presented in Attachment B.

This Non-stormwater Discharge (NSD) evaluation includes the following areas of the WSBP:

- City of Pittsfield Residential/Commercial Area (limited evaluation)
- Former GE Teens Complex (WSBP Site 9)
- Former GE 20s Complex (WSBP Sites 4, 5 and 6)
- Former GE 30s Complex (WSBP Site 3N, Berkshire Innovation Center (BIC) and MountainOne Bank)
- Former GE 40s Complex (WSBP Sites 7 and 8)

The purpose of the NSD evaluation is to identify potential non-stormwater discharges. The evaluation included the following:

- A visual inspection of the physical storm water collection and conveyance systems including storm drains, outfalls (where accessible), surficial areas of runoff, drainage swales, and detention basins;
- Review of available stormwater and sewer maps obtained from PEDA and the City of Pittsfield;
 and
- Visual assessment of stormwater (a portion of the City of Pittsfield Residential/Commercial Area).

Laura Quinn of BEC conducted the on-site evaluation between October 12-20, 2022 during periods of no rainfall (>48 hours since the previous rainfall event). A summary of the drainage points observed in each area and the results of the evaluation are presented in Attachment C.

2.0 EVALUATION

2.1 City of Pittsfield Residential/Commercial Area

Approximately 90 acres of residential and commercial areas in the City of Pittsfield contribute stormwater and runoff to the stormwater collection and conveyance system in the WSBP that is managed by PEDA. Attachment A illustrates the drainage basin that contributes stormwater to Outfall 001. Given the size of the City of Pittsfield contribution area and the primarily residential and commercial uses of this area, it was not evaluated in detail for non-stormwater discharges. On October 12, 2022, two stormwater system manhole covers located along Kellogg Street were removed and inspected for the presence of non-stormwater discharges. Each manhole conveyed flow from the City of Pittsfield residential and commercial areas of the drainage basin to the WSBP stormwater collection system. A map showing these manhole covers is provided in Attachment D.

No flow was observed in the manhole located in the centerline of Kellogg Street (collects runoff from Plunket Street and storm drains along Kellogg Street).

The manhole (MH-2) located on the south side of Kellogg Street (collects runoff from a large area along Woodlawn Avenue and north of Tyler Street) was approximately 14 feet deep and flow was observed coming from the east in the bottom of this manhole. To evaluate the nature of this water, a sample was collected and visually inspected as summarized below:

- The sample was clear.
- No foam was observed.
- No sheen was observed.
- A small amount of sediment was noted.
- No unusual odors or colors were noted.

Based on the visual assessment, the water did not appear to include industrial process wastewater or sanitary discharges. The source of the water is not known.

Further evaluation will be conducted during 2023 to determine the source of the water flowing into MH-2 from the City of Pittsfield portion of the drainage basin. It is anticipated the evaluation will include a detailed review of the City of Pittsfield stormwater drainage system maps and inspection of storm drains on the north end of Woodlawn Avenue and the drainage basin north of Tyler Street.

2.2 Former GE Teens Complex (WSBP Site 9)

An inspection of the former teens complex was conducted on October 12, 2022 and October 19-20, 2022. The former teens complex, also known as WSBP Area 9, is located east of Woodlawn Avenue, south of Tyler Street, north of the CSX railroad tracks and west of GE property. The complex is now vacant but does contain concrete and paved foundations, floors, and driveways of the former manufacturing complex. Maps of this area are provided in Attachment E. Historical stormwater drainage maps were used to evaluate this area.

Approximately 51 storm drains were inspected in Area 9 and along Woodlawn Avenue adjacent to the property. The storm drains were primarily located in former roadways/driveways, loading docks or on the perimeter of buildings. Except for two storm drains both located in the northern portion of Area 9, no stormwater drainage was observed. Numerous storm drains included standing water that was not flowing or were shallow, filled with sediment and non-functional. Many storm drains could not be located. No storm drains were observed in the former building footprints, only manholes (solid covers) were observed in these areas.

Regarding the two storm drains where flow was observed:

- 1. One catch basin was located at the northeast corner of the teens complex, the basin was located at the top of a concrete ramp on the eastern end of Building 17. Water was observed to be flowing from east to west towards the catch basin; no unusual colors or odors were noted. Based on available mapping it is possible that this catch basin is connected to the municipal sewer line which is located between former Buildings 15 and 17.
- 2. The second catch basin was centrally located between former Building 15 and Building 17 in the paved driveway between the two buildings. A small amount of water was observed flowing from the southeast; no unusual colors or odors were noted. Based on available mapping it is possible that this catch basin is connected to the municipal sewer line which is located between Buildings 15 and 17.

Further evaluation will be conducted during 2023 to determine the source and outfall location of these two storm drains. It is anticipated the evaluation will include inspection of the nearby municipal sanitary sewer system manholes and if needed, dye testing.

2.3 Former GE 20s Complex (including WSBP Sites 4, 5 and 6)

An inspection of the former GE 20s complex was conducted on October 13, 2022. The former GE 20s complex is bordered by Woodlawn Avenue to the west, East Street to the south, GE property to the east and the CSX railroad tracks to the north. Historical stormwater drainage maps were used to evaluate this area.

The complex is now occupied by a large, paved parking area and grassy landscaped areas to the north (WSBP Site 4) and south (WSBP Sites 5 and 6) of the parking area. A map of this area is provided in Attachment F. This area has a limited stormwater collection system including one storm drain (Area Drain 11) north of the driveway, two storm drains along East Street and a small trench drain along the south end of the driveway. This collection system conveys flow to a stormwater drainage system along the north side of East Street which flows west and discharges into a series of step pools that convey stormwater into the south forebay (south end of water quality basin). The large parking lot includes six rip rap swales and trench drains along the north side of the parking area that direct storm water to WSBP Site 4north of the parking lot.

Based on inspection of the riprap swales, trench drains and storm drains (see Attachment F), no non-stormwater discharges were identified on the former GE 20s complex.

2.4 Former GE 30s Complex (including WSBP Site 3N, BIC, MountainOne Bank)

An inspection of the former GE 30s complex was conducted on October 13, 2022. The former GE 30s Complex is bordered by Silver Lake and Silver Lake Boulevard to the south, Woodlawn Avenue to the east, East Street to the south and the CSX railroad tracks to the north. Maps provided by PEDA showing the recently developed stormwater system were used to evaluate this area.

The complex currently includes the following:

- MountainOne Bank located at the corner of East Street and Silver Lake Boulevard
- Berkshire Innovation Center (BIC) located at the corner of East Street and Woodlawn Avenue
- Eversource Solar Array located on north side of Silver Lake Boulevard at the northeast corner of the former 30s Complex
- WSBP Site 3N A 2.8-acre grassy area bordered by the CSX rail to the north, Woodlawn Ave to the east, the BIC to the south and the WSBP water quality basin to the west.
- Stormwater management areas including the north and south forebays, rip-rap drainage swales, water quality basin and a concrete culvert that discharges treated stormwater and groundwater from the water quality basin to Silver Lake.

A map of this area is included in Attachment G.

The MountainOne parcel and the BIC parcel were developed in 2013 and 2020, respectively. The stormwater collection and conveyance systems include the following:

- Storm drains
- Grass lined drainage swales
- Riprap lined drainage swales
- Riprap lined step pools
- Rain gardens
- Detention basins

These systems were designed and constructed to flow into the south forebay, north forebay or directly into the water quality basin. The two forebays and the water quality basin were designed to treat stormwater and contaminated groundwater by allowing sediments to drop out of suspension prior to discharge into Silver Lake.

No storm drains were observed inside the solar array at the northwest corner of the 30s Complex, however this part of the complex was not accessible to a thorough inspection due to lack of access.

Based on the inspection of the stormwater management systems as well as numerous storm drains and drainage swales (see Attachment G), no non-stormwater discharges were identified on the former GE 30s Complex.

2.5 Former GE 40s Complex (including WSBP Sites 7 and 8)

An inspection of the former GE 40s Complex was conducted on October 19, 2022. The former 40s Complex is south of Kellogg Street, north of the CSX railroad tracks and west of Woodlawn Avenue and includes WSBP Sites 7 and 8. Historical stormwater drainage maps were used to evaluate this area. Historical

stormwater drainage maps were used to evaluate this area. A map depicting this area is included in Attachment H.

This area includes a vegetated temporary stockpile on the western end of the site, a vegetated slope along the north and east side of the former complex, concrete building foundations and paved access roads. Approximately 1/3 of the western end of the former complex is covered with a temporary stockpile of crushed building materials from the 40s Complex building demolition. The stockpile has been covered with topsoil and supports vegetation.

Available maps show a system of storm drains located beneath the temporary stockpile area. It is unknown whether these drains were plugged or capped prior to placement of the stockpile. No storm drains were observed in the concrete and paved building foundations occupying the eastern half of the site. Approximately eight storm drains were inspected along the south side of the property (western end) and in the middle area of the former 40s Complex opposite the gated entrance. In addition, one catch basin was observed in the CSX right of way. Two grated vaults with standing water were noted but it is unknown if these are connected to the storm drain conveyance system. No significant flow was observed in any of the storm drains. A small amount of seepage was observed from the crushed concrete stockpile into a storm drain on the perimeter of the stockpile. This same area also had white dust along the perimeter of the stockpile.

Accessible storm drains were inspected on October 13, 2022 and no significant sources of non-stormwater discharges were identified. As mentioned, a small amount of non-stormwater discharge was observed seeping into a catch basin on the perimeter of the temporary stockpile. Berkshire Environmental will make a recommendation to PEDA that both the catch basin located on the perimeter of the crushed stockpile and the catch basin located in the CSX corridor be temporarily blocked as a stormwater control measure using a rubber storm drain mat to keep stormwater from entering these two storm drains.

3.0 SUMMARY AND RECOMMENDATIONS

The non-stormwater discharge evaluation for the WSBP identified no significant sources of non-stormwater discharges. Five action items recommended for 2023 include the following:

- a. Further evaluation of the source of flow observed in MH-2 on Kellogg Street. The evaluation will include a detailed review of the City of Pittsfield stormwater drainage system maps and inspection of storm drains on the north end of Woodlawn Avenue and the drainage basin north of Tyler Street.
- b. Further evaluation of flow observed in the catch basin located at the northeast corner of WSBP Site 9. Evaluation to include inspection of nearby municipal sanitary sewage system manholes and/or dye testing.
- c. Further evaluation of flow observed in the catch basin located between Buildings 15 and 17 (Site 9). Evaluation to include inspection of nearby municipal sanitary sewage system manholes and/or dye testing.
- d. Placement of a temporary storm drain mat over the catch basin located on the south side of the of the temporary stockpile in the 40s Complex (WSBP Site 7). The storm drain has the potential to convey leachate (dust) from the crushed building material stockpile to the stormwater system.

e. Placement of a temporary storm drain mat over the catch basin located in the CSX right of way, south of the 40s Complex (WSBP Site 8). The storm drain has the potential to convey spills, drips, dust, and trash from CSX corridor into the stormwater system.

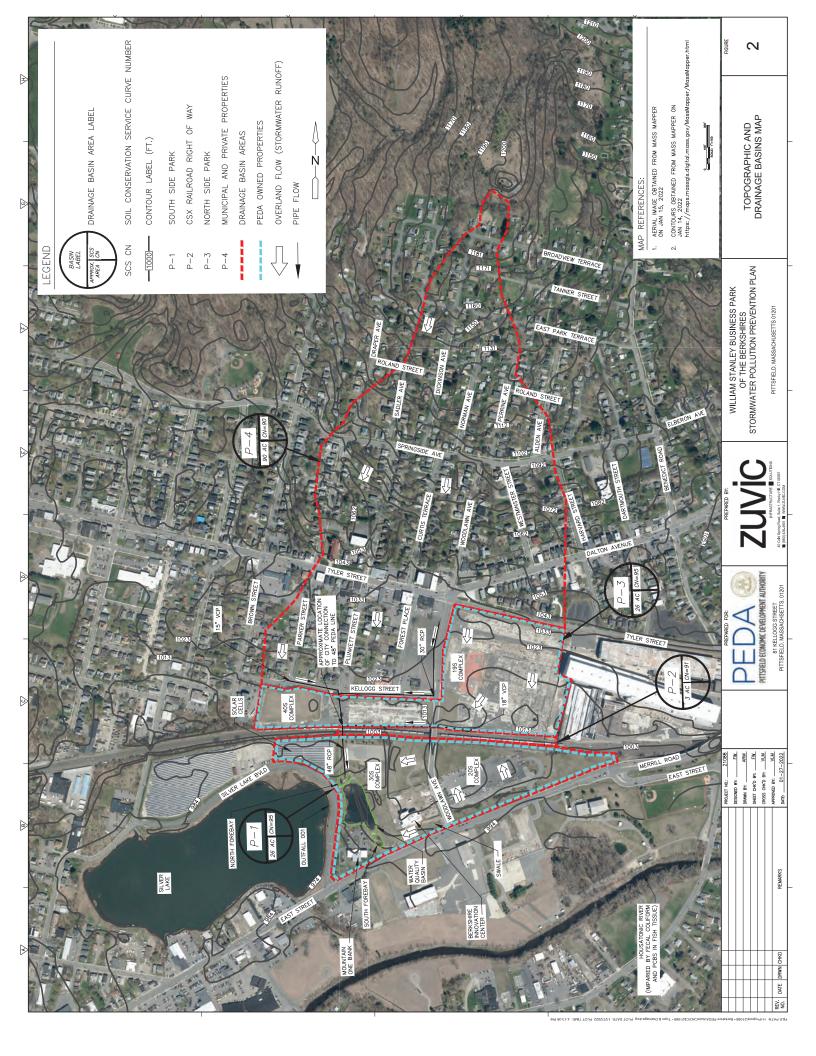
4.0 CERTIFICATION

Evaluation conducted by: Laura Quinn, Berkshire Environmental Consultants, Inc.

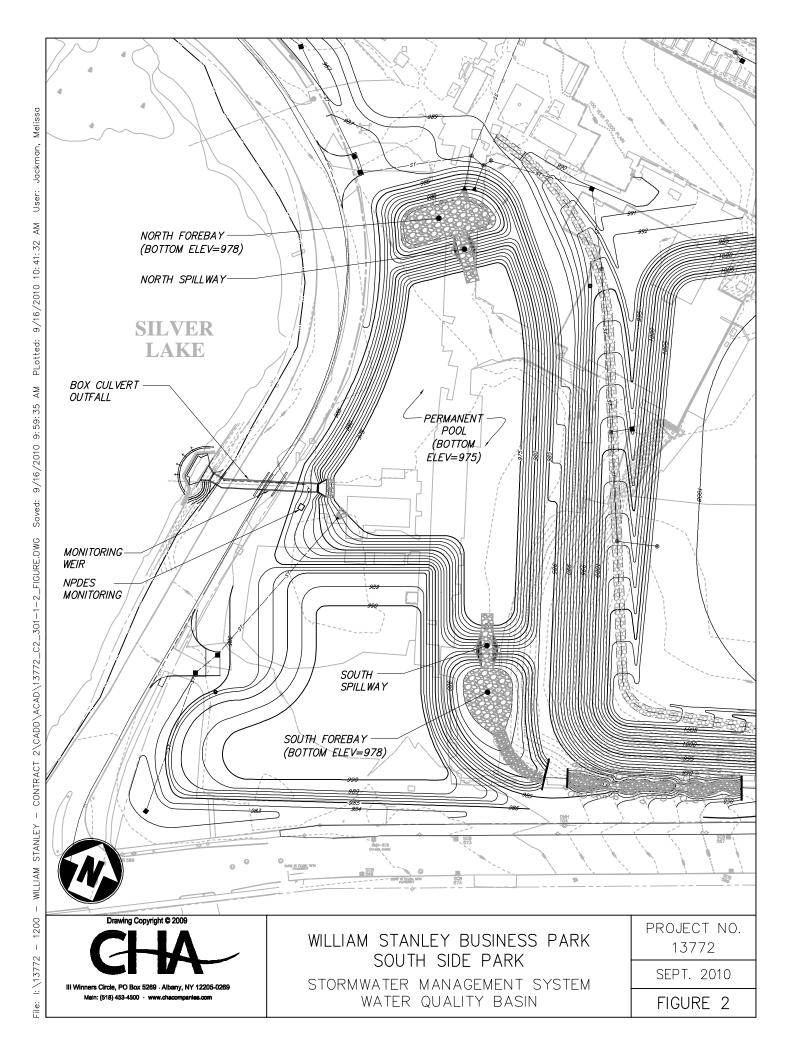
Date(s) of evaluation: October 12, 13, 19, 20 - 2022

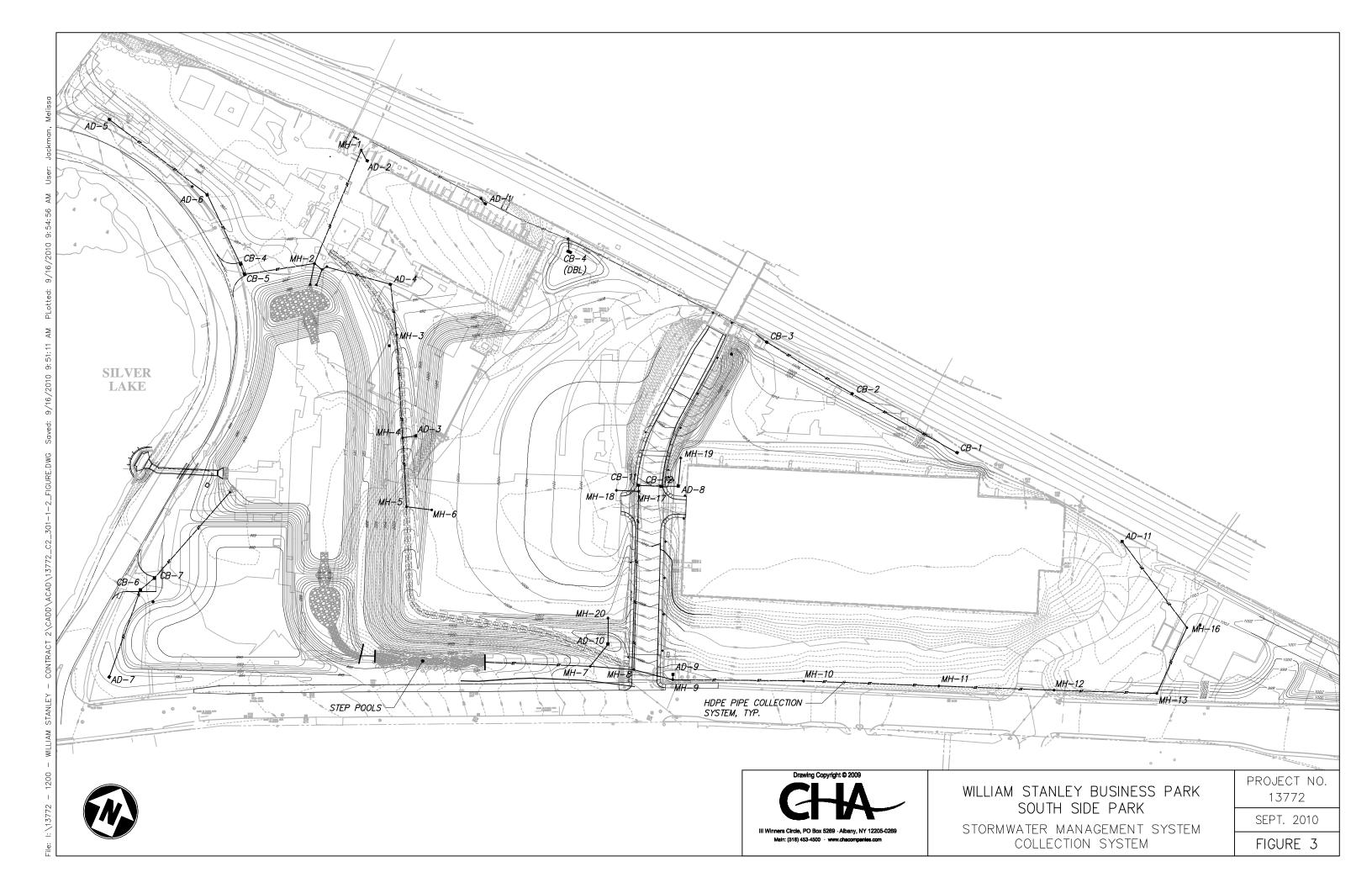
Signature: Date: 10/26/22





ATTACHMENT B	– PEDA OUTFALL 00	1 STORMWATER A	ND GROUNDWATE	R MANAGEMENT S	SYSTEMS MAP







		PEDA Outfall 0	01 Non-stormwater Discharge Evaluation			
City of Pittsfield Residential & Commercial						
GENERAL						
Date of Evaluation:	Wednesday, October 12, 2022					
Weather Conditions:	Sunny, 60-70 degrees F					
Previous Rainfall Event:	3 ,, -	Cianatura				
Inspector/Reviewer: VISUAL EVALUATION	Laura Quinn, BEC, Inc.	Signature:				
Date	Drainage Points Observed	Were any stains, smudges, odors, and other abnormal conditions observed (Y or N)?	Results of Evaluation	Notes		
10/19/2022	Storm drains on Forest Place (4)	N	No non-stormwater discharges identified	No flowing water observed		
10/19/2022	Storm drains on Kellogg Street (5)	N	No non-stormwater discharges identified	No flowing water observed		
10/12/2022	MH-1	N	No non-stormwater discharges identified	Four inlets and one outlet to the south; no drainage observed		
10/12/2022	MH-2	N		Two shallow inlets, one deep inlet from the east and one outlet to the southwest. MH-2 was deep (~14 feet below grade) and water was flowing in the bottom of the pipe coming from the east.		
Description of flow observed:						
City of Pittsfield commercial/residential notes: the northern portion of the drainage basin (See Figure 2 SWPPP) was not evaluated in detail for non-stormwater discharges since it has not historically been part of the GE Complex and would not be expected to be a significant source of PCBs to stormwater. This area is primarily residential but includes commercial areas south of and along Tyler Stree Drainage from this area is conveyed to PEDA through MH-1 and MH-2 on Kellogg Street. These two manholes were inspected to evaluate stains, odors or other abnormal conditions.						
SANITARY AND STORM SEWER MAP REVIEW						
Date	Maps Reviewed	Results of Evaluation				
10/12/2022	Storm Drains: 19s , 40s, CITY; O'Reilly, Talbot & Okun (2013)	No non-stormwater disc	harges identified based on the map review			

PEDA Outfall 001 Non-stormwater Discharge Evaluation Former GE Teens Complex (WSBP Site 9)						
GENERAL			- F - (
Date of Evaluation: Weather Conditions: Previous Rainfall Event: Inspector/Reviewer:	Wednesday, October 12, 2022 Sunny, 60-70 degrees F Monday, October 10, 2022 Laura Quinn, BEC, Inc.	Wednesday October 19, 2022 Mostly Cloudy, 50 degrees F Monday, October 17, 2022 Laura Quinn, BEC, Inc.	Thursday October 20, 2022 Sunny, 50 degrees F Monday, October 17, 2022 Laura Quinn, BEC, Inc.	Signature:		
VISUAL EVALUATION	Laura Quiriii, BEC, IIIC.	Laura Quiriii, BEC, IIIC.	Laura Quiriri, BEC, IIIC.			
Date		Were any stains, smudges, odors, and other abnormal conditions observed (Y or N)?	Results of Evaluation	Notes		
	Catch Basins W. Side of Teens / 9	N	No non-stormwater discharges identified	Numerous catch basins filled in with sediment/soil and		
	Catch Basins E. Side of Teens / 0	NA	NA	grown over with vegetation. All catch basins that were		
	Catch Basins Central Area of Teens (south of Building 8, east of Buildings 19, 16 and 11 and south of Buildings 4 &5 / 18	N	No non-stormwater discharges identified	open were either dry or had small amounts of standing water in the bottom. With the exception of two catch basins, no flow/influent was observed in the catch basins. A description of flow observed in two of the		
	Catch Basins S. Side of Teens (along RR tracks) / 2	N	No non-stormwater discharges identified	catch basins is provided in the section "Description of flow observed" below.		
	Catch Basins N. Side of Teens (between Building 17 and 15) / 15	N	No non-stormwater discharges identified	No catch basins were observed on the east side of the		
	Catch Basins along Woodlawn Ave / 7	N	No non-stormwater discharges identified	teens (east of Building 4/5)		
observed	1. eastern end of Building 17 at top of concrete ramp - a small amount of water was observed flowing from the east; no odors were noted. 2. area between Building 15 and Building 17 on north side of driveway separating the two former buildings. A small amount of water was observed flowing from south to north; no odors were noted.					
19s Complex notes: not all stormwater water catch basins could be located and inspected due to inaccurate maps, vegetation growth and time considerations. On the dates of the inspection a total of 5 stormwater catch basins were inspected in the former 19s Complex. No stormwater collection drains were observed in the former building footprints.						
SANITARY AND STORM SEWER MAP REVIEW						
	Maps Reviewed	Results of Evaluation	Notes			
	Storm Sewer System Mapping - PEDA PROPERTY (2012); Arcadis Figure 1	No non-stormwater discharges identified based on the map review	Stormwater drainage confirmed but not all	catch basins or manholes were identified.		
	Utility Locations - Storm Sewer Drainage Line; Blasland, Bouck & Lee (date unknown) Figures 5, 5A, 5B	No non-stormwater discharges identified based on the map review	Some stormwater drainage features were identified. More detailed maps should be id	identified but final outfall locations were not always entified.		
NA - not applicable, no d	discharge points observed					

	PEDA (Outfall 001 Non-stormwa	ater Discharge Evaluation	
	F	ormer GE 20s Complex	(WSBP Site 4, 5, 6)	
GENERAL Date of Evaluation: Weather Conditions Previous Rainfall E	s: Cloudy, 65 degrees F			
Inspector/Reviewer		Signature:		
VISUAL EVALUAT	TION			
Date	20s Complex Drainage Points Observed / # of Points Observed	Were any stains, smudges, odors, and other abnormal conditions observed (Y or N)?	Results of Evaluation	Notes
10/13/2022	Area Drain 11 / 1	N	No non-stormwater discharges identified	Standing water, no influent observed
	Trench Drain on North Side of Parking Area / 2	N	No non-stormwater discharges identified	Mostly clogged with sediment and organic matter
	Rip Rap Swale #1 / 1	N	No non-stormwater discharges identified	Dry, no water observed
	Rip Rap Swale #2 / 1	N	No non-stormwater discharges identified	Dry, no water observed
	Rip Rap Swale #3 / 1	N	No non-stormwater discharges identified	Dry, no water observed
	Rip Rap Swale #4 / 1	N	No non-stormwater discharges identified	Dry, no water observed
	Rip Rap Swale #5 / 1	N	No non-stormwater discharges identified	Dry, no water observed
	Rip Rap Swale #6 / 1	N	No non-stormwater discharges identified	Dry, no water observed
	Catch Basins along East Street / 2	N	No non-stormwater discharges identified	Dry, no water observed
	Trench Drain along East Street / 1	N	No non-stormwater discharges identified	Dry, no water observed
Description of flow observed:	w None observed			
basin (area drain 1	es: limited catch basins on the 20s property. Rip-rap of 1) observed in the driveway on the east end of the pro	_	on the north side of the parking lot direct rur	noff to a grassy area to the north. One catch
	TORM SEWER MAP REVIEW			
Date	Maps Reviewed	Results of Evaluation	Notes	- Hardina - Hard
10/13/2022	Grading and Drainage Plan East; Clough Harbor & Associates (2008)	discharges identified based on the map	Map appeared to accurately represent sto	ormwater collection system.
		review		

PEDA Outfall 001 Non-stormwater Discharge Evaluation Former GE 30s Complex (WSBP Site 3N, BIC, MountainOne Bank)

GENERAL

Date of Evaluation: Thursday, October 13, 2022 Weather Conditions: Cloudy, 65 degrees F Monday, October 10, 2022 Laura Quinn, BEC, Inc. Previous Rainfall Event:

Signature:

Inspector/Reviewer: VISUAL EVALUATION

Date	30s Complex	Were any stains,	Results of Evaluation	Notes
	Drainage Points Observed / # of Points Observed	smudges, odors, and		
		other abnormal		
		conditions observed		
		(Y or N)?		
10/13/2022	Storm Drains BIC Parking Lot / 2	N	No non-stormwater discharges identified	No drainage of any kind observed
	Grassy Drainage Swale - North Side of BIC building / along entire length	N	No non-stormwater discharges identified	No drainage of any kind observed
	Storm Drains to Triangular Drainage Area - West Side of BIC building / 6	N	No non-stormwater discharges identified	No drainage of any kind observed
	Area Drain 10 / 1	N	No non-stormwater discharges identified	No drainage of any kind observed
	Drainage Swale - West Side of BIC / 2	N	No non-stormwater discharges identified	No drainage of any kind observed
	Detention Area - northwest corner of BIC property / 1	N	No non-stormwater discharges identified	No drainage of any kind observed
	Hillside on South Side of BIC building / 3	N	No non-stormwater discharges identified	No drainage of any kind observed
	Detention Area at SE corner of BIC property / 1		No non-stormwater discharges identified	
	Inlet to Rip Rap Drainage Swale - North Side East / 1 Street	N	No non-stormwater discharges identified	No drainage of any kind observed
	Rip Rap Drainage Swale - North Side East Street / 1	N	No non-stormwater discharges identified	No drainage of any kind observed
	South Forebay Headwall Inlet / 1	N	No non-stormwater discharges identified	No drainage of any kind observed
	South Forebay Outlet/Dam / 1	N	No non-stormwater discharges identified	No drainage observed; heavily vegetated
	WQB - South Forebay Inlet / 1	N	No non-stormwater discharges identified	No drainage observed; heavily vegetated
	Storm Drains in Mountain One parking lot / 4	N	No non-stormwater discharges identified	No drainage of any kind observed
	Discharge of Storm Drains from Mountain One parking lot to	N	No non-stormwater discharges identified	No drainage of any kind observed; two
	south forebay / 2			discharge pipes observed on the slope on
				the west side of south forebay
	Storm Drains on west side of Mountain One property / 3	N	No non-stormwater discharges identified	
	Discharge of Storm Drains from west side of Mountain One to WQB / 1	N	No non-stormwater discharges identified	No drainage of any kind observed
	WQB Outlet / 1	N	No non-stormwater discharges identified	No drainage of any kind observed; concrete
	North Forebay Outlet/Dam 1	N	No non-stormwater discharges identified	No drainage observed; heavily vegetated
	WQB - North Forebay Inlet /1	N	No non-stormwater discharges identified	No drainage observed; heavily vegetated
	Catch Basins Silver L. Blvd / 2 (could not located Area Drain 5, Area Drain 6)	N	No non-stormwater discharges identified	
Description of flow	None observed			

Description of flow observed:

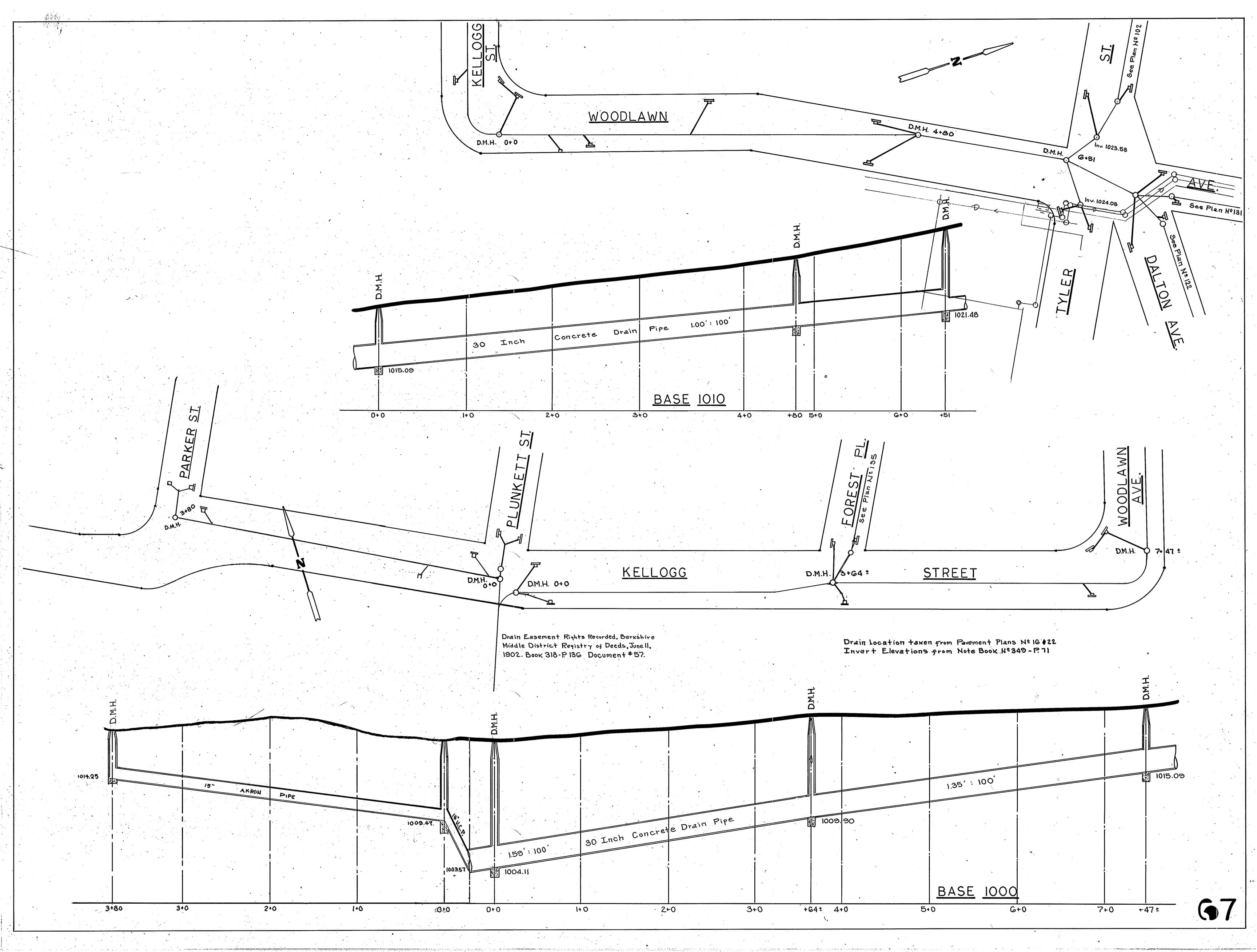
30s Complex notes: The 30s complex includes two structures that were constructed between 2012 (Mountain One Bank) and 2021 (Berkshire Innovation Center). Both properties include sewer connections for sanitary discharges. Significant stormwater collection systems were constructed for both properties that discharge to the PEDA South Forebay or directly to the Water Quality Basin.

Date	Maps Reviewed	Results of Evaluation
10/13/2022	Grading and Utilities Prepared For Mountain One Financial Partners (May 2011); Guntlow & Associates, Inc.	No non-stormwater discharges identified based on the map review
	William Stanley Business Park - Site Plan with Old Soil Sampling Locations (March 2018);O'Reilly, Talbot & Okun,	No non-stormwater discharges identified based on the map review
	Clough Harbour & Associates - Site Utility Stormwater Plan & Profile (August 2008)	No non-stormwater discharges identified based on the map review

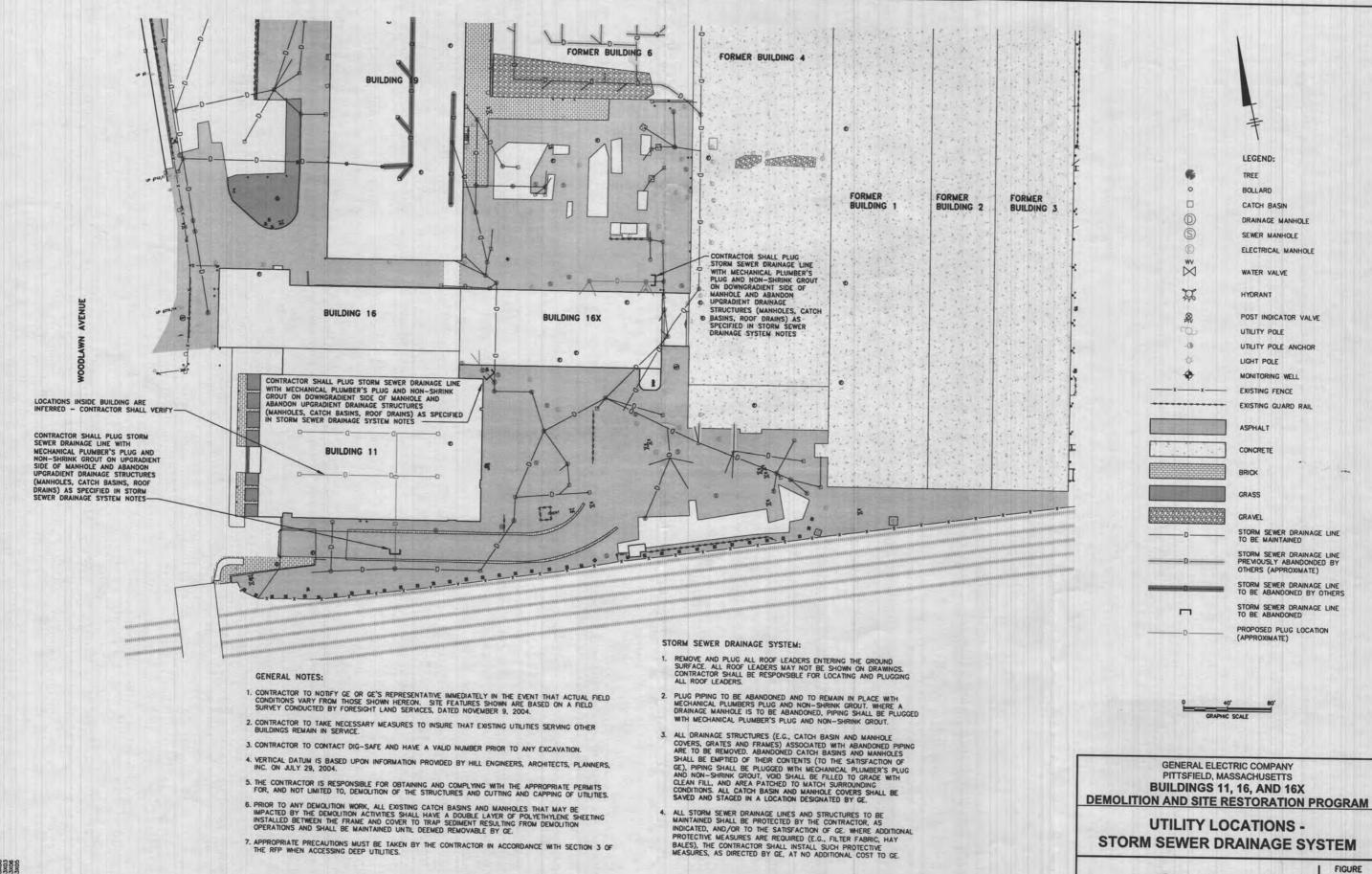
PEDA Outfall 001 Non-stormwater Discharge Evaluation Former GE 40s Complex (WSBP Site 7, 8)						
GENERAL						
Date of Evaluation:	Wednesday, October 19, 2022					
Weather Conditions:	Mostly Cloudy, 50 degrees F					
Previous Rainfall Eve	ent Monday, October 17, 2022					
Inspector/Reviewer:	Laura Quinn, BEC, Inc.	Signature:				
VISUAL EVALUATION	ON					
Date	40s Complex	Were any stains,	Results of Evaluation	Notes		
	Drainage Points Observed / # of	smudges, odors, and				
	points observed	other abnormal				
		conditions observed				
		(Y or N)?				
10/19/2022	Stormwater Catch Basins / 8	N	No non-stormwater discharges identified	Most catch basins were shallow and many were		
				full of sediment and vegetation. One catch basi		
				appeared to be collecting runoff from the		
				concrete stockpile, see description below.		
	Ota manufactor Octable Designing DD totals	N.	No construction discharge identification	Outside to a six best standing assistant but as flass		
	Stormwater Catch Basin in RR track	N	No non-stormwater discharges identified	Catch basin had standing water but no flow.		
	corridor / 1 Grated Vaults / 2	N	No non stormwater discharges identified	Standing water channed in both vaulte. Based		
	Grated Vaults / 2	IN .	No non-stormwater discharges identified	Standing water observed in both vaults. Based on available drawings the vaults are not		
				connected to stormwater collection system.		
Description of flow		A small amount of seepage was observed dripping/draining into a catch basin on the south side of the concrete stockpile area. The storm drain was partially				
observed:	covered with gravel (gravel apron arour	<u> </u>		bundary. A concrete stockpile is located on the		

footprints.



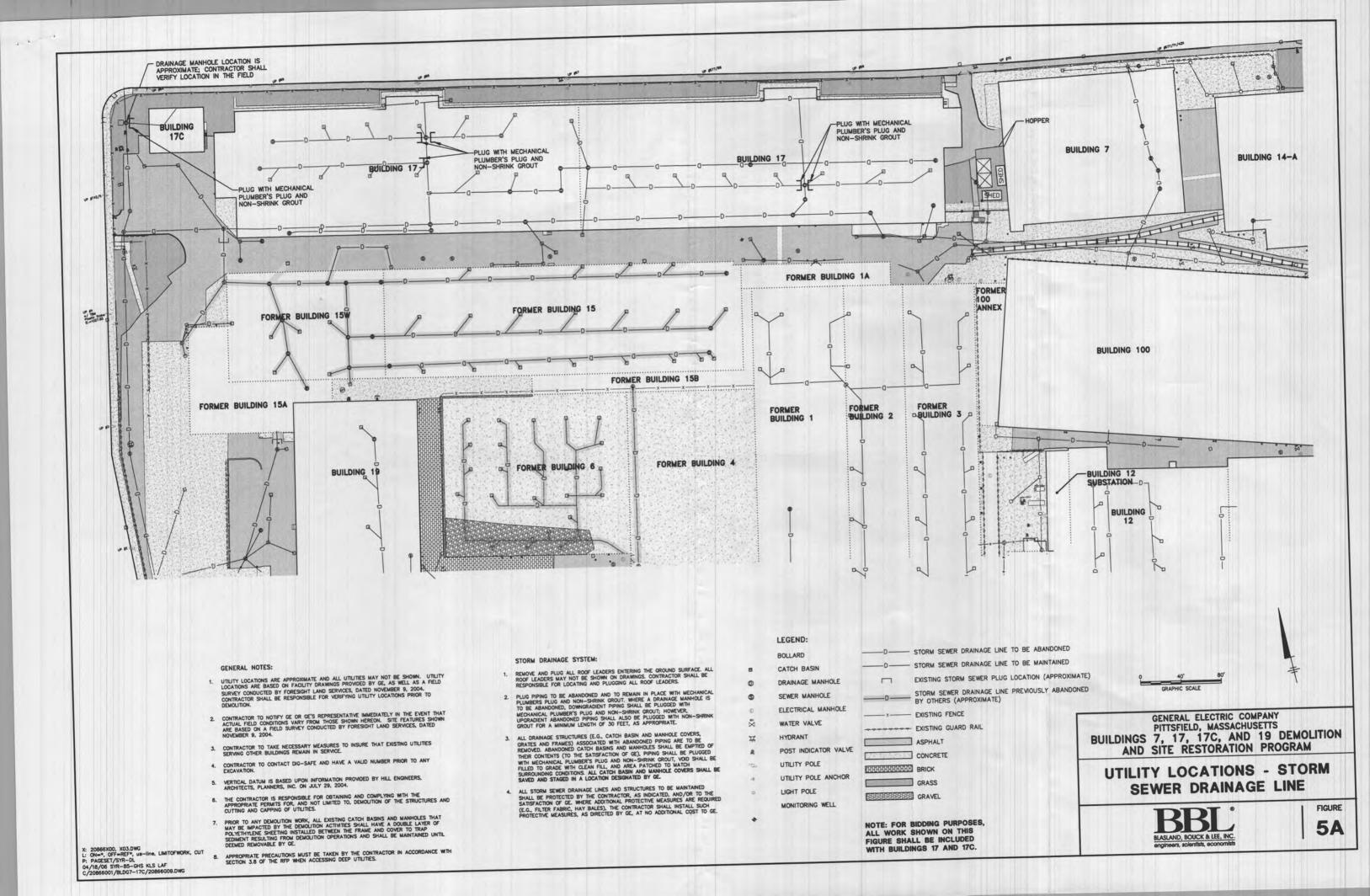


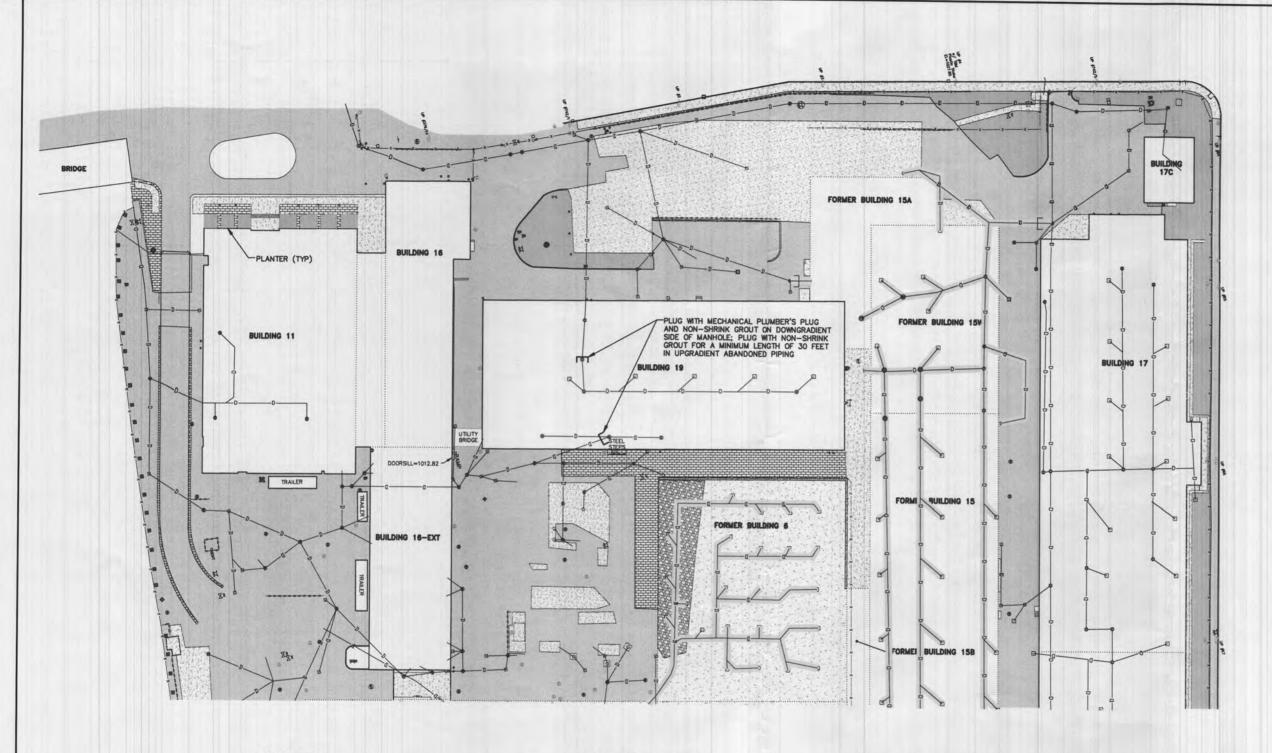




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ARCADIS BBL





GENERAL NOTES:

- UTILITY LOCATIONS ARE APPROXIMATE AND ALL UTILITIES MAY NOT BE SHOWN. UTILITY LOCATIONS ARE BASED ON FACILITY DRAWINGS PROVIDED BY GE, AS WELL AS A FIELD SURVEY CONDUCTED BY FORESIGHT LAND SERVICES, DATED NOVEMBER 9, 2004. CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING UTILITY LOCATIONS PRIOR TO DEMOLITION.
- CONTRACTOR TO NOTIFY GE OR GE'S REPRESENTATIVE IMMEDIATELY IN THE EVENT THAT ACTUAL FIELD CONDITIONS VARY FROM THOSE SHOWN HEREON. SITE FEATURES SHOWN ARE BASED ON A FIELD SURVEY CONDUCTED BY FORESIGHT LAND SERVICES, DATED NOVEMBER 9, 2004.
- DATED NOVEMBER 9, 2004.
 CONTRACTOR TO TAKE NECESSARY MEASURES TO INSURE THAT EXISTING UTILITIES SERVING OTHER BUILDINGS REMAIN IN SERVICE.
- CONTRACTOR TO CONTACT DIG-SAFE AND HAVE A VALID NUMBER PRIOR TO ANY EXCAVATION.
- VERTICAL DATUM IS BASED UPON INFORMATION PROVIDED BY HILL ENGINEERS, ARCHITECTS, PLANNERS, INC. ON JULY 29, 2004.

GENERAL NOTES (CONTINUED):

- THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING AND COMPLYING WITH THE APPROPRIATE PERMITS FOR, AND NOT LIMITED TO, DEMOLITION OF THE STRUCTURES AND CUTTING AND CAPPING OF UTILITIES.
- PRIOR TO ANY DEMOLITION WORK, ALL EXISTING CATCH BASINS AND MANHOLES THAT
 MAY BE IMPACTED BY THE DEMOLITION ACTIVITIES SHALL HAVE A DOUBLE LAYER OF
 POLYETHYLENE SHEETING INSTALLED BETWEEN THE FRAME AND COVER TO TRAP
 SEDIMENT RESULTING FROM DEMOLITION OPERATIONS AND SHALL BE MAINTAINED UNTIL
 DEEMED REMOVABLE BY GE.
- APPROPRIATE PRECAUTIONS MUST BE TAKEN BY THE CONTRACTOR IN ACCORDANCE WITH SECTION 3.8 OF THE RFP WHEN ACCESSING DEEP UTILITIES.

STORM DRAINAGE SYSTEM:

- REMOVE AND PLUG ALL ROOF LEADERS ENTERING THE GROUND SURFACE. ALL ROOF LEADERS MAY NOT BE SHOWN ON DRAWINGS. CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING AND PLUGGING ALL ROOF LEADERS.
- 2. PLUG PIPING TO BE ABANDONED AND TO REMAIN IN PLACE WITH MECHANICAL PLUMBERS PLUG AND NON-SHRINK GROUT. WHERE A DRAINAGE MANHOLE IS TO BE ABANDONED, DOWNGRADIENT PIPING SHALL BE PLUGGED WITH MECHANICAL PLUMBER'S PLUG AND NON-SHRINK GROUT; HOWEVER, UPGRADIENT ABANDONED PIPING SHALL ALSO BE PLUGGED WITH NON-SHRINK GROUT FOR A MINIMUM LENGTH OF 30 FEET, AS APPROPRIATE.
- 3. ALL DRAINAGE STRUCTURES (E.G., CATCH BASIN AND MANHOLE COVERS, GRATES AND FRAMES) ASSOCIATED WITH ABANDONED PIPING ARE TO BE REMOVED. ABANDONED CATCH BASINS AND MANHOLES SHALL BE EMPTIED OF THEIR CONTENTS (TO THE SATISFACTION OF GE), PIPING SHALL BE PLUGGED WITH MECHANICAL PLUMBER'S PLUG AND NON-SHEINK GROUT, VOID SHALL BE FILLED TO GRADE WITH CLEAN FILL, AND AREA PATCHED TO MATCH SURROUNDING CONDITIONS. ALL CATCH BASIN AND MANHOLE COVERS SHALL BE SAVED AND STAGED IN A LOCATION DESIGNATED BY GE.
- 4. ALL STORM SEWER DRAINAGE LINES AND STRUCTURES TO BE MAINTAINED SHALL BE PROTECTED BY THE CONTRACTOR, AS INDICATED, AND/OR TO THE SATISFACTION OF GE. WHERE ADDITIONAL PROTECTIVE MEASURES ARE REQUIRED (E.G., FILTER FABRIC, HAY BALES), THE CONTRACTOR SHALL INSTALL SUCH PROTECTIVE MEASURES, AS DIRECTED BY GE, AT NO ADDITIONAL COST TO GE.



LEGEND:

- TREE BOLLARD
- CATCH BASIN
- DRAINAGE MANHOLE
- SEWER MANHOLE
- ELECTRICAL MANHOLE
- WATER VALVE

H

- HYDRANT
 POST INDICATOR VALVE
- UTILITY POLE
- UTILITY POLE ANCHOR
- LIGHT POLE
- MONITORING WELL
- STORM SEWER DRAINAGE LINE TO BE MAINTAINED
 - STORM SEWER DRAINAGE LINE TO BE ABANDONED
 - EXISTING STORM SEWER PLUG LOCATION (APPROXIMATE)
 - STORM SEWER DRAINAGE LINE
 PREVIOUSLY ABANDONED BY OTHERS
- (APPROXIMATE)

 EXISTING FENCE
- EXISTING GUARD RAIL
- ASPHALT
- CONCRETE
- BRICK
- GRASS
- GRAVEL

NOTE: FOR BIDDING PURPOSES, ALL WORK SHOWN ON THIS FIGURE SHALL BE INCLUDED WITH BUILDING 19.



GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS
BUILDINGS 7, 17, 17C, AND 19 DEMOLITION
AND SITE RESTORATION PROGRAM

UTILITY LOCATIONS -STORM SEWER DRAINAGE LINE



FIGURE

5B

uw-fireprotection-line
P: PAGESET/SYR-DL
04/18/06 SYR-85-GHS KLS LAF
C/20866001/BLD19/20866G04.DWG

X: 20866X00, X03, X05.DWG
L: ON=*, OFF=REF, BUILDING-SHD, LIMITOFWORK,
UTIL-PIRE-MH, UTIL-HPSTEAM, UTIL-GAS, UTIL-SAN-HID,
u=-line, UE-LINE-HID, us--line, usteom--line,
UTIL-PIREPROTECT, UTIL-HPSTEAM, un-cliptine,



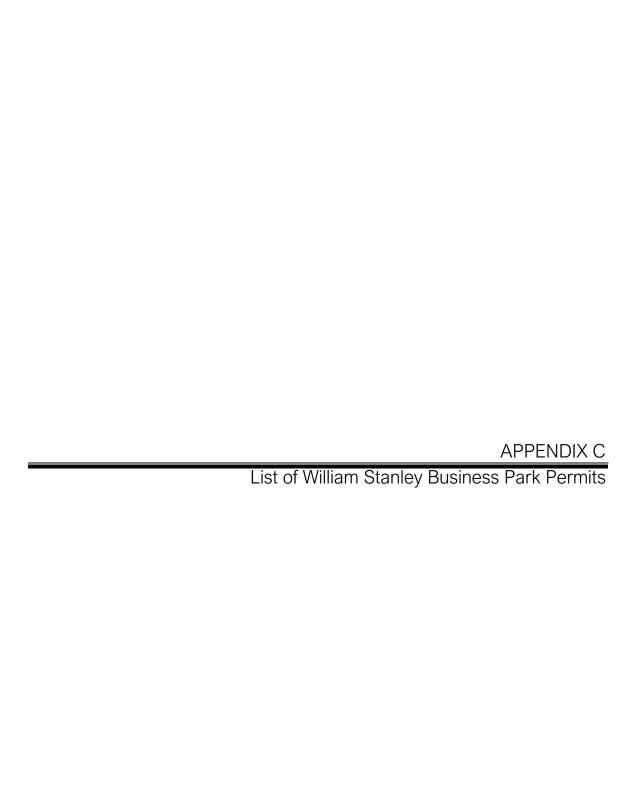




GENERAL PLAN NOTES: SURVEY INFORMATION IS COMPILED FROM TWO SURVEYS PERFORMED BY HILL—ENGINEERS, ARCHITECTS, PLANNERS, INC. THE DELINEATION BETWEEN THE TWO SURVEYS IS CSX RAILROAD. NORTH OF CSX RAILROAD (NORTH SIDE PARK) SOUTH OF CSX RAILROAD (SOUTH SIDE PARK) NORTH SIDE PARK SURVEY NOTES: 1. BASED ON "SITE PLAN: EXISTING" DATED 6/5/2001 BY HILL—ENGINEERS, ARCHITECTS, PLANNERS, INC. 2.SITE PLAN BASED ON AERIAL PHOTOGRAPHS TAKEN BY COL-EAST, INC. ON MARCH 23, 2000. 3.UTILITIES SHOWN ARE BASED ON A COMPILATION OF AVAILABLE PLANS, AERIAL PHOTOGRAPHY/MAPPING, AND FIELD LOCATIONS BY HILL ENGINEERS, ARCHITECTS, PLANNERS INC. BETWEEN APRIL-JULY, 2001. 4. SOME UTILITIES ARE SHOWN IN AN SCHEMATIC WAY ONLY AND ALL UTILITIES MAY NOT BE SHOWN. PRIOR TO ANY CONSTRUCTION, THE CONTRACTOR SHALL CONTACT "DIG-SAFE" AND HAVE ALL UNDERGROUND UTILITIES MARKED ON THE GROUND. SOUTH SIDE PARK SURVEY NOTES: 1. BASED ON "AS-BUILT TOPOGRAPHIC SURVEY- 20'S AND 30'S COMPLEX" DATED 5/5/2010 BY HILL-ENGINEERS, ARCHITECTS, PLANNERS, INC. 2.TOPOGRAPHIC SURVEY PERFORMED BY HILL—ENGINEERS, ARCHITECTS, PLANNERS, INC. BETWEEN APRIL 8 AND APRIL 23, 2010. 3.FOR A COMPLETE BOUNDARY LINE PERIMETER INFORMATION SEE PLAN ENTITLED "APPROVAL NOT REQUIRED DIVISION OF LAND — SURVEY PLAN" DATED AUGUST 10, 2004 AND REVISION DATED OCTOBER 5, 2004 PREPARED BY HILL=ENGINEERS, ARCHITECTS, PLANNERS, INC. 4.ELEVATIONS SHOWN ARE BASED UPON THE 1988 NGVD. 5.UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY AND ALL UTILITIES MAY NOT BE SHOWN. PRIOR TO ANY CONSTRUCTION, THE CONTRACTOR SHALL CONTACT "DIG—SAFE" AND HAVE ALL UNDERGROUND UTILITIES MARKED ON THE GROUND. MANHOLE DESCRIPTIONS ARE BASED UPON EXISTING FRAME AND COVER OBSERVED IN THE FIELD AND ARE NOT THE RESULT OF A UTILITY INVESTIGATION OR STRUCTURE INSPECTION. 100 PEJAR FLOODPLAIN ELEVATION 1990 GUARDRAIL ___ 3:1 (TYP) SLOPE SPILLWAY ---LOWER BOUNDARY OF BANK ELEV. = 978.00 RIP-RAP OUTFALL — MITIGATION AREA ---84 SF LANDS UNDER WATERBODIES AND WATERWAYS 2:1 SLOPE ___ — HISTORICAL LOCATION OF SOLID WASTE MANAGEMENT UNITS (TYP. OF 2) 4' X 8' BOX CULVERT _ — SPILLWAY OVEREXCAVATE PERMANENT POOL (2' DEPTH) LIMIT OF OVEREXCAVATION AT ELEV. 978 BACKFILL W/ONSITE CRUSHED CONCRETE SOUTH FOREBAY EL. 977.0 FILL SOUTH FOREBAY TO ELEV. 978 W/6" NATURAL STONE & 6" ONSITE CRUSHED CONCRETE DETAINING WALL 500 BITUMINOUS WALK STREET

C-301.1





William Stanley Business Park List of Current Permits

Permit Description	Issuing Authority and Date Effective	Permit ID
National Pollutant Discharge Elimination System Permit	EPA / November 1, 2021	NPDES Permit No. MA040231
BWP-SW-41 Beneficial Use Determination	MassDEP / September 20, 2023	File No. 23-236-023, FMF#440157 Application No. 23-SW41-0002-APP



APPENDIX D
Summary of Spills

PEDA / WILLIAM STANLEY BUSINESS PARK SUMMARY OF SPILLS

Date and Time	Location	Substance and Amount	Media Affected (air, pavement, soil, water)	Cause	Corrective Action	Regulatory Notification Required? (If Y, identify applicable agency)



APPENDIX E

NPDES Permit Monitoring QA/QC BMP

Pittsfield Economic Development Authority
NPDES Permit No. MA0040231- Part 1.C.2.b(4), and EPA's 2017 RGP - Part 2.5.2

QA/QC Plan for Monitoring Requirements

1 Summary of Changes

Revision No.	Date	Description of Change(s)
Rev 0.0	07/08/2022	Published.
Rev 1.0	07/19/2022	Formatting and Langue.
Rev 1.1	09/27/2022	Updated pH Method from EPA 150.1 to SM 4500-H+
Rev 1.2	10/18/2022	Updated section 2.2 and 3.1 for sample bottle and method information.
Rev 2.0	01/20/2023	Updated Permit and Regulatory Reference.
Rev 2.1	03/13/2023	Standard Operating Procedure for required effluent monitoring added to section 4

2 Applicable Monitoring Requirements

2.1 Effluent Limitations and Monitoring Requirements

Effluent Character	Effluent Characteristic		Limitation	Monitoring Requirement	
Parameter	Unit	Average Monthly	Maximum Daily	Measurement Frequency	Sample Type
Flow	MGD	Report	Report	Whenever discharge occurs	Meter or Estimate
Oil & Grease	mg/L	Report	15	1/Month	Grab
TSS	mg/L	30	100	1/Month	Grab
рН		6.5 – 9.0 S.U.	i	1/Month	Grab
Escherichia coli	cfu/100ml	Report	Report	1/Year ⁽¹⁾	Grab
Total Nitrogen	mg/L lb/day		Report	2/Year ⁽²⁾	Grab
PCBs, Total	μg/L	Report	Report	1/Month	Grab
Whole Effluent Toxicity	А	cute LC50 – Rej	port		
Total Hardness	mg/L				
Total Suspended Solids	mg/L				
Specific Conductance	μmhos/cm				
Ammonia Nitrogen	mg/L				
Total Residual Chlorine	μg/L			2/Year ⁽³⁾	Grab
Total Cadmium	μg/L	Report	Report	2/1601	Grab
Total Lead	μg/L				
Total Copper	μg/L				
Total Zinc	μg/L				
Total Nickel	μg/L				
Total Aluminum	μg/L				

Notes:

- 1. Escherichia coli sampling to be conducted once a year in December.
- 2. Total Nitrogen sampling to be conducted twice a year, once in June and once in December.
- 3. Whole Effluent Toxicity sampling to be conducted twice a year, once in April and once in October.

3 Sampling Requirements

3.1 Monitoring Point

PEDA's primary monitoring point is located on Silver Lake Blvd, Pittsfield, MA 01201 and has been designated by the permit as Outfall 001 (Lat,Long: 42.451852, -73.236820) and consists of a box culvert connecting WSBP's Water Quality Basin and Silver Lake. The primary monitoring point is used for all effluent monitoring requirements. PEDA is also required to collect a water sample from the receiving water (Silver Lake) as part of the Whole Effluent Toxicity testing. The receiving water is collected at the secondary monitoring point, approximately 200 feet South-southwest of Outfall 001 (Lat,Long: 42.450693, -73.237470). The two monitoring points are shown in Figure 1.

3.2 Specifications for Collection and Handling of Effluent Samples

Analysis	Method	Container	Quantity	Preservative	Holding Time
Oil & Grease	EPA 1664B	Glass, Amber	(2) 1000 mL	H ₂ SO ₄ , pH <2, 4°C	28 days
Total Suspended Solids	SM21-23 2540D	Plastic	1000 mL	4°C	7 days
pH ⁽¹⁾	SM4500H+-B	Plastic	100 mL	4°C	15 mins
Escherichia coli	SM 9223B - Colilert	Plastic, Sterile	100 mL	4° C, Na ₂ S ₂ O ₃	8 hrs
Total Nitrogen Group: Nitrate Total Nitrogen Group: Nitrite	EPA 300.0	Plastic	500 mL	4°C	48 hrs
Total Nitrogen Group: TKN	SM19-23 4500- N Org B,C-NH3 C	Plastic	250 mL	H ₂ SO ₄ , pH <2, 4°C	28 days
Ammonia as N	SM19-23 4500 NH3 C	Plastic	250 mL	H ₂ SO ₄ , pH <2, 4°C	28 days
PCBs, Total	EPA 608	Glass, Amber	1000 mL	4°C	7 days
Whole Effluent Toxicity (WET) ⁽²⁾	EPA-821-R-02- 012	Plastic, Bladder	(2) 2.5 gal	4°C	36 hrs
Specific Conductance Residual Chlorine	SM2510B SM4500Cl-D	Plastic	500 mL	4°C	24 hrs
Hardness Total Metals: Al, Cd, Cr, Cu, Pb, Ni, Zn	SW-846 6010 SW-846 6010D	Plastic	500 mL	HNO₃, pH <2, 4°C	180 days

Notes:

- 1. Calibration of the pH meter is required on each day of use before sampling is conducted. BEC maintains a pH meter calibration log.
- 2. Acute WET testing using daphnid (Ceriodaphnia dubia) and fathead minnow (pimephales promelas) is required by the NPDES permit. Sampling requires the collection of 2.5 gal from the effluent and 2.5 gal from the receiving water.

4 Sampling, Storage, and Transportation Procedure.

4.1 Monthly Sampling Procedure

The analytical laboratory should be contacted prior to the monthly sampling to schedule the courier pickup for the samples collected.

Grab samples will be collected at the primary monitoring point. Grab samples to be collected monthly are pH, Total Suspended Solids, Polychlorinated biphenyls (PCBs), and Oil and Grease (O&G). The grab samples will be collected in a manner that limits potential cross contamination between samples and any exposure risks to the sampling technician. This includes the use of appropriate PPE and decontamination methods, as necessary.

Prior to collecting the pH grab sample, the pH meter is calibrated per the meter's operational manual. The pH grab sample is collected in a clean one-liter glass container and tested in the field using a handheld pH meter. The results are recorded in a field notebook dedicated to PEDA Outfall 001 monitoring. The pH meter is calibrated prior to each monthly sampling event and a log of the calibration is maintained by BEC. The remaining grab samples (TSS, PCB and O&G) are collected in a clean glass sample container and transferred into the appropriate one-liter sample bottles provided by Pace Analytical Laboratory. Two one-liter grab samples are collected for O&G as required by the test method; these sample bottles are prepared by Pace Analytical Laboratory with sulfuric acid for preservation.

The samples are immediately placed into a cooler and transported to the BEC office in Pittsfield, MA where they are transferred into a refrigerator. The BEC technician will create the Chain of Custody (COC) and labels for all the samples. Samples shall be packed with ice and shall include a temperature blank. BEC will relinquish the samples to the Pace Analytical Laboratory courier at the scheduled time.

4.2 Semi-Annual Whole Effluent Toxicity (WET) Sampling Procedure

In addition to the monthly sampling, PEDA is required to conducted Whole Effluent Toxicity (WET) sampling twice a year. At least two months prior to when the semi-annual WET testing is to be conducted, BEC will contact New England Bioassay to schedule the testing with them and to schedule the sample pickups by courier.

WET sampling will be conducted simultaneously with the monthly sampling and follows the general procedure outlined in section 4.1 of this plan. The sampling and monitoring requirements for the WET testing are included in section 2.1 and 3.2 of this plan. All grab samples will be analyzed by PACE and should be submitted to the laboratory with the monthly samples. Additionally, two samples (one effluent, and one receiving water) will be collected and submitted to New England Bioassay for aquatic toxicity testing.

4.3 Semi-Annual Total Nitrogen Sampling Procedure

Additionally, PEDA is required to conduct Total Nitrogen sampling twice a year, in June and December. This sampling is to be done at the same time as the monthly sampling is conducted.

4.4 Annual E-Coli Sampling Procedure

PEDA is also required to conduct an annual E-Coli sampling in the month of December. This sampling is to be done at the same time as the monthly sampling is conducted.

5 Laboratory and Analytical Details

5.1 Laboratory Contact Information

Laboratory	Address	Phone Number	Services Used
Pace Analytical	39 Spruce Street	413.525.2332	Analytical testing of
	East Longmeadow, MA 01028		required monitoring
			parameters.
New England Bioassay	77 Batson Drive	860.643.9560	Biannual WET testing.
	Manchester, CT 06042		

5.2 Specifications for Analytical Methods

PEDA reports all results below the method's quantification limit (QL) as "Less than the QL" in lieu of reporting values between the analytical detection and quantification limits as "J" values on the discharge monitoring reports.

Parameter	Analytical Method	Quantification Limit ⁽¹⁾
Oil & Grease	EPA 1664B	1.6 mg/L
TSS	SM 21-23 2540D	1.5 mg/L
рН	SM 4500-H+ B-2011	0.1 S.U.
Escherichia coli	SM 9223B	1.0 MPN/100 mL
Nitrate as N ⁽²⁾	EPA 300.0	0.1 mg/L
Nitrite as N ⁽²⁾	EPA 300.0	0.01 mg/L
Total Kjeldahl Nitrogen ⁽²⁾	SM 19-23 4500-N Org B,C-NH3 C	1.0 mg/L
PCBs, Total ⁽³⁾	EPA 608.3	0.0400 μg/L (per Aroclor)
Whole Effluent Toxicity	EPA 821-R-02-012	N/A
Specific conductance	SM 2510B	2 μmhos/cm
Residual Chlorine	SM 4500Cl-D	0.02 mg/L
Hardness	SW-846 6010	1.4 mg/L
Total Cadmium	SW-846 6010D	0.0040 mg/L
Total Lead	SW-846 6010D	0.010 mg/L
Total Copper	SW-846 6010D	0.010 mg/L
Total Zinc	SW-846 6010D	0.010 mg/L
Total Nickel	SW-846 6010D	0.010 mg/L
Total Aluminum	SW-846 6010D	0.050 mg/L
Ammonia Nitrogen	SM19-23 4500 NH3 C	0.30 mg/L

Notes:

- 1. The quantification limit (Pace Analytical uses the term "reporting limit") is the lowest concentration which can be not only detected by the method, but also quantified with a specified degree of precision. At the QL, the analyte is both proven present and measured reliably.
- 2. Total Nitrogen is the sum of nitrate (NO3), nitrite (NO2), organic nitrogen and ammonia (all expressed as N). Total Kjeldahl Nitrogen measures both organic nitrogen and ammonia.
- 3. For Total PCB Analysis, the following Aroclors are analyzed: Aroclor-1016, Aroclor-1221, Aroclor-1232, Aroclor-1242, Aroclor-1248, Aroclor-1254, and Aroclor-1260.

6 Laboratory Data Review and Reporting

6.1 Review Schedule for Analytical Results

Analytical results will be reviewed within 72 hours from the receipt of results.

A record retention time of three years from the date of receipt for all analytical data and supporting documents related to the NPDES permit is required. Supporting documentation shall include, at a minimum, the following: final analytical laboratory reports, flow data, field notes, and submitted DMRs.

6.2 Analytical Results Data Validation and Reporting

After receipt of the analytical results from the testing laboratory, the data undergo a review process. The review process includes, but is not limited to, the following:

- Review of field sample IDs against the chain of custody;
- Review of case narrative summary;
- Review of samples' hold time against the allowable hold times.
- Review of analytical results and associated units against permitted limits; and,
- Review and determination of impact of any result's Flag/Qual;

Following this review, the data are entered into the PEDA DMR Calculations Excel workbook where they undergo further review by a separate reviewer before entry into NetDMR.

Figure 1: NPDES Monitoring Points

Example Bottle Orders

Routine Monthly Sampling (per month)

Qty	Matrix	Analysis	Container	Bottle Count	Preservative	Comments
1	Water	Solids, Total Suspended	1 L Plastic	1	Cool 4°C	
		(TSS) by SM2540D	Unpreserved			
1	Water	PCB, Total by EPA608	1 L Amber	1	Cool 4°C	
			Unpreserved			
2	Water	Oil and Grease by	1 L Amber +	2	H2SO4	
		EPA1664	H2SO4			

Routine Biannual WET Sampling (per sampling event)

Qty	Matrix	Analysis	Container	Bottle Count	Preservative	Comments
1	Water	**Multiple**	500 mL Plastic	1	Cool 4°C	conductivity, res
			Unpreserved			chlorine
1	Water	**Multiple**	500 mL Plastic	1	Cool 4°C	metals, hardness
			+HNO3			
1	Water	Ammonia-Nitrogen (NH3)	250 mL Plastic	1	H2SO4	
		by SM4500 NH3 C	+H2SO4			
1	Water	Solids, Total Suspended	1 L Plastic	1	Cool 4°C	
		(TSS) by SM2540D	Unpreserved			
1	Water	Total Nitrogen (Group)	250 mL Plastic	1	H2SO4	
			+H2SO4			
1	Water	Total Nitrogen (Group)	500 mL Plastic	1	NA	
2	Water	WET Testing	2.5 gal	2	Cool 4°C	
			Cubitainer			



Corrective Action Procedure

PEDA WSBP Corrective Action Procedure

In accordance with Part I.C.2.b.3 of NPDES Permit No. MA0040231, PEDA has prepared this Corrective Action Procedure to ensure effluent limits are met and the Stormwater Pollution Prevention Plan (SWPPP) is kept up to date.

Conditions Requiring SWPPP Review and Revision to Ensure Effluent Limits are Met

When any of the following conditions occur or are detected during an inspection, monitoring or other means, or EPA or the operator of the MS4 through which PEDA discharges informs PEDA that any of the following conditions have occurred, PEDA will review and revise, as appropriate, the SWPPP (e.g., sources of pollution; spill and leak procedures; non-stormwater discharges; the selection, design, installation and implementation of your stormwater control measures) so that the permit's effluent limits are met and pollutant discharges are minimized:

- An unauthorized release or discharge (e.g., spill, leak, or discharge of non-stormwater not authorized by this or another NPDES permit to a water of the United States) occurs at the facility.
- A discharge violates a numeric effluent limit listed in Part I.A.1 of the Permit.
- Stormwater control measures are not stringent enough for the stormwater discharge to be controlled as necessary such that the receiving water of the United States will meet applicable water quality standards or to meet the non-numeric effluent limits in this permit.
- A required control measure was never installed, was installed incorrectly, or not in accordance with the Multi-Sector General Permit (Parts 2 and/or 8) or is not being properly operated or maintained.
- Whenever a visual assessment shows evidence of stormwater pollution (e.g., color, odor, floating solids, settled solids, suspended solids, foam).

If construction or a change in operation or maintenance at WSBP occurs that significantly changes the nature of pollutants discharged via stormwater, or significantly increases the quantity of pollutants discharged, PEDA will review the SWPPP (e.g., sections related to sources of pollution, spill and leak procedures, non-stormwater discharges, selection, design, installation, and implementation of stormwater control measures) to determine if modifications are necessary to meet the effluent limits in the Permit.

Deadlines for Corrective Actions

PEDA will <u>immediately</u> take all reasonable steps to minimize or prevent the discharge of pollutants until they can implement a permanent solution, including cleaning up any contaminated surfaces so that the material will not discharge in subsequent storm events. In Part 5 of the MSGP, the term "immediately" means that the day a condition requiring corrective action is found, PEDA must take all reasonable steps to minimize or prevent the discharge of pollutants until they can implement a permanent solution. However, if PEDA identifies a problem too late in the workday to initiate corrective action, PEDA will perform the corrective action the following workday morning. The term "all reasonable steps" means PEDA must respond to the

PEDA WSBP Corrective Action Procedure

conditions triggering the corrective action, such as cleaning up any exposed materials that may be discharged in a storm event (e.g., through sweeping, vacuuming) or making arrangements (i.e., scheduling) for a new stormwater control measure to be installed.

If additional actions are necessary beyond those implemented pursuant to Part 5.1.3.1 of the MSGP, PEDA will complete the corrective actions (e.g., install a new or modified control and make it operational, complete the repair) before the next storm event if possible, and within 14 calendar days from the time of discovery that the condition in Part 5.1.1 is not met. If it is infeasible to complete the corrective action within 14 calendar days, PEDA will document why it is infeasible to complete the corrective action within the 14-day timeframe. PEDA will also identify a schedule for completing the work, which must be done as soon as practicable after the 14-day timeframe but no longer than 45 days after discovery. If the completion of corrective action will exceed the 45-day timeframe, PEDA will take the minimum additional time necessary to complete the corrective action, provided that PEDA notifies the appropriate EPA Regional Office of this intention to exceed 45 days, the rationale for an extension, and a completion date, which PEDA will also include in the corrective action documentation (see table below). Where the corrective actions result in changes to any of the controls or procedures documented in the SWPPP, PEDA must modify the SWPPP accordingly within 14 calendar days of completing corrective action work.

These time intervals are not grace periods, but are schedules considered reasonable for documenting findings and for making repairs and improvements. They are included in the MSGP to ensure that the conditions prompting the need for these repairs and improvements do not persist indefinitely.

PEDA WSBP Corrective Action Procedure

Documentation of corrective actions undertaken:

Permit Year	Were Corrective Actions Required (Y or N)	Date Condition Was identified – Description of Condition	Date Corrective Actions Were Undertaken – Description of Corrective Actions
2022	No		
2023			
2024			
2025			
2026			



General Information	
Date:	Time:
Weather:	Precipitation:
Inspector(s):	Inspector(s) Signature(s):

Site Area: Historic 19s Complex/PEDA Site 9

Stormwater Control Measures				
Areas of Interest	Comments			
Stormwater catch basins				
2. Water quality basins (6)				
3. Vegetated drainage swales				
4. Staining or stressed veg.				
5. Erosion				
6. Need for street sweeping?				

Site Area: Paved Area (located in historic 20s)

Stormwater Control Measures		
Areas of Interest	Comments	
Stormwater catch basins		
2. Stormwater rock channels		
3. Trench drain		
4. Staining or stressed veg.		
5. Erosion		
6. Need for street sweeping		

Site Area: Mountain One (Located in Historic 30s)

Stormwater Control Measures			
Areas of Interest	Comments		
1. Condition of transformer			
2. Condition of dumpster			
3. Parking lot catch basins			
4. Areas of erosion			
5. Outfall into north forebay			
6. Outfall into water quality basin			
7. Staining or stressed veg.			
8. Need for street sweeping			

Site Area: BIC (located in historic 30s)

Stormwater Control Measures			
Areas of Interest	Comments		
1. Condition of transformers (2)			
2. Condition of dumpster			
3. Parking lot catch basins			
4. Condition of drainage swales			
5. Areas of erosion			
6. Staining or stressed veg.			
7. Need for street sweeping			

Site Area: WQB and Paved Area (I	ocated in historic 30s)
Stormwater Control Measures	
Areas of Interest	Comments
1. North forebay and berm	
2. North forebay inlet pipe	
3. Erosion around WQB	
4. Boulder swale into south forebay	
5. South forebay, berm, and inlets	
6. Vegetation encroachment	
7. Box culvert	
8. Water chestnut screen	
9. Trash debris/litter	
10. Rain catchment area with CB	
11. Bridge abuttment slope	
12. Need for street sweeping	
Site Area: Historic 40s Complex	
Stormwater Control Measures	
Areas of Interest	Comments
Stormwater catch basins	
2. Catch basin in CSX rail corridor	
3. Staining or stressed veg.	
4. Erosion	
Notes	
Describe any previously unidentified sto	ormwater discharges from and/or pollutants:
Describe any incidents of non-compliant	ce observed and not described above:
Describe any additional control measur	es needed to comply with the permit requirements:
,	
Certification of the Duly Authorize	ed Representative:
	·
	I all attachments were prepared under my direction or supervision in accordance with a system designed to assure ated the information contained therein. Based on my inquiry of the person or persons who manage the system, or
	offormation, the information contained is, to the best of my knowledge and belief, true, accurate, and complete.
am aware that there are significant penalties for subn	nitting false information, including the possibility of fine and imprisonment for knowing violations."
Michael Coakley	Interim Executive Director
Michael Coakley Name	Position
Nume	r osition
Signatura	Date
Signature	Dute

William Stanley Business Park SWPPP Quarterly Visual Assessment

General Information						
Year/Quarter:						
Date/Time of Sample Collection:						
Date/Time of Visual Assessment:						
Inspector:						
Inspector Signature:						
Nature of the Discharge:						
Weather:						
Precipitation:						
Observation Results:						
Odor	□ None	□ Musty □	□ Sewage	□ Sulfur	□ Sour	□ Gas
Odol	□ Solvents	□ Other (De	cribe:)
Color	□ None	□ Other (De	cribe:)
Clarity	□ Clear	☐ Slightly Clo	oudy	□ Cloudy	□ Opaque	□ Other
Floating Solids	□ No	□ Yes (Decril	be:)
Settled Solids	□ No	□ Yes (Decril	be:)
Suspended Solids	□ No	□ Yes (Decri	be:)
Foam (gently shake sample)	□ No	□ Yes (Decri	be:)
Oil Sheen	□ None	□ Flecks □	□ Globs	□ Sheen	□ Slick	
Oli Sileeli	□ Other (D	ecribe:)	
Other Indicators of Pollution	□ No	□ Yes (Decri	be:)
Sample collected within the first 30	0 minutes	of an actua	l dischar	ge from a	storm eve	nt?
If not, explain:						
		 				
Additional Comments:						
Additional Comments:						
Certification of the Duly Authorize	d Represe	ntative:				
"I certify under penalty of law that this document	•		pared under	my direction	or supervision	in accordance
with a system designed to assure that qualified \boldsymbol{p}	ersonnel prop	erly gathered an	d evaluated	the information	on contained th	nerein. Based
on my inquiry of the person or persons who man						
the information contained is, to the best of my kr significant penalties for submitting false informat	_					
significant penalties for submitting faise informat	ion, including	the possibility of	illie allu illi	prisornitent ic	i kilowilig viole	ations.
	_	_				
Name		Ī	Position			
	_	_				
Signature		1	Date			

	SWPPP Quarterly inspection			
General Information				
Facility: PEDA	Site Area: Historic 19s Complex			
Date: 3/29/24	Time: 4:00 pm			
Weather:	Precipitation: None			
Inspector(s): RC	Inspector(s) Signature(s):			
Stormwater Control Measures				
Areas of Interest	Comments			
Stormwater catch basins				
2. Existing structures/features	1/4-51te Revelopment work in			
3. Staining or stressed veg.	////			
4. Erosion	NA - Site Reclevelopment work In progress			
	1			
Discharges/Pollutants				
Describe any previously unidentifie	ed stormwater discharges from and/or pollutants.			
	114			
	700			
Non-Compliance				
Describe any incidents of non-com	pliance observed and not described above.			
111	4			
107				
Additional Control Measures				
Describe any additional control me	easures needed to comply with the permit requirements.			
11111111				
NA				
Notes				
Use this space for any additional n	otes or observations from the inspection.			
11				
No				

Facility: PEDA	- 1
racility. FEDA	Site Area: Paved Area (located in historic 20s)
Stormwater Control Measures	
Areas of Interest	Comments
1. Stormwater catch basins	OK
2. Stormwater rock channels	014
3. Trench drain	could be clean at - NO Neg results 12+ ms
Staining or stressed veg.	Nene
5. Erosion	None
Discharges/Pollutants	
Describe any previously unidentifie	ed stormwater discharges from and/or pollutants:
N	
Non-Compliance	
Passible any insidents of non-con	ppliance observed and not described above:
Describe any incidents of non-con	phance observed and not described above.
1//	
/ 0 .	
Additional Control Measures	
Additional Control Modernto	1 11 the the requirements:
Describe any additional control m	easures needed to comply with the permit requirements:
Describe any additional control m	easures needed to comply with the permit requirements:
Describe any additional control m	easures needed to comply with the permit requirements:
Describe any additional control m	easures needed to comply with the permit requirements:
Describe any additional control m	easures needed to comply with the permit requirements:
Describe any additional control m	easures needed to comply with the permit requirements:
Describe any additional control m	
Describe any additional control m	
Describe any additional control m	easures needed to comply with the permit requirements: notes or observations from the inspection:
Describe any additional control m	
Describe any additional control m	
Describe any additional control m	

General Information		
Facility: PEDA	Site Area: Historic 40s Complex	
Ot	oe.	
Stormwater Control Measure	Comments	
Areas of Interest	B/C	
Stormwater catch basins		
2. Staining or stressed veg.	In progress of bedy moral	
3. Vegetated Stockpile	in gragities as were mounts	
4. Erosion	Nonce	
Discharges/Pollutants		TO YEL
Describe any previously unidentify	fied stormwater discharges from and/or pollutants:	
Describe any previously unidentify	, , ,	
+		
Non-Compliance	PHONE TO SERVICE THE RESERVE OF THE PERSON O	
Describe any incidents of non-co	ompliance observed and not described above:	
Describe any incidents of non-co	mphanee observed and the second	
Additional Control Measure	es established to the second s	
	measures needed to comply with the permit requirements:	
-		
-		
Notes		100
	Il notes or observations from the inspection:	
out this space jor any waartona	**************************************	
-		
~		
_		

General Information	
Facility: PEDA	Site Area: WQB and Paved Area (located in historic 30s)

Areas of Interest	Comments		
1. North forebay and berm	good		
2. North forebay inlet pipe	greet,		
3. Erosion around WQB	were obs.		
4. Boulder swale into south forebay	good		
5. South forebay, berm, and inlets	assal:		
6. Vegetation encroachment	ship mel		
7. Box Culvert	okon Corel Hous		
8. Water chestnut screens	good.		
9. Trash debris/litter	Animal it any		
10. Rain catchment area with CB	OK /		
11. Bridge abuttment slope	OK		

11. Bridge abuttment slope	I VK
	Discharge Points
At discharge points, describe any evide	ence of, or the potential for, pollutants entering the stormwater drainage system:
None	
Also describe observations regarding t	he physical condition of and around all stormwater discharge points:
gad	
Identify if any corrective action is pass	lad:
Identify if any corrective action is need	eu.
Nan	
,,,,	
Discharges/Pollutants	
	tormwater discharges from and/or pollutants:
Non-Compliance	
Describe any incidents of non-complia	nce observed and not described above:
Additional Control Measures	
	res needed to comply with the permit requirements:
	ires needed to comply with the permit requirements:
	ires needed to comply with the permit requirements:
Describe any additional control measu	ires needed to comply with the permit requirements:
Describe any additional control measu Notes	
Describe any additional control measu Notes	
Notes Use this space for any additional notes	s or observations from the inspection: Matres 5 day drapped at Lacatin
Describe any additional control measu	s or observations from the inspection: Matres 5 day drapmed at Lacator

General Information	
Facility: PEDA	Site Area: BIC (located in historic 30s)
Stormwater Control Measures	
Areas of Interest	Comments
1. Condition of Transformers (2)	all
2. Condition of dumpster	Oll
3. Parking lot catch basins	6K
4. Condition of drainage swale	OK
5. Areas of erosion	Non
Staining or stressed veg.	Nam
Discharges/Pollutants	
Describe any previously unidentified	stormwater discharges from and/or pollutants:
No	
Non-Compliance	
Describe any incidents of non-comp	liance observed and not described above:
1	
NA	
Additional Control Measures	
Describe any additional control med	asures needed to comply with the permit requirements:
111	
Notes	
	etes or observations from the inspection:
1/1-	
-	
-	

General Information	
Facility: PEDA	Site Area: Mountain One (Located in Historic 30s)
racility. 1 LB/1	
Stormwater Control Measures	
Areas of Interest	Comments
Condition of Transformer	OK.
Condition of dumpster	ok
Parking lot catch basins	OK.
4. Areas of erosion	Nam
5. Staining or stressed veg.	Non
Discharges/Pollutants	Library discharges from and/or pollutants:
Describe any previously unidentified	l stormwater discharges from and/or pollutants:
104	
1	
Non-Compliance	the standard described above
Describe any incidents of non-comp	liance observed and not described above:
NA	
Additional Control Measures	
Describe any additional control me	asures needed to comply with the permit requirements:
NA	
Notes	
Use this space for any additional ne	otes or observations from the inspection:
NA	
And the second second second	
Certification of the Duly Author	prized Representative:
"I certify under penalty of law that this docume	nt and all attachments were prepared under my direction or supervision in accordance with a system designed to assure tha uated the information contained therein. Based on my inquiry of the person or persons who manage the system, or those
nersons directly responsible for gathering the in	oformation, the information contained is, to the best of my knowledge and belief, true, accurate, and complete. I am aware ng false information, including the possibility of fine and imprisonment for knowing violations."
and I Coall.	lated a sure of the Disc
Name Corney	Position Execution Div
Micheal Coakly Name MSul Cocci	Infailm Execution Dir Position -1/5/24

Date

William Stanley Business Park SWPPP Quarterly Visual Assessment

	The Quarterly Visual Assessment
General Information	
/ear/Quarter:	2024 31
Date/Time of Sample Collection:	3/29/24 4/com
Date/Time of Visual Assessment:	#/20124 4'man
nspector:	R. Can see
nspector Signature:	1
Nature of the Discharge:	Storm & around water
Veather:	
Precipitation:	Partly Clarky
recipitation.	Nanc
Observation Results:	
baei vation Results.	r None □ Musty □ Sewage □ Sulfur □ Sour □ Gas
Odor	7
- 124 Y	□ Solvents □ Other (Decribe:
Color	■ None □ Other (Decribe:
Clarity	☐ Clear ☐ Slightly Cloudy ☐ Cloudy ☐ Opaque ☐ Other
Floating Solids	☑No ☐ Yes (Decribe:
Settled Solids	☑*No ☐ Yes (Decribe:)
Suspended Solids	☑No ☐ Yes (Decribe:
Foam (gently shake sample)	✓No □ Yes (Decribe:
0:1.01	☑None □ Flecks □ Globs □ Sheen □ Slick
Oil Sheen	□ Other (Decribe:
Other Indicators of Pollution	☑No ☐ Yes (Decribe:
actively and	it at to the field to saugh turber
	0
Additional Comments:	
additional Comments:	
-	
NA	
-	
Certification of the Duly Authorized	Representative:
	and all attachments were prepared under my direction or supervision in accordance
	ersonnel properly gathered and evaluated the information contained therein. Based
그러는 그들은 이렇게 되었다. 그들은 그렇게 되었다. 그리고 얼마나 얼마나 얼마나 되었다.	age the system, or those persons directly responsible for gathering the information
	owledge and belief, true, accurate, and complete. I am aware that there are
gnificant penalties for submitting false informati	ion, including the possibility of fine and imprisonment for knowing violations."
Michael Casklin	1 Hom Grands Die
ama Cooking	Position Excecution Dir
ame U	POSITION
	1 OSICION
he deline	11/11/24
Hay wen	4/15/24

General Information	
Date: 5/22/24	Time: 3100 pm
Weather: Sunny	Precipitation: Nem
Inspector(s): PC	Inspector(s) Signature(s):

Site Area: Historic 19s Complex

Areas of Interest		-		Comments			
Stormwater catch basins	gk	Site	not	mspectal	as	11-15	under
4. Existing structures/features	alk	constr	ruction				
6. Staining or stressed veg.	(
7. Erosion							

Site Area: Paved Area (located in historic 20s)

Areas of Interest	Comments
Stormwater catch basins	CKay Condition
2. Stormwater rock channels	Gray Contition, Some plant Growth
3. Trench drain	clogged at end of Drive way
7. Staining or stressed veg.	None als,
3. Erosion	NOTE abs.

Site Area: Mountain One (Located in Historic 30s)

tormwater Control Measure	S	
Areas of Interest	Comments	
1. Condition of Transformer	OK	
2. Condition of dumpster	oK	
3. Parking lot catch basins	ore	
4. Areas of erosion	Nem	
5. Staining or stressed veg.	None	

Site Area: BIC (located in historic 30s)

Areas of Interest		Comments	
1. Condition of Transformers (2)	GK		
2. Condition of dumpster	OK		
3. Parking lot catch basins	OK		
4. Condition of drainage swale	OK		
5. Areas of erosion	None		
6. Staining or stressed veg.	NINO		

Site Area: WQB and Paved Area (located in historic 30s)

Areas of Interest	Comments				
1. North forebay and berm	6/2				
2. North forebay inlet pipe	014				
3. Erosion around WQB	None				
4. Boulder swale into south forebay	GC				
5. South forebay, berm, and inlets	ose,				
6. Vegetation encroachment	workning				
7. Box Culvert	OIC				
8. Water chestnut screens	016				
9. Trash debris/litter	some, minimal				
10. Rain catchment area with CB	oa '				
11. Bridge abuttment slope	GRE				

Site Area: Historic 40s Complex

Areas of Interest	Comments
1. Stormwater catch basins	6Kcmdition
4. Staining or stressed veg.	Minimal Stains on paverne
5. Vegetated Stockpile	Removed, used as fill in 199
6. Erosion	None obs.

Notes	
Describe any previously unidentified stormwater discharges from and/or pollutants:	
Describe any incidents of non-compliance observed and not described above:	
Describe any additional control measures needed to comply with the permit requirements:	

Certification of the Duly Authorized Representative:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information contained therein. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information contained is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

Michael Coakley	Interim Executive Director	
Name	Position	
payed war	6/14/24	
Signature	Date /	

William Stanley Business Park SWPPP Quarterly Visual Assessment

3001	PP Quarterly v	isaai ris				
eneral Information						
ear/Quarter:	2024					
Date/Time of Sample Collection:	5/22/24	4				
Date/Time of Visual Assessment:	5/22/24	1				
nspector:	RC'					
nspector Signature:	1-	0				
Nature of the Discharge:	Storm &	Gran	ed wase			
Veather:	Sumy					
Precipitation:	Non					
Observation Results:				and the same		-
Oden		Musty		□ Sulfur	□ Sour	□ Gas
Odor	□ Solvents □ 0)
Color	☑None □	Other (D	ecribe:)
Clarity		Slightly (□ Cloudy	□ Opaque	□ Other
Floating Solids		Yes (Dec)
Settled Solids		Yes (Dec)
Suspended Solids	€No □	Yes (Dec	ribe:)
Foam (gently shake sample)		Yes (Dec)
	☑•None □	Flecks	□ Globs	□ Sheen	□ Slick	
Oil Sheen	□ Other (Decr	ribe:)	
Other Indicators of Pollution	□No □	Yes (Dec	ribe:)
Additional Comments:						
- WA						
7001						
Court of Sale Delea Authoris	ad Danracant	ativo:				
Certification of the Duly Authoriz "I certify under penalty of law that this docume	et and all attachme	ents were	prepared unde	er my directio	n or supervision	n in accorda
with a system designed to assure that qualified	personnel properly	v gathered	and evaluate	d the informati	tion contained	therein. Ba
on my inquiry of the person or persons who ma	nage the system, o	or those pe	ersons directly	responsible for	or gathering the	einformati
the information contained is, to the best of my	knowledge and bel	lief, true, a	accurate, and o	complete. I an	aware that th	ere are
significant penalties for submitting false inform	ation, including the	e possibilit	y of fine and ir	mprisonment	for knowing vio	nations.
Michael Cankles			lation	n Exec	Him I	ir.
Name	-		Position			
IVALUE			,	,		
			6/1	4/24		
Signature	_		Date	/		
Signature			Date'	1		

General Information	
Date: 9/24/24	Time: ([:17
Weather: 64° Mostly (lad	y Precipitation: None
Inspector(s): K. Perking	Inspector(s) Signature(s): 26 Fa 9
V. Caposco	

Site Area: Historic 19s Complex

Areas of Interest	Comments
1. Stormwater catch basins	OH
1. Existing structures/features	Do the WaB overflow structures need Sediment covers?
. Staining or stressed veg.	MA
7. Erosion	N/A

Site Area: Paved Area (located in historic 20s)

Areas of Interest	Comments
1. Stormwater catch basins	Two NE-overgrown w/ shirts/bittersweet
2. Stormwater rock channels	Eastern most - little overgrown
Trench drain	Parking lost - mostly clear, Apron into East St blocked
Staining or stressed veg.	N/A
. Erosion	I N/A

Site Area: Mountain One (Located in Historic 30s)

Areas of Interest	Comments	
1. Condition of Transformer	GOOD	
2. Condition of dumpster	COOD	
3. Parking lot catch basins	GOOD	
4. Areas of erosion	None	
5. Staining or stressed veg.	Vone	

Site Area: BIC (located in historic 30s)

Stormwater Control Measures		
Areas of Interest	Comments	
1. Condition of Transformers (2)	Good	
2. Condition of dumpster	Fine, some large trash behind enclosure	
3. Parking lot catch basins	Good	
4. Condition of drainage swale	Cooc	
5. Areas of erosion	None	
6. Staining or stressed veg.	None	

Retention pand drains are intentionally plugged

Site Area: WQB and Paved Area (located in historic 30s)

Stormwater Control Measure	
Areas of Interest	Comments
1. North forebay and berm	Trash on berm
2. North forebay inlet pipe	Gaso
3. Erosion around WQB	Some on Egst bank
4. Boulder swale into south for	ebay Some plants
5. South forebay, berm, and in	
6. Vegetation encroachment	Needs removal from top of forebay being and needs removal of Phrogen
7. Box Culvert	Outflow end - sam needs resealing
8. Water chestnut screens	Good - New
9. Trash debris/litter	Same on N side of parking lot/ behind wall
10. Rain catchment area with CE	
11. Bridge abuttment slope	OK condition

Site Area: Historic 40s Complex

Comments
Basin 5 Fof enhance blocked
Some along V slope E encl
N/A
Keep enexe on NS lope where Stockpile was removed.

