89 LaSalle Avenue Site

ERIE, NEW YORK

Periodic Review Report

NYSDEC Site Number: C915283

Prepared for:
Legacy UPAL, L.P.
89 LaSalle Avenue Site
Buffalo, New York 14225

Prepared by:
WSP USA Inc.
455 Commerce Dr., Suite 8
Buffalo, New York, USA 14228
(716) 204-5880

REVISED JUNE 2022

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

LIST OF APPENDICES

1.0 SITE OVERVIEW

1.1 Site Location & Description

The site is comprised of two parcels, addressed at 89 LaSalle Avenue (10.83 acres) and 71 NYL & W RR (1.083 acres) located in the City of Buffalo, County of Erie, New York and identified respectively as SBL 79.70-2-5.1 and SBL 79.70-2-16.111 on the Erie County Tax Map. The owner of the 89 LaSalle parcel is Legacy UPAL, L.P and the owner of the 71 NYL & W RR parcel is the City of Buffalo. The combined parcel acreage is approximately 11.9 acres bounded by commercial properties and LaSalle Avenue to the north, McCarthy Park to the south, residential apartments to the east (Camelot Ct.), and residential properties located on William Price Parkway to the west (see Site Vicinity Map, Figure 1-1). The site was remediated in accordance with Brownfield Cleanup Agreement (BCA) Site# C915283, which was executed on June 6, 2014.

1.2 Nature and Extent of Contamination Prior to Remediation

Prior to site remediation under the Brownfields Cleanup Program (BCP), a Remedial Investigation (RI) was performed to characterize the nature and extent of contamination at the site. The RI activities conducted on the Site as preparation for remedial efforts included the installation of four (4) wells, the advancement of fifteen (15) borings, the excavation of nineteen (19) test pits, and the collection of four (4) surface soil samples. Generally, the RI determined that the historic use of the Site as a landfill was evident in analytical results from the initial RI identifying the widespread presence of low levels of heavy metals and Polycyclic Aromatic Hydrocarbons (PAHs) as the Constituents of Primary Concern (COPCs) in soil/fill across the Site, and specifically at several locations identified across the central portion of the Site where the COPC concentrations were elevated relative the rest of the Site. Previous investigations had been conducted on portions of the BCP Site referenced as the LaSalle Reservoir Site, which generally encompassed the southeastern half of the Site (the former Buffalo Crushed Stone quarry area).

Four (4) impacted locations identified during the initial RI were subject to a supplemental remedial investigation delineating the elevated COPC impacts detected in these areas of concern. Findings from the supplemental test pit investigation of the four impacted areas of interest confirmed that there was no evidence of significant lateral or vertical contamination surrounding the original soil boring locations. Levels of COPCs detected in the supplemental test pits indicated that concentrations of COPCs, where detected, were below site-specific soil cleanup objectives as proposed in the Final RI Report and consistent with observations of RI analytical results across the site. The heterogeneous nature of the soil/fill across the Site, and analytical results indicating widespread low-level concentrations of COPCs above the Restricted Residential SCOs throughout Site overburden, demonstrated that a source or sources of contamination found at the four original areas of concern was not present.

1.3 Site Remedial Program

The site was remediated in accordance with the NYSDEC-approved 89 LaSalle RI-IRM-AA Report dated January 2015.

The following is a summary of the Remedial Actions performed at the site:

- Excavation of soil/fill identified at four RI boring locations as significantly exceeding restricted residential SCOs, to a minimum depth of 5 feet or bedrock where applicable;
- Construction and maintenance of a soil cover system consisting of two feet of clean imported material, and/or impervious material (i.e, asphalt pavement, concrete sidewalks and buildings) differentiated by a demarcation layer to prevent human exposure to remaining contaminated soil/fill remaining at the site;
- Execution and recording of an Environmental Easement to restrict land use and prevent future exposure to any contamination remaining at the site.
- Development and implementation of a Site Management Plan (SMP) for long term management of remaining contamination as required by the Environmental Easement, which includes plans for: (1) Institutional and Engineering Controls, (2) monitoring, (3) maintenance and (4) reporting;

Remedial activities were completed at the site in February 2015 (hotspot soil/fill excavations), and between April and October 2015 installation of the Site's cover system was incrementally installed as the Site's development progressed through construction and final site restoration.

A total of 350 tons of contaminated soil/fill was excavated and removed from the four hotspot locations identified in the RI Report (Boring locations B-5, B-7, B-8 and B-9) and illustrated on Figure 5 in the SMP. The excavated hotspot locations were subsequently backfilled with excess soils excavated and stockpiled from other uncontaminated locations on the Site, primarily storm sewer and water line utility trenching locations. In addition, approximately 1300 tons of topsoil mixed with vegetative material was also stripped from the upper 3-6 inches of portions of the site and disposed of off-site. This material was not identified as exceeding the applicable SCOs, however it was not suitable for reuse on the Site as part of the final cover system.

After completion of the remedial work, some contamination was left in the subsurface at this site, which is hereafter referred to as "remaining contamination." A layer of geotextile fabric has been installed as a demarcation layer in those areas of the Site where two feet of clean soil cover is the component of the cover system. This geotextile was placed on top of the subgrade soil/fill prior to placement of clean soil. At other locations on the Site where the cover system consists of impervious asphalt or concrete, a layer of geotextile has also been placed between the remaining soil/fill and clean structural gravel or crushed stone fill. In areas were buildings or structures act as the final cover system, a minimum of two feet, and in most areas four feet, of clean imported material was placed prior to placement of concrete pads and the erection of structures. In the case of Building 1, clean subbase material was placed, covered with clean topsoil and seeded in the same manner as other green space on the Site, until such time the building foundations and

concrete pad were poured and the topsoil and vegetative cover stripped down to the clean subbase material.

The SMP was prepared to manage remaining contamination at the site until the Environmental Easements are extinguished in accordance with ECL Article 71, Title 36. The SMP addresses the means for implementing the Institutional Controls (ICs) and Engineering Controls (ECs) that are required by the Environmental Easement for the Site.

1.4 Purpose of Periodic Review Report

This Periodic Review Report (PRR) presents information on the maintenance, monitoring and compliance activities performed at the 89 LaSalle Avenue Site No. C915283 covering the period from April 1, 2021 to March 30, 2022.

2.0 REMEDIAL SYSTEMS COMPLIANCE

2.1.1 General

Since remaining contaminated soil and groundwater exists beneath the site, Engineering Controls and Institutional Controls (EC/ICs) are required to protect human health and the environment.

Site specific SCOs were developed and approved based on 6NYCRR Part 375 Restricted Residential SCOs. These SCOs were employed as soil cleanup goals to achieve the remedial action objectives for the Site of minimizing the potential for exposure of remaining soil contaminants to humans and the environment. The SCOs established are soil concentration limits protective of human health and surface water quality. Achievement of the site specific SCOs was confirmed through verification sampling.

The selected Engineering Control implemented at the Site (following completion of remediation activities) was the construction and maintenance of a soil cover system consisting of two feet of clean imported material and/or impervious material (i.e., asphalt pavement, concrete sidewalks and buildings), differentiated by a demarcation layer to prevent human exposure to remaining contaminated soil/fill.

The approved SMP requires the implementation of a long-term monitoring plan that incorporates monitoring and maintenance of the Site cover system to identify evidence of excessive soil erosion to soil cover systems or deterioration of asphalt or concrete structures that might indicate that off-site transport of soil/fill is likely to occur or is occurring. In addition, semi-annual stormwater and sediment monitoring and analysis is performed to further assess performance of the cover system.

The results of the required monitoring activities and annual inspection are presented in Section 4 “Monitoring Plan Compliance Report”.

3.0 INSTITUTIONAL CONTROL COMPLIANCE

3.1 Introduction

3.1.1 General

Since remaining contaminated soil and groundwater exist beneath the Site, Engineering Controls and Institutional Controls (EC/ICs) are required to protect human health and the environment. The Engineering and Institutional Control Plan describes the procedures for the implementation and management of all EC/ICs at the site. The EC/IC Plan is one component of the SMP and is subject to revision by NYSDEC. The goals of the ICs are to: (1) implement, maintain and monitor Engineering Control systems; (2) prevent future exposure to remaining contamination by controlling disturbances of the subsurface contamination; and, (3) limit the use and development of the Site to Restricted Residential uses only. Adherence to these Institutional Controls is required by the Environmental Easement and will be implemented under this Site Management Plan.

3.2 Description of Institutional Controls

The Institutional Controls are:

- Compliance with the Environmental Easements and the SMP by the Grantor and the Grantor's successors and assigns;
- All Engineering Controls must be maintained as specified in the SMP;
- All Engineering Controls on the Controlled Property must be inspected at a frequency and in a manner defined in the SMP;
- Stormwater, sediment and other environmental or public health monitoring must be performed as defined in the SMP;
- Data and information pertinent to Site Management of the Controlled Property must be reported at the frequency and in a manner defined in the SMP.

The Site has a series of Institutional Controls in the form of site restrictions. Adherence to these Institutional Controls is required by the Environmental Easement. Site restrictions that apply to the Controlled Property are:

- The property may only be used for restricted residential use, provided that the long-term Engineering and Institutional Controls included in the SMP are employed;
- The property may not be used for a higher level of use, such as unrestricted residential use without additional remediation and amendment of the Environmental Easement, as approved by the NYSDEC;
- All future activities on the property that will disturb remaining contaminated material must be conducted in accordance with the SMP;
- The use of the groundwater underlying the property is prohibited without treatment rendering it safe for intended use;
- Vegetable gardens and farming on the property are prohibited; and,
- The site owner or remedial party will submit to NYSDEC a written statement that certifies, under penalty of perjury, that: (1) controls employed at the Controlled Property are

> unchanged from the previous certification or that any changes to the controls were approved by the NYSDEC; and, (2) nothing has occurred that impairs the ability of the controls to protect public health and environment or that constitute a violation or failure to comply with the SMP. NYSDEC retains the right to access such Controlled Property at any time in order to evaluate the continued maintenance of any and all controls. This certification shall be submitted annually, or at an alternate frequency that NYSDEC may allow and will be made by an expert that the NYSDEC finds acceptable.

The Environmental Easement summarizing the site use restrictions and requirements for the Site was executed by the Department on December 14, 2015, and filed with the Erie County Clerk on December 15, 2015. A copy of the easement and proof of filing is provided in Appendix A of the SMP.

3.2.1 Status of ICs

During the reporting period covered by this PRR, all ICs were in place and effective in meeting their objectives. There was no intrusive work performed on the BCP Site during the reporting period covered by this PRR.

There are no corrective measures required to ensure the effectiveness of ICs at this time based on the results of the monitoring and semi-annual inspection performed.

Stormwater and sediment samples for the current PRR period were collected on October 26, 2021 & April 7, 2022, when stormwater effluent was present in sufficient quantity for sampling at the MH-1 structure. The next sampling event is tentatively scheduled for October 2022.

4.0 MONITORING PLAN COMPLIANCE REPORT

4.1 Introduction

4.1.1 General

The Monitoring Plan describes the measures for evaluating the performance and effectiveness of the remedy to reduce or mitigate contamination at the Site, the soil cover system, and all affected site media identified below. The Monitoring Plan may only be revised with the approval of NYSDEC.

4.1.2 Schedule

Semi-annual monitoring and inspection of the performance of the remedy and overall reduction in contamination on-site will be conducted for the first 5 years. The frequency thereafter will be determined by NYSDEC. Characterizations of the quality of stormwater and sediment generated as runoff from the Site's engineered cover system have been selected as representative Site monitoring media. Trends in contaminant levels in stormwater and sediment in the affected areas will be evaluated to determine if the remedy continues to be effective in achieving remedial goals. The monitoring and inspection program are summarized in detail in Table 4-1. The results of the monitoring performed are discussed further in Section 4.2.

Table 4-1: Monitoring/Inspection Schedule

* The frequency of events will be conducted as specified until otherwise approved by NYSDEC and NYSDOH

Monitoring Program	Frequency*	Matrix	Analysis/Comments
Stormwater Discharge to City of Buffalo Storm Sewer System	Semi-annually	Stormwater runoff and sediment (when present)	TAL Metals (Method 6020B), Semi-volatile compounds (Method 8270D SIM), Total Solids [sediment only] (SM 2540)
Semi-annual Site Inspection	Semi-annually	Visually inspect entire site for cover system integrity and signs of unacceptable deterioration or other damage to cover system components that may result in exposure to contaminated soil	Prepare a detailed written description of the condition of all cover system components. Include a photographic record of inspection areas

4.2 Monitoring Program Results

4.2.1 Surface Water and Sediment Monitoring

In October 2021 a stormwater sample was collected and in April 2022, stormwater and sediment grab samples were collected from the manhole within 6 hours of a precipitation event exceeding 0.5 inch. Sediment collected during the October 2021 event from the base of the manhole consisted of eroded asphalt and small gravel and contained no organic material so a sample was not collected. Due to a lack of significant rainfall precipitation events in March 2022, the second semi-annual event had to be postponed until April 7 after 0.4 inches were recorded. Although this was one week after the end of the reporting period, there was no other viable option for sampling before the end of March. The samples were collected at one location, in accordance with the Legacy LaSalle C915283 Site SMP.

Stormwater and associated sediment samples were collected from the discharge of Manhole 1 (designated MH-1) located at the northwest corner of the BCP Site. MH-1 subsequently discharges to the City of Buffalo storm sewer system in LaSalle Ave.

Stormwater samples were analyzed for Semi-Volatiles and Total Metals. Sediment samples were analyzed for Semi-Volatiles, Total Metals and Total Solids. The analytical results from the October 2021 and April 2022 sampling events are summarized in Table 4-2. Table 4.2 presents sample detections compared to NYSDEC surface water standards (NYSDEC 1998) and Technical Guidance Series (T.O.Gs) Surface Water Guidance values, Class A Freshwater Sediment Guidance Values (Table 5) from the "*Screening and Assessment of Contaminated Sediments*", NYSDEC, July 2014, and Part 375 Restricted Residential SCOs.

Detections above NYSDEC surface water standards or guidance values for the following SVOCs and metals were found in the October 2021 stormwater sample:

- benzo[a]anthracene (0.00003 ppm)
- benzo[a]pyrene (0.00003 ppm)
- benzo[b]fluoranthene (0.00005 ppm)
- benzo[k]fluoranthene (0.00002 ppm)
- chrysene (0.00003 ppm)
- Indeno[1,2,3-cd]pyrene (0.00003 ppm)

Detections above NYSDEC surface water standards or guidance values for the following SVOCs and metals were found in the April 2022 stormwater sample:

- benzo[a]anthracene (0.00004 ppm)

- benzo[a]pyrene (0.00002 ppm)
- benzo[b]fluoranthene (0.00004 ppm)
- benzo[k]fluoranthene (0.00001 ppm)
- chrysene (0.00003 ppm)
- Indeno[1,2,3-cd]pyrene (0.00003 ppm)
- iron (0.458ppm)
- sodium (8910 ppm)

The SVOC PAH detections were all estimated values marginally above the TOGs 1.1.1 surface water guidance values. Iron was detected in the April 2022 sample above the surface water standards at a concentration consistent with past detections and marginally over the Part 703 groundwater quality standard. Sodium was detected at an elevated concentration above the groundwater quality standard and is likely attributable to run-off contributions from road salt due to typical winter road maintenance at the Site.

No exceedances of the Class A freshwater sediment guidance values were detected in the April 2022 sediment sample.

A copy of the laboratory Analytical Reports for the stormwater and sediment analyses performed is attached in Appendix A.

Table 4-3 provides a summary of the compounds that have exceeded either a regulatory standard or guidance value (for stormwater or sediment) from 2017 through the April 2022 semi-annual sampling events since they began under the SMP. The table indicates that low levels of six (6) PAHs have consistently been present in concentrations exceeding their respective NYSDEC T.O.G.S 1.1.1 Surface Water Guidance Values. The concentrations of these compounds over five of the past six sampling events have remained essentially unchanged and are consistent with background detections of PAHs in run-off found in urban settings due to depositional contributions from fossil fuel combustion, vehicle emissions and asphalt parking areas. Exceedances of Part 703 Surface Water Quality Standards for iron and sodium have been detected in the stormwater samples for the majority of the sampling events, these compounds are associated with background soil concentrations the use of road salt in the winter months. Only one exceedance of Part 703 Surface Water Quality Standards for semi- volatile compounds [bis(2-tethylhexyl) phthalate] occurred in 2018, with none since.

4.3 Semi-Annual Site Inspection Results

Site inspections were performed on October 26, 2021 and April 07, 2022, to address the frequency of twice per year established by the SMP Monitoring Program requirements. A Site-wide inspection form was

completed (Appendix B) during each inspection. The form compiles sufficient information to assess the following:

- Compliance with all ICs, including Site usage;
- General Site conditions at the time of the inspection;
- The site management activities being conducted including, where appropriate, confirmation sampling and a health and safety inspection;
- Compliance with permits and schedules included in the Operation and Maintenance Plan; and,
- Confirmation that Site records are up to date.

All areas of the Site were carefully inspected to assess the condition of surface soil, asphalt and concrete areas to determine if erosion or related deterioration is occurring that would jeopardize the integrity of soil, asphalt or concrete structures preventing the transport of soil/fill onto surrounding properties. During both inspection events, the integrity of the cover materials were found to be in excellent condition with no integrity issues observed.

A combined photographic log containing photos taken during the October 2021 and April 2022 inspections are provided in Appendix B.

4.4 Summary of Off-Site Activities During Reporting Period

No intrusive activities were performed off-site during the period covered by this PRR.

4.5 Conclusions and Recommendations

At the time of the semi-annual inspections, the Site was fully compliant with the institutional controls described in the SMP. All monitoring results and inspection results were acceptable with only low-level detection of limited SVOC PAHs and metals in the stormwater consistent with past findings at the Site outfall stormwater discharge and no evidence of erosion of the soil cover or hardscape portions of the cover on the Site.

5.0 OVERALL CONCLUSIONS AND RECOMMENDATIONS

Based on the monitoring and inspection results described in Section 4 and conducted during the timeframe covered by this PRR, compliance with all relevant components of the SMP ICs was achieved. A copy of the completed and certified "Site Management Periodic Review Report Notice Institutional and Engineering Controls Certification Form" is attached in Appendix C.

The results of the stormwater and sediment sample results after six years of development and the overall condition of the site and integrity of the final soil cover system are indicative that the remedy performed under the BCP is achieving its intended goals of minimizing, to the extent feasible, exposure of remaining contamination to the environment through stormwater runoff and associated sediment erosion.

Legacy is formally requesting a reduction in the Site Management Plan sampling frequency and site inspection from semi-annual to annual starting with the 2022-2023 reporting period and that the annual sampling/inspection event occur in the fall each year when weather conditions are more conducive to collecting a representative stormwater sample. This request is based on a review of the long-term monitoring results (summarized in Table 4-3) indicating that the Site remedy and ongoing institutional controls have been successful in controlling off-site impacts and the concentrations of compounds of concern have remained low and stable since monitoring was initiated in 2017. We propose that the next annual inspection and sampling event will be performed in September/October of 2022, contingent on stormwater availability for sampling.

6.0 REFERENCES

1. Golder Associates Inc., Final Engineering Report, 89 LaSalle Ave. Site, NYSDEC Site No. C915283, December 2015.

2. Golder Associates Inc., Site Management Plan, 89 LaSalle Ave. Site, NYSDEC Site No. C915283, prepared for Legacy LaSalle LLC, December 2015.

TABLE 4-2

SUMMARY OF ANALYTICAL RESULTS FOR STORMWATER AND SEDIMENT SAMPLES (OCTOBER 2021 & APRIL 2022)

(TABLE 4-1 IN TEXT)

TABLE 4-2
SUMMARY OF ANALYTICAL RESULTS FOR STORMWATER & SEDIMENT SAMPLES
89 LASALLE AVENUE BCP SITE # C915283
LEGACY LASALLE, LLC.
BUFFALO, NY

Lab ID	Water Quality Standards Surface Waters and Groundwater (6 NYCRR Part 703)	NYS T.O.G.S 1.1.1 Surface Water Guidance Values+	Class A Freshwater Sediment Guidance Values*	Restricted Residential SCOs Table 375-6.8(b)	L2158753 Stormwater [1]		L2218463 Stormwater [1]		L2218463 Sediment	
Sample ID					MH-1		MH-1		MH-1	
Sample Date					10/26/21		4/7/22		4/7/22	
Units	(ppm)	(ppm)	(ppm)	(ppm)	(ppm)		(ppm)		(ppm)	
Semivolatile Organics (Method 8270D-SIM)										
2-Methylnapthalene	NV	NV	NV	NV	ND		ND		ND	
Acetophenone	NV	NV	NV	NV	ND		ND		0.1	J
Acenaphthene	0.02	0.0053	NV	100	ND		ND		ND	
Acenaphthylene	NV	NV	NV	100	ND		ND		ND	
Anthracene	NV	0.0038	NV	100	ND		0.00001	J	ND	
Benzaldehyde	NV	NV	NV	NV	ND		ND		ND	
Benzo[a]anthracene	NV	0.000002	NV	1	**0.00003**	J	**0.00004**	J	0.11	J
Benzo[a]pyrene	NV	0.0000012	NV	1	**0.00003**	J	**0.00002**	J	0.12	J
Benzo[b]fluoranthene	NV	0.000002	NV	1	**0.00005**	J, B	**0.00004**	J	0.2	
Benzo[g,h,i]perylene	NV	NV	NV	100	0.00004	J, B	0.00003	J	0.19	
Benzo[k]fluoranthene	NV	0.000002	NV	3.9	**0.00002**	J, B	**0.00001**	J	0.069	J
Biphenyl	NV	0.005	NV	1	ND		ND		ND	
Bis(2-ethylhexyl) phthalate	0.005	NV	<360	NV	0.0017	J	ND		0.098	J
Butyl benzyl phthalate	NV	0.05	NV	NV	ND		ND		0.74	
Caprolactam	NV	NV	NV	NV	ND		ND		ND	
Carbazole	NV	NV	NV	NV	ND		ND		0.022	J
Chrysene	NV	0.000002	NV	3.9	**0.00003**	J	**0.00003**	J	0.16	
Dibenzo(a,h)anthracene	NV	NV	NV	0.33	ND		ND		0.035	J
Dibenzofuran	NV	NV	NV	NV	ND		ND		ND	
Di-n-butyl phthalate	NV	0.05	NV	NV	ND		ND		ND	
Di-n-octyl phthalate	NV	0.05	NV	NV	ND		ND		ND	
Diethyl phthalate	NV	0.05	NV	NV	ND		ND		ND	
Fluoranthene	NV	0.05	NV	100	0.00007	J	0.00005	J	0.22	
Fluorene	NV	0.00054	NV	100	ND		ND		ND	
Hexachlorobenzene	0.00004	NV	NV	NV	ND		ND		ND	
Indeno[1,2,3-cd]pyrene	NV	0.000002	NV	0.5	**0.00003**	J	**0.00003**	J	0.12	J
Naphthalene	0.01	NV	NV	100	ND		ND		0.24	
Phenanthrene	NV	0.005	NV	100	0.00003	J	0.00003	J	0.1	J
Pyrene	NV	0.05	NV	100	0.00005	J	0.00004	J	0.19	
Pentachlorophenol	0.001	NV	< 14	6.7	0.00072	J	ND		ND	
3-Methylphenol/4-Methylphenol	NV	NV	NV	NV	ND		ND		0.042	J
Total Metals (SW 846 Method 6020 B)										
Aluminum	NV	NV	NV	NV	0.124		0.16		1000	
Antimony	0.003	NV	NV	NV	0.00087	J	0.00138	J	ND	
Arsenic	0.05	NV	<10	16	ND		0.00075		2.27	
Barium	1	NV	NV	400	0.00499		0.1033		8.06	
Beryllium	0.011	0.003	NV	72	ND		ND		ND	
Cadmium	0.005	NV	<1	4.3	0.00015	J	0.00042		ND	
Calcium	NV	NV	NV	NV	15.5		74.9		188,000	
Chromium	0.05	NV	<43	180	0.00071	J	0.00401		2.61	
Cobalt	0.005	NV	NV	NV	ND	J	0.00022	J	1.27	J
Copper	0.2	NV	<32	270	0.00135	J	0.00441		7.23	
Iron	0.3	NV	NV	NV	0.244		**0.458**		3460	
Lead	0.05	NV	<36	400	0.00065	J	0.00139		3.48	J
Magnesium	35	NV	NV	NV	0.949		4.72		11800	
Manganese	0.3	NV	NV	2000	0.00686		0.03231		300	
Mercury	0.0007	NV	<0.2	0.81	ND		0.00013	J	ND	
Nickel	0.1	NV	<23	310	0.00061	J	0.00122	J	2.8	
Potassium	NV	NV	NV	NV	0.351		7.22		156	J
Selenium	0.0046	NV	NV	180	ND		ND		ND	
Silver	0.05	NV	<1	180	ND		ND		ND	
Sodium	20	NV	NV	NV	1.23		**8910**		2460	
Thallium	0.008	0.0005	NV	NV	ND		0.0002	J	ND	
Vanadium	0.014	NV	NV	NV	ND		0.00221	J	3.97	
Zinc	NV	2	<120	10000	0.02224		0.01912		24.5	

TABLE 4-2

SUMMARY OF ANALYTICAL RESULTS FOR STORMWATER & SEDIMENT SAMPLES

89 LASALLE AVENUE BCP SITE # C915283

LEGACY LASALLE, LLC.