æ

Notes

Describe any previously unidentified stormwater discharges from and/or pollutants:

Describe any incidents of non-compliance observed and not described above:

Describe any additional control measures needed to comply with the permit requirements:

Certification of the Duly Authorized Representative:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information contained therein. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information contained is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

Michael Coakley	Interim Executive Director	
Name	Position	
Man Colum	10/11/24	
Signature	Date /	

William Stanley Business Park SWPPP Quarterly Visual Assessment

the state of the s	The second secon
General Information	
Year/Quarter:	201403
Date/Time of Sample Collection:	9/24/24 11:00
Date/Time of Visual Assessment:	9/24/24 11:00
Inspector:	R. Capassa
Inspector Signature:	The Company of the Co
Nature of the Discharge:	Store & Garden
Weather:	Mostly cloudy
Precipitation:	
recipitation.	None.
Observation Results:	
	None □ Musty □ Sewage □ Sulfur □ Sour □ Gas
Odor	
Color	
	5
Clarity	©Clear □ Slightly Cloudy □ Cloudy □ Opaque □ Other
Floating Solids	□No □ Yes (Decribe:)
Settled Solids	No pres (Decribe:
Suspended Solids	No Syes (Decribe: Some Provided maker)
Foam (gently shake sample)	regNo □ Yes (Decribe:)
Oil Sheen	□None □ Flecks □ Globs □ Sheen □ Slick
76 76 76 76 7	□ Other (Decribe:
Other Indicators of Pollution	No □ Yes (Decribe:
Additional Comments:	
with a system designed to assure that qualified p on my inquiry of the person or persons who man the information contained is, to the best of my kr	d Representative: t and all attachments were prepared under my direction or supervision in accordance personnel properly gathered and evaluated the information contained therein. Base age the system, or those persons directly responsible for gathering the information nowledge and belief, true, accurate, and complete. I am aware that there are tion, including the possibility of fine and imprisonment for knowing violations." Literia Executiva Dir.
Signature Cours	10/11/24 Date

General Information	
Date: 12/31/24 Q4	Time: 2130
Weather: Partly Clary 47	Precipitation: Name
Inspector(s): RP	Inspector(s) Signature(s): Why the

Site Area: Historic 19s Complex

tormwater Control Measures Areas of Interest	Comments
Areas of Interest	Comments
 Stormwater catch basins 	6000
4. Existing structures/features	Stormdrain on Nroadway ext, has a cover in place
6. Staining or stressed veg.	VONE
7. Erosion	Vone

Site Area: Paved Area (located in historic 20s)

tormwater Control Measure	S	- 1
Areas of Interest	Comments	_
1. Stormwater catch basins	Good some litter	_
2. Stormwater rock channels	E' neads cleaving, some repair on W Za E most section has veg avergrowing	_
3. Trench drain	Drain by ESI, filled w/sediment	_
7. Staining or stressed veg.	Vone	_
8. Erosion	ome politica one new woodland Ave. is in slightly sunker area	

Site Area: Mountain One (Located in Historic 30s)

Stormwater Control Measures		
Areas of Interest	Comments	
1. Condition of Transformer	Good - some mulchan topo- Concrete slab = 2-3"	
2. Condition of dumpster	Coop	
3. Parking lot catch basins	Good - Some lead build up in Egrate	
4. Areas of erosion	Vone	
5. Staining or stressed veg.	None	

Site Area: BIC (located in historic 30s)

Areas of Interest	Comments
1. Condition of Transformers (2)	Good - Some encloaching Veg. by parking lat
2. Condition of dumpster	Good - Some trash behing endoque
3. Parking lot catch basins	Good - Some sectioned by by BIC entrance
4. Condition of drainage swale	Cond
5. Areas of erosion	Vone
6. Staining or stressed veg.	Vane

William Stanley Business Park SWPPP Quarterly Inspection

Site Area: WQB and Paved Area (located in historic 30s)

Stormwater Control Measures	
Areas of Interest	Comments
1. North forebay and berm	late of trash on bern. @ high water line sectionant level is high
2. North forebay inlet pipe	GOOD
3. Erosion around WQB	None
4. Boulder swale into south forel	pay 600d
5. South forebay, berm, and inle	ts Cosc
6. Vegetation encroachment	Ooutfall inletists covered w/ready
7. Box Culvert	Seam @ outlet botwn alvert and apronis open, water going in
8. Water chestnut screens	6000
9. Trash debris/litter	Some - very little
10. Rain catchment area with CB	Good
11. Bridge abuttment slope	6000

Site Area: Historic 40s Complex

ormwater Control Measure Areas of Interest	Comments
Areas of Interest	Della in blacker had be Extly R
 Stormwater catch basins 	Prain in like with entrance is blocked And to East by R
Staining or stressed veg.	None
5. Vegetated Stockpile	N/A
6. Erosion	None

Notes	
Describe any previously unidentified stormwater discharges from and/or pollutants:	
Describe any incidents of non-compliance observed and not described above:	
Describe any additional control measures needed to comply with the permit requirer	ments:

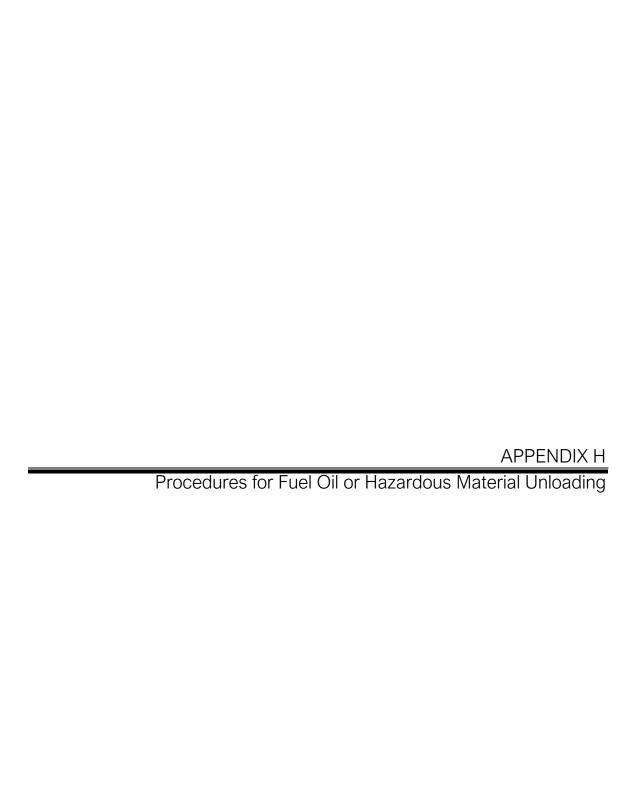
Certification of the Duly Authorized Representative:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information contained therein. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information contained is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

Michael Coakley	Interim Executive Director	
Name	Position	
Signature Signature	1/13/25 Date	

William Stanley Business Park SWPPP Quarterly Visual Assessment

General Information	
Year/Quarter:	202404
Date/Time of Sample Collection:	12/11/24 @ 10:00 am
Date/Time of Visual Assessment:	12/11/24 @ 10:00 am
Inspector:	R. Carlasco
Inspector Signature:	
Nature of the Discharge:	Storm & Crown water
Weather:	
Precipitation:	Minimal percip dury, burge drawn before
-	V ,
Observation Results:	C 15 C C C C C C C C C C C C C C -
Odor	✓ None □ Musty □ Sewage □ Sulfur □ Sour □ Gas
	□ Solvents □ Other (Decribe:
Color	i None WOther (Decribe: \$ lightly brown)
Clarity	□ Clear □ Slightly Cloudy □ Cloudy □ Opaque □ Other
Floating Solids	✓No □ Yes (Decribe:
Settled Solids	res (Decribe:
Suspended Solids	□ No Yes (Decribe: Particles, dist)
Foam (gently shake sample)	□ No □ Yes (Decribe:
Oil Sheen	✓None □ Flecks □ Globs □ Sheen □ Slick
	□ Other (Decribe:
Other Indicators of Pollution	the No □ Yes (Decribe:)
If not, explain: No, could not	t get to sik in the
Additional Comments:	
NA	
Certification of the Duly Authorize	
with a system designed to assure that qualified p on my inquiry of the person or persons who man the information contained is, to the best of my k	It and all attachments were prepared under my direction or supervision in accordance personnel properly gathered and evaluated the information contained therein. Based page the system, or those persons directly responsible for gathering the information, nowledge and belief, true, accurate, and complete. I am aware that there are tion, including the possibility of fine and imprisonment for knowing violations."
Name	Position
Signature	Date





PITTSFIELD ECONOMIC DEVELOPMENT AUTHORITY / WILLIAM STANLEY BUSINESS PARK TRAINING DOCUMENTATION 2024

Title of Training: Stormwater Pollution Prevention Plan / Spill Prevention and Response

Signature	Date
Cht Tank	8/4/2024
	Signature

By signing this form, you are indicating you have reviewed the training module.

PITTSFIELD ECONOMIC DEVELOPMENT AUTHORITY / WILLIAM STANLEY BUSINESS PARK TRAINING DOCUMENTATION 2024

Title of Training: Stormwater Pollution Prevention Plan / Spill Prevention and Response

Name (Print)	Signature	Date
Michael Coakley	Mand Com	9/13/24
		, ,

By signing this form, you are indicating you have reviewed the training module.

PITTSFIELD ECONOMIC DEVELOPMENT AUTHORITY / WILLIAM STANLEY BUSINESS PARK TRAINING DOCUMENTATION 2024

Title of Training: Stormwater Pollution Prevention Plan / Spill Prevention and Response

Name (Print)	Signature	Date
BEN SOUNE	Blen	11/26/2024

By signing this form, you are indicating you have reviewed the training module.



Permit Section	Exposure Control	Measurable Goal	Measure of Assessment	Milestones	Proposed Completion Date	Responsible Party
I.C.2.a.(1)	Minimize Exposure of Former Industrial Areas to Stormwater Discharges	Maintaining vegetation and pavement in existing locations to reduce the potential for erosion.	Minimization of erosion, maintaining vegetation and attaining compliance with the numeric effluent limits	Quarterly inspections include these areas	Routine	BEĆ
I.C.2.a.(2)	Good Housekeeping Measures	Ensure that site stormwater does not carry pollutants, waste, garbage, and floatable debris to receiving waters	Minimization of waste, garbage and floatable debris in the water quality basin and Silver Lake and by attaining compliance with the non-numeric effluent requirements of the Permit	Quarterly inspections of areas that are potential sources of pollution; corrective action as required	Routine	BEC
I.C.2.a.(3)	Preventative Maintenance	Minimize the potential for pollutants to reach Silver Lake	Well maintained forebays and the water quality basin, leaked or spilled materials not entering the stormwater management system and attaining compliance with the numeric and non-numeric effluent limits/requirements of the Permit	Quarterly inspections of transformers and stormwater management structures; maintenance and corrective action as required	Routine	BEC
I.C.2.a.(4)	Spill Prevention and Response Procedures	Site stormwater is not impacted by spills or chemicals or petroleum products	Develop and implement spill response procedures	Implement Spill Response Procedures	Completed in 2023	BEC
I.C.2.a.(5)	Erosion and Sedimentation Controls	Minimize the introduction of sediment to stormwater, maintain the capacity of the forebays and water quality basin and prevent sediment from entering Silver Lake.	Attaining low levels of total suspended and settleable solids in the discharge, minimal accumulation of sediment in the forebays and water quality basin and by attaining compliance with non-numeric effluent limits/requirements of the Permit	Quarterly inspections to verify; corrective action as required	Routine	BEC
I.C.2.a.(6)	Stormwater Management Practices	Attaining compliance with the non-numeric effluent limits/requirements of the Permit	Attaining compliance with the non-numeric effluent limits/requirements of the Permit	Quarterly inspections to verify; corrective action as required	Routine	BEC

Permit Section	Exposure Control	Measurable Goal	Measure of Assessment	Milestones	Proposed Completion Date	Responsible Party
I.C.2.a.(7)	De-Icing Materials Piles	Not Applicable	Not Applicable	Not applicable	Not Applicable	Not Applicable
I.C.2.a.(8)	Employee / Tenant Training	Tenant Training demonstrate knowledge of the	Completing the spill response and permit review training and obtain tenant certification	Training of PEDA Staff and WSBP Tenants	Completed in 2023	BEC
		required by the SWPPP		Tenant certification of SWPPP	Jul 26, 2023	PEDA
I.C.2.a.(9)	Non- Stormwater	Identify any non-stormwater contributions to the	Producing a report on the evaluation and eliminating any	Prepare Work Plan	Completed in 2022	BEC
	Discharge Evaluation		non-stormwater discharges	Preparation of Report	Completed in 2022	BEC
				Update Non-stormwater discharge evaluation to address the Redevelopment of WSBP Site 9 (Former Teens Complex)	June 30, 2025 (approximate)	BEC
			Elimination as required	Within 90 days of discovery (if needed)	PEDA/ Contractor(s)	
I.C.2.a.(10)	Dust Generation	sediment to stormwater, su	Attaining low levels of total suspended and settleable solids	Quarterly inspections to verify; corrective action as required	Routine	BEC
		maintain the capacity of the forebays and water quality basin and prevent sediment from entering Silver Lake	in the discharge, minimal accumulation of sediment in the forebays and water quality basin and by attaining compliance with the numeric and non-numeric effluent limits/requirements of the Permit	Sweeping driveway and parking as required	As Needed	PEDA/ Contractor

Permit Section	Exposure Control	Measurable Goal	Measure of Assessment	Milestones	Proposed Completion Date	Responsible Party
I.C.2.b.(1)	Control Technologies	Minimize the introduction of pollutants and sediment to stormwater, maintain the capacity of the forebays and water quality basin and prevent sediment from entering Silver Lake	Attaining low levels of total suspended and settleable solids in the discharge, minimal accumulation of sediment in the forebays and water quality basin and by attaining compliance with the numeric and non-numeric effluent limits/requirements of the Permit	Quarterly inspections to verify; corrective action as required	Routine	BEC
I.C.2.b.(2)	Inspection/ Assessment /	Complete the required inspections, assessment,	On-time reporting of inspections, assessment, monitoring and	Inspection checklists	Completed in 2022	BEC
	Monitoring		d maintenance of appropriate e with records in the SWPPP.	Quarterly visual assessment/inspection/record keeping	Routine	BEC
				Flow measurement	During measurable discharge	BEC
				Monthly monitoring	On/before last day of each month	BEC
			Reporting of monitoring results	15 th day of each month following monitoring	BEC	
I.C.2.b.(3)	Corrective Action	Complete the corrective actions, including reviewing and revising (as appropriate)	On-time SWPPP revision, record keeping and reporting	SWPPP review/revision	Within 14 days of discovery of need	BEC
	the SWPPP, and completing the record keeping in accordance with the Permit and MSGP		Corrective action	Within 14 days of discovery of need	PEDA/ Contractor(s)	
I.C.2.b.(4)	Quality Assurance /	Complete a QA/QC specification in accordance	Following the QA/QC procedures and obtaining high-quality data	Specification preparation	Completed in 2022	BEC
	Quality Control	with procedures and practices in the Permit and the RGP	that are useful for its intended purposes	Use of procedures in specification	Routine	BEC

Permit Section	Exposure Control	Measurable Goal	Measure of Assessment	Milestones	Proposed Completion Date	Responsible Party
I.C.2.b.(5)	Nutrient Minimization /	Prepare specifications for landscaping practices and	Contractors following the specifications and timelines	Specification preparation	Completed in 2022	BEC
	Sweeping driveway and parking areas owned by	iveway and sweeping in accordance with the Permit	outlined in them, reducing nutrients in stormwater, attaining low levels of total suspended and settleable solids in the discharge	Provide nutrient minimization specification to PEDA contractors	June 30, 2025	PEDA/BEC
	PEDA		and by attaining compliance with the non-numeric effluent limits/requirements of the Permit.	Use of procedures in nutrient minimization specification	June 30, 2025	PEDA / Contractor(s)
I.C.2.c.(1)(i- vii)	Source Identification	Determine locations where soil and other materials may	Completion of a report documenting potential pollutant	Compile/review existing data	Completed in 2022	BEC
		contain pollutants that may be impacting stormwater		Preparation of report	Completed in 2023	BEC
				Update the Source Identification Report	June 30, 2025 (approximate)	BEC
I.C.2.c(2)i	Abatement and Removal BMPs	Remove accumulated solids from the existing conveyance system	Attaining low levels of solids and PCBs being discharged through Outfall 001	Schedule removal of accumulated solids from the conveyance system	To Be Determined	PEDA / Contractor(s)
I.C.2.c(2)ii	Abatement and Remove accumulated solids from existing forebays, and water quality basin		Maintaining forebays and the water quality basin and attaining	North Forebay and Spillway Repair	Completed in 2022	PEDA / Contractor(s)
		compliance with the numeric and non-numeric effluent	South Forebay	As Needed		
			limits/requirements of the Permit	Water Quality Basin	As Needed	
I.C.2.c(2)iii	Abatement and Removal BMPs	Complete line cleaning operations	Attaining low levels of solids and PCBs being discharged into the forebays and water quality basin and through Outfall 001	The PEDA Site 9 Redevelopment Project includes replacement of the stormwater conveyance system	Completed in 2024	PEDA / Contractor(s)
				Complete a visual inspection of PEDA Site 7 and 8 (former 40s Complex) to determine the need for line cleaning operations	June 30, 2025	PEDA / Contractor(s)

Permit Section	Exposure Control	Measurable Goal	Measure of Assessment	Milestones	Proposed Completion Date	Responsible Party
I.C.2.c(2)iv	Abatement and Removal BMPs	Conduct street sweeping at paved areas including Woodlawn Avenue	Attaining low levels of solids and PCBs being discharged into the forebays and water quality basin and through Outfall 001	The City currently conducts street sweeping at a minimum of twice / year (Spring and Fall). In addition, street sweeping along East Street and Woodlawn Avenue is also done once during the summer months.	Routine	City of Pittsfield
		Conduct street sweeping at paved areas which must include all of the 20s and 30s complex		The need for street sweeping will be evaluated as part of quarterly inspections	Routine	PEDA Contractor or City of Pittsfield
I.C.2.c(2)vi	Abatement and Removal BMPs	Enhance storage capacity of the water quality basin through upstream engineering controls	Reduce the volume of water to be managed by the forebays and the water quality basin as measured by flow through Outfall 001	Site 9 – includes the construction of rain gardens and water management structures to reduce peak and total flows to Outfall 001	Completed in 2024	PEDA / Contractor(s)
				Site 7 and 8 (former 40s Complex) is not currently scheduled for redevelopment	To Be Determined	PEDA / Contractor(s)
I.C.2.c(2)vii	Abatement and Removal BMPs	Enhance storage capacity of the existing water quality basin;	Meeting permit effluent limitations	Since PEDA has been meeting effluent limitations, this BMP is not required at this time.	To Be Determined	PEDA / Contractor(s)
I.C.2.c(3)i	Eliminate or Minimize PCBs discharging through Outfall 001	Disconnect the existing conveyance system identified as contributing PCBs to the discharge	Attaining low levels of PCBs being discharged into the water quality basin and through Outfall 001.	The Site 9 Redevelopment project (former Teens Complex) includes the replacement of all portions of the conveyance system located within of Site 9 of the WSBP	Completed in 2024	PEDA / Contractor(s)

Permit Section	Exposure Control	Measurable Goal	Measure of Assessment	Milestones	Proposed Completion Date	Responsible Party
				Site 7 and 8 (former 40s Complex) are not currently scheduled for redevelopment. Contributions from Site 7 and 8 will be evaluated following development of these parcels	To Be Determined	PEDA / Contractor(s)
I.C.2.c(3)ii	Eliminate or Minimize PCBs discharging through Outfall 001	Reline, recondition, replace or abandon in place existing conveyance system identified as contributing PCBs to the discharge	Attaining low levels of PCBs being discharged into the Water Quality Basin and through Outfall 001	The Site 9 Redevelopment project (former Teens Complex) includes the replacement of all portions of the conveyance system to located within Site 9 of the WSBP	Completed in 2024	PEDA / Contractor(s)
				Site 7 and 8 (former 40s Complex) are not currently scheduled for redevelopment. Contributions from Site 7 and 8 will be evaluated following development of these parcels	To Be Determined	PEDA / Contractor(s)
I.C.2.c(4)i	Eliminate the discharge of PCBs during and following site redevelopment	Establish a frequency for routine cleaning of the conveyance system	Attaining low levels of PCBs being discharged into the Water Quality Basin and through Outfall 001	The Site 9 Redevelopment project (former Teens Complex) includes the replacement of all portions of the conveyance system within Site 9 of the WSBP	Completed in 2024	PEDA / Contractor(s)
				Site 7 and 8 (former 40s Complex) are not currently scheduled for redevelopment. Contributions from Site 7 and 8 will be evaluated following development of these parcels	To Be Determined	PEDA / Contractor(s)

Permit Section	Exposure Control	Measurable Goal	Measure of Assessment	Milestones	Proposed Completion Date	Responsible Party
I.C.2.c(4)ii	Eliminate the discharge of PCBs during and following site redevelopment	Implement a frequency for routine cleaning for the forebays, and water quality basin, no less than annually, and that ensures proper operation and that will ensure the average thickness of debris does not exceed 12 inches in the forebays and the calculated pool volume in the water quality basin is not reduced by more than 25% due to sediment accumulation	Attaining low levels of PCBs being discharged into the Water Quality Basin and through Outfall 001	Not currently required since the system is functioning and permit effluent limitations are being met. Note: the north forebay was excavated in 2022 and the spillway was repaired at the same time.	TBD	PEDÁ / Contractor(s)
I.C.2.c(4)iii	Eliminate the discharge of PCBs during and following site redevelopment	Establish a frequency for routine street sweeping, no less than twice per year	Attaining low levels of PCBs being discharged into the Water Quality Basin and through Outfall 001	The City currently conducts street sweeping at a minimum of twice per year (Spring and Fall). In addition, street sweeping along East Street and Woodlawn Avenue is also done once during the summer months.	Routine	City of Pittsfield
I.C.2.c.(4)iv	Eliminate the discharge of PCBs during and following site redevelopment	If any redevelopment results in new pavement, new catch basins, or new sediment treatment systems in the teens or 40s complexes, implement the optimization measures specified above for the existing infrastructure	Attaining low levels of PCBs being discharged into the Water Quality Basin and through Outfall 001	Develop a schedule for optimization measures including removal of accumulated solids in the stormwater collection and conveyance system on sites in WSBP (BIC, MountainOne, Eversource Solar, Site 3N, Site 4, 5, 6, and 9).	December 31, 2025	PEDA / Contractor(s)

Permit Section	Exposure Control	Measurable Goal	Measure of Assessment	Milestones	Proposed Completion Date	Responsible Party
I.C.2.c.(4)v	Limit generation of stormwater to be discharged through Outfall 001	Utilize green infrastructure measures where practicable, such as streetscapes, vacant lots, riparian corridors, green roof systems, cisterns, bioswales and bio basins, and porous paving	Attaining low levels of PCBs being discharged into the Water Quality Basin and through Outfall 001	The PEDA Site 9 (formerly Teens Complex) redevelopment is complete and includes numerous stormwater minimization structures	Completed in 2024	PEDA / Contractor(s)
				PEDA Site 7 and 8 (formerly GE 40s Complex) are not currently scheduled for redevelopment	To Be Determined	PEDA / Contractor(s)
I.C.2.c.(5)i-ii	Ongoing Evaluation of PCBs	Influent concentration of total PCBs and estimated total annual load into the north and south forebays	Analytical results from the biannual monitoring	Collect samples of stormwater discharging into the north and south forebays twice/year. Results will be documented in the SPPP (implemented in 2024)	Routine (could not be completed in 2024 due to lack of rainfall)	BEC
I.C.2.c.(5)iii	Ongoing Evaluation of PCBs	Effluent concentration of total PCBs and estimated total annual load discharging from Outfall 001	Analytical results from the monthly monitoring	This is currently being done within the monthly monitoring required by the NPDES permit.	Routine	BEC
I.C.2.c.(5)iv	Ongoing Evaluation of PCBs	Concentration of total PCBs and estimated total annual load in Silver Lake at the outlet	Analytical results included in Annual Monitoring Reports included on the EPA website for the GE-Pittsfield/Housatonic River Site, Silver Lake: https://www.epa.gov/ge- housatonic/silver-lake-ge- pittsfieldhousatonic-river- site#Reports	Evaluate the data as presented by GE in Annual Reports	To Be Determined	BEC

Abbreviations and Notes:

BEC = Berkshire Environmental Consultants, Inc.

BMPs = Best Management Practices

PEDA = Pittsfield Economic Development Authority

For compliance dates noted as "Routine", these are being completed in accordance with the schedule noted.

APPENDIX K

Technical Specifications:

- Spill Prevention and Response
 - Nutrient Minimization
 - Training

SPILL PREVENTION AND RESPONSE TECHNICAL SPECIFICATION

Prepared for: Pittsfield Economic Development Authority (PEDA)

Prepared by: Berkshire Environmental Consultants, Inc.

Date: October 26, 2022

PLEASE DISTRIBUTE THIS SPECIFICATION TO TENANTS OF THE WILLIAM STANLEY BUSINESS PARK AND POST IN A CONSPICUOUS AREA ACCESSIBLE TO ALL EMPLOYEES.

OVERVIEW

As part of PEDA's *Proposed Best Management Practices* – 2022, Berkshire Environmental Consultants, Inc. (BEC) has prepared this Spill Prevention and Response Specification for the Pittsfield Economic Development Authority that manages the William Stanley Business Park of the Berkshires (WSBP). The specification is to be applied to emergency spills on the WSBP property and is intended to minimize the impact of an accidental or emergency release of oil or hazardous chemicals to stormwater and groundwater discharged through PEDA's Outfall 001. Discharges to Outfall 001 are authorized under PEDA's National Pollutant Discharge Elimination System (NPDES) Permit No. MA0040231. This specification applies to the whole of the WSBP and specifically to MountainOne Bank, the Berkshire Innovation Center (BIC) and the Eversource solar array that occupy the former GE 30s Complex.

SPILL PREVENTION

At the WSBP key elements of oil and chemical spill prevention include the following:

- NEVER dispose of liquids or solids to on-site storm drains.
- Clean-up small spills (e.g., from a parked vehicle) using on-site spill kits
- Keep parking lots free of trash, debris, and sediment.
- Vigilance if you see something that does not look right, report it to your supervisor.

REMEMBER: the intent of spill prevention is to keep oil and hazardous chemicals as well as sediment, trash and debris from getting into the Water Quality Basin and negatively impacting discharges to Silver Lake.

SPILL RESPONSE

Given the commercial use of both the Mountain One Bank, BIC and Eversource properties, a spill could involve the following oil and/or chemicals:

- Transformer oil
- Gasoline
- Engine lubricants
- Hydraulic oil (trash collection)
- Engine coolants
- Landscaping chemicals (insecticides, herbicides)

If a spill is discovered, and if it is **SAFE TO DO SO**, do the following:

- Stop the flow of oil or chemicals
- Place absorbent pads or absorbent clay on the spill area
- Assess the location and size of the spill, including approximate amount and identification of spilled material, the direction spill is moving, weather conditions, any injuries and any expected safety concerns including fire and explosion.

SPILL PREVENTION AND RESPONSE TECHNICAL SPECIFICATION

Prepared for: Pittsfield Economic Development Authority (PEDA)

Prepared by: Berkshire Environmental Consultants, Inc.

Date: October 26, 2022

If there are any safety concerns including fire or explosion, contact the Pittsfield Fire Department immediately at 9-1-1.

It is the <u>responsibility of the WSBP tenant</u> to do the following:

- 1. Notify PEDA;
- 2. Hire a contractor to provide spill containment and clean up services, as necessary;
- 3. Make all required regulatory notifications (local, state and federal); and
- 4. Confirm that all spill cleanup materials (recovered oil or chemicals, absorbent materials) are disposed of in accordance with local, state and federal requirements.

SPILL NOTIFICATION TO PEDA

In the event of a spill of oil or hazardous chemicals, make the following notifications to the PEDA Stormwater Pollution Prevention Team (SPPT):

Name	Title	Contact Information
Michael Coakley	PEDA Interim Executive Director	Office: 413-448-9726
	SPPT Leader	Cell: 413-822-1760
Maura Hawkins	Berkshire Environmental Consultants, Inc.,	Office: 413-443-0130
	Senior Project Manager	Cell: 413-447-4867
	SPPT Member	
Ryan Capasse	Berkshire Environmental Consultants, Inc., Environmental Scientist	Office: 413-443-0130
	SPPT Member	

NUTRIENT MINIMIZATION TECHNICAL SPECIFICATION

Prepared for: Pittsfield Economic Development Authority (PEDA)

Prepared by: Berkshire Environmental Consultants, Inc.

Date: October 26, 2022

PLEASE DISTRIBUTE THIS SPECIFICATION TO CITY EMPLOYEES OR PRIVATE CONTRACTORS WHO PROVIDE STREET SWEEPING OR LANDSCAPING SERVICES TO PEDA OR TENANTS IN THE WSBP.

OVERVIEW

In accordance with Part I.C.2.b.5 of the NPDES Permit No. MA0040231 and PEDA's 2023 Stormwater Pollution Prevention Plan, (including *Proposed Best Management Practices*), Berkshire Environmental Consultants, Inc. (BEC) has prepared this Nutrient Minimization Specification for the Pittsfield Economic Development Authority (PEDA) who manages the William Stanley Business Park of the Berkshires (WSBP). The specification is to be applied to sweeping and landscaping activities within the WSBP and is intended to minimize introduction of excess nutrients to the treated stormwater and groundwater discharged through PEDA's Outfall 001. These discharges are allowed under PEDA's National Pollutant Discharge Elimination System (NPDES) Permit No. MA0040231. The storm water drainage basin is shown on a map in Attachment A. Areas in the drainage basin applicable to this specification include the following:

- Former GE Teens Complex (WSBP Site 9) currently vacant
- Former GE 20s Complex (WSBP Sites, 4, 5 and 6) currently vacant
- Former GE 30s Complex currently occupied by a solar array, Mountain One Bank, Berkshire Innovation Center (BIC), water quality basin and includes undeveloped WSBP Site 3N
- Former GE 40s Complex (WSBP Sites 7 and 8) currently vacant

USE OF PESTICIDES, HERBICIDES AND FERTILIZERS

Pesticides, herbicides and fertilizers will not be used routinely in the four former GE areas noted above except for the water quality basin located in the former GE 30s Complex. The water quality basin is being intermittently treated with an herbicide to manage an infestation of water chestnut in the basin. This treatment was applied in the spring and summer months during 2020, 2021 and 2022. This treatment will continue until the water chestnut is eradicated, anticipated to be approximately 2027.

STREET SWEEPING

The City of Pittsfield will conduct street sweeping seasonally as needed along Silver Lake Boulevard, Woodlawn Avenue, Kellogg Street, Tyler Street and East Street. The City will collect street sweepings and dispose of the materials off-site. Currently there is no schedule for routine street sweeping.

LANDSCAPING

The City of Pittsfield or a private contractor (on the BIC and Mountain One properties) may conduct grass mowing in the Former GE 30s Complex that has been redeveloped and is currently occupied by Mountain One Bank, the Berkshire Innovation Center (BIC), a solar array as well as the water quality basin and WSBP Site 3N and numerous stormwater conveyance swales. Any mowing along the edge of the water quality basin, the two forebays and any drainage swale will be conducted in the following manner:

NUTRIENT MINIMIZATION TECHNICAL SPECIFICATION

Prepared for: Pittsfield Economic Development Authority (PEDA)

Prepared by: Berkshire Environmental Consultants, Inc.

Date: October 26, 2022

- the first several passes (depending on the width of the mower) along the edge of the water or drainage swale should be made so that grass clippings will be discharged away from the water source. Once the mower is > 15 feet from the water, the direction of mowing can be altered if preferred; OR
- collect the grass clippings, remove from the WSBP and dispose of/compost off-site.

The intent is to keep the grass clippings out of the stormwater collection system.

For contractors that conduct leaf collection in the fall, all leaves will be removed from the WSBP and disposed of/composted off-site.

For contractors that conduct vegetation removal on the vacant properties, the vegetated materials cut down will be removed from the site and disposed/composted off-site.

STORMWATER POLLUTION PREVENTION PLAN TRAINING SPECIFICATION

Prepared for: Pittsfield Economic Development Authority (PEDA)

Prepared by: Berkshire Environmental Consultants, Inc.

Date: October 27, 2022

OVERVIEW

As part of PEDA's *Proposed Best Management Practices – 2022*, Berkshire Environmental Consultants, Inc. (BEC) has prepared this Training Specification for the Pittsfield Economic Development Authority that manages the William Stanley Business Park of the Berkshires (WSBP). The training will be designed for PEDA and City employees and PEDA tenants of the WSBP to demonstrate knowledge of the practices and procedures required by the Stormwater Pollution Prevention Plan (SWPPP). The goal of the training is to minimize the impact of an accidental or emergency release of oil or hazardous chemicals on water discharged through PEDA's Outfall 001. The discharge of stormwater and groundwater is allowed under PEDA's National Pollutant Discharge Elimination System (NPDES) Permit No. MA0040231.

TRAINING APPLICABILITY

Training on the components and goals of the SWPPP will be provided to PEDA and City employees and PEDA tenants of the WSBP.

TRAINING SCHEDULE

Initial training will be conducted in the first half of 2023. New city and PEDA employees and PEDA tenants of the WSBP will be trained within 90 days of employment and annually and thereafter on the components and goals of the SWPPP.

TRAINING TOPICS

Training topics will include the following:

- SWPPP Contents
- Location and use of emergency equipment
- Spill response procedures
- Spill prevention and control measures
- Good housekeeping and materials management practices

If applicable, standard operating procedures will be used by PEDA and city personnel or WSBP tenants for receiving, storing, and transferring chemicals and chemical waste at WSBP to reduce the likelihood of storm water contamination. Since WSBP tenants do not currently receive, store, or transfer chemicals or chemical waste, standard operating procedures are not required at this time.

In accordance with the Permit, initial employee training and annual refresher training will be conducted under the supervision of the Pollution Prevention Team. Records of employee training will be included in Appendix G of the SWPPP and will include the date(s), employee name, employee responsibility and topics covered.

Stormwater Pollution Prevention Plan Training



for the Pittsfield Economic Development Authority and tenants of the William Stanley Business Park of the Berkshires

The Pittsfield Economic Development Authority has been issued a NPDES permit to discharge treated stormwater and ground water through Outfall 001 into Silver Lake.

The National Pollutant Discharge Elimination System (NPDES) Permit No. MA0040231 was re-issued by the US Environmental Protection Agency (USEPA or EPA) and became effective November 1, 2021.

The purpose of the permit is to control water pollution by regulating point sources that discharge pollutants into waters of the United States.





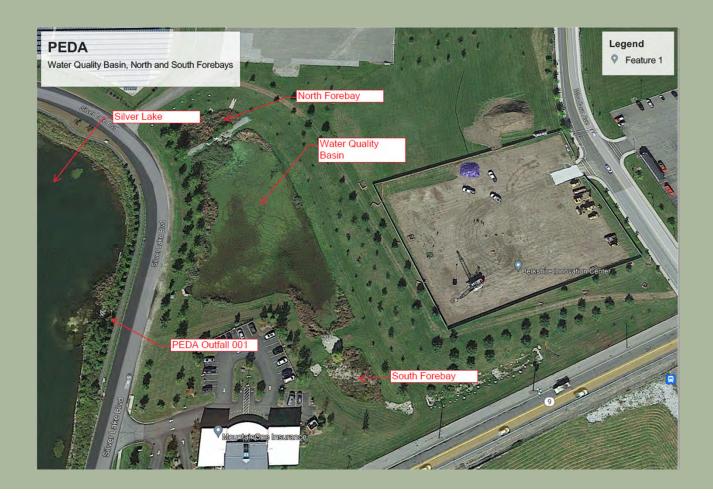
Polluted stormwater runoff
is a leading cause of impairment
to the nearly 40 percent
of surveyed U.S. water bodies
which do not meet water quality
standards

(Source: http://cfpub.epa.gov/npdes/faqs.cfm?program_id=6)

Since 2009, **General Electric** has transferred numerous former industrial properties to PEDA for redevelopment. These properties are known collectively as the William Stanley Business Park of the Berkshires



Stormwater generated on the William Stanley Business Park is conveyed to a water quality basin via the north or south forebay. The forebays and water quality basin serve to remove sediment and potential pollutants prior to discharge into Silver Lake.



NPDES Permit Requirements

With the goal of limiting the discharge of potential pollutants into Silver Lake (oil, chemicals, sediment, solid waste etc.) the NPDES permit requires PEDA to conduct monitoring of stormwater and groundwater discharges <u>and</u> meet certain effluent limitations stipulated in the permit.

NPDES Permit Details — Part I

Effluent Characteristic	Unit	Discharge Limitation		Monitoring Requirement ^{1,2}	
Parameter		Average Monthly	Maximum Daily	Measurement Frequency ³	Sample Type
Flow ⁴	MGD	Report	Report	When Discharging	Meter or Estimate
Oil and Grease	mg/L	Report	15	1/Month	Grab
TSS	mg/L	30	100	1/Month	Grab
pH ⁵		6.5 - 9.0 S.U.		1/Month	Grab
Escherichia coli	cfu/100 ml	Report	Report	1/Year	Grab
Total Nitrogen	mg/L lb/day		Report	2/Year	Grab
PCBs, Total 6,7	μg/L	Report	Report	1/Month	Grab
Whole Effluent Toxicity ^{8,9,10}			rt		
Total Hardness Total Suspended Solids Specific Conductance Ammonia Nitrogen Total Residual Chlorine Total Cadmium Total Chromium Total Lead Total Copper Total Zinc Total Nickel Total Aluminum	mg/L mg/L µmhos/cm mg/L µg/L µg/L	Report	Report	2/Year	Grab

NPDES Permit Requirements — Part I

- Monitoring
 - Flow monitored continuously
 - Monthly pH, Total Suspended Solids, Oil and Grease, PCBs
 - Semi-Annually Whole Effluent Toxicity Testing (Acute), Total Nitrogen
- Inspections
 - Quarterly Visual Assessment of Stormwater Discharges
 - Quarterly Inspections of the WSBP
- Reporting
 - Monthly Discharge Monitoring Reports (DMRs)
 - Annual Report



NPDES Permit Requirements - Reporting

All monitoring must be reported to the EPA and the MassDEP using the EPA's Central Data Exchange or CDX. CDX is an online data portal.



NPDES Permit Requirements - Training

In addition to routine monitoring and inspection requirements, the Permit specifies that PEDA must prepare a Stormwater Pollution Prevention Plan.

The SWPPP is designed to reduce, or prevent, the discharge of pollutants from the site to the receiving water and serves as a tool to document the PEDA's compliance with the terms of the permit.

NPDES Permit Requirements - Training

As a best management practice PEDA is required to provide training to PEDA and City personnel (as applicable) as well as tenants of the William Stanley Business Park to include the following:

- Overview of what is in the SWPPP
- Spill response procedures, good housekeeping, maintenance requirements, and material management practices
- The location of all controls on the site required by this permit, and how they are to be maintained;
- The proper procedures to follow with respect to the permit's pollution prevention requirements; and
- When and how to conduct inspections, record applicable findings, and take corrective actions.

Stormwater Pollution Prevention Plan - Overview

- Identify Stormwater Pollution Prevention Team Members and Responsibilities
- List of Potential Pollutant Sources
- □ List of Pollution Prevention Systems / Best Management Practices (BMPs)
- Description of Routine Inspections
- Monitoring Requirements
- Recordkeeping and Reporting Requirements

Spill Response Procedures – Potential Spills

Given the commercial use of both the Mountain

One Bank, BIC and the Eversource properties, a spill could involve the following oil and/or chemicals:

- Transformer oil
 - Gasoline
- Engine lubricants
 - Hydraulic oil
 - Engine coolants
- Landscaping chemicals (insecticides, herbicides)

Spill Response Procedures – Control the Spill

- If a spill is discovered, do the following if it is <u>SAFE TO DO</u> SO:
- Stop the flow of oil or chemicals
- Place absorbent pads or absorbent clay from the on-site spill kit on the spill area
- Once the spill is under control, make notification to PEDA.

If there are <u>any</u> safety concerns including fire or explosion, contact the Pittsfield Fire Department immediately at 9-1-1.



Spill Response Procedures - Notification

It is the responsibility of the WSBP tenant to do the following:

- Notify PEDA
- Hire a contractor to provide spill containment and cleanup services, as needed
- Make all required regulatory notifications (local, state and federal)
- Confirm that all spill cleanup materials (recovered oil or chemicals, absorbent materials) are disposed of properly

Spill Response Procedures - Notification

Provide information to a member of the Stormwater Pollution Prevention Team

Name	Title	Contact Information
Michael Coakley	PEDA Interim Executive Director	Office: 413-448-9726
	SPPT Leader	Cell: 413-822-1760
Maura Hawkins	Berkshire Environmental Consultants, Inc., Senior	Office: 413-443-0130
	Project Manager	Cell: 413-447-4867
	SPPT Member	
Ryan Capasse	Berkshire Environmental Consultants, Inc.,	Office: 413-443-0130
	Environmental Scientist	
	SPPT Member	

Note: If additional notifications are required to the MassDEP, the USEPA or an outside spill response contractor, these notifications will be made by a member of the SWPPP team.

These telephone numbers should be posted in a common area near a telephone

Spill Recordkeeping

Records of any reportable spills that occurred three years prior to the date of certification of the Plan will be maintained on a log included in Appendix D in the SWPPP.



Good Housekeeping

At the WSBP key elements of oil and chemical spill <u>prevention</u> include:

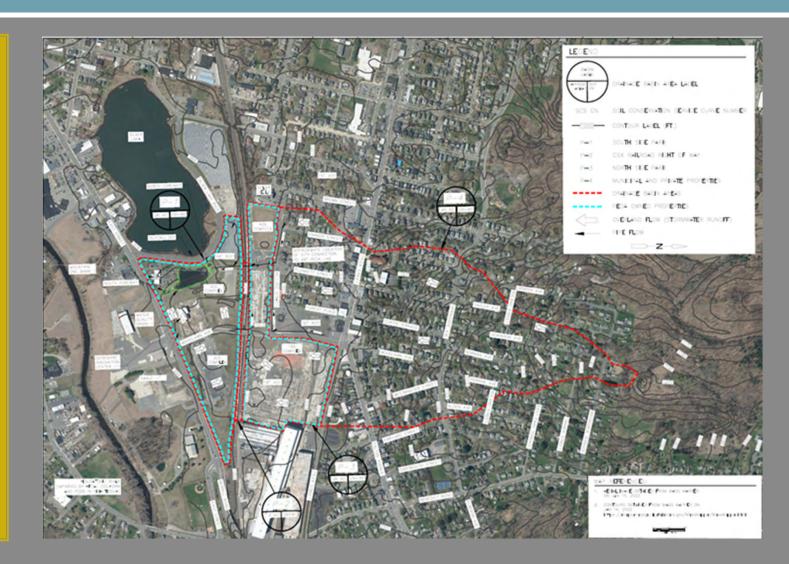
- NEVER dispose of liquids or solids to on-site storm drains.
- Keep trash containers covered.
- Store chemical or oil products indoors.
- Any potential wastes will be disposed of off-site by a licensed waste hauler.
- Clean-up small spills in parking lots or paved areas using on-site spill kits (e.g., from a parked vehicle).
- Keep parking lots free of trash, debris, and sediment.
- □ Vigilance if you see something that doesn't look right, report it to your supervisor.

PEDA Outfall 001

Stormwater from a large area within the City of Pittsfield as well as four former General Electric industrial complex areas is discharged through a series of catch basins and underground piping to one of the two forebays on either end of the water quality basin. Water from the water quality basin is conveyed beneath Silver Lake Boulevard and is discharged into the east end of Silver Lake at Outfall 001.

PEDA Outfall 001 – Drainage Basin

The drainage area that discharges through Outfall 001 into the east end of Silver Lake is outlined in RED



PEDA Outfall 001 -Water Treatment

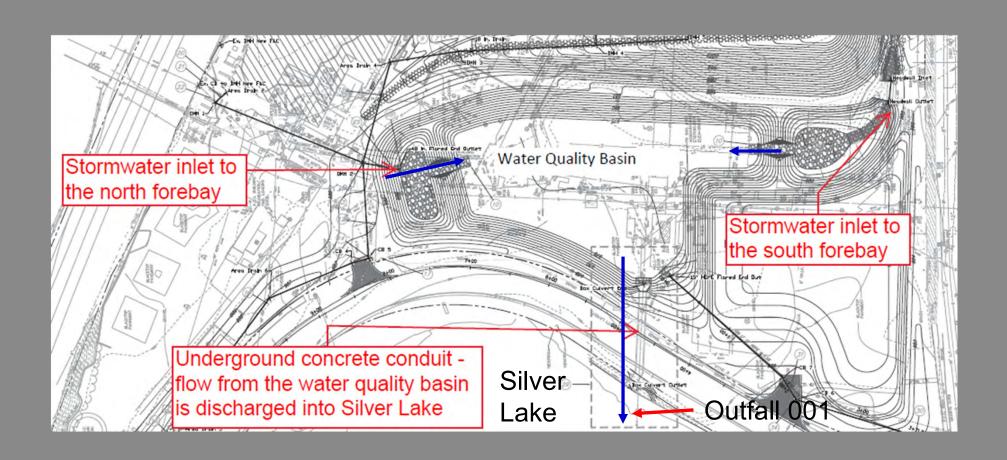
Stormwater that enters either the north or south forebay, slowly flows into the water quality basin through a boulder and soil dam. The intent of the forebays and water quality basin is to reduce/remove pollutants prior to the water entering the concrete conduit that connects the water quality basin with Silver Lake.



Primary potential pollutants include

- oil and grease, automotive fluids
- suspended solids
- polychlorinated biphenyls

PEDA Outfall 001 - Water Treatment

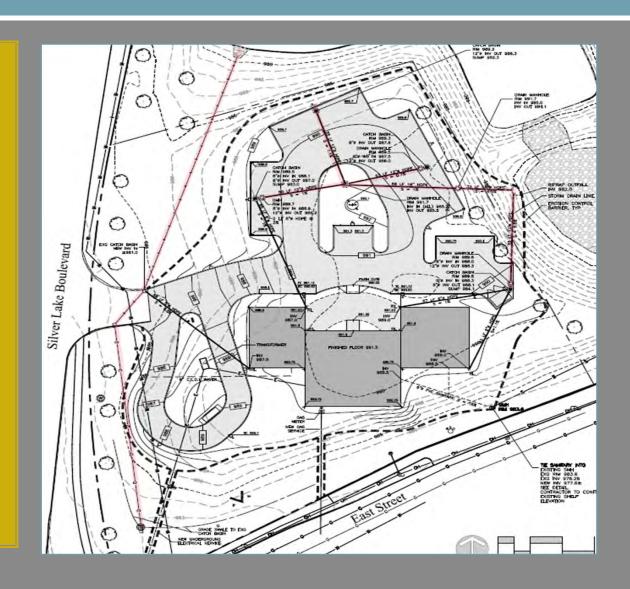


PEDA Outfall 001 – Stormwater System at Mountain One

There are two outfall locations from the parking lot that discharge separately to the west side of the south forebay.

There is one outfall from the lawn area at the southwest corner of the property and the driveway that discharges directly to the Water Quality Basin

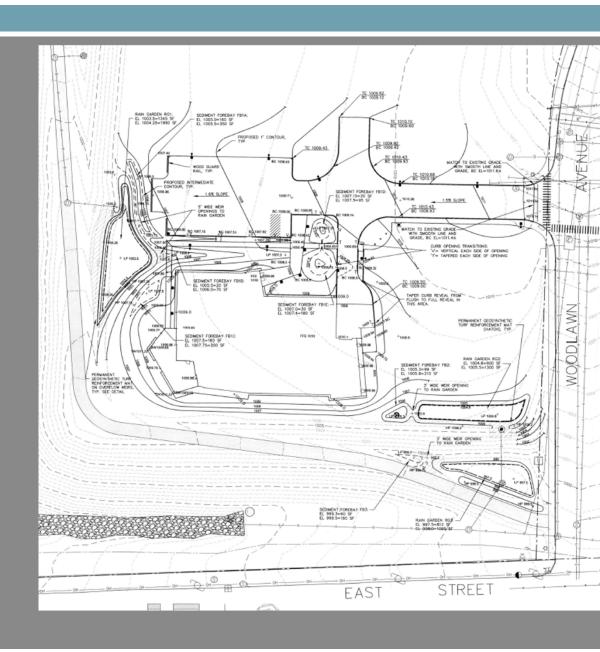
BE AWARE OF THESE OUTFALL LOCATIONS - IF ANY SHEEN OR ODORS ARE NOTED PLEASE NOTIFY PEDA



PEDA Outfall 001 – Stormwater System at Berkshire Innovation Center

There are three rain gardens and numerous drainage swales around the BIC building that discharge to the stormwater drainage system that flows into the forebays and/or the Water Quality Basin.

BE AWARE OF THESE SURFACE WATER COLLECTION AREAS – IF ANY SHEEN OR ODORS ARE NOTED PLEASE NOTIFY PEDA



INTENT OF TRAINING

- As PEDA or the City of Pittsfield personnel and as tenants of the WSBP this training should have provided you with the following:
- An understanding of the NPDES permit requirements that are the responsibility of PEDA.
- Overview of the Stormwater Pollution Prevention Plan.
- An understanding of the treatment systems in place to manage potential stormwater pollution.
- Actions to be taken if a spill is identified.
- Who must be notified in the event of a spill.



QUESTIONS OR CONCERNS?

Call:

Michael Coakley, PEDA Interim Executive Director

413-448-9726

Or

Berkshire Environmental Consultants, Inc.

413-443-0130



• APPENDIX L

Tenant Certifications

CONTRACTOR AND TENANT CERTIFICATION

William Stanley Business Park of the Berkshires Generally Bounded by East Street, Silver Lake Boulevard, Kellogg Street, and Tyler Street Pittsfield, MA 01201

I certify under penalty of law that I understand and agree to comply with the terms and conditions of the SWPPP for maintenance activities and/or construction at the Site. I also understand that the operator (PEDA) must comply with the terms of the National Pollutant Discharge Elimination System (NPDES) Permit for stormwater discharges at the Site and/or from construction activities and that it is unlawful for any person to cause or contribute to a violation of water quality standards.

Signature	July 26, 2023 Date	
Berkshire Innovation Center		
For (Company Name)		
Executive Director		
Responsible For (Describe Activities)		

CONTRACTOR AND TENANT CERTIFICATION

William Stanley Business Park of the Berkshires Generally Bounded by East Street, Silver Lake Boulevard, Kellogg Street, and Tyler Street Pittsfield, MA 01201

I certify under penalty of law that I understand and agree to comply with the terms and conditions of the SWPPP for maintenance activities and/or construction at the Site. I also understand that the operator (PEDA) must comply with the terms of the National Pollutant Discharge Elimination System (NPDES) Permit for stormwater discharges at the Site and/or from construction activities and that it is unlawful for any person to cause or contribute to a violation of water quality standards.

John Jak	7/26/2023	<u> </u>
Signature	Date	
MountainOne		
For (Company Name)		
tenant		
Responsible For (Describe Activities)		





December 20, 2022

Benjamin Guidi Massachusetts Department of Environmental Protection Bureau of Waste Site Cleanup 436 Dwight Street, 5th Floor Springfield, MA 01103

Richard Fisher c/o Weston Solutions 10 Lyman Street, Suite 2 Pittsfield, MA 01021

RE: Post-Work Notification

Water Quality Basin – North Forebay William Stanley Business Park, Pittsfield

Dear Mr. Guidi and Mr. Fisher:

The Pittsfield Economic Development Authority (PEDA) has completed maintenance and repairs to the North Forebay of the Water Quality Basin (WQB) located in the former 30s Complex on East Street in Pittsfield. The work consisted of the removal of sediment that had accumulated in the north forebay, and repairs to the overflow weir between the North Forebay and the main Water Quality Basin.

Activities subject to the 30s Complex Second Amended and Restated Grant of Environmental Restriction and Easement (ERE) subparagraph 4.H. were completed on December 1, 2022. Attached is the Post-Work Notification required by the amended 30s Complex ERE.

Please contact us if you have questions or require additional information. Thank you.

Sincerely,

ROUX ASSOCIATES, INC.

Edward J. Weagle, LSP, CHMM

Principal Geologist

Enclosures

POST-WORK NOTIFICATION CLOSURE REPORT

Grant of Environmental Restriction and Easement Section 4.H.
Surface and Subsurface Excavation for Maintenance of Water Quality Basin and Forebays
Pittsfield Economic Development Authority
Former 30s Complex
December 2022

Project Description

The Pittsfield Economic Development Authority (PEDA) completed maintenance and repairs to the North Forebay of the Water Quality Basin (WQB) located in the former 30s Complex off Silver Lake Boulevard and East Street in Pittsfield. The maintenance work was conducted to remove accumulated sediment in the North Forebay. The repair work was to restore erosion channels in the riprap spillway between the forebay and the main water quality basin and reposition the velocity attenuation boulders in the forebay. The work was performed between November 21, 2022, and December 1, 2022. A description of the activities performed is provided below.

The maintenance and repair of the forebay is a permitted activity under Section 4.H. Surface and Subsurface Excavation for Maintenance of Water Quality Basin and Forebays of the revised Grant of Environmental Restriction and Easement (ERE) recorded for the 30s Complex. The 15-days advanced written notice required by the ERE was made to EPA and MassDEP on August 23, 2022. The work was conducted in accordance with the Soil Management Protocol (SMP) and the Health and Safety Protocol (HSP) and was overseen by PEDA's Licensed Site Professional.

North Forebay Sediment Characterization

Three composite sediment samples were collected from the North Forebay by Berkshire Environmental Consultants (BEC) to pre-characterize the material to be disposed. BEC performed 12 hand auger soil borings and collected three composite soil samples for disposal analyses, as well as describing the material and measuring its thickness to estimate the amount of sediment requiring disposal. BEC's sampling activities indicated the sediment ranged from 2 to 3 feet thick and consisted mainly of organic sand and silt. Based on the information collected by BEC, an estimated 400 cubic yards of sediment required removal. Generally, the material contained low levels of polycyclic aromatic hydrocarbons (PAHs) consistent with road runoff, background concentrations of metals, total petroleum hydrocarbons ranging from 990 mg/kg to 3,000 mg/kg, and PBC concentrations ranging from 0.56 to 1.4 mg/kg. Pre-characterization data indicated the material was acceptable for disposal at Casella Waste Systems Ontario County Landfill in Stanley NY. Laboratory data reports are attached in Appendix A.

North Forebay Sediment Removal

Between November 21 and December 1, 2002, J.H. Maximillian was on-site performing work to remove and load out sediment. Prior to excavation, standing vegetation including several small trees were cut flush with the ground surface and chipped. During the excavation of the sediment, the velocity attenuation boulders placed in front of the stormwater inlet pipe were temporarily relocated, and sediment was excavated down to the crushed concrete floor of the forebay. The sediment was pulled to the side of the forebay where it was allowed to drain prior to being loaded out. Where needed, the material was amended with sawdust to absorb excess water so that the material would not liquify during transport. Following the removal of the sediment, the velocity attenuation boulders were repositioned in front of the storm drain outfall.

Disposition of Excavated Sediment

Casella Waste Systems issued approval for profile # 24966 accepting the material at the Ontario County Landfill in Stanley NY. Between November 28th and December 1st, 304.26 tons of material in ten truck loads were transported by Goulet Trucking to the landfill under a Material Shipping Record (MSR). A copy of the disposal documentation provided by the landfill is attached in Appendix B.

Overflow Weir Restoration

Following removal of sediment, the overflow weir between the north forebay and the main water quality basin was restored by placing crushed stone riprap on the eroded portions of the weir. Approximately 5 tons of riprap were used to repair the erosion and restore the design plan elevations and contours. Before and after photos of the weir repairs are attached in Appendix C.

Post-Work Notification

A copy of the required post-work notification form is attached in Appendix D.

Appendices

- A. Laboratory Reports
- B. Landfill Disposal Documents
- C. Photographs
- D. Post-Work Notification

ROUX | Page 1 3937.0001M000.101.Att-1

Post-Work Notification Water Quality Basin – North Forebay William Stanley Business Park, Pittsfield

APPENDICES

- A. Laboratory Reports
- B. Landfill Disposal Documents
- C. Photographs
- D. Post-Work Notification

3937.0001M000.101.AP-CV

Post-Work Notification Water Quality Basin – North Forebay William Stanley Business Park, Pittsfield

APPENDIX A

Laboratory Reports

3937.0001M000.101.AP-CV

September 22, 2022

Maura Hawkins Berkshire Environmental Consultants 1450 East St., Suite 6-H Pittsfield, MA 01201

Project Location: Pittsfield, MA

Client Job Number: Project Number: 43-11

Laboratory Work Order Number: 22I0628

Enclosed are results of analyses for samples as received by the laboratory on September 13, 2022. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Kaitlyn A. Feliciano Project Manager

Table of Contents

Sample Summary	4
Case Narrative	5
Sample Results	11
22I0628-01	11
22I0628-02	21
Sample Preparation Information	31
QC Data	33
Volatile Organic Compounds by GC/MS	33
B317147	33
Semivolatile Organic Compounds by GC/MS	38
B317121	38
B317329	46
Organochloride Pesticides by GC/ECD	51
B317120	51
Polychlorinated Biphenyls By GC/ECD	54
B317119	54
Herbicides by GC/ECD	55
B317221	55
Petroleum Hydrocarbons Analyses	57
B317123	57
B317327	57
Metals Analyses (Total)	58
B317272	58
B317432	58
Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)	59

Table of Contents (continued)

B317111	59
B317377	59
B317475	59
B317476	59
Pesticides Degradation Report	60
Dual Column RPD Report	62
Flag/Qualifier Summary	72
Certifications	73
Chain of Custody/Sample Receipt	83



Berkshire Environmental Consultants 1450 East St., Suite 6-H Pittsfield, MA 01201 ATTN: Maura Hawkins

REPORT DATE: 9/22/2022

PURCHASE ORDER NUMBER:

PROJECT NUMBER: 43-11

ANALYTICAL SUMMARY

22I0628 WORK ORDER NUMBER:

The results of analyses performed on the following samples submitted to CON-TEST, a Pace Analytical Laboratory, are found in this report.

PROJECT LOCATION: Pittsfield, MA

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
PF-COMP-091222-A	2210628-01	Soil		SM 2540G SM21-23 2510B Modified SW-846 1030 SW-846 6010D SW-846 7471B SW-846 8081B SW-846 8082A SW-846 8100 Modi SW-846 8151A SW-846 8260D SW-846 9014	
PF-COMP-091222-B 2	2210628-02	Soil		SW-846 9030A SW-846 9045C SM 2540G SM21-23 2510B Modified SW-846 1030	
				SW-846 6010D SW-846 7471B SW-846 8081B SW-846 8082A SW-846 8100 Modi	fied
				SW-846 8151A SW-846 8260D SW-846 8270E SW-846 9014 SW-846 9030A SW-846 9045C	

CASE NARRATIVE SUMMARY

All reported results are within defined laboratory quality control objectives unless listed below or otherwise qualified in this report.

For method 8151 samples were derivatized on 09/21/22

For method 8151 samples analysis bracketed by LCS to monitor esterification. All recoveries in the bracketing LCS met method criteria.



SW-846 8081B

Qualifications:

DL-03

Elevated reporting limit due to matrix interference.

Analyte & Samples(s) Qualified:

22I0628-01[PF-COMP-091222-A], 22I0628-02[PF-COMP-091222-B]

S-01

The surrogate recovery for this sample is not available due to sample dilution below the surrogate reporting limit required from high analyte concentration and/or matrix interferences.

Analyte & Samples(s) Qualified:

Decachlorobiphenyl

22I0628-01[PF-COMP-091222-A]

Decachlorobiphenyl [2C]

22I0628-01[PF-COMP-091222-A]

Tetrachloro-m-xylene

22I0628-01[PF-COMP-091222-A]

Tetrachloro-m-xylene [2C]

22I0628-01[PF-COMP-091222-A]

SW-846 8082A

Qualifications:

P-02

Sample RPD between primary and confirmatory analysis exceeded 40%. Per EPA method 8000, the lower value was reported due to obvious chromatographic interference on the column with the higher result.

Analyte & Samples(s) Qualified:

Aroclor-1248

22I0628-01[PF-COMP-091222-A], 22I0628-02[PF-COMP-091222-B]

SW-846 8100 Modified

Qualifications:

MS-19

Sample to spike ratio is greater than or equal to 4:1. Spiked amount is not representative of the native amount in the sample. Appropriate or meaningful recoveries cannot be calculated.

Analyte & Samples(s) Qualified:

TPH (C9-C36)

B317123-MS1, B317123-MSD1

SW-846 8151A

Qualifications:

O-32

A dilution was performed as part of the standard analytical procedure.

Analyte & Samples(s) Qualified:

22I0628-01[PF-COMP-091222-A], 22I0628-02[PF-COMP-091222-B]

S-02

The surrogate recovery for this sample cannot be accurately quantified due to interference from coeluting organic compounds present in the

sample extract.

Analyte & Samples(s) Qualified:

2,4-Dichlorophenylacetic acid

22I0628-01[PF-COMP-091222-A], 22I0628-02[PF-COMP-091222-B]

V-06

Continuing calibration verification (CCV) did not meet method specifications and was biased on the high side for this compound.

Analyte & Samples(s) Qualified:

Dalapon

B317221-BS1, B317221-BSD1

Dalapon [2C]

B317221-BS1, B317221-BSD1



V-20

Continuing calibration verification (CCV) did not meet method specifications and was biased on the high side. Data validation is not affected since sample result was "not detected" for this compound. Analyte & Samples(s) Qualified:

Dalapon

22I0628-01[PF-COMP-091222-A], 22I0628-02[PF-COMP-091222-B]

Dalapon [2C]

22I0628-01[PF-COMP-091222-A], 22I0628-02[PF-COMP-091222-B]

SW-846 8260D

Qualifications:

L-02

Laboratory fortified blank/laboratory control sample recovery and duplicate recoveries outside of control limits. Data validation is not affected since all results are "not detected" for associated samples in this batch and bias is on the high side.

Analyte & Samples(s) Qualified:

Bromomethane

B317147-BS1, B317147-BSD1

V-05

Continuing calibration verification (CCV) did not meet method specifications and was biased on the low side for this compound.

Analyte & Samples(s) Qualified:

1,2,3-Trichlorobenzene

2210628-01[PF-COMP-091222-A], 2210628-02[PF-COMP-091222-B], B317147-BLK1, B317147-BS1, B317147-BSD1, S076550-CCV1, B317147-BS1, B3171

2210628-01[PF-COMP-091222-A], 2210628-02[PF-COMP-091222-B], B317147-BLK1, B317147-BS1, B317147-BSD1, S076550-CCV1, B317147-BS1, B3171

Continuing calibration verification (CCV) did not meet method specifications and was biased on the high side. Data validation is not affected since sample result was "not detected" for this compound. Analyte & Samples(s) Qualified:

1,1,2-Trichloro-1,2,2-trifluoroethan

B317147-BS1, B317147-BSD1, S076550-CCV1

Bromomethane

B317147-BS1, B317147-BSD1, S076550-CCV1

Chloromethane

B317147-BS1, B317147-BSD1, S076550-CCV1

Dichlorodifluoromethane (Freon 12

B317147-BS1, B317147-BSD1, S076550-CCV1

Methyl Cyclohexane

B317147-BS1, B317147-BSD1, S076550-CCV1

SW-846 8270E

Qualifications:

L-02

Laboratory fortified blank/laboratory control sample recovery and duplicate recoveries outside of control limits. Data validation is not affected since all results are "not detected" for associated samples in this batch and bias is on the high side. Analyte & Samples(s) Qualified:

Benzidine

B317121-BS1, B317121-BSD1, B317329-BS1, B317329-BSD1

L-04

Laboratory fortified blank/laboratory control sample recovery and duplicate recovery are outside of control limits. Reported value for this compound is likely to be biased on the low side. Analyte & Samples(s) Qualified:

Hexachlorocyclopentadiene

B317329-BS1, B317329-BSD1



MS-09

Matrix spike recovery and/or matrix spike duplicate recovery outside of control limits. Possibility of sample matrix effects that lead to a low bias for reported result or non-homogeneous sample aliquots cannot be eliminated. Analyte & Samples(s) Qualified:

2,4-Dinitrophenol

22I0628-01[PF-COMP-091222-A], B317121-MS1, B317121-MSD1

3,3-Dichlorobenzidine

22I0628-01[PF-COMP-091222-A], B317121-MS1, B317121-MSD1

4,6-Dinitro-2-methylphenol

22I0628-01[PF-COMP-091222-A], B317121-MS1, B317121-MSD1

4-Chloroaniline

22I0628-01[PF-COMP-091222-A], B317121-MS1, B317121-MSD1

Aniline

22I0628-01[PF-COMP-091222-A], B317121-MS1, B317121-MSD1

Benzidine

22I0628-01[PF-COMP-091222-A], B317121-MS1, B317121-MSD1

Hexachlorocyclopentadiene

22I0628-01[PF-COMP-091222-A], B317121-MS1, B317121-MSD1

Hexachloroethane

22I0628-01[PF-COMP-091222-A], B317121-MS1, B317121-MSD1

Pentachloronitrobenzene

22I0628-01[PF-COMP-091222-A], B317121-MS1, B317121-MSD1

22I0628-01[PF-COMP-091222-A], B317121-MS1, B317121-MSD1

MS-22

Either matrix spike or MS duplicate is outside of control limits, but the other is within limits. RPD between the two MS/MSD results is

within method specified criteria. Analyte & Samples(s) Qualified:

3-Nitroaniline

B317121-MSD1

Benzoic Acid

B317121-MSD1

MS-23

Either matrix spike or MS duplicate is outside of control limits, but the other is within limits. RPD between the two MS/MSD results is outside of the method specified criteria. Reduced precision anticipated for any reported result for this compound.

Analyte & Samples(s) Qualified:

2-Nitrophenol

B317121-MS1

Anthracene

B317121-MS1

Benzo(a)anthracene

B317121-MS1

Benzo(a)pyrene

B317121-MS1

Benzo(b)fluoranthene

B317121-MS1

Chrysene

B317121-MS1

Fluoranthene B317121-MS1

Phenanthrene

B317121-MS1

Pvrene B317121-MS1



R-06

Matrix spike duplicate RPD is outside of control limits. Reduced precision is anticipated for reported result for this compound in this sample.

Analyte & Samples(s) Qualified:

2-Nitrophenol

22I0628-01[PF-COMP-091222-A], B317121-MSD1

Acenaphthene

22I0628-01[PF-COMP-091222-A], B317121-MS1, B317121-MSD1

22I0628-01[PF-COMP-091222-A], B317121-MSD1

Benzo(a)anthracene

22I0628-01[PF-COMP-091222-A], B317121-MSD1

Benzo(a)pyrene

22I0628-01[PF-COMP-091222-A], B317121-MSD1

Benzo(b)fluoranthene

22I0628-01[PF-COMP-091222-A], B317121-MSD1

Benzo(g,h,i)perylene

22I0628-01[PF-COMP-091222-A], B317121-MS1, B317121-MSD1

Benzo(k)fluoranthene

22I0628-01[PF-COMP-091222-A], B317121-MS1, B317121-MSD1

Carbazole

22I0628-01[PF-COMP-091222-A], B317121-MS1, B317121-MSD1

22I0628-01[PF-COMP-091222-A], B317121-MSD1

Dibenzofuran

22I0628-01[PF-COMP-091222-A], B317121-MS1, B317121-MSD1

Fluoranthene

22I0628-01[PF-COMP-091222-A], B317121-MSD1

Fluorene

22I0628-01[PF-COMP-091222-A], B317121-MS1, B317121-MSD1

Indeno(1,2,3-cd)pyrene

22I0628-01[PF-COMP-091222-A], B317121-MS1, B317121-MSD1

Naphthalene

22I0628-01[PF-COMP-091222-A], B317121-MS1, B317121-MSD1

Pentachloronitrobenzene

22I0628-01[PF-COMP-091222-A], B317121-MS1, B317121-MSD1

Phenanthrene

22I0628-01[PF-COMP-091222-A], B317121-MSD1

Pyrene

22I0628-01[PF-COMP-091222-A], B317121-MSD1

RL-12

Elevated reporting limit due to matrix interference.

Analyte & Samples(s) Qualified:

22I0628-02[PF-COMP-091222-B]

V-04

Initial calibration did not meet method specifications. Compound was calibrated using a response factor where %RSD is outside of method specified criteria. Reported result is estimated. Analyte & Samples(s) Qualified:

2210628-01[PF-COMP-091222-A], 2210628-02[PF-COMP-091222-B], B317121-BLK1, B317121-BS1, B317121-BSD1, B317121-MS1, B317121-MSD1, B317329-BLK1, B317329-BS1, B317329-BSD1, S076704-CCV1, S076823-CCV1

V-05

Continuing calibration verification (CCV) did not meet method specifications and was biased on the low side for this compound.

Analyte & Samples(s) Qualified:

Hexachlorocyclopentadiene

22I0628-01[PF-COMP-091222-A], 22I0628-02[PF-COMP-091222-B], B317121-BLK1, B317121-BSD1, B317121-MS1, B317121-MSD1, B317329-BS1, B317329-BSD1, S076704-CCV1, S076823-CCV1

Pentachlorophenol

2210628 - 01[PF-COMP-091222-A], 2210628 - 02[PF-COMP-091222-B], B317121 - BLK1, B317121 - BSD1, B317121 - MSD1, B317121 - MSB317329-BS1, B317329-BSD1, S076704-CCV1, S076823-CCV1



V-06

Continuing calibration verification (CCV) did not meet method specifications and was biased on the high side for this compound.

Analyte & Samples(s) Qualified:

2-Nitroaniline

S076823-CCV1

Aniline

S076823-CCV1

Dibenz(a,h)anthracene

2210628 - 01[PF-COMP-091222-A], 2210628 - 02[PF-COMP-091222-B], B317121 - BS1, B317121 - BS1, B317121 - MS1, B317121 - MS1, B317121 - MS1, B317329 - BS1, B317321 - BS1,S076704-CCV1

Di-n-octylphthalate

S076823-CCV1

Indeno(1,2,3-cd)pyrene

2210628 - 01[PF-COMP-091222-A], 2210628 - 02[PF-COMP-091222-B], B317121-BS1, B317121-BS1, B317121-MS1, B317121-MS1, B317121-MS1, B317329-BS1, B317S076704-CCV1

V-20

Continuing calibration verification (CCV) did not meet method specifications and was biased on the high side. Data validation is not affected since sample result was "not detected" for this compound. Analyte & Samples(s) Qualified:

Dibenz(a,h)anthracene

B317121-BLK1, B317329-BLK1

Indeno(1,2,3-cd)pyrene

B317121-BLK1, B317329-BLK1

V-35

Initial calibration verification (ICV) did not meet method specifications and was biased on the high side for this compound. Reported result is estimated.

Analyte & Samples(s) Qualified:

2210628 - 01[PF-COMP-091222-A], 2210628 - 02[PF-COMP-091222-B], B317121 - BLK1, B317121 - BSD1, B317121 - MSD1, B317121 - MSB317329-BS1, B317329-BSD1, S075436-ICV1, S076704-CCV1, S076823-CCV1

SW-846 8100 Modified

TPH (C9-C36) is quantitated against a calibration made with a diesel standard.

The results of analyses reported only relate to samples submitted to Con-Test, a Pace Analytical Laboratory, for testing. I certify that the analyses listed above, unless specifically listed as subcontracted, if any, were performed under my direction according to the approved methodologies listed in this document, and that based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.

Tod E. Kopyscinski Laboratory Director

Page 10 of 84



Project Location: Pittsfield, MA Sample Description: Work Order: 2210628

Date Received: 9/13/2022

Field Sample #: PF-COMP-091222-A

Sample ID: 22I0628-01
Sample Matrix: Soil

Sampled: 9/12/2022 17:47

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	1.3	mg/Kg dry	1		SW-846 8260D	9/14/22	9/14/22 12:21	MFF
Acrylonitrile	ND	0.13	mg/Kg dry	1		SW-846 8260D	9/14/22	9/14/22 12:21	MFF
tert-Amyl Methyl Ether (TAME)	ND	0.013	mg/Kg dry	1		SW-846 8260D	9/14/22	9/14/22 12:21	MFF
Benzene	ND	0.025	mg/Kg dry	1		SW-846 8260D	9/14/22	9/14/22 12:21	MFF
Bromobenzene	ND	0.025	mg/Kg dry	1		SW-846 8260D	9/14/22	9/14/22 12:21	MFF
Bromochloromethane	ND	0.025	mg/Kg dry	1		SW-846 8260D	9/14/22	9/14/22 12:21	MFF
Bromodichloromethane	ND	0.025	mg/Kg dry	1		SW-846 8260D	9/14/22	9/14/22 12:21	MFF
Bromoform	ND	0.025	mg/Kg dry	1		SW-846 8260D	9/14/22	9/14/22 12:21	MFF
Bromomethane	ND	0.050	mg/Kg dry	1		SW-846 8260D	9/14/22	9/14/22 12:21	MFF
2-Butanone (MEK)	ND	0.50	mg/Kg dry	1		SW-846 8260D	9/14/22	9/14/22 12:21	MFF
tert-Butyl Alcohol (TBA)	ND	0.50	mg/Kg dry	1		SW-846 8260D	9/14/22	9/14/22 12:21	MFF
n-Butylbenzene	ND	0.025	mg/Kg dry	1		SW-846 8260D	9/14/22	9/14/22 12:21	MFF
sec-Butylbenzene	ND	0.025	mg/Kg dry	1		SW-846 8260D	9/14/22	9/14/22 12:21	MFF
tert-Butylbenzene	ND	0.025	mg/Kg dry	1		SW-846 8260D	9/14/22	9/14/22 12:21	MFF
tert-Butyl Ethyl Ether (TBEE)	ND	0.013	mg/Kg dry	1		SW-846 8260D	9/14/22	9/14/22 12:21	MFF
Carbon Disulfide	ND	0.13	mg/Kg dry	1		SW-846 8260D	9/14/22	9/14/22 12:21	MFF
Carbon Tetrachloride	ND	0.025	mg/Kg dry	1		SW-846 8260D	9/14/22	9/14/22 12:21	MFF
Chlorobenzene	ND	0.025	mg/Kg dry	1		SW-846 8260D	9/14/22	9/14/22 12:21	MFF
Chlorodibromomethane	ND	0.013	mg/Kg dry	1		SW-846 8260D	9/14/22	9/14/22 12:21	MFF
Chloroethane	ND	0.050	mg/Kg dry	1		SW-846 8260D	9/14/22	9/14/22 12:21	MFF
Chloroform	ND	0.050	mg/Kg dry	1		SW-846 8260D	9/14/22	9/14/22 12:21	MFF
Chloromethane	ND	0.050	mg/Kg dry	1		SW-846 8260D	9/14/22	9/14/22 12:21	MFF
2-Chlorotoluene	ND	0.025	mg/Kg dry	1		SW-846 8260D	9/14/22	9/14/22 12:21	MFF
4-Chlorotoluene	ND	0.025	mg/Kg dry	1		SW-846 8260D	9/14/22	9/14/22 12:21	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	0.13	mg/Kg dry	1		SW-846 8260D	9/14/22	9/14/22 12:21	MFF
1,2-Dibromoethane (EDB)	ND	0.013	mg/Kg dry	1		SW-846 8260D	9/14/22	9/14/22 12:21	MFF
Dibromomethane	ND	0.025	mg/Kg dry	1		SW-846 8260D	9/14/22	9/14/22 12:21	MFF
1,2-Dichlorobenzene	ND	0.025	mg/Kg dry	1		SW-846 8260D	9/14/22	9/14/22 12:21	MFF
1,3-Dichlorobenzene	ND	0.025	mg/Kg dry	1		SW-846 8260D	9/14/22	9/14/22 12:21	MFF
1,4-Dichlorobenzene	ND	0.025	mg/Kg dry	1		SW-846 8260D	9/14/22	9/14/22 12:21	MFF
trans-1,4-Dichloro-2-butene	ND	0.050	mg/Kg dry	1		SW-846 8260D	9/14/22	9/14/22 12:21	MFF
Dichlorodifluoromethane (Freon 12)	ND	0.050	mg/Kg dry	1		SW-846 8260D	9/14/22	9/14/22 12:21	MFF
1,1-Dichloroethane	ND	0.025	mg/Kg dry	1		SW-846 8260D	9/14/22	9/14/22 12:21	MFF
1,2-Dichloroethane	ND	0.025	mg/Kg dry	1		SW-846 8260D	9/14/22	9/14/22 12:21	MFF
1,1-Dichloroethylene	ND	0.025	mg/Kg dry	1		SW-846 8260D	9/14/22	9/14/22 12:21	MFF
cis-1,2-Dichloroethylene	ND	0.025	mg/Kg dry	1		SW-846 8260D	9/14/22	9/14/22 12:21	MFF
trans-1,2-Dichloroethylene	ND	0.025	mg/Kg dry	1		SW-846 8260D	9/14/22	9/14/22 12:21	MFF
1,2-Dichloropropane	ND	0.025	mg/Kg dry	1		SW-846 8260D	9/14/22	9/14/22 12:21	MFF
1,3-Dichloropropane	ND	0.013	mg/Kg dry	1		SW-846 8260D	9/14/22	9/14/22 12:21	MFF
2,2-Dichloropropane	ND	0.025	mg/Kg dry	1		SW-846 8260D	9/14/22	9/14/22 12:21	MFF
1,1-Dichloropropene	ND	0.050	mg/Kg dry	1		SW-846 8260D	9/14/22	9/14/22 12:21	MFF
cis-1,3-Dichloropropene	ND	0.013	mg/Kg dry	1		SW-846 8260D	9/14/22	9/14/22 12:21	MFF
trans-1,3-Dichloropropene	ND	0.013	mg/Kg dry	1		SW-846 8260D	9/14/22	9/14/22 12:21	MFF
Diethyl Ether	ND	0.050	mg/Kg dry	1		SW-846 8260D	9/14/22	9/14/22 12:21	MFF

Page 11 of 84



Project Location: Pittsfield, MA Sample Description: Work Order: 2210628

Date Received: 9/13/2022

Field Sample #: PF-COMP-091222-A

Sample ID: 22I0628-01
Sample Matrix: Soil

Sampled: 9/12/2022 17:47

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.013	mg/Kg dry	1		SW-846 8260D	9/14/22	9/14/22 12:21	MFF
1,4-Dioxane	ND	1.3	mg/Kg dry	1		SW-846 8260D	9/14/22	9/14/22 12:21	MFF
Ethylbenzene	ND	0.025	mg/Kg dry	1		SW-846 8260D	9/14/22	9/14/22 12:21	MFF
Hexachlorobutadiene	ND	0.025	mg/Kg dry	1		SW-846 8260D	9/14/22	9/14/22 12:21	MFF
2-Hexanone (MBK)	ND	0.25	mg/Kg dry	1		SW-846 8260D	9/14/22	9/14/22 12:21	MFF
Isopropylbenzene (Cumene)	ND	0.025	mg/Kg dry	1		SW-846 8260D	9/14/22	9/14/22 12:21	MFF
p-Isopropyltoluene (p-Cymene)	ND	0.025	mg/Kg dry	1		SW-846 8260D	9/14/22	9/14/22 12:21	MFF
Methyl Acetate	ND	0.25	mg/Kg dry	1		SW-846 8260D	9/14/22	9/14/22 12:21	MFF
Methyl tert-Butyl Ether (MTBE)	ND	0.025	mg/Kg dry	1		SW-846 8260D	9/14/22	9/14/22 12:21	MFF
Methyl Cyclohexane	ND	0.025	mg/Kg dry	1		SW-846 8260D	9/14/22	9/14/22 12:21	MFF
Methylene Chloride	ND	0.13	mg/Kg dry	1		SW-846 8260D	9/14/22	9/14/22 12:21	MFF
4-Methyl-2-pentanone (MIBK)	ND	0.25	mg/Kg dry	1		SW-846 8260D	9/14/22	9/14/22 12:21	MFF
Naphthalene	ND	0.050	mg/Kg dry	1	V-05	SW-846 8260D	9/14/22	9/14/22 12:21	MFF
n-Propylbenzene	ND	0.025	mg/Kg dry	1		SW-846 8260D	9/14/22	9/14/22 12:21	MFF
Styrene	ND	0.025	mg/Kg dry	1		SW-846 8260D	9/14/22	9/14/22 12:21	MFF
1,1,1,2-Tetrachloroethane	ND	0.025	mg/Kg dry	1		SW-846 8260D	9/14/22	9/14/22 12:21	MFF
1,1,2,2-Tetrachloroethane	ND	0.013	mg/Kg dry	1		SW-846 8260D	9/14/22	9/14/22 12:21	MFF
Tetrachloroethylene	ND	0.025	mg/Kg dry	1		SW-846 8260D	9/14/22	9/14/22 12:21	MFF
Tetrahydrofuran	ND	0.25	mg/Kg dry	1		SW-846 8260D	9/14/22	9/14/22 12:21	MFF
Toluene	ND	0.025	mg/Kg dry	1		SW-846 8260D	9/14/22	9/14/22 12:21	MFF
1,2,3-Trichlorobenzene	ND	0.13	mg/Kg dry	1	V-05	SW-846 8260D	9/14/22	9/14/22 12:21	MFF
1,2,4-Trichlorobenzene	ND	0.025	mg/Kg dry	1		SW-846 8260D	9/14/22	9/14/22 12:21	MFF
1,3,5-Trichlorobenzene	ND	0.025	mg/Kg dry	1		SW-846 8260D	9/14/22	9/14/22 12:21	MFF
1,1,1-Trichloroethane	ND	0.025	mg/Kg dry	1		SW-846 8260D	9/14/22	9/14/22 12:21	MFF
1,1,2-Trichloroethane	ND	0.025	mg/Kg dry	1		SW-846 8260D	9/14/22	9/14/22 12:21	MFF
Trichloroethylene	ND	0.025	mg/Kg dry	1		SW-846 8260D	9/14/22	9/14/22 12:21	MFF
Trichlorofluoromethane (Freon 11)	ND	0.050	mg/Kg dry	1		SW-846 8260D	9/14/22	9/14/22 12:21	MFF
1,2,3-Trichloropropane	ND	0.050	mg/Kg dry	1		SW-846 8260D	9/14/22	9/14/22 12:21	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.025	mg/Kg dry	1		SW-846 8260D	9/14/22	9/14/22 12:21	MFF
1,2,4-Trimethylbenzene	ND	0.025	mg/Kg dry	1		SW-846 8260D	9/14/22	9/14/22 12:21	MFF
1,3,5-Trimethylbenzene	ND	0.025	mg/Kg dry	1		SW-846 8260D	9/14/22	9/14/22 12:21	MFF
Vinyl Chloride	ND	0.050	mg/Kg dry	1		SW-846 8260D	9/14/22	9/14/22 12:21	MFF
m+p Xylene	ND	0.050	mg/Kg dry	1		SW-846 8260D	9/14/22	9/14/22 12:21	MFF
o-Xylene	ND	0.025	mg/Kg dry	1		SW-846 8260D	9/14/22	9/14/22 12:21	MFF
Currogatos		0/. Dogovory	Dogovory I imit	1	Flog/Ouel				

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
1,2-Dichloroethane-d4	96.1	70-130		9/14/22 12:21
Toluene-d8	102	70-130		9/14/22 12:21
4-Bromofluorobenzene	99.3	70-130		9/14/22 12:21



Project Location: Pittsfield, MA Sample Description: Work Order: 2210628

Date Received: 9/13/2022

Field Sample #: PF-COMP-091222-A

Sample ID: 22I0628-01
Sample Matrix: Soil

Sampled: 9/12/2022 17:47

Semivolatile Organic Compounds by GC/MS

			Semivolatile Organic C	-			Date	Date/Time	
Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Prepared	Analyzed	Analyst
Acenaphthene	ND	0.22	mg/Kg dry	1	R-06	SW-846 8270E	9/13/22	9/16/22 14:39	BGL
Acenaphthylene	ND	0.22	mg/Kg dry	1		SW-846 8270E	9/13/22	9/16/22 14:39	BGL
Acetophenone	ND	0.44	mg/Kg dry	1		SW-846 8270E	9/13/22	9/16/22 14:39	BGL
Aniline	ND	0.44	mg/Kg dry	1	MS-09	SW-846 8270E	9/13/22	9/16/22 14:39	BGL
Anthracene	ND	0.22	mg/Kg dry	1	R-06	SW-846 8270E	9/13/22	9/16/22 14:39	BGL
Benzidine	ND	0.85	mg/Kg dry	1	MS-09, V-04, V-35	SW-846 8270E	9/13/22	9/16/22 14:39	BGL
Benzo(a)anthracene	0.80	0.22	mg/Kg dry	1	R-06	SW-846 8270E	9/13/22	9/16/22 14:39	BGL
Benzo(a)pyrene	0.86	0.22	mg/Kg dry	1	R-06	SW-846 8270E	9/13/22	9/16/22 14:39	BGL
Benzo(b)fluoranthene	1.2	0.22	mg/Kg dry	1	R-06	SW-846 8270E	9/13/22	9/16/22 14:39	BGL
Benzo(g,h,i)perylene	0.57	0.22	mg/Kg dry	1	R-06	SW-846 8270E	9/13/22	9/16/22 14:39	BGL
Benzo(k)fluoranthene	0.49	0.22	mg/Kg dry	1	R-06	SW-846 8270E	9/13/22	9/16/22 14:39	BGL
Benzoic Acid	ND	1.3	mg/Kg dry	1		SW-846 8270E	9/13/22	9/16/22 14:39	BGL
Bis(2-chloroethoxy)methane	ND	0.44	mg/Kg dry	1		SW-846 8270E	9/13/22	9/16/22 14:39	BGL
Bis(2-chloroethyl)ether	ND	0.44	mg/Kg dry	1		SW-846 8270E	9/13/22	9/16/22 14:39	BGL
Bis(2-chloroisopropyl)ether	ND	0.44	mg/Kg dry	1		SW-846 8270E	9/13/22	9/16/22 14:39	BGL
Bis(2-Ethylhexyl)phthalate	ND	0.44	mg/Kg dry	1		SW-846 8270E	9/13/22	9/16/22 14:39	BGL
4-Bromophenylphenylether	ND	0.44	mg/Kg dry	1		SW-846 8270E	9/13/22	9/16/22 14:39	BGL
Butylbenzylphthalate	ND	0.44	mg/Kg dry	1		SW-846 8270E	9/13/22	9/16/22 14:39	BGL
Carbazole	ND	0.22	mg/Kg dry	1	R-06	SW-846 8270E	9/13/22	9/16/22 14:39	BGL
4-Chloroaniline	ND	0.85	mg/Kg dry	1	MS-09	SW-846 8270E	9/13/22	9/16/22 14:39	BGL
4-Chloro-3-methylphenol	ND	0.85	mg/Kg dry	1		SW-846 8270E	9/13/22	9/16/22 14:39	BGL
2-Chloronaphthalene	ND	0.44	mg/Kg dry	1		SW-846 8270E	9/13/22	9/16/22 14:39	BGL
2-Chlorophenol	ND	0.44	mg/Kg dry	1		SW-846 8270E	9/13/22	9/16/22 14:39	BGL
4-Chlorophenylphenylether	ND	0.44	mg/Kg dry	1		SW-846 8270E	9/13/22	9/16/22 14:39	BGL
Chrysene	0.98	0.22	mg/Kg dry	1	R-06	SW-846 8270E	9/13/22	9/16/22 14:39	BGL
Dibenz(a,h)anthracene	ND	0.22	mg/Kg dry	1	V-06	SW-846 8270E	9/13/22	9/16/22 14:39	BGL
Dibenzofuran	ND	0.44	mg/Kg dry	1	R-06	SW-846 8270E	9/13/22	9/16/22 14:39	BGL
Di-n-butylphthalate	ND	0.44	mg/Kg dry	1		SW-846 8270E	9/13/22	9/16/22 14:39	BGL
1,2-Dichlorobenzene	ND	0.44	mg/Kg dry	1		SW-846 8270E	9/13/22	9/16/22 14:39	BGL
1,3-Dichlorobenzene	ND	0.44	mg/Kg dry	1		SW-846 8270E	9/13/22	9/16/22 14:39	BGL
1,4-Dichlorobenzene	ND	0.44	mg/Kg dry	1		SW-846 8270E	9/13/22	9/16/22 14:39	BGL
3,3-Dichlorobenzidine	ND	0.22	mg/Kg dry	1	MS-09	SW-846 8270E	9/13/22	9/16/22 14:39	BGL
2,4-Dichlorophenol	ND	0.44	mg/Kg dry	1		SW-846 8270E	9/13/22	9/16/22 14:39	BGL
Diethylphthalate	ND	0.44	mg/Kg dry	1		SW-846 8270E	9/13/22	9/16/22 14:39	BGL
2,4-Dimethylphenol	ND	0.44	mg/Kg dry	1		SW-846 8270E	9/13/22	9/16/22 14:39	BGL
Dimethylphthalate	ND	0.44	mg/Kg dry	1		SW-846 8270E	9/13/22	9/16/22 14:39	BGL
4,6-Dinitro-2-methylphenol	ND	0.44	mg/Kg dry	1	MS-09	SW-846 8270E	9/13/22	9/16/22 14:39	BGL
2,4-Dinitrophenol	ND	0.85	mg/Kg dry	1	MS-09	SW-846 8270E	9/13/22	9/16/22 14:39	BGL
2,4-Dinitrotoluene	ND	0.44	mg/Kg dry	1		SW-846 8270E	9/13/22	9/16/22 14:39	BGL
2,6-Dinitrotoluene	ND	0.44	mg/Kg dry	1		SW-846 8270E	9/13/22	9/16/22 14:39	BGL
Di-n-octylphthalate	ND	0.44	mg/Kg dry	1		SW-846 8270E	9/13/22	9/16/22 14:39	BGL
1,2-Diphenylhydrazine/Azobenzene	ND	0.44	mg/Kg dry	1		SW-846 8270E	9/13/22	9/16/22 14:39	BGL
Fluoranthene	2.1	0.22	mg/Kg dry	1	R-06	SW-846 8270E	9/13/22	9/16/22 14:39	BGL
Fluorene	ND	0.22	mg/Kg dry	1	R-06	SW-846 8270E	9/13/22	9/16/22 14:39	BGL
-	112	V	mg ng ary	•	10 00	5 5.5 6270E	Σ, 13,22	Page 13	

Page 13 of 84



Project Location: Pittsfield, MA Sample Description: Work Order: 2210628

Date Received: 9/13/2022

Field Sample #: PF-COMP-091222-A

Sampled: 9/12/2022 17:47

Sample ID: 22I0628-01
Sample Matrix: Soil

Semivolatile Organic Compounds by GC/MS								
	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed		

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Prepared	Analyzed	Analyst
Hexachlorobenzene	ND	0.44	mg/Kg dry	1		SW-846 8270E	9/13/22	9/16/22 14:39	BGL
Hexachlorobutadiene	ND	0.44	mg/Kg dry	1		SW-846 8270E	9/13/22	9/16/22 14:39	BGL
Hexachlorocyclopentadiene	ND	0.44	mg/Kg dry	1	MS-09, V-05	SW-846 8270E	9/13/22	9/16/22 14:39	BGL
Hexachloroethane	ND	0.44	mg/Kg dry	1	MS-09	SW-846 8270E	9/13/22	9/16/22 14:39	BGL
Indeno(1,2,3-cd)pyrene	0.59	0.22	mg/Kg dry	1	R-06, V-06	SW-846 8270E	9/13/22	9/16/22 14:39	BGL
Isophorone	ND	0.44	mg/Kg dry	1		SW-846 8270E	9/13/22	9/16/22 14:39	BGL
1-Methylnaphthalene	ND	0.22	mg/Kg dry	1		SW-846 8270E	9/13/22	9/16/22 14:39	BGL
2-Methylnaphthalene	ND	0.22	mg/Kg dry	1		SW-846 8270E	9/13/22	9/16/22 14:39	BGL
2-Methylphenol	ND	0.44	mg/Kg dry	1		SW-846 8270E	9/13/22	9/16/22 14:39	BGL
3/4-Methylphenol	ND	0.44	mg/Kg dry	1		SW-846 8270E	9/13/22	9/16/22 14:39	BGL
Naphthalene	ND	0.22	mg/Kg dry	1	R-06	SW-846 8270E	9/13/22	9/16/22 14:39	BGL
2-Nitroaniline	ND	0.44	mg/Kg dry	1		SW-846 8270E	9/13/22	9/16/22 14:39	BGL
3-Nitroaniline	ND	0.44	mg/Kg dry	1		SW-846 8270E	9/13/22	9/16/22 14:39	BGL
4-Nitroaniline	ND	0.44	mg/Kg dry	1		SW-846 8270E	9/13/22	9/16/22 14:39	BGL
Nitrobenzene	ND	0.44	mg/Kg dry	1		SW-846 8270E	9/13/22	9/16/22 14:39	BGL
2-Nitrophenol	ND	0.44	mg/Kg dry	1	R-06	SW-846 8270E	9/13/22	9/16/22 14:39	BGL
4-Nitrophenol	ND	0.85	mg/Kg dry	1		SW-846 8270E	9/13/22	9/16/22 14:39	BGL
N-Nitrosodimethylamine	ND	0.44	mg/Kg dry	1		SW-846 8270E	9/13/22	9/16/22 14:39	BGL
N-Nitrosodiphenylamine/Diphenylamine	ND	0.44	mg/Kg dry	1		SW-846 8270E	9/13/22	9/16/22 14:39	BGL
N-Nitrosodi-n-propylamine	ND	0.44	mg/Kg dry	1		SW-846 8270E	9/13/22	9/16/22 14:39	BGL
Pentachloronitrobenzene	ND	0.44	mg/Kg dry	1	MS-09, R-06	SW-846 8270E	9/13/22	9/16/22 14:39	BGL
Pentachlorophenol	ND	0.44	mg/Kg dry	1	V-05	SW-846 8270E	9/13/22	9/16/22 14:39	BGL
Phenanthrene	1.0	0.22	mg/Kg dry	1	R-06	SW-846 8270E	9/13/22	9/16/22 14:39	BGL
Phenol	ND	0.44	mg/Kg dry	1		SW-846 8270E	9/13/22	9/16/22 14:39	BGL
Pyrene	1.9	0.22	mg/Kg dry	1	R-06	SW-846 8270E	9/13/22	9/16/22 14:39	BGL
Pyridine	ND	0.44	mg/Kg dry	1	MS-09	SW-846 8270E	9/13/22	9/16/22 14:39	BGL
1,2,4,5-Tetrachlorobenzene	ND	0.44	mg/Kg dry	1		SW-846 8270E	9/13/22	9/16/22 14:39	BGL
1,2,4-Trichlorobenzene	ND	0.44	mg/Kg dry	1		SW-846 8270E	9/13/22	9/16/22 14:39	BGL
2,4,5-Trichlorophenol	ND	0.44	mg/Kg dry	1		SW-846 8270E	9/13/22	9/16/22 14:39	BGL
2,4,6-Trichlorophenol	ND	0.44	mg/Kg dry	1		SW-846 8270E	9/13/22	9/16/22 14:39	BGL

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
2-Fluorophenol	34.4	30-130		9/16/22 14:39
Phenol-d6	36.5	30-130		9/16/22 14:39
Nitrobenzene-d5	43.3	30-130		9/16/22 14:39
2-Fluorobiphenyl	33.8	30-130		9/16/22 14:39
2,4,6-Tribromophenol	33.0	30-130		9/16/22 14:39
p-Terphenyl-d14	38.7	30-130		9/16/22 14:39



Project Location: Pittsfield, MA Sample Description: Work Order: 2210628

Date Received: 9/13/2022

Field Sample #: PF-COMP-091222-A Sampled: 9/12/2022 17:47

Sample ID: 22I0628-01
Sample Matrix: Soil
Sample Flags: DL-03

Organochloride Pesticides by GC/ECD

1 0			-	-	-					
								Date	Date/Time	
Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Prepared	Analyzed	Analyst
Alachlor [1]	ND	1.3	0.36	mg/Kg dry	50		SW-846 8081B	9/13/22	9/16/22 12:47	JMB
Aldrin [1]	ND	0.32	0.028	mg/Kg dry	50		SW-846 8081B	9/13/22	9/16/22 12:47	JMB
alpha-BHC [1]	ND	0.32	0.14	mg/Kg dry	50		SW-846 8081B	9/13/22	9/16/22 12:47	JMB
beta-BHC [1]	ND	0.32	0.12	mg/Kg dry	50		SW-846 8081B	9/13/22	9/16/22 12:47	JMB
delta-BHC [1]	ND	0.32	0.15	mg/Kg dry	50		SW-846 8081B	9/13/22	9/16/22 12:47	JMB
gamma-BHC (Lindane) [1]	ND	0.13	0.030	mg/Kg dry	50		SW-846 8081B	9/13/22	9/16/22 12:47	JMB
Chlordane [1]	ND	1.3	0.48	mg/Kg dry	50		SW-846 8081B	9/13/22	9/16/22 12:47	JMB
4,4'-DDD [1]	ND	0.26	0.049	mg/Kg dry	50		SW-846 8081B	9/13/22	9/16/22 12:47	JMB
4,4'-DDE [1]	ND	0.26	0.026	mg/Kg dry	50		SW-846 8081B	9/13/22	9/16/22 12:47	JMB
4,4'-DDT [1]	ND	0.26	0.029	mg/Kg dry	50		SW-846 8081B	9/13/22	9/16/22 12:47	JMB
Dieldrin [1]	ND	0.26	0.024	mg/Kg dry	50		SW-846 8081B	9/13/22	9/16/22 12:47	JMB
Endosulfan I [1]	ND	0.32	0.11	mg/Kg dry	50		SW-846 8081B	9/13/22	9/16/22 12:47	JMB
Endosulfan II [1]	ND	0.51	0.11	mg/Kg dry	50		SW-846 8081B	9/13/22	9/16/22 12:47	JMB
Endosulfan sulfate [1]	ND	0.51	0.12	mg/Kg dry	50		SW-846 8081B	9/13/22	9/16/22 12:47	JMB
Endrin [1]	ND	0.51	0.11	mg/Kg dry	50		SW-846 8081B	9/13/22	9/16/22 12:47	JMB
Endrin aldehyde [1]	ND	0.51	0.26	mg/Kg dry	50		SW-846 8081B	9/13/22	9/16/22 6:22	JMB
Endrin ketone [1]	ND	0.51	0.14	mg/Kg dry	50		SW-846 8081B	9/13/22	9/16/22 12:47	JMB
Heptachlor [1]	ND	0.32	0.035	mg/Kg dry	50		SW-846 8081B	9/13/22	9/16/22 12:47	JMB
Heptachlor epoxide [1]	ND	0.32	0.028	mg/Kg dry	50		SW-846 8081B	9/13/22	9/16/22 12:47	JMB
Hexachlorobenzene [1]	ND	0.38	0.15	mg/Kg dry	50		SW-846 8081B	9/13/22	9/16/22 12:47	JMB
Methoxychlor [1]	ND	3.2	0.40	mg/Kg dry	50		SW-846 8081B	9/13/22	9/16/22 12:47	JMB
Toxaphene [1]	ND	6.4	2.0	mg/Kg dry	50		SW-846 8081B	9/13/22	9/16/22 12:47	JMB
Surrogates		% Reco	overy	Recovery Limit	ts	Flag/Qual				
Decachlorobiphenyl [1]			*	30-150		S-01			9/16/22 12:47	
D 11 11 1 101			4	20.150		0.01			0/1//02 12 47	

9/15/22 11:32

9/15/22 11:32

9/15/22 11:32

9/15/22 11:32

9/13/22

9/13/22

9/13/22

JEA

JEA

JEA



39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Polychlorinated Biphenyls By GC/ECD

Project Location: Pittsfield, MA Sample Description: Work Order: 2210628

Date Received: 9/13/2022

Field Sample #: PF-COMP-091222-A

Analyte

Sampled: 9/12/2022 17:47

RL

0.10

0.10

0.10

0.10

0.10

0.10

0.10

0.10

84.4

Results

ND

ND

ND

ND

0.16

0.76

0.50

ND

Sample ID: 22I0628-01
Sample Matrix: Soil

Aroclor-1016 [1]

Aroclor-1221 [1]

Aroclor-1232 [1]

Aroclor-1242 [1]

Aroclor-1248 [1]

Aroclor-1254 [2]

Aroclor-1260 [1]

Aroclor-1262 [1]

Tetrachloro-m-xylene [2]

Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
mg/Kg dry	4		SW-846 8082A	9/13/22	9/15/22 11:32	JEA
mg/Kg dry	4		SW-846 8082A	9/13/22	9/15/22 11:32	JEA
mg/Kg dry	4		SW-846 8082A	9/13/22	9/15/22 11:32	JEA
mg/Kg dry	4		SW-846 8082A	9/13/22	9/15/22 11:32	JEA
mg/Kg dry	4	P-02	SW-846 8082A	9/13/22	9/15/22 11:32	JEA

SW-846 8082A

SW-846 8082A

SW-846 8082A

Aroclor-1268 [1]	ND	0.10	mg/Kg dry	4		SW-846 8082A	9/13/22	9/15/22 11:32	JEA
Surrogates		% Recovery	Recovery Limits		Flag/Qual				
Decachlorobiphenyl [1]		89.6	30-150					9/15/22 11:32	
Decachlorobiphenyl [2]		103	30-150					9/15/22 11:32	
Tetrachloro-m-xylene [1]		83.4	30-150					9/15/22 11:32	