BUFFALO, NY

Notes & Data Qualifiers:

1 Stormwater analysis results for semi-volatiles are reported for Method 8270D-SIM
\+ The most stringent surface water limitation for either Source of Drinking Water H(WS) or Human Consumption of Fish H(FC) is listed
* Freshwater Sediment Guidance Values for Class A Sediments. "*Screening & Assessment of Contaminated Sediment*", NYSDEC, June 2014
B = Analyte was detected in associated method blank.
J = Analyte detected at a level less than the reporting limit (RL) and greater than or equal to the Method Detection Limit (MDL). Concentrations within this range are estimated.

Footnotes:

12.1 = Sample concentration exceeds NYSDEC Part 703 Water Quality Standards Surface Waters and Groundwater
BOLD = Sample concentration exceeds the TOGS 1.1.1 Surface Water Guidance values
0.34 = Sample concentration exceeds NYSDEC Part 375 Restricted Residential Use Soil Cleanup Objectives (SCOs)
44 = Sample concentration exceeds NYSDEC B10 Freshwater Sediment Guidance Value for Class A sediments
ND = Non detectable concentration by approved analytical methods; water quality standard.
NV = No Standard or Guidance Value Specified
NA = Not Analyzed

Table by:	TG
Checked by:	PTM
Reviewed by:	PTM

TABLE 4-3

SUMMARY OF EXCEEDANCES - STORMWATER AND SEDIMENT ANALYTICAL RESULTS (2017-2022)

JUNE 2022
TABLE 4-3
SUMMARY OF STORMWATER & SEDIMENT SAMPLES - COMPOUNDS WITH EXCEEDANCES (2017 - 2022)
89 LASALLE AVENUE BCP SITE # C915283
LEGACY LASALLE, LLC.
BUFFALO, NY

Lab ID	Water Quality Standards Surface Waters and Groundwater (6 NYCRR Part 703)	NYS T.O.G.S 1.1.1 Surface Water Guidance Values+	Class A Freshwater Sediment Guidance Values*	Restricted Residential SCOs Table 375-6.8(b)	L1710024-01 Stormwater	L1740169-01 Stormwater [1]	L1813173-01 Stormwater [1]	L1915294-01 Stormwater [1]	L1952404-01 Stormwater [1]	L2013833 Stormwater [1]	L1952404-01 Stormwater [1]	L2115550-01 Stormwater [1]	L2158753 Stormwater [1]	L2218463 Stormwater [1]
Sample ID					MH-1	MH-1	MH-1	MH-1	MH-1	MH-1	MH-1	MH-1	MH-1	MH-1
Sample Date					3/31/17	11/13/17	4/16/18	4/15/19	11/5/19	3/30/20	11/30/20	3/28/21	10/26/21	4/7/22
Units	(ppm)	(ppm)	(ppm)	(ppm)	(ppm)	(ppm)	(ppm)	(ppm)	(ppm)	(ppm)	(ppm)	(ppm)	(ppm)	(ppm)
Semivolatile Organics (Method 8270D-SIM)														
Benzo[a]anthracene	NV	0.000002	NV	1	ND	ND	**0.00004** J	ND	**0.00004** J	ND	**0.00004** J	**0.00002** J	**0.00003** J	**0.00004** J
Benzo[a]pyrene	NV	0.0000012	NV	1	ND	ND	0.00004 J	ND	0.00002 J	ND	0.00002 J	**0.00005** J	**0.00003** J	**0.00002** J
Benzo[b]fluoranthene	NV	0.000002	NV	1	ND	ND	**0.00009** J	**0.00003** J	**0.00003** J	**0.00003** J	**0.00003** J	**0.00009** J	**0.00005** J, B	**0.00004** J
Benzo[k]fluoranthene	NV	0.000002	NV	3.9	ND	ND	ND	0.00002 J	**0.00001** J	ND	**0.00001** J	**0.00002** J	**0.00002** J, B	**0.00001** J
Bis(2-ethylhexyl) phthalate	0.005	NV	<360	NV	ND	ND	0.0054	ND	0.002 J	ND	0.002 J	0.0039 J	0.0017 J	ND
Chrysene	NV	0.000002	NV	3.9	ND	ND	**0.00008** J	**0.00004** J	**0.00002** J	0.00001 J	**0.00002** J	**0.00007** J	**0.00003** J	**0.00003** J
Indeno[1,2,3-cd]pyrene	NV	0.000002	NV	0.5	ND	ND	ND	0.00002 J	**0.00002** J	**0.00002** J	**0.00002** J	**0.00008** J	**0.00003** J	**0.00003** J
Total Metals (SW 846 Series)														
Antimony	0.003	NV	NV	NV	0.00044 J	0.0005 J	0.00069 J	0.00489 J	ND	ND	0.00224 J	0.00082 J	0.00087 J	0.00138 J
Cadmium	0.005	NV	<1	4.3	0.00215	ND	0.06023	ND	0.00081	0.0001 J	0.00011 J	0.00009 J	0.00015 J	0.00042
Iron	0.3	NV	NV	NA	*0.798*	ND	12.1	0.0663	0.387	0.746	0.625	0.464	0.244	0.458
Lead	0.05	NV	<36	400	0.00215	ND	0.06023	ND	0.00316	0.00383	0.00307	0.00307	0.00065 J	0.00139
Sodium	20	NV	NV	NV	14	1.19	12.9	65.7	1.24	27.2	3.08	34.2	1.23	8910

JUNE 2022
TABLE 4-3
SUMMARY OF STORMWATER & SEDIMENT SAMPLES - COMPOUNDS WITH EXCEEDANCES (2017 - 2022)
89 LASALLE AVENUE BCP SITE # C915283
LEGACY LASALLE, LLC.
BUFFALO, NY

Lab ID	Water Quality Standards Surface Waters and Groundwater (6 NYCRR Part 703)	NYS T.O.G.S 1.1.1 Surface Water Guidance Values+	Class A Freshwater Sediment Guidance Values*	Restricted Residential SCOs Table 375-6.8(b)	L1710024-02 Sediment	L1813173-02 Sediment	L1915294-02 Sediment	L1952404-02 Sediment	L2115550-02 Sediment	L2218463 Sediment
Sample ID					MH-1	MH-1	MH-1	MH-1	MH-1	MH-1
Sample Date					3/31/17	4/16/18	4/15/19	11/5/19	3/28/21	4/7/22
Units	(ppm)	(ppm)	(ppm)	(ppm)	(ppm)	(ppm)	(ppm)	(ppm)	(ppm)	(ppm)
Semivolatile Organics (Method 8270D-SIM)										
Benzo[a]anthracene	NV	0.000002	NV	1	2.7	0.1	0.27	0.22	ND	0.11 J
Benzo[a]pyrene	NV	0.0000012	NV	1	2.1	0.11	0.28	0.21	ND	0.12 J
Benzo[b]fluoranthene	NV	0.000002	NV	1	2.9	0.18	0.39	0.3	ND	0.2
Benzo[k]fluoranthene	NV	0.000002	NV	3.9	1.1	0.06	0.12 J	0.073 J	ND	0.069 J
Bis(2-ethylhexyl) phthalate	0.005	NV	<360	NV	0.49	0.079 J	0.24 J	ND	ND	0.098 J
Chrysene	NV	0.000002	NV	3.9	2.6	0.15	0.28	0.22	ND	0.16
Indeno[1,2,3-cd]pyrene	NV	0.000002	NV	0.5	1.2	0.056	0.16 J	0.15 J	ND	0.12 J
Total Metals (SW 846 Series)										
Antimony	0.003	NV	NV	NV	ND	2.47 J	1.34 J	0.742 J	ND	ND
Cadmium	0.005	NV	<1	4.3	44	9.23	59.7	14.2	0.098 J	ND
Iron	0.3	NV	NV	NA	9200	7920	23000	17300	3650	3460
Lead	0.05	NV	<36	400	44	9.23	59.7	14.2	5.98	3.48 J
Sodium	20	NV	NV	NV	250	292	2760	78.9	217	2460

June 2022

TABLE 4-3

SUMMARY OF STORMWATER & SEDIMENT SAMPLES - COMPOUNDS WITH EXCEEDANCES (2017 - 2022)

89 LASALLE AVENUE BCP SITE # C915283

LEGACY LASALLE, LLC.

BUFFALO, NY

Notes & Data Qualifiers:

1 **Results stormwater analysis for semi-volatiles are reported for Method 8270D-SIM**

* Freshwater Sediment Guidance Values for Class A Sediments. "*Screening & Assessment of Contaminated Sediment*", NYSDEC, June 2014

B = Analyte was detected in associated method blank.

J = Analyte detected at a level less than the reporting limit (RL) and greater than or equal to the Method Detection Limit (MDL). Concentrations within this range are estimated.

Footnotes:

12.1 = Sample concentration exceeds NYSDEC Part 703 Water Quality Standards Surface Waters and Groundwater

BOLD = Sample concentration exceeds the TOGS 1.1.1 Surface Water Guidance values

0.34 = Sample concentration exceeds NYSDEC Part 375 Restricted Residential Use Soil Cleanup Objectives (SCOs)

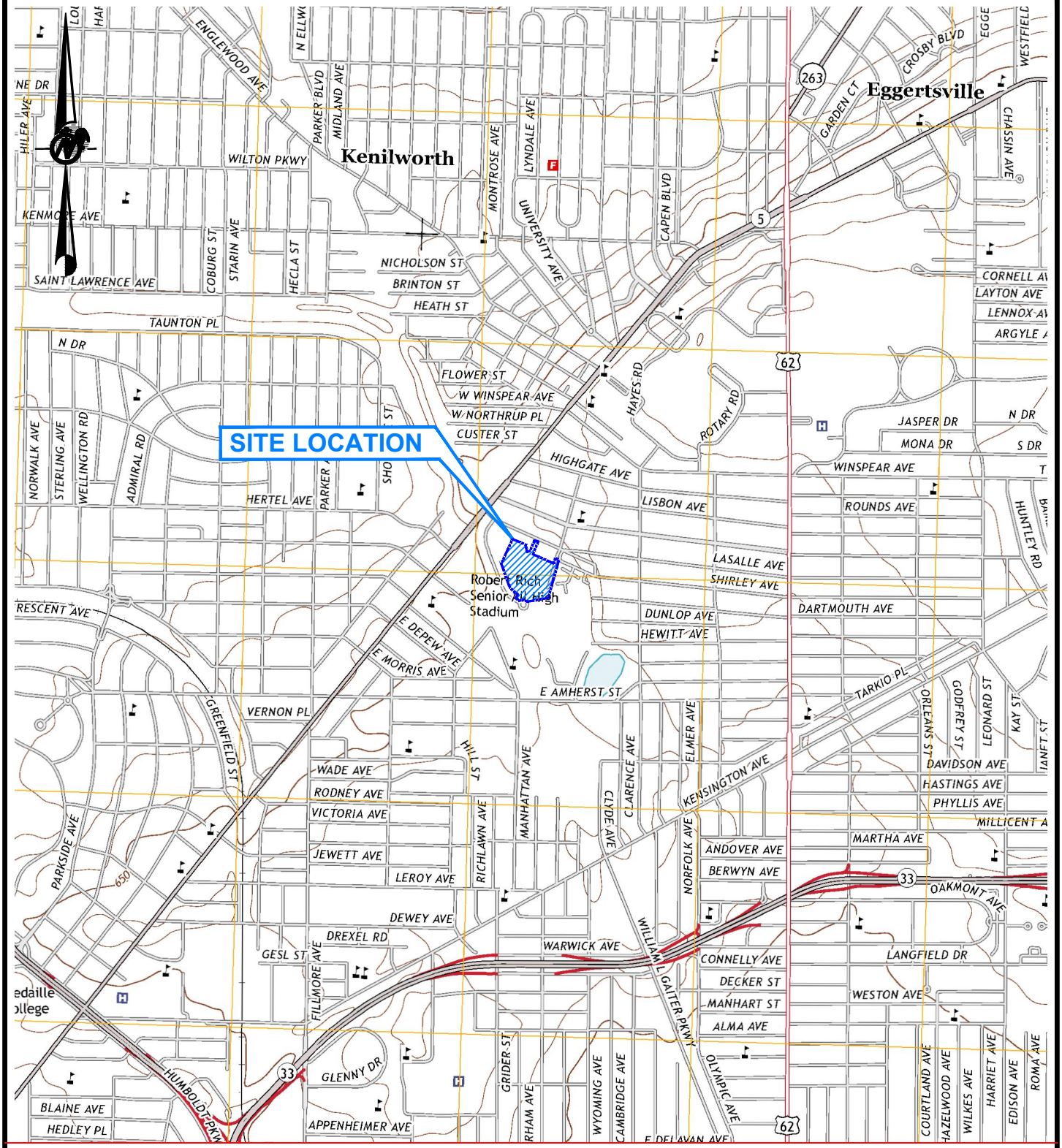
44 = Sample concentration exceeds NYSDEC B10 Freshwater Sediment Guidance Value for Class A sediments

ND = Non detectable concentration by approved analytical methods; water quality standard.