4

4

4

mg/Kg dry

mg/Kg dry

mg/Kg dry

30-150



Project Location: Pittsfield, MA Sample Description: Work Order: 2210628

Date Received: 9/13/2022

Field Sample #: PF-COMP-091222-A

Sampled: 9/12/2022 17:47

Sample ID: 22I0628-01
Sample Matrix: Soil

Sample Flags: O-32			Herbicides by	GC/ECD					
Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
2,4-D [2]	ND	130	μg/kg dry	4		SW-846 8151A	9/14/22	9/21/22 19:45	TG
2,4-DB [2]	ND	130	μg/kg dry	4		SW-846 8151A	9/14/22	9/21/22 19:45	TG
2,4,5-TP (Silvex) [2]	ND	13	μg/kg dry	4		SW-846 8151A	9/14/22	9/21/22 19:45	TG
2,4,5-T [2]	ND	13	μg/kg dry	4		SW-846 8151A	9/14/22	9/21/22 19:45	TG
Dalapon [2]	ND	320	μg/kg dry	4	V-20	SW-846 8151A	9/14/22	9/21/22 19:45	TG
Dicamba [2]	ND	13	μg/kg dry	4		SW-846 8151A	9/14/22	9/21/22 19:45	TG
Dichloroprop [2]	ND	130	μg/kg dry	4		SW-846 8151A	9/14/22	9/21/22 19:45	TG
Dinoseb [2]	ND	64	μg/kg dry	4		SW-846 8151A	9/14/22	9/21/22 19:45	TG
MCPA [2]	ND	13000	μg/kg dry	4		SW-846 8151A	9/14/22	9/21/22 19:45	TG
MCPP [2]	ND	13000	μg/kg dry	4		SW-846 8151A	9/14/22	9/21/22 19:45	TG
Surrogates		% Recovery	Recovery Limits		Flag/Qual				
2,4-Dichlorophenylacetic acid [1]		267 *	30-150		S-02			9/21/22 19:45	
2,4-Dichlorophenylacetic acid [2]		93.7	30-150					9/21/22 19:45	



Project Location: Pittsfield, MA Sample Description: Work Order: 2210628

Date Received: 9/13/2022

Field Sample #: PF-COMP-091222-A

Sampled: 9/12/2022 17:47

Sample ID: 22I0628-01
Sample Matrix: Soil

D - 4 1	IIId
Petroleum	Hydrocarbons Analyses

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
TPH (C9-C36)	990	210	mg/Kg dry	20		SW-846 8100 Modified	9/13/22	9/16/22 16:58	SFM
Surrogates		% Recovery	Recovery Limits	s	Flag/Qual				
2-Fluorobiphenyl		63.8	40-140		_	_		9/16/22 16:58	

ATP

ATP

ATP

ATP

9/18/22 20:50

9/15/22 13:24

9/18/22 20:50

9/18/22 20:50

Work Order: 22I0628

9/16/22

9/15/22

9/16/22

9/16/22



39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

mg/Kg dry

mg/Kg dry

mg/Kg dry

mg/Kg dry

1

1

1

Project Location: Pittsfield, MA Sample Description:

Date Received: 9/13/2022

Field Sample #: PF-COMP-091222-A

Analyte

Sampled: 9/12/2022 17:47

RL

4.3

2.1

0.43

0.85

0.64

0.031

4.3

0.43

Results

9.5

27

ND

13

34

0.033

ND

ND

Sample ID: 22I0628-01
Sample Matrix: Soil

Arsenic

Barium

Cadmium

Chromium

Lead

Mercury

Selenium

Silver

Metals Anal	yses (Total)					
Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
mg/Kg dry	1		SW-846 6010D	9/16/22	9/18/22 20:50	ATP
mg/Kg dry	1		SW-846 6010D	9/16/22	9/18/22 20:50	ATP
mg/Kg dry	1		SW-846 6010D	9/16/22	9/18/22 20:50	ATP
mg/Kg dry	1		SW-846 6010D	9/16/22	9/18/22 20:50	ATP

SW-846 6010D

SW-846 7471B

SW-846 6010D

SW-846 6010D

Work Order: 22I0628



39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Pittsfield, MA Sample Description:

Date Received: 9/13/2022

Field Sample #: PF-COMP-091222-A

Sample ID: 22I0628-01
Sample Matrix: Soil

Sampled: 9/12/2022 17:47

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
% Solids	78.0		% Wt	1		SM 2540G	9/14/22	9/15/22 8:34	EDD
Ignitability	Absent		present/absent	1		SW-846 1030	9/16/22	9/16/22 14:00	DRA
рН @22.9°С	7.5		pH Units	1		SW-846 9045C	9/13/22	9/13/22 16:00	JEC
Reactive Cyanide	ND	3.9	mg/Kg	1		SW-846 9014	9/17/22	9/18/22 13:30	DET
Reactive Sulfide	ND	20	mg/Kg	1		SW-846 9030A	9/17/22	9/18/22 11:45	DET
Specific conductance	22	2.0	μmhos/cm	1		SM21-23 2510B Modified	9/16/22	9/16/22 14:22	DRA



Project Location: Pittsfield, MA Sample Description: Work Order: 22I0628

Date Received: 9/13/2022

Field Sample #: PF-COMP-091222-B

Diethyl Ether

ND

0.12

mg/Kg dry

1

SW-846 8260D

9/14/22

Sampled: 9/12/2022 18:00

Sample ID: 2210628-02									
Sample Matrix: Soil									
			Volatile Organic Con	npounds by G	SC/MS				
Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	3.0	mg/Kg dry	1	g	SW-846 8260D	9/14/22	9/14/22 12:45	MFF
Acrylonitrile	ND	0.30	mg/Kg dry	1		SW-846 8260D	9/14/22	9/14/22 12:45	MFF
tert-Amyl Methyl Ether (TAME)	ND	0.030	mg/Kg dry	1		SW-846 8260D	9/14/22	9/14/22 12:45	MFF
Benzene	ND	0.060	mg/Kg dry	1		SW-846 8260D	9/14/22	9/14/22 12:45	MFF
Bromobenzene	ND	0.060	mg/Kg dry	1		SW-846 8260D	9/14/22	9/14/22 12:45	MFF
Bromochloromethane	ND	0.060	mg/Kg dry	1		SW-846 8260D	9/14/22	9/14/22 12:45	MFF
Bromodichloromethane	ND	0.060	mg/Kg dry	1		SW-846 8260D	9/14/22	9/14/22 12:45	MFF
Bromoform	ND	0.060	mg/Kg dry	1		SW-846 8260D	9/14/22	9/14/22 12:45	MFF
Bromomethane	ND	0.12	mg/Kg dry	1		SW-846 8260D	9/14/22	9/14/22 12:45	MFF
2-Butanone (MEK)	ND	1.2	mg/Kg dry	1		SW-846 8260D	9/14/22	9/14/22 12:45	MFF
tert-Butyl Alcohol (TBA)	ND	1.2	mg/Kg dry	1		SW-846 8260D	9/14/22	9/14/22 12:45	MFF
n-Butylbenzene	ND	0.060	mg/Kg dry	1		SW-846 8260D	9/14/22	9/14/22 12:45	MFF
sec-Butylbenzene	ND	0.060	mg/Kg dry	1		SW-846 8260D	9/14/22	9/14/22 12:45	MFF
tert-Butylbenzene	ND	0.060	mg/Kg dry	1		SW-846 8260D	9/14/22	9/14/22 12:45	MFF
tert-Butyl Ethyl Ether (TBEE)	ND	0.030	mg/Kg dry	1		SW-846 8260D	9/14/22	9/14/22 12:45	MFF
Carbon Disulfide	ND	0.30	mg/Kg dry	1		SW-846 8260D	9/14/22	9/14/22 12:45	MFF
Carbon Tetrachloride	ND	0.060	mg/Kg dry	1		SW-846 8260D	9/14/22	9/14/22 12:45	MFF
Chlorobenzene	ND	0.060	mg/Kg dry	1		SW-846 8260D	9/14/22	9/14/22 12:45	MFF
Chlorodibromomethane	ND	0.030	mg/Kg dry	1		SW-846 8260D	9/14/22	9/14/22 12:45	MFF
Chloroethane	ND	0.12	mg/Kg dry	1		SW-846 8260D	9/14/22	9/14/22 12:45	MFF
Chloroform	ND	0.12	mg/Kg dry	1		SW-846 8260D	9/14/22	9/14/22 12:45	MFF
Chloromethane	ND	0.12	mg/Kg dry	1		SW-846 8260D	9/14/22	9/14/22 12:45	MFF
2-Chlorotoluene	ND	0.060	mg/Kg dry	1		SW-846 8260D	9/14/22	9/14/22 12:45	MFF
4-Chlorotoluene	ND	0.060	mg/Kg dry	1		SW-846 8260D	9/14/22	9/14/22 12:45	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	0.30	mg/Kg dry	1		SW-846 8260D	9/14/22	9/14/22 12:45	MFF
1,2-Dibromoethane (EDB)	ND	0.030	mg/Kg dry	1		SW-846 8260D	9/14/22	9/14/22 12:45	MFF
Dibromomethane	ND	0.060	mg/Kg dry	1		SW-846 8260D	9/14/22	9/14/22 12:45	MFF
1,2-Dichlorobenzene	ND	0.060	mg/Kg dry	1		SW-846 8260D	9/14/22	9/14/22 12:45	MFF
1,3-Dichlorobenzene	ND	0.060	mg/Kg dry	1		SW-846 8260D	9/14/22	9/14/22 12:45	MFF
1,4-Dichlorobenzene	ND	0.060	mg/Kg dry	1		SW-846 8260D	9/14/22	9/14/22 12:45	MFF
trans-1,4-Dichloro-2-butene	ND	0.12	mg/Kg dry	1		SW-846 8260D	9/14/22	9/14/22 12:45	MFF
Dichlorodifluoromethane (Freon 12)	ND	0.12	mg/Kg dry	1		SW-846 8260D	9/14/22	9/14/22 12:45	MFF
1,1-Dichloroethane	ND	0.060	mg/Kg dry	1		SW-846 8260D	9/14/22	9/14/22 12:45	MFF
1,2-Dichloroethane	ND	0.060	mg/Kg dry	1		SW-846 8260D	9/14/22	9/14/22 12:45	MFF
1,1-Dichloroethylene	ND	0.060	mg/Kg dry	1		SW-846 8260D	9/14/22	9/14/22 12:45	MFF
cis-1,2-Dichloroethylene	ND	0.060	mg/Kg dry	1		SW-846 8260D	9/14/22	9/14/22 12:45	MFF
trans-1,2-Dichloroethylene	ND	0.060	mg/Kg dry	1		SW-846 8260D	9/14/22	9/14/22 12:45	MFF
1,2-Dichloropropane	ND	0.060	mg/Kg dry	1		SW-846 8260D	9/14/22	9/14/22 12:45	MFF
1,3-Dichloropropane	ND	0.030	mg/Kg dry	1		SW-846 8260D	9/14/22	9/14/22 12:45	MFF
2,2-Dichloropropane	ND	0.060	mg/Kg dry	1		SW-846 8260D	9/14/22	9/14/22 12:45	MFF
1,1-Dichloropropene	ND	0.12	mg/Kg dry	1		SW-846 8260D	9/14/22	9/14/22 12:45	MFF
cis-1,3-Dichloropropene	ND	0.030	mg/Kg dry	1		SW-846 8260D	9/14/22	9/14/22 12:45	MFF
trans-1,3-Dichloropropene	ND	0.030	mg/Kg dry	1		SW-846 8260D	9/14/22	9/14/22 12:45	MFF
P. 4 1P4									

Page 21 of 84

MFF

9/14/22 12:45



Project Location: Pittsfield, MA Sample Description: Work Order: 22I0628

Date Received: 9/13/2022

Field Sample #: PF-COMP-091222-B

Sampled: 9/12/2022 18:00

Sample ID: 22I0628-02 Sample Matrix: Soil

Volatile	Organic	Compounds	by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.030	mg/Kg dry	1	1 mg/ 2 mm	SW-846 8260D	9/14/22	9/14/22 12:45	MFF
1,4-Dioxane	ND	3.0	mg/Kg dry	1		SW-846 8260D	9/14/22	9/14/22 12:45	MFF
Ethylbenzene	ND	0.060	mg/Kg dry	1		SW-846 8260D	9/14/22	9/14/22 12:45	MFF
Hexachlorobutadiene	ND	0.060	mg/Kg dry	1		SW-846 8260D	9/14/22	9/14/22 12:45	MFF
2-Hexanone (MBK)	ND	0.60	mg/Kg dry	1		SW-846 8260D	9/14/22	9/14/22 12:45	MFF
Isopropylbenzene (Cumene)	ND	0.060	mg/Kg dry	1		SW-846 8260D	9/14/22	9/14/22 12:45	MFF
p-Isopropyltoluene (p-Cymene)	ND	0.060	mg/Kg dry	1		SW-846 8260D	9/14/22	9/14/22 12:45	MFF
Methyl Acetate	ND	0.60	mg/Kg dry	1		SW-846 8260D	9/14/22	9/14/22 12:45	MFF
Methyl tert-Butyl Ether (MTBE)	ND	0.060	mg/Kg dry	1		SW-846 8260D	9/14/22	9/14/22 12:45	MFF
Methyl Cyclohexane	ND	0.060	mg/Kg dry	1		SW-846 8260D	9/14/22	9/14/22 12:45	MFF
Methylene Chloride	ND	0.30	mg/Kg dry	1		SW-846 8260D	9/14/22	9/14/22 12:45	MFF
4-Methyl-2-pentanone (MIBK)	ND	0.60	mg/Kg dry	1		SW-846 8260D	9/14/22	9/14/22 12:45	MFF
Naphthalene	ND	0.12	mg/Kg dry	1	V-05	SW-846 8260D	9/14/22	9/14/22 12:45	MFF
n-Propylbenzene	ND	0.060	mg/Kg dry	1		SW-846 8260D	9/14/22	9/14/22 12:45	MFF
Styrene	ND	0.060	mg/Kg dry	1		SW-846 8260D	9/14/22	9/14/22 12:45	MFF
1,1,2-Tetrachloroethane	ND	0.060	mg/Kg dry	1		SW-846 8260D	9/14/22	9/14/22 12:45	MFF
1,1,2,2-Tetrachloroethane	ND	0.030	mg/Kg dry	1		SW-846 8260D	9/14/22	9/14/22 12:45	MFF
Tetrachloroethylene	ND	0.060	mg/Kg dry	1		SW-846 8260D	9/14/22	9/14/22 12:45	MFF
Tetrahydrofuran	ND	0.60	mg/Kg dry	1		SW-846 8260D	9/14/22	9/14/22 12:45	MFF
Toluene	ND	0.060	mg/Kg dry	1		SW-846 8260D	9/14/22	9/14/22 12:45	MFF
1,2,3-Trichlorobenzene	ND	0.30	mg/Kg dry	1	V-05	SW-846 8260D	9/14/22	9/14/22 12:45	MFF
1,2,4-Trichlorobenzene	ND	0.060	mg/Kg dry	1		SW-846 8260D	9/14/22	9/14/22 12:45	MFF
1,3,5-Trichlorobenzene	ND	0.060	mg/Kg dry	1		SW-846 8260D	9/14/22	9/14/22 12:45	MFF
1,1,1-Trichloroethane	ND	0.060	mg/Kg dry	1		SW-846 8260D	9/14/22	9/14/22 12:45	MFF
1,1,2-Trichloroethane	ND	0.060	mg/Kg dry	1		SW-846 8260D	9/14/22	9/14/22 12:45	MFF
Trichloroethylene	ND	0.060	mg/Kg dry	1		SW-846 8260D	9/14/22	9/14/22 12:45	MFF
Trichlorofluoromethane (Freon 11)	ND	0.12	mg/Kg dry	1		SW-846 8260D	9/14/22	9/14/22 12:45	MFF
1,2,3-Trichloropropane	ND	0.12	mg/Kg dry	1		SW-846 8260D	9/14/22	9/14/22 12:45	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.060	mg/Kg dry	1		SW-846 8260D	9/14/22	9/14/22 12:45	MFF
1,2,4-Trimethylbenzene	ND	0.060	mg/Kg dry	1		SW-846 8260D	9/14/22	9/14/22 12:45	MFF
1,3,5-Trimethylbenzene	ND	0.060	mg/Kg dry	1		SW-846 8260D	9/14/22	9/14/22 12:45	MFF
Vinyl Chloride	ND	0.12	mg/Kg dry	1		SW-846 8260D	9/14/22	9/14/22 12:45	MFF
m+p Xylene	ND	0.12	mg/Kg dry	1		SW-846 8260D	9/14/22	9/14/22 12:45	MFF
o-Xylene	ND	0.060	mg/Kg dry	1		SW-846 8260D	9/14/22	9/14/22 12:45	MFF
Surrogates		% Recovery	Recovery Limits	S	Flag/Qual				
1,2-Dichloroethane-d4		97.7	70-130					9/14/22 12:45	
Toluene-d8		101	70-130					9/14/22 12:45	



Project Location: Pittsfield, MA Sample Description: Work Order: 22I0628

Date Received: 9/13/2022

Field Sample #: PF-COMP-091222-B Sampled: 9/12/2022 18:00

Sample ID: 22I0628-02 Sample Matrix: Soil

Sample Flags: RL-12			Semivolatile Organic C	ompounds by	GC/MS				
Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acenaphthene	ND	0.59	mg/Kg dry	2		SW-846 8270E	9/15/22	9/16/22 19:11	BGL
Acenaphthylene	ND	0.59	mg/Kg dry	2		SW-846 8270E	9/15/22	9/16/22 19:11	BGL
Acetophenone	ND	1.2	mg/Kg dry	2		SW-846 8270E	9/15/22	9/16/22 19:11	BGL
Aniline	ND	1.2	mg/Kg dry	2		SW-846 8270E	9/15/22	9/16/22 19:11	BGL
Anthracene	ND	0.59	mg/Kg dry	2		SW-846 8270E	9/15/22	9/16/22 19:11	BGL
Benzidine	ND	2.3	mg/Kg dry	2	V-04, V-35	SW-846 8270E	9/15/22	9/16/22 19:11	BGL
Benzo(a)anthracene	2.2	0.59	mg/Kg dry	2		SW-846 8270E	9/15/22	9/16/22 19:11	BGL
Benzo(a)pyrene	2.6	0.59	mg/Kg dry	2		SW-846 8270E	9/15/22	9/16/22 19:11	BGL
Benzo(b)fluoranthene	3.7	0.59	mg/Kg dry	2		SW-846 8270E	9/15/22	9/16/22 19:11	BGL
Benzo(g,h,i)perylene	1.4	0.59	mg/Kg dry	2		SW-846 8270E	9/15/22	9/16/22 19:11	BGL
Benzo(k) fluoranthene	1.4	0.59	mg/Kg dry	2		SW-846 8270E	9/15/22	9/16/22 19:11	BGL
Benzoic Acid	ND	3.5	mg/Kg dry	2		SW-846 8270E	9/15/22	9/16/22 19:11	BGL
Bis(2-chloroethoxy)methane	ND	1.2	mg/Kg dry	2		SW-846 8270E	9/15/22	9/16/22 19:11	BGL
Bis(2-chloroethyl)ether	ND	1.2	mg/Kg dry	2		SW-846 8270E	9/15/22	9/16/22 19:11	BGL
Bis(2-chloroisopropyl)ether	ND	1.2	mg/Kg dry	2		SW-846 8270E	9/15/22	9/16/22 19:11	BGL
Bis(2-Ethylhexyl)phthalate	3.1	1.2	mg/Kg dry	2		SW-846 8270E	9/15/22	9/16/22 19:11	BGL
4-Bromophenylphenylether	ND	1.2	mg/Kg dry	2		SW-846 8270E	9/15/22	9/16/22 19:11	BGL
Butylbenzylphthalate	ND	1.2	mg/Kg dry	2		SW-846 8270E	9/15/22	9/16/22 19:11	BGL
Carbazole	ND	0.59	mg/Kg dry	2		SW-846 8270E	9/15/22	9/16/22 19:11	BGL
4-Chloroaniline	ND	2.3	mg/Kg dry	2		SW-846 8270E	9/15/22	9/16/22 19:11	BGL
4-Chloro-3-methylphenol	ND	2.3	mg/Kg dry	2		SW-846 8270E	9/15/22	9/16/22 19:11	BGL
2-Chloronaphthalene	ND	1.2	mg/Kg dry	2		SW-846 8270E	9/15/22	9/16/22 19:11	BGL
2-Chlorophenol	ND	1.2	mg/Kg dry	2		SW-846 8270E	9/15/22	9/16/22 19:11	BGL
4-Chlorophenylphenylether	ND	1.2	mg/Kg dry	2		SW-846 8270E	9/15/22	9/16/22 19:11	BGL
Chrysene	3.0	0.59	mg/Kg dry	2		SW-846 8270E	9/15/22	9/16/22 19:11	BGL
Dibenz(a,h)anthracene	ND	0.59	mg/Kg dry	2	V-06	SW-846 8270E	9/15/22	9/16/22 19:11	BGL
Dibenzofuran	ND	1.2	mg/Kg dry	2		SW-846 8270E	9/15/22	9/16/22 19:11	BGL
Di-n-butylphthalate	ND	1.2	mg/Kg dry	2		SW-846 8270E	9/15/22	9/16/22 19:11	BGL
1,2-Dichlorobenzene	ND	1.2	mg/Kg dry	2		SW-846 8270E	9/15/22	9/16/22 19:11	BGL
1,3-Dichlorobenzene	ND	1.2	mg/Kg dry	2		SW-846 8270E	9/15/22	9/16/22 19:11	BGL
1,4-Dichlorobenzene	ND	1.2	mg/Kg dry	2		SW-846 8270E	9/15/22	9/16/22 19:11	BGL
3,3-Dichlorobenzidine	ND	0.59	mg/Kg dry	2		SW-846 8270E	9/15/22	9/16/22 19:11	BGL
2,4-Dichlorophenol	ND	1.2	mg/Kg dry	2		SW-846 8270E	9/15/22	9/16/22 19:11	BGL
Diethylphthalate	ND	1.2	mg/Kg dry	2		SW-846 8270E	9/15/22	9/16/22 19:11	BGL
2,4-Dimethylphenol	ND	1.2	mg/Kg dry	2		SW-846 8270E	9/15/22	9/16/22 19:11	BGL
Dimethylphthalate	ND	1.2	mg/Kg dry	2		SW-846 8270E	9/15/22	9/16/22 19:11	BGL
4,6-Dinitro-2-methylphenol	ND	1.2	mg/Kg dry	2		SW-846 8270E	9/15/22	9/16/22 19:11	BGL
2,4-Dinitrophenol	ND	2.3	mg/Kg dry	2		SW-846 8270E	9/15/22	9/16/22 19:11	BGL
2,4-Dinitrotoluene	ND	1.2	mg/Kg dry	2		SW-846 8270E	9/15/22	9/16/22 19:11	BGL
2,6-Dinitrotoluene	ND	1.2	mg/Kg dry	2		SW-846 8270E	9/15/22	9/16/22 19:11	BGL
Di-n-octylphthalate	ND	1.2	mg/Kg dry	2		SW-846 8270E	9/15/22	9/16/22 19:11	BGL
1,2-Diphenylhydrazine/Azobenzene	ND	1.2	mg/Kg dry	2		SW-846 8270E	9/15/22	9/16/22 19:11	BGL
Fluoranthene	5.8	0.59	mg/Kg dry	2		SW-846 8270E	9/15/22	9/16/22 19:11	BGL
Fluorene	ND	0.59	mg/Kg dry	2		SW-846 8270E	9/15/22	9/16/22 19:11	BGL

Page 23 of 84



Project Location: Pittsfield, MA Sample Description: Work Order: 2210628

Date Received: 9/13/2022

Field Sample #: PF-COMP-091222-B Sampled: 9/12/2022 18:00

Sample ID: 22I0628-02
Sample Matrix: Soil

Sample Flags: RL-12 Semivolatile Organic Compounds by GC/MS

	ъ. и	D.	T	D	FI. (0. 1	25.0.1	Date	Date/Time	
Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Prepared	Analyzed	Analys
Hexachlorobenzene	ND	1.2	mg/Kg dry	2		SW-846 8270E	9/15/22	9/16/22 19:11	BGL
Hexachlorobutadiene	ND	1.2	mg/Kg dry	2		SW-846 8270E	9/15/22	9/16/22 19:11	BGL
Hexachlorocyclopentadiene	ND	1.2	mg/Kg dry	2	V-05	SW-846 8270E	9/15/22	9/16/22 19:11	BGL
Hexachloroethane	ND	1.2	mg/Kg dry	2		SW-846 8270E	9/15/22	9/16/22 19:11	BGL
Indeno(1,2,3-cd)pyrene	1.7	0.59	mg/Kg dry	2	V-06	SW-846 8270E	9/15/22	9/16/22 19:11	BGL
Isophorone	ND	1.2	mg/Kg dry	2		SW-846 8270E	9/15/22	9/16/22 19:11	BGL
1-Methylnaphthalene	ND	0.59	mg/Kg dry	2		SW-846 8270E	9/15/22	9/16/22 19:11	BGL
2-Methylnaphthalene	ND	0.59	mg/Kg dry	2		SW-846 8270E	9/15/22	9/16/22 19:11	BGL
2-Methylphenol	ND	1.2	mg/Kg dry	2		SW-846 8270E	9/15/22	9/16/22 19:11	BGL
3/4-Methylphenol	ND	1.2	mg/Kg dry	2		SW-846 8270E	9/15/22	9/16/22 19:11	BGL
Naphthalene	ND	0.59	mg/Kg dry	2		SW-846 8270E	9/15/22	9/16/22 19:11	BGL
2-Nitroaniline	ND	1.2	mg/Kg dry	2		SW-846 8270E	9/15/22	9/16/22 19:11	BGL
3-Nitroaniline	ND	1.2	mg/Kg dry	2		SW-846 8270E	9/15/22	9/16/22 19:11	BGL
4-Nitroaniline	ND	1.2	mg/Kg dry	2		SW-846 8270E	9/15/22	9/16/22 19:11	BGL
Nitrobenzene	ND	1.2	mg/Kg dry	2		SW-846 8270E	9/15/22	9/16/22 19:11	BGL
2-Nitrophenol	ND	1.2	mg/Kg dry	2		SW-846 8270E	9/15/22	9/16/22 19:11	BGL
4-Nitrophenol	ND	2.3	mg/Kg dry	2		SW-846 8270E	9/15/22	9/16/22 19:11	BGL
N-Nitrosodimethylamine	ND	1.2	mg/Kg dry	2		SW-846 8270E	9/15/22	9/16/22 19:11	BGL
N-Nitrosodiphenylamine/Diphenylamine	ND	1.2	mg/Kg dry	2		SW-846 8270E	9/15/22	9/16/22 19:11	BGL
N-Nitrosodi-n-propylamine	ND	1.2	mg/Kg dry	2		SW-846 8270E	9/15/22	9/16/22 19:11	BGL
Pentachloronitrobenzene									
	ND	1.2	mg/Kg dry	2	*****	SW-846 8270E	9/15/22	9/16/22 19:11	BGL
Pentachlorophenol	ND	1.2	mg/Kg dry	2	V-05	SW-846 8270E	9/15/22	9/16/22 19:11	BGL
Phenanthrene	2.6	0.59	mg/Kg dry	2		SW-846 8270E	9/15/22	9/16/22 19:11	BGL
Phenol	ND	1.2	mg/Kg dry	2		SW-846 8270E	9/15/22	9/16/22 19:11	BGL
Pyrene	5.7	0.59	mg/Kg dry	2		SW-846 8270E	9/15/22	9/16/22 19:11	BGL
Pyridine	ND	1.2	mg/Kg dry	2		SW-846 8270E	9/15/22	9/16/22 19:11	BGL
1,2,4,5-Tetrachlorobenzene	ND	1.2	mg/Kg dry	2		SW-846 8270E	9/15/22	9/16/22 19:11	BGL
1,2,4-Trichlorobenzene	ND	1.2	mg/Kg dry	2		SW-846 8270E	9/15/22	9/16/22 19:11	BGL
2,4,5-Trichlorophenol	ND	1.2	mg/Kg dry	2		SW-846 8270E	9/15/22	9/16/22 19:11	BGL
2,4,6-Trichlorophenol	ND	1.2	mg/Kg dry	2		SW-846 8270E	9/15/22	9/16/22 19:11	BGL
Surrogates		% Recovery	Recovery Limits	3	Flag/Qual				
2-Fluorophenol		49.5	30-130					9/16/22 19:11	
Phenol-d6		55.6	30-130					9/16/22 19:11	
Nitrobenzene-d5		63.2	30-130					9/16/22 19:11	
2-Fluorobiphenyl		53.2	30-130					9/16/22 19:11	
2,4,6-Tribromophenol		47.7	30-130					9/16/22 19:11	
p-Terphenyl-d14		65.2	30-130					9/16/22 19:11	



Project Location: Pittsfield, MA Sample Description: Work Order: 2210628

Date Received: 9/13/2022

Field Sample #: PF-COMP-091222-B Sampled: 9/12/2022 18:00

Sample ID: 2210628-02
Sample Matrix: Soil
Sample Flags: DL-03

Organochloride Pesticides by GC/ECD

								Date	Date/Time	
Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Prepared	Analyzed	Analyst
Alachlor [1]	ND	0.70	0.19	mg/Kg dry	20		SW-846 8081B	9/13/22	9/16/22 13:16	JMB
Aldrin [1]	ND	0.17	0.015	mg/Kg dry	20		SW-846 8081B	9/13/22	9/16/22 13:16	JMB
alpha-BHC [1]	ND	0.17	0.074	mg/Kg dry	20		SW-846 8081B	9/13/22	9/16/22 13:16	JMB
beta-BHC [1]	ND	0.17	0.063	mg/Kg dry	20		SW-846 8081B	9/13/22	9/16/22 13:16	JMB
delta-BHC [1]	ND	0.17	0.084	mg/Kg dry	20		SW-846 8081B	9/13/22	9/16/22 13:16	JMB
gamma-BHC (Lindane) [1]	ND	0.070	0.016	mg/Kg dry	20		SW-846 8081B	9/13/22	9/16/22 13:16	JMB
Chlordane [1]	ND	0.70	0.26	mg/Kg dry	20		SW-846 8081B	9/13/22	9/16/22 13:16	JMB
4,4'-DDD [1]	ND	0.14	0.026	mg/Kg dry	20		SW-846 8081B	9/13/22	9/16/22 13:16	JMB
4,4'-DDE [2]	0.042	0.14	0.014	mg/Kg dry	20	J	SW-846 8081B	9/13/22	9/16/22 13:16	JMB
4,4'-DDT [1]	ND	0.14	0.016	mg/Kg dry	20		SW-846 8081B	9/13/22	9/16/22 13:16	JMB
Dieldrin [1]	ND	0.14	0.013	mg/Kg dry	20		SW-846 8081B	9/13/22	9/16/22 13:16	JMB
Endosulfan I [2]	ND	0.17	0.054	mg/Kg dry	20		SW-846 8081B	9/13/22	9/16/22 13:16	JMB
Endosulfan II [1]	ND	0.28	0.060	mg/Kg dry	20		SW-846 8081B	9/13/22	9/16/22 13:16	JMB
Endosulfan sulfate [1]	ND	0.28	0.064	mg/Kg dry	20		SW-846 8081B	9/13/22	9/16/22 13:16	JMB
Endrin [1]	ND	0.28	0.059	mg/Kg dry	20		SW-846 8081B	9/13/22	9/16/22 13:16	JMB
Endrin aldehyde [1]	ND	0.28	0.14	mg/Kg dry	20		SW-846 8081B	9/13/22	9/16/22 6:50	JMB
Endrin ketone [1]	ND	0.28	0.078	mg/Kg dry	20		SW-846 8081B	9/13/22	9/16/22 13:16	JMB
Heptachlor [1]	ND	0.17	0.019	mg/Kg dry	20		SW-846 8081B	9/13/22	9/16/22 13:16	JMB
Heptachlor epoxide [1]	ND	0.17	0.015	mg/Kg dry	20		SW-846 8081B	9/13/22	9/16/22 13:16	JMB
Hexachlorobenzene [1]	ND	0.21	0.079	mg/Kg dry	20		SW-846 8081B	9/13/22	9/16/22 13:16	JMB
Methoxychlor [1]	ND	1.7	0.22	mg/Kg dry	20		SW-846 8081B	9/13/22	9/16/22 13:16	JMB
Toxaphene [1]	ND	3.5	1.1	mg/Kg dry	20		SW-846 8081B	9/13/22	9/16/22 13:16	JMB

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
Decachlorobiphenyl [1]	71.6	30-150		9/16/22 13:16
Decachlorobiphenyl [2]	82.3	30-150		9/16/22 13:16
Tetrachloro-m-xylene [1]	71.2	30-150		9/16/22 13:16
Tetrachloro-m-xylene [2]	58.5	30-150		9/16/22 13:16



Project Location: Pittsfield, MA Sample Description: Work Order: 2210628

Date Received: 9/13/2022

Field Sample #: PF-COMP-091222-B

Analyte

Sampled: 9/12/2022 18:00

RL

0.14

0.14

0.14

0.14

0.14

0.14

0.14

0.14

Results

ND

ND

ND

ND

0.20

0.74

0.50

ND

Sample ID: 22I0628-02
Sample Matrix: Soil

Aroclor-1016 [1]

Aroclor-1221 [1]

Aroclor-1232 [1]

Aroclor-1242 [1]

Aroclor-1248 [1]

Aroclor-1254 [2]

Aroclor-1260 [1]

Aroclor-1262 [1]

Polychlorinated B	Polychlorinated Biphenyls By GC/ECD							
				Date	Date/Time			
Units	Dilution	Flag/Qual	Method	Prepared	Analyzed	Analyst		
mg/Kg dry	y 4		SW-846 8082A	9/13/22	9/15/22 11:50	JEA		
mg/Kg dry	y 4		SW-846 8082A	9/13/22	9/15/22 11:50	JEA		
mg/Kg dry	y 4		SW-846 8082A	9/13/22	9/15/22 11:50	JEA		
mg/Kg dry	y 4		SW-846 8082A	9/13/22	9/15/22 11:50	JEA		
mg/Kg dry	y 4	P-02	SW-846 8082A	9/13/22	9/15/22 11:50	JEA		
mg/Kg dr	y 4		SW-846 8082A	9/13/22	9/15/22 11:50	JEA		
mg/Kg dr	y 4		SW-846 8082A	9/13/22	9/15/22 11:50	JEA		
mg/Kg dry	y 4		SW-846 8082A	9/13/22	9/15/22 11:50	JEA		
mg/Kg dr	y 4		SW-846 8082A	9/13/22	9/15/22 11:50	JEA		

Aroclor-1268 [1]	ND	0.14	mg/Kg dry	4		SW-846 8082A	9/13/22	9/15/22 11:50	JEA
Surrogates		% Recovery	Recovery Limits		Flag/Qual				
Decachlorobiphenyl [1]		80.3	30-150					9/15/22 11:50	<u>.</u>
Decachlorobiphenyl [2]		94.3	30-150					9/15/22 11:50	
Tetrachloro-m-xylene [1]		78.9	30-150					9/15/22 11:50	
Tetrachloro-m-xylene [2]		80.0	30-150					9/15/22 11:50	



Project Location: Pittsfield, MA Sample Description: Work Order: 2210628

Date Received: 9/13/2022

Field Sample #: PF-COMP-091222-B

Sampled: 9/12/2022 18:00

Sample ID: 22I0628-02
Sample Matrix: Soil

Sample Flags: O-32			Herbicides by	GC/ECD					
Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
2,4-D [2]	ND	170	μg/kg dry	4		SW-846 8151A	9/14/22	9/21/22 20:25	TG
2,4-DB [2]	ND	170	μg/kg dry	4		SW-846 8151A	9/14/22	9/21/22 20:25	TG
2,4,5-TP (Silvex) [2]	ND	17	μg/kg dry	4		SW-846 8151A	9/14/22	9/21/22 20:25	TG
2,4,5-T [2]	ND	17	μg/kg dry	4		SW-846 8151A	9/14/22	9/21/22 20:25	TG
Dalapon [2]	ND	430	μg/kg dry	4	V-20	SW-846 8151A	9/14/22	9/21/22 20:25	TG
Dicamba [2]	ND	17	μg/kg dry	4		SW-846 8151A	9/14/22	9/21/22 20:25	TG
Dichloroprop [2]	ND	170	μg/kg dry	4		SW-846 8151A	9/14/22	9/21/22 20:25	TG
Dinoseb [2]	ND	87	μg/kg dry	4		SW-846 8151A	9/14/22	9/21/22 20:25	TG
MCPA [2]	ND	17000	μg/kg dry	4		SW-846 8151A	9/14/22	9/21/22 20:25	TG
MCPP [2]	ND	17000	μg/kg dry	4		SW-846 8151A	9/14/22	9/21/22 20:25	TG
Surrogates		% Recovery	Recovery Limits	6	Flag/Qual				
2,4-Dichlorophenylacetic acid [1]		252 *	30-150		S-02			9/21/22 20:25	
2,4-Dichlorophenylacetic acid [2]		84.7	30-150					9/21/22 20:25	



Project Location: Pittsfield, MA Sample Description: Work Order: 2210628

Date Received: 9/13/2022

Field Sample #: PF-COMP-091222-B

Sampled: 9/12/2022 18:00

Sample ID: 22I0628-02
Sample Matrix: Soil

Petrol	eum l	Hvdra	ocarbon	c Ang	lveec

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
TPH (C9-C36)	3000	290	mg/Kg dry	20		SW-846 8100 Modified	9/15/22	9/16/22 17:58	SFM
Surrogates		% Recovery	Recovery Limits	6	Flag/Qual				
2 Elwarahinhanyi		96.1	40.140					0/16/22 17:59	

2-Fluorobiphenyl 86.1 40-140 9/16/22 17:58



Project Location: Pittsfield, MA Sample Description: Work Order: 2210628

Date Received: 9/13/2022

Field Sample #: PF-COMP-091222-B

Sampled: 9/12/2022 18:00

Sample ID: 22I0628-02
Sample Matrix: Soil

			Metals Analy	yses (Total)					
							Date	Date/Time	
Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Prepared	Analyzed	Analyst
Arsenic	6.1	5.6	mg/Kg dry	1		SW-846 6010D	9/16/22	9/18/22 20:55	ATP
Barium	37	2.8	mg/Kg dry	1		SW-846 6010D	9/16/22	9/18/22 20:55	ATP
Cadmium	0.58	0.56	mg/Kg dry	1		SW-846 6010D	9/16/22	9/18/22 20:55	ATP
Chromium	18	1.1	mg/Kg dry	1		SW-846 6010D	9/16/22	9/18/22 20:55	ATP
Lead	69	0.85	mg/Kg dry	1		SW-846 6010D	9/16/22	9/18/22 20:55	ATP
Mercury	0.048	0.044	mg/Kg dry	1		SW-846 7471B	9/15/22	9/15/22 13:26	ATP
Selenium	ND	5.6	mg/Kg dry	1		SW-846 6010D	9/16/22	9/18/22 20:55	ATP
Silver	ND	0.56	mg/Kg dry	1		SW-846 6010D	9/16/22	9/18/22 20:55	ATP



Project Location: Pittsfield, MA Sample Description: Work Order: 2210628

Date Received: 9/13/2022

Field Sample #: PF-COMP-091222-B

Sampled: 9/12/2022 18:00

Sample ID: 22I0628-02
Sample Matrix: Soil

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

							Date	Date/Time	
Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Prepared	Analyzed	Analyst
% Solids	57.5		% Wt	1		SM 2540G	9/14/22	9/15/22 8:34	EDD
Ignitability	Absent		present/absent	1		SW-846 1030	9/16/22	9/16/22 14:00	DRA
pH @23°C	7.1		pH Units	1		SW-846 9045C	9/13/22	9/13/22 16:00	JEC
Reactive Cyanide	4.8	3.9	mg/Kg	1		SW-846 9014	9/17/22	9/18/22 13:30	DET
Reactive Sulfide	ND	19	mg/Kg	1		SW-846 9030A	9/17/22	9/18/22 11:45	DET
Specific conductance	37	2.0	μmhos/cm	1		SM21-23 2510B Modified	9/16/22	9/16/22 14:22	DRA



Sample Extraction Data

Prep Method: % Solids	Analytical Method: SM 2540G
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Lab Number [Field ID]	Batch	Date
22I0628-01 [PF-COMP-091222-A]	B317181	09/14/22
22I0628-02 [PF-COMP-091222-B]	B317181	09/14/22

SM21-23 2510B Modified

Lab Number [Field ID]	Batch	Initial [g]	Date
2210628-01 [PF-COMP-091222-A]	B317377	1.00	09/16/22
22I0628-02 [PF-COMP-091222-B]	B317377	1.00	09/16/22

SW-846 1030

Lab Number [Field ID]	Batch	Initial [g]	Date
22I0628-01 [PF-COMP-091222-A]	B317376	50.0	09/16/22
22I0628-02 [PF-COMP-091222-B]	B317376	50.0	09/16/22

Prep Method: SW-846 3050B Analytical Method: SW-846 6010D

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
22I0628-01 [PF-COMP-091222-A]	B317432	1.51	50.0	09/16/22
22I0628-02 [PF-COMP-091222-B]	B317432	1.54	50.0	09/16/22

Prep Method: SW-846 7471 Analytical Method: SW-846 7471B

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
22I0628-01 [PF-COMP-091222-A]	B317272	0.613	50.0	09/15/22
22I0628-02 [PF-COMP-091222-B]	B317272	0.597	50.0	09/15/22

Prep Method: SW-846 3546 Analytical Method: SW-846 8081B

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
22I0628-01 [PF-COMP-091222-A]	B317120	10.0	10.0	09/13/22
22I0628-02 [PF-COMP-091222-B]	B317120	10.0	10.0	09/13/22

Prep Method: SW-846 3546 Analytical Method: SW-846 8082A

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
22I0628-01 [PF-COMP-091222-A]	B317119	10.0	10.0	09/13/22
22I0628-02 [PF-COMP-091222-B]	B317119	10.0	10.0	09/13/22

Prep Method: SW-846 3546 Analytical Method: SW-846 8100 Modified

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
22I0628-01 [PF-COMP-091222-A]	B317123	30.0	1.00	09/13/22



Sample Extraction Data

Prep Method: SW-846 3546	Analytical Method:	SW-846 8100 Modified

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
22I0628-02 [PF-COMP-091222-B]	B317327	30.0	1.00	09/15/22

Prep Method: SW-846 8151 Analytical Method: SW-846 8151A

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
22I0628-01 [PF-COMP-091222-A]	B317221	20.0	5.00	09/14/22
22I0628-02 [PF-COMP-091222-B]	B317221	20.0	5.00	09/14/22

Prep Method: SW-846 5035 Analytical Method: SW-846 8260D

Lab Number [Field ID]	Batch	Sample Amount(g)	Methanol Volume(mL)	Methanol Aliquot(mL)	Final Volume(mL)	Date
22I0628-01 [PF-COMP-091222-A]	B317147	28.8	11.3	1	50	09/14/22
22I0628-02 [PF-COMP-091222-B]	B317147	18.8	13.0	1	50	09/14/22

Prep Method: SW-846 3546 Analytical Method: SW-846 8270E

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
22I0628-01 [PF-COMP-091222-A]	B317121	30.0	1.00	09/13/22

Prep Method: SW-846 3546 Analytical Method: SW-846 8270E

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
22I0628-02 [PF-COMP-091222-B]	B317329	30.0	1.00	09/15/22

SW-846 9014

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
22I0628-01 [PF-COMP-091222-A]	B317476	25.3	250	09/17/22
22I0628-02 [PF-COMP-091222-B]	B317476	25.9	250	09/17/22

SW-846 9030A

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
22I0628-01 [PF-COMP-091222-A]	B317475	25.3	250	09/17/22
22I0628-02 [PF-COMP-091222-B]	B317475	25.9	250	09/17/22

SW-846 9045C

Lab Number [Field ID]	Batch	Initial [g]	Date
22I0628-01 [PF-COMP-091222-A]	B317111	20.0	09/13/22
22I0628-02 [PF-COMP-091222-B]	B317111	20.0	09/13/22



QUALITY CONTROL

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Datah D217147 SW 946 5025										

Batch B317147 - SW-846 5035			
Blank (B317147-BLK1)			Prepared & Analyzed: 09/14/22
Acetone	ND	2.5	mg/Kg wet
Acrylonitrile	ND	0.25	mg/Kg wet
tert-Amyl Methyl Ether (TAME)	ND	0.025	mg/Kg wet
Benzene	ND	0.050	mg/Kg wet
Bromobenzene	ND	0.050	mg/Kg wet
Bromochloromethane	ND	0.050	mg/Kg wet
Bromodichloromethane	ND	0.050	mg/Kg wet
Bromoform	ND	0.050	mg/Kg wet
Bromomethane	ND	0.10	mg/Kg wet
2-Butanone (MEK)	ND	1.0	mg/Kg wet
tert-Butyl Alcohol (TBA)	ND	1.0	mg/Kg wet
n-Butylbenzene	ND	0.050	mg/Kg wet
sec-Butylbenzene	ND	0.050	mg/Kg wet
tert-Butylbenzene	ND	0.050	mg/Kg wet
tert-Butyl Ethyl Ether (TBEE)	ND	0.025	mg/Kg wet
Carbon Disulfide	ND	0.25	mg/Kg wet
Carbon Tetrachloride	ND	0.050	mg/Kg wet
Chlorobenzene	ND	0.050	mg/Kg wet
Chlorodibromomethane	ND	0.025	mg/Kg wet
Chloroethane	ND	0.10	mg/Kg wet
Chloroform	ND	0.10	mg/Kg wet
Chloromethane	ND	0.10	mg/Kg wet
2-Chlorotoluene	ND	0.050	mg/Kg wet
4-Chlorotoluene	ND	0.050	mg/Kg wet
1,2-Dibromo-3-chloropropane (DBCP)	ND	0.25	mg/Kg wet
1,2-Dibromoethane (EDB)	ND	0.025	mg/Kg wet
Dibromomethane	ND	0.050	mg/Kg wet
1,2-Dichlorobenzene	ND	0.050	mg/Kg wet
1,3-Dichlorobenzene	ND	0.050	mg/Kg wet
1,4-Dichlorobenzene	ND	0.050	mg/Kg wet
trans-1,4-Dichloro-2-butene	ND	0.10	mg/Kg wet
Dichlorodifluoromethane (Freon 12)	ND	0.10	mg/Kg wet
1,1-Dichloroethane	ND	0.050	mg/Kg wet
1,2-Dichloroethane	ND	0.050	mg/Kg wet
1,1-Dichloroethylene	ND	0.050	mg/Kg wet
cis-1,2-Dichloroethylene	ND	0.050	mg/Kg wet
trans-1,2-Dichloroethylene	ND	0.050	mg/Kg wet
Dichlorofluoromethane (Freon 21)	ND	0.050	mg/Kg wet
1,2-Dichloropropane	ND	0.050	mg/Kg wet
1,3-Dichloropropane	ND	0.025	mg/Kg wet
2,2-Dichloropropane	ND ND	0.050	mg/Kg wet
1,1-Dichloropropene	ND ND	0.10	mg/Kg wet
cis-1,3-Dichloropropene	ND ND	0.025	mg/Kg wet
trans-1,3-Dichloropropene	ND ND	0.025	mg/Kg wet
Diethyl Ether	ND ND	0.10	mg/Kg wet
Diisopropyl Ether (DIPE)	ND ND	0.025	mg/Kg wet
1,4-Dioxane	ND ND	2.5	mg/Kg wet
Ethylbenzene	ND ND	0.050	mg/Kg wet
Hexachlorobutadiene	ND ND	0.050	mg/Kg wet
2-Hexanone (MBK)	ND ND	0.50	mg/Kg wet
Isopropylbenzene (Cumene)		0.050	mg/Kg wet
p-Isopropyltoluene (p-Cymene)	ND ND	0.050	mg/Kg wet
p soproprioreme (p cymene)	ND	0.050	



QUALITY CONTROL

Spike

Source

%REC

RPD

Volatile Organic Compounds by GC/MS - Quality Control

A	D 1	Reporting	T I'	Spike	Source	0/ DEC	%REC	DDD	RPD	NI. 4
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Satch B317147 - SW-846 5035										
Blank (B317147-BLK1)				Prepared & A	analyzed: 09	/14/22				
Methyl Acetate	ND	0.50	mg/Kg wet							
Methyl tert-Butyl Ether (MTBE)	ND	0.050	mg/Kg wet							
Methyl Cyclohexane	ND	0.050	mg/Kg wet							
Methylene Chloride	ND	0.25	mg/Kg wet							
-Methyl-2-pentanone (MIBK)	ND	0.50	mg/Kg wet							
Naphthalene	ND	0.10	mg/Kg wet							V-05
-Propylbenzene	ND	0.050	mg/Kg wet							
tyrene	ND	0.050	mg/Kg wet							
,1,1,2-Tetrachloroethane	ND	0.050	mg/Kg wet							
,1,2,2-Tetrachloroethane	ND	0.025	mg/Kg wet							
etrachloroethylene	ND	0.050	mg/Kg wet							
etrahydrofuran	ND	0.50	mg/Kg wet							
Coluene	ND	0.050	mg/Kg wet							
,2,3-Trichlorobenzene	ND	0.25	mg/Kg wet							V-05
,2,4-Trichlorobenzene	ND	0.050	mg/Kg wet							
,3,5-Trichlorobenzene	ND	0.050	mg/Kg wet							
,1,1-Trichloroethane	ND	0.050	mg/Kg wet							
,1,2-Trichloroethane	ND	0.050	mg/Kg wet							
richloroethylene	ND	0.050	mg/Kg wet							
richlorofluoromethane (Freon 11)	ND	0.10	mg/Kg wet							
,2,3-Trichloropropane	ND	0.10	mg/Kg wet							
,1,2-Trichloro-1,2,2-trifluoroethane (Freon	ND	0.050	mg/Kg wet							
13)		0.050	ma/V a viat							
,2,4-Trimethylbenzene	ND	0.050	mg/Kg wet							
,3,5-Trimethylbenzene	ND	0.050	mg/Kg wet							
Vinyl Chloride	ND	0.10	mg/Kg wet							
n+p Xylene	ND	0.10 0.050	mg/Kg wet							
-Xylene	ND	0.030	mg/Kg wet							
Surrogate: 1,2-Dichloroethane-d4	0.0242		mg/Kg wet	0.0250		96.9	70-130			
surrogate: Toluene-d8	0.0251		mg/Kg wet	0.0250		100	70-130			
Surrogate: 4-Bromofluorobenzene	0.0246		mg/Kg wet	0.0250		98.4	70-130			
.CS (B317147-BS1)				Prepared & A	analyzed: 09	/14/22				
Acetone	0.0915	0.057	mg/Kg wet	0.113		80.7	70-160			
Acrylonitrile	0.0103	0.0057	mg/Kg wet	0.0113		90.8	70-130			
ert-Amyl Methyl Ether (TAME)	0.0115	0.00057		0.0113		101	70-130			
Benzene	0.0118	0.0011	mg/Kg wet	0.0113		104	70-130			
Bromobenzene	0.0113	0.0011	mg/Kg wet	0.0113		100	70-130			
Bromochloromethane	0.0117	0.0011	mg/Kg wet	0.0113		103	70-130			
Bromodichloromethane	0.0114	0.0011	mg/Kg wet	0.0113		100	70-130			
Bromoform	0.0100	0.0011	mg/Kg wet	0.0113		88.4	70-130			
Bromomethane	0.0154	0.0023	mg/Kg wet	0.0113		136 *	40-130			L-02, V-20
-Butanone (MEK)	0.102	0.023	mg/Kg wet	0.113		89.9	70-160			
ert-Butyl Alcohol (TBA)	0.0820	0.023	mg/Kg wet	0.113		72.3	40-130			
-Butylbenzene	0.0118	0.0011	mg/Kg wet	0.0113		104	70-130			
ec-Butylbenzene	0.0116	0.0011	mg/Kg wet	0.0113		102	70-130			
ert-Butylbenzene	0.0114	0.0011	mg/Kg wet	0.0113		100	70-160			
ert-Butyl Ethyl Ether (TBEE)	0.0118	0.00057	mg/Kg wet	0.0113		104	70-130			
Carbon Disulfide	0.133	0.0057	mg/Kg wet	0.113		117	70-130			
Carbon Tetrachloride	0.0117	0.0011	mg/Kg wet	0.0113		103	70-130			
Chlorobenzene	0.0118	0.0011	mg/Kg wet	0.0113		104	70-130			
Chlorodibromomethane	0.0109	0.00057	mg/Kg wet	0.0113		95.9	70-130			
Chloroethane		0.0023	mg/Kg wet							



QUALITY CONTROL

Spike

Source

%REC

RPD

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B317147 - SW-846 5035										
LCS (B317147-BS1)				Prepared & A	Analyzed: 09/14	4/22				
Chloroform	0.0114	0.0023	mg/Kg wet	0.0113		100	70-130			
Chloromethane	0.0122	0.0023	mg/Kg wet	0.0113		107	70-130			V-20
2-Chlorotoluene	0.0116	0.0011	mg/Kg wet	0.0113		102	70-130			
-Chlorotoluene	0.0116	0.0011	mg/Kg wet	0.0113		102	70-130			
,2-Dibromo-3-chloropropane (DBCP)	0.00849	0.0057	mg/Kg wet	0.0113		74.9	70-130			
,2-Dibromoethane (EDB)	0.0113	0.00057	mg/Kg wet	0.0113		99.7	70-130			
Dibromomethane	0.0111	0.0011	mg/Kg wet	0.0113		97.7	70-130			
,2-Dichlorobenzene	0.0114	0.0011	mg/Kg wet	0.0113		101	70-130			
,3-Dichlorobenzene	0.0113	0.0011	mg/Kg wet	0.0113		100	70-130			
,4-Dichlorobenzene	0.0107	0.0011	mg/Kg wet	0.0113		94.7	70-130			
rans-1,4-Dichloro-2-butene	0.00970	0.0023	mg/Kg wet	0.0113		85.6	70-130			
Dichlorodifluoromethane (Freon 12)	0.0145	0.0023	mg/Kg wet	0.0113		128	40-160			V-20
,1-Dichloroethane	0.0112	0.0011	mg/Kg wet	0.0113		98.4	70-130			
,2-Dichloroethane	0.0108	0.0011	mg/Kg wet	0.0113		95.1	70-130			
,1-Dichloroethylene	0.0118	0.0011	mg/Kg wet	0.0113		104	70-130			
ris-1,2-Dichloroethylene	0.0115	0.0011	mg/Kg wet	0.0113		102	70-130			
rans-1,2-Dichloroethylene	0.0112	0.0011	mg/Kg wet	0.0113		98.6	70-130			
Dichlorofluoromethane (Freon 21)	0.0123	0.0011	mg/Kg wet	0.0113		109	70-130			
,2-Dichloropropane	0.0114	0.0011	mg/Kg wet	0.0113		101	70-130			
,3-Dichloropropane	0.0114	0.00057	mg/Kg wet	0.0113		100	70-130			
,2-Dichloropropane	0.0114	0.0011	mg/Kg wet	0.0113		99.7	70-130			
,1-Dichloropropene	0.0120	0.0023	mg/Kg wet	0.0113		106	70-130			
is-1,3-Dichloropropene	0.0120	0.00057	mg/Kg wet	0.0113		98.9	70-130			
rans-1,3-Dichloropropene		0.00057	mg/Kg wet	0.0113		93.9	70-130			
Diethyl Ether	0.0106	0.00037	mg/Kg wet	0.0113		107	70-130			
Disopropyl Ether (DIPE)	0.0121	0.0023	mg/Kg wet	0.0113		107	70-130			
,4-Dioxane	0.0120	0.057	mg/Kg wet	0.113		82.6	40-160			
Cthylbenzene	0.0936	0.0011	mg/Kg wet				70-130			
Hexachlorobutadiene	0.0121	0.0011		0.0113		107				
	0.0128		mg/Kg wet	0.0113		113	70-160			
2-Hexanone (MBK)	0.0914	0.011	mg/Kg wet	0.113		80.6	70-160			
sopropylbenzene (Cumene)	0.0116	0.0011	mg/Kg wet	0.0113		103	70-130			
-Isopropyltoluene (p-Cymene)	0.0121	0.0011	mg/Kg wet	0.0113		107	70-130			
Methyl Acetate	0.0109	0.011	mg/Kg wet	0.0113		96.5	70-130			
Methyl tert-Butyl Ether (MTBE)	0.0112	0.0011	mg/Kg wet	0.0113		98.7	70-130			
Methyl Cyclohexane	0.0135	0.0011	mg/Kg wet	0.0113		119	70-130			V-20
Methylene Chloride	0.0109	0.0057	mg/Kg wet	0.0113		96.2	40-160			
-Methyl-2-pentanone (MIBK)	0.0972	0.011	mg/Kg wet	0.113		85.8	70-160			
Naphthalene	0.00666	0.0023	mg/Kg wet	0.0113		58.8	40-130			V-05
n-Propylbenzene	0.0117	0.0011	mg/Kg wet	0.0113		103	70-130			
Styrene	0.0119	0.0011	mg/Kg wet	0.0113		105	70-130			
,1,1,2-Tetrachloroethane	0.0116	0.0011	mg/Kg wet	0.0113		103	70-130			
,1,2,2-Tetrachloroethane	0.0108	0.00057	mg/Kg wet	0.0113		95.0	70-130			
etrachloroethylene	0.0120	0.0011	mg/Kg wet	0.0113		106	70-130			
etrahydrofuran	0.00972	0.011	mg/Kg wet	0.0113		85.8	70-130			
Toluene	0.0116	0.0011	mg/Kg wet	0.0113		102	70-130			
,2,3-Trichlorobenzene	0.00902	0.0057	mg/Kg wet	0.0113		79.6	70-130			V-05
,2,4-Trichlorobenzene	0.00996	0.0011	mg/Kg wet	0.0113		87.9	70-130			
,3,5-Trichlorobenzene	0.0124	0.0011	mg/Kg wet	0.0113		109	70-130			
,1,1-Trichloroethane	0.0111	0.0011	mg/Kg wet	0.0113		98.2	70-130			
,1,2-Trichloroethane	0.0114	0.0011	mg/Kg wet	0.0113		101	70-130			
richloroethylene	0.0122	0.0011	mg/Kg wet	0.0113		107	70-130			
Frichlorofluoromethane (Freon 11)	0.0121	0.0023	mg/Kg wet	0.0113		107	70-130			



QUALITY CONTROL

Volatile Organic Compounds by GC/MS - Quality Control

113). 113. 1	Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes	
1.2.3 Trekkengrupmen	Batch B317147 - SW-846 5035											_
1.1.1.2	LCS (B317147-BS1)				Prepared & A	Analyzed: 09/	/14/22					
13.5. 13.6	1,2,3-Trichloropropane	0.00963	0.0023	mg/Kg wet	0.0113		85.0	70-130				
1.2.4-F1manthybbazene		0.0136	0.0011	mg/Kg wet	0.0113		120	70-130			V-20	
1,3,5-1 many hybracene 0.0117 0.0011 mg/kg wel 0.0113 1.01 0.013	,	0.0116	0.0011	ma/V a wat	0.0112		102	70 120				
Name Chilorido 10.132 0.0023 mg/kg wel 0.113 1.16 0.139 0.139 0.139												
Semonthemenance 1968 1968 1968 1968 1968 1968 1968 1968 1969 196	· ·											
Service 10,110 10,101	3											
Surrogate 1.2-Dichloroethane-44												
Surreguite: 1 Althornollorobenzence 0.0295 mg/kg we 0.0283 102 0.76130 No. 10	Surrogate: 1.2-Dichloroethane-d4			mg/Kg wet	0.0283		98.5	70-130				_
No. Part P												
No. Part P	=											
Needone 0.0886 0.057 mg/Kg wet 0.113 78.2 70.160 3.17 25 New Yorkyolinitis 0.0104 0.057 mg/Kg wet 0.0113 192. 70.160 3.17 25 New Yorkyolinitis 0.0104 0.057 mg/Kg wet 0.0113 105 70.13 1.53 25 New Yorkyolinitis 0.0104 0.0015 mg/Kg wet 0.0113 106 70.130 1.72 25 New Yorkyolinitis 0.0114 mg/Kg wet 0.0115 106 70.130 1.72 25 New Yorkyolinitis 0.0114 mg/Kg wet 0.0115 106 70.130 1.72 25 New Yorkyolinitis 0.0114 mg/Kg wet 0.0115 106 70.130 1.72 25 New Yorkyolinitis 0.0114 mg/Kg wet 0.0115 107 70.130 1.409 25 New Yorkyolinitis 0.0114 mg/Kg wet 0.0115 107 70.130 1.409 25 New Yorkyolinitis 0.0114 mg/Kg wet 0.0115 107 70.130 1.409 25 New Yorkyolinitis 0.0114 mg/Kg wet 0.0115 107 70.130 1.409 25 New Yorkyolinitis 0.0114 mg/Kg wet 0.0115 107 70.130 1.409 25 New Yorkyolinitis 0.0114 mg/Kg wet 0.0115 107 70.130 1.409 25 New Yorkyolinitis 0.0114 mg/Kg wet 0.0115 107 70.130 1.409 25 New Yorkyolinitis 0.0114 mg/Kg wet 0.0115 107 70.130 1.409 25 New Yorkyolinitis 0.0114 mg/Kg wet 0.0115 107 70.130 1.409 25 New Yorkyolinitis 0.0114 107 70.130 1.409 25 New Yorkyolinitis 0.0114 107 70.130 1.409	_				D 10		/1.4/22					
Aerylonitrile 0.0104 0.0057 mg/kg wet 0.013 9.2.2 70.130 1.53 25 kert-Amyl Mehryl Ether (TAME) 0.0119 0.00657 mg/kg wet 0.0113 1065 70.130 3.77 2.5 Bearene 0.0120 0.0011 mg/kg wet 0.0113 1065 70.130 3.77 2.5 Bearene 0.0120 0.0011 mg/kg wet 0.0113 1065 70.130 3.04 2.5 Bearene 0.0120 0.0011 mg/kg wet 0.0113 97.1 70.130 3.04 2.5 Bearene 0.0120 0.0011 mg/kg wet 0.0113 97.1 70.130 3.04 2.5 Bearene 0.0120 0.0011 mg/kg wet 0.0113 97.1 70.130 3.04 2.5 Bearene 0.0120 0.0011 mg/kg wet 0.0113 97.9 70.130 0.000 2.5 Bearene 0.0120 0.0012 mg/kg wet 0.0113 97.9 70.130 0.000 2.5 Bearene 0.0159 0.0023 mg/kg wet 0.0113 87.6 70.130 0.009 2.5 Bearene 0.0159 0.0023 mg/kg wet 0.0113 87.6 70.130 0.009 2.5 Bearene 0.0159 0.0023 mg/kg wet 0.0113 87.8 70.100 0.009 2.5 Bearene 0.0120 0.0011 mg/kg wet 0.0113 106 70.100 0.004 2.5 kert-Buryl Alcohol (TBA) 0.0827 0.023 mg/kg wet 0.0113 106 70.100 0.854 2.5 kert-Buryl Bearene 0.0121 0.0011 mg/kg wet 0.0113 106 70.130 0.25 2.5 kert-Buryl Ether (TBEE) 0.0121 0.0001 mg/kg wet 0.0113 106 70.130 0.25 2.5 kert-Buryl Ether (TBEE) 0.0121 0.00057 mg/kg wet 0.0113 106 70.130 0.000 0.006 2.5 kert-Buryl Ether (TBEE) 0.0121 0.00057 mg/kg wet 0.0113 106 70.130 0.00			0.057			Analyzed: 09/		70.160	2.17	25		—
Retrict Company Comp												•
Bernace 0,0120 0,0011 mg/Kg wet 0,0113 1,06 70-130 1,72 25 1,75	•											
Bromobenzene 0.0110 0.0011 mg/kg wet 0.0113 97.1 70-130 3.04 25 Bromochinomethane 0.0122 0.0011 mg/kg wet 0.0113 197 70-130 4.09 25 Bromochinomethane 0.0013 0.0011 mg/kg wet 0.0113 99.9 70-130 0.909 25 Bromochinomethane 0.00993 0.0011 mg/kg wet 0.0113 87.6 70-130 0.909 25 L-02, V Bromochine 0.0159 0.0023 mg/kg wet 0.0113 87.6 70-130 0.909 25 L-02, V Berballunder (MK) 0.0986 0.023 mg/kg wet 0.0113 140 •0-130 0.234 25 L-02, V Berballundersen 0.0121 0.0011 mg/kg wet 0.0113 106 70-130 0.23 25 L-02, V Berballyllenzene 0.0121 0.00057 mg/kg wet 0.0113 101 70-160 0.966 25 Eart-Bu												
Bromochloromethane 0.0122 0.0011 mg/kg wet 0.0113 107 70-130 4.09 25 25 25 25 25 25 25 2												
Bromodichloromethane 0.0113 0.0011 mg/Kg wet 0.0113 99.9 70.130 0.300 25 1.02 Normofrom 0.00993 0.0011 mg/Kg wet 0.0113 87.6 70.130 0.909 25 1.02 Normofrom 0.00993 0.0011 mg/Kg wet 0.0113 87.6 70.130 0.909 25 1.02 Normofrom 0.00996 0.0023 mg/Kg wet 0.0113 87.8 70.160 2.34 25 1.02 Normofrom 0.00827 0.0033 mg/Kg wet 0.113 87.8 70.160 2.34 25 1.02 Normofrom 0.0012 0.0011 mg/Kg wet 0.0113 106 70.130 3.27 25 1.02 Normofrom 0.0114 0.0011 mg/Kg wet 0.0113 106 70.130 3.27 25 1.02 Normofrom 0.0114 0.0011 mg/Kg wet 0.0113 106 70.130 3.27 25 1.02 Normofrom 0.0114 0.0011 mg/Kg wet 0.0113 106 70.130 3.27 25 1.02 Normofrom 0.0114 0.0011 mg/Kg wet 0.0113 106 70.130 0.28 25 1.02 Normofrom 0.0116 0.00057 mg/Kg wet 0.0113 106 70.130 0.28 25 1.02 Normofrom 0.0116 0.00057 mg/Kg wet 0.0113 106 70.130 0.493 25 1.02 Normofrom 0.0116 0.00057 mg/Kg wet 0.0113 106 70.130 0.000 25 1.02 Normofrom 0.0116 0.00057 mg/Kg wet 0.0113 0.000 0.000 0.00057												
Bromofrim 0,00093 0,0011 mg/Kg wet 0,0113 140 4,0130 3,19 25 L-02, V-2 (1.15 (Bromodichloromethane		0.0011									
Partianone (MEK)	Bromoform		0.0011	mg/Kg wet	0.0113		87.6	70-130	0.909			
ert-Butyl Alcohol (TBA)	Bromomethane	0.0159	0.0023	mg/Kg wet	0.0113		140 *	40-130	3.19	25	L-02, V-20	
Partylbenzene 0,0121 0,0011 mg/Kg wet 0,0113 106 70-130 2,28 25 exe-Butylbenzene 0,0120 0,0011 mg/Kg wet 0,0113 106 70-130 3,27 25 exe-Butylbenzene 0,0114 0,0011 mg/Kg wet 0,0113 101 70-160 0,696 25 exer-Butylbenzene 0,0114 0,0011 mg/Kg wet 0,0113 101 70-160 0,696 25 exer-Butyl Ethyl Ether (TBEE) 0,0121 0,00057 mg/Kg wet 0,0113 106 70-130 2,28 25 exer-Butyl Ethyl Ether (TBEE) 0,0121 0,00057 mg/Kg wet 0,0113 106 70-130 0,493 25 exer-Butyl Ethyl Ether (TBEE) 0,0114 0,0011 mg/Kg wet 0,0113 105 70-130 1,022 25 exer-Butyl Ethyl Ether (TBEE) 0,0118 0,0011 mg/Kg wet 0,0113 105 70-130 1,022 25 exer-Butyl Ethyl Ether (TBEE) 0,0118 0,0011 mg/Kg wet 0,0113 104 70-130 0,009 25 exer-Butyl Ethyl Ether (TBEE) 0,0118 0,0011 mg/Kg wet 0,0113 105 70-130 1,022 25 exer-Butyl Ethyl Ether (TBEE) 0,0118 0,0011 mg/Kg wet 0,0113 105 70-130 1,022 25 exer-Butyl Ethyl Ether (TBEE) 0,0118 0,0011 mg/Kg wet 0,0113 105 70-130 1,002 25 exer-Butyl Ethyl Ether (TBEE) 0,0118 0,0011 mg/Kg wet 0,0113 105 70-130 1,000 25 exer-Butyl Ethyl Ether (TBEE) 0,0118 0,0011 mg/Kg wet 0,0113 105 70-130 1,001 1,78 25 exer-Butyl Ethyl Ether (TBEE) 0,0118 0,0011 mg/Kg wet 0,0113 104 70-130 1,78 25 exer-Butyl Ethyl Ether (TBEE) 0,0118 0,0011 mg/Kg wet 0,0113 104 70-130 1,78 25 exer-Butyl Ethyl Ether (TBEE) 0,00000 0,00000 0,00000 0,00000 0,00000 0,00000 0,00000 0,00000 0,00000 0,00000 0,00000 0,00000 0,00000 0,00000 0,00000 0,00000 0,00000 0,0000	2-Butanone (MEK)	0.0996	0.023	mg/Kg wet	0.113		87.8	70-160	2.34	25		
Rec-Butylbenzene 0.0120 0.0011 ng/Kg wet 0.0113 106 70-130 3.27 25	ert-Butyl Alcohol (TBA)	0.0827	0.023	mg/Kg wet	0.113		73.0	40-130	0.854	25		
ert-Burylbenzene	n-Butylbenzene	0.0121	0.0011	mg/Kg wet	0.0113		106	70-130	2.28	25		
ert-Butyl Ethyl Ethyr (TBEE) 0.0121 0.00057 mg/Kg wet 0.0113 106 70-130 2.28 25 Carbon Disulfide 0.134 0.0057 mg/Kg wet 0.113 118 70-130 0.493 25 Carbon Tetrachloride 0.0119 0.0011 mg/Kg wet 0.0113 105 70-130 0.493 25 Carbon Tetrachloride 0.0118 0.0011 mg/Kg wet 0.0113 105 70-130 0.403 25 Carbon Tetrachloride 0.0118 0.0011 mg/Kg wet 0.0113 104 70-130 0.000 25 Carbon Carb		0.0120										
Carbon Disulfide 0,134 0,0057 mg/Kg wet 0,113 118 70-130 0,493 25 Carbon Tetrachloride 0,0119 0,0011 mg/Kg wet 0,0113 105 70-130 1,92 25 Carbon Tetrachloride 0,0118 0,0011 mg/Kg wet 0,0113 105 70-130 1,92 25 Chlorodebacene 0,0118 0,0011 mg/Kg wet 0,0113 104 70-130 0,000 25 Chlorodebacene 0,0106 0,00057 mg/Kg wet 0,0113 93.6 70-130 2,43 25 Chlorodebane 0,0112 0,0023 mg/Kg wet 0,0113 98.6 70-130 0,101 25 Chlorodebane 0,0116 0,0023 mg/Kg wet 0,0113 102 70-130 1,78 25 Chlorodebane 0,0118 0,0023 mg/Kg wet 0,0113 104 70-130 3,22 25 V-20 Chlorotoluene 0,0113 0,0011 mg/Kg wet 0,0113 104 70-130 3,22 25 V-20 Chlorotoluene 0,0114 0,0011 mg/Kg wet 0,0113 101 70-130 1,18 25 1,2-Dibromo-3-chloropropane (DBCP) 0,00000 0,0057 mg/Kg wet 0,0113 101 70-130 1,18 25 1,2-Dibromo-4bane (EDB) 0,0115 0,00057 mg/Kg wet 0,0113 101 70-130 1,18 25 1,2-Dibromoethane (EDB) 0,0116 0,0011 mg/Kg wet 0,0113 101 70-130 1,18 25 1,2-Dibromoethane (EDB) 0,0116 0,0011 mg/Kg wet 0,0113 101 70-130 1,19 25 1,2-Dibromoethane (EDB) 0,0116 0,0011 mg/Kg wet 0,0113 101 70-130 1,396 25 1,2-Dibromoethane (EDB) 0,0116 0,0011 mg/Kg wet 0,0113 101 70-130 1,396 25 1,3-Dichlorobenzene 0,0116 0,0011 mg/Kg wet 0,0113 101 70-130 1,396 25 1,3-Dichlorobenzene 0,0116 0,0011 mg/Kg wet 0,0113 101 70-130 1,396 25 1,3-Dichlorobenzene 0,0116 0,0011 mg/Kg wet 0,0113 103 70-130 1,396 25 1,3-Dichlorobenzene 0,00020 0,0023 mg/Kg wet 0,0113 103 70-130 1,30 2,47 25 1,4-Dichlorobenzene 0,00020 0,0023 mg/Kg wet 0,0113 130 40-160 1,09 25 V-20 1,1-Dichlorodebane (Freon 12) 0,0147 0,0023 mg/Kg wet 0,0113 102 70-130 3,40 25 1,1-Dichlorodebane (Freon 12) 0,0117 0,0011 mg/Kg wet 0,0113 103 70-130 1,26 25 1,1-Dichlorodebane 0,0117 0,0011 mg/Kg wet 0,0113 100 70-130 1,1-T 25 1,1-Dichlorodebane 0,0117 0,0011 mg/Kg wet 0,0113 100 70-130 1,1-T 25 1,1-Dichlorodebane 0,0117 0,0011 mg/Kg wet 0,0113 100 70-130 1,1-T 25 1,1-Dichlorodebane 0,0117 0,0011 mg/Kg wet 0,0113 100 70-130 1,1-T 25 1,1-Dichlorodebane 0,0117 0,0011 mg/Kg wet 0,0113 100 70-130 1,1-T 25 1,1-Dichlorodebane 0,0117 0,0011 mg/Kg wet	•											
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Chlorodibromomethane												
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2-Chlorotoluene	Chloromethane										V-20	
4-Chlorotoluene	2-Chlorotoluene		0.0011									
1,2-Dibromoethane (EDB) 0,0115 0,00057 mg/Kg wet 0,0113 101 70-130 1,39 25 1,2-Dichlorobenzene 0,0115 0,0011 mg/Kg wet 0,0113 101 70-130 4.89 25 1,2-Dichlorobenzene 0,0115 0,0011 mg/Kg wet 0,0113 101 70-130 0,396 25 1,3-Dichlorobenzene 0,0116 0,0011 mg/Kg wet 0,0113 103 70-130 2,47 25 1,4-Dichlorobenzene 0,0111 0,0011 mg/Kg wet 0,0113 103 70-130 2,47 25 1,4-Dichlorobenzene 0,00920 0,0023 mg/Kg wet 0,0113 103 70-130 3,73 25 1,4-Dichloro-2-butene 0,00920 0,0023 mg/Kg wet 0,0113 130 40-160 1,09 25 V-20 1,1-Dichloroethane 1,2-Dichloroethane 0,0115 0,0011 mg/Kg wet 0,0113 102 70-130 3,40 25 1,2-Dichloroethane 0,0111 0,0011 mg/Kg wet 0,0113 102 70-130 3,40 25 1,1-Dichloroethylene 0,0116 0,0011 mg/Kg wet 0,0113 103 70-130 1,26 25 1,1-Dichloroethylene 0,0117 0,0011 mg/Kg wet 0,0113 103 70-130 1,1-Dichloroethylene 0,0116 0,0011 mg/Kg wet 0,0113 103 70-130 1,1-Dichloroethylene 0,0116 0,0011 mg/Kg wet 0,0113 103 70-130 1,1-Dichloroethylene 0,0117 0,0011 mg/Kg wet 0,0113 103 70-130 1,1-Dichloroethylene 0,0117 0,0011 mg/Kg wet 0,0113 103 70-130 1,1-Dichloroethylene 0,0113 0,0011 mg/Kg wet 0,0113 103 70-130 1,1-Dichloroethylene 0,0113 0,0011 mg/Kg wet 0,0113 103 70-130 1,1-Dichloroethylene 0,0113 0,0011 mg/Kg wet 0,0113 100 70-130 1,1-Dichloroethylene 0,0113 0,0011 mg/Kg wet 0,0013 100 70-130 1,1-Dichloroethylene 0,0113 0,0011 mg/Kg wet 0,0013 100 70-130 1,1-Dichloroethylene 0,0113 100 70-130 1,1-Dichloroethylene	4-Chlorotoluene		0.0011	mg/Kg wet	0.0113		101	70-130	1.18	25		
Dibromomethane 0.0116 0.0011 mg/Kg wet 0.0113 103 70-130 4.89 25 1.2-Dichlorobenzene 0.0115 0.0011 mg/Kg wet 0.0113 101 70-130 0.396 25 1.3-Dichlorobenzene 0.0116 0.0011 mg/Kg wet 0.0113 103 70-130 2.47 25 1.4-Dichlorobenzene 0.0111 0.0011 mg/Kg wet 0.0113 98.3 70-130 3.73 25 1.4-Dichloro-2-butene 0.00920 0.0023 mg/Kg wet 0.0113 81.2 70-130 5.28 25 Dichlorodifluoromethane (Freon 12) 0.0147 0.0023 mg/Kg wet 0.0113 130 40-160 1.09 25 V-20 1.1-Dichloroethane 0.0115 0.0011 mg/Kg wet 0.0113 102 70-130 3.40 25 1.2-Dichloroethane 0.0111 0.0011 mg/Kg wet 0.0113 97.9 70-130 2.90 25 1.1-Dichloroethylene 0.0116 0.0011 mg/Kg wet 0.0113 103 70-130 1.26 25 1.1-Dichloroethylene 0.0117 0.0011 mg/Kg wet 0.0113 103 70-130 1.17 25 1.1-Dichloroethylene 0.0113 0.0011 mg/Kg wet 0.0113 100 70-130 1.11 25 Dichloroethylene 0.0113 0.0011 mg/Kg wet 0.0113 100 70-130 1.41 25 Dichloroethylene 0.0113 0.0011 mg/Kg wet 0.0113 109 70-130 0.734 25 1.2-Dichloroethylene 0.0113 0.0011 mg/Kg wet 0.0113 109 70-130 0.734 25 1.2-Dichloropropane 0.0113 0.0011 mg/Kg wet 0.0113 109 70-130 0.734 25 1.2-Dichloropropane 0.0113 0.0011 mg/Kg wet 0.0113 109 70-130 1.30 25	1,2-Dibromo-3-chloropropane (DBCP)	0.00900	0.0057	mg/Kg wet	0.0113		79.4	70-130	5.83	25		
1,2-Dichlorobenzene	1,2-Dibromoethane (EDB)	0.0115		mg/Kg wet	0.0113		101	70-130	1.39	25		
1,3-Dichlorobenzene		0.0116					103	70-130	4.89			
1,4-Dichlorobenzene 0.0111 0.0011 mg/Kg wet 0.0113 98.3 70-130 3.73 25 prans-1,4-Dichloro-2-butene 0.00920 0.0023 mg/Kg wet 0.0113 81.2 70-130 5.28 25 prans-1,4-Dichlorodifluoromethane (Freon 12) 0.0147 0.0023 mg/Kg wet 0.0113 130 40-160 1.09 25 V-20 1,1-Dichloroethane 0.0115 0.0011 mg/Kg wet 0.0113 102 70-130 3.40 25 1,2-Dichloroethane 0.0111 0.0011 mg/Kg wet 0.0113 97.9 70-130 2.90 25 1,1-Dichloroethylene 0.0116 0.0011 mg/Kg wet 0.0113 103 70-130 1.26 25 prans-1,2-Dichloroethylene 0.0117 0.0011 mg/Kg wet 0.0113 103 70-130 1.17 25 prans-1,2-Dichloroethylene 0.0113 0.0011 mg/Kg wet 0.0113 100 70-130 1.41 25 prans-1,2-Dichloroethylene 0.0113 0.0011 mg/Kg wet 0.0113 109 70-130 0.734 25 1,2-Dichloropropane 0.0113 0.0011 mg/Kg wet 0.0113 109 70-130 1.30 25												
trans-1,4-Dichloro-2-butene 0,00920 0.0023 mg/Kg wet 0.0113 81.2 70-130 5.28 25 Dichlorodifluoromethane (Freon 12) 0.0147 0.0023 mg/Kg wet 0.0113 130 40-160 1.09 25 V-20 1,1-Dichloroethane 0.0115 0.0011 mg/Kg wet 0.0113 102 70-130 3.40 25 1,2-Dichloroethane 0.0111 0.0011 mg/Kg wet 0.0113 97.9 70-130 2.90 25 1,1-Dichloroethylene 0.0116 0.0011 mg/Kg wet 0.0113 103 70-130 1.26 25 cis-1,2-Dichloroethylene 0.0117 0.0011 mg/Kg wet 0.0113 103 70-130 1.17 25 trans-1,2-Dichloroethylene 0.0113 0.0011 mg/Kg wet 0.0113 100 70-130 1.41 25 Dichlorofluoromethane (Freon 21) 0.0124 0.0011 mg/Kg wet 0.0113 109 70-130 0.734 25 1,2-Dichloropropane 0.0113 0.0011 mg/Kg wet 0.0113 99.7 70-130 1.30 25												
Dichlorodifluoromethane (Freon 12) 0.0147 0.0023 mg/Kg wet 0.0113 130 40-160 1.09 25 V-20 1,1-Dichloroethane 0.0115 0.0011 mg/Kg wet 0.0113 102 70-130 3.40 25 1,2-Dichloroethane 0.0111 0.0011 mg/Kg wet 0.0113 97.9 70-130 2.90 25 1,1-Dichloroethylene 0.0116 0.0011 mg/Kg wet 0.0113 103 70-130 1.26 25 25 cis-1,2-Dichloroethylene 0.0117 0.0011 mg/Kg wet 0.0113 103 70-130 1.17 25 25 crans-1,2-Dichloroethylene 0.0113 0.0011 mg/Kg wet 0.0113 100 70-130 1.41 25 Dichlorofluoromethane (Freon 21) 0.0124 0.0011 mg/Kg wet 0.0113 109 70-130 0.734 25 1,2-Dichloropropane 0.0113 0.0011 mg/Kg wet 0.0113 99.7 70-130 1.30 25												
1,1-Dichloroethane 0.0115 0.0011 mg/Kg wet 0.0113 102 70-130 3.40 25 1,2-Dichloroethane 0.0111 0.0011 mg/Kg wet 0.0113 97.9 70-130 2.90 25 1,1-Dichloroethylene 0.0116 0.0011 mg/Kg wet 0.0113 103 70-130 1.26 25 1,1-Dichloroethylene 0.0117 0.0011 mg/Kg wet 0.0113 103 70-130 1.17 25 1.17-Dichloroethylene 0.0113 0.0011 mg/Kg wet 0.0113 100 70-130 1.41 25 1.17-Dichlorofluoromethane (Freon 21) 0.0124 0.0011 mg/Kg wet 0.0113 109 70-130 0.734 25 1,2-Dichloropropane 0.0113 0.0011 mg/Kg wet 0.0113 99.7 70-130 1.30 25											V 20	
1,2-Dichloroethane 0.0111 0.0011 mg/Kg wet 0.0113 97.9 70-130 2.90 25 1,1-Dichloroethylene 0.0116 0.0011 mg/Kg wet 0.0113 103 70-130 1.26 25 1,1-Dichloroethylene 0.0117 0.0011 mg/Kg wet 0.0113 103 70-130 1.17 25 1,2-Dichloroethylene 0.0113 0.0011 mg/Kg wet 0.0113 100 70-130 1.17 25 1,2-Dichloroethylene 0.0113 0.0011 mg/Kg wet 0.0113 100 70-130 1.41 25 1,2-Dichloroptopane 0.0113 0.0011 mg/Kg wet 0.0113 109 70-130 0.734 25 1,2-Dichloropropane 0.0113 0.0011 mg/Kg wet 0.0113 99.7 70-130 1.30 25	· · ·										v-20	
1,1-Dichloroethylene 0.0116 0.0011 mg/Kg wet 0.0113 103 70-130 1.26 25 cis-1,2-Dichloroethylene 0.0117 0.0011 mg/Kg wet 0.0113 103 70-130 1.17 25 crans-1,2-Dichloroethylene 0.0113 0.0011 mg/Kg wet 0.0113 100 70-130 1.41 25 Dichlorofluoromethane (Freon 21) 0.0124 0.0011 mg/Kg wet 0.0113 109 70-130 0.734 25 1,2-Dichloropropane 0.0113 0.0011 mg/Kg wet 0.0113 99.7 70-130 1.30 25												
cis-1,2-Dichloroethylene 0.0117 0.0011 mg/Kg wet 0.0113 103 70-130 1.17 25 rans-1,2-Dichloroethylene 0.0113 0.0011 mg/Kg wet 0.0113 100 70-130 1.41 25 Dichlorofluoromethane (Freon 21) 0.0124 0.0011 mg/Kg wet 0.0113 109 70-130 0.734 25 1,2-Dichloropropane 0.0113 0.0011 mg/Kg wet 0.0113 99.7 70-130 1.30 25												
rans-1,2-Dichloroethylene 0.0113 0.0011 mg/Kg wet 0.0113 100 70-130 1.41 25 Dichlorofluoromethane (Freon 21) 0.0124 0.0011 mg/Kg wet 0.0113 109 70-130 0.734 25 1,2-Dichloropropane 0.0113 0.0011 mg/Kg wet 0.0113 99.7 70-130 1.30 25	·											
Dichlorofluoromethane (Freon 21) 0.0124 0.0011 mg/Kg wet 0.0113 109 70-130 0.734 25 1,2-Dichloropropane 0.0113 0.0011 mg/Kg wet 0.0113 99.7 70-130 1.30 25	-											
1,2-Dichloropropane 0.0113 0.0011 mg/Kg wet 0.0113 99.7 70-130 1.30 25												
12 Di-blandaria 0.00057 ma/V-mat 0.0110 0.000 0.000 0.000	1,2-Dichloropropane		0.0011	mg/Kg wet	0.0113		99.7	70-130	1.30	25		
V.V.13	1,3-Dichloropropane	0.0113	0.00057	mg/Kg wet	0.0113		99.3	70-130	0.902	25	Page 36 o	



QUALITY CONTROL

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes	
Batch B317147 - SW-846 5035											
LCS Dup (B317147-BSD1)				Prepared & A	Analyzed: 09	/14/22					
2,2-Dichloropropane	0.0113	0.0011	mg/Kg wet	0.0113		99.3	70-130	0.402	25		
1,1-Dichloropropene	0.0123	0.0023	mg/Kg wet	0.0113		108	70-130	2.53	25		
cis-1,3-Dichloropropene	0.0111	0.00057	mg/Kg wet	0.0113		97.9	70-130	1.02	25		
trans-1,3-Dichloropropene	0.0106	0.00057	mg/Kg wet	0.0113		93.1	70-130	0.856	25		
Diethyl Ether	0.0119	0.0023	mg/Kg wet	0.0113		105	70-130	1.42	25		
Diisopropyl Ether (DIPE)	0.0121	0.00057	mg/Kg wet	0.0113		107	70-130	0.753	25		
1,4-Dioxane	0.0935	0.057	mg/Kg wet	0.113		82.5	40-160	0.0969	50		† :
Ethylbenzene	0.0118	0.0011	mg/Kg wet	0.0113		104	70-130	3.03	25		
Hexachlorobutadiene	0.0130	0.0011	mg/Kg wet	0.0113		115	70-160	1.58	25		
2-Hexanone (MBK)	0.0925	0.011	mg/Kg wet	0.113		81.6	70-160	1.17	25		†
Isopropylbenzene (Cumene)	0.0116	0.0011	mg/Kg wet	0.0113		102	70-130	0.293	25		
p-Isopropyltoluene (p-Cymene)	0.0122	0.0011	mg/Kg wet	0.0113		108	70-130	0.839	25		
Methyl Acetate	0.0113	0.011	mg/Kg wet	0.0113		100	70-130	3.56	25		
Methyl tert-Butyl Ether (MTBE)	0.0113	0.0011	mg/Kg wet	0.0113		99.6	70-130	0.908	25		
Methyl Cyclohexane	0.0134	0.0011	mg/Kg wet	0.0113		118	70-130	0.844	25	V-20	
Methylene Chloride	0.0111	0.0057	mg/Kg wet	0.0113		98.0	40-160	1.85	25		†
4-Methyl-2-pentanone (MIBK)	0.0963	0.011	mg/Kg wet	0.113		85.0	70-160	0.949	25		†
Naphthalene	0.00703	0.0023	mg/Kg wet	0.0113		62.0	40-130	5.30	25	V-05	†
n-Propylbenzene	0.0118	0.0011	mg/Kg wet	0.0113		104	70-130	0.579	25		
Styrene	0.0116	0.0011	mg/Kg wet	0.0113		102	70-130	2.13	25		
1,1,1,2-Tetrachloroethane	0.0113	0.0011	mg/Kg wet	0.0113		99.5	70-130	2.97	25		
1,1,2,2-Tetrachloroethane	0.0105	0.00057	mg/Kg wet	0.0113		92.9	70-130	2.24	25		
Tetrachloroethylene	0.0121	0.0011	mg/Kg wet	0.0113		106	70-130	0.282	25		
Tetrahydrofuran	0.00924	0.011	mg/Kg wet	0.0113		81.5	70-130	5.14	25		
Toluene	0.0117	0.0011	mg/Kg wet	0.0113		103	70-130	0.877	25		
1,2,3-Trichlorobenzene	0.00994	0.0057	mg/Kg wet	0.0113		87.7	70-130	9.68	25	V-05	
1,2,4-Trichlorobenzene	0.0101	0.0011	mg/Kg wet	0.0113		89.3	70-130	1.58	25		
1,3,5-Trichlorobenzene	0.0125	0.0011	mg/Kg wet	0.0113		110	70-130	0.910	25		
1,1,1-Trichloroethane	0.0114	0.0011	mg/Kg wet	0.0113		100	70-130	2.02	25		
1,1,2-Trichloroethane	0.0116	0.0011	mg/Kg wet	0.0113		102	70-130	1.48	25		
Trichloroethylene	0.0125	0.0011	mg/Kg wet	0.0113		110	70-130	2.58	25		
Trichlorofluoromethane (Freon 11)	0.0121	0.0023	mg/Kg wet	0.0113		107	70-130	0.374	25		
1,2,3-Trichloropropane	0.00968	0.0023	mg/Kg wet	0.0113		85.4	70-130	0.469	25		
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	0.0137	0.0011	mg/Kg wet	0.0113		121	70-130	1.16	25	V-20	
1,2,4-Trimethylbenzene	0.0114	0.0011	mg/Kg wet	0.0113		100	70-130	1.58	25		
1,3,5-Trimethylbenzene	0.0115	0.0011	mg/Kg wet	0.0113		102	70-130	0.977	25		
Vinyl Chloride	0.0132	0.0023	mg/Kg wet	0.0113		117	40-130	0.515	25		†
m+p Xylene	0.0230	0.0023	mg/Kg wet	0.0227		101	70-130	5.33	25		
o-Xylene	0.0115	0.0011	mg/Kg wet	0.0113		102	70-130	3.01	25		
Surrogate: 1,2-Dichloroethane-d4	0.0272	·	mg/Kg wet	0.0283		96.1	70-130	·		·	
Surrogate: Toluene-d8	0.0283		mg/Kg wet	0.0283		100	70-130				
Surrogate: 4-Bromofluorobenzene	0.0287		mg/Kg wet	0.0283		101	70-130				



QUALITY CONTROL

Spike

Source

%REC

RPD

Semivolatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	Limit	Notes
Batch B317121 - SW-846 3546										
Blank (B317121-BLK1)				Prepared: 09	9/13/22 Analy	yzed: 09/16/2	.2			
Acenaphthene	ND	0.17	mg/Kg wet							
Acenaphthylene	ND	0.17	mg/Kg wet							
Acetophenone	ND	0.34	mg/Kg wet							
Aniline	ND	0.34	mg/Kg wet							
Anthracene	ND	0.17	mg/Kg wet							
Benzidine	ND	0.66	mg/Kg wet							V-04, V-35
Benzo(a)anthracene	ND	0.17	mg/Kg wet							
Benzo(a)pyrene	ND	0.17	mg/Kg wet							
Benzo(b)fluoranthene	ND	0.17	mg/Kg wet							
Benzo(g,h,i)perylene	ND	0.17	mg/Kg wet							
Benzo(k)fluoranthene	ND	0.17	mg/Kg wet							
Benzoic Acid	ND	1.0	mg/Kg wet							
Bis(2-chloroethoxy)methane	ND	0.34	mg/Kg wet							
Bis(2-chloroethyl)ether	ND	0.34	mg/Kg wet							
Bis(2-chloroisopropyl)ether	ND	0.34	mg/Kg wet							
Bis(2-Ethylhexyl)phthalate	ND	0.34	mg/Kg wet							
l-Bromophenylphenylether	ND	0.34	mg/Kg wet mg/Kg wet							
Butylbenzylphthalate	ND	0.34								
Carbazole I-Chloroaniline	ND	0.17	mg/Kg wet							
Chloro-3-methylphenol	ND	0.66	mg/Kg wet mg/Kg wet							
-Chloronaphthalene	ND	0.66 0.34	mg/Kg wet							
-Chlorophenol	ND	0.34	mg/Kg wet							
l-Chlorophenylphenylether	ND ND	0.34	mg/Kg wet							
-Chrysene	ND ND	0.34	mg/Kg wet							
Dibenz(a,h)anthracene	ND ND	0.17	mg/Kg wet							V-20
Dibenzofuran	ND ND	0.17	mg/Kg wet							v-20
Di-n-butylphthalate	ND ND	0.34	mg/Kg wet							
,2-Dichlorobenzene	ND ND	0.34	mg/Kg wet							
,3-Dichlorobenzene	ND ND	0.34	mg/Kg wet							
,4-Dichlorobenzene	ND ND	0.34	mg/Kg wet							
3,3-Dichlorobenzidine	ND ND	0.17	mg/Kg wet							
2,4-Dichlorophenol	ND ND	0.34	mg/Kg wet							
Diethylphthalate	ND ND	0.34	mg/Kg wet							
2,4-Dimethylphenol	ND ND	0.34	mg/Kg wet							
Dimethylphthalate	ND ND	0.34	mg/Kg wet							
4,6-Dinitro-2-methylphenol	ND ND	0.34	mg/Kg wet							
2,4-Dinitrophenol	ND ND	0.66	mg/Kg wet							
2,4-Dinitrotoluene	ND ND	0.34	mg/Kg wet							
2,6-Dinitrotoluene	ND	0.34	mg/Kg wet							
Di-n-octylphthalate	ND	0.34	mg/Kg wet							
,2-Diphenylhydrazine/Azobenzene	ND	0.34	mg/Kg wet							
Fluoranthene	ND	0.17	mg/Kg wet							
luorene	ND	0.17	mg/Kg wet							
Hexachlorobenzene	ND	0.34	mg/Kg wet							
	ND	0.34	mg/Kg wet							
Hexachlorocyclopentadiene	ND	0.34	mg/Kg wet							V-05
Hexachloroethane	ND	0.34	mg/Kg wet							
ndeno(1,2,3-cd)pyrene	ND	0.17	mg/Kg wet							V-20
sophorone	ND	0.34	mg/Kg wet							
-Methylnaphthalene	ND	0.17	mg/Kg wet							
-Methylnaphthalene	ND ND	0.17	mg/Kg wet							



QUALITY CONTROL

Spike

Source

%REC

RPD

Semivolatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	KPD Limit	Notes
Analyte	Resuit	LIIIII	UIIIIS	Level	Kesuit	/0KEC	Limits	KLD	Liiiit	notes
atch B317121 - SW-846 3546										
lank (B317121-BLK1)				Prepared: 09	/13/22 Analy	yzed: 09/16/2	22			
-Methylphenol	ND	0.34	mg/Kg wet							
/4-Methylphenol	ND	0.34	mg/Kg wet							
aphthalene	ND	0.17	mg/Kg wet							
-Nitroaniline	ND	0.34	mg/Kg wet							
-Nitroaniline	ND	0.34	mg/Kg wet							
-Nitroaniline	ND	0.34	mg/Kg wet							
litrobenzene	ND	0.34	mg/Kg wet							
-Nitrophenol	ND	0.34	mg/Kg wet							
-Nitrophenol	ND	0.66	mg/Kg wet							
-Nitrosodimethylamine	ND	0.34	mg/Kg wet							
-Nitrosodiphenylamine/Diphenylamine	ND	0.34	mg/Kg wet							
-Nitrosodi-n-propylamine	ND	0.34	mg/Kg wet							
entachloronitrobenzene	ND	0.34	mg/Kg wet							
entachlorophenol	ND	0.34	mg/Kg wet							V-05
henanthrene	ND	0.17	mg/Kg wet							
henol	ND	0.34	mg/Kg wet							
yrene	ND	0.17	mg/Kg wet							
yridine	ND	0.34	mg/Kg wet							
2,4,5-Tetrachlorobenzene	ND	0.34	mg/Kg wet							
2,4-Trichlorobenzene	ND	0.34	mg/Kg wet							
4,5-Trichlorophenol	ND	0.34	mg/Kg wet							
4,6-Trichlorophenol	ND	0.34	mg/Kg wet							
urrogate: 2-Fluorophenol	4.19		mg/Kg wet	6.67		62.9	30-130			
urrogate: Phenol-d6	4.60		mg/Kg wet	6.67		69.0	30-130			
urrogate: Nitrobenzene-d5	2.68		mg/Kg wet	3.33		80.3	30-130			
urrogate: 2-Fluorobiphenyl	2.22		mg/Kg wet	3.33		66.6	30-130			
urrogate: 2,4,6-Tribromophenol	4.56		mg/Kg wet	6.67		68.4	30-130			
urrogate: p-Terphenyl-d14	2.46		mg/Kg wet	3.33		73.8	30-130			
CS (B317121-BS1)				Prepared: 09	/13/22 Analy	yzed: 09/16/2	22			
cenaphthene	1.07	0.17	mg/Kg wet	1.67		64.0	40-140			
cenaphthylene	1.14	0.17	mg/Kg wet	1.67		68.3	40-140			
cetophenone	1.17	0.34	mg/Kg wet	1.67		70.2	40-140			
niline	1.24	0.34	mg/Kg wet	1.67		74.3	10-140			
nthracene	1.18	0.17	mg/Kg wet	1.67		71.0	40-140			
enzidine	3.15	0.66	mg/Kg wet	1.67		189 *	40-140			L-02, V-04, V-
enzo(a)anthracene	1.16	0.17	mg/Kg wet	1.67		69.8	40-140			
enzo(a)pyrene	1.15	0.17	mg/Kg wet	1.67		68.8	40-140			
enzo(b)fluoranthene	1.14	0.17	mg/Kg wet	1.67		68.4	40-140			
enzo(g,h,i)perylene	1.06	0.17	mg/Kg wet	1.67		63.5	40-140			
enzo(k)fluoranthene	1.21	0.17	mg/Kg wet	1.67		72.7	40-140			
enzoic Acid	0.776	1.0	mg/Kg wet	1.67		46.5	30-130			
is(2-chloroethoxy)methane	1.24	0.34	mg/Kg wet	1.67		74.5	40-140			
is(2-chloroethyl)ether	1.13	0.34	mg/Kg wet	1.67		67.7	40-140			
is(2-chloroisopropyl)ether	1.38	0.34	mg/Kg wet	1.67		82.6	40-140			
is(2-Ethylhexyl)phthalate	1.34	0.34	mg/Kg wet	1.67		80.4	40-140			
Bromophenylphenylether	1.32	0.34	mg/Kg wet	1.67		79.0	40-140			
utylbenzylphthalate	1.26	0.34	mg/Kg wet	1.67		75.8	40-140			
arbazole	1.16	0.17	mg/Kg wet	1.67		69.5	40-140			
-Chloroaniline	1.19	0.66	mg/Kg wet	1.67		71.6	10-140			
-Chloro-3-methylphenol	1.28	0.66	mg/Kg wet	1.67		76.9	30-130			
-Chloronaphthalene	0.982	0.34	mg/Kg wet	1.67		58.9	40-140			



QUALITY CONTROL

Spike

Source

%REC

RPD

Semivolatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Satch B317121 - SW-846 3546										
CS (B317121-BS1)				Prepared: 09	0/13/22 Analyz	ed: 09/16/2	22			
-Chlorophenol	1.20	0.34	mg/Kg wet	1.67		71.9	30-130			
-Chlorophenylphenylether	1.22	0.34	mg/Kg wet	1.67		73.5	40-140			
Chrysene	1.13	0.17	mg/Kg wet	1.67		67.9	40-140			
Dibenz(a,h)anthracene	1.18	0.17	mg/Kg wet	1.67		70.5	40-140			V-06
Dibenzofuran	1.18	0.34	mg/Kg wet	1.67		71.0	40-140			
Di-n-butylphthalate	1.19	0.34	mg/Kg wet	1.67		71.5	40-140			
,2-Dichlorobenzene	1.04	0.34	mg/Kg wet	1.67		62.7	40-140			
,3-Dichlorobenzene	1.03	0.34	mg/Kg wet	1.67		61.8	40-140			
,4-Dichlorobenzene	1.04	0.34	mg/Kg wet	1.67		62.1	40-140			
3-Dichlorobenzidine	1.47	0.17	mg/Kg wet	1.67		88.3	20-140			
4-Dichlorophenol	1.22	0.34	mg/Kg wet	1.67		73.1	30-130			
iethylphthalate	1.21	0.34	mg/Kg wet	1.67		72.4	40-140			
4-Dimethylphenol	1.22	0.34	mg/Kg wet	1.67		73.4	30-130			
rimethylphthalate	1.26	0.34	mg/Kg wet	1.67		75.3	40-140			
6-Dinitro-2-methylphenol	1.14	0.34	mg/Kg wet	1.67		68.2	30-130			
4-Dinitrophenol	0.748	0.66	mg/Kg wet	1.67		44.9	30-130			
4-Dinitrotoluene	1.20	0.34	mg/Kg wet	1.67		72.3	40-140			
,6-Dinitrotoluene	1.34	0.34	mg/Kg wet	1.67		80.3	40-140			
i-n-octylphthalate	1.35	0.34	mg/Kg wet	1.67		81.0	40-140			
2-Diphenylhydrazine/Azobenzene	1.13	0.34	mg/Kg wet	1.67		67.6	40-140			
luoranthene	1.12	0.17	mg/Kg wet	1.67		67.4	40-140			
uorene	1.14	0.17	mg/Kg wet	1.67		68.3	40-140			
exachlorobenzene	1.38	0.34	mg/Kg wet	1.67		82.6	40-140			
exachlorobutadiene	1.15	0.34	mg/Kg wet	1.67		68.9	40-140			
exachlorocyclopentadiene	0.834	0.34	mg/Kg wet	1.67		50.0	40-140			V-05
exachloroethane	1.08	0.34	mg/Kg wet	1.67		64.6	40-140			
deno(1,2,3-cd)pyrene	1.21	0.17	mg/Kg wet	1.67		72.8	40-140			V-06
ophorone	1.25	0.34	mg/Kg wet	1.67		74.7	40-140			
Methylnaphthalene	1.03	0.17	mg/Kg wet	1.67		62.0	40-140			
-Methylnaphthalene	1.22	0.17	mg/Kg wet	1.67		73.3	40-140			
Methylphenol	1.23	0.34	mg/Kg wet	1.67		73.6	30-130			
4-Methylphenol	1.23	0.34	mg/Kg wet	1.67		73.9	30-130			
aphthalene		0.17	mg/Kg wet	1.67		67.9	40-140			
Nitroaniline	1.13 1.20	0.17	mg/Kg wet	1.67		72.3	40-140			
-Nitroaniline	1.20	0.34	mg/Kg wet	1.67		71.7	30-140			
Nitroaniline	1.20	0.34	mg/Kg wet	1.67		68.2	40-140			
itrobenzene		0.34	mg/Kg wet	1.67		68.0	40-140			
-Nitrophenol	1.13	0.34	mg/Kg wet	1.67		70.9	30-130			
Nitrophenol	1.18	0.66	mg/Kg wet	1.67		70.9 78.7	30-130			
-Nitrosodimethylamine	1.31	0.34	mg/Kg wet							
-Nitrosodimetnylamine -Nitrosodiphenylamine/Diphenylamine	1.07			1.67		64.4	40-140			
-Nitrosodipnenylamine/Dipnenylamine -Nitrosodi-n-propylamine	1.28	0.34 0.34	mg/Kg wet mg/Kg wet	1.67		76.6	40-140			
entachloronitrobenzene	1.28			1.67		77.1	40-140			
	1.37	0.34	mg/Kg wet	1.67		82.2	40-140			37.05
entachlorophenol	0.882	0.34	mg/Kg wet	1.67		52.9	30-130			V-05
nenanthrene	1.19	0.17	mg/Kg wet	1.67		71.3	40-140			
henol	1.19	0.34	mg/Kg wet	1.67		71.3	30-130			
yrene	1.12	0.17	mg/Kg wet	1.67		67.5	40-140			
yridine	0.704	0.34	mg/Kg wet	1.67		42.2	30-140			
2,4,5-Tetrachlorobenzene	1.14	0.34	mg/Kg wet	1.67		68.6	40-140			
2,4-Trichlorobenzene	1.09	0.34	mg/Kg wet	1.67		65.4	40-140			
4,5-Trichlorophenol	1.27	0.34	mg/Kg wet	1.67		76.0	30-130			
,4,6-Trichlorophenol	1.21	0.34	mg/Kg wet	1.67		72.6	30-130			



QUALITY CONTROL

Semivolatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B317121 - SW-846 3546										
LCS (B317121-BS1)				Prepared: 09	0/13/22 Anal	yzed: 09/16/2	22			
Surrogate: 2-Fluorophenol	4.83		mg/Kg wet	6.67		72.4	30-130			
Surrogate: Phenol-d6	5.18		mg/Kg wet	6.67		77.7	30-130			
Surrogate: Nitrobenzene-d5	3.05		mg/Kg wet	3.33		91.5	30-130			
Surrogate: 2-Fluorobiphenyl	2.56		mg/Kg wet	3.33		76.7	30-130			
Surrogate: 2,4,6-Tribromophenol	5.74		mg/Kg wet	6.67		86.2	30-130			
Surrogate: p-Terphenyl-d14	2.67		mg/Kg wet	3.33		80.0	30-130			
LCS Dup (B317121-BSD1)				Prepared: 09	0/13/22 Anal	yzed: 09/16/2	22			
Acenaphthene	1.13	0.17	mg/Kg wet	1.67		67.6	40-140	5.35	30	
Acenaphthylene	1.17	0.17	mg/Kg wet	1.67		70.3	40-140	2.80	30	
Acetophenone	1.24	0.34	mg/Kg wet	1.67		74.6	40-140	6.13	30	
Aniline	1.09	0.34	mg/Kg wet	1.67		65.4	10-140	12.7	50	f
Anthracene	1.20	0.17	mg/Kg wet	1.67		72.3	40-140	1.84	30	
Benzidine	2.72	0.66	mg/Kg wet	1.67		163 *	40-140	14.4	30	L-02, V-04, V-35
Benzo(a)anthracene	1.24	0.17	mg/Kg wet	1.67		74.3	40-140	6.16	30	
Benzo(a)pyrene	1.18	0.17	mg/Kg wet	1.67		70.6	40-140	2.58	30	
Benzo(b)fluoranthene	1.17	0.17	mg/Kg wet	1.67		70.3	40-140	2.74	30	
Benzo(g,h,i)perylene	1.27	0.17	mg/Kg wet	1.67		76.2	40-140	18.2	30	
Benzo(k)fluoranthene	1.25	0.17	mg/Kg wet	1.67		75.3	40-140	3.51	30	
Benzoic Acid	0.793	1.0	mg/Kg wet	1.67		47.6	30-130	2.25	50	
Bis(2-chloroethoxy)methane	1.30	0.34	mg/Kg wet	1.67		78.0	40-140	4.59	30	
Bis(2-chloroethyl)ether	1.21	0.34	mg/Kg wet	1.67		72.8	40-140	7.35	30	
is(2-chloroisopropyl)ether	1.45	0.34	mg/Kg wet	1.67		87.3	40-140	5.51	30	
sis(2-Ethylhexyl)phthalate	1.43	0.34	mg/Kg wet	1.67		90.3	40-140	11.7	30	
-Bromophenylphenylether	1.34	0.34	mg/Kg wet	1.67		80.4	40-140	1.73	30	
Butylbenzylphthalate	1.50	0.34	mg/Kg wet	1.67		89.7	40-140	16.9	30	
Carbazole		0.17	mg/Kg wet	1.67		72.4	40-140	4.03	30	
-Chloroaniline	1.21	0.66	mg/Kg wet	1.67		57.7	10-140	21.5	30	+
l-Chloro-3-methylphenol	0.961	0.66	mg/Kg wet	1.67		78.6	30-130	2.14	30	
2-Chloronaphthalene	1.31	0.34	mg/Kg wet							
	1.06	0.34		1.67		63.8	40-140	7.95	30	
2-Chlorophenol	1.28	0.34	mg/Kg wet mg/Kg wet	1.67		76.9	30-130	6.77	30	
4-Chlorophenylphenylether	1.27	0.34		1.67		76.4	40-140	3.95	30	
Chrysene Dibarg(a b) anthrocona	1.12		mg/Kg wet	1.67		67.5	40-140	0.591	30	11.06
Dibenz(a,h)anthracene	1.43	0.17	mg/Kg wet	1.67		85.6	40-140	19.4	30	V-06
Dibenzofuran	1.24	0.34	mg/Kg wet	1.67		74.2	40-140	4.41	30	
Di-n-butylphthalate	1.32	0.34	mg/Kg wet	1.67		79.4	40-140	10.5	30	
,2-Dichlorobenzene	1.11	0.34	mg/Kg wet	1.67		66.6	40-140	6.16	30	
,3-Dichlorobenzene	1.09	0.34	mg/Kg wet	1.67		65.4	40-140	5.72	30	
1,4-Dichlorobenzene	1.10	0.34	mg/Kg wet	1.67		66.1	40-140	6.27	30	
3,3-Dichlorobenzidine	1.19	0.17	mg/Kg wet	1.67		71.6	20-140	20.9	50	+
,4-Dichlorophenol	1.27	0.34	mg/Kg wet	1.67		76.3	30-130	4.23	30	
Diethylphthalate	1.28	0.34	mg/Kg wet	1.67		76.9	40-140	6.06	30	
,4-Dimethylphenol	1.29	0.34	mg/Kg wet	1.67		77.6	30-130	5.59	30	
Dimethylphthalate	1.28	0.34	mg/Kg wet	1.67		76.7	40-140	1.87	30	
,6-Dinitro-2-methylphenol	1.13	0.34	mg/Kg wet	1.67		67.8	30-130	0.529	30	
,4-Dinitrophenol	0.740	0.66	mg/Kg wet	1.67		44.4	30-130	1.03	30	
,4-Dinitrotoluene	1.26	0.34	mg/Kg wet	1.67		75.6	40-140	4.49	30	
,6-Dinitrotoluene	1.31	0.34	mg/Kg wet	1.67		78.4	40-140	2.39	30	
Di-n-octylphthalate	1.40	0.34	mg/Kg wet	1.67		83.8	40-140	3.47	30	
,2-Diphenylhydrazine/Azobenzene	1.25	0.34	mg/Kg wet	1.67		74.8	40-140	10.1	30	
Fluoranthene	1.20	0.17	mg/Kg wet	1.67		71.8	40-140	6.35	30	
Fluorene	1.22	0.17	mg/Kg wet	1.67		73.0	40-140	6.62	30	



QUALITY CONTROL

Semivolatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits		RPD Limit	Notes
atch B317121 - SW-846 3546										
CS Dup (B317121-BSD1)				Prepared: 09	/13/22 Analy	zed: 09/1	6/22			
lexachlorobenzene	1.36	0.34	mg/Kg wet	1.67		81.5	40-140	1.32	30	
exachlorobutadiene	1.21	0.34	mg/Kg wet	1.67		72.7	40-140	5.31	30	
exachlorocyclopentadiene	0.914	0.34	mg/Kg wet	1.67		54.8	40-140	9.12	30	V-05
exachloroethane	1.17	0.34	mg/Kg wet	1.67		70.1	40-140	8.16	30	
ndeno(1,2,3-cd)pyrene	1.42	0.17	mg/Kg wet	1.67		85.4	40-140	16.0	30	V-06
sophorone	1.33	0.34	mg/Kg wet	1.67		79.9	40-140	6.73	30	
-Methylnaphthalene	1.09	0.17	mg/Kg wet	1.67		65.5	40-140	5.49	30	
-Methylnaphthalene	1.29	0.17	mg/Kg wet	1.67		77.7	40-140	5.78	30	
-Methylphenol	1.30	0.34	mg/Kg wet	1.67		78.2	30-130	6.06	30	
/4-Methylphenol	1.29	0.34	mg/Kg wet	1.67		77.6	30-130	4.96	30	
aphthalene	1.19	0.17	mg/Kg wet	1.67		71.3	40-140	4.88	30	
Nitroaniline	1.28	0.34	mg/Kg wet	1.67		76.9	40-140	6.14	30	
Nitroaniline	1.09	0.34	mg/Kg wet	1.67		65.2	30-140	9.53	30	
Nitroaniline	1.20	0.34	mg/Kg wet	1.67		72.2	40-140		30	
itrobenzene	1.23	0.34	mg/Kg wet	1.67		73.9	40-140		30	
-Nitrophenol	1.26	0.34	mg/Kg wet	1.67		75.3	30-130		30	
-Nitrophenol	1.20	0.66	mg/Kg wet	1.67		71.8	30-130		50	
-Nitrosodimethylamine	1.20	0.34	mg/Kg wet	1.67		65.8	40-140		30	
-Nitrosodiphenylamine/Diphenylamine	1.10	0.34	mg/Kg wet	1.67		77.3	40-140		30	
-Nitrosodi-n-propylamine		0.34	mg/Kg wet	1.67		82.4	40-140		30	
entachloronitrobenzene	1.37	0.34	mg/Kg wet							
	1.39			1.67		83.3	40-140		30	11.05
entachlorophenol	0.854	0.34	mg/Kg wet	1.67		51.2	30-130		30	V-05
nenanthrene	1.21	0.17	mg/Kg wet	1.67		72.6	40-140		30	
nenol	1.25	0.34	mg/Kg wet	1.67		74.8	30-130		30	
yrene	1.30	0.17	mg/Kg wet	1.67		77.9	40-140		30	
yridine	0.754	0.34	mg/Kg wet	1.67		45.2	30-140		30	
2,4,5-Tetrachlorobenzene	1.19	0.34	mg/Kg wet	1.67		71.3	40-140		30	
2,4-Trichlorobenzene	1.17	0.34	mg/Kg wet	1.67		70.4	40-140	7.30	30	
4,5-Trichlorophenol	1.28	0.34	mg/Kg wet	1.67		76.7	30-130	0.943	30	
4,6-Trichlorophenol	1.25	0.34	mg/Kg wet	1.67		75.1	30-130	3.49	30	
urrogate: 2-Fluorophenol	5.05		mg/Kg wet	6.67		75.7	30-130			
urrogate: Phenol-d6	5.28		mg/Kg wet	6.67		79.3	30-130			
urrogate: Nitrobenzene-d5	3.25		mg/Kg wet	3.33		97.4	30-130			
urrogate: 2-Fluorobiphenyl	2.72		mg/Kg wet	3.33		81.7	30-130			
urrogate: 2,4,6-Tribromophenol	5.85		mg/Kg wet	6.67		87.7	30-130			
urrogate: p-Terphenyl-d14	3.00		mg/Kg wet	3.33		90.1	30-130			
atrix Spike (B317121-MS1)	Sou	rce: 2210628-	01	Prepared: 09	/13/22 Analy	zed: 09/1	6/22			
cenaphthene	2.38	0.22	mg/Kg dry	2.14	ND	111	40-140)		R-06
cenaphthylene	1.42	0.22	mg/Kg dry	2.14	ND	66.6	40-140			
cetophenone	1.49	0.44	mg/Kg dry	2.14	ND		40-140			
niline	0.457	0.44	mg/Kg dry	2.14	ND		* 40-140			MS-09
nthracene	3.40	0.22	mg/Kg dry	2.14	0.163	151	* 40-140			MS-23
enzidine	0.0278	0.85	mg/Kg dry	2.14	ND		* 40-140			MS-09, V-04, V-35
enzo(a)anthracene	4.93	0.22	mg/Kg dry	2.14	0.796	193	* 40-140			MS-23
enzo(a)pyrene	4.84	0.22	mg/Kg dry	2.14	0.860	186	* 40-140			MS-23
enzo(b)fluoranthene	5.82	0.22	mg/Kg dry	2.14	1.24	214	* 40-140			MS-23
enzo(g,h,i)perylene	2.84	0.22	mg/Kg dry	2.14	0.566	107	40-140			R-06
enzo(k)fluoranthene	3.35	0.22	mg/Kg dry	2.14	0.487	134	40-140			R-06
enzoic Acid	0.858	1.3	mg/Kg dry	2.14	ND		40-140			
is(2-chloroethoxy)methane	1.55	0.44	mg/Kg dry	2.14	ND		40-140			
is(2-chloroethyl)ether	1.48	0.44	mg/Kg dry	2.14	ND		40-140			



Pentachlorophenol

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

QUALITY CONTROL

Semivolatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B317121 - SW-846 3546				-	· · ·	-			<u> </u>	
Matrix Spike (B317121-MS1)	Sour	ce: 22I0628-	-01	Prepared: 09	9/13/22 Analy	zed: 09/16/	22			
Bis(2-chloroisopropyl)ether	1.74	0.44	mg/Kg dry	2.14	ND	81.3	40-140			
Bis(2-Ethylhexyl)phthalate	2.60	0.44	mg/Kg dry	2.14	0.248	110	40-140			
4-Bromophenylphenylether	1.52	0.44	mg/Kg dry	2.14	ND	71.0	40-140			
Butylbenzylphthalate	1.53	0.44	mg/Kg dry	2.14	ND	71.4	40-140			
Carbazole	2.38	0.22	mg/Kg dry	2.14	0.124	106	40-140			R-06
4-Chloroaniline	0.551	0.85	mg/Kg dry	2.14	ND	25.8	40-140			MS-09
4-Chloro-3-methylphenol	1.62	0.85	mg/Kg dry	2.14	ND	75.7	30-130			
2-Chloronaphthalene	1.24	0.44	mg/Kg dry	2.14	ND	58.2	40-140			
2-Chlorophenol	1.51	0.44	mg/Kg dry	2.14	ND	70.6	30-130			
4-Chlorophenylphenylether	1.49	0.44	mg/Kg dry	2.14	ND	69.7	40-140			
Chrysene	5.23	0.22	mg/Kg dry	2.14	0.980	199 *	40-140			MS-23
Dibenz(a,h)anthracene	1.49	0.22	mg/Kg dry	2.14	0.148	62.9	40-140			V-06
Dibenzofuran	2.13	0.44	mg/Kg dry	2.14	ND	99.5	40-140			R-06
Di-n-butylphthalate	1.64	0.44	mg/Kg dry	2.14	ND	76.8	40-140			
1,2-Dichlorobenzene	1.37	0.44	mg/Kg dry	2.14	ND	63.9	40-140			
1,3-Dichlorobenzene	1.28	0.44	mg/Kg dry	2.14	ND	59.8	40-140			
1,4-Dichlorobenzene	1.30	0.44	mg/Kg dry	2.14	ND	60.8	40-140			
3,3-Dichlorobenzidine	0.00983	0.22	mg/Kg dry	2.14	ND	0.460 *	40-140			MS-09
2,4-Dichlorophenol	1.45	0.44	mg/Kg dry	2.14	ND	68.0	30-130			
Diethylphthalate	1.60	0.44	mg/Kg dry	2.14	ND	75.0	40-140			
2,4-Dimethylphenol	1.47	0.44	mg/Kg dry	2.14	ND	68.6	30-130			
Dimethylphthalate	1.55	0.44	mg/Kg dry	2.14	ND	72.6	40-140			
4,6-Dinitro-2-methylphenol	0.514	0.44	mg/Kg dry	2.14	ND	24.0 *	30-130			MS-09
2,4-Dinitrophenol	0.458	0.85	mg/Kg dry	2.14	ND	21.4 *	30-130			MS-09
2,4-Dinitrotoluene	1.21	0.44	mg/Kg dry	2.14	ND	56.5	40-140			
2,6-Dinitrotoluene	1.31	0.44	mg/Kg dry	2.14	ND	61.1	40-140			
Di-n-octylphthalate	1.91	0.44	mg/Kg dry	2.14	ND	89.1	40-140			
1,2-Diphenylhydrazine/Azobenzene	1.45	0.44	mg/Kg dry	2.14	ND	67.6	40-140			
Fluoranthene	12.1	0.22	mg/Kg dry	2.14	2.08	470 *	40-140			MS-23
Fluorene	2.53	0.22	mg/Kg dry	2.14	ND	118	40-140			R-06
Hexachlorobenzene	1.50	0.44	mg/Kg dry	2.14	ND	69.9	40-140			
Hexachlorobutadiene	1.37	0.44	mg/Kg dry	2.14	ND	64.0	40-140			
Hexachlorocyclopentadiene	ND	0.44	mg/Kg dry	2.14	ND	*				MS-09, V-05
Hexachloroethane	0.629	0.44	mg/Kg dry	2.14	ND	29.4 *				MS-09
Indeno(1,2,3-cd)pyrene	3.44	0.22	mg/Kg dry	2.14	0.593	133	40-140			R-06, V-06
Isophorone	1.57	0.44	mg/Kg dry	2.14	ND	73.6	40-140			
1-Methylnaphthalene	1.44	0.22	mg/Kg dry	2.14	ND	67.5	40-140			
2-Methylnaphthalene	1.78	0.22	mg/Kg dry	2.14	ND	83.4	40-140			
2-Methylphenol	1.53	0.44	mg/Kg dry	2.14	ND	71.5	30-130			
3/4-Methylphenol	1.56	0.44	mg/Kg dry	2.14	ND	72.8	30-130			
Naphthalene	1.86	0.22	mg/Kg dry	2.14	ND	86.9	40-140			R-06
2-Nitroaniline	2.04	0.44	mg/Kg dry	2.14	ND	95.6	40-140			
3-Nitroaniline	1.07	0.44	mg/Kg dry	2.14	ND	50.2	40-140			
4-Nitroaniline	1.23	0.44	mg/Kg dry	2.14	ND	57.6	40-140			
Nitrobenzene	1.41	0.44	mg/Kg dry	2.14	ND	66.1	40-140			
2-Nitrophenol	0.602	0.44	mg/Kg dry	2.14	ND	28.2				MS-23
4-Nitrophenol	2.03	0.85	mg/Kg dry	2.14	ND	94.8	30-130			
N-Nitrosodimethylamine	1.33	0.44	mg/Kg dry	2.14	ND	62.3	40-140			
N-Nitrosodiphenylamine/Diphenylamine	1.52	0.44	mg/Kg dry	2.14	ND	70.9	40-140			
N-Nitrosodi-n-propylamine	1.62	0.44	mg/Kg dry	2.14	ND	75.6	40-140			
Pentachloronitrobenzene	0.610	0.44	mg/Kg dry	2.14	ND	28.5 *	40-140			MS-09, R-06

1.18

0.44 mg/Kg dry

2.14

ND 55.3

30-130

V-05



QUALITY CONTROL

Semivolatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REG	2	%REC Limits	RPD		RPD Limit	Notes
Batch B317121 - SW-846 3546												
Matrix Spike (B317121-MS1)	Sou	rce: 22I0628-	-01	Prepared: 09	0/13/22 Analyz	zed: 09/	16/22	2				
Phenanthrene	10.4	0.22	mg/Kg dry	2.14	1.01	439	*	40-140				MS-23
Phenol	1.54	0.44	mg/Kg dry	2.14	ND	71.9		30-130				
Pyrene	9.69	0.22	mg/Kg dry	2.14	1.90	365	*	40-140				MS-23
Pyridine	0.848	0.44	mg/Kg dry	2.14	ND	39.7	*	40-140				MS-09
,2,4,5-Tetrachlorobenzene	1.29	0.44	mg/Kg dry	2.14	ND	60.5		40-140				
,2,4-Trichlorobenzene	1.39	0.44	mg/Kg dry	2.14	ND	65.0		40-140				
2,4,5-Trichlorophenol	1.45	0.44	mg/Kg dry	2.14	ND	67.7		30-130				
2,4,6-Trichlorophenol	1.33	0.44	mg/Kg dry	2.14	ND	62.4		30-130				
Surrogate: 2-Fluorophenol	5.83		mg/Kg dry	8.55		68.2		30-130				
Surrogate: Phenol-d6	6.11		mg/Kg dry	8.55		71.5		30-130				
Surrogate: Nitrobenzene-d5	3.69		mg/Kg dry	4.28		86.4		30-130				
Surrogate: 2-Fluorobiphenyl	2.87		mg/Kg dry	4.28		67.2		30-130				
Surrogate: 2,4,6-Tribromophenol	6.29		mg/Kg dry	8.55		73.6		30-130				
Surrogate: p-Terphenyl-d14	3.00		mg/Kg dry	4.28		70.2		30-130				
Matrix Spike Dup (B317121-MSD1)	Sou	rce: 2210628-	-01	Prepared: 09	0/13/22 Analyz	zed: 09/	16/22	2				
Acenaphthene	1.21	0.22	mg/Kg dry	2.14	ND	56.7		40-140	65.0	*	30	R-06
Acenaphthylene	1.24	0.22	mg/Kg dry	2.14	ND	58.2		40-140	13.5		30	
Acetophenone	1.34	0.44	mg/Kg dry	2.14	ND	62.6		40-140	10.6		30	
Aniline	0.431	0.44	mg/Kg dry	2.14	ND	20.2	*	40-140	5.97		30	MS-09
Anthracene	1.47	0.22	mg/Kg dry	2.14	0.163	61.0		40-140	79.4	*	30	R-06
enzidine	0.00727	0.85	mg/Kg dry	2.14	ND	0.340	*	40-140			30	MS-09, V-0 V-35
Benzo(a)anthracene	2.46	0.22	mg/Kg dry	2.14	0.796	77.8		40-140	66.8	*	30	R-06
Benzo(a)pyrene	2.55	0.22	mg/Kg dry	2.14	0.860	78.9		40-140	62.2	*	30	R-06
Benzo(b)fluoranthene	3.11	0.22	mg/Kg dry	2.14	1.24	87.3		40-140	60.8	*	30	R-06
Benzo(g,h,i)perylene	1.60	0.22	mg/Kg dry	2.14	0.566	48.3		40-140	56.1	*	30	R-06
Benzo(k)fluoranthene	2.02	0.22	mg/Kg dry	2.14	0.487	71.7		40-140	49.6	*	30	R-06
Benzoic Acid	0.694	1.3	mg/Kg dry	2.14	ND	32.5	*	40-140	21.0		30	MS-22
Bis(2-chloroethoxy)methane	1.37	0.44	mg/Kg dry	2.14	ND	63.9		40-140	12.4		30	
Bis(2-chloroethyl)ether	1.31	0.44	mg/Kg dry	2.14	ND	61.3		40-140	12.0		30	
Bis(2-chloroisopropyl)ether	1.56	0.44	mg/Kg dry	2.14	ND	72.8		40-140	11.1		30	
Bis(2-Ethylhexyl)phthalate	2.15	0.44	mg/Kg dry	2.14	0.248	89.2		40-140	18.9		30	
-Bromophenylphenylether	1.37	0.44	mg/Kg dry	2.14	ND	63.9		40-140	10.6		30	
Butylbenzylphthalate	1.57	0.44	mg/Kg dry	2.14	ND	73.4		40-140	2.76		30	
Carbazole	1.40	0.22	mg/Kg dry	2.14	0.124	59.7		40-140	51.9	*	30	R-06
-Chloroaniline	0.506	0.85	mg/Kg dry	2.14	ND	23.7	*	40-140	8.49		30	MS-09
l-Chloro-3-methylphenol	1.40	0.85	mg/Kg dry	2.14	ND	65.4		30-130	14.6		30	~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~
2-Chloronaphthalene	1.08	0.44	mg/Kg dry	2.14	ND	50.6		40-140	13.9		30	
2-Chlorophenol	1.30	0.44	mg/Kg dry	2.14	ND	61.0		30-130	14.6		30	
-Chlorophenylphenylether	1.35	0.44	mg/Kg dry	2.14	ND	63.0		40-140	10.1		30	
Chrysene	2.70	0.22	mg/Kg dry	2.14	0.980	80.4		40-140	63.8	*	30	R-06
Dibenz(a,h)anthracene	1.17	0.22	mg/Kg dry	2.14	0.148	47.9		40-140	24.1		30	V-06
Dibenzofuran	1.32	0.44	mg/Kg dry	2.14	ND	61.8		40-140	46.7	*	30	R-06
Di-n-butylphthalate	1.40	0.44	mg/Kg dry	2.14	ND	65.6		40-140	15.7		30	
,2-Dichlorobenzene	1.19	0.44	mg/Kg dry	2.14	ND	55.8		40-140	13.5		30	
,3-Dichlorobenzene	1.18	0.44	mg/Kg dry	2.14	ND	55.1		40-140	8.18		30	
,4-Dichlorobenzene	1.16	0.44	mg/Kg dry	2.14	ND	54.2		40-140	11.4		30	
,3-Dichlorobenzidine	0.00855	0.22	mg/Kg dry	2.14	ND	0.400	*	40-140			30	MS-09
,4-Dichlorophenol	1.28	0.44	mg/Kg dry	2.14	ND	60.0		30-130	12.4		30	
Diethylphthalate	1.42	0.44	mg/Kg dry	2.14	ND ND	66.4		40-140	12.2		30	
,4-Dimethylphenol	1.42	0.44	mg/Kg dry	2.14	ND ND	60.2		30-130	13.1		30	

Page 44 of 84



QUALITY CONTROL

Spike

Source

%REC

RPD

Semivolatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch B317121 - SW-846 3546										
Matrix Spike Dup (B317121-MSD1)	Sour	ce: 22I0628-	01	Prepared: 09	0/13/22 Analyz	zed: 09/16	/22			
4,6-Dinitro-2-methylphenol	0.559	0.44	mg/Kg dry	2.14	ND	26.2	* 30-130	8.45	30	MS-09
2,4-Dinitrophenol	0.457	0.85	mg/Kg dry	2.14	ND	21.4	* 30-130	0.280	30	MS-09
2,4-Dinitrotoluene	1.22	0.44	mg/Kg dry	2.14	ND	57.2	40-140	1.23	30	
2,6-Dinitrotoluene	1.38	0.44	mg/Kg dry	2.14	ND	64.5	40-140	5.41	30	
Di-n-octylphthalate	1.70	0.44	mg/Kg dry	2.14	ND	79.6	40-140	11.2	30	
1,2-Diphenylhydrazine/Azobenzene	1.25	0.44	mg/Kg dry	2.14	ND	58.4	40-140	14.6	30	
Fluoranthene	5.20	0.22	mg/Kg dry	2.14	2.08	146	* 40-140	80.0	* 30	R-06
Fluorene	1.35	0.22	mg/Kg dry	2.14	ND	63.2	40-140	60.5	* 30	R-06
Hexachlorobenzene	1.25	0.44	mg/Kg dry	2.14	ND	58.6	40-140	17.6	30	
Hexachlorobutadiene	1.21	0.44	mg/Kg dry	2.14	ND	56.6	40-140	12.2	30	
Hexachlorocyclopentadiene	ND	0.44	mg/Kg dry	2.14	ND		* 30-130	NC	30	MS-09, V-05
Hexachloroethane	0.733	0.44	mg/Kg dry	2.14	ND	34.3	* 40-140	15.2	30	MS-09
Indeno(1,2,3-cd)pyrene	1.86	0.22	mg/Kg dry	2.14	0.593	59.3	40-140	59.6	* 30	R-06, V-06
Isophorone	1.38	0.44	mg/Kg dry	2.14	ND	64.7	40-140	12.9	30	
1-Methylnaphthalene	1.14	0.22	mg/Kg dry	2.14	ND	53.1	40-140	23.9	30	
2-Methylnaphthalene	1.34	0.22	mg/Kg dry	2.14	ND	62.5	40-140	28.7	30	
2-Methylphenol	1.33	0.44	mg/Kg dry	2.14	ND	62.1	30-130	14.0	30	
3/4-Methylphenol	1.34	0.44	mg/Kg dry	2.14	ND	62.7	30-130	14.9	30	
Naphthalene	1.25	0.22	mg/Kg dry	2.14	ND	58.5	40-140	39.1	* 30	R-06
2-Nitroaniline	1.69	0.44	mg/Kg dry	2.14	ND	79.3	40-140	18.7	30	
3-Nitroaniline	0.835	0.44	mg/Kg dry	2.14	ND	39.1	* 40-140	25.0	30	MS-22
4-Nitroaniline	1.16	0.44	mg/Kg dry	2.14	ND	54.1	40-140	6.26	30	
Nitrobenzene	1.28	0.44	mg/Kg dry	2.14	ND	59.9	40-140	9.87	30	
2-Nitrophenol	0.863	0.44	mg/Kg dry	2.14	ND	40.4	30-130	35.5	* 30	R-06
4-Nitrophenol	1.66	0.85	mg/Kg dry	2.14	ND	77.7	30-130	19.8	30	
N-Nitrosodimethylamine	1.26	0.44	mg/Kg dry	2.14	ND	59.0	40-140	5.44	30	
N-Nitrosodiphenylamine/Diphenylamine	1.33	0.44	mg/Kg dry	2.14	ND	62.2	40-140	13.1	30	
N-Nitrosodi-n-propylamine	1.39	0.44	mg/Kg dry	2.14	ND	65.0	40-140	15.1	30	
Pentachloronitrobenzene	0.836	0.44	mg/Kg dry	2.14	ND	39.1	* 40-140	31.3	* 30	MS-09, R-06
Pentachlorophenol	0.976	0.44	mg/Kg dry	2.14	ND	45.7	30-130	19.1	30	V-05
Phenanthrene	2.82	0.22	mg/Kg dry	2.14	1.01	84.7	40-140	115	* 30	R-06
Phenol	1.33	0.44	mg/Kg dry	2.14	ND	62.3	30-130	14.2	30	
Pyrene	4.33	0.22	mg/Kg dry	2.14	1.90	114	40-140	76.6	* 30	R-06
Pyridine	0.778	0.44	mg/Kg dry	2.14	ND		* 40-140	8.68	30	MS-09
1,2,4,5-Tetrachlorobenzene	1.19	0.44	mg/Kg dry	2.14	ND	55.8	40-140	8.02	30	
1,2,4-Trichlorobenzene	1.20	0.44	mg/Kg dry	2.14	ND	56.2	40-140	14.5	30	
2,4,5-Trichlorophenol	1.34	0.44	mg/Kg dry	2.14	ND	62.7	30-130	7.67	30	
2,4,6-Trichlorophenol	1.26	0.44	mg/Kg dry	2.14	ND	58.9	30-130	5.67	30	
Surrogate: 2-Fluorophenol	5.24		mg/Kg dry	8.55		61.3	30-130			
Surrogate: Phenol-d6	5.52		mg/Kg dry	8.55		64.5	30-130			
Surrogate: Nitrobenzene-d5	3.44		mg/Kg dry	4.28		80.6	30-130			
Surrogate: 2-Fluorobiphenyl	2.76		mg/Kg dry	4.28		64.5	30-130			
Surrogate: 2,4,6-Tribromophenol	5.77		mg/Kg dry	8.55		67.5	30-130			
Surrogate: p-Terphenyl-d14	3.26		mg/Kg dry	4.28		76.1	30-130			

Notes



Analyte

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

QUALITY CONTROL

Spike

Level

Source

Result

%REC

%REC

Limits

RPD

Limit

RPD

Semivolatile Organic Compounds by GC/MS - Quality Control

Units

Reporting

Limit

Result

Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch B317329 - SW-846 3546										
Blank (B317329-BLK1)				Prepared: 09	0/15/22 Anal	yzed: 09/16/2	22			
Acenaphthene	ND	0.17	mg/Kg wet							
Acenaphthylene	ND	0.17	mg/Kg wet							
Acetophenone	ND	0.34	mg/Kg wet							
Aniline	ND	0.34	mg/Kg wet							
Anthracene	ND	0.17	mg/Kg wet							
Benzidine	ND	0.66	mg/Kg wet							V-04, V-35
Benzo(a)anthracene	ND	0.17	mg/Kg wet							
Benzo(a)pyrene	ND	0.17	mg/Kg wet							
Benzo(b)fluoranthene	ND	0.17	mg/Kg wet							
Benzo(g,h,i)perylene	ND	0.17	mg/Kg wet							
Benzo(k)fluoranthene	ND	0.17	mg/Kg wet							
Benzoic Acid	ND	1.0	mg/Kg wet							
Bis(2-chloroethoxy)methane	ND	0.34	mg/Kg wet							
Bis(2-chloroethyl)ether	ND	0.34	mg/Kg wet							
Bis(2-chloroisopropyl)ether	ND	0.34	mg/Kg wet							
Bis(2-Ethylhexyl)phthalate	ND	0.34	mg/Kg wet							
-Bromophenylphenylether	ND	0.34	mg/Kg wet							
Butylbenzylphthalate	ND	0.34	mg/Kg wet							
Carbazole	ND	0.17	mg/Kg wet							
-Chloroaniline	ND	0.66	mg/Kg wet							
-Chloro-3-methylphenol	ND	0.66	mg/Kg wet							
-Chloronaphthalene	ND	0.34	mg/Kg wet							
-Chlorophenol	ND	0.34	mg/Kg wet							
-Chlorophenylphenylether	ND	0.34	mg/Kg wet							
Chrysene	ND	0.17	mg/Kg wet							
Dibenz(a,h)anthracene	ND	0.17	mg/Kg wet							V-20
Dibenzofuran	ND	0.34	mg/Kg wet							
Di-n-butylphthalate	ND	0.34	mg/Kg wet							
,2-Dichlorobenzene	ND	0.34	mg/Kg wet							
,3-Dichlorobenzene	ND	0.34	mg/Kg wet							
,4-Dichlorobenzene	ND	0.34	mg/Kg wet							
,3-Dichlorobenzidine	ND	0.17	mg/Kg wet							
,4-Dichlorophenol	ND	0.34	mg/Kg wet							
Diethylphthalate	ND	0.34	mg/Kg wet							
,4-Dimethylphenol	ND	0.34	mg/Kg wet							
Dimethylphthalate	ND	0.34	mg/Kg wet							
l,6-Dinitro-2-methylphenol	ND	0.34	mg/Kg wet							
2,4-Dinitrophenol	ND	0.66	mg/Kg wet							
2,4-Dinitrotoluene	ND	0.34	mg/Kg wet							
2,6-Dinitrotoluene	ND	0.34	mg/Kg wet							
Di-n-octylphthalate	ND	0.34	mg/Kg wet							
,2-Diphenylhydrazine/Azobenzene	ND	0.34	mg/Kg wet							
Fluoranthene	ND	0.17	mg/Kg wet							
luorene	ND	0.17	mg/Kg wet							
Iexachlorobenzene	ND	0.34	mg/Kg wet							
Iexachlorobutadiene	ND	0.34	mg/Kg wet							17.05
Mexachlorocyclopentadiene	ND	0.34	mg/Kg wet							V-05
Jexachloroethane	ND	0.34	mg/Kg wet							17.20
ndeno(1,2,3-cd)pyrene	ND	0.17	mg/Kg wet							V-20
Sophorone Mathedon Ma	ND	0.34	mg/Kg wet							
-Methylnaphthalene ?-Methylnaphthalene	ND ND	0.17 0.17	mg/Kg wet mg/Kg wet							



QUALITY CONTROL

Spike

Source

%REC

RPD

Semivolatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	KPD Limit	Notes
	Result	Limit	Omis	LCVCI	resuit	/UKEC	Limits	MD	Liiiit	110168
eatch B317329 - SW-846 3546										
lank (B317329-BLK1)				Prepared: 09	/15/22 Analy	yzed: 09/16/2	.2			
-Methylphenol	ND	0.34	mg/Kg wet							
/4-Methylphenol	ND	0.34	mg/Kg wet							
aphthalene	ND	0.17	mg/Kg wet							
-Nitroaniline	ND	0.34	mg/Kg wet							
-Nitroaniline	ND	0.34	mg/Kg wet							
-Nitroaniline	ND	0.34	mg/Kg wet							
litrobenzene	ND	0.34	mg/Kg wet							
-Nitrophenol	ND	0.34	mg/Kg wet							
-Nitrophenol	ND	0.66	mg/Kg wet							
I-Nitrosodimethylamine	ND	0.34	mg/Kg wet							
-Nitrosodiphenylamine/Diphenylamine	ND	0.34	mg/Kg wet							
-Nitrosodi-n-propylamine	ND	0.34	mg/Kg wet							
entachloronitrobenzene	ND	0.34	mg/Kg wet							
entachlorophenol	ND	0.34	mg/Kg wet							V-05
henanthrene	ND	0.17	mg/Kg wet							
henol	ND	0.34	mg/Kg wet							
yrene	ND	0.17	mg/Kg wet							
yridine	ND	0.34	mg/Kg wet							
2,4,5-Tetrachlorobenzene	ND	0.34	mg/Kg wet							
2,4-Trichlorobenzene	ND	0.34	mg/Kg wet							
4,5-Trichlorophenol	ND	0.34	mg/Kg wet							
4,6-Trichlorophenol	ND	0.34	mg/Kg wet							
urrogate: 2-Fluorophenol	4.73		mg/Kg wet	6.67		70.9	30-130			
urrogate: Phenol-d6	5.05		mg/Kg wet	6.67		75.7	30-130			
urrogate: Nitrobenzene-d5	2.99		mg/Kg wet	3.33		89.7	30-130			
urrogate: 2-Fluorobiphenyl	2.38		mg/Kg wet	3.33		71.4	30-130			
urrogate: 2,4,6-Tribromophenol	5.61		mg/Kg wet	6.67		84.2	30-130			
urrogate: p-Terphenyl-d14	3.59		mg/Kg wet	3.33		108	30-130			
CS (B317329-BS1)				Prepared: 09/	/15/22 Analy	yzed: 09/16/2	.2			
cenaphthene	1.09	0.17	mg/Kg wet	1.67		65.4	40-140			
cenaphthylene	1.17	0.17	mg/Kg wet	1.67		70.4	40-140			
cetophenone	1.25	0.34	mg/Kg wet	1.67		75.0	40-140			
niline	1.28	0.34	mg/Kg wet	1.67		76.9	10-140			
inthracene	1.21	0.17	mg/Kg wet	1.67		72.9	40-140			
enzidine	3.50	0.66	mg/Kg wet	1.67		210 *	40-140			L-02, V-04, V-3
enzo(a)anthracene	1.21	0.17	mg/Kg wet	1.67		72.5	40-140			
enzo(a)pyrene	1.17	0.17	mg/Kg wet	1.67		70.4	40-140			
enzo(b)fluoranthene	1.21	0.17	mg/Kg wet	1.67		72.4	40-140			
enzo(g,h,i)perylene	0.975	0.17	mg/Kg wet	1.67		58.5	40-140			
enzo(k)fluoranthene	1.27	0.17	mg/Kg wet	1.67		76.0	40-140			
enzoic Acid	1.15	1.0	mg/Kg wet	1.67		68.9	30-130			
is(2-chloroethoxy)methane	1.29	0.34	mg/Kg wet	1.67		77.2	40-140			
is(2-chloroethyl)ether	1.32	0.34	mg/Kg wet	1.67		79.0	40-140			
is(2-chloroisopropyl)ether	1.42	0.34	mg/Kg wet	1.67		85.1	40-140			
is(2-Ethylhexyl)phthalate	1.62	0.34	mg/Kg wet	1.67		97.4	40-140			
Bromophenylphenylether	1.37	0.34	mg/Kg wet	1.67		82.2	40-140			
utylbenzylphthalate	1.56	0.34	mg/Kg wet	1.67		93.8	40-140			
arbazole	1.20	0.17	mg/Kg wet	1.67		71.9	40-140			
-Chloroaniline	1.04	0.66	mg/Kg wet	1.67		62.6	10-140			
-Chloro-3-methylphenol	1.37	0.66	mg/Kg wet	1.67		82.1	30-130			
-Chloronaphthalene	0.996	0.34	mg/Kg wet	1.67		59.8	40-140			



QUALITY CONTROL

Semivolatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Analyte	Kesuit	Limit	OHRS	Level	Kesull	/0KEC	Limits	KLD	LIIIIII	notes
Batch B317329 - SW-846 3546										
.CS (B317329-BS1)					/15/22 Analy					
-Chlorophenol	1.26	0.34	mg/Kg wet	1.67		75.6	30-130			
-Chlorophenylphenylether	1.27	0.34	mg/Kg wet	1.67		76.0	40-140			
Chrysene	1.12	0.17	mg/Kg wet	1.67		67.1	40-140			
Dibenz(a,h)anthracene	1.21	0.17	mg/Kg wet	1.67		72.9	40-140			V-06
Dibenzofuran	1.22	0.34	mg/Kg wet	1.67		73.4	40-140			
Di-n-butylphthalate	1.30	0.34	mg/Kg wet	1.67		78.3	40-140			
,2-Dichlorobenzene ,3-Dichlorobenzene	1.13	0.34	mg/Kg wet	1.67		67.6	40-140			
,4-Dichlorobenzene	1.08	0.34 0.34	mg/Kg wet mg/Kg wet	1.67		64.8	40-140			
,3-Dichlorobenzidine	1.10	0.34	mg/Kg wet	1.67 1.67		65.7 85.9	40-140 20-140			
	1.43		mg/Kg wet							
,4-Dichlorophenol Diethylphthalate	1.26	0.34 0.34	mg/Kg wet	1.67 1.67		75.5 77.3	30-130 40-140			
,4-Dimethylphenol	1.29 1.27	0.34	mg/Kg wet	1.67		76.2	30-130			
Dimethylphthalate	1.27	0.34	mg/Kg wet	1.67		78.2	40-140			
6-Dinitro-2-methylphenol	0.750	0.34	mg/Kg wet	1.67		45.0	30-130			
,4-Dinitrophenol	0.750	0.66	mg/Kg wet	1.67		39.4	30-130			
,4-Dinitrotoluene	1.22	0.34	mg/Kg wet	1.67		73.4	40-140			
6-Dinitrotoluene	1.31	0.34	mg/Kg wet	1.67		78.6	40-140			
Di-n-octylphthalate	1.72	0.34	mg/Kg wet	1.67		103	40-140			
,2-Diphenylhydrazine/Azobenzene	1.72	0.34	mg/Kg wet	1.67		80.3	40-140			
luoranthene	1.15	0.17	mg/Kg wet	1.67		68.8	40-140			
luorene	1.19	0.17	mg/Kg wet	1.67		71.6	40-140			
Iexachlorobenzene	1.38	0.34	mg/Kg wet	1.67		82.6	40-140			
Iexachlorobutadiene	1.19	0.34	mg/Kg wet	1.67		71.3	40-140			
Lexachlorocyclopentadiene	0.390	0.34	mg/Kg wet	1.67		23.4 *	40-140			L-04, V-05
lexachloroethane	0.934	0.34	mg/Kg wet	1.67		56.0	40-140			,
ndeno(1,2,3-cd)pyrene	1.19	0.17	mg/Kg wet	1.67		71.2	40-140			V-06
sophorone	1.34	0.34	mg/Kg wet	1.67		80.4	40-140			
-Methylnaphthalene	1.08	0.17	mg/Kg wet	1.67		64.6	40-140			
-Methylnaphthalene	1.26	0.17	mg/Kg wet	1.67		75.4	40-140			
-Methylphenol	1.28	0.34	mg/Kg wet	1.67		77.0	30-130			
/4-Methylphenol	1.30	0.34	mg/Kg wet	1.67		77.8	30-130			
Taphthalene	1.18	0.17	mg/Kg wet	1.67		71.0	40-140			
-Nitroaniline	1.35	0.34	mg/Kg wet	1.67		81.1	40-140			
-Nitroaniline	1.19	0.34	mg/Kg wet	1.67		71.4	30-140			
-Nitroaniline	1.27	0.34	mg/Kg wet	1.67		76.3	40-140			
litrobenzene	1.20	0.34	mg/Kg wet	1.67		72.0	40-140			
-Nitrophenol	1.23	0.34	mg/Kg wet	1.67		73.5	30-130			
-Nitrophenol	1.45	0.66	mg/Kg wet	1.67		87.2	30-130			
I-Nitrosodimethylamine	1.12	0.34	mg/Kg wet	1.67		67.3	40-140			
I-Nitrosodiphenylamine/Diphenylamine	1.38	0.34	mg/Kg wet	1.67		82.5	40-140			
I-Nitrosodi-n-propylamine	1.36	0.34	mg/Kg wet	1.67		81.3	40-140			
entachloronitrobenzene	1.29	0.34	mg/Kg wet	1.67		77.4	40-140			
entachlorophenol	1.10	0.34	mg/Kg wet	1.67		65.9	30-130			V-05
henanthrene	1.20	0.17	mg/Kg wet	1.67		71.9	40-140			
henol	1.26	0.34	mg/Kg wet	1.67		75.4	30-130			
yrene	1.32	0.17	mg/Kg wet	1.67		79.4	40-140			
yridine	0.711	0.34	mg/Kg wet	1.67		42.6	30-140			
,2,4,5-Tetrachlorobenzene	1.14	0.34	mg/Kg wet	1.67		68.4	40-140			
,2,4-Trichlorobenzene	1.16	0.34	mg/Kg wet	1.67		69.7	40-140			
,4,5-Trichlorophenol	1.28	0.34	mg/Kg wet	1.67		77.1	30-130			



QUALITY CONTROL

Semivolatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes	
Batch B317329 - SW-846 3546											_
LCS (B317329-BS1)				Prepared: 09	0/15/22 Anal	yzed: 09/16/2	22				_
Surrogate: 2-Fluorophenol	5.08		mg/Kg wet	6.67		76.1	30-130				-
Surrogate: Phenol-d6	5.55		mg/Kg wet	6.67		83.3	30-130				
Surrogate: Nitrobenzene-d5	3.31		mg/Kg wet	3.33		99.2	30-130				
Surrogate: 2-Fluorobiphenyl	2.67		mg/Kg wet	3.33		80.0	30-130				
Surrogate: 2,4,6-Tribromophenol	6.46		mg/Kg wet	6.67		96.8	30-130				
Surrogate: p-Terphenyl-d14	3.36		mg/Kg wet	3.33		101	30-130				
LCS Dup (B317329-BSD1)				Prepared: 09	0/15/22 Anal	yzed: 09/16/2	22				
Acenaphthene	1.12	0.17	mg/Kg wet	1.67		67.2	40-140	2.78	30		-
Acenaphthylene	1.19	0.17	mg/Kg wet	1.67		71.6	40-140	1.66	30		
Acetophenone	1.26	0.34	mg/Kg wet	1.67		75.7	40-140	0.956	30		
Aniline	1.32	0.34	mg/Kg wet	1.67		79.4	10-140	3.15	50		†
Anthracene	1.25	0.17	mg/Kg wet	1.67		74.8	40-140	2.68	30		
Benzidine	4.20	0.66	mg/Kg wet	1.67		252 *	40-140	18.3	30	L-02, V-04, V-35	
Benzo(a)anthracene	1.25	0.17	mg/Kg wet	1.67		75.0	40-140	3.47	30		
Benzo(a)pyrene	1.26	0.17	mg/Kg wet	1.67		75.4	40-140	6.89	30		
Benzo(b)fluoranthene	1.15	0.17	mg/Kg wet	1.67		69.2	40-140	4.52	30		
Benzo(g,h,i)perylene	1.15	0.17	mg/Kg wet	1.67		69.2	40-140	16.8	30		
Benzo(k)fluoranthene	1.20	0.17	mg/Kg wet	1.67		71.9	40-140	5.46	30		
Benzoic Acid	1.13	1.0	mg/Kg wet	1.67		67.9	30-130	1.52	50		
Bis(2-chloroethoxy)methane	1.29	0.34	mg/Kg wet	1.67		77.3	40-140	0.129	30		
Bis(2-chloroethyl)ether	1.31	0.34	mg/Kg wet	1.67		78.8	40-140	0.304	30		
Bis(2-chloroisopropyl)ether	1.42	0.34	mg/Kg wet	1.67		85.3	40-140	0.211	30		
Bis(2-Ethylhexyl)phthalate	1.62	0.34	mg/Kg wet	1.67		97.5	40-140	0.0411	30		
4-Bromophenylphenylether	1.37	0.34	mg/Kg wet	1.67		82.1	40-140	0.146	30		
Butylbenzylphthalate	1.59	0.34	mg/Kg wet	1.67		95.1	40-140	1.44	30		
Carbazole	1.26	0.17	mg/Kg wet	1.67		75.4	40-140	4.81	30		
4-Chloroaniline	1.06	0.66	mg/Kg wet	1.67		63.4	10-140	1.21	30		†
4-Chloro-3-methylphenol	1.34	0.66	mg/Kg wet	1.67		80.7	30-130	1.72	30		,
2-Chloronaphthalene	1.08	0.34	mg/Kg wet	1.67		64.5	40-140	7.66	30		
2-Chlorophenol	1.29	0.34	mg/Kg wet	1.67		77.5	30-130	2.40	30		
4-Chlorophenylphenylether	1.37	0.34	mg/Kg wet	1.67		82.3	40-140	7.88	30		
Chrysene	1.22	0.17	mg/Kg wet	1.67		73.3	40-140	8.83	30		
Dibenz(a,h)anthracene	1.38	0.17	mg/Kg wet	1.67		82.6	40-140	12.6	30	V-06	
Dibenzofuran		0.34	mg/Kg wet	1.67		77.4	40-140	5.33	•	• 00	
Di-n-butylphthalate	1.29	0.34	mg/Kg wet	1.67		82.1	40-140	4.76	30		
1,2-Dichlorobenzene	1.37	0.34	mg/Kg wet	1.67		67.1	40-140	0.743	30		
1,3-Dichlorobenzene	1.12	0.34	mg/Kg wet	1.67		63.7	40-140	1.68	30		
1,4-Dichlorobenzene	1.06	0.34	mg/Kg wet				40-140	0.764			
3,3-Dichlorobenzidine	1.09	0.34	mg/Kg wet	1.67 1.67		65.2 94.0		0.764 8.94	30 50		†
2,4-Dichlorophenol	1.57	0.17	mg/Kg wet				20-140		50		1
Diethylphthalate	1.27	0.34	mg/Kg wet	1.67		76.1	30-130	0.897	30		
• •	1.37			1.67		82.4	40-140	6.46	30		
2,4-Dimethylphenol	1.27	0.34	mg/Kg wet	1.67		76.2	30-130	0.0525	30		
Dimethylphthalate	1.36	0.34	mg/Kg wet	1.67		81.5	40-140	4.16	30		
4,6-Dinitro-2-methylphenol	0.744	0.34	mg/Kg wet	1.67		44.7	30-130	0.758	30		
2,4-Dinitrophenol	0.649	0.66	mg/Kg wet	1.67		38.9	30-130	1.23	30		
2,4-Dinitrotoluene	1.33	0.34	mg/Kg wet	1.67		80.0	40-140	8.58	30		
2,6-Dinitrotoluene	1.40	0.34	mg/Kg wet	1.67		83.9	40-140	6.53	30		
Di-n-octylphthalate	1.60	0.34	mg/Kg wet	1.67		96.1	40-140	7.20	30		
1,2-Diphenylhydrazine/Azobenzene	1.21	0.34	mg/Kg wet	1.67		72.6	40-140	10.0	30		
Fluoranthene	1.21	0.17	mg/Kg wet	1.67		72.5	40-140	5.26	30		
Fluorene	1.29	0.17	mg/Kg wet	1.67		77.6	40-140	8.07	30		



QUALITY CONTROL

Semivolatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B317329 - SW-846 3546	Tiosun	24111		20,01	Troduct	, vices	Zimito			11000
LCS Dup (B317329-BSD1)				Prepared: 09	0/15/22 Anal	vzed: 09/16/2	22			
Hexachlorobenzene	1.43	0.34	mg/Kg wet	1.67	,,	85.6	40-140	3.57	30	
Hexachlorobutadiene	1.20	0.34	mg/Kg wet	1.67		72.2	40-140	1.25	30	
Hexachlorocyclopentadiene	0.416	0.34	mg/Kg wet	1.67		25.0 *	40-140	6.62	30	L-04, V-05
Hexachloroethane	0.914	0.34	mg/Kg wet	1.67		54.8	40-140	2.13	30	, , , , , ,
Indeno(1,2,3-cd)pyrene	1.39	0.17	mg/Kg wet	1.67		83.1	40-140	15.4	30	V-06
Isophorone	1.29	0.34	mg/Kg wet	1.67		77.5	40-140	3.60	30	
1-Methylnaphthalene	1.06	0.17	mg/Kg wet	1.67		63.4	40-140	1.94	30	
2-Methylnaphthalene	1.24	0.17	mg/Kg wet	1.67		74.7	40-140	0.986	30	
2-Methylphenol	1.31	0.34	mg/Kg wet	1.67		78.6	30-130	2.00	30	
3/4-Methylphenol	1.32	0.34	mg/Kg wet	1.67		79.4	30-130	2.03	30	
Naphthalene	1.18	0.17	mg/Kg wet	1.67		70.9	40-140	0.254	30	
2-Nitroaniline	1.40	0.34	mg/Kg wet	1.67		84.0	40-140	3.47	30	
3-Nitroaniline	1.21	0.34	mg/Kg wet	1.67		72.8	30-140	1.94	30	
4-Nitroaniline	1.40	0.34	mg/Kg wet	1.67		83.8	40-140	9.32	30	
Nitrobenzene	1.17	0.34	mg/Kg wet	1.67		70.2	40-140	2.59	30	
2-Nitrophenol	1.24	0.34	mg/Kg wet	1.67		74.2	30-130	0.894	30	
4-Nitrophenol	1.46	0.66	mg/Kg wet	1.67		87.7	30-130	0.549	50	
N-Nitrosodimethylamine	1.04	0.34	mg/Kg wet	1.67		62.4	40-140	7.49	30	
N-Nitrosodiphenylamine/Diphenylamine	1.32	0.34	mg/Kg wet	1.67		79.4	40-140	3.85	30	
N-Nitrosodi-n-propylamine	1.36	0.34	mg/Kg wet	1.67		81.7	40-140	0.417	30	
Pentachloronitrobenzene	1.33	0.34	mg/Kg wet	1.67		79.7	40-140	3.00	30	
Pentachlorophenol	1.00	0.34	mg/Kg wet	1.67		60.2	30-130	8.97	30	V-05
Phenanthrene	1.24	0.17	mg/Kg wet	1.67		74.6	40-140	3.74	30	
Phenol	1.27	0.34	mg/Kg wet	1.67		76.1	30-130	0.950	30	
Pyrene	1.37	0.17	mg/Kg wet	1.67		82.3	40-140	3.51	30	
Pyridine	0.653	0.34	mg/Kg wet	1.67		39.2	30-140	8.41	30	
1,2,4,5-Tetrachlorobenzene	1.17	0.34	mg/Kg wet	1.67		70.2	40-140	2.57	30	
1,2,4-Trichlorobenzene	1.16	0.34	mg/Kg wet	1.67		69.5	40-140	0.345	30	
2,4,5-Trichlorophenol	1.36	0.34	mg/Kg wet	1.67		81.5	30-130	5.62	30	
2,4,6-Trichlorophenol	1.32	0.34	mg/Kg wet	1.67		79.3	30-130	4.83	30	
Surrogate: 2-Fluorophenol	5.04		mg/Kg wet	6.67		75.6	30-130			
Surrogate: Phenol-d6	5.44		mg/Kg wet	6.67		81.6	30-130			
Surrogate: Nitrobenzene-d5	3.17		mg/Kg wet	3.33		95.2	30-130			
Surrogate: 2-Fluorobiphenyl	2.70		mg/Kg wet	3.33		81.2	30-130			
Surrogate: 2,4,6-Tribromophenol	6.75		mg/Kg wet	6.67		101	30-130			
Surrogate: p-Terphenyl-d14	3.40		mg/Kg wet	3.33		102	30-130			



QUALITY CONTROL

Spike

Source

%REC

RPD

Organochloride Pesticides by GC/ECD - Quality Control

analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
atch B317120 - SW-846 3546										
lank (B317120-BLK1)				Prepared: 09	/13/22 Analy	yzed: 09/15/2	22			
pha-Chlordane	ND	0.0050	mg/Kg wet							
pha-Chlordane [2C]	ND	0.0050	mg/Kg wet							
amma-Chlordane	ND	0.0050	mg/Kg wet							
amma-Chlordane [2C]	ND	0.0050	mg/Kg wet							
lachlor	ND	0.020	mg/Kg wet							
lachlor [2C]	ND	0.020	mg/Kg wet							
ldrin	ND	0.0050	mg/Kg wet							
ldrin [2C]	ND	0.0050	mg/Kg wet							
pha-BHC	ND	0.0050	mg/Kg wet							
pha-BHC [2C]	ND	0.0050	mg/Kg wet							
eta-BHC	ND ND	0.0050	mg/Kg wet							
eta-BHC [2C]	ND ND	0.0050	mg/Kg wet							
elta-BHC		0.0050	mg/Kg wet							
elta-BHC [2C]	ND	0.0050	mg/Kg wet							
amma-BHC (Lindane)	ND									
amma-BHC (Lindane) amma-BHC (Lindane) [2C]	ND	0.0020	mg/Kg wet							
, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	ND	0.0020	mg/Kg wet							
hlordane	ND	0.020	mg/Kg wet							
hlordane [2C]	ND	0.020	mg/Kg wet							
4'-DDD	ND	0.0040	mg/Kg wet							
4'-DDD [2C]	ND	0.0040	mg/Kg wet							
4'-DDE	ND	0.0040	mg/Kg wet							
4'-DDE [2C]	ND	0.0040	mg/Kg wet							
4'-DDT	ND	0.0040	mg/Kg wet							
4'-DDT [2C]	ND	0.0040	mg/Kg wet							
ieldrin	ND	0.0040	mg/Kg wet							
ieldrin [2C]	ND	0.0040	mg/Kg wet							
ndosulfan I	ND	0.0050	mg/Kg wet							
ndosulfan I [2C]	ND	0.0050	mg/Kg wet							
ndosulfan II	ND	0.0080	mg/Kg wet							
ndosulfan II [2C]	ND	0.0080	mg/Kg wet							
ndosulfan Sulfate	ND	0.0080	mg/Kg wet							
ndosulfan Sulfate [2C]	ND	0.0080	mg/Kg wet							
ndrin	ND	0.0080	mg/Kg wet							
ndrin [2C]	ND	0.0080	mg/Kg wet							
ndrin Aldehyde	ND	0.0080	mg/Kg wet							
ndrin Aldehyde [2C]	ND	0.0080	mg/Kg wet							
ndrin Ketone	ND	0.0080	mg/Kg wet							
ndrin Ketone [2C]	ND	0.0080	mg/Kg wet							
eptachlor	ND	0.0050	mg/Kg wet							
eptachlor [2C]	ND	0.0050	mg/Kg wet							
eptachlor Epoxide	ND	0.0050	mg/Kg wet							
eptachlor Epoxide [2C]	ND	0.0050	mg/Kg wet							
exachlorobenzene	ND	0.0060	mg/Kg wet							
exachlorobenzene [2C]	ND ND	0.0060	mg/Kg wet							
lethoxychlor		0.050	mg/Kg wet							
lethoxychlor [2C]	ND	0.050	mg/Kg wet							
	ND									
oxaphene oxaphene [2C]	ND ND	0.10 0.10	mg/Kg wet mg/Kg wet							
urrogate: Decachlorobiphenyl	0.142	0.10	mg/Kg wet	0.200		71.0	30-150			
urrogate: Decachlorobiphenyl [2C]	0.142 0.154			0.200		77.0	30-150			
urrogate: Decacniorobiphenyi [2C] urrogate: Tetrachloro-m-xylene	0.134 0.125		mg/Kg wet mg/Kg wet	0.200		62.7	30-150 30-150			
urrogate: Tetrachloro-m-xylene urrogate: Tetrachloro-m-xylene [2C]	0.125 0.130		mg/Kg wet mg/Kg wet	0.200		65.0	30-150 30-150			



QUALITY CONTROL

Organochloride Pesticides by GC/ECD - Quality Control

Name			Reporting		Spike	Source		%REC		RPD	
Command	Analyte	Result		Units			%REC		RPD		Notes
	Batch B317120 - SW-846 3546										
lighe-Chlorden [2C] 0,089 0,005 mg/kg wet 0,100 88.5 40-140 camma-Chlordane 0,72 0,035 mg/kg wet 0,100 88.5 40-140 Nachlor 0,066 0,020 mg/kg wet 0,100 86.0 40-140 Nachlor 0,093 0,020 mg/kg wet 0,100 95.0 40-140 Nachlor 0,093 0,005 mg/kg wet 0,100 95.0 40-140 Nachlor 0,076 0,005 mg/kg wet 0,100 95.0 40-140 Nachlor 0,076 0,005 mg/kg wet 0,100 95.0 40-140 Nachlor 0,076 0,005 mg/kg wet 0,100 95.2 40-140 Nachlor 0,076 0,005 mg/kg wet 0,100 95.2 40-140 Nachlor 0,076 0,005 mg/kg wet 0,100 85.2 40-140 Nachlor 0,014 0,005 mg/kg wet 0,100 85.2 4	.CS (B317120-BS1)			:	Prepared: 09	/13/22 Analy	zed: 09/15/2	2			
Samma-Chloridane 10.072 0.055 mg/kg wet 0.100 72.1 40.140 4	lpha-Chlordane	0.076	0.0050	mg/Kg wet	0.100		75.9	40-140			
Commanication Commanicatio	lpha-Chlordane [2C]	0.089	0.0050	mg/Kg wet	0.100		88.5	40-140			
Nachlor 0.096 0.020 mg/kg wet 0.100 96.0 40-140 Nachlor [2C] 0.093 0.020 mg/kg wet 0.100 92.6 40-140 Nachlor [2C] 0.085 0.050 mg/kg wet 0.100 75.4 40-140 Nachlor [2C] 0.085 0.050 mg/kg wet 0.100 75.8 40-140 Nachlor [2C] 0.085 0.050 mg/kg wet 0.100 75.8 40-140 Nachlor [2C] 0.081 0.050 mg/kg wet 0.100 75.1 40-140 Nachlor [2C] 0.081 0.050 mg/kg wet 0.100 75.1 40-140 Nachlor [2C] 0.081 0.050 mg/kg wet 0.100 75.1 40-140 Nachlor [2C] 0.081 0.050 mg/kg wet 0.100 75.1 40-140 Nachlor [2C] 0.081 0.050 mg/kg wet 0.100 75.1 40-140 Nachlor [2C] 0.081 0.050 mg/kg wet 0.100 81.2 40-140 Nachlor [2C] 0.081 0.080 0.0920 mg/kg wet 0.100 81.2 40-140 Nachlor [2C] 0.083 0.0920 mg/kg wet 0.100 82.7 40-140 Nachlor [2C] 0.083 0.0920 mg/kg wet 0.100 82.7 40-140 Nachlor [2C] 0.084 0.0920 mg/kg wet 0.100 85.3 40-140 Nachlor [2C] 0.095 0.0940 mg/kg wet 0.100 85.3 40-140 Nachlor [2C] 0.096 0.0940 mg/kg wet 0.100 85.3 40-140 Nachlor [2C] 0.096 0.0940 mg/kg wet 0.100 85.3 40-140 Nachlor [2C] 0.096 0.0940 mg/kg wet 0.100 85.3 40-140 Nachlor [2C] 0.096 0.0940 mg/kg wet 0.100 85.3 40-140 Nachlor [2C] 0.096 0.0940 mg/kg wet 0.100 85.3 40-140 Nachlor [2C] 0.096 0.0940 mg/kg wet 0.100 85.6 40-140 Nachlor [2C] 0.096 0.0940 mg/kg wet 0.100 85.6 40-140 Nachlor [2C] 0.096 0.0940 mg/kg wet 0.100 85.6 40-140 Nachlor [2C] 0.096 0.0940 mg/kg wet 0.100 85.6 40-140 Nachlor [2C] 0.096 0.0940 mg/kg wet 0.100 85.6 40-140 Nachlor [2C] 0.096 0.0940 mg/kg wet 0.100 85.6 40-140 Nachlor [2C] 0.096 0.0940 mg/kg wet 0.100 85.6 40-140 Nachlor [2C] 0.096 0.0940 mg/kg wet 0.100 85.6 40-140 Nachlor [2C] 0.096 0.0940 mg/kg wet 0.100 85.6 40-140 Nachlor [2C]	amma-Chlordane	0.072	0.0050	mg/Kg wet	0.100		72.1	40-140			
Machior	amma-Chlordane [2C]	0.089	0.0050	mg/Kg wet	0.100		89.4	40-140			
Ndrin C	Machlor	0.096	0.020	mg/Kg wet	0.100		96.0	40-140			
Natin [2C] 0.085 0.0050 mg/K gwet 0.100 85.0 40-140 hgha-BHC 0.076 0.0050 mg/K gwet 0.100 75.8 40-140 hgha-BHC (2C] 0.080 0.0050 mg/K gwet 0.100 75.1 40-140 hgha-BHC (2C] 0.081 0.0050 mg/K gwet 0.100 75.1 40-140 hgha-BHC (2C] 0.081 0.0050 mg/K gwet 0.100 81.0 40-140 hgha-BHC (2C] 0.081 0.0050 mg/K gwet 0.100 81.0 40-140 hgha-BHC (2C] 0.081 0.0050 mg/K gwet 0.100 81.0 40-140 hgha-BHC (2C] 0.081 0.0050 mg/K gwet 0.100 81.2 40-140 hgha-BHC (2C] 0.081 0.0050 mg/K gwet 0.100 81.2 40-140 hgha-BHC (2C] 0.081 0.0050 mg/K gwet 0.100 81.2 40-140 hgha-BHC (2C] 0.083 0.0020 mg/K gwet 0.100 82.7 40-140 hgha-BHC (2C] 0.083 0.0020 mg/K gwet 0.100 82.7 40-140 hgha-BHC (2C] 0.083 0.0020 mg/K gwet 0.100 82.7 40-140 hgha-BHC (2C] 0.097 0.0040 mg/K gwet 0.100 85.3 40-140 hgha-BHC (2C] 0.097 0.0040 mg/K gwet 0.100 85.3 40-140 hgha-BHC (2C] 0.097 0.0040 mg/K gwet 0.100 85.3 40-140 hgha-BHC (2C] 0.097 0.0040 mg/K gwet 0.100 85.3 40-140 hgha-BHC (2C] 0.097 0.0040 mg/K gwet 0.100 85.3 40-140 hgha-BHC (2C] 0.097 0.0040 mg/K gwet 0.100 85.3 40-140 hgha-BHC (2C] 0.097 0.0040 mg/K gwet 0.100 85.3 40-140 hgha-BHC (2C] 0.097 0.0040 mg/K gwet 0.100 85.3 40-140 hgha-BHC (2C] 0.097 0.0040 mg/K gwet 0.100 85.3 40-140 hgha-BHC (2C] 0.097 0.0040 mg/K gwet 0.100 85.3 40-140 hgha-BHC (2C] 0.095 0.0040 mg/K gwet 0.100 85.3 40-140 hgha-BHC (2C] 0.095 0.0040 mg/K gwet 0.100 85.3 40-140 hgha-BHC (2C] 0.095 0.0040 mg/K gwet 0.100 85.4 40-140 hgha-BHC (2C] 0.095 0.0040 mg/K gwet 0.100 85.7 40-140 hgha-BHC (2C] 0.095 0.0040 mg/K gwet 0.100 85.7 40-140 hgha-BHC (2C] 0.095 0.0040 mg/K gwet 0.100 85.7 40-140 hgha-BHC (2C] 0.095 0.0040 mg/K gwet 0.100 85.7 40-140 hgha-BHC (2C] 0.095 0.0040 mg/K gwet 0.100 85.7 40-140 hgha-BHC (2C] 0.095 0.0040 mg/K gwet 0.100 85.7 40-140 hgha-BHC (2C] 0.095 0.0040 mg/K gwet 0.100 85.0 40-140 hgha-BHC (2C] 0.095 0.0040 mg/K gwet 0.100 85.0 40-140 hgha-BHC (2C] 0.095 0.0040 mg/K gwet 0.100 85.0 40-140 hgha-BHC (2C] 0.095 0.0040 mg/K gwet 0.100 85.0 40-140 hgha-BHC (2C] 0.095 0.0040 mg/K gwet 0.100 85.0 40-140 hgha-BHC (2C] 0.095	Alachlor [2C]	0.093	0.020	mg/Kg wet	0.100		92.6	40-140			
lipha-BHC 0.076 0.005 mg/Kg wet 0.100 75.8 40-140 lipha-BHC [CC] 0.080 0.0050 mg/Kg wet 0.100 80.2 40-140 seta-BHC [CC] 0.081 0.005 mg/Kg wet 0.100 75.1 40-140 lelta-BHC [CC] 0.081 0.005 mg/Kg wet 0.100 75.5 40-140 lelta-BHC [CC] 0.081 0.005 mg/Kg wet 0.100 75.5 40-140 lelta-BHC [CIndane) 0.080 0.0020 mg/Kg wet 0.100 81.2 40-140 leta-BHC [Lindane) 0.086 0.0020 mg/Kg wet 0.100 82.7 40-140 leta-BHC [Lindane] 0.086 0.0040 mg/Kg wet 0.100 82.7 40-140 leta-BHC [Lindane] 0.086 0.0040 mg/Kg wet 0.100 82.7 40-140 leta-DDT 0.096 0.097 0.0040 mg/Kg wet 0.100 85.3 40-140 leta-DDT 0.098 0.098	Aldrin	0.076	0.0050	mg/Kg wet	0.100		76.4	40-140			
	Aldrin [2C]	0.085	0.0050	mg/Kg wet	0.100		85.0	40-140			
Delia BHC [2C]	lpha-BHC		0.0050	mg/Kg wet	0.100		75.8	40-140			
Note	lpha-BHC [2C]		0.0050	mg/Kg wet	0.100		80.2	40-140			
Deta-BHC [2C]			0.0050								
Relia BHC 0,077 0,005 mg/kg wet 0,100 76.5 40-140	eta-BHC [2C]		0.0050								
Part											
Samma-BHC (Lindane) 0.080 0.0020 mg/Kg wet 0.100 80.2 40-140	elta-BHC [2C]										
Samma-BHC (Lindane) [2C]											
1.4-DDD											
A - DDD [2C]			0.0040								
1,4'-DDE	.4'-DDD [2C]		0.0040								
At-DDE [2C] 0.097 0.0040 mg/Kg wet 0.100 96.5 40-140 At-DDT 0.084 0.0040 mg/Kg wet 0.100 83.7 40-140 At-DDT [2C] 0.091 0.0040 mg/Kg wet 0.100 91.4 40-140 Dieldrin [2C] 0.096 0.0040 mg/Kg wet 0.100 95.6 40-140 Bicklarin [2C] 0.096 0.0050 mg/Kg wet 0.100 76.1 40-140 Bicklarin [2C] 0.087 0.0050 mg/Kg wet 0.100 76.1 40-140 Bicklarin [2C] 0.087 0.0050 mg/Kg wet 0.100 75.8 40-140 Bicklash II [2C] 0.086 0.0080 mg/Kg wet 0.100 75.8 40-140 Bicklash II [2C] 0.086 0.0080 mg/Kg wet 0.100 86.3 40-140 Bicklash II [2C] 0.088 0.0080 mg/Kg wet 0.100 87.8 40-140 Bicklash II [2C] 0.088 0.0080 mg/Kg wet 0.100 87.8 40-140 Bicklash II [2C] 0.088											
1.4'-DDT											
1.00											
Dieldrin											
Dieldrin [2C] 0.096 0.0040 mg/kg wet 0.100 95.6 40-140 Endosulfan I 0.076 0.0050 mg/kg wet 0.100 76.1 40-140 Endosulfan II 0.087 0.0080 mg/kg wet 0.100 86.7 40-140 Endosulfan II 0.076 0.0080 mg/kg wet 0.100 75.8 40-140 Endosulfan Sulfate 0.086 0.0080 mg/kg wet 0.100 86.3 40-140 Endosulfan Sulfate 0.076 0.0080 mg/kg wet 0.100 76.5 40-140 Endosulfan Sulfate [2C] 0.088 0.0080 mg/kg wet 0.100 87.8 40-140 Endrin 0.081 0.0080 mg/kg wet 0.100 87.8 40-140 Endrin Aldehyde 0.093 0.0080 mg/kg wet 0.100 92.8 40-140 Endrin Ketone 0.082 0.0080 mg/kg wet 0.100 92.0 40-140 Endrin Ketone [2C] 0.088 0.0080											
Endosulfan I 0,076 0,0050 mg/Kg wet 0,100 76.1 40-140											
Sendosulfan I [2C]											
Endosulfan II 0.076 0.0080 mg/Kg wet 0.100 75.8 40-140 86.3 40-140 86.0081 mg/Kg wet 0.100 mg/Kg wet 0.100 76.5 40-140 86.0081 mg/Kg wet 0.100 87.8 40-140 87.8 40-140 87.8 87.8 40-140 87.8 87.8 40-140 87.8 87.8 40-140 87.8 87.8 40-140 87.8 87.8 40-140 87.8 87.8 40-140 87.8 87.8 40-140 87.8 87.8 40-140 87.8 87.8 87.8 40-140 87.8 87.8 87.8 87.8 87.8 87.8 87.8 87.											
Endosulfan II [2C] 0.086 0.0080 mg/Kg wet 0.100 86.3 40-140 mg/Kg wet 0.100 76.5 40-140 mg/Kg wet 0.100 76.5 40-140 mg/Kg wet 0.100 87.8 40-140 mg/Kg wet 0.100 92.8 40-140 mg/Kg wet 0.100 92.0 40-140 mg/Kg wet 0.100 82.1 40-140 mg/Kg wet 0.100 mg/Kg wet 0.100 82.1 40-140 mg/Kg wet 0.100 mg/Kg wet 0.100 87.6 40-140 mg/Kg wg/Kg wet 0.100 87.8 40-140 mg/Kg wg/Kg wg											
Endosulfan Sulfate 0.076 0.0080 mg/Kg wet 0.100 76.5 40-140 endosulfan Sulfate [2C] 0.088 0.0080 mg/Kg wet 0.100 87.8 40-140 endrin 0.081 0.0080 mg/Kg wet 0.100 81.0 40-140 endrin [2C] 0.093 0.0080 mg/Kg wet 0.100 92.8 40-140 endrin Aldehyde 0.073 0.0080 mg/Kg wet 0.100 73.2 40-140 endrin Aldehyde [2C] 0.092 0.0080 mg/Kg wet 0.100 92.0 40-140 endrin Ketone 0.082 0.0080 mg/Kg wet 0.100 82.1 40-140 endrin Ketone [2C] 0.088 0.0080 mg/Kg wet 0.100 82.1 40-140 endrin Ketone [2C] 0.088 0.0080 mg/Kg wet 0.100 87.6 40-140 endrin Ketone [2C] 0.078 0.0050 mg/Kg wet 0.100 87.6 40-140 endrin Ketone [2C] 0.086 0.0050 mg/Kg wet 0.100 87.6 40-140 endrin Ketone [2C] 0.086 0.0050 mg/Kg wet 0.100 86.0 40-140 endrin Ketone [2C] 0.086 0.0050 mg/Kg wet 0.100 86.0 40-140 endrin Ketone [2C] 0.086 0.0050 mg/Kg wet 0.100 86.0 40-140 endrin Ketone Endrin Ketone Endrin Ketone 0.078 0.0050 mg/Kg wet 0.100 86.0 40-140 endrin Ketone Endrin Ketone 0.078 0.0050 mg/Kg wet 0.100 86.0 40-140 endrin Ketone Endrin Ketone 0.078 0.0050 mg/Kg wet 0.100 86.0 40-140 endrin Ketone Endrin Ketone 0.078 0.0050 mg/Kg wet 0.100 86.0 40-140 endrin Ketone Endrin Ketone 0.078 0.0050 mg/Kg wet 0.100 86.0 40-140 endrin Ketone Endrin Ketone 0.078 0.0050 mg/Kg wet 0.100 86.0 40-140 endrin Ketone Endrin Ketone 0.078 0.0050 mg/Kg wet 0.100 86.0 40-140 endrin Ketone Endrin Ketone 0.078 0.0050 mg/Kg wet 0.100 86.0 40-140 endrin Ketone 0.078 0.0050 mg/Kg wet 0.100 86.0 40-140 endrin Ketone 0.078 0.0050 mg/Kg wet 0.100 86.0 40-140 endrin Ketone 0.078 0.0050 mg/Kg wet 0.100 86.0 40-140 endrin Ketone 0.078 0.0050 mg/Kg wet 0.100 86.0 40-140 endrin Ketone 0.078 0.0050 mg/Kg wet 0.100 86.0 40-140 endrin Ketone 0.078 0.0050 mg/Kg wet 0.100 86.0 40-140 endrin Ketone 0.078 0.0050 mg/Kg wet 0.100 86.0 40-140 endrin Ketone 0.078 0.0050 mg/Kg wet 0.100 86.0 40-140 endrin Ketone 0.078 0.0050 mg/Kg wet 0.100 86.0 40-140 endrin Ketone 0.078 0.0050 mg/Kg wet 0.100 86.0 40-140 endrin Ketone 0.078 0.0050 mg/Kg wet 0.100 86.0 40-140 endrin Ketone 0.078 0.0050 mg/Kg wet 0.100 86.0 40-140											
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Endrin [2C] 0.081 0.0080 mg/Kg wet 0.100 81.0 40-140 0.093 0.0080 mg/Kg wet 0.100 92.8 40-140 0.093 0.0080 mg/Kg wet 0.100 73.2 40-140 0.093 0.0080 mg/Kg wet 0.100 73.2 40-140 0.093 0.0080 mg/Kg wet 0.100 92.0 40-140 0.093 0.0080 mg/Kg wet 0.100 92.0 40-140 0.093 0.0080 mg/Kg wet 0.100 82.1 40-140 0.093 0.0080 mg/Kg wet 0.100 82.1 40-140 0.093 0.0080 mg/Kg wet 0.100 82.1 40-140 0.093 0.0080 mg/Kg wet 0.100 87.6 40-140 0.093 0.093 0.093 0.093 0.093 0.093 mg/Kg wet 0.100 87.6 40-140 0.093 0.093 0.093 0.093 0.093 mg/Kg wet 0.100 86.0 40-140 0.093 0.093 0.093 0.093 0.093 0.093 mg/Kg wet 0.100 86.0 40-140 0.093 0.093 0.093 0.093 0.093 0.093 mg/Kg wet 0.100 86.0 40-140 0.093											
Endrin [2C] 0.093 0.0080 mg/Kg wet 0.100 92.8 40-140 Endrin Aldehyde 0.073 0.0080 mg/Kg wet 0.100 73.2 40-140 Endrin Aldehyde [2C] 0.092 0.0080 mg/Kg wet 0.100 92.0 40-140 Endrin Ketone 0.082 0.0080 mg/Kg wet 0.100 82.1 40-140 Endrin Ketone [2C] 0.088 0.0080 mg/Kg wet 0.100 87.6 40-140 Endrin Ketone [2C] 0.078 0.0050 mg/Kg wet 0.100 78.3 40-140 Endrin Ketone [2C] 0.086 0.0050 mg/Kg wet 0.100 78.3 40-140 Endrin Ketone [2C] 0.086 0.0050 mg/Kg wet 0.100 78.3 40-140 Endrin Ketone [2C] 0.086 0.0050 mg/Kg wet 0.100 78.3 40-140 Endrin Ketone [2C] 0.086 0.0050 mg/Kg wet 0.100 78.3 40-140 Endrin Ketone [2C] 0.086 0.0050 mg/Kg wet 0.100 78.3 40-140 Endrin Ketone [2C] 0.086 0.0050 mg/Kg wet 0.100 78.3 40-140 Endrin Ketone [2C] 0.086 0.0050 mg/Kg wet 0.100 78.1 40-140											
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Endrin Aldehyde [2C] 0.092 0.0080 mg/Kg wet 0.100 92.0 40-140 Endrin Ketone 0.082 0.0080 mg/Kg wet 0.100 82.1 40-140 Endrin Ketone [2C] 0.088 0.0080 mg/Kg wet 0.100 87.6 40-140 Heptachlor 0.078 0.0050 mg/Kg wet 0.100 78.3 40-140 Heptachlor [2C] 0.086 0.0050 mg/Kg wet 0.100 86.0 40-140 Heptachlor Epoxide 0.078 0.0050 mg/Kg wet 0.100 78.1 40-140											
Endrin Ketone 0.082 0.080 mg/Kg wet 0.100 82.1 do-140 Endrin Ketone [2C] 0.088 0.0080 mg/Kg wet 0.100 87.6 do-140 Heptachlor 0.078 0.0050 mg/Kg wet 0.100 78.3 do-140 Heptachlor [2C] 0.086 0.0050 mg/Kg wet 0.100 86.0 do-140 Heptachlor Epoxide 0.078 0.0050 mg/Kg wet 0.100 78.1 do-140	•										
Endrin Ketone [2C] 0.088 0.0080 mg/Kg wet 0.100 87.6 40-140 Heptachlor 0.078 0.0050 mg/Kg wet 0.100 78.3 40-140 Heptachlor [2C] 0.086 0.0050 mg/Kg wet 0.100 86.0 40-140 Heptachlor Epoxide 0.078 0.0050 mg/Kg wet 0.100 78.1 40-140											
Heptachlor 0.078 0.0050 mg/Kg wet 0.100 78.3 40-140 Heptachlor [2C] 0.086 0.0050 mg/Kg wet 0.100 86.0 40-140 Heptachlor Epoxide 0.078 0.0050 mg/Kg wet 0.100 78.1 40-140											
Heptachlor [2C] 0.086 0.0050 mg/Kg wet 0.100 86.0 40-140 Heptachlor Epoxide 0.078 0.0050 mg/Kg wet 0.100 78.1 40-140											
Heptachlor Epoxide 0.078 0.0050 mg/Kg wet 0.100 78.1 40-140											
Heptachlor Epoxide [2C] 0.087 0.0050 mg/Kg wet 0.100 86.7 40-140	leptachlor Epoxide [2C]										
0.070											
	•										
			0.030								
Surrogate: Decachlorobiphenyl 0.151 mg/Kg wet 0.200 75.7 30-150											
Surrogate: Decachlorobiphenyl [2C] 0.161 mg/Kg wet 0.200 80.3 30-150											
Surrogate: Tetrachloro-m-xylene 0.136 mg/Kg wet 0.200 68.1 30-150											
Surrogate: Tetrachloro-m-xylene [2C] 0.140 mg/Kg wet 0.200 70.0 30-150	urrogate: Tetrachloro-m-xylene [2C]	0.140		mg/Kg wet	0.200		70.0	30-150			



QUALITY CONTROL

Organochloride Pesticides by GC/ECD - Quality Control

		Reporting		Spike	Source	_	%REC	_	RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch B317120 - SW-846 3546										
LCS Dup (B317120-BSD1)]	Prepared: 09	/13/22 Analy	zed: 09/15/2	2			
alpha-Chlordane	0.076	0.0050	mg/Kg wet	0.100		75.8	40-140	0.186	30	
alpha-Chlordane [2C]	0.087	0.0050	mg/Kg wet	0.100		86.7	40-140	2.05	30	
gamma-Chlordane	0.072	0.0050	mg/Kg wet	0.100		71.8	40-140	0.442	30	
gamma-Chlordane [2C]	0.087	0.0050	mg/Kg wet	0.100		87.4	40-140	2.21	30	
Alachlor	0.089	0.020	mg/Kg wet	0.100		88.7	40-140	7.94	30	
Alachlor [2C]	0.089	0.020	mg/Kg wet	0.100		89.2	40-140	3.80	30	
Aldrin	0.078	0.0050	mg/Kg wet	0.100		77.9	40-140	1.97	30	
Aldrin [2C]	0.083	0.0050	mg/Kg wet	0.100		83.1	40-140	2.25	30	
alpha-BHC	0.079	0.0050	mg/Kg wet	0.100		79.3	40-140	4.48	30	
alpha-BHC [2C]	0.080	0.0050	mg/Kg wet	0.100		79.9	40-140	0.269	30	
beta-BHC	0.075	0.0050	mg/Kg wet	0.100		75.0	40-140	0.183	30	
beta-BHC [2C]	0.079	0.0050	mg/Kg wet	0.100		79.1	40-140	2.34	30	
delta-BHC	0.076	0.0050	mg/Kg wet	0.100		76.3	40-140	0.287	30	
delta-BHC [2C]	0.080	0.0050	mg/Kg wet	0.100		80.2	40-140	1.28	30	
gamma-BHC (Lindane)	0.081	0.0020	mg/Kg wet	0.100		81.5	40-140	1.63	30	
gamma-BHC (Lindane) [2C]	0.082	0.0020	mg/Kg wet	0.100		82.2	40-140	0.534	30	
4,4'-DDD	0.084	0.0040	mg/Kg wet	0.100		84.2	40-140	2.51	30	
4,4'-DDD [2C]	0.093	0.0040	mg/Kg wet	0.100		93.2	40-140	4.40	30	
4,4'-DDE	0.083	0.0040	mg/Kg wet	0.100		82.9	40-140	1.61	30	
4,4'-DDE [2C]	0.094	0.0040	mg/Kg wet	0.100		93.6	40-140	3.02	30	
4,4'-DDT	0.081	0.0040	mg/Kg wet	0.100		81.2	40-140	3.05	30	
4,4'-DDT [2C]	0.088	0.0040	mg/Kg wet	0.100		88.3	40-140	3.43	30	
Dieldrin	0.081	0.0040	mg/Kg wet	0.100		80.9	40-140	0.433	30	
Dieldrin [2C]	0.093	0.0040	mg/Kg wet	0.100		92.6	40-140	3.19	30	
Endosulfan I	0.076	0.0050	mg/Kg wet	0.100		75.9	40-140	0.234	30	
Endosulfan I [2C]	0.085	0.0050	mg/Kg wet	0.100		84.8	40-140	2.28	30	
Endosulfan II	0.074	0.0080	mg/Kg wet	0.100		74.4	40-140	1.80	30	
Endosulfan II [2C]	0.083	0.0080	mg/Kg wet	0.100		83.2	40-140	3.64	30	
Endosulfan Sulfate	0.075	0.0080	mg/Kg wet	0.100		75.5	40-140	1.34	30	
Endosulfan Sulfate [2C]	0.085	0.0080	mg/Kg wet	0.100		84.7	40-140	3.55	30	
Endrin	0.080	0.0080	mg/Kg wet	0.100		79.9	40-140	1.31	30	
Endrin [2C]	0.090	0.0080	mg/Kg wet	0.100		89.9	40-140	3.16	30	
Endrin Aldehyde	0.073	0.0080	mg/Kg wet	0.100		72.8	40-140	0.546	30	
Endrin Aldehyde [2C]	0.088	0.0080	mg/Kg wet	0.100		88.2	40-140	4.29	30	
Endrin Ketone	0.080	0.0080	mg/Kg wet	0.100		80.0	40-140	2.71	30	
Endrin Ketone [2C]	0.085	0.0080	mg/Kg wet	0.100		85.5	40-140	2.43	30	
Heptachlor	0.081	0.0050	mg/Kg wet	0.100		80.6	40-140	2.95	30	
Heptachlor [2C]	0.085	0.0050	mg/Kg wet	0.100		84.6	40-140	1.68	30	
Heptachlor Epoxide Heptachlor Epoxide [2C]	0.079	0.0050	mg/Kg wet	0.100		78.9	40-140	1.04	30	
Heptachlorobenzene	0.085	0.0050	mg/Kg wet	0.100		85.1	40-140	1.91	30	
Hexachlorobenzene Hexachlorobenzene [2C]	0.077	0.0060 0.0060	mg/Kg wet mg/Kg wet	0.100		76.7	40-140	1.02	30	
Methoxychlor	0.076	0.000	mg/Kg wet	0.100		76.2	40-140	4.32	30	
Methoxychlor [2C]	0.078	0.050	mg/Kg wet	0.100 0.100		78.2 90.2	40-140	3.22	30 30	
	0.090	0.030					40-140	3.26	30	
Surrogate: Decachlorobiphenyl	0.147		mg/Kg wet	0.200		73.6	30-150			
Surrogate: Decachlorobiphenyl [2C]	0.154		mg/Kg wet	0.200		77.0	30-150			
Surrogate: Tetrachloro-m-xylene	0.139		mg/Kg wet	0.200		69.3	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	0.134		mg/Kg wet	0.200		66.9	30-150			

RPD

%REC



39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

QUALITY CONTROL

Spike

Source

Polychlorinated Biphenyls By GC/ECD - Quality Control

Reporting

Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch B317119 - SW-846 3546										
Blank (B317119-BLK1)				Prepared: 09	/13/22 Analy	yzed: 09/15/2	.2			
Aroclor-1016	ND	0.020	mg/Kg wet							
Aroclor-1016 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1221	ND	0.020	mg/Kg wet							
Aroclor-1221 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1232	ND	0.020	mg/Kg wet							
Aroclor-1232 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1242	ND	0.020	mg/Kg wet							
Aroclor-1242 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1248	ND	0.020	mg/Kg wet							
Aroclor-1248 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1254	ND	0.020	mg/Kg wet							
Aroclor-1254 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1260	ND	0.020	mg/Kg wet							
Aroclor-1260 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1262	ND	0.020	mg/Kg wet							
Aroclor-1262 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1268	ND	0.020	mg/Kg wet							
Aroclor-1268 [2C]	ND	0.020	mg/Kg wet							
Surrogate: Decachlorobiphenyl	0.213		mg/Kg wet	0.200		107	30-150			
Surrogate: Decachlorobiphenyl [2C]	0.218		mg/Kg wet	0.200		109	30-150			
Surrogate: Tetrachloro-m-xylene	0.172		mg/Kg wet	0.200		85.8	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	0.167		mg/Kg wet	0.200		83.6	30-150			
LCS (B317119-BS1)				Prepared: 09	/13/22 Analy	yzed: 09/15/2	.2			
Aroclor-1016	0.17	0.020	mg/Kg wet	0.200		83.8	40-140			
Aroclor-1016 [2C]	0.17	0.020	mg/Kg wet	0.200		85.8	40-140			
Aroclor-1260	0.17	0.020	mg/Kg wet	0.200		83.9	40-140			
Aroclor-1260 [2C]	0.17	0.020	mg/Kg wet	0.200		84.1	40-140			
Surrogate: Decachlorobiphenyl	0.212		mg/Kg wet	0.200		106	30-150			
Surrogate: Decachlorobiphenyl [2C]	0.221		mg/Kg wet	0.200		111	30-150			
Surrogate: Tetrachloro-m-xylene	0.171		mg/Kg wet	0.200		85.7	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	0.170		mg/Kg wet	0.200		85.2	30-150			
LCS Dup (B317119-BSD1)				Prepared: 09	/13/22 Analy	yzed: 09/15/2	.2			
Aroclor-1016	0.15	0.020	mg/Kg wet	0.200		75.6	40-140	10.2	30	
Aroclor-1016 [2C]	0.15	0.020	mg/Kg wet	0.200		76.6	40-140	11.3	30	
Aroclor-1260	0.15	0.020	mg/Kg wet	0.200		76.6	40-140	9.18	30	
Aroclor-1260 [2C]	0.15	0.020	mg/Kg wet	0.200		76.6	40-140	9.25	30	
Surrogate: Decachlorobiphenyl	0.192		mg/Kg wet	0.200		95.9	30-150			
Surrogate: Decachlorobiphenyl [2C]	0.201		mg/Kg wet	0.200		101	30-150			
Surrogate: Tetrachloro-m-xylene	0.150		mg/Kg wet	0.200		75.2	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	0.149		mg/Kg wet	0.200		74.6	30-150			



QUALITY CONTROL

Herbicides by GC/ECD - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B317221 - SW-846 8151										
Blank (B317221-BLK1)				Prepared: 09	/14/22 Analy	yzed: 09/21/2	22			
,4-D	ND	24	μg/kg wet							
,4-D [2C]	ND	24	μg/kg wet							
,4-DB	ND	24	μg/kg wet							
,4-DB [2C]	ND	24	μg/kg wet							
,4,5-TP (Silvex)	ND	2.4	$\mu g/kg$ wet							
,4,5-TP (Silvex) [2C]	ND	2.4	$\mu g/kg$ wet							
,4,5-T	ND	2.4	$\mu g/kg$ wet							
,4,5-T [2C]	ND	2.4	μg/kg wet							
Palapon	ND	60	μg/kg wet							
alapon [2C]	ND	60	μg/kg wet							
Dicamba	ND	2.4	μg/kg wet							
Dicamba [2C]	ND	2.4	μg/kg wet							
richloroprop	ND	24	μg/kg wet							
Pichloroprop [2C]	ND	24	μg/kg wet							
rinoseb	ND	12	μg/kg wet							
pinoseb [2C]	ND	12	μg/kg wet							
1CPA	ND	2400	μg/kg wet							
1CPA [2C]	ND	2400	μg/kg wet							
МСРР	ND	2400	μg/kg wet							
1CPP [2C]	ND	2400	μg/kg wet							
urrogate: 2,4-Dichlorophenylacetic acid	66.3		μg/kg wet	95.2		69.6	30-150			
urrogate: 2,4-Dichlorophenylacetic acid	72.3		$\mu g/kg$ wet	95.2		75.9	30-150			
2C]										
LCS (B317221-BS1)				Prepared: 09	/14/22 Analy	yzed: 09/21/2	22			
,4-D	87.0	25	μg/kg wet	125		69.6	40-140			
,4-D [2C]	94.1	25	μg/kg wet	125		75.3	40-140			
,4-DB	96.5	25	μg/kg wet	125		77.2	40-140			
,4-DB [2C]	82.0	25	μg/kg wet	125		65.6	40-140			
4,5-TP (Silvex)	9.74	2.5	μg/kg wet	12.5		77.9	40-140			
,4,5-TP (Silvex) [2C]	10.2	2.5	μg/kg wet	12.5		81.9	40-140			
,4,5-T	8.95	2.5	μg/kg wet	12.5		71.6	40-140			
,4,5-T [2C]	8.42	2.5	μg/kg wet	12.5		67.4	40-140			
Palapon	166	62	μg/kg wet	312		53.1	40-140			V-06
Palapon [2C]	176	62	μg/kg wet	312		56.4	40-140			V-06
Dicamba	8.18	2.5	μg/kg wet	12.5		65.4	40-140			
Picamba [2C]	8.44	2.5	$\mu g/kg$ wet	12.5		67.6	40-140			
Pichloroprop	93.5	25	μg/kg wet	125		74.8	40-140			
richloroprop [2C]	93.5	25	μg/kg wet	125		74.8	40-140			
inoseb	10.4	12	$\mu g/kg$ wet	62.5		16.6	-1.7-35.2			
rinoseb [2C]	11.2	12	μg/kg wet	62.5		17.9	-0.54-38.4			
MCPA	8300	2500	μg/kg wet	12500		66.4	40-140			
1CPA [2C]	8770	2500	μg/kg wet	12500		70.2	40-140			
1CPP	8990	2500	μg/kg wet	12500		71.9	40-140			
1CPP [2C]	9070	2500	μg/kg wet	12500		72.6	40-140			
urrogate: 2,4-Dichlorophenylacetic acid	68.2		μg/kg wet	100		68.2	30-150			
						69.1	30-150			