NV = No Standard or Guidance Value Specified

Table by:	MH
Checked by:	PTM
Reviewed by:	PTM

FIGURES



REFERENCE

1.) BASE FROM 7.5 MINUTE QUADRANGLE OF BUFFALO NORTHEAST, NEW YORK DATED 2013.

2000 0 2000
SCALE FEET

Golder Associates
Buffalo, New York

SCALE	AS SHOWN
DATE	5/12/15
DESIGN	JGT
CADD	JGT
CHECK	
REVIEW	

FILE No. 1400657
PROJECT No. 1400657 REV. 0

TITLE

SITE VICINITY MAP

89 LASALLE AVENUE BCP SITE

PERIODIC REVIEW REPORT

LEGACY LASALLE LLC

FIGURE 1-1

Drawing file: Figure 1; Project Site Map.dwg May 12, 2015 – 9:12am

LASALLE AVENUE

ENVIRONMENTAL EASEMENT AREA
POINT OF BEGINNING

(60.0' WIDE)

CORDOVA AVENUE (60.0' WIDE)

PARKWAY

PRICE

WILLIAM

(60.0' WIDE)

LOT-1 LOT-2 LOT-3 LOT-4 LOT-5 LOT-6 LOT-7 LOT-8 LOT-9 LOT-10 LOT-11 LOT-12 LOT-13 LOT-14 LOT-15 LOT-16 LOT-17 LOT-18 LOT-19 LOT-20 LOT-21 LOT-22 LOT-23 LOT-24 LOT-25 LOT-26

MH-1 STORMWATER SAMPLING LOCATION

ENVIRONMENTAL EASEMENT AREA
9.23±Ac.

FORMER TENNIS COURT AREA (EXCLUDED FROM BCP SITE)

FORMER PARKING AREA FOR McCARTHY PARK(EXCLUDED FROM BCP SITE)

LEGEND

- BCP SITE BOUNDARY
- PARCEL BOUNDARY UPAL; LP PARCEL (SBL 79.70-2-5.1) (10.83 Ac.)
- CITY OF BUFFALO PARCEL (SBL 79.70-2-16.111) (1.04 Ac.)
- QUARRY LIMIT
- COVER SYSTEM - IMPERVIOUS SURFACES
- COVER SYSTEM - BUILDINGS AND STRUCTURES
- COVER SYSTEM - SOIL COVER
- (1) BUILDING NO.

REFERENCE

1.) BASE MAP FROM DIGITAL FILE PROVIDED BY McINTOSH & McINTOSH, P.C., LOCKPORT, NEW YORK, ENTITLED "SURVEY OF PART OF LOT-46, TWP.-11, R.-8, HOLLAND PURCHASE," DATED MARCH 20, 2012.

0 50 100
1" = 50' FEET

CLIENT
LEGACY LASALLE, LLC - BUFFALO NEW YORK

PROJECT
PERIODIC REVIEW REPORT

CONSULTANT
GOLDER

YYYY-MM-DD	2022-06-07
DESIGNED	JGT
PREPARED	AAZ
REVIEWED	PTM
APPROVED	PTM

TITLE
89 LASALLE AVENUE SITE PLAN

PROJECT NO.	CONTROL	REV.	FIGUR
20139374	001	0	2-

APPENDIX A

ANALYTICAL DATA REPORTS – ALPHA ANALYTICAL

OCTOBER 2021, APRIL 2022

ANALYTICAL REPORT

Lab Number:	L2158753
Client:	Golder Associates Inc. 2430 North Forest Rd. Suite 100 Getzville, NY 14068
ATTN:	Patrick Martin
Phone:	(716) 204-5880
Project Name:	LEGACY 89 LASALLE AVE BCP SITE
Project Number:	21455587
Report Date:	11/03/21

Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0574), IL (200077), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #P330-17-00196).

Eight Walkup Drive, Westborough, MA 01581-1019
508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com

Project Name: LEGACY 89 LASALLE AVE BCP SITE
Project Number: 21455587

Lab Number: L2158753
Report Date: 11/03/21

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2158753-01	MH-1 STORM WATER	WATER	Not Specified	10/26/21 13:40	10/27/21

Project Name:	LEGACY 89 LASALLE AVE BCP SITE	**Lab Number:**	L2158753
Project Number:	21455587	**Report Date:**	11/03/21

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively.

When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances, the specific failure is not narrated but noted in the associated QC Outlier Summary Report, located directly after the Case Narrative. QC information is also incorporated in the Data Usability Assessment table (Format 11) of our Data Merger tool, where it can be reviewed in conjunction with the sample result, associated regulatory criteria and any associated data usability implications.

Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

HOLD POLICY - For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Alpha Project Manager and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Project Management at 800-624-9220 with any questions.

Project Name:	LEGACY 89 LASALLE AVE BCP SITE	**Lab Number:**	L2158753
Project Number:	21455587	**Report Date:**	11/03/21

Case Narrative (continued)

Report Submission

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature: Cristin Walker

Title: Technical Director/Representative Date: 11/03/21

ORGANICS

SEMIVOLATILES

Project Name: LEGACY 89 LASALLE AVE BCP SITE **Lab Number:** L2158753

Project Number: 21455587 **Report Date:** 11/03/21

SAMPLE RESULTS

Lab ID: L2158753-01
Client ID: MH-1 STORM WATER
Sample Location: Not Specified

Date Collected: 10/26/21 13:40
Date Received: 10/27/21
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270D
Analytical Date: 10/30/21 12:23
Analyst: SZ

Extraction Method: EPA 3510C
Extraction Date: 10/29/21 20:40

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6	1
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2	1
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93	1
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.49	1
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.38	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50	1
Hexachlorocyclopentadiene	ND		ug/l	20	0.69	1
Isophorone	ND		ug/l	5.0	1.2	1
Nitrobenzene	ND		ug/l	2.0	0.77	1
NDPA/DPA	ND		ug/l	2.0	0.42	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64	1
Bis(2-ethylhexyl)phthalate	1.7	J	ug/l	3.0	1.5	1
Butyl benzyl phthalate	ND		ug/l	5.0	1.2	1
Di-n-butylphthalate	ND		ug/l	5.0	0.39	1
Di-n-octylphthalate	ND		ug/l	5.0	1.3	1
Diethyl phthalate	ND		ug/l	5.0	0.38	1
Dimethyl phthalate	ND		ug/l	5.0	1.8	1
Biphenyl	ND		ug/l	2.0	0.46	1
4-Chloroaniline	ND		ug/l	5.0	1.1	1
2-Nitroaniline	ND		ug/l	5.0	0.50	1
3-Nitroaniline	ND		ug/l	5.0	0.81	1
4-Nitroaniline	ND		ug/l	5.0	0.80	1
Dibenzofuran	ND		ug/l	2.0	0.50	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.44	1
Acetophenone	ND		ug/l	5.0	0.53	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61	1

Project Name: LEGACY 89 LASALLE AVE BCP SITE **Lab Number:** L2158753

Project Number: 21455587 **Report Date:** 11/03/21

SAMPLE RESULTS

Lab ID: L2158753-01 Date Collected: 10/26/21 13:40
Client ID: MH-1 STORM WATER Date Received: 10/27/21
Sample Location: Not Specified Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
p-Chloro-m-cresol	ND		ug/l	2.0	0.35	1
2-Chlorophenol	ND		ug/l	2.0	0.48	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.41	1
2,4-Dimethylphenol	ND		ug/l	5.0	1.8	1
2-Nitrophenol	ND		ug/l	10	0.85	1
4-Nitrophenol	ND		ug/l	10	0.67	1
2,4-Dinitrophenol	ND		ug/l	20	6.6	1
4,6-Dinitro-o-cresol	ND		ug/l	10	1.8	1
Phenol	ND		ug/l	5.0	0.57	1
2-Methylphenol	ND		ug/l	5.0	0.49	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.48	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77	1
Carbazole	ND		ug/l	2.0	0.49	1
Atrazine	ND		ug/l	10	0.76	1
Benzaldehyde	ND		ug/l	5.0	0.53	1
Caprolactam	ND		ug/l	10	3.3	1
2,3,4,6-Tetrachlorophenol	ND		ug/l	5.0	0.84	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	66		21-120
Phenol-d6	46		10-120
Nitrobenzene-d5	75		23-120
2-Fluorobiphenyl	93		15-120
2,4,6-Tribromophenol	84		10-120
4-Terphenyl-d14	97		41-149

Project Name: LEGACY 89 LASALLE AVE BCP SITE
Lab Number: L2158753
Project Number: 21455587
Report Date: 11/03/21

SAMPLE RESULTS

Lab ID: L2158753-01
Client ID: MH-1 STORM WATER
Sample Location: Not Specified

Date Collected: 10/26/21 13:40
Date Received: 10/27/21
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270D-SIM
Analytical Date: 10/30/21 16:11
Analyst: DV

Extraction Method: EPA 3510C
Extraction Date: 10/29/21 20:40

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	ND		ug/l	0.10	0.01	1
2-Chloronaphthalene	ND		ug/l	0.20	0.02	1
Fluoranthene	0.07	J	ug/l	0.10	0.02	1
Hexachlorobutadiene	ND		ug/l	0.50	0.05	1
Naphthalene	ND		ug/l	0.10	0.05	1
Benzo(a)anthracene	0.03	J	ug/l	0.10	0.02	1
Benzo(a)pyrene	0.03	J	ug/l	0.10	0.02	1
Benzo(b)fluoranthene	0.05	J	ug/l	0.10	0.01	1
Benzo(k)fluoranthene	0.02	J	ug/l	0.10	0.01	1
Chrysene	0.03	J	ug/l	0.10	0.01	1
Acenaphthylene	ND		ug/l	0.10	0.01	1
Anthracene	ND		ug/l	0.10	0.01	1
Benzo(ghi)perylene	0.04	J	ug/l	0.10	0.01	1
Fluorene	ND		ug/l	0.10	0.01	1
Phenanthrene	0.03	J	ug/l	0.10	0.02	1
Dibenzo(a,h)anthracene	ND		ug/l	0.10	0.01	1
Indeno(1,2,3-cd)pyrene	0.03	J	ug/l	0.10	0.01	1
Pyrene	0.05	J	ug/l	0.10	0.02	1
2-Methylnaphthalene	ND		ug/l	0.10	0.02	1
Pentachlorophenol	0.72	J	ug/l	0.80	0.01	1
Hexachlorobenzene	ND		ug/l	0.80	0.01	1
Hexachloroethane	ND		ug/l	0.80	0.06	1

Project Name: LEGACY 89 LASALLE AVE BCP SITE **Lab Number:** L2158753

Project Number: 21455587 **Report Date:** 11/03/21

SAMPLE RESULTS

Lab ID: L2158753-01 Date Collected: 10/26/21 13:40

Client ID: MH-1 STORM WATER Date Received: 10/27/21

Sample Location: Not Specified Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	61		21-120
Phenol-d6	47		10-120
Nitrobenzene-d5	87		23-120
2-Fluorobiphenyl	86		15-120
2,4,6-Tribromophenol	82		10-120
4-Terphenyl-d14	95		41-149

Project Name: LEGACY 89 LASALLE AVE BCP SITE
Project Number: 21455587
Lab Number: L2158753
Report Date: 11/03/21

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 10/30/21 10:40
Analyst: SZ

Extraction Method: EPA 3510C
Extraction Date: 10/29/21 20:40

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG1565073-1					
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.49
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.38
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50
Hexachlorocyclopentadiene	ND		ug/l	20	0.69
Isophorone	ND		ug/l	5.0	1.2
Nitrobenzene	ND		ug/l	2.0	0.77
NDPA/DPA	ND		ug/l	2.0	0.42
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.5
Butyl benzyl phthalate	ND		ug/l	5.0	1.2
Di-n-butylphthalate	ND		ug/l	5.0	0.39
Di-n-octylphthalate	ND		ug/l	5.0	1.3
Diethyl phthalate	ND		ug/l	5.0	0.38
Dimethyl phthalate	ND		ug/l	5.0	1.8
Biphenyl	ND		ug/l	2.0	0.46
4-Chloroaniline	ND		ug/l	5.0	1.1
2-Nitroaniline	ND		ug/l	5.0	0.50
3-Nitroaniline	ND		ug/l	5.0	0.81
4-Nitroaniline	ND		ug/l	5.0	0.80
Dibenzofuran	ND		ug/l	2.0	0.50
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.44
Acetophenone	ND		ug/l	5.0	0.53
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61
p-Chloro-m-cresol	ND		ug/l	2.0	0.35

Project Name: LEGACY 89 LASALLE AVE BCP SITE
Project Number: 21455587
Lab Number: L2158753
Report Date: 11/03/21

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 10/30/21 10:40
Analyst: SZ

Extraction Method: EPA 3510C
Extraction Date: 10/29/21 20:40

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG1565073-1					
2-Chlorophenol	ND		ug/l	2.0	0.48
2,4-Dichlorophenol	ND		ug/l	5.0	0.41
2,4-Dimethylphenol	ND		ug/l	5.0	1.8
2-Nitrophenol	ND		ug/l	10	0.85
4-Nitrophenol	ND		ug/l	10	0.67
2,4-Dinitrophenol	ND		ug/l	20	6.6
4,6-Dinitro-o-cresol	ND		ug/l	10	1.8
Phenol	ND		ug/l	5.0	0.57
2-Methylphenol	ND		ug/l	5.0	0.49
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.48
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77
Carbazole	ND		ug/l	2.0	0.49
Atrazine	ND		ug/l	10	0.76
Benzaldehyde	ND		ug/l	5.0	0.53
Caprolactam	ND		ug/l	10	3.3
2,3,4,6-Tetrachlorophenol	ND		ug/l	5.0	0.84

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	45		21-120
Phenol-d6	30		10-120
Nitrobenzene-d5	56		23-120
2-Fluorobiphenyl	60		15-120
2,4,6-Tribromophenol	63		10-120
4-Terphenyl-d14	82		41-149

Project Name: LEGACY 89 LASALLE AVE BCP SITE
Project Number: 21455587
Lab Number: L2158753
Report Date: 11/03/21

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D-SIM
Analytical Date: 10/30/21 15:52
Analyst: DV

Extraction Method: EPA 3510C
Extraction Date: 10/29/21 20:40

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 01 Batch: WG1565074-1					
Acenaphthene	ND		ug/l	0.10	0.01
2-Chloronaphthalene	ND		ug/l	0.20	0.02
Fluoranthene	ND		ug/l	0.10	0.02
Hexachlorobutadiene	ND		ug/l	0.50	0.05
Naphthalene	ND		ug/l	0.10	0.05
Benzo(a)anthracene	ND		ug/l	0.10	0.02
Benzo(a)pyrene	ND		ug/l	0.10	0.02
Benzo(b)fluoranthene	0.02	J	ug/l	0.10	0.01
Benzo(k)fluoranthene	0.02	J	ug/l	0.10	0.01
Chrysene	ND		ug/l	0.10	0.01
Acenaphthylene	ND		ug/l	0.10	0.01
Anthracene	ND		ug/l	0.10	0.01
Benzo(ghi)perylene	0.02	J	ug/l	0.10	0.01
Fluorene	ND		ug/l	0.10	0.01
Phenanthrene	ND		ug/l	0.10	0.02
Dibenzo(a,h)anthracene	ND		ug/l	0.10	0.01
Indeno(1,2,3-cd)pyrene	0.02	J	ug/l	0.10	0.01
Pyrene	ND		ug/l	0.10	0.02
2-Methylnaphthalene	ND		ug/l	0.10	0.02
Pentachlorophenol	ND		ug/l	0.80	0.01
Hexachlorobenzene	ND		ug/l	0.80	0.01
Hexachloroethane	ND		ug/l	0.80	0.06

Project Name: LEGACY 89 LASALLE AVE BCP SITE
Project Number: 21455587
Lab Number: L2158753
Report Date: 11/03/21

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D-SIM
Analytical Date: 10/30/21 15:52
Analyst: DV

Extraction Method: EPA 3510C
Extraction Date: 10/29/21 20:40

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 01 Batch: WG1565074-1					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	43		21-120
Phenol-d6	32		10-120
Nitrobenzene-d5	67		23-120
2-Fluorobiphenyl	69		15-120
2,4,6-Tribromophenol	59		10-120
4-Terphenyl-d14	73		41-149

Lab Control Sample Analysis

Batch Quality Control

Project Name: LEGACY 89 LASALLE AVE BCP SITE

Project Number: 21455587

Lab Number: L2158753

Report Date: 11/03/21

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1565073-2 WG1565073-3								
Bis(2-chloroethyl)ether	60		58		40-140	3		30
3,3'-Dichlorobenzidine	61		58		40-140	5		30
2,4-Dinitrotoluene	70		65		48-143	7		30
2,6-Dinitrotoluene	80		57		40-140	**34**	Q	30
4-Chlorophenyl phenyl ether	72		70		40-140	3		30
4-Bromophenyl phenyl ether	71		78		40-140	9		30
Bis(2-chloroisopropyl)ether	50		48		40-140	4		30
Bis(2-chloroethoxy)methane	61		68		40-140	11		30
Hexachlorocyclopentadiene	62		54		40-140	14		30
Isophorone	61		64		40-140	5		30
Nitrobenzene	66		65		40-140	2		30
NDPA/DPA	73		74		40-140	1		30
n-Nitrosodi-n-propylamine	64		60		29-132	6		30
Bis(2-ethylhexyl)phthalate	66		60		40-140	10		30
Butyl benzyl phthalate	76		65		40-140	16		30
Di-n-butylphthalate	66		62		40-140	6		30
Di-n-octylphthalate	67		64		40-140	5		30
Diethyl phthalate	67		62		40-140	8		30
Dimethyl phthalate	78		57		40-140	**31**	Q	30
Biphenyl	82		66		40-140	22		30
4-Chloroaniline	62		61		40-140	2		30
2-Nitroaniline	70		62		52-143	12		30
3-Nitroaniline	59		52		25-145	13		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: LEGACY 89 LASALLE AVE BCP SITE

Project Number: 21455587

Lab Number: L2158753

Report Date: 11/03/21

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1565073-2 WG1565073-3								
4-Nitroaniline	58		60		51-143	3		30
Dibenzofuran	70		63		40-140	11		30
1,2,4,5-Tetrachlorobenzene	88		66		2-134	29		30
Acetophenone	67		73		39-129	9		30
2,4,6-Trichlorophenol	82		63		30-130	26		30
p-Chloro-m-cresol	81		66		23-97	20		30
2-Chlorophenol	64		59		27-123	8		30
2,4-Dichlorophenol	72		76		30-130	5		30
2,4-Dimethylphenol	69		77		30-130	11		30
2-Nitrophenol	76		67		30-130	13		30
4-Nitrophenol	53		46		10-80	14		30
2,4-Dinitrophenol	54		55		20-130	2		30
4,6-Dinitro-o-cresol	65		68		20-164	5		30
Phenol	42		40		12-110	5		30
2-Methylphenol	64		64		30-130	0		30
3-Methylphenol/4-Methylphenol	65		65		30-130	0		30
2,4,5-Trichlorophenol	86		68		30-130	23		30
Carbazole	73		67		55-144	9		30
Atrazine	85		89		40-140	5		30
Benzaldehyde	59		53		40-140	11		30
Caprolactam	28		25		10-130	11		30
2,3,4,6-Tetrachlorophenol	73		71		40-140	3		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: LEGACY 89 LASALLE AVE BCP SITE

Project Number: 21455587

Lab Number: L2158753

Report Date: 11/03/21

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits

Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1565073-2 WG1565073-3

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	54		49		21-120
Phenol-d6	43		35		10-120
Nitrobenzene-d5	60		64		23-120
2-Fluorobiphenyl	75		61		15-120
2,4,6-Tribromophenol	72		74		10-120
4-Terphenyl-d14	85		75		41-149

Lab Control Sample Analysis

Batch Quality Control

Project Name: LEGACY 89 LASALLE AVE BCP SITE

Project Number: 21455587

Lab Number: L2158753

Report Date: 11/03/21

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 01 Batch: WG1565074-2 WG1565074-3								
Acenaphthene	72		74		40-140	3		40
2-Chloronaphthalene	75		75		40-140	0		40
Fluoranthene	78		79		40-140	1		40
Hexachlorobutadiene	68		68		40-140	0		40
Naphthalene	70		71		40-140	1		40
Benzo(a)anthracene	80		82		40-140	2		40
Benzo(a)pyrene	79		79		40-140	0		40
Benzo(b)fluoranthene	76		79		40-140	4		40
Benzo(k)fluoranthene	81		79		40-140	3		40
Chrysene	75		75		40-140	0		40
Acenaphthylene	79		78		40-140	1		40
Anthracene	76		77		40-140	1		40
Benzo(ghi)perylene	74		78		40-140	5		40
Fluorene	75		76		40-140	1		40
Phenanthrene	73		74		40-140	1		40
Dibenzo(a,h)anthracene	78		82		40-140	5		40
Indeno(1,2,3-cd)pyrene	72		75		40-140	4		40
Pyrene	78		79		40-140	1		40
2-Methylnaphthalene	73		73		40-140	0		40
Pentachlorophenol	96		99		40-140	3		40
Hexachlorobenzene	68		70		40-140	3		40
Hexachloroethane	63		63		40-140	0		40

Lab Control Sample Analysis

Batch Quality Control

Project Name: LEGACY 89 LASALLE AVE BCP SITE

Project Number: 21455587

Lab Number: L2158753

Report Date: 11/03/21

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits

Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 01 Batch: WG1565074-2 WG1565074-3

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	56		56		21-120
Phenol-d6	44		45		10-120
Nitrobenzene-d5	78		79		23-120
2-Fluorobiphenyl	75		75		15-120
2,4,6-Tribromophenol	70		71		10-120
4-Terphenyl-d14	83		83		41-149

METALS

Project Name: LEGACY 89 LASALLE AVE BCP SITE **Lab Number:** L2158753

Project Number: 21455587 **Report Date:** 11/03/21

SAMPLE RESULTS

Lab ID: L2158753-01 Date Collected: 10/26/21 13:40

Client ID: MH-1 STORM WATER Date Received: 10/27/21

Sample Location: Not Specified Field Prep: Not Specified

Sample Depth:

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	0.124		mg/l	0.0100	0.00327	1	11/03/21 03:52	11/03/21 16:26	EPA 3005A	1,6020B	PS
Antimony, Total	0.00087	J	mg/l	0.00400	0.00042	1	11/03/21 03:52	11/03/21 16:26	EPA 3005A	1,6020B	PS
Arsenic, Total	ND		mg/l	0.00050	0.00016	1	11/03/21 03:52	11/03/21 16:26	EPA 3005A	1,6020B	PS
Barium, Total	0.00499		mg/l	0.00050	0.00017	1	11/03/21 03:52	11/03/21 16:26	EPA 3005A	1,6020B	PS
Beryllium, Total	ND		mg/l	0.00050	0.00010	1	11/03/21 03:52	11/03/21 16:26	EPA 3005A	1,6020B	PS
Cadmium, Total	0.00015	J	mg/l	0.00020	0.00005	1	11/03/21 03:52	11/03/21 16:26	EPA 3005A	1,6020B	PS
Calcium, Total	15.5		mg/l	0.100	0.0394	1	11/03/21 03:52	11/03/21 16:26	EPA 3005A	1,6020B	PS
Chromium, Total	0.00071	J	mg/l	0.00100	0.00017	1	11/03/21 03:52	11/03/21 16:26	EPA 3005A	1,6020B	PS
Cobalt, Total	ND		mg/l	0.00050	0.00016	1	11/03/21 03:52	11/03/21 16:26	EPA 3005A	1,6020B	PS
Copper, Total	0.00135	J	mg/l	0.00200	0.00038	1	11/03/21 03:52	11/03/21 16:26	EPA 3005A	1,6020B	PS
Iron, Total	0.244		mg/l	0.0500	0.0191	1	11/03/21 03:52	11/03/21 16:26	EPA 3005A	1,6020B	PS
Lead, Total	0.00065	J	mg/l	0.00100	0.00034	1	11/03/21 03:52	11/03/21 16:26	EPA 3005A	1,6020B	PS
Magnesium, Total	0.949		mg/l	0.0700	0.0242	1	11/03/21 03:52	11/03/21 16:26	EPA 3005A	1,6020B	PS
Manganese, Total	0.00686		mg/l	0.00100	0.00044	1	11/03/21 03:52	11/03/21 16:26	EPA 3005A	1,6020B	PS
Mercury, Total	ND		mg/l	0.00020	0.00009	1	11/03/21 06:50	11/03/21 10:26	EPA 7470A	1,7470A	AC
Nickel, Total	0.00061	J	mg/l	0.00200	0.00055	1	11/03/21 03:52	11/03/21 16:26	EPA 3005A	1,6020B	PS
Potassium, Total	0.351		mg/l	0.100	0.0309	1	11/03/21 03:52	11/03/21 16:26	EPA 3005A	1,6020B	PS
Selenium, Total	ND		mg/l	0.00500	0.00173	1	11/03/21 03:52	11/03/21 16:26	EPA 3005A	1,6020B	PS
Silver, Total	ND		mg/l	0.00040	0.00016	1	11/03/21 03:52	11/03/21 16:26	EPA 3005A	1,6020B	PS
Sodium, Total	1.23		mg/l	0.100	0.0293	1	11/03/21 03:52	11/03/21 16:26	EPA 3005A	1,6020B	PS
Thallium, Total	ND		mg/l	0.00100	0.00014	1	11/03/21 03:52	11/03/21 16:26	EPA 3005A	1,6020B	PS
Vanadium, Total	ND		mg/l	0.00500	0.00157	1	11/03/21 03:52	11/03/21 16:26	EPA 3005A	1,6020B	PS
Zinc, Total	0.02224		mg/l	0.01000	0.00341	1	11/03/21 03:52	11/03/21 16:26	EPA 3005A	1,6020B	PS

Project Name: LEGACY 89 LASALLE AVE BCP SITE **Lab Number:** L2158753

Project Number: 21455587 **Report Date:** 11/03/21

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 01 Batch: WG1566075-1										
Aluminum, Total	ND		mg/l	0.0100	0.00327	1	11/03/21 03:52	11/03/21 15:26	1,6020B	PS
Antimony, Total	ND		mg/l	0.00400	0.00042	1	11/03/21 03:52	11/03/21 15:26	1,6020B	PS
Arsenic, Total	ND		mg/l	0.00050	0.00016	1	11/03/21 03:52	11/03/21 15:26	1,6020B	PS
Barium, Total	ND		mg/l	0.00050	0.00017	1	11/03/21 03:52	11/03/21 15:26	1,6020B	PS
Beryllium, Total	ND		mg/l	0.00050	0.00010	1	11/03/21 03:52	11/03/21 15:26	1,6020B	PS
Cadmium, Total	ND		mg/l	0.00020	0.00005	1	11/03/21 03:52	11/03/21 15:26	1,6020B	PS
Calcium, Total	ND		mg/l	0.100	0.0394	1	11/03/21 03:52	11/03/21 15:26	1,6020B	PS
Chromium, Total	ND		mg/l	0.00100	0.00017	1	11/03/21 03:52	11/03/21 15:26	1,6020B	PS
Cobalt, Total	ND		mg/l	0.00050	0.00016	1	11/03/21 03:52	11/03/21 15:26	1,6020B	PS
Copper, Total	0.00109	J	mg/l	0.00200	0.00038	1	11/03/21 03:52	11/03/21 15:26	1,6020B	PS
Iron, Total	ND		mg/l	0.0500	0.0191	1	11/03/21 03:52	11/03/21 15:26	1,6020B	PS
Lead, Total	ND		mg/l	0.00100	0.00034	1	11/03/21 03:52	11/03/21 15:26	1,6020B	PS
Magnesium, Total	ND		mg/l	0.0700	0.0242	1	11/03/21 03:52	11/03/21 15:26	1,6020B	PS
Manganese, Total	ND		mg/l	0.00100	0.00044	1	11/03/21 03:52	11/03/21 15:26	1,6020B	PS
Nickel, Total	ND		mg/l	0.00200	0.00055	1	11/03/21 03:52	11/03/21 15:26	1,6020B	PS
Potassium, Total	ND		mg/l	0.100	0.0309	1	11/03/21 03:52	11/03/21 15:26	1,6020B	PS
Selenium, Total	ND		mg/l	0.00500	0.00173	1	11/03/21 03:52	11/03/21 15:26	1,6020B	PS
Silver, Total	ND		mg/l	0.00040	0.00016	1	11/03/21 03:52	11/03/21 15:26	1,6020B	PS
Sodium, Total	ND		mg/l	0.100	0.0293	1	11/03/21 03:52	11/03/21 15:26	1,6020B	PS
Thallium, Total	ND		mg/l	0.00100	0.00014	1	11/03/21 03:52	11/03/21 15:26	1,6020B	PS
Vanadium, Total	ND		mg/l	0.00500	0.00157	1	11/03/21 03:52	11/03/21 15:26	1,6020B	PS
Zinc, Total	ND		mg/l	0.01000	0.00341	1	11/03/21 03:52	11/03/21 15:26	1,6020B	PS

Prep Information

Digestion Method: EPA 3005A

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 01 Batch: WG1566080-1										
Mercury, Total	ND		mg/l	0.00020	0.00009	1	11/03/21 06:50	11/03/21 10:19	1,7470A	AC

Project Name: LEGACY 89 LASALLE AVE BCP SITE
Project Number: 21455587
Lab Number: L2158753
Report Date: 11/03/21

Method Blank Analysis
Batch Quality Control

Prep Information

Digestion Method: EPA 7470A

Lab Control Sample Analysis

Batch Quality Control

Project Name: LEGACY 89 LASALLE AVE BCP SITE

Project Number: 21455587

Lab Number: L2158753

Report Date: 11/03/21

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01 Batch: WG1566075-2								
Aluminum, Total	95		-		80-120	-		
Antimony, Total	85		-		80-120	-		
Arsenic, Total	97		-		80-120	-		
Barium, Total	98		-		80-120	-		
Beryllium, Total	96		-		80-120	-		
Cadmium, Total	97		-		80-120	-		
Calcium, Total	90		-		80-120	-		
Chromium, Total	92		-		80-120	-		
Cobalt, Total	91		-		80-120	-		
Copper, Total	92		-		80-120	-		
Iron, Total	90		-		80-120	-		
Lead, Total	92		-		80-120	-		
Magnesium, Total	98		-		80-120	-		
Manganese, Total	90		-		80-120	-		
Nickel, Total	89		-		80-120	-		
Potassium, Total	96		-		80-120	-		
Selenium, Total	98		-		80-120	-		
Silver, Total	100		-		80-120	-		
Sodium, Total	93		-		80-120	-		
Thallium, Total	97		-		80-120	-		
Vanadium, Total	93		-		80-120	-		

Lab Control Sample Analysis

Batch Quality Control

Project Name: LEGACY 89 LASALLE AVE BCP SITE

Project Number: 21455587

Lab Number: L2158753

Report Date: 11/03/21

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01 Batch: WG1566075-2					
Zinc, Total	93	-	80-120	-	
Total Metals - Mansfield Lab Associated sample(s): 01 Batch: WG1566080-2					
Mercury, Total	87	-	80-120	-	

Matrix Spike Analysis
Batch Quality Control

Project Name: LEGACY 89 LASALLE AVE BCP SITE
Project Number: 21455587
Lab Number: L2158753
Report Date: 11/03/21

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG1566075-3 WG1566075-4 QC Sample: L2157782-05 Client ID: MS Sample												
Aluminum, Total	0.221	2	2.18	98		2.18	98		75-125	0		20
Antimony, Total	ND	0.5	0.4220	84		0.3925	78		75-125	7		20
Arsenic, Total	0.00054	0.12	0.1182	98		0.1208	100		75-125	2		20
Barium, Total	0.0059	2	1.993	99		1.958	98		75-125	2		20
Beryllium, Total	ND	0.05	0.04853	97		0.04892	98		75-125	1		20
Cadmium, Total	ND	0.053	0.05232	99		0.05154	97		75-125	2		20
Calcium, Total	574	10	528	**0**	Q	539	**0**	Q	75-125	2		20
Chromium, Total	0.0008J	0.2	0.1868	93		0.1905	95		75-125	2		20
Cobalt, Total	0.0005J	0.5	0.4609	92		0.4667	93		75-125	1		20
Copper, Total	ND	0.25	0.2309	92		0.2368	95		75-125	3		20
Iron, Total	0.404	1	1.40	100		1.42	102		75-125	1		20
Lead, Total	ND	0.53	0.4959	94		0.4891	92		75-125	1		20
Magnesium, Total	42.2	10	51.7	95		53.8	116		75-125	4		20
Manganese, Total	0.06280	0.5	0.5332	94		0.5394	95		75-125	1		20
Nickel, Total	0.0010J	0.5	0.4554	91		0.4647	93		75-125	2		20
Potassium, Total	1.86	10	11.6	97		11.7	98		75-125	1		20
Selenium, Total	ND	0.12	0.120	100		0.120	100		75-125	0		20
Silver, Total	ND	0.05	0.05061	101		0.04972	99		75-125	2		20
Sodium, Total	11.1	10	19.7	86		20.3	92		75-125	3		20
Thallium, Total	ND	0.12	0.1232	103		0.1206	100		75-125	2		20
Vanadium, Total	ND	0.5	0.4770	95		0.4866	97		75-125	2		20

Matrix Spike Analysis
Batch Quality Control

Project Name: LEGACY 89 LASALLE AVE BCP SITE
Project Number: 21455587

Lab Number: L2158753
Report Date: 11/03/21

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG1566075-3 WG1566075-4 QC Sample: L2157782-05 Client ID: MS Sample									
Zinc, Total	0.0078J	0.5	0.4767	95	0.4834	97	75-125	1	20
Total Metals - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG1566080-3 QC Sample: L2158753-01 Client ID: MH-1 STORM WATER									
Mercury, Total	ND	0.005	0.00451	90	-	-	75-125	-	20

Lab Duplicate Analysis

Batch Quality Control

Project Name: LEGACY 89 LASALLE AVE BCP SITE

Project Number: 21455587

Lab Number: L2158753

Report Date: 11/03/21

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG1566080-4 QC Sample: L2158753-01 Client ID: MH-1 STORM WATER						
Mercury, Total	ND	ND	mg/l	NC		20

Project Name: LEGACY 89 LASALLE AVE BCP SITE
Project Number: 21455587

Lab Serial Dilution Analysis
Batch Quality Control

Lab Number: L2158753
Report Date: 11/03/21

Parameter	Native Sample	Serial Dilution	Units	% D	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG1566075-6 QC Sample: L2157782-05 Client ID: DUP Sample						
Manganese, Total	0.06280	0.06104	mg/l	3		20
Sodium, Total	11.1	10.5	mg/l	5		20