QUALITY CONTROL

Herbicides by GC/ECD - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B317221 - SW-846 8151										
LCS Dup (B317221-BSD1)				Prepared: 09	/14/22 Analy	yzed: 09/21/	/22			
2,4-D	86.0	25	μg/kg wet	125		68.8	40-140	1.15	30	
2,4-D [2C]	92.5	25	μg/kg wet	125		74.0	40-140	1.71	30	
2,4-DB	86.4	25	μg/kg wet	125		69.1	40-140	11.0	30	
2,4-DB [2C]	78.5	25	μg/kg wet	125		62.8	40-140	4.36	30	
2,4,5-TP (Silvex)	9.42	2.5	μg/kg wet	12.5		75.4	40-140	3.36	30	
2,4,5-TP (Silvex) [2C]	9.64	2.5	μg/kg wet	12.5		77.1	40-140	5.99	30	
2,4,5-T	8.74	2.5	μg/kg wet	12.5		70.0	40-140	2.26	30	
2,4,5-T [2C]	8.18	2.5	μg/kg wet	12.5		65.4	40-140	2.98	30	
Dalapon	159	62	μg/kg wet	312		51.0	40-140	4.22	30	V-06
Dalapon [2C]	172	62	μg/kg wet	312		54.9	40-140	2.70	30	V-06
Dicamba	7.79	2.5	μg/kg wet	12.5		62.3	40-140	4.93	30	
Dicamba [2C]	8.40	2.5	μg/kg wet	12.5		67.2	40-140	0.543	30	
Dichloroprop	93.0	25	μg/kg wet	125		74.4	40-140	0.590	30	
Dichloroprop [2C]	92.3	25	μg/kg wet	125		73.8	40-140	1.26	30	
Dinoseb	9.96	12	μg/kg wet	62.5		15.9	-1.7-35.2	4.25	30	
Dinoseb [2C]	10.2	12	μg/kg wet	62.5		16.2	-0.54-38.4	9.49	30	
MCPA	8320	2500	μg/kg wet	12500		66.6	40-140	0.237	30	
MCPA [2C]	8740	2500	μg/kg wet	12500		69.9	40-140	0.370	30	
MCPP	8970	2500	μg/kg wet	12500		71.8	40-140	0.231	30	
MCPP [2C]	8980	2500	$\mu g/kg$ wet	12500		71.8	40-140	1.02	30	
Surrogate: 2,4-Dichlorophenylacetic acid	66.1		μg/kg wet	100		66.1	30-150			
Surrogate: 2,4-Dichlorophenylacetic acid [2C]	67.6		μg/kg wet	100		67.6	30-150			



QUALITY CONTROL

Petroleum Hydrocarbons Analyses - Quality Control

A 1.	D. Iv	Reporting	TT ''	Spike	Source	0/DEC	%REC	DDD	RPD	N
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch B317123 - SW-846 3546										
Blank (B317123-BLK1)				Prepared: 09	9/13/22 Analy	zed: 09/16	/22			
TPH (C9-C36)	ND	8.3	mg/Kg wet							
Surrogate: 2-Fluorobiphenyl	2.28		mg/Kg wet	3.33		68.4	40-140			
LCS (B317123-BS1)				Prepared: 09	9/13/22 Analy	zed: 09/16	/22			
TPH (C9-C36)	30.3	8.3	mg/Kg wet	33.3		90.8	40-140			
Surrogate: 2-Fluorobiphenyl	2.91		mg/Kg wet	3.33		87.2	40-140			
LCS Dup (B317123-BSD1)				Prepared: 09	9/13/22 Analy	zed: 09/16	/22			
TPH (C9-C36)	27.8	8.3	mg/Kg wet	33.3		83.4	40-140	8.50	30	
Surrogate: 2-Fluorobiphenyl	2.76		mg/Kg wet	3.33		82.9	40-140			
Matrix Spike (B317123-MS1)	Source	e: 2210628-	-01	Prepared: 09	9/13/22 Analy	zed: 09/16	/22			
TPH (C9-C36)	1250	210	mg/Kg dry	42.8	991	596	* 40-140			MS-19
Surrogate: 2-Fluorobiphenyl	3.56		mg/Kg dry	4.28		83.2	40-140			
Matrix Spike Dup (B317123-MSD1)	Source	e: 2210628-	-01	Prepared: 09	9/13/22 Analy	zed: 09/16	/22			
TPH (C9-C36)	1220	210	mg/Kg dry	42.8	991	533	* 40-140	2.18	30	MS-19
Surrogate: 2-Fluorobiphenyl	3.23		mg/Kg dry	4.28		75.4	40-140			
Batch B317327 - SW-846 3546										
Blank (B317327-BLK1)				Prepared: 09	9/15/22 Analy	zed: 09/16	/22			
TPH (C9-C36)	ND	8.3	mg/Kg wet							
Surrogate: 2-Fluorobiphenyl	2.43		mg/Kg wet	3.33		72.8	40-140			
LCS (B317327-BS1)				Prepared: 09	9/15/22 Analy	zed: 09/16	/22			
TPH (C9-C36)	26.6	8.3	mg/Kg wet	33.3		79.7	40-140			
Surrogate: 2-Fluorobiphenyl	2.73		mg/Kg wet	3.33		81.8	40-140			
LCS Dup (B317327-BSD1)				Prepared: 09	9/15/22 Analy	zed: 09/16	/22			
TPH (C9-C36)	25.6	8.3	mg/Kg wet	33.3		76.9	40-140	3.57	30	
Surrogate: 2-Fluorobiphenyl	2.54		mg/Kg wet	3.33		76.3	40-140			



QUALITY CONTROL

Metals Analyses (Total) - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B317272 - SW-846 7471										
Blank (B317272-BLK1)				Prepared &	Analyzed: 09	/15/22				
Mercury	ND	0.026	mg/Kg wet							
LCS (B317272-BS1)				Prepared &	Analyzed: 09	/15/22				
Mercury	20.4	3.8	mg/Kg wet	25.6		79.7	68.8-131.2			
LCS Dup (B317272-BSD1)				Prepared &	Analyzed: 09	/15/22				
Mercury	20.9	3.9	mg/Kg wet	25.6		81.7	68.8-131.2	2.42	20	
Batch B317432 - SW-846 3050B										
Blank (B317432-BLK1)				Prepared: 09	0/16/22 Anal	yzed: 09/18/	/22			
Arsenic	ND	3.3	mg/Kg wet							
Barium	ND	1.7	mg/Kg wet							
Cadmium	ND	0.33	mg/Kg wet							
Chromium	ND	0.66	mg/Kg wet							
Lead	ND	0.50	mg/Kg wet							
Selenium	ND	3.3	mg/Kg wet							
Silver	ND	0.33	mg/Kg wet							
LCS (B317432-BS1)				Prepared: 09	0/16/22 Anal	yzed: 09/18/	/22			
Arsenic	61.0	9.9	mg/Kg wet	63.0		96.8	82.2-117.6			
Barium	253	4.9	mg/Kg wet	257		98.6	82.1-118.3			
Cadmium	63.1	0.99	mg/Kg wet	66.6		94.7	82-117.9			
Chromium	65.8	2.0	mg/Kg wet	69.3		95.0	81.7-118.3			
Lead	83.0	1.5	mg/Kg wet	85.7		96.8	82.6-117.9			
Selenium	131	9.9	mg/Kg wet	134		97.4	78.4-120.9			
Silver	27.3	0.99	mg/Kg wet	26.2		104	79.4-121			
LCS Dup (B317432-BSD1)				Prepared: 09	0/16/22 Anal	yzed: 09/18/	/22			
Arsenic	59.7	9.7	mg/Kg wet	63.0		94.7	82.2-117.6	2.13	30	
Barium	264	4.9	mg/Kg wet	257		103	82.1-118.3	4.24	20	
Cadmium	67.6	0.97	mg/Kg wet	66.6		101	82-117.9	6.90	20	
Chromium	68.6	1.9	mg/Kg wet	69.3		99.0	81.7-118.3	4.12	30	
Lead	81.3	1.5	mg/Kg wet	85.7		94.8	82.6-117.9	2.10	30	
Selenium	131	9.7	mg/Kg wet	134		97.9	78.4-120.9	0.559	30	
Silver	26.6	0.97	mg/Kg wet	26.2		102	79.4-121	2.55	30	
Reference (B317432-SRM1) MRL CHECK				Prepared: 09	0/16/22 Anal	yzed: 09/18/	/22			
Lead	0.518	0.49	mg/Kg wet	0.486		107	80-120			



QUALITY CONTROL

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total) - Quality Control

		Reporting		Spike	Source		%REC	222	RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch B317111 - SW-846 9045C										
LCS (B317111-BS1)				Prepared &	Analyzed: 09	/13/22				
рН	5.98		pH Units	6.00		99.6	90-110			
LCS (B317111-BS2)				Prepared &	Analyzed: 09	/13/22				
рН	5.97		pH Units	6.00		99.5	90-110			
Duplicate (B317111-DUP1)	Sour	ce: 22I0628-	01	Prepared &	Analyzed: 09	/13/22				
рН	7.6		pH Units		7.5	5		2.08	8.25	
Batch B317377 - SM21-23 2510B Modified										
Blank (B317377-BLK1)				Prepared &	Analyzed: 09	/16/22				
Specific conductance	ND	2.0	μmhos/cm							
LCS (B317377-BS1)				Prepared &	Analyzed: 09	/16/22				
Specific conductance	150		μmhos/cm	137		113	90-122			
Duplicate (B317377-DUP1)	Sour	ce: 22I0628-	01	Prepared &	Analyzed: 09	/16/22				
Specific conductance	28	2.0	μmhos/cm		22	2		25.0	41.4	
Batch B317475 - SW-846 9030A										
Blank (B317475-BLK1)				Prepared: 09	0/17/22 Anal	yzed: 09/18/	22			
Reactive Sulfide	ND	2.0	mg/Kg							
LCS (B317475-BS1)				Prepared: 09	0/17/22 Anal	yzed: 09/18/	22			
Reactive Sulfide	10	2.0	mg/Kg	10.0		100	75.7-125			
Batch B317476 - SW-846 9014										
Blank (B317476-BLK1)			_	Prepared: 09	0/17/22 Anal	yzed: 09/18/	22	_	_	
Reactive Cyanide	ND	0.40	mg/Kg							
LCS (B317476-BS1)				Prepared: 09	0/17/22 Anal	yzed: 09/18/	22			
Reactive Cyanide	11	0.40	mg/Kg	10.0		106	81.2-113			



BREAKDOWN REPORT

Lab Sample ID:	S076623-PEM1	Analyzed:	09/15/2022
Column Number:	1		
Analyte	% Breakdown		
4,4'-DDT [1]	1.90		
Endrin [1]	5.52		
Column Number:	2		
Analyte	% Breakdown		
4,4'-DDT [2]	1.56		
Endrin [2]	3.82		

BREAKDOWN REPORT

Lab Sample ID:	S076623-PEM2	Analyzed:	09/15/2022
Column Number:	1		
Analyte	% Breakdown		
4,4'-DDT [1]	2.03		
Endrin [1]	8.95		
Column Number:	2		
Analyte	% Breakdown		
4,4'-DDT [2]	1.79		
Endrin [2]	6.80		

BREAKDOWN REPORT

Lab Sample ID:	S076623-PEM3	Analyzed:	09/15/2022
Column Number:	1		
Analyte	% Breakdown		
4,4'-DDT [1]	2.53		
Endrin [1]	8.87		



39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332 BREAKDOWN REPORT

Lab Sample ID:	S076623-PEM3	Analyzed:	09/15/2022
Column Number:	2		
Analyte	% Breakdown		
4,4'-DDT [2]	2.02		
Endrin [2]	6.24		

BREAKDOWN REPORT

Lab Sample ID:	S076623-PEM4	Analyzed:	09/16/2022
Column Number:	1	Anaryzeu	07,10/2022
	1		
Analyte	% Breakdown		
4,4'-DDT [1]	4.63		
Endrin [1]	6.34		
Column Number:	2		
Analyte	% Breakdown		
4,4'-DDT [2]	3.83		
Endrin [2]	5.40		



IDENTIFICATION SUMMARY FOR SINGLE COMPONENT ANALYTES

PF-COMP-091222-A

SW-846 8082A

Lab Sample ID:	2210628-01		Date(s) Analyzed:	09/15/2022	09/15/	2022
Instrument ID (1):	ECD1	_	Instrument ID (2):	ECD1		_
GC Column (1):	ID:	(mm)	GC Column (2):		ID:	(mm

ANALYTE	COL	RT	RT WI	NDOW	CONCENTRATION	%RPD
ANACTIC	JOE	1 (1	FROM	TO	CONCENTIVITION	701 N D
Aroclor-1248	1	0.000	0.000	0.000	0.16	
	2	0.000	0.000	0.000	0.28	54.5
Aroclor-1254	1	0.000	0.000	0.000	0.67	
	2	0.000	0.000	0.000	0.76	12.6
Aroclor-1260	1	0.000	0.000	0.000	0.50	
	2	0.000	0.000	0.000	0.50	0.0



IDENTIFICATION SUMMARY FOR SINGLE COMPONENT ANALYTES

PF-COMP-091222-B

Lab Sample ID:	2210628-02		Date(s) Analyzed:	09/16/2022	09/16	5/2022
Instrument ID (1):	ECD2A	_	Instrument ID (2):	ECD2E	3	
GC Column (1):	ID:	(mm)	GC Column (2):		ID:	(mm)

ANALYTE	COL	COL RT		NDOW	CONCENTRATION	%RPD
ANALITE	COL	1/1	FROM	TO	CONCLINITATION	7011FD
4,4'-DDE	1	7.032	7.009	7.069	0.028	
	2	7.010	6.966	7.026	0.042	40.0
Aroclor-1248	1	0.000	0.000	0.000	0.20	
	2	0.000	0.000	0.000	0.35	54.5
Aroclor-1254	1	0.000	0.000	0.000	0.65	
	2	0.000	0.000	0.000	0.74	12.9
Aroclor-1260	1	0.000	0.000	0.000	0.50	
	2	0.000	0.000	0.000	0.49	2.0



IDENTIFICATION SUMMARY FOR SINGLE COMPONENT ANALYTES

LCS		

SW-846 8082A

Lab Sample ID:	B317119-BS1		Date(s) Analyzed:	09/15/2022	09/15/	2022
Instrument ID (1):	ECD1		Instrument ID (2):	ECD1		
GC Column (1):	ID:	(mm)	GC Column (2):		ID:	(mm

ANALYTE	COL RT		RT WINDOW		CONCENTRATION	%RPD
7110/12112	OOL	111	FROM	TO	OONOLIVITUUTION	70111 D
Aroclor-1016	1	0.000	0.000	0.000	0.17	
	2	0.000	0.000	0.000	0.17	0.0
Aroclor-1260	1	0.000	0.000	0.000	0.17	
	2	0.000	0.000	0.000	0.17	0.0



IDENTIFICATION SUMMARY FOR SINGLE COMPONENT ANALYTES

LCS Dup	

SW-846 8082A

Lab Sample ID:	B317119-BSD1		Date(s) Analyzed:	09/15/2022	09/15/2	022
Instrument ID (1):	ECD1	_	Instrument ID (2):	ECD1		_
GC Column (1):	ID:	(mm)	GC Column (2):		ID:	(mm

ANALYTE	COL	COL RT		NDOW	CONCENTRATION	%RPD
7,07,2112	OOL	111	FROM	TO	OONOLIVITUATION	70111 15
Aroclor-1016	1	0.000	0.000	0.000	0.15	
	2	0.000	0.000	0.000	0.15	0.0
Aroclor-1260	1	0.000	0.000	0.000	0.15	
	2	0.000	0.000	0.000	0.15	0.0



IDENTIFICATION SUMMARY FOR SINGLE COMPONENT ANALYTES

LCS		

Lab Sample ID:	B317120-BS1		Date(s) Analyzed:	09/15/2022	09/15	5/2022
Instrument ID (1):	ECD2	_	Instrument ID (2):	ECD2		
GC Column (1):	ID:	(mm)	GC Column (2):		ID:	(mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%RPD
ANALITE		111	FROM	ТО	CONCENTIATION	701 N D
4,4'-DDD	1	7.496	7.466	7.526	0.086	
	2	7.435	7.407	7.467	0.097	12.0
4,4'-DDE	1	7.040	7.010	7.070	0.084	
	2	6.998	6.969	7.029	0.097	14.4
4,4'-DDT	1	7.713	7.683	7.743	0.084	
	2	7.679	7.650	7.710	0.091	8.0
Alachlor	1	6.458	6.429	6.489	0.096	
	2	6.160	6.130	6.190	0.093	3.2
Aldrin	1	6.363	6.333	6.393	0.076	
	2	6.229	6.199	6.259	0.085	11.2
alpha-BHC	1	5.618	5.588	5.648	0.076	
	2	5.501	5.471	5.531	0.080	5.1
alpha-Chlordane	1	6.989	6.958	7.018	0.076	
	2	6.870	6.841	6.901	0.089	15.8
beta-BHC	1	5.883	5.854	5.914	0.075	
	2	5.776	5.746	5.806	0.081	7.7
delta-BHC	1	6.006	5.976	6.036	0.077	
	2	5.968	5.937	5.997	0.081	5.1
Dieldrin	1	7.273	7.243	7.303	0.081	
	2	7.113	7.083	7.143	0.096	16.9
Endosulfan I	1	7.094	7.063	7.123	0.076	
	2	6.910	6.880	6.940	0.087	13.5
Endosulfan II	1	7.623	7.593	7.653	0.076	
	2	7.502	7.474	7.534	0.086	12.3
Endosulfan Sulfate	1	8.260	8.230	8.290	0.076	
	2	7.980	7.951	8.011	0.088	13.3
Endrin	1	7.451	7.421	7.481	0.081	
	2	7.341	7.311	7.371	0.093	13.8
Endrin Aldehyde	1	7.951	7.920	7.980	0.073	
	2	7.765	7.737	7.797	0.092	23.0
Endrin Ketone	1	8.442	8.412	8.472	0.082	



IDENTIFICATION SUMMARY FOR SINGLE COMPONENT ANALYTES

LCS		

Lab Sample ID:	B317120-BS1		Date(s) Analyzed:	09/15/2022	09/15/	2022
Instrument ID (1):	ECD2	_	Instrument ID (2):	ECD2		_
GC Column (1):	ID:	(mm)	GC Column (2):		ID:	(mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%RPD
ANALITE	COL	111	FROM	то	CONCENTION	701 NI D
	2	8.344	8.315	8.375	0.088	7.1
gamma-BHC (Lindane)	1	5.827	5.797	5.857	0.080	
	2	5.723	5.693	5.753	0.083	3.7
gamma-Chlordane	1	6.890	6.859	6.919	0.072	
	2	6.763	6.734	6.794	0.089	21.1
Heptachlor	1	6.151	6.121	6.181	0.078	
	2	6.012	5.981	6.041	0.086	9.8
Heptachlor Epoxide	1	6.799	6.770	6.830	0.078	
	2	6.627	6.598	6.658	0.087	10.9
Hexachlorobenzene	1	5.506	5.476	5.536	0.076	
	2	5.413	5.383	5.443	0.080	5.1
Methoxychlor	1	8.079	8.050	8.110	0.081	
	2	8.200	8.171	8.231	0.093	13.8



IDENTIFICATION SUMMARY FOR SINGLE COMPONENT ANALYTES

LCS Dup

Lab Sample ID:	B317120-BSD1		Date(s) Analyzed:	09/15/2022	09/15	/2022
Instrument ID (1):	ECD2	_	Instrument ID (2):	ECD2		
GC Column (1):	ID:	(mm)	GC Column (2):		ID:	(mm)

ANALYTE	COL	RT	RT WI	NDOW	CONCENTRATION	%RPD
ANALITE	COL	171	FROM	TO	CONCENTIATION	/OINF D
4,4'-DDD	1	7.496	7.466	7.526	0.084	
	2	7.436	7.407	7.467	0.093	10.2
4,4'-DDE	1	7.041	7.010	7.070	0.083	
	2	6.999	6.969	7.029	0.094	12.4
4,4'-DDT	1	7.713	7.683	7.743	0.081	
	2	7.680	7.650	7.710	0.088	8.3
Alachlor	1	6.459	6.429	6.489	0.089	
	2	6.160	6.130	6.190	0.089	0.0
Aldrin	1	6.363	6.333	6.393	0.078	
	2	6.229	6.199	6.259	0.083	6.2
alpha-BHC	1	5.618	5.588	5.648	0.079	
	2	5.500	5.471	5.531	0.080	1.3
alpha-Chlordane	1	6.989	6.958	7.018	0.076	
	2	6.870	6.841	6.901	0.087	13.5
beta-BHC	1	5.884	5.854	5.914	0.075	
	2	5.775	5.746	5.806	0.079	5.2
delta-BHC	1	6.006	5.976	6.036	0.076	
	2	5.967	5.937	5.997	0.080	5.1
Dieldrin	1	7.273	7.243	7.303	0.081	
	2	7.113	7.083	7.143	0.093	13.8
Endosulfan I	1	7.093	7.063	7.123	0.076	
	2	6.910	6.880	6.940	0.085	11.2
Endosulfan II	1	7.625	7.593	7.653	0.074	
	2	7.503	7.474	7.534	0.083	11.5
Endosulfan Sulfate	1	8.260	8.230	8.290	0.075	
	2	7.980	7.951	8.011	0.085	11.2
Endrin	1	7.452	7.421	7.481	0.080	
	2	7.341	7.311	7.371	0.090	11.8
Endrin Aldehyde	1	7.950	7.920	7.980	0.073	
	2	7.766	7.737	7.797	0.088	18.6
Endrin Ketone	1	8.442	8.412	8.472	0.080	



IDENTIFICATION SUMMARY FOR SINGLE COMPONENT ANALYTES

LCS Dup			
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	מנוגו		

Lab Sample ID:	B317120-BSD1		Date(s) Analyzed:	09/15/2022	09/15/202	2
Instrument ID (1):	ECD2	_	Instrument ID (2):	ECD2		
GC Column (1):	ID:	(mm)	GC Column (2):		ID:	(mm

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%RPD
700702172	002	111	FROM	TO	OONOLIVITUATION	70111111
	2	8.344	8.315	8.375	0.085	6.1
gamma-BHC (Lindane)	1	5.827	5.797	5.857	0.081	
	2	5.723	5.693	5.753	0.082	0.0
gamma-Chlordane	1	6.890	6.859	6.919	0.072	
	2	6.763	6.734	6.794	0.087	18.9
Heptachlor	1	6.150	6.121	6.181	0.081	
	2	6.011	5.981	6.041	0.085	4.8
Heptachlor Epoxide	1	6.800	6.770	6.830	0.079	
	2	6.628	6.598	6.658	0.085	7.3
Hexachlorobenzene	1	5.506	5.476	5.536	0.077	
	2	5.413	5.383	5.443	0.076	1.3
Methoxychlor	1	8.080	8.050	8.110	0.078	
	2	8.201	8.171	8.231	0.090	14.3



IDENTIFICATION SUMMARY FOR SINGLE COMPONENT ANALYTES

LCS		

SW-846 8151A

Lab Sample ID:	B317221-BS1		Date(s) Analyzed:	09/21/2022	09/21/2	022
Instrument ID (1):	ECD 8		Instrument ID (2):	ECD 8		_
GC Column (1):	ID:	(mm)	GC Column (2):		ID:	(mm)

ANALYTE	COL	RT	RT WI	NDOW	CONCENTRATION	%RPD
70002112	002	111	FROM	TO	CONCENTIVITION	70111 13
2,4,5-T	1	17.439	0.000	0.000	8.95	
	2	17.324	0.000	0.000	8.42	6.7
2,4,5-TP (Silvex)	1	17.226	0.000	0.000	9.74	
	2	17.015	0.000	0.000	10.2	5.0
2,4-D	1	15.985	0.000	0.000	87.0	
	2	15.578	0.000	0.000	94.1	7.8
2,4-DB	1	17.779	0.000	0.000	96.5	
	2	17.644	0.000	0.000	82.0	16.8
Dalapon	1	5.576	0.000	0.000	166	
	2	5.109	0.000	0.000	176	3.5
Dicamba	1	13.696	0.000	0.000	8.18	
	2	13.208	0.000	0.000	8.44	2.9
Dichloroprop	1	15.439	0.000	0.000	93.5	
	2	14.854	0.000	0.000	93.5	0.5
Dinoseb	1	18.303	0.000	0.000	10.4	
	2	17.810	0.000	0.000	11.2	11.3
MCPA	1	14.571	0.000	0.000	8300	
	2	14.094	0.000	0.000	8770	5.5
MCPP	1	14.207	0.000	0.000	8990	
	2	13.551	0.000	0.000	9070	0.8



IDENTIFICATION SUMMARY FOR SINGLE COMPONENT ANALYTES

LCS Dup

SW-846 8151A

Lab Sample ID:	B317221-BSD1		Date(s) Analyzed:	09/21/2022	09/21/2022	_
Instrument ID (1):	ECD 8	_	Instrument ID (2):	ECD 8		
GC Column (1):	ID:	(mm)	GC Column (2):		ID: (I	mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%RPD
ANACTIE	002	111	FROM	TO	CONCENTIVITION	/olar D
2,4,5-T	1	17.440	0.000	0.000	8.74	
	2	17.325	0.000	0.000	8.18	6.2
2,4,5-TP (Silvex)	1	17.227	0.000	0.000	9.42	
	2	17.016	0.000	0.000	9.64	2.5
2,4-D	1	15.985	0.000	0.000	86.0	
	2	15.578	0.000	0.000	92.5	7.3
2,4-DB	1	17.781	0.000	0.000	86.4	
	2	17.645	0.000	0.000	78.5	9.1
Dalapon	1	5.584	0.000	0.000	159	
	2	5.120	0.000	0.000	172	7.2
Dicamba	1	13.696	0.000	0.000	7.79	
	2	13.208	0.000	0.000	8.40	7.4
Dichloroprop	1	15.439	0.000	0.000	93.0	
	2	14.854	0.000	0.000	92.3	0.8
Dinoseb	1	18.306	0.000	0.000	9.96	
	2	17.811	0.000	0.000	10.2	2.0
MCPA	1	14.571	0.000	0.000	8320	
	2	14.094	0.000	0.000	8740	5.2
MCPP	1	14.207	0.000	0.000	8970	
	2	13.550	0.000	0.000	8980	0.2



FLAG/QUALIFIER SUMMARY

*	QC result is outside of established limits.
†	Wide recovery limits established for difficult compound.
‡	Wide RPD limits established for difficult compound.
#	Data exceeded client recommended or regulatory level
ND	Not Detected
RL	Reporting Limit is at the level of quantitation (LOQ)
DL	Detection Limit is the lower limit of detection determined by the MDL study
MCL	Maximum Contaminant Level
	Percent recoveries and relative percent differences (RPDs) are determined by the software using values in the calculation which have not been rounded.
	No results have been blank subtracted unless specified in the case narrative section.
DL-03	Elevated reporting limit due to matrix interference.
J	Detected but below the Reporting Limit (lowest calibration standard); therefore, result is an estimated concentration (CLP J-Flag).
L-02	Laboratory fortified blank/laboratory control sample recovery and duplicate recoveries outside of control limits. Data validation is not affected since all results are "not detected" for associated samples in this batch and bias is on the high side.
L-04	Laboratory fortified blank/laboratory control sample recovery and duplicate recovery are outside of control limits. Reported value for this compound is likely to be biased on the low side.
MS-09	Matrix spike recovery and/or matrix spike duplicate recovery outside of control limits. Possibility of sample matrix effects that lead to a low bias for reported result or non-homogeneous sample aliquots cannot be eliminated.
MS-19	Sample to spike ratio is greater than or equal to 4:1. Spiked amount is not representative of the native amount in the sample. Appropriate or meaningful recoveries cannot be calculated.
MS-22	Either matrix spike or MS duplicate is outside of control limits, but the other is within limits. RPD between the two MS/MSD results is within method specified criteria.
MS-23	Either matrix spike or MS duplicate is outside of control limits, but the other is within limits. RPD between the two MS/MSD results is outside of the method specified criteria. Reduced precision anticipated for any reported result for this compound.
O-32	A dilution was performed as part of the standard analytical procedure.
P-02	Sample RPD between primary and confirmatory analysis exceeded 40%. Per EPA method 8000, the lower value was reported due to obvious chromatographic interference on the column with the higher result.
R-06	Matrix spike duplicate RPD is outside of control limits. Reduced precision is anticipated for reported result for this compound in this sample.
RL-12	Elevated reporting limit due to matrix interference.
S-01	The surrogate recovery for this sample is not available due to sample dilution below the surrogate reporting limit required from high analyte concentration and/or matrix interferences.
S-02	The surrogate recovery for this sample cannot be accurately quantified due to interference from coeluting organic compounds present in the sample extract.
V-04	Initial calibration did not meet method specifications. Compound was calibrated using a response factor where %RSD is outside of method specified criteria. Reported result is estimated.
V-05	Continuing calibration verification (CCV) did not meet method specifications and was biased on the low side for this compound.
V-06	Continuing calibration verification (CCV) did not meet method specifications and was biased on the high side for this compound.
V-20	Continuing calibration verification (CCV) did not meet method specifications and was biased on the high side. Data validation is not affected since sample result was "not detected" for this compound.
V-35	Initial calibration verification (ICV) did not meet method specifications and was biased on the high side for this compound. Reported result is estimated.



CERTIFICATIONS

Certified Analyses included in this Report		
Analyte	Certifications	
SW-846 1030 in Soil		
Ignitability	NY,NH,CT,NC,ME,VA	
SW-846 6010D in Soil		
Arsenic	CT,NH,NY,ME,VA,NC	
Barium	CT,NH,NY,ME,VA,NC	
Cadmium	CT,NH,NY,ME,VA,NC	
Chromium	CT,NH,NY,ME,VA,NC	
Lead	CT,NH,NY,AIHA,ME,VA,NC	
Selenium	CT,NH,NY,ME,VA,NC	
Silver	CT,NH,NY,ME,VA,NC	
SW-846 6010D in Water		
Arsenic	CT,NH,NY,ME,VA,RI,NC	
Barium	CT,NH,NY,ME,VA,NC	
Cadmium	CT,NH,NY,ME,VA,NC	
Chromium	CT,NH,NY,ME,VA,NC	
Lead	CT,NH,NY,ME,VA,NC	
Selenium	CT,NH,NY,ME,VA,NC	
Silver	CT,NH,NY,ME,VA,NC	
SW-846 7471B in Soil		
Mercury	CT,NH,NY,NC,ME,VA	

4,4'-DDT

Dieldrin

4,4'-DDT [2C]

Dieldrin [2C]

Endosulfan I

Endosulfan II

Endosulfan I [2C]

3	
SW-846 8081B in Soil	
Alachlor	NC
Alachlor [2C]	NC
Aldrin	CT,NH,NY,ME,NC,VA
Aldrin [2C]	CT,NH,NY,ME,NC,VA
alpha-BHC	CT,NH,NY,ME,NC,VA
alpha-BHC [2C]	CT,NH,NY,ME,NC,VA
beta-BHC	CT,NH,NY,ME,NC,VA
beta-BHC [2C]	CT,NH,NY,ME,NC,VA
delta-BHC	CT,NH,NY,ME,NC,VA
delta-BHC [2C]	CT,NH,NY,ME,NC,VA
gamma-BHC (Lindane)	CT,NH,NY,ME,NC,VA
gamma-BHC (Lindane) [2C]	CT,NH,NY,ME,NC,VA
Chlordane	CT,NH,NY,ME,NC,VA
Chlordane [2C]	CT,NH,NY,ME,NC,VA
4,4'-DDD	CT,NH,NY,ME,NC,VA
4,4'-DDD [2C]	CT,NH,NY,ME,NC,VA
4,4'-DDE	CT,NH,NY,ME,NC,VA
4,4'-DDE [2C]	CT,NH,NY,ME,NC,VA

CT,NH,NY,ME,NC,VA

CT,NH,NY,ME,NC,VA

CT,NH,NY,ME,NC,VA

CT,NH,NY,ME,NC,VA

CT,NH,NY,ME,NC,VA

CT,NH,NY,ME,NC,VA

CT,NH,NY,ME,NC,VA



CERTIFICATIONS

Analyte	Certifications
SW-846 8081B in Soil	
Endosulfan II [2C]	CT,NH,NY,ME,NC,VA
Endosulfan Sulfate	CT,NH,NY,ME,NC,VA
Endosulfan Sulfate [2C]	CT,NH,NY,ME,NC,VA
Endrin	CT,NH,NY,ME,NC,VA
Endrin [2C]	CT,NH,NY,ME,NC,VA
Endrin Aldehyde	CT,NH,NY,ME,NC,VA
Endrin Aldehyde [2C]	CT,NH,NY,ME,NC,VA
Endrin Ketone	NC
Endrin Ketone [2C]	NC
Heptachlor	CT,NH,NY,ME,NC,VA
Heptachlor [2C]	CT,NH,NY,ME,NC,VA
Heptachlor Epoxide	CT,NH,NY,ME,NC,VA
Heptachlor Epoxide [2C]	CT,NH,NY,ME,NC,VA
Hexachlorobenzene	NC
Hexachlorobenzene [2C]	NC
Methoxychlor	CT,NH,NY,ME,NC,VA
Methoxychlor [2C]	CT,NH,NY,ME,NC,VA
Toxaphene	CT,NH,NY,ME,NC,VA
Toxaphene [2C]	CT,NH,NY,ME,NC,VA
SW-846 8081B in Water	
Alachlor	NC
Alachlor [2C]	NC
Aldrin	CT,NH,NY,ME,NC,VA
Aldrin [2C]	CT,NH,NY,ME,NC,VA
alpha-BHC	CT,NH,NY,ME,NC,VA
alpha-BHC [2C]	CT,NH,NY,ME,NC,VA
beta-BHC	CT,NH,NY,ME,NC,VA
beta-BHC [2C]	CT,NH,NY,ME,NC,VA
delta-BHC	CT,NH,NY,ME,NC,VA
delta-BHC [2C]	CT,NH,NY,ME,NC,VA
gamma-BHC (Lindane)	CT,NH,NY,ME,NC,VA
gamma-BHC (Lindane) [2C]	CT,NH,NY,ME,NC,VA
Chlordane	CT,NH,NY,ME,NC,VA
Chlordane [2C]	CT,NH,NY,ME,NC,VA
4,4'-DDD	CT,NH,NY,ME,NC,VA
4,4'-DDD [2C]	CT,NH,NY,ME,NC,VA
4,4'-DDE	CT,NH,NY,ME,NC,VA
4,4'-DDE [2C]	CT,NH,NY,ME,NC,VA
4,4'-DDT	CT,NH,NY,ME,NC,VA
4,4'-DDT [2C]	CT,NH,NY,ME,NC,VA
Dieldrin	CT,NH,NY,ME,NC,VA
Dieldrin [2C]	CT,NH,NY,ME,NC,VA
Endosulfan I	CT,NH,NY,ME,NC,VA
Endosulfan I [2C]	CT,NH,NY,ME,NC,VA
Endosulfan II	CT,NH,NY,ME,NC,VA
Endosulfan II [2C]	CT,NH,NY,ME,NC,VA



CERTIFICATIONS

Analyte	Certifications
SW-846 8081B in Water	
Endosulfan Sulfate	CT,NH,NY,ME,NC,VA
Endosulfan Sulfate [2C]	CT,NH,NY,ME,NC,VA
Endrin	CT,NH,NY,ME,NC,VA
Endrin [2C]	CT,NH,NY,ME,NC,VA
Endrin Aldehyde	CT,NH,NY,ME,NC,VA
Endrin Aldehyde [2C]	CT,NH,NY,ME,NC,VA
Endrin Ketone	NC
Endrin Ketone [2C]	NC
Heptachlor	CT,NH,NY,ME,NC,VA
Heptachlor [2C]	CT,NH,NY,ME,NC,VA
Heptachlor Epoxide	CT,NH,NY,ME,NC,VA
Heptachlor Epoxide [2C]	CT,NH,NY,ME,NC,VA
Hexachlorobenzene	NC
Hexachlorobenzene [2C]	NC
Methoxychlor	CT,NH,NY,ME,NC,VA
Methoxychlor [2C]	CT,NH,NY,ME,NC,VA
Toxaphene	CT,NH,NY,ME,NC,VA
Toxaphene [2C]	CT,NH,NY,ME,NC,VA
SW-846 8082A in Soil	
Aroclor-1016	CT,NH,NY,NC,ME,VA,PA
Aroclor-1016 [2C]	CT,NH,NY,NC,ME,VA,PA
Aroclor-1221	CT,NH,NY,NC,ME,VA,PA
Aroclor-1221 [2C]	CT,NH,NY,NC,ME,VA,PA
Aroclor-1232	CT,NH,NY,NC,ME,VA,PA
Aroclor-1232 [2C]	CT,NH,NY,NC,ME,VA,PA
Aroclor-1242	CT,NH,NY,NC,ME,VA,PA
Aroclor-1242 [2C]	CT,NH,NY,NC,ME,VA,PA
Aroclor-1248	CT,NH,NY,NC,ME,VA,PA
Aroclor-1248 [2C]	CT,NH,NY,NC,ME,VA,PA
Aroclor-1254	CT,NH,NY,NC,ME,VA,PA
Aroclor-1254 [2C]	CT,NH,NY,NC,ME,VA,PA
Aroclor-1260	CT,NH,NY,NC,ME,VA,PA
Aroclor-1260 [2C]	CT,NH,NY,NC,ME,VA,PA
Aroclor-1262	NH,NY,NC,ME,VA,PA
Aroclor-1262 [2C]	NH,NY,NC,ME,VA,PA
Aroclor-1268	NH,NY,NC,ME,VA,PA
Aroclor-1268 [2C]	NH,NY,NC,ME,VA,PA
SW-846 8082A in Water	
Aroclor-1016	CT,NH,NY,NC,ME,VA,PA
Aroclor-1016 [2C]	CT,NH,NY,NC,ME,VA,PA
Aroclor-1221	CT,NH,NY,NC,ME,VA,PA
Aroclor-1221 [2C]	CT,NH,NY,NC,ME,VA,PA
Aroclor-1232	CT,NH,NY,NC,ME,VA,PA
Aroclor-1232 [2C]	CT,NH,NY,NC,ME,VA,PA
Aroclor-1242	CT,NH,NY,NC,ME,VA,PA
Aroclor-1242 [2C]	CT,NH,NY,NC,ME,VA,PA



CERTIFICATIONS

Certified Analyses included in this Report

Dichloroprop [2C]

Analyte	Certifications
SW-846 8082A in Water	
Aroclor-1248	CT,NH,NY,NC,ME,VA,PA
Aroclor-1248 [2C]	CT,NH,NY,NC,ME,VA,PA
Aroclor-1254	CT,NH,NY,NC,ME,VA,PA
Aroclor-1254 [2C]	CT,NH,NY,NC,ME,VA,PA
Aroclor-1260	CT,NH,NY,NC,ME,VA,PA
Aroclor-1260 [2C]	CT,NH,NY,NC,ME,VA,PA
Aroclor-1262	NH,NY,NC,ME,VA,PA
Aroclor-1262 [2C]	NH,NY,NC,ME,VA,PA
Aroclor-1268	NH,NY,NC,ME,VA,PA
Aroclor-1268 [2C]	NH,NY,NC,ME,VA,PA
SW-846 8151A in Soil	
2,4-D	NY,ME,NC,NH,VA,CT
2,4-D [2C]	NY,ME,NC,NH,VA,CT
2,4-DB	NY,ME,NC,NH,VA,CT
2,4-DB [2C]	NY,ME,NC,NH,VA,CT
2,4,5-TP (Silvex)	NY,ME,NC,NH,VA,CT
2,4,5-TP (Silvex) [2C]	NY,ME,NC,NH,VA,CT
2,4,5-T	NY,ME,NC,NH,VA,CT
2,4,5-T [2C]	NY,ME,NC,NH,VA,CT
Dalapon	NY,ME,NC,NH,VA,CT
Dalapon [2C]	NY,ME,NC,NH,VA,CT
Dicamba	NY,ME,NC,NH,VA,CT
Dicamba [2C]	NY,ME,NC,NH,VA,CT
Dichloroprop	NY,ME,NC,NH,VA,CT
Dichloroprop [2C]	NY,ME,NC,NH,VA,CT
Dinoseb	NY,ME,NC,NH,VA,CT
Dinoseb [2C]	NY,ME,NC,NH,VA,CT
MCPA	NY,ME,NC,NH,VA,CT
MCPA [2C]	NY,ME,NC,NH,VA,CT
MCPP	NY,ME,NC,NH,VA,CT
MCPP [2C] SW-846 8151A in Water	NY,ME,NC,NH,VA,CT
2,4-D	ME,NC,NH,CT,NY,VA
2,4-D [2C]	ME,NC,NH,CT,NY,VA
2,4-DB	ME,NC,NH,CT,NY,VA
2,4-DB [2C]	ME,NC,NH,CT,NY,VA
2,4,5-TP (Silvex)	ME,NC,NH,CT,NY,VA
2,4,5-TP (Silvex) [2C]	ME,NC,NH,CT,NY,VA
2,4,5-T	ME,NC,NH,CT,NY,VA
2,4,5-T [2C] Dalapon	ME,NC,NH,CT,NY,VA ME,NC,NH,CT,NY,VA
Dalapon Dalapon [2C]	ME,NC,NH,CT,NY,VA ME,NC,NH,CT,NY,VA
Datapon [2C] Dicamba	ME,NC,NH,CT,NY,VA ME,NC,NH,CT,NY,VA
Dicamba [2C]	ME,NC,NH,CT,NY,VA
Dichloroprop	ME,NC,NH,CT,NY,VA
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ME,NC,NH,CT,NY,VA



CERTIFICATIONS

Certified Analyses included in this Report

trans-1,3-Dichloropropene

Analyte	Certifications	
SW-846 8151A in Water		
Dinoseb	ME,NC,NH,CT,NY,VA	
Dinoseb [2C]	ME,NC,NH,CT,NY,VA	
MCPA	NC,CT	
MCPA [2C]	NC,CT	
MCPP	NC,CT	
MCPP [2C]	NC,CT	
SW-846 8260D in Soil		
Acetone	CT,NH,NY,ME,VA	
Acrylonitrile	CT,NH,NY,ME,VA	
Benzene	CT,NH,NY,ME,VA	
Bromobenzene	NH,NY,ME,VA	
Bromochloromethane	NH,NY,ME,VA	
Bromodichloromethane	CT,NH,NY,ME,VA	
Bromoform	CT,NH,NY,ME,VA	
Bromomethane	CT,NH,NY,ME,VA	
2-Butanone (MEK)	CT,NH,NY,ME,VA	
n-Butylbenzene	CT,NH,NY,ME,VA	
sec-Butylbenzene	CT,NH,NY,ME,VA	
tert-Butylbenzene	CT,NH,NY,ME,VA	
Carbon Disulfide	CT,NH,NY,ME,VA	
Carbon Tetrachloride	CT,NH,NY,ME,VA	
Chlorobenzene	CT,NH,NY,ME,VA	
Chlorodibromomethane	CT,NH,NY,ME,VA	
Chloroethane	CT,NH,NY,ME,VA	
Chloroform	CT,NH,NY,ME,VA	
Chloromethane	CT,NH,NY,ME,VA	
2-Chlorotoluene	CT,NH,NY,ME,VA	
4-Chlorotoluene	CT,NH,NY,ME,VA	
1,2-Dibromo-3-chloropropane (DBCP)	NY	
1,2-Dibromoethane (EDB)	NH,NY	
Dibromomethane	NH,NY,ME,VA	
1,2-Dichlorobenzene	CT,NH,NY,ME,VA	
1,3-Dichlorobenzene	CT,NH,NY,ME,VA	
1,4-Dichlorobenzene	CT,NH,NY,ME,VA	
Dichlorodifluoromethane (Freon 12)	NY,ME,VA	
1,1-Dichloroethane	CT,NH,NY,ME,VA	
1,2-Dichloroethane	CT,NH,NY,ME,VA	
1,1-Dichloroethylene	CT,NH,NY,ME,VA	
cis-1,2-Dichloroethylene	CT,NH,NY,ME,VA	
trans-1,2-Dichloroethylene	CT,NH,NY,ME,VA	
1,2-Dichloropropane	CT,NH,NY,ME,VA	
1,3-Dichloropropane	NH,NY,ME,VA	
2,2-Dichloropropane	NH,NY,ME,VA	
1,1-Dichloropropene	NH,NY,ME,VA	
cis-1,3-Dichloropropene	CT,NH,NY,ME,VA	
4 1.2 D: 11		

CT,NH,NY,ME,VA



CERTIFICATIONS

Certified Analyses included in this Report

Carbazole

Analyte	Certifications
SW-846 8260D in Soil	
Ethylbenzene	CT,NH,NY,ME,VA
Hexachlorobutadiene	NH,NY,ME,VA
2-Hexanone (MBK)	CT,NH,NY,ME,VA
Isopropylbenzene (Cumene)	CT,NH,NY,ME,VA
p-Isopropyltoluene (p-Cymene)	NH,NY
Methyl tert-Butyl Ether (MTBE)	NY,VA
Methylene Chloride	CT,NH,NY,ME,VA
4-Methyl-2-pentanone (MIBK)	CT,NH,NY,VA
Naphthalene	NH,NY,ME,VA
n-Propylbenzene	NH,NY
Styrene	CT,NH,NY,ME,VA
1,1,1,2-Tetrachloroethane	CT,NH,NY,ME,VA
1,1,2,2-Tetrachloroethane	CT,NH,NY,ME,VA
Tetrachloroethylene	CT,NH,NY,ME,VA
Toluene	CT,NH,NY,ME,VA
1,2,4-Trichlorobenzene	NH,NY,ME,VA
1,1,1-Trichloroethane	CT,NH,NY,ME,VA
1,1,2-Trichloroethane	CT,NH,NY,ME,VA
Trichloroethylene	CT,NH,NY,ME,VA
Trichlorofluoromethane (Freon 11)	CT,NH,NY,VA
1,2,3-Trichloropropane	NH,NY,ME,VA
1,2,4-Trimethylbenzene	CT,NH,NY,ME,VA
1,3,5-Trimethylbenzene	CT,NH,NY,ME,VA
Vinyl Chloride	CT,NH,NY,ME,VA
m+p Xylene	CT,NH,NY,ME,VA
o-Xylene	CT,NH,NY,ME,VA
SW-846 8270E in Soil	
Acenaphthene	CT,NY,NH,ME,NC,VA
Acenaphthylene	CT,NY,NH,ME,NC,VA
Acetophenone	NY,NH,ME,NC,VA
Aniline	NY,NH,ME,NC,VA
Anthracene	CT,NY,NH,ME,NC,VA
Benzidine	CT,NY,NH,ME,NC,VA
Benzo(a)anthracene	CT,NY,NH,ME,NC,VA
Benzo(a)pyrene	CT,NY,NH,ME,NC,VA
Benzo(b)fluoranthene	CT,NY,NH,ME,NC,VA
Benzo(g,h,i)perylene	CT,NY,NH,ME,NC,VA
Benzo(k)fluoranthene	CT,NY,NH,ME,NC,VA
Benzoic Acid	NY,NH,ME,NC,VA
Bis(2-chloroethoxy)methane	CT,NY,NH,ME,NC,VA
Bis(2-chloroethyl)ether	CT,NY,NH,ME,NC,VA
Bis(2-chloroisopropyl)ether	CT,NY,NH,ME,NC,VA
Bis(2-Ethylhexyl)phthalate 4-Bromophenylphenylether	CT,NY,NH,ME,NC,VA CT,NY,NH,ME,NC,VA
4-Bromopnenyipnenyietner Butylbenzylphthalate	CT,NY,NH,ME,NC,VA CT,NY,NH,ME,NC,VA
S. I I.	VI, VI, VII, MIL, VI

NC



CERTIFICATIONS

Analyte	Certifications
SW-846 8270E in Soil	
4-Chloroaniline	CT,NY,NH,ME,NC,VA
4-Chloro-3-methylphenol	CT,NY,NH,ME,NC,VA
2-Chloronaphthalene	CT,NY,NH,NC,VA
2-Chlorophenol	CT,NY,NH,ME,NC,VA
4-Chlorophenylphenylether	CT,NY,NH,ME,NC,VA
Chrysene	CT,NY,NH,ME,NC,VA
Dibenz(a,h)anthracene	CT,NY,NH,ME,NC,VA
Dibenzofuran	CT,NY,NH,ME,NC,VA
Di-n-butylphthalate	CT,NY,NH,ME,NC,VA
1,2-Dichlorobenzene	NY,NH,ME,NC,VA
1,3-Dichlorobenzene	NY,NH,ME,NC,VA
1,4-Dichlorobenzene	NY,NH,ME,NC,VA
3,3-Dichlorobenzidine	CT,NY,NH,ME,NC,VA
2,4-Dichlorophenol	CT,NY,NH,ME,NC,VA
Diethylphthalate	CT,NY,NH,ME,NC,VA
2,4-Dimethylphenol	CT,NY,NH,ME,NC,VA
Dimethylphthalate	CT,NY,NH,ME,NC,VA
4,6-Dinitro-2-methylphenol	CT,NY,NH,ME,NC,VA
2,4-Dinitrophenol	CT,NY,NH,ME,NC,VA
2,4-Dinitrotoluene	CT,NY,NH,ME,NC,VA
2,6-Dinitrotoluene	CT,NY,NH,ME,NC,VA
Di-n-octylphthalate	CT,NY,NH,ME,NC,VA
1,2-Diphenylhydrazine/Azobenzene	NY,NH,ME,NC,VA
Fluoranthene	CT,NY,NH,ME,NC,VA
Fluorene	NY,NH,ME,NC,VA
Hexachlorobenzene	CT,NY,NH,ME,NC,VA
Hexachlorobutadiene	CT,NY,NH,ME,NC,VA
Hexachlorocyclopentadiene	CT,NY,NH,ME,NC,VA
Hexachloroethane	CT,NY,NH,ME,NC,VA
Indeno(1,2,3-cd)pyrene	CT,NY,NH,ME,NC,VA
Isophorone	CT,NY,NH,ME,NC,VA
1-Methylnaphthalene	NC
2-Methylnaphthalene	CT,NY,NH,ME,NC,VA
2-Methylphenol	CT,NY,NH,ME,NC,VA
3/4-Methylphenol	CT,NY,NH,ME,NC,VA
Naphthalene	CT,NY,NH,ME,NC,VA
2-Nitroaniline	CT,NY,NH,ME,NC,VA
3-Nitroaniline	CT,NY,NH,ME,NC,VA
4-Nitroaniline	CT,NY,NH,ME,NC,VA
Nitrobenzene	CT,NY,NH,ME,NC,VA
2-Nitrophenol	CT,NY,NH,ME,NC,VA
4-Nitrophenol	CT,NY,NH,ME,NC,VA
N-Nitrosodimethylamine	CT,NY,NH,ME,NC,VA
N-Nitrosodi-n-propylamine	CT,NY,NH,ME,NC,VA
Pentachloronitrobenzene	NY,NC
Pentachlorophenol	CT,NY,NH,ME,NC,VA
Phenanthrene	CT,NY,NH,ME,NC,VA
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CERTIFICATIONS

Analyte	Certifications
SW-846 8270E in Soil	
Phenol	CT,NY,NH,ME,NC,VA
Pyrene	CT,NY,NH,ME,NC,VA
Pyridine	CT,NY,NH,ME,NC,VA
1,2,4,5-Tetrachlorobenzene	NY,NC
1,2,4-Trichlorobenzene	CT,NY,NH,ME,NC,VA
2,4,5-Trichlorophenol	CT,NY,NH,ME,NC,VA
2,4,6-Trichlorophenol	CT,NY,NH,ME,NC,VA
2-Fluorophenol	NC
SW-846 8270E in Water	
Acenaphthene	CT,NY,NC,ME,NH,VA
Acenaphthylene	CT,NY,NC,ME,NH,VA
Acetophenone	NY,NC
Aniline	CT,NY,NC,ME,VA
Anthracene	CT,NY,NC,ME,NH,VA
Benzidine	CT,NY,NC,ME,NH,VA
Benzo(a)anthracene	CT,NY,NC,ME,NH,VA
Benzo(a)pyrene	CT,NY,NC,ME,NH,VA
Benzo(b)fluoranthene	CT,NY,NC,ME,NH,VA
Benzo(g,h,i)perylene	CT,NY,NC,ME,NH,VA
Benzo(k)fluoranthene	CT,NY,NC,ME,NH,VA
Benzoic Acid	NY,NC,ME,NH,VA
Bis(2-chloroethoxy)methane	CT,NY,NC,ME,NH,VA
Bis(2-chloroethyl)ether	CT,NY,NC,ME,NH,VA
Bis(2-chloroisopropyl)ether	CT,NY,NC,ME,NH,VA
Bis(2-Ethylhexyl)phthalate	CT,NY,NC,ME,NH,VA
4-Bromophenylphenylether	CT,NY,NC,ME,NH,VA
Butylbenzylphthalate	CT,NY,NC,ME,NH,VA
Carbazole	NC
4-Chloroaniline	CT,NY,NC,ME,NH,VA
4-Chloro-3-methylphenol	CT,NY,NC,ME,NH,VA
2-Chloronaphthalene	CT,NY,NC,ME,NH,VA
2-Chlorophenol	CT,NY,NC,ME,NH,VA
4-Chlorophenylphenylether	CT,NY,NC,ME,NH,VA
Chrysene	CT,NY,NC,ME,NH,VA
Dibenz(a,h)anthracene	CT,NY,NC,ME,NH,VA
Dibenzofuran	CT,NY,NC,ME,NH,VA
Di-n-butylphthalate	CT,NY,NC,ME,NH,VA
1,2-Dichlorobenzene	CT,NY,NC,ME,NH,VA
1,3-Dichlorobenzene	CT,NY,NC,ME,NH,VA
1,4-Dichlorobenzene	CT,NY,NC,ME,NH,VA
3,3-Dichlorobenzidine	CT,NY,NC,ME,NH,VA
2,4-Dichlorophenol	CT,NY,NC,ME,NH,VA
Diethylphthalate	CT,NY,NC,ME,NH,VA
2,4-Dimethylphenol	CT,NY,NC,ME,NH,VA
Dimethylphthalate	CT,NY,NC,ME,NH,VA
4,6-Dinitro-2-methylphenol	CT,NY,NC,ME,NH,VA



CERTIFICATIONS

Analyte	Certifications
SW-846 8270E in Water	
2,4-Dinitrophenol	CT,NY,NC,ME,NH,VA
2,4-Dinitrotoluene	CT,NY,NC,ME,NH,VA
2,6-Dinitrotoluene	CT,NY,NC,ME,NH,VA
Di-n-octylphthalate	CT,NY,NC,ME,NH,VA
1,2-Diphenylhydrazine/Azobenzene	NY,NC
Fluoranthene	CT,NY,NC,ME,NH,VA
Fluorene	NY,NC,ME,NH,VA
Hexachlorobenzene	CT,NY,NC,ME,NH,VA
Hexachlorobutadiene	CT,NY,NC,ME,NH,VA
Hexachlorocyclopentadiene	CT,NY,NC,ME,NH,VA
Hexachloroethane	CT,NY,NC,ME,NH,VA
Indeno(1,2,3-cd)pyrene	CT,NY,NC,ME,NH,VA
Isophorone	CT,NY,NC,ME,NH,VA
1-Methylnaphthalene	NC
2-Methylnaphthalene	CT,NY,NC,ME,NH,VA
2-Methylphenol	CT,NY,NC,NH,VA
3/4-Methylphenol	CT,NY,NC,NH,VA
Naphthalene	CT,NY,NC,ME,NH,VA
2-Nitroaniline	CT,NY,NC,ME,NH,VA
3-Nitroaniline	CT,NY,NC,ME,NH,VA
4-Nitroaniline	CT,NY,NC,ME,NH,VA
Nitrobenzene	CT,NY,NC,ME,NH,VA
2-Nitrophenol	CT,NY,NC,ME,NH,VA
4-Nitrophenol	CT,NY,NC,ME,NH,VA
N-Nitrosodimethylamine	CT,NY,NC,ME,NH,VA
N-Nitrosodi-n-propylamine	CT,NY,NC,ME,NH,VA
Pentachloronitrobenzene	NC
Pentachlorophenol	CT,NY,NC,ME,NH,VA
Phenanthrene	CT,NY,NC,ME,NH,VA
Phenol	CT,NY,NC,ME,NH,VA
Pyrene	CT,NY,NC,ME,NH,VA
Pyridine	CT,NY,NC,ME,NH,VA
1,2,4,5-Tetrachlorobenzene	NY,NC
1,2,4-Trichlorobenzene	CT,NY,NC,ME,NH,VA
2,4,5-Trichlorophenol	CT,NY,NC,ME,NH,VA
2,4,6-Trichlorophenol	CT,NY,NC,ME,NH,VA
2-Fluorophenol	NC



Con-Test, a Pace Environmental Laboratory, operates under the following certifications and accreditations:

Code	Description	Number	Expires
AIHA	AIHA-LAP, LLC - ISO 17025:2017	100033	03/1/2024
MA	Massachusetts DEP	M-MA100	06/30/2023
CT	Connecticut Department of Public Health	PH-0165	12/31/2022
NY	New York State Department of Health	10899 NELAP	04/1/2023
NH	New Hampshire Environmental Lab	2516 NELAP	02/5/2023
RI	Rhode Island Department of Health	LAO00373	12/30/2022
NC	North Carolina Div. of Water Quality	652	12/31/2022
NJ	New Jersey DEP	MA007 NELAP	06/30/2023
FL	Florida Department of Health	E871027 NELAP	06/30/2023
VT	Vermont Department of Health Lead Laboratory	LL720741	07/30/2023
VT-DW	Vermont Department of Health Drinking Water	VT-255716	06/12/2023
ME	State of Maine	MA00100	06/9/2023
VA	Commonwealth of Virginia	460217	12/14/2022
NH-P	New Hampshire Environmental Lab	2557 NELAP	09/6/2023
NC-DW	North Carolina Department of Health and Human Services	25703	07/31/2023
PA	Commonwealth of Pennsylvania DEP	68-05812	06/30/2023
MI	Dept. of Env, Great Lakes, and Energy	9100	09/6/2023

Glassware in freezer? Y / N Prepackaged Cooler? Y / N responsible for missing samples analyses the laboratory will perform. Any missing information is not the laboratory's responsibility. Pace Analytical values your partnership on each project and will try to assist with missing information, but will Disclaimer: Pace Analytical is not responsible for any omitted information on the Chain of Custody. The Chain of Custody is a legal document that must be complete and accurate and is used to determine what Glassware in the fridge? from prepacked coolers "Pace Analytical is not ' Matrix Codes: GW = Ground Water WW = Waste Water DW = Drinking Water ² Preservation Codes: I = fced Total Number Of X = Sodium Hydroxide B = Sodium Bisulfate Courier Use Only 0 = Other (please O = Other (please define) 5 = Sulfuric Acid Z ≻ ? Preservation Code age 1 of 1 VIALS N = Nitric Acid GLASS BACTERIA SL = Sludge SOL = Solid M = Methanol PLASTIC ENCORE T = Sodium Thiosulfate A = Air S = Soil define) possible sample concentration within the Conc H - High; M - Medium; L - Low; C - Clean; U -Please use the following codes to indicate MELAC and AIHA-LAP, LLC Accredited Chromatogram AIHA-LAP, LLC not be held accountable. Code column above: ANALYSIS REOUESTED Other Doc # 381 Rev 5_07/13/2021 outy Has (1) 1402. JAN of SOI/. CT RCP Required MA MCP Required MCP Certification Form Required ACP Certification Form Required MA State DW Required WRTA Margary Dig 7520 39 Spruce Street East Longmeadow, MA 01028 ENCORE BACTERIA Field Filtered Field Filtered Lab to Fitter Lab to Filter PCB ONL PLASTIC : School MWRA MBTA NON SOXHLET GLASS ď SOXHLET CHAIN OF CUSTOBY RECORD VIALS 3 0 0 0 0 Borlew & Bertshim Conc Code http://www.pacelabs.com Municipality Brownfield Due Date: PF- CEGIPO-09103-8 'Matrix Code PWSID# 10-Day EXCEL 3-Day 4-Day S CLP Like Data Pkg Required: COMP/GRAB 0 X B PFAS 10-Day (std) PDF 9-12-27 17:47 17:42 17:-22 Government Ending Date/Time Email To: -ax To #: format: Federal Other: -Day -Day 9.13-22 11:45 Client Comments: -Day City Project Entity Beginning Date/Time assiton 1 STOPES Access COC's and Support Requests M 0120 PF-ccarp-ogizza-A Date/Time: // 45 PF-CCMP-CMP-CM122-B Dale/Time: 17 CS Accounts Billabla Client Sample ID / Description Phone: 413-525-2332 Fax: 413-525-6405 Sux 6/+ P. H. Sell 48.33 Date/Time: 13-32 Date/Time: Date/Time Date/Time: Emmenut TOTAL BOY ENDER S Project Manager: M. Jawkins -Project Location: P145 FV L
Project Number: 47-11 Mrs Sall Pace Analytical Address: 1450 East St. Invoice Recipient: PED4 Sampled By: L. Quinn a Pace Quote Name/Numbery Relinquished by: (signature) iquished by: (signature) (signature) nature) eceived by: (signature) Received by: (signature) Work Order# Relinquished by: Relinguished tyr Received by: (s) Соттепте ed by: Phone: Page 83 of 84 39 Spruce St. East Longmeadow, MA. 01028 P: 413-525-2332 F: 413-525-6405

Pace" PEOPLE ADVANCING SCIENCE
Doc# 277 Rev 6 July 2022

Login Sample Receipt Checklist - (Rejection Criteria Listing - Using Acceptance Policy) Any False Statement will be brought to the attention of the Client - State True or False

	d By	0		Date	9/13/20	=	Time	1325	
How were the	-	In Cooler		No Cooler		On Ice	- ~	No Ice	
receive	-			140 000101				•	
		Direct From	Sample			Ambient		Melted Ice	
Were sampl		Within	سبب		By Gun #		_Actual Ten		
Tempura		2-6°C			By Blank #		_Actual Ten		***************************************
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Is COC in ink					•	ed within hold			
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pertinent Info		Project?	-11-0	ID's?		Collection D	ates/ i illies !		
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HCL- Meoh-		250 mL Amb.		500 mL 250 mL	Plastic		40z /	Amb/Clear	
HCL- Meoh- Bisulfate-	2 - Ц	250 mL Amb. Col./Bacteria		500 mL 250 mL Flash	Plastic point		4oz /	Amb/Clear Amb/Clear	
HCL- Meoh- Bisulfate- DI-		250 mL Amb. Col./Bacteria Other Plastic		500 mL 250 mL Flash Other	Plastic point Glass		4oz / 2oz /	Amb/Clear	
HCL- Meoh- Bisulfate- DI- Thiosulfate-		250 mL Amb. Col./Bacteria Other Plastic SOC Kit		500 mL 250 mL Flash Other Plasti	Plastic point Glass c Bag		4oz /	Amb/Clear Amb/Clear	
HCL- Meoh- Bisulfate- DI- Thiosulfate-		250 mL Amb. Col./Bacteria Other Plastic		500 mL 250 mL Flash Other Plasti Zipl	Plastic point Glass c Bag ock		4oz / 2oz /	Amb/Clear Amb/Clear	
HCL- Meoh- Bisulfate- DI- Thiosulfate- Sulfuric-	¥	250 mL Amb. Col./Bacteria Other Plastic SOC Kit Perchlorate		500 mL 250 mL Flash Other Plasti	Plastic point Glass c Bag ock	#	4oz / 2oz /	Amb/Clear Amb/Clear Encore	#
HCL- Meoh- Bisulfate- DI- Thiosulfate- Sulfuric-		250 mL Amb. Col./Bacteria Other Plastic SOC Kit Perchlorate Containers:	#	500 mL 250 mL Flash Other Plastic Zipl Unused	Plastic point Glass c Bag ock Media	#	4oz / 2oz / E Frozen:	Amb/Clear Amb/Clear Encore	#
HCL- Meoh- Bisulfate- DI- Thiosulfate- Sulfuric- Vials Unp-	¥	250 mL Amb. Col./Bacteria Other Plastic SOC Kit Perchlorate Containers: 1 Liter Amb.	#	500 mL 250 mL Flash Other Plasti Zipl Unused	Plastic point Glass c Bag ock Media Plastic	#	4oz / 2oz / Frozen:	Amb/Clear Amb/Clear Encore	#
HCL- Meoh- Bisulfate- DI- Thiosulfate- Sulfuric- Vials Unp- HCL-	¥	250 mL Amb. Col./Bacteria Other Plastic SOC Kit Perchlorate Containers: 1 Liter Amb. 500 mL Amb.	#	500 mL 250 mL Flash Other Plasti Zipl Unused 1 Liter 500 mL	Plastic point Glass c Bag ock Media Plastic Plastic	#	402 / 202 / Frozen:	Amb/Clear Amb/Clear Encore	#
HCL- Meoh- Bisulfate- DI- Thiosulfate- Sulfuric- Vials Unp- HCL- Meoh-	¥	250 mL Amb. Col./Bacteria Other Plastic SOC Kit Perchlorate Containers: 1 Liter Amb. 500 mL Amb. 250 mL Amb.	#	500 mL 250 mL Flash Other Plasti Zipl Unused 1 Liter 500 mL 250 mL	Plastic point Glass c Bag ock Media Plastic Plastic Plastic	#	402 / 202 / Frozen:	Amb/Clear Amb/Clear Encore oz Amb. Amb/Clear	#
HCL- Meoh- Bisulfate- DI- Thiosulfate- Sulfuric- Vials Unp- HCL- Meoh- Bisulfate-	¥	250 mL Amb. Col./Bacteria Other Plastic SOC Kit Perchlorate Containers: 1 Liter Amb. 500 mL Amb. 250 mL Amb. Col./Bacteria	#	500 mL 250 mL Flash Other Plastic Zipl Unused 1 Liter 500 mL 250 mL Flash	Plastic point Glass c Bag ock Media Plastic Plastic Plastic point	#	40Z / 20Z / Frozen:	Amb/Clear Amb/Clear Encore oz Amb. Amb/Clear Amb/Clear	#
HCL- Meoh- Bisulfate- DI- Thiosulfate- Sulfuric- Vials Unp- HCL- Meoh- Bisulfate- DI-	¥	250 mL Amb. Col./Bacteria Other Plastic SOC Kit Perchlorate Containers: 1 Liter Amb. 500 mL Amb. 250 mL Amb. Col./Bacteria Other Plastic	#	500 mL 250 mL Flash Other Plastic Zipl Unused 1 Liter 500 mL 250 mL Flash Other	Plastic point Glass c Bag ock Media Plastic Plastic Plastic point Glass	#	40Z / 20Z / Frozen:	Amb/Clear Amb/Clear Encore oz Amb. Amb/Clear Amb/Clear	#
HCL- Meoh- Bisulfate- DI- Thiosulfate- Sulfuric- Vials Unp- HCL- Meoh- Bisulfate-	¥	250 mL Amb. Col./Bacteria Other Plastic SOC Kit Perchlorate Containers: 1 Liter Amb. 500 mL Amb. 250 mL Amb. Col./Bacteria	#	500 mL 250 mL Flash Other Plastic Zipl Unused 1 Liter 500 mL 250 mL Flash	Plastic point Glass c Bag ock Media Plastic Plastic Plastic point Glass c Bag	#	402 / 202 / Frozen:	Amb/Clear Amb/Clear Encore oz Amb. Amb/Clear Amb/Clear	#

December 28, 2021

Maura Hawkins Berkshire Environmental Consultants 1450 East St., Suite 6-H Pittsfield, MA 01201

Project Location: Pittsfield, MA

Client Job Number: Project Number: 43-04-21

Laboratory Work Order Number: 21L0502

Enclosed are results of analyses for samples as received by the laboratory on December 8, 2021. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Scott C. Basal Project Manager

Table of Contents

Sample Summary	4
Case Narrative	5
Sample Results	8
21L0502-01	8
Sample Preparation Information	18
QC Data	20
Volatile Organic Compounds by GC/MS	20
B296464	20
Semivolatile Organic Compounds by GC/MS	25
B296919	25
Organochloride Pesticides by GC/ECD	30
B296928	30
Polychlorinated Biphenyls By GC/ECD	33
B296927	33
Herbicides by GC/ECD	34
B297361	34
Petroleum Hydrocarbons Analyses	36
B296918	36
Metals Analyses (Total)	37
B296831	37
B297040	37
Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)	38
B296500	38
B296855	38
B297150	38

Table of Contents (continued)

B297151	38
Pesticides Degradation Report	39
Dual Column RPD Report	42
Flag/Qualifier Summary	51
Certifications	52
Chain of Custody/Sample Receipt	63



Berkshire Environmental Consultants 1450 East St., Suite 6-H Pittsfield, MA 01201

ATTN: Maura Hawkins

REPORT DATE: 12/28/2021

PURCHASE ORDER NUMBER:

PROJECT NUMBER: 43-04-21

ANALYTICAL SUMMARY

WORK ORDER NUMBER: 21L0502

The results of analyses performed on the following samples submitted to CON-TEST, a Pace Analytical Laboratory, are found in this report.

PROJECT LOCATION: Pittsfield, MA

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
PFC-COMP-120721	21L0502-01	Soil		SM 2540G	
				SM21-23 2510B	
				Modified	
				SW-846 1030	
				SW-846 6010D	
				SW-846 7471B	
				SW-846 8081B	
				SW-846 8082A	
				SW-846 8100 Modi	fied
				SW-846 8151A	
				SW-846 8260D	
				SW-846 8270E	
				SW-846 9014	
				SW-846 9030A	
				SW-846 9045C	

CASE NARRATIVE SUMMARY

All reported results are within defined laboratory quality control objectives unless listed below or otherwise qualified in this report.

For method 8151 samples were derivatized on 12/28/21

For method 8151 samples analysis bracketed by LCS to monitor esterification. All recoveries in the bracketing LCS met method criteria.



SW-846 8081B

Qualifications:

DL-03

Elevated reporting limit due to matrix interference.

Analyte & Samples(s) Qualified:

21L0502-01[PFC-COMP-120721]

S-01

The surrogate recovery for this sample is not available due to sample dilution below the surrogate reporting limit required from high analyte concentration and/or matrix interferences.

Analyte & Samples(s) Qualified:

Decachlorobiphenyl

21L0502-01[PFC-COMP-120721]

Decachlorobiphenyl [2C]

21L0502-01[PFC-COMP-120721]

Tetrachloro-m-xylene

21L0502-01[PFC-COMP-120721]

Tetrachloro-m-xylene [2C]

21L0502-01[PFC-COMP-120721]

SW-846 8151A

Qualifications:

L-04

Laboratory fortified blank/laboratory control sample recovery and duplicate recovery are outside of control limits. Reported value for this compound is likely to be biased on the low side. Analyte & Samples(s) Qualified:

Dalapon

21L0502-01[PFC-COMP-120721], B297361-BLK1, B297361-BS1, B297361-BSD1

Dalapon [2C]

21L0502-01[PFC-COMP-120721], B297361-BLK1, B297361-BS1, B297361-BSD1

L-07

Either laboratory fortified blank/laboratory control sample or duplicate recovery is outside of control limits, but the other is within limits. RPD between the two LFB/LCS results is within method specified criteria.

Analyte & Samples(s) Qualified:

2.4-DB

B297361-BSD1

2,4-DB [2C]

B297361-BSD1

O-32

A dilution was performed as part of the standard analytical procedure.

Analyte & Samples(s) Qualified:

21L0502-01[PFC-COMP-120721]

SW-846 8260D

Qualifications:

V-05

Continuing calibration verification (CCV) did not meet method specifications and was biased on the low side for this compound.

Analyte & Samples(s) Qualified:

Dichlorodifluoromethane (Freon 12

21L0502-01[PFC-COMP-120721], B296464-BLK1, B296464-BS1, B296464-BSD1, S066225-CCV1

SW-846 8270E

Qualifications:



L-02

Laboratory fortified blank/laboratory control sample recovery and duplicate recoveries outside of control limits. Data validation is not affected since all results are "not detected" for associated samples in this batch and bias is on the high side.

Analyte & Samples(s) Qualified:

Benzidine

B296919-BS1, B296919-BSD1

V-05

Continuing calibration verification (CCV) did not meet method specifications and was biased on the low side for this compound.

Analyte & Samples(s) Qualified:

Benzidine

21L0502-01[PFC-COMP-120721], B296919-BLK1, B296919-BS1, B296919-BSD1, S066495-CCV1, S066690-CCV1

V-06

Continuing calibration verification (CCV) did not meet method specifications and was biased on the high side for this compound.

Analyte & Samples(s) Qualified:

Benzoic Acid

21L0502-01[PFC-COMP-120721], S066690-CCV1

V-35

Initial calibration verification (ICV) did not meet method specifications and was biased on the high side for this compound. Reported result is estimated

Analyte & Samples(s) Qualified:

Benzidine

21L0502-01[PFC-COMP-120721], B296919-BLK1, B296919-BS1, B296919-BSD1, S066495-CCV1, S066690-CCV1

SW-846 9045C

Qualifications:

H-03

Sample received after recommended holding time was exceeded.

Analyte & Samples(s) Qualified:

21L0502-01[PFC-COMP-120721]

SW-846 8100 Modified

TPH (C9-C36) is quantitated against a calibration made with a diesel standard.

Jua Webstensten

The results of analyses reported only relate to samples submitted to Con-Test, a Pace Analytical Laboratory, for testing. I certify that the analyses listed above, unless specifically listed as subcontracted, if any, were performed under my direction according to the approved methodologies listed in this document, and that based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.

Technical Representative



Project Location: Pittsfield, MA Sample Description: Work Order: 21L0502

Date Received: 12/8/2021

Field Sample #: PFC-COMP-120721

Sample ID: 21L0502-01
Sample Matrix: Soil

Sampled: 12/7/2021 10:51

Volatile Organic Compounds by GC/MS

			Volatile Organic Co	mpounds by G	C/MS				
Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	0.075	mg/Kg	1		SW-846 8260D	12/9/21	12/9/21 10:02	MFF
Acrylonitrile	ND	0.0045	mg/Kg	1		SW-846 8260D	12/9/21	12/9/21 10:02	MFF
tert-Amyl Methyl Ether (TAME)	ND	0.00075	mg/Kg	1		SW-846 8260D	12/9/21	12/9/21 10:02	MFF
Benzene	ND	0.0015	mg/Kg	1		SW-846 8260D	12/9/21	12/9/21 10:02	MFF
Bromobenzene	ND	0.0015	mg/Kg	1		SW-846 8260D	12/9/21	12/9/21 10:02	MFF
Bromochloromethane	ND	0.0015	mg/Kg	1		SW-846 8260D	12/9/21	12/9/21 10:02	MFF
Bromodichloromethane	ND	0.0015	mg/Kg	1		SW-846 8260D	12/9/21	12/9/21 10:02	MFF
Bromoform	ND	0.0015	mg/Kg	1		SW-846 8260D	12/9/21	12/9/21 10:02	MFF
Bromomethane	ND	0.0075	mg/Kg	1		SW-846 8260D	12/9/21	12/9/21 10:02	MFF
2-Butanone (MEK)	ND	0.030	mg/Kg	1		SW-846 8260D	12/9/21	12/9/21 10:02	MFF
tert-Butyl Alcohol (TBA)	ND	0.075	mg/Kg	1		SW-846 8260D	12/9/21	12/9/21 10:02	MFF
n-Butylbenzene	ND	0.0015	mg/Kg	1		SW-846 8260D	12/9/21	12/9/21 10:02	MFF
sec-Butylbenzene	ND	0.0015	mg/Kg	1		SW-846 8260D	12/9/21	12/9/21 10:02	MFF
tert-Butylbenzene	ND	0.0015	mg/Kg	1		SW-846 8260D	12/9/21	12/9/21 10:02	MFF
tert-Butyl Ethyl Ether (TBEE)	ND	0.00075	mg/Kg	1		SW-846 8260D	12/9/21	12/9/21 10:02	MFF
Carbon Disulfide	ND	0.0075	mg/Kg	1		SW-846 8260D	12/9/21	12/9/21 10:02	MFF
Carbon Tetrachloride	ND	0.0015	mg/Kg	1		SW-846 8260D	12/9/21	12/9/21 10:02	MFF
Chlorobenzene	ND	0.0015	mg/Kg	1		SW-846 8260D	12/9/21	12/9/21 10:02	MFF
Chlorodibromomethane	ND	0.00075	mg/Kg	1		SW-846 8260D	12/9/21	12/9/21 10:02	MFF
Chloroethane	ND	0.015	mg/Kg	1		SW-846 8260D	12/9/21	12/9/21 10:02	MFF
Chloroform	ND	0.0030	mg/Kg	1		SW-846 8260D	12/9/21	12/9/21 10:02	MFF
Chloromethane	ND	0.0075	mg/Kg	1		SW-846 8260D	12/9/21	12/9/21 10:02	MFF
2-Chlorotoluene	ND	0.0015	mg/Kg	1		SW-846 8260D	12/9/21	12/9/21 10:02	MFF
4-Chlorotoluene	ND	0.0015	mg/Kg	1		SW-846 8260D	12/9/21	12/9/21 10:02	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	0.0015	mg/Kg	1		SW-846 8260D	12/9/21	12/9/21 10:02	MFF
1,2-Dibromoethane (EDB)	ND	0.00075	mg/Kg	1		SW-846 8260D	12/9/21	12/9/21 10:02	MFF
Dibromomethane	ND	0.00075	mg/Kg	1		SW-846 8260D	12/9/21	12/9/21 10:02	MFF
1,2-Dichlorobenzene	ND	0.0015	mg/Kg	1		SW-846 8260D	12/9/21	12/9/21 10:02	MFF
1,3-Dichlorobenzene	ND	0.0015	mg/Kg	1		SW-846 8260D	12/9/21	12/9/21 10:02	MFF
1,4-Dichlorobenzene	ND ND	0.0015	mg/Kg	1		SW-846 8260D	12/9/21	12/9/21 10:02	MFF
trans-1,4-Dichloro-2-butene	ND ND	0.0013		1		SW-846 8260D	12/9/21	12/9/21 10:02	MFF
Dichlorodifluoromethane (Freon 12)	ND	0.015	mg/Kg mg/Kg	1	V-05	SW-846 8260D	12/9/21	12/9/21 10:02	MFF
1,1-Dichloroethane	ND ND	0.0015	mg/Kg	1	V-03	SW-846 8260D	12/9/21	12/9/21 10:02	MFF
1,2-Dichloroethane	ND	0.0015	mg/Kg	1		SW-846 8260D	12/9/21	12/9/21 10:02	MFF
1,1-Dichloroethylene	ND	0.0013	mg/Kg	1		SW-846 8260D	12/9/21	12/9/21 10:02	MFF
cis-1,2-Dichloroethylene	ND ND	0.0030		1		SW-846 8260D SW-846 8260D		12/9/21 10:02	MFF
trans-1,2-Dichloroethylene			mg/Kg				12/9/21		
1,2-Dichloropropane	ND ND	0.0015 0.0015	mg/Kg	1		SW-846 8260D	12/9/21 12/9/21	12/9/21 10:02	MFF
1,3-Dichloropropane	ND ND	0.0015	mg/Kg	1		SW-846 8260D SW-846 8260D		12/9/21 10:02	MFF
2,2-Dichloropropane			mg/Kg				12/9/21	12/9/21 10:02	MFF
	ND ND	0.0015	mg/Kg	1		SW-846 8260D	12/9/21	12/9/21 10:02	MFF
1,1-Dichloropropene	ND	0.0015	mg/Kg	1		SW-846 8260D	12/9/21	12/9/21 10:02	MFF
cis-1,3-Dichloropropene	ND	0.00075	mg/Kg	1		SW-846 8260D	12/9/21	12/9/21 10:02	MFF
trans-1,3-Dichloropropene	ND	0.00075	mg/Kg	1		SW-846 8260D	12/9/21	12/9/21 10:02	MFF
Diethyl Ether	ND	0.015	mg/Kg	1		SW-846 8260D	12/9/21	12/9/21 10:02 Page 8 0	MFF

Page 8 of 64



Project Location: Pittsfield, MA Sample Description: Work Order: 21L0502

Date Received: 12/8/2021

Field Sample #: PFC-COMP-120721

Sample ID: 21L0502-01
Sample Matrix: Soil

Sampled: 12/7/2021 10:51

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.00075	mg/Kg	1		SW-846 8260D	12/9/21	12/9/21 10:02	MFF
1,4-Dioxane	ND	0.075	mg/Kg	1		SW-846 8260D	12/9/21	12/9/21 10:02	MFF
Ethylbenzene	ND	0.0015	mg/Kg	1		SW-846 8260D	12/9/21	12/9/21 10:02	MFF
Hexachlorobutadiene	ND	0.0015	mg/Kg	1		SW-846 8260D	12/9/21	12/9/21 10:02	MFF
2-Hexanone (MBK)	ND	0.015	mg/Kg	1		SW-846 8260D	12/9/21	12/9/21 10:02	MFF
Isopropylbenzene (Cumene)	ND	0.0015	mg/Kg	1		SW-846 8260D	12/9/21	12/9/21 10:02	MFF
p-Isopropyltoluene (p-Cymene)	ND	0.0015	mg/Kg	1		SW-846 8260D	12/9/21	12/9/21 10:02	MFF
Methyl Acetate	ND	0.0015	mg/Kg	1		SW-846 8260D	12/9/21	12/9/21 10:02	MFF
Methyl tert-Butyl Ether (MTBE)	ND	0.0030	mg/Kg	1		SW-846 8260D	12/9/21	12/9/21 10:02	MFF
Methyl Cyclohexane	ND	0.0015	mg/Kg	1		SW-846 8260D	12/9/21	12/9/21 10:02	MFF
Methylene Chloride	ND	0.015	mg/Kg	1		SW-846 8260D	12/9/21	12/9/21 10:02	MFF
4-Methyl-2-pentanone (MIBK)	ND	0.015	mg/Kg	1		SW-846 8260D	12/9/21	12/9/21 10:02	MFF
Naphthalene	ND	0.0030	mg/Kg	1		SW-846 8260D	12/9/21	12/9/21 10:02	MFF
n-Propylbenzene	ND	0.0015	mg/Kg	1		SW-846 8260D	12/9/21	12/9/21 10:02	MFF
Styrene	ND	0.0015	mg/Kg	1		SW-846 8260D	12/9/21	12/9/21 10:02	MFF
1,1,1,2-Tetrachloroethane	ND	0.0015	mg/Kg	1		SW-846 8260D	12/9/21	12/9/21 10:02	MFF
1,1,2,2-Tetrachloroethane	ND	0.00075	mg/Kg	1		SW-846 8260D	12/9/21	12/9/21 10:02	MFF
Tetrachloroethylene	ND	0.0015	mg/Kg	1		SW-846 8260D	12/9/21	12/9/21 10:02	MFF
Tetrahydrofuran	ND	0.0075	mg/Kg	1		SW-846 8260D	12/9/21	12/9/21 10:02	MFF
Toluene	0.0016	0.0015	mg/Kg	1		SW-846 8260D	12/9/21	12/9/21 10:02	MFF
1,2,3-Trichlorobenzene	ND	0.0015	mg/Kg	1		SW-846 8260D	12/9/21	12/9/21 10:02	MFF
1,2,4-Trichlorobenzene	ND	0.0015	mg/Kg	1		SW-846 8260D	12/9/21	12/9/21 10:02	MFF
1,3,5-Trichlorobenzene	ND	0.0015	mg/Kg	1		SW-846 8260D	12/9/21	12/9/21 10:02	MFF
1,1,1-Trichloroethane	ND	0.0015	mg/Kg	1		SW-846 8260D	12/9/21	12/9/21 10:02	MFF
1,1,2-Trichloroethane	ND	0.0015	mg/Kg	1		SW-846 8260D	12/9/21	12/9/21 10:02	MFF
Trichloroethylene	ND	0.0015	mg/Kg	1		SW-846 8260D	12/9/21	12/9/21 10:02	MFF
Trichlorofluoromethane (Freon 11)	ND	0.0075	mg/Kg	1		SW-846 8260D	12/9/21	12/9/21 10:02	MFF
1,2,3-Trichloropropane	ND	0.0015	mg/Kg	1		SW-846 8260D	12/9/21	12/9/21 10:02	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.0075	mg/Kg	1		SW-846 8260D	12/9/21	12/9/21 10:02	MFF
1,2,4-Trimethylbenzene	ND	0.0015	mg/Kg	1		SW-846 8260D	12/9/21	12/9/21 10:02	MFF
1,3,5-Trimethylbenzene	ND	0.0015	mg/Kg	1		SW-846 8260D	12/9/21	12/9/21 10:02	MFF
Vinyl Chloride	ND	0.0075	mg/Kg	1		SW-846 8260D	12/9/21	12/9/21 10:02	MFF
m+p Xylene	ND	0.0030	mg/Kg	1		SW-846 8260D	12/9/21	12/9/21 10:02	MFF
o-Xylene	ND	0.0015	mg/Kg	1		SW-846 8260D	12/9/21	12/9/21 10:02	MFF
Surrogates		% Recovery	Recovery Limits		Flag/Qual				

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
1,2-Dichloroethane-d4	112	70-130		12/9/21 10:02
Toluene-d8	101	70-130		12/9/21 10:02
4-Bromofluorobenzene	94 9	70-130		12/9/21 10:02



Project Location: Pittsfield, MA Sample Description: Work Order: 21L0502

Date Received: 12/8/2021

Field Sample #: PFC-COMP-120721

Sample ID: 21L0502-01
Sample Matrix: Soil

Sampled: 12/7/2021 10:51

Semivolatile Organic Compounds by GC/MS $\,$

		3	emivolatile Organic C	ompounds by	GC/MS		ъ.	D 4 (T)	
Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acenaphthene	ND	0.30	mg/Kg dry	1		SW-846 8270E	12/15/21	12/17/21 12:11	BGL
Acenaphthylene	ND	0.30	mg/Kg dry	1		SW-846 8270E	12/15/21	12/17/21 12:11	BGL
Acetophenone	ND	0.60	mg/Kg dry	1		SW-846 8270E	12/15/21	12/17/21 12:11	BGL
Aniline	ND	0.60	mg/Kg dry	1		SW-846 8270E	12/15/21	12/17/21 12:11	BGL
Anthracene	ND	0.30	mg/Kg dry	1		SW-846 8270E	12/15/21	12/17/21 12:11	BGL
Benzidine	ND	1.2	mg/Kg dry	1	V-05, V-35	SW-846 8270E	12/15/21	12/17/21 12:11	BGL
Benzo(a)anthracene	1.0	0.30	mg/Kg dry	1		SW-846 8270E	12/15/21	12/17/21 12:11	BGL
Benzo(a)pyrene	1.3	0.30	mg/Kg dry	1		SW-846 8270E	12/15/21	12/17/21 12:11	BGL
Benzo(b)fluoranthene	2.1	0.30	mg/Kg dry	1		SW-846 8270E	12/15/21	12/17/21 12:11	BGL
Benzo(g,h,i)perylene	0.91	0.30	mg/Kg dry	1		SW-846 8270E	12/15/21	12/17/21 12:11	BGL
Benzo(k)fluoranthene	0.76	0.30	mg/Kg dry	1		SW-846 8270E	12/15/21	12/17/21 12:11	BGL
Benzoic Acid	ND	1.8	mg/Kg dry	1	V-06	SW-846 8270E	12/15/21	12/17/21 12:11	BGL
Bis(2-chloroethoxy)methane	ND	0.60	mg/Kg dry	1		SW-846 8270E	12/15/21	12/17/21 12:11	BGL
Bis(2-chloroethyl)ether	ND	0.60	mg/Kg dry	1		SW-846 8270E	12/15/21	12/17/21 12:11	BGL
Bis(2-chloroisopropyl)ether	ND	0.60	mg/Kg dry	1		SW-846 8270E	12/15/21	12/17/21 12:11	BGL
Bis(2-Ethylhexyl)phthalate	ND	0.60	mg/Kg dry	1		SW-846 8270E	12/15/21	12/17/21 12:11	BGL
4-Bromophenylphenylether	ND	0.60	mg/Kg dry	1		SW-846 8270E	12/15/21	12/17/21 12:11	BGL
Butylbenzylphthalate	ND	0.60	mg/Kg dry	1		SW-846 8270E	12/15/21	12/17/21 12:11	BGL
Carbazole	ND	0.30	mg/Kg dry	1		SW-846 8270E	12/15/21	12/17/21 12:11	BGL
4-Chloroaniline	ND	1.2	mg/Kg dry	1		SW-846 8270E	12/15/21	12/17/21 12:11	BGL
4-Chloro-3-methylphenol	ND	1.2	mg/Kg dry	1		SW-846 8270E	12/15/21	12/17/21 12:11	BGL
2-Chloronaphthalene	ND	0.60	mg/Kg dry	1		SW-846 8270E	12/15/21	12/17/21 12:11	BGL
2-Chlorophenol	ND	0.60	mg/Kg dry	1		SW-846 8270E	12/15/21	12/17/21 12:11	BGL
4-Chlorophenylphenylether	ND	0.60	mg/Kg dry	1		SW-846 8270E	12/15/21	12/17/21 12:11	BGL
Chrysene	1.5	0.30	mg/Kg dry	1		SW-846 8270E	12/15/21	12/17/21 12:11	BGL
Dibenz(a,h)anthracene	ND	0.30	mg/Kg dry	1		SW-846 8270E	12/15/21	12/17/21 12:11	BGL
Dibenzofuran	ND	0.60	mg/Kg dry	1		SW-846 8270E	12/15/21	12/17/21 12:11	BGL
Di-n-butylphthalate	ND	0.60	mg/Kg dry	1		SW-846 8270E	12/15/21	12/17/21 12:11	BGL
1,2-Dichlorobenzene	ND	0.60	mg/Kg dry	1		SW-846 8270E	12/15/21	12/17/21 12:11	BGL
1.3-Dichlorobenzene	ND	0.60	mg/Kg dry	1		SW-846 8270E	12/15/21	12/17/21 12:11	BGL
1,4-Dichlorobenzene	ND	0.60	mg/Kg dry	1		SW-846 8270E	12/15/21	12/17/21 12:11	BGL
3,3-Dichlorobenzidine	ND	0.30	mg/Kg dry	1		SW-846 8270E	12/15/21	12/17/21 12:11	BGL
2,4-Dichlorophenol	ND	0.60	mg/Kg dry	1		SW-846 8270E	12/15/21	12/17/21 12:11	BGL
Diethylphthalate	ND	0.60	mg/Kg dry	1		SW-846 8270E	12/15/21	12/17/21 12:11	BGL
2,4-Dimethylphenol	ND	0.60	mg/Kg dry	1		SW-846 8270E	12/15/21	12/17/21 12:11	BGL
Dimethylphthalate	ND	0.60	mg/Kg dry	1		SW-846 8270E	12/15/21	12/17/21 12:11	BGL
4,6-Dinitro-2-methylphenol	ND	0.60	mg/Kg dry	1		SW-846 8270E	12/15/21	12/17/21 12:11	BGL
2,4-Dinitrophenol	ND	1.2	mg/Kg dry	1		SW-846 8270E	12/15/21	12/17/21 12:11	BGL
2,4-Dinitrotoluene	ND	0.60	mg/Kg dry	1		SW-846 8270E	12/15/21	12/17/21 12:11	BGL
2,6-Dinitrotoluene	ND	0.60	mg/Kg dry	1		SW-846 8270E	12/15/21	12/17/21 12:11	BGL
Di-n-octylphthalate	ND ND	0.60	mg/Kg dry	1		SW-846 8270E SW-846 8270E	12/15/21	12/17/21 12:11	BGL
1,2-Diphenylhydrazine/Azobenzene	ND ND	0.60	mg/Kg dry	1		SW-846 8270E SW-846 8270E	12/15/21	12/17/21 12:11	BGL
Fluoranthene		0.30		1					
Fluorene	2.8		mg/Kg dry			SW-846 8270E	12/15/21	12/17/21 12:11	BGL
TROTOIC	ND	0.30	mg/Kg dry	1		SW-846 8270E	12/15/21	12/17/21 12:11 Page 10	BGL

Page 10 of 64



Project Location: Pittsfield, MA Sample Description: Work Order: 21L0502

Date Received: 12/8/2021

Field Sample #: PFC-COMP-120721

Sample ID: 21L0502-01
Sample Matrix: Soil

Sampled: 12/7/2021 10:51

Semivolatile Organic Compounds by GC/MS

							Date	Date/Time	
Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Prepared	Analyzed	Analyst
Hexachlorobenzene	ND	0.60	mg/Kg dry	1		SW-846 8270E	12/15/21	12/17/21 12:11	BGL
Hexachlorobutadiene	ND	0.60	mg/Kg dry	1		SW-846 8270E	12/15/21	12/17/21 12:11	BGL
Hexachlorocyclopentadiene	ND	0.60	mg/Kg dry	1		SW-846 8270E	12/15/21	12/17/21 12:11	BGL
Hexachloroethane	ND	0.60	mg/Kg dry	1		SW-846 8270E	12/15/21	12/17/21 12:11	BGL
Indeno(1,2,3-cd)pyrene	0.96	0.30	mg/Kg dry	1		SW-846 8270E	12/15/21	12/17/21 12:11	BGL
Isophorone	ND	0.60	mg/Kg dry	1		SW-846 8270E	12/15/21	12/17/21 12:11	BGL
1-Methylnaphthalene	ND	0.30	mg/Kg dry	1		SW-846 8270E	12/15/21	12/17/21 12:11	BGL
2-Methylnaphthalene	ND	0.30	mg/Kg dry	1		SW-846 8270E	12/15/21	12/17/21 12:11	BGL
2-Methylphenol	ND	0.60	mg/Kg dry	1		SW-846 8270E	12/15/21	12/17/21 12:11	BGL
3/4-Methylphenol	ND	0.60	mg/Kg dry	1		SW-846 8270E	12/15/21	12/17/21 12:11	BGL
Naphthalene	ND	0.30	mg/Kg dry	1		SW-846 8270E	12/15/21	12/17/21 12:11	BGL
2-Nitroaniline	ND	0.60	mg/Kg dry	1		SW-846 8270E	12/15/21	12/17/21 12:11	BGL
3-Nitroaniline	ND	0.60	mg/Kg dry	1		SW-846 8270E	12/15/21	12/17/21 12:11	BGL
4-Nitroaniline	ND	0.60	mg/Kg dry	1		SW-846 8270E	12/15/21	12/17/21 12:11	BGL
Nitrobenzene	ND	0.60	mg/Kg dry	1		SW-846 8270E	12/15/21	12/17/21 12:11	BGL
2-Nitrophenol	ND	0.60	mg/Kg dry	1		SW-846 8270E	12/15/21	12/17/21 12:11	BGL
4-Nitrophenol	ND	1.2	mg/Kg dry	1		SW-846 8270E	12/15/21	12/17/21 12:11	BGL
N-Nitrosodimethylamine	ND	0.60	mg/Kg dry	1		SW-846 8270E	12/15/21	12/17/21 12:11	BGL
N-Nitrosodiphenylamine/Diphenylamine	ND	0.60	mg/Kg dry	1		SW-846 8270E	12/15/21	12/17/21 12:11	BGL
N-Nitrosodi-n-propylamine	ND	0.60	mg/Kg dry	1		SW-846 8270E	12/15/21	12/17/21 12:11	BGL
Pentachloronitrobenzene	ND	0.60	mg/Kg dry	1		SW-846 8270E	12/15/21	12/17/21 12:11	BGL
Pentachlorophenol	ND	0.60	mg/Kg dry	1		SW-846 8270E	12/15/21	12/17/21 12:11	BGL
Phenanthrene	1.2	0.30	mg/Kg dry	1		SW-846 8270E	12/15/21	12/17/21 12:11	BGL
Phenol	ND	0.60	mg/Kg dry	1		SW-846 8270E	12/15/21	12/17/21 12:11	BGL
Pyrene	2.2	0.30	mg/Kg dry	1		SW-846 8270E	12/15/21	12/17/21 12:11	BGL
Pyridine	ND	0.60	mg/Kg dry	1		SW-846 8270E	12/15/21	12/17/21 12:11	BGL
1,2,4,5-Tetrachlorobenzene	ND	0.60	mg/Kg dry	1		SW-846 8270E	12/15/21	12/17/21 12:11	BGL
1,2,4-Trichlorobenzene	ND	0.60	mg/Kg dry	1		SW-846 8270E	12/15/21	12/17/21 12:11	BGL
2,4,5-Trichlorophenol	ND	0.60	mg/Kg dry	1		SW-846 8270E	12/15/21	12/17/21 12:11	BGL
2,4,6-Trichlorophenol	ND	0.60	mg/Kg dry	1		SW-846 8270E	12/15/21	12/17/21 12:11	BGL
					FI (0 1				

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
2-Fluorophenol	41.0	30-130		12/17/21 12:11
Phenol-d6	43.6	30-130		12/17/21 12:11
Nitrobenzene-d5	37.8	30-130		12/17/21 12:11
2-Fluorobiphenyl	39.7	30-130		12/17/21 12:11
2,4,6-Tribromophenol	39.4	30-130		12/17/21 12:11
p-Terphenyl-d14	42.9	30-130		12/17/21 12:11



Project Location: Pittsfield, MA Sample Description: Work Order: 21L0502

Date Received: 12/8/2021

Field Sample #: PFC-COMP-120721

Sampled: 12/7/2021 10:51

Sample ID: 21L0502-01
Sample Matrix: Soil

Tetrachloro-m-xylene [1] Tetrachloro-m-xylene [2]

Sample Flags: DL-03		O	rganochloride Pesti	cides by GC/	/ECD				
							Date	Date/Time	
Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Prepared	Analyzed	Analyst
Alachlor [1]	ND	1.8	mg/Kg dry	50		SW-846 8081B	12/15/21	12/17/21 13:15	JMB
Aldrin [1]	ND	0.44	mg/Kg dry	50		SW-846 8081B	12/15/21	12/17/21 13:15	JMB
alpha-BHC [1]	ND	0.44	mg/Kg dry	50		SW-846 8081B	12/15/21	12/17/21 13:15	JMB
beta-BHC [1]	ND	0.44	mg/Kg dry	50		SW-846 8081B	12/15/21	12/17/21 13:15	JMB
delta-BHC [1]	ND	0.44	mg/Kg dry	50		SW-846 8081B	12/15/21	12/17/21 13:15	JMB
gamma-BHC (Lindane) [1]	ND	0.18	mg/Kg dry	50		SW-846 8081B	12/15/21	12/17/21 13:15	JMB
Chlordane [1]	ND	1.8	mg/Kg dry	50		SW-846 8081B	12/15/21	12/17/21 13:15	JMB
4,4'-DDD [1]	ND	0.35	mg/Kg dry	50		SW-846 8081B	12/15/21	12/17/21 13:15	JMB
4,4'-DDE [1]	ND	0.35	mg/Kg dry	50		SW-846 8081B	12/15/21	12/17/21 13:15	JMB
4,4'-DDT [1]	ND	0.35	mg/Kg dry	50		SW-846 8081B	12/15/21	12/17/21 13:15	JMB
Dieldrin [1]	ND	0.35	mg/Kg dry	50		SW-846 8081B	12/15/21	12/17/21 13:15	JMB
Endosulfan I [1]	ND	0.44	mg/Kg dry	50		SW-846 8081B	12/15/21	12/17/21 13:15	JMB
Endosulfan II [1]	ND	0.70	mg/Kg dry	50		SW-846 8081B	12/15/21	12/17/21 13:15	JMB
Endosulfan sulfate [1]	ND	0.70	mg/Kg dry	50		SW-846 8081B	12/15/21	12/17/21 13:15	JMB
Endrin [1]	ND	0.70	mg/Kg dry	50		SW-846 8081B	12/15/21	12/17/21 13:15	JMB
Endrin aldehyde [1]	ND	0.70	mg/Kg dry	50		SW-846 8081B	12/15/21	12/17/21 13:15	JMB
Endrin ketone [1]	ND	0.70	mg/Kg dry	50		SW-846 8081B	12/15/21	12/17/21 13:15	JMB
Heptachlor [1]	ND	0.44	mg/Kg dry	50		SW-846 8081B	12/15/21	12/17/21 13:15	JMB
Heptachlor epoxide [1]	ND	0.44	mg/Kg dry	50		SW-846 8081B	12/15/21	12/17/21 13:15	JMB
Hexachlorobenzene [1]	ND	0.53	mg/Kg dry	50		SW-846 8081B	12/15/21	12/17/21 13:15	JMB
Methoxychlor [1]	ND	4.4	mg/Kg dry	50		SW-846 8081B	12/15/21	12/17/21 13:15	JMB
Toxaphene [1]	ND	8.8	mg/Kg dry	50		SW-846 8081B	12/15/21	12/17/21 13:15	JMB
Surrogates		% Recovery	Recovery Limits		Flag/Qual				
Decachlorobiphenyl [1]		*	30-150		S-01			12/17/21 13:15	
Decachlorobiphenyl [2]		*	30-150		S-01			12/17/21 13:15	