INORGANICS
&
MISCELLANEOUS

Project Name: LEGACY 89 LASALLE AVE BCP SITE
Project Number: 21455587
Lab Number: L2158753
Report Date: 11/03/21

SAMPLE RESULTS

Lab ID: L2158753-01
Client ID: MH-1 STORM WATER
Sample Location: Not Specified
Sample Depth:
Matrix: Water
Date Collected: 10/26/21 13:40
Date Received: 10/27/21
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	47.		mg/l	10	NA	1	-	10/29/21 06:45	121,2540B	DW

Project Name: LEGACY 89 LASALLE AVE BCP SITE **Lab Number:** L2158753

Project Number: 21455587 **Report Date:** 11/03/21

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG1564646-1										
Solids, Total	ND		mg/l	10	NA	1	-	10/29/21 06:45	121,2540B	DW

Lab Control Sample Analysis

Batch Quality Control

Project Name: LEGACY 89 LASALLE AVE BCP SITE

Project Number: 21455587

Lab Number: L2158753

Report Date: 11/03/21

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG1564646-2								
Solids, Total	96		-		80-120	-		

Lab Duplicate Analysis

Batch Quality Control

Project Name: LEGACY 89 LASALLE AVE BCP SITE

Project Number: 21455587

Lab Number: L2158753

Report Date: 11/03/21

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1564646-3 QC Sample: L2159244-01 Client ID: DUP Sample						
Solids, Total	250	220	mg/l	13		16

Project Name: LEGACY 89 LASALLE AVE BCP SITE
Project Number: 21455587

Lab Number: L2158753
Report Date: 11/03/21

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information

Cooler	Custody Seal
A	Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2158753-01A	Amber 250ml unpreserved	A	7	7	3.9	Y	Absent		TSC-2540(7)
L2158753-01B	Amber 250ml unpreserved	A	7	7	3.9	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L2158753-01C	Plastic 250ml HNO3 preserved	A	<2	<2	3.9	Y	Absent		FE-6020T(180),SE-6020T(180),BA-6020T(180),TL-6020T(180),CR-6020T(180),K-6020T(180),CA-6020T(180),NI-6020T(180),NA-6020T(180),CU-6020T(180),ZN-6020T(180),PB-6020T(180),MN-6020T(180),BE-6020T(180),SB-6020T(180),AS-6020T(180),V-6020T(180),AG-6020T(180),MG-6020T(180),HG-T(28),AL-6020T(180),CD-6020T(180),CO-6020T(180)

*Values in parentheses indicate holding time in days

Project Name:	LEGACY 89 LASALLE AVE BCP SITE	**Lab Number:**	L2158753
Project Number:	21455587	**Report Date:**	11/03/21

GLOSSARY

Acronyms

DL - Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

EDL - Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).

EMPC - Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.

EPA - Environmental Protection Agency.

LCS - Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

LCSD - Laboratory Control Sample Duplicate: Refer to LCS.

LFB - Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

LOD - Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

LOQ - Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

MDL - Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

MS - Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.

MSD - Matrix Spike Sample Duplicate: Refer to MS.

NA - Not Applicable.

NC - Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.

NDPA/DPA - N-Nitrosodiphenylamine/Diphenylamine.

NI - Not Ignitable.

NP - Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.

NR - No Results: Term is utilized when 'No Target Compounds Requested' is reported for the analysis of Volatile or Semivolatile Organic TIC only requests.

RL - Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

RPD - Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.

SRM - Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.

STLP - Semi-dynamic Tank Leaching Procedure per EPA Method 1315.

TEF - Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.

TEQ - Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.

TIC - Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Report Format: DU Report with 'J' Qualifiers

Project Name:	LEGACY 89 LASALLE AVE BCP SITE	**Lab Number:**	L2158753
Project Number:	21455587	**Report Date:**	11/03/21

Footnotes

1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Difference: With respect to Total Oxidizable Precursor (TOP) Assay analysis, the difference is defined as the Post-Treatment value minus the Pre-Treatment value.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

PAH Total: With respect to Alkylated PAH analyses, the 'PAHs, Total' result is defined as the summation of results for all or a subset of the following compounds: Naphthalene, C1-C4 Naphthalenes, 2-Methylnaphthalene, 1-Methylnaphthalene, Biphenyl, Acenaphthylene, Acenaphthene, Fluorene, C1-C3 Fluorenes, Phenanthrene, C1-C4 Phenanthrenes/Anthracenes, Anthracene, Fluoranthene, Pyrene, C1-C4 Fluoranthenes/Pyrenes, Benz(a)anthracene, Chrysene, C1-C4 Chrysenes, Benzo(b)fluoranthene, Benzo(j)+(k)fluoranthene, Benzo(e)pyrene, Benzo(a)pyrene, Perylene, Indeno(1,2,3-cd)pyrene, Dibenz(ah)+(ac)anthracene, Benzo(g,h,i)perylene. If a 'Total' result is requested, the results of its individual components will also be reported.

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. In addition, the 'PFAS, Total (6)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA, PFDA and PFOS. For MassDEP DW compliance analysis only, the 'PFAS, Total (6)' result is defined as the summation of results at or above the RL. Note: If a 'Total' result is requested, the results of its individual components will also be reported.

The target compound Chlordane (CAS No. 57-74-9) is reported for GC ECD analyses. Per EPA,this compound "refers to a mixture of chlordane isomers, other chlorinated hydrocarbons and numerous other components." (Reference: USEPA Toxicological Review of Chlordane, In Support of Summary Information on the Integrated Risk Information System (IRIS), December 1997.)

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Data Qualifiers

A - Spectra identified as "Aldol Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.

B - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).

C - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.

D - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.

E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.

F - The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.

G - The concentration may be biased high due to matrix interferences (i.e, co-elution) with non-target compound(s). The result should be considered estimated.

H - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.

I - The lower value for the two columns has been reported due to obvious interference.

J - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs).

M - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.

ND - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.

Report Format: DU Report with 'J' Qualifiers

Project Name:	LEGACY 89 LASALLE AVE BCP SITE	**Lab Number:**	L2158753
Project Number:	21455587	**Report Date:**	11/03/21

Data Qualifiers

NJ - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.

P - The RPD between the results for the two columns exceeds the method-specified criteria.

Q - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)

R - Analytical results are from sample re-analysis.

RE - Analytical results are from sample re-extraction.

S - Analytical results are from modified screening analysis.

V - The surrogate associated with this target analyte has a recovery outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

Z - The batch matrix spike and/or duplicate associated with this target analyte has a recovery/RPD outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

Report Format: DU Report with 'J' Qualifiers

Project Name:	LEGACY 89 LASALLE AVE BCP SITE	**Lab Number:**	L2158753
Project Number:	21455587	**Report Date:**	11/03/21

REFERENCES

1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - VI, 2018.

121 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WEF. Standard Methods Online.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.

Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility
EPA 624/624.1: m/p-xylene, o-xylene, Naphthalene
EPA 625/625.1: alpha-Terpineol
EPA 8260C/8260D: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.
EPA 8270D/8270E: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine, alpha-Terpineol; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine.
SM4500: NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO2, NO3.

Mansfield Facility
SM 2540D: TSS
EPA 8082A: NPW: PCB: 1, 5, 31, 87,101, 110, 141, 151, 153, 180, 183, 187.
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.
Biological Tissue Matrix: EPA 3050B

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility:

Drinking Water
EPA 300.0: Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2**: Nitrate-N, Nitrite-N; **SM4500NO3-F**: Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B, SM4500NO2-B**
EPA 332: Perchlorate; **EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.
Microbiology: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT,SM9222D**.

Non-Potable Water
SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH: Ammonia-N and Kjeldahl-N, **EPA 350.1**: Ammonia-N, **LACHAT 10-107-06-1-B**: Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2**: Nitrate-N, **SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300: Chloride, Sulfate, Nitrate.**
EPA 624.1: Volatile Halocarbons & Aromatics,
EPA 608.3: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs
EPA 625.1: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045**: PCB-Oil.
Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, SM9221E, EPA 1600, EPA 1603, SM9222D.**

Mansfield Facility:

Drinking Water
EPA 200.7: Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1** Hg.
EPA 522, EPA 537.1.

Non-Potable Water
EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.
EPA 200.8: Al, Sb, As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.
EPA 245.1 Hg.
SM2340B

For a complete listing of analytes and methods, please contact your Alpha Project Manager.

ALPHA ANALYTICAL

Westborough, MA 01581
8 Walkup Dr.
TEL: 508-898-9220
FAX: 508-898-9193

Mansfield, MA 02048
320 Forbes Blvd
TEL: 508-822-9300
FAX: 508-822-3288

NEW YORK CHAIN OF CUSTODY

Service Centers
Mahwah, NJ 07430: 35 Whitney Rd, Suite 5
Albany, NY 12205: 14 Walker Way
Tonawanda, NY 14150: 275 Cooper Ave, Suite 105

Page 1 of 1

Date Rec'd in Lab: 10/28/21

ALPHA Job #: L2158753

Client Information

Client: GOLDER ASSOC.
Address: 455 COMMERCE DR
SITE: 8 BUFFALO NY
Phone: 716-204-5880
Fax:
Email: ptmartin@golder.com

Project Information

Project Name: LEGACY 89 LASALLE AVE BCP SITE
Project Location:
Project #: 21455537
(Use Project name as Project #) ☐
Project Manager: PATRICK T. MARTIN
ALPHAQuote #: 14263

Turn-Around Time

Standard ☒ Due Date:
Rush (only if pre approved) ☐ # of Days:

Deliverables

☐ ASP-A ☒ ASP-B
☐ EQuIS (1 File) ☐ EQuIS (4 File)
☐ Other

Billing Information

☐ Same as Client Info
PO #

Regulatory Requirement

☐ NY TOGS ☐ NY Part 375
☐ AWQ Standards ☐ NY CP-51
☐ NY Restricted Use ☐ Other
☐ NY Unrestricted Use
☐ NYC Sewer Discharge

Disposal Site Information

Please identify below location of applicable disposal facilities.
Disposal Facility:
☐ NJ ☐ NY
☐ Other:

These samples have been previously analyzed by Alpha ☐

Other project specific requirements/comments:

Please specify Metals or TAL.

ANALYSIS

NYTCL - 8270D
TOT. METALS 6010 1Hg TOTAL
TS

Sample Filtration
☐ Done
☐ Lab to do
Preservation
☐ Lab to do
(Please Specify below)

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	NYTCL-8270D	TOT. METALS 6010 1Hg TOTAL	TS	Total Bottle	Sample Specific Comments
58753 81	MH-1 STORMWATER	10/26/21	13:40	WATER	NL	X	X	X		

Preservative Code:
A = None
B = HCl
C = HNO_3
D = H_2SO_4
E = NaOH
F = MeOH
G = $NaHSO_4$
H = $Na_2S_2O_3$
K/E = Zn Ac/NaOH
O = Other

Container Code
P = Plastic
A = Amber Glass
V = Vial
G = Glass
B = Bacteria Cup
C = Cube
O = Other
E = Encore
D = BOD Bottle

Westboro: Certification No: MA935
Mansfield: Certification No: MA015

Container Type	A	P	P							
Preservative	A	C	A							

Relinquished By:	Date/Time	Received By:	Date/Time
	10/27/21 1120	AAL	10/27/21 1120
DML	10/27/21 1200		10/28/21 00:55

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. BY EXECUTING THIS COC, THE CLIENT HAS READ AND AGREES TO BE BOUND BY ALPHA'S TERMS & CONDITIONS. (See reverse side.)