30-150

30-150

S-01

S-01

12/17/21 13:15

12/17/21 13:15



Project Location: Pittsfield, MA Sample Description: Work Order: 21L0502

Date Received: 12/8/2021

Field Sample #: PFC-COMP-120721

Sampled: 12/7/2021 10:51

Sample ID: 21L0502-01
Sample Matrix: Soil

		Po	lychlorinated Biph	enyls By GC	/ECD				
Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	0.14	mg/Kg dry	4		SW-846 8082A	12/15/21	12/18/21 16:09	TG
Aroclor-1221 [1]	ND	0.14	mg/Kg dry	4		SW-846 8082A	12/15/21	12/18/21 16:09	TG
Aroclor-1232 [1]	ND	0.14	mg/Kg dry	4		SW-846 8082A	12/15/21	12/18/21 16:09	TG
Aroclor-1242 [1]	ND	0.14	mg/Kg dry	4		SW-846 8082A	12/15/21	12/18/21 16:09	TG
Aroclor-1248 [1]	ND	0.14	mg/Kg dry	4		SW-846 8082A	12/15/21	12/18/21 16:09	TG
Aroclor-1254 [2]	0.36	0.14	mg/Kg dry	4		SW-846 8082A	12/15/21	12/18/21 16:09	TG
Aroclor-1260 [2]	0.20	0.14	mg/Kg dry	4		SW-846 8082A	12/15/21	12/18/21 16:09	TG
Aroclor-1262 [1]	ND	0.14	mg/Kg dry	4		SW-846 8082A	12/15/21	12/18/21 16:09	TG
Aroclor-1268 [1]	ND	0.14	mg/Kg dry	4		SW-846 8082A	12/15/21	12/18/21 16:09	TG
Surrogates		% Recovery	Recovery Limits	s	Flag/Qual				
Decachlorobiphenyl [1]		64.8	30-150					12/18/21 16:09	
Decachlorobiphenyl [2]		75.1	30-150					12/18/21 16:09	
Tetrachloro-m-xylene [1]		69.4	30-150					12/18/21 16:09	
Tetrachloro-m-xylene [2]		76.3	30-150					12/18/21 16:09	

12/28/21 11:02



39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Pittsfield, MA Sample Description: Work Order: 21L0502

Date Received: 12/8/2021

2,4-Dichlorophenylacetic acid [2]

Field Sample #: PFC-COMP-120721 Sampled: 12/7/2021 10:51

Sample ID: 21L0502-01
Sample Matrix: Soil

Sample Flags: O-32			Herbicides by	GC/ECD					
Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
2,4-D [1]	ND	350	μg/kg dry	4		SW-846 8151A	12/20/21	12/28/21 11:02	TG
2,4-DB [1]	ND	350	μg/kg dry	4		SW-846 8151A	12/20/21	12/28/21 11:02	TG
2,4,5-TP (Silvex) [1]	ND	35	μg/kg dry	4		SW-846 8151A	12/20/21	12/28/21 11:02	TG
2,4,5-T [1]	ND	35	μg/kg dry	4		SW-846 8151A	12/20/21	12/28/21 11:02	TG
Dalalpon [1]	ND	880	μg/kg dry	4	L-04	SW-846 8151A	12/20/21	12/28/21 11:02	TG
Dicamba [1]	ND	35	μg/kg dry	4		SW-846 8151A	12/20/21	12/28/21 11:02	TG
Dichloroprop [1]	ND	350	μg/kg dry	4		SW-846 8151A	12/20/21	12/28/21 11:02	TG
Dinoseb [1]	ND	180	μg/kg dry	4		SW-846 8151A	12/20/21	12/28/21 11:02	TG
MCPA [1]	ND	35000	μg/kg dry	4		SW-846 8151A	12/20/21	12/28/21 11:02	TG
MCPP[1]	ND	35000	μg/kg dry	4		SW-846 8151A	12/20/21	12/28/21 11:02	TG
Surrogates		% Recovery	Recovery Limits	1	Flag/Qual				
2,4-Dichlorophenylacetic acid [1]		126	30-150					12/28/21 11:02	

30-150

125



Project Location: Pittsfield, MA Sample Description: Work Order: 21L0502

Date Received: 12/8/2021

Field Sample #: PFC-COMP-120721

Sampled: 12/7/2021 10:51

Sample ID: 21L0502-01
Sample Matrix: Soil

D (1	TT 1 1	A 1
Petroleum	Hydrocarbons	Analyses

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
TPH (C9-C36)	1200	150	mg/Kg dry	10		SW-846 8100 Modified	12/15/21	12/18/21 17:31	SFM
Surrogates		% Recovery	Recovery Limits	s	Flag/Qual				
2-Fluorobiphenyl		42.4	40-140			_		12/18/21 17:31	



Project Location: Pittsfield, MA Sample Description: Work Order: 21L0502

Date Received: 12/8/2021

Field Sample #: PFC-COMP-120721

Sampled: 12/7/2021 10:51

Sample ID: 21L0502-01

Sample Matrix: Soil

		•	Metals Analy	ses (Total)		_			
Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Arsenic	ND	5.7	mg/Kg dry	1		SW-846 6010D	12/16/21	12/17/21 16:01	МЈН
Barium	67	2.8	mg/Kg dry	1		SW-846 6010D	12/16/21	12/17/21 16:01	MJH
Cadmium	ND	0.57	mg/Kg dry	1		SW-846 6010D	12/16/21	12/17/21 16:01	МЈН
Chromium	25	1.1	mg/Kg dry	1		SW-846 6010D	12/16/21	12/17/21 16:01	МЈН
Lead	72	0.85	mg/Kg dry	1		SW-846 6010D	12/16/21	12/17/21 16:01	МЈН
Mercury	ND	0.050	mg/Kg dry	1		SW-846 7471B	12/14/21	12/16/21 9:21	МЈН
Selenium	ND	5.7	mg/Kg dry	1		SW-846 6010D	12/16/21	12/17/21 16:01	МЈН
Silver	ND	0.57	mg/Kg drv	1		SW-846 6010D	12/16/21	12/17/21 16:01	МЈН



Project Location: Pittsfield, MA Sample Description: Work Order: 21L0502

Date Received: 12/8/2021

Field Sample #: PFC-COMP-120721

Sample ID: 21L0502-01
Sample Matrix: Soil

Sampled: 12/7/2021 10:51

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

							Date	Date/Time	
Analyt	e Results	RL	Units	Dilution	Flag/Qual	Method	Prepared	Analyzed	Analyst
% Solids	56.9		% Wt	1		SM 2540G	12/14/21	12/14/21 20:14	WAT
Ignitability	Absent		present/absent	1		SW-846 1030	12/9/21	12/9/21 17:00	DJM
pH @17.6°C	6.9		pH Units	1	H-03	SW-846 9045C	12/9/21	12/9/21 16:00	CB2
Reactive Cyanide	ND	3.9	mg/Kg	1		SW-846 9014	12/17/21	12/17/21 13:00	EC
Reactive Sulfide	ND	20	mg/Kg	1		SW-846 9030A	12/17/21	12/17/21 12:05	EC
Specific conductance	25	2.0	μmhos/cm	1		SM21-23 2510B Modified	12/14/21	12/14/21 15:00	CB2



21L0502-01 [PFC-COMP-120721]

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Sample Extraction Data

		Sample Extraction	Data		
Prep Method: % Solids Analytical Method: SM	I 2540G				
Lab Number [Field ID]	Batch			Date	
21L0502-01 [PFC-COMP-120721]	B296780			12/14/21	
SM21-23 2510B Modified					
Lab Number [Field ID]	Batch	Initial [g]		Date	
21L0502-01 [PFC-COMP-120721]	B296855	1.00		12/14/21	
SW-846 1030					
Lab Number [Field ID]	Batch	Initial [g]		Date	
21L0502-01 [PFC-COMP-120721]	B296497	50.0		12/09/21	
Prep Method: SW-846 3050B Analytical Metho	d: SW-846 6010D				
Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date	
21L0502-01 [PFC-COMP-120721]	B297040	1.55	50.0	12/16/21	
Prep Method: SW-846 7471 Analytical Method: Lab Number [Field ID]	: SW-846 7471B Batch	Initial [g]	Final [mL]	Date	
21L0502-01 [PFC-COMP-120721]	B296831	0.529	50.0	12/14/21	
Prep Method: SW-846 3546 Analytical Method	: SW-846 8081B				
Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date	
21L0502-01 [PFC-COMP-120721]	B296928	10.0	10.0	12/15/21	
Prep Method: SW-846 3546 Analytical Method	: SW-846 8082A				
Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date	
21L0502-01 [PFC-COMP-120721]	B296927	10.0	10.0	12/15/21	
Prep Method: SW-846 3546 Analytical Method	: SW-846 8100 Modified				
Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date	
21L0502-01 [PFC-COMP-120721]	B296918	30.0	1.00	12/15/21	
Prep Method: SW-846 8151 Analytical Method	: SW-846 8151A				
Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date	

B297361

10.0

5.00

12/20/21



Sample Extraction Data

Prep Method: SW-846 5035 Analytical Method: SW-846 8260D

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
21L0502-01 [PFC-COMP-120721]	B296464	6.68	10.0	12/09/21

Prep Method: SW-846 3546 Analytical Method: SW-846 8270E

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
21L0502-01 [PFC-COMP-120721]	B296919	30.0	1.00	12/15/21

SW-846 9014

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
21L0502-01 [PFC-COMP-120721]	B297150	25.4	250	12/17/21

SW-846 9030A

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
21L0502-01 [PFC-COMP-120721]	B297151	25.4	250	12/17/21

SW-846 9045C

Lab Number [Field ID]	Batch	Initial [g]	Date
21L0502-01 [PFC-COMP-120721]	B296500	20.0	12/09/21



QUALITY CONTROL

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B296464 - SW-846 5035										
Blank (B296464-BLK1)				Prepared & A	Analyzed: 12	/09/21				
Acetone	ND	0.10	mg/Kg							
Acrylonitrile	ND	0.0060	mg/Kg							
tert-Amyl Methyl Ether (TAME)	ND	0.0010	mg/Kg							
Benzene	ND	0.0020	mg/Kg							
Bromobenzene	ND	0.0020	mg/Kg							
Bromochloromethane	ND	0.0020	mg/Kg							
Bromodichloromethane	ND	0.0020	mg/Kg							
Bromoform	ND	0.0020	mg/Kg							
Bromomethane	ND	0.010	mg/Kg							
2-Butanone (MEK)	ND	0.040	mg/Kg							
tert-Butyl Alcohol (TBA)	ND	0.10	mg/Kg							
n-Butylbenzene	ND	0.0020	mg/Kg							
sec-Butylbenzene	ND	0.0020	mg/Kg							
tert-Butylbenzene	ND	0.0020	mg/Kg							
tert-Butyl Ethyl Ether (TBEE)	ND	0.0010	mg/Kg							
Carbon Disulfide	ND	0.010	mg/Kg							
Carbon Tetrachloride	ND	0.0020	mg/Kg							
Chlorobenzene	ND	0.0020	mg/Kg							
Chlorodibromomethane Chloroethane	ND	0.0010	mg/Kg							
Chloroform	ND	0.020 0.0040	mg/Kg							
Chloromethane	ND	0.0040	mg/Kg mg/Kg							
2-Chlorotoluene	ND	0.010	mg/Kg							
4-Chlorotoluene	ND	0.0020	mg/Kg							
1,2-Dibromo-3-chloropropane (DBCP)	ND	0.0020	mg/Kg							
1,2-Dibromoethane (EDB)	ND ND	0.0020	mg/Kg							
Dibromomethane	ND ND	0.0020	mg/Kg							
1,2-Dichlorobenzene	ND	0.0020	mg/Kg							
1,3-Dichlorobenzene	ND	0.0020	mg/Kg							
1,4-Dichlorobenzene	ND	0.0020	mg/Kg							
trans-1,4-Dichloro-2-butene	ND	0.0040	mg/Kg							
Dichlorodifluoromethane (Freon 12)	ND	0.020	mg/Kg							V-05
1,1-Dichloroethane	ND	0.0020	mg/Kg							
1,2-Dichloroethane	ND	0.0020	mg/Kg							
1,1-Dichloroethylene	ND	0.0040	mg/Kg							
cis-1,2-Dichloroethylene	ND	0.0020	mg/Kg							
trans-1,2-Dichloroethylene	ND	0.0020	mg/Kg							
1,2-Dichloropropane	ND	0.0020	mg/Kg							
1,3-Dichloropropane	ND	0.0010	mg/Kg							
2,2-Dichloropropane	ND	0.0020	mg/Kg							
1,1-Dichloropropene	ND	0.0020	mg/Kg							
cis-1,3-Dichloropropene	ND	0.0010	mg/Kg							
trans-1,3-Dichloropropene	ND	0.0010	mg/Kg							
Diethyl Ether	ND	0.020	mg/Kg							
Diisopropyl Ether (DIPE)	ND	0.0010	mg/Kg							
1,4-Dioxane	ND	0.10	mg/Kg							
Ethylbenzene	ND	0.0020	mg/Kg							
Hexachlorobutadiene	ND	0.0020	mg/Kg							
2-Hexanone (MBK)	ND	0.020	mg/Kg							
Isopropylbenzene (Cumene)	ND	0.0020	mg/Kg							
p-Isopropyltoluene (p-Cymene)	ND	0.0020	mg/Kg							
Methyl Acetate	ND	0.0020	mg/Kg							

%REC

RPD



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QUALITY CONTROL

Spike

Source

Volatile Organic Compounds by GC/MS - Quality Control

Reporting

Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch B296464 - SW-846 5035										
Blank (B296464-BLK1)				Prepared & A	Analyzed: 12	/09/21				
Methyl tert-Butyl Ether (MTBE)	ND	0.0040	mg/Kg							
Methyl Cyclohexane	ND	0.0020	mg/Kg							
Methylene Chloride	ND	0.020	mg/Kg							
-Methyl-2-pentanone (MIBK)	ND	0.020	mg/Kg							
Vaphthalene	ND	0.0040	mg/Kg							
-Propylbenzene	ND	0.0020	mg/Kg							
tyrene	ND	0.0020	mg/Kg							
,1,1,2-Tetrachloroethane	ND	0.0020	mg/Kg							
,1,2,2-Tetrachloroethane	ND	0.0010	mg/Kg							
etrachloroethylene	ND	0.0020	mg/Kg							
etrahydrofuran	ND	0.010	mg/Kg							
oluene	ND	0.0020	mg/Kg							
,2,3-Trichlorobenzene	ND	0.0020	mg/Kg							
,2,4-Trichlorobenzene	ND	0.0020	mg/Kg							
,3,5-Trichlorobenzene	ND	0.0020	mg/Kg							
,1,1-Trichloroethane	ND ND	0.0020	mg/Kg							
,1,2-Trichloroethane	ND ND	0.0020	mg/Kg							
richloroethylene	ND ND	0.0020	mg/Kg							
richlorofluoromethane (Freon 11)	ND ND	0.010	mg/Kg							
,2,3-Trichloropropane		0.0020	mg/Kg							
,1,2-Trichloro-1,2,2-trifluoroethane (Freon	ND	0.0020	mg/Kg							
13)	ND	0.010	mg/Kg							
,2,4-Trimethylbenzene	ND	0.0020	mg/Kg							
3,5-Trimethylbenzene	ND	0.0020	mg/Kg							
inyl Chloride	ND	0.010	mg/Kg							
n+p Xylene	ND	0.0040	mg/Kg							
-Xylene	ND	0.0020	mg/Kg							
urrogate: 1,2-Dichloroethane-d4	0.0555		mg/Kg	0.0500		111	70-130			
urrogate: Toluene-d8	0.0504		mg/Kg	0.0500		101	70-130			
urrogate: 4-Bromofluorobenzene	0.0469		mg/Kg	0.0500		93.8	70-130			
.CS (B296464-BS1)				Prepared & A	Analyzed: 12	/09/21				
cetone	0.221	0.10	mg/Kg	0.200		111	70-160			
crylonitrile	0.0214	0.0060	mg/Kg	0.0200		107	70-130			
ert-Amyl Methyl Ether (TAME)	0.0174	0.0010	mg/Kg	0.0200		86.9	70-130			
Benzene	0.0188	0.0020	mg/Kg	0.0200		94.1	70-130			
Gromobenzene	0.0182	0.0020	mg/Kg	0.0200		91.2	70-130			
Bromochloromethane	0.0190	0.0020	mg/Kg	0.0200		94.8	70-130			
Bromodichloromethane	0.0179	0.0020	mg/Kg	0.0200		89.6	70-130			
Bromoform	0.0171	0.0020	mg/Kg	0.0200		85.3	70-130			
Bromomethane	0.0193	0.010	mg/Kg	0.0200		96.4	40-130			
-Butanone (MEK)	0.223	0.040	mg/Kg	0.200		111	70-160			
ert-Butyl Alcohol (TBA)	0.179	0.10	mg/Kg	0.200		89.4	40-130			
-Butylbenzene	0.0189	0.0020	mg/Kg	0.0200		94.4	70-130			
ec-Butylbenzene	0.0189	0.0020	mg/Kg	0.0200		89.8	70-130			
ert-Butylbenzene	0.0180	0.0020	mg/Kg	0.0200		96.7	70-130			
ert-Butyl Ethyl Ether (TBEE)		0.0020	mg/Kg	0.0200		88.4	70-100			
Carbon Disulfide	0.0177	0.010								
Carbon Distringe Carbon Tetrachloride	0.175	0.010	mg/Kg	0.200		87.7	70-130			
arbon Tetrachioride Chlorobenzene	0.0167		mg/Kg	0.0200		83.6	70-130			
nioropen7ene	0.0185	0.0020	mg/Kg	0.0200		92.6	70-130			
						V6 V	70-130			
Chlorodibromomethane	0.0174	0.0010	mg/Kg	0.0200		86.8				
Chlorodibromomethane Chloroethane Chloroform	0.0174 0.0202 0.0177	0.0010 0.020 0.0040	mg/Kg mg/Kg	0.0200 0.0200 0.0200		101 88.4	70-130 70-130 70-130			

RPD

%REC



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QUALITY CONTROL

Spike

Source

Volatile Organic Compounds by GC/MS - Quality Control

Reporting

Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes	_
Batch B296464 - SW-846 5035											
LCS (B296464-BS1)				Prepared & A	Analyzed: 12/	09/21					_
Chloromethane	0.0197	0.010	mg/Kg	0.0200		98.5	70-130				
2-Chlorotoluene	0.0184	0.0020	mg/Kg	0.0200		91.9	70-130				
4-Chlorotoluene	0.0183	0.0020	mg/Kg	0.0200		91.7	70-130				
1,2-Dibromo-3-chloropropane (DBCP)	0.0187	0.0020	mg/Kg	0.0200		93.4	70-130				
1,2-Dibromoethane (EDB)	0.0190	0.0010	mg/Kg	0.0200		95.1	70-130				
Dibromomethane	0.0182	0.0020	mg/Kg	0.0200		90.9	70-130				
1,2-Dichlorobenzene	0.0198	0.0020	mg/Kg	0.0200		98.9	70-130				
1,3-Dichlorobenzene	0.0197	0.0020	mg/Kg	0.0200		98.5	70-130				
1,4-Dichlorobenzene	0.0193	0.0020	mg/Kg	0.0200		96.3	70-130				
trans-1,4-Dichloro-2-butene	0.0191	0.0040	mg/Kg	0.0200		95.7	70-130				
Dichlorodifluoromethane (Freon 12)	0.0140	0.020	mg/Kg	0.0200		70.1	40-160			V-05	•
1,1-Dichloroethane	0.0192	0.0020	mg/Kg	0.0200		96.2	70-130				
1,2-Dichloroethane	0.0194	0.0020	mg/Kg	0.0200		97.0	70-130				
1,1-Dichloroethylene	0.0191	0.0040	mg/Kg	0.0200		95.7	70-130				
cis-1,2-Dichloroethylene	0.0195	0.0020	mg/Kg	0.0200		97.3	70-130				
trans-1,2-Dichloroethylene	0.0191	0.0020	mg/Kg	0.0200		95.3	70-130				
1,2-Dichloropropane	0.0196	0.0020	mg/Kg	0.0200		98.1	70-130				
1,3-Dichloropropane	0.0189	0.0010	mg/Kg	0.0200		94.3	70-130				
2,2-Dichloropropane	0.0167	0.0020	mg/Kg	0.0200		83.5	70-130				
1,1-Dichloropropene	0.0171	0.0020	mg/Kg	0.0200		85.7	70-130				
cis-1,3-Dichloropropene	0.0186	0.0010	mg/Kg	0.0200		92.8	70-130				
trans-1,3-Dichloropropene	0.0177	0.0010	mg/Kg	0.0200		88.5	70-130				
Diethyl Ether	0.0186	0.020	mg/Kg	0.0200		92.9	70-130				
Diisopropyl Ether (DIPE)	0.0215	0.0010	mg/Kg	0.0200		107	70-130				
1,4-Dioxane	0.182	0.10	mg/Kg	0.200		90.9	40-160				•
Ethylbenzene	0.0185	0.0020	mg/Kg	0.0200		92.7	70-130				
Hexachlorobutadiene	0.0181	0.0020	mg/Kg	0.0200		90.5	70-160				
2-Hexanone (MBK)	0.204	0.020	mg/Kg	0.200		102	70-160				
Isopropylbenzene (Cumene)	0.0168	0.0020	mg/Kg	0.0200		83.9	70-130				
p-Isopropyltoluene (p-Cymene)	0.0183	0.0020	mg/Kg	0.0200		91.5	70-130				
Methyl tert-Butyl Ether (MTBE)	0.0178	0.0040	mg/Kg	0.0200		89.0	70-130				
Methylene Chloride	0.0220	0.020	mg/Kg	0.0200		110	40-160				
4-Methyl-2-pentanone (MIBK)	0.200	0.020	mg/Kg	0.200		100	70-160				
Naphthalene	0.0177	0.0040	mg/Kg	0.0200		88.6	40-130				
n-Propylbenzene	0.0190	0.0020	mg/Kg	0.0200		95.0	70-130				
Styrene	0.0185	0.0020	mg/Kg	0.0200		92.5	70-130				
1,1,2-Tetrachloroethane	0.0182	0.0020	mg/Kg	0.0200		91.1	70-130				
1,1,2,2-Tetrachloroethane	0.0196	0.0010	mg/Kg	0.0200		97.9	70-130				
Tetrachloroethylene	0.0168	0.0020	mg/Kg	0.0200		84.2	70-130				
Tehran	0.0206	0.010	mg/Kg	0.0200		103	70-130				
Toluene 1,2,3-Trichlorobenzene	0.0176	0.0020 0.0020	mg/Kg	0.0200		88.1	70-130				
1,2,4-Trichlorobenzene	0.0186	0.0020	mg/Kg	0.0200		93.2	70-130				
1,3,5-Trichlorobenzene	0.0171	0.0020	mg/Kg	0.0200		85.3	70-130				
1,1,1-Trichloroethane	0.0196	0.0020	mg/Kg	0.0200		97.9 85.2	70-130				
1,1,2-Trichloroethane	0.0171	0.0020	mg/Kg	0.0200		85.3	70-130				
Trichloroethylene	0.0188	0.0020	mg/Kg	0.0200		94.2	70-130				
Trichlorofluoromethane (Freon 11)	0.0176		mg/Kg	0.0200		87.8 91.4	70-130 70-130				
1,2,3-Trichloropropane	0.0183	0.010 0.0020	mg/Kg	0.0200		91.4	70-130				
	0.0196	0.0020	mg/Kg	0.0200		97.8	70-130				
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	0.0177	0.010	mg/Kg	0.0200		88.7	70-130				
1,2,4-Trimethylbenzene	0.0190	0.0020	mg/Kg	0.0200		95.2	70-130				



QUALITY CONTROL

Volatile Organic Compounds by GC/MS - Quality Control

		Reporting		Spike	Source		%REC		RPD		
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes	╝
Batch B296464 - SW-846 5035											_
LCS (B296464-BS1)				Prepared & A	Analyzed: 12/09	/21					
1,3,5-Trimethylbenzene	0.0183	0.0020	mg/Kg	0.0200		91.6	70-130				
Vinyl Chloride	0.0188	0.010	mg/Kg	0.0200		93.9	40-130				İ
m+p Xylene	0.0364	0.0040	mg/Kg	0.0400		91.0	70-130				
o-Xylene	0.0185	0.0020	mg/Kg	0.0200		92.5	70-130				
Surrogate: 1,2-Dichloroethane-d4	0.0554		mg/Kg	0.0500		111	70-130				
Surrogate: Toluene-d8	0.0495		mg/Kg	0.0500		99.0	70-130				
Surrogate: 4-Bromofluorobenzene	0.0475		mg/Kg	0.0500		95.0	70-130				
LCS Dup (B296464-BSD1)				Prepared & A	Analyzed: 12/09	/21					
Acetone	0.216	0.10	mg/Kg	0.200		108	70-160	2.52	25		i
Acrylonitrile	0.0206	0.0060	mg/Kg	0.0200		103	70-130	3.90	25		
tert-Amyl Methyl Ether (TAME)	0.0180	0.0010	mg/Kg	0.0200		90.2	70-130	3.73	25		
Benzene	0.0184	0.0020	mg/Kg	0.0200		91.9	70-130	2.37	25		
Bromobenzene	0.0183	0.0020	mg/Kg	0.0200		91.6	70-130	0.438	25		
Bromochloromethane	0.0187	0.0020	mg/Kg	0.0200		93.6	70-130	1.27	25		
Bromodichloromethane	0.0181	0.0020	mg/Kg	0.0200		90.4	70-130	0.889	25		
Bromoform	0.0171	0.0020	mg/Kg	0.0200		85.6	70-130	0.351	25		
Bromomethane	0.0179	0.010	mg/Kg	0.0200		89.3	40-130	7.65	25		†
2-Butanone (MEK)	0.224	0.040	mg/Kg	0.200		112	70-160	0.403	25		1
tert-Butyl Alcohol (TBA)	0.190	0.10	mg/Kg	0.200		94.8	40-130	5.86	25		+
n-Butylbenzene	0.0182	0.0020	mg/Kg	0.0200		90.9	70-130	3.78	25		
sec-Butylbenzene	0.0185	0.0020	mg/Kg	0.0200		92.6	70-130	3.07	25		
tert-Butylbenzene	0.0179	0.0020	mg/Kg	0.0200		89.6	70-160	7.62	25		Ť
tert-Butyl Ethyl Ether (TBEE)	0.0185	0.0010	mg/Kg	0.0200		92.7	70-130	4.75	25		
Carbon Disulfide Carbon Tetrachloride	0.169	0.010	mg/Kg	0.200		84.6	70-130	3.67	25		
Chlorobenzene	0.0160	0.0020 0.0020	mg/Kg	0.0200		80.2	70-130	4.15	25		
Chlorodibromomethane	0.0186	0.0020	mg/Kg	0.0200		92.9	70-130	0.323	25		
Chloroethane	0.0170	0.0010	mg/Kg mg/Kg	0.0200		85.0	70-130 70-130	2.10	25		
Chloroform	0.0181	0.020	mg/Kg	0.0200 0.0200		90.6 88.3	70-130	10.9 0.113	25 25		
Chloromethane	0.0177	0.0040	mg/Kg	0.0200		97.9	70-130	0.611	25		
2-Chlorotoluene	0.0196 0.0176	0.0020	mg/Kg	0.0200		88.0	70-130	4.34	25		
4-Chlorotoluene	0.0170	0.0020	mg/Kg	0.0200		89.9	70-130	1.98	25		
1,2-Dibromo-3-chloropropane (DBCP)	0.0188	0.0020	mg/Kg	0.0200		93.8	70-130	0.427	25		
1,2-Dibromoethane (EDB)	0.0194	0.0010	mg/Kg	0.0200		97.1	70-130	2.08	25		
Dibromomethane	0.0186	0.0020	mg/Kg	0.0200		92.9	70-130	2.18	25		
1,2-Dichlorobenzene	0.0192	0.0020	mg/Kg	0.0200		96.0	70-130	2.98	25		
1,3-Dichlorobenzene	0.0188	0.0020	mg/Kg	0.0200		93.9	70-130	4.78	25		
1,4-Dichlorobenzene	0.0184	0.0020	mg/Kg	0.0200		92.0	70-130	4.57	25		
trans-1,4-Dichloro-2-butene	0.0195	0.0040	mg/Kg	0.0200		97.3	70-130	1.66	25		
Dichlorodifluoromethane (Freon 12)	0.0136	0.020	mg/Kg	0.0200		68.1	40-160	2.89	25	V-05	1
1,1-Dichloroethane	0.0198	0.0020	mg/Kg	0.0200		98.8	70-130	2.67	25		
1,2-Dichloroethane	0.0183	0.0020	mg/Kg	0.0200		91.6	70-130	5.73	25		
1,1-Dichloroethylene	0.0186	0.0040	mg/Kg	0.0200		92.9	70-130	2.97	25		
cis-1,2-Dichloroethylene	0.0193	0.0020	mg/Kg	0.0200		96.3	70-130	1.03	25		
trans-1,2-Dichloroethylene	0.0185	0.0020	mg/Kg	0.0200		92.6	70-130	2.87	25		
1,2-Dichloropropane	0.0193	0.0020	mg/Kg	0.0200		96.3	70-130	1.85	25		
1,3-Dichloropropane	0.0193	0.0010	mg/Kg	0.0200		96.6	70-130	2.41	25		
2,2-Dichloropropane	0.0166	0.0020	mg/Kg	0.0200		83.2	70-130	0.360	25		
1,1-Dichloropropene	0.0164	0.0020	mg/Kg	0.0200		82.2	70-130	4.17	25		
cis-1,3-Dichloropropene	0.0182	0.0010	mg/Kg	0.0200		91.0	70-130	1.96	25		
trans-1,3-Dichloropropene	0.0183	0.0010	mg/Kg	0.0200		91.6	70-130	3.44	25		



QUALITY CONTROL

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes	
Batch B296464 - SW-846 5035											_
LCS Dup (B296464-BSD1)				Prepared &	Analyzed: 12	/09/21					_
Diethyl Ether	0.0191	0.020	mg/Kg	0.0200		95.6	70-130	2.86	25		_
Diisopropyl Ether (DIPE)	0.0217	0.0010	mg/Kg	0.0200		109	70-130	1.30	25		
1,4-Dioxane	0.206	0.10	mg/Kg	0.200		103	40-160	12.7	50		†
Ethylbenzene	0.0183	0.0020	mg/Kg	0.0200		91.4	70-130	1.41	25		
Hexachlorobutadiene	0.0177	0.0020	mg/Kg	0.0200		88.7	70-160	2.01	25		
2-Hexanone (MBK)	0.206	0.020	mg/Kg	0.200		103	70-160	1.00	25		†
Isopropylbenzene (Cumene)	0.0165	0.0020	mg/Kg	0.0200		82.3	70-130	1.93	25		
p-Isopropyltoluene (p-Cymene)	0.0183	0.0020	mg/Kg	0.0200		91.4	70-130	0.109	25		
Methyl tert-Butyl Ether (MTBE)	0.0178	0.0040	mg/Kg	0.0200		89.1	70-130	0.112	25		
Methylene Chloride	0.0218	0.020	mg/Kg	0.0200		109	40-160	0.731	25		†
4-Methyl-2-pentanone (MIBK)	0.203	0.020	mg/Kg	0.200		101	70-160	1.25	25		†
Naphthalene	0.0184	0.0040	mg/Kg	0.0200		91.8	40-130	3.55	25		†
n-Propylbenzene	0.0178	0.0020	mg/Kg	0.0200		88.9	70-130	6.63	25		
Styrene	0.0182	0.0020	mg/Kg	0.0200		91.0	70-130	1.63	25		
1,1,1,2-Tetrachloroethane	0.0182	0.0020	mg/Kg	0.0200		90.9	70-130	0.220	25		
1,1,2,2-Tetrachloroethane	0.0190	0.0010	mg/Kg	0.0200		94.9	70-130	3.11	25		
Tetrachloroethylene	0.0166	0.0020	mg/Kg	0.0200		83.1	70-130	1.31	25		
Tetrahydrofuran	0.0188	0.010	mg/Kg	0.0200		94.0	70-130	8.94	25		
Toluene	0.0171	0.0020	mg/Kg	0.0200		85.3	70-130	3.23	25		
1,2,3-Trichlorobenzene	0.0176	0.0020	mg/Kg	0.0200		88.0	70-130	5.74	25		
1,2,4-Trichlorobenzene	0.0171	0.0020	mg/Kg	0.0200		85.3	70-130	0.00	25		
1,3,5-Trichlorobenzene	0.0193	0.0020	mg/Kg	0.0200		96.3	70-130	1.65	25		
1,1,1-Trichloroethane	0.0169	0.0020	mg/Kg	0.0200		84.3	70-130	1.18	25		
1,1,2-Trichloroethane	0.0186	0.0020	mg/Kg	0.0200		93.1	70-130	1.17	25		
Trichloroethylene	0.0168	0.0020	mg/Kg	0.0200		84.2	70-130	4.19	25		
Trichlorofluoromethane (Freon 11)	0.0173	0.010	mg/Kg	0.0200		86.7	70-130	5.28	25		
1,2,3-Trichloropropane	0.0186	0.0020	mg/Kg	0.0200		93.2	70-130	4.82	25		
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon	0.0171	0.010	mg/Kg	0.0200		85.5	70-130	3.67	25		
113)			/**								
1,2,4-Trimethylbenzene	0.0187	0.0020	mg/Kg	0.0200		93.5	70-130	1.80	25		
1,3,5-Trimethylbenzene	0.0177	0.0020	mg/Kg	0.0200		88.7	70-130	3.22	25		
Vinyl Chloride	0.0155	0.010	mg/Kg	0.0200		77.7	40-130	18.9	25		†
m+p Xylene	0.0360	0.0040	mg/Kg	0.0400		90.0	70-130	0.994	25		
o-Xylene	0.0183	0.0020	mg/Kg	0.0200		91.5	70-130	1.09	25		_
Surrogate: 1,2-Dichloroethane-d4	0.0563		mg/Kg	0.0500		113	70-130				
Surrogate: Toluene-d8	0.0505		mg/Kg	0.0500		101	70-130				
Surrogate: 4-Bromofluorobenzene	0.0486		mg/Kg	0.0500		97.2	70-130				



QUALITY CONTROL

Spike

Source

%REC

RPD

Semivolatile Organic Compounds by GC/MS - Quality Control

Reporting

1	D 1.	Reporting	11.5	Spike	Source	0/BEC	%REC	DDD	RPD	NT :
nalyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
atch B296919 - SW-846 3546										
lank (B296919-BLK1)				Prepared: 12	2/15/21 Analy	yzed: 12/16/2	.1			
cenaphthene	ND	0.17	mg/Kg wet							
cenaphthylene	ND	0.17	mg/Kg wet							
cetophenone	ND	0.34	mg/Kg wet							
niline	ND	0.34	mg/Kg wet							
nthracene	ND	0.17	mg/Kg wet							
enzidine	ND	0.66	mg/Kg wet							V-05, V-35
enzo(a)anthracene	ND	0.17	mg/Kg wet							
enzo(a)pyrene	ND	0.17	mg/Kg wet							
enzo(b)fluoranthene	ND	0.17	mg/Kg wet							
enzo(g,h,i)perylene	ND	0.17	mg/Kg wet							
enzo(k)fluoranthene	ND	0.17	mg/Kg wet							
enzoic Acid	ND	1.0	mg/Kg wet							
is(2-chloroethoxy)methane	ND	0.34	mg/Kg wet							
is(2-chloroethyl)ether	ND	0.34	mg/Kg wet							
is(2-chloroisopropyl)ether	ND	0.34	mg/Kg wet							
is(2-Ethylhexyl)phthalate	ND	0.34	mg/Kg wet							
Bromophenylphenylether	ND	0.34	mg/Kg wet							
utylbenzylphthalate	ND	0.34	mg/Kg wet							
arbazole	ND	0.17	mg/Kg wet							
Chloroaniline	ND	0.66	mg/Kg wet							
Chloro-3-methylphenol	ND	0.66	mg/Kg wet							
Chloronaphthalene	ND	0.34	mg/Kg wet							
Chlorophenol	ND	0.34	mg/Kg wet							
Chlorophenylphenylether	ND	0.34	mg/Kg wet							
hrysene	ND	0.17	mg/Kg wet							
ibenz(a,h)anthracene	ND	0.17	mg/Kg wet							
ibenzofuran	ND	0.34	mg/Kg wet							
i-n-butylphthalate	ND	0.34	mg/Kg wet							
2-Dichlorobenzene	ND	0.34	mg/Kg wet							
3-Dichlorobenzene	ND	0.34	mg/Kg wet							
4-Dichlorobenzene	ND	0.34	mg/Kg wet							
3-Dichlorobenzidine	ND	0.17	mg/Kg wet							
4-Dichlorophenol	ND	0.34	mg/Kg wet							
iethylphthalate	ND ND	0.34	mg/Kg wet							
4-Dimethylphenol	ND ND	0.34	mg/Kg wet							
imethylphthalate	ND ND	0.34	mg/Kg wet							
6-Dinitro-2-methylphenol	ND ND	0.34	mg/Kg wet							
4-Dinitrophenol		0.66	mg/Kg wet							
4-Dinitrotoluene	ND ND	0.34	mg/Kg wet							
6-Dinitrotoluene	ND	0.34	mg/Kg wet							
i-n-octylphthalate	ND	0.34	mg/Kg wet							
1-n-octyphthalate 2-Diphenylhydrazine/Azobenzene	ND	0.34	mg/Kg wet							
uoranthene	ND		mg/Kg wet							
uorantnene	ND	0.17								
	ND	0.17	mg/Kg wet							
exachlorobenzene	ND	0.34	mg/Kg wet							
exachlorobutadiene	ND	0.34	mg/Kg wet							
exachlorocyclopentadiene	ND	0.34	mg/Kg wet							
exachloroethane	ND	0.34	mg/Kg wet							
deno(1,2,3-cd)pyrene	ND	0.17	mg/Kg wet							
ophorone	ND	0.34	mg/Kg wet							
Methylnaphthalene	ND	0.17	mg/Kg wet							

Notes



Analyte

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

QUALITY CONTROL

Spike

Level

Source

Result

%REC

%REC

Limits

RPD

Limit

RPD

Semivolatile Organic Compounds by GC/MS - Quality Control

Units

Reporting

Limit

Result

Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch B296919 - SW-846 3546										
Blank (B296919-BLK1)				Prepared: 12	2/15/21 Anal	yzed: 12/16/	21			
-Methylphenol	ND	0.34	mg/Kg wet							
/4-Methylphenol	ND	0.34	mg/Kg wet							
Japhthalene	ND	0.17	mg/Kg wet							
-Nitroaniline	ND	0.34	mg/Kg wet							
-Nitroaniline	ND	0.34	mg/Kg wet							
-Nitroaniline	ND	0.34	mg/Kg wet							
Vitrobenzene	ND	0.34	mg/Kg wet							
-Nitrophenol	ND	0.34	mg/Kg wet							
-Nitrophenol	ND	0.66	mg/Kg wet							
-Nitrosodimethylamine	ND	0.34	mg/Kg wet							
-Nitrosodiphenylamine/Diphenylamine	ND	0.34	mg/Kg wet							
-Nitrosodi-n-propylamine	ND	0.34	mg/Kg wet							
entachloronitrobenzene	ND	0.34	mg/Kg wet							
entachlorophenol	ND	0.34	mg/Kg wet							
henanthrene	ND	0.17	mg/Kg wet							
henol	ND	0.34	mg/Kg wet							
yrene	ND	0.17	mg/Kg wet							
yridine	ND	0.34	mg/Kg wet							
2,4,5-Tetrachlorobenzene	ND	0.34	mg/Kg wet							
2,4-Trichlorobenzene	ND	0.34	mg/Kg wet							
4,5-Trichlorophenol	ND	0.34	mg/Kg wet							
4,6-Trichlorophenol	ND	0.34	mg/Kg wet							
urrogate: 2-Fluorophenol	4.91		mg/Kg wet	6.67		73.6	30-130			
urrogate: Phenol-d6	5.75		mg/Kg wet	6.67		86.3	30-130			
urrogate: Nitrobenzene-d5	2.37		mg/Kg wet	3.33		71.2	30-130			
urrogate: 2-Fluorobiphenyl	2.51		mg/Kg wet	3.33		75.3	30-130			
urrogate: 2,4,6-Tribromophenol	5.13		mg/Kg wet	6.67		76.9	30-130			
urrogate: p-Terphenyl-d14	2.82		mg/Kg wet	3.33		84.5	30-130			
.CS (B296919-BS1)			1	Prepared: 12	2/15/21 Anal	yzed: 12/16/	21			
cenaphthene	1.27	0.17	mg/Kg wet	1.67		76.2	40-140			
cenaphthylene	1.33	0.17	mg/Kg wet	1.67		79.8	40-140			
cetophenone	1.32	0.34	mg/Kg wet	1.67		78.9	40-140			
niline	1.21	0.34	mg/Kg wet	1.67		72.3	10-140			
nthracene	1.30	0.17	mg/Kg wet	1.67		78.0	40-140			
enzidine	2.52	0.66	mg/Kg wet	1.67		151 *	40-140			L-02, V-05, V-3
enzo(a)anthracene	1.23	0.17	mg/Kg wet	1.67		73.6	40-140			
enzo(a)pyrene	1.40	0.17	mg/Kg wet	1.67		83.7	40-140			
enzo(b)fluoranthene	1.34	0.17	mg/Kg wet	1.67		80.6	40-140			
enzo(g,h,i)perylene	1.21	0.17	mg/Kg wet	1.67		72.9	40-140			
enzo(k)fluoranthene	1.42	0.17	mg/Kg wet	1.67		85.1	40-140			
enzoic Acid	0.521	1.0	mg/Kg wet	1.67		31.3	30-130			
is(2-chloroethoxy)methane	1.30	0.34	mg/Kg wet	1.67		78.1	40-140			
is(2-chloroethyl)ether	1.36	0.34	mg/Kg wet	1.67		81.7	40-140			
is(2-chloroisopropyl)ether	1.75	0.34	mg/Kg wet	1.67		105	40-140			
is(2-Ethylhexyl)phthalate	1.44	0.34	mg/Kg wet	1.67		86.7	40-140			
-Bromophenylphenylether	1.12	0.34	mg/Kg wet	1.67		67.2	40-140			
utylbenzylphthalate	1.39	0.34	mg/Kg wet	1.67		83.3	40-140			
arbazole	1.32	0.17	mg/Kg wet	1.67		79.0	40-140			
-Chloroaniline	1.05	0.66	mg/Kg wet	1.67		63.2	10-140			
-Chloro-3-methylphenol	1.47	0.66	mg/Kg wet	1.67		88.2	30-130			
-Chloronaphthalene	1.07	0.34	mg/Kg wet	1.67		64.4	40-140			



39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

QUALITY CONTROL

Semivolatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result %REC	%REC Limits	RPD	RPD Limit	Notes
Batch B296919 - SW-846 3546									
LCS (B296919-BS1)				Prepared: 12	2/15/21 Analyzed: 12/16/	21			
2-Chlorophenol	1.14	0.34	mg/Kg wet	1.67	68.6	30-130			
4-Chlorophenylphenylether	1.24	0.34	mg/Kg wet	1.67	74.4	40-140			
Chrysene	1.26	0.17	mg/Kg wet	1.67	75.4	40-140			
Dibenz(a,h)anthracene	1.28	0.17	mg/Kg wet	1.67	77.1	40-140			
Dibenzofuran	1.38	0.34	mg/Kg wet	1.67	82.8	40-140			
Di-n-butylphthalate	1.37	0.34	mg/Kg wet	1.67	82.0	40-140			
1,2-Dichlorobenzene	1.07	0.34	mg/Kg wet	1.67	64.1	40-140			
1,3-Dichlorobenzene	1.03	0.34	mg/Kg wet	1.67	61.7	40-140			
1,4-Dichlorobenzene	1.03	0.34	mg/Kg wet	1.67	62.4	40-140			
3,3-Dichlorobenzidine	1.19	0.17	mg/Kg wet	1.67	71.5	20-140			
2,4-Dichlorophenol	1.19	0.34	mg/Kg wet	1.67	70.6	30-130			
Diethylphthalate	1.18	0.34	mg/Kg wet	1.67	84.4	40-140			
2,4-Dimethylphenol	1.41	0.34	mg/Kg wet	1.67	76.3	30-130			
Dimethylphthalate	1.28	0.34	mg/Kg wet	1.67	77.0	40-140			
4,6-Dinitro-2-methylphenol	1.28	0.34	mg/Kg wet	1.67	77.0	30-130			
2,4-Dinitrophenol	1.03	0.66	mg/Kg wet	1.67	61.6	30-130			
2,4-Dinitrophenor	1.03	0.34	mg/Kg wet	1.67	91.3	40-140			
2,6-Dinitrotoluene	1.45	0.34	mg/Kg wet	1.67	87.0	40-140			
Di-n-octylphthalate	1.45	0.34	mg/Kg wet	1.67	93.4	40-140			
,2-Diphenylhydrazine/Azobenzene	1.30	0.34	mg/Kg wet	1.67	78.3	40-140			
Fluoranthene		0.17	mg/Kg wet	1.67	78.3 78.1	40-140			
Fluorene	1.30	0.17	mg/Kg wet	1.67					
Hexachlorobenzene	1.36	0.17	mg/Kg wet		81.5	40-140 40-140			
Hexachlorobetzene Hexachlorobutadiene	1.19	0.34	mg/Kg wet	1.67	71.5				
Hexachlorocyclopentadiene	1.05	0.34	mg/Kg wet	1.67	63.0	40-140			
Hexachlorocyclopentatiene Hexachloroethane	0.827	0.34	mg/Kg wet	1.67	49.6	40-140 40-140			
ndeno(1,2,3-cd)pyrene	1.17	0.34	mg/Kg wet	1.67	70.3	40-140			
	1.31	0.17	mg/Kg wet	1.67	78.4				
sophorone Methylpaphthalana	1.52	0.34		1.67	91.1	40-140			
1-Methylnaphthalene	1.34		mg/Kg wet	1.67	80.5	40-140			
2-Methylnaphthalene	1.46	0.17	mg/Kg wet	1.67	87.6	40-140			
2-Methylphenol	1.38	0.34	mg/Kg wet	1.67	82.6	30-130			
3/4-Methylphenol	1.45	0.34	mg/Kg wet	1.67	86.7	30-130			
Naphthalene	1.20	0.17	mg/Kg wet	1.67	72.2	40-140			
2-Nitroaniline	1.50	0.34	mg/Kg wet	1.67	90.0	40-140			
3-Nitroaniline	1.42	0.34	mg/Kg wet	1.67	85.4	30-140			
4-Nitroaniline	1.68	0.34	mg/Kg wet	1.67	101	40-140			
Nitrobenzene	1.40	0.34	mg/Kg wet	1.67	83.9	40-140			
2-Nitrophenol	1.12	0.34	mg/Kg wet	1.67	67.0	30-130			
4-Nitrophenol	1.37	0.66	mg/Kg wet	1.67	82.2	30-130			
N-Nitrosodimethylamine	1.24	0.34	mg/Kg wet	1.67	74.3	40-140			
N-Nitrosodiphenylamine/Diphenylamine	1.25	0.34	mg/Kg wet	1.67	75.2	40-140			
N-Nitrosodi-n-propylamine	1.42	0.34	mg/Kg wet	1.67	85.4	40-140			
Pentachloronitrobenzene	1.30	0.34	mg/Kg wet	1.67	78.0	40-140			
Pentachlorophenol	1.06	0.34	mg/Kg wet	1.67	63.5	30-130			
Phenanthrene	1.30	0.17	mg/Kg wet	1.67	77.9	40-140			
Phenol	1.31	0.34	mg/Kg wet	1.67	78.4	30-130			
Pyrene	1.27	0.17	mg/Kg wet	1.67	76.2	40-140			
Pyridine	0.777	0.34	mg/Kg wet	1.67	46.6	30-140			
1,2,4,5-Tetrachlorobenzene	1.00	0.34	mg/Kg wet	1.67	60.3	40-140			
1,2,4-Trichlorobenzene	1.07	0.34	mg/Kg wet	1.67	64.4	40-140			
2,4,5-Trichlorophenol	1.29	0.34	mg/Kg wet	1.67	77.3	30-130			
2,4,6-Trichlorophenol	1.16	0.34	mg/Kg wet	1.67	69.9	30-130			



QUALITY CONTROL

Semivolatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B296919 - SW-846 3546										
LCS (B296919-BS1)				Prepared: 12	2/15/21 Anal	yzed: 12/16/2	21			
Surrogate: 2-Fluorophenol	5.30		mg/Kg wet	6.67		79.5	30-130			
Surrogate: Phenol-d6	6.06		mg/Kg wet	6.67		90.9	30-130			
Surrogate: Nitrobenzene-d5	2.76		mg/Kg wet	3.33		82.7	30-130			
Surrogate: 2-Fluorobiphenyl	2.54		mg/Kg wet	3.33		76.3	30-130			
Surrogate: 2,4,6-Tribromophenol	6.19		mg/Kg wet	6.67		92.8	30-130			
Surrogate: p-Terphenyl-d14	2.80		mg/Kg wet	3.33		84.0	30-130			
LCS Dup (B296919-BSD1)				Prepared: 12	2/15/21 Anal	yzed: 12/16/2	21			
Acenaphthene	1.19	0.17	mg/Kg wet	1.67		71.6	40-140	6.20	30	
Acenaphthylene	1.30	0.17	mg/Kg wet	1.67		78.1	40-140	2.15	30	
Acetophenone	1.26	0.34	mg/Kg wet	1.67		75.5	40-140	4.48	30	
Aniline	1.17	0.34	mg/Kg wet	1.67		70.3	10-140	2.80	50	†
Anthracene	1.29	0.17	mg/Kg wet	1.67		77.7	40-140	0.488	30	
Benzidine	2.45	0.66	mg/Kg wet	1.67		147 *	40-140	2.90	30	L-02, V-05, V-35
Benzo(a)anthracene	1.23	0.17	mg/Kg wet	1.67		74.0	40-140	0.596	30	
Benzo(a)pyrene	1.40	0.17	mg/Kg wet	1.67		84.1	40-140	0.524	30	
Benzo(b)fluoranthene	1.36	0.17	mg/Kg wet	1.67		81.5	40-140	1.09	30	
Benzo(g,h,i)perylene	1.21	0.17	mg/Kg wet	1.67		72.5	40-140	0.468	30	
Benzo(k)fluoranthene	1.46	0.17	mg/Kg wet	1.67		87.7	40-140	3.08	30	
Benzoic Acid	0.614	1.0	mg/Kg wet	1.67		36.8	30-130	16.3	50	
Bis(2-chloroethoxy)methane	1.26	0.34	mg/Kg wet	1.67		75.5	40-140	3.33	30	
sis(2-chloroethyl)ether	1.23	0.34	mg/Kg wet	1.67		74.0	40-140	9.89	30	
sis(2-chloroisopropyl)ether	1.46	0.34	mg/Kg wet	1.67		87.9	40-140	18.0	30	
Bis(2-Ethylhexyl)phthalate	1.49	0.34	mg/Kg wet	1.67		89.6	40-140	3.36	30	
-Bromophenylphenylether	1.16	0.34	mg/Kg wet	1.67		69.6	40-140	3.51	30	
Butylbenzylphthalate	1.47	0.34	mg/Kg wet	1.67		88.0	40-140	5.44	30	
Carbazole	1.33	0.17	mg/Kg wet	1.67		79.7	40-140	0.907	30	
4-Chloroaniline	0.960	0.66	mg/Kg wet	1.67		57.6	10-140	9.17	30	†
4-Chloro-3-methylphenol	1.29	0.66	mg/Kg wet	1.67		77.4	30-130	13.0	30	,
2-Chloronaphthalene	1.08	0.34	mg/Kg wet	1.67		64.9	40-140	0.773	30	
2-Chlorophenol		0.34	mg/Kg wet	1.67		75.3	30-130	9.31	30	
l-Chlorophenylphenylether	1.26 1.17	0.34	mg/Kg wet	1.67		70.0	40-140	6.18	30	
Chrysene		0.17	mg/Kg wet	1.67		75.4	40-140	0.0265	30	
Dibenz(a,h)anthracene	1.26	0.17	mg/Kg wet	1.67		77.8	40-140	1.01	30	
Dibenzofuran	1.30	0.17	mg/Kg wet	1.67				3.46	•	
Di-n-butylphthalate	1.33	0.34	mg/Kg wet			80.0 85.2	40-140		30	
,2-Dichlorobenzene	1.42	0.34	mg/Kg wet	1.67			40-140	3.83	30	
1,3-Dichlorobenzene	1.13			1.67		68.1	40-140	6.05	30	
,4-Dichlorobenzene	1.08	0.34	mg/Kg wet	1.67		64.8	40-140	4.87	30	
	1.11	0.34	mg/Kg wet	1.67		66.4	40-140	6.18	30	
3,3-Dichlorobenzidine	1.23	0.17	mg/Kg wet	1.67		73.8	20-140	3.19	50	†
2,4-Dichlorophenol	1.15	0.34	mg/Kg wet	1.67		69.2	30-130	2.09	30	
Diethylphthalate	1.31	0.34	mg/Kg wet	1.67		78.8	40-140	6.81	30	
,4-Dimethylphenol	1.21	0.34	mg/Kg wet	1.67		72.8	30-130	4.75	30	
Dimethylphthalate	1.24	0.34	mg/Kg wet	1.67		74.1	40-140	3.81	30	
,6-Dinitro-2-methylphenol	1.19	0.34	mg/Kg wet	1.67		71.6	30-130	0.918	30	
4.4-Dinitrophenol	0.885	0.66	mg/Kg wet	1.67		53.1	30-130	14.8	30	
2,4-Dinitrotoluene	1.42	0.34	mg/Kg wet	1.67		85.0	40-140	7.14	30	
,6-Dinitrotoluene	1.37	0.34	mg/Kg wet	1.67		82.4	40-140	5.38	30	
Di-n-octylphthalate	1.61	0.34	mg/Kg wet	1.67		96.9	40-140	3.66	30	
,2-Diphenylhydrazine/Azobenzene	1.40	0.34	mg/Kg wet	1.67		83.8	40-140	6.81	30	
Fluoranthene	1.27	0.17	mg/Kg wet	1.67		76.4	40-140	2.20	30	
Fluorene	1.32	0.17	mg/Kg wet	1.67		79.0	40-140	3.04	30	



QUALITY CONTROL

Semivolatile Organic Compounds by GC/MS - Quality Control

Ausland	D16	Reporting	TT-24-	Spike	Source	0/DEC	%REC	DDD	RPD	N-4	-
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes	┙
Batch B296919 - SW-846 3546											_
LCS Dup (B296919-BSD1)			1	Prepared: 12	2/15/21 Anal	yzed: 12/16/2	21				
Hexachlorobenzene	1.23	0.34	mg/Kg wet	1.67		74.0	40-140	3.38	30		_
Hexachlorobutadiene	1.06	0.34	mg/Kg wet	1.67		63.8	40-140	1.32	30		
Hexachlorocyclopentadiene	0.906	0.34	mg/Kg wet	1.67		54.4	40-140	9.12	30		
Hexachloroethane	1.15	0.34	mg/Kg wet	1.67		69.0	40-140	1.81	30		
Indeno(1,2,3-cd)pyrene	1.29	0.17	mg/Kg wet	1.67		77.6	40-140	1.05	30		
Isophorone	1.33	0.34	mg/Kg wet	1.67		80.0	40-140	13.0	30		
1-Methylnaphthalene	1.20	0.17	mg/Kg wet	1.67		71.9	40-140	11.4	30		
2-Methylnaphthalene	1.42	0.17	mg/Kg wet	1.67		85.3	40-140	2.68	30		
2-Methylphenol	1.41	0.34	mg/Kg wet	1.67		84.8	30-130	2.70	30		
3/4-Methylphenol	1.40	0.34	mg/Kg wet	1.67		84.0	30-130	3.14	30		
Naphthalene	1.20	0.17	mg/Kg wet	1.67		72.1	40-140	0.139	30		
2-Nitroaniline	1.44	0.34	mg/Kg wet	1.67		86.6	40-140	3.87	30		
3-Nitroaniline	1.26	0.34	mg/Kg wet	1.67		75.5	30-140	12.3	30		†
4-Nitroaniline	1.53	0.34	mg/Kg wet	1.67		92.0	40-140	9.20	30		
Nitrobenzene	1.16	0.34	mg/Kg wet	1.67		69.7	40-140	18.5	30		
2-Nitrophenol	1.13	0.34	mg/Kg wet	1.67		67.6	30-130	0.921	30		
4-Nitrophenol	1.21	0.66	mg/Kg wet	1.67		72.7	30-130	12.3	50		
N-Nitrosodimethylamine	1.05	0.34	mg/Kg wet	1.67		63.2	40-140	16.2	30		
N-Nitrosodiphenylamine/Diphenylamine	1.27	0.34	mg/Kg wet	1.67		76.5	40-140	1.69	30		
N-Nitrosodi-n-propylamine	1.30	0.34	mg/Kg wet	1.67		78.1	40-140	9.00	30		
Pentachloronitrobenzene	1.34	0.34	mg/Kg wet	1.67		80.5	40-140	3.18	30		
Pentachlorophenol	1.04	0.34	mg/Kg wet	1.67		62.1	30-130	2.29	30		
Phenanthrene	1.28	0.17	mg/Kg wet	1.67		77.0	40-140	1.21	30		
Phenol	1.28	0.34	mg/Kg wet	1.67		76.6	30-130	2.40	30		
Pyrene	1.30	0.17	mg/Kg wet	1.67		77.9	40-140	2.21	30		
Pyridine	0.669	0.34	mg/Kg wet	1.67		40.1	30-140	14.9	30		†
1,2,4,5-Tetrachlorobenzene	1.06	0.34	mg/Kg wet	1.67		63.3	40-140	4.89	30		
1,2,4-Trichlorobenzene	1.13	0.34	mg/Kg wet	1.67		68.0	40-140	5.53	30		
2,4,5-Trichlorophenol	1.24	0.34	mg/Kg wet	1.67		74.3	30-130	3.96	30		
2,4,6-Trichlorophenol	1.16	0.34	mg/Kg wet	1.67		69.3	30-130	0.776	30		
Surrogate: 2-Fluorophenol	5.44		mg/Kg wet	6.67		81.5	30-130				_
Surrogate: Phenol-d6	5.81		mg/Kg wet	6.67		87.1	30-130				
Surrogate: Nitrobenzene-d5	2.31		mg/Kg wet	3.33		69.4	30-130				
Surrogate: 2-Fluorobiphenyl	2.50		mg/Kg wet	3.33		75.1	30-130				
Surrogate: 2,4,6-Tribromophenol	6.09		mg/Kg wet	6.67		91.3	30-130				
Surrogate: p-Terphenyl-d14	2.88		mg/Kg wet	3.33		86.4	30-130				



QUALITY CONTROL

Spike

Source

%REC

RPD

Organochloride Pesticides by GC/ECD - Quality Control

Reporting

analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
atch B296928 - SW-846 3546										
lank (B296928-BLK1)]	Prepared: 12	2/15/21 Analy	yzed: 12/17/2	1			
pha-Chlordane	ND	0.0050	mg/Kg wet							
pha-Chlordane [2C]	ND	0.0050	mg/Kg wet							
amma-Chlordane	ND	0.0050	mg/Kg wet							
amma-Chlordane [2C]	ND	0.0050	mg/Kg wet							
lachlor	ND	0.020	mg/Kg wet							
lachlor [2C]	ND	0.020	mg/Kg wet							
ldrin	ND	0.0050	mg/Kg wet							
ldrin [2C]	ND	0.0050	mg/Kg wet							
pha-BHC	ND	0.0050	mg/Kg wet							
pha-BHC [2C]	ND	0.0050	mg/Kg wet							
ta-BHC	ND	0.0050	mg/Kg wet							
ta-BHC [2C]	ND	0.0050	mg/Kg wet							
elta-BHC	ND	0.0050	mg/Kg wet							
elta-BHC [2C]	ND	0.0050	mg/Kg wet							
mma-BHC (Lindane)	ND	0.0020	mg/Kg wet							
ımma-BHC (Lindane) [2C]	ND	0.0020	mg/Kg wet							
nlordane	ND	0.020	mg/Kg wet							
nlordane [2C]	ND	0.020	mg/Kg wet							
4'-DDD	ND	0.0040	mg/Kg wet							
4'-DDD [2C]	ND	0.0040	mg/Kg wet							
4'-DDE	ND	0.0040	mg/Kg wet							
4'-DDE [2C]	ND	0.0040	mg/Kg wet							
4'-DDT	ND	0.0040	mg/Kg wet							
4'-DDT [2C]	ND	0.0040	mg/Kg wet							
ieldrin	ND	0.0040	mg/Kg wet							
eldrin [2C]	ND	0.0040	mg/Kg wet							
ndosulfan I	ND	0.0050	mg/Kg wet							
ndosulfan I [2C]	ND	0.0050	mg/Kg wet							
ndosulfan II	ND	0.0080	mg/Kg wet							
ndosulfan II [2C]	ND	0.0080	mg/Kg wet							
ndosulfan Sulfate	ND	0.0080	mg/Kg wet							
ndosulfan Sulfate [2C]	ND	0.0080	mg/Kg wet							
ndrin	ND ND	0.0080	mg/Kg wet							
ndrin [2C]	ND ND	0.0080	mg/Kg wet							
ndrin Aldehyde	ND	0.0080	mg/Kg wet							
ndrin Aldehyde [2C]	ND ND	0.0080	mg/Kg wet							
ndrin Ketone	ND ND	0.0080	mg/Kg wet							
adrin Ketone [2C]	ND ND	0.0080	mg/Kg wet							
eptachlor	ND ND	0.0050	mg/Kg wet							
eptachlor [2C]	ND ND	0.0050	mg/Kg wet							
eptachlor Epoxide		0.0050	mg/Kg wet							
eptachlor Epoxide [2C]	ND	0.0050	mg/Kg wet							
exachlorobenzene	ND	0.0060	mg/Kg wet							
exachlorobenzene [2C]	ND									
	ND	0.0060	mg/Kg wet							
ethoxychlor	ND	0.050	mg/Kg wet							
ethoxychlor [2C]	ND	0.050	mg/Kg wet							
oxaphene	ND	0.10	mg/Kg wet							
exaphene [2C]	ND	0.10	mg/Kg wet							
rrogate: Decachlorobiphenyl	0.145		mg/Kg wet	0.200		72.7	30-150			
rrogate: Decachlorobiphenyl [2C]	0.149		mg/Kg wet	0.200		74.4	30-150			
urrogate: Tetrachloro-m-xylene	0.138		mg/Kg wet	0.200		68.9	30-150			
urrogate: Tetrachloro-m-xylene [2C]	0.127		mg/Kg wet	0.200		63.4	30-150			



QUALITY CONTROL

Organochloride Pesticides by GC/ECD - Quality Control

Auglista	D14	Reporting	T Imit-	Spike	Source	0/DEC	%REC	ממם	RPD	N-4
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
satch B296928 - SW-846 3546										
CS (B296928-BS1)				-	/15/21 Analy	zed: 12/17/2				
lpha-Chlordane	0.083	0.0050	mg/Kg wet	0.100		83.4	40-140			
lpha-Chlordane [2C]	0.079	0.0050	mg/Kg wet	0.100		79.3	40-140			
amma-Chlordane	0.077	0.0050	mg/Kg wet	0.100		76.8	40-140			
amma-Chlordane [2C]	0.081	0.0050	mg/Kg wet	0.100		81.2	40-140			
lachlor	0.080	0.020	mg/Kg wet	0.100		80.0	40-140			
lachlor [2C]	0.077	0.020	mg/Kg wet	0.100		76.6	40-140			
Aldrin	0.084	0.0050	mg/Kg wet	0.100		83.6	40-140			
Aldrin [2C]	0.077	0.0050	mg/Kg wet	0.100		77.0	40-140			
lpha-BHC	0.075	0.0050	mg/Kg wet	0.100		75.2	40-140			
lpha-BHC [2C]	0.070	0.0050	mg/Kg wet	0.100		69.5	40-140			
eta-BHC	0.084	0.0050	mg/Kg wet	0.100		83.8	40-140			
eta-BHC [2C]	0.076	0.0050	mg/Kg wet	0.100		75.6	40-140			
elta-BHC	0.083	0.0050	mg/Kg wet	0.100		83.4	40-140			
elta-BHC [2C]	0.075	0.0050	mg/Kg wet	0.100		74.9	40-140			
amma-BHC (Lindane)	0.081	0.0020	mg/Kg wet	0.100		80.6	40-140			
amma-BHC (Lindane) [2C]	0.073	0.0020	mg/Kg wet	0.100		73.2	40-140			
,4'-DDD	0.094	0.0040	mg/Kg wet	0.100		93.6	40-140			
,4'-DDD [2C]	0.090	0.0040	mg/Kg wet	0.100		90.1	40-140			
,4'-DDE	0.090	0.0040	mg/Kg wet	0.100		89.9	40-140			
,4'-DDE [2C]	0.086	0.0040	mg/Kg wet	0.100		86.0	40-140			
,4'-DDT	0.090	0.0040	mg/Kg wet	0.100		89.6	40-140			
,4'-DDT [2C]	0.087	0.0040	mg/Kg wet	0.100		86.6	40-140			
vieldrin	0.089	0.0040	mg/Kg wet	0.100		89.3	40-140			
Dieldrin [2C]	0.085	0.0040	mg/Kg wet	0.100		84.9	40-140			
indosulfan I	0.082	0.0050	mg/Kg wet	0.100		82.0	40-140			
ndosulfan I [2C]	0.078	0.0050	mg/Kg wet	0.100		78.2	40-140			
indosulfan II	0.082	0.0080	mg/Kg wet	0.100		82.5	40-140			
indosulfan II [2C]	0.079	0.0080	mg/Kg wet	0.100		79.5	40-140			
indosulfan Sulfate	0.084	0.0080	mg/Kg wet	0.100		84.1	40-140			
indosulfan Sulfate [2C]	0.082	0.0080	mg/Kg wet	0.100		82.2	40-140			
Indrin	0.087	0.0080	mg/Kg wet	0.100		86.9	40-140			
indrin [2C]	0.082	0.0080	mg/Kg wet	0.100		82.3	40-140			
Indrin Aldehyde	0.062	0.0080	mg/Kg wet	0.100		68.1	40-140			
ndrin Aldehyde [2C]	0.071	0.0080	mg/Kg wet	0.100		70.7	40-140			
Indrin Ketone	0.086	0.0080	mg/Kg wet	0.100		86.2	40-140			
Indrin Ketone [2C]	0.084	0.0080	mg/Kg wet	0.100		83.6	40-140			
[eptachlor	0.084	0.0050	mg/Kg wet	0.100		81.7	40-140			
[eptachlor [2C]	0.082	0.0050	mg/Kg wet	0.100		75.4	40-140			
[eptachlor Epoxide	0.075	0.0050	mg/Kg wet	0.100		85.3	40-140			
leptachlor Epoxide [2C]		0.0050	mg/Kg wet	0.100		76.1	40-140			
(exachlorobenzene	0.076	0.0050	mg/Kg wet	0.100		73.7	40-140			
[exachlorobenzene [2C]	0.074	0.0060	mg/Kg wet	0.100		67.6	40-140			
Methoxychlor	0.068	0.050	mg/Kg wet	0.100			40-140			
Methoxychlor [2C]	0.084 0.085	0.050	mg/Kg wet	0.100		84.1 85.5	40-140			
urrogate: Decachlorobiphenyl	0.143			0.200						
urrogate: Decachlorobiphenyl urrogate: Decachlorobiphenyl [2C]			mg/Kg wet mg/Kg wet			71.5	30-150 30-150			
	0.150		0 0	0.200		75.2 65.0				
urrogate: Tetrachloro-m-xylene	0.132		mg/Kg wet	0.200		65.9	30-150			



QUALITY CONTROL

Organochloride Pesticides by GC/ECD - Quality Control

Amelista	D14	Reporting	T Ii	Spike	Source	0/DEC	%REC	ממם	RPD Limit	N-4
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Satch B296928 - SW-846 3546										
LCS Dup (B296928-BSD1)				Prepared: 12	2/15/21 Analy	zed: 12/17/2	.1			
lpha-Chlordane	0.084	0.0050	mg/Kg wet	0.100		84.0	40-140	0.717	30	
alpha-Chlordane [2C]	0.081	0.0050	mg/Kg wet	0.100		81.1	40-140	2.31	30	
gamma-Chlordane	0.077	0.0050	mg/Kg wet	0.100		77.3	40-140	0.631	30	
gamma-Chlordane [2C]	0.083	0.0050	mg/Kg wet	0.100		83.0	40-140	2.23	30	
Alachlor	0.081	0.020	mg/Kg wet	0.100		81.2	40-140	1.48	30	
Alachlor [2C]	0.080	0.020	mg/Kg wet	0.100		79.6	40-140	3.96	30	
Aldrin	0.088	0.0050	mg/Kg wet	0.100		87.8	40-140	4.82	30	
ldrin [2C]	0.084	0.0050	mg/Kg wet	0.100		84.0	40-140	8.73	30	
pha-BHC	0.082	0.0050	mg/Kg wet	0.100		82.0	40-140	8.60	30	
pha-BHC [2C]	0.079	0.0050	mg/Kg wet	0.100		79.1	40-140	12.8	30	
eta-BHC	0.085	0.0050	mg/Kg wet	0.100		84.8	40-140	1.14	30	
eta-BHC [2C]	0.078	0.0050	mg/Kg wet	0.100		78.3	40-140	3.41	30	
elta-BHC	0.084	0.0050	mg/Kg wet	0.100		84.0	40-140	0.687	30	
elta-BHC [2C]	0.077	0.0050	mg/Kg wet	0.100		77.1	40-140	2.84	30	
amma-BHC (Lindane)	0.086	0.0020	mg/Kg wet	0.100		85.9	40-140	6.47	30	
amma-BHC (Lindane) [2C]	0.081	0.0020	mg/Kg wet	0.100		81.4	40-140	10.5	30	
4'-DDD	0.094	0.0040	mg/Kg wet	0.100		94.1	40-140	0.618	30	
4'-DDD [2C]	0.090	0.0040	mg/Kg wet	0.100		90.2	40-140	0.112	30	
4'-DDE	0.091	0.0040	mg/Kg wet	0.100		90.7	40-140	0.811	30	
4'-DDE [2C]	0.087	0.0040	mg/Kg wet	0.100		87.0	40-140	1.11	30	
4'-DDT	0.091	0.0040	mg/Kg wet	0.100		90.7	40-140	1.15	30	
4'-DDT [2C]	0.087	0.0040	mg/Kg wet	0.100		86.9	40-140	0.391	30	
ieldrin	0.090	0.0040	mg/Kg wet	0.100		89.7	40-140	0.421	30	
ieldrin [2C]	0.086	0.0040	mg/Kg wet	0.100		86.4	40-140	1.75	30	
ndosulfan I	0.083	0.0050	mg/Kg wet	0.100		83.0	40-140	1.20	30	
ndosulfan I [2C]	0.080	0.0050	mg/Kg wet	0.100		80.1	40-140	2.42	30	
ndosulfan II	0.083	0.0080	mg/Kg wet	0.100		82.6	40-140	0.0860	30	
ndosulfan II [2C]	0.079	0.0080	mg/Kg wet	0.100		79.3	40-140	0.173	30	
ndosulfan Sulfate	0.085	0.0080	mg/Kg wet	0.100		84.6	40-140	0.563	30	
ndosulfan Sulfate [2C]	0.082	0.0080	mg/Kg wet	0.100		81.9	40-140	0.396	30	
ndrin	0.082	0.0080	mg/Kg wet	0.100		87.3	40-140	0.499	30	
Endrin [2C]	0.087	0.0080	mg/Kg wet	0.100		83.1	40-140	0.499	30	
ndrin Aldehyde	0.068	0.0080	mg/Kg wet	0.100		68.3	40-140	0.317	30	
ndrin Aldehyde [2C]	0.068	0.0080	mg/Kg wet	0.100		72.4	40-140	2.44	30	
ndrin Ketone	0.072	0.0080	mg/Kg wet	0.100		85.9	40-140	0.265	30	
ndrin Ketone [2C]	0.083	0.0080	mg/Kg wet	0.100		83.2	40-140	0.203	30	
eptachlor	0.083	0.0050	mg/Kg wet	0.100		87.0	40-140	6.30	30	
eptachlor [2C]		0.0050	mg/Kg wet	0.100		83.8	40-140	10.6	30	
eptachlor Epoxide	0.084	0.0050	mg/Kg wet	0.100		87.2	40-140	2.21	30	
eptachlor Epoxide [2C]	0.087	0.0050	mg/Kg wet	0.100		79.5	40-140	4.38	30	
exachlorobenzene	0.080	0.0050	mg/Kg wet	0.100		79.3 79.1	40-140	7.09	30	
exachlorobenzene [2C]	0.079	0.0060	mg/Kg wet	0.100		79.1 75.2	40-140	10.6	30	
lethoxychlor	0.075	0.050	mg/Kg wet							
fethoxychlor [2C]	0.085	0.050		0.100		84.5	40-140	0.482	30	
	0.087	0.050	mg/Kg wet	0.100		87.2	40-140	1.96	30	
urrogate: Decachlorobiphenyl	0.138		mg/Kg wet	0.200		68.9	30-150			
urrogate: Decachlorobiphenyl [2C]	0.148		mg/Kg wet	0.200		74.0	30-150			
urrogate: Tetrachloro-m-xylene	0.140		mg/Kg wet	0.200		70.1	30-150			
urrogate: Tetrachloro-m-xylene [2C]	0.134		mg/Kg wet	0.200		66.8	30-150			



39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

QUALITY CONTROL

Polychlorinated Biphenyls By GC/ECD - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B296927 - SW-846 3546		-	-							-
Blank (B296927-BLK1)				Prepared: 12	/15/21 Analy	yzed: 12/18/2	21			
Aroclor-1016	ND	0.020	mg/Kg wet							
Aroclor-1016 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1221	ND	0.020	mg/Kg wet							
Aroclor-1221 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1232	ND	0.020	mg/Kg wet							
Aroclor-1232 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1242	ND	0.020	mg/Kg wet							
Aroclor-1242 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1248	ND	0.020	mg/Kg wet							
Aroclor-1248 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1254	ND	0.020	mg/Kg wet							
Aroclor-1254 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1260	ND	0.020	mg/Kg wet							
Aroclor-1260 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1262	ND	0.020	mg/Kg wet							
Aroclor-1262 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1268	ND	0.020	mg/Kg wet							
Aroclor-1268 [2C]	ND	0.020	mg/Kg wet							
Surrogate: Decachlorobiphenyl	0.154		mg/Kg wet	0.200		76.8	30-150			
Surrogate: Decachlorobiphenyl [2C]	0.177		mg/Kg wet	0.200		88.4	30-150			
Surrogate: Tetrachloro-m-xylene	0.142		mg/Kg wet	0.200		71.0	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	0.158		mg/Kg wet	0.200		79.1	30-150			
LCS (B296927-BS1)				Prepared: 12	/15/21 Analy	yzed: 12/18/2	21			
Aroclor-1016	0.13	0.020	mg/Kg wet	0.200		64.3	40-140			
Aroclor-1016 [2C]	0.14	0.020	mg/Kg wet	0.200		70.1	40-140			
Aroclor-1260	0.13	0.020	mg/Kg wet	0.200		66.4	40-140			
Aroclor-1260 [2C]	0.15	0.020	mg/Kg wet	0.200		77.4	40-140			
Surrogate: Decachlorobiphenyl	0.155		mg/Kg wet	0.200	<u> </u>	77.4	30-150	·	·	·
Surrogate: Decachlorobiphenyl [2C]	0.179		mg/Kg wet	0.200		89.3	30-150			
Surrogate: Tetrachloro-m-xylene	0.144		mg/Kg wet	0.200		72.1	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	0.161		mg/Kg wet	0.200		80.3	30-150			
LCS Dup (B296927-BSD1)				Prepared: 12	/15/21 Analy	zed: 12/18/2	21			
Aroclor-1016	0.11	0.020	mg/Kg wet	0.200		57.4	40-140	11.4	30	
Aroclor-1016 [2C]	0.12	0.020	mg/Kg wet	0.200		62.2	40-140	11.9	30	
Aroclor-1260	0.12	0.020	mg/Kg wet	0.200		58.4	40-140	12.8	30	
Aroclor-1260 [2C]	0.14	0.020	mg/Kg wet	0.200		67.9	40-140	13.2	30	
Surrogate: Decachlorobiphenyl	0.132		mg/Kg wet	0.200		65.9	30-150			
Surrogate: Decachlorobiphenyl [2C]	0.152		mg/Kg wet	0.200		75.8	30-150			
Surrogate: Tetrachloro-m-xylene	0.120		mg/Kg wet	0.200		60.0	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	0.133		mg/Kg wet	0.200		66.6	30-150			



QUALITY CONTROL

Herbicides by GC/ECD - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B297361 - SW-846 8151										
Blank (B297361-BLK1)				Prepared: 12	2/20/21 Analy	yzed: 12/28/2	21			
,4-D	ND	24	μg/kg wet							
,4-D [2C]	ND	24	μg/kg wet							
,4-DB	ND	24	μg/kg wet							
,4-DB [2C]	ND	24	μg/kg wet							
,4,5-TP (Silvex)	ND	2.4	μg/kg wet							
,4,5-TP (Silvex) [2C]	ND	2.4	μg/kg wet							
,4,5-T	ND	2.4	μg/kg wet							
.4,5-T [2C]	ND	2.4	μg/kg wet							
alapon	ND	60	μg/kg wet							L-04
alapon [2C]	ND	60	μg/kg wet							L-04
ricamba	ND	2.4	μg/kg wet							
ricamba [2C]	ND	2.4	μg/kg wet							
richloroprop	ND	24	μg/kg wet							
pichloroprop [2C]	ND	24	μg/kg wet							
vinoseb	ND	12	μg/kg wet							
pinoseb [2C]	ND	12	μg/kg wet							
ICPA	ND	2400	μg/kg wet							
1CPA [2C]	ND	2400	μg/kg wet							
СРР	ND	2400	μg/kg wet							
MCPP [2C]	ND	2400	μg/kg wet							
urrogate: 2,4-Dichlorophenylacetic acid	59.7		μg/kg wet	95.2		62.7	30-150			
urrogate: 2,4-Dichlorophenylacetic acid 2C]	56.3		μg/kg wet	95.2		59.2	30-150			
.CS (B297361-BS1)				Prepared: 12	2/20/21 Analy	vzed: 12/28/2	71			
,4-D	83.0	25	μg/kg wet	125	, 20, 21 Tillar	66.4	40-140			
,4-D [2C]	90.7	25	μg/kg wet	125		72.5	40-140			
,4-DB	50.3	25	μg/kg wet	125		40.2	40-140			
,4-DB [2C]	52.0	25	μg/kg wet μg/kg wet	125		41.6	40-140			
,4,5-TP (Silvex)	9.06	2.5	μg/kg wet μg/kg wet	12.5		72.5	40-140			
,4,5-TP (Silvex) [2C]	9.06 9.36	2.5	μg/kg wet μg/kg wet	12.5		74.9	40-140			
,4,5-T		2.5	μg/kg wet μg/kg wet	12.5		67.5	40-140			
,4,5-T [2C]	8.43	2.5	μg/kg wet μg/kg wet	12.5		80.4	40-140			
Palapon	10.1	62	μg/kg wet μg/kg wet	312		33.2 *	40-140			L-04
alapon alapon [2C]	104	62	μg/kg wet μg/kg wet	312						
vicamba	118	2.5	μg/kg wet μg/kg wet	12.5		37.7 * 68.7	40-140 40-140			L-04
vicamba [2C]	8.59	2.5	μg/kg wet μg/kg wet	12.5		68.7 70.1	40-140			
vichloroprop	8.76	2.5	μg/kg wet μg/kg wet	12.5		70.1 76.1	40-140			
vichloroprop [2C]	95.2	25	μg/kg wet μg/kg wet							
inoseb	95.9			125		76.7	40-140			
inoseb [2C]	8.04	12	μg/kg wet	62.5		12.9	2.28-30.2			
	9.92	12 2500	μg/kg wet	62.5		15.9	2.56-33.2			
ICPA	8920	2500	μg/kg wet	12500		71.4	40-140			
ICPA [2C]	9060	2500	μg/kg wet	12500		72.5	40-140			
ACPP (ACP) (ACP)	10100	2500	μg/kg wet	12500		80.4	40-140			
1CPP [2C]	9490	2500	μg/kg wet	12500		76.0	40-140			
urrogate: 2,4-Dichlorophenylacetic acid	67.8		μg/kg wet	100		67.8	30-150			
urrogate: 2,4-Dichlorophenylacetic acid	70.1		μg/kg wet	100		70.1	30-150			



QUALITY CONTROL

Herbicides by GC/ECD - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
z rimiye.	Result	Lillit	Omts	Level	Result	/UKEC	Lillits	RID	Lillit	110103
Batch B297361 - SW-846 8151										
LCS Dup (B297361-BSD1)				Prepared: 12	2/20/21 Anal	zed: 12/28	/21			
2,4-D	78.8	25	μg/kg wet	125		63.0	40-140	5.19	30	
2,4-D [2C]	85.7	25	μg/kg wet	125		68.6	40-140	5.62	30	
2,4-DB	47.0	25	μg/kg wet	125		37.6	¥ 40-140	6.86	30	L-07
2,4-DB [2C]	46.7	25	μg/kg wet	125		37.4	¥ 40-140	10.7	30	L-07
2,4,5-TP (Silvex)	8.76	2.5	μg/kg wet	12.5		70.1	40-140	3.33	30	
2,4,5-TP (Silvex) [2C]	8.68	2.5	μg/kg wet	12.5		69.5	40-140	7.50	30	
2,4,5-T	7.92	2.5	μg/kg wet	12.5		63.3	40-140	6.34	30	
2,4,5-T [2C]	9.56	2.5	μg/kg wet	12.5		76.5	40-140	5.08	30	
Dalapon	109	62	μg/kg wet	312		35.0	¥ 40-140	5.42	30	L-04
Dalapon [2C]	121	62	μg/kg wet	312		38.6	¥ 40-140	2.29	30	L-04
Dicamba	8.11	2.5	μg/kg wet	12.5		64.8	40-140	5.81	30	
Dicamba [2C]	8.12	2.5	μg/kg wet	12.5		65.0	40-140	7.59	30	
Dichloroprop	91.3	25	μg/kg wet	125		73.1	40-140	4.08	30	
Dichloroprop [2C]	89.9	25	μg/kg wet	125		71.9	40-140	6.43	30	
Dinoseb	7.48	12	μg/kg wet	62.5		12.0	2.28-30.2	7.16	30	
Dinoseb [2C]	9.20	12	μg/kg wet	62.5		14.7	2.56-33.2	7.55	30	
MCPA	8230	2500	μg/kg wet	12500		65.8	40-140	8.05	30	
MCPA [2C]	8610	2500	μg/kg wet	12500		68.9	40-140	5.04	30	
MCPP	9340	2500	μg/kg wet	12500		74.8	40-140	7.33	30	
MCPP [2C]	9110	2500	$\mu g/kg$ wet	12500		72.9	40-140	4.13	30	
Surrogate: 2,4-Dichlorophenylacetic acid	63.2		μg/kg wet	100		63.2	30-150			
Surrogate: 2,4-Dichlorophenylacetic acid [2C]	63.0		μg/kg wet	100		63.0	30-150			



QUALITY CONTROL

Petroleum Hydrocarbons Analyses - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B296918 - SW-846 3546										
Blank (B296918-BLK1)				Prepared: 12	2/15/21 Anal	yzed: 12/16/2	21			
TPH (C9-C36)	ND	8.3	mg/Kg wet							
Surrogate: 2-Fluorobiphenyl	2.47		mg/Kg wet	3.32		74.4	40-140			
LCS (B296918-BS1)				Prepared: 12	2/15/21 Anal	yzed: 12/16/2	21			
TPH (C9-C36)	29.9	8.3	mg/Kg wet	33.3		89.8	40-140			
Surrogate: 2-Fluorobiphenyl	2.86		mg/Kg wet	3.33		85.8	40-140			
LCS Dup (B296918-BSD1)				Prepared: 12	2/15/21 Anal	yzed: 12/16/2	21			
TPH (C9-C36)	29.2	8.3	mg/Kg wet	33.2		87.8	40-140	2.57	30	
Surrogate: 2-Fluorobiphenyl	2.95		mg/Kg wet	3.32		88.8	40-140			



QUALITY CONTROL

Metals Analyses (Total) - Quality Control

		Reporting		Spike	Source		%REC	_	RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch B296831 - SW-846 7471										
Blank (B296831-BLK1)				Prepared: 12	2/14/21 Anal	yzed: 12/16/	21			
Mercury	ND	0.025	mg/Kg wet							
LCS (B296831-BS1)				Prepared: 12	2/14/21 Anal	yzed: 12/16/	21			
Mercury	17.3	0.76	mg/Kg wet	15.6		111	59.3-140.4			
LCS Dup (B296831-BSD1)				Prepared: 12	2/14/21 Anal	yzed: 12/16/	21			
Mercury	17.6	0.75	mg/Kg wet	15.6		113	59.3-140.4	1.64	20	
Batch B297040 - SW-846 3050B										
Blank (B297040-BLK1)				Prepared: 12	2/16/21 Anal	yzed: 12/17/	21			
Arsenic	ND	3.3	mg/Kg wet							
Barium	ND	1.7	mg/Kg wet							
Cadmium	ND	0.33	mg/Kg wet							
Chromium	ND	0.67	mg/Kg wet							
Lead	ND	0.50	mg/Kg wet							
Selenium	ND	3.3	mg/Kg wet							
Silver	ND	0.33	mg/Kg wet							
LCS (B297040-BS1)				Prepared: 12	2/16/21 Anal	yzed: 12/17/	21			
Arsenic	167	10	mg/Kg wet	170		98.1	82.9-117.6			
Barium	185	5.0	mg/Kg wet	183		101	82.5-117.5			
Cadmium	92.7	1.0	mg/Kg wet	89.5		104	82.8-117.3			
Chromium	102	2.0	mg/Kg wet	101		101	82.1-117.8			
Lead	143	1.5	mg/Kg wet	140		102	82.9-117.1			
Selenium	180	10	mg/Kg wet	182		99.1	79.7-120.3			
Silver	53.5	1.0	mg/Kg wet	50.1		107	80.2-120			
LCS Dup (B297040-BSD1)				Prepared: 12	2/16/21 Anal	yzed: 12/17/	21			
Arsenic	169	9.8	mg/Kg wet	170		99.6	82.9-117.6	1.51	30	
Barium	189	4.9	mg/Kg wet	183		103	82.5-117.5	2.23	20	
Cadmium	93.2	0.98	mg/Kg wet	89.5		104	82.8-117.3	0.548	20	
Chromium	102	2.0	mg/Kg wet	101		101	82.1-117.8	0.103	30	
Lead	144	1.5	mg/Kg wet	140		103	82.9-117.1	0.937	30	
Selenium	183	9.8	mg/Kg wet	182		100	79.7-120.3	1.20	30	
Silver	53.5	0.98	mg/Kg wet	50.1		107	80.2-120	0.00183	30	
Reference (B297040-SRM1) MRL CHECK				Prepared: 12	2/16/21 Anal	yzed: 12/17/	21			
Lead	0.495	0.50	mg/Kg wet	0.502		98.8	80-120			



QUALITY CONTROL

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total) - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B296500 - SW-846 9045C										
LCS (B296500-BS1)				Prepared &	Analyzed: 12	/09/21				
рН	5.97		pH Units	6.00		99.6	90-110			
LCS (B296500-BS2)				Prepared &	Analyzed: 12	/09/21				
рН	6.00		pH Units	6.00		99.9	90-110			
Batch B296855 - SM21-23 2510B Modified										
Blank (B296855-BLK1)				Prepared &	Analyzed: 12	/14/21				
Specific conductance	ND	2.0	μmhos/cm							
LCS (B296855-BS1)				Prepared &	Analyzed: 12	/14/21				
Specific conductance	140		μmhos/cm	137		99.4	90-114			
Duplicate (B296855-DUP1)	Sou	rce: 21L0502	-01	Prepared &	Analyzed: 12	/14/21				
Specific conductance	24	2.0	μmhos/cm		25	5		2.37	44.6	
Batch B297150 - SW-846 9014										
Blank (B297150-BLK1)				Prepared &	Analyzed: 12	/17/21				
Reactive Cyanide	ND	0.40	mg/Kg							
LCS (B297150-BS1)				Prepared &	Analyzed: 12	/17/21				
Reactive Cyanide	9.8	0.40	mg/Kg	10.0		98.3	81.3-111			
Batch B297151 - SW-846 9030A										
Blank (B297151-BLK1)				Prepared &	Analyzed: 12	/17/21				
Reactive Sulfide	ND	2.0	mg/Kg							
LCS (B297151-BS1)				Prepared &	Analyzed: 12	/17/21				
Reactive Sulfide		2.0	mg/Kg							



BREAKDOWN REPORT

Lab Sample ID:	S066538-PEM1	Analyzed:	12/17/2021
Column Number:	1		
Analyte	% Breakdown		
4,4'-DDT [1]	2.75		
Endrin [1]	5.57		
Column Number:	2		
Analyte	% Breakdown		
4,4'-DDT [2]	2.45		
Endrin [2]	6.20		

BREAKDOWN REPORT

Lab Sample ID:	S066538-PEM2	Analyzed:	12/17/2021
Column Number:	1		
Analyte	% Breakdown		
4,4'-DDT [1]	1.83		
Endrin [1]	3.40		
Column Number:	2		
Analyte	% Breakdown		
4,4'-DDT [2]	1.52		
Endrin [2]	3.42		

BREAKDOWN REPORT

Lab Sample ID:	S066548-PEM1	Analyzed:	12/18/2021
Column Number:	1		
Analyte	% Breakdown		
4,4'-DDT [1]	5.23		
Endrin [1]	5.02		



39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332 BREAKDOWN REPORT

Lab Sample ID:	S066548-PEM1	Analyzed:	12/18/2021
Column Number:	2		
Analyte	% Breakdown		
4,4'-DDT [2]	1.60		
Endrin [2]	2.97		

BREAKDOWN REPORT

Lab Sample ID:	S066548-PEM2	Analyzed:	12/18/2021
Column Number:	1		
Analyte	% Breakdown		
4,4'-DDT [1]	2.72		
Endrin [1]	3.80		
Column Number:	2		
Analyte	% Breakdown		
4,4'-DDT [2]	1.16		
Endrin [2]	1.14		

BREAKDOWN REPORT

Lab Sample ID:	S066548-PEM3	Analyzed:	12/19/2021
Column Number:	1		
Analyte	% Breakdown		
4,4'-DDT [1]	2.60		
Endrin [1]	4.31		
Column Number:	2		
Analyte	% Breakdown		
4,4'-DDT [2]	1.42		
Endrin [2]	1.21		

BREAKDOWN REPORT



39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332 BREAKDOWN REPORT

Lab Sample ID:	S066548-PEM4	Analyzed:	12/19/2021
Column Number:	1		
Analyte	% Breakdown		
4,4'-DDT [1]	2.62		
Endrin [1]	6.04		
Column Number:	2		
Analyte	% Breakdown		
4,4'-DDT [2]	1.81		
Endrin [2]	3.34		

BREAKDOWN REPORT

Lab Sample ID:	S066548-PEM5	Analyzed:	12/19/2021
Column Number:	1		
Analyte	% Breakdown		
4,4'-DDT [1]	3.10		
Endrin [1]	5.34		
Column Number:	2		
Analyte	% Breakdown		
4,4'-DDT [2]	2.11		
Endrin [2]	1.81		



IDENTIFICATION SUMMARY FOR SINGLE COMPONENT ANALYTES

PFC-COMP-120721

SW-846 8082A

Lab Sample ID:	21L0502-01		Date(s) Analyzed:	12/18/2021	12/18/20	21
Instrument ID (1):	ECD5		Instrument ID (2):	ECD5		
GC Column (1):	ID:	(mm)	GC Column (2):		ID:	(mm

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%RPD	
7.00.2112	002		FROM	TO	00110211111111111111	70111 2	
Aroclor-1254	1	0.000	0.000	0.000	0.33		
	2	0.000	0.000	0.000	0.36	8.7	
Aroclor-1260	1	0.000	0.000	0.000	0.17		
	2	0.000	0.000	0.000	0.20	16.2	



IDENTIFICATION SUMMARY FOR SINGLE COMPONENT ANALYTES

LCS		

SW-846 8082A

Lab Sample ID:	B296927-BS1		Date(s) Analyzed:	12/18/2021	12/18/202	21
Instrument ID (1):	ECD5		Instrument ID (2):	ECD5		
GC Column (1):	ID:	(mm)	GC Column (2):		ID:	(mm

ANALYTE	COL	COL RT		NDOW	CONCENTRATION	%RPD
7.10/12172	002	111	FROM	TO	OONOLIVITUUTION	70111 15
Aroclor-1016	1	0.000	0.000	0.000	0.13	
	2	0.000	0.000	0.000	0.14	7.4
Aroclor-1260	1	0.000	0.000	0.000	0.13	
	2	0.000	0.000	0.000	0.15	14.3



IDENTIFICATION SUMMARY FOR SINGLE COMPONENT ANALYTES

LCS Dup	

SW-846 8082A

Lab Sample ID:	B296927-BSD1		Date(s) Analyzed:	12/18/2021	12/18/	2021
Instrument ID (1):	ECD5	_	Instrument ID (2):	ECD5		
GC Column (1):	ID:	(mm)	GC Column (2):		ID:	(mm

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%RPD
7,10,12172	OOL	111	FROM	TO	OONOLIVITUUTION	70111 D
Aroclor-1016	1	0.000	0.000	0.000	0.11	
	2	0.000	0.000	0.000	0.12	0.0
Aroclor-1260	1	0.000	0.000	0.000	0.12	
	2	0.000	0.000	0.000	0.14	15.4



IDENTIFICATION SUMMARY FOR SINGLE COMPONENT ANALYTES

LCS		
LCS		

Lab Sample ID: B296928-BS1			Date(s) Analyzed:	12/17/2021	12/17/2021	_
Instrument ID (1):	ECD2	_	Instrument ID (2):	ECD2		
GC Column (1):	ID:	(mm)	GC Column (2):		ID: (m	ım)

ANALYTE	COL	RT	RT WI	NDOW	CONCENTRATION	%RPD
ANALITE	COL	171	FROM	то	CONCENTIATION	70TYF D
4,4'-DDD	1	7.379	7.348	7.408	0.094	
	2	7.353	7.322	7.382	0.090	4.4
4,4'-DDE	1	6.931	6.900	6.960	0.090	
	2	6.917	6.887	6.947	0.086	4.6
4,4'-DDT	1	7.594	7.563	7.623	0.090	
	2	7.594	7.563	7.623	0.087	3.4
Alachlor	1	6.356	6.325	6.385	0.080	
	2	6.090	6.059	6.119	0.077	3.8
Aldrin	1	6.260	6.230	6.290	0.084	
	2	6.155	6.125	6.185	0.077	8.7
alpha-BHC	1	5.533	5.502	5.562	0.075	
	2	5.440	5.411	5.471	0.070	6.9
alpha-Chlordane	1	6.875	6.844	6.904	0.083	
	2	6.789	6.759	6.819	0.079	4.9
beta-BHC	1	5.793	5.763	5.823	0.084	
	2	5.713	5.684	5.744	0.076	10.0
delta-BHC	1	5.912	5.882	5.942	0.083	
	2	5.902	5.871	5.931	0.075	10.1
Dieldrin	1	7.154	7.123	7.183	0.089	
	2	7.030	6.999	7.059	0.085	4.6
Endosulfan I	1	6.977	6.945	7.005	0.082	
	2	6.828	6.798	6.858	0.078	5.0
Endosulfan II	1	7.500	7.469	7.529	0.082	
	2	7.418	7.388	7.448	0.079	4.9
Endosulfan Sulfate	1	8.147	8.116	8.176	0.084	
	2	7.896	7.867	7.927	0.082	2.4
Endrin	1	7.329	7.298	7.358	0.087	
	2	7.256	7.226	7.286	0.082	5.9
Endrin Aldehyde	1	7.825	7.794	7.854	0.068	
	2	7.681	7.650	7.710	0.071	4.3
Endrin Ketone	1	8.333	8.302	8.362	0.086	



IDENTIFICATION SUMMARY FOR SINGLE COMPONENT ANALYTES

LCS		

Lab Sample ID:	B296928-BS1		Date(s) Analyzed:	12/17/2021	12/17/20	021
Instrument ID (1):	ECD2	-	Instrument ID (2):	ECD2		-
GC Column (1):	ID:	(mm)	GC Column (2):		ID:	(mm)

ANALYTE	COL	COL RT		NDOW	CONCENTRATION	%RPD
7110/12/12	002	111	FROM	TO	OONOLIVITATION	701111111111111111111111111111111111111
	2	8.268	8.238	8.298	0.084	2.4
gamma-BHC (Lindane)	1	5.737	5.706	5.766	0.081	
	2	5.660	5.630	5.690	0.073	10.4
gamma-Chlordane	1	6.778	6.748	6.808	0.077	
	2	6.684	6.653	6.713	0.081	5.1
Heptachlor	1	6.054	6.022	6.082	0.082	
	2	5.942	5.911	5.971	0.075	8.9
Heptachlor Epoxide	1	6.689	6.658	6.718	0.085	
	2	6.549	6.519	6.579	0.076	11.2
Hexachlorobenzene	1	5.424	5.394	5.454	0.074	
	2	5.354	5.325	5.385	0.068	8.5
Methoxychlor	1	7.974	7.943	8.003	0.084	
	2	8.124	8.094	8.154	0.085	1.2



IDENTIFICATION SUMMARY FOR SINGLE COMPONENT ANALYTES

LCS Dup

Lab Sample ID:	B296928-BSD1		Date(s) Analyzed:	12/17/2021	12/17	/2021
Instrument ID (1):	ECD2	_	Instrument ID (2):	ECD2		_
GC Column (1):	ID:	(mm)	GC Column (2):		ID:	(mm)

ANALYTE	COL	RT	RT WI	NDOW	CONCENTRATION	%RPD
ANALITE		111	FROM	ТО	CONCENTIATION	701 N D
4,4'-DDD	1	7.380	7.348	7.408	0.094	
	2	7.352	7.322	7.382	0.090	4.4
4,4'-DDE	1	6.932	6.900	6.960	0.091	
	2	6.917	6.887	6.947	0.087	4.5
4,4'-DDT	1	7.595	7.563	7.623	0.091	
	2	7.594	7.563	7.623	0.087	4.5
Alachlor	1	6.358	6.325	6.385	0.081	
	2	6.090	6.059	6.119	0.080	1.2
Aldrin	1	6.262	6.230	6.290	0.088	
	2	6.155	6.125	6.185	0.084	4.7
alpha-BHC	1	5.534	5.502	5.562	0.082	
	2	5.441	5.411	5.471	0.079	3.7
alpha-Chlordane	1	6.877	6.844	6.904	0.084	
	2	6.790	6.759	6.819	0.081	3.6
beta-BHC	1	5.795	5.763	5.823	0.085	
	2	5.714	5.684	5.744	0.078	8.6
delta-BHC	1	5.914	5.882	5.942	0.084	
	2	5.902	5.871	5.931	0.077	8.7
Dieldrin	1	7.156	7.123	7.183	0.090	
	2	7.030	6.999	7.059	0.086	4.6
Endosulfan I	1	6.977	6.945	7.005	0.083	
	2	6.830	6.798	6.858	0.080	3.7
Endosulfan II	1	7.501	7.469	7.529	0.083	
	2	7.419	7.388	7.448	0.079	4.9
Endosulfan Sulfate	1	8.149	8.116	8.176	0.085	
	2	7.897	7.867	7.927	0.082	3.6
Endrin	1	7.330	7.298	7.358	0.087	
	2	7.256	7.226	7.286	0.083	4.7
Endrin Aldehyde	1	7.826	7.794	7.854	0.068	
	2	7.681	7.650	7.710	0.072	5.7
Endrin Ketone	1	8.335	8.302	8.362	0.086	



IDENTIFICATION SUMMARY FOR SINGLE COMPONENT ANALYTES

LCS Dup

Lab Sample ID:	B296928-BSD1		Date(s) Analyzed:	12/17/2021	12/17/2021	_
Instrument ID (1):	ECD2	_	Instrument ID (2):	ECD2		
GC Column (1):	ID:	(mm)	GC Column (2):		ID: (m	ım)

ANALYTE	COL	RT	RT WI	NDOW	CONCENTRATION	%RPD
ANALITE	COL	111	FROM	TO	CONCENTION	701 NI D
	2	8.269	8.238	8.298	0.083	3.6
gamma-BHC (Lindane)	1	5.739	5.706	5.766	0.086	
	2	5.660	5.630	5.690	0.081	6.0
gamma-Chlordane	1	6.780	6.748	6.808	0.077	
	2	6.684	6.653	6.713	0.083	7.5
Heptachlor	1	6.055	6.022	6.082	0.087	
	2	5.942	5.911	5.971	0.084	3.5
Heptachlor Epoxide	1	6.691	6.658	6.718	0.087	
	2	6.550	6.519	6.579	0.080	8.4
Hexachlorobenzene	1	5.425	5.394	5.454	0.079	
	2	5.354	5.325	5.385	0.075	5.2
Methoxychlor	1	7.975	7.943	8.003	0.085	
	2	8.124	8.094	8.154	0.087	2.3



IDENTIFICATION SUMMARY FOR SINGLE COMPONENT ANALYTES

LCS		

SW-846 8151A

Lab Sample ID:	B297361-BS1		Date(s) Analyzed:	12/28/2021	12/28/2	021
Instrument ID (1):	ECD 8	_	Instrument ID (2):	ECD 8		_
GC Column (1):	ID:	(mm)	GC Column (2):		ID:	(mm)

ANALYTE	COL	RT	RT WI	NDOW	CONCENTRATION	%RPD
ANACTIC	JOL	111	FROM	TO	CONCENTIVITION	701 TI
2,4,5-T	1	16.123	0.000	0.000	8.43	
	2	16.231	0.000	0.000	10.1	18.4
2,4,5-TP (Silvex)	1	15.508	0.000	0.000	9.06	
	2	15.383	0.000	0.000	9.36	2.8
2,4-D	1	13.669	0.000	0.000	83.0	
	2	13.633	0.000	0.000	90.7	8.9
2,4-DB	1	16.944	0.000	0.000	50.3	
	2	16.959	0.000	0.000	52.0	3.9
Dalapon	1	4.663	0.000	0.000	104	
	2	4.343	0.000	0.000	118	16.5
Dicamba	1	11.564	0.000	0.000	8.59	
	2	11.421	0.000	0.000	8.76	1.8
Dichloroprop	1	13.167	0.000	0.000	95.2	
	2	12.953	0.000	0.000	95.9	0.9
Dinoseb	1	17.588	0.000	0.000	8.04	
	2	17.173	0.000	0.000	9.92	21.4
MCPA	1	12.383	0.000	0.000	8920	
	2	12.258	0.000	0.000	9060	1.8
MCPP	1	12.054	0.000	0.000	10100	
	2	11.759	0.000	0.000	9490	5.2



IDENTIFICATION SUMMARY FOR SINGLE COMPONENT ANALYTES

-	D
LCS	Dub

SW-846 8151A

Lab Sample ID:	B297361-BSD1		Date(s) Analyzed:	12/28/2021	12/28	3/2021
Instrument ID (1):	ECD 8	_	Instrument ID (2):	ECD 8		
GC Column (1):	ID:	(mm)	GC Column (2):		ID:	(mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%RPD
70702112	002	111	FROM TO		CONCENTIVITION	
2,4,5-T	1	16.121	0.000	0.000	7.92	
	2	16.230	0.000	0.000	9.56	19.0
2,4,5-TP (Silvex)	1	15.506	0.000	0.000	8.76	
	2	15.381	0.000	0.000	8.68	1.4
2,4-D	1	13.668	0.000	0.000	78.8	
	2	13.633	0.000	0.000	85.7	8.1
2,4-DB	1	16.944	0.000	0.000	47.0	
	2	16.958	0.000	0.000	46.7	0.6
Dalapon	1	4.662	0.000	0.000	109	
	2	4.342	0.000	0.000	121	9.5
Dicamba	1	11.562	0.000	0.000	8.11	
	2	11.421	0.000	0.000	8.12	0.2
Dichloroprop	1	13.164	0.000	0.000	91.3	
	2	12.953	0.000	0.000	89.9	1.2
Dinoseb	1	17.584	0.000	0.000	7.48	
	2	17.171	0.000	0.000	9.20	20.4
MCPA	1	12.380	0.000	0.000	8230	
	2	12.256	0.000	0.000	8610	4.9
MCPP	1	12.052	0.000	0.000	9340	
	2	11.759	0.000	0.000	9110	2.1



FLAG/QUALIFIER SUMMARY

*	QC result is outside of established limits.
†	Wide recovery limits established for difficult compound.
‡	Wide RPD limits established for difficult compound.
#	Data exceeded client recommended or regulatory level
ND	Not Detected
RL	Reporting Limit is at the level of quantitation (LOQ)
DL	Detection Limit is the lower limit of detection determined by the MDL study
MCL	Maximum Contaminant Level
	Percent recoveries and relative percent differences (RPDs) are determined by the software using values in the calculation which have not been rounded.
	No results have been blank subtracted unless specified in the case narrative section.
DL-03	Elevated reporting limit due to matrix interference.
H-03	Sample received after recommended holding time was exceeded.
L-02	Laboratory fortified blank/laboratory control sample recovery and duplicate recoveries outside of control limits. Data validation is not affected since all results are "not detected" for associated samples in this batch and bias is on the high side.
L-04	Laboratory fortified blank/laboratory control sample recovery and duplicate recovery are outside of control limits Reported value for this compound is likely to be biased on the low side.
L-07	Either laboratory fortified blank/laboratory control sample or duplicate recovery is outside of control limits, but the other is within limits. RPD between the two LFB/LCS results is within method specified criteria.
O-32	A dilution was performed as part of the standard analytical procedure.
S-01	The surrogate recovery for this sample is not available due to sample dilution below the surrogate reporting limit required from high analyte concentration and/or matrix interferences.
V-05	Continuing calibration verification (CCV) did not meet method specifications and was biased on the low side for this compound.
V-06	Continuing calibration verification (CCV) did not meet method specifications and was biased on the high side for this compound.
V-35	Initial calibration verification (ICV) did not meet method specifications and was biased on the high side for this compound. Reported result is estimated.



Certified Analyses included in this Report	CERTIFICATIONS
Analyte	Certifications
SW-846 1030 in Soil	Certifications
	AND THE STATE OF T
Ignitability	NY,NH,CT,NC,ME,VA
SW-846 6010D in Soil	
Arsenic	CT,NH,NY,ME,VA,NC
Barium	CT,NH,NY,ME,VA,NC
Cadmium	CT,NH,NY,ME,VA,NC
Chromium	CT,NH,NY,ME,VA,NC
Lead	CT,NH,NY,AIHA,ME,VA,NC
Selenium	CT,NH,NY,ME,VA,NC
Silver	CT,NH,NY,ME,VA,NC
SW-846 7471B in Soil	
Mercury	CT,NH,NY,NC,ME,VA
SW-846 8081B in Soil	
Alachlor	NC
Alachlor [2C]	NC
Aldrin	CT,NH,NY,ME,NC,VA
Aldrin [2C]	CT,NH,NY,ME,NC,VA
alpha-BHC	CT,NH,NY,ME,NC,VA
alpha-BHC [2C]	CT,NH,NY,ME,NC,VA
beta-BHC	CT,NH,NY,ME,NC,VA
beta-BHC [2C]	CT,NH,NY,ME,NC,VA
delta-BHC	CT,NH,NY,ME,NC,VA
delta-BHC [2C]	CT,NH,NY,ME,NC,VA
gamma-BHC (Lindane)	CT,NH,NY,ME,NC,VA
gamma-BHC (Lindane) [2C]	CT,NH,NY,ME,NC,VA
Chlordane	CT,NH,NY,ME,NC,VA
Chlordane [2C]	CT,NH,NY,ME,NC,VA
4,4'-DDD	CT,NH,NY,ME,NC,VA
4,4'-DDD [2C]	CT,NH,NY,ME,NC,VA
4,4'-DDE	CT,NH,NY,ME,NC,VA
4,4'-DDE [2C]	CT,NH,NY,ME,NC,VA
4,4'-DDT	CT,NH,NY,ME,NC,VA
4,4'-DDT [2C]	CT,NH,NY,ME,NC,VA
Dieldrin	CT,NH,NY,ME,NC,VA
Dieldrin [2C]	CT,NH,NY,ME,NC,VA
Endosulfan I	CT,NH,NY,ME,NC,VA
Endosulfan I [2C]	CT,NH,NY,ME,NC,VA
Endosulfan II	CT,NH,NY,ME,NC,VA
Endosulfan II [2C]	CT,NH,NY,ME,NC,VA
Endosulfan Sulfate	CT,NH,NY,ME,NC,VA
Endosulfan Sulfate [2C]	CT,NH,NY,ME,NC,VA
Endrin	CT,NH,NY,ME,NC,VA
Enorm	C 431 Major 431 Major 10, 171

CT,NH,NY,ME,NC,VA

CT,NH,NY,ME,NC,VA

CT,NH,NY,ME,NC,VA

Endrin Ketone NC
Endrin Ketone [2C] NC

Endrin [2C]

Endrin Aldehyde

Endrin Aldehyde [2C]



CERTIFICATIONS

Analyte	Certifications
SW-846 8081B in Soil	
	CTABLANVAC NO VA
Heptachlor	CT,NH,NY,ME,NC,VA
Heptachlor [2C]	CT,NH,NY,ME,NC,VA
Heptachlor Epoxide	CT,NH,NY,ME,NC,VA
Heptachlor Epoxide [2C]	CT,NH,NY,ME,NC,VA
Hexachlorobenzene	NC
Hexachlorobenzene [2C]	NC
Methoxychlor	CT,NH,NY,ME,NC,VA
Methoxychlor [2C]	CT,NH,NY,ME,NC,VA
Toxaphene	CT,NH,NY,ME,NC,VA
Toxaphene [2C]	CT,NH,NY,ME,NC,VA
SW-846 8081B in Water	
Alachlor	NC
Alachlor [2C]	NC
Aldrin	CT,NH,NY,ME,NC,VA
Aldrin [2C]	CT,NH,NY,ME,NC,VA
alpha-BHC	CT,NH,NY,ME,NC,VA
alpha-BHC [2C]	CT,NH,NY,ME,NC,VA
beta-BHC	CT,NH,NY,ME,NC,VA
beta-BHC [2C]	CT,NH,NY,ME,NC,VA
delta-BHC	CT,NH,NY,ME,NC,VA
delta-BHC [2C]	CT,NH,NY,ME,NC,VA
gamma-BHC (Lindane)	CT,NH,NY,ME,NC,VA
gamma-BHC (Lindane) [2C]	CT,NH,NY,ME,NC,VA
Chlordane	CT,NH,NY,ME,NC,VA
Chlordane [2C]	CT,NH,NY,ME,NC,VA
4,4'-DDD	CT,NH,NY,ME,NC,VA
4,4'-DDD [2C]	CT,NH,NY,ME,NC,VA
4,4'-DDE	CT,NH,NY,ME,NC,VA
4,4'-DDE [2C]	CT,NH,NY,ME,NC,VA
4,4'-DDT	CT,NH,NY,ME,NC,VA
4,4'-DDT [2C]	CT,NH,NY,ME,NC,VA
Dieldrin	CT,NH,NY,ME,NC,VA
Dieldrin [2C]	CT,NH,NY,ME,NC,VA
Endosulfan I	CT,NH,NY,ME,NC,VA
Endosulfan I [2C]	CT,NH,NY,ME,NC,VA
Endosulfan II	CT,NH,NY,ME,NC,VA
Endosulfan II [2C]	CT,NH,NY,ME,NC,VA
Endosulfan Sulfate	CT,NH,NY,ME,NC,VA
Endosulfan Sulfate [2C]	CT,NH,NY,ME,NC,VA
Endrin	CT,NH,NY,ME,NC,VA
Endrin [2C]	CT,NH,NY,ME,NC,VA
Endrin Aldehyde	CT,NH,NY,ME,NC,VA
Endrin Aldehyde [2C]	CT,NH,NY,ME,NC,VA
Endrin Ketone	NC
Endrin Ketone [2C]	NC
Heptachlor	CT,NH,NY,ME,NC,VA



CERTIFICATIONS

Analyte	Certifications	
SW-846 8081B in Water		
	OT MANUAL	
Heptachlor [2C]	CT,NH,NY,ME,NC,VA	
Heptachlor Epoxide	CT,NH,NY,ME,NC,VA	
Heptachlor Epoxide [2C]	CT,NH,NY,ME,NC,VA	
Hexachlorobenzene	NC	
Hexachlorobenzene [2C]	NC	
Methoxychlor	CT,NH,NY,ME,NC,VA	
Methoxychlor [2C]	CT,NH,NY,ME,NC,VA	
Toxaphene	CT,NH,NY,ME,NC,VA	
Toxaphene [2C]	CT,NH,NY,ME,NC,VA	
SW-846 8082A in Soil		
Aroclor-1016	CT,NH,NY,NC,ME,VA,PA	
Aroclor-1016 [2C]	CT,NH,NY,NC,ME,VA,PA	
Aroclor-1221	CT,NH,NY,NC,ME,VA,PA	
Aroclor-1221 [2C]	CT,NH,NY,NC,ME,VA,PA	
Aroclor-1232	CT,NH,NY,NC,ME,VA,PA	
Aroclor-1232 [2C]	CT,NH,NY,NC,ME,VA,PA	
Aroclor-1242	CT,NH,NY,NC,ME,VA,PA	
Aroclor-1242 [2C]	CT,NH,NY,NC,ME,VA,PA	
Aroclor-1248	CT,NH,NY,NC,ME,VA,PA	
Aroclor-1248 [2C]	CT,NH,NY,NC,ME,VA,PA	
Aroclor-1254	CT,NH,NY,NC,ME,VA,PA	
Aroclor-1254 [2C]	CT,NH,NY,NC,ME,VA,PA	
Aroclor-1260	CT,NH,NY,NC,ME,VA,PA	
Aroclor-1260 [2C]	CT,NH,NY,NC,ME,VA,PA	
Aroclor-1262	NH,NY,NC,ME,VA,PA	
Aroclor-1262 [2C]	NH,NY,NC,ME,VA,PA	
Aroclor-1268	NH,NY,NC,ME,VA,PA	
Aroclor-1268 [2C]	NH,NY,NC,ME,VA,PA	
SW-846 8082A in Water		
Aroclor-1016	CT,NH,NY,NC,ME,VA,PA	
Aroclor-1016 [2C]	CT,NH,NY,NC,ME,VA,PA	
Aroclor-1221	CT,NH,NY,NC,ME,VA,PA	
Aroclor-1221 [2C]	CT,NH,NY,NC,ME,VA,PA	
Aroclor-1232	CT,NH,NY,NC,ME,VA,PA	
Aroclor-1232 [2C]	CT,NH,NY,NC,ME,VA,PA	
Aroclor-1242	CT,NH,NY,NC,ME,VA,PA	
Aroclor-1242 [2C]	CT,NH,NY,NC,ME,VA,PA	
Aroclor-1248	CT,NH,NY,NC,ME,VA,PA	
Aroclor-1248 [2C]	CT,NH,NY,NC,ME,VA,PA	
Aroclor-1254	CT,NH,NY,NC,ME,VA,PA	
Aroclor-1254 [2C]	CT,NH,NY,NC,ME,VA,PA	
Aroclor-1260	CT,NH,NY,NC,ME,VA,PA	
Aroclor-1260 [2C]	CT,NH,NY,NC,ME,VA,PA	
Aroclor-1262	NH,NY,NC,ME,VA,PA	
Aroclor-1262 [2C]	NH,NY,NC,ME,VA,PA	
Aroclor-1268	NH,NY,NC,ME,VA,PA	



CERTIFICATIONS

Analyte	Certifications
SW-846 8082A in Water	
Aroclor-1268 [2C]	NH,NY,NC,ME,VA,PA
SW-846 8151A in Soil	
2,4-D	NY,ME,NC,NH,VA,CT
2,4-D [2C]	NY,ME,NC,NH,VA,CT
2,4-DB	NY,ME,NC,NH,VA,CT
2,4-DB [2C]	NY,ME,NC,NH,VA,CT
2,4,5-TP (Silvex)	NY,ME,NC,NH,VA,CT
2,4,5-TP (Silvex) [2C]	NY,ME,NC,NH,VA,CT
2,4,5-T	NY,ME,NC,NH,VA,CT
2,4,5-T [2C]	NY,ME,NC,NH,VA,CT
Dalapon	NY,ME,NC,NH,VA,CT
Dalapon [2C]	NY,ME,NC,NH,VA,CT
Dicamba	NY,ME,NC,NH,VA,CT
Dicamba [2C]	NY,ME,NC,NH,VA,CT
Dichloroprop	NY,ME,NC,NH,VA,CT
Dichloroprop [2C]	NY,ME,NC,NH,VA,CT
Dinoseb	NY,ME,NC,NH,VA,CT
Dinoseb [2C]	NY,ME,NC,NH,VA,CT
MCPA	NY,ME,NC,NH,VA,CT
MCPA [2C]	NY,ME,NC,NH,VA,CT
MCPP	NY,ME,NC,NH,VA,CT
MCPP [2C]	NY,ME,NC,NH,VA,CT
SW-846 8260D in Product/Solid	
Acetone	CT,NH,NY,ME,VA
Acrylonitrile	CT,NH,NY,ME,VA
Benzene	CT,NH,NY,ME,VA
Bromobenzene	NH,NY,ME,VA
Bromochloromethane	NH,NY,ME,VA
Bromodichloromethane	CT,NH,NY,ME,VA
Bromoform	CT,NH,NY,ME,VA
Bromomethane	CT,NH,NY,ME,VA
2-Butanone (MEK)	CT,NH,NY,ME,VA
tert-Butyl Alcohol (TBA)	NY
n-Butylbenzene	CT,NH,NY,ME,VA
sec-Butylbenzene	CT,NH,NY,ME,VA
tert-Butylbenzene	CT,NH,NY,ME,VA
Carbon Disulfide	CT,NH,NY,ME,VA
Carbon Tetrachloride	CT,NH,NY,ME,VA
Chlorobenzene	CT,NH,NY,ME,VA
Chlorodibromomethane	CT,NH,NY,ME,VA
Chloroethane	CT,NH,NY,ME,VA
Chloroform	CT,NH,NY,ME,VA
Chloromethane	CT,NH,NY,ME,VA
2-Chlorotoluene	CT,NH,NY,ME,VA
4-Chlorotoluene	CT,NH,NY,ME,VA
1,2-Dibromo-3-chloropropane (DBCP)	NY



CERTIFICATIONS

Analyte	Certifications	
SW-846 8260D in Product/Solid		
1,2-Dibromoethane (EDB)	NH,NY	
Dibromomethane	NH,NY,ME,VA	
1,2-Dichlorobenzene	CT,NH,NY,ME,VA	
1,3-Dichlorobenzene	CT,NH,NY,ME,VA	
1,4-Dichlorobenzene	CT,NH,NY,ME,VA	
trans-1,4-Dichloro-2-butene	NY	
Dichlorodifluoromethane (Freon 12)	NH,NY,ME,VA	
1,1-Dichloroethane	CT,NH,NY,ME,VA	
1,2-Dichloroethane	CT,NH,NY,ME,VA	
1,1-Dichloroethylene	CT,NH,NY,ME,VA	
cis-1,2-Dichloroethylene	CT,NH,NY,ME,VA	
trans-1,2-Dichloroethylene	CT,NH,NY,ME,VA	
1,2-Dichloropropane	CT,NH,NY,ME,VA	
1,3-Dichloropropane	NH,NY,ME,VA	
2,2-Dichloropropane	NH,NY,ME,VA	
1,1-Dichloropropene	NH,NY,ME,VA	
cis-1,3-Dichloropropene	CT,NH,NY,ME,VA	
trans-1,3-Dichloropropene	CT,NH,NY,ME,VA	
1,4-Dioxane	NY	
Ethylbenzene	CT,NH,NY,ME,VA	
Hexachlorobutadiene	NH,NY,ME,VA	
2-Hexanone (MBK)	CT,NH,NY,ME,VA	
Isopropylbenzene (Cumene)	CT,NH,NY,ME,VA	
p-Isopropyltoluene (p-Cymene)	NH,NY	
Methyl Acetate	NY	
Methyl tert-Butyl Ether (MTBE)	NY,VA	
Methyl Cyclohexane	NY	
Methylene Chloride	CT,NH,NY,ME,VA	
4-Methyl-2-pentanone (MIBK)	CT,NH,NY,VA	
Naphthalene	NH,NY,ME,VA	
n-Propylbenzene	NH,NY	
Styrene	CT,NH,NY,ME,VA	
1,1,1,2-Tetrachloroethane	CT,NH,NY,ME,VA	
1,1,2,2-Tetrachloroethane	CT,NH,NY,ME,VA	
Tetrachloroethylene	CT,NH,NY,ME,VA	
Toluene	CT,NH,NY,ME,VA	
1,2,3-Trichlorobenzene	NY,ME	
1,2,4-Trichlorobenzene	NH,NY,ME,VA	
1,3,5-Trichlorobenzene	ME	
1,1,1-Trichloroethane	CT,NH,NY,ME,VA	
1,1,2-Trichloroethane	CT,NH,NY,ME,VA	
Trichloroethylene	CT,NH,NY,ME,VA	
Trichlorofluoromethane (Freon 11)	CT,NH,NY,ME,VA	
1,2,3-Trichloropropane	NH,NY,ME,VA	
1,2,4-Trimethylbenzene	CT,NH,NY,ME,VA	
1,3,5-Trimethylbenzene	CT,NH,NY,ME,VA	
Vinyl Chloride	CT,NH,NY,ME,VA	
		D 50



CERTIFICATIONS

Analyte	Certifications
SW-846 8260D in Product/Solid	
m+p Xylene	CT,NH,NY,ME,VA
o-Xylene	CT,NH,NY,ME,VA
1,2-Dichloroethane-d4	VA
Toluene-d8	VA
4-Bromofluorobenzene	VA
Pentafluorobenzene	VA
1,4-Difluorobenzene	VA
Chlorobenzene-d5	VA
1,4-Dichlorobenzene-d4	VA
SW-846 8260D in Soil	
Acetone	CT,NH,NY,ME,VA
Acrylonitrile	CT,NH,NY,ME,VA
Benzene	CT,NH,NY,ME,VA
Bromobenzene	NH,NY,ME,VA
Bromochloromethane	NH,NY,ME,VA
Bromodichloromethane	CT,NH,NY,ME,VA
Bromoform	CT,NH,NY,ME,VA
Bromomethane	CT,NH,NY,ME,VA
2-Butanone (MEK)	CT,NH,NY,ME,VA
tert-Butyl Alcohol (TBA)	NY,ME
n-Butylbenzene	CT,NH,NY,ME,VA
sec-Butylbenzene	CT,NH,NY,ME,VA
tert-Butylbenzene	CT,NH,NY,ME,VA
Carbon Disulfide	CT,NH,NY,ME,VA
Carbon Tetrachloride	CT,NH,NY,ME,VA
Chlorobenzene	CT,NH,NY,ME,VA
Chlorodibromomethane	CT,NH,NY,ME,VA
Chloroethane	CT,NH,NY,ME,VA
Chloroform	CT,NH,NY,ME,VA
Chloromethane	CT,NH,NY,ME,VA
2-Chlorotoluene	CT,NH,NY,ME,VA
4-Chlorotoluene	CT,NH,NY,ME,VA
1,2-Dibromo-3-chloropropane (DBCP)	NY,ME
1,2-Dibromoethane (EDB)	NH,NY
Dibromomethane	NH,NY,ME,VA
1,2-Dichlorobenzene	CT,NH,NY,ME,VA
1,3-Dichlorobenzene	CT,NH,NY,ME,VA
1,4-Dichlorobenzene	CT,NH,NY,ME,VA
trans-1,4-Dichloro-2-butene	NY,ME
Dichlorodifluoromethane (Freon 12)	NH,NY,ME,VA
1,1-Dichloroethane	CT,NH,NY,ME,VA
1,2-Dichloroethane	CT,NH,NY,ME,VA
1,1-Dichloroethylene	CT,NH,NY,ME,VA
cis-1,2-Dichloroethylene	CT,NH,NY,ME,VA
trans-1,2-Dichloroethylene	CT,NH,NY,ME,VA
1,2-Dichloropropane	CT,NH,NY,ME,VA



CERTIFICATIONS

Certified Analyses included in this Report

Benzo(a)pyrene

Analyte	Certifications
SW-846 8260D in Soil	
1,3-Dichloropropane	NH,NY,ME,VA
2,2-Dichloropropane	NH,NY,ME,VA
1,1-Dichloropropene	NH,NY,ME,VA
cis-1,3-Dichloropropene	CT,NH,NY,ME,VA
trans-1,3-Dichloropropene	CT,NH,NY,ME,VA
Diethyl Ether	ME
1,4-Dioxane	NY,ME
Ethylbenzene	CT,NH,NY,ME,VA
Hexachlorobutadiene	NH,NY,ME,VA
2-Hexanone (MBK)	CT,NH,NY,ME,VA
Isopropylbenzene (Cumene)	CT,NH,NY,ME,VA
p-Isopropyltoluene (p-Cymene)	NH,NY
Methyl Acetate	NY,ME
Methyl tert-Butyl Ether (MTBE)	NY,ME,VA
Methyl Cyclohexane	NY
Methylene Chloride	CT,NH,NY,ME,VA
4-Methyl-2-pentanone (MIBK)	CT,NH,NY,ME,VA
Naphthalene	NH,NY,ME,VA
n-Propylbenzene	NH,NY,ME
Styrene	CT,NH,NY,ME,VA
1,1,1,2-Tetrachloroethane	CT,NH,NY,ME,VA
1,1,2,2-Tetrachloroethane	CT,NH,NY,ME,VA
Tetrachloroethylene	CT,NH,NY,ME,VA
Toluene	CT,NH,NY,ME,VA
1,2,3-Trichlorobenzene	NY,ME
1,2,4-Trichlorobenzene	NH,NY,ME,VA
1,3,5-Trichlorobenzene	ME
1,1,1-Trichloroethane	CT,NH,NY,ME,VA
1,1,2-Trichloroethane	CT,NH,NY,ME,VA
Trichloroethylene	CT,NH,NY,ME,VA
Trichlorofluoromethane (Freon 11)	CT,NH,NY,ME,VA
1,2,3-Trichloropropane	NH,NY,ME,VA
1,2,4-Trimethylbenzene	CT,NH,NY,ME,VA
1,3,5-Trimethylbenzene	CT,NH,NY,ME,VA
Vinyl Chloride	CT,NH,NY,ME,VA
m+p Xylene	CT,NH,NY,ME,VA
o-Xylene	CT,NH,NY,ME,VA
SW-846 8270E in Soil	
Acenaphthene	CT,NY,NH,ME,NC,VA
Acenaphthylene	CT,NY,NH,ME,NC,VA
Acetophenone	NY,NH,ME,NC,VA
Aniline	NY,NH,ME,NC,VA
Anthracene	CT,NY,NH,ME,NC,VA
Benzidine	CT,NY,NH,ME,NC,VA
Benzo(a)anthracene	CT,NY,NH,ME,NC,VA
Panza(a)myrana	CT NIVNIH ME NIC VA

CT,NY,NH,ME,NC,VA



CERTIFICATIONS

Decardo Minerathone	Analyte	Certifications	
Bearwigh, Djuerylane	SW-846 8270E in Soil		
Bennio Acid NYSHIME.NCVA	Benzo(b)fluoranthene	CT,NY,NH,ME,NC,VA	
Botanio Acid But a theorethosy methane CTNYNHMENCVA But a theorethosy methane Bit a theorethosy photography and the common and the com	Benzo(g,h,i)perylene	CT,NY,NH,ME,NC,VA	
BisCa-bloroedory inerhance DisCa-bloroedory inerhance DisCa-bloroedory inerhance DisCa-bloroedory poly betty DisCa-bloroedory Di	Benzo(k)fluoranthene	CT,NY,NH,ME,NC,VA	
Bist 2-biloscotylyfebor List 2-binoscopyryjether CT-NY-NH,ME-NC-VA List 2-binoscopyryjether CT-NY-NH,ME-NC-VA List 2-binoscopyryjether CT-NY-NH,ME-NC-VA List 2-binoscopyryjether CT-NY-NH,ME-NC-VA List 2-binoscopyrighthalate CT-NY-NH,ME-NC-VA Coltro-3-nesthylphatalate CT-NY-NH,ME-NC-VA C-Libronaline CT-NY-NH,ME-NC-VA CT-NY-NH,ME-NC	Benzoic Acid	NY,NH,ME,NC,VA	
Hot C. Arbornisagropy pather Bisty Estip Pacty pithelaties C. T.NY, NII, ME, N.C., VA Bisty Estip Pacty pithelaties C. T.NY, NII, ME, N.C., VA Birty Becarge NC Carbazole NC Carb	Bis(2-chloroethoxy)methane	CT,NY,NH,ME,NC,VA	
Bis(2-Ethylbesy)pytholalate	Bis(2-chloroethyl)ether	CT,NY,NH,ME,NC,VA	
4. Homosphenylphenylether	Bis(2-chloroisopropyl)ether	CT,NY,NH,ME,NC,VA	
Buty Denzy phthalate	Bis(2-Ethylhexyl)phthalate	CT,NY,NH,ME,NC,VA	
Curbazole NC 4-Chloro-martine CINYNILMENC,VA 4-Chloro-martylphemol CINYNILMENC,VA 2-Chlorophemol CINYNILMENC,VA 2-Chlorophemol CINYNILMENC,VA 4-Chlorophemol CINYNILMENC,VA 4-Chlorophemol CINYNILMENC,VA Chrysene CINYNILMENC,VA Chrysene CINYNILMENC,VA Dibenzofuna CINYNILMENC,VA Dibenzofuna CINYNILMENC,VA Di-a-butylphthulate CINYNHABENC,VA Di-1-butylphthulate CINYNHABENC,VA Di-1-butylphthulate CINYNHABENC,VA Di-1-butylphthulate CINYNHABENC,VA Di-1-butylphthulate CINYNHABENC,VA J-3-Dichlorobenzene NYMILMENC,VA J-3-Dichlorobenzene NYMILMENC,VA J-4-Dichlorobenzene NYMILMENC,VA Di-thilophemolemene CINYNHABENC,VA Dichlorobenzene CINYNHABENC,VA Di-Dichlorobenzene CINYNHABENC,VA Di-Dichlorobenzene CINYNHABENC,VA Di-Di-doverylphthalate CINYNHABENC,VA Di-doverylphthalate CINYNHABE	4-Bromophenylphenylether	CT,NY,NH,ME,NC,VA	
4-Chlorosailine CTNYNHMENC,VA 4-Chlorosphenol CTNYNHMENC,VA 2-Chlorosphenol CTNYNHMENC,VA 2-Chlorosphenol CTNYNHMENC,VA 4-Chlorosphenol CTNYNHMENC,VA 4-Chlorosphenol CTNYNHMENC,VA 4-Chlorosphenol CTNYNHMENC,VA Chrysene CTNYNHMENC,VA Dibenofara CTNYNHMENC,VA Dibenofara CTNYNHMENC,VA Dibenofara CTNYNHMENC,VA 1-2-bichlorobenzene NYNHMENC,VA 1-3-Dichlorobenzene NYNHMENC,VA 1-3-Dichlorobenzene NYNHMENC,VA 1-3-Dichlorobenzene NYNHMENC,VA 1-4-Dichlorobenzene NYNHMENC,VA 1-4-Dichlorobenzene NYNHMENC,VA 1-4-Dichlorobenzene CTNYNHMENC,VA 1-4-Dichlorobenzene NYNHMENC,VA 1-4-Dichlorobenzene NYNHMENC,VA 1-4-Dichlorobenzene CTNYNHMENC,VA 1-4-Dichlorobenzene NYNHMENC,VA 1-4-Dichlorobenzene NYNHMENC,VA 1-4-Dichlorobenzene CTNYNHMENC,VA 1-4-Dintroblorobenzene CTNYNHMENC,VA 1-4-Dintroblorobenzene NYNHMENC,VA 1-4-Dintroblorobenzene CTNYNHMENC,VA 1-4-Dintroblorobenzene CTNYNHMENC,VA 1-1-Diphenyllydrazine/Arabenzene NYNHMENC,VA 1-1-Diphenyllydrazine/Arabenzene NYNHMENC,VA 1-1-Diphenyllydrazine/Arabenzene CTNYNHMENC,VA	Butylbenzylphthalate	CT,NY,NH,ME,NC,VA	
4-Chloron-3-methylphenol CTNYNILMENC,VA 2-Chloronphenol CTNYNILMENC,VA 4-Chlorophenol CTNYNILMENC,VA 4-Chlorophenolylencylether CTNYNILMENC,VA 4-Chlorophenolylencylether CTNYNILMENC,VA Chrysae CTNYNILMENC,VA Dibenola, Dimbracene CTNYNILMENC,VA Dibenola CTNYNILMENC,VA Dibenola CTNYNILMENC,VA Di-a-butylphthalate CTNYNILMENC,VA 1-2-Dichlorobenome NYNILMENC,VA 1-2-Dichlorobenome NYNILMENC,VA 1-3-Dichlorobenome NYNILMENC,VA 1-3-Dichlorobenome NYNILMENC,VA 1-4-Dichlorobenome NYNILMENC,VA 1-4-Dichlorophenol CTNYNILMENC,VA 2-4-Dinbrachylphthalate CTNYNILMENC,VA 3-5-oschylphthalate CTNYNILMENC,VA 3-6-oschylphthalate CTNYNILMENC,VA	Carbazole	NC	
2-Chloromphthalene CT.NY.NH.ME.NC,VA 2-Chlorophenely lether CT.NY.NH.ME.NC,VA 4-Chlorophenely pheny lether CT.NY.NH.ME.NC,VA Dibenzofuran CT.NY.NH.ME.NC,VA Dibenzofuran CT.NY.NH.ME.NC,VA Dibenzofuran CT.NY.NH.ME.NC,VA Dibenzofuran CT.NY.NH.ME.NC,VA Dibenzofuran CT.NY.NH.ME.NC,VA Dibenzofuran CT.NY.NH.ME.NC,VA 1,3-Dichlorobenzene NY.NH.ME.NC,VA 1,3-Dichlorobenzene NY.NH.ME.NC,VA 1,3-Dichlorobenzene NY.NH.ME.NC,VA 2,4-Dichlorobenzene CT.NY.NH.ME.NC,VA 2,4-Dinchylphalalate CT.NY.NH.ME.NC,VA 2,4-Dinchylphalalate CT.NY.NH.ME.NC,VA 2,4-Dinchylphalalate CT.NY.NH.ME.NC,VA 4,6-Dinitro-2-methylphenol CT.NY.NH.ME.NC,VA 2,4-Dinitroblotane CT.NY.NH.ME.NC,VA 2,4-Dinitroblotane CT.NY.NH.ME.NC,VA 2,4-Dinitroblotane CT.NY.NH.ME.NC,VA 2,5-Dinitroblotane CT.NY.NH.ME.NC,VA 2,5-Dinitroblotane CT.NY.NH.ME.NC,VA 1,2-Diphenylhydnazine/Azobenzene NY.NH.ME.NC,VA 1,2-Diphenylhydnazine/Azobenzene NY.NH.ME.NC,VA 1,2-Diphenylhydnazine/Azobenzene NY.NH.ME.NC,VA 1,2-Diphenylhydnazine/Azobenzene NY.NH.ME.NC,VA 1,2-Diphenylhydnazine/Azobenzene NY.NH.ME.NC,VA 1,2-Diphenylhydnazine/Azobenzene CT.NY.NH.ME.NC,VA 1,2-Diphenylhydnazine/Azobenzene NY.NH.ME.NC,VA 1,2-Diphenylhydnazine/Azobenzene CT.NY.NH.ME.NC,VA 1,2-Diphenylhydnazine/Azobenzene CT.NY.	4-Chloroaniline	CT,NY,NH,ME,NC,VA	
2-Chlorophenol CT,NY,NH,ME,NC,VA 4-Chlorophenylphenylphenol CT,NY,NH,ME,NC,VA Dibenz/ola)andhracene CT,NY,NH,ME,NC,VA Dibenz/ofuran CT,NY,NH,ME,NC,VA Dibenz/ofuran CT,NY,NH,ME,NC,VA Dibenz/ofuran CT,NY,NH,ME,NC,VA Dibenz/ofuran CT,NY,NH,ME,NC,VA Di-a-butylphthalate CT,NY,NH,ME,NC,VA 1,3-Dichlorobenzene NY,NH,ME,NC,VA 1,4-Dichlorobenzene NY,NH,ME,NC,VA 1,4-Dichlorobenzene NY,NH,ME,NC,VA 1,4-Dichlorobenzene NY,NH,ME,NC,VA 1,4-Dichlorobenzene NY,NH,ME,NC,VA 1,4-Dichlorobenzene CT,NY,NH,ME,NC,VA 1,4-Dichlorobenzene CT,NY,NH,ME,NC,VA 1,4-Dichlorobenzene CT,NY,NH,ME,NC,VA 1,4-Dichlorobenzene CT,NY,NH,ME,NC,VA 1,4-Dintroy-zenethylphenol CT,NY,NH,ME,NC,VA 1,4-Dintroy-zenethylphenol CT,NY,NH,ME,NC,VA 1,4-Dintroy-zenethylphenol CT,NY,NH,ME,NC,VA 1,4-Dintroy-zenethylphenol CT,NY,NH,ME,NC,VA 1,4-Dintroy-denol CT,NY,NH,ME,NC,VA 1,2-Diphurylhydrazine ZD,Dintroylene CT,NY,NH,ME,NC,VA Di-n-octylphthalate CT,N	4-Chloro-3-methylphenol	CT,NY,NH,ME,NC,VA	
CTNYNILME.NC,VA	2-Chloronaphthalene	CT,NY,NH,NC,VA	
Chrysene CTNYNHMENC,VA Dienzén, hisrifracene CTNYNHMENC,VA Dien-butyphthalate CTNYNHMENC,VA 1,2-Dichlorobenzene NYNHMENC,VA 1,3-Dichlorobenzene NYNHMENC,VA 1,4-Dichlorobenzene NYNHMENC,VA 1,4-Dichlorobenzene NYNHMENC,VA 1,4-Dichlorobenzene NYNHMENC,VA 1,4-Dichlorobenzene NYNHMENC,VA 1,4-Dichlorobenzene NYNHMENC,VA 2,4-Dichlorobenzene CTNYNHMENC,VA 2,4-Dichlorophenol CTNYNHMENC,VA 2,4-Dichlorophenol CTNYNHMENC,VA 2,4-Dimitro-2-methylphenol CTNYNHMENC,VA 4,6-Dimitro-2-methylphenol CTNYNHMENC,VA 2,4-Dimitro-2-methylphenol CTNYNHMENC,VA 2,4-Dimitro-2-methylphenol CTNYNHMENC,VA 2,4-Dimitro-2-methylphenol CTNYNHMENC,VA 2,4-Dimitro-2-methylphenol CTNYNHMENC,VA 1,2-Diphenylhydrazine/Azobenzene CTNYNHMENC,VA 1,2-Diphenylhydrazine/Azobenzene CTNYNHMENC,VA 1,2-Diphenylhydrazine/Azobenzene NYNHMENC,VA Fluorene NYNHMENC,VA Fluorene NYNHMENC,VA Hexachloro-brazene CTNYNHMENC,VA	2-Chlorophenol	CT,NY,NH,ME,NC,VA	
Dibenz(a,h)anthracene	4-Chlorophenylphenylether	CT,NY,NH,ME,NC,VA	
Dibenzofuran	Chrysene	CT,NY,NH,ME,NC,VA	
Di-n-brtylphthalate CTNYNH.ME.NC.VA 1,3-Dichlorobenzene NY,NH.ME.NC.VA 1,3-Dichlorobenzene NY,NH.ME.NC.VA 1,4-Dichlorobenzene NY,NH.ME.NC.VA 2,4-Dichlorobenzenidine CT.NY,NH.ME.NC.VA 2,4-Dichlorophenol CT.NY,NH.ME.NC.VA 2,4-Dichlorophenol CT.NY,NH.ME.NC.VA 2,4-Dimbtylphenol CT.NY,NH.ME.NC.VA 2,4-Dimitrylphthalate CT.NY,NH.ME.NC.VA 4,6-Dimitro-2-methylphenol CT.NY,NH.ME.NC.VA 4,6-Dimitro-2-methylphenol CT.NY,NH.ME.NC.VA 4,6-Dimitro-2-methylphenol CT.NY,NH.ME.NC.VA 2,4-Dimitrophenol CT.NY,NH.ME.NC.VA 2,4-Dimitrophenol CT.NY,NH.ME.NC.VA 2,4-Dimitrotoluene CT.NY,NH.ME.NC.VA 2,4-Dimitrotoluene CT.NY,NH.ME.NC.VA Di-n-octylphthalate CT.NY,NH.ME.NC.VA Di-n-octylphthalate CT.NY,NH.ME.NC.VA Pi-n-octylphthalate CT.NY,NH.ME.NC.VA 1,2-Diphenylhydrazine/Azobenzene NY,NH.ME.NC.VA Fluoranthene CT.NY,NH.ME.NC.VA Fluoranthene CT.NY,NH.ME.NC.VA Hexachlorobrane CT.NY,NH.ME.NC.VA	Dibenz(a,h)anthracene	CT,NY,NH,ME,NC,VA	
1,2-Dichlorobenzene NY,NH,ME,NC,VA 1,3-Dichlorobenzene NY,NH,ME,NC,VA 3,3-Dichlorobenzidine CT,NY,NH,ME,NC,VA 3,3-Dichlorobenzidine CT,NY,NH,ME,NC,VA 2,4-Dichlorobenol CT,NY,NH,ME,NC,VA 2,4-Dimethylphthalate CT,NY,NH,ME,NC,VA 2,4-Dimethylphthalate CT,NY,NH,ME,NC,VA 2,4-Dimethylphthalate CT,NY,NH,ME,NC,VA 4,6-Dimitro-2-methylphenol CT,NY,NH,ME,NC,VA 4,6-Dimitro-2-methylphenol CT,NY,NH,ME,NC,VA 2,4-Dimitrotoluene CT,NY,NH,ME,NC,VA 2,4-Dimitrotoluene CT,NY,NH,ME,NC,VA 2,4-Dimitrotoluene CT,NY,NH,ME,NC,VA 2,6-Dimitrotoluene CT,NY,NH,ME,NC,VA 1,2-Diphenylhydrazine/Azobenzene NY,NH,ME,NC,VA 1,2-Diphenylhydrazine/Azobenzene CT,NY,NH,ME,NC,VA Fluoranthene CT,NY,NH,ME,NC,VA Fluoranthene CT,NY,NH,ME,NC,VA Hexachlorobutadiene CT,NY,NH,ME,NC,VA Hexachlorobutadiene CT,NY,NH,ME,NC,VA Hexachlorochane CT,NY,NH,ME,NC,VA Indeno(1,2,3-ed)pyrene CT,NY,NH,ME,NC,VA Isophorone CT,NY,NH,ME,NC,VA	Dibenzofuran	CT,NY,NH,ME,NC,VA	
1,3-Dichlorobenzene NY,NH,ME,NC,VA 1,4-Dichlorobenzene NY,NH,ME,NC,VA 3,3-Dichlorobenzidine CT,NY,NH,ME,NC,VA 2,4-Dichlorophenol CT,NY,NH,ME,NC,VA 2,4-Dichlorophenol CT,NY,NH,ME,NC,VA 2,4-Dimethylphthalate CT,NY,NH,ME,NC,VA Dimethylphthalate CT,NY,NH,ME,NC,VA 4,6-Dimitro-2-methylphenol CT,NY,NH,ME,NC,VA 4,5-Dimitro-2-methylphenol CT,NY,NH,ME,NC,VA 2,4-Dimitrotoluene CT,NY,NH,ME,NC,VA 2,4-Dimitrotoluene CT,NY,NH,ME,NC,VA 2,6-Dimitrotoluene CT,NY,NH,ME,NC,VA 1,2-Diphenylhydrazine/Azobenzene NY,NH,ME,NC,VA 11,2-Diphenylhydrazine/Azobenzene NY,NH,ME,NC,VA Pluoranthene CT,NY,NH,ME,NC,VA Pluoranthene CT,NY,NH,ME,NC,VA Hexachlorobenzene CT,NY,NH,ME,NC,VA Hexachlorobutadiene CT,NY,NH,ME,NC,VA Hexachlorobutadiene CT,NY,NH,ME,NC,VA Hexachloroethalene CT,NY,NH,ME,NC,VA Hexachloroethalene CT,NY,NH,ME,NC,VA Isophorone CT,NY,NH,ME,NC,VA Isophorone CT,NY,NH,ME,NC,VA Isophorone CT,NY,NH,ME,NC,VA Isophorone CT,NY,NH,ME,NC,VA I-Methylnaphthalene NC 2-Methylphenol CT,NY,NH,ME,NC,VA Naphthalene CT,NY,NH,ME,NC,VA Naphthalene CT,NY,NH,ME,NC,VA	Di-n-butylphthalate	CT,NY,NH,ME,NC,VA	
I.4-Dichlorobenzene NY,NH,ME,NC,VA 3,3-Dichlorobenzidine CT,NY,NH,ME,NC,VA CT,NY,NH,ME,NC,VA Diethylphthalate CT,NY,NH,ME,NC,VA CM-CHAPLylaphthalene CT,NY,NH,ME,NC,VA CM-CHAPLylaphthalene CT,NY,NH,ME,NC,VA	1,2-Dichlorobenzene	NY,NH,ME,NC,VA	
3,3-Dichlorobenzidine CT,NY,NH,ME,NC,VA 2,4-Dichlorophenol CT,NY,NH,ME,NC,VA Diethylphthalate CT,NY,NH,ME,NC,VA Dimethylphthalate CT,NY,NH,ME,NC,VA Dimethylphthalate CT,NY,NH,ME,NC,VA 4,6-Dinitro-2-methylphenol CT,NY,NH,ME,NC,VA 2,4-Dinitrotoluene CT,NY,NH,ME,NC,VA 2,4-Dinitrotoluene CT,NY,NH,ME,NC,VA 2,4-Dinitrotoluene CT,NY,NH,ME,NC,VA Di-n-octylphthalate CT,NY,NH,ME,NC,VA Di-n-octylphthalate CT,NY,NH,ME,NC,VA 1,2-Diphenylhydrazine/Azobenzene NY,NH,ME,NC,VA Fluoranthene CT,NY,NH,ME,NC,VA Fluorene NY,NH,ME,NC,VA Hexachlorobenzene CT,NY,NH,ME,NC,VA Hexachlorobutadiene CT,NY,NH,ME,NC,VA Hexachlorocyclopentadiene CT,NY,NH,ME,NC,VA Hexachlorocythane CT,NY,NH,ME,NC,VA Indeno(1,2,3-ed)pyrene CT,NY,NH,ME,NC,VA Indeno(1,2,3-ed)pyrene CT,NY,NH,ME,NC,VA Indeno(1,2,3-ed)pyrene CT,NY,NH,ME,NC,VA Indeno(1,2,3-ed)pyrene CT,NY,NH,ME,NC,VA	1,3-Dichlorobenzene	NY,NH,ME,NC,VA	
2,4-Dichlorophenol CT,NY,NH,ME,NC,VA Diethylphthalate CT,NY,NH,ME,NC,VA 2,4-Dimethylphthalate CT,NY,NH,ME,NC,VA Dimethylphthalate CT,NY,NH,ME,NC,VA 4,6-Dinitro-2-methylphenol CT,NY,NH,ME,NC,VA 4,6-Dinitro-2-methylphenol CT,NY,NH,ME,NC,VA 2,4-Dinitrotoluene CT,NY,NH,ME,NC,VA 2,4-Dinitrotoluene CT,NY,NH,ME,NC,VA 2,6-Dinitrotoluene CT,NY,NH,ME,NC,VA Di-n-octylphthalate CT,NY,NH,ME,NC,VA 1,2-Diphenylhydrazine/Azobenzene NY,NH,ME,NC,VA 1,2-Diphenylhydrazine/Azobenzene NY,NH,ME,NC,VA Fluoranthene CT,NY,NH,ME,NC,VA Fluorene NY,NH,ME,NC,VA Hexachlorobenzene CT,NY,NH,ME,NC,VA Hexachlorobenzene CT,NY,NH,ME,NC,VA Hexachlorocyclopentadiene CT,NY,NH,ME,NC,VA Hexachlorocyclopentadiene CT,NY,NH,ME,NC,VA Indeno(1,2,3-cd)pyrene CT,NY,NH,ME,NC,VA Isophorone CT,NY,NH,ME,NC,VA L-Methylnaphthalene NC 2-Methylnaphthalene CT,NY,NH,ME,NC,VA Naphthalene CT,NY,NH,ME,NC,VA Naphthalene CT,NY,NH,ME,NC,VA Naphthalene CT,NY,NH,ME,NC,VA	1,4-Dichlorobenzene	NY,NH,ME,NC,VA	
Diethylphthalate CT,NY,NH,ME,NC,VA 2,4-Dimethylphthalate CT,NY,NH,ME,NC,VA 4,6-Dinitro-2-methylphenol CT,NY,NH,ME,NC,VA 4,6-Dinitro-2-methylphenol CT,NY,NH,ME,NC,VA 2,4-Dinitro-2-methylphenol CT,NY,NH,ME,NC,VA 2,4-Dinitrotoluene CT,NY,NH,ME,NC,VA 2,6-Dinitrotoluene CT,NY,NH,ME,NC,VA Di-n-octylphthalate CT,NY,NH,ME,NC,VA Di-n-octylphthalate CT,NY,NH,ME,NC,VA Fluoranthene CT,NY,NH,ME,NC,VA Fluoranthene CT,NY,NH,ME,NC,VA Hexachloro-brazene CT,NY,NH,ME,NC,VA Lexachloro-brazene CT,NY,NH,ME,NC,VA	3,3-Dichlorobenzidine	CT,NY,NH,ME,NC,VA	
2,4-Dimethylphenol CT,NY,NH,ME,NC,VA 4,6-Dinitro-2-methylphenol CT,NY,NH,ME,NC,VA 4,6-Dinitro-2-methylphenol CT,NY,NH,ME,NC,VA 2,4-Dinitrophenol CT,NY,NH,ME,NC,VA 2,4-Dinitrophenol CT,NY,NH,ME,NC,VA 2,6-Dinitrotoluene CT,NY,NH,ME,NC,VA 2,6-Dinitrotoluene CT,NY,NH,ME,NC,VA Di-n-octylphthalate CT,NY,NH,ME,NC,VA 1,2-Diphenylhydrazine/Azobenzene NY,NH,ME,NC,VA 1,2-Diphenylhydrazine/Azobenzene NY,NH,ME,NC,VA Fluoranthene CT,NY,NH,ME,NC,VA Fluoranthene CT,NY,NH,ME,NC,VA Hexachlorobenzene CT,NY,NH,ME,NC,VA Hexachlorocyclopentadiene CT,NY,NH,ME,NC,VA Hexachlorocyclopentadiene CT,NY,NH,ME,NC,VA Indeno(1,2,3-cd)pyrene CT,NY,NH,ME,NC,VA Isophorone CT,NY,NH,ME,NC,VA 1-Methylaphthalene NC 2-Methylaphthalene CT,NY,NH,ME,NC,VA 2-Methylaphthalene CT,NY,NH,ME,NC,VA 3/4-Methylphenol CT,NY,NH,ME,NC,VA Naphthalene CT,NY,NH,ME,NC,VA	2,4-Dichlorophenol	CT,NY,NH,ME,NC,VA	
Dimethylphthalate CT,NY,NH,ME,NC,VA 4,6-Dinitro-2-methylphenol CT,NY,NH,ME,NC,VA 2,4-Dinitrotoluene CT,NY,NH,ME,NC,VA 2,4-Dinitrotoluene CT,NY,NH,ME,NC,VA 2,6-Dinitrotoluene CT,NY,NH,ME,NC,VA Di-n-octylphthalate CT,NY,NH,ME,NC,VA 1,2-Diphenylhydrazine/Azobenzene NY,NH,ME,NC,VA Fluoranthene CT,NY,NH,ME,NC,VA Fluoranthene CT,NY,NH,ME,NC,VA Hexachlorobenzene NY,NH,ME,NC,VA Hexachlorobenzene CT,NY,NH,ME,NC,VA Hexachlorobenzene CT,NY,NH,ME,NC,VA Hexachlorobenzene CT,NY,NH,ME,NC,VA Hexachlorocthane CT,NY,NH,ME,NC,VA Indeno(1,2,3-cd)pyrene CT,NY,NH,ME,NC,VA Isophorone CT,NY,NH,ME,NC,VA I-Methylnaphthalene CT,NY,NH,ME,NC,VA 1-Methylnaphthalene CT,NY,NH,ME,NC,VA 2-Methylphenol CT,NY,NH,ME,NC,VA Naphthalene CT,NY,NH,ME,NC,VA	Diethylphthalate	CT,NY,NH,ME,NC,VA	
4.6-Dinitro-2-methylphenol CT,NY,NH,ME,NC,VA 2,4-Dinitrotoluene CT,NY,NH,ME,NC,VA 2,6-Dinitrotoluene CT,NY,NH,ME,NC,VA 2,6-Dinitrotoluene CT,NY,NH,ME,NC,VA Di-n-octylphthalate CT,NY,NH,ME,NC,VA 1,2-Diphenylhydrazine/Azobenzene NY,NH,ME,NC,VA Fluoranthene CT,NY,NH,ME,NC,VA Fluorene NY,NH,ME,NC,VA Hexachlorobenzene CT,NY,NH,ME,NC,VA Hexachlorobutadiene CT,NY,NH,ME,NC,VA Hexachloroctadiene CT,NY,NH,ME,NC,VA Hexachloroctane CT,NY,NH,ME,NC,VA Indeno(1,2,3-cd)pyrene CT,NY,NH,ME,NC,VA Isophorone CT,NY,NH,ME,NC,VA 1-Methylphaphthalene CT,NY,NH,ME,NC,VA 2-Methylphenol CT,NY,NH,ME,NC,VA 3/4-Methylphenol CT,NY,NH,ME,NC,VA Naphthalene CT,NY,NH,ME,NC,VA	2,4-Dimethylphenol	CT,NY,NH,ME,NC,VA	
2,4-Dinitrophenol CT,NY,NH,ME,NC,VA 2,4-Dinitrotoluene CT,NY,NH,ME,NC,VA 2,6-Dinitrotoluene CT,NY,NH,ME,NC,VA Di-n-octylphthalate CT,NY,NH,ME,NC,VA 1,2-Diphenylhydrazine/Azobenzene NY,NH,ME,NC,VA Fluoranthene CT,NY,NH,ME,NC,VA Fluorene NY,NH,ME,NC,VA Hexachlorobenzene CT,NY,NH,ME,NC,VA Hexachlorobutadiene CT,NY,NH,ME,NC,VA Hexachlorocyclopentadiene CT,NY,NH,ME,NC,VA Hexachlorocyclopentadiene CT,NY,NH,ME,NC,VA Indeno(1,2,3-cd)pyrene CT,NY,NH,ME,NC,VA Isophorone CT,NY,NH,ME,NC,VA 1-Methylnaphthalene NC 2-Methylnaphthalene CT,NY,NH,ME,NC,VA 3/4-Methylphenol CT,NY,NH,ME,NC,VA Naphthalene CT,NY,NH,ME,NC,VA	Dimethylphthalate	CT,NY,NH,ME,NC,VA	
2,4-Dinitrotoluene CT,NY,NH,ME,NC,VA 2,6-Dinitrotoluene CT,NY,NH,ME,NC,VA Di-n-octylphthalate CT,NY,NH,ME,NC,VA 1,2-Diphenylhydrazine/Azobenzene NY,NH,ME,NC,VA Fluoranthene CT,NY,NH,ME,NC,VA Fluorene NY,NH,ME,NC,VA Hexachlorobenzene CT,NY,NH,ME,NC,VA Hexachlorobenzene CT,NY,NH,ME,NC,VA Hexachlorobentadiene CT,NY,NH,ME,NC,VA Hexachlorocyclopentadiene CT,NY,NH,ME,NC,VA Hexachlorocyclopentadiene CT,NY,NH,ME,NC,VA Indeno(1,2,3-cd)pyrene CT,NY,NH,ME,NC,VA Isophorone CT,NY,NH,ME,NC,VA I-Methylnaphthalene NC 2-Methylnaphthalene CT,NY,NH,ME,NC,VA 2-Methylphenol CT,NY,NH,ME,NC,VA Naphthalene CT,NY,NH,ME,NC,VA	4,6-Dinitro-2-methylphenol	CT,NY,NH,ME,NC,VA	
2,6-Dinitrotoluene CT,NY,NH,ME,NC,VA Di-n-octylphthalate CT,NY,NH,ME,NC,VA 1,2-Diphenylhydrazine/Azobenzene NY,NH,ME,NC,VA Fluoranthene CT,NY,NH,ME,NC,VA Fluorene NY,NH,ME,NC,VA Hexachlorobenzene CT,NY,NH,ME,NC,VA Hexachlorobutadiene CT,NY,NH,ME,NC,VA Hexachlorocyclopentadiene CT,NY,NH,ME,NC,VA Hexachlorocyclopentadiene CT,NY,NH,ME,NC,VA Indeno(1,2,3-cd)pyrene CT,NY,NH,ME,NC,VA Isophorone CT,NY,NH,ME,NC,VA 1-Methylnaphthalene NC 2-Methylnaphthalene CT,NY,NH,ME,NC,VA 3/4-Methylphenol CT,NY,NH,ME,NC,VA Naphthalene CT,NY,NH,ME,NC,VA	2,4-Dinitrophenol	CT,NY,NH,ME,NC,VA	
Di-n-octylphthalate CT,NY,NH,ME,NC,VA 1,2-Diphenylhydrazine/Azobenzene NY,NH,ME,NC,VA Fluoranthene CT,NY,NH,ME,NC,VA Fluorene NY,NH,ME,NC,VA Hexachlorobenzene CT,NY,NH,ME,NC,VA Hexachlorobutadiene CT,NY,NH,ME,NC,VA Hexachlorocyclopentadiene CT,NY,NH,ME,NC,VA Hexachlorocyclopentadiene CT,NY,NH,ME,NC,VA Indeno(1,2,3-cd)pyrene CT,NY,NH,ME,NC,VA Isophorone CT,NY,NH,ME,NC,VA 1-Methylnaphthalene NC 2-Methylnaphthalene CT,NY,NH,ME,NC,VA 3/4-Methylphenol CT,NY,NH,ME,NC,VA Naphthalene CT,NY,NH,ME,NC,VA	2,4-Dinitrotoluene	CT,NY,NH,ME,NC,VA	
1,2-Diphenylhydrazine/Azobenzene NY,NH,ME,NC,VA Fluoranthene CT,NY,NH,ME,NC,VA Fluorene NY,NH,ME,NC,VA Hexachlorobenzene CT,NY,NH,ME,NC,VA Hexachlorocyclopentadiene CT,NY,NH,ME,NC,VA Hexachlorocyclopentadiene CT,NY,NH,ME,NC,VA Hexachlorocthane CT,NY,NH,ME,NC,VA Indeno(1,2,3-ed)pyrene CT,NY,NH,ME,NC,VA Isophorone CT,NY,NH,ME,NC,VA 1-Methylnaphthalene NC 2-Methylnaphthalene CT,NY,NH,ME,NC,VA CT,NY,NH,ME,NC,VA CT,NY,NH,ME,NC,VA CT,NY,NH,ME,NC,VA CT,NY,NH,ME,NC,VA CT,NY,NH,ME,NC,VA CT,NY,NH,ME,NC,VA Naphthalene CT,NY,NH,ME,NC,VA	2,6-Dinitrotoluene	CT,NY,NH,ME,NC,VA	
Fluorent CT,NY,NH,ME,NC,VA Fluorene NY,NH,ME,NC,VA Hexachlorobenzene CT,NY,NH,ME,NC,VA Hexachlorobutadiene CT,NY,NH,ME,NC,VA Hexachlorocyclopentadiene CT,NY,NH,ME,NC,VA Hexachloroethane CT,NY,NH,ME,NC,VA Indeno(1,2,3-ed)pyrene CT,NY,NH,ME,NC,VA Isophorone CT,NY,NH,ME,NC,VA 1-Methylnaphthalene CT,NY,NH,ME,NC,VA 2-Methylphenol CT,NY,NH,ME,NC,VA Naphthalene CT,NY,NH,ME,NC,VA	Di-n-octylphthalate	CT,NY,NH,ME,NC,VA	
Fluorene NY,NH,ME,NC,VA Hexachlorobenzene CT,NY,NH,ME,NC,VA Hexachlorobutadiene CT,NY,NH,ME,NC,VA Hexachlorocyclopentadiene CT,NY,NH,ME,NC,VA Hexachloroethane CT,NY,NH,ME,NC,VA Indeno(1,2,3-cd)pyrene CT,NY,NH,ME,NC,VA Isophorone CT,NY,NH,ME,NC,VA 1-Methylnaphthalene NC 2-Methylnaphthalene CT,NY,NH,ME,NC,VA 2-Methylphenol CT,NY,NH,ME,NC,VA Naphthalene CT,NY,NH,ME,NC,VA	1,2-Diphenylhydrazine/Azobenzene	NY,NH,ME,NC,VA	
Hexachlorobenzene CT,NY,NH,ME,NC,VA Hexachlorobutadiene CT,NY,NH,ME,NC,VA Hexachlorocyclopentadiene CT,NY,NH,ME,NC,VA Hexachloroethane CT,NY,NH,ME,NC,VA Indeno(1,2,3-cd)pyrene CT,NY,NH,ME,NC,VA Isophorone CT,NY,NH,ME,NC,VA 1-Methylnaphthalene NC 2-Methylnaphthalene CT,NY,NH,ME,NC,VA 2-Methylphenol CT,NY,NH,ME,NC,VA 3/4-Methylphenol CT,NY,NH,ME,NC,VA Naphthalene CT,NY,NH,ME,NC,VA	Fluoranthene	CT,NY,NH,ME,NC,VA	
Hexachlorobutadiene CT,NY,NH,ME,NC,VA Hexachlorocyclopentadiene CT,NY,NH,ME,NC,VA Hexachlorocyclopentadiene CT,NY,NH,ME,NC,VA Hexachlorocyclopentadiene CT,NY,NH,ME,NC,VA Indeno(1,2,3-cd)pyrene CT,NY,NH,ME,NC,VA Isophorone CT,NY,NH,ME,NC,VA 1-Methylnaphthalene NC 2-Methylnaphthalene CT,NY,NH,ME,NC,VA 2-Methylphenol CT,NY,NH,ME,NC,VA 3/4-Methylphenol CT,NY,NH,ME,NC,VA Naphthalene CT,NY,NH,ME,NC,VA	Fluorene	NY,NH,ME,NC,VA	
Hexachlorocyclopentadiene CT,NY,NH,ME,NC,VA Hexachloroethane CT,NY,NH,ME,NC,VA Indeno(1,2,3-cd)pyrene CT,NY,NH,ME,NC,VA Isophorone CT,NY,NH,ME,NC,VA 1-Methylnaphthalene NC 2-Methylnaphthalene CT,NY,NH,ME,NC,VA 2-Methylphenol CT,NY,NH,ME,NC,VA 3/4-Methylphenol CT,NY,NH,ME,NC,VA Naphthalene CT,NY,NH,ME,NC,VA	Hexachlorobenzene	CT,NY,NH,ME,NC,VA	
Hexachloroethane CT,NY,NH,ME,NC,VA Indeno(1,2,3-cd)pyrene CT,NY,NH,ME,NC,VA Isophorone CT,NY,NH,ME,NC,VA 1-Methylnaphthalene NC 2-Methylnaphthalene CT,NY,NH,ME,NC,VA 2-Methylphenol CT,NY,NH,ME,NC,VA 3/4-Methylphenol CT,NY,NH,ME,NC,VA Naphthalene CT,NY,NH,ME,NC,VA	Hexachlorobutadiene	CT,NY,NH,ME,NC,VA	
Indeno(1,2,3-cd)pyrene CT,NY,NH,ME,NC,VA Isophorone CT,NY,NH,ME,NC,VA 1-Methylnaphthalene NC 2-Methylnaphthalene CT,NY,NH,ME,NC,VA 2-Methylphenol CT,NY,NH,ME,NC,VA 3/4-Methylphenol CT,NY,NH,ME,NC,VA Naphthalene CT,NY,NH,ME,NC,VA	Hexachlorocyclopentadiene		
Isophorone CT,NY,NH,ME,NC,VA 1-Methylnaphthalene NC 2-Methylnaphthalene CT,NY,NH,ME,NC,VA 2-Methylphenol CT,NY,NH,ME,NC,VA 3/4-Methylphenol CT,NY,NH,ME,NC,VA Naphthalene CT,NY,NH,ME,NC,VA	Hexachloroethane	CT,NY,NH,ME,NC,VA	
1-Methylnaphthalene NC 2-Methylnaphthalene CT,NY,NH,ME,NC,VA 2-Methylphenol CT,NY,NH,ME,NC,VA 3/4-Methylphenol CT,NY,NH,ME,NC,VA Naphthalene CT,NY,NH,ME,NC,VA	Indeno(1,2,3-cd)pyrene	CT,NY,NH,ME,NC,VA	
2-Methylnaphthalene CT,NY,NH,ME,NC,VA 2-Methylphenol CT,NY,NH,ME,NC,VA 3/4-Methylphenol CT,NY,NH,ME,NC,VA Naphthalene CT,NY,NH,ME,NC,VA	Isophorone	CT,NY,NH,ME,NC,VA	
2-Methylphenol CT,NY,NH,ME,NC,VA 3/4-Methylphenol CT,NY,NH,ME,NC,VA Naphthalene CT,NY,NH,ME,NC,VA		NC	
3/4-Methylphenol CT,NY,NH,ME,NC,VA Naphthalene CT,NY,NH,ME,NC,VA		CT,NY,NH,ME,NC,VA	
Naphthalene CT,NY,NH,ME,NC,VA	2-Methylphenol		
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	Naphthalene	CT,NY,NH,ME,NC,VA	



CERTIFICATIONS

Analyte	Certifications
SW-846 8270E in Soil	
2-Nitroaniline	CT,NY,NH,ME,NC,VA
3-Nitroaniline	CT,NY,NH,ME,NC,VA
4-Nitroaniline	CT,NY,NH,ME,NC,VA
Nitrobenzene	CT,NY,NH,ME,NC,VA
2-Nitrophenol	CT,NY,NH,ME,NC,VA
4-Nitrophenol	CT,NY,NH,ME,NC,VA
N-Nitrosodimethylamine	CT,NY,NH,ME,NC,VA
N-Nitrosodi-n-propylamine	CT,NY,NH,ME,NC,VA
Pentachloronitrobenzene	NY,NC
Pentachlorophenol	CT,NY,NH,ME,NC,VA
Phenanthrene	CT,NY,NH,ME,NC,VA
Phenol	CT,NY,NH,ME,NC,VA
Pyrene	CT,NY,NH,ME,NC,VA
Pyridine	CT,NY,NH,ME,NC,VA
1,2,4,5-Tetrachlorobenzene	NY,NC
1,2,4-Trichlorobenzene	CT,NY,NH,ME,NC,VA
2,4,5-Trichlorophenol	CT,NY,NH,ME,NC,VA
2,4,6-Trichlorophenol	CT,NY,NH,ME,NC,VA
2-Fluorophenol	NC
SW-846 8270E in Water	
Acenaphthene	CT,NY,NC,ME,NH,VA
Acenaphthylene	CT,NY,NC,ME,NH,VA
Acetophenone	NY,NC
Aniline	CT,NY,NC,ME,VA
Anthracene	CT,NY,NC,ME,NH,VA
Benzidine	CT,NY,NC,ME,NH,VA
Benzo(a)anthracene	CT,NY,NC,ME,NH,VA
Benzo(a)pyrene	CT,NY,NC,ME,NH,VA
Benzo(b)fluoranthene	CT,NY,NC,ME,NH,VA
Benzo(g,h,i)perylene	CT,NY,NC,ME,NH,VA
Benzo(k)fluoranthene	CT,NY,NC,ME,NH,VA
Benzoic Acid	NY,NC,ME,NH,VA
Bis(2-chloroethoxy)methane	CT,NY,NC,ME,NH,VA
Bis(2-chloroethyl)ether	CT,NY,NC,ME,NH,VA
Bis(2-chloroisopropyl)ether	CT,NY,NC,ME,NH,VA
Bis(2-Ethylhexyl)phthalate	CT,NY,NC,ME,NH,VA
4-Bromophenylphenylether	CT,NY,NC,ME,NH,VA
Butylbenzylphthalate	CT,NY,NC,ME,NH,VA
Carbazole	NC
4-Chloroaniline	CT,NY,NC,ME,NH,VA
4-Chloro-3-methylphenol	CT,NY,NC,ME,NH,VA
2-Chloronaphthalene	CT,NY,NC,ME,NH,VA
2-Chlorophenol	CT,NY,NC,ME,NH,VA
4-Chlorophenylphenylether	CT,NY,NC,ME,NH,VA
Chrysene Diberg(a b)outhrecome	CT,NY,NC,ME,NH,VA
Dibenz(a,h)anthracene	CT,NY,NC,ME,NH,VA



CERTIFICATIONS

Analyte	Certifications	
SW-846 8270E in Water		
Dibenzofuran	CT,NY,NC,ME,NH,VA	
Di-n-butylphthalate	CT,NY,NC,ME,NH,VA	
1,2-Dichlorobenzene	CT,NY,NC,ME,NH,VA	
1,3-Dichlorobenzene	CT,NY,NC,ME,NH,VA	
1,4-Dichlorobenzene	CT,NY,NC,ME,NH,VA	
3,3-Dichlorobenzidine	CT,NY,NC,ME,NH,VA	
2,4-Dichlorophenol	CT,NY,NC,ME,NH,VA	
Diethylphthalate	CT,NY,NC,ME,NH,VA	
2,4-Dimethylphenol	CT,NY,NC,ME,NH,VA	
Dimethylphthalate	CT,NY,NC,ME,NH,VA	
4,6-Dinitro-2-methylphenol	CT,NY,NC,ME,NH,VA	
2,4-Dinitrophenol	CT,NY,NC,ME,NH,VA	
2,4-Dinitrotoluene	CT,NY,NC,ME,NH,VA	
2,6-Dinitrotoluene	CT,NY,NC,ME,NH,VA	
Di-n-octylphthalate	CT,NY,NC,ME,NH,VA	
1,2-Diphenylhydrazine/Azobenzene	NY,NC	
Fluoranthene	CT,NY,NC,ME,NH,VA	
Fluorene	NY,NC,ME,NH,VA	
Hexachlorobenzene	CT,NY,NC,ME,NH,VA	
Hexachlorobutadiene	CT,NY,NC,ME,NH,VA	
Hexachlorocyclopentadiene	CT,NY,NC,ME,NH,VA	
Hexachloroethane	CT,NY,NC,ME,NH,VA	
Indeno(1,2,3-cd)pyrene	CT,NY,NC,ME,NH,VA	
Isophorone	CT,NY,NC,ME,NH,VA	
1-Methylnaphthalene	NC	
2-Methylnaphthalene	CT,NY,NC,ME,NH,VA	
2-Methylphenol	CT,NY,NC,NH,VA	
3/4-Methylphenol	CT,NY,NC,NH,VA	
Naphthalene	CT,NY,NC,ME,NH,VA	
2-Nitroaniline	CT,NY,NC,ME,NH,VA	
3-Nitroaniline	CT,NY,NC,ME,NH,VA	
4-Nitroaniline	CT,NY,NC,ME,NH,VA	
Nitrobenzene	CT,NY,NC,ME,NH,VA	
2-Nitrophenol	CT,NY,NC,ME,NH,VA	
4-Nitrophenol	CT,NY,NC,ME,NH,VA	
N-Nitrosodimethylamine	CT,NY,NC,ME,NH,VA	
N-Nitrosodi-n-propylamine	CT,NY,NC,ME,NH,VA	
Pentachloronitrobenzene	NC	
Pentachlorophenol	CT,NY,NC,ME,NH,VA	
Phenanthrene	CT,NY,NC,ME,NH,VA	
Phenol	CT,NY,NC,ME,NH,VA	
Pyrene	CT,NY,NC,ME,NH,VA	
Pyridine	CT,NY,NC,ME,NH,VA	
1,2,4,5-Tetrachlorobenzene	NY,NC	
1,2,4-Trichlorobenzene	CT,NY,NC,ME,NH,VA	
2,4,5-Trichlorophenol	CT,NY,NC,ME,NH,VA	
2,4,6-Trichlorophenol	CT,NY,NC,ME,NH,VA	Γ =
		Dogo 61



CERTIFICATIONS

Certified Analyses included in this Report

Analyte Certifications

SW-846 8270E in Water

2-Fluorophenol

NC

Con-Test, a Pace Environmental Laboratory, operates under the following certifications and accreditations:

Code	Description	Number	Expires
AIHA	AIHA-LAP, LLC - ISO17025:2017	100033	03/1/2022
MA	Massachusetts DEP	M-MA100	06/30/2022
CT	Connecticut Department of Publile Health	PH-0165	12/31/2022
NY	New York State Department of Health	10899 NELAP	04/1/2022
NH-S	New Hampshire Environmental Lab	2516 NELAP	02/5/2022
RI	Rhode Island Department of Health	LAO00112	12/30/2021
NC	North Carolina Div. of Water Quality	652	12/31/2022
NJ	New Jersey DEP	MA007 NELAP	06/30/2022
FL	Florida Department of Health	E871027 NELAP	06/30/2022
VT	Vermont Department of Health Lead Laboratory	LL720741	07/30/2022
ME	State of Maine	MA00100	06/9/2023
VA	Commonwealth of Virginia	460217	12/14/2022
NH-P	New Hampshire Environmental Lab	2557 NELAP	09/6/2022
VT-DW	Vermont Department of Health Drinking Water	VT-255716	06/12/2022
NC-DW	North Carolina Department of Health	25703	07/31/2022
PA	Commonwealth of Pennsylvania DEP	68-05812	06/30/2022
MI	Dept. of Env, Great Lakes, and Energy	9100	09/6/2022

Page 63 of 64

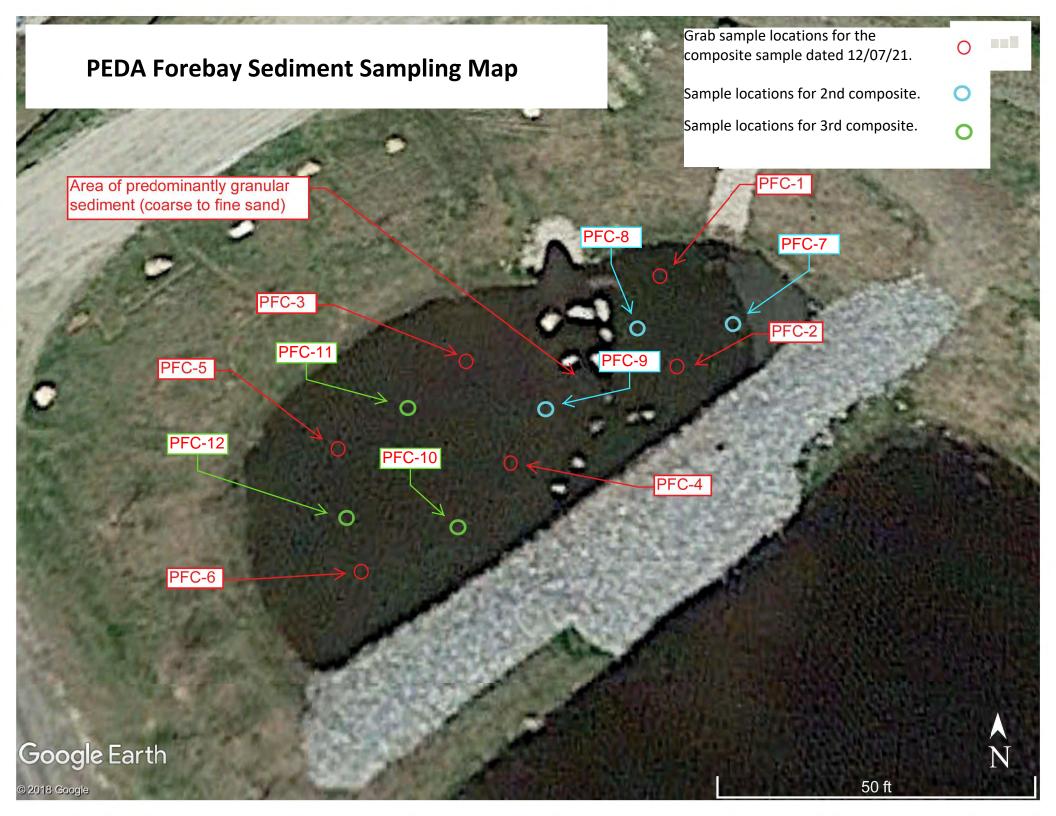
Prepackaged Cooler? Y / N analyses the laboratory will perform. Any missing information is not the laboratory's responsibility. Pace Glassware in freezer? Y / N responsible for missing samples Disclaimer: Pace Analytical is not responsible for any omitted information on the Chain of Custody. The Chain of Custody is a legal document that must be complete and accurate and is used to determine what Analytical values your partnership on each project and will try to assist with missing information, but will Glassware in the fridge? GW = Ground Water
WW = Waste Water
DW = Drinking Water define)
SEDIMENT
Preservation Codes: "Pace Analytical is not from prepacked coolers Total Number Of: X = Sodium Hydroxide Courier Use Only B = Sodium Bisulfate O = Other (please D = Other (please define) Matrix Codes: S = Sulfuric Acid Preservation Code N = Nitric Acid BACTERIA A = Air 5 = Soil SL = Sludge M = Methanol VIALS GLASS. PLASTIC ENCORE SOL = Solid T = Sodium Thiosulfate H= HCL possible sample concentration within the Conc H · High; M · Medium; L · Low; C · Clean; U · Please use the following codes to indicate WELAC and AlfiAsLAP, LLC Accredition Chromatogram AIHA-LAP,LLC not be held accountable. Code cotumn above: ANALYSIS REQUESTED Unknown Other ANALYZED FOR Doc # 381 Rev 5_07/13/2021 . 95.0 - house 7 £ 245000 MA MCP Required CT RCP Required RCP Certification Form Required MCP Certification Form Reguired MA State DW Required deid from 12450M 39 Spruce Street East Longmeadow, MA 01028 0 E BACTERIA. 5 Field Filtered H.S. - Held desired Field Filtered Lab to Fitter Lab to Filter PCB ONL PLASTIC School MWRA MBTA ALL SAMPLES ARE ONE (1) COMPOSITE Bething Nonvious of Don SOXHLET WASTE MANAGEMENT DISPOSAL GLASS SOXHLET CHAIN OF CUSTODY RECORD VIALS d 0 0 0 0 Conc Code http://www.pacelabs.com Municipality Brownfield Due Date: 'Matrix Code # GIS/Md 10-Day 3-Day EXCE 0 4-Day CLP Like Data Pkg Required: COMP/GRAB CONF (B□ PFAS 10-Day (std) 监 10121 Government Ending Date/Time Email To: Fax To #: ormat; Federal Other: 7-Day Day Day Client Comments: Ċţ Project Entity East St. Suite G-H. Pittsfield MA Beginning Date/Time Consiltan ţ ١ Access COC's and Support Requests Invoice Recipient: PEDA - Accomb Payable PFC-COMP-12077 PFC-COMP-120721 PFC-COMP-120721 Date/Time: (2 : 15 Date/Time: 12 - 8 12-12-61 14-0-2021 Client Sample ID / Description Phone: 413-525-2332 Envioumental Fax: 413-525-6405 Date/Time: Date/Time: Date/Time: 2100502 Maura Hawkins Propertional Forebay 12.5 2,5 Project Number: 43-04-2 4143-0130 Project Location: P. Hs FELL Company Name: Series Pace Analytical Sampled By: R. CAPASSE Refinquished by: (signature) Pace Quote Name/Number: Relinquished by: (signature gd by (signature) Received by: (signature) Received by: (signature) Pace Work Order# of place (sig Project Manager; Comments: Phone: /

I Have Not Confirmed Sample Container
Numbers With Lab Staff Before Relinquishing
Over Samples_____



Login Sample Receipt Checklist - (Rejection Criteria Listing - Using Acceptance Policy) Any False Statement will be brought to the attention of the Client - State True or False

Client Receiv	<u>₿₺∁</u> /ed Bv	· · · · · · · · · · · · · · · · · · ·		Date	12-8.21		Time	1432	
How were t	_			•					
recei		In Cooler		No Cooler		On Ice		_ No Ice	
10001	••••	Direct from Samp	•			Ambient		_ Melted Ice	
Were sam	ples within		By Gun #	<u>3</u>	_	Actual Tem	p-2.2		•
Temperatu	ire? 2-6°C		By Blank #			Actual Tem	p -		_
	Custody S		M	•	•	s Tampered			_
	s COC Relin	•		•	s Chain Agi	ree With Sa	mples?		
Are the	ere broken/l	eaking/loose caps	on any sam	•	<u></u>			•	
Is COC in ir	_				mples recei		olding time?		
Did COC i		` Client		Analysis			er Name		
pertinent In		Project		ID's		Collection	Dates/Times	<u> </u>	,
		d out and legible?							
Are there La		?	F	•	Who was	s notified?	***		_
Are there Ru			F		Who was	s notified?			
Are there Sh	nort Holds?		<u>F</u>		Who was	s notified?			•
ls there eno						,			
	•	ere applicable?	MA		MS/MSD?				
Proper Medi			<u> </u>		_	samples red	uired?	<u></u>	•
Were trip bla			<u> </u>		On COC?	F			
Do all samp	les have the	proper pH?	MA	Acid			Base		•
Vials	#	Containers:	#			#			#
Unp-		1 Liter Amb.		1 Liter	Plastic		16 o	z-Amb.	
HCL-		500 mL Amb.		500 mL	. Plastic			nb/Clear	3
Meoh-	\ \	250 mL Amb.			. Plastic		L	mb/Clear	
Bisulfate-	<u>2</u>	Flashpoint	***************************************		acteria			nb/Clear	
DI-		Other Glass			Plastic		l	core	
Thiosulfate-		SOC Kit	:		c Bag		Frozen:		
Sulfuric-		Perchlorate		Zipl	ock				
				Unused	Media				
Vials	#	Containers:	#			#			#
Unp-		1 Liter Amb.			Plastic			z Amb.	
HCL-		500 mL Amb.	···	500 mL				nb/Clear	
Meoh-		250 mL Amb.		250 mL				nb/Clear	
Bisulfate- DI-		Col./Bacteria Other Plastic			point			nb/Clear	
					Glass			core	
							riozen.		
		1 Clomorate		2 1/21	OOK 1				
Thiosulfate- Sulfuric- Comments :		SOC Kit Perchlorate		Plasti Zipl	c Bag ock		Frozen:		



Post-Work Notification Water Quality Basin – North Forebay William Stanley Business Park, Pittsfield

APPENDIX B

Landfill Disposal Documents

3937.0001M000.101.AP-CV



1879 Route 5 & 20 Stanley, NY 14561 (585)-526-4420

December 2, 2022

J.H. Maxymillian Inc. Attn: Robyn Staples 45 Wood Lawn Ave Pittsfield, MA 01201

RE: Ontario County Landfill

Certificate of Disposal

Dear Ms. Staples,

On November 28th, 29th, 30th, and December 1st, a total of 304.26 tons of contaminated soil, to be destroyed was delivered to the Ontario County Landfill. Pursuant to our NYSDEC Solid Waste Permit # 8-3244-00004/00001-0, all materials brought into our facility are disposed of, compacted, and covered daily. No scavenging of materials is permitted. Landfill management was on-site during the delivery of the above referenced material to ensure that it was buried and covered, as required.

Please feel free to contact me if you have any questions or require any additional information at becky.hollenbeck@casella.com or at 585.526.4020.

Best regards,

CASELLA WASTE SERVICES OF ONTARIO, LLC.

Becky Hollenbeck OCLF Office Manager RpPrf.rpt

Profile: 24966

NEWS NE / ONTARIO COUNTY LANDFILL

Profile Report

Transactions from 11/15/2022 through 11/28/2022
Inbound and Outbound Tickets
Third Party and Intercompany Customers
Recycle and Disposal Material
Full Details

Ticket	Date	Truck	In / Out	Bill. Units	Gallons	Tons	Est Tons	Tax	Disposal Amount	Amount
24966 - PITTSFI	ELD ECO DEV, AU	JTH								-
1034467	11/28/2022	RH56-D49	I	22.69 T	0.00	22.69	0.00	\$0.00	\$0.00	\$0.00
1034482	11/28/2022	2320-120	1	32.67 T	0.00	32.67	0.00	\$0.00	\$0.00	\$0.00
1034487	11/28/2022	18-5-154	I	31.98 T	0.00	31.98	0.00	\$0.00	\$0.00	\$0.00
1034493	11/28/2022	RH42-D68	1	27.66 T	0.00	27.66	0.00	\$0.00	\$0.00	\$0.00
24966 - PITTSFI 4 tickets and 4 transact	ELD ECO DEV, AU	U TH		-	0.00	115.00	0.00	\$0.00	\$0.00	\$0.00
Report Grand	d Totals			-	0.00	115.00	0.00	\$0.00	\$0.00	\$0.00

4 tickets and 4 transactions

RpPrf.rpt

Profile: 24966

NEWS NE / ONTARIO COUNTY LANDFILL

Profile Report

Transactions from 11/29/2022 through 11/29/2022 Inbound and Outbound Tickets Third Party and Intercompany Customers Recycle and Disposal Material Full Details

Ticket	Date	Truck	In / Out	Bill. Units	Gallons	Tons	Est Tons	Tax	Disposal Amount	Amount
24966 - PITTSFI	IELD ECO DEV, A	UTH								
1034652	11/29/2022	RH56-D59	1	33.38 T	0.00	33.38	0.00	\$0.00	\$0.00	\$0.00
1034663	11/29/2022	RH42-D68	1	31.72 T	0.00	31.72	0.00	\$0.00	\$0.00	\$0.00
24966 - PITTSFI 2 tickets and 2 transact	IELD ECO DEV, A	UTH		-	0.00	65.10	0.00	\$0.00	\$0.00	\$0.00
Report Grand	d Totals			- 14	0.00	65.10	0.00	\$0.00	\$0.00	\$0.00
2 tickets and 2 tras	nsactions									E-1-CD4

2 tickets and 2 transactions

RpPrf.rpt

Profile: 24966

NEWS NE / ONTARIO COUNTY LANDFILL

Profile Report

Transactions from 11/30/2022 through 11/30/2022
Inbound and Outbound Tickets
Third Party and Intercompany Customers
Recycle and Disposal Material
Full Details

Ticket	Date	Truck	In / Out	Bill. Units	Gallons	Tons	Est Tons	Tax	Disposal Amount	Amount
24966 - PITTSFI	ELD ECO DEV, AU	JTH								
1034749	11/30/2022	EA20	I	33.22 T	0.00	33.22	0.00	\$0.00	\$0.00	\$0.00
1034806	11/30/2022	RH56-D59	I	29.00 T	0.00	29.00	0.00	\$0.00	\$0.00	\$0.00
1034819	11/30/2022	RH42	I	24.26 T	0.00	24.26	0.00	\$0.00	\$0.00	\$0.00
24966 - PITTSFI 3 tickets and 3 transacti	ELD ECO DEV, AU	UTH			0.00	86.48	0.00	\$0.00	\$0.00	\$0.00
Report Grand	d Totals			-	0.00	86.48	0.00	\$0.00	\$0.00	\$0.00

3 tickets and 3 transactions

Page 1 of 1 12/2/2022 11:35AM User ID: MWADHAMS

RpPrf.rpt

Profile: 24966

NEWS NE / ONTARIO COUNTY LANDFILL

Profile Report

Transactions from 12/01/2022 through 12/01/2022
Inbound and Outbound Tickets
Third Party and Intercompany Customers
Recycle and Disposal Material
Full Details

Ticket	Date	Truck	In / Out	Bill. Units	Gallons	Tons	Est Tons	Tax	Disposal Amount	Amount
24966 - PITTSFI	ELD ECO DEV	, AUTH								
1034873	12/1/2022	2320-120	I	37.68 T	0.00	37.68	0.00	\$0.00	\$0.00	\$0.00
24966 - PITTSFI I ticket and I transaction		, AUTH			0.00	37.68	0.00	\$0.00	\$0.00	\$0.00
Report Grand	d Totals			3	0.00	37.68	0.00	\$0.00	\$0.00	\$0.00

1 ticket and 1 transaction

ap1034467z

NEWS NE / ONTERTO COUNTY LANDFILL

A Division of Casella Waste Systems 1879 NYS Route 5620 Stanley, NY 14561

Ticket: 1034467 Date: 11/28/2022

Time: 11:41:48 - 12:06:02

Customer: LE-02040/MAXYMILLIAN/24966

Carrier: GT/GOUNET Truck: RH56-D49

Truck Type: DR/DUMP TRAILER

Profile: 24966/PITTSFIELD ECO DEV, A Generator: PEDA/PITTSFTELD ECONOMIC DE

Grid: PH9-A2/PHASE P-A2

Comment: LOAD 1

Gross: 81580 L In Scale 1 Tare: 36200 L Out Scale 2

Net: 45380 L

Tons: 22.69

Materials & Services

Origin: MA/MASS

Material: IN/INDUSTRIAL WASTE

Quantity: 22.69 Ton Rate: \$0.00/T Amount: \$ 0.00

> Total Taxes: \$ 0.00

Total Amount: \$

Weighmaster: MWADHAMS

Driver:

By signing above, I declare that I did NOT deposit any PROHIBITED WASTES

150904-1000

NEWS NE / ONTARIO COUNTY LANDFILL A Division of Casella Waste Systems 1879 NYS Route 5&20 Stanley, NY 14561

Ticket: 1034467 Date: 11/28/2022

Time: 11:41:48 - 12:06:02

Scale

****** Reprinted Ticket ****** Gross: 81580 L In Scale 1 Truck: RH56-D49 Tare: 36200 L Out Scale 2 Net: 45380 L

Customer: LE-02040/MAXYMILLIAN/24966

Carrier: GT/GOULET

Truck Type: DUMP TRAILER

Profile: 24966/PITTSFIELD ECO DEV, AU

PO: 6092

Comment: LOAD 1

Origin	Materials & Service	Quantity Unit	Rate/Unit	Amount
MA/MASS Gross:81580 L	 IN/INDUSTRIAL WASTE Scale Tare:3620	 22.69 Ton Out Scale	\$0.00/T Net:45380	\$0.00 L

Total Amount: \$0.00

Driver: 11/28/2022 12 06

Deputy Weighmaster:

Morgan Wadhams



Massachusetts Department of Environmental Protection Bureau of Air & Waste

Material Shipping Record & Log For the shipment of contaminated soil, urban fill, and dredge

materials not subject to management under section 310 CMR 40.0035 nor manifesting under 310 CMR 30.000

Profile #1 24966

Tracking Number

ote: lake additional oples of this page s necessary.	Load#: 1 R HULETT TEUCKIN	J6	CASELLA WAST	re/ontario County le
	Signature of transporter	ν	Receiving facility	11:41Am
	Date received Time	received	Date of shipment	Time of shipment
	50 Truck/Tractor registration		Trailer registration	
	30 Tol		-	
	Load size (cubic yards/tons)			
	Load#:			
	Signature of transporter		Receiving facility	
	Date received Time	received	Date of shipment	Time of shipment
	Truck/Tractor registration		Trailer registration	
	Load size (cubic yards/tons)			
	Load#:			
	Signature of transporter	95 11-	Receiving facility	
	Date received Time	received	Date of shipment	Time of shipment
	Truck/Tractor registration		Trailer registration	
	Load size (cubic yards/tons)	99-12	-	
Ē	K. Log Sheet Volume In	formation		
9	Total volume this page (cubic yards/ton	ıs)	-	
	Total carried forward (cubic yards/tons)		Page	of
	A second control of the second control of th			
	Total carried forward and this page (cul	bic yards/tons)		



Massachusetts Department of Environmental Protection Bureau of Air & Waste

24966

Material Shipping Record & Log

For the shipment of contaminated soil, urban fill, and dredge materials not subject to management under section 310 CMR 40.0035 nor manifesting under 310 CMR 30.000

Tracking Number

H. Certification of Generator

"I certify under penalties of law that I have personally examined and am familiar with the information contained in this submittal, including any and all documents accompanying this certification, and that, based on my inquiry of those individuals immediately responsible for obtaining the information contained herein is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties, including, but not limited to, possible fines and imprisonment, for willfully submitting false, inaccurate, or incomplete information."

Date (MY/DD/2002)
Date (MY/DD/2002)
Date (MY/DD/2002)
Date (MY/DD/2002)
Date (MY/DD/2002)

I. Acknowledgment of Receipt by Receiving Facility

Ontario County Landfill
Receiving Facility
MORGAN WADHAMS
Representative (Print)
State Operator
Title Mwadhams
Signature

1//28/2020 Date (MM/DD/YYYY)

ap 1034482z

NEWS NE / ONTARIO COUNTY LANDFILL

A Division of Casella Waste Systems 1879 NYS Route 5&20 Stanley, NY 14561

Ticket: 1034482

Date: 11/28/2022

Time: 12:25:11 - 12:47:36

Customer: LE-02040/MAXYMILLIAN/24966

Carrier: GT/GOULET Truck: 2320-120

Truck Type: DR/DUMP TRAILER

Profile: 24966/PITTSFIELD ECO DEV, A

Generator: PEDA/PITTSFIELD ECONOMIC DE

Grid: PH9-A2/PHASE F-A2

Comment: LOAD2

Gross: 102620 L In Scale 1

Tare: 37280 L Out Scale 2

Met: 65340 L

Tons: 32.67

Materials & Services

Origin: MA/MASS
Material: IN/INDUSTRIAL WASTE

Quantity: 32.67 Ton Rate: \$0.00/T

Amount: \$ 0.00

Total Taxes: \$

Total Amount: \$

0.00

0.00

M STAMA

Weighmaster: MWADHAMS

Driver:

By signing above, I declare that I did NOT deposit any PROHIBITED WASTES

..........

NEWS NE / ONTARIO COUNTY LANDFILL A Division of Casella Waste Systems 1879 NYS Route 5&20 Stanley, NY 14561 Ticket: 1034482 Date: 11/28/2022

Time: 12:25:11 - 12:47:36

Scale

Gross: 102620 L In Scale 1 Tare: 37280 L Out Scale 2

Net: 65340 L

Customer: LE-02040/MAXYMILLIAN/24966

****** Reprinted Ticket ******

Carrier: GT/GOULET

Truck: 2320-120

Truck Type: DUMP TRAILER

Profile: 24966/PITTSFIELD ECO DEV, AU

PO: 6092

Comment: LOAD2

Origin		ls & Services		Quantity Unit		Amount
MA/MASS Gross:102620 L	In	JSTRIAL WASTE Tare:37280	L	32.67 Ton Out Scale	\$0.00/T Net:65340 L	\$0.00
					Total Amount:	\$0.00

Driver: IIJAAAAA 12-47

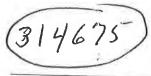
Deputy Weighmaster:

Morgan Wadhams



Massachusetts Department of Environmental Protection Bureau of Air & Waste

Material Shipping Record & Log
For the shipment of contaminated soil, urban fill, and dredge
materials not subject to management under section 310 CMR 40.0035 nor manifesting under 310 CMR 30.000



Tracking Number

J. Load	Information
---------	-------------

Note: Make additional copies of this page as necessary.

Load Informa	ition		
Signature of transporter 11 - 2 8 - 2 C Date received 23 - 2 C Truck/Tractor registration 3 Load size (cubic yards/lo	T-120	Receiving facility 11-28-22 Date of shipment 27 Trailer registration	COUNTY LF 12-25 pm Time of shipmeht 418C ME
Load#:			
Signature of transporter		Receiving facility	
Date received	Time received	Date of shipment	Time of shipment
Truck/Tractor registration		Trailer registration	*
Load size (cubic yards/tor	ns)		
Load#:			
Signature of transporter		Receiving facility	
Date received	Time received	Date of shipment	Time of shipment
Truck/Tractor registration		Trailer registration	
Load size (cubic yards/tons	5)		
Log Sheet Vol	ume Information		
Total volume this page (cut	oic yards/tons)		
Total carried forward (cubic	yards/lons)	Page	of
olal carried forward and th	is page (cubic yards/tons)		



Massachusetts Department of Environmental Protection Bureau of Air & Waste

Material Shipping Record & Log

For the shipment of contaminated soil, urban fill, and dredge materials not subject to management under section 310 CMR 40.0035 nor manifesting under 310 CMR 30.000

24966

Tracking Number

H. Certification of Generator

"I certify under penalties of law that I have personally examined and am familiar with the information contained in this submittal, including any and all documents accompanying this certification, and that, based on my inquiry of those individuals immediately responsible for obtaining the information contained herein is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties, including, but not limited to, possible fines and imprisonment, for willfully submitting false, inaccurate, or incomplete information."

Signature

| 1 | 22 | 2022

Date (MM/DD/YYY)

Name (Print)

I. Acknowledgment of Receipt by Receiving Facility

Ontario County Landfill

ap1034487z

NEWS NE / ONTARIO COUNTY LANDFILL.

A Division of Casella Waste Systems 1879 NYS Route 5620 Stanley, MY 14561

Ticket: 1034487

Date: 11/28/2022

Time: 12:28:42 - 13:03:21

Customer: LE-02040/MAXYMILLIAN/24966

Carrier: GT/GOULET

Truck: 18-5-154

Truck Type: DR/DUMP TRAILER

Profile: 24966/PITTSFIELD ECO DEV, A

Generator: PEDA/PITTSFIELD ECONOMIC DE

Grid: PH9-A2/PHASE P-A2

Comment: LOAD 3

Gross: 101340 L In Soals 1

Tare: 37380 L Out Scale 2

Net: 63960 L

Tone: 31.98

Materials & Services

Origin: MA/MASS

Material: IN/INDUSTRIAL WASTE

Quantity: 31.98 Ton

Rate: \$0.00/T

Amount: \$ 0.00

Total Taxes: \$

0.00 Total. Amount: 8 0.00

Weighmaster: MWADHAMS

Driver:

By signing above, I declare that I did NOT deposit any PROHIBITED WASTES

NEWS NE / ONTARIO COUNTY LANDFILL A Division of Casella Waste Systems 1879 NYS Route 5&20 Stanley, NY 14561

Ticket: 1034487 Date: 11/28/2022

Time: 12:28:42 - 13:03:21

Scale

****** Reprinted Ticket ****** Gross: 101340 L In Scale 1 Tare: 37380 L Out Scale 2 Truck: 18-5-154

Customer: LE-02040/MAXYMILLIAN/24966

Carrier: GT/GOULET

Truck Type: DUMP TRAILER

Profile: 24966/PITTSFIELD ECO DEV, AU

PO: 6092

Comment: LOAD 3

Origin			als & Services		Quantity		Rate/Unit		Amount
MA/MASS			OUSTRIAL WASTE		31.98		\$0.00/T		\$0.00
Gross:101340 L	In	Scale	Tare:37380	L	Out Sca	1e	Net:63960	L	

Total Amount:

\$0.00

Driver: 11/24/022 13.53

Deputy Weighmaster:

Morgan Wadhams

Net: 63960 L



Massachusetts Department of Environmental Protection Bureau of Air & Waste

24966

Material Shipping Record & Log

For the shipment of contaminated soil, urban fill, and dredge materials not subject to management under section 310 CMR 40.0035 nor manifesting under 310 CMR 30.000

Tracking Number

H. Certification of Generator

Signature

"I certify under penalties of law that I have personally examined and am familiar with the information contained in this submittal, including any and all documents accompanying this certification, and that, based on my inquiry of those individuals immediately responsible for obtaining the information contained herein is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties, including, but not limited to, possible fines and imprisonment, for willfully submitting false, inaccurate, or incomplete information."