Form No: 01-25 HC (rev. 30-Sept-2013)

APPENDIX B

SEMI-ANNUAL SITE INSPECTION FORMS & PHOTO LOG DOCUMENTATION

89 LaSalle Avenue
BUFFALO, NEW YORK
Site Management Plan

NYSDEC Site Number: C915283

SEMI-ANNUAL INSPECTION FORM

OCT 26, 2021

Inspection Item Description	Frequency	Comments	Corrective Action (If Required)
Site Cover Systems: - Soil Cover - Asphalt Paved Areas - Concrete Sidewalks and other concrete structures - Other (if applicable) **Document specific locations and nature of condition issue if any observed.**	Semi-Annually	EXCELLENT COND. EXCELLENT COND. EXCELLENT COND. N/A	
Stormwater – Manhole Discharge Sampling Location General Condition	Semi-Annually	COMPLETED @ MH-1 ON 10/26/21 AFTER 70.5" RAIN EVENT	"SEDIMENT" SAMPLE COLLECTED CONSISTED PRIMARILY OF GRAVEL & ASPHALT PARTICLES
Excavation Work Locations – General Conditions	Per Occurrence	NO INTRUSIVE WORK BEING DONE	N/A

Patrick J. Martin
10/26/21

89 LaSalle Avenue
BUFFALO, NEW YORK
Site Management Plan

NYSDEC Site Number: C915283

SEMI-ANNUAL INSPECTION FORM

APRIL 7, 2022

Inspection Item Description	Frequency	Comments	Corrective Action (If Required)
Site Cover Systems: - Soil Cover - Asphalt Paved Areas - Concrete Sidewalks and other concrete structures - Other (if applicable) **Document specific locations and nature of condition issue if any observed.**	Semi-Annually	EXCELLENT COND. EXCELLENT COND. EXCELLENT COND. N/A	N/A
Stormwater – Manhole Discharge Sampling Location General Condition	Semi-Annually	COMPLETED @ MH-1 ON 4/7/22 AFTER >0.5" RAIN EVENT	DUE TO LACK OF QUALIFYING RAIN EVENT PRIOR TO 3/30/22, THIS SAMPLING EVENT HAD TO BE CONDUCTED 1ST WK OF APRIL
Excavation Work Locations – General Conditions	Per Occurrence	NO INTRUSIVE WORK BEING DONE	N/A

Patrick J. Morris
4/7/22

PHOTOGRAPHIC LOG		
2022 SITE MANAGEMENT PLAN	**89 LA SALLE AVENUE PRR SITE INSPECTION**	**GL21502976**

Photo No.	**Date**
1	10/26/21

MH-1 Sampling location

Photo No.	**Date**
2	10/26/21

Former location of block service building on LaSalle Ave (demolished). Looking east

PHOTOGRAPHIC LOG		
2022 SITE MANAGEMENT PLAN	**89 LA SALLE AVENUE PRR SITE INSPECTION**	**GL21502976**

Photo No.	**Date**
3	10/26/21

Northwest corner of Building 1. Looking east-southeast

Photo No.	**Date**
4	10/26/21

West side of Building 1. Looking northeast

PHOTOGRAPHIC LOG		
2022 SITE MANAGEMENT PLAN	**89 LA SALLE AVENUE PRR SITE INSPECTION**	**GL21502976**

Photo No.	**Date**
5	10/26/21

South of Building 1 access road. Looking east

Photo No.	**Date**
6	10/26/21

Access road and parking area between Buildings 4 and 5. Looking northeast

PHOTOGRAPHIC LOG		
2022 SITE MANAGEMENT PLAN	**89 LA SALLE AVENUE PRR SITE INSPECTION**	**GL21502976**

Photo No.	**Date**
7	10/26/21

Vegetated soil cover south of Building 5. Looking northeast

Photo No.	**Date**
8	10/26/21

Building 2 courtyard area. Looking northwest

PHOTOGRAPHIC LOG		
2022 SITE MANAGEMENT PLAN	**89 LA SALLE AVENUE PRR SITE INSPECTION**	**GL21502976**

Photo No.	**Date**
9	10/26/21

Access road and parking areas east of Building 2. Looking east - southeast

Photo No.	**Date**
10	10/26/21

Access road and parking areas north of Building 2. Looking east - southeast

PHOTOGRAPHIC LOG		
2022 SITE MANAGEMENT PLAN	**89 LA SALLE AVENUE PRR SITE INSPECTION**	**GL21502976**

Photo No.	**Date**
11	10/26/21

Traffic circle at main entrance (Building 1 in background). Looking west-northwest

Photo No.	**Date**
12	10/26/21

Solids (primarily asphalt particles and gravel) accumulated and collected from bottom of MH-1. Representative of “sediment” sample collected.

PHOTOGRAPHIC LOG		
2022 SITE MANAGEMENT PLAN	**89 LA SALLE AVENUE PRR SITE INSPECTION**	**GL21502976**

Photo No.	**Date**
13	4/7/22

MH-1 Sampling location

PHOTOGRAPHIC LOG		
2022 SITE MANAGEMENT PLAN	**89 LA SALLE AVENUE PRR SITE INSPECTION**	**GL21502976**

Photo No.	**Date**
14	4/7/22

Former location of block service building on LaSalle Ave (demolished). Looking east

Photo No.	**Date**
15	4/7/22

Northwest corner of Building 1. Looking east-southeast

PHOTOGRAPHIC LOG		
2022 SITE MANAGEMENT PLAN	**89 LA SALLE AVENUE PRR SITE INSPECTION**	**GL21502976**

Photo No.	**Date**
16	4/7/22

West side of Building 1. Looking northeast

Photo No.	**Date**
17	4/7/22

South of Building 1 access road. Looking east

PHOTOGRAPHIC LOG		
2022 SITE MANAGEMENT PLAN	**89 LA SALLE AVENUE PRR SITE INSPECTION**	**GL21502976**

Photo No.	**Date**
18	4/7/22

Access road and parking area between Buildings 4 and 5. Looking northeast

Photo No.	**Date**
19	4/7/22

Vegetated soil cover south of Building 5. Looking northeast

PHOTOGRAPHIC LOG		
2022 SITE MANAGEMENT PLAN	**89 LA SALLE AVENUE PRR SITE INSPECTION**	**GL21502976**

Photo No.	**Date**
20	4/7/22

Building 2 courtyard area. Looking northwest

Photo No.	**Date**
21	4/7/22

Access road and parking areas east of Building 2. Looking east-southeast

PHOTOGRAPHIC LOG		
2022 SITE MANAGEMENT PLAN	**89 LA SALLE AVENUE PRR SITE INSPECTION**	**GL21502976**

Photo No.	**Date**
22	4/7/22

Access road and parking areas north of Building 2. Looking east-southeast

Photo No.	**Date**
23	4/7/22

Traffic circle at main entrance. (Building 1 in background). Looking west-northwest

PHOTOGRAPHIC LOG		
2022 SITE MANAGEMENT PLAN	**89 LA SALLE AVENUE PRR SITE INSPECTION**	**GL21502976**

Photo No.	**Date**
24	4/7/22

Access road between Buildings 1 and 2. Looking southwest

Photo No.	**Date**
25	4/7/22

Solids (primarily asphalt particles and gravel) accumulated and collected from bottom of MH-1. Representative of “sediment” sample collected.

APPENDIX C

SITE C915283 SITE MANAGEMENT PLAN PERIODIC REVIEW REPORT – 2021/2022
ICS-ECS CERTIFICATION FORM

Enclosure 2

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Site Management Periodic Review Report Notice

Institutional and Engineering Controls Certification Form

Site Details **Box 1**

Site No. **C915283**

Site Name 89 LaSalle Avenue Site

Site Address: 89 LaSalle Avenue Zip Code: 14212
City/Town: Buffalo
County: Erie
Site Acreage: 9.230

Reporting Period: March 30, 2021 to March 30, 2022

	YES	NO
1. Is the information above correct?	X	☐
If NO, include handwritten above or on a separate sheet.		
2. Has some or all of the site property been sold, subdivided, merged, or undergone a tax map amendment during this Reporting Period?	☐	X
3. Has there been any change of use at the site during this Reporting Period (see 6NYCRR 375-1.11(d))?	☐	X
4. Have any federal, state, and/or local permits (e.g., building, discharge) been issued for or at the property during this Reporting Period?	☐	X
If you answered YES to questions 2 thru 4, include documentation or evidence that documentation has been previously submitted with this certification form.		
5. Is the site currently undergoing development?	☐	X

Box 2

	YES	NO
6. Is the current site use consistent with the use(s) listed below? Restricted-Residential, Commercial, and Industrial	X	☐
7. Are all ICs in place and functioning as designed?	X	☐

IF THE ANSWER TO EITHER QUESTION 6 OR 7 IS NO, sign and date below and DO NOT COMPLETE THE REST OF THIS FORM. Otherwise continue.

A Corrective Measures Work Plan must be submitted along with this form to address these issues.

Signature of Owner, Remedial Party or Designated Representative

Date

Box 2A

	YES	NO
8. Has any new information revealed that assumptions made in the Qualitative Exposure Assessment regarding offsite contamination are no longer valid?	☐	☒

If you answered YES to question 8, include documentation or evidence that documentation has been previously submitted with this certification form.

9. Are the assumptions in the Qualitative Exposure Assessment still valid? (The Qualitative Exposure Assessment must be certified every five years)	☒	☐

If you answered NO to question 9, the Periodic Review Report must include an updated Qualitative Exposure Assessment based on the new assumptions.

SITE NO. C915283 **Box 3**

Description of Institutional Controls

Parcel	Owner	Institutional Control
Portion of 79.70-2-16.111	City of Buffalo DPW	Ground Water Use Restriction Soil Management Plan Landuse Restriction Monitoring Plan Site Management Plan IC/EC Plan

1. Prohibition of groundwater use.
2. Land use restricted to Restricted Residential, Commercial or Industrial purposes.
3. Soil Management for any future intrusive work.

Portion of 79.70-2-5.1	Legacy UPAL, L.P.	Ground Water Use Restriction Soil Management Plan Landuse Restriction Monitoring Plan Site Management Plan IC/EC Plan

1. Prohibition of groundwater use.
2. Land use restricted to Restricted Residential, Commercial or Industrial purposes.
3. Soil Management for any future intrusive work.

Box 4

Description of Engineering Controls

Parcel	Engineering Control
Portion of 79.70-2-16.111	Cover System

1. Monitoring and maintenance of the cover system.
2. Semi-annual storm water and sediment monitoring.

Portion of 79.70-2-5.1	Cover System

1. Monitoring and maintenance of the cover system.
2. Semi-annual storm water and sediment monitoring.

Box 5

Periodic Review Report (PRR) Certification Statements

1. I certify by checking "YES" below that:

   a) the Periodic Review report and all attachments were prepared under the direction of, and reviewed by, the party making the Engineering Control certification;

   b) to the best of my knowledge and belief, the work and conclusions described in this certification are in accordance with the requirements of the site remedial program, and generally accepted engineering practices; and the information presented is accurate and compete.

YES	NO
X	☐

2. For each Engineering control listed in Box 4, I certify by checking "YES" below that all of the following statements are true:

   (a) The Engineering Control(s) employed at this site is unchanged since the date that the Control was put in-place, or was last approved by the Department;

   (b) nothing has occurred that would impair the ability of such Control, to protect public health and the environment;

   (c) access to the site will continue to be provided to the Department, to evaluate the remedy, including access to evaluate the continued maintenance of this Control;

   (d) nothing has occurred that would constitute a violation or failure to comply with the Site Management Plan for this Control; and

   (e) if a financial assurance mechanism is required by the oversight document for the site, the mechanism remains valid and sufficient for its intended purpose established in the document.

YES	NO
X	☐

IF THE ANSWER TO QUESTION 2 IS NO, sign and date below and DO NOT COMPLETE THE REST OF THIS FORM. Otherwise continue.

A Corrective Measures Work Plan must be submitted along with this form to address these issues.

Signature of Owner, Remedial Party or Designated Representative

Date

IC CERTIFICATIONS
SITE NO. C915283

Box 6

SITE OWNER OR DESIGNATED REPRESENTATIVE SIGNATURE

I certify that all information and statements in Boxes 1,2, and 3 are true. I understand that a false statement made herein is punishable as a Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law.

I PATRICK J. MARTIN at 455 COMMERCE DR., STE 5, BUFFALO, NY,
print name print business address

am certifying as OWNER (Owner or Remedial Party)

for the Site named in the Site Details Section of this form.

Patrick J. Martin 4/27/22
Signature of Owner, Remedial Party, or Designated Representative Rendering Certification Date

EC CERTIFICATIONS

Box 7

Qualified Environmental Professional Signature

I certify that all information in Boxes 4 and 5 are true. I understand that a false statement made herein is punishable as a Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law.

I PATRICK J. MARTIN at 455 COMMERCE DR, STE. 8, BUFFALO, NY
print name print business address

am certifying as a Qualified Environmental Professional for the OWNER
(Owner or Remedial Party)

STATE OF NEW YORK
PATRICK T. MARTIN
No. 71014-1
LICENSED PROFESSIONAL ENGINEER

Patrick J. Martin
Signature of Qualified Environmental Professional, for the Owner or Remedial Party, Rendering Certification

Stamp (Required for PE)

4/27/22
Date