Signature

Date (MM/DD/1999)

Name (Print)

Date (MM/DD/YYYY)

١.	Acknowledgment of Receipt by Receiving	g Facility
	ontario Country Landfill	
	Receiving Facility Wanhams	
	Representative (Print) SCALC (Devastor)	
	Title MM Wadhams	11/28/2000



Massachusetts Department of Environmental Protection Bureau of Air & Waste

Material Shipping Record & Log
For the shipment of contaminated soil, urban fill, and dredge
materials not subject to management under section 310 CMR 40.0035
nor manifesting under 310 CMR 30.000

	nor manifesting under 310 CMR 30.000	der section 310 CMR 40.0035	Tracking Number
	J. Load Information	10.0033	
	mormation		
additional	Load#: 3		
s of this page cessary.	7.11		
essary.	May 1		
	Signature of transporter		
	-1 -1 93 4 5 251	Receiving	Countyl
		receiving facility	-our Ar
	8-5 Time received	MA 11-28-2	2 12:00000
	Truck/Tractor registration		Time of shipment
	57	Trailer registration	2829967 N
	Load size (cubic yards/tons)	registration	LIP. W
	Load#:		
	and it		
	44		
	Signature of transporter		
		Recolule	
	Date received	Receiving facility	
1.3	Time received	Date of shipment	
	Truck/Tractor registration	- uto or snipment	Time of shipment
			- ampatem
ī	Dod -:	Trailer registration	
ī	oad size (cubic yards/tons)	Trailer registration	
ī	oad size (cubic yards/tons)	Trailer registration	
		Trailer registration	
	oad size (cubic yards/tons) Oad#:	Trailer registration	
L	oad#:	Trailer registration	
L	oad#:	Trailer registration	
L.	oad#; gnature of transporter		
L.	oad#; gnature of transporter	Trailer registration Receiving facility	
L. Się Dat	oad#: gnature of transporter te received Time received	Receiving facility Date of shipment	
L. Się Dat	oad#; gnature of transporter	Receiving facility Date of shipment	
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Date True	gnature of transporter te received Time received ck/Tractor registration d size (cubic yards/tons) g Sheet Volume Information	Receiving facility Date of shipment	
Date True	gnature of transporter te received Time received ck/Tractor registration d size (cubic yards/tons) g Sheet Volume Information	Receiving facility Date of shipment	
Dail Trus	gnature of transporter te received Time received ck/Tractor registration d size (cubic yards/tons) g Sheet Volume Information volume this page (cubic yards/tons)	Receiving facility Date of shipment	
Dail Trus	gnature of transporter te received Time received ck/Tractor registration d size (cubic yards/tons) g Sheet Volume Information volume this page (cubic yards/tons)	Receiving facility Date of shipment Trailer registration	
Dal True Load K. Log Total o	gnature of transporter te received Time received ck/Tractor registration d size (cubic yards/tons) g Sheet Volume Information volume this page (cubic yards/tons)	Receiving facility Date of shipment Trailer registration	
Dal True Load K. Log Total o	gnature of transporter te received Time received ck/Tractor registration d size (cubic yards/tons) g Sheet Volume Information volume this page (cubic yards/tons)	Receiving facility Date of shipment	

ap1034493z

NEWS NE / ONTARIO COUNTY LANDFILL

A Division of Casella Waste Systems 1879 NYS Route 5620 Stanley, NY 14561

Ticket: 1034493

Date: 11/28/2022

Time: 12:49:46 - 13:21:40

Customer: LE-02040/MAXYMILLIAN/24966

Carrier: GT/GOULET

Truck: RH42-D68

Truck Type: DR/DUMP TRAILER

Profile: 24966/PITTSFIELD ECO DEV, A Generator: PEDA/PITTSFIELD ECONOMIC DE

Grid: PH9-A2/PHASE P-A2

Comment: LOAD 4

91160 L In Scale 1 Gross:

Tare: 35840 L Out Scale 2

Nest: 55320 L

Tons: 27.66

Materials & Services

Origin: MA/MASS

Material: IN/INDUSTRIAL WASTE

Quantity: 27.66 Ton Rate: \$0.00/T

Amount: \$ 0.00

Total Taxes: \$

0.00

Total Amount: \$

0.00

NEWS NE / ONTARIO COUNTY LANDFILL A Division of Casella Waste Systems 1879 NYS Route 5&20 Stanley, NY 14561

Ticket: 1034493 Date: 11/28/2022

Time: 12:49:46 - 13:21:40

Scale

****** Reprinted Ticket ****** Gross: 91160 L In Scale 1 Truck: RH42-D68 Tare: 35840 L Out Scale 2 Net: 55320 L

Customer: LE-02040/MAXYMILLIAN/24966

Carrier: GT/GOULET Truck Type: DUMP TRAILER

Profile: 24966/PITTSFIELD ECO DEV, AU

PO: 6092

Comment: LOAD 4

Origin	Materials & Services	Quantity Unit	Rate/Unit Amount
MA/MASS	IN/INDUSTRIAL WASTE Scale Tare:35840	27.66 Ton L Out Scale	\$0.00/T \$0.00 Net:55320 L

Total Amount:

\$0.00

Driver: __112M20221921

Deputy Weighmaster:

Morgan Wadhams



Massachusetts Department of Environmental Protection
Bureau of Air & Waste

Material Shipping Record & Log

For the shipment of contaminated soll, urban fill, and dredge materials not subject to management under section 310 CMR 40.0035 nor manifesting under 310 CMR 30.000

Profile # 24966

Tracking Number

H. Certification of Generator

"I certify under penalties of law that I have personally examined and am familiar with the information contained in this submittal, including any and all documents accompanying this certification, and that, based on my inquiry of those individuals immediately responsible for obtaining the information contained herein is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties, including, but not limited to, possible fines and imprisonment, for willfully submitting false, inaccurate, or incomplete information."

11	Jugal	low	W		
Signalure	11/2	2/1	1422		
Date (M)	IDDIEYYY	9-1	CAK	EY	
Name (P	rint)	1	VIIV	-	

	Acknowledgment of Receipt by Re	ceiving Facility
	Ontario Country Landfil	l
	Receiving Facility Morgan Wadhams Representative (Print)	
	Scale operator	
i	Muadhams	11/28/2022
	Signature	Date (MM/DD/YYYY)



Massachusetts Department of Environmental Protection Bureau of Air & Waste

Material Shipping Record & Log

For the shipment of contaminated soil, urban fill, and dredge materials not subject to management under section 310 CMR 40.0035 nor manifesting under 310 CMR 30.000

Tracking Number

ote;	J. Load Informat	.1011		
e additional	Load#:)	
es of this page ecessary		1 11		
ecessary.	Signature of transporter	UCKING Jelan Su	on ontevio	1. 1-1
	11-28-22	1/0100	Receiving facility	ounty land FULL
	Date received	18:31 AM	11-28-22	12:4000
	42	Time received	11-38-32 Date of shipment	Time of shipment
	Truck/Tractor registration		Trailer registration	MAINE
	- 20 Th	/		15(1)1/06
	Load size (cubic yards/tons	5)	D-68	
	Load#:			
	Signature of transporter	-	Receiving facility	
	Date received	1	receiving racility	
	Date received	Time received	Date of shipment	Time of shipment
	Truck/Tractor registration			time of shipment
		110	Trailer registration	
	Load size (cubic yards/tons)			
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	Loauff.			
	Signature of transporter			
0.			Receiving facility	
	Date received	Time received	Date of shipment	
	Truck/Tractor registration		bate of ampinent	Time of shipment
	rractor registration		Trailer registration	
	Load size (cubic yards/tons)			
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	Total carried forward and this pa	age (cubic yards/tons)		

ap1034652z

NEWS NE / ONTARIO COUNTY LANDFILL

A Division of Casella Waste Systems 1879 NYS Route 5&20 Stanley, NY 14561

Ticket: 1034652

Date: 11/29/2022

Time: 11:23:18 - 11:59:07

Customer: LE-02040/MAXYMILLIAN/24966

Carrier: GT/GOULET

Truck: RH56-D59

Truok Type: DR/DUMP TRAILER

Profile: 24966/PITTSFIELD ECO DEV, A Generator: PEDA/PITTSFIELD ECONOMIC DE

Grid: PH9-A2/PHASE P-A2

P.O.: 6092

Comment: 5

Gross: 102900 L In Scale 1:

Tare: 36140 L Out Soals 2

Not: 66760 L

Tons: 33.38

Materials & Services

Origin: MA/MASS

Material: IN/INDUSTRIAL WASTE

Quantity: 33.38 Ton Rate: \$0.00/T

Amount: \$ 0.00

NEWS NE / ONTARIO COUNTY LANDFILL A Division of Casella Waste Systems 1879 NYS Route 5&20 Stanley, NY 14561

Ticket: 1034652 Date: 11/29/2022

Total Amount:

Time: 11:23:18 - 11:59:07

Scale

\$0.00

****** Reprinted Ticket ****** Gross: 102900 L In Scale 1 Truck: RH56-D59 Tare: 36140 L Out Scale 2 Net: 66760 L

Customer: LE-02040/MAXYMILLIAN/24966

Carrier: GT/GOULET Truck Type: DUMP TRAILER

Profile: 24966/PITTSFIELD ECO DEV, AL

PO: 6092

Comment: 5

Driver: 11/20/4022 1169

Origin		ls & Services		Quantity		Rate/Unit	Amount
MA/MASS		STRIAL WASTE Tare:36140	L	33.38 Out Scal	Ton	\$0.00/T Net:66760	\$0.00

Deputy Weighmaster:

Morgan Wadhams



Massachusetts Department of Environmental Protection Bureau of Air & Waste

Material Shipping Record & Log

For the shipment of contaminated soll, urban fill, and dredge materials not subject to management under section 310 CMR 40.0035 nor manifesting under 310 CMR 30.000

Profile # 24966 Tracking Number

H. Certification of Generator

"I certify under penalties of law that I have personally examined and am familiar with the information contained in this submittal, including any and all documents accompanying this certification, and that, based on my inquiry of those individuals immediately responsible for obtaining the information contained herein is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties, including, but not limited to, possible fines and imprisonment, for willfully submitting false, inaccurate, or incomplete information."

Date (MM/DD/YYYY)
Name (Print)

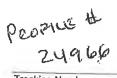
_		
I.	I. Acknowledgment of Receipt by Receiving Fa	cility
	Ontanio County Landfill Recelving Facility	
	Recelving Facility Morgan Wadhams	eneglacing (1)
	Representative (Print) Scale Operator	No.
	Tille Mwadhams	11/29/22
	Signature	Data (MM/Drivvvv)



Note: Make additional copies of this page as necessary.

Massachusetts Department of Environmental Protection Bureau of Air & Waste

Material Shipping Record & Log
For the shipment of contaminated soil, urban fill, and dredge
materials not subject to management under section 310 CMR 40.0035 nor manifesting under 310 CMR 30.000



Tracking Number

Load#: 5		
RHULETT TRUCKING	ONTARIO COU	UTY LANDFILL
Signature of transporter	Receiving facility	11:23
Time received	Date of shipment	Time of shipment
Truck/Tractor registration	Trailer registration	
Load size (cubic yards/tons)		
Load#:		
1		
Signature of transporter	Receiving facility	
Date received Time received	Date of shipment	Time of shipment
Truck/Tractor registration	Trailer registration	
Load size (cubic yards/lons)	-	
Load#:		
Signature of transporter	Receiving facility	
Date received Time received	Date of shipment	Time of shipment
ruck/Tractor registration	Trailer registration	
oad size (cubic yards/tons)	-	
og Sheet Volume Information		
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Total carried forward and this page (cubic yards/tons)

ap1034663z

NEWS NE / ONTARIO COUNTY LANDFILL

A Division of Casella Waste Systems 1879 MYS Route 5420 Stanley, WY 14561

Ticket: 1034663

Date: 11/29/2022

Time: 12:01:16 - 12:24:12

Customer: LE-02040/MAXYMILLIAN/24966

Carrier: GT/GQULET

Truck: RH42-D68

Truck Type: DR/DUMP TRAILER

Profile: 24966/PITTSFIELD ECO DEV, A

Generator: PEDA/PITASFIELD ECONOMIC DE Grid: PH9-A2/PHASE P-A2

P.O.: 6092

Gross: 99280 L In Scale 1

Tare: 35840 I Out Sqale 2

Net: 63440 L

Tons: 31.72

Materials & Services

Origin: MA/MASS

Material: IN/INDUSTRIAL WASTE

Quantity: 31.72 Ton

Rate: \$0.00/T

Amount: \$ 0.00

0.00 Total Taxes: 6

0.00 Total Amount: \$

Weighmaster: MWADHAMS

Driver:

au signing above, I declare that I did NOT

NEWS NE / ONTARIO COUNTY LANDFILL A Division of Casella Waste Systems 1879 NYS Route 5&20 Stanley, NY 14561

Ticket: 1034663 Date: 11/29/2022

Time: 12:01:16 - 12:24:12

Scale

****** Reprinted Ticket ****** Gross: 99280 L In Scale 1 Truck: RH42-D68 Tare: 35840 L Out Scale 2 Net: 63440 L

Customer: LE-02040/MAXYMILLIAN/24966

Carrier: GT/GOULET

Truck Type: DUMP TRAILER

Profile: 24966/PITTSFIELD ECO DEV, AU

PO: 6092

Comment:

Origin	Materials & Services	Quantity Unit	Rate/Unit Amount
MA/MASS	IN/INDUSTRIAL WASTE Scale Tare:35840	31.72 Ton L Out Scale	\$0.00/T \$0.00 Net:63440 L

Total Amount:

\$0.00

Driver:

Deputy Weighmaster:

Morgan Wadhams



Note: Make additional copies of this page as necessary. Massachusetts Department of Environmental Protection Bureau of Air & Waste

Material Shipping Record & Log For the shipment of contaminated soil, urban fill, and dredge

For the shipment of contaminated soil, urban fill, and dredge materials not subject to management under section 310 CMR 40.0035 nor manifesting under 310 CMR 30.000

14966 Tracking Number

. Load Information	
Load#:	
Signature of transporter 11-19-22 Date received Time received	No ONTENIO COUNTS LANDENT Receiving facility 11-19-22 12:01 pm Date of shipment Time of shipment
Truck/Tractor registration	Trailer registration D-68
Load size (cubic yards/tons) Load#:	
Signature of transporter	Receiving facility
Date received Time received	Date of shipment Time of shipment
Truck/Tractor registration	Trailer registration
Load size (cubic yards/tons)	-
Load#:	₹ .
Signature of transporter	Death of the
	Receiving facility
Date received Time received	Date of shipment Time of shipment
Truck/Tractor registration	Trailer registration
Load size (cubic yards/tons)	
Log Sheet Volume Information	
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Total carried forward and this page (cubic yards/tons)



Massachusetts Department of Environmental Protection Bureau of Air & Waste

Material Shipping Record & Log

For the shipment of contaminated soil, urban fill, and dredge materials not subject to management under section 310 CMR 40.0035 nor manifesting under 310 CMR 30.000

Tracking Number

H. Certification of Generator

"I certify under penalties of law that I have personally examined and am familiar with the information contained in this submittal, including any and all documents accompanying this certification, and that, based on my inquiry of those individuals immediately responsible for obtaining the information contained herein is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties, including, but not limited to, possible fines and imprisonment, for willfully submitting false, inaccurate, or incomplete information."

Signalure

Date (MM/DD/YYYY)

Name (Print)

Name (Print)

Acknowledgment of Receipt by Re	ceiving Facility
Ontano County Land	711
Receiving Facility MATTER Wadham S	
Representative (Print) Scale Operator	7-10
MWadhams	11/29/2022
Sinnatura	Date (MM/DD/WWV)

ap1034749z

NEWS NE / ONTARIO COUNTY LANDFILL

A Division of Casella Waste Systems Stanley, NY 14561

Ticket: 1034749

Date: 11/30/2022

Time: 06:45:15 - 07:01:56

Customer: LE-02040/MAXYMILL, TAW/24966

Carrier: ER/EVERETT RUSSELL

Truck: EA20

Truck Type: DR/DUMP TRAILER

Profile: 24966/PITTSFIELD ECO DEV, A

Generator: PEDA/PITTSFIELD ECONOMIC DE Grid: PH9-A2/PHASE P-A2

P.O.: 6092

Gross: 104780 L In Scale 1 Tare:

38340 L Out Scale 2 Net:

66440 L

NEWS NE / ONTARIO COUNTY LANDFILL A Division of Casella Waste Systems 1879 NYS Route 5&20 Stanley, NY 14561 Ticket: 1034749 Date: 11/30/2022

Time: 06:45:15 - 07:01:56

Scale

Gross: 104780 L In Scale 1
Tare: 38340 L Out Scale 2

Net: 66440 L

Customer: LE-02040/MAXYMILLIAN/24966

****** Reprinted Ticket ******

Carrier: ER/EVERETT RUSSELL

Truck Type: DUMP TRAILER

Profile: 24966/PITTSFIELD ECO DEV, AU

PO: 6092

Comment:

Truck: EA20

Origin		als & Services		Quantity Unit	Rate/Unit	Amount
MA/MASS Gross:104780 L	In	JSTRIAL WASTE Tare:38340	L	33.22 Ton Out Scale	\$0.00/T Net:66440 L	\$0.00
					Total Amount:	\$0.00

Driver: 110002020701

Deputy Weighmaster:

NANCY



Note: Make additional copies of this page as necessary.

Massachusetts Department of Environmental Protection Bureau of Air & Waste

Material Shipping Record & Log
For the shipment of contaminated soil, urban fill, and dredge
materials not subject to management under section 310 CMR 40.0035
nor manifesting under 310 CMR 30.000

Tracking Number

. Load Informati		Approv	11 # 24966
. Loau iiiioimati	on		
Load#:	01	ALL	Alex Ly
Signature of transporter	hertelf.	Receiving equity	Wen 145
Date received AAAAM Truck/Tractor registration	Time received MA	Date of shipment 31178 Trailer registration	Time of shipment
Load size (cubic yards/tons	;)	Trailer registration	1/20/2
Load#:	Ma	- Liena francisco de la constitución de la constitu	3
Signature of transporter		Receiving facility	
Date received	Time received	Date of shipment	Time of shipment
Truck/Tractor registration		Trailer registration	
Load size (cubic yards/tons)		_	
Load#:	*		
Signature of transporter		Receiving facility	
Date received	Time received	Date of shipment	Time of shipment
Truck/Tractor registration		Trailer registration	
Load size (cubic yards/tons)	4		
Log Sheet Volu	me Information		
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Total carried forward and this			

ap1034819z

NEWS NE / ONTARIO COUNTY LANDFILL

A Division of Casella Waste Systems 1879 NYS Route 5&20 Stanley, NY 14561

****** Reprinted Ticket - Edited ****

Ticket: 1034819 Date: 11/30/2022

Time: 12:04:06 - 12:25:28

Customer: LE-02040/MAXYMILLIAN/24966

Carrier: GT/GOULET

Truck: RH42

Truck Type: DR/DUMP TRAILER

Profile: 24966/PITTSFIELD ECO DEV, A Generator: PEDA/PITTSFIELD ECONOMIC DE

Grid: PH9-A2/PHASE P-A2

P.O.: 6092

Gross: 84460 L In Scale 1 Tare: 35940 L Out Scale 2

Net: 48520 L

Tons: 24.26

Materials & Services

Origin: MA/MASS

Material: IN/INDUSTRIAL WASTE

Quantity: 24.26 Ton Rate: \$0.00/T Amount: \$ 0.00

Total Taxes: \$

0.00

Total Amount: \$

0.00

Weighmanter: MANCY

Driver:

By signing above, I declare that I did NOT deposit any PROHIBITED WASTES



Note: Make additional copies of this page as necessary.

Massachusetts Department of Environmental Protection Bureau of Air & Waste

Material Shipping Record & Log
For the shipment of contaminated soil, urban fill, and dredge
materials not subject to management under section 310 CMR 40.0035 nor manifesting under 310 CMR 30,000

Tracking Number

J. Load Inform	nation		
Load#:	_ /		
R-Hullett Tull Signature of Iransport 11-30-22	Hing- Gludum	Receiving facility 11-32-12	ounty landfill
Hate received	Time received	Date of shipment	Time of shipment
Truck/Tractor registrat	ion	Trailer registration	mai ne
Load size (cubic yards	/tons)	0-68	
Load#:	-1	(A)	1
Signature of transporte	г	Receiving facility	
Date received	Time received	Date of shipment	Time of shipment
Truck/Tractor registration	on	Trailer registration	
Load size (cubic yards/t	ons)		
Signature of transporter		Receiving facility	
Date received	Time received	Date of shipment	Time of shipment
ruck/Tractor registration		Trailer registration	
oad size (cubic yards/to	ns)		
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Massachusetts Department of Environmental Protection Bureau of Air & Waste

Material Shipping Record & Log

For the shipment of contaminated soil, urban fill, and dredge materials not subject to management under section 310 CMR 40.0035 nor manifesting under 310 CMR 30.000

Tracking Number

H. Certification of Generator

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Signature

Signature

1/22/2022

Date (MM/DD/9777)

Michael CONKLEY

Name (Print)

I. Acknowledgment of Receipt by Receiving Facility

Receiving Facility

Representative (Prin

Title

Signatur

Date (MM/DD/YYYY)

ap1034806z

NEWS NE / ONTARTO COUNTY LANDFILL

A Division of Casella Waste Systems 1879 NYS Route 5&20 Stanley, NY 14561

Ticket: 1034806 Date: 11/30/2022

Time: 11:27:53 - 11:47:04

Customer: LE-02040/MAXYMILLIAN/24966

Carrier: GT/GOULET Truck: RH56-D59

Truck Type: DR/DUMP TRAILER

Profile: 24966/PITTSFIELD ECO DEV, A Generator: PEDA/PITTSFIELD ECONOMIC DE

Grid: PH9-A2/PHASE P-A2

Manifest: 56 P.O.: 6092

Comment: LOAD 8

Gross: 94180 L In Scale 1 - Tare: 36180 L Out Scale 2

Net: 58000 L

Tons: 29.00

Materials & Services

Ordgin: MA/MASS

Material: IN/INDUSTRIAL WASTE

Quantity: 29.00 Ton Rate: \$0.00/T Amount: \$ 0.00

> Total Taxes: \$ 0.00 Total Amount: \$ 0.00

otal Amount: \$ 0.00

Weighmaster: MWADHAMS

Driver:

By signing above, I declare that I did NOT deposit any PROHIBITED WASTES



Note: Make additional copies of this page as necessary.

Massachusetts Department of Environmental Protection Bureau of Air & Waste

Material Shipping Record & Log For the shipment of contaminated soil, urban fill, and dredge

For the shipment of contaminated soil, urban fill, and dredge materials not subject to management under section 310 CMR 40.0035 nor manifesting under 310 CMR 30.000

24966; Tracking Number

Load Informat	ion	59-	
Load#: 8			
B. HULETT TR	JUKING	CNTARIO CON	Alexa in In Pro-
Signature of transporter	hart.	Receiving facility	NTY LANDPILL
11/30/22	1AM	11/30/22	11:20
Date received	Time received	Date of shipment	
560		0.59	Time of shipment
Truck/Tractor registration		Trailer registration	
30 TOW		Togistization	
Load size (cubic yards/tons	3)		
Load#:			
Signature of transporter		Receiving facility	
Date received	-		
Date tecelifed	Time received	Date of shipment	Time of shipment
Truck/Tractor registration		Trailer registration	4
		real of registration	
Load size (cubic yards/tons)			
Load#:			5
Name to see 5	00		
Signature of transporter		Receiving facility	
Date received	Time received	Date of shipment	Time of shipment
ruck/Tractor registration		Trailer registration	
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Massachusetts Department of Environmental Protection Bureau of Air & Waste

Material Shipping Record & Log

For the shipment of contaminated soil, urban fill, and dredge materials not subject to management under section 310 CMR 40.0035 nor manifesting under 310 CMR 30.000

24960 ;

H. Certification of Generator

"I certify under penalties of law that I have personally examined and am familiar with the information contained in this submittal, including any and all documents accompanying this certification, and that, based on my inquiry of those individuals immediately responsible for obtaining the information contained herein is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties, including, but not limited to, possible fines and imprisonment, for willfully submitting false, inaccurate, or incomplete information."

Signature

Date (MM/DD/YYYY)

Name (Pdnt)

Name (Pdnt)

. Acknowledgment of Receipt by	Receiving Facility
Onfario County Landfill	/
Morran (Madha m)	100
Representative (Print)	
Tille MIL College	
Signature Signature	1/30/2020 Date (MM/DD/VVV)

ap1034873z

NEWS NE / ONTARIO COUNTY LANDFILL

A Division of Casella Waste Systems 1879 MYS Route 5±20 Stanley, MY 14561

Ticket: 1034973 Date: 12/1/2022

Time: 06:51:23 - 07:20:02

Chatomer: LE 02040/HANYMILLIAN/24966

Carrier: GT/HOULET Truck: 2320 110

Truck Type: DR/DUMP TRAILER

Profile: 24966/PTTTSFIELD ECO DEV, A Generator: PEDA/SITTSFIELD ECONOMIC DE

Grid: PH9-AC/PHASE P AC

P.O.: 6092

Gross. /11900 L In Scale 1 face: 36540 L Out. Scale 2

Net: 75360 L

Tons: 37.68

Materials & Services

Grigin: MA/MASS

Material: IN/INDUSTRIAL WASTE

Quantity: 37_68 Ton Rate: \$0.00/T Amount: \$ 0.00

> Total Taxes: \$ 0. Total Amount: \$ 0.

Weighmastel: MANIT

Driver

By signing above, I declare that I did NOT deposit any PROHIBITED WASTES

į.





Material Shipping Record & Log
For the shipment of contaminated soil, urban fill, and dredge
materials not subject to management under section 310 CMR 40.0035 nor manifesting under 310 CMR 30.000

Tracking Number

24966

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	Load#: Signature of transporter	Possible feetile	,
	Date received Time received	Receiving facility	
K	Title received	Date of shipment	Time of shipment
	Truck/Tractor registration Load size (cubic yards/tons)	Trailer registration	
	Load#:		
	Signature of transporter	Receiving facility	
	Date received Time received	Date of shipment	Time of shipment
	Truck/Tractor registration	Trailer registration	
	Load size (cubic yards/tons)		
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	Total carried forward and this page (cubic yards/tons)		



Massachusetts Department of Environmental Protection Bureau of Air & Waste

Material Shipping Record & Log
For the shipment of contaminated soll, urban fill, and dredge

For the shipment of contaminated soll, urban fill, and dredge materials not subject to management under section 310 CMR 40.0035 nor manifesting under 310 CMR 30.000

Tracking Number

H. Certification of Generator

"I certify under penalties of law that I have personally examined and am familiar with the information contained in this submittal, including any and all documents accompanying this certification, and that, based on my inquiry of those individuals immediately responsible for obtaining the information contained herein is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties, including, but not limited to, possible fines and imprisonment, for willfully submitting false, inaccurate, or incomplete information."

Date (MINDOWN)
Name (Print)
Name (Print)

I. Acknowledgment of Receipt by Receiving Facility

Receiving Facility

Representative (Print)

Title

Signature

Date (MM/DD/YYYY)

Post-Work Notification Water Quality Basin – North Forebay William Stanley Business Park, Pittsfield

APPENDIX C

Photographs

3937.0001M000.101.AP-CV



North Forebay March 2022 (facing north)



North Forebay December 2022 (facing north)



Overflow Weir March 2022 (facing west)



Overflow Weir December 2022 (facing west)



View of restored north forebay December 2022 (facing west)

Post-Work Notification Water Quality Basin – North Forebay William Stanley Business Park, Pittsfield

APPENDIX D

Post-Work Notification

3937.0001M000.101.AP-CV

Bk: 06937 Pg: 321

EXHIBIT E

POST-WORK NOTIFICATION FORM FOR PROPERTY WITH ENVIRONMENTAL RESTRICTION AND EASEMENT

I. General Information

Type of work:	Excavation of greater than five (5) cubic feet and less than or equal to ten (10) cubic yards in the top six feet (per Second Amended Grant Paragraph 4.A)
(check all that apply)	Excavation of any volume in the top six feet (per Second Amended Grant Paragraph 4.B)
	Excavation of ten (10) cubic yards or less that is in whole or in part deeper than top foot (per Second Amended Grant Paragraph 4.C)
	 Surface and/or subsurface excavation for Utility Maintenance Work at any depth (per Second Amended Grant Paragraph 4.D)
	Subsurface excavation for construction of new utilities (per Second Amended Grant Paragraph 4.E)
	Subsurface excavation for construction or placement of Buildings (per Second Amended Grant Paragraph 4.F)
	Water Quality Basin Maintenance Work (per Second Amended Grant Paragraph 4.H)
	Net Cut (per Second Amended Grant Paragraph 4.I)
	Emergency excavation (per Second Amended Grant Paragraph 8)
Property Addres	ss: PEDA Former 30s Complex - East Street, Pittsfield, MA
Tax Parcel ID:	No. I10-4-101
	II. Description of Excavation Activities
Start date of exc	avation/soil disturbance: November 21, 2022
End date of exca	avation/soil disturbance: December 1, 2022
Amount of soil	excavated or moved: 304 tons of sediment removed from north forebay
Any soil or othe Area? X	r excavated material moved out of the General Commercial Area, BIC Area or Water Quality Basin es No
Excavation dime	ensions (approximate length x width x depth, in feet): Area of north forebay, est. 5,000 sq.ft.
	roject unless previously submitted (attach extra sheets, if necessary; identify date if previously cavation and landfill disposal of sediments from north forebay of
	ter quality basin
	sults in one or more Net Cuts:

Bk: 06937 Pg: 322

Volume of each Net Cut (cubic yards): NA	
Aggregate area of all Net Cuts at the Property, including the current project (square feet): NA	
Aggregate volume of all Net Cuts at the Property, including the current project (cubic yards): N	٦
Final disposition of soil (attach grading or other plans showing disposition of soil on the Property, or bills of and certificates of disposal, if applicable): Ontario County Landfill, Stanley NY	f ladin
Attach a plan (e.g., a copy of the Plan of Restricted Areas), unless previously submitted, or if boundaries of a the restricted areas (i.e. General Commercial Area, BIC Area or Water Quality Basin Area) have changed, a Plan of Restricted Areas showing: (if previously submitted, identify date submitted	
(1) location of excavation(s) within the property(2) direction	
(3) major site features (e.g., roads, buildings, edges of pavement/barriers, locations of utilities if knot (4) location of disposition of soil/materials, if on the Property	own)
Attach photographs of work area prior to work, during work and post-restoration work, if available (optional).
Was soil sampling and analysis conducted? X_YesNo	
If Yes, attach analytical results and show sampling locations (and indicate depths) on an attached plan unless previously submitted (if previously submitted, identify date submitted:).	,
Were the Health and Safety Protocol and/or the Soil Management Protocol and/or the Inspection, Monitoring Maintenance Plan (as defined in the ERE Second Amended Grant), if applicable, followed? (check each that applies ¹)	
 X Health and Safety Protocol was followed X Soil Management Protocol was followed Inspection, Maintenance and Monitoring Plan was followed Not Applicable 	
III. Additional Information for Emergency Excavation	
If work was conducted as an Emergency Excavation (see Paragraph 8 ("Emergency Excavation") of the Sec Amended Grant):	ond
 Attach an opinion and completion report prepared by an LSP (or other appropriately trained professional authorized by the Second Amended Grant) (including copy of written plan for restoration). Date and time property owner first obtained knowledge of the emergency: NA Date and time property owner provided oral notification of the emergency to DEP: NA 	as
IV. Signature	
Two signatures are required (except for excavation pursuant to Second Amended Grant paragraph 4.A where the owner or person conducting the work must sign). The property owner, or person conducting the work if of	
See note 3 in Section V ("Notes About the Use of this Form"), below.	

than the property owner, and the Licensed Site Professional who has overseen the work, must each complete and sign the statement, below.

Owner or person conducting the work if other than the property owner:

•
I, Michael Coakley , to the best of my knowledge and belief, state that the material information contained in this submittal is true, accurage and complete.
Signature: May low
Name/Title: Michael Coakley, Interim Executive Director
Organization: Pittsfield Economic Development Authority
Address: P.O. Box 617, Pittsfield, MA 01202-0167
Telephone #: 413-448-9726
Relationship to site:
Licensed Site Professional:
, Edward Weagle to the best of my knowledge and belief, state that the material information contained in this submittal is true, accurate and complete.
Signature:
Name/Title: Edward J. Weagle, Principal Geologist
Organization: Roux Associates, Inc.
Address: 200 Summit Drive, Burlington, MA 01801
Telephone #:413-312-8782
Relationship to site: PEDA's Licensed Site Professional

V. Notes About the Use of this Form

- (1) This form is due no later than thirty (30) days after completion of the permitted activities and uses under Paragraph 4 ("Permitted Activities and Uses") of the Second Amended Grant, except that for activities and uses under Paragraph 4.I of the Second Amended Grant ("Excavation for Net Cuts") this form is due no later than seven (7) days after completion of the Net Cut(s). Immediate notification is required for Emergency Excavation pursuant to Paragraph 8 ("Emergency Excavation") of the Second Amended Grant. This form is required for the postemergency excavation notice required by Paragraph 8 of the Second Amended Grant.
- (2) Separate, 15 days' advance written notice is required for work conducted under Paragraph 4.B ("Excavation of any Volume in the Top Six Feet") of the Second Amended Grant, Paragraph 4.D ("Surface and/or Subsurface Excavation for Utility Maintenance Work at any Depth"), and Paragraph 4.I ("Excavation for Net Cuts") of the Second Amended Grant. Separate advance notification requirements also apply to work conducted under Paragraph 4.E ("Subsurface Excavation for Construction of New Utilities") and Paragraph 4.F ("Subsurface Excavation for Construction or Placement of Buildings").

Bk: 06937 Pg: 324

(3) The Health and Safety Protocol and the Soil Management Protocol do not apply to the Permitted Activities and Uses set forth in Paragraphs 4.A ("Excavation of Ten (10) Cubic Yards or Less in the Top Six Feet of the General Commercial Area and BIC Area).

VI. Where to Submit this Form

Submit this completed form, via certified mail, to:

MA Department of Environmental Protection Bureau of Waste Site Cleanup, Special Projects

436 Dwight Street

Springfield, Massachusetts 01103

(Attn.: GE Housatonic Removal Action Project Manager)

Submit a copy of this form, via certified mail, to:

U.S. Environmental Protection Agency Office of Site Remediation and Restoration

Five Post Office Square,

Suite 100 -- Mail Code OSRR-07

Boston, MA 02109-3912

Attn: GE-Pittsfield/Housatonic River Site



Source Identification

Source Identification Report NPDES Permit No. MA0040231

PITTSFIELD ECONOMIC DEVELOPMENT AUTHORITY WILLIAM STANLEY BUSINESS PARK OF THE BERKSHIRES PITTSFIELD, MASSACHUSETTS

OCTOBER 2023

Table of Contents

1.0	INTRODUCTION	1
	STORMWATER CONVEYANCE SYSTEM	
2.	.1 South Side Park	2
2.	.2 North Side Park	2
2.	.3 OFF-SITE RESIDENTIAL AND COMMERCIAL PROPERTIES	3
2.	.4 CSX Railroad Corridor	3
3.0	SOURCE IDENTIFICATION	4
4.0	SUMMARY OF HISTORICAL DATA	5
	.1 SUMMARY OF ANALYTICAL RESULTS - OUTFALL 001	
	.2 SUMMARY OF ANALYTICAL RESULTS - FOREBAY SEDIMENT SAMPLING	
4.	.3 SUMMARY OF ANALYTICAL RESULTS - HISTORICAL SAMPLING FOR PCBs IN SOILS	7

i

ATTACHMENTS

Attachment A Stormwater Conveyance Figures

Attachment B City of Pittsfield – Stormwater Sewer Map

Attachment C Source Identification Tables

1.0 INTRODUCTION

Under the authority of the Federal Clean Water Act, as amended (33 U.S.C. §1251 et seq.; the "CWA"), and the Massachusetts Clean Waters Act, as amended, (M.G.L. Chap. 21 §§26-53), the National Pollutant Discharge Elimination System (NPDES) Permit No. MA0040231 (the Permit) requires the Pittsfield Economic Development Authority (PEDA) evaluate the stormwater conveyance system and properties for potential sources of PCBs or other site-related contaminants that contribute to the discharge from PEDA's Outfall 001.

This report addresses the source identification requirement of the Permit issued on August 18, 2021, by the U.S. Environmental Protection Agency (EPA) and the Commonwealth of Massachusetts Department of Environmental Protection (MassDEP). The Permit issued to PEDA (the Permittee), was effective as of November 1, 2021, expires on October 31, 2026, and superseded NPDES Permit No. MA0003891. The Permit incorporates certain requirements of the 2021 NPDES Multi-Sector General Permit (MSGP) and the EPA 2017 General Permit for Remediation Activity Discharges (RGP).

PEDA is responsible for stormwater management associated with activities at the William Stanley Business Park of the Berkshires (WSBP or the Site) located in Pittsfield, MA. WSBP is bounded by East Street, Silver Lake Boulevard, Kellogg Street, and Tyler Street and consists of South Side Park and North Side Park which are separated by the CSX railroad corridor. Figure 1 of the SWPPP shows the areas associated with the WSBP. The drainage area subject to the Permit also includes privately-owned residential and commercial properties north of the WSBP and connected to the Site by means of the City of Pittsfield's stormwater conveyance system. The stormwater management system and discharge location (Outfall 001) are in the south side park. Figure 2 of the SWPPP illustrates the drainage area subject to the Permit.

2.0 STORMWATER CONVEYANCE SYSTEM

PEDA's stormwater drainage basin includes stormwater generated from the following areas:

- former GE 20s and 30s complexes (south side park);
- former GE 19s and 40s complexes (north side park);
- off-site residential and commercial properties (north of the WSBP); and
- the CSX railroad corridor (which separates the north and south side parks).

Figure 2 of the SWPPP illustrates the location of the four former GE complexes. The WSBP's stormwater conveyance system is shown on several figures included in Appendix A.

2.1 South Side Park

The south side park is comprised of the former GE 20s and 30s complexes; these two areas are separated by Woodlawn Avenue. South side park underwent redevelopment of the stormwater collection and conveyance systems in 2008. The redevelopment included the installation of the water quality basin, the north and south forebays, stormwater catch basins and underground piping. Currently the former GE 30s complex includes the following significant structures:

- The water quality basin and two adjoining north and south forebays;
- Outfall 001 including a concrete conduit below Silver Lake Boulevard which conveys all stormwater from water quality basin (and the WSBP) into Silver Lake;
- MountainOne bank: and
- Berkshire Innovation Center (BIC).

These features are shown on Figure 2 of the SWPPP.

The former GE 20's complex currently includes a large, paved parking lot.

2.2 North Side Park

The north side park is comprised of the former GE 19s and 40s complexes. The former GE 19s complex was initially part of GE's "East Street Area 2-North" property as described in the Consent Decree (CD) for the GE-Pittsfield/Housatonic River Site. The north side park has not undergone the same level of redevelopment as the south side park and currently mostly utilizes the preexisting stormwater conveyance system. Both complexes have had modifications to the existing stormwater conveyance systems including the closure of some catch basins and piping.

These features are shown on Figure 2 of the SWPPP.

In 2022, PEDA contracted ROUX Associates, Inc. to manage the redevelopment of the former GE 19s complex including replacement of the stormwater management system.

2.3 Off-Site Residential and Commercial Properties

There are approximately ninety-one acres of off-site residential and commercial properties which discharge stormwater into the WSBP's stormwater conveyance system. This discharge is collected and managed by the City of Pittsfield's stormwater sewer system and enters the WSBP's stormwater conveyance system at the north side park, on the former GE 40s complex. The approximate location of this connection and the extent of the City of Pittsfield's stormwater conveyance system that discharges to the WSBP is shown in Attachment A.

2.4 CSX Railroad Corridor

The CSX railroad corridor was historically utilized by GE for various industrial activities and previously included direct connections to portions of the WSBP. These direct connections were entirely removed or disconnected. Currently there is only one catch basin located on the portion of the CSX railroad corridor between the north and south sides of the WSBP. This catch basin is connected to the stormwater piping between the former GE 19s and 40s complexes.

3.0 SOURCE IDENTIFICATION

This source identification study focused on identifying possible sources of polychlorobiphenyls (PCB) that impact the effluent discharged from PEDA's outfall 001. One of the primary potential sources of PCBs is the non-aqueous phase liquid (NAPL) contaminated groundwater present on some areas of the former GE Pittsfield complex.

Included in Attachment C of this report are the source identification tables. These tables summarize both empirical and observational data and reflect, to the fullest extent possible, PEDA's knowledge of the former GE complexes that comprise the WSBP.

PEDA's NPDES Permit No. MA0040231 outlines the following potential sources of contamination used as the basis for this investigation:

- Residual presence of PCBs in soils, and other surfaces exposed to stormwater;
- Residual presence of PCBs in pipes, catch basins, and other conveyance system structures;
- Infiltration of groundwater into the conveyance system on PEDA property;
- Infiltration of groundwater directly into the water quality basin;
- PCBs in sediment in the forebays and water quality basin being resuspended;
- Onflow from offsite that contributes to the Outfall 001 conveyance system; and,
- Inflow from illicit connections to PEDA's conveyance system.

While no sources of pollution were identified through this investigation, there are areas on the WSBP that have not been ruled out as potential sources of PCB contamination. These areas include the following:

- Stormwater conveyance systems located on the former GE 19s and 40s complexes which have not yet been redeveloped or modified following their initial demolishing and partial closure of stormwater management systems.
- Surface and subsurface soil on the 19s and 40s complexes that contain low levels of PCBs (see Table 3).

Additionally, PEDA has not performed a comprehensive study of the inflow of stormwater from the residential and commercial properties or from the CXS railroad catch basin as potential sources of pollution due to the uncontrolled nature of these portions of the stormwater drainage basin.

4.0 SUMMARY OF HISTORICAL DATA

Historical data were compiled from various sources and used as the basis for the source identification of PCB contamination. These data were summarized and are presented in this section of the report. These data reflect, to the best of PEDA's and BEC's knowledge, an accurate depiction of the Site as it pertains to the identification of sources of PCB contamination.

4.1 Summary of Analytical Results - Outfall 001

Monthly monitoring has been conducted at Outfall 001 since 2010. Table 1 below provides a summary of monitoring data from 2018 through 2022.

Table 1: Summary of Outfall 001 Monthly Monitoring (2018 – 2022)^a

Monitoring	Monthly Min	Monthly Max	TSS	O+G	Total PCB
Period	pH (S.U.)	pH (S.U.)	(mg/L)	(mg/L)	(μg/L)
Jan 2018	7.61	8.60	25.0	< 2.8	0.1500
Feb 2018	7.02	7.90	4.2	< 1.5	< 0.1300
Mar 2018	7.75	8.03	8.3	< 1.4	< 0.4000
Apr 2018	8.01	8.34	61.0	1.4	0.0340
May 2018	7.72	8.17	8.6	< 1.6	0.0630
Jun 2018	7.12	7.71	2.1	< 1.4	0.0099
Jul 2018	6.72	6.72	< 3.1	< 1.5	< 0.0400
Aug 2018	6.30	7.30	4.4	< 1.6	< 0.0440
Sep 2018	7.01	7.44	9.2	2.1	< 0.0400
Oct 2018	7.28	7.82	8.0	< 1.6	< 0.0400
Nov 2018	7.48	7.91	7.8	< 1.6	< 0.0420
Dec 2018	7.72	8.20	6.0	< 1.6	0.0270
Jan 2019	7.41	7.79	23.0	< 1.8	< 0.0440
Feb 2019	7.25	7.83	24.0	2.6	0.0235
Mar 2019	7.24	8.04	49.0	< 1.4	< 0.0834
Apr 2019	7.80	8.16	46.0	< 1.6	< 0.0800
May 2019	7.48	8.03	26.0	< 1.6	< 0.0800
Jun 2019	6.82	7.33	82.0	< 1.6	< 0.0834
Jul 2019	6.71	7.35	14.0	< 1.4	< 0.0412
Aug 2019	6.83	6.83	4.5	< 1.6	< 0.0824
Oct 2019		No dischar	ge during monitor	ing period.	
Nov 2019	6.84	6.96	11.0	< 1.6	0.0627
Dec 2019	7.19	7.48	1.1	< 1.6	< 0.0416
Jan 2020	7.59	8.13	6.4	< 1.5	< 0.0404
Feb 2020	7.85	8.06	5.0	< 1.5	< 0.0408
Mar 2020	8.11	8.42	2.0	< 1.5	< 0.0400
Apr 2020	7.89	8.31	15.0	< 1.6	< 0.0400
May 2020	7.56	8.43	130.0	< 1.6	< 0.0434
Jun 2020	7.78	8.37	11.0	< 1.5	< 0.0404

Monitoring	Monthly Min	Monthly Max	TSS	O+G	Total PCB
Period	pH (S.U.)	pH (S.U.)	(mg/L)	(mg/L)	(μg/L)
Jul 2020	6.95	7.63	6.6	< 1.6	< 0.0400
Aug 2020	6.61	6.62	12.0	< 1.4	< 0.0400
Sep 2020	6.41	6.41	< 9.6	< 1.8	< 0.0416
Oct 2020		No dischar	ge during monitor	ing period.	
Nov 2020	7.82	7.96	< 4.5	< 1.4	0.1272
Nov 2020	7.05	7.97	8.0	< 2.8	0.0825
Dec 2020	7.07	7.07	22.0	< 1.4	< 0.4120
Jan 2021	7.00	8.21	4.0	< 1.4	< 0.0228
Feb 2021		No dischar	ge during monitor	ing period.	
Mar 2021	7.60	8.30	4.6	< 1.6	0.0791
Apr 2021	6.96	7.43	11.0	< 1.4	0.0211
May 2021	7.08	7.62	56.0	2.8	0.0584
Jun 2021	7.32	7.51	360.0	4.7	0.0479
Jul 2021	7.20	7.75	15.0	4.2	< 0.0386
Aug 2021	7.14	7.37	7.3	< 1.6	0.0241
Sep 2021	7.16	7.31	8.4	1.6	< 0.0394
Oct 2021	7.17	7.54	6.0	< 1.4	0.0814
Nov 2021	7.23	7.29	25.0	< 1.6	< 0.0816
Dec 2021	7.23	7.23	6.2	< 1.4	< 0.0852
Jan 2022	7.51	7.51	2.2	< 2.8	< 0.0808
Feb 2022	7.31	7.31	36.0	< 2.8	< 0.0800
Mar 2022	7.36	7.36	4.6	< 1.5	< 0.0800
Apr 2022	7.68	7.68	4.0	< 1.7	< 0.0824
May 2022	7.31	7.31	2.6	< 1.6	< 0.0834
Jun 2022	7.57	7.57	25.0	< 1.5	< 0.0816
Jul 2022	7.48	7.48	27.0	< 1.6	< 0.0824
Aug 2022		No dischar	ge during monitor	ring period.	
Sep 2022	7.06	7.06	3.2	< 1.5	< 0.0820
Oct 2022	7.23	7.23	14.0	< 1.6	< 0.0816
Nov 2022	7.42	7.42	7.0	< 1.6	< 0.0808
Dec 2022	7.38	7.38	5.6	< 1.4	< 0.0800

Note:

4.2 Summary of Analytical Results - Forebay Sediment Sampling

BEC has conducted sediment sampling in the north forebay on six separate occasions for the purpose of excavating and disposing of accumulated sediment. In November 2022, PEDA contracted ROUX Associates, Inc. to oversee maintenance and repairs to the north forebay and excavate and dispose of the accumulated sediment. Table 2 below provides the average PCB and total petroleum hydrocarbon (TPH) concentrations identified at the time the samples were collected.

a – Analytical data compiled from historical DMR data.

Table 2: Summary of PCB and TPH Forebay Results

Year	Avg. Total PCB Conc. (mg/kg dry) ^a	TPH (C9-C36) Conc. (mg/kg dry) ^a
2018	3.10	1900
2019	0.93	1000
2020	0.95	710
2021	0.56	1200
2022	1.43	1995

Notes:

a – Analyses requested by PEDA and Managed by BEC.

4.3 Summary of Analytical Results - Historical Soil Sampling

Soil sampling was completed at all four of the former GE complexes as part of the property transfer from GE to PEDA. These results were summarized in the completion reports for these four areas. Table 3 provides the average PCB concentrations from 0-1 feet below ground surface for both paved and unpaved surfaces in each of the four former GE complexes:

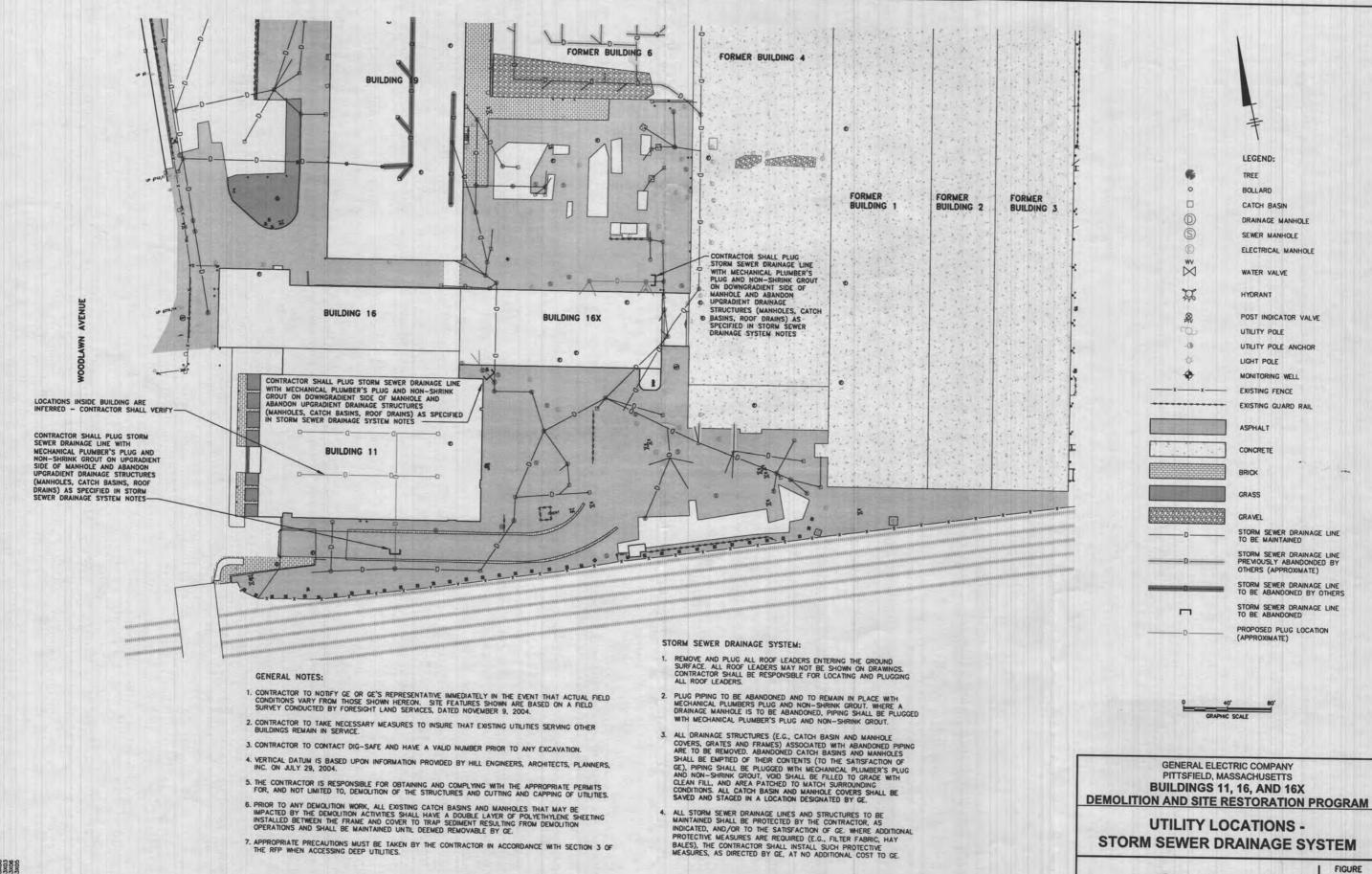
Table 3: Summary of PCBs in Surface Soils on Former GE Sites

Evaluated Parameter	19s Complex ^a	20s Complex ^b	30s Complex ^c	40s Complex ^d
Avg. PCB Conc. in Soil (unpaved, 0- to 1-foot depth)	1.4 ppm	8.12 ppm	12.39 ppm	3.72 ppm
Avg. PCB Conc. in Soil (paved and unpaved, 0-to 1-foot depth)	3.3 ppm	9.47 ppm	7.32 ppm	3.09 ppm

Notes:

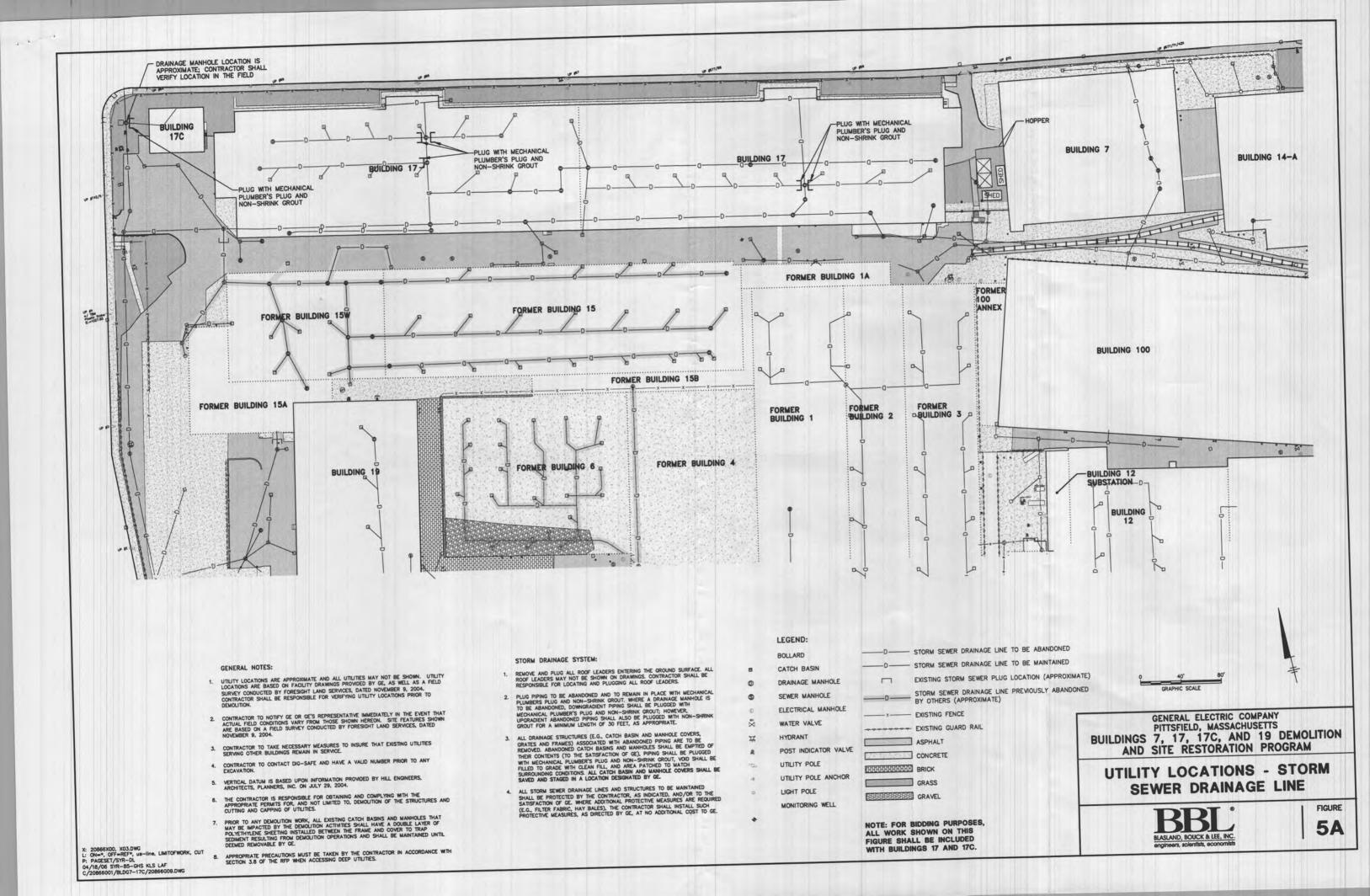
- a Final Completion Report for East Street Area 2-North Removal submitted to EPA by GE in January 2012.
- b Final Completion Report for the 20s Complex Removal Action submitted by GE in March 2005.
- Final Completion Report for the 30s Complex Removal Action submitted by GE in March 2005.
- d Final Completion Report for the 40s Complex Removal Action submitted by GE in January 2011.

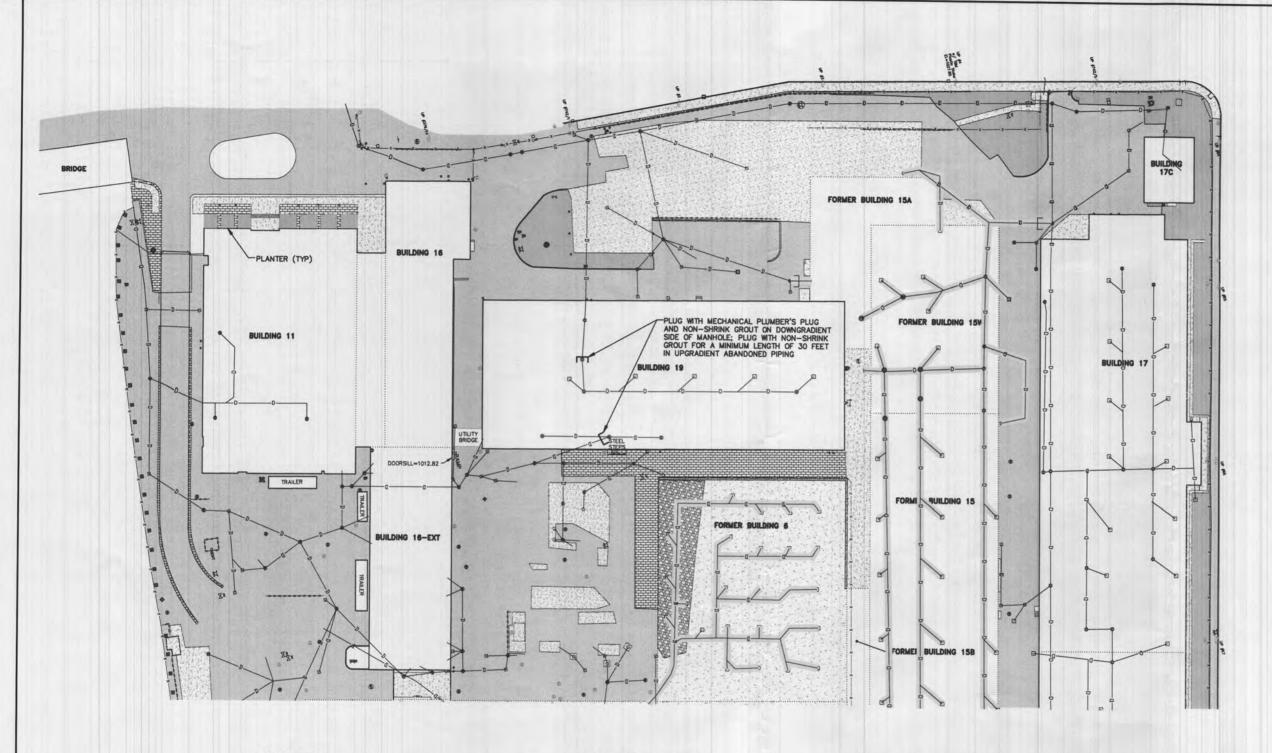
ATTACHMENT A STORMWATER CONVEYANCE FIGURES



5

ARCADIS BBL





GENERAL NOTES:

- UTILITY LOCATIONS ARE APPROXIMATE AND ALL UTILITIES MAY NOT BE SHOWN. UTILITY LOCATIONS ARE BASED ON FACILITY DRAWINGS PROVIDED BY GE, AS WELL AS A FIELD SURVEY CONDUCTED BY FORESIGHT LAND SERVICES, DATED NOVEMBER 9, 2004. CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING UTILITY LOCATIONS PRIOR TO DEMOLITION.
- CONTRACTOR TO NOTIFY GE OR GE'S REPRESENTATIVE IMMEDIATELY IN THE EVENT THAT ACTUAL FIELD CONDITIONS VARY FROM THOSE SHOWN HEREON. SITE FEATURES SHOWN ARE BASED ON A FIELD SURVEY CONDUCTED BY FORESIGHT LAND SERVICES, DATED NOVEMBER 9, 2004.
- DATED NOVEMBER 9, 2004.
 CONTRACTOR TO TAKE NECESSARY MEASURES TO INSURE THAT EXISTING UTILITIES SERVING OTHER BUILDINGS REMAIN IN SERVICE.
- CONTRACTOR TO CONTACT DIG-SAFE AND HAVE A VALID NUMBER PRIOR TO ANY EXCAVATION.
- VERTICAL DATUM IS BASED UPON INFORMATION PROVIDED BY HILL ENGINEERS, ARCHITECTS, PLANNERS, INC. ON JULY 29, 2004.

GENERAL NOTES (CONTINUED):

- THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING AND COMPLYING WITH THE APPROPRIATE PERMITS FOR, AND NOT LIMITED TO, DEMOLITION OF THE STRUCTURES AND CUTTING AND CAPPING OF UTILITIES.
- 7. PRIOR TO ANY DEMOLITION WORK, ALL EXISTING CATCH BASINS AND MANHOLES THAT MAY BE IMPACTED BY THE DEMOLITION ACTIVITIES SHALL HAVE A DOUBLE LAYER OF POLYETHYLENE SHEETING INSTALLED BETWEEN THE FRAME AND COVER TO TRAP SEDIMENT RESULTING FROM DEMOLITION OPERATIONS AND SHALL BE MAINTAINED UNTIL DEEMED REMOVABLE BY GE.
- APPROPRIATE PRECAUTIONS MUST BE TAKEN BY THE CONTRACTOR IN ACCORDANCE WITH SECTION 3.8 OF THE RFP WHEN ACCESSING DEEP UTILITIES.

STORM DRAINAGE SYSTEM:

- REMOVE AND PLUG ALL ROOF LEADERS ENTERING THE GROUND SURFACE. ALL ROOF LEADERS MAY NOT BE SHOWN ON DRAWINGS. CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING AND PLUGGING ALL ROOF LEADERS.
- 2. PLUG PIPING TO BE ABANDONED AND TO REMAIN IN PLACE WITH MECHANICAL PLUMBERS PLUG AND NON-SHRINK GROUT. WHERE A DRAINAGE MANHOLE IS TO BE ABANDONED, DOWNGRADIENT PIPING SHALL BE PLUGGED WITH MECHANICAL PLUMBER'S PLUG AND NON-SHRINK GROUT; HOWEVER, UPGRADIENT ABANDONED PIPING SHALL ALSO BE PLUGGED WITH NON-SHRINK GROUT FOR A MINIMUM LENGTH OF 30 FEET, AS APPROPRIATE.
- 3. ALL DRAINAGE STRUCTURES (E.G., CATCH BASIN AND MANHOLE COVERS, GRATES AND FRAMES) ASSOCIATED WITH ABANDONED PIPING ARE TO BE REMOVED. ABANDONED CATCH BASINS AND MANHOLES SHALL BE EMPTIED OF THEIR CONTENTS (TO THE SATISFACTION OF GE), PIPING SHALL BE PLUGGED WITH MECHANICAL PLUMBER'S PLUG AND NON-SHEINK GROUT, VOID SHALL BE FILLED TO GRADE WITH CLEAN FILL, AND AREA PATCHED TO MATCH SURROUNDING CONDITIONS. ALL CATCH BASIN AND MANHOLE COVERS SHALL BE SAVED AND STAGED IN A LOCATION DESIGNATED BY GE.
- 4. ALL STORM SEWER DRAINAGE LINES AND STRUCTURES TO BE MAINTAINED SHALL BE PROTECTED BY THE CONTRACTOR, AS INDICATED, AND/OR TO THE SATISFACTION OF GE. WHERE ADDITIONAL PROTECTIVE MEASURES ARE REQUIRED (E.G., FILTER FABRIC, HAY BALES), THE CONTRACTOR SHALL INSTALL SUCH PROTECTIVE MEASURES, AS DIRECTED BY GE, AT NO ADDITIONAL COST TO GE.



LEGEND:

- TREE BOLLARD
- CATCH BASIN
- DRAINAGE MANHOLE
- SEWER MANHOLE
- ELECTRICAL MANHOLE
- WATER VALVE

H

- HYDRANT
 POST INDICATOR VALVE
- UTILITY POLE
- UTILITY POLE ANCHOR
- LIGHT POLE
- MONITORING WELL
- STORM SEWER DRAINAGE LINE TO BE MAINTAINED
 - STORM SEWER DRAINAGE LINE TO BE ABANDONED
 - EXISTING STORM SEWER PLUG LOCATION (APPROXIMATE)
 - STORM SEWER DRAINAGE LINE
 PREVIOUSLY ABANDONED BY OTHERS
- (APPROXIMATE)

 EXISTING FENCE
- EXISTING GUARD RAIL
- ASPHALT
- CONCRETE
- BRICK
- GRASS
- GRAVEL

NOTE: FOR BIDDING PURPOSES, ALL WORK SHOWN ON THIS FIGURE SHALL BE INCLUDED WITH BUILDING 19.



GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS
BUILDINGS 7, 17, 17C, AND 19 DEMOLITION
AND SITE RESTORATION PROGRAM

UTILITY LOCATIONS -STORM SEWER DRAINAGE LINE

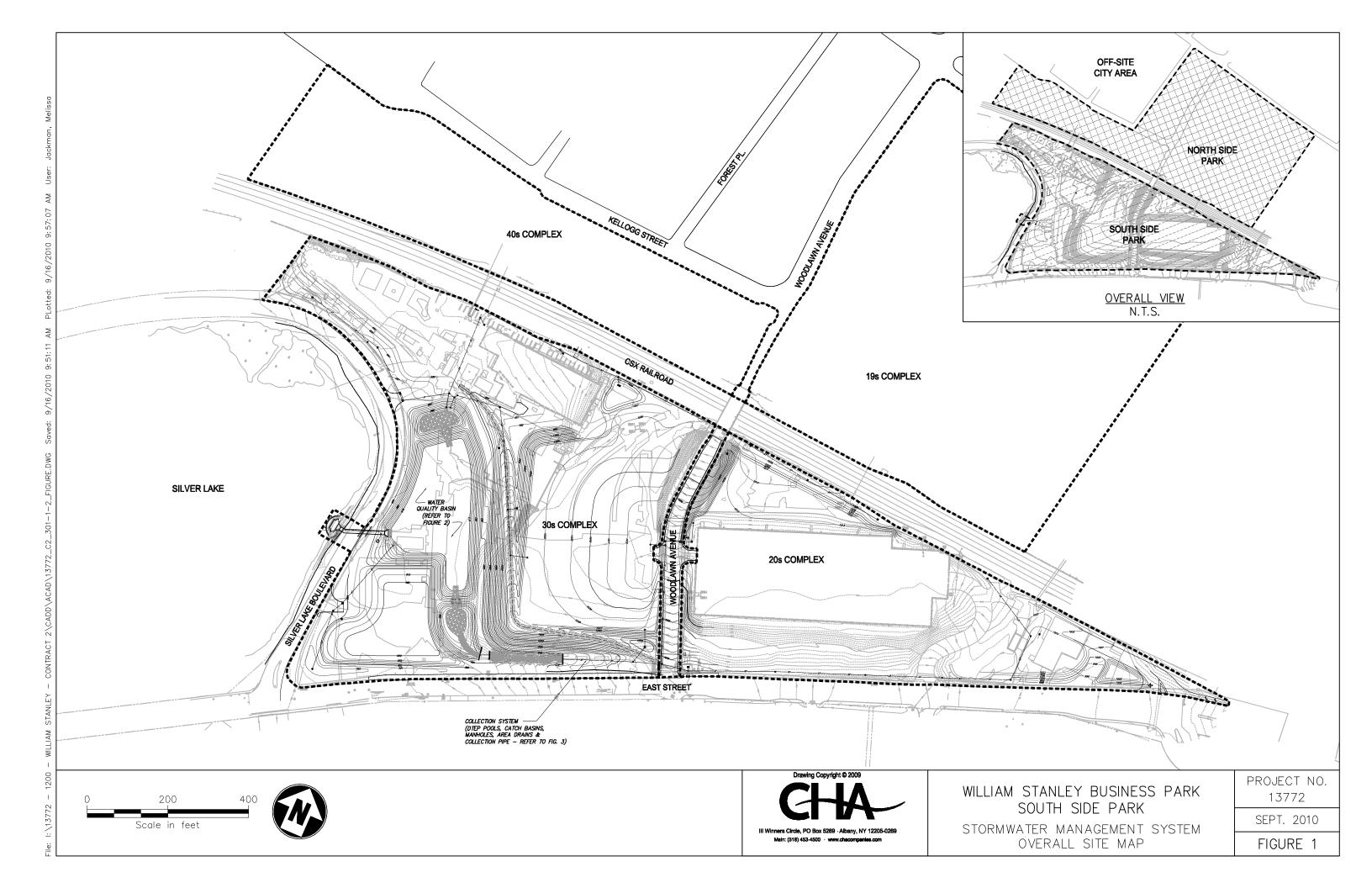


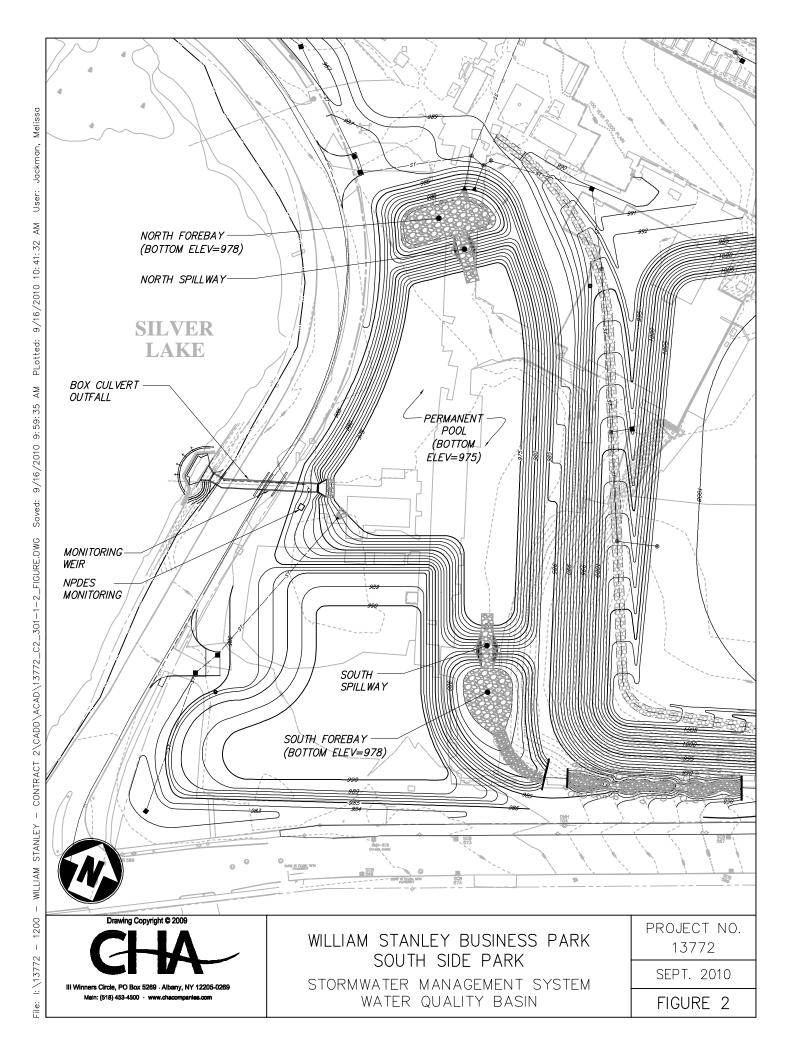
FIGURE

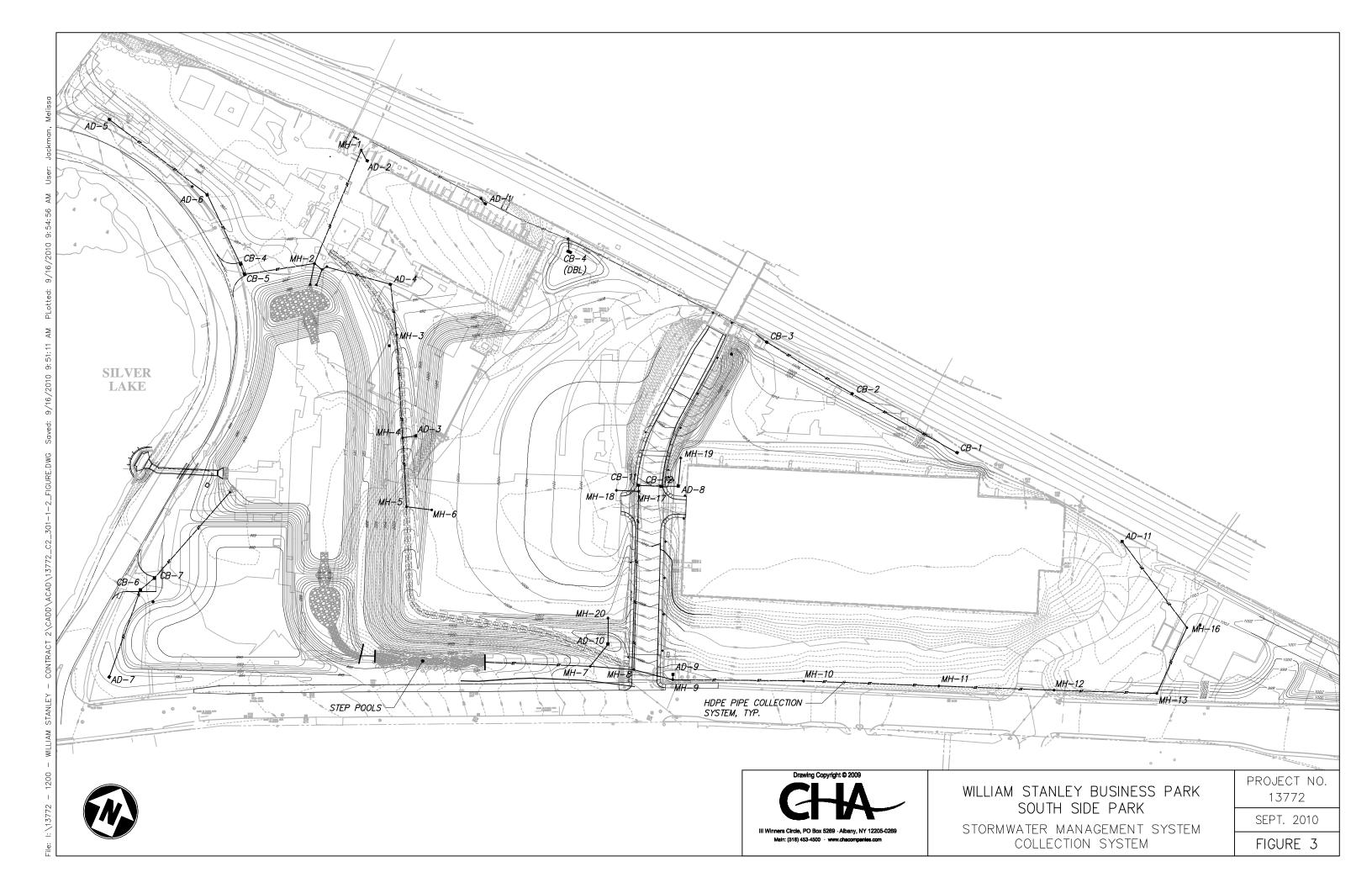
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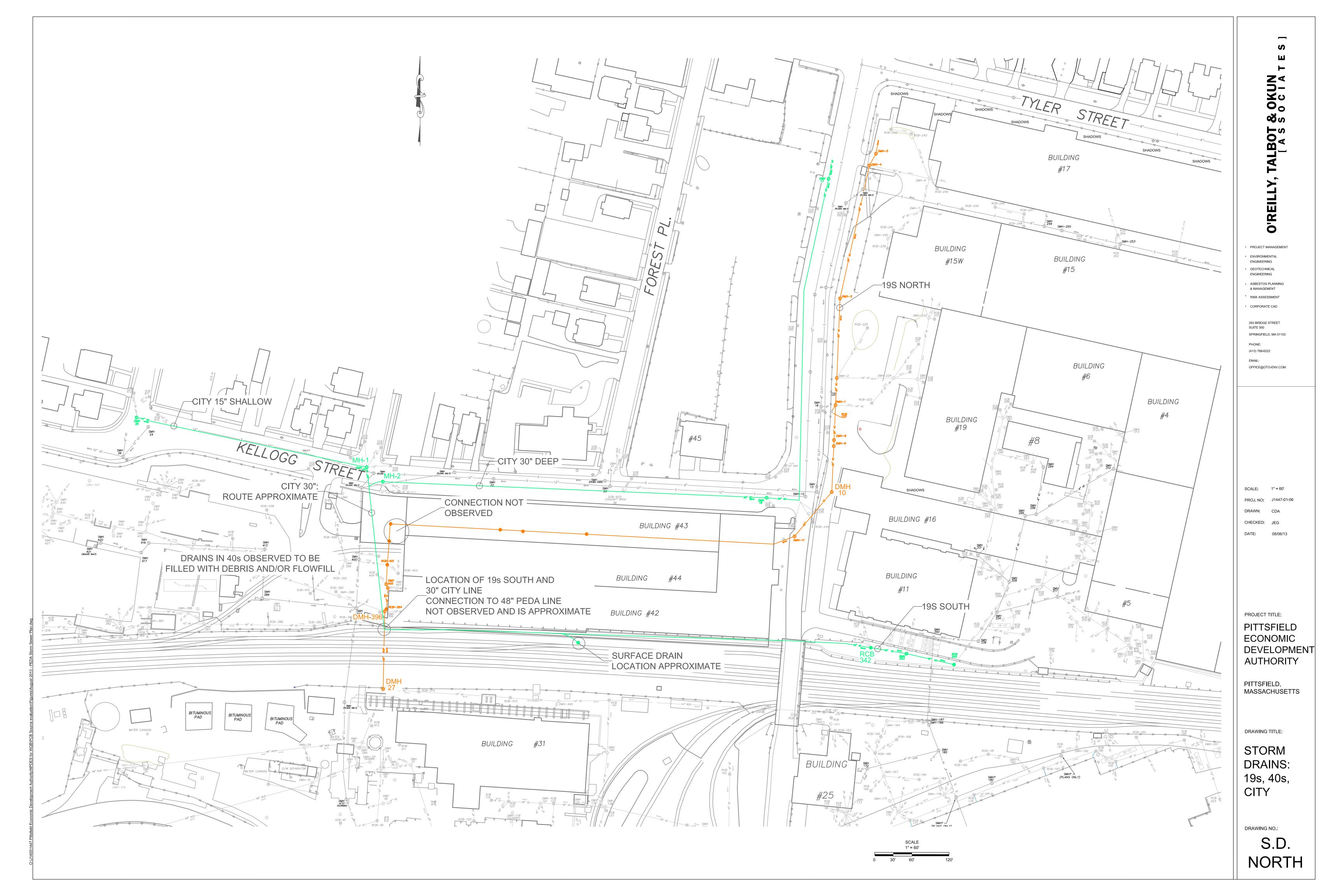
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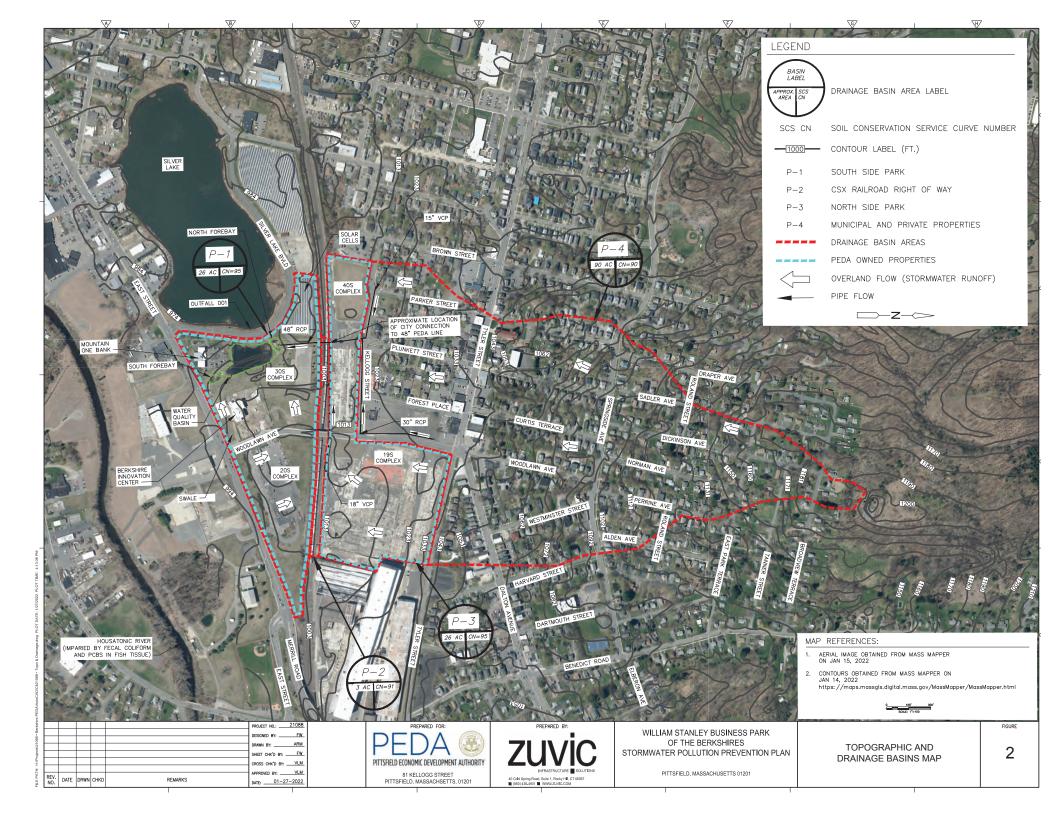
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UTIL-PIRE-MH, UTIL-HPSTEAM, UTIL-GAS, UTIL-SAN-HID,
u=-line, UE-LINE-HID, us--line, usteom--line,
UTIL-PIREPROTECT, UTIL-HPSTEAM, un-cliptine,





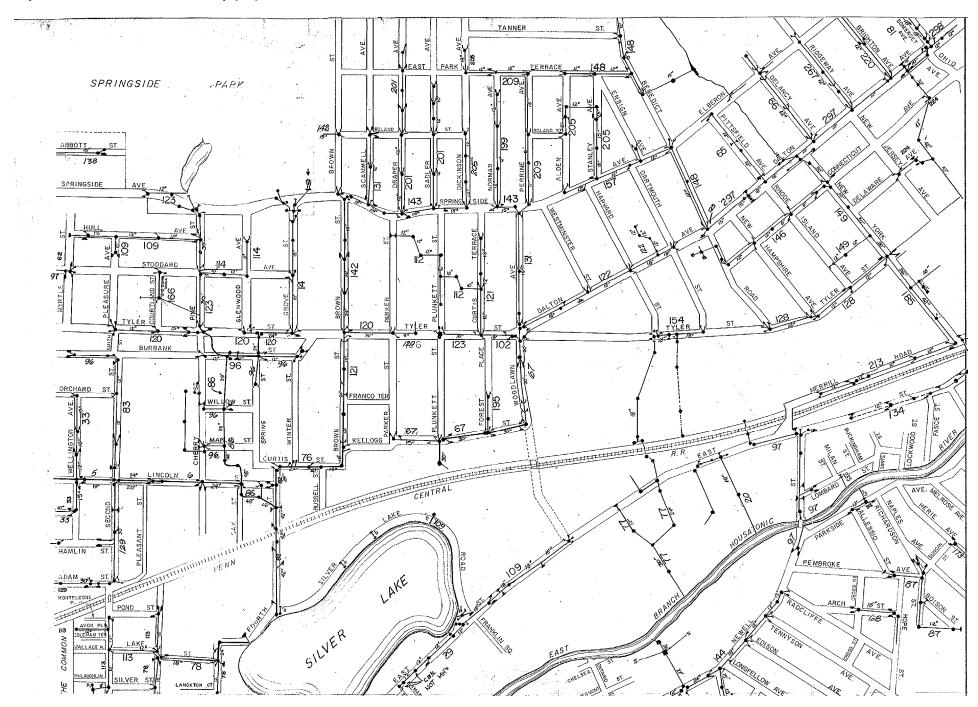






ATTACHMENT B

CITY OF PITTSFIELD – STORMWATER SEWER MAP



ATTACHMENT C SOURCE IDENTIFICATION TABLES

PEDA Source Identification: Former GE 19s Complex

Potential Sources ¹	Status	Evaluation	Supporting Documents
Residual presence of PCBs in soils, and other surfaces exposed to stormwater	The remediation of the former GE 19s Complex was documented in the <i>Final Completion Report for the East Street Area 2-North Removal Action</i> submitted to EPA by GE on January 2012. In this report, GE summarizes the evaluation of PCBs in soil within the 19s Complex and presents those data against the applicable standard. That report concludes that the soil in the 19s Complex meets the performance standards established in the Consent Decree.	After the submittal of the Final Completion Report for East Street Area 2-North Removal Action, EPA issued a certification of completion for this removal action.	Final Completion Report for East Street Area 2-North Removal Action submitted to EPA by GE on January 2012.
Residual presence of PCBs in pipes, catch basins, and other conveyance system structures	There has been no comprehensive evaluation of the residual presence of PCBs in pipes, catch basins, and other conveyance system structures.	PEDA has contracted an engineering firm to oversee the redevelopment of the former GE 19s Complex into a construction ready site. This process will include the evaluation of the current stormwater conveyance system and determine the appropriate closure or replacement of the stormwater conveyance system on the site.	NA
Infiltration of groundwater into the conveyance system on PEDA property	The GE-Pittsfield/Housatonic River Site Groundwater Management Area 1 (GECD310) Long-Term Trend Evaluation Report - Spring 2022 submitted to EPA by GE in August 2022 summarizes the ongoing evaluation of NAPL contaminated groundwater on the former and current GE properties. This report shows no detectable levels of groundwater contamination existing on the former GE 19s complex.	The GE-Pittsfield/Housatonic River Site Groundwater Management Area 1 (GECD310) Long-Term Trend Evaluation Report - Spring 2022 demonstrating no NAPL contamination in the former GE 19s Complex. No source of contaminated groundwater infiltrating the conveyance system was identified.	GE-Pittsfield/Housatonic River Site Groundwater Management Area 1 (GECD310) Long-Term Trend Evaluation Report - Spring 2022 submitted to EPA by GE on August 2022
Onflow from offsite that contributes to the Outfall 001 conveyance system	BEC evaluated properties surrounding the former GE 19s Complex to determine if a potential source of contaminants of concern existed, and whether or not any onflow could occur.	BEC has determined that there are no potential sources of contamination surrounding the WSBP that are or could reasonably migrate onto the former GE 19s Complex.	NA
Inflow from illicit connections to PEDA's conveyance system	No comprehensive study of the stormwater conveyance systems inflows has been conducted.	While there is no evidence of illicit connections to PEDA's conveyance system, there is the potential for these connections.	NA

^{1 -} NPDES Permit #MA0040231, Part I.C.2.c (1)

PEDA Source Identification: Former GE 20s Complex

Potential Sources ¹	Status	Evaluation	Supporting Documents
Residual presence of PCBs in soils, and other surfaces exposed to stormwater	The remediation of the former GE 20s complex was documented in the <i>Final Completion Report for the 20s Complex Removal Action</i> submitted to EPA by GE in March 2005. In this report, GE summarizes the evaluation of PCBs in soil within the 20s Complex and presents those data against the applicable standard. The report concludes that soil in the 20s Complex meets the Performance Standards established in the Consent Decree.	After the submittal of the Final Completion report for the 20s Complex Removal Action, EPA issued a certification of completion for the 20s Complex Removal Action.	Final Completion Report for the 20s Complex Removal Action submitted to EPA by GE on March 2005
Residual presence of PCBs in pipes, catch basins, and other conveyance system structures		The GE 20s complex had been remediated by GE prior to the installation of the new stormwater conveyance system on the site. It is unlikely that the current stormwater conveyance system on the site is a potential source of pollutants of concern.	Soil Investigation Report and Conditional Exception Request for Planned Stormwater, Electric, and Telecommunications Utility Installations, General Electric, 2009; and NPDES Permit No. MA0040231, pg. 215
Infiltration of groundwater into the conveyance system on PEDA property Onflow from offsite that contributes to the Outfall 001	transfer of the property to PEDA, a new stormwater conveyance system was installed on the former GE 20s complex (2010).	The GE 20s complex had been remediated by GE prior to the installation of the new stormwater conveyance system on the site. It is unlikely that the current stormwater conveyance system on the site is a potential source of pollutants of concern. BEC has determined that there are no potential sources of contamination surrounding the WSBP that are or could	Soil Investigation Report and Conditional Exception Request for Planned Stormwater, Electric, and Telecommunications Utility Installations, General Electric, 2009 NPDES Permit No. MA0040231, pg. 215
conveyance system Inflow from illicit connections to PEDA's conveyance system	concern existed, and whether or not any onflow could occur.	reasonably migrate onto the former GE 20s complex. During the installation of the new stormwater conveyance system, no illicit connections were noted.	NA

^{1 -} NPDES Permit #MA0040231, Part I.C.2.c (1)

PEDA Source Identification: Former GE 30s Complex

Potential Sources ¹	Status	Evaluation	Supporting Documents
Residual presence of PCBs in soils, and other surfaces exposed to stormwater	The remediation of the former GE 30s Complex was documented in the <i>Final Completion Report for the 30s Complex Removal Action</i> submitted to EPA by GE in March 2005. In this report, GE summarizes the evaluation of PCBs in soil within the 30s Complex and presents those data against the applicable standard. That report concludes that the soil in the 30s Complex meets the Performance Standards established in the Consent Decree.	After the submittal of the Final Completion report for the 30s Complex Removal Action, EPA issued a certification of completion for the 30s Complex Removal Action.	Final Completion Report for the 30s Complex Removal Action submitted by GE on March 2005
Residual presence of PCBs in	Remediation of the former GE 30s complex was completed in	The GE 30s complex was remediated by GE prior to the	Soil Investigation Report and Conditional Exception Request for
pipes, catch basins, and other	2005 and was subsequently transferred to PEDA. Following the	installation of the new stormwater conveyance system on the	Planned Stormwater, Electric, and Telecommunications Utility
conveyance system structures	transfer of the property to PEDA, a new stormwater conveyance system was installed in 2010 on the former GE 30s complex.	site. It is unlikely that the current stormwater conveyance system on the site is a potential source of pollutants of concern.	Installations , General Electric, 2009; and NPDES Permit No. MA0040231, pg. 215
Infiltration of groundwater into the conveyance system on PEDA property	transfer of the property to PEDA, a new stormwater	The GE 30s complex was remediated by GE prior to the installation of the new stormwater conveyance system on the site. It is unlikely that infiltration of groundwater into the current stormwater conveyance system on the site is a potential source of pollutants of concern.	Soil Investigation Report and Conditional Exception Request for Planned Stormwater, Electric, and Telecommunications Utility Installations, General Electric, 2009; and NPDES Permit No. MA0040231, pg. 215
Infiltration of groundwater directly into the water quality basin	Infiltration of groundwater directly into the water quality basin does occur due to the design and intended function of the Water Quality Basin (WQB). GE conducts biannual contaminated groundwater studies related to NAPL contamination from historical site use. The latest report submitted to EPA (Spring 2022) shows NAPL contamination are not present in the groundwater monitoring wells located on the 30s complex.	While the WQB on the former GE 30s Complex does allow for the infiltration of groundwater, there is no evidence to suggest that this infiltration of groundwater is a potential source of contamination or that the groundwater surrounding the WQB has any measurable quantity of contamination. Additionally, between 2011 and 2018 effluent samples taken from Outfall 001 were analyzed for both suspended and dissolved PCBs. These results showed no dissolved PCBs were present in the effluent. This confirms that the presence of pollutants of concern in the WQB is limited to sediment and does not include ground water.	NAPL Investigation Report, Water Quality Basin, 30s Complex GE-Pittsfield/Housatonic River Site Groundwater Management Area 1 (GECD310) Long-Term Trend Evaluation Report - Spring 2022 Historical PEDA NPDES Monitoring Data Summary
· ·	The forebays and water quality basin were designed to allow for suspended solids and sediment to settle out of wastewater prior to discharge through Outfall 001. The north forebay, which treats the majority of water entering the Water Quality Basin, has been excavated twice since 2010 to remove accumulated sediments and to maintain the capacity of the forebay. Characterization of the sediment has identified the presence of pollutants of concern.	It is understood that the forebays and the water quality basin contain sediments that include pollutants of concern and in the event of a significant storm event these sediments could become resuspended. Monthly monitoring has not identified resuspension of sediment in the forebays and water quality basin as a significant source of pollutants, however, it is identified as a potential source of pollutants of concern.	Historical PEDA NPDES Monitoring Data Summary
Inflow from illicit connections to PEDA's conveyance system	A new stormwater conveyance system was installed on the former GE 30s Complex (2010).	During the installation of the new stormwater conveyance system, no illicit connections were noted.	NA

PEDA Source Identification: Former GE 40s Complex

Potential Sources ¹	Status	Evaluation	Supporting Documents
Residual presence of PCBs in soils, and other surfaces exposed to stormwater	The remediation of the former GE 40s complex was documented in the <i>Final Completion Report for the 40s Complex Removal Action</i> submitted to EPA by GE on January 2011. In this report, GE summarized the evaluation of PCBs in soil within the 40s Complex and presented those data against the applicable standard. That report concludes that the soil in the 40s Complex meets the Performance Standards established in the Consent Decree.	After the submittal of the Final Completion report for the 40s Complex Removal Action, EPA issued a certification of completion for the 40s Complex Removal Action.	Final Completion Report for the 40s Complex Removal Action submitted to EPA by GE on January 2011.
Residual presence of PCBs in pipes, catch basins, and other conveyance system structures	There has been no comprehensive evaluation of the residual presence of PCBs in pipes, catch basins, and other conveyance system structures.	Crushed concrete that is currently stored in a temporary stockpile on the 40s site will be transported to the 19s Complex during the upcoming redevelopment. It is our understanding that the 40s Complex will be redeveloped following completion of the 19s based on interest in the site. Similar to the 19s Complex, this process will include the evaluation of the stormwater conveyance system and a determination regarding the appropriate closure or replacement of the stormwater conveyance system on the site.	NA
Infiltration of groundwater into the conveyance system on PEDA property	The GE-Pittsfield/Housatonic River Site Groundwater Management Area 1 (GECD310) Long-Term Trend Evaluation Report - Spring 2022 submitted to EPA by GE on August 2022 summarizes the ongoing evaluation of NAPL contaminated groundwater on the former and current GE properties. This report shows no detectable levels of groundwater contamination existing on the former GE 40s complex.	The GE-Pittsfield/Housatonic River Site Groundwater Management Area 1 (GECD310) Long-Term Trend Evaluation Report - Spring 2022 demonstrating no NAPL contamination in the former GE 40s Complex. No source of contaminated groundwater infiltrating the conveyance system was identified.	GE-Pittsfield/Housatonic River Site Groundwater Management Area 1 (GECD310) Long-Term Trend Evaluation Report - Spring 2022 submitted to EPA by GE on August 2022
Onflow from offsite that contributes to the Outfall 001 conveyance system	BEC evaluated properties surrounding the former GE 40s Complex to determine if a potential source of contaminants of concern existed, and whether or not any onflow could occur.	BEC has determined that there are no potential sources of contamination surrounding the WSBP that are or could reasonably migrate onto the former GE 40s Complex.	NA
Inflow from illicit connections to PEDA's conveyance system	No comprehensive study of the stormwater conveyance systems inflows has been conducted.	While there is no evidence of illicit connections to PEDA's conveyance system, there is the potential for these connections.	NA

^{1 -} NPDES Permit #MA0040231, Part I.C.2.c (1)





PEDA Annual Certifications

PITTSFIELD ECONOMIC DEVELOPMENT AUTHORITY STORMWATER POLLUTION PREVENTION PLAN CERTIFICATION OF THE DULY AUTHORIZED REPRESENTATIVE

Pittsfield Economic Development Authority
William Stanley Business Park of the Berkshires
Generally Bounded by East Street, Silver Lake Boulevard, Kellogg, and Tyler Streets
Pittsfield, MA 01201

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Michael Coakley	INTUIN Executive Direc	
Mend luin	02/01/2022	
Signature	Date	

CERTIFICATION OF THE DULY AUTHORIZED REPRESENTATIVE

William Stanley Business Park of the Berkshires Generally Bounded by East Street, Silver Lake Boulevard, Kellogg, and Tyler Streets Pittsfield, MA 01201

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

TWHM Executive Director
Title

1/13/23

Stormwater Pollution Prevention Plan Annual Certification Statement

For: Pittsfield Economic Development Authority (PEDA) William Stanley Business

Park, Pittsfield, Massachusetts

NPDES Permit: MA0040231

Effective: November 1, 2021 – October 31, 2026

Year: 2023

I hereby certify that during 2023 the Pittsfield Economic Development Authority (PEDA) has completed required inspections and monitoring, implemented necessary control measures and completed training activities as described in the Stormwater Pollution Prevention Plan (SWPPP). Records were maintained as required by the NPDES Permit and as summarized in the SWPPP. No violations of the numerical or non-numerical effluent limits were identified during 2023.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Name (printed): Michael Conkley	
	Duterm Executive Director-PEDA
Signature:	Mand lever
Date:	1/15/24

Stormwater Pollution Prevention Plan Annual Certification Statement

For: Pittsfield Economic Development Authority (PEDA) William Stanley Business

Park, Pittsfield, Massachusetts

NPDES Permit: MA0040231

Effective: November 1, 2021 - October 31, 2026

Year: 2024

I hereby certify that during 2024 the Pittsfield Economic Development Authority (PEDA) has completed required inspections and monitoring, implemented necessary control measures and completed training activities as described in the Stormwater Pollution Prevention Plan (SWPPP). Records were maintained as required by the NPDES Permit and as summarized in the SWPPP. No violations of the numerical or non-numerical effluent limits were identified during 2024.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Name (printed): Michael COAKLEY

Title: Interim Executive Director

Signature: May Cerry